

MANCHESTER·BOSTON REGIONAL AIRPORT

REQUEST FOR PROPOSALS

MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL

APRIL, 2019

FY19-805-52

LEGAL NOTICE

MANCHESTER•BOSTON REGIONAL AIRPORT REQUEST FOR PROPOSALS

MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL

APRIL, 2019

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Manchester•Boston Regional Airport invites the submittal of Request for Proposals (RFP) from professional firms interested in providing **One (1) and/or Two (2)** "Multi-Tasking Equipment (MTEs) for Airfield Snow Removal" at Manchester•Boston Regional Airport.

The proposals will be reviewed and evaluated by the Manchester Boston Regional Airport selection committee. At least one qualified firm for furnishing the equipment will be selected based on specifications as defined by the criteria established in the RFP.

A Letter of Interest along with five (5) copies of the RFP must be received no later than 9:30 AM on April 19, 2019 at the Airport Administration Office, Attention: OPERATIONS & FACILITIES. All responses must be plainly marked "MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL".

Copies of the RFP packet are available at the Airport Administration Office, One Airport Road, Suite 300, Manchester, New Hampshire 03103; Telephone 603-624-6539.

Manchester•Boston Regional Airport reserves the right to waive any irregularities and to reject any and all RFP's on any basis and without disclosure of the reason.

Manchester•Boston Regional Airport is committed to ensuring that no person is excluded from participating in or denied the benefits of its services on the basis of race, color or national origin, as provided by Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin), as amended.

Theodore S. Kitchens, A.A.E. Airport Director

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RECITALS

WHEREAS, the Airport has identified a significant need for new Multi-Tasking Equipment (MTE) for Airfield Snow Removal and is funding this purchase using Airport Improvement Program funding;

WHEREAS, the Airport has determined to implement the purchase using a Request for Proposal (RFP);

WHEREAS, pursuant to the Enabling Law, the Airport issued a Request for Proposals ("RFP") on April 10, 2019 in order to obtain from firms who would be invited to submit their proposals for the delivery of One (1) and/or Two (2) Multi-Tasking Equipment (MTEs) for Airfield Snow Removal (depending on funding);

WHEREAS, proposals are due on April 19, 2019;

WHEREAS, following the review and selection process established in the RFP the Airport will select the most responsive responsible bidder that submitted the specifications, that met the requirements at the lowest cost for **1 Unit and/or 2 Units.**;

WHEREAS, the AIRPORT desires to receive, **One** (1) and/or Two (2) Multi-Tasking Equipment (MTEs) for Airfield Snow Removal in accordance with the terms and conditions of this Proposal;

NOW THEREFORE, for and in consideration of the covenants, agreements, and benefits to those providing PROPOSALS, all will agree as follows:

SECTION 1.0

1.1 GENERAL INFORMATION

MANCHESTER•BOSTON REGIONAL AIRPORT (MHT)

Owner:	City of Manchester, New Hampshire	
Location:	City of Manchester (County of Hillsborough) and Town of Londonderry (County of Rockingham) State of New Hampshire, located approximately four and one-half (4.5) miles southeast of the downtown Manchester business district.	
Identifier:	MHT	
Operator:	City of Manchester, Department of Aviation. Airport staff is responsible for the operation of MHT.	

Certification: Title 14 CFR Part 139 Class 1 Airport

SECTION 2.0

2.1 PROPOSAL DOCUMENTS AND INTERPRETATION

PROPOSAL Documents. The "PROPOSAL Documents" comprise:

- 2.1.1 this PROPOSAL and all Exhibits including marketing brochures and other presentations made by proposers during the RFP process;
- 2.1.2 any Change Order or other Modification or Amendment;
- 2.1.3 any Notice to Proceed; and,
- 2.1.4 any Specifications any organization description on PROPOSAL
- 2.1.5 Title 14 CFR Part 139 Certification of Airports now and as amended.
- 2.1.6 Title 49 CFR Part 1542 Airport Security now and as amended.
- 2.2 Interpretation. The PROPOSAL Documents are intended to be complementary, and what is set forth in any one document is as binding as if set forth in each document. The Parties recognize that Amendments and Modifications may provide for specific modification to the terms and conditions of other PROPOSAL Documents, in which case, the modified terms and conditions shall govern, as expressly set forth in the Amendment or Modification. However, all terms and conditions of such other PROPOSAL Documents that are not expressly modified or deleted by an Amendment or Modification shall remain in effect.

Exhibit "B", Article 2 shall govern matters of interpretation related to the applicability, stringency, and consistency of the PROPOSAL Documents, which are included among the PROPOSAL Standards. Unless stated otherwise in this PROPOSAL, if a conflict between the sections of this PROPOSAL and the exhibits arises, the sections control over the exhibits.

- 2.3 Applicability of Proposal Standards. Contractor shall be obligated to comply only with those Proposal Standards, which are applicable in any particular case. Where more than one Proposal Standard applies to any particular performance obligation of Contractor hereunder, each such applicable Proposal Standard shall be complied with. In the event there are different levels of stringency among such applicable Proposal Standards, the most stringent of the applicable Proposal Standards shall govern. In the event of any inconsistency among the Proposal Standards, Contractor shall notify the AIRPORT. The AIRPORT's determination as to the applicable standard shall be binding.
- 2.4 Defined Terms. Capitalized terms have the meanings set forth in **Exhibit "A"**. Further interpretation provisions are set forth in **Exhibit "A"**.

SECTION 3.0

3.1 INTRODUCTION

3.2 OVERVIEW

Manchester•Boston Regional Airport "MHT" is seeking Proposals to this RFP from Offeror(s) for One (1) and/or Two (2) MULTI-TASKING EQUIPMENT (MTEs) FOR AIRFIELD SNOW REMOVAL. It is the AIRPORT's intent to contract with a firm or agency for delivery of One (1) and/or Two (2) MULTI-TASKING EQUIPMENT (MTEs) for Airfield Snow Removal.

The selected CONTRACTOR shall be responsible for delivery of the unit(s), under terms of the contract, except as identified herein.

3.3 TERM OF CONTRACT

The term of the final Contract will be for the purchase of equipment including the applicable warranty period as stated in the RFP.

3.4 PROPOSED TIME SCHEDULE

April 10, 2019	Issue formal request for Proposals
April 19, 2019	Open and Review Proposals @ 9:30am, EST
TBD	Contract Commences

SECTION 4.0

4.1 PROPOSALS REQUESTED

The Manchester•Boston Regional Airport (hereinafter called the Airport) hereby solicits proposals from qualified firms (hereinafter called either the Company or Manufacturer) interested in providing MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL (hereinafter called Equipment or Units) for Manchester•Boston Regional Airport. The City of Manchester which owns and operates the Airport through its Department of Aviation, will accept and review Proposals from Companies and select one (1) Company to provide **One (1) and/or Two (2)** MULTI-TASKING EQUIPMENT (MTEs) FOR AIRFIELD SNOW REMOVAL delivered to 400 Kelly Avenue, Manchester, NH 03103.

Quantity of Submittals Required: Each CONTRACTOR must provide: <u>One (1) signed</u> <u>original, four (4) copies and one (1) soft (electronic) copies</u> of their PROPOSAL. The original with signature is to be clearly marked as "ORIGINAL" on the outside cover and contain <u>original ink signatures</u>. All copies should be clearly marked "COPY".

4.2 SCOPE

The airport is requesting sealed proposals for at least **One (1) and/or Two (2)** Multi-Tasking Equipment (MTEs) for Airfield Snow Removal. The airport is requesting cost proposals for the delivery of 1 Unit and/or 2 Units. The airport intends to issue a contract based upon available funding. The airport reserves the right to negotiate with one or more parties who have submitted proposals. Such negotiations are designed to achieve terms and conditions most favorable to the airport.

The Multi-Tasking Equipment (MTE) for Airfield Snow Removal must meet SAE standard ARP5548 Multi-Tasking Equipment (MTE) for Airfield Snow Removal. The Multi-Tasking Equipment (MTE) for Airfield Snow Removal must meet specifications of the FAA Advisory Circular AC 150/5220-20A Airport Snow and Ice Control Equipment. The proposed equipment must be capable of operating in echelon with other airport owned MTE's and snow brooms engaged in clearing bulk accumulation with the snow plow, sweeper, and high volume – high speed air. The equipment will be required to effectively clear $\frac{1}{2}$ + inch of snow, weighing 25 lbs. per cubic foot from a runway that is 150 feet wide with an additional 50 feet of paved shoulders and is 9250 long all in 10 minutes.

- Advisory Circular AC 150/5220-20A: Airport Snow and Ice Control Equipment
- Advisory Circular AC 150/5210-5D: Painting, Marking, and Lighting of Vehicles Used on an Airport

4.3 APPLICABLE DOCUMENTS

The following publications form a part of this document to the extent specified herein. The latest issue of SAE publications shall apply. The applicable issue of other publications shall be the issue in effect on the date of the purchase order. In the event of conflict between the text of this document and references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

4.3.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or 724-776-4970 (outside USA), <u>www.sae.org</u>.

SAE J931 Hydraulic Fluid Power Circuit Filtration - Application & Methods

SAE J1292 Automobile and Motor Coach Wiring

SAE J1503 Performance Test for Air-Conditioned, Heated, and Ventilated Off-Road, Self-Propelled Work Machines.

4.3.2 FAR & FAA Publications

Available from Federal Aviation Administration, 800 Independence Avenue, SW, Washington, DC 20591, Tel: 866-835-5322, <u>www.faa.gov</u>.

AC 150/5210-5D Painting, Marking, and Lighting of Vehicles on an Airport

4.3.3 FMCSR Publications

Available from Federal Motor Carrier Safety Administration, 1200 New Jersey Avenue SE, Washington, DC 20590, Tel: 1-800-832-5660, <u>www.fmcsa.dot.gov</u>.

Title 49, Chapter III, Subchapter B-Federal Motor Carrier Safety Regulations

4.3.4 Latest release of Federal Spec 297, Rustproofing of Commercial (Nontactical) Vehicles

4.3.5 RTCA Publications

Available from RTCA, Inc., 1150 18th Street, NW, Suite 910, Washington, DC 20036, Tel: 202-833-9339, <u>www.rtca.org</u>.

RTCA DO-186 Minimum Performance Standards for Airborne Radio Communications Equipment Operating Within the Radio Frequency Range 117.975 - 137.000 MHz

4.3.6 FMVSS - Federal Motor Vehicle Safety Standards

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4.4 DEFINITIONS

See also, Dictionary of Automotive Engineering, Don Goodsell.

AIRPORT RUNWAY BROOM: A cylindrical rotary broom device designed to clean snow, slush and ice; and when specified, other materials such as sand, snow and ice control chemicals, debris, rubber residue, and other materials from airport runway, taxiway, and ramp areas and associated pavements by using a brush with bristles to clean the surfaces.

AIR BLAST: A device for developing and directing a continuous stream of forced air ahead or behind the brush for moving snow and debris.

AUXILIARY EQUIPMENT: Any equipment, in addition to the basic chassis that is required for a piece of equipment/vehicle to perform its functions. For example, a winch would be auxiliary equipment for a tow truck.

AXLE CAPACITY: The allowable weight load on an axle based on supportive engineering data and the best judgment of the manufacturer of the axle.

AXLE RATIO: The numerical ratio of the drive shaft speed to the speed of the axle. The numerical ratio equals the torque multiplication factor of the axle.

AXLE, DEAD: A means of support for the wheels at each end that is non-driven.

AXLE, LIVE: A means of support for the wheels at each end that is driven.

BROOM: A complete operating unit. A broom contains a brush with bristles that sweep.

BROOM CAPACITY RATING: The amount of snow moved per unit of time, normally in tons per hour, resulting in an acceptable surface condition.

BRUSH CORE: The center rotating structure which supports the bristles.

BRUSH HEAD: The portion of the runway broom which supports and carries the bristle and its core.

BRUSH HOOD COVER: A cover for the top half of the brush.

BRUSH: The rotating cylinder of many bristles

BRUSH ANGLING SYSTEM: The capability of angling or rotating the brush head to allow the discharge of snow to the left or right of the carrier vehicle when moving in a forward direction. The angle is changed from the operator's position in the cab by use of a system such as hydraulic rams, hydraulic or electric motors, or other devices or mechanisms.

BRUSH ELEVATION MECHANISM: A device for raising and lowering the brush. The height is changed from the operator's position in the cab by use of a system such as hydraulic rams, hydraulic or electric motors, or other devices or mechanisms.

BRUSH PATTERN: The width, perpendicular to the brush core, of the area the rotating brush contacts with the surface in the down position.

BRUSH PATTERN ADJUSTING SYSTEM: A system for adjusting the pattern of the brush.

CAB: An enclosed area on a vehicle designed and intended to hold and carry an operator.

CAB CONVENTIONAL: A cab mounted just behind the drive engine for the chassis.

CAB FORWARD: A cab mounted to the most forward position on the chassis.

CAB-OVER ATTACHMENT: A cab mounted over the front attachment.

CAB-OVER ENGINE: A cab mounted over the front mounted engine.

CAN BUS: Controller Area Network, a specialized internal communications network, interconnecting components inside a vehicle, utilizing a standard communication protocol. Interconnecting components include but are not limited to information processors for engines, transmissions, antilock brakes, lighting systems, body controllers, attachment controls and the related sensors, servos and user interfaces.

CARRIER VEHICLE: The prime mover to which the runway broom, or displacement plow is attached or any vehicle designed and purchased for the purpose of transporting any working snow head.

CASTER ASSEMBLIES: Wheels, generally of small size, with the ability to swivel and their attachment mechanism(s) to the plow or rotary broom. The wheels ride along the pavement and may support some of the weight of the plow or broom and/or may provide a method of adjusting the clearance between the bottom of the cutting edge or brush and the pavement. Each caster assembly can be of the single or dual wheel type. Caster wheel assemblies may be equipped with pneumatic, foam filled or solid rubber tires. Caster tire and wheel assemblies shall be approved and rated for the speeds and loads they will encounter during use.

CASTING DISTANCE: The distance the snow moves left or right measured perpendicular to the vehicle travel from the broom end, to the center of the area of most concentrated snow cast observed during casting.

CENTER DRIVE BROOM: Brush driven from the center position of the brush head.

CERTIFICATION/APPLICATION APPROVAL: Confirmation by a manufacturer or qualified expert that the unit or component fulfills the requirement of the application.

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CERTIFIED PERFORMANCE: Written confirmation of the ability of a unit or component to performance as specified based on calculations or testing.

COEFFICIENT OF FRICTION: A unitless number that represents the resistance of sliding of two surfaces in contact with each other. These values should be between 0 and 1. Higher values indicate more resistance to sliding. Refer to Swept Surface Condition.

CONFIGURATION: The functional arrangement of parts or components assembled to make a working machine or apparatus.

CURBSIDE: The right side of the vehicle when viewed from the rear. Opposite side from road side.

CURB WEIGHT: The weight of the carrier vehicle with all factory installed and auxiliary equipment, in the travel position, full fuel tank(s) and a nominal 180+ pound operator.

CUTTING EDGE: The portion of the plow that contacts and/or scrapes the pavement surface, traditionally available, but not limited to, steel, rubber, polyethylene, with or without tungsten carbide inserts.

CUTTING EDGE REINFORCEMENT: Supports the cutting edge and prevents damage to moldboard upon impact at cutting edge.

"DE-CEL" TYPE CYLINDER: A type of hydraulic cylinder designed to automatically control the speed of function as the cylinder reaches a certain point in its stroke.

DEFLECTOR (BRUSH): A device mounted on the front of the brush hood to allow the operator to direct the snow casting. The deflector position is changed from the operator's position in the cab by use of a system such as hydraulic rams, hydraulic or electric motors, or other devices or mechanisms.

DELUGE SYSTEM: A means of providing large amounts of fluid through high flow directional spray nozzles to windshield(s), side and rear window(s), mirror(s), and other surfaces to improve operational visibility from the cab.

DIFFERENTIAL: The gear assembly in the drive axle that permits one wheel to turn slower or faster than the other when negotiating a turn. The gear assembly in the transfer case that allows the front drive-shaft to turn slower or faster than the other when negotiating a turn.

DIFFERENTIAL, AUTOMATIC LOCKING: The gear assembly in the transfer case that allows the front drive-shaft to turn slower or faster than the rear prop-shaft when negotiating a turn while providing maximum driving torque to both the front and rear axles. The gear assembly on the drive axle that permits one wheel to turn slower or faster than the other when negotiating a turn while providing maximum driving torque to both wheels. Automatic locking differentials provide positive drive to both driven members while not requiring operator input or control.

DIFFERENTIAL, MANUAL LOCKING (BEVEL GEAR): The gear assembly on the drive axle that permits one wheel to turn slower or faster than the other wen negotiating a turn. An operator controlled provision may be offered to fully lock and unlock the differential action from the cab.

DIMENSIONS:

- AE Centerline of rear axle/tandem to the end of frame
- BA Bumper to centerline of Front axle
- BBC Bumper to back of Cab
- CA Back of Cab to centerline of rear axle
- CE Back of cab to end of the frame (AE + CA = CE)
- FH Frame height from the ground to the top of frame
- OAL Overall Length
- WB Wheelbase
- OAH Ground to top of highest point on the unit

DRIVE FRAME: Portion of plow support structure that attaches to the moldboard to the hitch.

END DRIVE BROOM: Brush driven from one or both ends.

FMVSS: An abbreviation for the Federal Motor Vehicle Safety Standards.

FRONT/REAR AXLE DISCONNECT: A mechanism designed to engage and disengage power to the axle.

FUEL CAPACITY: The actual volume of fuel able to be stored in on-board tanks.

GAWR: Abbreviation for Gross Axle Weight Rating. The rating of the lowest rated member of an axle as defined by the component manufacturer(s) from the following components: Tires, suspension, hubs/wheels, rims, bearings, beam and brakes.

GEAR RATIO: The ratio of the speed of the input to a gear to the speed of the output from the gear. For a pair of gears, the ratio is found by dividing the number of teeth on the driven gear by the number of teeth on the driving gear.

GEARED SPEED: The theoretical vehicle speed based on maximum governed engine RPM, transmission gear ratio(s), driving axle ratio, and tire size.

GEARS, SINGLE, AND MULTIPLE REDUCTION: Single reduction gearing refers to one speed reduction through the gearing component. Multiple reduction refers to more than one step of speed reduction through the gearing component.

GRADE-ABILITY: The percent grade that a vehicle will negotiate.

GVWR: Abbreviation for Gross Vehicle Weight Rating. The sum of the Gross Axle Weight Ratings (GAWR).

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HID LIGHT: Acronym for High Intensity Discharge light. Light created by electric arc, not a filament type light bulb.

HIGH SPEED BROOM: A runway broom designed to perform at its Maximum Capacity Rating while operating at a forward speed of at least 25 MPH.

HITCH: A device utilized to couple/uncouple an attachment to the carrier vehicle, then attaches to the plow drive frame.

HORSEPOWER, GROSS BRAKE (OR ACTUAL DELIVERED HORSEPOWER): A measure of the rate at which work is produced. The time rate of doing work, as measured by a Prony brake or dynamometer. Brake horsepower is expressed as the torque in foot – pounds times the number of revolutions per minute divided by the constant 5252.

 $HP = \frac{\text{torque rpm}}{5252}$

HORSEPOWER, GROSS: The brake HP determined under conditions defined by dynamometer test of the stripped engine, that is, the brake horsepower of the engine with only those accessories and attachments necessary to the functioning of the engine during test.

HORSEPOWER, NET: The brake horsepower delivered to the clutch, or its equivalent, with all accessories and attachments functioning (including exhaust pipe, muffler and tail pipe) which are standard or regular equipment on the engine as installed in the particular chassis. Gross horsepower less the parasitic loads.

IMPELLER (AIR BLAST): The internal rotating portion of the air blast which produces the air movement.

MAXIMUM TIRE LOAD RATING: The load rating at the maximum permissible inflation pressure for that tire.

MAXIMUM PERMISSIBLE INFLATION PRESSURE: The maximum cold inflation pressure to which a tire may be inflated.

MAXIMUM SPEED: The highest speed at which a vehicle, with its rated payload, can be driven for an extended period on a level first-class highway without sustaining damage.

MOLDBOARD: Portion of the plow that moves the snow, available in many shapes and sizes, depending on the local conditions and the combination of casting or rolling of the snow that might be required. Traditionally, moldboard surfaces have been made from, but not limited to polyurethane, steel, or stainless steel.

MOLDBOARD OVERHANG: The longitudinal distance between the cutting edge and the top of the moldboard. Typically, the top edge of the moldboard is forward of the cutting edge.

MOLDBOARD PITCH: The angle of the cutting edge in relation to the pavement.

NHTSA: An abbreviation for the National Highway Traffic Safety Administration.

NEW AND CURRENT PRODUCTION COMPONENTS: New, unused and free of all defects and imperfections that could affect the serviceability of the finished product. Component with a manufacture date no older than 1 year prior to bid proposal.

NEW AND OF CURRENT PRODUCTION UNIT (AS IN TOTAL UNIT CHASSIS AND ATTACHMENTS): Unit whose manufacture (assembly of) started no earlier than the award date of the contract.

PERFORMANCE RATING: Capacity Rating.

PLY RATING: A unit of measurement used in tire construction to denote strength of tires.

POWER DIVIDER: Usually a small auxiliary gear box or chain driven device to allow distribution of drive shaft power to several different mechanical devices mounted on the same truck.

POWER TAKE-OFF (PTO): A mechanical device used to transmit engine power to auxiliary equipment. Power take-offs can be mounted on either a main or auxiliary transmission. Front-mounted and flywheel-mounted power take-offs are also used in various applications.

POWER TRAIN: All the components from a power source such as an engine to the powered device such as driving wheels of a chassis or the brush shaft of the broom. This includes Engines, transmissions, gearboxes, drive shafts, differentials, driving axles, hydraulic pumps, motors and hoses.

REFLECTORS: Glass or plastic prism lenses which reflect light.

RESISTING BENDING MOMENT (RBM): A calculation used to compare frames of different section modulus and of different material. It is the product of the section modulus times the yield strength of the frame material.

The formula expression is: RBM = Section Modulus x Yield Strength.

REVERSING: The capability to angle or pivot the plow moldboard or rotary broom on a center axis so as to discharge snow to the left or right of the carrier vehicle when moving in a forward direction. Power Reversing is reversing from the operator's position in the cab by use of a system such as hydraulic rams, hydraulic or electric motors, or other devices or mechanisms to change the snow discharge angle from a plow or rotary broom.

RIM PULL: Actual amount of effort in pounds available at point of contact of tire and road surface.

ROAD ROLLING RESISTANCE: Sum of the forces at the area of contact between a vehicle's tires and road surface acting against the direction of movement.

ROADSIDE: The left side of the vehicle when viewed from the rear. Opposite of curbside.

ROLLING RADIUS: Height measured from the center of the axle to the ground.

SAFETY CUSHION DEVICE: A component designed to absorb impact to minimize damage to the plow, pavement surface, and/or operator.

SERIAL NUMBER: A unique number issued to a vehicle or to a component of a vehicle for identification purposes. Also see VIN number.

SHOCK/IMPACT ABSORBERS: Devices utilized to absorb impact to prevent damage to plow, pavement surface, carrier vehicle and/or operator.

SINGLE ENGINE RUNWAY BROOM: Runway broom with a single engine that provides power to both the chassis motive power and the brush head.

SNOW DEFLECTOR: Devices designed to minimize blowing snow from coming over the top of the moldboard.

SNOW SHIELD: A cover for the brush hood or plow to keep snow from building up.

SPRING CAPACITY: The allowable load that can be supported by the spring(s).

STEERING, ALL WHEEL: Any system that augments the steering action of a chassis, providing for power or power assisted steering controlled by the operator in the cab, on all wheels of the vehicle.

STEERING, POWER: A steering system which does not include a direct mechanical connection between the operator and the steering axle. This can be accomplished by, but is not limited to, hydraulic or electric means.

STEERING, POWER ASSISTED: Steering gear or mechanism with a direct mechanical (controlling) connection to a steering axle that has provisions for part of the force required for operation to be provided by air, hydraulic, or other means, not including mechanical leverage (longer handles)

STOPPING DISTANCE: The distance traveled by a vehicle from the point of application of force to the brake control to the point at which the vehicle reaches a full stop.

STRUCTURAL MEMBER: A part of a vehicle designed primarily to support the load of a vehicle in operation.

SUCTION LINE: A tubular connection between a reservoir or tank and the inlet of a pump.

SWEPT SURFACE CONDITION: A measurement of coefficient of friction (braking action) on a clean swept pavement surface, measured from a friction measuring device. Also a visual inspection to determine the surface is clean and bear with no remaining debris or chunks of snow and ice.

Intials	
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THIRD PARTY: A disinterested party professionally qualified to conduct the test, and/or record test data other than the manufacturer that is acceptable to the purchaser.

TILT CAB: A cab that pivots forward to gain access to the engine or other major component.

TIRE CLEARANCE: Space between tires and the nearest part of the body or under-structure. TIRE LOADED RADIUS: The distance from the center of the wheel to the road with tire loaded to rated capacity. Static radius applies when vehicle is at rest. Rolling radius applies for a vehicle in motion. Rolling radius is usually slightly greater than the static radius.

TONS PER HOUR (TPH): A function of snow density x depth of snow x swept path x vehicle speed.

TORQUE: Force having a twisting or turning effect, expressed in foot-pounds.

TRACTIVE EFFORT: The maximum force developed by a vehicle power train at contact between the driven wheels and road surface with 100% available traction.

TRANSFER CASE: Split power gear box transmitting drive to the front and rear axles.

TRANSMISSION: Selective gearbox providing various combinations of gear ratios.

TRANSMISSION, AUTOMATIC: A type of transmission designed to self-select and change gear ratios based on vehicle and engine speed.

TRANSMISSION, HYDROSTATIC: A type of transmission that provides gear reduction between the engine and drive wheels that uses fluid under pressure to transmit power and torque rather than mechanical components.

TRANSMISSION, MANUAL: A type of transmission that can function only with periodic mechanical input from an operator to select the gear reduction or drive ratio used in the transmission, and a mechanism (clutch) to disengage the power from the engine to the transmission during the mechanical shift input from the operator.

TRANSMISSION, POWERSHIFT: A type of transmission that can function only with periodic input from an operator to select the gear reduction or drive ratio in use in the transmission. Powershift transmissions include a device that allows the change of drive ratios or gears by means of an internal device that does not require operator action to interrupt power from the engine while changing the gear or drive ratio.

TREAD; WHEEL TRACK: (a) The distance between the centers of tires on the same axle at the points where they contact the road surface. Duals are measured from the center of dual wheels. (b) That portion of a tire that comes into contact with the road. (c) The pattern of the surface of the tire that comes in contact with the road.

TRIP MECHANISM: A method of allowing the plow cutting edge to pass over surface objects and automatically returns to the original plowing position. Examples include Trip Edge design

where only the cutting edge trips while keeping the moldboard in a fixed position; and Trip Moldboard design where the complete moldboard is allowed to rotate; and, Moldboard Cushioning design where the cutting edge and moldboard, as one, deflect rearward and/or upward.

TRUNNION: (a) The axis, pivot point, or center point between axles. (b) Journals allowing pivoting or turning such as a tandem axle spring or walking beam assembly. (c) The axis or pivot point of power transmission in a steerable drive axle where the turning member joins the non-turning member of the axle.

TURNING CIRCLE, WALL TO WALL: The diameter of a semi-circle described by the outmost edge of the vehicle and/or attachment while the vehicle maneuvers through an 180 degree turn and the attachment is at its most favorable as well as its worst case position.

TWO-SPEED AXLE: A driving axle arrangement whereby the driver can select one of two ratios.

VEHICLE IDENTIFICATION NUMBER (VIN): A unique number issued to a vehicle for identification purposes. Format and code of a VIN is prescribed by law to identify manufacturer, configuration, and date of production. A unique VIN shall be assigned for separate identification of traction drive chassis versus trailers (tow brooms) in modular configured MTE units.

SECTION 5.0

5.1 OBLIGATIONS OF THE CONTRACTOR

- 5.2 The Contractor shall provide the necessary MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL essential to comply with the Federal Aviation Administration requirements and regulations, particularly the appropriate sections of Federal Aviation Administration Advisory Circulars pertaining to Airport Snow Removal as published by the Department of Transportation as they presently exist and/or may be amended.
- 5.3 Determination of compliance with all the provisions of this contract shall rest solely with Manchester•Boston Regional Airport.

CONTRACTOR shall, as between itself and the AIRPORT, be responsible and liable to the AIRPORT for, and not relieved of, its obligations under the PROPOSAL Documents by, the acts, omissions, breaches, defaults, non-compliance, negligence, willful misconduct, or other legal fault of each Contractor-Related Entity and all references in this PROPOSAL to any act, omission, breach, default, non-compliance, negligence, willful misconduct, or other legal fault of CONTRACTOR will be construed accordingly to include any such act, omission, breach, default, non-compliance, negligence, willful misconduct or other legal fault committed by any other Contractor-Related Entity.

5.4 Designated Representative. The individual identified in Exhibit "C" as the "Designated Representative" shall, until further designation under this Section, act as the designated representative of CONTRACTOR with respect to this PROPOSAL and shall coordinate with the Assistant Airport Director, Operations and Facilities, as to administrative matters under this PROPOSAL. CONTRACTOR may replace the individual designated as its representative under this PROPOSAL from time to time by written notice to the AIRPORT, subject to the reasonable approval of the AIRPORT. CONTRACTOR shall replace the individual designated as its representative under this PROPOSAL at any time upon written notice by the AIRPORT in the AIRPORT'S reasonable discretion. Any individual designated as the representative of CONTRACTOR under this PROPOSAL shall have sufficient qualifications and experience to serve as CONTRACTOR'S representative hereunder and shall be vested with the authority to act on behalf of CONTRACTOR, to receive notices on behalf of CONTRACTOR and to make binding decisions with respect to the performance of the service. The designated representative shall be the AIRPORT'S primary contact for the performance and delivery and shall be available, as required, for the benefit of the AIRPORT.

SECTION 6.0

6.0 PROPOSAL COMPENSATION

6.1 General Payment Requirements.

The payment terms set forth in this Article.

- 6.1.1 Airport will pay Manufacturer for each unit delivery that has proven to meet the performance specifications set forth in this RFP.
 - 6.1.1.1 Proof of Performance Test must be completed as specified in Appendix "A".
 - 6.1.1.2 The Airport will not accept or compensate for equipment that performs below 90% of the specified requirements.
 - 6.1.1.3 The Airport will reduce the payment for equipment that exceeds 90% of the performance specified but less than 100% of the performance specified as follows:

Payments for Units that perform between 95% and 99% will be reduced by .05% for each 1% below 100%. Payments for units that perform between 90% and 94% will be reduced by 2.5% and 1% per percentage of performance below 95%.

Example: The 3^{rd} party test analysis of the Unit certifies the unit performance is 93% of the specified requirement. The payment would be reduced by 2.5% + 1% for each percentage below 95% or 2 additional percentages. The Airport would pay 95.5% of the example unit cost.

- 6.1.1.4 The Manufacturer can test unit(s) after delivery at the Airport. The Airport will make personnel and facilities available for the third party to test a Unit. The Airport will retain 20% of each Unit delivered until the performance test is completed.
- 6.2 With each application for payment, Manufacturer shall submit a certified release of all claims, known or that should reasonably be known, and liens against the Airport, stating "In consideration for the payment requested herein and upon receipt of such payment, Manufacturer waives and releases all claims and liens of every sort against Airport relating to or arising out of the delivery equipment. The final request for payment shall not be made until Manufacturer delivers to Airport a complete release Manufacturer of all claims and liens of any sort.
- 6.3 The aggregate total of payments to Manufacturer shall not exceed the total of the Proposal Price.

- 6.4 In addition to the Airport's other rights and any provision hereof to the contrary notwithstanding and to the extent reasonably necessary to protect itself, Airport shall not be obligated to make any payment (whether a progress payment or final payment) to MANUFACTURER hereunder if any one or more of the following conditions exist:
 - 6.4.1 Manufacturer is in breach or default under this Proposal;
 - 6.4.2 Any part of such payment is attributable to services, which are not performed in accordance with this Proposal; provided, however, such payment shall be made as to the part thereof attributable to services which were performed in accordance with this Proposal;
 - 6.4.3 Manufacturer has failed to make payments promptly to Subcontractors or other third parties used in connection with the services for which Airport has made payment to Manufacturer; or,
 - 6.4.4 Nothing contained herein shall require the Airport to pay Manufacturer an aggregate amount exceeding the Proposal Price.
 - 6.4.5 MANUFACTURER shall promptly pay all bills validly due and owing for labor in connection with the manufacture and delivery of equipment.
 - 6.4.6 Manufacturer shall ensure the Airport has these rights with Manufacturer's employees, agents, assigns, successors, and subcontractors, and the obligations of these rights shall be explicitly included in any subcontractors or agreements formed between Manufacturer and any subcontractors to the extent that those subcontractors or agreements relate to fulfillment of Manufacturer's obligations to the Airport. Costs of any audits conducted under the authority of this right to audit and not addressed elsewhere will be borne by the Airport.
 - 6.4.7 The acceptance Manufacturer or Manufacturer's successors of final payment under this Proposal, shall constitute a full and complete release of Airport from any and all claims, demands, and causes of action whatsoever which Manufacturer successors have or may have against Airport under the provisions of this Proposal except those previously made in writing and identified Manufacturer as unsettled at the time of the final request for payment in a document captioned "Unsettled Claims" included with Manufacturer's final request for payment.

SECTION 7.0

7.0 REPRESENTATIONS AND WARRANTIES

- 7.0.1 Representations and Warranties of the AIRPORT.
- 7.0.2 The Airport is the Department of Aviation in the City of Manchester, with full legal right, power and authority to enter into and to perform its obligations under this PROPOSAL.
- 7.0.3 This PROPOSAL has been duly authorized, executed and delivered by all necessary action of the AIRPORT and constitutes a legal, valid, and binding obligation of the Airport, enforceable against the AIRPORT in accordance with its terms.
- 7.1 **Representations and Warranties of MANUFACTURER.** In addition to any other representations and warranties made by MANUFACTURER hereunder, MANUFACTURER represents and warrants that:
 - 7.1.1 MANUFACTURER is duly organized, validly existing and in good standing. MANUFACTURER has the authority to do business in the State of New Hampshire and in any state in which it conducts its activities, with the full legal right, power and authority to enter into and perform its obligations under this PROPOSAL.
 - 7.1.2 This PROPOSAL has been duly authorized, executed and delivered by all necessary corporate action of MANUFACTURER and constitutes a legal, valid and binding obligation of MANUFACTURER, enforceable against MANUFACTURER in accordance with its terms, except to the extent that its enforceability may be limited by the Bankruptcy Code or by equitable principles of general application.
 - 7.1.3 To the best of its knowledge after due inquiry, neither the execution nor delivery Proposal MANUFACTURER of this nor the performance by by MANUFACTURER of its obligations in connection with the transactions contemplated hereby nor the fulfillment by MANUFACTURER of the terms or conditions hereof: (a) conflicts with, violates, or results in a breach of any constitution, law, governmental regulation, by-laws, or certificates of incorporation applicable to MANUFACTURER; or, (b) conflicts with, violates or results in a breach of any order, judgment, or decree, or any Proposal, agreement, or which MANUFACTURER is a party or by which instrument to MANUFACTURER or any of its properties or assets are bound, or constitutes a default under any of the foregoing.
 - 7.1.4 No approval, authorization, order or consent of, or declaration, registration, or filing with, any Governmental Authority is required for the valid execution and delivery of this Proposal by MANUFACTURER except as such have been duly obtained or made.

- 7.1.5 Except as disclosed in writing to the Airport, there is no legal proceeding, at law or in equity, before or by any court, arbitral tribunal, or other Governmental Authority pending or, to the best of MANUFACTURER'S knowledge after due inquiry, overtly threatened or publicly announced against MANUFACTURER, in which an unfavorable decision, ruling, or finding could reasonably be expected to have a material and adverse effect on the execution and delivery of this Proposal by MANUFACTURER or the validity, legality, or enforceability of this Proposal against MANUFACTURER, or any other agreement or instrument entered into by MANUFACTURER in connection with the transactions contemplated hereby, or on the ability of MANUFACTURER to perform its obligations hereunder or under any such other agreement or instrument.
- 7.1.6 Except as disclosed in writing to the AIRPORT, there are no material and adverse claims or demands based in environmental, Proposal, or tort law pending or threatened against MANUFACTURER or any of its Affiliates with respect to any facilities designed or constructed by MANUFACTURER or any of its Affiliates that would have a material and adverse effect upon the ability of MANUFACTURER to perform the Work.
- 7.1.7 Neither MANUFACTURER nor any of its Affiliates has any knowledge of any material violation of any law, order, rule, or regulation with respect to any facilities designed or constructed by MANUFACTURER or any of its Affiliates.
- 7.1.8 The information supplied and representations and warranties made by MANUFACTURER in all submittals made in response to the RFQ and RFP with respect to MANUFACTURER (and to its knowledge, all information supplied in such submittals with respect to any Affiliate or MANUFACTURER -Related Entity) are true, correct, and complete in all material respects.
- 7.1.9 MANUFACTURER is under no obligation, commitment or impediment of any kind, whether contractual or otherwise, that will limit or prevent performance of its obligations under this Proposal.
- 7.1.10 MANUFACTURER is financially secure and no action relating to the Bankruptcy Code or suspension of payments by MANUFACTURER or any Affiliate has, to the best of its knowledge after due inquiry, been taken or is threatened.

7.1.11 MANUFACTURER:

- 7.1.11.1 has examined, carefully studied, and thoroughly understands the Proposal Documents;
- 7.1.11.2 has become familiar with and is satisfied as to the general, local, and delivery conditions that may affect cost, progress, and performance of the delivery;
- 7.1.11.3 is familiar with and is satisfied as to all Applicable Laws that may affect

cost, progress, and performance of the equipment delivery;

- 7.1.11.4 is prepared to deliver equipment in accordance with Proposal Standards and subject to the terms and conditions of the Proposal Documents; and,
- 7.1.11.5 warrants that it shall perform all construction of equipment in a good and workmanlike manner, meeting the standards of quality prevailing in work of this kind. contractor shall perform all work using trained and skilled persons having substantial experience performing the work. With respect to any parts and goods it furnishes, contractor warrants:
- 7.1.11.6 that all items are free of defects in title, design, material, and workmanship,
- 7.1.11.7 that each item meets or exceeds Manufacturer's specifications and requirements for the equipment, structure, or other improvement in which the item is installed,
- 7.1.11.8 that each item is new, in accordance with original equipment specifications, and of a quality that meets or exceeds the demands of severe Airport Winter Operations, and
- 7.1.11.9 that no item or its use infringes any patent, copyright, or proprietary right.

SECTION 8.0

8.0 BID REQUIREMENTS:

8.1 Bids not conforming with the following requirements may be rejected:

8.1.1 Bids will consist of, and shall be made on **APPENDIX "D"** PRICE PAYMENT AND DELIVERY SCHEDULE or format substantial comparable.

8.1.3 CONTRACTORS must submit a complete including a statement of their experience for delivery of **One (1) and/or Two (2)** MULTI-TASKING EQUIPMENT (MTEs) FOR AIRFIELD SNOW REMOVAL., including a comprehensive description of the proposal attached to these documents. Each CONTRACTOR should furnish any additional data, exhibits, or statements which they deem essential and pertinent to assure total understanding and evaluation by Manchester•Boston Regional Airport.

8.1.2 Award of the Contract shall be based on a review of the proposal, bid package submitted, and cost.

8.1.3 Bids must be submitted in such a manner as to make them complete and free from ambiguity, without alterations and erasures and must be properly signed by the CONTRACTOR or its legally authorized officer or agent. In the event of a discrepancy between the dollar amount written and that given in figures on the Bid Form, the amount in writing will be considered the bid.

8.1.4 Price Payment and all other data and information required by these instructions must be submitted in a sealed envelope clearly identified as "MULTI-TASKING EQUIPMENT (MTEs) FOR AIRFIELD SNOW REMOVAL".

8.2 BID PRICE: The amount to be shown as the bid price on APPENDIX "D" in Item 1 is to be Price per Unit One (1) unit, and Item 2 is the Price for Two (2) units.

8.3 BID OPENING:

Bids will be publicly opened and read as specified in the Invitation to Bid, with all interested persons invited to attend. Any bid received after the scheduled time for receipt of such bids will be returned to the CONTRACTOR unopened.

SECTION 9.0

9.1 PROPOSAL SPECIFICATIONS

The Company shall deliver **One** (1) and/or **Two** (2) MULTI-TASKING EQUIPMENT (MTEs) FOR AIRFIELD SNOW REMOVAL.

9.2 <u>Insurance Requirements</u>

Highlights of the insurance requirements include the following:

- During the installation period, the Company and all subcontractors must maintain \$1,000,000 of insurance coverage for injury or death in any one occurrence and for damage to property in any one accident.
- \$1,000,000 of comprehensive commercial general liability insurance is required throughout the term of the service Proposal.
- \$1,000,000 of excess liability insurance is required throughout the term of the service Proposal.
- Worker's compensation or employer's liability insurance is required throughout the term of the Proposal, as applicable.

- \$1,000,000 of comprehensive automobile liability insurance for all owned, nonowned and hired vehicles used by Company is required throughout the term of the Proposal.
- An indemnification of the Airport and Manchester•Boston Regional Airport is required.
- The Airport of Manchester and the Manchester•Boston Regional Airport must be named as additional insured on all insurance certificates with cancellation notification.

9.3 Airport Contact

Inquiries on all matters pertaining to this Proposal or the process should be directed to:

Carlton E. Braley Jr., A.A.E. Assistant Director, Operations and Facilities Manchester•Boston Regional Airport 1 Airport Road, Suite 300 Manchester, NH 03103 Telephone: 603/624-6539 email: cbraley@flymanchester.com

Inquiries shall be limited to this proposal package, or questions related to clarification of the contents of this proposal package. All clarifications will be supplied to all proposers.

9.4 Responsibility For Proposal

CONTRACTOR is responsible for carefully examining the terms and conditions set forth in this proposal, and for otherwise judging for itself all the circumstances and conditions affecting the CONTRACTOR'S proposal.

Failure on the part of the CONTRACTOR to make such examination and to investigate fully and thoroughly shall not be grounds for any declaration that the Contractor did not understand the conditions of the proposal.

9.5 <u>Proprietary Data</u>

The AIRPORT does not anticipate the receipt of proprietary data/material related to this proposal. However, if the CONTRACTOR provides same, the AIRPORT will handle in strictest confidence all material received in response to this Request for proposals designated "proprietary". The AIRPORT will, upon request of the CONTRACTOR, enter a confidentiality agreement with the Contractor that will pertain to the content of the Contractor's proposal defined as proprietary and will apply throughout the period during which the Airport is reviewing and evaluating CONTRACTOR'S proposal. The AIRPORT requires that CONTRACTOR handle in confidence, any information or data received from the Airport which may be construed as proprietary to the Airport's ownership and management of AIRPORT.

9.6 Signature on Proposal

9.6.1. An individual duly authorized to represent and lawfully act on behalf of the CONTRACTOR must date and sign, in ink, at the end of the Proposal. The legal name of the CONTRACTOR must be typed above the signature of the representative.

9.6.2. If the CONTRACTOR is a corporation, the Proposal must be signed by an authorized officer(s), the title of the officer(s) signing the Proposal must be shown, and the corporate seal must be affixed to the Proposal. <u>All signatures must be notarized.</u>

9.6.3. If the CONTRACTOR is a partnership, the Proposal must be signed by an authorized general partner(s), using the term "Member of Firm" or "Partner". <u>Signature must be notarized.</u>

9.6.4. If the CONTRACTOR is an individual, the PROPOSAL must be signed by and in the full name of the CONTRACTOR, using the term "doing business as (insert appropriate business name)", or "sole owner". <u>Signature must be notarized</u>.

TECHNICAL REQUIREMENTS:

9.7 <u>General Description</u>:

The Airport is requesting One (1) and/or Two (2) Multi-Tasking Equipment (MTEs) for use in Airfield Snow Removal operations. The Multi-Tasking Equipment (MTE) for Airfield Snow Removal must meet SAE standard ARP5548 Multi-Tasking Equipment (MTE) for Airfield Snow Removal.

It is the intent of this specification to describe an Airport Multi-Function Snow Removal High Speed, Multi-Tasking Snow Removal Unit to include Carrier Vehicle, Snow Plow, Rotary Broom, High Velocity Air Blast. The unit will include an All-Wheel Drive Tow Vehicle with 24 ft. plow and a Fifth-wheel hitch and a 20 ft. tow behind snow broom with cassette brush system; bristles to be 10# wire. All units must meet and comply with the following FAA Advisory Circulars: AC 150/5220-20A and AC 150/5210-5D, latest editions. In the interest of process and quality control, the manufacturer shall be ISO9001 certified.

9.8 <u>Warranty</u>:

Manufacturer, must guarantee in writing that for a period of five (5) years from the time of first use, they will at their own expense and without expense to the purchaser, replace all failed parts and make all repairs that may be required by reason of defective design, workmanship, or material in any part of the assembly of the Multi-Tasking Equipment (MTE) for Airfield Snow Removal, it's appurtenances, or associated components. The bidder is to provide assistance to

the purchaser with any warranty problems that may arise with manufacturing, suppliers, or Contractors.

Upon notice in writing, the Contractor shall promptly repair or replace all defective or damaged items delivered under the Proposal. The Contractor may elect to have any replaced item returned to their plant.

If they should fail as a result of improper application by the Contractor, batteries, rubber and material normally consumed in operation are excluded from this guarantee but shall, in any event, be guaranteed by the Contractor to the extent of any guarantee received by the Contractor from his supplier.

Warranty shall include shipment and/or transportation costs for all parts and labor.

9.9 <u>Multi-Tasking Equipment (MTE):</u>

The term carrier vehicle represents the various self-propelled prime movers that provide the power necessary to move this snow and ice control equipment during winter operations. The design of the vehicle chassis shall be based on an all-wheel drive concept for optimized performance and safety. Vehicle must perform at the capacity defined. Although these units are not designed as over-the-road highway vehicles, the following Federal Motor Vehicle Safety Standards shall apply as though they were an on-highway vehicle:

- FMVSS 101 Controls & Displays
- FMVSS 102 Transmission Shift Lever Sequence, Starter Interlock & Transmission Braking Effect
- FMVSS 103 Windshield Defrosting & Defogging Systems
- FMVSS 104 Windshield Wiping & Washing Systems
- FMVSS 105 Hydraulic & Electric Brake Systems
- FMVSS 106 Brake Hoses
- FMVSS 108 Lamps, Reflective Devices, & Associated Equipment
- FMVSS 111 Rearview Mirrors FMVSS 113 Hood Latch Systems
- FMVSS 116 Motor Vehicle Brake Fluids
- FMVSS 119 New Pneumatic Tires
- FMVSS 120 Tire Selection & Rims for Vehicles Other Than Passenger cars
- FMVSS 121 Air Brake Systems
- FMVSS 124 Accelerator Control Systems
- FMVSS 201 Occupant Protection in Interior Impacts
- FMVSS 205 Glazing Materials
- FMVSS 206 Door Locks & Door Retention Components
- FMVSS 207 Seating Systems
- FMVSS 208 Occupant Crash Protection
- FMVSS 209 Seat Belt Assemblies
- FMVSS 210 Seat Belt Assembly Anchorages
- FMVSS 302 Flammability of Interior Materials

a. This is a special purpose vehicle customized specifically to meet special airport operator needs.

The unit shall be a carrier vehicle with a front mounted displacement plow and a towed type sweeper attached through a fifth wheel connection. The integration of these multi-piece units shall be seamless with integrated engineering design to perform such that the system is stable, reliable, easy to operate and control.

9.10 ALL-WHEEL DRIVE CARRIER VEHICLE

9.10.1 <u>Materials:</u> Materials used on a carrier vehicle shall conform to the specifications listed in the appropriate sections of Title 49, Chapter III, Federal Motor Carrier Safety Regulations. The materials shall be of the best quality available for their intended industrial use. Component parts shall be new, unused, of current production. They shall be free of all defects and imperfections that could affect the serviceability of the finished product.

9.10.2 <u>Design</u>: Equipment shall be developed in accordance with the best engineering practices available. This includes the incorporation of ergonomic designs specifically directed at the vehicle's cab environment. Vehicle cab shall include current state-of-the-art design that consider improved cab visibility, communications systems, interior lighting and the mitigation of noise and vibration.

Design and installation of equipment shall permit easy accessibility for maintenance and service. All vehicle stress points shall be designed to distribute and dissipate shock forces.

9.10.3 <u>Construction</u>: Vehicle construction shall provide maximum protection against structural member failures. Equipment shall withstand the cold, moisture, strains, jars, vibration, and other conditions that are likely to be encountered during winter operations. All components and assemblies shall be free of hazardous protrusions, sharp edges, cracks, or other elements that might cause injury to personnel or damage to equipment. Location of all oil, hydraulic, and air lines and electrical wiring shall be in protected positions properly attached to the frame or body structure. Wherever these lines pass through apertures they shall be protected with looms or grommets except where a through-frame connector is necessary.

9.11 <u>Chassis</u>: The design of the vehicle chassis shall be based on an all-wheel drive concept for optimized performance and safety.

It shall have power assisted steering and a transmission with suitable load and speed ranges to accommodate severe operating conditions. Vehicle shall have heavy duty tow hooks, tow eyes, or other suitable tow connections attached to the front & rear of the vehicle. The tow hooks, eyes, or other suitable tow connections shall be attached to the frame or structure of the vehicle, and provide adequate strength to allow lifting and/or pulling the vehicle for emergency recovery situations. A pintle hook, rated at not less than the GVWR shall be permanently attached to the rear

frame structure capable of towing a vehicle. All installed parts and accessories necessary for the safe operation of the vehicle shall conform to applicable provisions of Title 49.

9.12 <u>Structural Members</u>: The frame shall be made of either pressed or structural steel shape and reinforced as required to prevent distortion under maximum load conditions. All frames and stiffeners shall be treated with a corrosion inhibitor and shall be primed and painted before assembly.

Single formed channel made of carbon manganese

- Yield Strength: 110,000 psi minimum
- RBM: 2,500,000 in-lb. per rail minimum
- Front Frame Extension: 24 in. or as required
- Two (2) Rear Tow Hooks or Tow Eyes
- Rear Pintle Hook/Hitch (30K Max Gross Trailer Weight)
- 9.13 <u>Dimensions and Clearances:</u> Carrier vehicles with snow removal attachments shall have the following overall dimensions:

a. Minimum Ground Clearance: The minimum ground clearance of a vehicle chassis shall be specified by manufacturer.

b. Maximum Overall Height: The maximum overall height of a vehicle including lights, and exhaust stacks (with rain cap up if so equipped) shall not exceed 13 feet (4.0 m) unless otherwise specified by the customer. A placard shall be installed in the vehicle cab stating the maximum overall height. If practical, the placard should be located at the top of the windshield as nearly over the steering wheel as possible to be immediately visible to the operator when looking upwards.

c. Maximum Overall Width: The overall width of a vehicle without plow (transportation) shall be specified by Manufacturer who shall take into consideration gates and doors to equipment shops at the airport.

d. Maximum Overall Length: Maximum vehicular length may be specified by manufacturer who shall take into consideration shop areas and maneuverability expected of the vehicle during operation.

9.14 <u>Weight Distribution:</u> The gross vehicle weight of the vehicle shall be distributed over its axles in accordance with best engineering practices. The center of gravity shall be kept as low as possible under maximum load conditions.

A copy of the calculated weight distribution shall be provided to the customer prior to construction, and the produced vehicle shall not deviate from the calculated weight distribution by more than 5% on any axle, or for the gross weight as determined by weighing the unit at a public certified scale.

9.15 <u>Drive Engine</u>: Engine and vehicle manufacturers shall provide an application

approval, at the time of vehicle delivery that states the engine is suitable for use in the vehicle as configured and that the installation is approved by the engine manufacturer. The vehicle engine shall be of internal combustion type. Unless specified, the diesel engine shall be designed and tuned for operation using ASTM D 2 diesel fuel. Anti-freeze, crankcase and gear oils, greases, automatic transmission fluid, and hydraulic oils shall be as per current SAE, API, or ASTM specifications and not proprietary products. It shall be able to meet the performance characteristics specified herein on commercial grade fuel. Dual engine vehicles shall use a common fuel. The engine shall develop sufficient torque and horsepower to meet its normal operational requirements without exceeding the no-load speed at the peak of its certified gross brake horsepower curve. Engine noise and vibration shall be reduced in the vehicle cab by use of best engineering practices and machine layout. Idle time limiters or other automatic shutdown devices designed to limit emissions, conserve fuel, or enhance operating costs must be permanently disabled if such devices could leave a unit disabled on a taxiway or runway. Permanently disabled means the disabling must be done in such a manner so as not to be easily or accidentally reactivated.

Furnish EPA on-road emission compliant drive engine for green fleets

- Provide an in-line 6-cylinder, 4 cycle
- Displacement: 11.0 Liter minimum
- Horsepower: 469 minimum
- Peak Torque: 1,700 lbs.-ft @ 1,200 rpm minimum
- Furnish Engine Block Heater (125 VAC, 1500 watts)
- Supply Engine Oil Pan Heater (125 VAC)
- 9.16 <u>Cooling System:</u> The engine cooling system shall be based on either a liquid or forced air design. Internal temperatures of liquid cooled engines shall be controlled by a bypass thermostat that regulates the flow of engine coolant. Drain cocks shall be installed at the lowest point of the cooling system and at other points necessary to completely drain the system. A sight glass or other device is required in all liquid cooling systems to allow the operator to determine that there is sufficient fluid for normal and safe operation without the need to open the system.

Provide temperature-controlled hydrostatic fan drive

- Provide silicone heater & radiator hoses with constant torque clamps
- Provide temperature-controlled hydrostatic fan drive
- 9.17 <u>Coolant Temperatures:</u> The design and installation of the system shall assure that coolant temperatures shall remain within the engine manufacturer's operational specification (both high and low) when properly maintained and operated in ambient temperatures during snow removal operations. In areas which frequently experience temperatures below 20°F, cooling system heaters, oil pan heaters, lubricating oil heaters, battery and block heaters, and cold start aides required unless otherwise specified.

Automatic-Emergency Shutdown:

The engine shall be protected by an automatic "shut-down" system triggered by low coolant level, high coolant temperature or low oil pressure. The operator shall be notified of such engine faults with audible and visual alarms in the cab of the tow vehicle. An emergency shutdown push-pull control button shall be located on the in-cab operator's panel and in the engine compartment service panel.

- 9.18 <u>Fuel System:</u> The fuel system shall comply with Title 49 and include all components necessary for a complete operational system. Fuel system capacity shall allow for 12 hrs. continuous operation.
 - Single (left-side) fuel fill, 30 GPM fill rate minimum & shut-off valve
 - Install fuel Furnish 105-gallon capacity fuel tank(s) minimum, or sufficient size that enables continuous operations for (12) hours. DOT certified
 - Install fuel level sensors in each tank and level indicator in front and rear LCD screens
- 9.19 <u>Fuel Tank(s) and Lines:</u> Useable fuel capacity should be not less than a calculated value of: (total maximum brake horsepower for all engines) x (055 gals/hr./bhp) x (12 hours) x (0.8 for an 60% load factor). If dual tanks are used, the supply system shall be designed to ensure an uninterrupted flow of fuel to the engine(s) without input by the operator, and to allow shutoff of each tank should the crossover lines of either tank be damaged.

Dual tanks shall also have adequately sized crossover lines to allow refilling both tanks from one location. Fuel lines shall be securely fastened in place, installed to prevent chafing or strain and protected by grommets where lines project through metal apertures. Each fuel tank is to be equipped with an accessible bronze or brass drain plug or a quick drain. A properly rated fuel water separator with integral heater shall be installed in an accessible location near the tank. If the engine requires a boost pump to assure adequate fuel flow to the engine, a pressure operated switch with in-cab warning light shall be furnished to warn the operator of low boost pump pressure. The boost pump should be installed to shut off when the engine is turned off, or to have an emergency shutoff switch or circuit breaker located near the light to allow the operator to shut off the boost pump in the event of fuel leakage downstream of the boost pump.

9.20 <u>Fuel Filler Pipe:</u> The fuel filler pipe(s) shall be located outside of the vehicle cab in an area accessible for refueling from the ground. A light chain shall be attached near its opening and to the filler cap to prevent loss of the cap. The filler neck shall include a screen to prevent the entry of foreign objects into the tank. Filler neck shall be capable of high flow refueling nozzle. The fuel filler cap shall be painted a color appropriate for the type of fuel, and a permanent label shall be affixed as close as practical to the fill neck(s), in an area visible to the person refueling the vehicle, stating the appropriate fuel and capacity of the tank(s). A label shall also be installed in the cab near the fuel gauge indicating left side of the vehicle must be positioned towards the fuel pumps (e.g., Fuel Fill \rightarrow).

9.21 <u>Air Cleaner:</u> The air cleaner shall be of a two-stage design. The first stage incorporates a pre-cleaner while the second consists of a dry type replaceable paper filter. A restriction indicator is required in the cab for each engine air intake system.

The connection between the air cleaner outlet(s) and the engine intake(s) shall be waterproof and dust tight. The air cleaner intake shall be positioned in a manner to eliminate the ingestion of snow and other contaminants, e.g. within the hood cavity.

9.22 <u>Exhaust System and Muffler:</u> The engine shall be equipped with an efficient and safe exhaust system including mufflers. Its location shall minimize noise and exhaust gases entering the vehicle cab under all operating conditions. Further noise reduction by noise suppression materials, such as muffler insulation, is encouraged. Horizontal portions of exhaust systems shall be protected, whenever possible, from corrosive agents and fuel spills. Mufflers and exhaust components positioned in or near normal operator work areas shall include appropriate guards to minimize the burn risk to airport personnel.

Exhaust systems shall be positioned on the vehicle in a manner to minimize contact with slush and snow. Muffler(s) are to be made of aluminum, aluminized steel, stainless steel, or materials coated with ceramics. Devices shall be installed to prevent snow and slush from entering vertical exhaust stacks. Customers may specify the location and direction of exhaust system discharge when appropriate for storage building ventilation systems or other operational needs.

- 9.23 <u>Governor:</u> Engine speed shall be regulated by a governor set to provide the maximum operating speed recommended by the engine, driveline, and power train manufacturers.
- 9.24 <u>Lubrication:</u> An engine's lubricating system shall be equipped with standard production fittings and accessories. Engine oil filter(s) shall be engine manufacturers approved design and able to accept commercial replacement elements. All engine(s) shall receive lubrication prior to delivery with lubricants designated for use under ambient temperature conditions at the point of delivery. The unit(s) shall be tagged to identify the proper lubricants and their temperature ranges.
- 9.25 <u>Automatic Lubrication System:</u> The unit shall be equipped with a microprocessor controlled multi-point automatic lubrication system. The system shall be designed for construction equipment applications and shall be capable of distributing pressure fed, calibrated quantities of grease to all critical pivots and joints on a programmable time based delivery system. The system shall utilize independent metering for each lubrication point. The system shall have a grease storage capacity of a minimum of 2 (two) liters. The system shall include a main pump and reservoir with control unit, software, monitoring system, grease filter, and low level indicator. The unit shall operate on 12 volts DC, negative ground. The complete system shall include all high pressure distribution hoses and plumbing, distribution blocks, metering injectors, and pressure switches. The main unit and monitoring

panel shall be located in the main engine compartment. A monitor panel in the vehicle cab shall not be required.

The system shall include a parameter setting and diagnostic software package and system interface cables to perform diagnostics and calibration.

- 9.26 <u>Engine Protection System:</u> An automatic Engine Protection System to prevent engine damage due to low engine pressure, high coolant temperature, or low coolant level is required. A provision for the emergency movement of the unit from a runway or taxiway must be provided.
- 9.27 <u>Accessibility</u>:
 - a. Component Location: Engine and chassis components shall be positioned to allow easy access for inspection and maintenance purposes. Components that historically present maintenance problems or those that have the potential to cause operational problems should particularly be located in unobstructed areas. Locks, controls and fasteners shall be designed to prevent over-torquing. Fluid capacities that must be checked during a pre-trip inspection, such as hydraulic oil level(s), windshield washer fluid level, and diesel fuel level shall be visually observable or otherwise capable of being checked without the need for tools, and without requiring work stands, portable ladders, or other equipment to check the service levels. To the extent practical lighting in these areas shall be adequate to perform the checks without the need for flashlights or other portable lighting.
 - b. Cover Plates: Cover plates shall be equipped with either quick-disconnect fastenings or hinges.
- 9.28 <u>Transmission:</u> Transmission and vehicle manufacturers shall provide an application approval, at the time of vehicle delivery that states the transmission is suitable for use in the vehicle as configured and that the installation is approved by the transmission manufacturer. The transmission shall operate smoothly and efficiently and be capable of transmitting the maximum gross torque generated by the engine to the drive wheels through all gear reductions. Manual Transmission not acceptable.
 - Allison 4000 Rugged Duty Series 6-speed electronic, or equal, minimum
 - Furnish Electronic Oil Level Sensor (OLS) system for fluid level checks from the shift selector
 - Provide factory filled Synthetic Transmission Lubricant

a. <u>Automatic</u>: Automatic or non-manual transmissions are either hydrostatic (with or without transfer case), automatic power shift, standard power shift, or fully automatic. Designs utilizing torque converters shall have a suitable torque ratio for the expected load ranges. The torque converter shall not operate at less than 70% efficiency. The gear or range selector shall have forward, neutral and reverse positions clearly identified.
9.29 <u>Transfer Case</u>: The vehicle and transfer case manufacturers shall provide an application approval at the time of vehicle delivery that states the transfer case is suitable for use in the vehicle, as configured. Transfer case assemblies shall provide positive drive to the front and rear axle(s) and may be of optional single or multi-speed design. Three proven alternatives are the manual front axle disconnect type, the center differential with manual or automatic lockout type, or an overriding clutch type.

The purchaser to accept Manufacturers standard transfer case(s). The transfer case may be a separate unit mounted independently or integrated with the transmission.

- Carrier Vehicle Manufacturer Branded
- Automatic locking preferred but not required
- 9.30 <u>Axles</u>: The axle and vehicle manufacturers shall provide an application approval at the time of vehicle delivery that states the front and rear axles are suitable for use in the vehicle, as configured. The axle manufacturer's published rating shall at the least be equal to the load imposed at ground level when the vehicle and/or each component is in its maximum load configuration and/or a material body, if any, loaded to its cubic rated volume). Each axle shall be equipped with a retarding type device to ensure a torque transfer to each wheel having traction. When appropriate, manual lockout controls shall be located in the vehicle cab. The torque capacity of each axle and differential shall be at least 10% in excess of the maximum torque that the axle may experience under any GVW operating condition.

The power transmitting shaft on each steering axle shall incorporate steering joints that do not produce objectionable steering characteristics while the vehicle is operating on uneven surfaces.

Front Axle: 23,000lbs. minimum, driver-controlled traction differential and cage ring type steering ends, or manufactures standard.

Rear Axle: 23,000lbs. minimum, full floating or manufactures standard.

9.31 Brake System:

Vehicle service and emergency braking systems shall meet Title 49 requirements for vehicles of similar design. These systems, whether air, hydraulic, or of another design, shall be complete with all necessary equipment to safely control, stop and hold a fully equipped vehicle under all normal operating conditions. Both systems shall be readily accessible for external adjustment. Anti-lock brakes may be specified for improved safety on the airport operational areas.

- Provide a dual system, air operated mechanical
- Provide electronic antilock brake system
- Supply an 18.7 CFM compressor, minimum
- Furnish a Bendix AD-1S Air Dryer
- Provide an auxiliary air inlet (left side) to utilize a female air chuck to charge system.

- Air Brakes, Parking and Emergency: Secondary Emergency System, Modulated split type with left side Auxiliary Air Inlet and quick drain lanyards on all tanks.
- 9.32 <u>Steering Mechanism</u>:

The vehicle shall have a steering mechanism that is operated from the driver's seat. During normal operations, the mechanism shall be capable of controlling the vehicle with all equipment operating. Steering equipped with power assistance shall revert to manual operation in the event of power assist system failure, or be equipped with a dual power steering system that operates in a fail-safe manner so that the failure of one system will not lead to a loss of steering. The design of the steering mechanism should, in the event of a power assist failure, be capable of safely maneuvering the vehicle off the primary operational areas of the airport and to a park position from the maximum design speed allowed on the airport.

- Sheppard XD120 integral hydraulic power gear, or equal, minimum
- Chassis Hydraulics Warning System: Low level/high temperature
- 9.33 <u>Suspension System</u>:

Vehicles shall be equipped with a current production model suspension system having a minimum rated capacity equal to the GVW of the carrier vehicle. When required, front and rear axles shall have auxiliary suspension springs. Manufacturer's capacity ratings may not be arbitrarily raised to conform to the requirements of this specification. The suspension system shall exhibit no permanent set after the load is removed.

Front Suspension Requirements:

- Manufacturer's standard design, semi-elliptic or tapered parabolic type spring
- Rating: 29,000 lbs. minimum
- Manufacturer's standard design, semi-elliptic or tapered parabolic type spring
- Rating: 26,000 lbs. minimum

9.34 <u>Wheels, Rims, Tires, and Tubes</u>:

a. Wheels, rim and tire ratings shall conform to the Tire and Rim Association's published recommendations.

b. Tires. Each tire shall have a rated carrying capacity at least equal to the loads imposed on them in the maximum load configuration (i.e., plow up and plow down). Tires on each individual axle shall be of the same size. Tires between axles may vary due to loads, configurations, and engineered gearing sets. In such cases, care must be taken and all components must be viewed as a system that provides an acceptable speed match between driven axles. Tires shall have an aggressive tire tread. Tires (and tubes when applicable) shall meet the first line commercial grade requirements for the speed and type of service required. The front and rear tread widths shall not vary by more than 4%.

c. Spare Rim/Tire. A spare rim(s) and tire(s) are required. If one size and configuration of tire and wheel cannot be immediately interchanged to all positions

on the vehicle, one spare rim and tire for each distinct configuration is required.

- Steel or Aluminum sized per manufacturer's engineering staff
- 9.35 <u>Hydraulic System</u>:

The hydraulic system shall consist of appropriate rams, pumps, piping, fittings, valves, controls, fluid reservoirs, filters, coolers, and other parts essential to its full operation. The system shall be capable of hydraulically positioning equipment through the entire range of its design limits. It shall be capable of operating all controls simultaneously without a noticeable reduction in power response. All hydraulic controls shall be located in the vehicle cab. The equipment manufacturer shall avoid high pressure hydraulic lines within the cab by means of remote cable or electric over hydraulic controls whenever possible. If a high pressure line must be located within the cab, it shall be properly shielded to protect the operator to the satisfaction of the purchaser. The system shall be ruggedly constructed and able to withstand all loads imposed on it without relying on the use of mechanical locks. Adequate cooling must be included to maintain acceptable hydraulic oil temperatures throughout expected vehicle operational ranges. Filters within the hydraulic system shall conform to SAE J931.

- 9.36 <u>Pump(s) and Power Takeoff</u>: The pump(s) shall be ruggedly constructed and powered by the engine through a power takeoff. It shall have sufficient capacity to operate the hydraulic equipment specified herein under all operating conditions and speeds. Belt driven pumps are not acceptable.
- 9.37 <u>Lines and Fittings</u>: Only commercial quality hydraulic lines, hoses, and fittings that are capable of withstanding system working pressures under load are acceptable. Hydraulic hoses shall have a bursting pressure of three times their rated working pressure. The use of fittings, joints, and connections shall be kept to a minimum. Where local climatic conditions require, the purchaser should consider requiring arctic type hoses with temperature ratings appropriate for the location. Test gauge connection fittings shall be provided at all suitable points throughout system for maintenance and trouble-shooting. All hydraulic system components are to be shielded from engine exhaust heat, and heat shields shall be installed on the engine exhaust system to divert any possible leakage from the hydraulic system. Hoses shall be installed inside steel tubing wherever necessary to deflect the flow of fluid from exhaust and electrical system components in the event of hose rupture or leakage.
- 9.38 <u>Fluid Tank</u>: The hydraulic fluid tank shall have a filler neck consisting of a strainer, drain plug, shutoff valve, air vent and baffles. Its capacity shall exceed the volume of oil required for the operation of any combination of attachments by 50%. A sight glass or other device shall be provided to allow the operator to verify that fluid level is sufficient for safe operation without the necessity of opening the system. An oil level warning device shall be provided in the cab for all hydraulic systems.

A label shall be installed as close as practical to the filler neck indicating the proper

fluid type, viscosity and volume for servicing the hydraulic system, and the capacity of the tank.

- 9.39 <u>System Winterization</u>: Hydraulic systems shall be designed and operated in accordance with the requirements specified in ARP1247. The hydraulic system shall meet the same low temperature requirements as the engine coolant system. Where appropriate properly sized shutoff valves shall be installed on each side of all filters to facilitate filter changing with minimal fluid loss. If filters are installed in compartments or other areas where fluid collection is possible, drain holes will be installed to allow fluid drainage during servicing.
- 9.40 <u>Electrical System</u>: The electrical system shall be negatively grounded and installed in accordance with current state-of-the-art practices and appropriate Federal requirements. All vehicle wiring shall be in accordance with SAE J1292. All vehicle body electrical equipment, components, and wiring shall meet the requirements set forth in ARP1247. All parts of the electrical system shall be waterproof, easily accessible, securely mounted, and protected against extreme temperatures, physical damage, snow, oil, and corrosion. All electrical circuit wiring shall be made of stranded conductors with a capacity exceeding the anticipated maximum circuit loading. Insulation of electrical wiring shall be equal to the recommended standards established for insulation materials by the Society of Automotive Engineers (SAE). All electrical circuit wires shall be identified by color or number along their entire length. The wiring codes shall match information to be provided in the supporting service manuals.
 - Alternator: Largest Available, 110 amps minimum, chassis engine driven
 - Lighting: 12 or 24 volts
 - Starting: 12 or 24 volts
 - Battery: (4) 12V, 950 CCA each, minimum
 - Furnish Heated Battery Box (125 VAC, 300 watts)
 - Furnish a single location for electrical & power inputs
 - Provide four emergency stop switches located outside of vehicle (if available)
 - Provide jump start terminals on the battery box
 - Furnish a Total Vehicle Master Electrical Disconnect Switch at battery box, or inside cab.

9.40.1 All vehicle components and systems shall operate without being affected by interference damage or disruption including detrimental effects or interference to on-board computer modules from either vehicle generated noise, or stray EMF or RMF fields encountered from any airport operations. EMF and RMF noise sources that may be generated by the vehicle, especially if such noise is detrimental to aircraft, Air Traffic Control, or air navigation equipment, shall be shielded.

9.41 <u>Power Supply</u>: The carrier vehicle shall be equipped with self-regulating electric alternators having an output capacity that exceeds the anticipated electrical load. The minimum idle output of the alternator shall be 20% greater than that required by the vehicle with the engine operating at idle, heater and defroster set at low fan

setting, parking and/or marker lights on, communication radio(s) on, windshield wipers operating, and either hazard flashers or Vehicle Safety Identification Lights on.

The minimum output of the alternator when operating at governed engine speed shall be 20% greater than that required by the vehicle in its operating mode with the heater and defroster set to maximum settings, headlights and marker/tail lights on, communication radio(s) on, windshield wipers at maximum setting, and the Vehicle Safety Identification Lights operating. An electrical load analysis worksheet shall be provided to the customer prior to construction showing the electrical loads during the above described conditions.

9.42 <u>Batteries:</u> shall be securely mounted and adequately protected against physical injury, water, chemicals and exhaust heat. They shall be properly sized based on vehicle manufacturer recommendations and be readily accessible for change out and for other purposes.

Enclosed battery compartments shall have adequate ventilation. Battery capacity (cranking amps, voltage, reserve power, continuous/deep cycle demand) shall be compatible with the size of the engine and the anticipated electrical load expected under normal operating conditions. An on-board self-regulating battery charger may be specified by the purchaser.

- 9.43 <u>Starting Device</u>: The vehicle shall have an electrical starter that shall not introduce a voltage drop sufficient to adversely affect the ignition system. It shall be equipped with an overload protection device if such device is available from Manufacturer of the starter.
- 9.44 <u>Ignition System</u>: Under extreme weather conditions a block heater or other heating device should be considered for improved ignition. A high idle control for efficient engine warmup and stand by operations shall be provided. High idle switches or throttle controls shall be designed to operate only when the transmission is in neutral.
- 9.45 <u>Backup Alarm</u>: Unit shall be equipped with a backup alarm installed at the rear of the vehicle. The backup alarm shall be activated whenever the transmission is placed in reverse. The backup alarm shall be a SAE J994, Type B vehicle backup alarm. Backup alarms may be specified by the customer for other vehicles.
- 9.46 <u>Rear View Camera and Monitor</u>: The Multi Task unit shall be fitted with a rear view camera and monitor. The camera shall be mounted at the rear of the engine compartment and fitted with a snow shield-ice bridge so as to provide an unobstructed view of the pavement trailing the vehicle. A color LCD monitor, approximately 4" x 6" shall be mounted on the right cab pillar utilizing an adjustable base. The monitor shall have an adjustable brightness to compensate for night time operation.

- 9.47 <u>Horn</u>: The vehicle shall be equipped with an electric or air horn to allow the operator to provide an audible warning in an emergency.
- 9.48 <u>Lighting System</u>: The lighting system, including reflectors, markers identification and clearance lights, shall conform to FMVSS 108 as though the vehicle were an on-highway vehicle. Customers may specify an all LED sealed wiring lighting system for reduced maintenance costs and improved lighting system reliability.
 - 9.48.1 Cab-mounted headlights with turn signals
 - 9.48.2 Clearance and marker lights to comply with federal regulations
 - 9.48.3 Engine compartment lights
 - 9.48.4 Fender-mounted headlights and turn signals
 - Roof-mounted yellow LED strobe light
 - Provide cab side light bars with auxiliary long range & close-range LED work lighting packages
 - Side markers at rear
 - Working lights to illuminate the plow, broom and blower ducts
 - Side marker or clearance lights on the plow, broom and air blast chutes.
 - Furnish a compliant yellow AOA lighting package
 - Provide a cab roof/rack mounted LED amber Mini-Light Bar

In addition, task-oriented lights, and other lighting shall be furnished to help the operator identify the overall width, and when practical to project a beam or, light pattern on the ground in front of the unit to assist the operator in determining those areas to be cleared and to provide adequate illumination for the operator and service personal when the unit is on darkened aeronautical areas.

a. <u>Headlights:</u> The carrier vehicle shall be equipped with two or more sealed-beam quartz-halogen or high intensity discharge (HID) type headlights with upper and lower driving beams and a foot or hand controlled switch for beam selection. If snow removal attachments obstruct forward illumination of these lights an auxiliary set of comparable lights shall be provided to overcome the obstruction. A control to select the secondary lights shall be provided in the operator cab.

b. <u>Backup Lights:</u> There shall be at least two backup lights installed at the rear of and at either side of the vehicle that will automatically be activated when the vehicle is shifted into reverse gear.

c. <u>Vehicle Safety Identification Lights:</u> The vehicle shall have a minimum of one flashing strobe mounted on its uppermost part (see FAA AC 150/5210-5D, Painting, Marking and Lighting of Vehicles on an Airport). The light emitted from the beacon should not reflect off rearview mirrors and into the operator's eyes.

9.49 <u>Operator's Cab</u>:

9.49.1 <u>General</u>: Carrier vehicle cabs shall be made of either metal or fiberglass construction. They shall be fully enclosed accommodating a single operator plus assistant/trainee (full cab). A definite separation shall exist between the engine and operator's compartment. All non-glass surfaces, such as the floor, sides, and roof of the cab, shall have insulation to reduce exterior noise. The maximum interior cab noise measured at the operator's seat shall not exceed 85 dBa under the following conditions: windows closed, heater and defrost systems at maximum operation, and carrier vehicle and equipment engines operating at maximum rated capacity. Manufacturers of the equipment are encouraged to improve upon the specified noise level. To the extent possible, the interior of the cab shall be ergonomically designed providing the operator with a pleasant working atmosphere that is devoid of the stark conditions normally associated with older equipment. All cabs shall provide at least two different routes of egress to allow the operator to exit the cab in the event of rollover or overturn.

9.49.2 <u>Communications Equipment Space</u>: Transceivers shall be installed in carrier vehicles to establish voice communication with other vehicles, the air traffic control tower, and snow control center and maintenance facilities. The vehicle cab shall be designed to provide convenient space near the operator for the installation of a pair of transceivers.

Radio equipment shall be supplied. Radio programming and installation by owner. Mobile radios shall be supplied with roof-type mounted antennas:

Two (2) Laird B132S 1/4 Wave Broadband Antenna, 132-525 MHz, Tunable Center Frequency, Chrome Color, 23" Overall Length, 21" Straight Whip Style with spring. Two (2) Laird MB8U ³/₄" hole, NMO style all brass mobile mount with 17' RG58U solid center antenna cable.

One (1) Icom IC-A120 VHF-AM Air Band Mobile Transceiver 118.000-136.975 MHz - 8W (typical), 760 channels total. Complete with mobile mount bracket, related cables and mounting hardware and the following accessories:

HM-216 HAND MICROPHONE SP-30 20 WATT EXTERNAL SPEAKER

One (1) Motorola M22KSS9PW1 N APX4500 PROJECT 25 CAI Digital Mobile Radio, VHF (136-174) MHz. 1-50 Watts, with the following options:

Q811	ADD: SOFTWARE P25 CONVENTIONAL
GA00804	ADD: APX O2 CONTROL HEAD (Grey)
G444	ADD: APX CONTROL HEAD SOFTWARE
G66	ADD: DASH MOUNT
G89	ADD: NO RF ANTENNA NEEDED
G24	ADD: 3 YEAR SERVICE FROM THE START LITE

W12	ADD: RF PREAMP
G831	ADD: AUXILARY SPEAKER 15W
W22BA	ADD: PALM MICROPHONE

9.49.3 Communication Equipment/Airport Intercom:

One (1) Airport intercom/headset shall be furnished.

Setcom System 1300 Specifications

Radio mixer Setcom Systems 1300 or equivalent complete with noise attenuating over-the-head headband style headset certified for 24dB noise reduction, noise canceling lip microphone featuring an amplified electric microphone mounted on a flexible boom. The system must include Split-Audio in which the AM radio is heard in the right ear only and the FM radio is heard in the left ear only. The system must be capable of simultaneous transmission on the radios. The operator's station must be able to adjust the volume level of the AM and FM audio inputs independent of each other with separate on-off switches and include a momentary three position toggle switch to select and key either radio.

The system components are as follows:

MS-1310 Master Station APX Radio Cable A120 Radio Cable ES-1310-10 Extension Station, 10' 7B-1310R Headset, 6' (dual ear Over-the-Head right cable dress)

NH State Proposal/NAPSO Value Point Radio Equipment Contact: Ossipee Mountain Electronics 832 Whittier Highway Moultonborough, NH 03254

Tel. (603) 476-5581

- Attn: Brian Vastine
- 9.50 <u>Fire Extinguisher(s)</u>: The vehicle cab shall have at least one 2A-10BC interior mounted fire extinguisher that is readily accessible to the operator. Vehicles equipped with fuel tank(s), hydraulic oil tank(s), or any flammable liquid tank(s) that have a total combined volume of 200 gallons or more of flammable liquid shall be equipped with one 20 B:C: Purple K type fire extinguisher installed on the vehicle or equipment at a place readily accessible from the ground.
- 9.51 <u>Operator Seat</u>: The vehicle cab shall provide an air ride operator seat that can easily be adjusted up and down, fore and aft, a minimum of 3 inches (7.6 cm) in each direction. The seat should also be capable of reducing the effect of vehicle vibration

by featuring air-cushion shock absorbing seat systems, or systems of comparable design. All vehicle seats shall have three-point (minimum) seat belts, certified by the vehicle manufacturer to have been tested and in conformance with FMVSS requirements. Seats shall be fully upholstered with a good quality fabric.

- Ergonomic heated/cooled seat with various adjustable settings and seat belts
- Permanent second seat
- Driver's location in the center of the cabin, providing ample work space and view to all directions
- 9.52 Windows and Windshield: An electrically heated windshield shall be provided. The vehicle cab shall maximize the use of glass, including the placement of panels if possible in the lower sections of door panels, to increase the operator's view of operational areas and ground surfaces. All installed glass shall be laminated, safety rated, and conform to all FMVSS requirements. Glass to be tinted. The location and size of the windshield shall minimize visual obstructions to the operator. The windshield shall be designed to avoid snow build up and be equipped with one or more variable speed intermittent operating wipers (standard or wet arm). The windshield wiper system shall be capable of sweeping a clear view for all occupants up and be equipped with at least one variable speed automatically operating wiper (standard or wet) that is capable of sweeping a clear view for all occupants. The windshield washer reservoir shall have a capacity of at least $1\frac{1}{2}$ gallons (5.6 liters). Fluid applicators shall be located to provide at least 75% coverage of the windshield. The cab shall be equipped with sun visors. Windshields and other glass surfaces in the vehicle cab used in the operation of the vehicle and/or to view pavement surfaces, including rear windows if installed, shall be cleared by means of a defroster system that is part of the cab's heating system. The standard circulating air type defroster may be complimented by electrical type heating systems for glass areas as required.
- 9.53 <u>Exterior Rearview Mirrors</u>: Two electrically heated exterior rear view mirrors of the extension arm type shall be mounted one on each side of the vehicle cab. Rear view mirrors are to be powered and remotely controlled. Each mirror shall have an area of not less than 100 in² (650 cm²).
- 9.54 <u>Heater</u>: The carrier vehicle cab shall have a heating system that is capable of maintaining a minimum interior temperature of 65 °F (18 °C) at an ambient outside temperature of -20 °F (-29 °C). Heat output shall be controllable from within the cab by a selector switch that is conveniently located to the operator. Under all conditions of heating and ventilation, the temperatures measured in the operator's immediate environment should be uniform within 9 °F (5 °C) (see SAE J1503).
- 9.55 <u>Ventilation</u>: Ventilator/heater fan shall have blower capacity equal to one cab volume per minute. Cab ventilator intakes should be screened and positioned in such a manner to minimize the entry of snow.
- 9.56 Hour Meters: Every engine permanently attached to a carrier vehicle shall be

equipped with an hour meter that registers engine operation time from 0 to 9999 hours. Hour meters shall be prominently displayed so that they can be easily read by an operator or service personnel. The hour meters shall be of direct read design and shall only register when the engine is running.

9.57 <u>Instrumentation</u>: The cab shall display an instrument panel equipped with rocker and/or toggle switches and controls (instruments) that are friendly to operators wearing bulky winter clothing. Toggle switches, where used, shall have a minimum length of 1½ inches (4 cm). Frequently used instruments shall be located in direct line-of-sight and within forearm reach of a medium sized person sitting in the operator's position. All instruments shall be clearly identified with labels that indicate their function. Instruments should display urgency-of-action lights, i.e., green for normal operation, amber for warning, and red for emergency. Instruments shall be illuminated by background lighting regulated by dimmer switches capable of providing infinitely variable lighting intensities. Circuit breakers shall be grouped for easy access and convenience. Typical instruments that report and track major functions of a carrier vehicle and mounted equipment are as follows:

A. Engine:

- 1) Voltmeter
- 2) Lubricating Oil Pressure Gauge(s)
- 3) Coolant Temperature Gauge(s)
- 4) Tachometer(s) including hour meter(s)
- 5) Starting Controls (including auxiliary cold start controls)
- 6) Hydraulic Oil Pressure and Temperature Gauge if applicable
- 7) Transmission
- B. Vehicle Chassis:
 - 1) Brake-air Pressure Gauges if applicable
 - 2) Low-air Pressure Warning, visual and audible type if applicable
 - 3) Light Switches and Headlight Beam Indicator
 - 4) Speedometer with Recording Odometer
 - 5) Fuel Quantity Gauge(s)
 - 6) Equipment Controls

9.58 <u>Sheet Metal Components</u>:

9.58.1 <u>General</u>: The carrier vehicle engine, as well as its mechanical components, shall be protected wherever possible from snow, rain and other winter elements. Body and engine enclosures may be fabricated from aluminum, fiberglass, and/or steel. Self-tapping bolts are unacceptable in the construction of these enclosures.

a. <u>Steps:</u> Four-way safety tread, open design steps are required to ascend and descend high profile carrier vehicles. These steps, together with assist handles, shall provide for constant three-point contact, and shall be of ample size to ensure safe and easy access for persons wearing bulky winter clothing.

b. <u>Walkway:</u> A four-way safety tread, open design walkway shall be provided, as necessary, for access.

c. <u>Handrails</u>: Handrails shall be provided as required at all steps, walkways, and work stations. They shall be made of corrosion-resistant materials or otherwise treated to prevent corrosion.

d. <u>Fenders:</u> All carrier vehicles shall be equipped with fenders and when determined by the operator, non-sail mud flaps to prevent wheels from throwing snow and other debris.

e. <u>Drains</u>: Plugged or free flowing drains shall be provided at all body and compartment locations where standing water can collect. Free flowing drains shall not drain onto sensitive mechanical or electrical components or on areas anticipated to be occupied by personnel during normal operations.

f. <u>Doors</u>: Doors shall be equipped with a positive closing mechanism and, where appropriate, a locking mechanism. Top hinged compartment doors shall be held in the open position by a support arm(s).

g. <u>Gutters:</u> The vehicle cab shall be equipped with gutters, located above the entrance doors, of sufficient length to span the door width and provide runoff protection to occupants either entering or exiting the cab.

9.59 Painting, Marking, and Lighting of Vehicles:

9.59.1 <u>Painting and Marking</u>: The vehicle shall be painted Chrome-Yellow in accordance with color tolerance charts that have been made available for FAA regional airport inspectors and key potential users in the aviation safety equipment industry (see AC 150/5210-5D). To minimize glare to the operator, the back of the plow blade shall be painted flat black.

9.59.2 <u>Preparation and Finish</u>: The carrier vehicle and all mounted and towed equipment shall be cleaned first, then treated with a corrosion inhibitor, primed, puttied, sanded, and finally painted. The paint shall consist of not less than two coats of Chrome-Yellow polyurethane enamel, acrylic enamel, acrylic urethane, or similar high durability, long life paint as required by the purchaser, applied to produce full hiding.

9.59.3 <u>Quality:</u> The finished paint shall be free of "fisheye," "orange peel," chips, runs, or other imperfections that detract from the equipment's corrosion resistance and appearance.

9.60 <u>Miscellaneous</u>:

9.60.1 <u>Plastic Plates</u>: Plastic plates are acceptable only in locations that are not exposed to the elements and subject to weathering or excessive heat.

9.60.2 <u>Information</u>: Plates shall identify make, model, serial number, and any other relevant data.

9.60.3 <u>Technical Publications</u>: Manufacturer shall furnish two complete sets of manuals. One set of manuals shall consist of an Operator's manual, Parts Manual, and Maintenance and Service Manual.

9.60.4 <u>Operator's Manual</u>: The operator's manual includes lubrication charts and instructions.

9.60.5 <u>Parts Manual</u>: The parts manual identifies and lists all parts, components, and sub-assemblies used in the fabrication of the carrier vehicle and mounted equipment.

9.60.6 <u>Maintenance and Service Manual</u>: A maintenance and service manual provides guidance to non-specialists performing routine services. The manual should also describe in detail with appropriate schematics the overhaul and major maintenance procedures required to maintain and repair the vehicle. The maintenance manuals shall include complete schematics of the electrical, air, and hydraulic systems as applicable. Number codes on wires and hoses as found on the vehicle shall match those provided in the maintenance manual schematics.

9.60.7 <u>Accessories and Tools</u>: The carrier vehicle shall be equipped with tire tools, a jack, shear pins, and specialized tools as specified by the purchaser. They shall be kept either in a secure and readily accessible enclosure that is permanently affixed to the vehicle or in the maintenance facilities of the airport as required by the purchaser.

9.60.8 Lug wrench and any other special tire tool required to change a flat tire.

9.62.9 <u>Specialized Tools</u>: Specialized tools required for routine servicing of the carrier vehicle and its auxiliary equipment.

9.61 <u>Delivery</u>:

9.61.1 <u>Shipment</u>: The vendor (seller) is responsible for the safe and timely delivery of the vehicle and its accessories, spare parts, and tools to 400 Kelly Avenue, Manchester, NH, 03103.

9.61.2 <u>Marking</u>: Carrier vehicles shall be marked for shipment in accordance with instructions agreed to by the purchaser.

9.61.3 <u>Instruction and Training</u>: Manufacturer shall, at no additional cost, furnish the services of trained personnel to the purchaser at a time and place agreed to by all parties. These individuals shall provide instructions to airport personnel sufficient to familiarize themselves with the operational and maintenance

characteristics of the vehicle and its auxiliary equipment. The period of instruction shall be 8 hours for 3 shifts or over 5 days total of 24 hours of training upon crew size.

- 9.62 <u>TOW-BEHIND BROOM UNIT</u>: The tow-behind broom unit shall be a modular type sweeper blower. This unit will be coupled with the towing vehicle fitted with a snow plow and snow plow attachment. The tow-behind shall be a heavy-duty steel chassis fitted with a direct drive hydrostatic broom and the ability to turn left or right automatically based on the operator's selection. The tow-behind shall also be capable of placing the broom into the transport position in order to minimize the overall width of the unit.
 - Cassette brush system; bristles to be 10# wire.
 - High volume high air speed, hydraulically driven fan for airblast.
 - A vehicle management system allows the operator to have full control of all hydraulic functions supporting individual operational requirements.
 - A rear steering trailer axle is electronically monitored to ensure safe and consistent operation
 - Wheels and Tires: Single-rear tires, size 425/65-R22.5
 - Brakes: Electronically controlled ABS system with ABS valves and speed sensors for both wheels
 - Rear Axle: 11-ton minimum, steerable trailer axle
 - Rear Steering: The trailer hydraulic rear steering enables the plow, broom and blower to follow the same path. This system operates in full automatic, following input from the operator steering wheel. The system can be set to manual or automatic operation as required. The rear trailer steering can also be locked mechanically, for road travel.
- 9.63 Engine Enclosure Requirements:
 - Provide a weather-proof clam shell design with two doors per side
 - Full-height stainless steel piano-type hinges to assure door alignment or two pivot points with hydraulic assist system, manufacturer's standard system accepted
 - Provide wide-open, easy access for routine maintenance inspection safely from the ground
 - Provide lighted engine enclosure
 - Furnish single location for filter maintenance
 - Furnish centralized rear drain kit for engine fluids
- 9.64 Broom Hitch Box & Swing Assembly Requirements:
 - Provide SAE 2-inch diameter fifth wheel kingpin
 - Provide adjustable hitch for height variations on chassis
 - Electronic steer rotary positioning sensor shall be integrated and protected from damage
 - Provide chassis integration package to include ballast, fifth wheel hitch, trailer air and electrical systems

9.65 Broom Angle & Cradling (Stowing) Requirements:

- Provide 35° swing angle for the broom head
- Provide a sealed slewing ring rotation bearing design
- Provide a rotation design utilizing dual hydraulic cylinders with internal positioning sensors
- Hydraulic hoses& electrical harnesses shall be routed cleanly through pivot center
- Provide single touch auto cradling/uncradling to provide simplified operation
- 9.66 Broom Specifications:
 - Broom working width 18 feet minimum.
 - Brush Diameter 46 inches minimum.
 - Brush rotation speed 300-720 rpm. The broom speed will automatically increase with forward speed or can be adjusted by the operator.
 - Broom Angle $\pm 35^{\circ}$
 - Automatically adjustable snow deflector is placed on the front of the broom to deflect snow away from the broom.
 - Broom shall have an automatic time-based system for brush wear control and deflector adjustment requiring no input from the operator. Design shall allow the broom to float independently of the chassis to maintain constant brush pattern even on uneven surfaces.

9.67 <u>Pump Drive & Hydraulics:</u>

- Provide a pressurized automatic central lubrication system
- Furnish a cyclonic reservoir to minimize the volume of hydraulic fluid or manufacturer's standard
- Supply a hydraulic oil heater
- Supply a hydrostatic pressure gauge
- Provide back-up hydraulic package
- 9.68 Broom Engine Requirements:
 - Provide an in-line 6-cylinder, 4 cycle
 - Displacement 11.0 Liter minimum
 - Horsepower 422 @ 1,900 rpm minimum
 - Peak torque 1,600 lbs.-ft. @ 1,400 rpm minimum
 - Provide a heated fuel/water separator
 - Provide broom engine blocker
 - Furnish auxiliary engine oil heater
 - Provide integral fuel line pre-heater or heated intake grid starting aid, thermally protected, ignition switch activated
- 9.69 Broom Head & Core Requirements:
 - Provide 600 rpm with 4000 lbs.-ft. minimum of available torque at the broom shaft
 - Provide a weight transfer system
 - Dual end drive with 5:1 planetary gear drive
 - Provide oil bath core center bearing
 - Provide four (4) 180/70 R8 casters, or two (2) 245/70-R17.5 caster wheels

- Provide snow shedding hood with one-touch control
- Furnish broom head vibrator
- Furnish dual forced air blowers
- 20 ft. wide broom with cassette brush system & 10 lb. wire bristles
- 9.70 Control Requirements:
 - Provide an LCD display on adjustable arm
 - Provide rear mounted full LCD display with enhanced broom controls & diagnostics
 - Supply diagnostics kit for any applicable controls
 - Provide an automatic broom pattern adjustment system
 - Provide an automatic ground speed control system
 - Provide a single joystick control and switches integrated into the carrier vehicle armrest
 - Provide a control panel for basic broom functions located at the rear and accessible from ground
- 9.71 Axle & Steering Requirements:
 - Provide 26,000-pound capacity steering axle minimum
 - Provide sealed ball end/cage ring design to protect axle end from dirt and moisture
 - Provide an electronic steer system that controls the rear axle steering angle to coordinate broom tracking with the carrier vehicle plow
 - Provide an auto centering system that aligns the rear axle when vehicle is placed in reverse
 - Provide an ABS equipped axle for controlled braking in all conditions
 - 425/65R22.5 tires minimum; furnish Electronic Tire Pressure Monitoring System
 - Install recommended tire pressure labels at each wheel position
 - Install high visibility green Wheel-Check loose wheel-nut indicators on all lug nuts
- 9.72 <u>Electrical & Lighting System Requirements:</u>
 - Provide a 12 or 24-volt DC lighting and starting system
 - Provide three (3) 12-volt batteries minimum
 - Furnish Largest Available alternator, 110-amp minimum
 - Furnish LED stop, turn, brake and marker lights
 - Install LED work lights inside the engine compartment
 - Provide a compliant yellow AOA lighting package
 - Install LED work and spot lights
 - Furnish on-board battery charger (20 amp self-regulating)
 - Furnish Heated Battery Box (125 VAC, 300 watts)
 - Provide rear facing LED Flood Lights (work lights)
 - Provide an engine enclosure roof mounted LED amber Mini-Light Bar

- 9.73 <u>Fuel System Requirements:</u>
 - Furnish 105-gallon capacity fuel tank(s) minimum, or sufficient size that enables continuous operations for (12) hours. DOT certified
 - Install fuel level sensors in each tank and level indicator in front and rear LCD screens
 - Furnish single left side fuel fill

9.74 Cooling System:

- Manufacturer's standard thermostatically controlled fan system
- Provide silicone radiator hoses with constant torque clamps
- Supply a spin-on coolant filter

9.75 <u>Required Options:</u>

- All LED lighting package
- Cold Weather Package
- Automatic Central Lubrication System

9.76 PLOW BLADE:

The snowplow shall be comprised of two parts - the lifting/turning attachment and the detachable plow blade. The plow blade shall be attached to the plow hitch using a hydraulically operated quick coupling. The ability for quick detached of the plow will allow entrance to the service facility bay or storage facility.

The plow moldboard will adjust automatically to optimize the snow cleaning in wet or dry snow conditions.

Hydraulic cylinders will control the plow blade movement; left/right or up/down based on the operator selection for the plowing operation. The operator shall have precise plow blade adjustment during operation while automatically gaining dampened plow movement when the plow is at end of the stroke.

The Snowplow shall have a working width of 22.3 ft, angle of working $\pm 37^{\circ}$ minimum, not to exceed 29.5 ft. total width. The self-adjusting moldboard shall be made of low friction polyethylene plastic that can be easily disassembled for repair. The plow moldboard will automatically adjust to optimize snow cleaning in wet or dry conditions and thus ensuring the cutting edges are in contact to the pavement at all times.

The cutting edges are self-adjusting on the move allowing the cutting edge to clear obstacles such as in-pavement lighting without causing damage.

The Polyurethane cutting edge sections shall have independent spring fixtures allowing them to move upward 2 inches (50 mm).

9.77 High Velocity Air Blast:

The hydraulically driven air blower shall be located in front of rear axle to remove snow, water or other objects from the cleaning path behind the broom. The air blower shall have two ducts which are synchronized to work together with the plow and broom movements. The air blower must follow the path of the plow and broom, including tight turns imposed by the rear steering. The air blast shall be a hydraulically driven air turbine impeller. The air blower function shall activate when the blower and aggregate engine are at idle. The air blower function shall automatically activate upon lowering the synchronized plow/broom components. Upon raising the plow/broom, the air blast ducts shall raise and the aggregate engine return to idle automatically. Rubber guides shall be attached along the underside of each blower duct, close to the pavement surface to increase and focus the air blast without the risk of damage to metal tunnel skirts.

Upon selection of the transportation mode, the blower ducts shall automatically lock in the up position by means of hydraulic locking valves.

The blower air inlet shall have a screen installed to prevent entry of foreign objects.

- Blower Fan diameter shall be a minimum 36.in
- Blower Fan Air speed shall be a minimum 250 mph
- Blower Shall be change airblast direction in a minimum of 8 sec.

SECTION 10.0

10.0 REJECTION OR ACCEPTANCE OF BIDS:

- 10.1 At any time prior to the hour and date set for the opening of the bids, a contractor may withdraw his/her bid. Withdrawal of a previous bid will not preclude the submission of a subsequent bid prior to the hour and date set for the opening of bids. After the scheduled time for opening of bids, no contractor will be permitted to withdraw his/her bid, and in the absence of the CONTRACTOR'S specific qualifications to the contrary, the submission of a bid will constitute a valid offer, subject to acceptance by AIRPORT for a period of thirty (30) calendar days following the due date for bids.
- 10.2 The AIRPORT reserves the right to waive any irregularities in any bid, to reject any and all bids for whatever reason it deems sufficient, and/or to re-advertise for bids without disclosure of any reason.
- 10.3 Any bid which is incomplete, conditional, ambiguous, obscure, or which contains additions or alterations not called for, or irregularities of any kind, may be rejected for such reason. In the event of the successful contractor's refusal to enter

into a contract, the right is reserved to accept the proposal of any other contractor without re-advertisement.

- 10.4 In the event it is necessary to re-bid the contract, the current contract shall be extended to, TBD to allow adequate time for the re-bid process.
- 10.5 Bid Proposal and Contractor submissions will be reviewed and evaluated based upon proposal responsiveness, qualifications, experience and performance capabilities.
- 10.6 The Airport shall select one or more companies for further review and consideration based upon the evaluations criteria.

SECTION 11.0

11.0 NOTICE OF AWARD:

11.1 It is anticipated that AIRPORT will give Notice of Award of the contract to the successful contractor within five (5) business days after the bid opening. However, AIRPORT reserves a period of thirty (30) calendar days after such opening during which time the notice may be given.

SECTION 12.0

- 12.0 ADDENDA:
 - 12.1 Should a CONTRACTOR have any doubts as to the meaning of the proposal documents, he/she shall at once notify the Assistant Airport Director Operations & Facilities, Manchester•Boston Regional Airport, Manchester, New Hampshire 03103, telephone (603) 624-6539. Corrections, or clarifications, if required, will be made in written addenda to all who have received such documents. AIRPORT will not be responsible for any other instructions, interpretations or explanations.
 - 12.2 Addenda, if issued, will be mailed by Certified Mail, Return Receipt requested, not later than three (3) business days prior to the date fixed for opening bids. All addenda so issued shall become part of the Contract Documents and are required to be acknowledged in the space provided on the Bid Form.

SECTION 13.0

13.0 INDEMNIFICATION INSURANCE AND BOND REQUIREMENTS

13.1 In consideration of the utilization of CONTRACTOR'S services by the City of Manchester and Manchester•Boston Regional Airport and other valuable consideration, the receipt of which is hereby acknowledged, CONTRACTOR agrees that all persons furnished by CONTRACTOR shall be considered the CONTRACTOR'S employees or agents and that CONTRACTOR shall be responsible for payment of all unemployment, social security and other payroll taxes including contributions from them when required by law.

- 13.2 CONTRACTOR hereby agrees to protect, defend, indemnify, and hold the City of Manchester and Manchester•Boston Regional Airport and their employees, agents, officers and servants free and harmless from any and all losses, claims, liens, demands and causes of action of every kind and character including but not limited to, the amounts of judgments, penalties, interests, court costs, legal fees and all other expenses incurred by Manchester•Boston Regional Airport arising in favor of any party, including claims, liens, debts, personal injuries, including employees of AIRPORT, death or damages to property (including property of Manchester•Boston Regional Airport) and without limitation by or in any way incident to, in connection with or arising directly or indirectly out of this CONTRACTOR agreement. CONTRACTOR agrees to investigate, handle, respond to, provide defense for and defend any such claims, demands, or suits at the sole expense of the CONTRACTOR.
- 13.3 CONTRACTOR also agrees to bear all other costs and expenses related thereto, even if the claim or claims alleged are groundless, false or fraudulent. This provision is not intended to create any cause of action in favor of any third party against CONTRACTOR or AIRPORT to enlarge in any way the Contractor's liability but is intended solely to provide for indemnification of AIRPORT from liability for damages or injuries to third persons or property arising from CONTRACTOR'S performance hereunder.
- 13.4 CONTRACTOR agrees to maintain in full force and effect:
 - 13.4.1 Comprehensive General Liability insurance written on occurrence form, including completed operations coverage, personal injury liability coverage, broad form property damage liability coverage, XCU coverage, and contractual liability coverage insuring the agreements contained herein. The minimum limits of liability carried on such insurance shall be \$5,000,000 each occurrence and, where applicable, in the aggregate combined single limit for bodily injury and property damage liability; \$5,000,000 each accident, combined single limit for bodily injury and property damage.
 - 13.4.2 Automobile liability insurance for owned, non-owned and hired vehicles. The minimum limit of liability carried on such insurance shall be \$1,000,000 each accident, combined single limit for bodily injury and property damage. (This applies only if the company asked to have a company owned vehicle on the AOA. It would then require the automobile requirements as mentioned.)

The CONTRACTOR maintains Comprehensive liability insurance as indicated in Section A covering all of your companies' actions whether on or off airport, whether on or off duty. (The airport maintains a general

liability policy, but the contractor insurance is primary).

- 13.4.3 Worker's Compensation insurance whether or not required by the New Hampshire Revised Statutes Annotated, 1955, as amended, with statutory coverage and including employer's liability insurance with limits of liability of at least \$100,000 for each accidental injury and, with respect to bodily injury by disease, \$100,000 each employee and \$500,000 per policy year.
- 13.4.4 Any and all deductibles on the above described insurance policies shall be assumed by and be for the account of, and at the sole risk of CONTRACTOR.
- 13.4.5 Insurance companies utilized must be admitted to do business in New Hampshire or be on the Insurance Commissioner's list of approved non-admitted companies and shall have a rating of (A) or better in the current edition of Best's Key Rating Guide.
- 13.4.6 CONTRACTOR agrees to furnish certificate(s) of the above mentioned insurance to the City of Manchester within fourteen (14) days from the date of this agreement and with respect to the renewals of the current insurance policies, at least thirty (30) days in advance of each renewal date. Such certificates shall, with respect to comprehensive general liability and auto liability insurance, name the City of Manchester, Manchester•Boston Regional Airport, as additional insured and, with respect to all policies shall state that in the event of cancellation or material change, written notice shall be given to AIRPORT at the Airport Administration Office, One Airport Road, Suite 300, Manchester, New Hampshire 03103 at least thirty (30) days in advance of such cancellation or change.
- 13.4.7 The purchase of the insurance required or the furnishing of the aforesaid certificate shall not be a satisfaction of Contractor's liability hereunder or in any way modify the CONTRACTOR'S indemnification responsibilities to the City of Manchester and Manchester•Boston Regional Airport.
- 13.4.8 It shall be the responsibility of CONTRACTOR to ensure that all subcontractors comply with the same insurance requirements that he is required to meet.

SECTION 14.0

14.0 ASSIGNMENT

14.1 This contract may not be assigned by CONTRACTOR without the written consent of Manchester•Boston Regional Airport which consent shall not be unreasonably withheld. Any assignment made without the written consent of Manchester•Boston Regional Airport may result in termination of this contract. Manchester•Boston Regional Airport may assign this contract to any authorized governmental entity which assumes control of the Airport.

SECTION 15.0

15.0 MISREPRESENTATION AND INVALID PROVISIONS

15.1 All terms and conditions with respect to this contract are expressly contained herein and CONTRACTOR agrees that no representative or agent of AIRPORT has made any representation or promise with respect to this contract not expressly contained herein. In the event that any covenant, condition, or provision herein contained is held to be invalid by any Court of competent jurisdiction, such invalidity shall in no way affect any other covenant, condition or provision herein contained.

SECTION 16.0

16.0 NOTICES

16.1 Notices to Manchester•Boston Regional Airport shall be sufficient if sent by ordinary mail postage prepaid to: Airport Director, Manchester•Boston Regional Airport, One Airport Road, Suite 300, Manchester, New Hampshire 03103, and notices to the Contractor, if sent by ordinary mail or to such other respective address as the parties may designate to each other in writing from time to time.

SECTION 17.0

17.0 PROPOSAL SPECIFICATIONS:

The CONTRACTOR shall provide MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL.

17.2 Airport Contact

Inquiries on all matters pertaining to this Proposal or the process should be directed to:

Carlton E. Braley Jr., A.A.E. Assistant Director, Operations and Facilities Manchester•Boston Regional Airport 1 Airport Road, Suite 300 Manchester, NH 03103 Telephone: 603/624-6539 email: cbraley@flymanchester.com

Inquiries shall be limited to this Proposal package, or questions related to clarification of the contents of this proposal package. All clarifications will be supplied to all proposers.

17.3 Responsibility For Proposal

CONTRACTOR is responsible for carefully examining the terms and conditions set forth in this proposal, and for otherwise judging for itself all the circumstances and conditions affecting the CONTRACTOR'S proposal.

Failure on the part of the CONTRACTOR to make such examination and to investigate fully and thoroughly shall not be grounds for any declaration that the Contractor did not understand the conditions of the proposal.

17.4 Proprietary Data

The AIRPORT does not anticipate the receipt of proprietary data/material related to this proposal. However, if the CONTRACTOR provides same, the AIRPORT will handle in strictest confidence all material received in response to this Request for proposals designated "proprietary". The AIRPORT will, upon request of the CONTRACTOR, enter a confidentiality agreement with the Contractor that will pertain to the content of the Contractor's proposal defined as proprietary and will apply throughout the period during which the Airport is reviewing and evaluating CONTRACTOR'S proposal.

The AIRPORT requires that CONTRACTOR handle in confidence, any information or data received from the Airport which may be construed as proprietary to the Airport's ownership and management of AIRPORT.

17.5 Signature on Proposal

17.1.1. An individual duly authorized to represent and lawfully act on behalf of the CONTRACTOR must date and sign, in ink, at the end of the Proposal. The legal name of the CONTRACTOR must be typed above the signature of the representative.

17.1.2. If the CONTRACTOR is a corporation, the Proposal must be signed by an authorized officer(s), the title of the officer(s) signing the Proposal must be shown, and the corporate seal must be affixed to the Proposal. <u>All signatures must be notarized.</u>

17.1.3. If the CONTRACTOR is a partnership, the Proposal must be signed by an authorized general partner(s), using the term "Member of Firm" or "Partner". <u>Signature must be notarized.</u>

17.1.4. If the CONTRACTOR is an individual, the PROPOSAL must be signed by and in the full name of the CONTRACTOR, using the term "doing business as (insert appropriate business name)", or "sole owner". <u>Signature must be notarized.</u>

SECTION 18.0

18.0 FEDERAL REQUIRED PROVISIONS

18.1 Breach of Contract Terms:

Any violation or breach of terms of this contract on the part of the Contractor or its subcontractors may result in the suspension or termination of this contract or such other action that may be necessary to enforce the rights of the parties of this agreement. Owner will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payments to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by the deadline indicated in the Owner's notice. The duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

18.2 Buy American Preferences:

Contractor agrees to comply with 49 USC §50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the Federal Aviation Administration has issued a waiver for the product; the product is listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein within **Exhibit "D" and Exhibit "E".**

18.3 Access to Records and Reports:

Contractor must maintain an acceptable cost accounting system. Contractor agrees to provide the Airport, the Federal Aviation Administration and the Comptroller General of the United States or any of their duly authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to the specific PROPOSAL for the purpose of making audit, examination, excerpts and transcriptions. Contractor agrees to maintain all books, records and reports required under this PROPOSAL for a period of not less than three years after final payment is made and all pending matters are closed

18.4 General Civil Rights Provision:

Contractor 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. This provision binds Contractor and subcontractors from the bid solicitation period through the completion of the PROPOSAL. This provision is in addition to that required by Title VI of the Civil Rights Act of 1964.

- 18.5 Title VI Solicitation Notice:
 - 18.5.1 The Contractor in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 USC §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders or offerors that it will affirmatively ensure that any contract entered into pursuant to this advertisement will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.
 - 18.5.2 Compliance with Nondiscrimination Requirements:

18.5.2.1 During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor"), agrees as follows:

18.5.2.1.1. 1. Compliance with Regulations: The Contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

2. Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, 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. The Contractor will not participate directly or indirectly in the

discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract 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 the Contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractors or supplier will be notified by the Contractor of the Contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.

4. Information and Reports: The Contractor 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 the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish the information, the Contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of a Contractor's noncompliance with the non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:

a. Withholding payments to the Contractor under the contract until the

Contractor complies; and/or

b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. Incorporation of Provisions: The Contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations, and directives issued pursuant thereto. The Contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the Contractor becomes involved in, or is threatened with litigation by subcontractors, or supplier because of such direction, the Contractor may request the sponsor to enter into any

litigation to protect the interests of the sponsor. In addition, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

18.5.3 Title VI List of Pertinent Nondiscrimination Acts and Authorities:

During the performance of this contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

• Title VI of the Civil Rights Act of 1964 (42 USC § 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 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

• Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;

• The Age Discrimination Act of 1975, as amended (42 USC § 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);

• 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 Contractor, 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 USC §§ 12131 – 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;

• The Federal Aviation Administration's Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

• Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures

nondiscrimination 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;

• 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, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 et seq).

18.5.4 Certification of Contractor Regarding Debarment

By submitting a bid/proposal under this solicitation, Contractor certified that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

18.5.5 Disadvantaged Business Enterprises

18.5.5.1 Proposal Assurance (§ 26.13). The CONTRACTOR or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this PROPOSAL. Failure by the Contractor to carry out these requirements is a material breach of this PROPOSAL, which may result in the termination of this PROPOSAL or such other remedy as the Airport deems appropriate, which may include, but is not limited to:

- 18.5.5.2 Withholding monthly progress payments;
- 18.5.5.3 Assessing sanctions;
- 18.5.5.4 Liquidated damages; and/or
- 18.5.5.5 Disqualifying the Contractor from future bidding as non-responsible.

18.5.6 Certification Regarding Lobbying. Contractor certifies to the best of his or her knowledge and belief, that:

18.5.6.1 No Federal appropriated funds have been paid or will be paid, by or on behalf of CONTRACTOR, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal PROPOSAL, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal PROPOSAL, grant, loan, or cooperative agreement.

18.5.6.2 If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in

connection with this Federal PROPOSAL, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

18.5.6.3 The language of this certification was included in the award documents for all sub-awards at all tiers (including subcontractors' subgrants, and PROPOSALs under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

18.5.7 Trade Restriction Certification

18.5.7.1 By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant PROPOSAL, the Offeror – is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (USTR);

18.5.7.2 has not knowingly entered into any proposal or subcontractor for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the USTR; and

18.5.7.3 has not entered into any subcontractor for any product to be used on the Federal project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR.

18.5.7.4 This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 USC Section 1001.

18.5.7.5 The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

18.5.7.6 Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no proposal shall be awarded to an Offeror or subcontractor:

18.5.7.7 who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR or

18.5.7.8 whose subcontractor are owned or controlled by one or more citizens or nationals of a foreign country on such USTR list or

18.5.7.9 who incorporates in the public works project any product of a foreign country on such USTR list.

18.5.7.10 Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a Contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

18.5.7.11 The Offeror agrees that, if awarded a proposal resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontractors. The Contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by USTR, unless the Offeror has knowledge that the certification is erroneous.

18.5.7.12 This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration (FAA) may direct through the Owner cancellation of the PROPOSAL or subcontractor for default at no cost to the Owner or the FAA.

18.5.8 Veteran's Preference.

18.5.8.1 In the employment of labor (excluding executive, administrative, and supervisory positions), the Contractor and all sub-tier Contractor's must give preference to covered veterans as defined within Title 49 United States Code Section 47112. Covered veterans include Vietnam-era veterans, Persian Gulf veterans, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 USC 632) owned and controlled by disabled veterans. This preference only applies when there are covered veterans readily available and qualified to perform the work to which the employment relates.

18.6 Miscellaneous Provisions

18.6.1 Exhibits. All exhibits hereto are hereby incorporated herein by reference.

18.6.2 Assignments. This PROPOSAL is a purchase and delivery PROPOSAL for Contractor, Contractor's interest in this PROPOSAL, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party.

18.6.3 Entire Proposal; Modifications; Conflicts. This PROPOSAL supersedes all prior agreements, written or oral, between Contractor and Airport and shall constitute the entire PROPOSAL and understanding

between the parties with respect to the subject matter hereof. This PROPOSAL and each of its provisions shall be binding upon the Parties and may not be waived, modified, amended or altered except by a writing signed by Airport. If there is a conflict between this PROPOSAL and the General Conditions, then the provision which provides the greatest benefit to Airport shall govern.

18.6.4 Captions. The captions of paragraphs in this PROPOSAL are for convenience only and shall not be considered or referred to in resolving questions of interpretation or construction. CONTRACTOR and Airport shall both be deemed equally to be the drafters of the PROPOSAL Documents, and the PROPOSAL Documents shall not be construed against Airport or Contractor as the drafter.

18.6.5 Governing Law:

18.6.5.1 This PROPOSAL and all of the rights and obligations of the Parties hereto and all of the terms and conditions hereof shall be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of New Hampshire. Exclusive venue for litigation shall be located in Hillsborough County, NH.

18.6.5.2 Any new laws, codes, or regulations or modifications of existing laws, codes, or regulations which take effect after the signing date of this PROPOSAL which impose additional cost or time may be a basis for adjustment of the PROPOSAL Price and PROPOSAL Time, as appropriate.

18.6.6 Non-Waiver.

18.6.6.1 If either Party fails to require the other to perform a term of this PROPOSAL, that failure does not prevent the Party from later enforcing that term and all other terms. If either Party waives the others' breach of a term, that waiver does not waive a later breach of this PROPOSAL. An approval or direction by the Airport, or by any other employee or agent of the Airport, of any part of Contractor's performance does not waive compliance with this

PROPOSAL or establish a standard of performance other than that required by this PROPOSAL and by law.

18.6.6.2 Binding Effect. This PROPOSAL shall be binding upon and inure to the benefit of the parties hereto and their respective permitted assigns and successors.

18.6.6.3 Appointment. Airport hereby expressly reserves the right from time to time to designate by notice to Contractor one or more

representatives to act partially or wholly for Airport in connection with the performance of Airport's obligations hereunder. Contractor shall act only upon instructions from such representatives unless otherwise specifically notified to the contrary.

18.6.6.4 Notices. All notices, consents, approvals, demands, requests or other communications provided for or permitted to be given under any of the provisions of this PROPOSAL shall be in writing and shall be deemed to have been duly given or served when delivered by hand delivery or when deposited in the U.S. mail by registered or certified mail, return receipt requested, postage prepaid and addressed in Article VII, or to such other person or address as may be given in writing by either party to the other in accordance with the aforesaid.

18.6.6.5 Dispute Resolution. The dispute resolution procedures, which shall be applicable to all Phases of this PROPOSAL, are set forth in the General Conditions.

18.6.6.6 Severability. In case any provision hereof shall, for any reason, be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect any other provision hereof, and this PROPOSAL shall be construed as if such invalid or unenforceable provision had not been included herein.

18.6.6.7 Independent Contractor. Contractor recognizes that it is engaged as an independent Contractor and acknowledges that the Airport will have no responsibility to provide transportation, insurance or other fringe benefits normally associated with employee status. Contractor, in accordance with its status as an independent Contractor, covenants and agrees that it shall conduct itself consistent with such status, that it will neither hold itself out as nor claim to be an officer, partner, employee or agent of Airport by reason hereof, and that it will not by reason hereof make any claim, demand or application to or for any right or privilege applicable to an officer, partner, employee or agent of the Airport, including, but not limited to, unemployment insurance benefits, social security coverage or retirement benefits. The Contractor hereby agrees to make its own arrangements for any of such benefits as it may desire and agrees that it is responsible for all income taxes required by Applicable Law.

18.6.6.8 Use of Work Products. The Airport may use all notes, plans, computations, databases, tabulations, exhibits, photographs, reports, underlying data and other work products (collectively, the "Documents") that Contractor prepares or obtains under this Agreement.

18.7.1 Environmental Laws

18.7.1.1 Clean Air and Water Pollution Control

18.7.1.2 Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 USC § 740-7671q) and the Federal Water Pollution Control Act as amended (33 USC § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

18.7.1.3 Contractor must include this requirement in all subcontracts that exceeds \$150,000. Contractor shall comply with all federal, state, and local statutes, ordinances, regulations, rules, policies, codes, or guidelines now or hereafter in effect, as they may be amended from time to time, that govern Hazardous Materials or relate to the protection of human health, safety, or the environment, including but not be limited to:

18.7.1.4 the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. Section 136 et seq.;

18.7.1.5 the Safe Drinking Water Act, 44 U.S.C. Section 300(f) et seq.;

18.7.1.6 the Oil Pollution Control Act of 1990, 33 U.S.C. Section 270 et seq.;

18.7.1.7 the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, 42 U.S.C., Section 9601 et seq., and as amended by the Superfund Amendments and Reauthorization Act of 1986, Pub. Law No. 99-499, 100 Stat. 1613;

18.7.1.8 the Toxic Substances Control Act, 15 U.S.C., Section 2601 et seq.;

18.7.1.9 the Clean Air Act as amended, 42 U.S.C. 7401 et seq.;

18.7.1.10 the Clean Water Act, 33 U.S.C., Section 1251, et seq.;

18.7.1.11 Hazardous Materials Transportation Act, 49 U.S.C., Section 1801 et seq.;

18.7.1.12 the Resources Conservation and Recovery Act, 42 U.S.C., Section 6901 et seq.;

18.7.1.13 and those substances defined as hazardous waste or as hazardous substances under the laws of New Hampshire and/or the United States or in

regulations promulgated under these laws (collectively, "Environmental Laws"). Within 10 days of receipt Contractor of any invoice relating to a failure or alleged failure of Contractor (or its agent or employee to comply with the Environmental Laws, Contractor shall pay such invoice or reimburse the Airport for any such Airport-paid invoice corresponding to any fines or penalties that may be levied against the Airport by the Environmental Protection Agency, the New Hampshire Commission on Environmental Quality, or any other governmental agency. In paying such invoice, the Airport shall not, without Contractor's prior, written consent, prejudice, waive or forfeit, and, the Airport shall reserve in writing with the agency the right of Contractor to contest, dispute or appeal any such fine or penalty.

18.7.1.14 Except as required for equipment operation, the Contractor shall not possess, use, generate, release, discharge, store, dispose of, or transport any Hazardous Materials on, under, in, above, to or from the Airport, or any other areas or facilities subject to this Agreement, except in strict compliance with the Environmental Laws. "Hazardous Materials" include, but are not limited to:

18.7.1.15 all substances, materials, wastes, pollutants, oils, or governmentally regulated substances or contaminants defined or designated as hazardous, toxic, radioactive, dangerous, or any other similar term in or under any of the Environmental Laws,

18.7.1.16 asbestos and asbestos-containing materials, petroleum products including crude oil or any fraction thereof, gasoline, aviation fuel, jet fuel, diesel fuel, lubricating oils and solvents, urea formaldehyde, flammable explosives, PCBs, radioactive materials or waste, or

18.7.1.17 any other substance that, because of its quantity, concentration, physical, chemical, or infectious characteristics may cause or threaten a present or potential hazard to human health or the environment when improperly generated, used, stored, handled, treated, discharged, distributed, disposed of, or released.

18.7.1.18 The Airport is subject to the National Pollution Discharge Elimination System Program (NPDES), and the regulations, 40 CFR Part 122, relating to stormwater discharges, for operations at the AIRPORT. Contractor is familiar with these NPDES stormwater regulations, and shall conduct operations in accordance with 40 CFR Part 122, as amended from time to time. Contractor understands that there are significant penalties for submitting false information, including fines and imprisonment for knowing violations.

18.7.1.19 Close cooperation is necessary to ensure compliance with any NPDES stormwater discharge permit terms and conditions, as well as to

ensure safety and to minimize costs. Contractor shall implement "Best Management Practices" as defined in 40 CFR, Part 122.2, as amended from time to time, if necessary to minimize the exposure of stormwater to significant materials generated, stored, handled, or otherwise used Contractor as defined in the federal stormwater regulations.

18.7.1.20 The Airport's NPDES stormwater discharge permit and any subsequent amendments, extensions, or renewals are incorporated into this Agreement. Contractor shall be bound by all applicable portions of the permit.

18.7.1.21 Contractor shall implement the NPDES requirements at its sole expense, unless otherwise agreed to in writing between the Airport and Contractor and shall meet all deadlines that may be imposed or agreed to by the Airport. Time is of the essence.

18.7.1.22 If either Party asks, the other Party shall provide any nonprivileged information submitted to a government entity(ies) under applicable NPDES stormwater regulations.

Contractor appoints the Airport as its agent to negotiate with the appropriate governmental entity(ies) any modifications to the Airport's permit.

18.7.1.23 The Airport's remedies with regard to Environmental Requirements are cumulative and survive termination of this Agreement.

18.7.1.24 With no intent to limit Contractor's indemnification to the Airport set forth in the General Conditions, Contractor shall protest, defend and indemnify the Airport and its officers, agents and employees against any loss, cost, claim, demand, penalty, fine, settlement, liability or expense (including but not limited to attorneys' and consultants' fees, court costs and litigation expenses) related to:

18.7.1.25 Any investigation, monitoring, cleanup, containment, removal, storage or restoration work performed by the Airport or a third party due to Contractor's, its employees', or agents' use or placement of hazardous materials (of whatever kind or nature, known or unknown) on the Airport premises, or any other areas impacted by this agreement;

18.7.1.26 Any actual, threatened or alleged hazardous materials contamination of the Airport's premises by Contractor, its employees or agents;

18.7.1.27 The disposal, release or threatened release of hazardous materials Contractor, its employees or agents at the Airport that affects the soil, air, water, vegetation, buildings, personal property or persons;

18.7.1.28 Any personal injury, death or property damage (real or personal) arising out of or related to hazardous materials used by Contractor, its employees or agents at the Airport; OR

18.7.1.29 Any violation by Contractor, its employees or agents of any environmental laws.

18.7.1.30 This indemnity is not applicable to losses, claims, penalties, fines, settlements, liabilities and expenses that result from conditions existing on the effective date of this agreement or are created by or caused by any entity other than by Contractor or its agent or any employee of either.

18.7.1.31 Certification of Offeror/Bidder Regarding Debarment By submitting a bid/PROPOSAL under this solicitation, the bidder or offeror certifies that neither it nor its principals are presently debarred or suspended by any Federal department or agency from participation in this transaction.

18.7.1.32 Texting When Driving

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving", (10/1/2009) and DOT Order 3902.10, "Text Messaging While Driving", (12/30/2009), the Federal Aviation Administration encourages recipients of Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant. In support of this initiative, the Owner encourages the Contractor to promote policies and initiatives for its employees and other work personnel that decrease crashes by distracted drivers, including policies that ban text messaging while driving motor vehicles while performing work activities associated with the project. The Contractor must include the substance of this clause in all sub-tier contracts exceeding \$3,500 that involve driving a motor vehicle in performance of work activities associated with the project.

18.7.1.33 Energy Conservation Requirements

Contractor and Subcontractor agree to comply with mandatory standards and policies relating to energy efficiency as contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 USC 6201*et seq*).

18.7.1.34 Solicitation Clause

All contracts and subcontracts that result from this solicitation incorporate by reference the provisions of 29 CFR part 201, the Federal Fair Labor Standards Act (FLSA), with the same force and effect as if

given in full text. The FLSA sets minimum wage, overtime pay, recordkeeping, and child labor standards for full and part-time workers.

18.7.1.35 The CONTRACTOR has full responsibility to monitor compliance to the referenced statute or regulation. The CONTRACTOR must address any claims or disputes that arise from this requirement directly with the U.S. Department of Labor – Wage and Hour Division.

18.7.1.36 Occupational Safety and Health Act of 1970 Contract Clause All contracts and subcontracts that result from this solicitation incorporate by reference the requirements of 29 CFR Part 1910 with the same force and effect as if given in full text. The employer must provide a work environment that is free from recognized hazards that may cause death or serious physical harm to the employee. The employer retains full responsibility to monitor its compliance and their subcontractor's compliance with the applicable requirements of the Occupational Safety and Health Act of 1970 (20 CFR Part 1910). The employer must address any claims or disputes that pertain to a referenced requirement directly with the U.S. Department of Labor – Occupational Safety and Health Administration.

18.8 Procurement of Recovered Materials

18.8.1 Contractor and subcontractors agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

18.8.2 The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or The Contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

18.8.3 The list of EPA-designated items is available at www.epa.gov/smm/comprehensive-procurement-guidelines-construction-products.

18.8.4 Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the Contractor can demonstrate the item is:

a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
b) Fails to meet reasonable contract performance requirements;

or

c) Is only available at an unreasonable price.

18.9 Certification of Offeror/Bidder Regarding Tax Delinquency and Felony Convictions

18.9.1 The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark (\Box) in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

18.9.2 Certifications

18.9.2.1 The applicant represents that it is (\Box) is not (\Box) a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

18.9.2.2 The applicant represents that it is (\Box) is not (\Box) is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

18.9.2.3 Note

If an applicant responds in the affirmative to either of the above representations, the applicant is ineligible to receive an award unless the sponsor has received notification from the agency suspension and debarment official (SDO) that the SDO has considered suspension or debarment and determined that further action is not required to protect the Government's interests. The applicant therefore must provide information to the owner about its tax liability or conviction to the Owner, who will then notify the FAA AIRPORTs District Office, which will then notify the agency's SDO to facilitate completion of the required considerations before award decisions are made.

18.9.2.4 Term Definitions

18.9.2.5 Felony conviction: Felony conviction means a conviction within the preceding twenty-four (24) months of a felony criminal violation under any Federal law and includes conviction of an offense defined in a section of the U.S. code that specifically classifies the offense as a felony and conviction of an offense that is classified as a felony under 18 U.S.C. § 3559.

18.9.2.6 Tax Delinquency: A tax delinquency is any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

SECTION 19.0

19.0 Exceptions

19.1 The AIRPORT may accept PROPOSALs that have exceptions. Exceptions must be clearly identified with a justification statement.

SECTION 20.0

- 20.0 Proposal Selection
 - 20.1 The AIRPORT intends to select at least one (1) PROPOSAL for delivery of One (1) and/or Two (2) Multi-Tasking Equipment (MTEs) for Airfield Snow Removal, but reserves the right to accept none of the Proposals, to negotiate for modification of any Proposal with the mutual consent of the CONTRACTOR, to accept the most responsive and responsible Proposal which, in the judgment of the Airport, shall be deemed the most advantageous to the AIRPORT, to waive any of the requirements of the proposal procedures explained in this document, and/or to proceed in any other manner deemed to be in the AIRPORT'S best interest. AIRPORT reserves the right to retain all copies of proposals submitted by prospective Companies.

SECTION 21.0

- 21.0 Disqualification
 - 21.1 Although not intended to be an inclusive list of causes for disqualification, any one or more of the following, among others, may be considered sufficient for disqualification of a CONTRACTOR and the rejection of the proposal:
 - a. Evidence of collusion among Companies.
 - b. Submitting a proposal that is incomplete, obscure or which contains irregularities, inaccuracies, or misstatements.
 - c. Lack of business skills or financial resources necessary to successfully provide sufficient services as revealed by either financial statements or experience.
 - d. Lack of responsibility as shown by past history, references, or other factors.
 - e. Default or termination of other contracts or agreements.
 - f. Other causes as the Airport deems appropriate at the Airport's sole and absolute discretion.

Intials _____

SECTION 22.0

- 22.0 Notice of Acceptance of Proposal
 - 22.1 Upon the Airport's selection of a Proposal, the selected Companies will be notified on or about Monday, June 3, 2019.

MANCHESTER•BOSTON REGIONAL AIRPORT

ADDENDUM ACKNOWLEDGEMENT

We acknowledge receipt of the following addenda:

Addendum No	Dated
Addendum No	Dated

If partnership, give name and address of each member:

CONTRACTOR

BY: _____(Agent)

Incorporated Under the Laws of:

New Hampshire

EXHIBIT "A"

DEFINED TERMS

1.1 This PROPOSAL, including all Proposal Documents, will be interpreted in accordance with the following:

1.1.1 General. The interpretation and miscellaneous provisions of the General Conditions apply to all PROPOSAL Documents and Work. References to sections, paragraphs, articles or other provisions shall be deemed to mean those contained in this main body of the PROPOSAL unless specified otherwise.

1.1.2 Entire Proposal. This PROPOSAL, including all proposal Documents, contains the entire agreement between the parties hereto with respect to the transactions contemplated by this PROPOSAL. Without limiting the generality of the foregoing, this PROPOSAL shall completely and fully supersede all other understandings and agreements among the parties with respect to such transactions, including those contained in the RFP (if any), the submittal made by the Contractor in response thereto, the RFP, the Proposal made by the Airport in response thereto, and any amendments or supplements to any such documents.

1.1.3 Gender and Plurality. Words of the masculine gender mean and include correlative words of the feminine and neuter genders and words importing the singular number mean and include the plural number and vice versa.

1.1.4 Headings. The table of contents and any headings preceding the text of the articles, sections and subsections of this PROPOSAL shall be solely for convenience of reference and shall not affect its meaning, construction or effect.

1.1.5 References to Hereto. The terms "hereto," "hereby," "hereof," "herein," "hereunder" and any similar terms refer to this PROPOSAL.

1.1.6 References to Including. The words "include," "includes" and "including" are to be construed as meaning "include without limitation," "includes without limitation" and "including without limitation," respectively.

1.1.7 References to Statutes. Each reference to a statute or statutory provision includes any statute or statutory provision which amends, extends, consolidates or replaces the statute or statutory provision or which has been amended, extended, consolidated or replaced by the statute or statutory provision and includes any orders, regulations, by-laws, ordinances, codes of practice or instruments made under the relevant statute.

1.1.8 References to Governmental Authorities. Each reference to the Airport or a Governmental Authority is deemed to include a reference to any successor to the Airport or such Governmental Authority or any organization or entity which has taken over the

functions or responsibilities of the AIRPORT or such Governmental Authority. Each reference to a private Person that is not an individual is deemed to include a reference to its successors and permitted assigns.

1.1.9 References to Documents and Standards. Each reference to an agreement, document, standard, principle or other instrument includes a reference to that agreement, document, standard, principle or instrument as amended, supplemented, substituted, novated or assigned.

1.1.10 Delivery of Documents in Digital Format. In this PROPOSAL, the Contractor is obligated to deliver reports, records, designs, plans, drawings, specifications, Proposals and other documentary submittals in connection with the performance of its duties hereunder. The Contractor agrees that all such documents shall be submitted to the AIRPORT both in printed form (in the number of copies indicated) and, at the AIRPORT's request, in digital form. Digital copies shall consist of computer readable data submitted in any standard interchange format which the AIRPORT may reasonably request to facilitate the administration and enforcement of this PROPOSAL. In the event that a conflict exists between the signed or the signed and stamped hard copy shall govern.

1.1.11 Severability. If any provision of this PROPOSAL is held to be invalid, unenforceable or illegal to any extent, such provision may be severed and such invalidity, unenforceability or illegality will not prejudice or affect the validity, enforceability and legality of the remaining provisions of this PROPOSAL. If any such provision of this PROPOSAL is held to be invalid, unenforceable or illegal, the Parties will promptly endeavor in good faith to negotiate new provisions to eliminate such invalidity, unenforceability or illegality and to restore this PROPOSAL as nearly as possible to its original intent and effect.

1.1.12 Drafting Responsibility. The Parties waive the application of any rule of law which otherwise would be applicable in connection with the construction of this PROPOSAL to the effect that ambiguous or conflicting terms or provisions should be construed against the Party who (or whose counsel) prepared the executed agreement or any earlier draft of the same.

1.1.13 Counterparts. This PROPOSAL may be executed in any number of original counterparts. All such counterparts shall constitute but one and the same Proposal.

1.1.14 Governing Law. This PROPOSAL and all of the rights and obligations of the Parties hereto and all of the terms and conditions hereof shall be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of New Hampshire. Exclusive venue for litigation shall be located in County of Hillsborough County, NH.

EXHIBIT "B" GENERAL CONDITIONS

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ARTICLE 1 - GENERAL PROVISIONS

1.1 Definitions

1.1.1 Capitalized terms have the meanings set forth in Article 1.

1.2 Execution, Correlation and Intent

1.2.1 Execution of the proposal CONTRACTOR is conclusive that CONTRACTOR has visited the delivery site, become familiar with local conditions under which the Service will be performed.

1.2.2 The Proposal Documents have been read and carefully considered by the CONTRACTOR.

1.2.3 Reference to standard specifications, manuals, or codes of a technical society, organization, or association, or to laws or regulations of a governmental authority, whether specific or implied, mean the latest edition in effect as of date of Proposal bid date, except as may be otherwise specifically stated in the Proposal Documents.

1.2.4 No provision of any referenced standard, specification, or manual changes the duties and responsibilities of the AIRPORT, CONTRACTOR or Designer from those set forth in the PROPOSAL.

1.2.5 Unless otherwise defined in the PROPOSAL, words which have well-known approved industry technical meanings are used in the PROPOSAL in accordance with these recognized meanings.

1.2.6 Where the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall mean the direction, requirement, permission, order, designation, or prescription of Director unless explicitly stated otherwise. The words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to Director, unless explicitly stated otherwise.

1.2.7 Reference to a specific requirement of a cited standard shall include all general requirements of the entire cited standard pertinent to the specific reference.

1.3 Ownership and Use of Documents

1.3.1 Neither Contractor, Subcontractor, nor Service Provider will own or claim a copyright to documents contained in the PROPOSAL or any part of the PROPOSAL.

1.3.2 Documents contained in the Proposal Documents, prepared by the AIRPORT or CONTRACTOR, and copies furnished to CONTRACTOR, are for use solely with respect to the Work.

1.3.3 Any documents created by the CONTRACTOR its subcontractors for this proposal shall become the property of the AIRPORT upon their creation. In the event this transfer of ownership is ineffective for any reason, the AIRPORT is hereby granted an irrevocable, non-exclusive, perpetual, royalty-free license to use said documents in conjunction with the Project. This provision shall be in all Proposals awarded Contractor shall require the provision in all Proposals of lower tiers.

1.4 Interpretation

1.4.1 Specifications are written in an imperative streamlined form and are directed to the CONTRACTOR, unless noted otherwise. When written in this form, words "shall be" are included by inference where a colon (:) is used within sentences or phrases.

1.4.2 In the interest of brevity, the Proposal frequently omits modifying words such as "all" and "any" and articles such as "the" and "an", but an absent modifier or article is not intended to affect interpretation of a statement.

ARTICLE 2 - THE AIRPORT

2.1 Limitations of the Airport's Officers and Employees

2.1.1 No officer or employee of the AIRPORT may authorize CONTRACTOR to perform an act or work contrary to the Proposal Documents, except as otherwise provided in the PROPOSAL.

2.2 Duties of the Airport

2.2.1 Information or services that the AIRPORT is required to provide under the PROPOSAL will be provided by the AIRPORT with reasonable promptness to avoid delay in orderly progress of the delivery.

2.2.2 Except as expressly stated in this PROPOSAL and the Document 00700-General Conditions, the AIRPORT owes no duty to CONTRACTOR or any Service Provider or Supplier.

2.3 The Airport's Right to Reject Work

2.3.1 The Airport shall have the right to reject performance that does not conform to the PROPOSAL Documents. AIRPORT shall also have the right to require special inspection or testing of the performance of service. Neither AIRPORT'S right to act under this Section nor any decision by AIRPORT either to exercise or not to exercise such right shall give rise to any duty or responsibility of AIRPORT to CONTRACTOR or to any other person or entity, or result in a waiver of any of Airport's rights or relieve CONTRACTOR of its obligations.

ARTICLE 3 – RELEASE AND INDEMNIFICATION

CONTRACTOR agrees to and shall release the AIRPORT, its agents, employees, officers and legal representatives (Collectively the "Airport") from all liability for injury, death, damage or loss to persons or property sustained in connection with or incidental to performance under this PROPOSAL, even if the injury, death, damage or loss is caused by the Airport's sole or concurrent negligence and/or the AIRPORT'S strict product's liability or strict statutory liability.

CONTRACTOR agrees to and shall defend indemnify, and hold the AIRPORT, its agents, employees, officers and legal representatives (Collectively the "Airport") harmless for all claims, causes of action, liabilities, fines and expenses (including, without limitation, attorneys' fees, court costs and all other defense costs and interest) for injury, death, damage or loss to persons or property sustained in connection with or incidental to performance under the PROPOSAL including, without limitation, those caused by:

CONTRACTOR'S and/or its agents, employees, officers, directors, CONTRACTOR or subcontractors (Collectively in numbered subparagraphs 3.25.1.1 through 3.25.1.3, "Contractor") actual or alleged negligence or intentional acts or omissions;

The AIRPORT'S actual or alleged concurrent negligence, whether Contractor is immune from liability or not;

The AIRPORT'S CONTRACTOR'S actual or alleged strict products liability or strict statutory Design-Build liability, whether Contractor is immune from liability or not.

CONTRACTOR'S duty to defend, indemnify and hold harmless the Airport shall survive any termination of this PROPOSAL.

The indemnification obligations hereunder shall not be limited in any way by the limits of any insurance coverage or any limitation on the amount or type of damages, compensation or benefits payable by, for, or to CONTRACTOR or any Service provider, supplier, or any other individual Contractor or any subcontractor, supplier or any other individual or entity under any insurance policy, workers; compensation acts, disability benefit acts or other employee benefits acts.

Release and Indemnification – Patent, copyright, trademark and trade secret infringement unless otherwise specifically required by the PROPOSAL, Contractor agrees to and shall release and defend, indemnify and hold harmless the Airport, its agents, employees, officers and legal representatives (collectively the "AIRPORT") from all claims or causes of action brought against the AIRPORT by any party, including CONTRACTOR, alleging that the Airport's use of any equipment, software, process or documents Contractor furnishes during the term of the PROPOSAL infringes on a patent, copyright or trademark, or misappropriates a trade secret. Contractor shall pay subject to reimbursement if allowed under the PROPOSAL, all costs (including, without limitation, attorney's fees, court costs and all other defense costs and interest) and damages awarded.

CONTRACTOR shall not settle any claim on terms which prevent the AIRPORT from

using the equipment, software, process or product with the Director's prior written consent.

Unless otherwise specifically required by the PROPOSAL, within sixty (60) days after being notified of the claim, CONTRACTOR shall, at its own expense, either:

Obtain for the AIRPORT the right to continue using the equipment, software, process or product, or

If both parties agree, replace or modify them with compatible and functionally equivalent products.

If none of these alternative is reasonably available, the AIRPORT may return the equipment, software or product, or discontinue the process, CONTRACTOR shall refund the purchase price.

- 3.1 Indemnification Procedures
- 3.1.1 Notice of Indemnification Claims: If the AIRPORT or CONTRACTOR receives notice of any claim or circumstances which could give rise to an indemnified loss, the receiving party shall give written notice to the other Party within ten (10) days. The notice must include the following:
 - 3.1.2 description of the indemnification event in reasonable detail,
 - 3.1.3 the basis on which indemnification may be due, and
 - 3.1.4 the anticipated amount of the indemnified loss.

This notice does not stop or prevent the AIRPORT from later asserting a different basis for indemnification or a different amount of indemnified loss than that indicated in the initial notice. If the AIRPORT does not provide this notice within the 10-day period, it does not waive any right to indemnification except to the extent that Contractor is prejudiced, suffers loss, or incurs expense because of the delay.

- 3.1.5 Defense of Indemnification Claims:
- 3.1.5.1 Assumption of Defense: CONTRACTOR may assume the defense of the claim at its own expense with counsel chosen by it that is reasonably satisfactory to the AIRPORT. CONTRACTOR shall then control the defense and any negotiations to settle the claim. Within ten (10) days after receiving written notice of the indemnification request, CONTRACTOR must advise the AIRPORT as to whether or not it will defend the claim. If CONTRACTOR does not assume the defense, the AIRPORT shall assume and control the defense, and all defense expenses constitute an indemnified loss.
- 3.1.5.2 Continued Participation: If CONTRACTOR elects to defend the claim, the Airport may retain separate counsel to participate in, but not control, the defense and to participate in, but not control, any settlement negotiations. CONTRACTOR may settle the claim without the consent or agreement of the AIRPORT, unless it:

3.1.5.2.1 would result in injunctive relief or other equitable remedies or otherwise require the AIRPORT to comply with restrictions or limitations that adversely affect the AIRPORT;

3.1.5.2.2 would require the AIRPORT to pay amounts that CONTRACTOR does not fund in full; or

3.1.5.2.3 would not result in the AIRPORT'S full and complete release from all liability to the plaintiffs or claimants who are parties to or otherwise bound by the settlement.

ARTICLE 4 - ADMINISTRATION OF THE PROPOSAL

4.1 Communications in Administration of the Proposal

4.1.1 Except as otherwise provided in the PROPOSAL or when authorized by Director in writing, CONTRACTOR shall communicate with and through the Assistant Director or Designee. Director will communicate with subcontractors and suppliers through CONTRACTOR, but Director is entitled to communicate directly with subcontractors and suppliers at any time to obtain information.

- 4.1.1.1 Inspectors employed by the AIRPORT shall be authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. Inspectors are not authorized to revoke, alter or waive any provision of the PROPOSAL. Inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for CONTRACTOR or its subcontractors.
- 4.2 Final Completion and Final Payment

4.2.1 CONTRACTOR shall submit the following items to the AIRPORT before the AIRPORT will issue a final agreement:

- 4.2.2 Written statement that CONTRACTOR knows of no substantial reason that insurance will not be renewable to cover Correction Period required by the PROPOSAL Documents;
- 4.3 Consent of Surety to final payments; The AIRPORT will make monthly payments to CONTRACTOR within thirty (30) days after acceptance of the service and notification of acceptable performance, subject to limitations, if any, as stated in the PROPOSAL Documents.
- 4.3.2 Acceptance of payment: CONTRACTOR shall constitute a waiver of all Claims, whether known or unknown, CONTRACTOR, except those previously made in writing and identified Contractor as unsettled at time of final Application for Payments.

4.3.3 Warranties required by the PROPOSAL shall commence on the date of start of service. Warranties shall not commence on items not yet completed as of the date.

ARTICLE 5 - MISCELLANEOUS PROVISIONS

5.1 Governing Laws

5.1.1 The PROPOSAL is subject to the laws of the State of New Hampshire, the Airport and Ordinances, the laws of the federal government of the United States, and all rules and regulations of any regulatory body or officer having jurisdiction.

5.1.2 Venue for any litigation relating to the PROPOSAL is Hillsborough County, NH.

5.2 Successors

5.2.1 The PROPOSAL binds and benefits the Parties and their legal successors and permitted assigns; however, this Paragraph does not alter the restrictions on assignment and disposal of assets set out in Paragraph 6.3.1. The PROPOSAL does not create any personal liability on the part of any officer or agent of the Airport.

5.3 Written Notice

5.3.1 All notices required or permitted by the PROPOSAL must be in writing and must be effected by hand delivery; registered or certified mail, return receipt requested; or facsimile with confirmation copy mailed to receiving Party. Notice is sufficient if made or addressed with proper postage to the address stated in the PROPOSAL for each Party ("Notice Address") or faxed to the facsimile number stated in the PROPOSAL for each Party. The notice is deemed delivered on the earlier of:

5.3.1.1 the date the Notice is actually received;

5.3.1.2 the third day following deposit in a United States Postal Service post office or receptacle; or

5.3.1.3 the date the facsimile is sent unless the facsimile is sent after 5:00 p.m. local time of the recipient and then it is deemed received on the following day.

Any Party may change its Notice Address or facsimile number at any time by giving written notice of the change to the other Party in the manner provided for in this Paragraph at least fifteen (15) days prior to the date the change becomes effective.

5.4 Rights and Remedies

5.4.1 Duties and obligations imposed by the PROPOSAL and rights and remedies available thereunder are in addition to and not a limitation of duties, obligations, rights, and

remedies otherwise imposed or available by law.

5.4.2 No act or failure to act by the Airport or Contractor is a waiver of rights or duties afforded them under the PROPOSAL, nor is the act or failure to act constitute approval of or acquiescence in a breach of the PROPOSAL. No waiver, approval or acquiescence is binding unless in writing and, in the case of the AIRPORT, signed by Director.

5.5 Inspections

5.5.1 CONTRACTOR shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

5.5.2 Neither observations by the Airport, nor inspections, tests, or approvals by others, relieves CONTRACTOR from obligations to deliver service in accordance with the PROPOSAL Documents, and current Federal, State and Airport Regulations.

5.6 Parties in Interest

5.6.1 The PROPOSAL does not bestow any rights upon any third party, but binds and benefits the Parties only.

5.6.2 CONTRACTOR shall comply with all applicable federal, state, and Airport laws, rules, ordinances and regulations. Nothing herein shall be construed to require that Contractor ensures that the PROPOSAL documents are prepared in accordance with applicable laws

5.7 Enforcement

5.7.1 AIRPORT Attorney or designee has the right to enforce all legal rights and obligations under the PROPOSAL without further authorization.

5.8 Severability

5.8.1 If any part of the PROPOSAL is for any reason found to be unenforceable, all other parts remain enforceable to the extent permitted by law.

EXHIBIT "C"

DESIGNATED REPRESENTATIVE

NAME:

TITLE:

CONTACT INFORMATION:

EXHIBIT "D"

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with its proposal. The bidder or offeror must indicate how it intends to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark (\Box) or the letter "X".

 \Box Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

a) Only installing steel and manufactured products produced in the United States; or

b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or

c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

• To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.

• To faithfully comply with providing U.S. domestic products.

• To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

 \Box The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

a) To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.

b) That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.

c) To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.

d) To furnish U.S. domestic product for any waiver request that the FAA rejects.

e) To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Guidelines for Contract Provisions for Obligated Sponsors and Airport Improvement Program Projects Issued on June 19, 2018

Type 3 Waiver – The cost of components and subcomponents produced in the United States is more than 60 percent of the cost of all components and subcomponents of the "facility". The required documentation for a Type 3 waiver is:

a) Listing of all manufactured products that are not comprised of 100 percent U.S. domestic content (excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).

b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.

c) Percentage of non-domestic component and subcomponent cost as compared to total "facility" component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

a) Detailed cost information for total project using U.S. domestic product

b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date	Signature
Company	Name
Ti	tle

EXHIBIT "E"

Certificate of Buy American Compliance for Manufactured Products

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (\Box) or the letter "X".

 \Box Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:

a) Only installing steel and manufactured products produced in the United States;

b) Installing manufactured products for which the Federal Aviation Administration (FAA) has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or

c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.

2. To faithfully comply with providing U.S. domestic product.

3. To furnish U.S. domestic product for any waiver request that the FAA rejects

4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

 \Box The bidder or offeror hereby certifies it cannot comply with the 100 percent Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:

1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that supports the type of waiver being requested.

2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.

3. To faithfully comply with providing U.S. domestic products at or above the approved U.S. domestic content percentage as approved by the FAA.

4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver – The cost of the item components and subcomponents produced in the United States is more that 60 percent of the cost of all components and subcomponents of the "item". The required documentation for a Type 3 waiver is:

Guidelines for Contract Provisions for Obligated Sponsors and Airport Improvement Program Projects Issued on June 19, 2018 Page 11

a) Listing of all product components and subcomponents that are not comprised of 100 percent U.S. domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).

b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.

c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using U.S. domestic source product exceeds the total project cost using non-domestic product by 25 percent. The required documentation for a Type 4 of waiver is:

a) Detailed cost information for total project using U.S. domestic product

b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

Date	Signature
Company	Name
	Title

APPENDIX "A" PERFORMANCE TESTING

1. Objective:

The objective of this procedure is for the Manufacturer to determine the Multi-Tasking Equipment capabilities. Potential suppliers of the MTE Unit(s) in response to requirements based on this specification and SAE Documents shall conduct capability tests based on this procedure. Testing is not required on the production unit prior to delivery, but shall be conducted on a prototype or vehicle of similar configuration with similar components and design to that being offered. In the absence of a prototype test, the Manufacturer will be permitted to test a delivered unit after delivery at the Airport by a 3rd party.

2. Criteria:

The equipment must be capable of removing snow along airfield surfaces by clearing bulk accumulation with the snow plow, sweeper, and high volume – high speed air. The equipment will be required to effectively clear $\frac{1}{2}$ + inch of snow, weighing 25 lbs. per cubic foot from a runway that is 150 feet wide with an additional 50 feet of paved shoulders and is 9250 long all in 10 minutes.

The Multi-Tasking Equipment (MTE) for Airfield Snow Removal must meet SAE standard ARP5548 Multi-Tasking Equipment (MTE) for Airfield Snow Removal.

It is the intent of this specification to describe an Airport Multi-Function Snow Removal High Speed, Multi-Tasking Snow Removal Unit to include Carrier Vehicle, Snow Plow, Rotary Broom, High Velocity Air Blast.

The Multi-Tasking Equipment must meet SAE standard ARP 5548 Multi-Tasking Equipment (MTE) for Airfield Snow Removal High Speed, Multi-Tasking Snow Removal Unit to include Carrier Vehicle, Snow Plow, Rotary Broom High Velocity Air Blast. The Multi-Tasking Equipment (MTE) must meet specifications of the FAA Advisory Circular AC 150/5220-20A Airport Snow and Ice Control Equipment. The proposed equipment must be capable of operating in echelon with other airport owned MTE's and snow brooms engaged in clearing a minimum of ¹/₂ inch of snow, weighing 25 lbs. per cubic foot from a runway that is 150 feet wide with an additional 50 feet of paved shoulders and is 9250 long all in 10 minutes.

APPENDIX "B" ADDITIONAL REQUIREMENTS

Engine-Jacket Water Heater: Re-circulating type with thermostatic control and weatherproof receptacle plug (minimum - 1500 watts).

Auxiliary Heating System: Diesel fired auxiliary heating system with programmable timer connected to fuel supply from main chassis. Auxiliary heating system shall be designed to provide supplemental heat to the hydraulic tank, cooling system, and operators compartment with the carrier engine off reducing fuel consumption and engine wear.

Engine Oil Pan Heater: 300 watts.

Battery Warmer Pad: Approximately 50 to 100 watts per battery.

Transmission Oil Pan Heater: Wattage as recommended by the transmission manufacturer. Additional Door Handles: Handles shall be installed on lower part of vehicle cab door. Auxiliary Cab Heater and Circulating Fans Cab air conditioning system

Windows:

- a) Extra Window in Lower Part of Cab Doors
- b) Tinted Windshield and Windows
- c) Liquid deluge system for side windows, windshield and rear view mirror with 20 gallon minimum capacity and easy accessible fill
- d) Side Window Wipers

Seats:

- a) Bostrom "T" Seat (or equivalent for driver and passenger sides)
- b) Heated Driver Seat
- c) Arm Rests for Operator Seat

Cab Insulation Upgrade (to reduce exterior noise below 85 dBa) Air Horn Clock

Additional Lighting:

- a) Auxiliary Cab Dome Light
- b) Roof or Rack Mounted Lights
- c) Door Lights
- d) High Intensity Strobe Beacon
- e) HID Lights

Additional Corrosion Prevention that conforms to Federal Specification 297 D, Rust-proofing of Commercial (Non-tactical) Vehicles.

Radio Transceivers:

Radio equipment shall be supplied. Radio programming and installation by owner. Mobile radios shall be supplied with roof-type mounted antennas:

Two (2) Laird B132S 1/4 Wave Broadband Antenna, 132-525 MHz, Tunable Center Frequency, Chrome Color, 23" Overall Length, 21" Straight Whip Style with spring.

Two (2) Laird MB8U ³/₄" hole, NMO style all brass mobile mount with 17' RG58U solid center antenna cable.

One (1) Icom IC-A120 VHF-AM Air Band Mobile Transceiver 118.000-136.975 MHz 8W (typical), 760 channels total. Complete with mobile mount bracket, related cables and mounting hardware and the following accessories:

HM-216 HAND MICROPHONE SP-30 20 WATT EXTERNAL SPEAKER

One (1) Motorola M22KSS9PW1 N APX4500 PROJECT 25 CAI Digital Mobile Radio, VHF (136-174) MHz. 1-50 Watts, with the following options:

Q811	ADD: SOFTWARE P25 CONVENTIONAL
GA00804	ADD: APX O2 CONTROL HEAD (Grey)
G444	ADD: APX CONTROL HEAD SOFTWARE
G66	ADD: DASH MOUNT
G89	ADD: NO RF ANTENNA NEEDED
G24	ADD: 3 YEAR SERVICE FROM THE START LITE
W12	ADD: RF PREAMP
G831	ADD: AUXILARY SPEAKER 15W
W22BA	ADD: PALM MICROPHONE

APPENDIX "C" OPERATIONAL NEEDS DETAIL SHEET

The following site and operational information is critical to assure that the MULTI-TASKING EQUIPMENT (MTE) Manufacturer understands the exact nature of the machine that the Airport is requesting to meet its operational needs.

Part I Operating Conditions

The unit must be capable of <u>operating</u> at temperatures as low as $\underline{-50}^{\circ}F$ to as high as $\underline{+55}^{\circ}F$. The unit must be capable of <u>cold soaked starting</u> at temperatures as low as $\underline{-40}^{\circ}F$ to as high as $\underline{60}^{\circ}F$.

The unit will be stored:

- Outside at temperatures as low as -50°F
- Outside, at temperatures as low as 50°F while connected to electric power for installed heaters, battery chargers, etc.
- Power Available is <u>120</u> Volts AC/DC

The unit will be used to remove snow and ice from Runways, Taxiways, Ramp & Gate Areas and Service Roadways.

The unit will transit as a self-powered unit.

Part II Operational Requirements

POST SUBMITTAL EVENTS

1.01 Evaluation of Proposals

The Airport will use evaluation criteria it judges most appropriate to the review process and the relative importance of this criteria will be determined at the sole discretion of the Airport. No Company shall have any cause of action against the City or its Department of Aviation arising out of a failure to secure a MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL contract with the Airport, failure by Airport to consider a Company's Proposal, or the methods by which the Airport evaluated proposals received. The selection of the prospective Company and the decision to engage in negotiations with that Company shall be at the sole discretion of the Airport.

1.02 Exceptions

The Airport may accept proposals that have exceptions. Exceptions must be clearly identified with a justification statement. The exception must meet AIP obligations including Buy American Provisions.

1.03 Proposal Selection

The Airport intends to select at least one (1) Proposal for MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL, but reserves the right to accept none of the Proposals, to negotiate for modification of any Proposal with the mutual consent of the Company, to accept the Proposal which, in the judgment of the Airport, shall be deemed the most advantageous to the Airport, to waive any of the requirements of the proposal procedures explained in this document, and/or to proceed in any other manner deemed to be in the Airport's best interest. Airport reserves the right to retain all copies of Proposals submitted by prospective Companies.

1.04 <u>Disqualification</u>

Although not intended to be an inclusive list of causes for disqualification, any one or more of the following, among others, may be considered sufficient for disqualification of a Company and the rejection of the Proposal:

- a. Evidence of collusion among Companies.
- b. Submitting a Proposal that is incomplete, obscure or which contains irregularities, inaccuracies, or misstatements.
- Lack of business skills or financial resources necessary to successfully provide sufficient MULTI-TASKING EQUIPMENT (MTE) FOR AIRFIELD SNOW REMOVAL as revealed by either financial statements or experience.
- d. Lack of responsibility as shown by past history, references, or other factors.
- e. Default or termination of other contracts or agreements.
- f. Other causes as the Airport deems appropriate at the Airport's sole and absolute discretion.

1.05 Notice of Acceptance of Proposal

Upon the Airport's selection of a Proposal, the selected Companies will be notified no later than Monday, June 3, 2019 by telephone.

APPENDIX "D" PRICE PAYMENT AND DELIVERY SCHEDULE

<u>BID ITEM: 1</u>	
Price per Unit	
One (1) unit	\$
<u>Total Proposal</u>	\$
<u>Delivery</u>	Date:
BID ITEM: 2	
Price per Unit Two (2) Units	\$
<u>Total Proposal</u>	\$
Delivery	Date: