ADDENDUM NO. 1
November 16, 2015

To all Bidders on the Project Titled:

Bid# CL16-GN-0030, Tririga Work Order Implementation Services Project for the University of Massachusetts – Lowell

UNIVERSITY OF MASSACHUSETTS – Lowell
Purchasing Department
Wannalancit Business Center
600 Suffolk Street, Rm 415
Lowell, MA 01854

Reference RFP Documents dated November 9, 2015.

The attention of bidders submitting proposals for the above subject project is called to the following addendum to the specifications. The items set forth herein, whether of omission, addition, substitution, or clarifications are all to be included in and form part of the proposal submitted.

Questions and Answers:

1. Can a listing of the specific IBM TRIRIGA modules which the University is implementing be provided? We understand the focus of services is TRIRIGA Workplace Operations Manager, are the TRIRIGA Facility Condition Assessment, Request Central, Connector for Offline Forms, or others being implemented?

   Currently, DCAMM's implementation has focused on the Workplace Operations Manager and Request Central. The University is interested in considering the potential future implementation of other modules, in particular Space Inventory, Real Estate, and Key Management. Consideration of future modules will be limited, focusing on what additional configuration might be needed. There no schedule to implement other modules.

2. Has the University purchased the TRIRIGA Connector for Business Applications? This is generally required for integrations.

   The University has not purchased any TRIRIGA products directly. The University understands that DCAMM has access to the Connector for Business Applications. An important consideration for bidders, and for all of the questions and answers below, is that the University is working in close collaboration with DCAMM on all aspects of the TRIRIGA implementation.

3. We understand the requirement: "Capability to move open Work Orders from CAMIS to Tririga". Can an estimate be provided of the number of open work orders? What format will this data be provided in?
   The University has approximately 3,000 workorders, some of which are preventive maintenance items. Data will be provided in Excel. See answer to Question 4 below.

4. Does the University intend to configure and implement the Preventive Maintenance functionality in this phase? If no, is this a planned next phase?

   DCAMM and the University plan to implement Preventive Maintenance (PM) functionality. PM is an important issue for the University. The University currently uses workorders in the legacy system with parallel logging in Excel to overcome limitations of CAMIS. to handle PMs. The University has 180 active PM records and approximately 2,100 active equipment records. The University seeks strategic review and advice best practices for handling PMs in Tririga.

5. Does the University intend to manage inventory within TRIRIGA? If no, will an integration be required to another system for inventory management? Can details be provided of this system?

   The University does not currently intend to manage inventory within or TRIRIGA and no integration is currently planned. As stated in the RFP, the emphasis is on migrating the current process of entering, processing, and closing out workorders. The University seeks and expects strategic advice on what configuration decisions will either help or hinder future inventory management either within TRIRIGA or by integration with another system.

6. Can a listing be provided of the required reports the University anticipates from TRIRIGA?

   The University seeks flexibility to develop custom reports. Current reports are focused on managing workorders and workload, tracking backlog, tracking recurring problems by building and/or system, preventive maintenance, and budget planning. The University also creates and uses summary reports of buildings, equipment, fleet, and projects.

7. Will an integration be required to DCAMM or any other University systems? If yes, what data is being passed between systems?

   DCAMM is hosting the implementation. No system integrations are anticipated at this time. The University seeks and expects strategic advice on what configuration decisions will either help or hinder potential future system integrations.

8. We assume the floor plans are staying within the existing system – correct?
   Yes. The floor plans, and associated data, will remain in the University's existing system for the foreseeable future. Currently the University maintains floorplans in AutoCAD drawings, the space inventory is managed in a SQL database that is a home grown

database modeled after the FAMIS system. Data and geometry are updated in Autocad, the space inventory update process uses FMG Plus (by ACAD Plus Inc.). Square footage, FICM code/room use, and departmental occupancy are tracked via FMG Plus as attribute data in blocks. Once a building floorplan is prepared for update, the FMG Plus export process concurrently pushes the updates to the tables in the University SQL database as well as to the DCAMM CAMIS/FAMIS Oracle database (CAMIS is the DCAMM title for their FAMIS implementation). Within the University database, the records are deleted and then updated with the new records. Within DCAMM's Oracle database, the triggers perform an update or insert of data, nothing is ever deleted, only archived. Additionally, the only attributes being updated in CAMIS are the room number and square footage, not the additional attributes such as occupant or use. The University's in house space inventory will remain the system of record for those attributes. However the University seeks advice on what the future update process will look like with TRIRIGA. In the interim, DCAMM will be loading the existing spaces from CAMIS into TRIRIGA. The University is concerned given the rate of change and update occurring at the campus. The University has several new buildings under construction and, importantly, many spaces changing due to renovation. It is not clear what the options are for the update process.

The University seeks strategic advice on what configuration decisions will either help or hinder future addition Facilities Management (Space management) Module.

9. What is the platform and application versions that you currently/intend to deploy?

   DCAMM has just updated the platform to 3.4.2; the application version is 10.3.2

10. Is there a maximum page limit for the entire response or just items number 1 and 2 under section 6.2?
    As stated in item 8, the University requires concise proposals. While no hard limit for the other items will be enforced, the University expects:
    - 1 page for Item 3, Organization Chart, identifying all sub-consultants
    - 1-2 pages per person, up to 10 pages total for Item 4, Resumes of key personnel
    - 1 page for Item 5, Proposed schedule
    - 1 page for Item 6, Budget, with hours and costs assigned to the deliverables
    - 1 page for Item 7, Three references (contact information for each)

11. A stated desire is to be able to provide room updates via AutoCAD. Is there an intention to implement some portion of the Facilities Management (Space management) module and the TRIRIGA CAD Integrator?
    See answer to Question 8 above

12. Is the current SQL database tracking space integrated with AutoCAD today? ESRI?

    See answer to Question 8 above. There are no current plans to integrate TRIRIGA with Esri. The University has a separate process for conversion of the floorplans and space

data for use within Esri. The University is open to hearing how strategic decisions at this point may impact our ability to integrate TRIRIGA with our GIS system in the future.

13. It is stated that implementation has begun. Do you have an implementation plan that you can share?
    Conversations are ongoing with DCAMM. There is no implementation plan to share.

14. TRIRIGA has not typically been deployed in a multi-tenant environment. Has IBM provided technical guidance on architecture or other technical considerations? Has this been tested already or should it be included in our scope to design/test?

    IBM has not provided technical guidance on architecture or other technical considerations. Given DCAMM's role and responsibility for the Commonwealth's capital asset management and maintenance, they plan to implement TRIRIGA for all of their holdings, such as state office buildings, the UMass campuses, and courthouses. DCAMM has an internal team focused on implementation and rollout.

    The current model is that all users will share a single instance of TRIRIGA. Configuration will be based on a series of queries that filter out other campuses and entities. The University understands that updates and configurations must be done through DCAMM.

    DCAMM's current implementation model is a single tenant (DCAMM itself). The University seeks strategic advice on potential limitations of the current approach. Potential strategies, with design and testing, that address identified limitations, and that support the University doing its own updates, should be included in your scope. Each step (strategy, design, and testing) should have an associated cost/level of effort.

15. Is UML enabling some portion of end user population to enter work requests using the TRIRIGA Request Central module?

    Yes: the intent is that all Faculty and Staff are able to use ADFS 2.0 (SAML compliant) to log on to Request Central to submit a workorder. Conversations are ongoing with DCAMM on SSO and Just-in-time provisioning/dynamic user creation. DCAMM has indicated they have IBM resources to assist with both issues. Bulk load is **not** an option. The University understands that the current system uses Websphere to accept security tokens and pass them to TRIRIGA.

16. Do work orders include preventive maintenance tasks related to an asset management program? If so does the scope include migrating preventive maintenance schedules (PMs) and equipment asset data, and roughly how many assets and PMs?

    See answer to Question 4 above.

17. Can you provide an estimate of the number and roles of users who will use the TRIRIGA system (e.g., # managers, # maintenance supervisors, # maintenance technicians, # self-service requesters, etc.)?
    Approximate numbers:
    - Managers: 13
    - Supervisors: 14
    - Foreman: 7
    - Service Center 4 (core group managing workorders)
    - Tsongas/ICC 11 (semi-independent facilities)
    - Faculty/Staff Approximately 2,100

18. For the stated "Annual deferred maintenance reporting/requests" is UML anticipating using the TRIRIGA Facility Condition Assessment module?

    Use of the Facility Condition Assessment module is not anticipated at this point. The emphasis for this project will be replacing current University processes and understanding configuration options that may help or hinder adding future modules.

19. Will UMass Lowell be implementing their own instance of TRIRIGA or will you be working off DCAMM's instance of TRIRIGA?

    See answer to Question 14 above

20. Who will be responsible for configuration of TRIRIGA? Will the successful proponent also be expected to configure TRIRIGA? Will the proponent and UMass Lowell have exclusive access to configure TRIRIGA or will this also be shared with DCAMM?

    See answer to Question 14 above

21. Have requirements gathering sessions and design session taken place or is it the expectation that the successful proponent should account for this activity?

    As stated in the RFP, the emphasis is on migrating our current processes to TRIRIGA. As such, we have a solid baseline of requirements and general idea of design. Bidders should include a worksession to confirm these items as part of the kickoff/startup of the project. The University expects the consultant will provide strategic advice on the implications of the current requirements and design ideas.

22. What platform/app version of TRIRIGA is currently being implemented at DCAMM?

    See answer to Question 9 above

23. Is your Database server Oracle, MS SQL or DB2?

    Oracle

24. Does the current TRIRIGA implementation have all the necessary foundation data:

    a. Locations (Buildings, Structure, Linear Structure, Land, Floor and Spaces)
    b. Organization (UMASS Organization Structure, Shops, Vendors, etc.)
    c. Geography (Country, State, County, City, etc.)
    d. Assets (Building Equipment, Tools, etc.)
    e. People (Employees, Contractors, External Contacts, etc.)

    If not, what is the source of the data and will any integration be required to obtain it?

    DCAMM has done an initial load, based on export data from the University, of Locations, Organization, Geography, and Assets. Confirmation of those items, and loading of People will be included in this scope of services.

25. What version of AutoCAD is currently used at the University?
    Release 2013

26. Does the project involve both Demand or Corrective Work Orders and Preventive Maintenance Work Orders? If PM's are included, how are the currently maintained?
    The project involves both. See answer to Question 4 above.

27. How many buildings & floors are currently managed by the University and need to be included in the TRIRIGA system?
    The University occupies 53 buildings, with 260 floors and 9,845 rooms. An initial load of all buildings and rooms has already been done – see answer to question 24 above.

28. Do you use a 'train the trainer' approach? How many people will need to be trained on the new system?

    The University expects the successful consultant team to train approximately 30 people as well as up to 3 open sessions for Faculty/Staff (please identify a separate cost for the open sessions). See answer to Question 17

29. Does the University currently use any software for Space Management? If yes, please give brief description of the software and version currently used.
    See answer to Question 8 above.

30. Do you have electronic CAD drawings for all your As-Built floor plans?
    See answers to Question 8 above and 31 and 32 below.

31. Do you have a drawing library or inventory of all your drawings?

    a. Who owns your drawings? (University or A/E firm?)
    b. What is the ratio of electronic drawings vs. hardcopy (paper) drawings?

    Can we assume the University will perform all CAD drawing updates?
    Yes: the University currently updates floor plans on a quarterly basis and will continue to handle updates. The University owns the drawings, which have a basic level of architectural detail, polylines for all spaces, and attribute data as described in the answer to Question 8 above. The University also maintains a library/archives of all building and campus-related drawings. All historic drawings have been scanned.

32. Are the CAD drawings completed to scale?
    Accurate CAD drawings, with basic architectural detail and all rooms polylined, are completed to scale and are updated on a quarterly basis. See answer to Question 8 above.

33. Are the CAD drawings polylined for Sq. ft. Calculations?
    See answers to Questions 8 and 32 above.

    a. How is this information for square footage stored?
    b. Is it attached to the drawing (attributes) or in a connected database?
    c. What is your polylining process and quality checking process?

34. Do the CAD drawings adhere to a common CAD Standards?
    Yes.

35. Do you know any integration that is needed with other applications? Can you identify the applications and briefly explain the functionality?

    The update process from the University's Autocad floor plans to Tririga will be important. Updates will occur frequently. No other integrations are currently planned. However, the University seeks strategic advice on potential future integrations. See answers to Question 7 and 8 above.

36. Does the current CAMIS Work Order Management system completely shut down after TRIRIGA roll-out or do you envision certain University locations still using it?
    At some point, the current system will completely shut down. The University does not envision any continued use of CAMIS. DCAMM has indicated that DCAMM and the University will have access to the legacy data indefinitely.

37. Do you have data that requires security restrictions? If so what are the levels of restriction, and who can access each of the restricted levels?

The University does not see any need for security restrictions beyond the basic definition of roles (eg submit, process, assign, edit, close out work orders)

38. Does the university expect the project to be performed onsite or can it be remote?
    The University expects up to 3 on site meetings; bidders should include, in their approach, their strategy and reasons for onsite versus remote meetings and work. Bidders can assume remote access to the test and training environments. Configurations will be done through, and in collaboration, with DCAMM.

39. Does the current DCAMM implementation have separate Development, Testing and Production environments?

    DCAMM has five environments: production, training, testing, development, and sandbox.

40. Does the University plan to use Inventory Management as part of the Work Order Management implementation? Do you plan to supply Asset parts from stock or supplier for Work Order Management?
    See answer to Question 5 above

41. Are they using Integrated Windows Authentication in IIS for Single Sign-On?
    Single sign-in will be done with ADFS 2.0 (SAML compliant) not Integrated Windows Authentication. See answer to Question 15

42. You would like the proposal to take into account the University calendar- is staff off when students have a break, or can work and meetings be completed during those times?
    Generally speaking, staff works when students are on break. The University has partial closing between Christmas and New Year's, during which most staff will not be working.

43. Will UMass Lowell permit monthly billing using contractor's 4-4-5 business calendar?
    Details of billing will be worked out with the successful proponent.

44. Please confirm the following deliverables are to be used as billing milestones:
    a. Weekly phone check-ins with core UML team
    b. Monthly phone/web check-ins with UML and DCAMM team
    c. One (1) conference call/web-based meeting with UMass Amherst and UML team
    d. Up to three (3) on site meetings,
    e. Kick-off
    f. Draft recommendations
    g. Implementation assistance
    h. Brief meeting notes with focus on Action Items/responsibilities
    i. Implementation schedule, with milestones and dependencies
    j. Summary of existing conditions, UML Space Inventory and DCAMM Tririga: 5-8 page technical memo
    k. Summary of recommendations: 8-10 page technical memo

The University will accept monthly billing or billing milestones. The details of billing will be worked out with the successful proponent.

All other of the portions of the Contract Documents remain **unchanged.**

--End of Addendum No. 1--