#### TAMPA INTERNATIONAL AIRPORT

#### USE AND LEASE AGREEMENT FOR FUEL FACILITIES AND PIPELINE

ALASKA AIRLINES, INC.

# HILLSBOROUGH COUNTY AVIATION AUTHORITY

Board Date\_\_\_\_\_, 202\_

Prepared by:

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#### USE AND LEASE AGREEMENT FOR FUEL FACILITIES AND PIPELINE

THIS USE AND LEASE AGREEMENT FOR FUEL FACILITIES AND PIPELINE ("Agreement"), is made and entered into this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 202\_, by and between Hillsborough County Aviation Authority, a public body corporate existing under the laws of the State of Florida ("Authority"), and Alaska Airlines, Inc., a corporation organized and existing under the laws of the State of Alaska and authorized to do business in the State of Florida ("Company") (hereinafter individually and collectively referred to as "Party or "Parties").

#### WITNESSETH:

WHEREAS, Authority controls, operates, and maintains an airport in Hillsborough County, Florida, known as Tampa International Airport ("Airport"); and

WHEREAS, Company is engaged in the business of transporting passengers and/or cargo and has entered into an Airline-Airport Use and Lease Agreement with Authority ("Basic Agreement") or Operating Agreement with Authority ("Operating Agreement"); and

WHEREAS, it is deemed desirable that facilities be provided at Airport for the storage, sale and distribution of aviation fuels and other petroleum products and for purposes incidental thereto, including but not limited to facilities for refueling aircraft upon the ramps and airplane loading aprons of said Airport through the use of underground fueling systems, apparatus, equipment, and facilities; and

WHEREAS, Company desires to lease, operate and maintain the Fuel Facilities owned by Authority including the right to certain pipe line rights of way in the operation thereof; and

WHEREAS, Company shall hire an Agent to provide services required in connection with Company's delivery of aircraft fuel through said Fueling Facilities and otherwise on the Airport; and

WHEREAS, Company and Agent are parties to a separate agreement outlining the duties and responsibilities of Agent on behalf of Company and the joint and several liabilities of Company and Agent in the maintenance and operation of the Fueling Facilities hereunder. Said agreement shall be incorporated hereunder as Exhibit "A", Agent Agreement and may be amended from time to time.

NOW, THEREFORE, in consideration of the mutual promises and agreements hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto, intending to be legally bound, hereby agree as follows:

# ARTICLE 1 DEFINITIONS

The Definitions contained herein pertain to this Use and Lease Agreement for Fuel Facilities and Pipeline only and are not to be construed in the context of any other agreement even though the defined terms contained herein may be the same as, or similar to, terms used or defined in other agreements with the Authority.

- 1.1 <u>Agent</u> The qualified, experienced, financially solvent and duly licensed party or parties, under contract with the Fuel Committee to exercise on behalf of Company and the Fuel Committee, all the rights and obligations defined herein, including the operation, management and maintenance of the Fuel Facilities; the provision of insurance coverages set forth in Article 19; and payment of all fees and charges due to the Authority all of which shall be set forth in Agent Agreement and incorporated in Exhibit "A" attached hereto.
- 1.2 <u>Fuel Committee</u> That group of airlines serving the Airport each being party to an Interline Fuel Agreement and each having individually executed the Agent Agreement at the Airport as well as this Agreement in addition to a basic agreement or an operating agreement.
- 1.3 <u>Fuel or Fueling Facilities</u> The bulk fuel storage facility on the Airport, consisting of above ground storage tanks, pumps, filters, valves, connecting piping, storage and shop buildings, control room, transmission lines, hydrant loop piping around each airside terminal, hydrant valves and controls, along with miscellaneous structures and equipment necessary for a fully functioning jet fuel storage facility and underground hydrant system, serving the ramps and aprons at each airside terminal and common or segregated air cargo facilities, as further depicted on Exhibit "B", Map of Fuel Facilities System, which is attached hereto and incorporated herein by reference, as may be modified throughout the term of this Agreement.
- 1.4 <u>Inter-Line Agreement</u> That Agreement signed by each member of the Fuel Committee, setting forth the rights, obligations and responsibilities of Fuel Committee members with respect to the operation and maintenance of the Fuel Facilities System at the Airport, including but not limited to the assumption of liability and payment of rents, fees, charges and assessments incurred as a result of the operation and maintenance of the Fuel Facilities System.
- 1.5 <u>Tanker Refuelers</u> Self-propelled vehicles designed for the transport and into-plane dispensing of aviation fuels via tanks as opposed to transferring fuel from the on-site hydrant system into the aircraft.

# ARTICLE 2 EXECUTION OF AGREEMENT

This Agreement contains the terms and conditions under which Company is granted the right to lease and use the Fuel Facilities at the Airport. Authority and Company recognize that, as a matter of convenience, it is preferable for each airline to execute similar Agreements (as opposed to all airlines executing the same original). Authority and Company understand and agree that by doing so (i) this Agreement shall apply to and bind each and every airline executing this or any other copy hereof to the same extent as if all airlines had executed the same original; (ii) all airlines operating at the Airport may not execute this Agreement and the non-execution by any of them shall have no effect upon the joint and several liability of Company and the airlines executing this Agreement; (iii) additional airlines may become eligible to execute this Agreement from time to time; and (iv) the future execution of this Agreement by any additional airline shall have no effect upon the joint and several liability of Company and the airlines that have previously executed this Agreement.

#### ARTICLE 3

# DEMISED PREMISES AND OPERATING AREA

#### 3.1 <u>Demised Premises</u>

In addition to the Fuel Facilities described in Article 1, Paragraph 1.3, Company hereby agrees to lease in common with others from the Authority land containing approximately 226,076 square feet, more or less, underlying the Fuel Storage Facilities, the location of which is further described on Exhibit "B" attached hereto and incorporated herein by reference. The elements described in Paragraphs 1.3, 3.1, 3.2 and 3.3 shall be hereinafter collectively referred to as the "Demised Premises".

#### 3.2 Pipeline Right of Way

Authority hereby grants to Company the right to use in common with others a pipeline right of way, the location and description of which is designated on Exhibit "B" and Exhibit "C", Pipeline Right of Way, attached hereto and incorporated herein by reference.

The Pipeline Right of Way is 124,206 square feet, and is calculated as a three foot corridor along the 41,402 linear feet of pipeline leading from the Fuel Storage Facilities to each end location as follows:

Ending Location	Linear Feet from Fuel Storage Facilities
Federal Express	9,860 linear feet
Airside A	8,667 linear feet
Airside C	10,952 linear feet
Airsides E and F	11,923 linear feet

#### 3.3 Common Use Roadway

Authority also grants to Company the right to use in common with others, a road right of way, the location and description of which is designated on Exhibit "B", attached hereto and by reference made a part hereof and hereafter referred to as "common use roadway".

#### 3.4 <u>Condition of Demised Premises</u>

The condition of the Demised Premises is described in the Evaluation of Jet A Fuel Systems Report prepared by URSGWC, dated February 1999; the TFC Fuel System Hydraulic Analysis Report Tampa International Airport Fuel Farm Renovations prepared by Prime Engineering Incorporated, dated September 2013; the API 570 Report Review & Recommendations, prepared by Currier Engineering Management Consulting, dated July 1, 2019; and in the collected Environmental Audit Reports of the Demised Premises, all of which are collectively referred to as "Assessment Reports" and listed in Exhibit "D" attached hereto and incorporated herein by reference.

# ARTICLE 4 USES AND RESTRICTIONS

#### 4.1 <u>Agent</u>

Upon execution of this Agreement, Company shall select an Agent and request approval from Authority for such Agent, which approval shall not be unreasonably withheld. Upon receipt of written approval of said Agent from Authority, Company shall promptly enter into an Agreement with Agent. Said Agreement shall incorporate the responsibility of Agent to fulfill the designated duties and obligations of Company under this Agreement. Company recognizes the joint and several liabilities of all parties and agrees and understands that the obligations of Company, whether performed by Company or by Company's Agent are subject to the Authority's Rules and Regulations and Operating Directives, as may be amended from time to time.

#### 4.2 Interline Agreement

Upon execution of this Agreement, Company shall simultaneously execute the Interline Agreement as a member of the Fuel Committee.

#### 4.3 <u>Permitted Uses</u>

Company shall have the right to use the land and equipment described in Article 3 hereof for the maintenance, use and operation of the Fuel Facilities, in accordance with the permitted uses herein. The Demised Premises shall be used by Company for the purchase, receipt, storage, handling,

distribution, sale, exchange and dispensing of Jet A and any other fuel or propellant, for Company's aircraft or equipment.

#### 4.4 Use of Pipeline Rights of Way

The pipe line rights of way shall be used by Company for the construction, installation, repair, inspection, maintenance, operation and removal of pipe lines, including necessary pipe valves, fittings, control devices, manholes, and appurtenances ("pipeline structures") as may be necessary or desirable in connection with Company's supplying aviation fuel on said Airport. Company shall have the right (subject to rules and regulations prescribed by Authority for the safety of persons and property upon the Airport or aircraft using the runway and taxiway facilities of said Airport and special direction prescribed by the Authority's Chief Executive Officer at any time during the life of this Agreement to enter upon and to pass over and along said pipeline rights of way or extensions thereof, whenever and wherever necessary in connection with the construction, reconstruction, repair, maintenance, inspection and, operation and removal of said pipelines; and said pipelines rights of way shall not be used for any purpose other than herein mentioned without the prior written consent of the Authority.

#### 4.5 Surface and Subsurface Rights

All rights to the use of the surface overlying the pipeline rights of way described herein, or as hereafter may be extended or relocated, shall remain in Authority for its use in any lawful and proper manner it may deem necessary for the operation of said Airport in the promotion and accommodation of air commerce and air navigation, and Authority reserves the right to use on its behalf any portion of the surface area of said pipeline rights of way for any and all lawful purposes.

#### 4.6 <u>Restrictions</u>

All fueling operations conducted by Company utilizing the Airport underground hydrant system at the Airport shall be in accordance with the rights granted hereunder and shall be provided in those areas designated for such purposes. Company shall utilize vehicles and equipment designed to be operated with an underground hydrant fuel system. Company's refueling vehicles shall be parked or stored only in areas designated by Authority for such purposes when not actively engaged in refueling operations at the Airport.

Tanker Refuelers are prohibited on Terminal aircraft aprons serviced by the hydrant system unless prior written consent from Authority is obtained.

#### 4.7 Exclusions and Reservations

- A. Nothing in this Article 4 shall be construed as authorizing Company to conduct any business on the Demised Premises separate and apart from those activities permitted in Section 4.3 herein.
- B. Company shall not interfere or permit interference with the use, operation, or maintenance of the Airport, including but not limited to, the effectiveness or accessibility of the drainage, sewerage, water, communications, fire protection, utility, electrical, or other systems installed or located from time to time at the Airport.
- C. Company shall not engage in any activity prohibited by Authority's existing or future noise abatement procedures.
- D. Except as authorized herein, Company shall not permit or enter into any other third party agreement(s) for the provision of any of the services hereunder, without advance written consent from the Authority.

# ARTICLE 5

### <u>TERM</u>

This Agreement shall become effective upon approval by the Authority and shall run for a term of twenty-five (25) years retroactive to October 1, 1999 and terminating on September 30, 2024.

# ARTICLE 6

# PAYMENTS

#### 6.1 Ground Rent for the Demised Premises

The Ground Rent for the Demised Premises due throughout the term of the Agreement shall be paid by Agent on Company's behalf in equal monthly installments, in advance on or before the first day of each and every month, without demand or invoice. The Ground Rent for the Demised Premises starting on January 1, 2022 is \$181,955.12, payable at \$15,162.93 monthly ("Ground Rent for the Demised Premises"). The Ground Rent for Demised Premises is calculated as follows:

Unimproved land totaling 226,076 square feet at \$0.730424 per square foot, which rent is \$165,131.34 annually, payable in monthly installments of \$13,760.94, plus applicable taxes; and

Aeronautical vehicular pavement at Fuel Storage Facilities totaling 37,026 square feet at \$0.104346 per square foot, which rent is \$3,863.51 annually, payable in monthly installments of \$321.96, plus applicable taxes; and

Pipeline Right of Way corridor totaling 124,206 square feet at \$0.104346 per square foot per year, which rent is \$12,960.40 annually, payable in monthly installments of \$1,080.03, plus applicable taxes.

# Adjustment to the Ground Rent for the Demised Premises

Commencing on October 1, 2022 and on every October 1 of each year of the term of this Agreement thereafter, the Ground Rent for the Demised Premises will increase by 2.15%. The rental rate following the adjustment shall remain in effect until the next adjustment.

# 6.2 <u>Fuel Facilities</u>

- A. Payment for Fuel Facilities shall be calculated as follows:
  - (1) Rent for the Fuel Facilities is comprised of Fuel Storage Facilities Rent and Improvements Payments Rent.
    - (a) Fuel Storage Facilities Rent

The annual rent for the Fuel Storage Facilities is \$394,042.82, payable at \$32,836.90 monthly ("Fuel Storage Facilities Rent").

# (b) Improvements Payments Rent

Monthly payments of the following items, as set forth in certain agreements between the Fuel Committee and Authority, as more particularly described in Exhibit E, Fuel System Rates and Charges, which payments survive the termination of this Agreement (collectively, "Improvements Payments Rent"):

(i) Expansion of System – East Cargo Area to Emery, executed by Fuel Committee on behalf of Company and by Authority, dated July 2002, in the final amount of \$3,802,040 amortized over 30 years at 8% interest, payable in monthly payments of \$27,898.02, with a final payment date of June 2030; and

- (ii) Expansion of System East Cargo Area to Federal Express, executed by Fuel Committee on behalf of Company and by Authority, dated March 2003, in the final amount of \$613,155 amortized over 30 years at 8% interest, payable in monthly payments of \$4,499.11, with a final payment date of February 2033; and
- (iii) Secondary Containment for Fuel Storage Tanks Improvement costs set forth in that certain Memorandum of Understanding for Secondary Containment of Fuel Storage Tanks, executed by Fuel Committee on behalf of Company and by Authority, dated December 18, 2008, in the final amount of \$4,696,086.84 amortized over 20 years at 7.25% interest, payable in monthly payments of \$37,116.74, with a final payment date of December 2028; and
- (iv) Amended Memorandum of Understanding for Bulk Fuel Storage Facility Upgrades – Improvement costs set forth in that certain Memorandum of Understanding for Fuel Facility Upgrades, executed by Fuel Committee on behalf of Company and by Authority, dated July 29, 2014, as amended, in the final amount of \$9,759,800 amortized over 20 years at 5% interest, payable in monthly payments of \$64,777.61, with a final payment date of December 2036; and
- (v) EFSO Project Improvement costs set forth in that certain Memorandum of Understanding for EFSO and Fuel Truck Rack Upgrades executed by Fuel Committee on behalf of Company and by Authority, dated August 27, 2020, in the final amount of \$565,283.11 amortized over 3 years at 4.625% interest, payable in monthly payments of \$16,847.03, with a final payment date of December 2024; and
- (vi) Fuel Truck Rack Project Improvement costs set forth in that certain Memorandum of Understanding for EFSO and Fuel Truck Rack Upgrades executed by Fuel Committee on behalf of Company and by Authority, dated August 27, 2020. The Memorandum of Understanding for EFSO and Fuel Truck Rack Upgrades dated August 27, 2020 is hereby affirmed and ratified; and

Plus

Any residual costs not covered by Passenger Facility Charges ("PFCs") or Airport Improvement Program ("AIP") Grants or any other federal, State, or local programs, depending on the project, will be charged back to Company and amortized over the expected life of the improvement at 8%.

- (2) The annual rent for the Fuel Facilities due throughout the term of the Agreement shall be paid by Agent on Company's behalf in equal monthly installments, in advance on or before the first day of each and every month, without demand or invoice. The rent due for the Fuel Facilities herein shall commence on April 1, 2000 and shall be billed to collect rents retroactive to October 1, 1999. Retroactive rents due will be paid to Authority in seven (7) equal monthly installments beginning April 1, 2000 and ending October 31, 2000.
- (3) The amount due for the Fuel Facilities for each month during the term herein shall be calculated as provided on Exhibit "E", Fuel System Rates and Charges, and attached hereto. As costs are added for upgrades and expansions, said amounts will be added to Exhibit "E" with a corresponding expiration date for tracking and no further amendment required to the Agreement.
- B. Payment for Cleanup of Contamination:
  - (1) Certain contaminated area have been registered under the State of Florida Early Detection Incentive (EDI) Program including the Fuel Storage Facility, the ramp areas of Airsides B, C, D and E and the integral connecting hydrant piping system. Cleanup of those contamination areas will be funded by the State, to the extent allowed under the EDI Program or other applicable State, Federal or local programs. Those costs of contamination cleanup not covered under EDI or other State, Federal or other local programs will be, and will be paid by Company or amortized, at a minimum, over the term of the Agreement at 8% at Company's option.
  - (2) Together, Authority and Company will identify other sources of funding for contamination cleanup costs. Annual residual costs not covered by identifiable funding sources will be paid by Company.
  - (3) Any Clean-up costs to be amortized will be set forth on Exhibit E and attached hereto, identifying Company's monthly fees due.

- C. Company's Right To Pursue Recovery:
  - (1) Nothing herein shall preclude Company's right to pursue recovery of costs associated with the cleanup of contamination from insurance or other third parties. However, Company's pursuit of such cost recovery shall in no way delay the cleanup of contamination associated with Airport Improvement Projects.

#### 6.3 Failure to Make Timely Payments

Without waiving any other right available to the Authority, in the event of default of Company's payment of any rents, fees, charges, and/or payments due and payable in accordance with the terms of this Agreement within twenty (20) days after same shall become due and payable, Authority reserves the right to charge Company interest thereon, from the date such rents, fees and charges became due until the date payment is received by the Authority, at the maximum interest rate then authorized by law, or twelve percent (12%) per annum, whichever is less.

#### 6.4 Place of Payments

Company will submit all payments required by this Agreement as follows: (ELECTRONICALLY – PREFERRED METHOD) Via ACH with Remittance Advice to Receivables@TampaAirport.com

or

(MAIL DELIVERY) Hillsborough County Aviation Authority Attn: Finance Department Tampa International Airport P. O. Box 919730 Lock Box ID: REV X6306 Orlando, Florida 32891-9730

or

(HAND DELIVERY) Hillsborough County Aviation Authority Attn: Finance Department Tampa International Airport 4160 George J. Bean Parkway Suite 2400, Administration Building Tampa, Florida 33607

# ARTICLE 7 OBLIGATIONS OF COMPANY

Company hereby agrees to comply with the following obligations, whether performed by Company or by Agent on behalf of Company:

# 7.1 Business Operations

- A. Company shall conduct its business operations hereunder in accordance with applicable laws and the Authority's Rules and Regulations and Operating Directives, as may be amended from time to time, and in an orderly and proper manner, considering the nature of such operation, so as not to unreasonably annoy, disturb, endanger or be offensive to other tenants or users of the Airport. Company shall conduct its operations and the use of said pipelines, improvements and other facilities in the pipeline rights of way in such manner as will reduce to the minimum that is reasonably practicable, considering the nature and extent of Company's operations, spillage, overflowing or escaping of Company's gases, jet fuel, flammable substances and petroleum or petroleum products.
- B. Company shall strictly comply with all applicable testing procedures and monitoring requirements for operation of the Fuel Facilities promulgated by State Department of Environmental Protection ("DEP" or its successor) Federal Environmental Protection Agency ("EPA" or its successor) and local Hillsborough County Environmental Protection Commission ("EPC" or its successor).
- C. Company shall comply with all NFPA and FAA, Safe Fueling and Fire Prevention regulations, related City of Tampa Ordinances, and applicable safety regulations at the Airport that may be adopted by the Authority.
- D. Company shall not discharge any industrial waste or foreign material other than sanitary sewage into any component of the sanitary sewage system, nor shall Company cause or permit the same by any of its officers, agents, servants, employees, invitees, independent contractors, successors or assigns, nor shall Company, its officers, agents, servants, employees, invitees, independent contractors, successors or assigns discharge or place any industrial waste or foreign material into any component of the storm drainage system or onto any paved or unpaved area within the boundaries of the Airport without first neutralizing or treating same as required by applicable Anti-pollution laws or ordinances, and in a manner satisfactory to Authority, the Florida State Board of Health, and other public bodies, Federal, State, County or Municipal having jurisdiction over, or responsibility for prevention of pollution of canals, streams, rivers and other bodies of water. Company's introduction of objectionable

waste into any component of Authority's sanitary or storm drainage system shall, if not remedied by Company in a timely manner in accordance with regulatory requirements, be deemed a default and a cause for cancellation of this Agreement.

#### 7.2 <u>Conduct of Agent, Employees and Invitees</u>

Company shall, within reason, control the conduct, demeanor and appearance of its agent, employees, invitees, and of those doing business with it and, upon objection from the Authority concerning the conduct, demeanor appearance of any such persons, shall immediately take all reasonable steps necessary to remove the cause of objection.

#### 7.3 Equipment and Vehicle Parking

Subject to Company's use of Demised Premises as provided in Section 3.1 herein, Company shall ensure that all equipment and vehicles owned or operated by Company, by Company's vendors or contractors will be parked and/or stored in areas designated for such parking in the Demised Premises and Company will not permit vehicles to be parked in common use areas so as to interfere in any way with any other operations at the Airport.

### 7.4 <u>Debris</u>

Company shall remove or otherwise dispose of all garbage, debris, and other waste materials (whether solid or liquid) arising out of its use and occupancy of the Demised Premises or out of its operations, in a manner approved by the Authority. Any such debris or waste which is temporarily stored shall be kept in suitable, sealed garbage and waste receptacles, designed to safely and properly contain whatever material may be placed therein. Company shall use extreme care when effecting removal of all such waste.

#### 7.5 <u>Nuisance</u>

Company shall not commit any nuisance, waste, or injury on the Demised Premises, or elsewhere on the Airport, and shall not do or permit to be done anything, which may result in the creation or commission or maintenance of such nuisance, waste, or injury.

#### 7.6 <u>Vapor or Smoke</u>

Company shall not create nor permit to be caused or created upon the Demised Premises, or elsewhere on the Airport, any obnoxious odor, smoke or noxious gases, fumes or vapors. The creation of exhaust fumes by the operation of internal-combustion engines or engines of other types,

so long as such engines are maintained and are being operated in a proper manner, shall not be a violation of this Agreement.

#### 7.7 Excessive Load

Company hereby agrees that it will use all paved areas according to the specifications and planned use for such areas and Company will prohibit its employees, vendors or subcontractors from exceeding the planned use or from placing excessive loads on paved areas on the Demised Premises. Company shall be responsible for the repair of any paved area damaged by nonconforming usage or excessive loading.

#### 7.8 Frequency Protection

Company shall provide frequency protection within the aviation air/ground VHF frequency band and the UHF frequency band in accordance with restrictions promulgated by the Federal Aviation Administration for the vicinity of the FAA Remote Receiver Facility, Transmitter Facility or Aids to Air Navigation.

#### 7.9 <u>Taxes</u>

Company shall pay all applicable sales, use, tangible, intangible and ad valorem taxes of any kind, against the Demised Premises, including the real property and any improvements thereto or leasehold estate created herein, or which result from Company's occupancy or use of the Demised Premises whether levied against Company or Authority. Company shall also pay any other taxes or assessments against the Demised Premises or leasehold estate created herein. Company may reserve the right to contest such taxes and withhold payment of such taxes upon written notice to Authority of its intent to do so, so long as the nonpayment of such taxes does not result in a lien against the real property or any improvements thereon or a direct liability on the part of Authority. Authority agrees to immediately forward to Company any notices of such taxes and assessments due upon receipt of same.

# ARTICLE 8 MAINTENANCE AND REPAIR

#### 8.1 <u>Company's Responsibilities</u>

Company shall throughout the term of this Agreement assume the responsibility for all routine maintenance and repair of the Demised Premises, whether such repair or maintenance is ordinary or extraordinary, structural or otherwise, and without limiting the generality hereof:

A. Company shall keep all areas of the Demised Premises in a state of good repair to include repair of any damage to the vehicular parking pavement or other surface of the Demised Premises or any building improvements caused by weathering and/or aging, Company's operations, or by any oil, gasoline, grease lubricants or other flammable liquids and substances having a corrosive or detrimental effect thereon.

Company shall conduct its repairs and maintenance on the Demised Premises, to the extent reasonably practicable, so as to avoid unreasonably interfering with the use of or access to adjoining premises by other tenants of the Airport or the use by aircraft of the landing and take-off facilities and navigational aids on the Airport.

- B. Company shall maintain and repair all pipelines, structures, improvements and other facilities constructed, installed in or on the pipeline rights of way, including under ramp fueling facilities, in good condition and repair as is usual and customary for such facilities. Company shall at all times maintain the said pipeline rights of way free and clear of any offensive substances, refuse matter, scrap material or waste resulting from its use of said pipeline rights of way or its work performed thereon or therein and shall return the surface to its previous condition upon completion of maintenance to its underground installations.
- C. Company shall at all times keep and maintain in a clean and orderly condition the appearance of Company's fixtures, equipment and personal property which are located in any part of the Demised Premises.
- D. Company shall ensure the proper working condition of its fire protection and safety equipment and all other safety equipment as required by any law, rule, order, ordinances, resolutions or regulation of any competent authority.
- E. Company shall take such anti-erosion measures, including but not limited to, the planting and replanting of grasses with respect to all portions of the Demised Premises not paved or built upon.
- F. Company shall be responsible for the maintenance and repair of all utility service lines except common utilities, if any, including but not limited to, service lines for the supply of water, gas service lines, electrical power and telephone conduits and line, sanitary sewers and storm sewers which are now or which may be subsequently located upon the Demised Premises and used by Company.

# 8.2 <u>Authority's Responsibilities</u>

Authority shall not be liable for, or required to perform any routine maintenance or repair upon the Demised Premises. If the Company fails to perform its maintenance responsibilities, the Authority shall have the right, but not the obligation, to perform such maintenance responsibilities, provided the Authority has first, in any situation not involving an emergency, by written notice to Company, afforded Company a period of thirty (30) days within which to correct the failure. All costs incurred by the Authority in performing the maintenance responsibilities of Company, plus a ten percent (10%) administrative charge, shall be paid by Company within ten (10) days of receipt of billing therefor.

# ARTICLE 9 ANNUAL REVIEW AND FINANCIAL PLAN

#### 9.1 <u>Annual Review of Fuel Operations</u>

Authority and Fuel Committee shall review on an annual basis the overall operation of the Fuel Facilities including all applicable testing and monitoring procedures undertaken by Company. Such review shall also include an analysis of the adequacy of the Fuel Facilities and the rate structure of fees charged by the Fuel Committee to provide fuel to all airlines operating at the Airport. Company shall submit such annual reports on forms furnished by or approved by the Authority documenting the fees charged and volume of fuel pumped for the year. Said annual report will indicate whether or not there occurred any shortfall or surplus in fuel supply during the previous twelve months.

#### 9.2 Annual Project Review

- A. Annually, prior to the end of the first quarter of each calendar year throughout the Term of the Agreement, the Authority will submit to the Fuel Committee a schedule of capital projects and cost estimates for such projects for the upcoming fiscal year. Upgrades, modifications or expansions of the Fuel Facilities will be included in the schedule along with estimates of project costs.
- B. Annually, prior to the end of the first quarter of each calendar year throughout the Term of this Agreement, the Fuel Committee will submit to Authority a schedule of proposed capital projects for the upcoming fiscal year along with its five-year plan for such projects.
- C. The Fuel Committee and Authority will review all capital improvement projects planned and proposed for the upcoming fiscal year and, in meetings with Authority, agree on the priority, scheduling and estimated cost of each project.

#### 9.3 <u>Scheduling of Projects</u>

As airfield construction and improvement projects are scheduled and time is of the essence due to construction time schedules, the evaluation of options for the remediation of contamination will be incorporated into the scope of the particular project depending on the identified level of risk to the environment and/or impact to the environment or human health. In those instances where there is clear evidence of impact or risk to the environment or human health, Company will work with Authority's efforts in taking a proactive position to remediate known contamination using state-approved, risk-based clean up levels. Together, Authority and Company will evaluate the feasibility and timeliness of seeking funding for all eligible costs associated with the remediation of contamination.

### 9.4 Annual Financial Plan

Following such annual project review, the Authority will prepare a detailed Financial Plan for each capital project agreed upon, including all costs associated with the planning, design, engineering, construction, administration and debt service for the project.

# ARTICLE 10 ALTERATIONS TO DEMISED PREMISES

#### 10.1 <u>Authority's Improvements</u>

Authority and Company agree that Company or other designated representative of the Fuel Committee shall participate in all selection and review processes related to the design, development and construction of all agreed upon capital improvement projects related to the Fuel Facilities undertaken by Authority.

#### 10.2 <u>Conditions Governing Alterations by Company</u>

In accordance with Company's responsibilities for the maintenance and repair of the Demised Premises as provided in Article 7, Company shall make no alterations to the Demised Premises without the prior written consent of the Authority as issued under the Authority's Tenant Work Permit Program, as may be amended from time to time, a copy of which is attached hereto.

#### ARTICLE 11

# TITLE TO IMPROVEMENTS

Title to all buildings, improvements, equipment and other property constructed, installed or placed on the Demised Premises and all pipeline structures installed on said pipeline rights of way at any time during the

term of this Agreement shall be and remain in Authority. Upon termination, Company shall surrender possession of the Demised Premises and said pipeline right of way to Authority in good condition.

#### **ARTICLE 12**

### **RELOCATION OF PIPELINE RIGHTS OF WAY**

In the event Authority shall, in its discretion, and after using its best efforts consistent with good engineering and safety practices to minimize or obviate the necessity to relocate the pipeline rights of way, and after due consideration of the interests of Company, and necessity or convenience to Authority determine that the use of any portion of such pipeline rights of way, is necessary for the construction of any airport or aviation improvements or facilities, whether on or in said pipeline rights of way, including, without limitation, buildings, storm drains, sewer lines, underground ducts, structures, vaults or other subsurface structures, or water mains it deems necessary for the operation of said Airport and the Fuel Facilities within said right of way must be relocated to clear such proposed building, structure or facility to prevent a hazardous condition which would otherwise prevail or unreasonably interfere with said construction, then Authority shall, within ninety (90) days after delivery of written notice to Company, commence to relocate said pipeline and appurtenances in and along such realigned right of way as Authority may prescribe. Relocations for the benefit of the Fuel Facilities will be charged back to Company. Relocations for the benefit of Airport projects not associated with Fuel Facilities will not be charged back to Company.

#### ARTICLE 13

# DEFAULT AND TERMINATION RIGHTS

#### 13.1 Events of Default

The following events are deemed conditions of default:

- A. The conduct of any business or performance of any acts by Company or its Agent at the Airport not specifically authorized herein or by other agreements between Authority and Company, and said business or acts do not cease within thirty (30) days of receipt of Authority's written notice to cease said business or acts.
- B. The failure of Company to cure a default in the performance of any of the terms, covenants, and conditions required herein within thirty (30) days of receipt of written notice by Authority to do so. Provided, however, if a dispute arises between Authority and Company with respect to any obligation or alleged obligation of Company to make payments to Authority, payments made under protest to the Authority by Company shall not waive any rights of Company to contest the validity or amount of such payment. In the event any court or other body having jurisdiction determines all or any part of the protested payment shall not be due, Authority

shall promptly reimburse Company any amount determined as not due plus interest on such amount at one percent (1%) per month.

- C. The failure by Company to provide and keep in force insurance coverage in accordance with Article 19.
- D. The abandonment by Company of the Demised Premises, or its conduct of business at the Airport, or its Agent's conduct of business at the Airport; and, in this connection, suspension of operations for a period of sixty (60) consecutive days will be considered abandonment in the absence of a labor dispute or other governmental action in which Company is directly involved.
- E. The modification or alteration of Company's interest under this Agreement by any unauthorized assignment or subletting or by operation of law.
- F. Failure of Company to take occupancy of the Demised Premises when same is tendered by Authority.
- G. Failure of Company to comply with applicable federal, State and local environmental laws, regulations, which may be revised from time to time, and/or violation of any part of the provisions of Article 22 or disposition by Company of any sanitary waste, pollutants, contaminants, hazardous waste, toxic waste, industrial cooling water, sewage or any other materials in violation of the provisions of Article 22.
- H. Failure of Company to execute the Interline Agreement, or maintain a Basic Agreement or Operating Agreement with Authority at the Airport.
- I. Failure of Company to comply with Florida Statute 287.133- Concerning Criminal Activity on Contracts with Public Entities.
- J. The permanent abandonment of the Airport by the Authority as an air terminal.
- K. The inability to use the Airport for a period of longer than ninety (90) consecutive days due to war, earthquake or other casualty.
- L. The inability of Company to use the Airport for a period of longer than ninety (90) days because of the issuance of any order, rule or regulation by a competent governmental Authority or court jurisdiction over Company or Authority, preventing Company from operating its business; provided, however that such inability or such order, rule or regulation is not due to any fault of Company.

M. A material breach by Authority if not remedied after thirty (30) days from receipt of Notice from Company to do so.

#### 13.2 <u>Authority's Remedies</u>

In the event of Company's default, the Authority, at its election, may exercise any one or more of the following options or remedies, the exercise of any of which shall not be deemed to preclude the exercise of any others herein listed or otherwise provided by statute or general law:

- A. Terminate Company's right to possession under the Agreement and in accordance with law re-enter and retake possession of the Demised Premises and relet or attempt to relet the same on behalf of Company at such rent and under such terms and conditions as the Authority may deem commercially reasonable. The Authority shall not be deemed to have thereby accepted a surrender of the Demised Premises, and Company shall remain liable for all rent, or other sums due under this Agreement and for all damages suffered by the Authority because of Company's breach of any of the covenants of the Agreement; or
- B. In the event that Authority relets Demised Premises, rentals, fees, and charges received by Authority from such reletting shall be applied: (i) to the payment of any indebtedness other than rentals, fees, and charges due hereunder from Company to Authority; (ii) to the payment of any cost of such reletting; and (iii) to the payment of rentals, fees, and charges due and unpaid hereunder. The residue, if any, shall be held by Authority and applied in payment of future rentals, fees, and charges as the same may become due and payable hereunder. If that portion of such rentals, fees, and charges received from such reletting and applied to the payment of rentals, fees, and charges hereunder is less than the rentals, fees, and charges as would have been payable during applicable periods by Company hereunder, then Company shall pay such deficiency to Authority. Company shall also pay to Authority, as soon as ascertained, any reasonable costs and expenses incurred by Authority in such reletting not covered by the rentals, fees, and charges received from such reletting; or
- C. Declare this Agreement to be terminated, ended and null and void, and re-enter upon and take possession of the Demised Premises whereupon all right and interest of Company in the Demised Premises shall end; or
- D. Treat the Agreement as remaining in existence, curing Company's default by performing or paying the obligation which Company has breached, and all sums paid or expenses incurred by Authority directly or indirectly in curing Company's default shall become immediately due and payable and shall bear interest at the highest rate permitted by law from the date of disbursement by Authority until paid by Company. If the breach consists of a failure to pay

rent as stipulated in this Agreement and Authority elects to treat the Agreement as remaining in existence, Authority can take such action as is necessary to recover the rent due as each installment matures; or

E. Any and all other remedies available by law.

### 13.3 Continuing Responsibilities of Company

Notwithstanding the occurrence of any event of default, Company shall remain liable to Authority for all rentals, fees, and charges payable hereunder and for all preceding breaches of any covenant of this Agreement. No re-entry or retaking possession of the Demised Premises by the Authority shall be construed as an election on its part to terminate this Agreement, unless a written notice of such intention be given to Company, nor shall pursuit of any remedy herein provided constitute a forfeiture or waiver of any rental payments or other moneys due to the Authority hereunder, or of any damages accruing to the Authority by reason of the violations of any of the terms, provisions, and covenants herein contained. The Authority's acceptance of rental payment or other moneys following any event of default hereunder shall not be construed as the Authority's waiver of such event of default. No forbearance by the Authority of action upon any violation or breach of any of the terms, provisions and covenants herein contained shall be deemed or construed to constitute a waiver of the terms, provisions and covenants herein contained. Forbearance by the Authority to enforce one or more of the remedies herein provided upon an event of default shall not be deemed or construed to constitute a waiver of any such remedy. It is agreed by the Parties that losses or damages that the Authority may suffer by reason of termination of this Agreement, or the deficiency from any reletting as provided for above, shall include the expense of repossession or reletting, any unpaid amounts for construction of improvements, and any repairs or remodeling undertaken by the Authority following repossession.

#### 13.4 <u>Time of the Essence</u>

Time is of the essence of this Agreement; therefore, if Company shall fail to perform the covenants or conditions at the time fixed for performance, Authority may declare Company to be in default of such Agreement.

#### 13.5 <u>Company's Remedies</u>

A. Company may terminate this Agreement and all of its obligations hereunder, with the exception of its obligations set forth in Section 24.2, at any time that Company is not in default in the payment of any rents, fees or charges to Authority, by first giving to Authority thirty (30) days' written notice upon the happening of any of the events of default by Authority.

B. In the event of a material breach by Authority in the performance of any of the covenants or agreements herein contained, and the failure of the Authority to remedy such breach for a period of thirty (30) days after receipt from Company of written notice to remedy same, the Authority shall have the burden of proof to demonstrate (i) that it is proceeding with diligence to cure said default, or (ii) that the default cannot be cured within thirty (30) days, and/or (iii), that such default will/will not be cured within a reasonable period of time. Company, at its option shall have the right to perform or expend any reasonable amount required to cure such breach, upon Company first giving written notice to Authority of its intent to do so.

### 13.6 Joint and Several Liabilities of Company and Fuel Committee Members

Company and other Fuel Committee members shall be jointly and severally obligated and liable to Authority for the performance of and with respect to each and every promise, term, condition, covenant and obligation of this Agreement, and Authority may, at its option, treat the applicable breach of any term, condition, covenant, promise or other provision of this Agreement by any Fuel Committee member as a breach by any or all Fuel Committee members. Authority agrees to use reasonable efforts to make collection against jointly and severally liable parties currently under breach.

- A. If any one or more of the following shall occur, then upon the occurrence of any such event or at any time thereafter during the continuance thereof, Authority may, at its option, immediately and without prior notice terminate the lettings, licenses and other rights of a Fuel Committee member hereunder:
  - (1) A Fuel Committee member shall become insolvent (as such term is defined in Section 101 of the Bankruptcy Code); or take the benefit of any present or future insolvency statute; or make a general assignment for the benefit of creditors; or file a voluntary petition in bankruptcy or a petition or answer seeking an arrangement of its organization or the readjustment of its indebtedness under the Bankruptcy Code or under any other law or statute of the United States or of any state thereof; or consent to the appointment of a receiver, trustee or liquidator of all or substantially all of its property.
  - (2) By order or decree of a court, a Fuel Committee member shall be adjudged a debtor or bankrupt or an order shall be made approving a petition filed by any of its creditors or by any of its stockholders, seeking its reorganization or the readjustment of its indebtedness under the Bankruptcy Code or under law or statute of the United States or any state thereof.

- (3) A petition under any part of the Bankruptcy code or an action under any present or future insolvency law or statute shall be filed against a Fuel Committee member and shall not be dismissed within thirty (30) consecutive days after the filing thereof.
- (4) By or pursuant to, or under authority of any legislative act, resolution or rule, or any order or decree of any court or governmental board, agency or officer, a receiver, trustee or liquidator shall take possession or control of all or substantially all of the property of a Fuel Committee member and such possession or control shall continue in effect for a period of fifteen (15) consecutive days.
- (5) A Fuel Committee member shall become a corporation in dissolution.
- (6) The letting, license, or other interest of or rights of a Fuel Committee member hereunder shall be transferred, to pass to, or devolved upon, by operation of law or otherwise, any other person, or firm, corporation or other entity, by, in connection with or as a result of any bankruptcy, insolvency, trusteeship, liquidation or other proceedings or occurrence described in Section 13.6(A)(1) through 13.6(A)(5) above.
- (7) A Fuel Committee member shall voluntarily discontinue its operations at the Airport for a period of ninety (90) consecutive days or, after exhausting or abandoning any further appeals, a Fuel Committee member shall be prevented for a period of thirty (30) consecutive days by action of any governmental agency from conducting its operations on the Demised Premises regardless of the fault of Fuel Committee member.
- B. If a Fuel Committee member shall merge or consolidate with or into another corporation, such merger or consolidation shall not be grounds for termination of such Fuel Committee member's rights hereunder if the successor corporation acknowledges in writing to the Authority's Chief Executive Officer that it has assumed all the obligations of such Fuel Committee member under this Agreement. If the successor corporation fails upon written request, to acknowledge in writing that is has assumed all obligations of the Fuel Committee member hereunder, Authority may, at its option, terminate the letting, license, and other rights of such Fuel Committee member hereunder.
- C. If the tenancy and rights thereunder of Company or any Fuel Committee member are terminated by Authority pursuant to this Article 13, the remaining Fuel Committee members shall remain tenants in common on the Demised Premises, and their joint and several liability

for the performance of all obligations to Authority pursuant to this Agreement shall not be limited or diminished by the termination of any rights of any other Fuel Committee member.

#### **ARTICLE 14**

### CONSTRUCTION LIEN

The Authority's interest in the Demised Premises shall not be subjected to any construction, mechanics, materialman's, tax, laborer's or any other lien, whether the Authority has given its written approval for the improvements or otherwise, and Company shall save and hold harmless the Authority and its interest in the Demised Premises from any such lien or purported lien, including costs and attorney's fees. Within fifteen (15) days of filing of any lien, Company shall cause same to be satisfied or shall post bond for the lien.

# ARTICLE 15

# <u>UTILITIES</u>

Company shall make all provisions it deems necessary for connection to necessary utilities and shall pay the full cost and expense for installation and use of all said utilities. All such utilities shall be segregated by a separately metered account in Company's name and the Authority shall not be responsible for payment of any utility service used by Company.

# ARTICLE 16

# **INGRESS AND EGRESS**

#### 16.1 Use of Public Way

The Company, its contractors, suppliers of material and furnishers of services, shall have the right of ingress to and egress from the Demised Premises via appropriate public way to be used in common with others having rights of passage within the Demised Premises, provided that the Authority may, at its expense, from time to time, substitute other means of ingress and egress so long as an alternate adequate means of ingress and egress is available.

#### 16.2 Road Closures

The Authority may at any time temporarily or permanently close or consent to or request the closing of any such roadway, and any other area at the Demised Premises presently or hereafter used as such, so long as a means of ingress and egress reasonably equivalent to that provided in 16.1 above is concurrently made available to Company. Company hereby releases and discharges the Authority, its successors and assigns, of and from any and all claims, demands or causes of action which Company may now or at any time hereafter have against any of the foregoing arising or alleged to arise out of the closing of any street, roadway, or other areas used as such, whether within or outside

the Demised Premises, provided that Authority make available to Company a means of ingress and egress reasonably equivalent to that provided in 16.1 above.

# ARTICLE 17 TAXES, PERMITS, LICENSES

In accordance with Company's obligations set forth in Article 7, Company shall pay all applicable sales, use, tangible, intangible and ad valorem taxes of any kind, against the Demised Premises, including the real property and any improvements thereto or leasehold estate created herein, or which result from Company's occupancy or use of the Demised Premises whether levied against Company or Authority. Company shall bear, at its own expense, all costs of operating its equipment and business including any and all taxes assessed against the operation of the business and any sales, use or similar taxes levied or assessed on any payments made by Company hereunder. Company shall bear all cost of obtaining any permits, licenses, or other authorizations required by authority of law in connection with the operation of its business at the Airport, and copies of all such permits, certificates and licenses shall be forwarded to the Authority.

# ARTICLE 18

### **INDEMNIFICATION**

Company agrees to protect, defend, reimburse, indemnify and hold Authority, its agents, employees, contractors or board members and each of them, free and harmless at all times, except to the extent caused by the negligence of the agents, employees, contractors, officers or board members of the Authority, from and against any and all claims, liability, expenses, losses, costs, fines and damages (including actually incurred reasonable attorney's fees) and causes of action of every kind and character, whether or not meritorious, against or from Authority by reason of any damage to property (or the environment, including any contamination of Airport property such as the soil, ground water or storm water by fuel, gas, chemicals or other substances deemed by the Environmental Protection Agency (EPA) to be environmental contaminants at the time this Agreement is executed or as may be redefined by the appropriate regulatory agencies in the future), or bodily injury (including death) incurred or sustained by any party hereto, any agent or employee of any party hereto, and any third or other party whomsoever, or any governmental agency, arising out of or incident to or in connection with Company's performance under this Agreement, Company's use or occupancy of the Demised Premises, Company's negligent acts, omissions or operations hereunder or the performance, non-performance or purported performance of Company or any breach of the terms of this Agreement by Company. Provided, however, that upon the filing by anyone of a claim with the Authority for damages arising out of incidents for which Company herein agrees to indemnify and hold the Authority harmless, the Authority shall promptly notify Company of such claim and, in the event that Company does not settle or compromise such claim, then Company shall undertake the legal defense of such claim both on behalf of Company and on behalf of the Authority. It is specifically agreed, however, that the Authority, at its option and at its own expense, may participate in the legal defense of such claim. Any final judgment rendered against the Authority for any cause for which Company is liable hereunder shall be conclusive against Company as to liability and amount upon the expiration of the time for appeal therefrom. Company recognizes the broad nature of this indemnification and hold harmless clause, and voluntarily makes this covenant and expressly acknowledges the receipt of Ten Dollars (\$10.00) and such other good and valuable consideration provided by Authority in support of this indemnification in accordance with laws of the State of Florida. This clause shall survive the termination of this Agreement for any reason as to claims arising during the Term thereof. Compliance with the insurance requirements of Article 19 shall not relieve Company of its liability or obligation to indemnify Authority as set forth in Article 19.

# ARTICLE 19 INSURANCE

#### 19.1 Insurance Terms and Conditions

The Company must maintain (or cause to be maintained) the following limits and coverages uninterrupted or amended through the term of this Agreement. In the event the Company becomes in default of the following requirements, the Authority reserves the right to take whatever actions deemed necessary to protect its interests. Required liability policies other than Workers' Compensation/Employer's Liability, will provide that the Authority, members of the Authority's governing body, and the Authority's officers, agents, volunteers, and employees are included as additional insureds.

#### 19.2 Limits and Requirements

#### A. <u>Workers' Compensation/Employer's Liability</u>

The minimum limits of insurance (inclusive of any amount provided by an umbrella or excess policy) are:

Part One:	"Statutory"
Part Two:	
Each Accident	\$1,000,000
Disease – Policy Limit	\$1,000,000
Disease – Each Employee	\$1,000,000

#### B. <u>Commercial General Liability</u>

The minimum limits of insurance (inclusive of any amounts provided by an umbrella or excess policy) covering the work performed pursuant to this Agreement will be the amounts specified herein. Coverage will be provided for liability resulting out of, or in connection with,

ongoing operations performed by, or on behalf of, the Company under this Agreement or the use or occupancy of the Demised Premises by, or on behalf of, the Company in connection with this Agreement. Coverage will be provided on a form no more restrictive than ISO Form CG 00 01. Additional insurance coverage will be provided on a form no more restrictive than ISO Form CG 20 11 01 96 and CG 20 37 10 01. The Commercial General Liability coverage may be satisfied using an Aviation Liability policy.

#### Agreement Specific

General Aggregate	\$250,000,000
Each Occurrence	\$250,000,000
Personal and Advertising Injury	
Each Occurrence	\$250,000,000
Products and Completed Operations	
Aggregate	\$250,000,000

# C. Business Auto Liability

Coverage will be provided for all owned, hired and non-owned vehicles. Coverage will be no more restrictive than Form CA 00 01. The minimum limits of insurance (inclusive of any amounts provided by an umbrella or excess policy) covering the work performed pursuant to this Agreement will be:

Each Occurrence – Bodily Injury andProperty Damage Combined\$10,000,000

# D. <u>Property Insurance for the Fuel Facilities</u>

Authority will maintain such insurance at all times. Said policy will insure all improvements now or hereafter located on the Demised Premises in an amount equal to the Replacement Cost Value of such improvements. The Company agrees to reimburse the Authority for the amount of any deductible applicable to any loss covered by the Authority's Property Insurance and sustained against the improvements located on the Demised Premises. However, such obligation to reimburse Authority for deductibles under Authority's Property Insurance shall not exceed \$250,000.00 in any one loss or occurrence.

#### E. <u>Environmental Insurance (Pollution)</u>

Such insurance will be maintained by the Company, or caused by the Company to be maintained by the Agent, on a form acceptable to Authority for liability resulting from pollution

or other environmental impairment, which arises out of, or in connection with, work under this Agreement. The Company will provide and maintain environmental coverage from the inception of the Agreement. If on an occurrence basis, the insurance must be maintained throughout the duration of the Agreement. If on a claims-made basis, insurance must respond to claims reported within three (3) years of the end of this Agreement. If the Company is unable to produce a Policy acceptable to Authority, Authority may purchase and provide such coverage, with the premium to be paid by the Company on a monthly basis as part of the Company's rents and fees, with no responsibility for Authority as to the financial responsibility of the insurance company used or the coverages provided. The limits of coverage will be:

Each Occurrence	\$5,000,000
Policy Aggregate	\$10,000,000

#### F. <u>Personal Property Insurance - Contents</u>

The Company is responsible for insuring its own personal property, including any contents, improvements, or betterments. The Authority reserves the right to obtain copies of all insurance policies that may serve as a source of recovery for damages.

### 19.3 <u>Waiver of Subrogation</u>

Company, for itself and on behalf of its insurers, to the fullest extent permitted by law without voiding the insurance required hereunder, waives all rights against Authority and members of Authority's governing body, Authority's officers, agents, volunteers and employees, for damages or loss to the extent covered by any insurance maintained by Company. The Authority, for itself and on behalf of its insurers providing the insurance required under this Agreement, to the fullest extent permitted by law without voiding the insurance required hereunder, waives all rights against the Company and the Company's officers, agents, volunteers and employees, for damages or loss to the extent covered by any insurance maintained by the Authority hereunder.

#### 19.4 Conditions of Acceptance

The insurance maintained by the Company throughout the term of this Agreement must conform at all times with Exhibit F, Standard Procedure S250.06, Contractual Insurance Terms and Conditions, in effect at the time of this Agreement, as may be amended from time to time.

# ARTICLE 20 DAMAGE OR DESTRUCTION

#### 20.1 Partial Damage

If any part of Demised Premises, or adjacent facilities directly and substantially affecting the use of Demised Premises, shall be partially damaged by fire or other casualty, without regard to fault, and said circumstances do not render Demised Premises untenantable as reasonably determined by Authority, the same shall be repaired to usable condition with due diligence by Authority as hereinafter provided. No abatement of rentals shall accrue to Company so long as Demised Premises remain tenantable. Notwithstanding anything to the contrary, the Authority shall be responsible for any costs of repairs that exceed the amount of any insurance proceeds payable to Authority by reason of any such damage or destruction.

#### 20.2 <u>Substantial Damage</u>

If any part of Demised Premises, or adjacent facilities directly and substantially affecting the use of Demised Premises, shall be so extensively damaged by fire or other casualty as to render any portion of said Demised Premises untenantable but capable of being repaired, as reasonably determined by Authority, the same shall be repaired to usable condition with due diligence by Authority as hereinafter provided. Without limiting the rights of the Authority pursuant to 20.4 herein, if such repairs have not been commenced by Authority within 90 days of such damage, Company shall have the option to terminate its agreement related to those facilities so damaged. In such case, the rentals payable hereunder with respect to the affected Demised Premises shall be paid up to the time of such damage and shall thereafter be abated equitably in proportion as the part of the area rendered untenantable bears to total Demised Premises until such time as such affected Demised Premises shall be restored adequately for Company's use. Notwithstanding anything to the contrary, the Authority shall be responsible for any costs of repairs that exceed the amount of any insurance proceeds payable to Authority by reason of any such damage or destruction.

#### 20.3 Destruction

- A. If any part of Demised Premises, or adjacent facilities directly and substantially affecting the use of Demised Premises, shall be damaged by fire or other casualty, and is so extensively damaged as to render any portion of said Demised Premises not economically feasible to repair, as reasonably determined by Authority, Authority shall notify Company within a period of forty-five (45) days after the date of such damage of its decision whether to reconstruct or replace said space; provided, however, Authority shall be under no obligation to replace or reconstruct such premises. The rentals payable hereunder with respect to affected Demised Premises shall be paid up to the time of such damage and thereafter shall abate until such time as replacement or reconstructed space becomes available for use by Company.
- B. In the event Authority elects to reconstruct or replace affected Demised Premises, Authority shall use its best efforts to provide Company with alternate facilities reasonably acceptable to Company to continue its operation while reconstruction or replacement is being completed at a rental rate not to exceed that provided for in this Agreement for comparable space.
- C. In the event Authority elects to not reconstruct or replace affected Demised Premises, the agreement for the affected premises shall be terminated and Authority shall meet and consult with Company on ways and means to provide Company with adequate replacement space for affected Demised Premises. In such event, Authority agrees to amend this Agreement to reflect related additions and deletions to Demised Premises.

D. Notwithstanding anything to the contrary, the Authority shall be responsible for any costs of repairs that exceed the amount of any insurance proceeds payable to Authority by reason of any such damage or destruction.

#### 20.4 Damage Caused by Company

In the event that due to the negligence or willful act or omission of Company, its employees, its agents, or licensees, the Demised Premises shall be damaged or destroyed by fire, other casualty or otherwise, there shall be no abatement of rents during the repair or replacement of said Demised Premises. Notwithstanding anything to the contrary, the Company shall be responsible for any costs of repairs that exceed the amount of any insurance proceeds payable to Authority by reason of any such damage or destruction.

#### 20.5 <u>Authority's Responsibilities</u>

Authority's obligations to repair, reconstruct, or replace affected premises under the provisions of this Article shall in any event be limited to restoring affected Demised Premises to substantially the same condition that existed at the date of damage or destruction, provided that Authority shall in no way be responsible for the restoration or replacement of any equipment, furnishings, property, real improvements, signs, or other items owned by Company.

#### ARTICLE 21

#### COMPLIANCE WITH AIRPORT SECURITY RULES

Company, its officers, employees, agents, and those under its control, shall comply with security measures required of Company or Authority by the FAA or contained in any Airport master security plan approved by the FAA to include an Airport Tenant Security Program as outlined in FAR Part 107 respective to Company's Exclusive Use Premises. If Company, its officers, employees, agent, or those under its control shall fail or refuse to comply with said measures and such non-compliance results in a monetary penalty being assessed against Authority, then, in addition to the provisions of Article 13, Company shall be responsible and shall reimburse Authority in the full amount of any such monetary penalty and other damages.

# ARTICLE 22 ENVIRONMENTAL PROVISIONS

#### 22.1 Environmental Representations

Notwithstanding any other provisions of this Agreement, and in addition to any and all other Agreement requirements, and any other covenants and warranties of Company, Company hereby expressly warrants, guarantees, and represents to the Authority, upon which the Authority expressly

relies that Company is knowledgeable of any and all federal, State, regional and local governmental laws, ordinances, regulations, orders and rules, without limitation which govern or which in any way apply to the direct or indirect results and impacts to the environmental and natural resources due to, or in any way resulting from, the conduct by Company of its operations pursuant to or upon the Demised Premises. Company agrees to keep informed of future changes in environmental laws, regulations and ordinances;

Company agrees to comply with all applicable federal, state, regional and local laws, regulations and ordinances protecting the environmental and natural resources and all rules and regulations promulgated or adopted as some may from time to time be amended and accepts full responsibility and liability for such compliance;

Company shall, prior to commencement of any such operations pursuant to this Agreement, secure any and all permits, and properly make all necessary notifications as may be required by any and all governmental agencies having jurisdiction over parties or the subject matter hereof;

Company shall maintain and provide upon request by Authority satisfactory documentary evidence of all such requisite legal permits and notifications as hereinabove required.

Company agrees to cooperate with any investigation, audit or inquiry by the Authority or any governmental agency regarding possible violation of any environmental law or regulation. The Authority is to be notified immediately of any investigation, audit or inquiry by any governmental agency regarding possible violation of any environmental law or regulation.

# 22.2 Generator of Hazardous Waste

If Company is deemed to be a generator of hazardous waste, as defined by federal, state or local law, Company shall obtain a generator identification number from the U.S. Environmental Protection Agency ("EPA") and the appropriate generator permit and shall comply with all federal, state and local laws, and any rules and regulations promulgated thereunder, including but not limited to, insuring that the transportation, storage, handling and disposal of such hazardous wastes are conducted in full compliance with applicable law.

#### 22.3 Hazardous Materials Inventory List

Provisions shall be made by Company to have an accurate hazardous materials inventory list (including quantities) of all such hazardous materials, including, but not limited to, any oil, petroleum product and any hazardous or toxic waste or substance, or any substance which because of its quantitative concentration, chemical, radioactive, flammable, explosive, infectious or other characteristics, constitutes a danger or hazard to the environment or to the public health, safety or

welfare whether stored, disposed of or recycled on the Demised Premises. The Authority shall have the right to inspect the Demised Premises at any time to verify compliance with environmental laws and Company agrees to provide said inventory list for inspection upon request by the Authority officials, Fire Department Officials or other regulatory personnel having jurisdiction over the implementation of proper storage, handling and disposal procedures on the Demised Premises.

#### 22.4 Handling of Hazardous Material

Company shall ensure that its employees, agent, contractors, and all persons working for, or on behalf of Company, have been fully and properly trained in the handling and storage of all applicable hazardous and toxic waste materials and other pollutants and contaminants including materials on Company's hazardous material inventory list; and such training complies with any and all applicable federal, state and local laws, ordinances, regulations, rulings, orders and standards which are now or are hereinafter promulgated.

#### 22.5 Emergency Response Coordinator

Company agrees to provide to Authority and to such State and county officials as required by federal, State, regional or local regulations, the name and phone number of Company's twenty-four (24) hour emergency response coordinator in case of any spill, leak or other emergency situation involving hazardous, toxic, flammable and/or other pollutant/contaminated materials.

#### 22.6 Notification and Copies

Company agrees to provide the Authority with copies of all permit application materials, permits, monitoring reports, environmental audits, contamination assessments, environmental response plan and regulated materials storage and disposal plans, final manifest and material safety data sheets documentation within ten (10) days of their submittal to all regulatory agencies having jurisdiction over such matters.

# 22.7 Violation

A. If Authority receives a notice from any person or entity asserting a violation by Company of Company's covenants and agreements contained herein, or if Authority otherwise has reasonable grounds upon which to believe that such a violation has occurred, Authority shall have the right, but not the obligation, to contract, at Company's sole cost and expense, for the services of persons ("Site Reviewers") to enter the Demised Premises and perform environmental site assessments for the purpose of determining whether there exists any environmental condition that could result in any liability, cost or expense to Authority. The Site Reviewers shall perform such tests on the Demised Premises as may be necessary, in the opinion of the Site Reviewers to conduct a prudent environmental site assessment. Company shall supply such information as is requested by the Site Reviewers.

B. If Company receives a Notice of Violation or similar enforcement action or notice of noncompliance, Company shall provide a copy of same to the Authority within two (2) business days of receipt by the Company or Company. Company will provide to Authority within ten (10) days following the date of said Notice of Violation, Company's written response/plan to comply with the recommended action cited in the Notice of Violation. Any remediation method proposed by Company shall be in compliance with all applicable federal, state and local environmental regulations. In addition, the Demised Premises should be remediated to a cleanup level compatible with any of the Airport's development programs and Master Plan as well as the construction activities and methods associated with the implementation of these programs and the Master Plan.

Failure by Company to commence with the recommended course of action within a reasonable course of time shall be deemed to be a condition of default under this Agreement and, if not cured within ten (10) days of receipt of notice from the Authority, shall be grounds for termination of this Agreement, and shall also provide the Authority grounds for taking whatever other action it may have in addition to termination based upon default as provided for under this Agreement.

#### ARTICLE 23

#### FEDERAL STATE AND LOCAL STORM WATER REGULATIONS

Notwithstanding any other provisions or terms of this Agreement, Company acknowledges that the demised Premises are subject to stormwater rules and regulations. Company agrees to observe and abide by such stormwater rules and regulations as may be applicable to Authority's property and uses thereof.

Company acknowledges that any stormwater discharge permit issued to the Authority may name Company as a co-permitee. Authority and Company both acknowledge that close cooperation is necessary to insure compliance with any stormwater discharge permit terms and conditions, Company agrees to comply with applicable stormwater discharge permit requirements including but not limited to the SWPPP, as it may be amended from time to time. Company shall implement best management practices to minimize the exposure of stormwater to "significant materials" generated, stored, handled or otherwise used by Company, and to reduce or eliminate pollution, including the prevention of hazardous materials from entering stormwater runoff conveyances.

## ARTICLE 24 ENVIRONMENTAL INSPECTION

#### 24.1 <u>Environmental Conditions at Commencement of Agreement</u>

Company acknowledges that it has been given the opportunity to review the findings of several environmental Assessment Reports of the Demised Premises as listed in Exhibit "D", which is incorporated herein by reference, wherein a determination has been made of the presence of contamination as defined by applicable federal or state laws and regulations, including, but not limited to, petroleum substances, and asbestos existing on the Premises, whether any said substances have been generated, released, stored or deposited over, or presently exist beneath or on the Demised Premises from any source.

Company shall be responsible for any contamination and remediation of existing contamination preliminarily defined by the Environmental Assessment reports of the Demised Premises, as listed in Exhibit D. Existing contamination is defined as current and past contamination that has occurred during the life of the previous lease whether or not such contamination has been fully identified in the attached Exhibit D. Company will not be held liable for contamination that predates the use or operations on the Demised Premises as fuel farm or pipeline and hydrant system under the terms and conditions of the Lease and Pipe Line License Agreements entered into with Delta, Air Canada, Eastern, Northwest, and National in the early 1970's.

Within on hundred and eighty (180) days of the effective date of the Agreement, Company shall have the right, but not the obligation to perform additional site assessment activities of the Demised Premises to further define contamination areas. Authority has the right to review the site assessment Work Plan and Environmental Baseline Report. Authority shall complete its review of the Work Plan or Environmental Assessment Report within thirty (30) days of submittal to Authority by Company. Authority approved Environmental Baseline Report will be incorporated into Exhibit D of the Agreement.

Company understands and agrees to comply fully with all applicable environmental regulations (including those associated with risk-based cleanup) requiring the cleanup of contamination including but not limited to, payment of any costs associated with the assessment and clean-up of contamination and the costs associated with the construction of any improvements to the Fuel Facilities needed to comply with all applicable environmental regulations and any upgrades and improvements as may be needed in order to comply with future regulations which may be imposed according to the provisions set forth in Article 24 hereof.

#### 24.2 <u>Environmental Inspection at End of Agreement Term or Early Termination</u>

At least thirty (30) days, but no more than ninety (90) days, before the expiration of the term, or early termination under the provisions of Section 13.5A, Company shall, at its sole cost, provide to the Authority an environmental inspection report which would include the results of a Phase II environmental audit, if required, including such testing as Authority's Engineer deems necessary to adequately evaluate the Demised Premises.

In the event the Demised Premises is damaged in any manner by Company or Company's in the accomplishment of such tests, Company agrees to take immediate action to restore the Demised Premises to its prior existing condition.

In the event that the environmental inspection report indicates the presence of hazardous substances or hazardous waste, Company shall immediately take such action as is necessary to clean up and remediate same, at its own expense in accordance with applicable federal, state, and local law. The remediation must continue until the applicable governmental authorities have determined that no further action is necessary to bring the Demised Premises into compliance with governmental guidelines. Support documentation from the permitting or regulatory agency must be provided to the Authority. Notwithstanding the provisions herein contained, if Company fails to remediate, pursuant to the requirements of applicable federal, state and local environmental laws, ordinances, rules and regulations, any environmental condition that could result in any liability, cost or expense to Authority, Authority shall have the right, but not the obligation, to enter onto the Demised Premises and take such actions as Authority deems necessary to perform such remediation; and all costs and expenses paid or incurred by Authority in the exercise of such right including without limitation, attorneys' and legal assistants' fees and costs incurred prior to trial, at trial, on any appeal and in any bankruptcy proceeding, shall be deemed additional rental and shall be paid by Company to Authority, on demand, and Authority shall have all rights and remedies with respect to such additional rental as are provided herein for nonpayment of the rents and fees hereunder.

The firm(s) conducting the site inspection or the site cleanup work must be qualified and approved by the Authority in accordance with the Authority's Tenant Work Permit Program, and the methodology used by such firm shall be consistent with the then current engineering practices and methods required by the State of Florida or the United States government and be acceptable to the Authority.

At Authority's request, Company shall be required to remove from the Demised Premises at the conclusion of the Term herein, any above or underground storage tanks, or any underground installation of any nature installed or maintained by Company. Company understands and agrees

that it is strictly liable for any environmental violation or harm, or any contamination to the soil or the water table under the Demised Premises occurring during the term. Said liability shall extend beyond the Term of the Agreement until the Demises Premises are retested and determined to be in a condition equal to or better than that defined in Exhibit D documents.

#### 24.3 <u>Conflict Resolution</u>

If Authority and Company disagree with the findings of any environmental inspection or required remediation, Authority and Company agree to attempt to resolve the disagreement through informal good faith negotiations.

Notwithstanding such informal good faith negotiations, the Authority may, at its own cost, conduct an environmental audit by a qualified engineer, and if the results are not compatible with the results of Company's audit, Company's engineer and Authority's environmental engineer shall confer and make efforts to reconcile their differences. In the event the environmental engineers cannot reconcile their differences, the Authority, as property owner, shall determine which audit shall govern.

#### ARTICLE 25

#### STORAGE TANKS

Company shall not be permitted to install or close underground storage tanks of any kind without the advance written approval of the Authority. At Authority's request, at the conclusion of the Term, Company shall be required to remove from the Demised Premises any underground installation of any nature installed by Company. Company understands and agrees that it is strictly liable for any environmental violation or harm, or any contamination to the soil or the water table under the Demised Premises occurring during the Term.

## ARTICLE 26 AMERICANS WITH DISABILITIES ACT

Company will comply with the applicable requirements of the Americans with Disabilities Act; the Florida Americans with Disabilities Accessibility Implementation Act; Florida Building Code, Florida Accessibility Code for Building Construction; and any similar or successor laws, ordinances, rules, standards, codes, guidelines, and regulations and will cooperate with Authority concerning the same subject matter.

## ARTICLE 27 AFFIRMATIVE ACTION

The Company assures that it will undertake an affirmative action program as required by 14 CFR Part 152, Subpart E, to ensure that no person shall on the ground of race, creed, color, national origin, or sex be excluded from participating in any employment activities covered in 14 CFR Part 152, Subpart E. The Company assures that no person shall be excluded on these grounds from participating in or receiving the services or benefits of any program or activity covered by this subpart. The Company assures that it will require that its covered suborganizations provide assurances to the Company that they similarly will undertake affirmative action programs and that they will require assurances from their suborganizations, as required by 14 CFR Part 152, Subpart E, to the same effect.

#### **ARTICLE 28**

#### **NON-DISCRIMINATION**

These provisions apply to all work performed under this Agreement. Failure to comply with the terms of these provisions may be sufficient grounds to:

- A. Terminate this Agreement;
- B. Seek suspension/debarment of Company; or
- C. Take any other action determined to be appropriate by Authority or the FAA.

#### 28.1 Civil Rights – General – 49 USC § 47123

#### A. Compliance:

Company agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability, be excluded from participating in any activity conducted with or benefitting from Federal assistance. If Company transfers its obligation to another, the transferee is obligated in the same manner as Company.

### B. Duration:

This provision obligates the Company for the period during which the property is owned, used or possessed by the Company and the Airport remains obligated to the FAA. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

#### 28.2 <u>Civil Rights – Title VI Assurances</u>

A. Compliance with Non-Discrimination Requirements:

During the performance of this Agreement, Company, for itself, its assignees, successors in interest, subcontractors and consultants agrees as follows:

- Compliance with Regulations: Company will comply with the Title VI List of Pertinent Non-Discrimination Statutes and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this Agreement.
- 2. Non-Discrimination: Company, with regard to the work performed by it during this Agreement, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. Company will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including but not limited to those listed at Section 28.2(B) below, including employment practices when this Agreement covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.
- 3. Solicitations for Subcontracts, Including Procurements of Materials and Equipment: In all solicitations, either by competitive bidding, or negotiation made by Company for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier will be notified by Company of Company's obligations under this Agreement and the Acts and the Regulations relative to non-discrimination on the grounds of race, color, or national origin.
- 4. Information and Reports: Company will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by Authority or the FAA to be pertinent to ascertain compliance with such Acts, Regulations, and directives. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, Company will so certify to Authority or the FAA, as appropriate, and will set forth what efforts it has made to obtain the information.
- 5. Sanctions for Non-compliance: In the event of Company's non-compliance with the non-discrimination provisions of this Agreement, Authority will impose such Agreement sanctions as it or the FAA may determine to be appropriate, including, but not limited to, cancelling, terminating, or suspending this Agreement, in whole or in part.
- 6. Incorporation of Provisions: Company will include the provisions of paragraphs one through five of this Article in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives

issued pursuant thereto. Company will take action with respect to any subcontract or procurement as Authority or the FAA may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided, that if Company becomes involved in, or is threatened with litigation by a subcontractor or supplier because of such direction, Company may request Authority to enter into any litigation to protect the interests of Authority. In addition, Company may request the United States to enter into the litigation to protect the interests of the United States.

B. Title VI List of Pertinent Non-Discrimination Authorities:

During the performance of this Agreement, Company, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR Part 21 (Non-discrimination In Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42 U.S.C. § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- 4. Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- 5. The Age Discrimination Act of 1975, as amended (42 U.S.C. § 6101 et seq.) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- 7. The Civil Rights Restoration Act of 1987 (PL 100-209) (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the

programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);

- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 12189) as implemented by Department of Transportation regulations at 49 CFR Parts 37 and 38;
- 9. The FAA's Non-Discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- 10. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations);
- 11. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, Company must take reasonable steps to ensure that LEP persons have meaningful access to Company's programs (70 Fed. Reg. at 74087 to 74100); and
- Title IX of the Education Amendments of 1972, as amended, which prohibits Company from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

The Company agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance. If the Company transfers its obligation to another, the transferee is obligated in the same manner as the Company.

This provision obligates the Company for the period during which the property is owned, used or possessed by the Company and the Airport remains obligated to the FAA. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

## ARTICLE 29 DISADVANTAGED BUSINESS ENTERPIRSE

Company shall comply with the Authority's approved Disadvantaged Business Enterprise (DBE) program submitted in compliance with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Office of the Secretary, Part 26, Participation by DBE programs of the Department of Transportation-Effectuation of Title VI of the Civil Rights Act of 1964 and as said regulations may be amended. Further provided, that no person shall be excluded from participation in, denied the benefits of or otherwise discriminated against in connection with the award and performance of any contract, including Agreements, covered by 49 CFR Part 26 on the grounds of race, color, national origin or sex.

#### ARTICLE 30

## **RIGHTS RESERVED TO THE AUTHORITY**

Rights not specifically granted to the Company by this Agreement are expressly and independently reserved to the Authority, including but not limited to the right to develop or improve the Airport as it sees fit regardless of the desires or views of Company and without interference or hindrance on the part of Company. The Authority expressly reserve(s) the right to prevent any use of the Demised Premises which would interfere with or adversely affect the operation or maintenance of the Airport, or otherwise constitute an Airport hazard.

#### ARTICLE 31

### RIGHT OF ENTRY

The Authority, through its Airport Chief Executive Officer, shall have the right to request from Company and to be provided entry to the Demised Premises assigned herein to Company for the purposes and to the extent necessary to protect the Authority's rights and interest, to provide for periodic inspection of said Demised Premises from the standpoint of safety and health, provided such inspection does not unreasonably interfere with Company's business operations, and to check Company's compliance with the terms of this Agreement.

## ARTICLE 32 RIGHT OF FLIGHT

It shall be a condition of this Agreement that the Authority reserves unto itself, its successors and assigns, for the use and benefit of the public, a right of flight for the passage of aircraft in the airspace above the surface of the real property owned by the Authority, together with the right to cause in said airspace, such noise as may be inherent in the operation of aircraft, now known or hereafter used, for navigation of or flight in the said airspace, and for use of said airspace for landing on, taking off from or operating on the Airport.

Company further expressly agrees tor itself, its successors and assigns to restrict the height of structures, objects of natural growth and other obstruction on Demised Premises to such a height so as to comply with Federal Aviation Regulation, Part 77.

## ARTICLE 33

## PROPERTY RIGHTS RESERVED

This Agreement shall be subject and subordinate to all the terms and conditions of any instruments and documents under which the Authority acquired the land or improvements thereon, of which said Demised Premises are a part, and shall be given only such effect as will not conflict with nor be inconsistent with such terms and conditions. Company understands and agrees that this Agreement shall be subordinate to the provisions of any existing or future agreement between Authority and the United States of America, or any of its agencies, relative to the operation or maintenance of the Airport, the execution of which has been or may be required as a condition precedent to the expenditure of federal funds for the development of the Airport, and to any terms or conditions imposed upon the Airport by any other governmental entity.

## ARTICLE 34 <u>SIGNS</u>

#### 34.1 <u>Written Approval</u>

Except with prior written approval of the Authority, which may be withheld at the Authority's sole discretion, Company shall not erect, maintain or display any signs or any advertising at or on the exterior parts of the Demised Premises or in any way so as to be visible from outside the Demised Premises.

#### 34.2 <u>Removal</u>

Upon the expiration or termination of the Agreement, the Company shall remove, obliterate or paint out, as the Authority may direct, at its sole discretion, any and all signs and advertising on the Demised Premises and, in connection therewith, shall restore the portion of the Demised Premises affected by such signs or advertising to the same conditions as existed prior to the placement of such signs or advertising.

## ARTICLE 35 QUIET ENJOYMENT

Authority agrees that on performance of the covenants and agreements on the part of Company to be performed hereunder, Company shall peaceably have and enjoy the Demised Premises, appurtenances, facilities, rights, licenses and privileges granted herein.

## ARTICLE 36 NO MORTGAGE RIGHTS OF COMPANY

The Company shall not have the right to mortgage its leasehold interest for the purpose of securing a loan from any lender.

#### ARTICLE 37

#### **RENT AND PAYMENTS A SEPARATE COVENANT**

Company shall not for any reason withhold or reduce Company's required payments of rent and other charges provided in this Agreement, it being expressly understood and agreed by the parties that the payment of rent and other fees and payments due hereunder is a covenant by Company that is independent of the other covenants of the parties hereunder.

#### **ARTICLE 38**

#### ASSIGNMENT

Company shall not assign this Agreement, either in whole or in part, without prior written consent of the Authority which consent shall not be unreasonably withheld. No request for, or consent to, such assignment shall be considered unless Company shall have paid all rentals, fees, and charges which have accrued in favor of the Authority and Company shall have otherwise met all other legal obligations to be performed, kept, and observed by it under the terms and conditions of this Agreement or as this Agreement may be subsequently amended or modified. The Authority reserves the right to investigate the financial capacity of the proposed assignee prior to making its decision.

## ARTICLE 39 CORPORATE CERTIFICATION

The undersigned hereby warrants and certifies to the Authority that Company is a corporation in good standing and is authorized to do business in the State of Florida and that he or she is authorized and empowered to bind the corporation to the terms of this Agreement.

### ARTICLE 40

#### EMINENT DOMAIN

In the event that the United States of America or the State of Florida shall, by exercise of the right of eminent domain or any other power, acquire title in whole or in part of the Airport, including any portion assigned to Company, Company shall have no right of recovery whatsoever against the Authority but shall make its claim for compensation solely against the United States of America or the State of Florida, as the case may be.

## ARTICLE 41 APPLICABLE LAW AND VENUE

This Agreement shall be construed in accordance with the laws of the State of Florida. Venue for any action brought pursuant to this Agreement shall be in Hillsborough County, Florida.

#### ARTICLE 42

#### Reserved.

#### **ARTICLE 43**

#### **INVALIDITY OF CLAUSES**

The invalidity of any portion, article, paragraph, provision or clause of this Agreement shall have no effect upon the validity of any other part of portion thereof.

# ARTICLE 44 NOTICES AND COMMUNICATIONS

All notices or communications whether to Authority or to the Companies pursuant hereto will be deemed validly given, served, or delivered, upon receipt by the Party by hand delivery, or three (3) days after depositing such notice or communication in a postal receptacle, or two (2) business days after depositing such notice or communication with a reputable overnight courier service, and addressed as follows:

TO Authority:	TO Company:
Hillsborough County Aviation Authority Tampa International Airport P. O. Box 22287 Tampa, Florida 33622 Attn: Chief Executive Officer	Alaska Airlines Attn: SCM Fuel - SEAPP PO Box 68900 Seattle, WA 98168
Or	With a Copy to
(MAIL OR HAND DELIVERY) Hillsborough County Aviation Authority Tampa International Airport 4160 George J. Bean Parkway Suite 2400, Administration Building Tampa, Florida 33607	(MAIL OR HAND DELIVERY) Alaska Airlines Attn: SCM Fuel - SEAPP PO Box 68900 Seattle, WA 98168

or to such other address as a Party may designate in writing by notice to the other Party delivered in accordance with the provisions of this Article.

Attn: Chief Executive Officer

If the Notice is sent through a mail system, a verifiable tracking documentation such as a certified return receipt or overnight mail tracking receipt is encouraged.

#### **ARTICLE 45**

#### FEDERAL RIGHT TO RECLAIM

In the event a United States governmental agency shall demand and take over the entire facilities of the Airport or the portion thereof wherein the Demised Premises are located, for public purposes, then this Agreement shall hereupon terminate and the Authority shall be released and fully discharged from any and all liability hereunder. In the event of such termination, Company's obligation to pay rent shall cease, however, nothing herein shall be construed as relieving Company from any of its liabilities relating to events or claims of any kind whatsoever prior to this termination.

#### ARTICLE 46

#### **NON-EXCLUSIVE RIGHTS**

This Agreement will not be construed to grant or authorize the granting of an exclusive right within the meaning of 49 USC §40103(e) or 49 USC §47107(a), as may be amended from time to time, and related regulations.

#### ARTICLE 47

#### RADON GAS NOTIFICATION

In accordance with requirements of the State of Florida, the following notification statement shall be included in all agreements relating to rental of real property. This is provided for information purposes only.

> "RADON GAS: Radon is naturally occurring radio-active gas that, when it has accumulated in a building in sufficient quantities, may present health risks to persons who are exposed to it over time. Levels of radon that exceed federal and state guidelines have been found in buildings in Florida. Additional information regarding radon and radon testing may be obtained from your county public health unit."

# ARTICLE 48 AGENT FOR SERVICE OF PROCESS

Upon execution of this Agreement, Company shall submit to Authority a list of all representatives of Company who have signature authority to legally bind Company to the terms and conditions of this Agreement. Thereafter, Company shall submit any changes to said list to Authority in timely manner. It is expressly agreed and understood that if Company is not a resident of the State of Florida, or is an association or

partnership without a member or partner resident of said state, or is a foreign corporation, then in any such event Company does designate the Secretary of State, State of Florida, its agent for the purpose of service of process in any court action between it and Authority arising out of or based upon this Agreement and the service shall be made as provided by the laws of the State of Florida, for service upon a non-resident. It is further expressly agreed, covenanted, and stipulated that if for any reason service of such process is not possible, and as an alternative method of service of process, Company may be personally served with such process out of this state, by the registered mailing of such complaint and process to Company at the address set out hereafter in this Agreement and that such service shall constitute valid service upon Company as of the date of mailing and Company shall have thirty (30) days from date of mailing to respond thereto. It is further expressly understood that Company hereby agrees to the process so served, submits to the jurisdiction and waives any and all obligation and protest thereto, any laws to the contrary notwithstanding.

## ARTICLE 49 MISCELLANEOUS

This Agreement represents the complete Agreement between the parties and any prior Agreements or representations, whether written or verbal, are hereby superseded. This Agreement may subsequently be amended only by written instrument upon the approval of the Authority and the Fuel Committee Members that collectively constitute or represent more than: (a) fifty percent (50%) in the number of Fuel Committee Members and (b) fifty percent (50%) of the total gallonage for the twelve months prior to the month in which the amendment is presented to the Fuel Committee for approval.

### ARTICLE 50

### AUTHORITY APPROVALS

Except as otherwise indicated elsewhere in this Agreement, wherever in this Agreement approvals are required to be given or received by Authority, it is understood that the Authority's Chief Executive Officer or designee is hereby empowered to act on behalf of Authority.

### (THE REMAINDER OF THE PAGE IS INTENTIONALLY LEFT BLANK.)

IN WITNESS WHEREOF, the parties hereto ha, 202	ive set their hands and corporate seals on this day of
ATTEST:	HILLSBOROUGH COUNTY AVIATION AUTHORITY
Address: P. O. Box 22287 Tampa, FL 33622 Signed, sealed, and delivered in the presence of:	By:, Chairman , Chairman Address: P. O. Box 22287 Tampa, FL 33622
Witness Signature	
Print Name	By: David Scott Knight David Scott Knight Assistant General Counsel
Witness Signature	
Print Name	
HILLSBOROUGH COUNTY AVIATION AUTHO STATE OF FLORIDA COUNTY OF HILLSBOROUGH	DRITY
notarization, this day of, 2 in the capacity of Secret	edged before me by means of physical presence or online 202_, by in the capacity of Chairman, and by ary, of the Board of Directors, Hillsborough County Aviation er the laws of the State of Florida, on its behalf. They are an oath.

Signature of Notary Public - State of Florida

(Print, Type, or Stamp Commissioned Name of Notary Public)

DocuSign Envelope ID: 2F8D6B48-B07F-4D9F-AC26-1C39872725B7

d'

## ALASKA AIRLINES, INC.

Signed in the presence of: Witness Signature Ulance Strekt Print Name Witness Signature Vitness Signature Vitness Signature Vitness Signature Vitness Signature Vitness Signature Vitness Signature Vitness Signature Vitness Signature Vitness Signature	By: U.P. Supply Chief Ann Andizzone. Print Name Print Address
ALASKA AIRLINES, INC.	
STATE OF Washington	
COUNTY OF	
notarization, this $2^{\circ\circ}$ day of <u>December</u>	e me by means of physical presence or online _, 202_, by <u>Ann Aroizzone</u> as (name of person) <u>Aircines, Inc.</u> inty on behalf of whom instrument was executed)
(Signature	of Notary Public - State of <u>Washington</u> <u>RA M. Murray</u> e, or Stamp Commissioned Name of Notary Public)
Personally known to me OR Produced Identification	NIN RA M MURA
(Type of Identification Produced)	NOTARY B PUBLIC
Use and Lease Agreement for Fuel Facilities and Pipeline ALASKA AIRLINES, INC.	50 OF WASHING April 22, 2021

n

#### TAMPA INTERNATIONAL AIRPORT

### FUEL SYSTEM MAINTENANCE, OPERATION AND MANAGEMENT SERVICES AGREEMENT

#### BETWEEN

## CONTRACTING AIRLINES (AS HEREINAFTER DEFINED) BY THE FUEL COMMITTEE CHAIRPERSON (AS HEREINAFTER DEFINED) AS THEIR COLLECTIVE, AUTHORIZED REPRESENTATIVE

AND

# AIRCRAFT SERVICE INTERNATIONAL, INC.

# **EFFECTIVE AS OF DECEMBER 1, 2018**

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# SCHEDULE A - Addresses

SCHEDULE B - List of Fuel System Capital Assets

### TAMPA INTERNATIONAL AIRPORT

#### FUEL SYSTEM MAINTENANCE, OPERATION AND MANAGEMENT SERVICES AGREEMENT

THIS FUEL SYSTEM MAINTENANCE, OPERATION AND MANAGEMENT SERVICES AGREEMENT (this "<u>Agreement</u>") is entered into effective as of December 1, 2018 by and between the CONTRACTING AIRLINES (as hereinafter defined) (including such other persons that become Contracting Airlines) by the Fuel Committee Chairperson (as hereinafter defined) as their collective, authorized representative, and AIRCRAFT SERVICE INTERNATIONAL, INC., a Delaware corporation ("<u>Operator</u>").

WHEREAS, Operator is an aviation service corporation authorized to do business at Tampa International Airport with the ability to provide certain maintenance, operation and management services as well as to provide certain ancillary services; and

WHEREAS, the Contracting Airlines desire to engage Operator to maintain, operate and manage the Facilities (as hereinafter defined) and to provide management services to the Contracting Airlines;

NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements herein contained, Operator and the Contracting Airlines agree as follows:

#### ARTICLE 1 DEFINITIONS

The following terms shall have the meaning set forth below:

"<u>A4A</u>" or "<u>ATA</u>" means Airlines for America.

"<u>Air Carrier</u>" means any "air carrier" or "foreign air carrier" as such terms are defined in 49 U.S.C. 1301, as amended, or any successor provision thereto, and which is operating at the Airport on a regularly scheduled basis.

"Airport" means the Tampa International Airport located in Tampa, Florida, U.S.A..

"<u>AOA</u>" has the meaning set forth in Section 9.1(b).

"<u>Associate Airline</u>" means any Air Carrier 100% of the capital stock or other equity interest of which is owned, directly or indirectly, by a Contracting Airline, or by a Person which owns or controls a Contracting Airline and such Contracting Airline has certified to the Fuel Committee in writing that such Air Carrier is so owned.

"Associate Airline Agreement" means an agreement between an Associate Airline, its Contracting Airline, and the other Contracting Airlines pursuant to which an Associate Airline is granted certain rights to access and use the Fuel System and its Contracting Airline agrees to pay or be liable for certain costs and obligations relating thereto. "<u>Authority</u>" means the Hillsborough County Aviation Authority, a public body corporate existing under the laws of the State of Florida.

"<u>Aviation Fuel</u>" means that jet fuel which complies with the specifications established by ASTM Specification D-1655, latest revision.

"<u>Bonded Fuel</u>" means fuel that: (i) is produced outside the United States of America or in a foreign trade zone, that remains segregated to the extent required by United States Customs and Border Protection or other applicable Laws; and (ii) is boarded on aircraft in the conduct of foreign trade and otherwise meets the requirements and definitions as determined and regulated by United States Customs and Border Protection.

"Change of Control" is defined in Section 10.6 of this Agreement.

"<u>Contracting Airline</u>" means any Air Carrier which is, at the time in question, a party to the Interline Agreement.

"Environmental Laws" means all federal, state and local statutes, ordinances, regulations and rules relating to environmental quality, health, safety, contamination and clean-up, including, without limitation, the Clean Air Act, 42 U.S.C. §7401 et seq.; the Clean Water Act, 33 U.S.C. §1251 et seq., and the Water Quality Act of 1987; the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), 7 U.S.C. §136 et seq.; the Noise Control Act, 42 U.S.C. §4901 et seq.; the Occupational Safety and Health Act, 29 U.S.C. §651 et seq.; the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. §6901 et seq., as amended by the Hazardous and Solid Waste Amendments of 1984; the Safe Drinking Water Act, 42 U.S.C. §300f et seq.; the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §9601 et seq., as amended by the Superfund Amendments and Reauthorization Act, the Emergency Planning and Community Right-to-Know Act, and the Radon Gas and Indoor Air Quality Research Act; the Hazardous Material Transportation Act, 49 U.S.C. §9601 et seq.; the Toxic Substance Control Act ("TSCA"), 15 U.S.C. §2601 et seq.; all State of Florida environmental protection, super lien and environmental clean-up statutes, with implementing regulations and guidelines, and all local laws, regulations and ordinances insofar as they are equivalent or similar to and not preempted by federal laws or state laws recited above or purport to regulate Hazardous Materials.

"Event of Default" is defined in Article 11 of this Agreement.

"<u>Facilities</u>" means collectively the integrated fuel distribution systems and fuel storage facilities owned, leased, acquired or controlled by the Contracting Airlines and operated on behalf of the Contracting Airlines by the Operator. The Facilities include, without limitation, all equipment, pipelines, storage tanks, truck racks, and related fixtures, machinery, furnishings, apparatus and personal property acquired, purchased, constructed, financed or leased by the Contracting Airlines for the receipt, storage, transportation, distribution and dispensing of Aviation Fuel and Products at the Airport.

"<u>Fuel Committee</u>" means the committee formed for the purpose of assuring that the Facilities are operated, and the activities of the Contracting Airlines are conducted, in the best interests of the Contracting Airlines, as provided in the Interline Agreement. Each of the

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Contracting Airlines shall designate an individual as its member representative on the Fuel Committee.

"<u>Fuel Committee Chairperson</u>" means an individual designated by the Fuel Committee in accordance with the Interline Agreement that is authorized to take such further action on behalf of the Fuel Committee as may be necessary or appropriate for the orderly and expeditious conduct of the business of the Fuel Committee.

"<u>Fuel System Access Agreement</u>" means the agreement between the Fuel Committee and any Into-Plane Operator, allowing access to the Facilities by the Into-Plane Operator to provide into-plane fueling services to a User.

"<u>Fuel System Capital Asset</u>" means the equipment acquired and owned by Operator from time to time upon written direction from the Contracting Airlines for use exclusively in connection with the performance of the Operator's duties and obligations under this Agreement. A current list of Fuel System Capital Assets is attached at **Schedule B**.

"<u>Fuel System Lease</u>" means all leases, easements, rights-of-way, and other agreements, as amended from time to time, including, but not limited to, the Tampa International Airport Use and Lease Agreement between the Authority and each of the Contracting Airlines, as such agreements may be amended from time to time, and/or by which the Authority grants possession and right of use of the Facilities to the Contracting Airlines or any successor thereto.

"Gallon" means a U.S. Gallon.

"<u>Hazardous Material</u>" means any waste or other substance that is listed, defined, designated, or classified as, or otherwise determined to be, hazardous, radioactive, or toxic or a pollutant or a contaminant under or pursuant to any Environmental Law, including any admixture or solution thereof, and specifically including petroleum and all derivatives thereof or synthetic substitutes therefor and asbestos or asbestos-containing materials.

"Interline Agreement" means the Interline Agreement among the Contracting Airlines pertaining to, among other things, the allocation of rentals, rates, fees and charges established pursuant to the Fuel System Lease and other expenses associated with the Contracting Airlines and the Facilities, as amended, modified and restated from time to time.

"Into-Plane Operator" means any person approved by the Contracting Airlines to have limited access to the Facilities for the purpose of providing transportation and delivery of Aviation Fuel into aircraft. All "Into-Plane Operators", including a Contracting Airline performing self-service, must (i) execute a Fuel System Access Agreement with the Fuel Committee, which agreement will be prepared and approved by the Contracting Airlines and (ii) obtain all necessary approvals and permits from the Authority to perform into-plane fueling services for Users at the Airport.

"<u>Itinerant User</u>" means an Air Carrier using the Facilities other than a Contracting Airline, Associate Airline, or Non-Contracting Airline User.

"Lines and Rules" has the meaning set forth in Section 9.1(b) hereof.

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"<u>Non-Contracting Airline User</u>" means any Air Carrier using the Facilities other than a Contracting Airline, Associate Airline, or Itinerant User. All Non-Contracting Airline Users must execute a Non-Contracting User Agreement with the Contracting Airlines.

"<u>Non-Contracting User Agreement</u>" means the agreement between the Contracting Airlines and any Non-Contracting User desirous of using the Facilities.

"<u>Non-Contracting User</u>" means any person using the Facilities that has executed a Non-Contracting User Agreement with the Contracting Airlines.

"<u>Operations Manual</u>" means all the manuals, books, pamphlets and other written materials setting forth quality control standards, maintenance programs, operating instructions, and other standards, terms and conditions relating to the maintenance and operation of the Facilities, including, without limitation, A4A Specification 103, latest revision.

"Operator" has the meaning set forth in the Preamble to this Agreement.

"<u>Operator's Management Fee</u>" means the Operator's Management Fee as defined in Section 4.1(a) of this Agreement. The Operator's Management Fee is part of the Total Operating Cost.

"<u>Person</u>" or "<u>person</u>" means any natural person, firm, partnership, corporation, governmental body or other legal entity.

"<u>Pre-Existing Conditions</u>" means the environmental condition(s) of the Facilities and any other property leased to the Contracting Airlines pursuant to the Fuel System Lease as of December 1, 2018.

"<u>Products</u>" means and includes aviation gasoline, diesel fuel, motor vehicle fuels, glycol, oil, lubricants and other petroleum-derived products, other than Aviation Fuel.

"<u>Supplier</u>" means, (i) any person that has a contract with any of the Users for the delivery of Aviation Fuel or Products into the Facilities; or (ii) any Contracting Airline or Non Contracting User delivering Aviation Fuel or Products into the Facilities for its own account and use.

"<u>System Agreements</u>" means, collectively, the Interline Agreement, the Fuel System Lease, Fuel System Access Agreements, Associate Airline Agreements, and Non-Contracting User Agreements (as defined in the Interline Agreement).

"<u>System Use Charge</u>" means the charge to be paid by each User for the credit of the Contracting Airlines for each and every Gallon of Aviation Fuel put through any part of the Facilities.

"Total Cost" means the total of all costs, expenses and fees incurred by the Contracting Airlines and shared among the Contracting Airlines.

"<u>Total Operating Cost</u>" means the Operator's Total Operating Cost as defined in Section 4.1 of this Agreement.

"<u>User</u>" means any Contracting Airline, Associate Airline, Non-Contracting User or Itinerant User.

"Vehicles" has the meaning set forth in Section 9.1(b) hereof.

#### ARTICLE 2 <u>APPOINTMENT OF OPERATOR</u>

2.1 <u>Appointment.</u> The Contracting Airlines hereby appoint the Operator to perform services in connection with the maintenance, operation and management of the Facilities and Operator hereby accepts such appointment on the terms and conditions set forth herein. Subject to the terms and conditions of this Agreement, and the Interline Agreement, the Contracting Airlines hereby authorize Operator, insofar as it may lawfully do so and insofar as is necessary and appropriate for the Operator to perform services in accordance with this Agreement, to have full access to the Facilities.

2.2 Agreement Subject to Other Agreements. This Agreement is subject to all of the terms and conditions of the Fuel System Lease and the Interline Agreement as they are in effect and amended from time to time, and to any agreements entered into in replacement thereof, and in the event of any conflict between this Agreement and the Fuel System Lease or the Interline Agreement, the terms of the Fuel System Lease and the Interline Agreement shall prevail. The Contracting Airlines have furnished or will furnish to Operator copies of the Fuel System Lease and the Interline Agreements and replacements hereof promptly as they become effective. The Contracting Airlines' failure to so furnish such copies shall not be a default by the Contracting Airlines under this Agreement, however, Operator shall not be liable for non-compliance with any agreement or provision thereof which the Contracting Airlines failed to furnish to Operator, but only as long as such noncompliance does not constitute any violation of law applicable to the Operator's conduct of its business.

#### ARTICLE 3 SERVICES

3.1 <u>Services.</u> Operator shall provide all labor, materials, supplies, equipment and tools to maintain and operate the Facilities and to perform management and administrative services related to the Facilities in accordance with all of the requirements of the Fuel System Lease and the Interline Agreement. Such duties shall include, but shall not be limited to the following:

(a) maintain, repair, replace, inspect and, as requested by the Contracting Airlines, make modifications and additions to (i) all vehicles and equipment used by Operator at the Airport in connection with this Agreement; and (ii) the Facilities and all other present and future improvements and additions thereto. The Operator shall keep all of the foregoing (A) in good, safe and efficient operating condition and repair; (B) in sanitary and sightly condition; (C) in compliance with the obligations of the Contracting Airlines under the System Agreements and

all other relevant agreements; (D) in compliance with all applicable governmental laws, rules and regulations; (E) in compliance with all directives and applicable rules established by the Contracting Airlines; (F) in compliance with applicable industry standards; and (G) in compliance with the latest revisions of the Operations Manual;

(b) on a scheduled basis, with such frequency as required to maintain the Facilities in good working order and condition, inspect or cause to be inspected the equipment of Persons who have executed Fuel System Access Agreements or are otherwise conducting Into-Plane activities to ensure that: (i) such equipment is compatible with the safe and efficient operation of the Facilities; and (ii) metering devices on such equipment are accurate and compatible with such devices used by Operator and the Contracting Airlines;

(c) prepare cost estimates and studies for matters such as maintenance and repair of the Facilities to aid the Contracting Airlines in evaluating the relative advantages and disadvantages of alternatives;

(d) take such measures as are reasonably required to secure the Facilities and to prevent tampering with the control system, storage and distribution facilities, buildings and equipment comprising the Facilities;

(e) prepare for the Contracting Airlines' approval the Operations Manual (for the avoidance of doubt, the Operations Manual shall become and remain property of the Contracting Airlines);

(f) perform such other functions relating to the operation and maintenance of the Facilities as the Contracting Airlines may reasonably authorize or request;

(g) provide local management and technical personnel to interface, coordinate and attend meetings required for the orderly and efficient operation of the Facilities, including, without limitation, meetings with the Contracting Airlines, the Authority, Suppliers, architects, engineers, contractors, agencies, airline station management, airline quality control inspectors, Users, Into-Plane Operators, and others as may be required from time to time;

(h) the transportation of Aviation Fuel and Products through the Facilities, including maintenance, surveillance and quality control of the Facilities and monitor and control of withdrawals of Aviation Fuel and Products transported through the Facilities, in accordance with the terms and conditions of this Agreement, the Operations Manual and written policies adopted by the Contracting Airlines and provided to the Operator;

(i) the coordination and delivery of Aviation Fuel and Products into the Facilities so that the Facilities are utilized in the most efficient and economical manner;

(j) the determination of the location and status of shipments of Aviation Fuel and Products made on behalf of Users prior to introduction into the Facilities;

(k) assure that Aviation Fuel received at the Facilities and dispensed from the Facilities meets or exceeds the Aviation Fuel specification and quality standards listed in ASTM

Specification D-1655, latest revision, and is transported, delivered and handled in accordance with the latest edition of ATA Specification 103;

(1) protect Aviation Fuel and Products from the introduction of any substances which change the quality of the Aviation Fuel or Products after delivery thereof to the Facilities and take all other reasonable steps to preserve the quality of the Aviation Fuel and Products in the Facilities;

(m) maintain on a current basis complete and accurate books and records for the allocation of Total Cost among the Contracting Airlines, in accordance with the terms and conditions of the Interline Agreement;

(n) maintain on a current basis complete and accurate books and records and make reports to the Contracting Airlines, in such form and detail as may be specified by the Contracting Airlines, of dispersals of Aviation Fuel and Products from the Facilities, expenses of the Facilities and revenue generated therefrom, and allocation of revenue and expenses;

(o) upon request of any User, issue a report of the quantity of Aviation Fuel and/or Products in the Facilities that is available to that User;

(p) maintain separate inventories for Bonded Fuel and comply with all Laws and procedures related to Bonded Fuel;

(q) act on behalf of a Contracting Airline, at such time, if any, as a Contracting Airline is designated by the U.S. Customs Service as the operator of the Facilities as a foreign-trade zone, to implement practices and procedures to comply with laws and regulations applicable from time to time to foreign-trade zones, including the following:

(1) establish procedures to designate all fuel admitted or accepted into the zone as either "foreign merchandise" as defined in 19 C.F.R. §146.1 or "domestic merchandise" as defined in 19 C.F.R. §146.1, file all customs documentation in a Contracting Airline's name (including for example, Customs Form 214), collect customs powers of attorney from all Suppliers delivering foreign fuel, and collect or complete all other documentation required by applicable rules and regulations from time to time in connection with the operation of the foreign trade zone;

(2) maintain separate inventories of foreign trade zone and domestic Aviation Fuel for each Supplier;

(3) obtain from each Supplier a complete list of its airline customers having flights using foreign Aviation Fuel for the Facilities, and designate and collect information from Users using such foreign Aviation Fuel, in such format as Operator may require, with respect to each flight, including corporate name of user, country of registration, flight number, origin point, intermediate stops, and final destination and the estimated quantity of foreign Aviation Fuel used; and

(4) establish procedures for the submission and collection of data and satisfaction of other legal requirements to assure that the foreign trade zone is operated on

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behalf of the Contracting Airlines in full and strict compliance with all applicable rules and regulations, and that all informational, record keeping and reporting requirements have been satisfied;

(r) by the third business day of each calendar month, provide each Contracting Airline and each Non-Contracting Airline User and Supplier with a report of the total amount of all Aviation Fuel dispensed from the Facilities during the previous month, and Operator shall be responsible for determining that the actual amount of any delivery of Aviation Fuel to or from the Facilities shall be correct and accurately reflected in its records;

(s) maintain a general ledger, including journals, subsidiary ledger interface, software upgrades, account reconciliations and monthly/annual trial balance compilations;

(t) maintain a fixed asset ledger, including reconciliations of construction- inprogress and transfers to capital accounts, consistently in accordance with generally accepted accounting principles, and tax depreciation computations; and periodic reporting for insurance and tax purposes;

(u) maintain an accounts receivable ledger, including receipts posting, cash application, past due correspondence and follow-up; prepare past due aging summary along with documentation and follow-up for bankrupt accounts;

(v) invoice and collect charges from the Contracting Airlines and Non-Contracting Users and other Persons who may throughput Aviation Fuel or Products through the Facilities;

(w) process accounts and notes payable, including but not limited to preparation of note payment amortization schedules and checks; review documents, and prepare cost/capital account application for the payment of leases, construction progress payments, taxes, management fees, rental payments, debt service payments, professional fees, customs broker fees and other miscellaneous payments; and reject all payment requests that are not appropriate or correct;

(x) when requested, prepare and submit statutory reports required by federal, state, or local law, ordinance or regulations to be filed, submitted or maintained by the Contracting Airlines, including without limitation, coordination of timely preparation and submission of federal and state and local income tax returns with professional assistance from authorized outside tax accountants and attorneys, and coordinate all tax and fee payments related to such returns and reports;

(y) when requested, prepare monthly and annual State of Florida sales tax returns required by law, including research for various revenue/receipt tax applications;

(z) prepare and submit all regulatory reports required by federal, state or local law, ordinance or regulations pertaining to environmental monitoring or compliance;

(aa) prepare and maintain complete and accurate records concerning Aviation Fuel storage and Aviation Fuel use by each Contracting Airline, Associate Airline, Non-

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Contracting User and Itinerant User including as described in Article 13 of this Agreement and/or in the form requested by the Contracting Airlines from time to time;

(bb) coordinate insurance requirements entailing special cost analyses, coverage research and periodic procurement of insurance and appraisals as required by the Contracting Airlines and the System Agreements; and assure that required insurance of Users, Suppliers and Into-Plane Operators is current and in compliance with the System Agreements;

(cc) maintain a separate bank account in the name of the Contracting Airlines, the funds in which account shall not be commingled with other Operator funds; manage cash and related controls which entail monthly reconciliations of bank accounts; and maintain adequate balances, authorized signature cards and a cumulative record of cash sources and uses;

(dd) invest from time to time at the direction of the Contracting Airlines surplus funds in an interest bearing account in the name of the Contracting Airlines, including the purchase of government securities and high grade commercial paper as authorized by the Contracting Airlines, provided however, that such funds shall not be commingled with any Operator funds;

(ee) from funds maintained under this Agreement, cause the Contracting Airlines to pay, perform and discharge all rent, fees, tariffs, taxes, charges and other amounts for which any Contracting Airline is or may become obligated;

(ff) research, compile, analyze, and present special reports of current operations, financial matters and industry developments that may impact the efficient operation of the Contracting Airlines, including defining alternatives and providing recommendations supporting short and long term strategies that are in the best interests of the Contracting Airlines;

(gg) research and resolve problems and respond to requests for information as reasonably requested by the Contracting Airlines. Operator shall be permitted to charge reasonable fees for similar service rendered to Non-Contracting Users, Suppliers, Into-Plane Operators, vendors and others, subject to the approval of the Contracting Airlines, which approval shall not be unreasonably withheld or delayed;

(hh) coordinate meeting arrangements;

(ii) comply with applicable Environmental Laws and the environmental provisions of the System Agreements and the securing and filing of all necessary permits, licenses, documents, etc., relating to any of the foregoing;

(jj) assure all Persons are properly accessing and using the Facilities, are properly licensed and trained to do so, and that established procedures and contractual obligations are met and followed;

(kk) assist outside auditors with an annual certified financial audit of the Contracting Airlines by providing summary, comparative, and forecast reports of financial transactions; draft financial statements; prepare and follow-up on bond or note holder and bank

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confirmation letters; explain all activities of the Contracting Airlines summarized in meeting minutes and legal correspondence and other tasks as requested by the auditors;

(ll) administer this Agreement, the System Agreements, and any other agreements covering or relating to the operation of the Contracting Airlines and/or the Facilities; administer the various agreements entered into from time to time by the Contracting Airlines and/or Operator with third parties relating to the operation, maintenance and improvement of the Facilities and all other property leased, controlled or used in the conduct of a Contracting Airline's business as such business may exist from time to time; distribute and collect such agreements and amendments and renewals thereof; and assure that performance and operation is in accordance with such agreements; and

(mm) take all actions necessary to control and mitigate the results of any release or spill of Hazardous Material in connection with the operation of the Facilities and of all releases or spills of Aviation Fuel, Products or Hazardous Material on, in, under or from the Facilities or for which the Contracting Airlines or Operator are otherwise responsible. With regard to such other releases as are caused by, or are the responsibility of a User or Into-Plane Operator, Operator shall, upon notice and request from the Contracting Airlines, or such User or Into-Plane Operator, and upon satisfactory assurance of payment for such services, remediate such release for the account of such User or Into-Plane Operator.

#### ARTICLE 4 FEES AND CHARGES

4.1 <u>Total Operating Cost</u>. The Operator's "<u>Total Operating Cost</u>" shall consist of an Operator's Management Fee, the Reimbursable Direct Costs and the Reimbursable Indirect Costs as defined in this Section 4.1.

(a) Operator's Management Fee – For services rendered hereunder, the Contracting Airlines shall pay to Operator an annual fee (the "<u>Operator's Management Fee</u>") payable monthly in advance on the first day of each month, as follows:

Amount	
	per annum
n de la construcción de la constru No	per annum
	per annum
<u>(</u>	ber annum
,	per annum

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The Operator's Management Fee will be fixed in the amounts set forth above for the term of this Agreement. In the event this Agreement is terminated or expires, the Operator's Management Fee for the year in which such termination or expiration occurs shall be pro-rated on a monthly basis.

(b) Reimbursable Direct Costs - Reimbursable Direct Costs shall include the following items to the extent actually paid by Operator:

(1) direct salaries and wages (including overtime pay), together with payments or costs for reasonable associated payroll expense, retirement funds or unemployment compensation funds, employee savings programs, life, health, accident and unemployment insurance premiums, workers' compensation, vacation and holiday pay, sick leave pay and other fringe benefits, including any approved employee incentive program for Operator's employees assigned to operate the Facilities and who work exclusively at the Facilities;

(2) cost of auto repair, maintenance, parts and insurance coverage for motor vehicles used in connection with the Facilities;

(3) cost of contract labor and outside services for repair and maintenance of the Facilities performed by an outside contractor on contract and not as a part of a specific capital project;

(4) depreciation costs on Fuel System Capital Assets and equipment purchased and owned by Operator and used exclusively for the Facilities in accordance with generally accepted accounting principles consistently applied;

(5) interest expense associated with the acquisition of Fuel System Capital Assets as follows:

(i) if Operator obtains external financing for Fuel System Capital Assets, the debt service and related acquisition fees thereon; or

(ii) if Operator does not obtain external financing therefor, per annum interest at two percentage points over the prime rate printed by the Wall Street Journal on the first business day of each month (or at the maximum rate permitted by law, whichever is lower), on Operator's unamortized investment in Fuel System Capital Assets;

(6) cost of parts and supplies for routine and emergency maintenance repairs of the Facilities such as routine filter changes, etc.;

(7) the purchase price of routine maintenance parts, supplies and inventory stock items for the Facilities;

(8) the purchase of both gasoline and diesel fuel inventory for equipment usage for the Facilities;

(9) rental of Operator-owned equipment used solely in connection with the Facilities;

(10) cost of equipment, material and supplies for the inspection, testing and analysis of Aviation Fuel in the Facilities;

(11) cost of outside miscellaneous services such as cleaning of uniforms, overnight mail, special fabrication work and repairs performed at the vendor's shop related to services provided by Operator to the Contracting Airlines hereunder;

(12) utilities, electricity and water charges for the operation of the Facilities;

(13) charges for routine removal of Hazardous Material and other waste products and solid waste relating to the Facilities;

(14) other charges, expenses and costs approved in advance by the Contracting Airlines; and

(15) for those management, technical and financial services requested but not included herein the following charges will be assessed:

(i) per hour charge at a rate approximating cost, which shall be defined as the applicable individual's hourly payroll rate (base salary divided by 2,080) times 1.25; and

(ii) reasonable cost of travel, lodgings and meals.

(c) Reimbursable Indirect Costs - Reimbursable Indirect Costs shall include the following items to the extent such items are related to services provided by Operator to the Contracting Airlines hereunder, and to the extent actually paid by the Operator:

(1) supplies for computer operation;

(2) federal, state and local taxes attributable to the performance of services hereunder, but excluding Operator's corporate license fees, franchise taxes and income taxes;

(3) premiums for insurance to be maintained pursuant to Section 9.2 hereof and payment of any deductibles in connection therewith on account of losses incurred by the Contracting Airlines or the Operator in connection with this Agreement;

(4) the cost of office supplies, printing of forms and rental and repair of small office equipment;

(5) outside consultant fees approved by the Contracting Airlines as a maintenance and operating expense and not as part of a capital project;

(6) telephone, remote and basic communication equipment, rental and toll charges;

(7) reasonable costs of travel, lodging and meals for the Operator's Tampa management staff to attend meetings held outside the Tampa area in connection with services provided under this Agreement, and, with the approval of the Contracting Airlines, reasonable costs of travel, lodging and meals for non-Tampa based management staff, requested or necessary, to attend meetings in Tampa or otherwise to direct and manage the provision of services under this Agreement in Tampa; and

(8) other charges, expenses and costs approved by the Contracting Airlines.

4.2 <u>Costs Excluded from Total Operating Cost.</u> The following costs and expenses shall not be included in Total Operating Cost unless the Contracting Airlines consent in writing to such inclusion:

(a) except as provided for herein, overhead costs for Operator's home office or non-Tampa area offices, examples of which are compensation of personnel based outside of the Tampa area and the cost of those services which Operator contemplates performing at its home office. Operator contemplates that its home office will provide the usual home office management, supervisory and administrative functions and that its home office will prepare the payrolls and similar reports that may be necessary in connection with performing services hereunder, but not the underlying time keeping and similar records on which such reports or statements are based. Costs of preparation of monthly statements and invoices in connection with this Agreement shall be part of the Total Operating Cost, wherever performed;

(b) fees of Operator's legal counsel, except to the extent such fees are reimbursable under insurance policies or otherwise approved by the Contracting Airlines;

(c) the cost of any Fuel System Capital Asset except the amounts referred to in Section 4.1(b)(4) or 4.1(b)(5), hereof;

(d) any cost or expense which is reimbursed from the proceeds of any insurance obtained by Operator pursuant to Article 9;

(e) in the event Operator performs other services for any Person, other than pursuant to this Agreement, all expenses incurred by Operator in connection with providing such services including overhead, wages and payroll costs attributable to such services and all other costs incurred by it in providing such services;

(f) any charges incurred by Operator by reason of Operator's negligence or failure to obtain any available early payment or pre-payment discount and any late payment charges incurred by Operator, unless and to the extent that such failure or late payment is specifically authorized by the terms of this Agreement or is specifically directed, or the result of action or lack of action, by the Contracting Airlines or due to another cause beyond the reasonable control of Operator;

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(g) any charges or expenses related to Operator's failure to comply with any law, rule, regulation, ordinance or any term or condition of this Agreement; and

(h) any claim against Operator pursuant to Section 9.1.

4.3 <u>Expenditures.</u> Expenditures for outside services or materials shall be approved in advance by the Contracting Airlines and, if reasonably feasible, be subject to competitive bid. Purchases of materials or services from any Person in any way affiliated with Operator shall be specifically disclosed in writing to the Contracting Airlines and shall be subject to the prior written approval of the Contracting Airlines. The foregoing shall not be deemed to restrict Operator from taking appropriate action in the event of an emergency.

4.4 <u>Allocation of Costs.</u> The amount payable by the Contracting Airlines for the Total Operating Cost shall be allocated among the Contracting Airlines in the manner set forth in the Interline Agreement. Operator shall calculate and apply all credits as provided in the Interline Agreement in computing the Total Cost for each month and each Contracting Airline's allocated share thereof.

#### ARTICLE 5 OTHER SERVICES BY OPERATOR

5.1 <u>Other Services to the Contracting Airlines.</u> Subject to permitting requirements at the Airport, Operator may render services to each individual Contracting Airline and other Persons, other than those services constituting the subject matter hereof, including but not limited to, into-plane servicing of aircraft and making of improvements to exclusive use premises, on such terms and conditions as are agreed upon by Operator and each individual Contracting Airline or other Person, as long as the rendering of such services does not interfere with Operator's performance of its obligations hereunder to the Contracting Airlines, and subject to Section 4.2(e) above regarding allocation of costs and expenses.

#### ARTICLE 6 STANDARDS OF OPERATIONS

The following standards shall apply in addition to the requirements set forth in the Operations Manual:

6.1 <u>Hours.</u> Operator shall perform its services under this Agreement to operate the Facilities twenty-four (24) hours per day, seven days per week.

6.2 <u>Impartiality.</u> Operator shall furnish services to the Contracting Airlines in an impartial manner as to each User and shall not favor any User over any other User.

6.3 <u>Efficient Operation</u>. Operator shall operate the Facilities in an efficient, prudent and economical manner and shall in good faith act to keep the Total Cost to a minimum consistent with the level and type of service desired by the Contracting Airlines. Operator shall

comply with all directions, rules and procedures prescribed by the Contracting Airlines and all applicable governmental laws, rules and regulations.

6.4 <u>Staffing and Budget.</u> Prior to March 1st of each year, Operator shall submit to the Contracting Airlines for their approval Operator's proposed budget and staffing plan of the Facilities, prepared in accordance with the A4A standard budget format (ATA Specification 124 as of the date of this Agreement), as amended, modified or updated from time to time, or such other budget format as may be identified by the Contracting Airlines from time to time. Such budget and staffing plan shall include an identification of job positions, scope of duties, salary and wage levels. Operator shall provide personnel for the Facilities in accordance with such approved staffing plan. At the reasonable request of the Contracting Airlines, Operator shall periodically submit to the Contracting Airlines for their approval a revised budget for the Facilities.

6.5 <u>Employees of Operator.</u> Operator is an independent contractor and its employees engaged in performing services hereunder shall be considered employees of Operator for all purposes and shall under no circumstances (including, without limitation, the Multi-Employer Pension Plan Amendments Act of 1980, as amended) be deemed to be employees of any Contracting Airline. No Contracting Airline shall have any right or responsibility to supervise or control any employee of Operator. Operator shall train and, as necessary, retrain its employees in accordance with training procedures to be developed on or before commencement of services under this Agreement and approved by the Contracting Airlines and subject to FAA standards, rules and regulations. Operator shall maintain appropriate records to document such training and retraining. When present at the Airport, Operator's employees shall not display any insignia or name other than that of Operator.

6.6 <u>Relations with Workers.</u> Operator assumes responsibility for establishing workable and satisfactory relations with its employees and any authorized employee representative representing Operator's personnel who are engaged in the performance of services hereunder, including responsibility for labor negotiations, arbitrations and grievance hearings which may involve such personnel.

#### ARTICLE 7 BILLS AND ACCOUNTS

## 7.1 <u>Billing.</u>

(a) In accordance with the Interline Agreement, each Contracting Airline is required to maintain on deposit in a reserve account an amount equal to two (2) months of each Contracting Airline's estimated allocable portion of Total Costs. Operator may draw against such reserve account if any Contracting Airline does not pay all amounts billed hereunder as provided in the Interline Agreement. Operator shall deposit the amounts for such reserve accounts in an interest bearing account in the name of the Contracting Airlines.

(b) Operator shall invoice each Contracting Airline in accordance with the Interline Agreement such Contracting Airline's share of the Total Cost for each month and all

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other amounts due from each Contracting Airline, including all expenses (including reasonable attorneys' fees) incurred by Operator in collecting or attempting to collect delinquent accounts from such Contracting Airline. Any failure by the Operator to render an invoice will not affect the Contracting Airline's obligations to pay such amounts.

(c) Operator shall invoice each Non-Contracting User in accordance with the directives of the Contracting Airlines. Any failure by the Operator to render an invoice will not affect the obligations of each Non-Contracting User to pay all amounts due to the Contracting Airlines.

7.2 Operator's Fee and Expenses. After the end of each month, Operator shall render an itemized bill to the Contracting Airlines for the portion of the Total Operating Cost incurred by Operator or otherwise allocable to such preceding month. The amount set forth on any such itemized bill shall be due and payable within thirty (30) days from date of invoice. Any amount owed to Operator and not paid when due shall bear interest at one percent (1%) per month (or the maximum rate permitted by law, whichever is lower), from the due date until paid. All expenses (including reasonable attorneys' fees) incurred by Operator in collecting or attempting to collect delinquent accounts from any Contracting Airline shall be reimbursed by the other Contracting Airlines.

7.3 Books, Records and Accounts of Operator. Operator shall at all times keep complete and accurate books, records and accounts from which it shall determine the cost to it of services rendered hereunder and the fee payable therefor, the allocation of such cost and fee among the Contracting Airlines, the amount of any credits to be allocated among the Contracting Airlines and the allocation thereof. Upon request of the Contracting Airlines, Operator shall employ a certified public accountant (who at the Contracting Airlines' option, may be the certified public accountant regularly employed to audit Operator's books or any other certified public accountant selected by the Contracting Airlines) to carry out an examination of such books, records and accounts. The cost of any such requested services shall be part of the Total Operating Cost. The books, records and accounts of Operator pertinent to this Agreement shall, at all reasonable times, be accessible to and open for inspection, examination and audit by the Contracting Airlines, each Contracting Airline and their respective authorized representatives. Subject to requirements of law, all books, records and accounts which have been audited by the Contracting Airlines may be disposed of five (5) years after the last of any such audit and, after providing notice to the Contracting Airlines and upon the Contracting Airlines' request, the Contracting Airlines may take possession of such books, records and accounts.

#### ARTICLE 8 <u>FUEL SYSTEM CAPITAL ASSETS</u>

8.1 <u>Acquisition of Fuel System Capital Assets.</u> From time to time upon written direction from the Contracting Airlines, Operator may acquire Fuel System Capital Assets. All Fuel System Capital Assets shall remain the property of Operator so long as this Agreement is in force and effect, subject, however, to the provisions of this Article 8.

8.2 <u>Sale or Disposition of Fuel System Capital Assets.</u> Operator shall not sell or dispose of any Fuel System Capital Asset without the prior written approval of the Contracting Airlines. Any amount received by Operator upon the sale or disposition of a Fuel System Capital Asset which is in excess of Operator's unamortized investment therein shall be credited to the Contracting Airlines. The Contracting Airlines shall reimburse Operator for any deficiency if the amount received upon such sale or disposition is less than Operator's unamortized investment therein. Operator's unamortized investment in a Fuel System Capital Asset shall equal Operator's actual costs of acquiring such Fuel System Capital Asset and any improvements or modifications capitalized in accordance with generally accepted accounting principles consistently applied, less the cumulative amount charged to the Contracting Airlines, excluding interest, as a Total Operating Cost pursuant to Section 4.1 herein.

8.3 <u>Purchase Upon Termination of Agreement.</u> Upon the expiration or termination of this Agreement, the Contracting Airlines shall purchase from Operator, and Operator shall sell to the Contracting Airlines, all of Operator's interest in Fuel System Capital Assets at a purchase price in cash equal to Operator's then unamortized investment in the Fuel System Capital Assets, consistent with the provisions of Section 4.1(b)(4). Such sale shall convey title to the Contracting Airlines free and clear of any and all liens. The Contracting Airlines shall be responsible for all costs related to such sale, including, but not limited to, sales and transfer taxes.

8.4 <u>Allocation of Amounts Upon Sale.</u> Any payments by Operator to the Contracting Airlines upon the sale or disposition of Fuel System Capital Assets pursuant to Sections 8.2 or 8.3 shall be allocated in accordance with the allocation provisions of the Interline Agreement.

#### ARTICLE 9 INDEMNIFICATION AND INSURANCE

#### 9.1 Indemnification.

(a) Operator agrees to indemnify, defend, keep, save, protect and hold harmless the Contracting Airlines, the Authority, and their respective directors, officers, employees, agents, successors and assigns (collectively, the "<u>Indemnified Parties</u>") from and against any and all claims, fines, penalties, liabilities, damages, losses, proceedings, judgments, obligations, suits and causes of action, including attorneys' fees, professionals fees and other costs, charges, claims, liens, demands and expenses incident thereto, of every kind, nature and character which may be suffered by, accrued against, be charged to, or recoverable from the Indemnified Parties by reason of:

> (1) any loss of, or damage to property, or injury to or death of any Person to the extent arising directly or indirectly out of any failure of supervision on the part of Operator, any negligent act or omission of Operator and/or its officers, directors, employees, contractors, subcontractors, agents and invitees, or any of them, in connection with the performance of this Agreement, any breach of this Agreement by Operator or failure to comply with applicable laws, rules and regulations, except to the extent shown by final judgment to have been caused by or attributable to the negligent or willful act or omission of an Indemnified Party,

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in which event the Indemnified Party shall contribute to the payment of damages decreed by judgment and the actual costs of defense borne by Operator, to the extent the Indemnified Party is found liable by such judgment; and

(2) any costs, claims, liabilities, losses, judgments, expenses (including, without limitation, attorneys' fees and costs), fine or damages associated with any Pre-Existing Conditions (for the avoidance of doubt Operator's duties and obligations under this Section 9.1(a)(2) shall be in addition to and shall not limit any duties or obligations of Operating under Section 16 hereof).

Without limiting the foregoing, any and all such claims relating to the environment, personal injury, death, damage to property, defects in materials or workmanship, actual or alleged infringement on any patent, trademark, copyright or other tangible or intangible personal property or right, actual or alleged employment discrimination or wrongful discharge, or any actual or alleged violation of any statute, ordinance, order, rule or regulation or decree of any court, shall be included in the indemnity hereunder. Operator further agrees to investigate, handle, respond to, provide defense for and defend all suits for any and all claims for which Operator is required to indemnify the Indemnified Parties hereunder, at Operator's sole expense, even if such claims are considered groundless, false or fraudulent. Each Indemnified Party shall give Operator prompt and reasonable notice of any such claim or action. In no event shall costs incurred in the defense of any action be deemed to be a part of the Total Operating Cost unless previously agreed to by the Contracting Airlines. To the extent permitted by insurance coverage required to be maintained by Operator under this Agreement, Operator shall use legal counsel reasonably acceptable to the Contracting Airlines in performing its obligations hereunder. The Indemnified Parties shall have the right, at their respective options and sole cost, to participate in the defense of any suit, without relieving Operator of any of its obligations under this indemnity provision, provided that the Indemnified Parties and their respective attorneys shall coordinate and cooperate with Operator's attorneys. Operator further expressly understands and agrees that the requirements set forth in this indemnity to protect, defend, indemnify, keep, save and hold the Indemnified Parties free and harmless are separate from, and not limited by, Operator's responsibility to obtain insurance pursuant to other Sections in this Agreement.

(b) Operator acknowledges that in its performance under this Agreement and otherwise, Operator will operate vehicles and equipment ("<u>Vehicles</u>") and/or its employees will be moving about in areas where aircraft are operated, known commonly as the Air Operations Area ("<u>AOA</u>"). Operator further acknowledges that the AOA is marked with various painted lines and other markings and there are Airport rules indicating and/or specifying how operations and movement within the AOA are to be conducted (collectively "<u>Lines and Rules</u>"). Notwithstanding the foregoing, Operator acknowledges and agrees that, except for Vehicles that are parked within areas that are specifically marked for that purpose, aircraft will always be deemed to have the right of way, and Operator will be wholly responsible for ensuring that Vehicles and its personnel remain clear of any aircraft, even when and where aircraft have deviated from the Lines and Rules ("<u>Duty</u>"). Operator further acknowledges and agrees that it will indemnify the Indemnified Parties for any damage or liability caused by any breach of the Duty, except to the extent any such damage or liability is the result of the gross negligence of any aircraft operator, and Operator releases and will indemnify and hold the Indemnified Parties

harmless from any damage to any personal property and/or bodily injury or death of any person(s) resulting from such breach of the Duty. Operator further acknowledges and agrees that this section will not operate to limit any other provision of this Agreement or the Indemnified Parties' rights at law.

Operator agrees and hereby undertakes to indemnify the Indemnified (c) Parties against any and all fines, penalties, and settlements from actions against the Indemnified Parties for violations of Federal Aviation Administration ("FAA") or other applicable federal, state, municipal, local or other governmental regulations or statutes caused by Operator's act or omission, and reasonable attorneys' fees and court costs, except where and to the extent such violation results from the Indemnified Parties' negligence or willful misconduct. Operator acknowledges that sums due under this section may become due both during and after the term of this Agreement. Operator agrees to pay any amounts owed under this section within thirty (30) days after receipt of notice thereof in writing from the Indemnified Parties. Any sums that come due pursuant to this section shall be due immediately upon demand from the appropriate Indemnified Party. Operator agrees that in no event will the payment of any indemnity under this section or deductions from amounts owed to Operator pursuant to this section release or excuse Operator from its duties and obligations under this Agreement. Operator further agrees that all decisions on the manner in which to manage, settle, defend or dispose of cases covered by this section will be made by the Indemnified Parties, in their sole discretion. Operator acknowledges that such actions, settlements, and negotiations may take place at any time, including, but not exclusively, before formal proceedings have begun, before a complaint is issued, and both before and after any formal decision is issued. Operator agrees to cooperate with and provide reasonable assistance to the Indemnified Parties in the management of cases covered by this section.

(d) Limitation of Liability. Notwithstanding any other provision of this Agreement to the contrary, in the event of a breach by Operator of any term or condition of this Agreement, Operator shall be under no liability to any Contracting Airline, or Associate Airline, for mail fines, for delay to scheduled or non-scheduled arrivals or departures of cargo or passenger aircraft or equipment owned or operated by any Contracting Airline, or Associate Airline, or for loss of full or partial use and occupancy of any such aircraft (excluding physical damage to aircraft). NO PARTY SHALL BE LIABLE TO ANY OTHER PARTY FOR LOSS OF USE, DIMINUTION OF VALUE, CONSEQUENTIAL, SPECIAL, INDIRECT OR INCIDENTAL OR EXEMPLARY DAMAGES, INCLUDING LOSS OF PROFITS OR COSTS ARISING OUT OF THE SERVICES PERFORMED HEREUNDER.

## 9.2 <u>Insurance</u>.

(a) Operator shall assure that all insurance required pursuant to this Agreement is obtained and maintained during the term hereof. Operator shall obtain and maintain all additional insurance as the Contracting Airlines may specify in writing from time to time. All such insurance shall be issued by insurers of recognized financial responsibility reasonably acceptable to the Contracting Airlines. All property coverage shall name Operator, each Contracting Airline and such other Persons and entities as the Contracting Airlines may designate, or are required under the Fuel System Lease, as loss payees to the extent of their interest thereunder, or as otherwise required under the System Agreements. All liability coverage, except for Workers' Compensation, shall name as additional named insureds each Contracting Airline and such other Persons as the Contracting Airlines may designate. Operator and the Contracting Airlines agree that the insurance required by this Agreement shall in no way limit Operator's liability hereunder.

(b) Operator shall assure that all insurance required pursuant to this Agreement shall not be cancelable or materially reduced except upon thirty (30) days' written notice to each of Contracting Airlines and to such other Persons and entities as the Contracting Airlines may designate of such proposed cancellation or reduction. Operator shall assure that the Operator's Aviation/General Liability Coverage shall state that such coverage is primary insurance, over and above any other valid and collectible insurance issued to any of the additional insureds and additional named insureds thereunder, and is without right of contribution from any insurance carried by the Contracting Airlines or any other additional insured or additional named insured. Operator shall assure that the liability insurance required pursuant to this Agreement shall insure all liability assumed by Operator under this Agreement (including, without limitation, the indemnity obligations under Section 9.1) up to the limit of such policies, subject to the terms and conditions of such policies.

(c) Operator shall cause certificate(s) of insurance to be furnished to the Contracting Airlines that comply with the terms and conditions of the System Agreements, certifying that all the insurance coverage required pursuant to this Section 9.2 is in effect and meets the conditions set forth in Section 9.2(b) of this Agreement.

(d) At all times, the insurance coverage in effect must comply with all the terms and conditions of the Fuel System Lease and the other System Agreements, with minimum limits of coverage under this Agreement as follows (subject to revision to comply with terms and conditions of the Fuel System Lease and the other System Agreements):

(1) Commercial broad form general liability insurance ("<u>Aviation/General Liability Insurance</u>") providing for specific perils associated with storage, delivery and fueling operations, with coverage at least as broad as that provided by INSURANCE SERVICES OFFICE COMMERCIAL GENERAL LIABILITY COVERAGE form CG0001 (Occurrence form):

(i) For operations within AOA (including automobile, contractual, completed operations, independent contractor and products hazards) - \$250,000,000 per occurrence, combined single limit.

(ii) For operations other than within AOA (bodily injury and property damage) -- \$100,000,000 per occurrence, combined single limit.

(2) Workers Compensation and Employers' Liability Insurance:

(i) Coverage A -- Statutory limits.

(ii) Coverage B -- \$1,000,000 per occurrence / accident / employee, covering all of Operator's employees providing services under this Agreement or in such greater amount required by applicable Pennsylvania law.

(3) Commercial Automobile Liability Insurance – \$5,000,000 per occurrence, combined single limit, for bodily injury and property damage for owned, non-owned and hired automobiles (outside of AOA).

(4) Full Replacement Cost Insurance on the Facilities and all personal property owned by the Contracting Airlines or Operator and used in connection with the operation of the Facilities (now or hereafter existing), if any, against any loss or damage by fire, flood, earthquake and all other casualties and perils as are included within what is commonly known as "all risk coverage" with full replacement cost insurance, in amounts sufficient to prevent the Contracting Airlines, or the Authority from being or becoming a co-insurer within the terms of the policy or policies in question and in no event less than the full replacement cost value thereof.

(5) Environmental liability insurance with limits of \$5,000,000 per incident covering loss, leakage or spillage of fuel, gasoline products, chemical solvents, hazardous materials or hazardous waste.

(6) Such other insurance as may reasonably be required from time to time in writing by the Contracting Airlines.

9.3 <u>Use of Insurance Proceeds.</u>

(a) If any Fuel System Capital Asset is damaged, destroyed or lost, such damage, destruction or loss shall be, unless otherwise directed by the Contracting Airlines, repaired or replaced by Operator with due diligence to the extent of available insurance proceeds. Operator shall apply to such repair or replacement all or so much as may be necessary of the proceeds of insurance, if any, available to it by reason of such damage, destruction or loss. If the proceeds of insurance are insufficient to defray the full cost of such repair or replacement, the deficiency shall be funded by the Contracting Airlines. If such insurance proceeds are in excess of the full cost of such repair or replacement, Operator shall apply such excess as a credit to the Contracting Airlines in the month in which such proceeds were received. If Operator is directed by the Contracting Airlines not to repair or replace the damage, destruction or loss of a Fuel System Capital Asset, the proceeds of insurance, if any, available to Operator by reason of such damage, destruction or loss shall be treated as proceeds of the sale of such Fuel System Capital Asset in accordance with the provisions of Section 8.2.

(b) In the event of the damage, destruction or loss of any portion of the Facilities, Operator shall, to the extent of insurance proceeds made available to Operator, repair or replace such portion with due diligence, unless otherwise instructed by the Contracting Airlines. Operator shall not be obligated to expend more than the amount available to it from proceeds of insurance, plus the amount available for the Contracting Airlines, if any.

(c) Notwithstanding the foregoing, in the event of any damage, destruction or loss of any Fuel System Capital Asset or any portion of the Facilities is caused by the negligent

or willful act or omission of Operator, its officers, directors, employees or agents, Operator shall bear full financial responsibility for any applicable policy deductibles. This provision shall not in any way limit Operator's obligations pursuant to Section 9.1.

### ARTICLE 10 TERM AND TERMINATION

10.1 <u>Term.</u> This Agreement shall commence on December 1, 2018, and shall continue in effect, unless sooner terminated in accordance with its provisions, for an initial term of one year, terminating on November 30, 2023.

10.2 <u>Termination for Convenience</u>. The Contracting Airlines may terminate this Agreement, with or without cause, upon sixty (60) days prior written notice to the Operator.

10.3 <u>Termination Upon Termination of Fuel System Lease</u>. The Contracting Airlines may terminate this Agreement, upon thirty (30) days prior written notice to the Operator upon any termination of the Fuel System Lease.

10.4 <u>Termination for Default.</u> Either the Operator or the Contracting Airlines may terminate this Agreement by written notice to the other of the occurrence of an Event of Default as defined in Sections 11.1 and 11.2 with respect to the party being noticed.

10.5 Bankruptcy of Operator. In the event (a) bankruptcy proceedings are commenced by or against Operator; (b) Operator becomes insolvent; (c) the Contracting Airlines have evidence that the Operator is not paying its bills when due without just cause; (d) a receiver of any substantial portion of the Operator's assets is appointed; (e) the Operator takes any step leading to its cessation as a going concern; or (f) the Operator either ceases or suspends operations for reasons other than strike, then the Contracting Airlines may immediately terminate this Agreement on written notice to the Operator unless the Operator immediately gives the Contracting Airlines assurances, deemed adequate by the Contracting Airlines in their sole discretion, of the future performance of this Agreement by Operator. If bankruptcy proceedings are commenced with respect to the Operator and if this Agreement has not otherwise terminated, then the Contracting Airlines may suspend all further performance of this Agreement until the Operator assumes or rejects this Agreement pursuant to Section 365 of the Bankruptcy Code or any similar or successor provision. Any such suspension of further performance by the Contracting Airlines pending the Operator's assumption or rejection will not be a breach of this Agreement and will not affect any Contracting Airline's right to pursue or to enforce any rights or remedies against the Operator whether under this Agreement or otherwise.

10.6 <u>Change of Control.</u> Operator shall notify the Contracting Airlines at least thirty (30) days before any Change of Control of Operator, subject to the requirements of applicable law and, upon request by Operator, the Contracting Airlines shall enter into a customary confidentiality agreement with respect to any such disclosure. For purposes of this section a "Change of Control" shall consist of: (1) the dissolution or liquidation of Operator, (2) any reorganization, merger or consolidation of Operator, or any transaction with one or more persons or entities as a result of which thirty-five percent (35%) or more of the equity securities of Operator is exchanged for or converted into cash or property or ownership of existing equity

#### EXHIBIT A

securities of Operator or the issuance or new equity securities of Operator that equal or exceed thirty-five percent (35%) in amount of the equity securities of Operator outstanding immediately prior to such transaction, or (3) the sale of (or agreement to sell or grant of a right or option to purchase as to) all or substantially all of the assets of Operator to any one or more persons or entities.

### ARTICLE 11 DEFAULT

11.1 <u>Event of Default with Respect to Operator</u>. The failure by Operator to perform any term or provision as required herein within thirty (30) days after receipt of notice of default given by the Contracting Airlines, or, with respect to events which are incapable of being cured within thirty (30) days, Operator's failure to commence and diligently continue efforts to cure such default to the satisfaction of the Contracting Airlines within such thirty (30) days, shall constitute an Event of Default with respect to Operator.

11.2 Event of Default with Respect to the Contracting Airlines. The failure by the Contracting Airlines to perform any term or provision as required herein within thirty (30) days after receipt of notice of default given by the Operator or, with respect to events which are incapable of being cured within thirty (30) days, failure to commence and diligently to continue efforts to cure such default to the satisfaction of Operator within such thirty (30) days, shall constitute an Event of Default with respect to the Contracting Airlines.

11.3 <u>Remedies in Event of Default.</u> In addition to any right to terminate this Agreement upon the occurrence of an Event of Default as described in Section 10.4, the Operator or the Contracting Airlines, as the case may be, may pursue any and all other remedies available at law or in equity in the event of a default by the other party hereto.

11.4 <u>Notice of Non-Payment.</u> If any Contracting Airline shall fail to pay to Operator any amount payable in accordance with the Interline Agreement, Operator shall give such nonpaying Contracting Airline and the other Contracting Airlines prompt written notice of such failure and shall follow instructions from the Contracting Airlines as to further actions. If, within thirty (30) days after the Operator gives notice to such non-paying Contracting Airline, the Operator has not collected the non-payment from such non-paying Contracting Airline, the Operator shall notify the other Contracting Airlines.

#### ARTICLE 12 EXCUSABLE DELAY

12.1 <u>Excusable Delay.</u> Operator shall be excused from, and shall not be liable for, any impairment or interruption of service due to causes beyond its control. Such causes shall be deemed to include, without limitation, fire, earthquake, explosions, epidemics, quarantine restrictions, flood, windstorm, power shortages, accidents, war (whether declared or undeclared), warlike operations, insurrections, acts of public enemies, civil commotions, riots, rebellions, embargoes, transportation delays, materials controls, strikes and work stoppages, other than those caused by an act or omission of the Operator, court orders, regulations, rulings or acts of any governmental agency now existing or hereafter in effect (not arising from a breach of

Operator's obligations under this Agreement) and acts of God. Nevertheless, in the event of any impairment or interruption of service resulting from such cause or causes, Operator shall use its best efforts to eliminate such impairment or interruption as soon as possible and in the interim to provide such services hereunder as may practicably be performed by Operator.

## **ARTICLE 13**

## **AVIATION FUEL INVENTORY AND INVENTORY LOSS**

13.1 <u>Access to the Fuel System.</u> The only parties permitted to access the Facilities to withdraw Aviation Fuel and Products, and dispense Aviation Fuel and Products, into-plane are: any Contracting Airline and any Into-Plane Operator that has executed a Fuel System Access Agreement.

13.2 <u>Inventory Reconciliation</u>. The Operator shall take all steps necessary and appropriate to reconcile the inventory of Aviation Fuel and Products in the Facilities, including without limitation, the following:

(a) The Operator shall, in accordance with A4A standards (including, without limitation, ATA Specifications 103 and 123 as of the date of this Agreement), as amended, modified or updated from time to time, or such other standards identified as the industry standard by the Contracting Airlines, coordinate on a daily basis all matters related to inventory reconciliation and the maintenance of current, complete and accurate inventory records. Receipts into inventory shall be recorded on a net Gallon basis and dispersals from inventory shall be recorded on a gross Gallon basis converted to a net Gallon basis by the Operator, or recorded in such other manner as the Contracting Airlines may designate from time to time. At approximately the same time each day, Operator shall take inventory measurements of the storage facility and fuel in transit downstream from storage tanks, for each measurement so taken, shall record the volume and the time of day such measurement was made.

(b) The Operator shall daily reconcile the total dispersal of Aviation Fuel as recorded on the daily summary reports and meter reconciliations submitted by the Into-Plane Operators.

(c) Using the daily measurements described in (a) and (b) above, the Operator shall daily and at month's end reconcile the total physical inventory to the calculated inventory and provide the reconciliation to the Contracting Airlines. On a monthly basis, the Operator shall distribute the month's end (loss)/gain reconciliation to all inventory holders by the third business day of each calendar month.

(d) The Operator shall be responsible to monitor incoming Aviation Fuel shipments and will take all appropriate action in the best interests of the Contracting Airlines to resolve differences in the amount of the shipment reported by the pipeline company or other party delivering the Aviation Fuel and the amount of such Aviation Fuel received, measured and reported by the Operator.

(e) The Operator shall be responsible for all losses of Aviation Fuel in excess of 0.10 percent of the monthly dispersals (or such lesser percentage as may be established from time to time within the industry as the industry standard, as determined by the Contracting Airlines) that cannot be reconciled as required by this Agreement or adequately explained as a normal operating loss reasonably beyond Operator's control.

(f) The Operator shall not permit any Contracting Airline, Supplier or Non-Contracting User to operate in a negative inventory position unless previous arrangements have been made among Users of the Facilities to exchange or borrow Aviation Fuel and evidence of such arrangements by Users has been previously documented to Operator by all parties involved in the exchange.

## ARTICLE 14 USERS OTHER THAN THE CONTRACTING AIRLINES

14.1 <u>System Use Charge.</u> Each Non-Contracting User, for itself or for an Itinerant User, will be charged with and will pay a System Use Charge to the Contracting Airlines for each Gallon of Aviation Fuel and Products dispensed from the Facilities for the use of such Non-Contracting User, for itself or for an Itinerant User. Operator shall invoice and collect all System Use Charges due to the Contracting Airlines. The System Use Charge calculated as provided herein, will be assessed and payable as follows:

(a) If the end user of the Aviation Fuel or Products is a Non-Contracting Airline User, the System Use Charge will be billed to the Non-Contracting Airline User;

(b) If the end user of the Aviation Fuel or Products is an Itinerant User, the System Use Charge will be billed to the Supplier of such Itinerant User; and

(c) If the end user of the Aviation Fuel or Products is a Contracting Airline, or an Associate Airline, no System Use Charge will be assessed and, instead, the Contracting Airline, or Associate Airline will be billed in accordance with the Interline Agreement.

The System Use Charge will be in such amount as the Contracting Airlines will establish in accordance with the Interline Agreement and any change in the charge will be effective upon the first day of any calendar month following written notification of such change given by the Contracting Airlines to Operator or such other date as the Contracting Airlines may determine. The System Use Charge will be applied by Operator as a credit as provided in the Interline Agreement. Each Non-Contracting User shall maintain on deposit with the Operator an amount equal to two months' estimated System Use Charge. Operator may draw against such deposit in the event the Non-Contracting User does not pay all amounts billed hereunder in a timely fashion.

14.2 <u>Payment Requirements.</u> Not later than ten (10) days following the end of each calendar month, Operator will render or cause to be rendered an itemized bill to each Non-Contracting User for the amounts due and payable for such calendar month. Such bill will be due and payable upon receipt and will be delinquent thirty (30) days thereafter. The amount of any delinquent bill will bear interest at two percent (2%) per month (or at the maximum rate permitted by law, whichever is lower), from the date such amount is due. Operator will promptly notify the Contracting Airlines of any delinquency and may, upon the authorization of

the Contracting Airlines put such Non-Contracting User on a cash or prepayment basis. In the event of the continued failure of a Non-Contracting User to pay such charges, Operator may pursue any and all legal and equitable remedies as authorized by the Contracting Airlines.

### ARTICLE 15 ADDITIONAL AND WITHDRAWING CONTRACTING AIRLINES

From time to time one or more Air Carriers may become additional Contracting Airlines or may withdraw in accordance with the Interline Agreement. Operator shall accept each such additional Contracting Airline as a Contracting Airline or such withdrawal effective on the applicable date pursuant to the Interline Agreement.

## ARTICLE 16 ENVIRONMENTAL MATTERS

## 16.1 Environmental Obligations of Operator.

(a) Operator is engaged in the business of providing fuel system operation and maintenance services of the kind and nature contemplated under this Agreement and understands the environmental risks and hazards associated with the provision of such services.

(b) In its performance of the services hereunder, Operator agrees to comply with all applicable provisions of the Fuel System Lease and all applicable present and future Environmental Laws and all safety rules, regulations, restrictions, ordinances and/or other laws of federal, state or local governmental entities relating to Hazardous Material. Prior to performing any services required under this Agreement, Operator shall obtain all required licenses, permits, approvals and other authorizations and shall ensure that its employees possess all training required under any Environmental Laws to perform such services. Without limiting the generality of its obligations as provided in the preceding sentences, Operator shall comply with all Environmental Laws governing discharges to land and water, including, without limitation, compliance with the terms and conditions of any National Pollutant Discharge Elimination System ("<u>NPDES</u>") permits, General Stormwater permits, site-specific Stormwater Pollution Prevention Plans ("<u>SWPPP</u>"), site-specific Facility Response Plans ("<u>FRP</u>"), or Spill Prevention Control and Countermeasure ("<u>SPCC</u>") Plans applicable to the Operator, the Contracting Airlines or the Airport.

(c) Operator also shall implement an internal environmental compliance program which includes the conduct of a comprehensive environmental compliance audit, on at least an annual basis, to document the satisfaction of the Operator's environmental compliance obligations under this Agreement. Operator shall provide the Contracting Airlines with an opportunity to review the findings of the annual audit reports. Also, if requested by the Contracting Airlines, Operator shall meet with the Contracting Airlines and their agents and representatives to discuss the results of completed audits, suggested changes to any audit reports, and protocols and reasonable changes to be incorporated into future audits. Operator shall promptly correct any deficiencies identified in any audit reports in a manner and pursuant to a schedule reviewed and approved by the Contracting Airlines. The results of any audits performed under this Section shall be treated as confidential information by all parties hereto and shall not be disclosed to any third party, except to the extent required by law.

(d) Operator shall conduct all services required under this Agreement in a prudent manner, taking all reasonable precautions to avoid environmental impacts, including, without limitation, (i) unpermitted spills, leaks, releases or disposal of Hazardous Material and (ii) any spill, leak, release, disposal, diffusion, migration or exacerbation of any Pre-Existing Conditions. Operator shall not discharge or dispose of any Hazardous Material, regardless of quantity or concentration, into or out of the Fuel System or associated Airport storm water and or sanitary sewer drains and plumbing facilities, except in accordance with applicable permits or other regulatory authorizations.

(e) Operator shall, on an annual basis, provide a summary in the annual meeting book it provides to the Contracting Airlines, summarizing the results of the Operator's review of the environmental conditions of the Facilities in the preceding year. Such report summary will include the results of any audits, inspections or other reviews of the Facilities for environmental compliance and provide a summary of any environmental issues encountered in the preceding year.

(f) Operator will timely correct any deficiencies identified in connection with any compliance plan or environmental audit in a manner and pursuant to a schedule reviewed and approved by the Contracting Airlines.

(g) All releases of Hazardous Material discovered or caused by Operator will be reported in accordance with applicable federal, state and local laws of any governmental authority of competent jurisdiction and, in addition, within two (2) hours of such release, to the Contracting Airlines. Operator will immediately initiate procedures to mitigate the release. Operator shall be solely responsible for the timely reporting of all such spills, leaks or releases as required under any Environmental Laws. Operator shall immediately provide the Contracting Airlines with notice of any actual or alleged noncompliance with Environmental Laws respecting the management and/or operation of the Facilities or associated with Operator's actions under this Agreement and copies of any correspondence with any governmental agency or third party generated or received in connection with the management and/or operation of the Facilities or any actions of the Operator's under this Agreement that addresses, involves or relates to any Environmental Laws.

(h) If (i) any previous operation of the Facilities prior to this Agreement resulted in a spill, leak or release of Hazardous Material or otherwise failed to comply with any applicable Environmental Laws (including, without limitation, any Pre-Existing Conditions) or (ii) any operation of the Facilities under this Agreement results or have resulted in a spill, leak or release of Hazardous Material or other failure to comply with any applicable Environmental Laws, Operator shall immediately undertake appropriate actions to fully respond to any such spill, leak or release, or otherwise correct any instances of noncompliance, as required under all applicable Environmental Laws and to the satisfaction of the Contracting Airlines. In the event that Operator fails to timely perform all appropriate corrective measures, the Contracting Airlines may, in their sole discretion, immediately enter upon the premises of the Operator governed by this Agreement and undertake all actions deemed necessary by the Contracting Airlines at Operator's sole cost and expense.

(i) Any notices and reports required under this Section from Operator shall be provided to the designated parties as set forth in this Agreement or to any other parties that the Contracting Airlines may subsequently designate to receive such notices.

16.2 Environmental Contractors. All consultants or subcontractors performing work under this Agreement on behalf of Operator which involves Hazardous Material shall be qualified and licensed to undertake the applicable work. The Contracting Airlines shall be notified of the retention of any consultants or subcontractors at least ten (10) business days prior to the commencement of any work by such consultants or subcontractors (except in an emergency, in which case the Contracting Airlines shall be notified within one (1) business day after the selection of the consultants or subcontractors). All work shall be performed in a good, safe and workmanlike manner.

16.3 <u>Contracting Airlines' Inspections and Audits.</u> The Contracting Airlines and their authorized representatives and consultants shall have the right, but not the obligation, to enter the premises of the Operator governed by this Agreement at any reasonable time to confirm Operator's compliance with the provisions of this Article 16 and to review all permits, reports, plans and other documents regarding the use, handling, storage or disposal of Hazardous Material or compliance with Environmental Laws. Operator shall also provide information in response to requests for information regarding compliance with its obligations under this Section.

Environmental Indemnity. In consideration of the fees paid to Operator to 16.4 perform the services hereunder, in addition to all other indemnities provided in this Agreement, but subject to the provisions of the last sentence of Section 9.1 hereof, Operator agrees to further indemnify, defend and hold harmless the Contracting Airlines, and the Authority (including their respective officers, agents, servants and employees) from and against any and all claims, liabilities, damages, losses, penalties, and judgments, including costs and expenses incident thereto, which may be suffered by, accrue against, be charged to, or recoverable from the Contracting Airlines arising out of or in any way connected with the failure of Operator or its employees or agents to comply with its obligations under this Article 16, except to the extent caused by the negligent or willful acts or omissions of the indemnitees, including their officers, directors, employees and agents in connection with the services performed by Operator under this Agreement. This provision shall survive the termination of this Agreement. Operator shall pay the cost of any deductible amounts, insurance exclusions, disclaimers or uncovered liabilities or other damages resulting from the willful misconduct or negligence of, or breach of its obligations under this Agreement by, Operator.

#### ARTICLE 17 ADDITIONAL PROVISIONS

17.1 <u>Notices.</u> All notices required or permitted to be given pursuant to this Agreement shall be in writing and deemed given when sent by overnight express delivery, or by facsimile, telex or telegram, or personally delivered and addressed to the party to receive notice at the

address set forth beside its name on the signature page hereof or such other address as a party hereafter designates by written notice given in accordance with this Section 17.1.

17.2 <u>Amendments.</u> This Agreement may not be amended or modified except in writing signed by the Operator and the Contracting Airlines. Any such amendment or modification shall be binding on Operator and the Contracting Airlines.

17.3 <u>Assignment; Successors.</u> This Agreement may not be assigned without the written consent of both parties, which consent shall not be unreasonably withheld; provided, however, that nothing herein shall prevent the assignment of this Agreement by any party to a person with which it may merge or be consolidated or which may acquire substantially all of its business, provided that such person shall assume all the obligations of such party under this Agreement. Notwithstanding the foregoing, the Contracting Airlines shall be permitted to assign, pledge or encumber their rights under this Agreement, without Operator's consent, for the purpose of obtaining financing for modifications, additions or improvements to the Facilities. All the terms and conditions of this Agreement shall accrue to and be binding upon the successors and permitted assigns of the respective parties hereof.

17.4 <u>Complete Agreement</u>. This Agreement sets forth the complete agreement of the parties with respect to the subject matter hereof. The parties agree that the terms and conditions of this Agreement supersede any and all terms and conditions of any prior agreements with respect to the subject matter hereof.

17.5 <u>Waiver</u>. The failure of the Contracting Airlines or Operator to exercise any power or right under this Agreement shall not operate as a waiver thereof nor shall any single or partial exercise of any power or right preclude any other or further exercise thereof, or the exercise of any other power or right.

17.6 <u>Suspension and Abatement.</u> If the Contracting Airlines' or the Operator's operations at the Airport should be substantially restricted by action of any competent authority with sovereignty over the Contracting Airlines, then either the Contracting Airlines or the Operator shall have the right, upon written notice to the other, to a suspension of this Agreement and an abatement of a just proportion of the services and facilities to be afforded hereunder from the time of such notice until such restriction shall have been removed. If the Facilities may be required by the United States for use in connection with national defense, the Contracting Airlines, in addition to any other options to terminate, may immediately suspend this Agreement in its entirety by giving to the Operator written notice, if possible.

17.7 <u>Compliance with Laws.</u> Operator shall at all times during the term of this Agreement comply with all applicable laws, rules and regulations and any amendments thereto, as they now exist or may hereafter be adopted or amended, of any federal, state or local governmental agency or political subdivision having jurisdiction. Operator further agrees that it will use the Facilities for no purpose other than that specified herein. Operator shall keep current all licenses and permits, whether municipal, county, Airport, state, or federal, required for the conduct of its operations at the Airport, and pay all fees promptly when due, subject to its right to contest such fees.

#### EXHIBIT A

17.8 <u>No Joint Venture</u>. It is expressly agreed that the Contracting Airlines are not, in any way or for any purpose, a partner of Operator in the conduct of Operator's business or a member of a joint enterprise with Operator, and do not assume any responsibility for Operator's conduct or performance of this Agreement. The relationship of the parties hereto is that of purchaser and provider of services. Nothing in this Agreement shall be construed to create or imply an agency relationship or the relationship of employer or employee between Operator, its officers, employees, agents or representatives and any or all of the Users or the Contracting Airlines. It is the intention and purpose of the parties that Operator, its officers, employees, agents and representatives shall, at all times and for all purposes, be considered as and be an independent contractor.

17.9 <u>Attorneys' Fees.</u> If the Contracting Airlines or Operator fail to perform any of their respective obligations under this Agreement or in the event a dispute arises concerning the meaning or interpretation of any provision of this Agreement, the defaulting party or the party not prevailing in such dispute, as the case may be, shall pay any and all costs and expenses incurred by the other party in enforcing or establishing its respective rights hereunder (whether or not such action is prosecuted to judgment), including, without limitation, court costs and reasonable attorneys' fees.

17.10 <u>Survival of Indemnities.</u> Expiration or termination of this Agreement shall not affect the right of any party to enforce any and all indemnities given or made to the other party under this Agreement, nor shall it effect any provision of this Agreement that expressly states it shall survive termination hereof. Each party hereto specifically acknowledges and agrees that, with respect to each of the indemnities contained in this Agreement, the indemnitor has an immediate and independent obligation to defend the indemnitees from any claim which actually or potentially falls within the indemnity provision even if such allegation is or may be groundless, fraudulent or false, which obligation arises at the time such claim is tendered to the indemnitor by the indemnitee.

17.11 Integrated Agreement, Modification. This Agreement contains all the agreements of the parties and, except as otherwise provided herein, cannot be further amended or modified except by written agreement. This Agreement supersedes and replaces the Fuel System Maintenance, Operation and Management Services Agreement dated as of December 1, 2013 between the Contracting Airlines and Operator.

17.12 <u>Governing Law.</u> This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware.

17.13 <u>Severability</u>. In the event any section, term, covenant or condition of this Agreement is found to be invalid under the laws of any jurisdiction, such invalidity shall not affect any other section, term, covenant or condition hereof.

17.14 <u>Chairperson to Act for the Contracting Airlines.</u> Any action required of or permitted to the Contracting Airlines hereunder may be performed by the Fuel Committee Chairperson for and on behalf of the Contracting Airlines. The Operator shall follow the directions of the Fuel Committee Chairperson in all matters in connection with this Agreement

and shall not, as a result of any act or omission taken in good faith reliance thereon, incur any liability to the Contracting Airlines.

17.15 <u>Execution in Counterparts.</u> This Agreement may be executed in several counterparts, each which shall be an original and all of which shall constitute but one and the same instrument. Delivery of an executed counterpart of this Agreement, by facsimile, electronic mail in portable document format (.pdf) or by any other electronic means has the same effect as delivery of an executed original of this Agreement.

Remainder of Page Intentionally Left Blank.

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

#### CONTRACTING AIRLINES:

By: Madelyn Tackett Name: <u>Madelyn Tackett</u>

Title: Fuel Committee Chairperson

AIRCRAFT SERVICE INTERNATIONAL, INC., a Delaware corporation

By:		 		
Name:				
Title:	· · · · · · · · · · · · · · · · · · ·	 	 	

Address for Notices: See Schedule A

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

## CONTRACTING AIRLINES:

By:\_\_\_\_\_\_ Name: \_\_\_\_\_\_ Title: Fuel Committee Chairperson

AIRCRAFT SERVICE INTERNATIONAL, INC., a Delaware corporation

By: Name: 14 Bannopan Title: Conformer Scenessmy,

Address for Notices: See Schedule A

## SCHEDULE A

## NOTICE ADDRESSES FOR CONTRACTING AIRLINES:

Tampa International Airport Contracting Airlines Manager - Fuel Infrastructure Management Southwest Airlines Co. P.O. Box 36611, HDQ 7FM 2702 Love Field Drive Dallas, TX 75235-1611 Phone: (214) 792-4170 Email: <u>Madelyn.Tackett@wnco.com</u> Attention: Madelyn Tackett

with a copy to:

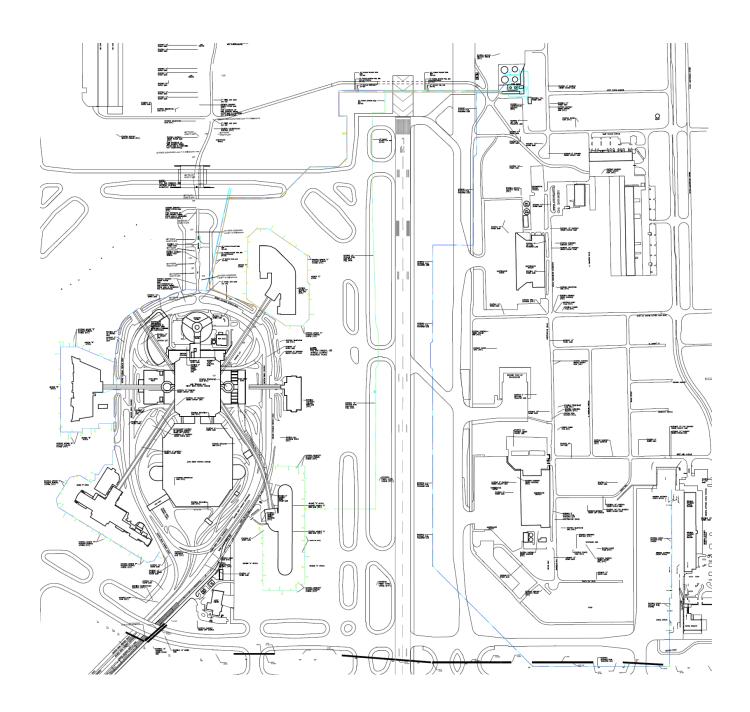
Quarles & Brady One Renaissance Square Two North Central Avenue Phoenix, Arizona 85004-2391 Attention: Daniel L. Muchow

NOTICE ADDRESSES FOR OPERATOR:

Aircraft Service International, Inc. Attn: Randy Davies 4900 Diplomacy Road Fort Worth, Texas 76155 Phone: (516) 857-5371 Email: randy.davies@menziesaviation.com EXHIBIT A

# **SCHEDULE B**

# List of Fuel System Capital Assets



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Exhibit B Map of Fuel Facilities System Tampa International Airport Enlarged Detail of Airside A Piping / Hydrant System

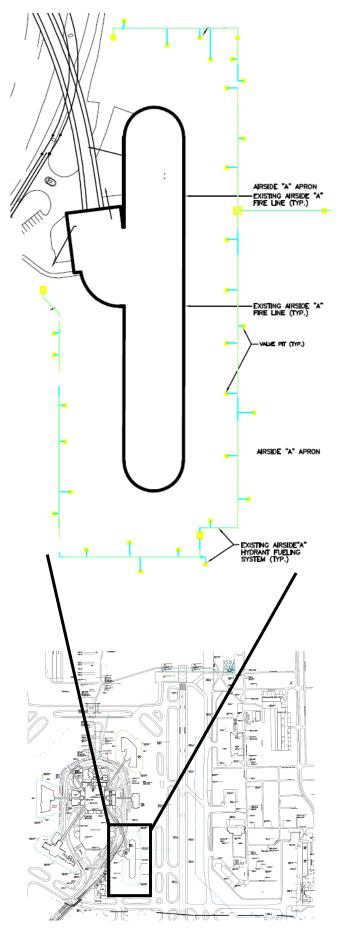


Exhibit B Map of Fuel Facilities System

## Enlarged Detail of Airside C Piping / Hydrant System

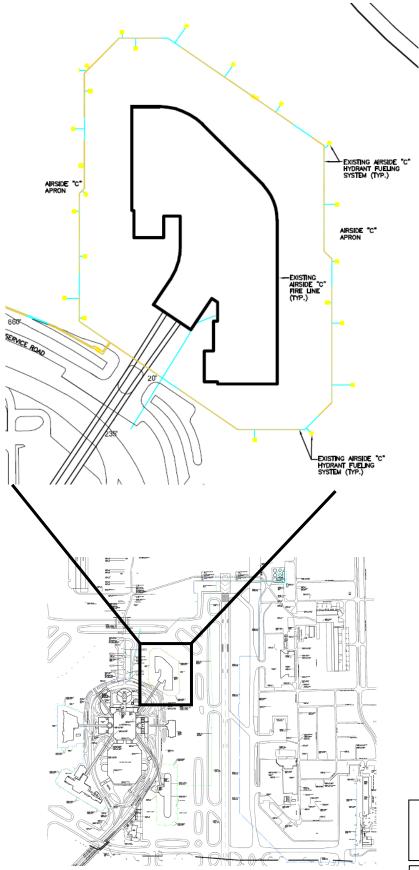


Exhibit B Map of Fuel Facilities System



## Enlarged Detail of Airside E Piping / Hydrant System

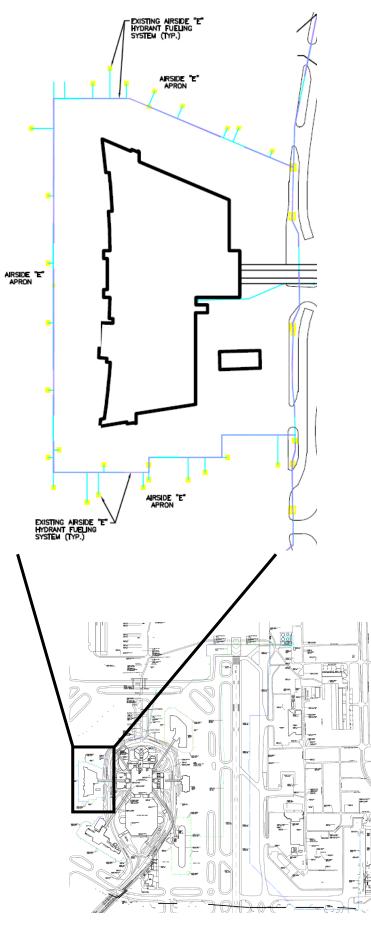
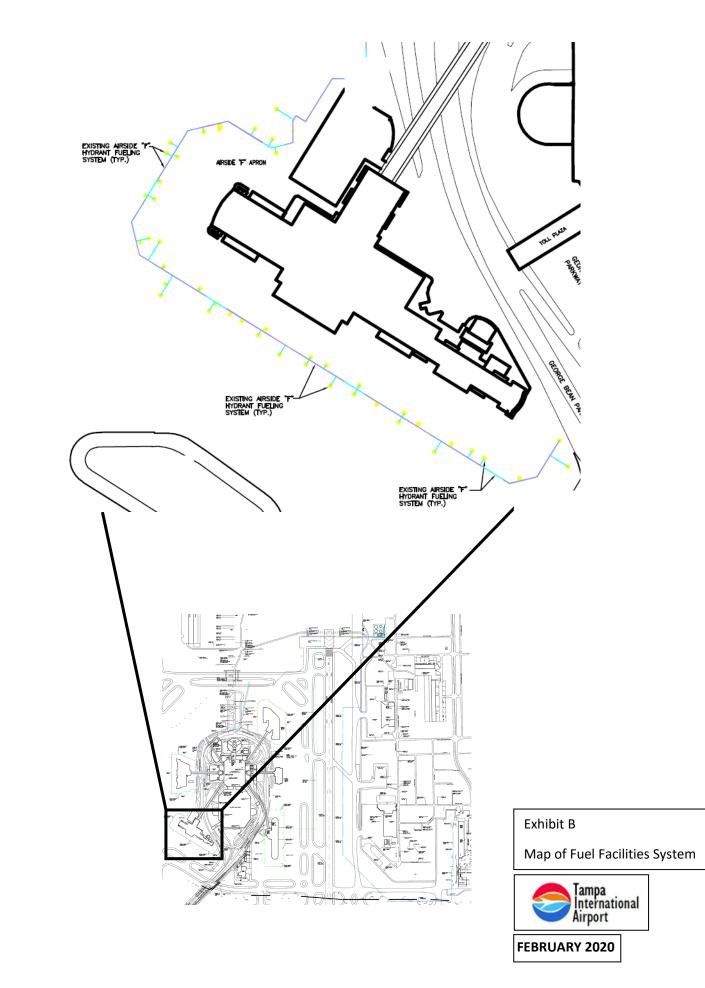
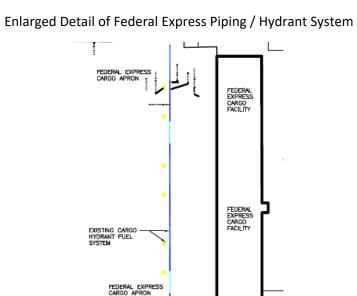


Exhibit B Map of Fuel Facilities System

FEBRUARY 2020

# Enlarged Detail of Airside F Piping / Hydrant System





EXISTING CARGO HYDRANT FUEL SYSTEM

12 Bes . Real-1 1200

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CARGO APRON

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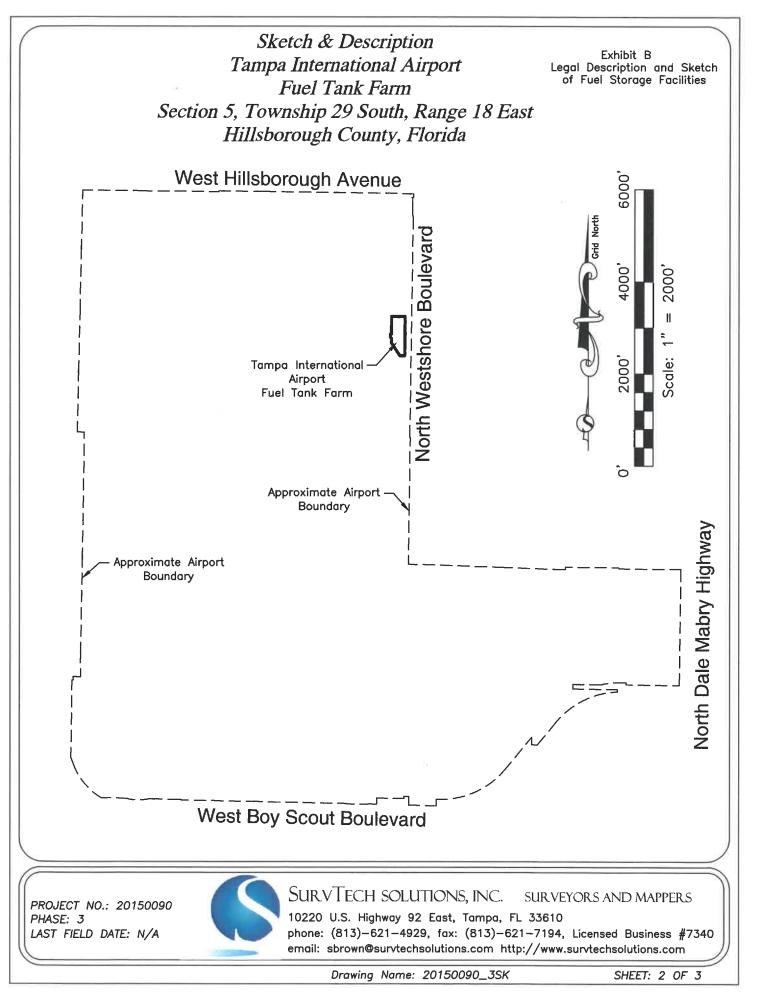
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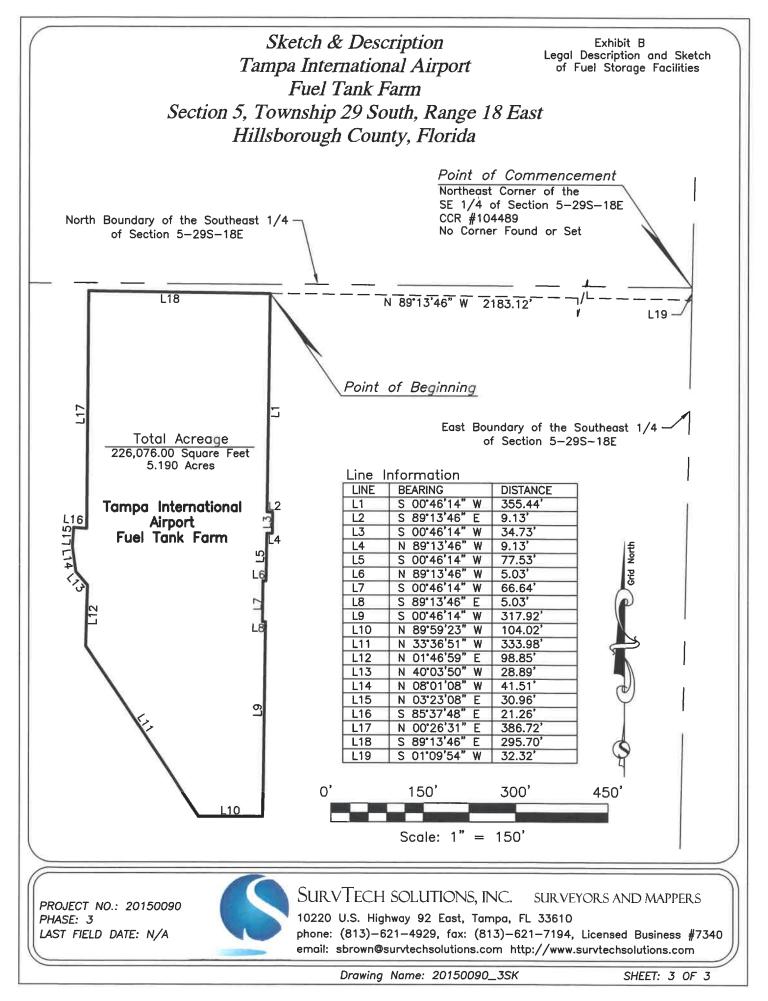
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Chatal & Description	
Sketch & Description       Exhibit B         Tampa International Airport       Legal Description and Sketch	.h ) ( )
Fuel Tank Farm of Fuel Storage Facilities	0_35
Section 5, Township 29 South, Range 18 East	990 5009 1 1
Hillsborough County, Florida	01500 :: 201 :: N/A
	0.: 20 Vame K/Pag
Fuel Tank Farm: As Written by SurvTech Solutions A parcel of land lying and being in the Southeast 1/4 of Section 5, Township 29 South, Range 18 East, Hillsborough County, Florida, being more particularly described as follows:	Project No.: 20150090 Phase: 3 Drawing Name: 20150090_3SK Last Field Date: N/A Field Book/Page: N/A
COMMENCE at the Northeast corner of the Southeast $1/4$ of Section 5, Township 29 South, Range 18 East, Hillsborough County, Florida, per Certified Corner Records document #104489 having a Northing of 1329012.616 and an Easting of 489126.739, NAD83 2007 adjustment; thence coincident with the East boundary of the Southeast $1/4$ of said Section 5, S 01'09'54" W a distance of 32.32 feet; thence departing said East boundary, N 89'13'46" W a distance of 2183.12 feet to the POINT OF BEGINNING; thence S 00'46'14" W a distance of 355.44 feet; thence S 89'13'46" E a distance of 9.13 feet; thence S 00'46'14" W a distance of 34.73 feet; thence N 89'13'46" W a distance of 9.13 feet; thence S 00'46'14" W a distance of 77.53 feet; thence N 89'13'46" W a distance of 5.03 feet; thence S 00'46'14" W a distance of 66.64 feet; thence S 89'13'46" E a distance of 5.03 feet; thence S 00'46'14" W a distance of 317.92 feet; thence N 89'59'23" W a distance of 104.02 feet; thence N 33'36'51" W a distance of 28.89 feet; thence N 08'01'08" W a distance of 98.85 feet; thence N 40'03'50" W a distance of 30.96 feet; thence S 85'37'48" E a distance of 21.26 feet; thence N 00'26'31" E a distance of 386.72 feet; thence S 89'13'46" E a distance of 295.70 feet to the POINT OF BEGINNING.	ERS Drafted By: M. Rook Date Drafted: 7/1619 Revision Date: N/A Approved By: S. Brown Date Approved: 7/29/19
Containing an area of 226,076.00 square feet, 5.190 acres, more or less.	TECH SOLUTIONS, INC. SURVEYORS AND MAPP .S. Highway 92 East, Tampa, FL 33610 813)-621-4929, fax: (813)-621-7194, Licensed Business prown@survtechsolutions.com http://www.survtechsolutions.co
Stacy L. Brown P.S.M. No. 6516	SUR V 10220 u phone: (
Revision: 1. Parcel Size MDR 08/01/19 SurvTech Solutions, Inc. LB No. 7340	J ⊂ É É
<ol> <li>Not valid without the signature and original raised seal of a Florida Licensed Surveyor and Mapper.</li> <li>The bearing structure for this survey is based on a Florida West State Plane grid bearing of S 01°09'54" W for the East Boundary of the SE 1/4 of Section 5-29S-18E.</li> <li>THIS IS NOT A BOUNDARY SURVEY.</li> </ol>	
Date Plotted: 8/2/2019 11:51:56 AM By: Micahel D. Rook	SHEET: 1 OF 3





# Exhibit C – Pipeline Right of Way

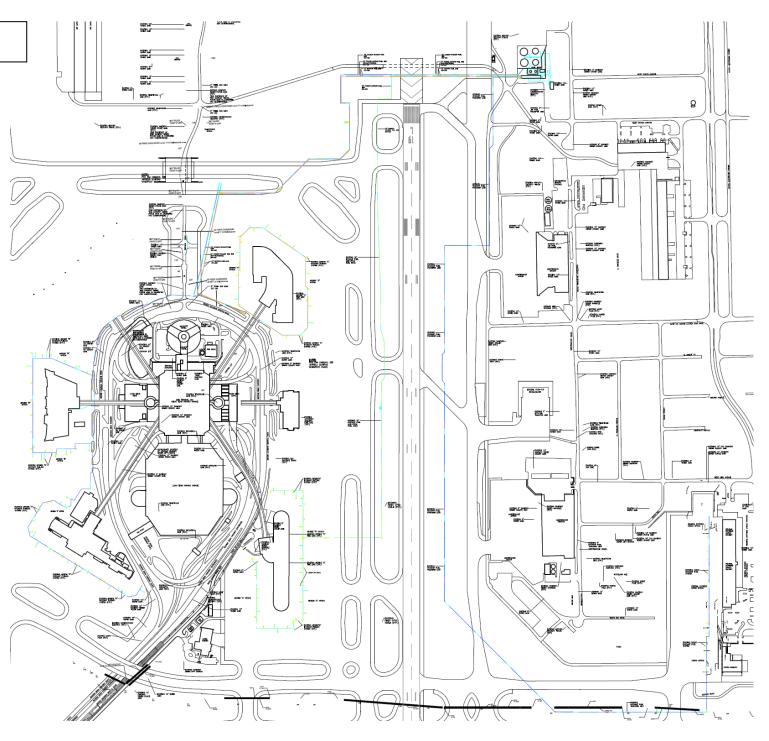


# FEBRUARY 2020

# LEGEND PIPELINE RUN TO AND AROUND AIRSIDES

Ending Location	Linear Feet	
	<b>.</b>	
Federal Express	9,860 linear feet	
Airside A	8,667 linear feet	
Airside C	10,952 linear feet	
Airsides E and F	<u>11,923 linear feet</u>	
Total	41,402 linear feet	

Total Pipeline Right of Way 124,208 square feet calculated as a 3-foot corridor along the 41,402 linear feet of pipeline.



	$\left( \right)$	EXHIBIT D	Greiner, Inc. P. ox 31646 (33631-3416) 76 Vest Courtney Campbell Causeway	,
Greiner		EXHIBIT	Tanaya, Florida 33607-1462 (813) 286-1711 FAX: (813) 287-8591	
T9900.01 October 14, 1991		D	OR BK 11156 PG 0547	

Hillsborough County Aviation Authority Tampa International Airport Post Office Box 22287 Tampa, Florida 33622

Attention: Mr. Jim Jones Director of Design and Construction

## Reference: Estimated Cleanup Costs for Airside "B" Fuel Line Valve Pit Area, Tampa International Airport (TIA)

Dear Jim:

In accordance with your request, we have prepared some cost estimates for the cleanup of petroleum-contaminated soils and groundwater and the removal of free floating petroleum in the vicinity of the Airside B fuel line valve pit, located east of Taxiway C at TIA.

## Contaminated Soils

On October 1, 1991 Greiner, Inc. personnel performed a "soil gas survey" at the valve pit site. This preliminary survey consisted of performing hand auger soil borings, collecting soil samples at 1-foot depth intervals, placing the samples in sealed jars, and testing the "headspace" in each jar for petroleum vapors with an Organic Vapor Analyzer (OVA). This soil gas testing method is recommended by the Florida Department of Environmental Regulation (FDER) for petroleum-contaminated soils. As shown on Attachment A 1 of 4, the soil boring and testing sequence progressed away from the valve pit north, south, east and west until the approximate limits of "excessively-contaminated" soils (i.e., greater than 50 parts per million OVA petroleum reading) were determined. The only exception being borings performed west of the valve pit, where the presence of excessively-contaminated soil likely extends under the edge of the taxiway pavement; no borings were performed west of the edge of pavement. Attachment A 1 of 4 shows the estimated extent of excessively-contaminated soils based on the soil gas survey.

> Tampa International Airport Use and Lease Agreement for Fuel Facilities and Pipeline Exhibit "D" Item 1 of 7

336	EXHIBIT D
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	ESE
	A GLESSAF Cargany
	LIMITED CONTAMINATION ASSESSMENT REPORT AIRCRAFT SERVICE INTERNATIONAL, INC. 4720 NORTH WESTSHORE BOULEVARD
<b>M</b>	TAMPA, HILLSBOROUGH COUNTY, FLORIDA
	Prepared for:
	HILLSBOROUGH COUNTY ENVIRONMENTAL PROTECTION COMMISSION Tampa, Florida
r Á	Prepared by: ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
	Tampa, Florida
	ESE No. 3928295
	January 1993
	· · · · ·
	March. Oren
	Sylyra P. Lorrain Project Manager Project Manager Plorida Registration No. 0000174
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DocuSign Envelope ID: 2F8D6B48-B07F-4D9F-AC26-1C39872725B7

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**d**í

EXHIBIT D



# ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

# **STATE CLEAN-UP SITE**

# LIMITED CONTAMINATION ASSESSMENT REPORT SUMMARY

# AIRSIDES -- B, C, D, & E FDEP Facility ID No. 298625784

NOVEMBER 30, 1993

EXHIBIT D

November 30, 1993



Environmental Science & Engineering, Inc.

NOV 30 1993

E.P.C. OF H.C.

LOGGED

11 | 30 | 93

Mr. Henry Robert Lue Hillsborough County Environmental Protection Commission Waste Management Division 1410 North 21st Street Tampa, FL 33605

Re: Limited Contamination Assessment Report Summary Tampa International Airport Hillsborough County, Tampa, Florida

Dear Mr. Lue:

Environmental Science & Engineering, Inc. (ESE) was authorized by the Hillsborough County Environmental Protection Commission (HCEPC) to conduct a Limited Contamination Assessment Report (LCAR) at portions of the Tampa International Airport (TIA) (Airsides B, C, D, and E), Florida Department of Environmental Protection (FDEP) Facility No. 298625784. The site is located in Tampa, Hillsborough County, Florida. The TIA Airsides B, C, D, and E were admitted to the state funded Early Detection Incentive (EDI) Program on April 17, 1989 under DER File No. 29-3887 and included the Aircraft Service International (ASI) tank form and hydrant piping. A limited CAR was performed at ASI tank farm and is on file at HCEPC as LCAR dated January, 1993.

The purpose of the investigation, as set forth by the request of HCEPC, was to investigate the soil quality for impacts by petroleum hydrocarbons and to evaluate the presence of free-phase petroleum product as a result of potential discharges from the hydrant fuel system surrounding Airsides B, C, D, and E and Airside B valve control pit across Taxiway C. The soil quality investigation procedures were conducted in accordance with the guidelines outlined in Florida Administrative Code (FAC) Chapter 17-770.200.

#### Monitor Well Installation and Construction

As part of the authorized scope by HCEPC, one shallow monitor well (MW) was installed to assess the presence of petroleum hydrocarbon impacts in the groundwater in the vicinity of the soil boging (CS-24) installed near area Gate 18 at Airside B by Greiner, Inc. in March 1992. Approximately 45' inches of free product was reported in that soil boring location. MW-1 was installed on September 19, 2993, by a licensed professional drilling company under the supervision of an ESE geologist and was designed to bracket the top of the surficial aquifer. The location of MW-1 is shown on Figure 1. Because the depth of the water table was approximately 14 feet below land surface (BLS) on September 29, 1993, the MW was installed to a depth of 20 feet BLS with 10 feet of screen. Prior to commencement of drilling activities at the well location, a posthole boring was performed from land surface to 4 feet BLS in order to identify any unmarked buried utilities. The MW was then installed through hollow-stem augers. All auger flights, well casing, and screen sections were steam-cleaned prior to use and/or installation in a decontamination pit lined with plastic sheeting. The MW was constructed of 2-diameter Schedule 40 polyvinyl chloride (PVC) well casing and 2-inch diameter 0.010-inch, mil-slotted well screen. The well pipe and screen section were completed using factory threaded flush joints and no glued sections were installed. The MW boring was backfilled with 20/30 grade silica sand to approximately 2 feet above each screen interval followed by a 1-foot thick bentonite seal and grout to land surface. The MW was completed with a 10-inch diameter steel protective manhole cover and sanitary locking well cap. Immediately following the MW installation, the well was developed.

Groundwater was pumped until the discharge effluent was clear and free of fine grained sediment. The monitor was developed for a duration of approximately 0.5 hour. No free-phase petroleum product was detected in the well at the time of development.

5840 W. Cypress Street, Suite A Tampa, FL 33607 P.O. Box 23601, 33623-3601 Phone (813) 287-2755 Fax (813) 287-2722

EXHIBIT D



Jaunuary 6, 1994

ESE No. 3939513999

Mr. Henry Robert Lue Hillsborough County Environmental Protection Commission Waste Management Division 1410 North 21st Street Tampa, FL 33605

Re: Aircraft Service International (ASI) 4720 North Westshore Boulevard Tampa, Florida Facility ID No. 298625784

Dear Mr. Lue:

Environmental Science & Engineering, Inc. (ESE) has prepared a revised budget spreadsheet as a change order summarizing the activities associated with the original authorized limited contamination assessment requested and additional contamination assessment activities performed at the above-referenced facility. The results of the investigation were summarized in a limited contamination assessment report (LCAR) submitted in January, 1993.

The attached budget spreadsheet in the amount of \$42,163.21 (presented as a change order to the original task authorization in the amount of \$30,809.59) is for preparation of a LCAR. The spreadsheet associated with the data summary report, summarizes the labor and expenses for completion of the limited contamination assessment field work activities and report preparation, as well as efforts required to review all invoice efforts, and preparation of this budget spreadsheet. A project labor detail report is attached for your review.

The attached budget spreadsheet in the amount of \$42,163.21 summarizes the labor and expenses associated with completing the LCAR activities as well as additional contamination assessment activities requested by HCEPC for the ASI facility. The scope of work for completing the LCAR included the following tasks:

- A site investigation and records review was performed whereby ESE personnel identified, onsite and offsite features and site history pertinent to contamination assessment activities.
- A soil quality assessment was performed which included the installation of 74 shallow soil borings to 4 feet below land surface (BLS) inside the bulk terminal containment the USTs, ASTs, and aboveground and underground petroleum product dispensing lines using a stainless steel bucket auger. In addition, 67 shallow soil borings were installed to approximately 10 feet BLS outside the bulk terminal, using a drill rig, to evaluate the extent of "excessively contaminated soil" per FAC Chapter 17-770.200(2), and to define site-specific lithology. In addition, one soil boring was installed inside the Delta, containment area and a composite soil sample collected for laboratory analysis for purgeable aromatics by EPA Method 8020, total recoverable petroleum hydrocarbons (TRPH) by EPA Method 9073, and eight heavy metals.
- The installation of 3 piezometers to 15 feet BLS was performed to assess the direction of groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site prior to installation of permanent groundwater flow across the site permanent groundwate

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Tampa International Airport Use and Lease Agreement for Fuel Facilities and Pipeline Exhibit "D" Item 4 of 7

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EXHIBIT D



# ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

# **STATE CLEAN-UP SITE**

# LIMITED CONTAMINATION ASSESSMENT REPORT SUMMARY FOR SUPPLEMENTAL CONTAMINATION ASSESSMENT ACTIVITIES

# AIRSIDES -- B, C, D, & E FDEP Facility ID No. 298625784

APRIL 20, 1994

OR BK 11156 PG 0552

# BASELINE PHASE II ENVIRONMENTAL INVESTIGATIONS

Conducted on:

# **Delta Fuel Tank Farm**

4720 N. Westshore Boulevard Tampa, Florida Project No. 4987404

Prepared for:

Tampa Petroleum Corporation P.O. Box 261628 Tampa, Florida 33685-1628

February 1998



# EnviroAssessments, Inc.

Environmental Engineering • Industrial Hygiene • Health & Safety Services

----EXHIBIT-D---

TAMPA INTERNATIONAL AIRPORT



# HILLSBOROUGH COUNTY AVIATION AUTHORITY TAMPA, FLORIDA

# **EVALUATION OF JET-A FUEL SYSTEMS**

# TAMPA INTERNATIONAL AIRPORT TAMPA, FLORIDA

OR BK 11156 PG 0554

HCAA PROJECT NO. 2895

URSGWC PROJECT NO. C100009803.30

Prepared By

URS GREINER WOODWARD CLYDE

FEBRUARY1999

Tampa International Airport Use and Lease Agreement for Fuel Facilities and Pipeline Exhibit "D" Item 7 of 7

# WHAT IS YOUR **PRIME** GOAL?

### TFC Fuel System Hydraulic Analysis Tampa International Airport Fuel Farm Renovations

Tampa Fuel Committee Tampa, FL 1319-0002.000

Issued For Review – September 27, 2013

Prepared for:





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TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

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Section 0

Introduction



### INTRODUCTION



TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

Tampa International Airport is planning to gradually increase the number of hydrant fueling carts and trucks servicing aircraft. The requirements for expansion has led the Tampa Fuel Committee (TFC) to modify the existing capacity of their fuel farm to expand supply to the increased number of fuel hydrants while still maintaining day to day operations until new construction has been completed. This study presents hydraulic analysis of modified system and alternatives for pumping capacity and retrofitting the existing aircraft fueling system with a target (14 to 17) new fuel hydrants at a rate of 280 to 350 GPM to service aircraft.

The existing Fuel Farm system at Tampa for all concourses and the south cargo consists of two (2) 25,000bbl Jet-A tanks, two (2) 15,000bbl Jet-A tanks, two (2) 1,500bbl Jet-A tanks, and ten (10) jet fuel pumps (plus one spare diesel driven pump) for a total maximum flow rate of 9,460 GPM which supplies the following systems on site:

- 1. Concourse A: (30) hydrant valves total (18 gates total).
- 2. Concourse C: (23) hydrant valves total (16 gates total).
- 3. Concourse E: (29) hydrant valves total (14 gates total).
- 4. <u>Concourse F</u>: (43) hydrant valves total (15 gates total).
- 5. South Cargo: (15) hydrant valves total.

Refer to the attached drawing called *Hydrant Exhibit* which is based on a system map provided by the Tampa International Airport for layout and interconnection data.

#### **DESCRIPTION OF DESIGN SCENARIOS**

A hydraulic analysis was performed on the existing Tampa hydrant system, with proposed options to expand the system to supply additional aircraft loading positions with hydrant fueling in the future. These options are based on providing 280-350 GPM at 90psig to each hydrant valve. The hydraulic analysis yields the following results.

- 1. <u>Case A Future hydrant demands with control valves at fuel farm</u>: Single 18" and dual 12" fuel supply from Fuel Farm to maximize hydrant points anticipated with the use of flow control valves set at 1,245 GPM downstream of the filter separators.
  - a. <u>Scenario</u>: Five (5) new pumps operating seventeen (17) hydrants dispersed evenly throughout the hydrant fueling systems.
- 2. <u>Case B Future hydrant demands without control valves at fuel farm</u>: Single 18" and dual 12" fuel supply from Fuel Farm to maximize hydrant points anticipated without the installation of flow control valves downstream of the filter separators.
  - a. <u>Scenario</u>: Five (5) new pumps operating seventeen (17) hydrants dispersed evenly throughout the hydrant fueling systems.

The design basis and analysis results for these scenarios are included in the following sections.

Section 1

Assumptions and Initial Data



# ASSUMPTIONS & INITIAL DATA

PRIME ENGINEERING

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

#### 1.0 AIRCRAFT REQUIREMENTS AND DIVERSITY

Analysis is based on providing fueling for a combination of Boeing 737's, 737/800's, and 747's for Concourses A, C, E and F along with cargo aircraft in the South Cargo area. The following provides a basis for analysis for aircraft fueling:

- 1. Total flow rates from the tank farms divided by the number of hydrants required per aircraft
- 2. Maintain minimum pressure requirement of 90 psig as measured at the outlet of hydrant valve

The Boeing 747 has two underwing pressure nozzles, one pair per wing. Each nozzle is sized for a maximum loading rate of 500GPM at 35psig (wing pressure). The maximum ground service fueling expectation per Boeing aircraft characteristic data is 65,000 gallon loading. Typical loading rate per nozzle is 280-350 GPM, with one to two nozzles, depending on the hydrant fueling cart or truck capacity.

The Boeing 767 has two underwing pressure nozzles, one pair per wing. Each nozzle is sized for a maximum loading rate of 500GPM at 35psig (wing pressure). The maximum ground service fueling expectation per Boeing aircraft characteristic data is 24,000 gallon loading. Typical loading rate per nozzle is 280-350 GPM, with one to two nozzles, depending on the hydrant fueling cart or truck capacity.

The Boeing 737 and 737/800 has one underwing pressure nozzle located under the left wing. Each nozzle is sized for a maximum loading rate of 500GPM each at 50psig (wing pressure). The maximum ground service fueling expectation per Boeing aircraft characteristic data is 6,875 gallon loading. Typical loading rate per nozzle is 280-350 GPM, with one to two nozzles, depending on the hydrant fueling cart or truck capacity.

#### 1.1 EXISTING FUEL SYSTEM DESCRIPTION

See the *Hydrant Exhibit* for overall fuel system schematic.

The existing fuel system located at the Tampa Fuel Farm consists of two (2) 25,000bbl Jet-A tanks, two (2) 15,000bbl Jet-A tanks, two (2) 1,500bbl Jet-A tanks, and ten (10) jet fuel pumps (8 primary + 2 Air Canada) plus one spare diesel driven pump. The existing ten (10) jet fuel pumps are 125HP Gould 3736 series (4x6-13) centrifugal pumps each with a design point of 1,000 GPM @ 400ft TDH.

This existing fuel system is connected to the following potential system demands:

- 1. <u>Concourse A</u>: (30) hydrant valves total (18 gates total).
- 2. Concourse C: (23) hydrant valves total (16 gates total).
- 3. Concourse E: (29) hydrant valves total (14 gates total).
- 4. Concourse F: (43) hydrant valves total (15 gates total).
- 5. <u>South Cargo</u>: (15) hydrant valves total.

These potential system demands have been included in the following analysis as noted below.

# **ASSUMPTIONS & INITIAL DATA**

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

#### 1. Hydrant Dispensing System

The existing hydrant fueling system services the entire airport, including the four (4) commercial air services concourses and the south cargo complex. Excluding the hydrant risers, the hydrant fueling system has 40,205 feet of below-grade piping ranging from 10 to 20 inches in diameter. There are a total of 140 hydrants connected to the below-grade piping system. The hydrants are four inches in diameter. Each hydrant has a rated capacity of 350 gpm.

Table 1-A documents the connected load to the hydrant pumping system.

Concourse	Number of Hydrant Connections	Nominal Dispensing Rate at Cart in GPM	Total Max Connected Load in GPM
Airside A	30	280-350	10,500
Airside C	23	280-350	8,050
Airside E	29	280-350	10,150
Airside F	43	280-350	15,050
South Cargo	15	280-350	5,250
Total	140		49,000

#### Table 1-A: Existing Hydrant Dispensing System

The average and peak pumping demands on the fuel farm are controlled by the number of hydrant trucks and carts in services at the airport. Currently there are 13 dispatched hydrant trucks and 15 gate-specific hydrant carts. The number of trucks and carts connected at any one time to the hydrant system varies based on the flight schedule and the size of the aircraft. During Prime Engineering's three (3) day fuel farm site visit in March 2012, the peak fuel dispensing periods at the airport required at most three (3) or four (4) pumps to meet demand.

Using field data, a hydrant fuel system demand calculation is shown in Table 1-B.

#### Table 1-B: Existing Hydrant Fuel System Demand

Dispensing Carts	Quantity	Nominal Dispensing Rate at Cart in GPM	Total Connected Load in GPM	Usage Diversity	Net Dispensing Demand in GPM		
Truck Mounted	13	350	4,550	30%	1,365		
Cart Mounted	15	280	4,200	30%	1,260		
Totals	28		8,750		2,625		
		Av	verage Pumping	g Design Rate	2,625		
	Peaking Factor						
	Peak Pumping Design Rate						



# **ASSUMPTIONS & INITIAL DATA**

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

Using the pumping diversity model shown above, one (1) available connection to the hydrant system places a demand of approximately 94 gpm on the pumping system. Furthermore, comparing the number of currently available connections to the hydrant system to the current fuel farm throughput shows that each hydrant dispensing unit dispenses approximately 13,805 gallons per day.

To support the 5% fuel dispensing growth rate, the airport would need to add dispensing carts as shown in Table 1-C:

Year	Fuel Demand per Day	Fuel Dispensed per Day per Cart	Number of Carts Required	Diversified Pumping Demand GPM	Average Pumping Demand GPM
2012	386,551	13,805	28	94	2,632
2013	405,879	13,805	29	94	2,726
2014	426,173	13,805	30	94	2,820
2015	447,482	13,805	32	94	3,008
2016	469,856	13,805	34	94	3,196
2017	493,348	13,805	36	94	3,384
2018	518,015	13,805	38	94	3,572
2019	543,916	13,805	39	94	3,666
2020	571,112	13,805	41	94	3,854

#### **Table 1-C: Hydrant Dispensing Cart Additions**

#### 2. Pumping and Filtering

As noted in Section 1.1.1, to meet the hydrant cart operating pressure requirements, the pumping system capacity has been reduced from the original design capacity. Table 1-D illustrates the three (3) different operating pressures under which the current system is capable of operating, depending on the flow demand on the pump. The current operating pressure of 160 psig is unusually high for a Jet "A" hydrant fueling system. In this report, a dynamic hardy-cross and hydraulic analysis is conducted on the hydrant system to ascertain whether the system pressure can be reduced. A lower operating pressure will lower the dynamic shocks (water hammer) in the system and extend system life.



### PRIME ENGINEERING

# **ASSUMPTIONS & INITIAL DATA**

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

Pump Position	Status	Control System	Нр	Voltage/ Phase/ Cycle	Current Operating Capacity GPM @ 160 psig	Stated Design Capacity GPM @ 152 psig	Filter Capacity GPM
Spare	Expansion Slot	N/A		480/3/60			
Spare	Expansion Slot	N/A		480/3/60			
A – 1	Online	Old Air Canada	125	480/3/60	860	1,000	1,245
A – 2	Online	Old Air Canada	125	480/3/60	860	1,000	1,245
9	Diesel-Driven Pump	Manual			860	1,000	1,245
Spare	Expansion Slot	N/A		480/3/60			
Spare	Expansion Slot	N/A		480/3/60			
8	Online	Primary	125	480/3/60	860	1,000	1,245
7	Out for Service	Primary	125	480/3/60	860	1,000	1,245
6	Online	Primary	125	480/3/60	860	1,000	1,245
5	Online	Primary	125	480/3/60	860	1,000	1,245
-4	Out for Service	Primary	125	480/3/60	860	1,000	1,245
3	Online	Primary	125	480/3/60	860	1,000	1,245
2	Online	Primary	125	480/3/60	860	1,000	1,245
1	Online	Primary	125	480/3/60	860	1,000	1,245
			Connect	ed Capacity	9,460	11,000	13,695
			Full Buildo	out Capacity	11,180	16,000	17,430
			Fir	m Capacity	8,600	9,000	11,205

#### Table 1-D: Existing Pumping and Filter Capacity

The average pumping system requirements are analyzed in Table 1-E. The fuel farm normally operates with three (3) pumps at 860 gpm each for a total capacity of  $\pm -2,500$  gpm. Increasing the size of the pumps to match the capacity of the filter vessels would reduce the number of pumps required.

# **ASSUMPTIONS & INITIAL DATA**

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

Year	Fuel Demand per Day	Average Pumping Demand GPM	New Pumping Capacity GPM @ Revised System TBD	Pumps Required to Meet Average Demand
2012	386,551	2,632	1,245	2.11
2013	405,879	2,726	1,245	2.18
2014	426,173	2,820	1,245	2.27
2015	447,482	3,008	1,245	2.41
2016	469,856	3,196	1,245	2.57
2017	493,348	3,384	1,245	2.72
2018	518,015	3,572	1,245	2.87
2019	543,916	3,666	1,245	2.94
2020	571,112	3,854	1,245	3.10

#### **Table 1-E: Average Pumping Requirements**

To support the 2020 average pumping demand of 3,854 with a peaking factor of 1.5, the hydrant pumping system will need a firm pumping capacity of 5,540 gpm. As shown in Table 1-F, by sizing new pumps to match the 1,245-gpm capacity of the existing filter/separators, the future hydrant pumping system would have five (5) pumps plus one (1) spare, for a total of six (6) pumps. Currently, the pumping system requires only three (3) pumps with one (1) spare, for a total of four (4) pumps.

Year	Peak Pumping Demand GPM	New Pumping Capacity GPM @ Revised System TBD	Pumps Required to Meet Peak Demand	Spare Pump	Pumps Required to Firm Pumping Demand
2012	3,937	1,245	3.16	1	4
2013	4,134	1,245	3.32	1	5
2014	4,341	1,245	3.49	1	5
2015	4,558	1,245	3.66	1	5
2016	4,786	1,245	3.84	1	5
2017	5,025	1,245	4.04	1	5
2018	5,276	1,245	4.24	1	6
2019	5,540	1,245	4.45	1	6
2020	5,817	1,245	4.67	1	6

Table 4-9 Firm Pumping Requirements

### PRIME ENGINEERING

## **ASSUMPTIONS & INITIAL DATA**

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

#### 1.2 ASSUMPTIONS AND GENERAL INFORMATION

The following assumptions and general information apply to this study:

- 1. Hydraulic model created in KYPipe software Pipe2010 Premium Version 5.017b.
- 2. All data used for the hydraulic model is a compilation of field notes and drawings received from the Tampa Airport.
- 3. No modification to the existing header systems is anticipated with the exception of modifications shown in the Tampa International Airport Fuel Facility Improvements Construction package.
- 4. See HYDRAULIC ANALYSIS in Section 3 Summary of Results for description of system and fluid data used in this analysis.
- 5. The new hydrant supply pump motor horsepowers will vary depending on whether Case A or Case B is used.
- 6. Tables are generated based on a total flow rate produced by the Fuel Farm. The total flow rate can be divided by 280 GPM or 350 GPM to obtain the resulting estimated fueling hydrant count.
- 7. All fueling hydrant counts assume SIMULTANEOUS operation with the Concourses and hydrants listed within the same tables.

Section 2

Modeling Techniques



# **MODELING TECHNIQUES**

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

#### 2.0 GENERAL INFORMATION

A hydraulic model was created using KYPipe software Pipe2010 Premium Version 5.017b. Pipe2010 allows for modeling a piping system and performing a steady state analysis. The KYPipe model was constructed based on the existing Fuel Farm, pipe segments, hydrants, and valves as well as proposed Fuel Farm piping modifications. The model was analyzed based on the Tampa Fuel Farm and its hydrant fueling system linked to the maximum expected hydrants at Concourses A, C, E, F, and South Cargo. Existing system information was collected from field investigations, as-built documents, and interviews with fuel farm operators.

KYPipe allows modeling of systems with a wide variety of components. Each component is placed in the system at a location called a "node". The software allows the user to enter the unique characteristics of every component of a system. For the model created for this analysis, nodes included tanks, pumps, valves, hydrants, and miscellaneous appurtenances that affect the dynamics of fuel flowing through the system. Characteristics of each node component are based on either actual equipment design data, where available, or typical design data.

The parameters for analyzing potential worst-case steady state conditions of the hydraulic model are:

- 1. Low level storage tanks at fuel farms
- 2. Maximum hydrant flow (350 GPM narrow-body and/or 700 GPM wide-body)
- 3. Balanced locations of active hydrants to produce minimum pressures within the hydrant loop

Hydrants were added from the analysis based on maintaining a minimum of 90 psig at the hydrant valve connection point for optimal fueling requirements stated by the hydrant cart manufacturers. The number of hydrants available can be divided accordingly based on the types of aircraft expected.

#### 2.1 TAMPA FUEL FARM

Prime Engineering conducted an interview with the Fuel Facilities Manager, Enos Sage, for the Tampa Fuel Farm.

The flow rate profile for the Tampa Fuel Farm System averages 2,632 GPM throughout the day.

The typical total daily fuel usage is 386,568 gallons per day.

The fuel header pressure is controlled at 160 psig, which is a result of operating the existing 1,000 GPM pumps at a reduced rate of 860 GPM in order to maintain an operable hydrant system pressure ranging between 140 and 150 psig during operation.

The Tampa Fuel Farm currently appears to be operating at an unusually high pressure for a Jet-A fuel hydrant system. A lower operating pressure will lower the dynamic shocks (water hammer) in the system and extend system life.



### MODELING TECHNIQUES

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

#### 2.2 BASIS OF HYDRAULIC ANALYSIS

Hydraulic analysis is based on the following fluid and system data, and is analyzed using KYPipe steady-state simulation software which performs calculations based on the Darcy-Weisbach method.

- 1. Fluid: Jet A
  - a. Name: Jet-A
  - b. Specific Gravity: 0.81
  - c. Kinematic Viscosity: 2 cSt
  - d. Vapor Pressure: <5 mm Hg
- 2. Minimum Operating Pressure Requirements:
  - a. Hydrant valve discharge (at coupling point): 90 psig
- 3. Maximum Dispensing Flow Rates:
  - a. Aircraft Fuel Hydrant: 280-350 GPM per hydrant
- 4. Pipe Data:
  - a. Carbon Steel (ASTM A53 Grade B ERW or API 5L Seamless)
  - b. Roughness Coefficient: 0.1500
- 5. Tampa Fuel Farm Hydrant Existing Pump Data:
  - a. Quantity: Ten (10) Pumps Existing. Eight (8) pumps are primary hydrant supply pumps with a normal operation of 7+1 (seven (7) pumps maximum operating per design, with one (1) pump as backup for maintenance, etc). Two (2) pumps are dedicated supply pumps for Air Canada.
  - b. Manufacturer: Goulds
  - c. Design Point: 1,000 GPM @ 400' TDH
  - d. Model: Gould 3736 4x6-13
  - e. Motor Data: 125 HP / 3,550 rpm
- 6. Tampa Fuel Farm Hydrant New Pump Data:
  - a. Quantity: Five (5) New Vertical Inline Pumps. Normal operation will be 4+1 (four (4) pumps maximum operating per design, with one (1) pump as backup for maintenance, etc).
  - b. Manufacturer: Flowserve
  - c. Design Point: 1,245 GPM @ 450' TDH
  - d. Model: PVML 35.15.15.30F
  - e. Motor Data: 150HP / 3,550 rpm

The existing hydrant valves and pits are comprised of 6" laterals with 6"x4" API 1584 hydrant valves sized for a normal loading rates of 280-350GPM each at 90psig. One (1) hydrant valve will be provided for each narrow-body parking position. Two (2) hydrant valves may be provided for each wide-body loading to provide 560-700 GPM total loading rate, if flight range requires and hydrant cart availability allows.

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## **MODELING TECHNIQUES**

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

All cases below include the following common design features:

- 1. No modifications to hydrant loop piping.
- 2. System modifications incorporated as shown in the Tampa International Airport Fuel Facility Improvements Construction package
- 3. Note that the references below are all <u>hydrant points only</u>, meaning a single hydrant pit and cart assembly. If dual-fueling is used, this would account for two hydrant points (for a total flow of 560-700 GPM).

Included in the Attachments are new pump curves to illustrate potential operations and impact of various outside systems. Note that the curves are based on a 1,245 GPM design basis. This requirement has a direct effect on the number of hydrant points that can be supplied at one time. The *Hydrant Exhibit* is an overall map of the entire facility including the Tampa Fuel Farm along with the hydrant loops around the various concourses and is also included in the Attachments.

INCORPORATED

Section 3

**Summary of Results** 



### PRIME ENGINEERING

### SUMMARY OF RESULTS

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

#### 3.0 GENERAL INFORMATION

Two (2) cases were analyzed to determine hydrant loading throughput at the existing concourses. The results in the attached tables indicate the existing infrastructure supplying the Tampa concourses has sufficient capacity to supply the potential hydrant loop demands in the year 2020.

Hydraulic cases were modeled to include the Tampa Fuel Farm and hydrant loops at Concourses A, C, E, F, and South Cargo. The total system flow rates for each case are indicated below.

The Hydraulic Analysis for the Tampa Fuel Farm is based on field data collected by Prime Engineering on March 5, 2012, Records Drawings from Burns and McDonnell dated 1970, and Record Drawings from ECMC Services dated 2009. Hydraulic Analysis for Concourses A, C, E, F, and South Cargo are based on facility maps (CAD) for Existing Aviation Fuel Concourses, provided by the Tampa Airport on August 6, 2013, and Record Drawings from Burns and McDonnell dated 1987.

#### 3.1 SYSTEM LIMITATIONS

Through this analysis, the following existing system limitations have been noted, which could be addressed through the design of the fueling system and/or discussions with the operations and fuel farm operator/owner.

1. Existing Flow Control Valves at Tank Farm

The existing CLA-VAL flow control valves at the tank farm have set points that could potentially limit the total flow going to the hydrant loops. This could cause a hydraulic imbalance in the system and increase the losses within the system.

Due to this potential for hydraulic imbalance, Case B removes the need to install the CLA-VALs in the modified pumping system.

#### 3.2 CASE DESCRIPTION & SUMMARY

Following are descriptions of cases to determine the capabilities of the Tampa Fuel Farm and hydrant loops and also adding the expansion of future hydrants. These results are tabulated in the attached tables.

# 1. CASE A: FUTURE HYDRANT DEMANDS WITH CONTROL VALVES AT FUEL FARM

This case consists of a single 18" and dual 12" supply lines from the Tampa Fuel Farm to points on all Concourses and the South Cargo area while maintaining at least 90 psig downstream of the hydrant valves. Case A includes a 8" Model 40-01/640-01 CLA-VAL installed downstream of each filter separator to prevent excessive flow by limiting flow to 1,245 GPM regardless of changing line pressure.

a. Scenario – Use the four (4) new pumps operating seventeen (17) hydrants dispersed evenly throughout the hydrant fueling systems to operate at 90 psig. The total flow rate that can be supplied to all (17) hydrants while maintaining 90 psig at the hydrant points is 4,900 GPM.

### SUMMARY OF RESULTS

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

- b. From the total flow rate the total number of hydrants that would be able to operate is (17) at 280 GPM each or (14) at 350 GPM each. The system pressure is maintained at 90 psig at the hydrant points with a pressure of 135 psig at the tank farm hydrant supply system.
- c. The System Resistance Curve (Attachment 2) shows the effects of the design point as the system demands increase and more pumps are brought online to meet capacity.
- d. The pumps required to accomplish this scenario are:
  - i. Manufacturer: Goulds
  - ii. Design Point: 1,245 GPM @ 400' TDH
  - iii. Model: 3910 MX 4x6-11/13
  - iv. Motor Data: 150/200 HP / 3,600 rpm

# 2. CASE B: FUTURE HYDRANT DEMANDS WITHOUT CONTROL VALVES AT FUEL FARM

This case consists of a single 18" and dual 12" supply lines from the Tampa Fuel Farm to points on all Concourses and the South Cargo area while maintaining at least 90 psig downstream of the hydrant valves. Case B does not include a flow control valve downstream of each filter separator which reduces the total dynamic head requirements by decreasing the overall losses in the hydrant supply system.

- a. Scenario Use the four (4) new pumps operating seventeen (17) hydrants dispersed evenly throughout the hydrant fueling systems to operate at 90 psig. The total flow rate that can be supplied to all (17) hydrants while maintaining 90 psig at the hydrant points is 4,900 GPM.
- b. From the total flow rate the total number of hydrants that would be able to operate is (17) at 280 GPM each or (14) at 350 GPM each. The system pressure can be maintained at 90 psig at the hydrant points with a pressure of 130 psig at the tank farm hydrant supply system.
- c. The pumps required to accomplish this scenario are:
  - i. Manufacturer: Goulds
  - ii. Design Point: 1,245 GPM @ 390' TDH
  - iii. Model: 3910 MX 4x6-11/13
  - iv. Motor Data: 150/200 HP / 3,600 rpm

#### 3.3 **RESULTS AND RECOMMENDATIONS**

It is recommended that CASE A be the design case for the new pumps at the Tampa Fuel Farm. From the analysis of CASE B, the removal of the CLA-VALs has little effect on the rated design point.



# SUMMARY OF RESULTS

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

Pump Position	Status	Control System	HP (Note 1)	Voltage/ Phase/ Cycle	Operating Capacity GPM @ 160 psig	Filter Capacity GPM
$\mathbf{P}-1$	Online	H-O-A	150	480/3/60	1,245	1,245
P - 2	Online	H-O-A	150	480/3/60	1,245	1,245
P-3	Online	H-O-A	150	480/3/60	1,245	1,245
P-4	Online	H-O-A	150	480/3/60	1,245	1,245
P – 5	Online	H-O-A	150	480/3/60	1,245	1,245
<b>P</b> – 6	Expansion Slot	H-O-A	150	480/3/60		1,245
<b>P</b> – 7	Expansion Slot	H-O-A	150	480/3/60		1,245
P - 8	Expansion Slot	H-O-A	150	480/3/60		1,245
			Connecte	ed Capacity	6,925	9,960
		F	ull Build-ou	ut Capacity	9,415	9,960
		4,980	4,980			
P – 8	Diesel-Driven Pump	Manual	TBD	N/A	3,600	

#### **Table 3-A: New Pump Configuration**

Notes:

1. Pumps are to have Variable Speed Drives

### PRIME ENGINEERING

### **ATTACHMENTS**

TAMPA FUEL COMMITTEE TFC FUEL SYSTEM HYDRAULIC ANALYSIS TAMPA INTERNATIONAL AIRPORT 1319-0002.000

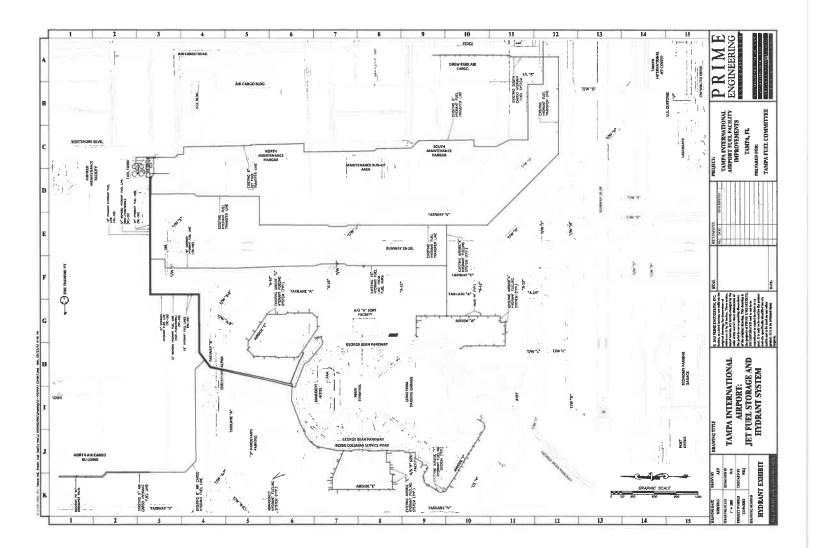
#### ATTACHMENTS

- → Hydrant Exhibit: Fueling Hydrant System Map
- ✤ System Resistance Curve
- → Tampa Fuel Farm Existing Pump Curve Goulds Pump 3736 4x6-13 / 125HP
- → Tampa Fuel Farm New Pump Curve (CASE A) Flowserve Pump PVML 35.15.15.30F | 150HP
- → KYPipe Hydraulic Summary Report CASE A

Attachment 1

Hydrant Exhibit: Fueling Hydrant System Map

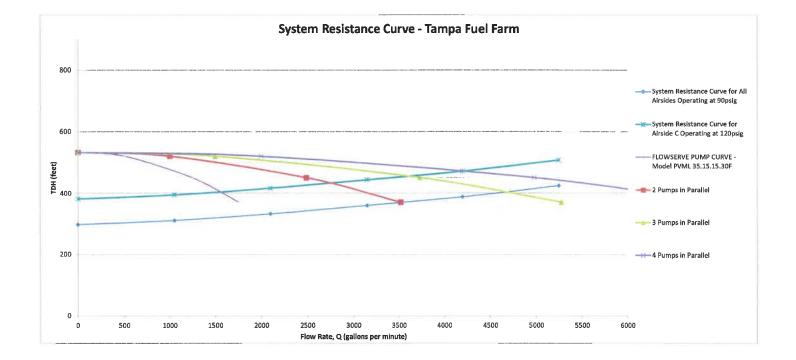




Attachment 2

System Resistance Curve

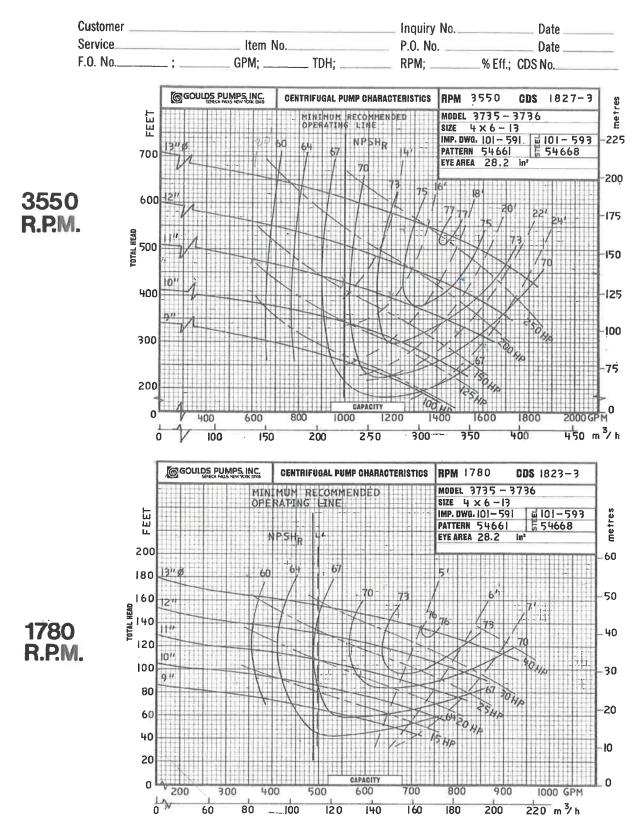




Attachment 3

Existing Tampa Fuel Farm Pump Curve





GOULDS PUMPS, INC. SENECA FAILS NEW YORK 1314B

Exhibit D

Attachment 4

New Tampa Fuel Farm Pump Curve



### FLOWSERVE

#### Exhibit D

#### Hydraulic Datasheet

	Pumping Systems	nc		ump / Stag	÷			15.15.30F	- 1	1	
Customer reference				ased on c		: 50					
	e esperir and e			owserve r	eference		52981 Ve				
Service	Jet A Fuel		D;	ate		: 50	eptembe	r 23, 2013	3		
	ating Conditions							pecificati	on		
Capacity	: 1245.0 USgpm			Material column code : S-6							
Water capacity (CQ=1.00)	: -		L	Pump sp	ecificatio	1	3 e				
Normal capacity	3 -		ſ			0	ther Rec	quiremen	ts		
Total Developed Head	: 450.00 ft			Hydraulic	selection	: No spec	ification				
Water head (CH=1.00)	: -			Construct							
NPSH available (NPSHa)	: 49.1 ft			Test toler				vel A			
NPSHa less NPSH margin	: -			Driver Siz					SF		
Maximum suction pressure	: 0.0 psig		I	Seal conf		,			-		
	Liquid				0	Ū					
Liquid type	: Other										
Temperature / Spec. Gravity	:75 F /	0.770									
Solid Size - Actual / Limit	: - /	-									
Viscosity / Vapor pressure	: 0.6 cP /	7.80 psia									
			Perfo	rmance							
Hydraulic power	: 109 hp		1	Impeller	diameter						
Pump speed	3550 rpm			Rateo	1			10.60 in			
Efficiency (CE=1.00)	: 75.1 %			Maxir	num		:	12.28 in			
			- 1	Minim	num		:	10.04 in			
NPSH required (NPSHr)	: 22.8 ft		- 1	Suction s	specific sp	beed	:	11090 U	S units		
Rated power	: 145 hp		- 1	Minimum	continuc	us flow	:	263.9 US	gpm		
Maximum power	171 hp			Maximur	n head @	rated dia	:	532.16 ft			
Driver power	150 hp / 112 k	W		Flow at E	BEP			1457.8 U	Sgpm		
Casing working pressure	: 177.4 psig			Flow as	% of BEP		:	85.4 %			
(based on shut off and Rated s	specific gravity @ Cu	t dia)		Efficienc	y at norm	al flow	:	-			
Maximum allowable	: 580.2 psig			Impeller dia ratio (rated/max) : 86.3 %							
				Impener	Head rise to shut off : 18.3 %						
Hydrostatic test pressure	: 870.2 psig			•			•	18.3 %			
Hydrostatic test pressure Est. rated seal chamb. press.	: 870.2 psig : -			Head rise	e to shut		:	18.3 % 70.6 %			
Est. rated seal chamb. press.		P IS GUARANTI	EED FOR O	Head rise Total hea	e to shut ad ratio (r	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press.	:-	IP IS GUARANTI	EED FOR O	Head rise Total hea	e to shut ad ratio (r	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press.	:-	P IS GUARANTI	EED FOR O	Head rise Total hea	e to shut ad ratio (r	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press. CURVES	:-	P IS GUARANTI	EED FOR O	Head rise Total hea	e to shut ad ratio (r condition:	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press. CURVES	:-	IP IS GUARANTI	EED FOR O	Head rise Total hea	e to shut ad ratio (r	off ated/max)	:	70.6 %	NCY.	 [	
Est. rated seal chamb. press. CURVES	:-	P IS GUARANTI	EED FOR O	Head rise Total hea	e to shut ad ratio (r conditions	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press.	:-	P IS GUARANTI		Head rise Total hea	e to shut ad ratio (r conditions	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press.	:-	P IS GUARANTI		Head rise Total hea	e to shut ad ratio (r conditions	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press. CURVES	:-			Head rise Total hea	e to shut ad ratio (r conditions	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press.	:-			Head rise Total hea	e to shut ad ratio (r conditions	off ated/max)	:	70.6 %			
Est. rated seal chamb. press. CURVES	:-	P IS GUARANTI		Head rise Total hea	e to shut ad ratio (r conditions	off ated/max)	:	70.6 %	NCY.		
Est. rated seal chamb. press. CURVES				Head rise Total hea	e to shut ad ratio (r conditions	off ated/max)	:	70.6 %	NCY.	F 80	
Est. rated seal chamb. press. CURVES				Head rise Total hea	e to shut ad ratio (r condition:	off ated/max) S; CAPACITO	:	70.6 %	NCY.		
Est. rated seal chamb. press. CURVES				Head rise Total hea	e to shut ad ratio (r condition: Power	off ated/max) S; CAPACITO	:	70.6 %	NCY.	80 70	
Est. rated seal chamb. press. CURVES 200 150 150 50 0 100 800 112.24 700 50 102 12.24 700 112 700 112 70 112	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition:	off ated/max) S; CAPACITO	:	70.6 %	NCY.		
Est. rated seal chamb. press. CURVES 200 150 150 50 0 100 50 0 122.24 700 600 12.24 10.60	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition: Power	off ated/max) S; CAPACITO	:	70.6 %		- 70 - 60	
Est. rated seal chamb. press. CURVES 200 150 100 50 0 100 50 100 50 100 50 12.22 10.66 500 11.2.22 10.66 10.60 10.66 10	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition: Power	off ated/max) S; CAPACITO	:	70.6 %		70	Icy
Est. rated seal chamb. press. CURVES 200 150 100 50 0 100 50 100 50 100 50 12.22 10.66 500 11.2.22 10.66 10.60 10.66 10	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition: Power	off ated/max) S; CAPACITO	:	70.6 %		- 70 - 60	iency
Est. rated seal chamb. press. CURVES 200 150 100 50 0 100 50 0 12.21 10.66	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition: Power	off ated/max) S; CAPACITO	:	70.6 %		70 60 50 40	ficiency
Est. rated seal chamb. press. CURVES 200 150 150 50 0 100 50 100 50 12.24 500 10.66 10.60	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition: Power	off ated/max) S; CAPACITO	:	70.6 %		- 70 - 60 - 50	Efficiency
Est. rated seal chamb. press. CURVES 200 150 100 50 0 100 50 0 12.21 10.66	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition:	off ated/max) S; CAPACITO	:	70.6 %	NCY.	70 60 50 40	Efficiency
Est. rated seal chamb. press. CURVES	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition: Power	off ated/max) S; CAPACITO	:	70.6 %		- 70 - 60 - 50 - 40 - 30 - 20	Efficiency
Est. rated seal chamb. press. CURVES 200 150 100 50 0 100 50 0 12.22 10.60 10.6	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition:	off ated/max) S; CAPACITO	:			70 60 50 40 30	Efficiency
Est. rated seal chamb. press. CURVES	ARE APPROXIMATE, PUM			Head rise Total hea	e to shut ad ratio (r condition:	off ated/max) S; CAPACITO	:	70.6 %		- 70 - 60 - 50 - 40 - 30 - 20	Efficiency
Est. rated seal chamb. press. CURVES	ARE APPROXIMATE, PUM	P IS GUARANTI		Head rise Total hea	e to shut ad ratio (r conditions	off ated/max) S; CAPACITO	(, HEAD, AI	70.6 %		- 70 - 60 - 50 - 40 - 30 - 20	Efficiency
Est. rated seal chamb. press. CURVES	ARE APPROXIMATE, PUM			Head risk Total heat NE SET OF O	e to shut ad ratio (r conditions	off ated/max) s; CAPACIT	(, HEAD, AI	70.6 %		- 70 60 50 40 30 20 10 0	Efficiency

Attachment 5

KY Pipe Hydraulic Summary Report



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Date & Time: Wed Sep 25 09:44:24 2013

Master File : c:\users\njoshi\documents\projects\tampa fuel farm\hydraulics\case a - tampa fuel farm 9-17-13.KYP\case a - tampa fuel farm 9-17-13.P2K

UNITS SPECIFIED

FLOWRATE ..... = gallons/minute
HEAD (HGL) ..... = feet
PRESSURE ..... = psig

THE SPECIFIC GRAVITY OF THIS LIQUID = 0.8300

REGULATING VALVE DATA

VALVE LABEL	VALVE TYPE	VALVE SETTING (ft or gpm)
RV-1	PRV-1	273.23
RV-2	PRV-1	273.23
RV-3	PRV-1	273.23
RV-4	PRV-1	273.23
RV-5	PRV-1	273.23
RV-6	PRV-1	273.23
RV-7	PRV-1	273.23
RV-8	PRV-1	273.23
RV-9	PRV-1	273.23
RV-10	PRV-1	273.23
RV-11	PRV-1	273.23
RV-12	PRV-1	273.23
RV-13	PRV-1	273.23
RV-14	PRV-1	273.23
RV-15	FCV-1	1245.00
RV-16	FCV-1	1245.00
RV-17	FCV-1	1245.00
RV-18	FCV-1	1245.00

PIPELINE DATA

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE 1 #1	NAMES #2	LENGTH (ft)	DIAMETER (in)	ROUGHNESS COEFF.	MINOR LOSS COEFF.
P-1	AC-1 Jet-A	J-2	10.00	20.00	120.0000	1.92
P-2	T-2 Jet-A	J-1	20.00	20.00	120.0000	1.92
P-3	J-6	J-2	45.00	20.00	120.0000	1.90
P-4	J-2AC-2	Jet-A	10.00	20.00	120.0000	1.92
P-5	J-1	J-3	100.00	20.00	120.0000	1.20
P-6	T-1 Jet-A	J-1	15.00	20.00	120.0000	1.92
P-7	J-3	J-4	175.00	20.00	120.0000	2.25

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P-8	T-4 Jet-A	5-U T 2	20.00	Exhipit (D)	120.0000	1.92
P-9 P-10	T-3 Jet-A J-5	J-3 J-6	130.00	20.00	120.0000 120.0000	1.92 2.25
P-10 P-11	J-5	J-14	10.00	20.00	120.0000	0.40
P-12	J-7	J-4	10.00	20.00	120.0000	0.40
P-13	J-7	I-L-133	10.00	8.00	120.0000	0.75
P-14	J-4	I-L-136	10.00	8.00	120.0000	0.75
P-15	J-10	J-7	10.00	20.00	120.0000	0.40
P-16	J-210	I-L-1	10.00	6.00	120.0000	0.00
P-17	J-12	J-10	10.00	20.00	120.0000	0.40
P-18	J-12	I-L-137	8.00	8.00	120.0000	0.75
P-19	J-14	J-12	10.00	20.00	120.0000	0.40
P-20 P-21	J-14 0-L-1	I-L-139 I-RV-10	10.00 25.62	8.00 6.00	120.0000 120.0000	0.75 0.00
P-21 P-22		I - P - 2 (A)	23.02	6.00	120.0000	0.00
P-23	0-L-133		1.00	6.00	120.0000	0.00
P-24	0-RV-1	J-75	2.00	6.00	120.0000	0.00
P-25	0-L-137	I-P-4 (A)	2.00	6.00	120.0000	0.00
P-26		I-P-3 (A)	2.00	6.00	120.0000	0.00
P-27	0-RV-2	J-15	2.00	6.00	120.0000	0.00
P-28	O-RV-3	J-76	2.00	6.00	120.0000	0.00
P-29	O-P-3 (A)	I-L-2	4.00	6.00	120.0000	0.00
P-30 P-31	O-P-4 (A) O-RV-4	I-L-3 J-155	4.00 9.33	6.00 6.00	120.0000 120.0000	0.00 0.00
P-32	O-P-1 (A)	J-291	2.73	6.00	120.0000	0.00
P-33	O-P-2 (A)	J-290	2.67	6.00	120.0000	0.00
P-34	0-RV-5	J-165	5.32	6.00	120.0000	0.00
P-35	J-32	J-26	5.00	18.00	120.0000	0.00
P-36	O-RV-6	J-8	15.60	6.00	120.0000	0.00
P-39	0-RV-7	J-81	5.12	6.00	120.0000	0.00
P-40	0-RV-8	J-80	3.34	6.00	120.0000	0.00
P-41 P-42	0-L-2 0-L-3	I-RV-15 I-RV-16	2.00 2.00	8.00 8.00	120.0000 120.0000	0.00 0.00
P-42 P-43	0-L-3 0-RV-9	J-41	4.10	6.00	120.0000	0.00
P-44	0-L-5	I-RV-17	2.00	8.00	120.0000	0.00
P-45	0-L-6	I-RV-18	2.00	8.00	120.0000	0.00
P-46	0-RV-15	I-L-12	2.66	8.00	120.0000	0.00
P-47	0-RV-10	J-72	24.38	6.00	120.0000	0.00
P-48	0-RV-16	I-L-11	2.48	8.00	120.0000	0.00
P-49 P-50	0-RV-11 0-RV-17	J-237 I-L-10	9.31 5.00	6.00 8.00	120.0000 120.0000	0.00 0.00
P-51	0-RV-17	I-L-4	5.00	8.00	120.0000	0.00
P-52	0-L-4	J-289	10.87		120.0000	1.15
P-53	0-RV-12	J-285	4.08	6.00	120.0000	0.00
P-54	0-RV-13	J-274	5.20	6.00	120.0000	0.00
P-55	0-RV-14	J-259	7.29	6.00	120.0000	0.00
P-56	J-13	J-9	10.00	16.00	120.0000	0.40
P-57 P-58	J-9 J-18	J-11 J-11	10.00 20.00	16.00 16.00	120.0000 120.0000	0.40 2.25
P-59	J-17	J-11	10.00	20.00	120.0000	0.00
P-60	J-19	J-17	10.00	16.00	120.0000	0.40
P-61	0-L-11	J-13	2.52	8.00	120.0000	0.00
P-62	J-20	J-19	10.00	16.00	120.0000	0.40
P-63	0-L-12	J-9	2.34	8.00	120.0000	0.00
P-64	J-21	J-20	10.00	16.00	120.0000	0.40
P-66 P-67	J-22 0-L-10	J-21 J-22	10.00 10.00	16.00 12.00	120.0000 120.0000	0.40 0.00
P-68	J <b>-</b> 17	I-L-7	20.00	20.00	120.0000	2.25
P-69	0-L-7	J-32	7.28	20.00	120.0000	0.00
P-70	J-23	J-32	12.72	20.00	120.0000	0.00
P-72	I-L-8	J-18	425.00	12.00	120.0000	0.00
P-73	J-25	0-L-8	1184.07	12.00	120.0000	0.00
P-75-XX	J-25	J-26	22.00	12.00	120.0000	1.67
P-76	J-25	J-283	50.00	12.00	120.0000	0.00
P-77 P-79	J-23 J-26	J-37 J-294	2300.00 2182.37	$18.00 \\ 18.00$	120.0000 120.0000	0.75 0.75
P-80	J-27	J-295	9.03	18.00	120.0000	0.00
P-81	J-27	J-28	560.00	12.00	120.0000	1.15
P-82	J-28	J-123	104.90	12.00	120.0000	7.95
P-83	J-30	J-28	10.00	12.00	120.0000	1.15
P-84	J-30	J-31	1600.00	12.00	120.0000	0.75
P-85 P-86	J-31 J-29	J-132 J-33	133.85 1200.00	20.00 18.00	120.0000 120.0000	7.95 1.90
P-86 P-87	J-29 J-33	J-33 J-200	173.12	18.00	120.0000	7.95
P-88	J-33	J-34	700.00	18.00	120.0000	1.15

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Р-89 Р-90	J-34 J-24	J-256	93.41 100.00 E	14.00 Synihit (D)	120.0000 120.0000	7.95
						0.00
P-92	J-36	J-38	630.00	12.00	120.0000	0.75
P-93	J-37	J-39	630.00	18.00	120.0000	0.75
P-94	J-38	J-27	1320.00	12.00	120.0000	3.00
P-95	J-39	J-29	1320.00	18.00	120.0000	3.00
P-96	J-42	J-40	78.86	14.00	120.0000	0.00
P-97	I-L-9	J-40	40.00	6.00	120.0000	2.10
P-98	0-L-9	I-RV-9	5.90	6.00	120.0000	0.00
P-99	J-43	J-42	82.89	14.00	120.0000	0.00
P-102	J-44	J-43	49.58	14,00	120.0000	0.00
P-103	J-46	J-59	62,90	14.00	120,0000	0.00
P-104	J-47	J-46	102.23	14.00	120.0000	0.00
P-105	J-48	J-47	66.28	14.00	120.0000	0.00
P-106	J-49	J-48	62.74	14.00	120.0000	0.00
P-107	J-50	J-49	78.83	14.00	120.0000	0.00
P-108	J-51	J-50	65.63	14.00	120.0000	0.00
P-109	J-52	J-51	64.33	14.00	120.0000	0.00
P-110	J-53	J-52	94.78	14.00	120.0000	0.00
P-111	J-54	J-53	79.51	14.00	120.0000	0.00
P-112	J-55	J-54	64.90	14.00	120.0000	
P-112 P-113	J-56	J-54 J-55	44.40			0.00
P-113 P-114	J-57			14.00	120.0000 120.0000	0.00
		J-56	33.72	14.00		0.00
P-115	J-58	J-57	41.51	14.00	120.0000	0.00
P-116	J-59	J-44	65.91	14.00	120.0000	0.00
P-117	J-60	J-58	54.63	14.00	120.0000	0.00
P-118	J-61	J-60	92.82	14.00	120.0000	0.00
P-119	J-62	J-61	39.18	14.00	120.0000	0.00
P-120	J-63	J-62	55.89	14.00	120.0000	0.00
P-121	J-64	J-63	37.57	14.00	120.0000	0.00
P-122	J-65	J-64	62.85	14.00	120.0000	0.00
P-123	J-66	J-65	49.95	14.00	120.0000	0.00
P-124	J-67	J <b>-</b> 66	24.30	14.00	120.0000	0.00
P-125	J-68	J <b>-</b> 67	40.64	14.00	120.0000	0.00
P-126	J-69	J-68	109.75	14.00	120.0000	0.00
P-139	J-52	I-L-19	40.00	6.00	120.0000	0.00
P-140	J-53	I-L-20	40.00	6.00	120.0000	0.00
P-146	J-61	J-60	996.03	6.00	120.0000	0.00
P-164	0-L-19	I-RV-8	6.66	6.00	120.0000	0.00
P-165	0-L-20	I-RV-7	4.88	6.00	120.0000	0.00
P-182	J-70	J-98	146.72	12.00	120.0000	0.00
P-183	J-98	J-106	104.95	12.00	120.0000	0.00
P-184	J-99	J-103	103.79	12.00	120.0000	0.00
P-185	J-100	J-129	64.41	12.00	120.0000	0.00
P-186	J-101	J-102	122.34	12.00	120.0000	0.00
P-187	J-102	J-99	103.78	12.00	120.0000	0.00
P-188	J-103	J-104	154.65	12.00	120.0000	0.00
P-189	J-104	J-105	136.04	12.00	120.0000	0.00
P-190	J-105	J-70	83.00	12.00	120.0000	0.00
P-191	J-106	J-107	176.61	12.00	120.0000	0.00
P-193	J-107	J-109	67.51	12.00	120.0000	0.00
P-195	J-109	J-111	140.39	12.00	120.0000	0.00
P-196	J-109	I-L-43	23.47	6.00	120.0000	0.00
P-197	J-111	J-113	123.36	12.00	120.0000	0.00
P-199	J-113	J-115	175.51	12.00	120.0000	0.00
P-201	J-115	J-117	137.51	12.00	120.0000	0.00
P-203	J-117	J-119	112.00	12.00	120.0000	0.00
P-204	J-117	I-L-47	23.90	6.00	120.0000	0.00
P-205	J-119	J-121	124.94	12.00	120.0000	0.00
P-207	J-121	J-30	57.79	12.00	120.0000	0.00
P-209	J-123	J-125	112.08	12.00	120.0000	0.00
P-211	J-125	J-127	90.72	12.00	120.0000	0.00
P-213	J-127	J-100	64.19	12.00	120.0000	0.00
P-216	J-129	J-101	92.80	12.00	120.0000	0.00
P-222	J-104	I-L-59	29.70	6.00	120.0000	0.00
P-231	0-L-43	I-RV-2	26.53	6.00	120.0000	0.00
P-235	0-L-43 0-L-47	I-RV-2 I-RV-3	26.55	6.00	120.0000	0.00
P-247	O-L-59	I-RV-1	20.30	6.00	120.0000	0.00
P-248	J-132	J-142	145.14	20.00	120.0000	0.00
P-250	J-142	J-144	56.26	20.00	120.0000	0.00
P-252	J-144	J-145	61.81	20.00	120.0000	0.00
P-254	J-145	J-148	89.18	20.00	120.0000	0.00
P-256	J-148	J-150	73.75	20.00	120.0000	0.00
P-258 P-260	J-150	J-152 J-154	84.94 70.98	20.00 20.00	120.0000	0.00
F-200	J-152	0-104	10.98	20.00	120.0000	0.00

DocuSign Envelope ID: 2	F8D6B48-B07F	-4D9F-AC26-1	C39872725B7			
P-ZOI	J-152	T-T-AD	22.01	6,00	120.0000	0.00
P-262	J-154	J-156		Exhibit	120.0000	0.00
P-264	J-156	J-198	55.58	20.00	120.0000	0.00
P-266	J-158	J-160	73.75	20.00	120.0000	0.00
P-268	J-160	J-162	55.75	20.00	120.0000	0.00
P-270	J-162	J-164	46.94	20.00	120.0000	0.00
P-271	J-162	I-L-101	35.87	6.00	120.0000	0.00
P-272	J <b>-</b> 164	J-286	28.97	20.00	120.0000	0.00
P-274	J <b>-</b> 166	J-168	55.83	20.00	120.0000	0.00
P-276	J-168	J-170	53.33	20.00	120.0000	0.00
P-278	J-170	J-172	73.47	20.00	120.0000	0.00
P-280	J-172	J-174	39.13	20.00	120.0000	0.00
P-282	J-174	J-176	50.17	20.00	120.0000	0.00
P-284	J-176	J-178	59.01	20.00	120.0000	0.00
P-286	J-178	J-180	64.39	20.00	120.0000	0.00
P-287	J-178	I-L-109	24.24	6.00	120.0000	0.00
P-288 P-290	J-180	J-182 J-184	72.82	20.00	120.0000	0.00
P-290 P-292	J-182 J-184	J-184 J-186	129.52 132.60	20.00 20.00	120.0000 120.0000	0.00
P-292 P-294	J-184 J-186	J-188 J-188	81.97	20.00	120.0000	0.00
P-296	J-188	J-190	88.69	20.00	120.0000	0.00
P-298	J-190	J-192	93.86	20.00	120.0000	0.00
P-300	J-192	J-193	114.90	20.00	120.0000	0.00
P-302	J-193	J-196	98.25	20.00	120.0000	0.00
P-304	J-196	J-31	76.29	20.00	120.0000	0.00
P-306	J-198	J-158	34.91	20.00	120.0000	0.00
P-308	J-200	J-202	38.14	14.00	120.0000	0.00
P-310	J-202	J-204	58,86	14.00	120.0000	0.00
P-312	J-204	J-206	51.07	14.00	120.0000	0.00
P-314	J-206	J-208	39.92	14.00	120.0000	0.00
P-316	J-208	J-210	36.11	14.00	120.0000	0.00
P-318	J-210	J-211	55.96	14.00	120.0000	0.00
P-320	J-211	J-214	47.64	14.00	120.0000	0.00
P-322	J-214	J-216	52.22	14.00	120.0000	0.00
P-324	J-216	J-218	50.22	14.00	120.0000	0.00
P-326	J-218	J-220	42.83	14.00	120.0000	0.00
P-328	J-220	J-222	48.74	14.00	120.0000	0.00
P-330	J-222	J-224	26.78	14.00	120.0000	0.00
P-332	J-224	J-226	68.25	14.00	120.0000	0.00
P-334	J-226	J-228	42.94	14.00	120.0000	0.00
P-336	J-228	J-230	67.76	14.00	120.0000	0.00
P-338	J-230	J-232	80.76	14.00	120.0000	0.00
P-340 P-342	J-232 J-234	J-234 J-236	77.27 69.64	$14.00 \\ 14.00$	120.0000 120.0000	0.00
P-343	J-234 J-234	J-236 I-L-77	25.62		120.0000	0.00
P-344	J-234	J-238	53.46	14.00	120.0000	0.00
P-346	J-238	J-240	53.66	14.00	120.0000	0.00
P-348	J-240	J-242	66.02	14.00	120.0000	0.00
P-350	J-242	J-243	52.82	14.00	120.0000	0.00
P-352	J-243	J-246	58.98	14.00	120.0000	0.00
P-354	J-246	J-248	45.42	14.00	120.0000	0.00
P-356	J-248	J-250	45.53	14.00	120.0000	0.00
P-358	J-250	J-252	33.52	14.00	120.0000	0.00
P-360	J-252	J-254	109.69	14.00	120.0000	0.00
P-362	J-254	J-33	152.67	14.00	120.0000	0.00
P-364	J-35	J-268	100.00	12.00	120.0000	0.00
P-365	J-24	I-L-118	9.89	6.00	120.0000	0.00
P-366	J-256	J-260	100.00	12.00	120.0000	0.00
P-368	J-260	J-262	100.00	12.00	120.0000	0.00
P-370	J-262	J-264	100.00	12.00	120.0000	0.00
P-372	J-264	J-266	100.00	12.00	120.0000	0.00
P-374 P-377	J-266 J-268	J-35 J-271	100.00	12.00	120.0000 120.0000	0.00
P-379	J-271	J-271 J-273	100.00	12.00 12.00	120.0000	0.00
P-380	J-271	I-L-126	15.66	6.00	120.0000	0.00
P-381	J-271 J-273	J-275	100.00	12.00	120.0000	0.00
P-383	J-275	J-277	100.00	12.00	120.0000	0.00
P-385	J-277	J-279	100.00	12.00	120.0000	0.00
P-387	J-279	J-281	100.00	12.00	120.0000	0.00
P-389	J-281	J-258	100.00	12.00	120.0000	0.00
P-391	J-258	I-L-132	10.95	6.00	120.0000	0.00
P-403	0-L-77	I-RV-11	15.08	6.00	120.0000	0.00
P-426	0-L-95	I-RV-4	18.16	6.00	120.0000	0.00
P-432	0-L-101	I-RV-5	8.81		120.0000	0.00
P-440	0-L-109	I-RV-6	10.16	6.00	120.0000	0.00

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2-450	0-1-118	1-KV-14	1.82 _	<u>6,00</u>	120.0000	0.00
P-458	0-L-126	I-RV-13	4.14 <b>E</b> 2	xhibit 😡	120.0000	0.00
P-464	0-L-132	I-RV-12	9.97	6.00	120.0000	0.00
P-465	J-286	J-166	36.41	20.00	120.0000	0.00
P-466	J-283	J-287	6903.03	12.00	120.0000	0.00
P-467	J-287	J-258	1496.97	12.00	120.0000	0.00
P-468	J-286	J-288	747.82	12.00	120.0000	0.00
P-470	J-289	J-22	9.13	16.00	120.0000	0.00
P-471	J-288	J-287	502.18	12.00	120.0000	0.00
P-472	J-36	J-288	4000.00	12.00	120.0000	0.00
P-473	J-290	I-L-6	1.33	8.00	120.0000	0.00
P-474	J-291	I-L-5	1.27	8.00	120.0000	0.00
P-479	J-294	J-36	117.63	12.00	120.0000	0.00
P-483	J-294	J-296	650.00	12.00	120.0000	0.00
P-484	J-295	J-29	10.97	18.00	120.0000	0.00
P-485	J-296	J-295	1300.00	12.00	120.0000	0.00

#### PUMP/LOSS ELEMENT DATA

THERE IS A DEVICE AT	NODE L-1	DESCRIBED BY THE FOLLOWING DATA:	(ID=	3)
HEAD (ft) -30.00 -50.00 -65.00	FLOWRATE (gpm) 100.00 500.00 1000.00	EFFICIENCY (%) 75.00 (Default) 75.00 (Default) 75.00 (Default)		
THERE IS A DEVICE AT	NODE L-2	DESCRIBED BY THE FOLLOWING DATA:	(ID=	1)
HEAD (ft) 0.00 -27.80 -111.20	FLOWRATE (gpm) 0.00 1245.00 2490.00	EFFICIENCY (%) 75.00 (Default) 75.00 (Default) 75.00 (Default)		
THERE IS A DEVICE AT	NODE L-3	3	(ID=	1)
THERE IS A DEVICE AT	NODE L-4	DESCRIBED BY THE FOLLOWING DATA:	(ID=	6)
HEAD (ft) 0.00 -1.00 -6.40 -16.50	FLOWRATE (gpm) 0.00 500.00 1245.00 2000.00	EFFICIENCY (%) 75.00 (Default) 75.00 (Default) 75.00 (Default) 75.00 (Default)		
THERE IS A DEVICE AT	NODE L-S	;>	(ID=	1)
THERE IS A DEVICE AT	NODE L-(	5>	(ID=	1)
THERE IS A DEVICE AT	NODE L-	DESCRIBED BY THE FOLLOWING DATA:	(ID=	2)
HEAD (ft) 0.00 -8.30 -33.40	FLOWRATE (gpm) 0.00 1000.00 2000.00	EFFICIENCY (%) 75.00 (Default) 75.00 (Default) 75.00 (Default)		
THERE IS A DEVICE AT	NODE L-8	3>	(ID=	2)
THERE IS A DEVICE AT	NODE L-S	>	(ID=	3)
THERE IS A DEVICE AT	NODE L-10	)>	(ID=	6)
THERE IS A DEVICE AT	NODE L-1:	>	(ID=	6)
THERE IS A DEVICE AT	NODE L-12	2>	(ID=	6)
THERE IS A DEVICE AT		>	( T D-	3)

DocuSign Env	elope ID: 2F8	D6B	48-B07F-4D9F-	AC26-10	C398 -∠∪		(ID=	3)
THERE IS A	DEVICE	ፚጥ	NODE		43	Exhibit D		3)
THERE IS A				Ц-	-47	>	(ID=	3)
THERE IS A	A DEVICE	АT	NODE	L-	-59	>	(ID=	3)
THERE IS A	A DEVICE	AT	NODE	L-	-77	>	(ID=	3)
THERE IS A	A DEVICE	AT	NODE	L-	95	>	(ID=	3)
THERE IS A	A DEVICE	AT	NODE	L-1	01	>	(ID=	3)
THERE IS A	A DEVICE	AT	NODE	L-1	09	>	(ID=	3 )
THERE IS A	A DEVICE	ΑT	NODE	L-1	18	>	(ID=	3 )
THERE IS A	A DEVICE	AT	NODE	L-1	26	>	(ID=	3)
THERE IS A	A DEVICE	AT	NODE	L-1	.32	>	(ID=	3)
		2 11	NODE	- 1	2.2	PROPERTY AND DALLAND DALL	( = D	
THERE IS A	A DEVICE	AT	NODE	7-1	.33	DESCRIBED BY THE FOLLOWING DATA:	(ID≂	4)
	HEAD (ft)		FLOWRATE			EFFICIENCY		
-	-0.30 -1.10 -2.50		(gpm) 1000.00 2000.00 3000.00			(%) 75.00 (Default) 75.00 (Default) 75.00 (Default)		
-	-0.30 -1.10 -2.50	AT	1000.00 2000.00 3000.00		.36	75.00 (Default) 75.00 (Default)	(ID=	4)
	-0.30 -1.10 -2.50 A DEVICE		1000.00 2000.00 3000.00 NODE			75.00 (Default) 75.00 (Default) 75.00 (Default)		4) 4)
- THERE IS A	-0.30 -1.10 -2.50 A DEVICE A DEVICE	AT	1000.00 2000.00 3000.00 NODE NODE	L-1	.37	75.00 (Default) 75.00 (Default) 75.00 (Default)	(ID=	
THERE IS A	-0.30 -1.10 -2.50 A DEVICE A DEVICE A DEVICE	AT AT	1000.00 2000.00 3000.00 NODE NODE NODE	L-1 L-1	.37	75.00 (Default) 75.00 (Default) 75.00 (Default) >	(ID=	4)
THERE IS A THERE IS A THERE IS A THERE IS A THERE IS A 52 52 4	-0.30 -1.10 -2.50 A DEVICE A DEVICE A DEVICE	AT AT	1000.00 2000.00 3000.00 NODE NODE NODE	L-1 L-1 L-1	.37	75.00 (Default) 75.00 (Default) 75.00 (Default) >	(ID= (ID=	4)
THERE IS A THERE IS A THERE IS A THERE IS A THERE IS A 52 52 4	-0.30 -1.10 -2.50 A DEVICE A DEVICE A DEVICE HEAD (ft) 32.10 20.00 50.00 70.00	AT AT AT	1000.00 2000.00 3000.00 NODE NODE FLOWRATE (gpm) 0.00 500.00 1245.00 1760.00	L-1 L-1 L-1	.39 (A)	75.00 (Default) 75.00 (Default) 75.00 (Default) > > DESCRIBED BY THE FOLLOWING DATA: EFFICIENCY (%) 0.00 47.00 75.10	(ID= (ID= (ID=	4)
THERE IS A THERE IS A THERE IS A THERE IS A THERE IS A 52 52 41 33	-0.30 -1.10 -2.50 A DEVICE A DEVICE A DEVICE HEAD (ft) 32.10 20.00 50.00 70.00 A DEVICE	AT AT AT	1000.00 2000.00 3000.00 NODE NODE FLOWRATE (gpm) 0.00 500.00 1245.00 1760.00	L-1 L-1 P-1 (	.37 .39 (A)	75.00 (Default) 75.00 (Default) 75.00 (Default) > > DESCRIBED BY THE FOLLOWING DATA: EFFICIENCY (%) 0.00 47.00 75.10 76.50	(ID= (ID= (ID= (ID=	4) 4) 5)

NODE DATA

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	JUNCTION ELEVATION (ft)	EXTERNAL GRADE (ft)
AC-1 Jet-A AC-2 Jet-A J-1 J-2 J-3 J~4 J-5 J-6 J-7 J-8 J-9		0.00 0.00 0.00 0.00 0.00 0.00 0.00 350.00 0.00	24.00 24.00 23.00 24.00 23.00 22.00 22.00 23.00 22.00 23.00 23.00 22.00	42.00 42.00
J-10		0.00	22.00	

J-11 J-12	0.00	22.5%hibit D
J-13	0.00	22.00
J-14	0.00	22.00
J-15 J-17	350.00 0.00	23.00 22.00
J-18	0.00	22.00
J-19	0.00	22.00
J-20 T-21	0.00	22.00 22.00
J-21 J-22	0.00 0.00	22.00
J-23	0.00	0.00
J-24	0.00	18.00
J-25 J-26	0.00 0.00	22.00 22.00
J-27	0.00	18.00
J-28	0.00	18.00
J-29 J-30	0.00 0.00	18.00 18.00
J-31	0.00	18.00
J-32	0.00	22.00
J-33 J-34	0.00 0.00	18.00 18.00
J-35	0.00	18.00
J-36	0.00	18.00
J-37 J-38	0.00	18.00 18.00
J-39	0.00	18.00
J-40	0.00	18.00
J-41 J-42	350.00 0.00	23.00 18.00
J-43	0.00	18.00
J-44	0.00	18.00
J-46 J-47	0.00 0.00	18.00 18.00
J-48	0.00	18.00
J-49	0.00	18.00
J-50 J-51	0.00 0.00	18.00 18.00
J-52	0.00	18.00
J-53	0.00	18.00
J-54 J-55	0.00 0.00	18.00 18.00
J-56	0.00	18.00
J-57	0.00	18.00
J-58 J-59	0.00 0.00	18.00 18.00
J-60	0.00	18.00
J-61	0.00	18.00
J-62 J-63	0.00 0.00	18.00 18.00
J-64	0.00	18.00
J-65	0.00	18.00
J-66 J-67	0.00	18.00 18.00
J-68	0.00	18.00
J-69	0.00	18.00
J-70 J-72	0.00 350.00	18.00 23.00
J-75	350.00	23.00
J-76	350.00	23.00
J-80 J-81	350.00 350.00	23.00 23.00
J-98	0.00	18.00
J-99	0.00	18.00
J-100 J-101	0.00 0.00	18.00 18.00
J-102	0.00	18.00
J-103	0.00	18.00
J-104 J-105	0.00 0.00	18.00 18.00
J-106	0.00	18.00
J-107	0.00	18.00
J-109 J-111	0.00 0.00	18.00 18.00
~	0.00	

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J-115	0.00	18.Exhibit D
J-117	0.00	18.00
J-119	0.00	18.00
J-121	0.00	18.00
J-123	0.00	18.00
J-125	0.00	18.00
J-127 J-129	0.00 0.00	18.00 18.00
J-132	0.00	18.00
J-142	0.00	18.00
J - 144	0.00	18.00
J-145	0.00	18.00
J-148	0.00	18.00
J-150	0.00	18.00
J-152	0.00	18.00
J-154	0.00	18.00
J-155	350.00	23.00
J-156	0.00	18.00
J-158	0.00	18.00
J-160	0.00	18.00
J-162	0.00	18.00
J-164	0.00	18.00
J-165	350.00	23.00
J-166	0.00	18.00
J-168	0.00	18.00
J-170	0.00	18.00
J-172	0.00 0.00	18.00 18.00
J-174 J-176	0.00	18.00
J-178	0.00	18.00
J-180	0.00	18.00
J-182	0.00	18.00
J-184	0.00	18.00
J-186	0.00	18.00
J-188	0.00	18.00
J-190	0.00	18.00
J-192	0.00	18.00
J-193	0.00	18.00
J-196	0.00	18.00
J-198	0.00	18.00
J-200	0.00	18.00
J-202	0.00	18.00
J-204	0.00	18.00
J-206	0.00	18.00
J-208	0.00	18.00
J-210	0.00 0.00	18.00
J-211 J-214	0.00	18.00 18.00
J-214 J-216	0.00	18.00
J-218	0.00	18.00
J-220	0.00	18.00
J-222	0.00	18.00
J-224	0.00	18.00
J-226	0.00	18.00
J-228	0.00	18.00
J-230	0.00	18.00
J-232	0.00	18.00
J-234	0.00	18.00
J-236	0.00	18.00
J-237	350.00	23.00
J-238	0.00	18.00
J-240	0.00 0.00	18.00
J-242		18.00
J-243 J-246	0.00 0.00	18.00 18.00
J-248 J-248	0.00	18.00
J-250	0.00	18.00
J-252	0.00	18.00
J-254	0.00	18.00
J-256	0.00	18.00
J-258	0.00	18.00
J-259	350.00	23.00
J-260	0.00	18.00
J-262	0.00	18.00

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	ID: 2F8D6B48-B07F-4		25B7	
J-266		0.00	⊥≈.00 18 <b>.⊟xhibit</b> I	D
J-268		0.00	18.00	_
J-271		0.00	18.00	
J-273		0.00	18.00	
J-274		350.00	23.00	
J-275		0.00	18.00	
J-277 J-279		0.00 0.00	18.00 18.00	
J-281		0.00	18.00	
J-283		0.00	18.00	
J-285		350,00	23.00	
J-286		0.00	0.00	
J-287 J-288		0.00 0.00	18.00 0.00	
J-289		0.00	22.00	
J-290		0.00	22.00	
J-291		0.00	22.00	
J-294		0.00	0.00	
J-295 J-296		0.00 0.00	18.00 0.00	
I-L-1	Hydrant Valv	0.00	0.00	
I-L-2	Filter Separ	0.00	22.00	
I-L-3	Filter Separ	0.00	22.00	
I-L-4	Cla-Val dP	0.00	22.00	
I-L-5 I-L-6	Filter Separ Filter Separ	0.00 0.00	22.00 22.00	
I-L-7	Meter	0.00	22.00	
0-L-8	Meter	0.00	22.00	
0-L-9	Hydrant Valv	0.00	23.00	
I-L-10	Cla-Val dP	0.00	22.00	
I-L-11 I-L-12	Cla-Val dP Cla-Val dP	0.00 0.00	0.00	
I-L-19	Hydrant Valv	0.00	23.00	
I-L-20	Hydrant Valv	0.00	23.00	
0-L-43	Hydrant Valv	0.00	23.00	
I-L-47	Hydrant Valv	0.00	23.00	
0-L-59 0-L-77	Hydrant Valv Hydrant Valv	0.00 0.00	23.00 23.00	
0-L-95	Hydrant Valv	0.00	23.00	
0-L-101	Hydrant Valv	0.00	23.00	
I-L-109	Hydrant Valv	0.00	23.00	
0-L-118	Hydrant Valv	0.00	23.00	
0-L-126 0-L-132	Hydrant Valv Hydrant Valv	0.00 0.00	23.00 23.00	
I-L-133	nyuranc varv	0.00	22.00	
I-L-136		0.00	22.00	
I-L-137		0.00	22.00	
I-L-139		0.00	22.00	
I-P-1 (A) I-P-2 (A)		0.00 0.00	21.00 21.00	
I-P-3 (A)		0.00	21.00	
I-P-4 (A)		0.00	21.00	
0-RV-1	Hydrant Valv		23.00	273.23
O-RV-2	Hydrant Valv	0.00	23.00	273.23
I-RV-3 0-RV-4	Hydrant Valv Hydrant Valv	0.00	23.00 23.00	273.23
0-RV-5	Hydrant Valv		23.00	273.23
I-RV-6	Hydrant Valv	0.00	23.00	
I-RV-7	Hydrant Valv	0.00	23.00	
I-RV-8	Hydrant Valv	0.00	23.00 23.00	272 22
0-RV-9 I-RV-10	Hydrant Valv Hydrant Valv	0.00	23.00	273.23
0-RV-11	Hydrant Valv		23.00	273.23
0-RV-12	Hydrant Valv		23.00	273.23
0-RV-13	Hydrant Valv		23.00	273.23
0-RV-14	Hydrant Valv		23.00	273.23
I-RV-15 I-RV-16	6" or 8" Cla 6" or 8" Cla	0.00 0.00	22.00 22.00	
1-RV-10 1-RV-17	6" or 8" Cla	0.00	22.00	
I-RV-18	6" or 8" Cla	0.00	22.00	
T-1 Jet-A			24.00	42.00
T-2 Jet-A T-3 Jet-A			24.00 24.00	42.00
T-3 Jet-A T-4 Jet-A			24.00	42.00 42.00

<ul> <li>-RW-2 Hydrant Valv</li> <li>0.00</li> <li>23.601</li> <li>-RW-5 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>-RW-7 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>-RW-11 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>-RW-12 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>-RW-13 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>-RW-14 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>-RW-13 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>-RW-14 Hydrant Valv</li> <li>0.00</li> <li>1.00</li> <li>0.00</li> <li>1.00</li> <li>0.00</li> <li>0.00</li> <li>1.00</li> <li>0.00</li> <li>0.00</li> <li>0.00</li> <li>0.00</li> <li>0.00</li> <li>0.00</li> <li>0.00</li> <li>1.00</li> <li>0.00</li> <li>0.</li></ul>	DocuSign Envelope	ID: 2F8D6B48-B07F-4	D9F-AC26-1C39872725B	7 ∠3.00	
				23 Exhibit D	
<ul> <li>I-RV-5 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>I-RV-11 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>I-RV-12 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>I-RV-13 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>I-RV-14 Hydrant Valv</li> <li>0.00</li> <li>23.00</li> <li>I-RV-13 Hydrant Valv</li> <li>0.00</li> <li>0.00</li> <li>0.01</li> <li>0.01</li> <li>0.00</li> <li>0.00</li> <li>0.01</li> <li>0.01</li> <li>0.00</li> <li>0.00<td></td><td>-</td><td></td><td></td><td></td></li></ul>		-			
I-RV-9         Hydrant Valv         0.00         23.00           I-RV-12         Hydrant Valv         0.00         23.00           I-RV-13         Hydrant Valv         0.00         23.00           I-RV-14         Hydrant Valv         0.00         23.00           O-I-1         Hydrant Valv         0.00         23.00           O-I-133         0.00         22.00           O-I-133         0.00         22.00           O-I-133         0.00         22.00           O-F-3 (A)         0.00         21.00           O-P-4 (A)         0.00         21.00           O-P-4 (A)         0.00         21.00           O-P-7 (A)         0.00         21.00           O-P-4 (A)         0.00         21.00           O-RV-6         Hydrant Valv          23.00         273.23           O-RV-7         Hydrant Valv          23.00         273.23           O-RV-8         Hydrant Valv          23.00         273.23           O-RV-16         G' or B'' Cla         0.00         22.00         0           O-L-13         Filter Separ         0.00         22.00         0           O-RV-16	_				
I-RV-11         Hydrant Valv         0.00         23.00           I-RV-13         Hydrant Valv         0.00         23.00           I-RV-14         Hydrant Valv         0.00         23.00           O-L-1         Hydrant Valv         0.00         23.00           O-L-133         0.00         22.00           O-L-133         0.00         22.00           O-RV-3         Hydrant Valv          23.00           O-RV-4         No         0.00         21.00           O-P-74         (A)         0.00         21.00           O-P-7         Hydrant Valv          23.00         273.23           O-RV-6         Hydrant Valv          23.00         273.23           O-L-2         Filter Separ         0.00         22.00         273.23           O-RV-6         Hydrant Valv          23.00         273.23           O-RV-16         G'or 8" C		-			
I-RV-12       Hydrant Valv       0.00       23.00         I-RV-14       Hydrant Valv       0.00       23.00         0-L-1       Hydrant Valv       0.00       22.00         0-L-133       0.00       22.00         0-L-134       0.00       22.00         0-L-133       0.00       22.00         0-L-134       0.00       21.00         0-RV-3       Hydrant Valv        23.00       273.23         0-P-2 (A)       0.00       21.00       273.23         0-P-2 (A)       0.00       21.00       273.23         0-RV-6       Hydrant Valv        23.00       273.23         0-RV-7       Hydrant Valv        23.00       273.23         0-L-2       Filter Separ       0.00       22.00       0         0-L-5       Filter Separ       0.00       22.00       0         0-L-5       Filter Separ       0.00       22.00       0         0-RV-16       6" or 8" Cla       0.00       22.00       0         0-RV-17       Hydrant Valv        23.00       273.23         0-RV-18       6" or 8" Cla       0.00       22.00       0		-			
I-RV-13       Hydrant Valv       0.00       23.00         0-L-1       Hydrant Valv       0.00       22.00         0-L-133       0.00       22.00         0-L-133       0.00       22.00         0-L-133       0.00       22.00         0-L-133       0.00       22.00         0-RV-3       Hydrant Valv        23.00       273.23         0-P-2.4 (A)       0.00       21.00       0       273.23         0-P-7       Hydrant Valv        23.00       273.23         0-RV-6       Hydrant Valv        23.00       273.23         0-RV-7       Hydrant Valv        23.00       273.23         0-RV-8       Hydrant Valv        23.00       273.23         0-RV-7       Hydrant Valv        23.00       273.23         0-RV-7       Hydrant Valv        23.00       273.23         0-RV-7       Hydrant Valv        23.00       273.23         0-RV-16       6" or 8" Cla       0.00       22.00       0         0-L-2       Filter Separ       0.00       22.00       0         0-RV-16       6" or					
I-RV-14       Hydrant Valv       0.00       23.00         O-L-136       0.00       22.00         O-L-137       0.00       22.00         O-L-137       0.00       22.00         O-L-137       0.00       22.00         O-L-137       0.00       22.00         O-RV-3       Hydrant Valv        23.00       273.23         O-P-4 (A)       0.00       21.00       0         O-P-7 (A)       0.00       21.00       0         O-P-7 (A)       0.00       21.00       0         O-RV-6       Hydrant Valv        23.00       273.23         O-RV-7       Hydrant Valv        23.00       273.23         O-RV-7       Hydrant Valv        23.00       273.23         O-L-2       Filter Separ       0.00       22.00       0         O-L-5       Filter Separ       0.00       22.00       0         O-RV-16       6" or 8" Cla       0.00       22.00       0         O-RV-18       6" or 8" Cla       0.00       22.00       0         O-RV-18       6" or 8" Cla       0.00       22.00       0         O-L-1 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
O-L-1         Hydrant Valv         0.00         0.00         22.00           O-L-133         0.00         22.00         0           O-L-137         0.00         22.00           O-RV-3         Hydrant Valv          23.00         273.23           O-P-3 (A)         0.00         21.00         0         0           O-P-4 (A)         0.00         21.00         0           O-P-7 (A)         0.00         21.00         0           O-P-7 (A)         0.00         21.00         0           O-P-7 (A)         0.00         21.00         0           O-RV-6         Hydrant Valv          23.00         273.23           O-RV-7         Hydrant Valv          23.00         273.23           O-RV-8         Hydrant Valv          23.00         273.23           O-L-5         Filter Separ         0.00         22.00         0           O-RV-16         G % Cla         0.00         22.00         0           O-RV-16         G % S Cla         0.00         22.00         0           O-RV-16         G % S Cla         0.00         22.00         0           O-L-11 <td></td> <td></td> <td></td> <td></td> <td></td>					
O-L-136         0.00         22.00           O-L-137         0.00         22.00           O-L-137         0.00         22.00           O-L-137         0.00         22.00           O-RV-3         Hydrant Valv          23.00         273.23           O-P-4 (A)         0.00         21.00         0           O-P-2 (A)         0.00         21.00         0           O-P-2 (A)         0.00         21.00         0           O-RV-6         Hydrant Valv          23.00         273.23           O-RV-7         Hydrant Valv          23.00         273.23           O-RV-8         Hydrant Valv          23.00         273.23           O-RV-7         Hydrant Valv          23.00         273.23           O-L-2         Filter Separ         0.00         22.00         0           O-RV-16         6" or 8" Cla         0.00         22.00         0           O-RV-17         6" or 8" Cla         0.00         22.00         0           O-RV-18         6" or 8" Cla         0.00         22.00         0           O-RV-17         6" or 8" Cla         0.00		-			
O-L-133         0.00         22.00           O-L-139         0.00         22.00           O-RV-3         Hydrant Valv          23.00         273.23           O-P-7         (A)         0.00         21.00         0           O-P-4         (A)         0.00         21.00         0           O-P-4         (A)         0.00         21.00         0           O-P-4         (A)         0.00         21.00         0           O-P-2         (A)         0.00         21.00         0           O-P-2         (A)         0.00         21.00         273.23           O-RV-6         Hydrant Valv          23.00         273.23           O-RV-1         Fydrant Valv          23.00         273.23           O-L-6         Filter Separ         0.00         22.00         0           O-RV-16         6" or 8" Cla         0.00         22.00         0           O-RV-16         6" or 8" Cla         0.00         22.00         0           O-RV-18         6" or 8" Cla         0.00         22.00         0           O-L-12         Cla-Val dP         0.00         22.00         0 <td></td> <td>nyarane varv</td> <td></td> <td></td> <td></td>		nyarane varv			
O-L-137         0.00         22.00           O-RV-3         Hydrant Valv          23.00         273.23           O-P-4         (A)         0.00         21.00         0           O-P-4         (A)         0.00         21.00         0           O-P-1         (A)         0.00         21.00         0           O-P-2         (A)         0.00         21.00         0           O-P-2         (A)         0.00         21.00         0           O-P-2         (A)         0.00         21.00         0           O-RV-6         Hydrant Valv          23.00         273.23           O-RV-7         Hydrant Valv          23.00         273.23           O-RV-8         Hydrant Valv          23.00         273.23           O-L-2         Filter Separ         0.00         22.00         0           O-RV-16         6" or 8" Cla         0.00         22.00         0           O-RV-16         6" or 8" Cla         0.00         22.00         0           O-L-12         Cla-Val dP         0.00         22.00         0         0           O-L-12         Cla-Val dP <td></td> <td></td> <td></td> <td></td> <td></td>					
O-L-139         0.00         22.00           O-P-3 (A)         0.00         21.00           O-P-4 (A)         0.00         21.00           O-P-1 (A)         0.00         21.00           O-P-1 (A)         0.00         21.00           O-P-2 (A)         0.00         21.00           O-P-2 (A)         0.00         21.00           O-P-2 (A)         0.00         21.00           O-RV-6         Hydrant Valv            O-RV-7         Hydrant Valv            O-RV-8         Hydrant Valv            O-RV-16         Filter Separ         0.00         22.00           O-L-3         Filter Separ         0.00         22.00           O-RV-16         G'' or 8" Cla         0.00         22.00           O-RV-17         G'' or 8" Cla         0.00         22.00           O-RV-18         G'' or 8" Cla         0.00         22.00           O-L-11         Cla-Val dP         0.00         22.00           O-L-12         Cla-Val dP         0.00         22.00           O-L-13         Hydrant Valv         0.00         23.00           O-L-14         Glaval dP         0.00					
O-RV-3         Hydrant Valv          23.00         273.23           O-P-3 (A)         0.00         21.00         0           O-P-1 (A)         0.00         21.00         0           O-P-2 (A)         0.00         21.00         0           O-P-2 (A)         0.00         21.00         273.23           O-RV-6         Hydrant Valv          23.00         273.23           O-RV-7         Hydrant Valv          23.00         273.23           O-RV-8         Hydrant Valv          23.00         273.23           O-L-2         Filter Separ         0.00         22.00         273.23           O-L-5         Filter Separ         0.00         22.00         0           O-RV-16         Gr or 8" Cla         0.00         22.00         0           O-RV-16         Gr or 8" Cla         0.00         22.00         0           O-RV-16         Gr or 8" Cla         0.00         22.00         0           O-L-1         Cla-Val dP         0.00         20.00         0         0           O-L-1         Cla-Val dP         0.00         23.00         0         0         0         0					
O-P-3 (A)         0.00         21.00           O-P-4 (A)         0.00         21.00           O-P-1 (A)         0.00         21.00           O-P-2 (A)         0.00         21.00           O-RV-6         Hydrant Valv          23.00         273.23           O-RV-7         Hydrant Valv          23.00         273.23           O-RV-7         Hydrant Valv          23.00         273.23           O-L-2         Filter Separ         0.00         22.00         273.23           O-L-3         Filter Separ         0.00         22.00         273.23           O-RV-16         Filter Separ         0.00         22.00         273.23           O-RV-16         Filter Separ         0.00         22.00         273.23           O-RV-16         Gr or 8" Cla         0.00         22.00         273.23           O-RV-16         Gr or 8" Cla         0.00         22.00         273.23           O-RV-17         Gr or 8" Cla         0.00         22.00         273.23           O-RV-18         Gr or 8" Cla         0.00         22.00         273.23           O-L-17         Hydrant Valv         0.00         23.00		Hydrant Valv			273.23
O-P-4 (A)       0.00       21.00         O-P-2 (A)       0.00       21.00         O-RV-6       Hydrant Valv        23.00       273.23         O-RV-7       Hydrant Valv        23.00       273.23         O-RV-8       Hydrant Valv        23.00       273.23         O-RV-7       Hydrant Valv        23.00       273.23         O-RV-7       Filter Separ       0.00       22.00       273.23         O-L-3       Filter Separ       0.00       22.00       273.23         O-RV-16       Filter Separ       0.00       22.00       273.23         O-RV-16       Hydrant Valv        23.00       273.23         O-RV-16       Hydrant Valv        23.00       273.23         O-RV-17       6" or 8" Cla       0.00       22.00       273.23         O-RV-18       for or 8" Cla       0.00       22.00       273.23         O-RV-17       for or 8" Cla       0.00       22.00       273.23         O-RV-18       for or 8" Cla       0.00       22.00       273.23         O-L-4       Cla-Val dP       0.00       23.00       22.00       20.01		1	0.00		
O-P-1 (A)       0.00       21.00         O-RV-6       Hydrant Valv        23.00       273.23         O-RV-7       Hydrant Valv        23.00       273.23         O-RV-8       Hydrant Valv        23.00       273.23         O-RV-7       Hydrant Valv        23.00       273.23         O-L-2       Filter Separ       0.00       22.00       273.23         O-L-5       Filter Separ       0.00       22.00       273.23         O-RV-16       F" of 8" Cla       0.00       22.00       273.23         O-RV-16       6" or 8" Cla       0.00       22.00       273.23         O-RV-17       6 or 8" Cla       0.00       22.00       273.23         O-RV-18       6" or 8" Cla       0.00       22.00       273.23         O-RV-17       6 or 8" Cla       0.00       22.00       200       21.21         O-L-7       Meter       0.00 <t< td=""><td></td><td></td><td></td><td></td><td></td></t<>					
O-P-2 (A)       0.00       21.00         O-RV-6       Hydrant Valv        23.00       273.23         O-RV-7       Hydrant Valv        23.00       273.23         O-RV-8       Hydrant Valv        23.00       273.23         O-RV-8       Hydrant Valv        23.00       273.23         O-L-2       Filter Separ       0.00       22.00       0         O-L-5       Filter Separ       0.00       22.00       0         O-RV-16       6" or 8" Cla       0.00       22.00       0         O-RV-16       for or 8" Cla       0.00       22.00       0         O-RV-16       for or 8" Cla       0.00       22.00       0         O-RV-16       for or 8" Cla       0.00       22.00       0         O-RV-17       6" or 8" Cla       0.00       22.00       0         O-L-4       Cla-Val dP       0.00       22.00       0       0         O-L-10       Cla-Val dP       0.00       23.00       0       0       0         I-L-8       Meter       0.00       23.00       0       0       0       1       1       0       0       23.00					
O-RV-7 Hydrant Valv 23.00 273.23 O-RV-8 Hydrant Valv 23.00 273.23 O-L-2 Filter Separ 0.00 22.00 O-L-3 Filter Separ 0.00 22.00 O-L-6 Filter Separ 0.00 22.00 O-RV-15 6" or 8" Cla 0.00 22.00 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-L-4 Cla-Val dP 0.00 22.00 O-L-11 Cla-Val dP 0.00 0.00 O-L-12 Cla-Val dP 0.00 22.00 I-L-8 Meter 0.00 22.00 I-L-9 Hydrant Valv 0.00 23.00 O-L-20 Hydrant Valv 0.00 23.00 I-L-4 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-7 Meter 0.00 23.00 I-L-7 Hydrant Valv 0.00 23.00 I-L-7 Hydrant Valv 0.00 23.00 I-L-10 Hydrant Valv 0.00 23.00 I-L-11 Hydrant Valv 0.00 23.00 I-L-20 Hydrant Valv 0.00 23.00 I-L-21 Hydrant Valv 0.00 23.00 I-L-22 Hydrant Valv 0.00 23.00 I-L-39 Hydrant Valv 0.00 23.00 I-L-41 Hydrant Valv 0.00 23.00 I-L-42 Hydrant Valv 0.00 23.00 I-L-43 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-143 Hydrant Valv 0.00 23.00 I-L-144 Hydrant Valv 0.00 23.00 I-L-159 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-104 Hydrant Valv 0.00 23.00 I-L-105 Hydrant Valv 0.00 23.00 I-L-106 Hydrant Valv 0.00 23.00 I-L-107 Hydrant Valv 0.00 23.00 I-L-108 Hydrant Valv 0.00 23.00 I-L-109 H	0-P-2 (A)				
O-RV-7 Hydrant Valv 23.00 273.23 O-RV-8 Hydrant Valv 23.00 273.23 O-L-2 Filter Separ 0.00 22.00 O-L-3 Filter Separ 0.00 22.00 O-L-6 Filter Separ 0.00 22.00 O-RV-15 6" or 8" Cla 0.00 22.00 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-L-4 Cla-Val dP 0.00 22.00 O-L-11 Cla-Val dP 0.00 0.00 O-L-12 Cla-Val dP 0.00 22.00 I-L-8 Meter 0.00 22.00 I-L-9 Hydrant Valv 0.00 23.00 O-L-20 Hydrant Valv 0.00 23.00 I-L-4 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-7 Meter 0.00 23.00 I-L-7 Hydrant Valv 0.00 23.00 I-L-7 Hydrant Valv 0.00 23.00 I-L-10 Hydrant Valv 0.00 23.00 I-L-11 Hydrant Valv 0.00 23.00 I-L-20 Hydrant Valv 0.00 23.00 I-L-21 Hydrant Valv 0.00 23.00 I-L-22 Hydrant Valv 0.00 23.00 I-L-39 Hydrant Valv 0.00 23.00 I-L-41 Hydrant Valv 0.00 23.00 I-L-42 Hydrant Valv 0.00 23.00 I-L-43 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-143 Hydrant Valv 0.00 23.00 I-L-144 Hydrant Valv 0.00 23.00 I-L-159 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-104 Hydrant Valv 0.00 23.00 I-L-105 Hydrant Valv 0.00 23.00 I-L-106 Hydrant Valv 0.00 23.00 I-L-107 Hydrant Valv 0.00 23.00 I-L-108 Hydrant Valv 0.00 23.00 I-L-109 H	O-RV-6	Hydrant Valv		23.00	273.23
O-RV-8 Hydrant Valv 23.00 273.23 O-L-2 Filter Separ 0.00 22.00 O-L-3 Filter Separ 0.00 22.00 O-L-6 Filter Separ 0.00 22.00 O-RV-15 6" or 8" Cla 0.00 22.00 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-L-11 Cla-Val dP 0.00 22.00 O-L-12 Cla-Val dP 0.00 0.00 O-L-12 Cla-Val dP 0.00 22.00 O-L-10 Cla-Val dP 0.00 22.00 O-L-7 Meter 0.00 22.00 O-L-7 Meter 0.00 22.00 O-L-9 Hydrant Valv 0.00 23.00 O-L-9 Hydrant Valv 0.00 23.00 I-L-9 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-10 Hydrant Valv 0.00 23.00 I-L-77 Hydrant Valv 0.00 23.00 I-L-19 Hydrant Valv 0.00 23.00 I-L-10 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-128 Hydrant Valv 0.00 23.00 I-L-129 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 S U T P U T O P T I O N D A T A OUTPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT MAXIMUM AND MINIMUM PEESSURES = 5 MAXIMUM AND MINIMUM PEESSURES = 5 MAXIMUM AND MINIMUM PEESSURES = 5 MAXIMUM AND MINIMUM VELOCITIES = 5 MAXIMUM AND MINIM	0-RV-7			23.00	
O-L-3 Filter Separ 0.00 22.00 O-L-5 Filter Separ 0.00 22.00 O-RV-15 6" or 8" Cla 0.00 22.00 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-L-11 Cla-Val dP 0.00 22.00 O-L-12 Cla-Val dP 0.00 22.00 O-L-10 Cla-Val dP 0.00 22.00 O-L-10 Cla-Val dP 0.00 22.00 O-L-11 Cla-Val dP 0.00 22.00 I-L-8 Meter 0.00 22.00 O-L-19 Hydrant Valv 0.00 23.00 I-L-9 Hydrant Valv 0.00 23.00 I-L-43 Hydrant Valv 0.00 23.00 I-L-43 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-77 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-111 Hydrant Valv 0.00 23.00 I-L-124 Hydrant Valv 0.00 23.00 I-L-195 Hydrant Valv 0.00 23.00 I-L-195 Hydrant Valv 0.00 23.00 I-L-195 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-134 Hydrant Valv 0.00 23.00 I-L-135 O U T P U T O P T I O N D A T A OUTPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT MAXIMUM AND MINIMUM PRESSURES = 5 MAXIMUM AND MINIMUM PRESSURES = 5 MAXI	O-RV-8	Hydrant Valv		23.00	273.23
O-L-5 Filter Separ 0.00 22.00 O-L-6 Filter Separ 0.00 22.00 O-RV-15 6" or 8" Cla 0.00 22.00 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-L-4 Cla-Val dP 0.00 22.00 O-L-11 Cla-Val dP 0.00 0.00 O-L-12 Cla-Val dP 0.00 22.00 I-L-8 Meter 0.00 22.00 I-L-9 Hydrant Valv 0.00 23.00 O-L-7 Meter 0.00 23.00 O-L-20 Hydrant Valv 0.00 23.00 I-L-3 Hydrant Valv 0.00 23.00 I-L-43 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-96 Hydrant Valv 0.00 23.00 I-L-97 Hydrant Valv 0.00 23.00 I-L-99 Hydrant Valv 0.00 23.00 I-L-99 Hydrant Valv 0.00 23.00 I-L-99 Hydrant Valv 0.00 23.00 I-L-99 Hydrant Valv 0.00 23.00 I-L-91 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.	0-L-2	Filter Separ	0.00	22.00	
O-L-6 Filter Separ 0.00 22.00 O-RV-15 6" or 8" Cla 0.00 22.00 O-RV-10 Hydrant Valv 23.00 273.23 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-L-4 Cla-Val dP 0.00 0.00 O-L-11 Cla-Val dP 0.00 0.00 O-L-10 Cla-Val dP 0.00 22.00 I-L-8 Meter 0.00 22.00 I-L-9 Hydrant Valv 0.00 23.00 O-L-20 Hydrant Valv 0.00 23.00 I-L-39 Hydrant Valv 0.00 23.00 I-L-43 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-77 Hydrant Valv 0.00 23.00 I-L-77 Hydrant Valv 0.00 23.00 I-L-79 Hydrant Valv 0.00 23.00 I-L-19 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-194 Hydrant Valv 0.00 23.00 I-L-195 Hydrant Valv 0.00 23.00 I-L-196 Hydrant Valv 0.00 23.00 I-L-197 Hydrant Valv 0.00 23.00 I-L-198 Hydrant Valv 0.00 23.00 I-L-199 Hydrant Valv 0.00 23.00 I-L-109 H		Filter Separ	0.00	22.00	
O-RV-15 6" or 8" Cla 0.00 22.00 O-RV-10 Hydrant Valv 23.00 273.23 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-L-4 Cla-Val dP 0.00 22.00 O-L-11 Cla-Val dP 0.00 0.00 O-L-12 Cla-Val dP 0.00 22.00 O-L-10 Cla-Val dP 0.00 22.00 O-L-7 Meter 0.00 22.00 I-L-9 Hydrant Valv 0.00 23.00 O-L-19 Hydrant Valv 0.00 23.00 I-L-20 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-47 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-119 Hydrant Valv 0.00 23.00 I-L-119 Hydrant Valv 0.00 23.00 I-L-110 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-109 Hydrant Valv 0.00 23.00 I-L-109 Hydrant Valv 0.00 23.00 I-L-109 Hydrant Valv 0.00 23.00 I-L-109 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-109 Hydrant Valv 0.00 23.00 I-L-109 Hydrant Valv 0.00 23.00 SYSTEM CONFIGURATION	0-L-5	Filter Separ	0.00	22.00	
O-RV-10 Hydrant Valv 23.00 273.23 O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-L-14 Cla-Val dP 0.00 22.00 O-L-11 Cla-Val dP 0.00 0.00 O-L-12 Cla-Val dP 0.00 22.00 O-L-10 Cla-Val dP 0.00 22.00 I-L-8 Meter 0.00 22.00 I-L-9 Hydrant Valv 0.00 23.00 O-L-19 Hydrant Valv 0.00 23.00 I-L-43 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-96 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-111 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-138 Hydrant Valv 0.00 23.00 I-L-147 Hydrant Valv 0.00 23.00 I-L-159 Hydrant Valv 0.00 23.00 I-L-164 Hydrant Valv 0.00 23.00 I-L-177 Hydrant Valv 0.00 23.00 I-L-196 Hydrant Valv 0.00 23.00 I-L-197 Hydrant Valv 0.00 23.00 I-L-197 Hydrant Valv 0.00 23.00 I-L-100 Hydrant Valv	0-L-6	Filter Separ	0.00	22.00	
O-RV-16 6" or 8" Cla 0.00 22.00 O-RV-17 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-L-4 Cla-Val dP 0.00 22.00 O-L-11 Cla-Val dP 0.00 0.00 O-L-12 Cla-Val dP 0.00 22.00 O-L-10 Cla-Val dP 0.00 22.00 I-L-8 Meter 0.00 22.00 I-L-9 Hydrant Valv 0.00 23.00 O-L-19 Hydrant Valv 0.00 23.00 I-L-20 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-71 Hydrant Valv 0.00 23.00 I-L-77 Hydrant Valv 0.00 23.00 I-L-195 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-17 Hydrant Valv 0.00 23.00 I-L-18 Hydrant Valv 0.00 23.00 I-L-18 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-199 Hydrant Valv 0.00 23.00 I-L-199 Hydrant Valv 0.00 23.00 I-L-196 Hydrant Valv 0.00 23.00 I-L-197 Hydrant Valv 0.00 23.00 I-L-198 Hydrant Valv 0.00 23.00 I-L-199 Hydrant Valv 0.00 23.00 SYSTEM CONFIGURATION	0-RV-15	6" or 8" Cla	0.00	22.00	
O-RV-17 6" or 8" Cla 0.00 22.00 O-RV-18 6" or 8" Cla 0.00 22.00 O-L-4 Cla-Val dP 0.00 22.00 O-L-11 Cla-Val dP 0.00 0.00 O-L-12 Cla-Val dP 0.00 22.00 O-L-7 Meter 0.00 22.00 I-L-8 Meter 0.00 23.00 O-L-9 Hydrant Valv 0.00 23.00 O-L-20 Hydrant Valv 0.00 23.00 I-L-9 Hydrant Valv 0.00 23.00 I-L-9 Hydrant Valv 0.00 23.00 I-L-9 Hydrant Valv 0.00 23.00 I-L-77 Hydrant Valv 0.00 23.00 I-L-77 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-104 Hydrant Valv 0.00 23.00 I-L-105 Hydrant Valv 0.00 23.00 I-L-106 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 SYSTEM CONFIGURATION SYSTEM CONFIGURATION	0-RV-10	Hydrant Valv		23.00	273.23
O-RV-18       6" or 8" Cla       0.00       22.00         O-L-4       Cla-Val dP       0.00       22.00         O-L-11       Cla-Val dP       0.00       0.00         O-L-12       Cla-Val dP       0.00       22.00         O-L-10       Cla-Val dP       0.00       22.00         O-L-7       Meter       0.00       22.00         I-L-8       Meter       0.00       23.00         O-L-20       Hydrant Valv       0.00       23.00         O-L-20       Hydrant Valv       0.00       23.00         I-L-98       Hydrant Valv       0.00       23.00         I-L-19       Hydrant Valv       0.00       23.00         I-L-43       Hydrant Valv       0.00       23.00         I-L-59       Hydrant Valv       0.00       23.00         I-L-101       Hydrant Valv       0.00       23.00         I-L-101       Hydrant Valv       0.00       23.00         I-L-118       Hydrant Valv       0.00       23.00         I-L-126       Hydrant Valv       0.00       23.00         I-L-128       Hydrant Valv       0.00       23.00         O-L-109       Hydrant Valv       0.00	0-RV-16	6" or 8" Cla	0.00		
O-L-4         Cla-Val dP         0.00         22.00           O-L-11         Cla-Val dP         0.00         0.00           O-L-12         Cla-Val dP         0.00         200           O-L-7         Meter         0.00         22.00           I-L-8         Meter         0.00         23.00           O-L-9         Hydrant Valv         0.00         23.00           O-L-19         Hydrant Valv         0.00         23.00           O-L-20         Hydrant Valv         0.00         23.00           O-L-20         Hydrant Valv         0.00         23.00           I-L-43         Hydrant Valv         0.00         23.00           I-L-59         Hydrant Valv         0.00         23.00           I-L-95         Hydrant Valv         0.00         23.00           I-L-77         Hydrant Valv         0.00         23.00           I-L-77         Hydrant Valv         0.00         23.00           I-L-118         Hydrant Valv         0.00         23.00           I-L-126         Hydrant Valv         0.00         23.00           O-L-109         Hydrant Valv         0.00         23.00           O-L-109         Hydrant Valv <td>0-RV-17</td> <td>6" or 8" Cla</td> <td>0.00</td> <td>22.00</td> <td></td>	0-RV-17	6" or 8" Cla	0.00	22.00	
O-L-11       Cla-Val dP       0.00       0.00         O-L-12       Cla-Val dP       0.00       200         O-L-10       Cla-Val dP       0.00       22.00         O-L-7       Meter       0.00       22.00         I-L-8       Meter       0.00       23.00         O-L-19       Hydrant Valv       0.00       23.00         O-L-20       Hydrant Valv       0.00       23.00         I-L-43       Hydrant Valv       0.00       23.00         I-L-59       Hydrant Valv       0.00       23.00         I-L-59       Hydrant Valv       0.00       23.00         I-L-77       Hydrant Valv       0.00       23.00         I-L-75       Hydrant Valv       0.00       23.00         I-L-101       Hydrant Valv       0.00       23.00         I-L-118       Hydrant Valv       0.00       23.00         I-L-126       Hydrant Valv       0.00       23.00         I-L-132       Hydrant Valv       0.00       23.00         I-L-132       Hydrant Valv       0.00       23.00         OUTPUT       SLECTION:       ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT         MAXIMUM AND MINIMUM PRESURES	0-RV-18	6" or 8" Cla	0.00	22.00	
O-L-12       Cla-Val dP       0.00       22.00         O-L-10       Cla-Val dP       0.00       22.00         O-L-7       Meter       0.00       22.00         I-L-8       Meter       0.00       23.00         O-L-19       Hydrant Valv       0.00       23.00         O-L-20       Hydrant Valv       0.00       23.00         O-L-20       Hydrant Valv       0.00       23.00         I-L-59       Hydrant Valv       0.00       23.00         I-L-59       Hydrant Valv       0.00       23.00         I-L-59       Hydrant Valv       0.00       23.00         I-L-77       Hydrant Valv       0.00       23.00         I-L-77       Hydrant Valv       0.00       23.00         I-L-77       Hydrant Valv       0.00       23.00         I-L-18       Hydrant Valv       0.00       23.00         I-L-126       Hydrant Valv       0.00       23.00         I-L-132       Hydrant Valv       0.00       23.00         O-L-109       Hydrant Valv       0.00       23.00         O-L-109       Hydrant Valv       0.00       23.00         MAXIMUM AND MINIMUM PRESSURES       =	0-L-4	Cla-Val dP	0.00	22.00	
O-L-10 Cla-Val dP 0.00 22.00 O-L-7 Meter 0.00 22.00 I-L-8 Meter 0.00 23.00 O-L-19 Hydrant Valv 0.00 23.00 O-L-20 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-59 Hydrant Valv 0.00 23.00 I-L-95 Hydrant Valv 0.00 23.00 I-L-101 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-118 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-126 Hydrant Valv 0.00 23.00 I-L-132 Hydrant Valv 0.00 23.00 I-L-199 Hydrant Valv 0.00 23.00 SYSTEM CONFIGURATION SYSTEM CONFIGURATION					
O-L-7       Meter       0.00       22.00         I-L-8       Meter       0.00       22.00         I-L-9       Hydrant Valv       0.00       23.00         O-L-19       Hydrant Valv       0.00       23.00         O-L-20       Hydrant Valv       0.00       23.00         I-L-3       Hydrant Valv       0.00       23.00         I-L-43       Hydrant Valv       0.00       23.00         I-L-59       Hydrant Valv       0.00       23.00         I-L-95       Hydrant Valv       0.00       23.00         I-L-95       Hydrant Valv       0.00       23.00         I-L-101       Hydrant Valv       0.00       23.00         I-L-156       Hydrant Valv       0.00       23.00         I-L-126       Hydrant Valv       0.00       23.00         I-L-132       Hydrant Valv       0.00       23.00         O-L-109       Hydrant Valv       0.00       23.00         O-L-109       Hydrant Valv       0.00       23.00         O-L-109       Hydrant Valv       0.00       23.00         MAXIMUM AND MINIMUM PRESSURES       =       5         MAXIMUM AND MINIMUM PRESSURES       =	0-L-12	Cla-Val dP			
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NUMBER OF PIPES $(n) = 2/8$					
				= 248	
NUMBER OF END NODES $\dots \dots \dots (j) = 231$					
NUMBER OF PRIMARY LOOPS $\dots$ (1) = 12					
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NUMBER OF SUPPLY ZONES $\dots (z) = 1$	NOURER OF	SOLLT YOURS	•••••(Z)	— 1	



July 01, 2019

Ms. Madelyn Tackett Southwest Airlines

Re: TPA – Tampa International Airport API 570 Report Review & Recommendations

Dear Ms. Tackett:

In response to your request for our engineering review of the February, 2019 API 570 In-Service Inspection Report written by HMT, we offer the following summary of our review process and our recommendations related to the HMT report.

### BACKGROUND

The TPA Jet-A Fuel system is a buried piping system consisting of externally coated and cathodically protected carbon steel pipe. The internal pipe surface is <u>uncoated</u> according to the API 570 report, which was standard practice in the 1960's. We were given the HMT report and asked to provide a draft report of any issues or questions we may identify. In late May, 2019, we provided a draft report to you that outlined several concerns with the HMT report and its findings. Currier & Co (C&C) was then engaged to continue the review of this material and work to validate and/or assess the data – using all means at our disposal – and to then provide final recommendations.

### **CURRIER & COMPANY INVESTIGATIVE PROCESS**

C&C reached out directly to HMT through the technician who wrote the report (the Inspector who performed the onsite examination of the piping at TPA) and this proved to be a productive conversation. We confirmed that HMT performed the previous examination 10 years ago – in the <u>same</u> place on the <u>same</u> pipe as <u>this</u> year's examination. Much of the baseline data for the new report was pulled from the prior report written in 2009 by HMT. This follows industry standard practice for API 570 examination(s) and generally allows for determining a rate at which corrosion is taking place in the piping being examined.

#### **Issues Identified and Findings**

The original 1969 12-inch piping is listed as Schedule 30 (wall-thickness = 0.330-inches) in the 2019 HMT report – which is highly <u>unlikely</u> in our experience and we discovered that this supposition <u>originated</u> in the 2009 HMT report as noted above.

Some of the computational and report description 'cell' errors that were identified in the C&C draft report were surprisingly submitted <u>correctly</u> by the inspector to his HMT report reviewer, and so we were surprised to learn that the errors were mistakenly included in the 2019 HMT report (somehow). This was verified by C&C in the inspector's notes but it is not clear why the errors occurred. For example, the report generally refers to all of the pipe as "Line Schedule 40" carbon steel originally installed in 1969. Later in the report, the 18" dia. pipe is stated to be SCH STD (0.375 in.) and the 12" dia. as SCH 30. (0.330 in.).

During our discussions with the inspector, the visual (external) condition of the piping was investigated – something that is difficult to outline and describe in many API 570 written reports – even though photos are provided in the 2019 HMT report. It was the Inspector's opinion that both the 12-inch and the 18-inch pipes appeared to be in very good external (visual) condition. We agree, based on the photos in the HMT report(s); we agree that the external condition shows virtually no degradation of the piping.

However, the (2) two HMT reports (2009 and 2019) call out <u>advanced</u> (substantial) degradation of the 12" pipe (a direct result of their <u>assumption</u> that this was originally Schedule 30 pipe). We were confused by this because substantial external degradation had to be present if this was in fact Schedule 30 pipe. (In our experience, Jet-A lines wear, but do not corrode <u>internally</u> – except within low velocity lines that are not well drained). This is not the case in TPA. Furthermore, corrosion was <u>not</u> found by the Inspector and the Inspector confirmed that both the 12-inch & 18-inch pipes were in the <u>same</u> excavation and directly adjacent to one another. Since the CP report is very good for both the 12-inch and the 18-inch lines, and since the 18-inch line shows little degradation we therefore conclude that the piping was not Schedule 30 to start with.

C&C also visited with the airport farm operator and reached out to the airport engineering team in an effort to obtain documentation on the original installation of the pipe. While drawings were found, the thickness/schedule info for the pipe was not identified on the plans we obtained. The piping thickness would typically be found in the project specifications – which may exist with the original designer, but we are not recommending that they be found at this point.

#### **C&C REPORT FINDINGS**

As stated in the HMT inspection report, ultrasonic testing (UT) and visual testing (VT) were performed on two lengths of excavated (buried) Jet-A piping, to include 12 linear feet of 12-inch dia. steel pipe and 12 linear feet of 18-inch dia. steel pipe. Both piping segments chosen were at the location of a welded 90<sup>o</sup> elbow, which is in accordance with best practices.

C&C strongly believes that the original 12-inch diameter piping installed was SCH 20 (0.250-inch wall-thickness). This would equate to a nearly identical lifetime corrosion rate when compared to the 18-inch SCH STD pipe in the same spot and in the same soils. Both are cathodically protected. Since the interior corrosion cannot adequately explain the UT readings in the HMT report, C&C concludes that both the 2009 & 2019 HMT reports incorrectly state the installed thickness of the 12-inch pipe, and in fact this should be identified as SCH 20 (0.250-inch wall).

The HMT pipe analysis found both pipes to be above the Minimum Required Thickness (MRT). In spite of the HMT data as reported, HMT found that both pipes have a remaining 1/2 life of 30+ years. The actual current measured wall thickness for the 18-inch dia. pipe was 0.346 in. (originally 0.375 in.) which is well above the MRT per API 2611 of 0.1859 in. The actual measured wall thickness for the 12-inch dia. pipe was 0.223 in. which is well above the MRT per API 2611 of 0.1317-inches. However, it should be noted that if this pipe was originally installed as SCH 20, as C&C strongly believes, the MRT calculation supports a significantly longer useful life for the 12" pipe meaning far beyond 30 years.

#### The HMT Corrosion Rate Calculations and Remaining Life Calculations

These HMT calculations for the 12-inch pipe are the reason we evaluated this report in the first place and we find that they are flawed because they are based on an original base metal (wall) thickness of 0.330. We find that the 12-inch piping in question, when LTCR & STCR are re-calculated with the appropriate original thickness of SCH 20 (0.250"), the solved-for values will correspond to the 18-inch HMT findings and we therefore conclude that the 12-inch and 18-inch piping have very long lifespans.

#### SOIL CORROSIVITY / CATHODIC PROTECTION

Because this Jet-A piping system is cathodically protected, no soil corrosivity analysis is required to be performed as part of the API 570 testing. However, in an effort to give well-researched recommendations, C&C requested the most recent Annual Cathodic Survey from Menzies Aviation. The most recent inspections took place on November 5<sup>th</sup>-6<sup>th</sup>, 2019 and a report was received in January of 2019. We have reviewed the annual survey and it did not raise any additional concerns. Based on the performance of the cathodic system evidenced in that report, we are, again, stating our belief that the 12" pipe was originally SCH 20 (0.250-inch wall).

#### **CONCLUSIONS & RECOMMENDATIONS**

Based on these findings, we recommend that future API 570 inspections are performed using a 12-inch pipe original wall thickness of SCH 20 (0.250-inch wall). This will provide more accurate calculations and life expectancy calculations for the piping. When all data in the HMT report are adjusted for the accurate original conditions, the life expectancy of the system will automatically be found to be much longer than originally predicted by HMT and the corrosion/degradation rate to be much lower. Based on our first-hand experience, we have no concerns for the longevity of this piping.

C&C does not believe any further testing is required at this time except for routine inspections normally provided by the operator as part of their preventative maintenance protocols.

The next required API 570 test is in 10 years. The consortium/farm operator may choose to have HMT amend their report. HMT may or may not be willing to do this.

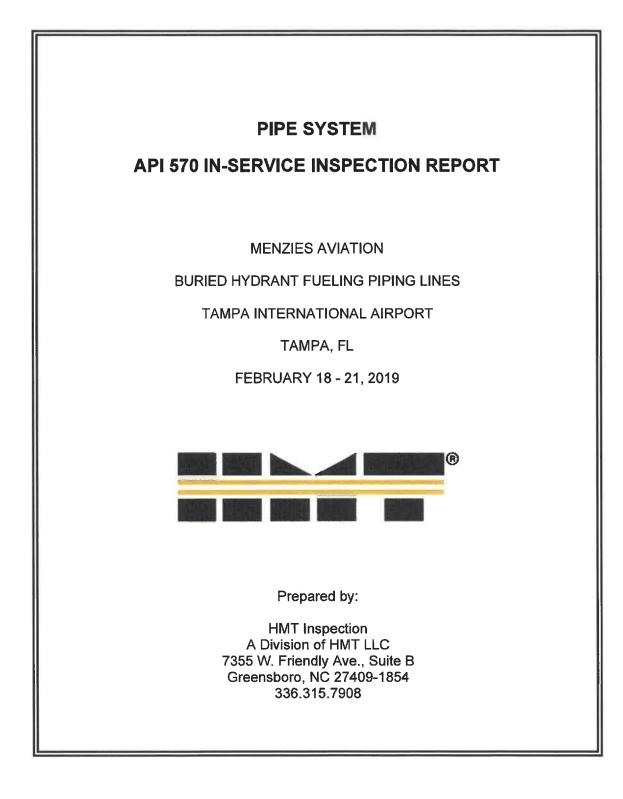
As with any representative test, it is not possible to ascertain the actual condition of all of the pipe on the airfield. The API 570 process, in general and in conjunction with a properly maintained cathodic system, has proven over many decades to be a valuable indicator of overall piping system condition.

Feel free to contact either Chris Olson, Jon Currier or me at 813.495.8072 to discuss any questions you may have of this review. Jon's cell is 310-422-8062.

Sincerely,

William A Freeman

William H. Freeman, PE Currier & Company, Inc. TPA - API 570 Report Review



API 570 External Inspection Report for Menzies Aviation	HMT Inspection
Piping System No. Buried Hydrant Fueling Lines	February 18 - 21, 2019
Tampa, FL	Page 2 of 22

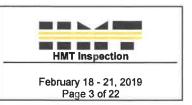
# EXECUTIVE SUMMARY

It is recommended that the owner / user reviews, evaluates, and implements the recommendations set forth in Section 2.0, Inspection Summary, of this report or, the owner / user may determine that no action(s) need be taken prior to continued service and such decision(s) should be documented in the piping historical record file.

It is recommended that the owner / user adheres to the recommendations given herein in Section 2.0 for continued service until such time as tank operating conditions change or another inspection assessment per API 570 guidelines determines that an adjustment in safe operation for this piping should be made.

- It has been determined that, due to the non-hazardous nature of the service Jet-A (Aviation Fuel), this piping circuit is designated Class 3.
- Further Ultrasonic (UT) testing and Visual (VT) inspection of this circuit should be performed within 10 years and no later than February 2029 (ref. API 570 Section 6, Tables 1 and 2).

API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL



# SUMMARY OF RECOMMENDED ACTIONS

No recommended or required actions at this time. This piping circuit is in acceptable condition for continued service under the current operating conditions.

#### ACTION CODE (AC) DEFINITIONS

Code A: Repairs critical to piping integrity required - Out of compliance with the <u>current</u> API 570 Code. Positive action must be taken prior to continued service. Code B: Further Engineering evaluation required - Out of compliance with the <u>current</u> API 570 Code with <u>no damage or failure</u> <u>noted</u>. Must be assessed (action taken or not taken) and documented prior to continued service.

Code C: No action required - Pertinent findings / suggestions / recommendations only. Monitor for continued deterioration.

 Code D: Acceptable - In compliance w/ API 570 Code - No action required

 HMTAPI570RPT
 27273301 Buried Hydrant Fueling Linesr2 (Rev 0)

3/8/2019 11:49 AM

API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL



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# PERSONNEL

HMT Inspection provided the following personnel:

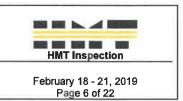
Christopher Marsh API 570 Piping Inspector Certification Number: 23226 Level II Technician

Luch Neang Technician

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## **1.0 DESCRIPTION**

#### DA GENE

GENERAL:	LINE / PIPING IDENTIFICATION:	Buried Hydrant Fueling Lines	
	OWNER:	Menzies Aviation	
	PIPING LOCATION:	Tampa, FL (International Airport)	
	TYPE OF FACILITY:	Airport	
	DESIGN STANDARD / PIPING SPECIFICATION:	ASME B31.3	
	INSTALLER:	No Data Available	
	PRODUCT / SERVICE:	Jet-A (Aviation Fuel)	
	PIPING CLASSIFICATION:	Class 3	
	DESIGN PRESSURE:	No Data Available	
	OPERATING PRESSURE:	200 PSIG	
	MAXIMUM ALLOWABLE WORKING PRESSURE (MAWP):	257 PSI	
	DESIGN TEMPERATURE:	No Data Available	
	OPERATING TEMPERATURE:	Ambient	
	ALLOWABLE STRESS:	16,000 PSIG	
	LONGITUDINAL JOINT EFFECIENCY:	1.0	
	CATHODIC PROTECTION & TYPE:	None	
	NAMEPLATE PRESENT:	N/A	
	INSULATED:	N/A	
DIMENSIONS:	OUTSIDE DIAMETER (O.D.):	10.00 inches / 18.00 inches	
	CIRCUIT LENGTH (IN FEET):	12.00 feet (Approximate)	
GEOMETRY:	SUPPORTS:	None	
	MATERIAL OF CONSTRUCTION:	Carbon Steel (Grade Not Known)	
	LINE SCHEDULE:	40	
DATES:	YEAR OF FABRICATION / CONSTRUCTION:	1969	
	YEAR INSTALLED:	1969	
	LAST COATED:	No Data Available	
	LAST INSPECTION & TYPE:	2009	
ACCESS:	LINE ELEVATION:	Underground	
	LINE ACCESS:	None	
COATINGS / LININGS:	EXTERNAL:	White Paint	
LININGJ.	INTERNAL:	None	

API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL

# 2.0 INSPECTION SUMMARY

The following is a summary of the significant findings of the inspection (item numbers correspond with the HMT API 570 Checklist).

**INSPECTION INTERVAL:** It has been determined that, due to the non-hazardous nature of the service Jet-A (Aviation Fuel), this piping circuit is designated Class 3.

Further Ultrasonic (UT) testing and Visual (VT) inspection of this circuit should be performed within 10 years and no later than February 2029 (ref. API 570 Section 6, Tables 1 and 2).

**CORROSION RATE DETERMINATION:** In accordance with API 570, 4<sup>th</sup> Edition, Para. 7.1.2, the Long-Term Corrosion Rate (LTCR) was calculated based on random Ultrasonic (UT) thickness measurements throughout the pipeline circuit. LTCR calculations were made on the 12-inch and 18-inch carbon steel lines.

**MAWP CALCULATIONS:** In accordance with API 570, 4<sup>th</sup> Edition, Para. 7.5, Maximum Allowable Working Pressure (MAWP) calculations were made on the NPS 12 and NPS 18 carbon steel circuits. Thickness measurement determined that the piping system can maintain the current design operating conditions and may be limited only by the associated valves and flanges.

### BACKGROUND:

**ITEM P11 / ACTION CODE D:** The piping system inspected was the NPS 12 and NPS 18 carbon steel piping which was excavated. This line consists of coated carbon steel piping. All lines are located outdoors were buried underground. Previous inspection found no recordable issues.

**ACTION CODE D:** The piping joint efficiency used for evaluation was 1.0 and the allowable stress was 16,000 psi. Minimum values based on normal industry practice were used. Maximum Allowable Working Pressure (MAWP) and remaining life calculations were based on these values.

#### **ACTION CODE (AC) DEFINITIONS**

 Code A: Repairs critical to piping integrity required - Out of compliance with the <u>current</u> API 570 Code. Positive action must be taken prior to continued service.

 Code B: Further Engineering evaluation required - Out of compliance with the <u>current</u> API 570 Code with <u>no damage or failure</u> noted. Must be assessed (action taken or not taken) and documented prior to continued service.

 Code C: No action required - Pertinent findings / suggestions / recommendations only. Monitor for continued deterioration.

 Code D: Acceptable - In compliance w/ API 570 Code - No action required

API 570 External Inspection Report
for
Menzies Aviation
Piping System No. Buried Hydrant Fueling Lines
Tampa, FL

HMT Inspection	
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#### **INSPECTION SUMMARY (CONT'D.):**

#### BACKGROUND (CONT'D.):

**ITEM P14 / ACTION CODE D:** Ultrasonic (UT) thickness readings were taken at various locations throughout the accessible segments (ref. Circuit Dwg.). No readings were sufficiently below nominal thickness to result in a recordable indication requiring repair.

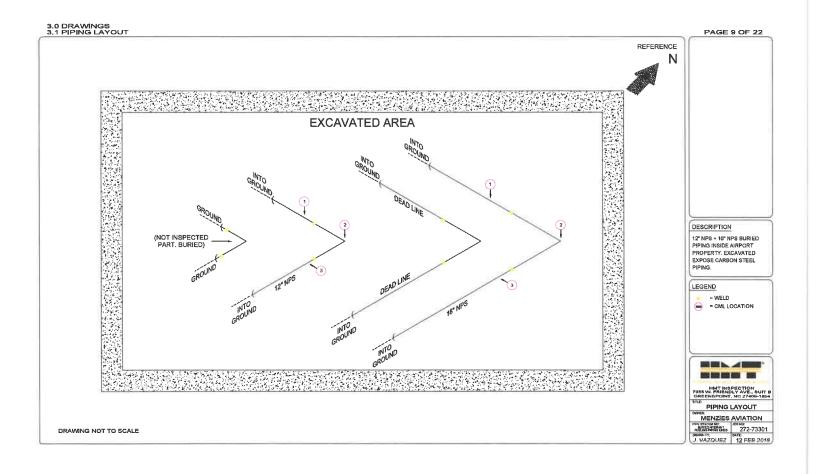
#### ACTION CODE (AC) DEFINITIONS

Code A: Repairs critical to piping integrity required - Out of compliance with the <u>current</u> API 570 Code. Positive action must be taken prior to continued service.

Code B: Further Engineering evaluation required - Out of compliance with the <u>current</u> API 570 Code with <u>no damage or failure</u> <u>noted</u>. Must be assessed (action taken or not taken) and documented prior to continued service. Code C: No action required - Pertinent findings / suggestions / recommendations only. Monitor for continued deterioration.

Code D: Acceptable - In compliance w/ API 570 Code - No action required
HMTAPI570RPT 27273301 Buried Hydrant Fueling Linesr2 (Rev 0)

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# 4.0 PIPING INSPECTION CHECKLIST

ITEM NO.	DESCRIPTION	INSPECTION COMMENTS
P1	Search for any indication of leakage from process piping.	Acceptable
P2	Search for any indication of leakage from steam tracing	N/A
P3	Search for any indication of leakage from repairs or existing pipe clamps.	N/A
P4	Record / locate all repairs and / or existing pipe clamps.	N/A
P5	Do all piping repairs meet API 570 guidelines?	N/A
P6	Inspect for piping misalignment / restricted movement.	N/A
P7	Inspect for expansion misalignment.	N/A
P8	Inspect for piping dislodged from one (1) or more supports.	N/A
P9	Inspect for deformation of a vessel or tank wall in the vicinity of piping attachments.	N/A
P10	Inspection for piping supports forced out-of-plumb by piping expansion or contraction.	N/A

API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL



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# PIPING INSPECTION CHECKLIST (CONT'D.)

ITEM NO.	DESCRIPTION	INSPECTION COMMENTS
P11	Check records for any excessive replacement or repair of mechanical components connected to the piping.	Reference Section 2.0
P12	Inspect for base plate shifting, concrete cracking and / or shearing of foundation bolts for mechanical equipment which piping is connected to.	N/A
P13	Inspect for defects in flange connections between mechanical equipment and piping.	N/A
P14	Inspect piping circuit for coating failure and corrosion.	Reference Section 2.0
P15	Inspect soil-to-air interface.	Acceptable
P16	Inspect for areas of pipe deformation, bulges or depressions.	Acceptable
P17	Inspect bolting support points under clamps.	N/A
P18	Inspect all thin, small-bore or alloy piping.	N/A
P19	Inspect all threaded piping and threaded connections.	N/A
P20	Inspect insulation for damage and areas of penetrations.	N/A
P21	Inspect insulation interface areas for coating failure, corrosion and / or biological growth.	Acceptable
P22	Inspect for missing areas of insulation or jacket.	N/A
P23	Inspect the sealant for areas of deterioration of missing sealant material.	N/A
P24	Inspect for bulges in the insulation.	N/A
P25	Inspect for areas of insulation banding which may be broken or missing.	N/A
P26	Inspect piping supports for corrosion or coating failure.	N/A

API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL



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# PIPING INSPECTION CHECKLIST (CONT'D.)

ITEM NO.	FOUNDATION	INSPECTION COMMENTS
P27	Inspection piping supports for distortion or damage.	N/A
P28	Inspect for movement or deterioration of concrete footings.	N/A
P29	Inspect for damaged or loose foundation bolts.	N/A
P30	Inspect for excessive overhanging weight.	N/A
P31	Inspect for inadequate or missing piping supports.	N/A
P32	Inspect for loose supports resulting in metal wear.	N/A
P33	Inspect and document any shoe not in contact with its supports.	N/A
P34	Inspect for pipe hanger distortion.	N/A
P35	Inspect spring hangers for lack of tension.	N/A
P36	Inspect for pipe brace distortion or breakage.	N/A
P37	Inspect for loose piping brackets.	N/A
P38	Inspect for restricted operation of pipe rollers or slide plates.	N/A
P39	Inspect for restricted operation of pulleys or pivot points in counter- balanced piping details.	N/A
P40	If piping designated as Class 1 and requires annual pressure testing by U.S. Coast Guard regulations, verify that this has been performed as required.	N/A

API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL



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# **5.0 CALCULATION TABLES**

### MAXIMUM ALLOWABLE WORKING PRESSURE

#### (ref. API 570, Para. 7.5 & Table 1)

Pipe Classification (ref. API 570, Para. 6.3.4.2, 6.3.4.3, 6.3.4.4, 6.3.4.5)	Class 3	
Pipe Description (NPS & Weight)	18 NPS / Standard	
Outside Diameter of Pipe (O.D.)	18.000 in.	
Allowable Stress	16,000 psi	
Longitudinal Weld Joint Efficiency	1.0	
Thickness Determined from Inspection	0.346 in.	
Observed Corrosion Rate (7.1.2)	0.0023 in. / yr.	
Next Planned Inspection	2029	
Estimated Metal Loss by Next Planned Inspection	0.023 in.	
Maximum Allowable Working Pressure (MAWP)	<b>200</b> psi	
Conclusion (Acceptable / Not Acceptable)	Acceptable	

### **CORROSION RATE CALCULATIONS**

#### Long-Term Corrosion Rate (LTCR) (ref. API 570, Para. 7.1.2)

<u> </u>	
Initial Thickness (Nominal)	0.375 in.
Actual Minimum Thickness (current)	0.346 in.
Initial Inspection Year or Year of Construction	1969
Current Inspection Year	2019
Long-Term Corrosion Rate (LTCR)	0.0006 in. / yr.

#### Short-Term Corrosion Rate (STCR) (ref. API 570, Para. 7.1.2)

Previous Thickness	0.369 in.
Actual Minimum Thickness (current)	0.346 in.
Previous Inspection Year	2009
Current Inspection Year	2019
Short-Term Corrosion Rate (STCR)	0.0023 in. / yr.

### **REMAINING LIFE CALCULATIONS**

### (ref. API 570, Para. 7.1.2 & API 574, Para. 12.1.4, 12.1.5 & Table 7)

Actual Minimum Thickness	0.346 in.
Minimum Alert Thickness (ref. API 574, Table 7)	0.130 in.
Minimum Required Thickness (ref. API 2611, Annex C)	0.1859
Corrosion Rate	0.0023 in. / yr.
LTCR Remaining 1/2-Life	30+ Years

API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL



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# 5.0 CALCULATION TABLES (CONT'D.)

### MAXIMUM ALLOWABLE WORKING PRESSURE

#### (ref. API 570, Para. 7.5 & Table 1)

Pipe Classification (ref. API 570, Para. 6.3.4.2, 6.3.4.3, 6.3.4.4, 6.3.4.5)	Class 3	
Pipe Description (NPS & Weight)	12 NPS / Standard	
Outside Diameter of Pipe (O.D.)	12.750 in.	
Allowable Stress	16,000 psi	
Longitudinal Weld Joint Efficiency	1.0	
Thickness Determined from Inspection	0.223 in.	
Observed Corrosion Rate (7.1.2)	0.0033 in. / yr.	
Next Planned Inspection	2029	
Estimated Metal Loss by Next Planned Inspection	0.033 in.	
Maximum Allowable Working Pressure (MAWP)	200 psi	
Conclusion (Acceptable / Not Acceptable)	Acceptable	

### **CORROSION RATE CALCULATIONS**

#### Long-Term Corrosion Rate (LTCR) (ref. API 570, Para. 7.1.2)

Initial Thickness (Nominal)	0.333 in.
Actual Minimum Thickness (current)	0.223 in.
Initial Inspection Year or Year of Construction	1969
Current Inspection Year	2019
Long-Term Corrosion Rate (LTCR)	0.0022 in. / yr.

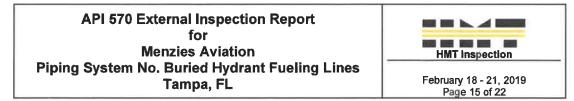
#### Short-Term Corrosion Rate (STCR) (ref. API 570, Para. 7.1.2)

Previous Thickness	0.264 in.
Actual Minimum Thickness (current)	0.231 in.
Previous Inspection Year	2009
Current Inspection Year	2019
Short-Term Corrosion Rate (STCR)	0.0033 in. / yr.

### **REMAINING LIFE CALCULATIONS**

### (ref. API 570, Para. 7.1.2 & API 574, Para. 12.1.4, 12.1.5 & Table 7)

Actual Minimum Thickness	0.223 in.
Minimum Alert Thickness (ref. API 574, Table 7)	0.130 in.
Minimum Required Thickness (ref. API 2611, Annex C)	0.1317
Corrosion Rate	0.0033 in. / yr.
LTCR Remaining ½-Life	30+ Years



### 6.0 TABLES

CML	SIZE	ACTUAL	PREV.	ORIG.	REQ.	STCORR	LT CORR	REMAINING	NEXT	NEXT
(UT)	NPS, in.	Thk., in.	Thk, In.	Thk., in.	Thk., in.	Rate	Rate	1/2 LIFE	Inspection	Inspection
		Feb-19	Jan-09	Nov-69					UT, VT, S/A	Inj. Point
1-T	12,00	0,237	0.000	0.333	0,1300	0.0000	0.0020	27.4	10,0	3,0
1-E	12.00	0.241	0.000	0.333	0.1300	0.0000	0.0019	29.7	10.0	3.0
1-B	12.00	0.291	0.000	0,333	0.1300	0.0000	0,0009	94.3	10.0	3.0
1-W	12,00	0,243	0,000	0.333	0,1300	0.0000	0.0018	30,9	10,0	3,0
2-T	12.00	0.237	0.234	0.333	0.1300	0.0000	0.0020	27.4	10.0	3.0
2-0/S	12,00	0,231	0,264	0.333	0.1300	0.0033	0.0021	15.5	10,0	3,0
2-B	12.00	0.223	0.247	0.333	0.1300	0.0024	0.0022	19.6	10.0	3.0
2-1/S	12.00	0.237	0.241	0.333	0.1300	0.0004	0.0020	27.4	10.0	3.0
3-T	12,00	0,235	0,244	0.333	0,1300	0,0009	0.0020	26,4	10,0	3,0
3-N	12.00	0.254	0.216	0.333	0.1300	0.0000	0.0016	38,6	10.0	3,0
3-B	12.00	0.268	0.215	0.333	0.1300	0.0000	0.0013	52.3	10.0	3,0
3-S	12.00	0.258	0.226	0.333	0.1300	0.0000	0.0015	42.0	10.0	3.0
1-T	18,00	0,374	0,000	0.375	0.1300	0.0000	0.0000	6005.3	10,0	3,0
1-E	18.00	0.399	0.000	0.375	0.1300	0.0000	0.0000	No Corrosion	10.0	3.0
1-B	18,00	0.405	0.000	0.375	0.1300	0.0000	0,0000	No Corrosion	10.0	3.0
1-W	18,00	0,391	0,000	0.375	0.1300	0,0000	0.0000	No Corrosion	10,0	3,0
2-T	18.00	0.390	0,381	0.375	0,1300	0,0000	0,0000	No Corrosion	10.0	3,0
2-0/S	18.00	0.410	0.413	0.375	0.1300	0.0003	0.0000	472.0	10.0	3.0
2-B	18.00	0.389	0.388	0.375	0.1300	0.0000	0.0000	No Corrosion	10.0	3.0
2-I/S	18,00	0,388	0,386	0.375	0.1300	0,0000	0,0000	No Corrosion	10.0	3.0
3-T	18,00	0.378	0.371	0.375	0.1300	0.0000	0.0000	No Corrosion	10,0	3,0
3-N	18,00	0,364	0,356	0.375	0.1300	0,0000	0,0002	523.6	10.0	3,0
3-B	18,00	0.346	0,369	0.375	0.1300	0.0023	0.0006	47.5	10,0	3.0
3-W	18.00	0.353	0.375	0.375	0.1300	0.0022	0,0004	51.3	10.0	3.0

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for Menzies Aviation	HMT Inspection
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# **7.0 NDT INSPECTION**

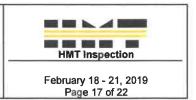
# 7.1 NDT INSPECTION SCOPE

The following Nondestructive Testing (NDT) was conducted to evaluate the physical characteristics of the pipe:

- A) Visual (VT) inspection of areas for the detection of anomalies or significant product side metal loss which may affect the integrity. Performed in accordance with HMT Inspection VT Procedure No. 1611.9, Revision No. 6.
- B) Random Ultrasonic (UT) testing. Performed in accordance with HMT Inspection UT Procedure No. 1611.1, Revision No. 8.

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API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL



## **8.0 EQUIPMENT**

# 8.1 ULTRASONIC

UT equipment utilized for the inspection was a GE USM Go Plus Flaw Detector (Serial No. 17070016).

Transducer equipment utilized was a BRITEK 7.5 MHz, 0.312 inch dual element.

Calibration block equipment utilized was a 5 step, carbon steel test block (0.100 inch to 0.500 inch).

Echogel 20 was used as couplant.

API 570 External Inspection Report for Menzies Aviation Piping System No. Buried Hydrant Fueling Lines Tampa, FL

HM1	Inspection	

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# 9.0 WARRANTY

## WARRANTY

HMT Inspection, a division of HMT LLC ("HMT"), has evaluated the condition of this tank based on the observations and measurements made by the HMT Piping Inspector and within API 570 guidelines. While our evaluation accurately describes the condition of the tank at the time of inspection, the tank owner / operator must independently assess the inspection information / report provided by HMT and any conclusions reached by the tank owner / operator and any action taken or omitted to be taken are the sole responsibility of the owner / operator. With respect to inspection and testing, HMT warrants only that the services have been performed in accordance with accepted industry practice. If any such services fail to meet the foregoing warranty, HMT shall reperform the service to the same extent and on the same conditions as the original service.

The preceding paragraph sets forth the exclusive remedy for claims based on failure or of defect in materials or services, whether such claim is made in contract or tort (including negligence) and however instituted, and, upon expiration of the warranty period, all such liability shall terminate. The foregoing warranty is exclusive and in lieu of all other warranties, whether written, oral, implied or statutory. NO IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE SHALL APPLY, nor shall HMT be liable for any loss or damage whatsoever by reason of its failure to discover, report, repair or modify latent defects or defects inherent in the design of any tank inspected. In no event, whether a result of breach of contract, warranty or tort (including negligence) shall HMT be liable for any consequential or incidental damages including, but not limited to, loss of profit or revenues, loss of use of equipment tested or services by HMT or any associated damage to facilities, down-time costs or claims of other damages.

### **10.0 PHOTOGRAPHS**

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12-inch Piping View



18-inch Piping View

HMTAPI570RPT

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Exhibit D





This is to Certify

is qualified in accordance with the HMT Procedure for Qualification and Certification of Nondestructive Examination Personnel which is in compliance with the requirements of the American Society for Nondestructive Testing Recommended Practice SNT-TC-1A-2016 ed.

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Method	Level	Expiration Date
API 653	No. 26636	11/30/2019
API 510	No. 25450	01/31/2022
API 570	No. 23226	01/31/2020
STI SP001	No. 27911	06/27/2021
UT(t)	II	08/03/2020
MT(y)	II	08/03/2020
РТ	II	08/03/2020
Hugh K. Lowerto	n)	D 1 10 0010
		December 17, 2018
Hugh K. Howerton		Date
ASNT Level III		STREET, STREET



AMERICAN PETROLEUM INSTITUTE INDIVIDUAL CERTIFICATION PROGRAMS

# API Individual Certification Programs certifies that

Christopher Charles Marsh

has met the requirements to be a certified

API-570 Pípíng Inspector

Certification Number 23226

Original Certification DateJanuary 31, 2002Current Certification DateJanuary 31, 2017Expiration DateJanuary 31, 2020

Tine Briskin

Manager, Individual Certification Programs



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Exhibit D





This is to Certify

is qualified in accordance with the HMT Procedure for Qualification and Certification of Nondestructive Examination Personnel which is in compliance with the requirements of the American Society for Nondestructive Testing Recommended Practice SNT-TC-1A-2011 ed.

Martin Martin

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Method	Level	Expiration Date
STI	No. 990322	07/23/2019
MFL	Π	05/26/2020
UTt	II	05/27/2020
МТу	II	05/26/2020
LT/BT	II	05/27/2020
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		July 23, 2015
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ASNT Level III		

#### Tampa International Airport Use and Lease Agreement For Fuel Facilities and Pipeline Exhibit E - Fuel System Rates and Charges Effective 12/1/2021

Fuel System Rates and Charges Prepared by Aviation Authority

Assumptions:

Calculations do not consider availability of PFC funds. Calculations do not include annual O&M or Operator Costs. Rental adjustments due to system improvements or additions will be calculated based on actual project costs and will be implemented when the project is placed in service.

	Square Feet	Monthly	Annual
GROUND RENT (will increase by 2.15% on the anniversary of the Commencement Date each year during term of this Agreement)			
Unimproved Aeronautical Land at Fuel Storage Facility	226,076	\$13,760.94	\$165,131.24
Aeronautical Vehicular Pavement at Fuel Storage Facility	37,026	\$321.96	\$3,863.52
Pipeline Right of Way corridor	124,206	\$1,080.03	\$12,960.36
TOTAL GROUND RENT		\$15,162.93	\$181,955.12
FUEL FACILITIES RENT		\$32,836.90	\$394,042.82
EXTENSION OF FUEL SYSTEM FROM EAST CARGO AREA TO EMERY - JULY 2000 TO JUNE 2030			
\$3,802,040 final cost amortized 30 years @ 8% (Dated July 2002)		\$27,898.02	\$334,776.24
Billed effective July 2002			
EXTENSION OF FUEL SYSTEM FROM EAST CARGO AREA TO FED EX - MARCH 2003 TO FEBRUARY 2033			
\$613,155 final cost amortized 30 years @ 8% (Dated March 2003)		\$4,499.11	\$53,989.32
Billed effective March 2003			
MEMORANDUM OF UNDERSTANDING FOR SECONDARY CONTAINMENT OF FUEL STORAGE TANKS - JANUARY 2008 - DECEMBER 2028			
\$4,800,00 final cost amortized 20 years @ 7.25% (Dated December 2008)		\$37,116.74	\$445,400.88
Billed effective January 1, 2009			
MEMORANDUM OF UNDERSTANDING FOR FUEL FACILITY UPGRADES - JANUARY 2016 to DECEMBER 2036			
\$9,759,800 final cost amortized 20 years @ 5.0% (Dated July 2014 as amended)		\$64,777.61	\$777,331.32
Billed effective February 2017			
MEMORANDUM OF UNDERSTANDING FOR EFSO AND FUEL TRUCK RACK UPGRADES (EFSO PROJECT) - DECEMBER 2021 to DECEMBER 2024			
\$565,283.11 final cost amortized 3 years @ 4.625% (Dated November 2021)		\$16,847.03	\$202,164.36
Billed effective December 2021			
GRAND TOTAL FUEL SYSTEM RATES AND CHARGES		\$199,138.34	\$2,389,660.06

STANDARD PROCEDURE	Number: <u>S250.06</u>
Aviation Authority	Effective: <u>05/31/02</u>
Aviation Authority	Revised: <u>03/04/20</u>
Subject: CONTRACTUAL INSURANCE TERMS AND CONDITIONS	Page: <u>1</u> of <u>11</u>

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**PURPOSE:** To establish the insurance terms and conditions associated with contractual insurance requirements. This Standard Procedure is applicable to all companies with Authority contracts, and to the extent required by Florida Department of Transportation Public Transportation Grant Agreement, every contractor, subcontractor, consultant, and sub-consultant at each tier. Unless otherwise provided herein, any exceptions to the following conditions or changes to required coverages or coverage limits must have prior written approval from the General Counsel and Executive Vice President of Legal Affairs or designee.

### **INSURANCE COVERAGE:**

A. Procurement of Coverage:

With respect to each of the required coverages, the company will, at the company's expense, procure, maintain and keep in force the types and amounts of insurance conforming to the minimum requirements set forth in the applicable contract. To the extent required by Florida Department of Transportation Public Transportation Grant Agreement, company shall further require that all contractors, subcontractors, consultants, and subconsultants at each tier satisfy and meet all the requirements of the applicable contract, including the terms and conditions of this Standard Procedure. Coverage will be provided by insurance companies eligible to do business in the State of Florida and having an AM Best rating of A- or better and a financial size category of VII or better. Utilization of non-rated companies, companies with AM Best ratings lower than A-, or companies with a financial size category lower than VII must be submitted by the company to the Authority Director of Risk and Insurance or designee for approval prior to use. The Authority retains the right to approve or disapprove the use of any insurer, policy, risk pooling or self-insurance program.

B. Term of Coverage:

Except as otherwise specified in the contract, the insurance will commence on or prior to the effective date of the contract and will be maintained in force throughout the duration of the contract and for any period of extended coverage required in the contract. If a policy is written on a claims-made form, the retroactive date must be shown and this date must be before the earlier of the date of the execution of the contract or the beginning of contract

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Aviation Authority	Effective: <u>05/31/02</u>
Aviation Authority	Revised: <u>03/04/20</u>
Subject: CONTRACTUAL INSURANCE TERMS AND CONDITIONS	Page: <u>2</u> of <u>11</u>

work, and the coverage must respond to all claims reported within three years following the period for which coverage is required unless a longer period of time is otherwise stated in the contract.

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C. Reduction of Aggregate Limits:

If the general or aggregate limit for any policy is exhausted, the company, and to the extent required by Florida Department of Transportation Public Transportation Grant Agreement, all of the company's contractors, subcontractors, consultants, and sub-consultants at each tier, will immediately take all possible steps to have it reinstated. The commercial general liability policies and any excess or umbrella policies used to provide the required amount of insurance shall include a per project designated aggregate limit endorsement providing that the limits of such insurance specified in the contract shall apply solely to the work under the contract without erosion of such limits by other claims or occurrences.

1. Cancellation Notice

Each insurance policy will be specifically endorsed to require the insurer to provide written notice to the Authority at least 30 days (or 10 days prior notice for nonpayment of premium) prior to any cancellation, non-renewal or adverse change, initiated by the insurer, and applicable to any policy or coverage described in the contract or in this Standard Procedure. The endorsement will specify that such notice will be sent to:

> Hillsborough County Aviation Authority Attn.: Chief Executive Officer Tampa International Airport Post Office Box 22287 Tampa, Florida 33622

Additionally, to the extent required by Florida Department of Transportation Public Transportation Grant Agreement, the workers' compensation, commercial general liability and railroad protective insurance (if required) of every contractor, subcontractor, consultant, and sub-consultant at each tier shall be specifically

STANDARD PROCEDURE	Number: <u>S250.06</u>
Aviation Authority	Effective: <u>05/31/02</u>
Aviation Authority	Revised: <u>03/04/20</u>
Subject: CONTRACTUAL INSURANCE TERMS AND CONDITIONS	Page: <u>3</u> of <u>11</u>

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endorsed to require the insurer to provide the Florida Department of Transportation notice within ten days of any cancellation, notice of cancellation, lapse, renewal, or proposed change to any policy or coverage described in the contract or this Standard Procedure.

D. No waiver by approval/disapproval:

The Authority accepts no responsibility for determining whether the company or any contractor, subcontractor, consultant, or sub-consultant at each tier is in full compliance with the insurance coverage required by the contract. The Authority's approval or failure to disapprove any policy, coverage, or Certificate of Insurance does not relieve or excuse the company of any obligation to procure and maintain the insurance required in the contract or in this Standard Procedure, nor does it serve as a waiver of any rights or defenses the Authority may have.

- E. Future Modifications Changes in Circumstances:
  - 1. Changes in Coverages and Required Limits of Insurance

The coverages and minimum limits of insurance required by the contract are based on circumstances in effect at the inception of the contract. If, in the opinion of the Authority, circumstances merit a change in such coverage or minimum limits of insurance required by the contract, the Authority may change the coverage and the minimum limits of insurance required, and the company will, within 60 days of receipt of written notice of a change in the coverage and/or the minimum limits required, comply with such change and provide evidence of such compliance in the manner required by the contract. Provided, however, that no change in the coverages or minimum limits of insurance required will be made by the Authority until at least two years after inception of the contract or two years after any change by the Authority in the coverages or minimum limits of insurance required in the contract unless extreme conditions warrant such change and are agreeable to both parties. To the extent required by Florida Department of Transportation Public Transportation Grant Agreement, any such change or modification in coverage or

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limits shall also apply to the contractors, subcontractors, consultants, and subconsultants at each tier.

If, in the opinion of the Authority, compliance with the insurance requirements is not commercially practicable for the company, its contractors, subcontractors, suppliers, consultants, or subconsultants at each tier, at the written request of the company, the Authority may, at its sole discretion and subject to any conditions it deems appropriate, relax or temporarily suspend, in whole or in part, the insurance requirements which would otherwise apply to the company. Any such modification will be subject to the prior written approval of the Authority's General Counsel and Executive Vice President of Legal Affairs or designee, and subject to the conditions of such approval.

- F. Proof of Insurance Insurance Certificate:
  - 1. Prior to Work, Use or Occupancy of Authority Premises

The company and, to the extent required by Florida Department of Transportation Public Transportation Grant Agreement, the company's contractors, subcontractors, consultants, and sub-consultants at each tier, will not commence work, or use or occupy Authority's premises in connection with the contract, until the required insurance is in force, preliminary evidence of insurance acceptable to the Authority has been provided to the Authority, and the Authority has granted permission to the company to commence work or use or occupy the premises in connection with the contract.

2. Proof of Insurance Coverage

As preliminary evidence of compliance with the insurance required by the contract, the company will furnish the Authority with an ACORD Certificate of Liability Insurance (Certificate) reflecting the required coverage described in the contract and this Standard Procedure.

The Certificate must:

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- a. Be signed by an authorized representative of the insurer. Upon request of the Authority, company will furnish the Authority with any specific endorsements effecting coverage required by the contract. The endorsements are to be signed by a person authorized by insurer to bind the coverage on the insurer's behalf;
- b. State that: "Hillsborough County Aviation Authority, members of the Authority's governing body and the Authority's officers, volunteers, and its employees are additional insureds for all policies described above other than workers' compensation and professional liability (if required by contract)";
- c. To the extent required by Florida Department of Transportation Public Transportation Grant Agreement, state that the Florida Department of Transportation is an additional insured for commercial general liability;
- d. Indicate that the insurers for all required policies shown on the Certificate have waived their subrogation rights against the Authority, members of the Authority's governing body, and the Authority's officers, volunteers, agents, and employees;
- e. Indicate that the Certificate has been issued in connection with the contract;
- f. Indicate the amount of any deductible or self-insured retention applicable to all coverages; and
- g. Identify the name and address of the Certificate holder as:

Hillsborough County Aviation Authority Attn.: Chief Executive Officer Tampa International Airport Post Office Box 22287 Tampa, Florida 33622;

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If requested by the Authority, the company will, within 15 days after receipt of written request from the Authority, provide the Authority, or make available for review, a certified complete copy of the policies of insurance. The company may redact those portions of the insurance policies that are not relevant to the coverage required by the contract. The company will provide the Authority with renewal or replacement evidence of insurance, acceptable to the Authority, prior to expiration or termination of such insurance.

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- G. Deductibles, Self-Insurance, Alternative Risk or Insurance Programs:
  - 1. All deductibles, as well as all self-insured retentions and any alternative risk or insurance programs (including, but not limited to, the use of captives, trusts, pooled programs, risk retention groups, or investment-linked insurance products), must be approved by the General Counsel and Executive Vice President of Legal Affairs or designee. The company agrees to provide all documentation necessary for the Authority to review the deductible, self-insurance or alternative risk or insurance program.
  - 2. The company will pay on behalf of the Authority, any member of the Authority's governing body, and/or any officer, volunteer, agent, or employee of the Authority, any deductible, self-insured retention (SIR), or difference from a fully insured program which, with respect to the required insurance, is applicable to any claim by or against the Authority, or any member of the Authority's governing body, or any officer, volunteer, agent, or employee of the Authority.
  - 3. The agreement by the Authority to allow the use of a deductible, self-insurance or alternative risk or insurance program will be subject to periodic review by the Director of Risk and Insurance or designee. If, at any time, the Authority deems that the continued use of a deductible, self-insurance, or alternative risk or insurance program by the company should not be permitted, the Authority may, upon 60 days' written notice to the company, require the company to replace or modify the deductible, self-insurance, or alternative risk or insurance program in a manner satisfactory to the Authority.

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4. Any deductible amount, self-insurance, or alternative risk or insurance program's retention will be included and clearly described on the Certificate prior to any approval by the Authority. This is to include fully insured programs as to a zero deductible per the policy. Authority reserves the right to deny any Certificate not in compliance with this requirement.

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- 5. To the extent required by Florida Department of Transportation Public Transportation Grant Agreement, the commercial general liability may not be subject to a self-insured retention. Subject to approval by the Authority under subparagraphs 1-4 above, the commercial general liability may contain a deductible, provided that such deductible shall be paid by the named insured.
- H. Company's Insurance Primary:

The insurance required by the contract will apply on a primary and non-contributory basis. Any insurance or self-insurance maintained by the Authority will be excess and will not contribute to the insurance provided by or on behalf of the company.

To the extent required by Florida Department of Transportation Public Transportation Grant Agreement, the company will ensure that the insurance provided by all contractors, subcontractors, consultants, and subconsultants at each tier will apply on a primary basis as to any other insurance available and shall not be more restrictive than the coverage afforded to the named insured.

I. Incident Notification:

In accordance with the requirements of Standard Procedure S250.02, the company will promptly notify the Airport Operations Center (AOC) of all incidents involving bodily injury or property damage occurring on Authority-owned property, tenant owned property or third party property.

J. Customer Claims, Issues, or Complaints:

In addition to complying with all terms outlined in Standard Procedure S250.02, all

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customer claims, issues, or complaints involving property damage or bodily injury related to the company will be promptly handled, addressed and resolved by the company.

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The company will track all customer claims, issues, or complaints involving property damage or bodily injury and their status on a Claims Log available for review, as needed, by Risk Management. The Claims Log should include a detailed report of the incident along with the response and/or resolution. Risk Management has the option to monitor all incidents, claims, issues or complaints where the Authority could be held liable for injury or damages.

### K. Applicable Law:

With respect to any contract entered into by the Authority with a value exceeding \$10,000,000, if any required policy or program is: (i) issued to a policyholder outside of Florida or (ii) contains a "choice of law" or similar provision stating that the law of any state other than Florida shall govern disputes concerning the policy, then such policy or program must be endorsed so that Florida law (including but not limited to Part II of Chapter 627 of the Florida Statutes) will govern any and all disputes concerning the policy or program in connection with claims arising out of work performed pursuant to the contract.

### L. Waiver of Subrogation:

The company, for itself and on behalf of its insurers, to the fullest extent permitted by law without voiding the insurance required by the contract, waives all rights against the Authority, members of the Authority's governing body and the Authority's officers, volunteers, agents, and employees, as well as the State of Florida, Department of Transportation, including the Department's officers and its employees, for damages or loss to the extent covered and paid for by any insurance maintained by the company. The company shall require all contractors, subcontractors, suppliers, consultants and subconsultants at each tier for themselves and their insurers, to the fullest extent permitted by law without voiding the insurance required by the contract, to waive all rights against the Authority, members of the Authority's governing body and the Authority's officers, volunteers, agents and its employees, as well as the State of Florida, Department of

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Transportation, including the Department's officers and its employees, for damages or loss to the extent covered and paid for by any insurance maintained by the company to the extent covered and paid for by any insurance maintained by the company's contractors, subcontractors, suppliers, consultants and subconsultants at each tier. The company shall further require that all contractors, subcontractors, suppliers, consultants, and subconsultants at each tier include the following in every contract and on each policy:

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"Hillsborough County Aviation Authority, members of the Authority's governing body and the Authority's officers, volunteers, agents, and its employees, as well as the State of Florida, Department of Transportation, including the Department's officers and its employees, are additional insureds for the coverages required by all policies as described above other than workers compensation and professional liability."

- M. Company's Failure to Comply with Insurance Requirements:
  - 1. Authority's Right to Procure Replacement Insurance

If, after the inception of the contract, the company fails to fully comply with the insurance requirements of the contract, in addition to and not in lieu of any other remedy available to the Authority provided by the contract, the Authority may, at its sole discretion, procure and maintain on behalf of the company, insurance which provides, in whole or in part, the required insurance coverage.

2. Replacement Coverage at Sole Expense of Company

The entire cost of any insurance procured by the Authority pursuant to this Standard Procedure will be paid by the company. At the option of the Authority, the company will either directly pay the entire cost of the insurance or immediately reimburse the Authority for any costs incurred by the Authority, including all premiums, fees, taxes, and 15% for the cost of administration.

a. Company to Remain Fully Liable

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The company agrees to remain fully liable for full compliance with the insurance requirements in the contract. To the extent that there is any exclusion, deficiency, reduction, or gap in a policy which makes the insurance more restrictive than the coverage required, the company agrees to remain responsible and obligated to make the Authority whole as if the company and all of its contractors, subcontractors, consultants, and subconsultants at each tier fully met the insurance requirements of the contract.

b. Authority's Right to Terminate, Modify, or Not Procure

Any insurance procured by the Authority is solely for the Authority's benefit and is not intended to replace or supplement any insurance coverage which otherwise would have been maintained by the company or by any of its contractors, subcontractors, consultants, or sub-consultants at each tier. Authority is not obligated to procure any insurance pursuant to these requirements and retains the right, at its sole discretion, to terminate or modify any such insurance which might be procured by the Authority pursuant to this Standard Procedure.

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 APPROVED:
 Michael Stephens
 DATE:
 03/04/20

# DocuSign

#### **Certificate Of Completion**

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Witness Events	Signature	Timestamp
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Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	2/21/2022 11:39:11 AM
Certified Delivered	Security Checked	2/21/2022 11:40:09 AM
Signing Complete	Security Checked	2/21/2022 11:40:23 AM
Completed	Security Checked	2/21/2022 11:40:23 AM
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