

**QUESTIONS AND ANSWERS REGARDING  
MSCAA PROJECT 08-1260-03  
Glycol Management Program – Deice Facility Airside Construction  
May 8, 2019**

<b>1.</b>	<b>Will perspective contractors be allowed to make additional site visits in addition to the pre-bid meeting?</b>
	Yes, the public side of project site is available to visit anytime along Louis Carruthers Drive. However, be aware that the east half of the project is occupied by construction activities.
<b>2.</b>	<b>Can you confirm the three pipe connection inverts entering and leaving the Detention Vault?</b>
	Proposed pipe Inverts are shown on the pipe tables. Designer intention was to install pipe into sidewall of underground detention vault. Underground detention vault connections and final design will need to be approved via construction phase submittal.
<b>3.</b>	<b>Can we get the brand name and MSDS on the Glycol being stored?</b>
	The airport uses Cryotech Polar Guard Advance Type IV and Cryotech Polar Plus LT Type I. Both Safety data sheets are attached.
<b>4.</b>	<b>Specification G700-2.3 Overfill Prevention Valve, it is stated that an overfill valve is not required on the (3) 25,000 gal storage tanks, is this correct since the other (10) tanks require having the valve?</b>
	Correct. Due to the potential of fluid shear the type IV tanks do not have an overfill valve. Level sensors will be used for overfill protection.
<b>5.</b>	<b>Will seismic and wind calculations be required on Aboveground Storage Tanks?</b>
	Seismic and wind design calculations have been factored into the design shown in the plans. If the contractor choses to propose tanks with different or alternative bolting patterns, then separate seismic and wind calculations will be required and shall be stamped by a licensed engineer with the State of Tennessee.
<b>6.</b>	<b>To avoid storage tanks be classified as over height in shipping can the tank saddles be field welded to body of tanks? This would save on shipping costs since the diameter of tanks are already 12' without saddles adding saddles at tank manufacturers facility would make them have to be escorted.</b>
	This is acceptable to the engineer if it is coordinated with the tank manufacturer and the manufacturer agrees to this method and provides sufficient installation instructions.

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7.	<b>Section 00405: Please provide Bid Schedule documents in Excel format.</b>
	The updated bid schedule will be provided with each Addendum.
8.	<b>Addendum 1: Please provide a revised Bid Schedule in Excel format based with Addendum 1 changes</b>
	The updated bid schedule will be provided with each Addendum.
9.	<b>The Bid Schedule shows the following: Schedule I = Base Bid, Schedule II = Alternate 1, Schedule III = Alternate 2, Schedule IV = Alternate 3 and Schedule V = Alternate 4. ----- Drawing 009, G-PL-01 states the following: Schedule I and II = Base Bid. Schedule III = Alternate 1, Schedule IV = Alternate 2 and Schedule V = Alternate 3. There is no mention of Alternate 4 on this drawing.----- Spec Section 01230 Part 2. The alternates in this section match up with the alternates in the bid form. ----- Request that these inconsistencies be reconciled and corrected across the board so that all will know what work is a part of the base bid and what work is a part of the alternates.</b>
	Plans are modified in this addendum to read as per the Bid Form and Specification section 01230.
10.	<b>Please confirm that drawings C-GS-11 through C-GS-16, shown on drawing C-GS-10 are under BASE BID and specifically identified by Unit Price numbers 272-283.</b>
	Confirmed. Work identified on these drawings include both base bid and alternate 1 work.
11.	<b>On specification page G-500, the last paragraph on this page is marked 500-5.1, I believe it should marked 500-5.2.</b>
	G-500 specification has been modified to correct the numbering of 500-5.1 through 500-5.4. See addendum No. 2.
12.	<b>No. 60/ Spec. No. A-100-5.1: I cannot find this referenced Spec No. that should contain information regarding what to price and include in this Unit Price. Can you please assist?</b>
	All building MEP, structural and architectural, shall be included in this lump sum price A-100-5.1 unless identified as a separate pay item.

13.	<p>Reference drawing G-PL-01, states:                  Schedule I&amp;II Base Bid                  Schedule III Add Alternate 1                  Schedule IV Add Alternate 2                  Schedule V Add Alternate 3</p> <p>Bid Form states:                  Schedule 1 Base Bid                  Schedule 2 Alternate 1                  Schedule 3 Alternate 2                  Schedule 4 Alternate 3</p> <p>Specification 01230 states:                  Schedule 2 Alternate 1                  Schedule 3 Alternate 2                  Schedule 4 Alternate 3                  Schedule 5 Alternate 4</p> <p>As you can see above, drawing G-PL-01 does not follow the Bid Form or specification 01230. We ask that this be corrected.</p>
	See question 9.
14.	Will geotech report be provided?
	Yes, It is provided as part of Addendum 2.
15.	Does MSCAA have designated onsite waste disposal site for excess excavation and rubble? If so where, how does it need to be maintained, is there a separate SWPPP?
	Yes, the area south of Shelby Drive is used for excess disposal. The entrance to that area is on Airways Blvd. The disposal area must be maintained per all erosion control and stabilization measures. The area will be maintained under the same project specific SWPPP.
16.	Please clarify location of topsoil T-905-5.1. 41 acres of topsoil placement appears to be excessive.
	Topsoil placement is for temporary and permanent sodding.
17.	With the owner please clarify the phasing and milestone dates. It appears that the project phasing (anticipated start dates) do not correlate with the mandatory Taxiway open periods.
	See question 19.

<b>18.</b>	<b>Will the mandatory Taxiway Juliet open period be relaxed? i.e. will work in phases 2A &amp; 2B be permitted from November through March?</b>
	See question 19.
<b>19.</b>	<b>When does the engineer anticipate Phase 2a to begin? Can it start immediately after the NTP?</b>
	Subphase 2A/ 2B and 3A/3B may occur at any time over the course of Phase 2 or 3, respectively. Subphases 2A/2B or 3A/3B may not be performed concurrently with any other respective subphases. Taxiway N and J have defined time periods where construction may not take place as stated in the plans. Phase 1 shall be completed before beginning Phase 2.
<b>20.</b>	<b>Can work begin on other phase 2 subphases if work in phases 2A &amp; 2B have not been completed?</b>
	See question 19.
<b>21.</b>	<b>We understand from the pre-bid meeting that the duration per phases (sub phases) aren't necessarily the driving factor in the schedule...but rather the Milestone start dates. Is this correct? And if so, could you elaborate on that further.</b>
	Milestone dates are determined to meet airport requirements. Phase durations are based on expected performance time of the construction activities.
<b>22.</b>	<b>What is the maximum allowable disturbed acreage per the permit?</b>
	Maximum allowable disturbed area will be limited by the capacity of the respective sediment basins. West Basin is sized for Phase 3E and can receive a total contributing drainage area (disturbed and off-site runoff) of 17.3 Ac. The East Basin is sized for Phase 2D and can receive 20.9 Ac. of drainage area. The permit requires the total unstabilized area to remain below 50 acres at any given time.
<b>23.</b>	<b>The largest cut area appears to be the area where batch plants, stockpiles, laydown areas, etc. have been located. We assume the material encountered in these areas will not be suitable for fill, is there a specified disposal or excess site provided?</b>
	Contractor shall not assume excavation is unsuitable for embankment. The largest cut area is the east apron. Embankment will be required for the west apron. Stock piles for unclassified excavation shall be coordinated with the program manager through the course of construction. See specification P-152 for unsuitable material excavation.

<b>24.</b>	Regarding the subgrade preparation item, could the engineer please clarify how the 48” deep “processing” is anticipated to be done? Is the expectation that an additional 48” of excavation be required in all fill areas...and then this material be replaced in lifts back to proposed subgrade?
<b>a.</b>	If this is the case...will the excavation of this material be paid under “Unclassified Excavation”?
	See Specification P-152 for requirements for subgrade preparation. Contractor will be required to confirm densities at depth. Basis of payment and method of measurement is discussed in P-152.
<b>25.</b>	Drawing E-DT-01, Sheet Note #4 indicates “Light bases shall be Class 1B...” Is it the engineer’s intention to have stainless steel light bases, extensions, spacer rings, etc. for all L-868 bases?
	L-868 bases, extensions, and spacer rings shall be Class 1B. Multihole adapter is galvanized.
<b>26.</b>	Drawing E-DT-02, Sheet Note #4 indicates “Light bases shall be Class 1B...” Is it the engineer’s intention to have stainless steel light bases, blank lids, spacer rings, etc. for all L-868 bases?
	L-868 bases, extensions, and spacer rings shall be Class 1B. Multihole adapter is galvanized.
<b>27.</b>	Drawing E-DT-05, Sheet Note #3 indicates “Light bases shall be Class 1B...” Is it the engineer’s intention to have stainless steel light bases, blank lids, spacer rings, etc. for all L-867 adjustable bases?
	L-867 adjustable bases shall be Class 1B. Blank lids where applicable are galvanized.
<b>28.</b>	Drawing E-DT-06, Sheet Note #3 indicates “Light bases shall be Class 1B...” Is it the engineer’s intention to have stainless steel light bases, blank lids, spacer rings, etc. for all L-867 junction bases and taxiway edge light bases?
	L-867 taxiway edge light bases shall be Class 1B. Junction cans in earth are galvanized. Blank lids are galvanized.
<b>29.</b>	Drawing E-DT-09 and E-DT-09A do not have specific guidance on the type of light base can required. Are Class 1A (galvanized) cans and blank covers acceptable for sign pads?
	For E-DT-09, bases and lids shall be galvanized. For E-DT-09A, bases and extensions, as applicable shall be Class 1B, and blank lids are galvanized.
<b>30.</b>	Drawing E-DT-04 Light Fixture Schedule – this schedule indicates incandescent lights for the L-852C/D fixtures. The bid form indicates LED fixtures. Which is correct?
	Incandescent is correct. See addendum No. 2.

<b>31.</b>	<b>Specification Section L-130, Engine Generator Set – The bid form does not have a separate pay item for this work. Where do we place the cost for the generator, ATS, etc.?</b>
	See addendum No. 2
<b>32.</b>	<b>Bid form, Bid Schedule I, spec # L-130-5.4 indicates 6500’ of pvc conduit. What size conduit? Is this conduit concrete encased or direct bury?</b>
	4” conduit, concrete encased. See addendum No. 2
<b>33.</b>	<b>Lift Station, drawing C-UT-19 provides a list of components. Will a detail be provided for this pre-fab building reflecting raceway connections required?</b>
	No, details will not be provided. Successful bidder will be responsible for providing those details in shop drawing submitted for approval.
<b>34.</b>	<b>Lift Station, drawing C-UT-19, Item AB is a 2” ran to DV-01. What is this conduit for, wire to be installed and where to terminate conduit in bldg.?</b>
	Conduit is for diversion structure knife gate control cable. Conduit will need to terminate in SCADA RTU.
<b>35.</b>	<b>Lift Station, drawing C-UT-19, Item F is an area light on pole. Will information be provided as to what type of pole (size, wood, metal) and light is to be provided?</b>
	Pole shall be metal pole, with height of 35 feet. Type of light is same as lights shown in light fixture schedule on E-LT-03. See Addendum 2.
<b>36.</b>	<b>Will a detail for the Deice shelter be provided?</b>
	See question #33. Specific details for the prefabricated shelter shall be included in shop drawings submitted by the successful bidder.
<b>37.</b>	<b>Will the single and double blending cubes be provided with the conduit and wire preinstalled?</b>
	Blender cubes are provided internally prewired.
<b>38.</b>	<b>Drawing E-GD-04, detail 1. Where is this detail utilized in the field?</b>
	This is a typical detail for electrical rack construction within the project.

<b>39.</b>	Drawing E-EP-02 indicates panel schedules for Single & Double Position Load Rack Panels and Single & Double Mini-Power Centers. Are these panels provided with the Blending Cubes or is the electrical contractor responsible for furnishing and installing these items in the Blending Cubes?
	Electrical contractor is responsible for installing these on electrical racks per E-PV-03 and details 1 and 2 on E-GD-04
<b>40.</b>	Drawing E-DT-28A, MLGW Pad mount transformer detail. Which pay item does the transformer pad apply to?
	No pay item applies. Detail applies to Contractor work required for MLGW transformer pads for primary power along Louis Carruthers.
<b>41.</b>	Several locations in the drawings reference “coordinate with MLGW to establish power to the pump/lift station”. Drawing E-EP-01, single line for 1600a switchboard located in Glycol Pump House indicates a 225a breaker to feed the lift station shelter. Are we to feed the lift station from the switchboard or is a separate service required for the lift station shelter?
	Power for lift station is from 1600A switchboard in Glycol Pump House. Note of sheet C-UT-19 has been updated. See addendum No. 2.
<b>42.</b>	Drawing E-GD-04, detail #2 indicates the mini-power centers and load rack panels are Nema4x. Panel schedules on drawing E-EP-02 indicate these panels are Nema3r. Are we to provide Nema3r or Nema4x?
	Panels shall be NEMA 4x
<b>43.</b>	Drawing E-EP-02, panel schedules for East and West Area Panels are Nema1. Is this correct or are we to provide Nema3r or Nema4x?
	East and West Area panels are located inside the base station shelter. These panels are NEMA 1.
<b>44.</b>	Per Addendum #1, Drawing MM-02 the CEDD fixtures are 8” diameter. The details on the drawings do not reflect 8” fixtures and the cans are 12” diameter. Should the JCAII contract include adapter rings from 12” to 8”? Or does the contractor need to furnish these?
	Contractor will need to furnish and install. See addendum No. 2.
<b>45.</b>	Per Addendum #1, Drawing MM-02 there are (32) CEDD Base Stations. These appear to be decent size cabinets on the JCAII website literature. Where will all of these cabinets be placed? Are the locations shown on the drawings?
	Cabinets will not be used. The base stations are mounted to the wall of the base station shelter. See addendum No. 2 sheet C-UT-25 for shelter layout.

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46.	<p>G-200-3.10 Flushing: The Flushing work required, as described in this specification section, does not have a Unit Price provided for this described procedure. This will have a significant cost impact and should have its unique Unit Price cost. I am suggesting and requesting that this change be added to the Bid Form.</p>
	<p>Flushing will not be broken out as a separate bid item.</p>
47.	<p>G-PH-01 and G-PH-05: Drawing GP-PH-01 defines 4 phases. Drawing GP-PH-05 notes 8 and 9 discuss Phase 5. Is this a typo? Should it be Phase 4? If not, then what work is included in Phase 5?</p>
	<p>See addendum No. 2.</p>
48.	<p>G-PH-01 and G-PH-15: Drawing GP-PH-01 defines 4 phases. Drawing GP-PH-15 note heading reads "Phase 5 Notes:" and notes 8 and 9 discuss Phase 5. Is this a typo? Should it be Phase 4? If not, then what work is included in Phase 5?</p>
	<p>See addendum No. 2.</p>
49.	<p>Section G-700: Paragraph 700.-1.4 Submittals references Section 33 52 43. There is no Section 33 52 43 in the bid documents. Correct and/or confirm.</p>
	<p>Removed reference to 33 52 43 in 700-1.04 from G-700. Contractor shall reference G-100.</p>
50.	<p>Section G-700: Paragraph 700-5.1 states that payment will be made under "Schedule 1". The bid form has pay items G-700-5.1 and G-700-5.2 listed under Schedule II. Clarify and correct which "Schedule" the aboveground storage tanks will be under.</p>
	<p>Tanks will be provided under Schedule 2 (Bid Alternate 1). Specification G-700-5.1 and 5.2 has been updated to Schedule 2.</p>
51.	<p>Pump Schedule M-SH-01 and Section G-500: Pumps 9-10, P-11, P-43 and P-44 on the pump schedule on Drawing Sheet 331 are not described in Section G-500. Please provide the spec requirements for these 4 pumps.</p>
	<p>P-9 is covered under the Type IV Anti-Ice Fluid Offload Pump. P-10 and P-11 are covered under the same style as the Type I Deice Fluid Offload Pump (500-2.6) and have updated specification. P-43 and P-44 are covered under the same style pump as the NPW issue pumps (500-2.7) and have updated specification. See addendum No. 2.</p>
52.	<p>Sheets 291 thru 299: Along the East and West Deice lines there are numerous reducer notes that have stations that read in 200+ numbers. We believe these to be in error and should correspond with a 300+ number. Please clarify the intent of the 200+ station numbers or correct the reducer station numbers on the plan view as well as the profiles.</p>
	<p>Stations will be corrected to 300+ and 400+ stationing. See addendum No. 2.</p>



53.	Sheets 300 thru 302: Please provide the Glycol Branch Enlarged Views and Profiles for the missing branches not covered by Sheets 300 thru 302. Specifically Branches 1-12 on the West side and Branches 22-24 on the East Side.
	These branches are of a typical configuration, see detail 5 on dwg no. C-GS-50 (sheet 303)
54.	Pre-Bid Site Visit: Please provide us with the different scope sheets from the Glycol Vendors and other vendors as discussed at the 04/26/19 prebid site visit.
	See addendum No. 2. An inclusions and exclusions sheet from the glycol vendor will be included in this addendum to help coordinate bids. A final price and quote from the glycol vendor will be provided in a future addendum.
55.	<p>Div 1 – Sect 01100, Part 3.01 7 - Drawing G-PH-01: Referenced Spec section calls out the referenced drawing as being the source of the NTP “Dates”. The drawing has reference to NTP being Milestone 0 which is 12 Days after Construction mobilization notice is provided.</p> <p>All other milestones are listed yet not spoken to regarding their significance. The phasing offered is detailed to the sequence of work and “No Later Than Dates” are called out for select phases.</p> <p>We have the following questions pertaining to this plan sheet regarding NTP Dates and Milestones.</p> <p>Are the Milestones contractual constraints of any kind?</p> <p>Provided the completion milestone is maintained, will resequencing be allowed provided Taxiway closure windows are maintained as identified in Phase 2A &amp; 2B, and 3A &amp; 3B Notes on the same drawing?</p>
	Milestones are provided to meet Airport requirements for this project. Re-sequencing will be allowed with required coordination with the Program Manager.
56.	<p>G-PH-03 &amp; 04: With respect to the limits sequencing depicted in the Phase Notes, the schedule provided on G-PH-01 and limits drawn for Phases 2C, 2D, 2E, 3C, 3D, &amp; 3E on these referenced drawings.</p> <p>Is the sequence and shape of the sub-phases flexible?</p> <p>How were these limits determined? Are they quantity driven or somehow related to airport operation needs? Are these limits able to be moved provided constraints (if any) are maintained? Are these limits related to a funding schedule? If so can the planned funding schedule be shared with all bidders?</p> <p>A clear picture of the constraints that are driving the phasing shown in the drawings would be beneficial to bidders to insure accurate and compliant bids.</p>
	Yes, sequence of sub-phases are flexible pending coordination and approval from the Program Manager. Phasing limits were determined by required erosion control measures, constructability, and required airfield operational areas.

57.	G-PH-03 & 04: Are the sub phases intended to be limits strictly to the paving section thereby allowing for the grading and underground installations to commence without regard to the phasing? At least for the areas outside of the existing Taxiways.
	No, reference question 56 for factor influencing phasing sizes and approach.
58.	General Provisions 50-06: Please provide the current status of the facilitating project constructing the Taxiway Bridges. What date can we rely upon for their Final Completion?
	Substantial completion of the existing project is mid September 2019.
59.	Div 1 – Sect 01100, Part 3.01 7 Drawing G-PH-01, GP 50-06: Please explain the impact on this projects NTP date should the facilitating project schedule be impacted and cause delay or finish early.
	Reference note 5 on sheet G-PL-01.
60.	General Provisions 50-06: Does MSCAA have any intentions of awarding additional contracts within the limits of this project during the contract time allocated for this contract? If so, additional information is requested as to the scope and allocated laydown for other contracts.
	It has not been determined the exact timing of bid/award of the next Phase of this project. However, MSCAA has shown multiple staging areas to provide maximum flexibility for both MSCAA and the successful contractor. We are currently reviewing the design schedule of the next phase and that will dictate which staging areas are to be used during each phase. We will release additional information on the next addendum.
61.	General Provisions 50-06: Related to our obligation as to manage materials and spoils as to not interfere with the other contractors, there appears to be a fair amount of materials, spoils and debris that is currently on site. It would be difficult for the contractor to estimate the disposal costs not knowing material types, quantities and disposal requirements. Please state how we should expect to receive the site? Should MSCAA request us to dispose of these materials, how will this be paid?
	The spoils on the existing project site will be removed as part of the current project. Any spoils, debris, or other material left on any part of the site will be handled and paid for through the most relevant bid items and quantities as determined by the Program Manager.
62.	Division 0 – Section 00440 Buy America: Please change the certification language to exclude the materials included in the Taxiway Guidance and Glycol System that have been soul sourced specified by MSCAA.
	Section 00440 “Buy America” does not apply to the two (2) sole sourced items in Additive Alternate 1. These two items are specifically defined as the Bay Management System provided by JCAII and the Glycol Dispensing Equipment provided by LAS.

63.	At the pre-bid meeting it was mentioned that there is a limit to the amount of work area that can be opened up at one time due to environmental requirements. Can this be further clarified?
	See question 22.
64.	At the pre-bid meeting it was stated that DBEs who are not USDOT approved must be submitted for approval by May 6th for consideration. It was also stated that a DBE who is currently approved an USDOT can be submitted by May 24th for consideration. Can you please confirm these dates are correct? Also, would it be possible to extend the May 6th date to May 13th?
	The deadline for those companies not previously certified is extended to May 10 <sup>th</sup> . Those companies who are already certified by another DOT must submitted by May 24 <sup>th</sup> .
65.	Division 0 – Section 00200 1 Reservation of Rights & Contract Section 7.03: Can MSCAA please provide a list of entities that have pending claims or litigation with MSCAA to avoid including such entities or their parents, subsidiaries, affiliates or predecessors in interest in the bid?
	There are no entities that have pending claims or litigation with MSCAA.
66.	S-100 Special Tech Provision – Safety & Security: Please provide location of all owner furnished material to be utilized on the project.
	Crossing gate arms, guard house, and low-profile barricades Type 1 will be contractor furnished. See addendum No. 2.
67.	<p>Gen Provision 60-08 Owner Furnished Material: During the pre-bid meeting, it was stated that the supply contract quotes for the Glycols System equipment and the Messenger Management System equipment will be provided. If not already a part of these quotes, bidders will need the details related to what is included and excluded from these quotes. Please provide the following:</p> <p>Warehousing requirements and location that the Contractor will receive materials.</p> <p>Expected schedule that the Contractor should expect to take delivery and begin warehousing material.</p> <p>Number of shipments and dates that they anticipate delivery.</p> <p>If procurement to be coordinated by the contractor, expected overall procurement duration to receive materials on site.</p> <p>Please forward these details as to allow the bidder to clearly understand the scope remaining relative to these supply contracts.</p>
	Inclusions and Exclusions will be provided as part of this Addendum. Reach out to those providers to work out any additional details.

**Questions are listed as submitted, company names are withheld.**  
**This Addendum No. 2 includes Questions received through May 2, 2019.**  
**Any future questions will be answered in a future Addendum.**