



CHARLOTTE

CHARLOTTE AREA TRANSIT SYSTEM – City Procurement

Addendum # 3	CATS ENTERPRISE ASSET MANAGEMENT RFP # 269-2024-1372
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To: All Prospective Proposers

Date: 8/31/2023

Subject: Addendum 3 – RFP # 269-2024-1372

Please note the questions and answers below. The CATS Transit Asset management Plan and an updated Requirements Matrix in Excel have been uploaded in the documents section of Bonfire.

Q1. How many asset (by type) do you want to manage in the new EAM system? Please provide counts by type: (a) vehicles: railcars, buses, nonrevenue vehicles, paratransit, (b) linear/track (centerline miles), and (c) Facilities by type (buildings, stops, etc). How many assets are CATS currently managing, and what are those?

A1. See attached facilities list. There are also approximately 5000 bus stops and/or shelters. These should be considered individual assets for tracking and work order processing.

The below chart includes current and future assets

LRV	200
Alignment Miles	70
Yard miles	15
TPSS	80
Comm Case	75
Balance Weight Arms	400
Grade Crossing	150
Down Guy	590
Mainline Airbreak	80
Manual Disc Switch	180
Motor Disc switch	50
Section Insulator	280
Signal House (fixed guideways only)	70
Signal Case	15
Switch	120
Turnout	50

Q2. Does CATS have a preference for the EAM pricing model that is proposed?. Do you prefer a user-based or asset-based pricing model, or are you open to proposals with either approach?

A2. User based – not per seat.

Q3. Could you please share a count of unique users who will be using the new Enterprise Asset Management platform?

A3. depends on how we use the system - could be over 800+ (current Spear user count)

- Security Users are about 2/3 of our employees
- Current: 157 (includes Training, Transit Energy, vacancies)
- Future: 400
- Employees
- Current: 236
- Future: 600

Q4. Can you please provide a break by department and roles?

A4.

Technicians: 250

Dispatchers/Schedulers: 75

System Administrators: 15

Total Users: 400

Q5. For Parts Inventory, will Workday be the primary system of record or the EAM system? What integration requirements exist between the two?

A5. Asset should be the primary. Integration requirements TBD.

Q6. GIS – Does the City have an existing GIS solution that the EAM system would be able to integrate with, and all required GIS data?

A6. ARCGis

Q7. NIMS – Does the City expect that an automated upload to the NIMS system is provided as part of the solution, or does the city already have the ability to do this and therefore the need from the EAM system would be an intermediary file that the city would upload to NIMS?

A7. Yes, we expect to have a solution to upload to NIMS if certain conditions are met on the incident

Q8. (Sec. 3.4) Is CityWorks used for functions other than those that would be part of an EAM solution? Is the system planned for continued usage alongside an EAM system that would integrate directly with ESRI ArcGIS?

A8. CityWorks is used for Customer Service issue tracking and the expectation would be to either duplicate the CSR functionality in the asset solution or integrate the information in the CSR into the asset solution for work order generation. MAS - it also manages Incidents that communicate from Spear to Cityworks and vice versa

Q9. (Sec. 3.4) Workday is listed twice - are there functions of Workday other than the financials listed with the second listing (labor cost, inventory cost, asset cost, value, useful life) that are planned for Integration with the EAM system?

A9. Workday integration will mainly be used for parts ordering and replenishment. CATS needs to discuss if the labor will automatically hit a GL string for costing.

Q10. The Data Extraction itself will be carried out by CATS team or this is to be considered in vendor scope? Also, are there any enterprise wide data migration tool that is preferred (like Informatica).

A10. Vendor will be expected to transfer data from Spear and CityWorks with the assistance of CATS Staff

Q11. As we understand, data from various legacy source systems will be migrated to the EAM platform as part of the greenfield implementation. Will there be any source system that will eventually be decommissioned? If yes, please provide the details.

A11. Spear will be decommissioned. CityWorks will not be decommissioned but CATS will no longer use the existing functionality if the EAM product can duplicate the current CSR functionality. Safety Culture forms will be decommissioned if EAM can duplicate the functionality.

Q12.

Application support and maintenance scope is not detailed in the RFP. Please provide us the following information to come up with the desired solution:
1. What is the nature of support (L1/L2/L3) required from the vendor after implementation?
4. What will be the expected nature of support coverage (24x7, 16x5, 8x5) for EAM support?
3. What will be the expected nature of support coverage for EAM support?

A12. L1/L2/L3 will be defined in the contract with specific SLA's. Support coverage shall be 24x7 and will be end-to-end support to include all interfaces, database, application, services, etc.

Q13. Assuming EAM solution will be on cloud, please confirm whether there is any expectation on dedicated cloud offering (e.g. IBM Cloud for Maximo) or it can be deployed on a hyperscaler, such as, Azure/AWS/etc?

A13. Cloud hosting shall be recommended by the EAM provider and will be considered. The City prefers AWS.

Q14. Is there any specific requirement from City side on the database platform (Oracle/SQL Server/DB2) which will be used for EAM deployment?

A14. The City prefers 2019 - 2022 MSSQL.

Q15. Have CATS evaluated any specific EAM solution/Mobile solution software and is there any preferred software package from the outcome of the evaluation?

A15. CATS has not reviewed any asset solution within the last year.

Q16. We understand that 2 Fiscals data is to be migrated into Maximo. Please advise the approximate volume on data migration items (Including all legacy applications) for Facilities, Rail Operations and Maintenance, Bus and Rail Safety, Finance, Special Transportation (Paratransit) Service, Bus Parts and Materials, Rail Parts and Materials, Real Estate and Quality Assurance

A16. Yes, RFP states minimum 2 years' worth of data, size TBD

Q17. Support compliance with environmental reporting requirements - what is the current environmental reporting tool, and are you collecting all the information necessary for compliance?

A17. No tool being used at this time. Information is collected manually.

Q18. Integrated with the Barcode Management module and equipment - can you please describe the Barcode Management module and equipment you are referring to? Is this a homegrown solution or CATS?

A18. Bartender barcoding is the current solution. If the vendor has a replacement or integrated solution, then CATS will entertain the offering in the RFQ response. CATS requires the ability to create, print and read barcodes for inventory, cycle counting, and asset identification (asset tags)

Q19. What is the City's current version of ArcGIS?

A19. 10.5.1 but updating to 11.x

Q20. Based on the user requirements indicated in Section 3.3 of the RFP document, we assume the following user requirements should be scoped:

Please confirm that total core power users needed for the scope of services is 44.
 Please confirm that total core casual users needed for the scope of services is 44.
 Does CATS consider casual users to be field tech (mobile device) users that perform the work on work orders? The total number of users mentioned is 118 (core users: 34 & casual users: 74). Can we consider this number for licensing purposes or do you see a change in this number? Is there any plan to increase the user count in subsequent time period? If Yes, please provide the tentative yearly user growth plan.

A20. see previous responses. As alignments are extended or completed depends on our user increase. Rail may have years where it is about 0-5% increase per year and 2 years before and after openings we may see an increase anywhere between 20-30% each year

Q21. Section 3.4: Can you provide more detail around what is the envisioned functionality of the Cityworks interface? Which will be system of record, and what data will be passed?

A21. This will need to be discussed with the core group. If we go live with everyone at once, then we will not require a Cityworks interface. If we used a phased approach, then we will require the CityWorks interface until full go live. CSR information will be decided if the asset solution can duplicate the functionality.

Q22. 11. Third Parties - How does the city manage the collection of their data entered against work orders? Do the vendors have access to the existing system and are able to enter data directly or does the city take the data and enter it for them? Would the city provide access for third parties to use mobile devices provided by the city for their use?

A22. No third parties will have access to our system.

Q23. Please share any process maps that describe the current processes at CATS.

A23. CATS Process maps are outdated and must be revamped. Some of this work is in progress but some may need to be developed and assistance may be needed.

Q24. Please share any diagram that shows the IT landscape (along with the integrations) at CATS.

A24. No to the landscape. We can provide existing integrations but that will not be beneficial with a new system because the integrations will go away. Why is this needed?

Q25. There are 7 integrated systems that are provided. Let us know if these systems supports web service or API based integrations.

A25.

System	Description	Nature of Interface (One-way or Bi-Directional)	web service or API
Cityworks	Charlotte/CATS City Asset Management System. Interface for fixed assets and ArcGIS	One-way(Unless EAM solution can replace Cityworks functionality)	API
Workday	City of Charlotte – ERP System	Bi- Directional	TBD
Transit Master	Vehicle Mileage Vehicle incidents to create service requests	One-way	Not available at this time – internal only

Hastus	Vehicle incidents to create service requests * Hastus is the source for bus stops – need to add	One-way	OIG export file
Stemco	Vehicle tire pressure and mileage	One-way	Cloud
VIA Ops Center	Reporting special transportation (para-transit) vehicle mileage	One-way	Cloud
Workday	Financials - labor cost, inventory cost, asset cost, value, useful life	Bi- Directional	TBD

Q26. There is no mention of middleware in the document, please let us know if there are any enterprise-wide middleware in place or is it point to point integrations?

A26. BizTalk (but we really want to avoid this). The City is currently reviewing informatica, workato, snap logic and dell boomi for middleware products which are compatible with workday. (no standard chosen)

Q27. We understand that the training approach will be "train the trainer". As part of this, is CATS looking for any tools for training and user adoption/in app guidance? Or is there any system in place already for the same?

A27. we would like a product like WalkMe.com, documentation and videos. CATS will entertain training options in the response which use automation, AI, video, etc. (something standard and repeatable)

Q28. There is no mention of Automation testing in the document. Please let us know if there is any enterprise wide tool that is in place today or do you want us to propose any tool.

A28. We currently do not have an automation testing tool. CATS would entertain recommendations.

Q29. Are there any BI tools for reporting that are in consideration?

A29. Tableau, PowerBI and SSRS

Q30. What is the current make and model of Employee Card reader in use by CATS?

A30. Current Spear maintenance kiosks are using the RFIDEAS RDR-6081AKU card reader.

Q31. Would you please provide the specifications of the existing employee badge RFID cards?

A31. HID iClass PxG9P and HID iClass DP

Q32. Can conduit and wire used by the existing FMS be reused for connections to the new FMS?

A32. Yes, to some extent. Additional wiring requirements could require additional conduit. The expectation would be to utilize the current hardware and cable pathways/conduit. A liquids management system was utilized at CATS however the system was "moth balled" after the vendor failed to provide a working solution. All hardware, flow meters, alarms, level sensors, etc. are still in place and some localized tank level alarms are still utilized in a standalone usage.

Q33. How many Diesel Dispensers are required to be replaced and does CATS have specified requirements for the replacements?

A33. We have 8 Diesel Dispensers. 2 will need to be standard diesel fuel dispensers, 6 will need to be transit style trolley systems with posi loc bus nozzles.

Q34. How many fluid dispensers are required to be replaced and does CATS have specified requirements for the replacements?

A34. We have 114 Fluid Dispensers. Any replacements that require metering shall be analog dispensers with 16 qt totals and ¼ qt graduations.

Q35. The Matrix includes “maintenance fluids” and further defines diesel, DEF, ATF, coolants, engine and other lubricants. What fluids specifically are to be controlled and monitored on fuel islands?

A35. Fuel Island - Diesel Fuel, DEF, Engine Oil, Transmission Fluid, Coolant. Inside the shops – Engine Oil, Transmission Fluid, Coolant, Gear Oil, Grease – Mike Morrison

Q36. Can you please provide further clarification on the following statements within the Requirement Matrix Document:

Section 3.1: Planned/Preventative Maintenance: Allow for user defined long term out of service asset from the preventative maintenance system.

- A. 3.1: The system should have the capability to “Flag/Hibernate” the scheduled PM’s from units that will be out of service for extensive periods of time so the vehicle doesn’t show up out of compliance on the PM schedule.

Section 3.1: Planned/Preventative Maintenance: Capability to define acceptable limits above or below PM intervals for each job during which the job should be performed.

- A. 3.1: Our PM’s have a tolerance window of + or - 10%, we need the ability to run reports that will show us the tolerance we have to the PM schedule, so when we run a report we can see (forecast) how far out or behind in the window of the PM we are.

LRV- every 5,000, On Time 500 miles before & After

SC – Monthly

Infrastructure – within 30 days of last inspection

Section 4: Ability to calculate maximum and minimum stock levels and create automatic work orders based on user defined criteria for each storeroom.

Reference Q23

Q37. Do you require control and monitoring of fluids dispensed in the maintenance bays in the maintenance shop?

A37. Yes

Q38. Can you please clarify the Matrix requirement that states “Solution must provide new maintenance fluids dispenser unit hardware”?

A38. Fluid dispenser’s replacements that require metering shall be analog dispensers with 16 qt totals and ¼ qt graduations & must be able to interface with maintenance software so quantity by vehicle/engine types can be programmed in for preventive maintenance & to capture top offs/adjustment electronically.

Q40. Will fuel dispensed at rail operations be included in this project?

A39. No.

Q40. Will vehicle mounted equipment be installed by CATS or the selected vendor?

TBD, depending on the complexity of the install. Please quote.

A40. When the telematic equipment is installed on the buses, who’s responsibility is it to complete the installation?

Medallions or other slap on tracking devices can be installed by CATS, more intrusive installations should be completed by contractor.

Q41. Will the leak monitoring system which is “in the design phase” include tank product quantity tracking?

A41. Yes

Q42. Provide the capability to transfer materials and labor from one work order to another work order - is this process meant to create an additional work order by duplication, or is this removing planned materials and labor from one work order and creating the same entries on an existing work order? Please provide a use case example for clarity.

A42. Removing planned materials and labor from one work order and creating the same entries on an existing work order. Example: parts/labor was charged to the wrong bus so this would need to be removed and applied to an existing work order.

Q43. Sec. 2.4 - Real Estate Management:
How many square feet of managed real estate space?

A43. The portfolio consists of the following:

- 14 major facilities housing the Light Rail, Bus, and Special Transportation Services comprising 1,145,856 square feet of space.
- 29 Light Rail Train Stations along the 18.5 miles of the LYNX Blue Line South and Blue Line extension North.
- 19 Park and Ride public parking lots for bus and rail passengers throughout the Charlotte area.

Q44. Section 4 - Materials Management:

Ability to calculate maximum and minimum stock levels and create automatic work orders based on user defined criteria for each storeroom - please define the process and purpose of automating work orders pertaining to stock levels and give a use case with example.

A44. This should be “creating automatic PO’s” not work orders; so when the minimum stocking levels are met it kicks out an auto-requisition for approval to replenish.

Reference Q36

Q45. Yard Management – Please explain in detail what is required as a minimum, and what is desired – management of available space in four dimensions, GIS representation of the yard, or simple association of an asset to a location in real time.

A45. Maintenance just needs simple association of an asset to a location in real time.

Q46. Work Order Management - A requirement indicates that a ‘flexible’ work order data entry screen is necessary, can the city clarify what ‘flexible’ needs to be and how the flexibility is to be evaluated and used?

A46. The system should be able to have data entry from a desktop, kiosk, or tablet

Q47. Work Order Management - Another requirement calls for labor to be added to a work order that has been closed – this is to clarify that ‘closed’ in this context means ‘completed’, as ‘closed’ implies a financial closure that cannot be undone and can only be addressed by correcting transactions.

A47. Completed in our environment is at the foreman/supervisory level, closed is at the next or superintendent level. So in the event the WO has been closed & we need edit the WO we need to have the ability to do so. Restrictions can be managed based on user access levels.

Q48. Work Order Management - Another requirement calls for labor to be added to a work order that has been closed, same confirmation requested as for #5.

A48. Before closing/completing a work order, a supervisor should be reviewing for accuracy. In the case of someone did work and then went on vacation without inputting their labor, that person will need to have the ability to add their time

Q49. Change management – What does the city expect from a responder for change management assistance, and does the city have its own change management capability? Please provide an explanation of how this will be addressed.

A49. Reference Question 10.

Q50. Change management scope is not detailed in the RFP. We understand that the change management scope will be covered by CATS - is that understanding right?

A50. Reference question 10.

Q51. Concerning section 2.1 of the Requirements Matrix, please elaborate on how CATS defines a distinctive linear reference system.

A51. N/A

Q52. Section 3.2 "Service Request" outlines several use cases. Can you define the persona's leveraging these capabilities. Are they internal to your organization or external? Can they include the public?

A52. Only Internal through Customer Service

Q53. Please provide a list of all the vehicles that will need to be equipped with RFID devices that includes year and make for each vehicle.

A53. There are a total of ~500 revenue vehicles in BOD, the year, make and model are dynamic

Q54. Are there "as-built" drawings for any of the existing fuel buildings that can be provided?

A54. Please see Attachment A. These are not "as-built" and the only thing missing from the drawings are the oil and coolant dispensers, which are present for each fuel dispenser.

Q55. Would it be possible to get the Requirements Matrix document in Excel format for ease of use?

A55. Yes, we will provide an excel sheet with both matrixes included.

Q56. Will CATS supply weighted evaluation criteria?

A56. No

Q57. The RFP references completing the 'Company Background Response and Additional Questions' and identifies it is in the procurement portal. Please confirm where this doc is located? In RFP page 18 under required forms they have given "The "Company's Background Response & Additional Questions"(Questionnaire in Procurement Portal);". Can you please confirm if you are referring to document '10-J. Cloud Security Questionnaire'?

A57. Yes, we are referring to the Cloud Questionnaire.

Q58. Is there a budget assigned and approved for this project? If yes, can you please provide approximate numbers?

A58. CATS has an initial budget of 1.8 million for maintenance and materials management. Additional funds will be allocated for asset management, fluids management, yard management, and safety management software from capital and awarded grant funds.

Q59. Please confirm if the total bid amount is inclusive of services, licenses and maintenance.(DBE goal percentage)

A59. We desire all the above in the bid proposal. The funding currently allocated to the project does not include the annual maintenance costs but only implementation.

Q60. For consultants preparing a separate proposal offering professional services, should we include the entire software requirements matrix in our submission, or just Section 6?

A60. Just section 6. The professional services will be used to document the processes needed to implement the remainder of the matrix (translating business processes into software processes).

Q61. Missing RFP Sections – Did the City intentionally omit sections 2.2 and 3.4 from the requirements matrix? Is there any expectation that these sections are to be distributed or discussed later?

A61. There is not a 2.2 or 3.4 the jump in numbers was a typo.

Q62. In RFP section 4, Section F Required Forms, a DBE Program Form is listed. Is this form the same as FTA Contracts FORM A-List of Proposed Subcontractors that is posted on the portal?

A62. Yes, it is.

Q63. Addendum 1 states that, “in order to constitute a complete proposal/bid response you must acknowledge receipt of this addendum with the Addenda Receipt Confirmation Form in Section 6 of the RFP in your Proposal. Any Company not acknowledging receipt of an issued addendum may not be considered.” Is this requirement fulfilled through Acknowledgment item 2? If not, please provide this form.

A63. Yes, it is.

Q64. Concerning the Cloud Security Questionnaire, the first 14 questions are to be completed by CATS personnel and not the responder, correct?

CATS will complete the first 14 after we have short listed the vendors. Vendors must complete the rest to with their proposal to be considered.

A64. That is correct. Question 1-14 will be answered by CATS later. Please fill the rest of the questions out though based on your proposal.

Q65. Section 3.5: Is it correct to interpret that CATS desires that the entire project and system integration will occur in 12 months?

A65. The new system should be fully integrated within 12 months.

Q66. (Sec. 2.1) What is the planned response date for responses to questions submitted after the pre-proposal conference?

A66.

SEPTEMBER 2, 2023	<i>Submission of Written Questions After the Pre-Proposal Conference.</i> Questions are due by 4:00 p.m.
OCTOBER 19, 2023	<i>Proposal Submission.</i> Proposals are due by 2:00 p.m. via the Procurement Portal.
OCTOBER 19, 2023 – NOVEMBER 2, 2023	<i>Evaluation.</i> The Evaluation Committee will assess each Proposal and conduct evaluation activities with Companies.
JANUARY, 2023	<i>Contract Award by Council.</i>
FEB/MARCH, 2023	<i>Services commence.</i> Company begins providing the Services.

Q67. "Services commence. Company begins providing the Services." is mentioned as January 2023, we believe this is a typo. We are considering this as January 2024, hence the tentative Go Live date you are looking at is January 2025. Please confirm this understanding.

A67. This date is an estimate but yes, the date should say January 2024. FEB/March for the start of the contract. CATS is not the expert we will be looking for guidance from the perspective vendors. We would expect to go live within 12 months.

Q68. The requirements provided are at a very high level. We would recommend providing a firm quote for a discovery phase and a budgetary quote for the implementation phase and then after finalization of the requirement final firm quote will be provided - is this approach acceptable to you?

A68.No, CATS does not want this.

Q69. In the pricing worksheet AMS cost is not mentioned. Do we need to include the AMS cost as different line item or it can be merged with any other existing line item?

A69.This is at your discretion.

Q70. Can the vendors suggest changes to the standard contract terms ?

A70.Yes, that is part of the exceptions, per Step 4 on page 3, 1.6.15 and H. on page 23.

Q71. CATS has any budget restrictions?

A71. CATS has budget restrictions for all projects. The project will be implemented in phases and as funding becomes available. A roadmap will be created for future implementations will be created by CATS based on business need.

Q72. Will you release the attendance for the Pre-Proposal Meeting?

A72.Please see the vendors below:

NAME	COMPANY
Abigail Ketchum	Timmons
Abirami Sugunan	Infosys
Amal PRAKASH M	Hitachivantara
Andy Owens	Hanaengineers
Angelina Nicolella	IBM
Anthony Levy	Coderedbs
Blu Avo Group	Blu Avo Group
BUCKLEY Lea M	Hexagon
Chris Bassett	Assetworks
Chris Dull	Trmnet
Chris Ohm	Delasoft
Chuck Bandy	IBM
Ciara Cox	Coderedbs
Dan Anzil	Trapezgroup
Dean Stavrou	Itsdelivers
Dennis Dingler	Jfpetrogroup
Devesh Jain	Hitachivantara
Dheeraj Prasad	Hitachivantara
Dolly Bush	Stratumcp
Dulce Sanchez	21Tech
Ellery Blasch	Itsdelivers
Eric Jiang	Trapezgroup
Erin M	Axim
Erin McCormick	Erin McCormick

Freund, Jeff	Dtsgis
Gisele Marks	Cohesivegroup
Grant Youngblood	Hiperweb
Greg Hoile	Cohesivegroup
Howell, Adam	Atkinglobal
Jacqueline Tucker	Stratumcp
James Burson	Itsdelivers
Jamie Pohto	Cohesivegroup
Jean Smith	Trapezgroup
Jeff Yasinski	Cohesivegroup
Jeffrey Encada	Jeffrey Chebli
Jim Kiles	Kiles
John Elliott	Fleetwatch
Johnson, Marla	Eaest
Kalappa Karthik I A	Infosys
Kathleen Bailey	Itsdelivers
Keisha Lergie	Servicenow
Kelly Freels	Kci
Kevin Leck	Lumenorconsulting
Michael Runyon	Runyon
Nick Sueppel	Collectivedata
Peterson, Jennifer	Eaest
Ramon Rivera	Fleetwatch
Ray Friem	Coderedbs
Reid Yanchar	Trapezgroup
Ronald Humphrey	Coderedbs
Sabrina Blais	Trapezgroup
Scott Sugar	Lumenorconsulting
Shawn Hunt	Hanaengineers
Spencer Smith	Servicenow
Stephanie Robinson	Cohesivegroup
Tanner, Michelle	Atkinglobal
Taylor Dawson	21Tech
Tim Langer	Collectivedata
Travis Ritter	Cohesivegroup
Zach Bartlett	Interloc Solutions

In order to constitute a complete proposal/bid response you must acknowledge receipt of this addendum with the Addenda Receipt Confirmation Form in Section 6 of the RFP in your Proposal. ***Any Company not acknowledging receipt of an issued addendum may not be considered.***

In the event additional changes or clarifications to this RFP are warranted, all Companies are responsible for monitoring the City's [Contract Opportunities](#) site or www.ips.state.nc.us or for additional addenda.

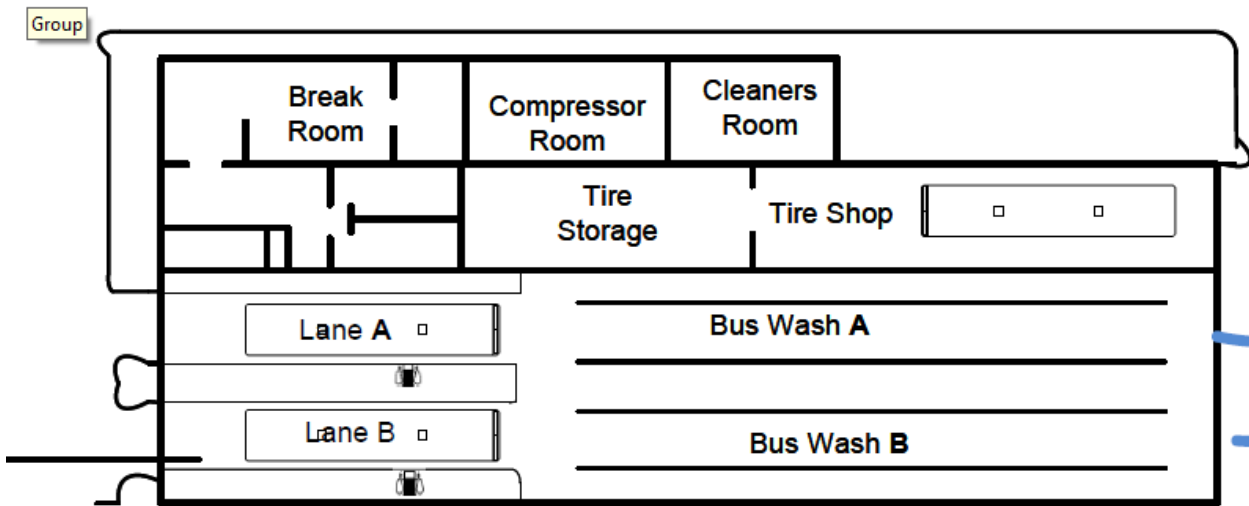
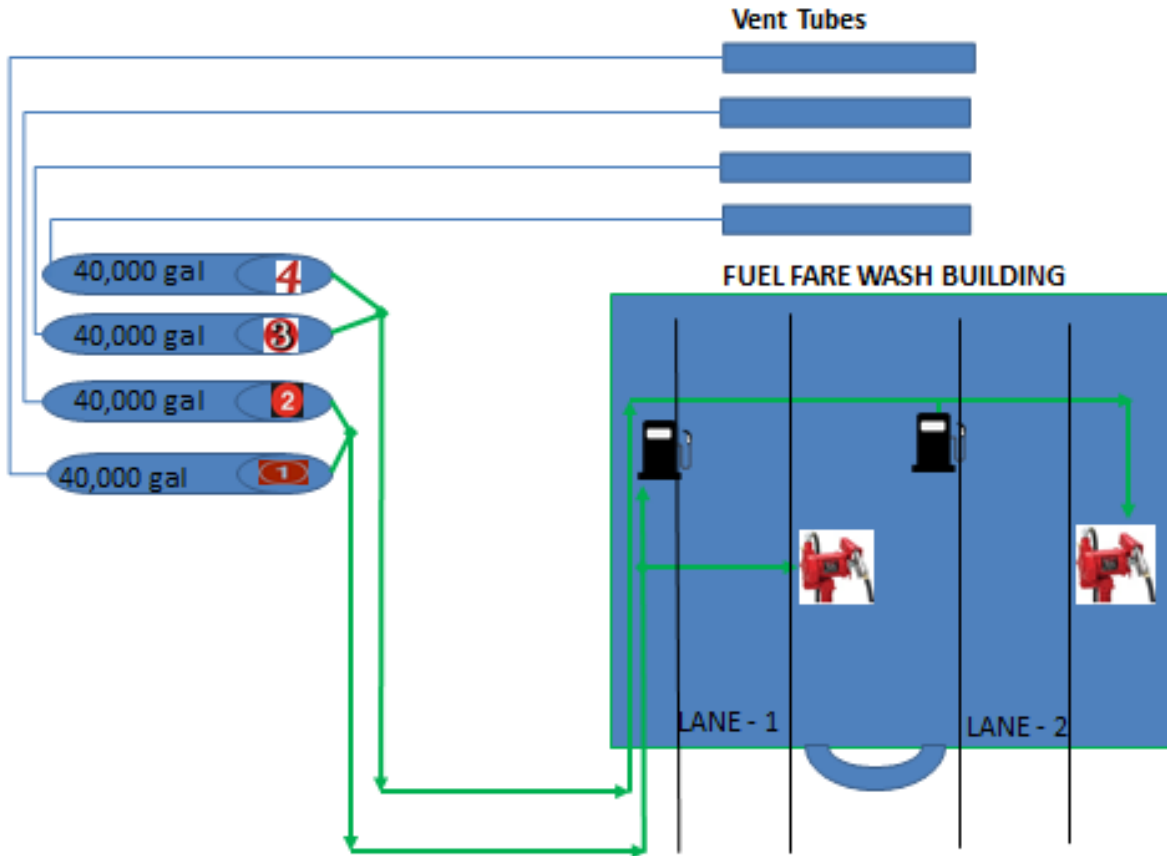
We appreciate your interest in doing business with the City and look forward to receiving a Proposal from your company

Sincerely,

John Larson
Sr. Procurement Officer

Exhibit A

Davidson



South Tryon Facility – Fuel System

We have (3) 40,000 gallon and (1) 10,000 gallon underground fuel tanks. Each tank has one 4 H.P. submerged pump inside of it. All four tanks are all plumbed together by a common pipe manifold (shown in red).

The system is designed so that any one of the (4) submersible pumps may run at anytime or any combination of them can run at the same time. Anytime a pump is running, the pipe manifold going to all the tanks and the fuel nozzles, will have pump pressure of (42 PSI) on the line.

