LOS ANGELES COMMUNITY COLLEGE DISTRICT

IT Organization, Staff & Process Evaluation

DATE

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I.   BID REQUIREMENTS

A.   Base Bid – IT Organization and Staff, Process and Security Evaluation

1.   Bidders shall submit the following information with the bids in order to allow LACCD to make an objective value-based decision regarding the award of this work. Accordingly, each Bidder shall, as a part of its Bid Response:

a)   Submit a Statement of Compliance confirming that the submitted Bid conforms to the requirements laid out in this Specification.

b)   Submit Bidder's company literature describing the Bidder's qualifications, experience and approach to providing the systems, services, and recommendations required for the Evaluation.

c)   Submit a list of relevant project experience and client references describing a minimum of three (3) similar projects successfully undertaken and completed by the Bidder within the last three (3) years. The project experience submitted shall clearly demonstrate that the Consultant shall have extensive experience working in complex environments with overlapping priorities and underlying politics. Priority will be given to respondents who demonstrate prior project experience within a high education setting and/or project experience involving clients with multiple locations. The District reserves the right to contact any of the completed projects presented by the Bidder. The following information shall be provided regarding each project presented:

(1)   Project name and location

(2)   Client/Owner reference, including contact name and telephone number

(3)   Description of the project, summary of the scope and narrative explaining how each reference project is similar in size and scope to this project.

d)   Submit resumes for key personnel proposed for the Project. Resumes shall identify each individual's technical qualifications, years with the firm and specific project experience.

e)   Submit a list of any anticipated work on the Project that the Bidder may subcontract. For all subcontracted work, Bidder shall describe the work and identify the proposed subcontractor. Bidder shall provide appropriate qualification information pertaining to the specific portion each subcontracting firm is being contracted for.

f)   Submit a detailed demonstration / walk-through of the structured process that the Bidder intends to employ at each location.

g)   Submit confirmation of the industry standards, benchmarks and baselines (i.e., ITIL, COBIT, ISO/IEC, etc.) that the Bidder intends to use to assess each of the locations.

h)   Provide sample deliverables, either from the Bidder's previous projects (redacted as necessary) or in template form, to establish expectations for the content and format of deliverables.

i) Provide an anticipated timeline / schedule for the evaluation broken down into individual parts / activities, based on the described priorities and including recommendations on organizational structure and staffing, business processes, secondary site, and business and continuity and disaster recovery.

j) Provide a list of the information, support from District staff, and other resources that the Bidder will require the District to furnish upon contract agreement in order to facilitate the evaluation.

II.   LACCD INFORMATION TECHNOLOGY STAFF & PROCESS EVALUATION

A.   Overview

1.   The Los Angeles Community College District is the largest community college district in the nation. Consisting of nine colleges, the District serves more than 200,000 students annually. District technology consists of two types of systems, each with its own focus and infrastructure needs. The administrative side of district technology includes the enterprise systems that support districtwide functions. The core business systems currently in place are SAP (human resources, contracts and purchasing, and payroll) and Oracle PoepleSoft (Student Information System). The academic side of district technology focus on instructional and student support and are usually supported at the college level. Examples include, Canvas (course management system), employee email, and campus labs. Successful firms will be provided with an inventory of applications for use in the assessment process.

2.

3.   The purpose of this scope of work is for the Consultant to perform an evaluation of Information Technology (IT) Architecture, Infrastructure, and Operations at each of the twelve Los Angeles Community College District (LACCD or the District) locations in order to evaluate the viability and capacity of existing IT staffing and organizational structure, IT processes, and cyber security to support the current and anticipated future IT environments throughout the District. Integrated into this evaluation will be the development of recommendations for appropriate technology standards and business processes for use by all District and college sites. Recommendations for an integrated approach for IT architecture, infrastructure, and cyber security will also require specific guidance on industry-standard Business Continuity and Disaster Recovery (BCDR) solutions and the manner in which this fits within the overall recommendation for improving the IT organizational structure and processes. Recommendations will need to present a model for performance or product standards as it relates to security and overall data center operations. The District will provide a list of all mission critical academic and administrative application, and enterprise systems.

4.   The District has conducted and will make available results from recent assessments of the IT infrastructure and equipment, and cyber security penetration testing. Specifically, the assessments included:
    1. Baseline Infrastructure (Networking and Cybersecurity, Wireless, Voice, Servers, Storage, Backup)
    2. Safety and Emergency Response (Video Surveillance, Card Access, Mass Notification, Emergency Phones)

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3. Instructional Systems (Smart Classroom, AV Asset Management, Distance Education)
4. Cyber security (Penetration testing, network vulnerability assessment)

Respondents are expected to use existing reports without duplication of the work conducted in these assessments. The initial recommendations from these assessments will need to be expanded upon with specific guidance for a successful business continuity and cyber security model.

5. The twelve LACCD locations consist of the following (more information regarding each location is available at(https://www.laccd.edu/About/Pages/Our-Colleges.aspx). Additional information on the size and scope of technology infrastructure is provided in appendix A

   a) Los Angeles City College

   b) East Los Angeles College ex

      (1) South Gate Educational Center

   c) Los Angeles Harbor College

   d) Los Angeles Mission College

   e) Los Angeles Pierce College

   f) Los Angeles Southwest College

   g) Los Angeles Trade-Tech College

   h) Los Angeles Valley College

   i) West Los Angeles College

   j) LACCD Educational Services Center / District Headquarters (located in downtown Los Angeles)

      (1) Van De Kamp Center

6. The evaluation shall assess the current state of IT Operations at each location, compare / contrast this current state with best practices employed in the educational environment and other standardized IT metrics, and develop a series of recommendations and roadmaps to guide LACCD in executing the recommendations. Accordingly, the evaluation shall consist of the following Consultant-performed activities:

   a) Determination of current District organizational drivers, guiding principles and business strategies with respect to IT Operations.

   b) Review and assessment of current systems management, documentation, change management and processes at each location.

   c) Review and assessment of the centralized and decentralized organizational structure used by the District and its colleges.

   d) Review and assessment of IT staff organization and responsibilities at each location and the manner in which the individual structures interact and respond to one another.

   e) .

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f) Development of a series of recommendations regarding data storage, back-up systems and the use of additional data centers for business continuity.

g) Recommendation for performance and/or product standards used in the implementation of (f).

h) Development of an IT Staffing model that maps current staffing to operational responsibilities and project demands and makes recommendations regarding IT Staffing at each location based on the findings of the assessment and analysis of the survey.

i) Work collaboratively with LACCD to develop road-maps to guide LACCD in executing these recommendations at each location, with set timelines and priority given to those actions required to improve security.

j) Documentation of findings and presentation of reporting documents, including a presentation to key stakeholders, a District-wide Executive Summary, assessments for each individual College and an assessment for the District's Educational Services Center.

7. This evaluation shall focus on IT Staffing and IT Processes at LACCD. Accordingly, it <u>will not include</u> the assessment and evaluation of the following systems, except where these systems have a direct impact on IT Staffing. IT Processes or business and continuity and disaster recovery. The evaluation of these systems are included in the previous assessments :

a) Hardware systems, including servers, storage and other computing resources (Provided in previous assessment and will be made available to the selected Bidder).

b) Network systems, including WAN (Wide Area Network), LAN (Local Area Network) and wireless networking components (Provided in previous assessment and will be made available to the selected Bidder).

c) Classroom, Audio Visual, Distance Learning and Educational technologies (Provided in previous assessment and will be made available to the selected Bidder).

d) Physical Security, Card Access, and Video Surveillance systems (Provided in previous assessment and will be made available to the selected Bidder).

e) End User devices and peripherals (Provided in previous assessment and will be made available to the selected Bidder).

f) Applications, including ERP and other administrative server-based applications and desktop applications.

g) Telephone systems, including VoIP (Voice over Internet Protocol), TDM (Time Division Multiplexing), analog and cellular services (Provided in previous assessment and will be made available to the selected Bidder).

h) Other low voltage systems, including physical security, BMS (Building Management System) and EMS (Energy Management System), clocks, and overhead paging / public address.

B. Confirmation of Business and Organization Drivers

1. The Consultant shall meet with LACCD to determine and evaluate the District's overall organizational drivers, guiding principles and business strategies with regard to IT services and staffing and to confirm the overall goals of the evaluation. The District will make

available all requested personnel for the Bidder to effectively execute plan and deliver all committed deliverables.

2. The District anticipates that the following factors will be incorporated into the recommendations made at the end of the evaluation but also encourages the Consultant to suggest additional factors for consideration based on its experience and the outcome of these meetings:

   a) How IT Operations can enable strategies for growth/retention of students, faculty and staff.

   b) How IT Operations can position itself to respond to constantly evolving teaching pedagogies.

   c) How IT Operations can anticipate, plan for and respond to the increasing IT demands of its customer base.

   d) How IT Operations can encourage, support and contribute to an improvement in learning outcomes.

   e) How IT Operations can protect student and employee information and provide a seamless and uninterrupted service to students and employees.

   f) How IT Operations can collaborate across the District to provide a higher standard of service.

3. The Consultant shall meet with a representative group created by LACCD to present its anticipated approach for assessing the existing IT services and staffing to LACCD for review and approval. This shall include:

   a) A detailed demonstration / walk-through of the structured process that the Consultant will employ at each location.

   b) Confirmation of the industry standards, benchmarks and baselines (i.e., ITIL, COBIT, ISO/IEC, etc.) that the Consultant will use to assess each of the locations.

   c) Presentation of sample deliverables for each major activity, either from the Consultant's previous projects (redacted as necessary) or in template form, to establish expectations for the content and format of deliverables.

   d) The anticipated timeline / schedule for the evaluation broken down into individual parts / activities.

   e) Information, support from District staff, and other resources that the Consultant will require the District to furnish in order to facilitate the evaluation.

4. The Consultant shall meet with the District's Personnel Commission to present the Consultant's proposed process, gather input from the Personnel Commission and ensure that the goals of evaluation are understood by and aligned with the Personnel Commission.

C. Information Gathering

1. LACCD will work with the Consultant so that they shall meet with District or College staff at each location. The Consultant shall interview IT staff regarding services and operations at each location. The Consultant shall interview other personnel (staff, faculty, students, etc.) individually or in groups, in consultation with the District, at each location to gain an understanding of the overall operation and requirements of the location and gain feedback on the perception of IT operations and staffing at the location. It is anticipated that the same set of questions will be asked to staff at each location. Consultants may present any model believed to be expedient and effective for arranging these meetings, including

combing groups as deemed fit by the consultants. Consultants are expected to follow-up with these groups to gain additional information as deemed necessary in the analysis.

2. The Consultant shall provide the District with an information / documentation request that lists what it needs to perform its assessment of the IT Operations. This request shall be given with a minimum of two weeks' notice. The District will make a good faith effort to provide the information if it exists, and may supplement the requested documents with other information it feels may be applicable to the project. The Consultant-provided list shall have sufficient details to allow the District to furnish the information (i.e., it shall not be a request for "all applicable information".)

D. Assessment of IT Organizational Structure

1. The District currently operates with a centralized IT staff responsible for enterprise systems (Student Information System, Employee Systems, and Financial Systems), a district-wide data center and the internal operations of the District Office. Each college has an IT manager responsible for college systems, college data centers, college operations and academic computing. (Appendix B: District IT Org Chart)

2. Based on the information obtained from the documentation and the interviews, the Consultant shall review and assess existing organizational structure and make recommendations for changes, if needed. The evaluation should focus on ways to improve the security of the District and college technology systems and data, improve operations and enhance collaborative service across the district by effectively utilizing district resources and staffing.

3. Recommendations should align with IT standards and recommendations from industry experts and law enforcement, such as the FBI, who provide recommendations related to minimizing the risk of cyber intrusion and hacking.

E. Assessment of IT Staffing

1. The Consultant shall determine current state roles/responsibilities for IT staffing, including:

   a) Current organizational structure of the IT Staff at each location, and reporting structure to District leadership.

   b) Skill sets and associated responsibility maps for each member of the IT staff at each location.

   c) Support capabilities and processes for trouble tickets and service requests.

   d) Support capabilities for project requirements and prioritization.

   e) IT staff to workload ratios

2. As a part of this assessment, the Consultant shall provide

   a) An organization chart for required IT Staffing at each location identifying both current and needed positions.

   b) An organization chart indicating reporting lines at each of the twelve locations and the operational relationship to up to District level leadership.

3. Based on the information obtained from the documentation and the interviews, the Consultant shall provide an assessment for how well the current staffing at each location matches with the requirements of each location and of the District as a whole, and identify

shortfalls, inconsistencies and opportunities for re-organization in IT Staffing.

4. The Consultant shall also provide an assessment of how the current IT Staffing at each location can support the best practices and recommendations produced as a part of the IT Processes assessment for each location and shall identify opportunities for potential improvements to the organizational structure in IT Staffing in the context of those recommendations. Staffing recommendations should consider the reality of budget constraints and indicate ways to improve collaboration and minimize costs when appropriate and without interfering with the core objective of improved services. Current budgets will be provided to the successful bidder.

5. The Consultant shall also provide a training plan that will include recommendations for updating the current IT Staff's skillsets to align each member of staff with the best practices and recommendations made in the evaluation.

F. Assessment of IT Processes

1. Based on the information obtained from the documentation and the interviews, the Consultant shall review and assess existing processes, workflow and operational documentation for each location. The Consultant shall assess current tools, technologies and methodologies utilized by IT staff to perform their duties at each location.

2. Based on the information obtained from the documentation and the interviews, the Consultant shall assess operational processes at each location, including but not limited to the following subcomponents:

   a) System Management

   b) Cyber security

   c) Support tools, processes and metrics

   d) Monitoring tools and capabilities

   e) Change Management Processes

   f) Service Catalog

3. Based on the information obtained from the documentation and the interviews, the Consultant shall evaluate and report on current IT technology standards (based on the District's standards and industry best practices), in the context of IT Staffing and IT Processes, and adherence to these standards at each location

4. Based on the information obtained from the documentation and the interviews, the Consultant shall identify and report on individuals and/or departments installing, operating and supporting IT systems that are outside of / separate from the District-supported IT systems at each location.

5. Based on the information obtained from the documentation and the interviews, the Consultant shall assess the current IT Communications Strategy at each location, including but not limited to:

   a) How are priorities communicated within the IT Team and to external customers?

   b) How are on-going improvements communicated within the IT Team and to external customers?

   c) How are on-going challenges communicated within the IT Team and to external customers?

6. Based on the information obtained from the documentation and the interviews, the

Consultant shall evaluate Program/Project Management at each location, including but not limited to:

    a)   How is the IT project portfolio managed and reported?

    b)   How are project budgets determined and approved? How are these budgets monitored during the project and evaluated at the end of the project?

    c)   How are project schedules determined and approved? How are these schedules monitored during the project and evaluated at the end of the project?

    d)   How are projects assigned to team members?

    e)   What project metrics are reported and how are they reported?

    f)   How are district-wide resources used to assist in the completion of tasks?

7. The Consultant shall document the risks and issues it discovers during its evaluation of IT Operations at each location. Risks and issues shall be identified as District-wide or specific location(s). The Consultant shall provide a sortable Risks and Issues List (spreadsheet or equivalent; format to be reviewed and approved by the District) which clearly includes the following:

    a)   The scope of the risk or issue; District-wide or specific location(s).

    b)   The risk or issue type, based on the industry best practices, standards and guidelines being used for this assessment.

    c)   A clear, brief description of the risk or issue.

    d)   The impact of the risk or issue on the District or location(s).

    e)   A recommendation (or recommendations) for addressing the risk or issue based on industry best practices and similar metrics.

    f)   An opinion on the impact to the District if the risk or issue is not addressed, ranked as High, Medium or Low, based on metrics to be agreed with the District.

    g)   An opinion on the cost of addressing the risk or issue, ranked as High, Medium or Low, based on metrics to be agreed with the District.

    h)   An opinion on the priority of the risks or issues based on the impact of the issue on the District's IT Operations, ranked as High, Medium or Low, based on metrics to be agreed with the District.

8. The consultant shall review the existing District Board Rule and Administrative Regulations regarding IT make recommendations as needed to revise, add or delete policies to match industry standard and align with other recommendations developed in these assessments.

G.   Assessment of Cyber Security and Business Continuity

1. Based on interviews, documentation and existing technology assessments, the consultant will assess the current planned strategies and refine these strategies to include specific directions and define the required technology to implement these strategies through performance or product standards.

2. The District currently has different processes for the back-up and storage of data. Each site is in the process of implementing a standard on-site segregated back-up. The assessment must include the need for a secondary back-up storage site on district property and specify the best location for this site based on industry standards and existing infrastructure. The assessment must include a review of the previous assessments recommendation to have offsite back-up systems and recommend a specific strategy for off-site storage through cloud,

tape or other industry standard. This strategy should consider cost, security and the ability to implement a restoration strategy that would minimize critical system downtime in the event of an emergency.

3. Based on interviews, documentation and existing technology assessments, the consultant will assess the need for a secondary data center for enterprise systems, district and/or college systems. The assessment should consider various industry strategies including the use of cold and warm sites and make recommendations that fit with the District operational goals and the need for student and employee access to critical systems.

4. The District has an existing plan to upgrade and standardize servers across all sites to improve operations and security. The assessment should include a review of this plan and recommendations for performance or product standards for servers and firewalls that would be necessary to implement recommendations regarding security and business continuity.

H.   Recommendations

1. The Consultant shall provide an assessment of the maturity level of each of the processes reviewed during the assessment phase using the ITIL Process Maturity Model or equivalent framework as approved by the District. The Consultant shall provide an assessment for each location and an overall summary assessment of the District as a whole.

2. Based on the staffing and organizational structure assessment the consultant will provide recommendations for the following:

    a) An improved organizational and reporting structure (as deemed necessary)

    b) An improved staffing model for all sites

    c) Additional staffing as required to fulfill the improvements recommended in this assessment and to maintain system security

    d) A training plan to maintain the industry standard knowledge and skills of all IT personnel.

3. Based on the Cyber Security and Business Continuity assessment the consultant will provide the following recommendations:

    a) A model for a secondary back-up site ~~on property~~, including a proposed location of the back-up site (as deemed necessary by the assessment).

    b) A model of off-site back-up, including the specific technology or model to be used

    c) A performance or product standard.

4. Based on the process-related issues identified during the assessment phase, the Consultant shall provide a series of recommendations that address the risks and issues for LACCD to implement in the short-term. Recommendations shall be focused on the activities that will provide the highest value to the District. They shall be based on assessment of the issues with the highest assessed priority and risk to the District and location(s) and shall be reviewed and approved by the District. A clear, succinct rationale shall be provided by the Consultant to support each recommendation.

5. Based on the risks and issues identified during the assessment phase, the Consultant shall provide a series of recommendations that LACCD should implement in the short-term. Recommendations shall be focused on the activities that will provide the highest value to the District. They shall be based on assessment of the issues with the highest assessed priority and risk to the District and location(s) and shall be reviewed and approved by the District. A clear, succinct rationale shall be provided by the Consultant to support each

recommendation. The Consultant shall provide updated proposed IT organizational structure charts, workflow diagrams, narrative descriptions and other documentation to document and support each recommendation.

I.   Roadmap of Recommendations

1.   The Consultant shall provide a phased roadmap documenting its proposed recommendations for improving IT Processes and Staffing for each location. The roadmap shall balance risk, cost and value in assessing the various recommendations and shall take into account that some actions may be required before others can be started. The roadmap shall including the recommendation, a brief description of the required action and an estimated duration for the activity, as well as the dependencies to complete those recommendations. The recommendation shall align with the proposed Strategic Execution Plan for Measure J projects, as appropriate. The roadmap shall address recommendations in the following timeframes:

a)   The next six months

b)   Six to twelve months

c)   Beyond twelve months

J.   Documentation of Findings

1.   Documentation

a)   The Consultant shall provide the following documentation for District review and approval:

(1)   An overall report of the IT Operations Evaluation project, which shall include but not be limited to:

(a)   Overview of the Goals of the Assessment

(b)   Outline of the approach used

(c)   Review of findings

(d)   Survey Highlights

(e)   Presentation of Recommendations and Roadmap

(f)   Conclusions and Recommended Next Steps

(2)   An Executive Summary version of the report containing the major highlights of the report.

(3)   A District-wide Matrix comparing and contrasting the 10 locations against the established baseline for each of the assessment factors. (This matrix can be included in the report but shall also function as a standalone document.)

(4)   A presentation to key LACCD stakeholders (including the Personnel Commission) at a District location where the assessment and recommendations are presented. The Consultant shall arrange to record the presentation (including questions/answers and discussion) for subsequent viewing by LACCD stakeholders unable to attend the presentation in person.

b) The Consultant shall provide all documentation (including all reports, presentations, supporting information, etc.) in both electronic and hard copy formats. Reports and presentations shall be provided in both native file format (i.e., MS Word for Word documents, MS PowerPoint for PowerPoint documents, etc.) and pdf formats. Given the inclusion of cyber security and other areas of technology risk, all materials will be deemed confidential and shall not be shared with any internal or external entity without the expressed consent of the District.

K. Project Management

1. A minimum of five working days before each meeting and interview, the Consultant shall provide an agenda listing the topics for discussion and including all attachments and supporting documentation to the District for review and approval. On receipt of the District's comments, the Consultant shall update the documents accordingly and issue them as a final version.

L. District Priorities

1. The District views this assessment as essential and urgent to the success of the organization. To assist in developing the timeline for the proposal, the following information is provided:

a) The District has approved a retirement incentive. In December 2017, the ESC will lose approximately 25% of its IT staff and will require guidance from the IT staffing section of this assessment to determine the best manner in which to proceed with hiring.

b) The District will be purchasing servers for all colleges in Spring 2018 and will require performance and/or product standards and the business and continuity and disaster recovery recommendations

M. Confidentiality and Information Security

1. All information provided to the Consultant or developed during its evaluation shall be treated as confidential and shall not be shared with other District staff or outside of the Consultant's team.

2. The Consultant shall store all information (both hardcopy and electronic) with the same level of care as it stores its own company confidential information. The District reserves the right to audit the Consultant at any time to verify its information is held securely. The Consultant shall notify the District within one working day should it suffer a breach (or a suspected breach) of its system.

3. Each member of the Consultant team shall be required to sign a Non-Disclosure Agreement (NDA) furnished by the District. Each member of the Consultant team shall also be required to submit to a District background check at the discretion of the District.

N. Subsequent Work

1. The Consultant or Consulting Firm that performs this evaluation will be prohibited from any of the subsequent scopes of work that follow-on from the recommendations made in the evaluation except as approved through a competitive and open RFP process.