

Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Julia H. Cooper
Harry Freitas

SUBJECT: SEE BELOW

DATE: September 15, 2016

Approved

D. DSL

Date

9/20/16

INFORMATION

SUBJECT: ACTIONS RELATED TO THE REQUEST FOR PROPOSAL FOR THE INTEGRATED PERMITTING SYSTEM

On March 1, 2016, the City Council (item 3.4) approved staff's recommendation to negotiate and execute an agreement with CSDC for the purchase of an Integrated Permitting System and other related recommendations. The purpose of this information memorandum is to provide additional information about the final agreement and the permitting project as directed by the Mayor and Council at the aforementioned Council meeting.

1. *Provide an Information Memorandum to Council prior to the execution of the agreement with a 1) detailed scope of work, 2) deliverables and 3) performance metrics.*

The final agreement with CSDC is included as a separate attachment with this memorandum.

- The detailed scope of work may be found in Exhibit A to the Agreement;
 - The schedule of deliverables may be found in Appendix A.4 – Project Schedule of Exhibit A, to the Agreement;
 - Performance metrics are included in Section 3.1 of Exhibit A, and Appendix A.9 Service Catalogue & Service Descriptions (Section 3.5 Service Operation, and Section 6.4 Service Levels) of the Agreement.
2. *As current processes become digitized and available online, what is the strategy to inform and educate customers of these online tools? What tools and programs will be developed to train the public on how to use the tools? How will we work with customers to develop a user-centered design?*

Existing and new communication channels will be used to inform Permit Center customers of changes to and use of the new online tools are summarized as follows:

2.A. Publicizing Availability of the Upgraded Permits Portal

- Communication channels
 - PBCE website and www.sjpermits.org: visitors to the PBCE website and existing online portal already encounter procedural information for the portal. This information will be updated to describe the upgraded system.
 - Permit Center phone (408-535-3555): staff will be trained to explain to callers to the Permit Center of availability and procedures for the upgraded online portal.
 - Permit Center visitors; Customers interactions: the Permit Center staff will explain and provide handouts on procedures for the upgraded online portal.
 - PBCE is considering a Facebook page devoted to plans, permits and inspection information in FY2016-17: staff anticipate this becoming a popular 2-way communication channel for providing new information and answering public questions about the processes for planning, permitting and inspections. Discussions will include the upgraded online portal.
- Publicity
 - Media coverage: The media will be invited to explore and report on the ease and features of the upgraded permits portal.
 - Next-door posts: News of the upgraded portal will be released through neighborhood e-lists via Nextdoor.
 - Councilmember newsletters: Announcements of the availability of the upgraded permits portal will be made in these newsletters.
 - Permit Center postings: Contractors, homeowners, designers and others who visit the Permit Center will see fliers and posters announcing the new portal.

2.B. Helping Customers Learn to Use the Upgraded Permits Portal

- The current online permits portal, www.sjpermits.org, is a self-guided system equipped with instructional messages. Similarly, the upgraded portal will be designed with even more attention to ease and navigation in order for a range of types of customers to have success with the online permitting system.
- A tutorial will be developed and posted at the PBCE website.
- Staff will be trained to explain to callers and visitors to the Permit Center procedures for the upgraded online portal.

2.C. User-Centered Design

- City staff and the City's Project Manager will bring in types of customers (homeowner, contractor, designer) to test and provided feedback on the upgraded portal at various junctures (to be determined).
- City staff will benchmark existing deployments of the AMANDA 7 system for examples of successful customer-centric designs, and to also learn lessons from these agencies of what is working well and what could be improved.

3. *How will this project integrate with other large scale IT projects in the City?*

3.A. Customer Relationship Management / Service Request Management ("CRM/SRM")

There is a current RFP for a CRM/SRM system. One of the goals for that system is to provide a unified view of a constituent's interaction with City Hall and allow City staff to see, for example, whether the issuance of an off-sale alcohol permit at the business has resulted in increased crime, code enforcement activity, or graffiti complaints nearby. What is the process for working with IT to map out these processes to integrate with the CRM/SRM?

The Information Technology Department ("ITD") and IT Staff from other City departments will work together to map out integration processes with CRM/SRM (or any other large scale IT project in the city) as summarized below:

- Planning (currently in progress)
 - Documentation of Development Services current and future Application Landscapes.
 - Research integration platforms that will support Application Integration, API Management, Business Process Management, Master Data Management and Enterprise Messaging.
- Integration Platform
 - Development Services IT staff will work with ITD to evaluate, select, and deploy a sensible integration platform before the Design phases of these two projects.
- Compare

During the project Requirements phases, the Permitting System Project Team shall meet with CRM/SRM project team and compare Development Services Application Landscape with ITD's Application Landscape and:

- Identify overlapping transactional data.
- Identify overlapping features and functionalities.
- Identify overlapping business processes.
- Identify areas (data, features, functionalities, business processes) that require optimizations, consolidations, modernization, and integration.

- Define a System of Record (Master Data) for overlapping data and business processes: Master data management has the objective of providing processes for collecting, aggregating, matching, consolidating, quality-assuring, persisting and distributing such data throughout an organization to ensure consistency and control in the ongoing maintenance and application use of this information.

3.B. HR/PAYROLL/BUDGETING

Will there be seamless communication with the new budgeting system to ensure that revenues can be readily known, and projections easily made for staffing decisions?

Seamless communication with the new budgeting system will be ensured by:

- Following the same integration processes detailed above for CRM/SRM.
- Running a real time and roll up (day, week, month, year) reporting from the budgeting system dashboard:
 - PBCE and Finance staff will ensure Development Services data required for revenue analysis is readily available and current.
 - Historical revenue, workload and staffing level reporting will also provide a basis for future projections.

3.C. OPEN DATA PORTAL

The City has an Open Data portal (<http://data.sanjoseca.gov/home>). What resources will enable the City to identify appropriate data sets and automatically upload non-personal data to the portal?

- Much of the required resources are in place. Council's recent approval of the Open Data Policy lays the foundation and provides structure for this work. PBCE Development Services has been working closely with the City Manager's Office Data Analytics Team (DAT) since team inception. Our common goal is providing all appropriate data to the public. The DAT has conducted a city wide inventory of data and done preliminary ranking.
- PBCE has already automated the process to push data for Open Data portal to consume.
- In addition, the CSDC DataMart product (scheduled Phase 4, possibly earlier) of the implementation will provide an additional, secure, manageable data store for all users.

4. *What are the significant risks and challenges you have identified during the implementation process, and how will you mitigate them? For example, as you consider issues such as productivity loss during staff training, data migration, and system upgrades, how do you anticipate you will address them?*

Several risks and challenges are summarized as follows:

4.A. Challenges:

- City Staff availability: An internal survey of 14 different groups representing the Development Services partners all presented staff availability as their primary concern. The current record level of development activity combined with difficulty recruiting and filling staff vacancies and the resultant inexperience level of new staff is a substantial risk. The Project Team members must have the skills sufficient to perform the tasks required. For example, Business Analysts must be trained, have analysis experience and must be able to use the AMANDA permitting software as needed. Staff must also be given the time required to perform their project tasks and not create unnecessary delay.
- Risk Reduction:
 - Careful selection of experienced staff to key positions in the project will allow the most efficient use of time, reduce the need for training, reduce the need for peer review (right the first time) and build consensus within their workgroups.
 - Define the scope of work carefully and completely, concentrating on the middle, most traveled path. Anomalies, outliers and the one off exceptions can be dealt with as they arise provided that the flexibility of manual entry is maintained.
- Scope Creep (a continuous growth of a project scope): This is a very common problem in project management. The top three reasons that scope creep can manifest in this initiative are:
 - Underestimating the complexity of the project.
 - Poor requirements analysis.
 - Not involving users early enough.
- Risk Reduction:
 - Proper identification of project objectives and resources required to achieve these objectives.
 - Strong project management oversight by both CSDC and the City.
 - Excellent communication between parties. Regularly scheduled meetings are vital.
 - Involve the users and the technical teams early in both the requirements analysis and design stages of each phase.
 - Understand the customers' priorities. Define the business requirements as "must-haves" and "nice to have" and prioritize each of these separately.

- Apply Use-Case-based and/or User-Story-based requirement gathering methodologies to enable the users to better understand the system before it is fully implemented.
- Follow Project Management guidelines and best practices to define, document and control scope creep.

4.B. Risks:

- Delays in acquiring required infrastructure: staff anticipates that Phase 1 of the project will have the most risk because of the extremely aggressive schedule. Once the planning phase is complete, the Project Team will only have nine months to complete Phase 1 including the procurement, delivery and installation of any infrastructure equipment and the hiring and ramping up of new resources, all consuming a significant amount of time. Staff shall take the following steps to mitigate this risk:
 - Before the initial, kick-off/planning meeting in September, compare our current IT infrastructure to our future IT infrastructure required for Phase 1. (PBCE IT has already started this process).
 - Prepare gap analysis document early and communicate it to appropriate decision makers.
 - Select our most experienced, qualified team members to execute Phase 1 while allowing less experienced team members to train, ramp up and/or hiring additional team members.
 - Work closely with and include City ITD in the project team. PBCE Staff will communicate the project roadmap with ITD and involve ITD staff as required.
- Delays incurred due to poor management of Cost, Scope, Schedule, Quality, Resources, Communication, Training PBCE-IT and Support preparations
 - Scope – Requirements will be specified using Use case(s) and User Story(ies). The vendor will also be provided access to the test environment that hosts the current applications. This will allow them to closely review the Use cases and User Stories.
 - Cost, Schedule, Resources – Will be monitored closely in the weekly status meetings and corrective measures will be exercised at each meeting.

Schedule - After the requirements gathering phase, the schedule will be refined to ascertain that it is realistic in light of having a clear understanding of the requirements.

Incremental releases of implementations have been recommended (Sprints – 2 to 3 week development cycles) to enable concurrent working across the teams and allow the End Users to quickly provide feedback to the team implementing the features. This will promote a higher quality of infrastructure and product releases.

- Quality – Incrementally build an automated Test suite so that regressions can be caught quickly and rectified before the City performs their testing.

Types of Testing will include: Unit, Interface, Module level, System level, End-To-End, Performance and Load testing.

Operational Readiness review – Formally review the readiness of the new infrastructure, and the applications to be deployed, from a technical and logistical stance.

- Project Communication – Daily stand-ups will be used. These are 15 – 20 min daily meetings. These meetings will quickly go over what each individual,
 - Achieved yesterday.
 - Planning to work on today.
 - Are there any impediments that are getting in the way of their work.

The tight communication loop will keep the key stakeholders and the Development team members well informed on the progress of the project and allow the Project Manager (PM) to quickly tackle any road blocks.

Formal weekly status meetings will review Cost, Scope, Schedule, Resource, Risk and Quality aspects of the project and any necessary actions will be taken in each meeting. Relationship manager from the vendor will be invited to the meeting.

- Training PBCE-IT professionals - The PBCE-IT professionals will obtain their training by actively participating in the development effort without compromising their commitments to other projects. Professionals in the team, who wish to expand their technical horizons, will be welcomed to the training sessions with the view to increasing intellectual capital in the team.
- Support preparations - A list of Technical Documents required for the project have been specified. This will enable the PBCE-IT team to maintain the new infrastructure and applications after the end of the project.
- Mayor/Council concerns:
 - Productivity loss during staff training: mitigated considerably by the selection of a familiar product. Further reduced by training on overtime if available.
 - Data Migration: for the majority of the San Jose Permitting project this risk is minimized since most functional areas already use AMANDA. Migration will be confined to new implementations within the product: Code Enforcement and Public Works. Risk is minimized by having a detailed understanding of the legacy system (PBCE IT team members have been maintaining the CES system for 16+ years) and by allocating sufficient time to properly analyze data conversion requirements. PW data conversion is minimal.

- System upgrades: The most substantial upgrade is from AMANDA 6 (current version installed on-site) to AMANDA 7 (cloud) and is handled by the system vendor. Staff training for the new interface is part of the implementation schedule.

5. *What gains in key productivity measures such as reduction in processing time, cost savings, or customer satisfaction do you expect to achieve with full implementation?*

The key productivity gains are summarized below:

5.A. Electronic Plan Review

- Increase productivity with a reduction in turnaround time, elimination of lost plans and delays in communication between the reviewer and customer.
- A considerable cost savings on the applicant side will be realized in the print production of plans, out of state and in-state travel to submit/deliver plans.
- Increased customer satisfaction is a natural outcome (of reduced processing time and cost savings). Green satisfaction is a bonus; the carbon foot print of the entire process will be reduced substantially.

5.B. Improved Public Portal

- Building Permit applications for electronic plan markup (review) can be submitted, fees paid, plans reviewed, permits issued and inspections scheduled through the portal without needing to physically travel to City Hall.
- Adding Planning and Public Works permit types to the portal as they come online in Phase 1 will improve portal usage, provide a gateway to E-Review of plans for those permit types and decrease the amount of staff time required to manage permit applications.

5.C. AMANDA Mobile for building inspectors

- Decrease the time spent by inspectors on non-inspection related activities. This will allow inspectors to provide a more thorough and complete inspection each time, reducing call backs for re-inspection.
- Standardized comments and increased legibility of inspection notices will provide additional clarity as to what needs to be accomplished prior to the next inspection, reducing processing time, providing cost savings and increasing customer satisfaction. This will also allow identification of the most common construction deficiencies and opportunities for education outreach to the construction community.
- Provide real time inspection results to contractors and owners not able to be present at the inspection. It will reduce the time for a meter release to get from the inspector to the PG&E Service desk from several days to a minute. In

addition, we can provide a Certificate of Occupancy to Owner, Contractor, or Construction Lender, accomplishing all three productivity gains.

5.D. AMANDA DataMart

AMANDA DataMart will be used to support City Open Data initiatives by exposing a simplified data structures to members of the public. Versions of this are already being done in the City using various home-grown solutions. Adopting the AMANDA DataMart will standardize this process.

5.E. Reporting

The AMANDA Analytics Dashboard and Business Intelligence tool will improve reporting across the City.

Staff plans to execute the Agreement within the next several days. We are excited and look forward to commencing the project kick-off and implementation activities. Staff would like to thank the Mayor and City Council Members for their support on this very critical project.

/s/
JULIA H. COOPER
Director of Finance

/s/
HARRY FREITAS
Director of Planning, Building, and
Code Enforcement

For more information or questions, please contact Mark Giovannetti, Deputy Director, at (408) 535-7052 regarding the Agreement, or Shilpi Dwivedi, PBCE IT Manager at (408) 793-6917 regarding the project.

Attachment



**Agreement for Integrated Permitting System
Between
the City of San José
and
CSDC Systems, Inc.**

This Agreement is entered into as of the City's execution date ("Effective Date") between the City of San José, a municipal corporation (hereinafter "City"), and CSDC Systems, Inc., a Delaware corporation, registered to do business in the State of California (hereinafter "CSDC" or "Contractor"). Each of City and Contractor are sometimes hereinafter referred to as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, the City issued a Request for Proposal ("RFP") for an Integrated Permitting System ("System"); and

WHEREAS, the Contractor has gained a good understanding of City's requirements pertaining to this System through Contractor's examination of City's existing system, demonstrations of the existing system and replacement System, and the Request for Proposals documents; and

WHEREAS, the Contractor has the necessary expertise and skills to perform such services; and

WHEREAS, based on this in-depth understanding and the Contractor's knowledge and experience with other municipal organizations, Contractor warrants that the proposed System will meet the City's specifications and requirements as described in the Scope of Work;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

1. AGREEMENT DOCUMENTS

The documents forming the entire Agreement between City and Contractor shall consist of this Agreement including:

- EXHIBIT A - Scope of Work
 - Appendix A.1 – AMANDA Solution Overview
 - Appendix A.2 – Functional Requirements
 - Appendix A.3 – AIM Project Approach
 - Appendix A.4 – Preliminary Project Schedule
 - Appendix A.5 – Integrated Data Tracking System Components
 - Appendix A.6 – Deployment, Network and Security
 - Appendix A.7 – Payment Card Industry (PCI) Requirements
 - Appendix A.8 – AMANDA Training Courses
 - Appendix A.9 – Service Catalogue & Service Descriptions
 - Appendix A.10 – Acceptance Form
 - Appendix A.11 – Price List
- EXHIBIT B - Compensation/Payment Schedule
- EXHIBIT C - Insurance Requirements
- EXHIBIT D-1 - Software License Agreement
- EXHIBIT D-2 - Software Maintenance and Technical Support Agreement
- EXHIBIT D-3 - Cloud Managed Services (Unisys Third Party, Pass-thru Agreement)
- EXHIBIT E - Change Order Form
- EXHIBIT F - Notice of Exercise of Option to Extend Agreement
- EXHIBIT G - CSDC Proposal Response
- EXHIBIT H - City of San Jose RFP #15-16-04 Integrated Permitting System

In the event any discrepancies or inconsistencies between the provisions of this Agreement and the Exhibits, the provisions of this Agreement will prevail. The provisions in the Exhibits shall prevail over conflicting terms in the Attachments to the Exhibits. Exhibits G and H are incorporated by reference, and shall be relied upon to aid in interpretation of the terms in the body of the Agreement, and Exhibits A through F. Exhibits G and H do not reduce the requirements negotiated by the Parties as set forth in the body of the Agreement, and Exhibits A through F. Contractor and City hereby acknowledge that they have drafted and negotiated the Agreement jointly, and the Agreement will be construed neither against nor in favor of either, but rather in accordance with its fair meaning.

Notwithstanding the foregoing, the terms of the Software License Agreement and Software Maintenance & Technical Support Agreement (Exhibits D1 and D2) shall prevail with respect to the specific terms therein.

This Agreement and the Exhibits set forth above, contain all of the agreements, representations and understandings of the Parties hereto, and supersede and replace any previous understandings, commitments, or agreements, whether oral or written. Any other terms or conditions included in any shrink-wrap or boot-screen license agreements, quotes, invoices, acknowledgments, bills of lading, or other forms utilized or exchanged by the Parties shall not be incorporated in this Agreement or be binding upon the Parties unless the Parties expressly agree in writing or unless otherwise provided for in this Agreement.

2. TERM OF AGREEMENT

2.1. Term

The term of this Agreement is from Effective Date to January 31, 2024 ("Initial Term"), inclusive, subject to the provisions of Section 13 TERMINATION.

2.2. Options to Extend

After the Initial Term, the City reserves the right, at its sole discretion, to extend the term of this Agreement for up to ten additional one-year terms through January 31, 2034 ("Option Periods"). City shall provide Contractor with no less than thirty (30) days prior written notice of its intention to exercise its option to extend the term of this Agreement. See Exhibit F for Notice of Exercise of Option to Extend Agreement Form.

2.3. Annual Appropriation of Funds

City's funding of this Agreement shall be on a fiscal year basis (July 1 to June 30) and is subject to annual appropriations. Contractor acknowledges that the City, a municipal corporation, is precluded by the California State Constitution and other laws from entering into obligations that financially bind future governing bodies, and that, therefore, nothing in this Agreement shall constitute an obligation of future legislative bodies of the City to appropriate funds for purposes of this Agreement. Accordingly, the parties agree that the Initial Term and any Option Periods is contingent upon the appropriation of funds by the City. This Agreement will terminate immediately if funds necessary to continue the Agreement are not appropriated. Despite the foregoing, the City shall pay Contractor for any Services performed in accordance with this Agreement up to the date of termination.

3. SCOPE OF SERVICES

3.1. Scope of Work

Contractor agrees to procure and install the System, provide the software products, and perform the Services as set forth in the Scope of Services which consists of EXHIBIT A Scope of Work including Appendices and are attached hereto and are incorporated as though fully set forth herein (the "Scope of Services").

3.2. Equipment

Any additional equipment, parts, or services required for final acceptance as detailed in Scope of Services (Exhibit A) but not reflected in the Contractor's pricing shall be the sole responsibility of the Contractor and at no cost to the City. Contractor, however, is not responsible for the equipment, parts, or services specified in scope of Services (Exhibit A) as the City's responsibility.

3.3. Notification

Contractor agrees to notify City promptly of any factor, occurrence, or event coming to its attention that may affect Contractor's ability to meet the requirements of the Agreement, or that is likely to occasion any material delay in completion of the projects contemplated by this Agreement. City agrees to notify Contractor if City is delayed in providing Contractor the information, access or support City has agreed to provide under the Agreement if such delay will cause a material delay in Contractor's ability to meet the requirements of this Agreement.

3.4. Contractor's Software

The terms of the licensing of the Software, including subsequent releases licensed to City, shall be as set forth in the Software Subscription License Agreement (D-1).

3.5. Maintenance Service

After the initial warranty period of one-year, which shall commence upon each phase/product/module Go-Live System Acceptance as specified in APPENDIX A.10, the terms of maintenance of the System shall be as set forth in the Software Maintenance Agreement (Exhibit D-2).

4. DATA AND FACILITIES

Contractor acknowledges that it has in its possession all applicable specifications and drawings, and all other documents to which reference is made herein and/or which are matched hereto, and all such data are adequate to enable Contractor fairly to determine its ability to perform the work called for herein at the price and in accordance with the schedule set forth herein. Contractor represents that it now has or can readily procure without assistance of City all facilities, machinery and equipment necessary for the performance of this Agreement.

5. STANDARD OF SERVICE

In connection with the performance of any services pursuant to this Agreement:

5.1. Number of Employees

Contractor warrants it will provide sufficient employees to complete the Services ordered within the applicable time frames established pursuant to this Agreement. Furthermore, Contractor shall, at its expense, supply all tools, equipment and other materials necessary to perform the Services contemplated in this Agreement.

5.2. Skill of Employees

Contractor warrants that employees shall have sufficient skill, knowledge, and training to perform Services and that the Services shall be performed in a professional and workmanlike manner.

5.3. Duty of Confidentiality

All data, documents, discussions or other information developed or received by or for one party in performance of this Agreement are confidential and must not be disclosed to any person except as authorized by the other party, or as required by law. The receiving party warrants that all employees utilized by it in performing Services are under a written obligation to the receiving party

requiring the employee to maintain the confidentiality of information of the other party to the extent permitted by law.

5.4. Security and Safety

Contractor shall require employees providing Services at a City location to comply with applicable City security and safety regulations and policies. City may require each employee providing Services to undergo a background investigation, including, but not limited to a criminal records and fingerprint check. Contractor shall promptly replace any employee found to be unacceptable to City, in its sole discretion, on the basis of a significant infraction found in the background investigation.

5.5. Contractor's obligations to employees

Contractor shall provide for and pay the compensation of its employees and shall pay all taxes, contributions, and benefits (such as, but not limited to, workers' compensation benefits) which an employer is required to pay relating to the employment of employees. City shall not be liable to Contractor or to any employee for Contractor's failure to perform its compensation, benefit, or tax obligations. Contractor shall indemnify, defend and hold City harmless from and against all such taxes, contributions and benefits and will comply with all associated governmental regulations, including the filing of all necessary reports and returns.

5.6. Replacement of Employees

During the course of performance of Services, City may request replacement of an employee or a proposed employee, provided that there is reasonable cause. In such event, Contractor shall, within ten (10) working days of receipt of such request from City, provide a substitute employee of sufficient skill, knowledge, and training to perform the applicable Services. If, within the first thirty (30) days after an employee's commencement of Services, City notifies Contractor (1) such employee's level of performance is unacceptable, (2) such employee has failed to perform as required, or (3) such employee, in City's sole opinion, lacks the skill, knowledge or training to perform at the required level, then Contractor will be required to review the work performed by such employee, confirm that quality of work, and correct any items the Contractor deemed incorrect. If City requests replacement of an employee for the above-referenced reasons after such thirty (30) day time period, or at any time for a reason other than the reasons indicated above. City shall not be required to pay for, and shall be entitled to a refund of, any sums paid to Contractor for such employee's Services after the date of City's requested replacement of such employee.

6. SCHEDULE OF PERFORMANCE

Contractor shall perform the Services according to the terms and provisions of EXHIBIT A. Time is expressly made of the essence with respect to each and every term and provision of this Agreement.

7. CHANGE ORDER PROCEDURE AND AUTHORIZATION

7.1. Changes

Any changes to this Agreement that relate to (i) the deletion of Products or Services, (ii) adding additional Products, or Services (iii) changing or modifying Products or Services, or (iv) making other changes that materially alter the scope of this Agreement or the Deliverables required under this Agreement, including approval of all performance and/or payment schedules shall be made by the Director of Finance in accordance with the procedures set forth below.

7.2. Contract Change Requests

Either party hereto may, from time to time, and at any time during the term hereof request a change, as defined in the above section. (The party requesting the change is hereinafter referred to as the "Requesting Party.") Requests for changes shall be in writing and shall be addressed and delivered to the other party. Such writing shall be identified as a "Contract Change Request," shall carry a sequential number for ease of tracking, shall set forth in detail the nature of the change

requested and the costs associated therewith, and shall identify the Products, Services, Deliverables or Schedules to be changed.

7.3. Procedures

As soon as practical after receipt by the notified party of copies of the Request, the parties shall meet as necessary to discuss the change and to ascertain its cost and schedule impacts, if any.

7.4. Change Orders

If the parties decide to implement a change request, a standard form Change Order ("CO") shall be prepared in a form substantially similar to the form attached hereto as Exhibit E, which CO shall describe the change, delineate the cost, schedule, and other impacts of the change and the payment terms for any price increase. Only City's Director of Finance and Contractor's Authorized Representative shall have authority to execute COs to this Agreement. Execution of a CO by City's Director of Finance and Contractor's Authorized Representative shall constitute a modification hereof and shall be binding on both parties hereto.

8. COMPENSATION

City shall pay Contractor an amount not to exceed Seven Million, Eight Hundred Forty-Nine Thousand, Seven Hundred Fifty dollars (\$7,849,750) during the Initial Term ("Maximum Compensation"). The terms, rate and schedule of payment are set forth in the attached Exhibit A "Scope of Work and Price List", and Exhibit B, "Compensation/Payment Schedule." Contractor shall submit to City invoices at the completion of each milestone that include a breakdown of Services as provided in attached Exhibit B, entitled "Compensation/Payment Schedule." The compensation for the software subscription license shall be as set forth in Exhibit D-1 to the extent it is not specified in Exhibit B. City will make payments to Contractor within thirty (30) days after the date of approval of each invoice. City will make payments when due in the form of a check, or wire transfer drawn on a U.S. financial institution.

9. TAXES AND CHARGES

Contractor shall be responsible for payment of all taxes, fees, contributions or charges applicable to the conduct of Contractor's business.

10. SYSTEM ACCEPTANCE

Upon final completion of each component of the System installation, City and Contractor shall conduct an Acceptance Test. The criteria for the Acceptance Tests shall be as set forth in a mutually-agreed Acceptance Test Plan (as described in Exhibit A, Section 17). System Acceptance shall occur upon successful completion of the Acceptance Tests described in the Acceptance Test Plan to be provided by Contractor. When System Acceptance occurs for each phase/product/module, deliverable and/or milestone, the Parties will memorialize this event by promptly executing an Acceptance Form (Exhibit A, Appendix A.10), including a Final System Acceptance Certificate.

If, in the discretion of City, the System does not meet the requirements of the Acceptance Test specifications, City may (1) permit Contractor to repair or (2) permit Contractor to replace the System so that the same meets the Acceptance Test specifications in all material respects, all at no additional expense to City.

Payment for any part or parts of the System or Services provided hereunder, or inspection or testing thereof by City, shall not constitute acceptance or relieve Contractor of its obligations under this Agreement. City may inspect the components of the System when delivered and reject upon notification to Contractor any and all of the System which does not conform to the Specifications or other requirements of this Agreement. Components of the System which are rejected shall be promptly corrected, repaired, or replaced by Contractor in accordance with Contractor's warranty obligations under this Agreement, such that the System conforms to the warranties, Specifications and the other requirements of this Agreement. If City receives components of the System with defects or nonconformities not reasonably apparent on inspection, then City reserves the right to require prompt

correction, repair, or replacement by Contractor in accordance with Contractor's warranty obligations under this Agreement following the discovery of such defect or nonconformity.

11. REPRESENTATION AND WARRANTIES

11.1. Warranty Period & Enforcement

The applications software and related software shall, during any Warranty Period, function properly under ordinary use and operate in conformance with its Specifications and Documentation. During the one-year Warranty Period, Contractor shall provide warranty service to City at no additional cost and will include all Services or replacement products necessary to enable Contractor to comply with the foregoing warranty. Contractor shall pass through to City any manufacturers' warranties which Contractor receives on the System and, at City's request; Contractor shall enforce such warranties on City's behalf.

11.2. Warranty Against Infringement

Contractor agrees to defend and indemnify City of all direct losses, costs and damages resulting from a determination that the Software as supplied to City infringes any patent rights, copyrights or trademarks provided that: City promptly notifies Contractor in writing upon City becoming aware of existence of any such suit, action, proceeding threat; allows Contractor sole control of the defense and/or settlement thereof; and provides such reasonable cooperation as Contractor may require. In no event shall City consent to any judgment or decree or do any other act in compromise of any such claim without Contractor's express prior written consent. In no event will Contractor be liable for the payment of any amount agreed to in settlement without its express consent. In the event that City is enjoined from use of the Software due to a proceeding based upon infringement of patent, copyright or trademark, Contractor shall, at its option, either:

- 11.2.1. Modify the Software, at Contractor's expense, so it becomes non-infringing; or
- 11.2.2. Replace the infringing Software with equal non-infringing Software, at Contractor's expense; or
- 11.2.3. Procure, at Contractor's expense, the necessary licenses for the City to continue using the Software; or
- 11.2.4. Remove the Software and refund the purchase price and transportation costs thereof, less a reasonable amount for depreciation.

11.3. Operability

Contractor warrants that the Software does not contain any timers, counters, or preprogrammed devices that will cause the Software to become erased, inoperable, or incapable of processing in the manner as documented in the contract documents specified.

11.4. Upgrades

Contractor agrees to maintain the Software to operate on all compatible upgrades of the hardware product line and operations system used by City and specified in the Software Subscription License Agreement (Exhibit D-1).

12. WARRANTIES

12.1. Prime Contractor Responsibility

Contractor understands and accepts full responsibility for all Contractor's requirements and deliverables defined in this Agreement. Contractor warrants that it:

- 12.1.1. Has read and agrees with the specifications contained in the Scope of Services (Exhibits A-1 through A-3);

12.1.2. Fully understands the facilities, difficulties, and restrictions attending performance of the services; and

12.1.3. Contractor agrees to inform City of any unforeseen conditions which will materially affect performance of the work within 45 calendar days of the execution of this Agreement and shall not proceed until written instructions are received from City.

The responsibility for requirements and deliverables defined in Exhibit A and Exhibits D1, D2, and D3 are as set forth in these agreements.

12.2. Authority to Make Agreement

Contractor represents and warrants that Contractor has full right and authority to perform its obligations under this Agreement. City shall be entitled to use the System without disturbance.

12.3. Contractor Agreements with City Employees

Neither Contractor nor any director, employee or agent of Contractor or its subcontractors or vendors shall knowingly, without prior written notification thereof to City, enter into any business relationship with any employee or agent of City unless such person is acting for and on behalf of City.

12.4. Specifications

The Software as listed in Exhibit D1 shall, during the warranty period, function properly under ordinary use and operate in conformance with this Specifications and Documentation. During the warranty period, Contractor will provide warranty service to City at no additional cost in accordance with the Warranty as provided in Section 11 Representation and Warranties and will include all Services or replacement products necessary to enable Contractor to comply with the foregoing warranty. Contractor shall pass through to City any manufacturers' warranties which Contractor receives on the System and, at City's request, Contractor shall enforce such warranties on City's behalf.

13. TERMINATION

13.1. Termination for Convenience

City shall have the right to terminate this Agreement, without cause, by giving not less than Sixty (60) days written notice of termination.

13.2. Termination for Default

Either Party may terminate this Agreement upon written notice to the other Party in the event that other Party breaches its obligations under this Agreement and fails to cure such breach within forty-five (45) days after receiving written notice of such breach.

13.3. Termination Authority

The Director of Finance ("Director") is empowered to terminate this Agreement on behalf of City.

13.4. Consequences of Termination

In the event of termination, Contractor shall deliver to City copies of all reports, documents, and other work performed by Contractor under this Agreement. In the event of termination for convenience and upon receipt of copies of all reports, documents, and other work performed by Contractor under this Agreement, City shall pay Contractor for services satisfactorily performed and reimbursable expenses properly incurred to the date of termination.

14. INDEMNIFICATION

Contractor shall defend, indemnify and hold harmless City, its officers, employees and agents against any claim, loss or liability arising out of or resulting in any way from work performed under this Agreement due to the willful or negligent acts (active or passive) or omissions by Contractor's officers, employees or agents. The acceptance of said services and duties by City shall not operate as a waiver of such right of indemnification.

15. CONFIDENTIAL AND PROPRIETARY INFORMATION

15.1. Confidentiality

All data and information generated, collected, developed, discovered or otherwise saved in the System exclusively for the City, including derivative data (collectively the "**Data**") or received by or for Contractor in performance of this Agreement are confidential and must not be disclosed to any person except as authorized by City, or as required by law. Data does not include software programs, data models, scripts or interfaces based on Contractor's intellectual property.

15.2. Ownership of Materials

All reports, documents or other materials developed or discovered by Contractor exclusively for the City, or any other person engaged directly or indirectly by Contractor to perform the Services under this Agreement, shall remain the property of the City. During the Term of this Agreement, the Contractor is granted authority to solely use City reports, documents, or materials to provide the Services under the Agreement with the City.

15.3. Ownership of Data

The City shall maintain ownership and control of the Data throughout the Agreement period and in perpetuity. Contractor shall have the right to use the Data solely to perform Services under the Agreement with the City. Contractor may not use the Data, a subset of the Data, and/or a summary of the Data, or, cause or permit the Data, a subset and/or a summary thereof, to be used by any third party, outside the scope of the Agreement without the express written consent of the City. Contractor shall provide City with a copy of the Data in a mutually-agreed-upon format as may be required and/or provide script to City to refresh test environment. Since the Data is originated by the City and provided to Contractor, Contractor cannot and does not warrant that throughout all operational and maintenance activities the accuracy of the Data will be preserved. For clarity, while the Parties may agree that the Data is derived from a reliable source, the Parties acknowledge and agree that the accuracy and completeness of the Data cannot be guaranteed and that the Data may contain nonconformities, errors, omissions or other defects.

15.4. Enforcement

The City and Contractor agree that damages are not adequate, and no adequate remedy at law exists for any threatened or actual disclosure or use of information by Contractor in violation of the provisions of this Agreement.

16. INSURANCE REQUIREMENTS

Contractor agrees to have and maintain the policies set forth in Exhibit C, entitled "Insurance Requirements," which is attached hereto and incorporated herein. All policies, endorsements, certificates and/or binders shall be subject to approval by the Risk Manager of the City of San Jose as to form and content. These requirements are subject to amendment or waiver if so approved in writing by the Risk Manager. Contractor agrees to provide City with a copy of said policies, certificates and/or endorsements before work commences under this Agreement.

17. WAIVER

Contractor agrees that City's waiver of any breach or violation of any provision of this Agreement shall not be deemed to be a waiver of any other provision or a waiver of any subsequent breach or violation of

the same or any other provision. City's acceptance of the performance of any of Contractor's services will not be a waiver of any provision of this Agreement.

18. INDEPENDENT CONTRACTOR

Contractor, in the performance of this Agreement, is an independent contractor. Contractor shall maintain complete control over all of Contractor's employees, any subcontracting subcontractors, and Contractor's operations. Neither Contractor nor any person retained by Contractor may represent, act, or purport to act as the agent, representative or employee of City. Neither Contractor nor City is granted any right or authority to assume or create any obligation on behalf of the other.

19. COMPLIANCE WITH LAWS

Contractor shall comply with all applicable laws, ordinances, codes and regulations (collectively, "laws") of the federal, state and local governments, including without limitation, any and all laws specified elsewhere in this Agreement.

20. CONFLICT OF INTEREST

Contractor shall avoid all conflict of interest or the appearance of conflict of interest in performance of this Agreement.

21. NONDISCRIMINATION

Contractor agrees that there shall be no discrimination against, or segregation of, any person, on account of race, sex, color, age, religion, sexual orientation, actual or perceived gender identity, disability, ethnicity, national origin, marital status, or family status, in connection with or related to the performance of this Agreement.

22. GIFTS

22.1. Prohibition on Gifts

Contractor acknowledges that Chapter 12.08 of the San Jose Municipal Code prohibits City's officers and designated employees from accepting gifts as defined in Chapter 12.08.

22.2. No Offer

Contractor agrees not to offer any City officer or designated employee any gift prohibited by Chapter 12.08.

22.3. Breach of Agreement

Contractor's offer or giving of any gift prohibited by Chapter 12.08 will constitute a material breach of this Agreement. In addition to any other remedies City may have in law or equity, City may terminate this Agreement for such breach as provided in Section 13 TERMINATION of this Agreement.

23. DISQUALIFICATION OF FORMER EMPLOYEES

Contractor is familiar with Chapter 12.10 of the San Jose Municipal Code ("Revolving Door Ordinance") relating to the disqualification of City's former officers and employees in matters which are connected with their former duties or official responsibilities. Contractor shall not utilize either directly or indirectly any officer, employee, or agent of Contractor to perform services under this Agreement, if in the performance of such services, the officer, employee, or agent would be in violation of the Revolving Door Ordinance.

24. CONTRACTOR'S BOOKS AND RECORDS

24.1. Maintenance during Term

Contractor shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, and other documents evidencing or relating to charges for services, or expenditures and disbursements charged to City for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Contractor pursuant to this Agreement.

24.2. Maintenance after Term

Contractor shall maintain all documents which demonstrate performance under this Agreement for a minimum period of three (3) years, or for any longer period required by law, from the date of termination or completion of this Agreement.

24.3. Inspection

Any documents required to be maintained pursuant to this Agreement must be made available for inspection or audit, at no cost to City, at any time during regular business hours, upon written request by the City Attorney, City Auditor, City Manager, or a designated representative of any of these officers. Contractor shall provide copies of such documents to City for inspection at City Hall when it is practical to do so. Otherwise, unless an alternative is mutually agreed upon, the records shall be available at Contractor's address indicated for receipt of notices in this Agreement.

24.4. Custody of Records

Where City has reason to believe that any of Contractor's documents relating to this Agreement may be lost or discarded due to dissolution, disbandment or termination of Contractor's business, City may, by written request by any of the above-named officers, require that custody of the Contractor's documents be given to City and that these documents be maintained in City Hall. City agrees to grant access to Contractor's documents to any party authorized by Contractor, Contractor's representatives, or Contractor's successor-in-interest.

25. ASSIGNABILITY

The parties agree that the expertise and experience of Contractor are material considerations for this Agreement. Unless specifically authorized by this Agreement, Contractor may not assign the performance of any obligation or interest under this Agreement without the prior written consent of City. Any attempt by Contractor to assign this Agreement, in violation of this Section, will be voidable at City's sole option.

26. SUBCONTRACTORS

26.1. Authorized Subcontractors

Notwithstanding Section 25 ASSIGNABILITY above, Contractor may use designated subcontractors approved in advance by City in performing Contractor's services. Contractor must obtain City's prior written consent in order to change or add subcontractors. Contractor shall be responsible for directing the work of the approved subcontractors and for any compensation due to subcontractors. City assumes no responsibility whatsoever concerning such compensation.

26.2. Compliance with Agreement

Contractor shall ensure that Contractor's subcontractors comply with this Agreement. At City's request, Contractor shall require any or all of Contractor's subcontractors to sign an agreement with Contractor requiring compliance with this Agreement. Notwithstanding the above, the specific terms of Exhibit(s) D-1, D-2, and D-3 shall prevail over the terms of this Agreement to the extent there is any conflict.

30.4. Authority of Director of Finance

Where this Agreement requires or permits City to act and no officer of the City is specified, City's Director of Finance or the designated representative of City's Director of Finance has the authority to act on City's behalf.

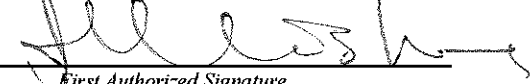
APPROVED AS TO FORM:

Senior Deputy City Attorney

City of San José
a municipal corporation

By _____
Name: Mark Giovannetti
Title: Deputy Director, Finance
Date: _____

CSDC Systems Inc. "Contractor"
a Delaware corporation authorized to
conduct business in California

1. By 
First Authorized Signature

Name: Mr. Dan Mishra
Title: Chairman and CEO
Date: August 16, 2016

2. By 
Second Authorized Signature

Name: Satish Ranganathan
Title: Chief Financial Officer
Date: AUGUST 16, 2016

Exhibit A – Scope of Work

The following Statement of Work (SOW) defines the principal activities and responsibilities of Contractor and the City of San José (hereinafter “City”) for the implementation of the Integrated Permitting System. The purpose of this SOW is to document the Scope of Work for the implementation of a new Integrated Permitting System for the City of San José, including the scope of services, project activities and assumptions, project milestones and deliverables and the participation and responsibilities of Contractor and City staff. The Payment Schedule (Exhibit B) is based on the Project Milestones and Deliverables described in the Scope of Work.

1. INTRODUCTION

1.1. The project is defined as the provision of an Integrated Permitting System, by CSDC Systems Inc. to the City of San Jose (“City”), as replacement to current permitting system.

1.2. AMANDA 7 Cloud platform will replace the current legacy permitting system (AMANDA 6) in use by the City with a new Integrated Permitting System that is consistent with existing and planned permitting business processes and technology. AMANDA 7 Cloud will be installed and configured to meet the permitting requirements identified by the City.

1.3. The new System will modernize

1.3.1. Mobile Inspection. Enables inspectors to access their scheduled inspection details and history, using their mobile devices. It allows them to directly record essential information about the inspection, including process information, checklists and deficiencies, and folder specifications, right at the inspection site. It even provides them with the option to attach any necessary pictures, comments, signatures, and results, and generate inspection reports. If GPS functionality is enabled, the most efficient and optimized route is proposed to complete all the desired inspections. AMANDA Mobile also offers the functionality to conduct an unscheduled/drive-by inspection. In a connected environment, upon completion of an inspection, the inspector has the ability to synchronize and swiftly send it back to AMANDA. AMANDA Mobile uses leading-edge store and forward technology to operate in a disconnected mode. The software provides an efficient and organized method of immediately recording data and completing inspections on the go.

1.3.2. E-Plan Review. For E-plan review and E-submittals of plans Contractor will leverage a strategic partnership with Avolve for use of their product ProjectDox. Avolve Software designed and developed ProjectDox to make the job of reviewing building plans efficient, accurate, and transparent — reducing the time it takes to bring construction projects on line.

1.3.3. E-Submittals of Plans and Automated notifications. Automated notifications can be configured to communicate to the public at any point during the business workflow. Some examples of points are accepted/rejected applications, routing for review, approval/denial of plan submittal (includes markup document), permit issuance, fees due, failed/passed inspection notices, outstanding holds after final inspection and CO/COO communication. These notifications can be through multiple communication methods. Email notification is the most

common, but SMS notification is available as well. AMANDA 7 includes the ability for administrators to configure email templates that are then used when needed during the workflow. This makes the configuration of these messages easier to develop initially as well as maintain by system administrators

- 1.3.4.** Online Permit status tracking. The AMANDA Public Portal dashboard gives the registered user a one stop look at all projects/applications that are active with the City. My Permits, My Projects, My Code Cases and My Licenses are all sections where customers can view the status of all records related to them in your system. From here they can pay for multiple permits at one time or go and view details of each record. The amount of detail available for each record type is configurable based on the City's needs and can allow the customer to see application information, process information, view payment history, make payments, view attachments and generated documents as well as copies of plans. They can also upload new versions of plan submittals.
- 1.3.5.** Web-based Interface for both public and City staff. AMANDA 7 and the AMANDA Public Portal are both web based and browser and device agnostic.
- 1.3.6.** Automated workflows related to plan review, approval and in-field inspections. The AMANDA business rules engine supports all the necessary workflow needed for plan review, approval and in-field inspections.
 - Plan Review – Install ProjectDox as the e-Plan solution. In that process the interface between the two systems is bi-directional and real-time so that review outcomes are updated in AMANDA automatically. Workflow can be predefined but is also flexible to change on the go as reviews often need to be added ad hoc as the project changes.
 - Approval – Upon Plan review approval and the stamping of plans AMANDA will then facilitate the last remaining steps needed for permit issuance. The customer can be notified that everything is in order and final fees are due. ProjectDox will automatically stamp and package the plans for digital delivery via the AMANDA Public Portal. Any holds that have been added and not released would stop the process at this point as well or can be deferred to Certification of Occupancy/Completion.
 - In-field Inspections – This workflow starts with automated or manual scheduling of the inspection (details just below on the next bullet point). Once scheduled an inspector will use the AMANDA Mobile application to complete their assigned tasks. Inspectors can search for inspections scheduled for a single day or for a date range. The application has GPS capabilities providing the inspector with a map view of all tasks and the most efficient route for completing them. The outcome of the inspection drives the future workflow. A passed inspection may notify other departments that the event has occurred or may just allow for the following required inspection to be scheduled. A failure can cause a fee to be assessed as well as automatically generate the Inspection Notice to be emailed to the contractor or made available for download via the Public Portal. Other common outcomes of inspections might be, but are not limited to, partial, reschedule, no show, stop work, etc. AMANDA is configurable to include all the

necessary outcomes that the City of San Jose needs as part of their workflow.

- Automated scheduling of inspections via the web, phone etc. The AMANDA Inspection Scheduling business rules can be invoked through several interaction points. Customers can log in to the AMANDA Public Portal and view the status of, schedule or cancel inspections for all of their permits/projects. They can also utilize the AMANDA Contractor App which is an iOS or Android phone application that allows for status checking, payments and inspection scheduling.

- 1.3.7.** Other solutions that make the best possible use of time for both the City and the development community. System includes ProjectDox and GeoCortex as tools to enhance the City and the development community's experience.
- 1.4.** The project as outlined in this Scope of Work (SOW) encompasses all aspects of the new System implementation, including but not limited to project management, data conversion, software control file configuration, design, development, testing, integrate with existing operations and business applications, support of interfaces, modifications and reports, and training, and in general support increased automation and operational efficiencies, such as workflow and document management.
- 1.5.** To the extent not inconsistent with this Agreement between the City and Contractor, including this Scope of Work; the City's RFP #15-16-04 for an Integrated Permitting System and Contractor's proposal response October 20, 2015 are hereby incorporated by reference herein, shall provide context and supplement this scope of services, and be subject to the terms and conditions of the Agreement.
- 1.6.** The scope of this effort is for Contractor to provide services to the City and lead the implementation in the conversion to a new Integrated Permitting System ensuring the fulfillment of all the technical and functional requirements as listed in their response to the City's RFP #15-16-04. In this regard, Contractor will provide the following implementation services:
 - Project Initiation and Management
 - Installation of AMANDA 7 software on Cloud
 - Business process modeling & prototyping
 - Fit-gap Analysis of Folder Types, Reports, Batches, Interfaces, Public Portal AMANDA Configuration
 - Discovery Analysis
 - Configuration, Data Conversion and Data Migration
 - Develop and implement required Interfaces
 - Integration with City Systems
 - Unit Testing & System Testing
 - Core Team and End-User Training
 - Custom Reports Development and Delivery
 - Interface and Modification Specification, Development and Delivery
 - User Acceptance Testing
 - Replacing the customizations in current AMANDA 6 Permitting System, with new COTS AMANDA 7 Permitting System "standard" solutions. Go-Live Planning and Transition to Go-Live

- Post Go Live Support

1.7. This Exhibit A sets forth the general Scope of Work required from Contractor, as well as defines the principal activities and responsibilities of both the Contractor and the City for the purchase, installation and implementation of a new Integrated Permitting System. This Exhibit A shall contain the following attachments:

- Appendix A.1 – AMANDA Solution Overview
- Appendix A.2 – Functional Requirements
- Appendix A.3 – AIM Project Approach
- Appendix A.4 – Preliminary Project Schedule
- Appendix A.5 – Integrated Data Tracking System Components
- Appendix A.6 – Deployment, Network and Security
- Appendix A.7 – Payment Card Industry (PCI) Requirements
- Appendix A.8 – AMANDA Training Courses
- Appendix A.9 – Service Catalogue & Service Descriptions
- Appendix A.10 – Acceptance Form
- Appendix A.11 – Price List

2. GENERAL OVERVIEW OF SYSTEM:

2.1. The City of San José (“City”) is replacing its existing permitting system with **AMANDA 7 Cloud Managed Service** platform as an upgrade to the existing AMANDA 6 System, a web-based, Commercial-Off-The-Shelf (COTS) solution for permitting, inspections, plan review, planning development, code enforcement, tracking, scheduling, cashiering, GIS interface, and reporting.

2.2. The **AMANDA Cloud Managed Service** will be hosted in the continental US on the Microsoft Azure platform through Contractor’s hosting partner: Unisys

2.3. Contractor will provide at a minimum the following hosted environments with performance requirements as described in Section 3.1, and pursuant to Service Level Agreement (Exhibit A, Appendix A.9).

2.4. Contractor shall provide the following required interfaces/integration:

2.4.1. Upgrade existing and implement new AMANDA business processes:

- Planning and Zoning (new)
- Building Permit-Plan Review and Inspection (existing)
- Engineering Permits (i.e., grading, encroachment, subdivision mapping) (new)
- Fire Prevention Plan Review and Inspection (existing)
- Fire Prevention Special Event Permits (new)
- Bi-Directional Interfaces with a variety of systems such as the City’s Geographical Information System (new)
- Review, analysis and streamlining of Public Works Traffic workflow (new)
- Public Works Special District and folder structure (new)
- Replace Code’s existing CES program with AMANDA (new)
- Inspection Capacity (existing)

2.4.2. Contractor shall integrate with existing systems as defined in Section 7.5.5.

3. SYSTEM REQUIREMENTS:

3.1. Contractor shall provide a web-based Integrated Permitting System ("System") that provides for online portal that:

- user access to the application with a web browser
- City customers can apply for a permits account and edit their account
- 24 hours a day, 7 days a week web access portal to the public to apply for, pay, receive, and check the status of permits, applications and inspections.
- The AMANDA Cloud shall provide 99.9% uptime
- online plan review, including a portal for plans submission, review and approval that can be accessed by customers and staff (e-plan review)
- paper-free inspection dispatch and recordation that can be accessed by customers and staff
- Data Analytics to identify bottlenecks in workflow, reporting, and dashboards that present key performance indicators, trends and warnings. Provides ability to drill down into details to perform analysis of data.
- provides a complete audit trail of all financial transactions with time stamps and user IDs
- modern data exchange capabilities such as web services to support the City's "open data" initiatives for publishing performance data to the web.
- Back-up procedures to back-up application, underlying software and all data as part of AMANDA Cloud solution.
- Code Enforcement Inspection Module

3.2. The System will include permitting modules for Planning, Building, Code Enforcement, Public Works, Fire and integrated with GIS and Enterprise Content management systems. The System also includes mobile solution platform for Inspectors (Building, Fire, Code, Utilities, etc.).

3.3. The System shall be flexible and configurable to support future changes in permitting requirements without the need for substantial modification to the application.

3.4. The System shall be scalable to permit future expansion and addition of new online services to meet the City's changes in requirements, technology needs and demands.

3.5. The System shall provide data transparency through Web Services API that supports application to application integration. System shall include existing Enterprise Application Integration tool (EAI) that uses XML and file based integration to share data between different systems.

3.6. The System shall be accessible via desktop PC's, laptops, smart phones and tablets (including all major platforms such as IOS, Android and Surface).

3.7. For wireless inspections, mobile access must capture inspector's signatures (for use when printing and emailing an order in the field), as well as the client's signature (to capture acknowledgement of receipt).

- 3.8. The System shall provide an open data option for publishing web data. City may use the Systems Admin ability to flag data candidates for publishing and export data through an open data XML report.
- 3.9. The System shall provide secured access and information over the internet. All transaction and queries are encrypted over https using 128 bit (strong) encryption. In addition, the System will provide for multi-level security zones, data integrity checks and strong authentication to further protect information between the various firewalls. The multiple levels of security are summarized below.
- User Security
 - Separation of Duties
 - Data Security
 - Audit Logging
 - External Web Access Security
 - Testing to check technical vulnerabilities during system integration testing and external hacker testing by third-party. See Appendix A.6 for details.
- 3.10. Add an on-line fee calculator/estimator function/requirement for external customer use.
- 3.11. The System shall be PCI-DSS compliant and certified by the PCI Standards council as set forth in:
- Appendix A.7 Payment Card Industry (PCI) Requirements
 - Appendix A.9 Managed Services Catalogue for PCI Reports (Section 3.3.10.1)
 - and further described in Section 4 below.

4. ONLINE PAYMENT PROCESSING:

- 4.1. The System (through interface) must utilize the City's existing Merchant Service Provider, Wells Fargo Merchant Services (WFMS) for credit and/or debit card transaction processing, and send credit card transactions for processing to the First Data Corporation ("FDC") Nashville platform (the "Payment Processor"), Cybersource (gateway or payment portal). The gateway moves the payment data from AMANDA to First Data.
- 4.2. Wells Fargo Merchant Services (WFMS) payment network is PCI compliant for the payment processing.
- 4.3. Since the City's WFMS will be used for payment processing, the acceptance of major card brands is dependent on the City's WFMS. Therefore, the support of Visa, Master Card, American Express and Discover, including Visa and Master Card logo debit cards is dependent on WFMS.
- 4.4. Since the City's WFMS will be used for payment processing, the System shall only support real-time credit card processing facilities. The System will not store or capture any credit card information, and as such will not provide an off-line mode for the payment. However, the System will provide full off-line storage of all other transaction details.
- 4.5. WFMS shall provide the privacy, security backup and optional disaster recovery services to support online credit card processing.

- 4.6. City in conjunction with WFMS provide all scope of services for online credit card processing including:
- 4.6.1. Multiple layers of security and privacy protection as well as data backup services
 - 4.6.2. No credit card information storage/destruction. Encryption of all information exchanged between the payment provider and the System.
 - 4.6.3. Customer Service is provided with respect to any calls related to the online services including payment transactions
 - 4.6.4. Reporting such as monthly transaction summary reports for all payments made through portal
- 4.7. The System's hosted Cloud infrastructure on Microsoft Azure shall be PCI-DSS compliant as set forth in the Appendix A.7 PCI Requirements, Appendix A.9 Service Catalogue, and as described in below link, as applicable. Since System will not store, collect or process credit card information, the site does not need to be PA-DSS compliant.

<https://azure.microsoft.com/en-us/support/trust-center/compliance/pci-dss/>

5. TECHNICAL SYSTEM REQUIREMENTS

- 5.1. System (AMANDA Back Office and AMANDA Public Portal) meet the Federal Board's Section 508 and W3C Web Content compliance.
- 5.2. System can be integrated with commercial off-the-shelf (COTS) Customer Relationship Management (CRM) systems. In these types of integration, the following key identifiers are shared.
- AMANDA People RSN linked to CRM Contact ID for verified contacts
 - AMANDA Folder People RSN linked to CRM Contact ID for unverified contacts
 - AMANDA Property RSN Linked to CRM Address or Location ID
 - AMANDA Folder RSN linked to CRM Case ID
 - Email addresses and telephone fields are linked to fields in the AMANDA People Table or alternatively stored in Folder Info Fields for unverified contacts.
- 5.3. System delivered using a browser for both internal employees and members of the public. The public will access AMANDA through portal, while City staff will access AMANDA through the Back Office application.
- 5.4. System supports and is compatible with all major web browsers including Internet Explorer 11+, MS Edge, Google Chrome (most recent version), Safari (most recent version), and Firefox (most recent version).
- 5.5. System provides for all public-facing elements in English. System shall also provide public facing pages in Spanish, with City to perform language translations.
- 5.6. System includes standard and context sensitive help at each screen to assist the user during the execution of tasks. When clicked, the tutorial popups are displayed to explain the related functionality. Each of the tutorial popups can be configured to meet specific

City needs. Help messages, can also be configured to guide the user at key stages of transaction processing. Contractor provides standard online help manuals and tutorials. Based on the specific business processes and user functions, Contractor can lead or support the development of online help and interactive tutorials.

- 5.7.** The user interface can be personalized to optimize workflow for City staff.
- 5.8.** The Contractor will host the System in a fully redundant data center environment (Microsoft Azure) which provides a service level uptime guarantee of 99.9%. To ensure optimal performance and uptime for City staff accessing System on the Azure Cloud, City should use high capacity redundant internet pipes, preferably from two different ISPs. The Contractor will proactively monitor the System uptime using tools available as part of the Microsoft Azure platforms. Please see the following for additional details:
- <https://azure.microsoft.com/en-us/support/legal/sla/>
- 5.9.** System protects City data while in transit and at rest through encryption of all data in transit and, depending on the City's choice can encrypt some or all data while at rest in the database. Data stored on mobile devices such as inspector's laptops are encrypted in the mobile database. All transactions on the portal are encrypted.
- 5.10.** System supports single-sign-on through the Enterprise Authentication adapter. This adapter supports both LDAP and Active Directory environment for internal users using the Kerberos protocol. Multiple domains are supported using the Enterprise Authentication Adaptor.
- 5.11.** External and public users access System through Contractor's portal and are authenticated either using System Portal Registration module or the City's LDAP (such as Active Directory). In both scenarios System minimally stores the user's name, email address and password (encrypted) in the System. If using LDAP, System also stores the LDAP ID to cross reference with the LDAP system. System also supports two phase registration requiring confirmation and user validation by a staff person before providing the user with additional access credentials. System also supports restricted access by anonymous users to the System.
- 5.12.** The System shall provide security precautions to safe guard City data. The Cloud Managed Services is housed in a Tier III data center with 24-hour monitoring, and multi-factor authentication for staff accessing the center. The System is proactively monitored:
- Regular monitoring of infrastructure to support information availability
 - Daily security monitoring of System logs
 - Event monitoring of all applications
 - Security best practices
- 5.13.** The System supports roles-based access control. All user administration for internal (staff) and external (applicants) is conducted through System Administration. Administrators can assign roles, button permissions, as well as row-level security.
- 5.14.** The System supports audit trails of data changed in the system.
- 5.14.1.** The System will maintain a full audit trail of all actions stamping transaction audit records with the user id, date and time of each transaction. The System

provides fine-grain audit logging mechanism which maintains complete history of all changes made to the logged tables, including ID of the user which changed the data, date and time of the activity, previous and new values of the altered fields, and operation type. The System also provides an audit log browser tool which allows authorized users to inspect audit logs using System web GUI. All database changes are logged in the Audit log and viewable using the Audit button.

5.14.2. The System does not support “view based” audit trails of users who may have viewed sensitive information.

5.15. The System can limit number of simultaneous logins if requested by City.

5.16. The System supports custom workflows to aid in delivering service to the public. The System includes a dynamic workflow engine that can be configured to automate any business process as a sequence of connected steps. Each step in the workflow may be completed serially or concurrently and at each stage in the workflow, one individual or group is responsible for a specific task. Once the task is complete, the dynamic workflow engine ensures that the individuals responsible for the next task are notified (by addition of the task to their task list) and have access to the data they need.

5.16.1. The workflow for any Folder (permit, case, etc.) can be viewed as a list of tasks, their outcomes and the relevant dates; as a flowchart; or as a Gantt chart (milestone view).

5.16.2. Each of the tasks in the workflow tracks the following attributes: scheduled starting and ending dates; actual starting and ending dates; a status; an assigned user; addition information; attachments; documents; fees or payments; and outcomes. As such System is designed to automate all aspects of the case lifecycle including managing preliminary comments and customer interactions, application intake, reviews, approvals, fees, electronic plans review, GIS mapping, and development conditions management and is therefore well suited to meet the service delivery requirements to the public.

5.17. The System can accommodate custom fields to capture data without the need for custom programming. System has the capability to define custom data files without the need for programming through Contractor's Variable Data Model design. This allows City to configure, capture, track, validate and manage any information/data required for the application lifecycle. Custom fields can be added to a wide number of tables including but not limited to: Folder, Process, People, Property, Document, Attachment etc.

5.18. The System allows for configuration without requiring writing custom Java code. The System's Admin console provides the ability to configure System using tables. The System provides the ability for scripting logic to enhance flexibility to meet any business need. These scripts are written using SQL, the native language of the database.

5.19. The System supports scheduling of jobs using Batch Scheduler. Batch Scheduler is a module that allows City to schedule recurring tasks at a time when the drain on System resources will not affect users. Batch Scheduler can automatically schedule monthly/annual invoices, late fees, etc. based on events that happen in System. Batch Scheduler allows printing reports, invoices, letters, memos, etc.; outputting as a PDF file

analytic (and sending automatically in an email); outputting as an HTML file (for posting on the web); and linking the report to a folder for reference and as an audit trail. In addition, Batch Scheduler can run customized procedure code with a report so that audit trails are maintained and other processing is done; customize report output to suit requirements; ensure that tasks are not forgotten by having the system check for when invoices or letters should be generated; and automatically distribute reports rather than relying on clerical staff to print reports and then mail them.

5.19.1. Scheduling requirements for use of Batch Scheduler include specifying the name of the job, type of job (e.g. report, procedure, etc.), schedule pattern of the job (i.e., one time, daily, weekly, monthly, annually, etc.), procedures to run before or after the job, and specifying email address notification in the event of an error when performing the batch job.

5.20. The System supports ability to interface with it by providing a number of methods for integrating information with the System including SOAP based web services, XML (using EAI) and flat file import and export (such as CSV format) using the Batch Scheduler.

5.21. The System supports public access to datasets in machine-readable format to meet the City's requirements for open and transparent data efforts:

5.21.1. Timestamps for permits through System workflow engine tracks time from submission to approval. Through the City's existing CSDC Milestone Monitor Module, System also tracks time worked on a case, the time a case is sitting in queue and the time a case is waiting for information from the applicant.

5.21.2. System allows export of information stored on System (such as properties under construction, permit status, type of permit, inspection status, plan review comments etc.), to provide the public with access to information for open data purposes.

5.22. Technical support shall be provided as follows:

5.22.1. The Contractor provides the single point of contact for reporting problems ("Contractor's Service Desk"). Currently established methods supported by the Service, include the customer portal, chat, email, and telephone.

5.22.2. The hours of support are detailed in the Cloud Managed Services Service Level Agreement (see Exhibit A, Appendix A.9). During the transitional period where a hybrid cloud environment exists, the uptime service level is dependent on City infrastructure.

5.22.3. Custom feature requests are integrated into System and can follow two paths. In each case the feature is submitted through our support portal.

5.22.3.1. The custom feature is reviewed by the user group and prioritized. If it is voted as a top priority feature by the user group, it is then a candidate for the next point or major release of AMANDA. Timing is typically 6 to 18 months from date the feature is submitted. Note, Contractor reserves the right to not implement a feature if the feature is in conflict with the core architecture or impacts the product roadmap.

5.22.3.2. The custom feature is paid for by the City. In this case the feature is reviewed by Contractor and the City. The feature then is added as a "custom" component to a standard release. The custom component may at some time become part of the standard release at which time the terms of Contractor's standard Maintenance and Support Agreement apply.

5.23. The Contractor's methodology for reducing customization during the implementation phase of the project is through the System's variable data model architecture which significantly reduces the need to customization as it supports a high degree of variability and configurability. Furthermore, if a customization occurs Contractor isolates the customization by using APIs.

5.24. Through System Analytics, the City can determine where there might be opportunity for improvement in cycle time of permits etc. The City can track the time an application spends in queue. If the queue time for a particular permit type increases this is an indication that permit application volume is increasing for that permit type or that the staff are under resourced for processing this permit type.

5.25. The Mobile platforms used by Contractor is Sencha Touch as the mobile development platform for Apps. Sencha is the leading MVC- based JavaScript framework for building cross-platform mobile web applications. Contractor also uses Windows Visual Studio as our Windows mobile development platform. The System supports the following mobile platforms:

5.25.1. Contractor's mobile apps are cross platform, and therefore support IOS, Android. Currently the System Mobile Inspection platform is a Windows based product and supports Windows PCs, Laptops and Tablets. Contractor is in the process of testing this product on Android devices and support Windows 7, 8 and 10 devices.

5.25.2. Each of the mobile platforms support a full range of functionality of a subset. There are three options in the field:

5.25.2.1. Use AMANDA Back Office. Option 1 provides the full functionality of AMANDA in the field but does not leverage local device features such as GPS or Cameras. Option 1 requires full time connection.

5.25.2.2. Use AMANDA Mobile Inspections. Option 2 provides full mobile functionality in the field and leverages device features such as GPS and Camera. Option 2 also provides for stand-alone database and therefore can operate when the device is disconnected.

5.25.2.3. Use AMANDA Mobile Apps. Option 3 provides many of the features of Option 1 with the restriction that some advanced feature such as tracking deficiencies is not available. The app however can leverage the use of device features such as Camera or GPS.

5.25.3. The mobile platform supports real-time and store/forward transactions. The Windows based platform uses store and forward transactions and therefore can

operate stand-alone when no network is available. Information is securely stored in the mobile database.

5.25.4. The mobile platform has the ability to capturing a signature in the field.

5.25.5. Contractor does not recommend emailing a copy of inspections results directly to the customer, but rather should be routed through the System server. This provides an audit trail as well as the ability to review inspection results if required (such as stop work order).

5.26. The System provides for out-of-the box reporting tools and has a number of standard reports. The System includes AMANDA Analytics, which is based on an industry leading web reporting tools for creating ad-hoc and standard reports, analytics and dashboards.

5.26.1. The City may also use Crystal, Cognos or other 3rd party report writing tools. System includes the AMANDA Datamart which makes it even easier to use 3rd party tools to report against System data.

5.26.2. System provides the following reporting tools:

5.26.2.1. Standard (canned) Reports: System provides over 65 standard reports that include license based, statistical, financial, investigations etc. These reports allow users to select key search criteria and can be further configured if required. Each group of standard reports includes a number of detailed reports.

5.26.2.2. AMANDA Analytics: provides an easy to use yet powerful tool for building dashboards to present key performance indicators (KPI), trends, and warnings with the ability to drill down into details. This is a reporting tool to web-enable existing and new management reports as KPI monitors. Monitors are used to track trends, alerts, summaries, warnings, ticklers and other reminders. Information can be presented in a line graph, bar graph, pie chart, list, table, speedometer, etc. Managers can drill down to get details from AMANDA folders.

5.26.2.3. Third-Party Reporting Tools: such as Crystal Reports, Cognos, BI Publisher, etc. may also be used to develop business specific reports and views. Access to results from these tools is available directly from within AMANDA and these custom reports may be added to our standard report menu.

5.27. The Data Retention and Archival module in System provides the following functionality:

- Automates time tracking to trigger time based rules for data retention and archival
- Provides out of the box Archival and Disposal rules that can be further configured by the client
- Data can be archived as external files/reports before disposal rules kick in

5.28. System shall meet the Functional System requirements in accordance with Appendix A.2

6. CITY'S RESPONSIBILITIES:

6.1. The City will provide technical and business staff and project management expertise to support the Contractor in the implementation of the System:

6.1.1. The City will provide one dedicated Project Manager. The City Project Manager ("City PM") owns the project deliverables and is responsible for day-to-day project management. The City PM acts as the primary liaison with the Steering Committee and executive sponsor, as well as the project team. The City PM will work with Contractor PM to meet the project objectives, to identify project issues and facilitate resolution, and to participate in active coaching of the implementation team. The City PM is the person at the City who is responsible for the execution of the project. The City staff assigned to the project would, for reporting purposes, report to the project manager.

6.1.2. The City will provide four to five subject matter experts dedicated to the implementation team (non-technical), and seven to eleven staff from technical to end users available 25-50% of the time. In addition, the City will provide subject matter experts to be available in the areas of Planning, Building, Code Enforcement, Fire Permits, Public Works Permitting, and Payment Processing for the duration of the project as needed for general categories listed below:

6.1.2.1. **Business Core Team** including end users to be available in the areas of Fire Permits, Public Works Permitting, and Payment Processing for the duration of the project.

- Database Administrator. Responsible for understanding how to setup the different databases instances (development, testing, training and production) of AMANDA, and assist Contractor to setup tasks.
- Business Specialists. Understand the architecture of the application and how it relates to business needs. Involved in data collection and participate in making policy decisions. Will have ownership of the processes within their functional area(s) and the project deliverables. Manage effort to gather the business process requirements and develop the related business solutions.
- Testers. Assists in performing acceptance testing on the System from the integrated modules to the Folders to any documents, forms or report. Contractor will train Testers to verify the operation of all functions during the Acceptance Test stage.
- Trainers. Involved with Contractor Trainer and will be the trainer on the AMANDA product suite. Responsible to train the end users on AMANDA and prepare appropriate training materials based on templates provided by Contractor. Responsible for developing training materials and conducting the training classes after the go-live date.
- Data Conversion / Interfaces Lead. Involved with Contractor to analyze, map and test converted data. Learn AMANDA tables and plan the business rules for conversion. Prepare, review and finalize

the data mapping documents, test data after data conversion is completed. Lead in loading the data into the test and production databases.

6.1.2.2. **Technical Core Team** to support data extraction from legacy systems for data conversion, server and database technical support, desktop and network infrastructure support staff.

- **Technical Specialists.** Involved in developing data access programs, setup website look and feel using XML/XSL and e-Commerce connectivity, setup forms, reports and merge documents.
- **Systems & Network Administrators.** Assist setting up the workstations, proper connectivity to the network, user access to network environment, testing prior to going live.

6.1.2.3. **Team Leads** will be assigned by the City based on best fit and qualifications of available resources to meet minimum competency requirements as determined under advisement with Contractor. Team Leads will be assigned in the following key areas:

- Business Analysis
- Technical Infrastructure Network
- Integration
- User Experience
- Quality Assurance & Testing
- Change Management

In the event, a Team Lead needs to be replaced, the City will select and assign the next best fit individual from available resources and shall consult with Contractor regarding qualifications to ensure there is no or minimal impact to the project.

6.2. The City will be responsible for performing data clean-up of the data in the legacy system.

6.3. The City will assist Contractor with go-live activities such as migrating all data to production, running final data conversion, and testing.

6.4. The City will define Test Cases for the appropriate Phase, in preparation for User Acceptance Testing.

6.5. The City will perform User Acceptance Testing, as defined in the Project Schedule. This includes the testing of Folder configurations, Interfaces/Integrations, Batches, Reports, Portal and Data Conversion.

6.6. The City will be responsible for attending all administration and end-user training sessions, as defined in the Project Plan.

- 6.7.** The City shall endeavor to review and provide edits/comments, reject or approve milestones/deliverables within five (5) business days of receipt of the Project Milestone/Deliverable Acceptance Form (Appendix A.10). Both Parties understand that delays introduced by lengthy approval processes will influence the completion of milestones and delivery of the AMANDA production system. As such, both Parties shall engage in prompt decision-making, problem resolution and timely consideration of Deliverable Sign-offs to achieve an on-time and on-budget project completion. The Parties will endeavor to make decisions and resolve problems within three (3) business days after the decision to be made or issue to be resolved is identified. In the event that any decision cannot be made in three days, the City and Contractor will make a decision or resolve an issue within a maximum of five (5) business days.
- 6.8.** The City will sign-off Change Orders pursuant to the Change Order procedures as provided in Section 7 of Agreement.
- 6.9.** For the data conversion portion of the project, the City will be responsible for extracting data from legacy Permitting System in a mutually-agreed-upon format suitable for transformation by the Contractor in preparation for Contractor to perform data conversion.
- 6.10.** The City will be responsible for providing Contractor with expertise, documentation and the appropriate access to third-party systems used for integrations and interfaces. Any required configuration or modifications to third-party systems shall be the responsibility of the City.
- 6.11.** The City will be responsible for providing to Contractor the necessary workspace, including a desk and network connection, for all Contractor staff to use while onsite in the City of San Jose offices.
- 6.12.** The City shall make available facilities for Contractor project staff while on-site, including: on-site office space for Contractor project staff, supplies, outside network connection, conference call and meeting/training facilities including any necessary logistics support for class schedules, meeting rooms, training rooms, material reproduction, training workstations, training supplies, and general administrative support when required. In all cases, Contractor recommends no more than ten attendees for any training session and one workstation for each attendee.
- 6.13.** The City shall provide qualified and experienced business and technical staff with in-depth knowledge of business processes. The project budget and timelines may be affected if City staff is unavailable during the Analysis, Training or Testing phases. The City staff shall assist Contractor with the data mapping and cleansing activities for the successful data conversion in accordance with the project time schedule. City staff is responsible for all data cleanup required in the legacy system due to the quality of the data. Any modifications to data due to differences in the structure of the legacy system and AMANDA and will be the joint responsibility of the City and Contractor. The City staff shall provide the necessary and available documentation including ERD diagrams and Data Dictionaries for all legacy systems.
- 6.14.** The City technical staff responsible to assist Contractor with AMANDA setup and configuration tasks should have the following general knowledge, programming skills and experience:

 - Oracle RDBMS and Application Server (Tomcat 6.x or later)

- Database Functions, Procedures
- PL/SQL
- JSP, XML
- Microsoft Excel
- Working knowledge of City technical infrastructure

6.15. Excluding the software provided by CSDC and cloud services, the City's responsibility for final acceptance shall be limited to components such as client machines, firewalls, internet connection, hand held OCR scanners, printers to print inspection slips, website certificate and the like or as otherwise may be agreed to by City.

7. CONTRACTOR'S RESPONSIBILITIES:

7.1. Project Team

Contractor shall provide an experienced project team with a Project Manager to complete all tasks and activities to deliver the functionality described in Appendix A.2 for the System implementation.

- 7.1.1.** Project Manager – Contractor shall assign **Derek McConnery** to be responsible for overall project management. The PM will create and maintain project plans as well as develop, implement and maintain key processes (e.g. change, quality, issue and risk management) and track and report on project progress. The PM will interact with the City Project Manager and the project committees as appropriate.
- 7.1.2.** Project Director – Contractor shall assign **Epsit Jajal**, VP of Client Services to be responsible for the high-level direction of the project. Will review on weekly basis the status of the project and act as an escalation level of any potential issues.
- 7.1.3.** Solution Architect (SA) – Contractor shall assign **Todd Karr** to be responsible for leading the scope verification sessions with the participation of the Business Analysts. The SA is the primary architect of the AMANDA Prototype and defines all Folder Types and their attributes. These Folder Types are assigned to BAs for the preparation of specifications and further development.
- 7.1.4.** Business Analyst (BA's) – Contractor shall assign **Parul Jain** (Primary) and **Kirk Nunemaker** (Secondary) to be responsible for the analysis, design and documentation of AMANDA Folders and the preparation of Folder specifications for City approval. All City requirements including data conversion, interfaces, reports and batch processing are reviewed by the BAs. Once the specifications are approved, the CSDC Technical Configuration Specialists will be responsible for the Configuration and Testing of AMANDA Folders and all their components.
- 7.1.5.** Technical Consultant (TC) – Contractor shall assign **Yvonne Ramsaroop** to be responsible for configuration and unit testing Folders, Outputs/Reports, Batch Jobs, interfaces, portal pages, mobile deployment and conversion scripts. The Technical Consultant also walks through the configured Folder with the BA.

- 7.1.6.** Configuration (CS) Specialist – Contractor shall assign Gustavo Del Prado to be responsible for the configuration of all Folder components and associated requirements to ensure that the AMANDA system is configured to meet all approved specifications. The CS will also be involved extensively in the testing of all configuration components required for the successful operation of the new AMANDA Permitting installation. Once the configuration and testing are completed the User Acceptance Testing starts until the required UAT forms are signed-off by the City, confirming that the AMANDA system is operating according to the approved specifications.
- 7.1.7.** Trainer – Contractor shall assign Uday Aradhya to be responsible for the overall training of the City Staff with respect to the AMANDA integrated modules provided by Contractor and configured and tested during the AMANDA implementation.
- 7.1.8.** Contractor must obtain City’s prior approval before changing the key personnel listed above and/or changing his/her responsibilities. Such approval shall not be unreasonably withheld.
- 7.1.9.** The Contractor shall provide on-site support of project team for following activities:
- Project manager (full-time onsite as needed),
 - Solution Architect (onsite during modeling, prototyping and design activities, as required through configuration and to support testing and go-live preparation)
 - Technical Architect (onsite during design activities, as required through configuration and onsite for go-live preparation and production deployment)
 - Lead Business Analyst (onsite during requirements, modeling, prototyping and design, as required through configuration and full time to support testing and acceptance)
 - Lead Technical Consultant (onsite during prototyping and design activities, as required through configuration and development of interfaces and onsite to support testing and acceptance.
- 7.1.10.** The above noted onsite resources will be supported by a team of business analysts and technical consultants working remotely in Contractor’s offices in Fort Worth, Texas and/or Mississauga, Canada.

7.2. General

- 7.2.1.** Contractor is responsible for leading all configuration and implementation activities. Contractor shall perform the initial installation and update of the AMANDA software and database in the Contractor’s hosted Development/Test environment and provide the City with secure access to the AMANDA software and environment during development. Access shall include administrative rights. A single shared AMANDA database will be used by all users across all programs using AMANDA applications, which requires coordinating project access to the existing AMANDA database in a Development/Test environment.

- 7.2.2.** The Contractor shall host the infrastructure and applications with Unisys/Azure, and will provide all necessary facility space, power and air conditioning for the required hardware at the Contractor's location. The Contractor will be responsible for providing and establishing a secure, physical data center for the following environments: application, web server and database backups of the Development, Test and Production Environments. If any project-related information is lost, the Contractor is responsible for restoring the lost information. For details see Cloud Managed Services: Service Catalogue (Exhibit A, Appendix A.9).
- 7.2.3.** Failure and Disaster Recovery ("DR") – The Contractor's Permitting System will reside in the cloud and as such will take advantage of Contractor's DR policies and procedures. For details see Cloud Managed Services: Service Catalogue (Exhibit A, Appendix A.9).
- 7.2.4.** Contractor shall provide change request management planning documents and related services upon City approval. Contractor will prepare detailed project plans, processes for tracking project status, a change request management process and preliminary project schedule, in a critical path format, and approach documents for conversion, integration, testing and implementation/deployment as detailed in subsequent sections in this scope of work. See Appendix A.4 – Preliminary Project Schedule for the project plan. Contractor shall immediately notify the City of any issues, risks, or test results that indicate the project timeline is in jeopardy.
- 7.2.5.** Contractor shall submit reports on project status at a minimum of twice per month. Contractor shall submit reports immediately if there are any issues, risks or identifiable test results that indicate the project timeline is in jeopardy.
- 7.2.6.** Contractor and the City will share responsibility for the performance testing of the AMANDA system. The AMANDA system will be tested and verified jointly using agreed-upon toolsets. These tests will be conducted at the client site.

7.3. Implementation Initiation Activities

- 7.3.1.** Contractor will conduct a kick-off meeting to present a preliminary implementation plan and preliminary project schedule and identify implementation risks and introduce the project team. Contractor will present a high level overview of the solution. The City will present the current systems environment and the project objectives reiterated discussed and agreed.
- 7.3.2.** Contractor will during initial stages of the project conduct analysis to learn all of the City's policies and procedures to identify requirements, specific processing and sequences and dependencies that will be configured within the new system. Integrate best practices and automation.
- 7.3.3.** Contractor will identify all the appropriate functional areas and interfaces to be analyzed during the Analysis Activities, and determine to what extent the analysis should be carried out, providing a detailed schedule of analysis workshops that will occur.

- 7.3.4. Contractor will review City's integration requirements of the solution with other City systems (such as Cashiering and internal GIS systems).
- 7.3.5. Contractor will prepare detailed project plans, schedules, and, approach documents for data conversion, integration, testing and deployment.
- 7.3.6. Contractor will prepare Analysis Activities (Fit Gap), including the following tasks and deliverables:
 - Contractor will provide product overview training/orientation in preparation for Analysis Activities.
 - Contractor will lead functional workshops in which City resources are taken through the business processes to be supported by the standard configured software.
 - Any out of scope items shall be documented by a change order.
 - Review with the functional SME's the standard configuration of codes and control tables.
- 7.3.7. Contractor will recommend a course of action for each change request which should typically be addressed by one of the following strategies: re-engineering the business process; product configuration; product enhancement requests, adding new functionality into a future release of the product; discarding the requirement.

7.4. Execution Activities

- 7.4.1. Configuration. Contractor will configure (and unit and regression testing) the system based on the outcome of Analysis Activities in order to support City's business requirements. City SME will assist Contractor to perform business validation testing. Contractor will perform knowledge transfer to City as part of the project.
- 7.4.2. Modifications. According to modifications identified and agreed to during analysis activities, Contractor will program modifications to the solution.
- 7.4.3. Interfaces and Integration. According to the interfaces and integration strategy identified and agreed to during Analysis Activities, Contractor will program and/or configure custom Interfaces or standard APIs/Web Services in order to integrate the solution with other applications. In addition, Contractor will also, transfer knowledge to City staff on how to use System APIs and Web Services so that staff may modify legacy systems to connect to AMANDA System.
- 7.4.4. Testing. Contractor is responsible for the unit test, integration, and system test (where appropriate) of all deliverables.

7.5. Data Migration / Conversion Activities

- 7.5.1.** Contractor shall perform data migration for the systems identified in Appendix A.5 – Integrated Data Tracking System. Such data migration shall be a joint effort.

 - 7.5.1.1. Source to Intermediate. The City is best positioned to access, control and extract data from the source system. City will clean, map and move the data from the source system into the intermediate tables.
 - 7.5.1.2. Intermediate Tables. Contractor is best positioned to access, control and move data into AMANDA tables. Contractor will create intermediate tables and will work with City to map data from intermediate to AMANDA tables. Contractor will create and execute the scripts to move data from intermediate to AMANDA tables, followed by testing.
 - 7.5.1.3. Contractor moves data from intermediate tables to AMANDA.
- 7.5.2.** Contractor shall be responsible for transformation and loading of data from the intermediate table format into the AMANDA database for the testing and production environments. Contractor shall be responsible for data conversion from the mutually agreed format to the new AMANDA System.
- 7.5.3.** Contractor will identify data conversion and quality issues, related to data integrity (duplicates, orphans, etc.) and data accuracy (completeness) during data conversion to the AMANDA database. Contractor shall work with the City to develop a resolution plan and City will be responsible for data cleansing activities which may involve manual updates and edits by City staff.
- 7.5.4.** Contractor will include all functional areas to be analyzed during the Analysis Activities and provide a detailed schedule of analysis workshops that will occur. The functional areas include:

 - Planning Permits
 - Building Permits
 - Code Enforcement Permits
 - Fire Permits
 - Public Works Permits
- 7.5.5.** Contractor will implement the following Interfaces and Integrations:

 - Replace existing Online Permits with AMANDA Public Portal (new)
 - E-plan review software such as ProjectDox from Avolve (new)
 - Alfresco Electronic Content Management System (ECMS) (in-process)
 - Property updates from the County Assessor's office (existing)
 - ArcGIS & Latitude GeoCortex (integrated GIS spatial data module) (new)
 - Property updates from the County Assessor's office (existing)
 - Microsoft Office 365 (new)

- Exchange / Outlook email messaging and calendar (new)
- Q-Matic People Records (new)
- Firehouse (new)
- Financial Management System (FMS) (existing)
- iNovah Cashiering System (existing)
- Wells Fargo Merchant Bank Services for credit card processing and gateway provider: First Data (payment processor) and Cybersource (gateway) (existing)
- Wells Fargo Lockbox (existing)
- AMANDA Business Tax System (in progress)
- Revenue Results (new)
- PeopleSoft or new HR/Payroll System (new)
- Capital Project Management System (CPMS) (new)

7.5.6. Contractor will convert the following:

- Code Enforcement System database (CES)

7.5.7. Contractor shall be responsible for all interface configurations that are inbound-to and outbound-from AMANDA. The City shall be responsible for all development of client-side interfaces and interfaces that are inbound-to and outbound-from the various external systems. For the interfaces required to be setup between AMANDA and other third-party systems, Contractor assumes that:

7.5.7.1. City staff and/or third-party software providers with knowledge of the third party system(s) are available as required.

7.5.7.2. Contractor is not responsible for any software, database, environment, etc. changes to existing third-party systems.

7.5.7.3. Contractor will integrate web-based AMANDA with third-party systems that have technology compatible with the J2EE technology framework (for example, .NET applications will be integrated using Web Services) but integration using desktop technologies (for example, .EXE extension applications) is not supported.

7.6. Testing Activities

7.6.1. Contractor shall be responsible for the unit test, integration and system test of all deliverables.

7.6.2. Contractor shall assist the City in developing an Acceptance Test Plan in accordance with the requirements and functional specifications documented for this project. The City shall be responsible for ensuring that the test plan is suitable for management, end-users and computer operations. The City is responsible for reviewing the test plan and test data specifications for completeness and accuracy and will provide sufficient test data (e.g., 100 actual accounts representing mix of complex/simple accounts prior to full data dump) for comprehensive testing to confirm the new AMANDA system meets all the documented requirements.

7.6.3. Contractor shall ensure the System will be installed, tested, and operational for go-live **no later than January 2019** (23 months from kick-off, assuming 8/22/16 kickoff), with new online portal and e-Plan solution delivered/tested and go-live within the **first 9 months of kick-off**, or as may be mutually revised and agreed to in the Preliminary Project Schedule, Appendix A.4, by City and Contractor.

7.7. Use of Subcontractors:

7.7.1. Contractor plans to use and the City approves the following subcontractors on this project to deliver e-Plan review and GIS Viewing functionality.

- Avolve for e-Plan Review software. Provide assistance with the installation, configuration and delivery of ProjectDox e-Plan review software.
- Latitude Geographics for enhanced GIS. Provide assistance with the installation, configuration and delivery of the GeoCortex Essentials as a GIS viewer for internal and external use.
- Unisys for hosting the AMANDA cloud

7.7.2. Per Section 26 of Agreement entitled "SUBCONTRACTORS", Contractor is responsible for directing the work of the approved subcontractors and any compensation due to subcontractors.

8. ROLES AND RESPONSIBILITIES MATRIX:

The purpose of the Responsibilities Matrix below is to identify and summarize the primary roles and responsibilities between the Contractor and City to complete certain tasks.

RACI – Responsible; Accountable; Consulted; Informed		Unisys	Customer	Agreement / Notes	
Service Strategy	Governance Processes	Financial Management		X	Unless otherwise identified in a Customer Order, Customers are responsible for the Governance processes of their AMANDA Business Applications.
		Service Portfolio Management		X	
		Business Relationship Management		X	
		Demand Management		X	
		Strategy Generation		X	
Service Design	Operational Processes	Service Level Management	X	X	Unisys is responsible for the processes related to availability, capacity, continuity and service level management, only. Unisys Service Management will provide reports addressing activity/achievements for each (responsible) process.
		Availability Management	X		
		Capacity Management	X		
		IT Service Continuity Management	X		
		Service Catalog Management		X	
		Information Security Management	X	X	Unisys and Customer are jointly responsible for Information Security Management and Compliance Management.
		Supplier Management		X	
		Design Coordination		X	
		Architecture Management		X	
		Risk Management		X	
Service Transition	Operational Processes	Compliance Management	X	X	
		Change Management	X, X	X, N/A	The first value corresponds to PaaS and the second to AaaS.
		Service Asset & Configuration Management	X, X	X, N/A	
		Release & Deployment Management	X, X	X, N/A	For Platform Managed Services (PaaS), Unisys is responsible for the AMANDA Environments. Customer is responsible for their AMANDA Business Application, which
		Transition Planning and Support	X, X	X, N/A	
		Service Validation and Testing	X, X	X, N/A	
Change Evaluation	X, X	X, N/A			

RACI – Responsible; Accountable; Consulted; Informed		Unisys	Customer	Agreement / Notes	
		Knowledge Management Application Development	X, X	X, N/A	includes configuration, code, reports, templates, etc. For Application Managed Services (AaaS), Unisys is responsible for the AMANDA Environments and AMANDA Business Applications. Change Management will be a joint responsibility.
			X, X	X, N/A	
Service Operation	Processes	Incident Management	X		The Unisys Service Desk Unisys may require support from Customer to deliver the Services.
		Problem Management	X		
		Request Fulfilment	X		
		Access Management		X	
		Event Management	X		
	Functions	Technical Management	X		If the Customer Order specifies Managed Platform Services, Customer will have access to the AMANDA Admin module and all associated AMANDA Business Application configurations & code, but not to the VM's, etc.
		IT Operations Management	X		
		Applications Management		X	
		Service Desk	X		
Continual Service Improvement	CSI	Service Improvement		X	
		Service Measurement	X		
		Service Reporting	X		

9. PROJECT MANAGEMENT AND APPROACH

9.1. General

9.1.1. The Contractor Project Manager will develop and maintain a Project Management Plan, which will incorporate all project related plans to carry out any required tasks for Scope Management, Time Management, Cost Management, Quality Management, Communications Management, Risk Management and Stakeholder Management. In adherence to Project Management Office (PMO) standards, the Project Management Plan will outline the overall project management principles to be applied to the project for successful delivery. Once the Project Management Plan is approved by both Contractor and City, any deviation from the approved plan will require a revision to the plan and any cost assessment to be completed by Contractor and shall be subject to mutual agreement.

9.1.2. Contractor shall provide project management and implementation services, and use following key factors in the day-to-day management:

- Weekly Plan Updates
- Issue Management
- Scope Management
- Quality Management
- Risk Management
- Contractor Project Reviews
- City Reviews and Meetings
- Status Reports
- Snapshot Reports

- Project Control

- 9.1.3. The Contractor shall provide knowledge transfer through training of City's database Administrator and Staff throughout the implementation to City functional and technical staff through daily communications, activities and ultimately training.
- 9.1.4. Contractor shall provide a Project Manager who is responsible for the day-to-day management of the project as detailed in this scope of work.
- 9.1.5. Any addition to scope may increase the project timeline. Both the Contractor and City Project Managers will evaluate the impact to the Project schedule if a change order is requested and approved through a formal change order as described in Section 7 of the Agreement.
- 9.1.6. In general, the Contractor's Project Manager has the leadership role in carrying out the scope of work and implementation to successful completion and go-live. The City's Project Manager is primarily a support role to ensure the City's requirements are met and project is completed successfully and on schedule. City and Contractor Project Managers will jointly coordinate day-to-day execution of the Project Schedule. City and Contractor project managers will collaboratively manage project scope, budgets, issues, risks, communications and Change Orders.
- 9.1.7. Scope management is a critical success factor to delivering on time projects that meet their project objectives. As such, Contractor shall manage project scope carefully and reviewed on a regular basis. Project Scope extensions that cannot be absorbed into the current timeline and budget will be deferred to post go-live activities as described in Section 9.2.5.

9.2. Project Planning

- 9.2.1. Project Schedule – Contractor shall maintain a detailed project schedule that includes installation, planning, fit gap analysis, conversion, training, testing, interfaces, and system modifications noted in the functional requirements, critical milestones, and data conversion tasks. The schedule shall include all tasks and responsibilities of the project with specific tasks tied to a responsible party. A preliminary Project Schedule has been prepared for a preliminary assignment of personnel and initial definition of milestones (**Appendix A.4 - Project Schedule**).
- 9.2.2. Configuration Management – Contractor shall develop a configuration management plan document for the project. Contractor shall perform configuration management throughout the term of the Agreement and according to the configuration management plan, as described in the AIM methodology (see Appendix A.3).
- 9.2.3. Issue Management – Contractor shall track all project issues using an issue-tracking process. The issue tracking process shall facilitate documentation of the following:
- Issue description

- Issue priority
- Issue status (e.g. open, pending, under investigation, resolved)
- Plan for resolution and escalation process if necessary
- Individual responsible for resolution
- Targeted and actual resolution dates
- Resolution action.

9.2.4. Risk Management – Contractor shall manage project risks throughout the life of the Agreement. Contractor shall inform the City Project Manager of risks by including an updated risk report with each monthly project status report. The risk report shall include the following items:

- Risk monitoring activities
- Risk identification
- Analysis of risk
- Proposed risk mitigation measures
- Results of prior risk mitigation measures

9.2.5. Change Request Management – Contractor shall develop change management planning documents (or proposal) for the System. Change Order proposals shall contain the following information:

9.2.5.1. A description of the Change Request Services and Deliverables including Contractor's reasons for deciding whether a Change Request is in or out of scope.

9.2.5.2. A description of the consequences of not performing the Change Request work or the effect on the project schedule and work plan of performing the work.

9.2.5.3. An estimated itemized cost to comply with the Change Request.

9.2.5.4. If the Change Order request is approved by the City, the Change Order Procedure in **Section 7** of the Agreement must be followed. The City will approve a Change Request by issuing a Change Order (Exhibit E) including approved changes in the cost, schedule and work plan required to complete the Change Order. The City shall review and provide changes/comments or approve a Change Order within five (5) business days of processing a Change Request.

9.2.5.5. Neither party will be obligated to proceed with a Change Order until the Change Order is executed by both parties.

9.2.6. Testing – Contractor shall develop a system test planning documents for the System with City input to be utilized for City testing. Project system testing shall include, but is not limited to, functional testing, technical testing, performance testing, conversion testing, unit level tests of standard configuration and billing as well as any new programming, a system test for Integrated Permitting System and required interfaces, acceptance testing, and disaster recovery testing.

9.2.7. Training Plan – Contractor shall develop a product training plan for City users in preparation for Go-Live and at different levels (technical support, super users/admins, end-users).

9.2.8. Data Conversion – Contractor shall develop a data conversion plan for the System. Contractor shall execute data conversion according to the plan approved by the City's Project Manager.

9.3. Project Communication

9.3.1. Communication Plan

9.3.1.1. Contractor together with City shall develop a Communication Plan that will address specific needs of the project for City review and approval.

9.3.1.2. The Communication Plan shall identify all stakeholders that should be notified of the project status. Primary method of communicating information shall be through use of email.

9.3.1.3. At specified intervals, the Project Managers will schedule project review meetings to discuss progress, problems and review project status. Such meetings must be at least every two weeks for the duration of the project.

9.3.1.4. If applicable, at least once a month a meeting with the Steering Committee shall be scheduled to prevent any surprised regarding unforeseen obstacles during the project implementation.

9.3.1.5. A project status report will be prepared before every review meeting. The report will identify progress to date, the tasks to be completed during the next period and any obstacles or problems that need special attention. A summary of decisions taken will also be included in these reports. The project managers will also maintain and update the schedule of tasks (project schedule) and will notify project participants of the deadlines that all project participants must meet.

9.3.2. Weekly Project Management Status Report

9.3.2.1. Contractor's Project Manager shall prepare and submit weekly project management status reports.

9.3.2.2. Weekly project management status reports shall address the overall project status with respect to the project work plan and/or project schedule and shall provide progress information on all completed, ongoing and planned project activities, deliverable status and the next month's schedule for review and proposed changes to the project work plan. These reports shall summarize any outstanding project issues or obstacles and detail any actual or proposed deviations from planned activities, schedules, budgets, or staffing.

9.3.2.3. Each weekly project management status report shall have a current project schedule attached that incorporates planned and actual start and end dates, percentage complete, dependencies and critical items.

9.3.3. Monthly Risk Status Reports

9.3.3.1. Contractor shall prepare and submit monthly risk status reports

9.3.3.2. The monthly risk status report shall provide formal written evidence of problems, risks and issues requiring attention with proposed remedies.

9.3.3.3. Project Status Meetings – Contractor staff and City staff as required, shall attend weekly and monthly project status meetings. Project Manager shall present the current project status at the meetings.

9.4. Phased Project

9.4.1. Contractor shall initiate a phased project approach in which Contractor will deliver:

- Phase 1: Public Portal & E-Plans (on version 6 while working toward upgrading the system to version 7 and bringing new departments online in subsequent phases)
- Phase 1A: AMANDA Planning Division Rework
- Phase 2: GIS and AMANDA Mobile
- Phase 3: AMANDA 7 Modules & Implementations
- Phase 4: AMANDA and Workflow Redesign

All phases are detailed in the Preliminary Project Schedule (Appendix A.4)

9.4.2. This approach provides the City with a quick win, and a measurable improvement in customer service while Parties assess existing processes and make recommendations on process improvements. These improvements will be delivered in subsequent project phases.

9.4.3. Contractor shall leverage the AMANDA Cloud for version 7 roll out to minimize impact to the City's IT resources and to enable faster project startup. Details are provided in Cloud Managed Services Catalogue, Appendix A.9

9.4.4. Contractor shall leverage existing AMANDA integrations as outlined in Section 7.5.5.

10. PROJECT SCHEDULE

The project and System implementation schedule are detailed in Appendix A.4 – Preliminary Project Schedule, including installation, planning, fit gap analysis, conversion, training, testing, interfaces, and system modifications (if noted in the functional requirements), critical milestones, data conversion tasks, and related deliverables.

- 10.1. Contractor shall ensure the System will be complete, installed, tested, and operational for go-live no later than **January 2019** (23 months from kick-off, assuming 8/22/16 kickoff), unless otherwise mutually revised and agreed to by City and Contractor.
- 10.2. Contractor shall provide new online portal and e-Plan solution delivered/tested and go-live within the **first 9 months after kick-off**, or as may be mutually revised and agreed to in the project plan, Appendix A.4, by City and Contractor.
- 10.3. It is the City's expectation that the Contractor shall meet all the project deliverables and dates in accordance to the detailed Preliminary Project Schedule (Appendix A.4). Any changes to the Preliminary Project Schedule must be mutually agreed to and incorporated into a revised Project Schedule.

11. INITIATE IMPLEMENTATION

- 11.1. Contractor shall initiate detailed project planning and City resource planning, project management.
- 11.2. Contractor shall conduct the initial kick-off meeting to officially begin the project and present the project schedule and objectives to all interested parties.
- 11.3. Contractor conducts pre-analysis tasks, which include collecting documentation of current business processes and viewing a demonstration of the existing system.
- 11.4. Contractor delivers and installs the required software modules and licenses on the cloud, and deliver to City software application documentation. All necessary precautions regarding the protection of secure environments must be followed by City and CSDC staff while the AMANDA software is fully installed and the initial testing of basic functionality is successfully completed.
- 11.5. **Deliverables:**
 - 11.5.1. Kick-off Meeting
 - 11.5.2. Project Plan documents (per Section 9.2, 9.3, etc.)
 - 11.5.3. Completed checklist of information and walkthrough of existing system
 - 11.5.4. Software delivery
 - 11.5.5. AMANDA Prototype Signed-Off Specifications
 - 11.5.6. Documentation of Tasks, Roles & Responsibilities and Milestones

12. SCOPE VERIFICATION & PROTOTYPE

- 12.1. Contractor shall develop the scope verification and phase documents for the initial prototype AMANDA Folders Types which will be fully developed in subsequent steps. This business modeling includes the following:
 - Understand functionality of user-defined folder components. For Example, list of folders and their relationships (e.g., list of folder statuses, folder

people, folder tabs, info fields, processes, attachment types, fixtures, fees, etc.) are confirmed with City Staff.

- Understand functionality of outputs, interfaces, conversion sources, and web portal services.
- Review Folder configurations with City including business process workflows to generate the various Prototype Folder types
- Verify all elements and processes (for example: manual and mail-based processes) to be replaced by AMANDA
- Verify components and processes to be integrated with AMANDA
- Verify sources of database conversions and nature of data

12.2. Contractor shall conduct a high-level review of AMANDA Folders with the City's designated Project Manager and staff.

12.3. Contractor shall prepare a detailed Needs Analysis from the review of the list of folders and their relationships. The consolidation or differentiation of tax types in new Folder definitions will be explored and identified.

12.4. Contractor shall review the prototype Folders with City Staff and/or key stakeholders to ensure these Folders accurately represent the business rules that will be developed for all Folders. Prototype Folders include subtypes, work codes, information fields, fixtures, folder people, folder property, fees and workflow processes.

12.5. Contractor shall confirm the lists of outputs, interfaces, conversion sources and portal services required.

12.6. Contractor shall conduct workshops sessions with City Staff to identify business process opportunities and best practices.

12.7. Deliverables:

12.7.1. List and high-level definition of Folder Types

12.7.2. Prototype folders ready for Needs Analysis

13. NEEDS ANALYSIS

13.1. Contractor shall analyze the business requirements as listed below:

13.1.1. Documents Analysis. Analyze all output documents including Folder-related merge documents and reports

13.1.2. Interface Analysis. Analyze details of interfaces including secure file transferring protocol, data requirements, data format, schedules and error handling

13.1.3. Batch Routine Analysis. Analyze details of batch routines including frequency, estimated duration, notification of error and scheduling

13.1.4. Public Portal Analysis. Analyze requirements for online services. The following functionality is in scope:

- Apply for a Permit

- Edit Existing Permit Accounts
- A complete audit trail of all financial transaction, including time stamps and User IDs for internal use only.

13.2. Contractor shall conduct the Folder Needs Analysis and Configuration steps including:

- Verify and document Folder Info fields
- Verify and document Folder Processes (Workflows)
- Verify and document Folder Fees
- Verify and document Folder Business Rules

13.3. Contractor shall conduct product orientation training to familiarize City staff with AMANDA using the Prototype Folders.

13.4. Contractor shall conduct and lead “business-fit” workshops, using the prototype Folders as a baseline. Detailed Folder configuration requirements (data validation rules, workflow business rules, fee calculations, etc.) are captured using the AMANDA Administration Console to generate Folder Specification Report (FSR) directly from AMANDA. The AMANDA Public Portal, interface and output document/form requirements are defined in this step.

13.5. Contractor shall lead data conversion analysis workshops during this step. These analysis sessions will provide details of data conversion including source system, data requirements, data mapping and data quality documents which provide a complete definition of every field to be converted to a predefined intermediate table format before updating the AMANDA database.

13.6. Contractor will identify data conversion problems and data quality issues related to data integrity (duplicates, orphans, etc.) and data accuracy (completeness). The City will be responsible for determining a resolution plan and data cleansing activities which may involve manual updates and edits by City staff.

13.7. Deliverables

Needs Analysis documentation which consists of the following:

- 13.7.1.** Folder Analysis: Folder Specification Reports (FSRs), including functional and technical specifications.
- 13.7.2.** Confirmed list of reports, batches, interfaces and portal services.
- 13.7.3.** Reports Analysis: Output design worksheets
- 13.7.4.** Batch Analysis: Batch specifications worksheets
- 13.7.5.** Interfaces Analysis: Interfaces mapping worksheets
- 13.7.6.** Portal Analysis: Portal design worksheets
- 13.7.7.** Data Conversion Analysis: Finalized intermediate table format and Data Conversion mapping worksheets

13.7.8. Prototype Folders enhanced with setup data and all setup requirements documented in FSRs, documenting the final design of each folder type.

14. CONFIGURATION

14.1. Contractor shall conduct the final configuration of the AMANDA system. Once all AMANDA components are configured they will be tested by Contractor (Unit Testing).

14.1.1. Folder Configuration. Configure and update the Folders to reflect business rules and requirements finalized in the FSRs. Verify and update user-defined folder components

14.1.2. Documents Configuration. Configuration of Merge Documents and Reports

14.1.3. Interfaces Configuration. Configuration and development of interfaces

14.1.4. Batch Routines Configuration. Configuration and development of scripts for scheduling batch execution

14.1.5. Public Portal Configuration. Configuration and development of Public Portal web pages.

14.1.6. The following functionality is in scope:

- Apply for a Permit
- Edit Existing Permit Accounts
- A complete audit trail of all financial transactions, including time stamps and User IDs for internal use only by System Administrator.

14.2. Contractor shall ready the new system for User Acceptance Testing (UAT).

14.3. Deliverables

14.3.1. Finalized intermediate tables with data tested, conversion mapping documents, data in AMANDA tables, finalized conversion scripts.

14.3.2. Configured Folders deployed on cloud infrastructure ready for UAT

14.3.3. Configure Reports deployed on cloud infrastructure ready for UAT

14.3.4. Configure Batches deployed on cloud infrastructure ready for UAT

14.3.5. Configured Interfaces deployed on cloud infrastructure read for UAT

14.3.6. Configure Portal deployed on cloud infrastructure ready for UAT

14.3.7. Converted data in cloud infrastructure ready for UAT

15. DATA CONVERSION / MIGRATION / INTEGRATION

15.1. Data conversion (align AMANDA 6 table/folder formats to AMANDA 7, if applicable)

- 15.1.1. Data Conversion Scripts. Configuration and development of scripts for data conversion. Run conversion scripts to populate data in Test instance
 - 15.1.2. Contractor shall obtain from City the extracted data from the source system, and move data into AMANDA tables, using a two-step process
 - 15.1.3. Contractor works with City to create intermediate tables. The Contractor moves data from the source system into the intermediate tables.
 - 15.1.4. Contractor moves data from intermediate tables to AMANDA.
 - 15.1.5. Contractor shall develop the outputs, batch routines, interfaces, public portal and data conversion scripting. At the end of this process the intermediate tables and conversion scripts are secured for final execution in the Go-Live phase.
- 15.2. Data migration for existing Planning Folders to new created Planning Folders.
- 15.3. Data migration from existing legacy Code Enforcement System (CES) data to new AMANDA 7 code enforcement module.
- 15.4. Data migration is required for all the systems in Appendix A.5 - Integrated Data Tracking System Components.
- 15.5. Contractor shall integrate with all systems listed in Section 2.4 of this Exhibit.
- 15.6. Deliverables**
- 15.6.1. Finalized intermediate tables with data tested, conversion mapping documents, data in AMANDA tables, finalized conversion scrips.
 - 15.6.2. Converted data in cloud infrastructure ready for UAT

16. TRAINING

- 16.1. Contractor will provide a Training Plan and product training materials for custom programs (product modifications) that reflect City's business processes during the Analysis Activities.
- 16.2. Contractor will provide training sessions as outlined below in section 16.3. This training may be delivered in any of the following methods:
 - Onsite in person and/or seminar training, and/or online/intranet interactive and/or pre-recorded training.
 - Trainings and associated materials shall be archived and made available to staff on intranet.
 - Long term training shall be provided in the form of archived digital training materials, long term refresher training for management/training staff, as well as a "train-the-trainer" program for City Staff.

16.3. Contractor shall provide Product Training and Project Training as listed below:

16.3.1. Product Training

- AMANDA Administration for Code Enforcement (6 users per class, 1 class, 5 days per class)
- AMANDA Administration for current AMANDA Administrators (6 users per class, 1 class, 4 days per class)
- AMANDA Administration for Re-design (6 users per class, 1 class, 2 days per class)
- Getting Started with GeoCortex Essentials Core End User (6 users per class, 1 class, 2 days per class)
- Developing Workflows for GeoCortex Essentials Core End Users (6 users per class, 1 class, 2 days per class)
- ProjectDox Applicant Community Outreach (12 users per class, 2 classes, 1 day per class)
- ProjectDox Applicant Pilot Kickoff (12 users per class, 2 classes, 1 day per class)
- Introduction to ProjectDox (12 users per class, 2 classes, 1 day per class)
- ProjectDox Markups (12 users per class, 2 classes, 1 day per class)
- ProjectDox Project Administrator (12 users per class, 1 class, 1 day per class)
- ProjectDox System Administrator (12 users per class, 1 class, 1 day per class)
- ProjectDox Approval Process Internal Users (12 users per class, 2 classes, 1 day per class)
- ProjectDox Approval Process Admin/Coordinators (12 users per class, 2 classes, 1 day per class)
- ProjectDox GIS User/Admin Training (12 users per class, 2 classes, 1 day per class)
- ProjectDox Workflow Training (12 users per class, 2 classes, 1 day per class)
- Portal Administration / SmartGuide (6 per class, 2 classes, 1 day per class)
- AMANDA Mobile Admin (6 per class, 1 class, 1 days per class)
- AMANDA Analytics (Yellowfin) report writer (6 users per class, 1 class, 1 day)

16.3.2. Project Training

- UAT Training for Public Portal (6 users per class, 1 class, 1 day per class)
- UAT Training for ProjectDox (6 users per class, 1 class, 1 day per class)
- UAT Training for GeoCortex (6 users per class, 1 class, 1 day per class)
- UAT Training for Mobile (6 users per class, 1 class, 1 day per class)

- UAT Training for Code Enforcement (6 users per class, 1 class, 1 day per class)
- UAT Training for AMANDA 7 (6 users per class, 1 class, 1 day per class)
- UAT Training for AMANDA Redesign (6 users per class, 1 class, 1 day per class)
- UAT Training for Planning (6 users per class, 1 class, 1 day per class)
- AMANDA 7 Core End User Back Office Orientation (6 users per class, 1 class, 1 day per class)
- AMANDA Core End Users Train the Trainer for AMANDA 7 - Other business areas (10 per class, 2 classes, 3 days per class)
- AMANDA Mobile Inspector Train the Trainer (6 per class, 1 class, 2 days per class)
- AMANDA Core End User, Train the Trainer for Code Enforcement – (6 per class, 1 class, 5 days per class)
- AMANDA Core End User, Train the Trainer for AMANDA Redesign – (6 per class, 3 classes, 2 days per class)
- AMANDA Portal Administration (6 per class, 1 class, 3 days per class)

16.4. Business Process training based on City standard operating procedures will be provided by the City for all staff.

16.5. Deliverables

16.5.1. End User Training delivery, material including online document if available, agenda and schedule.

16.5.2. Testers trained on AMANDA and ready for testing

17. TESTING & FINAL ACCEPTANCE TESTING

17.1. General

17.1.1. The Contractor will be required to conduct a series of testing activities in support of the Integrated Permitting implementation, including test plan development, system tests, and acceptance test activities.

17.1.2. Contractor will work with the City to deliver a comprehensive testing plan which will be developed as part of the project in compliance with Folder Specification Reports (FSRs) and other analysis and mapping documents with input from City staff. The test plans must include conversion testing, a system test for Integrated Permitting and the required interfaces. The tests must thoroughly test all features and functions of each specific component and will require final acceptance by the City. The key component of the testing plan is the User Acceptance Test (UAT).

17.1.3. One of the key underlying deliverables of the project will be to conform to the City's process improvement initiatives. The key component of the testing plan is the UAT. Contractor will train City testers to perform the UAT by following defined scenarios prepared in the earlier phases of the project with the help of City subject matter experts (SMEs). Contractor will also support all project testing activities by participating in many testing tasks: unit tests, data conversion, interfaces, reports, web applications and others.

17.2. Functional Testing Activities follow:

Contractor shall perform the following functional testing activities:

- 17.2.1. The focus for all functional testing is the verification that the documented business requirements are achieved by operating the new AMANDA folders while accessing the converted data.
- 17.2.2. The City testing team will consist of subject matter experts who are familiar with the business requirements and can determine whether the results obtained are correct or not.
- 17.2.3. Any results that are inconsistent with the business requirements defined during the analysis stage will be documented for correction by the CSDC team.
- 17.2.4. The testing of each folder type will follow a procedure that starts with data capture, proceeds to data verification of mandatory fields, field relationships, drop-down lists, optional fields, etc. that will determine subsequent stages of folder testing.
- 17.2.5. The testing of the workflow configuration for each folder will include all required combinations of processes, verification of the operation of stored procedures, resolution of every attempt result, and in general the successful completion of every process step resulting in the acceptance of the folder.
- 17.2.6. The required documents and forms will be tested once the data entry and workflow testing is completed. The format and content of each document, a letter generated by Word for example, will be verified.
- 17.2.7. The adding and viewing of attachments for each folder type will be verified.
- 17.2.8. The access and viewing of completed AMANDA folders will be tested to ensure that all authorized staff can retrieve the information in the AMANDA database.
- 17.2.9. Once the functional and business requirements are satisfied, the acceptance form for each folder will be completed.

17.3. Interface Testing Activities

Contractor shall perform the following Interface Testing activities:

- 17.3.1. Each Interface will be tested individually to verify that the data transfers between systems are accurate, timely and complete. Contractor and the City will assign

staff to the testing team that will be responsible for verifying the transfer of data between AMANDA and the external systems.

- 17.3.2.** The interface transactions will be verified to ensure that the format and content are correct and complete according to the specifications developed during the analysis stage.
- 17.3.3.** Some interfaces are unidirectional and generate transactions that are input to the AMANDA system or output from the AMANDA system. Interfaces may also be bi-directional when AMANDA and an external system generate output transactions that are input to the other system. The testing procedures will ensure that both types of interfaces and their transactions are thoroughly tested for accuracy, timeliness and completeness.
- 17.3.4.** Interfaces will be built as batch transfers or as interactive data transfers between two systems. The interface testing procedures are iterative and the testing steps will be repeated after making changes to the interface routines based on the documented results.
- 17.3.5.** The testing procedures will ensure that the batch transfers are part of the scheduled operation of the AMANDA Batch Scheduler configured to handle all required batch interfaces.
- 17.3.6.** Interactive interfaces will be tested using the AMANDA Enterprise Application Interface (EAI) or the AMANDA Web Services component.
- 17.3.7.** The testing of interfaces also includes the verification that the databases of both systems are updated correctly and will be verified in the case of AMANDA by accessing the data using the AMANDA folder types configured for each purpose.
- 17.3.8.** As each interface is tested successfully, the acceptance form for each interface will be completed as part of the project.

17.4. The User Acceptance Testing

Contractor shall perform the following UAT preparations, or together with City as applicable:

- 17.4.1.** Prepare an Acceptance Test Plan will include system, performance, reliability and user acceptance testing activities for City staff to test the different AMANDA system components. There are several levels of testing, from the simple tests designed to test each folder to the full test of all integrated system functions. At some point, representatives of user departments will also be involved in determining the practical functionality of the system. The testing plan will include system, performance, reliability and user acceptance testing activities.
- 17.4.2.** UAT is conducted according to the UAT Plan, developed by City and Contractor together.
- 17.4.3.** Contractor to assist, train (on-site) City staff to perform acceptance test activities to fully test the implementation including testing of interfaces by testing each of

the scenarios for testing interfaces between City existing systems and AMANDA. City Staff to validate results.

- 17.4.4.** Prepare acceptance test data using complete set of all available data and convert and test data to build a complete working AMANDA system.
- 17.4.5.** Conversion procedures are run to provide current data for testing as required.
- 17.4.6.** The City shall create Test Scripts with Contractor input to confirm Integrated Permitting Solution as described in this Agreement and any subsequent approved Change Requests for Modifications and Interfaces.
- 17.4.7.** The Contractor (through Unisys) is responsible for performance testing of the AMANDA 7 clients on the initial AMANDA 7 configuration that does not have City's customizations. City is responsible for performance testing of the AMANDA 7 clients on the modified AMANDA 7 configuration that has City's customizations.
- 17.4.8.** The emphasis during Unit Testing is the verification that each AMANDA folder component is configured and ready for functional testing.
 - 17.4.8.1.** Each folder type and subtype may consist of several components configured as separate tabs which will be used to store details pertaining to each folder type and subtype.
 - 17.4.8.2.** The folder components that must be present will consist of one or several of the following tabs, depending on the specific configuration of each folder: Folder People, Folder Property, Info Fields, Processes, Fees, Attachments, Documents, Forms, etc.
 - 17.4.8.3.** The City testing team will test each folder type to ensure that all components required to store specific information associated with each type are configured.
 - 17.4.8.4.** As the testing of each folder type is completed, the corresponding acceptance form will also be completed.
- 17.4.9.** City shall test the configured AMANDA system by conducting the following User Acceptance Tests and assisted by Contractor as required, to ensure the test results for each testing phase provide evidence that AMANDA capabilities have been properly integrated and tested in the City's test environment.
 - Folders UAT. User Acceptance Testing of all Folders and related items such as fees, output documents, etc.
 - Interfaces UAT. User Acceptance Testing of all Interfaces
 - Batch Routines UAT. User Acceptance Testing of all Batch Routines
 - Public Portal UAT. User Acceptance Testing of Public Portal access
 - Data conversion UAT. User Acceptance Testing of converted data
- 17.4.10.** City to approve results of acceptance testing after all agreed-upon repairs or changes have been satisfactorily tested and verified, and/or any exceptions noted.

17.4.11. The System will be deemed to have passed the UAT when all acceptance criteria defined in the UAT Plan have been satisfied.

17.5. The UAT activities follow:

- 17.5.1. Design acceptance test procedures. The City should prepare suitable test scenarios as early in the project as possible. Contractor would suggest that one or more sample applications be used, with all data entered and tracked through the complete processes.
- 17.5.2. Prepare acceptance test data. Contractor shall use a complete set of all available data and to convert and test data to build a complete working AMANDA System. If there are any new testing data needed to test all aspects of the new system, the City will make these available.
- 17.5.3. Perform acceptance test activities. City staff will be trained to fully test the implementation. City testers should understand how to document events when errors occur, with a full understanding of the entire workflows. Validation of forms and reports is included in the testing activities.
- 17.5.4. Perform acceptance testing on interfaces. Each of the scenarios for interfaces between existing systems must be tested. In general, these are likely to be periodic batch runs (nightly, weekly or monthly) and will be run without operator intervention. Careful checking of the results of these interfaces must be done by the City before going live.
- 17.5.5. City to validate and document test results. All results should be as expected and all reports should be accurate and be formatted as required by the City. All test results will be documented and made available to Contractor as soon as they are available.
- 17.5.6. City to inform Contractor of any problems. This should be an on-going process of information exchange as happens in any good project team and should not wait for formal meetings as this can cause significant delays.
- 17.5.7. Contractor to correct any problems found during acceptance testing, keep a log of all errors discovered by the City. Errors will be repaired or alternatives defined. Changes will be tested so that at the end of the period, all functionality will be operating satisfactorily on the test AMANDA database.
- 17.5.8. Approve results of acceptance testing. After all agreed-upon repairs or changes have been satisfactorily tested and verified, the City will expeditiously approve the acceptance tests in writing, noting any exceptions.

17.6. Data Conversion Testing Activities follow:

Contractor shall perform the following Data Conversion Testing activities:

- 17.6.1. The City data conversion team responsible for transferring legacy data to the intermediate tables will execute the initial data transfers according to the data formats defined during the data conversion analysis stage.

- 17.6.2. The intermediate tables will be used by the CSDC data conversion team to transfer the legacy data to the AMANDA tables. A detailed log of all data conversion processes will provide estimates of the duration of each data conversion step.
- 17.6.3. All AMANDA database requirements regarding indexes, relationships and security will be implemented to guarantee referential integrity.
- 17.6.4. The folder types that will access the converted data are tested by City staff and any discrepancies from expected results will be documented.
- 17.6.5. The verification of results will ensure that all required AMANDA database fields are available for testing the folder components. The City testing team will ensure that all legacy data can be accessed during the testing of folder components.
- 17.6.6. The testing of converted data is iterative and the testing steps are repeated, including the building of new data sets, after the necessary corrections to the conversion procedures are made by the CSDC team. The City team makes the required changes to the procedures for data transfers to the intermediate tables.
- 17.6.7. Once all data are converted successfully, the acceptance form for data conversion will also be completed.

17.7. FINAL ACCEPTANCE TESTING

- 17.7.1. The final acceptance test will be a comprehensive test, involving City personnel, of all components within the System including batch processes to ensure that all aspects of the system are operating as expected and in accordance with the required design. City team members and others are trained to complete the acceptance test stage.
- 17.7.2. Initially, individual units are thoroughly tested by both Contractor and assigned City staff. Once these are operating properly, comprehensive testing of the integrated system is formally completed and both parties will execute a Final System Acceptance Certificate (Appendix A.10).
- 17.7.3. Once Contractor completes the testing of new folders and verifies converted data, Contractor will train City staff and members of the project team to run the acceptance tests on all installed components. Each group of testers will be responsible for the detailed verification of converted data and folder functionality.
- 17.7.4. Contractor shall keep track of all requests prepared by the acceptance test team. A report will be produced showing the anticipated resolution date. Contractor acknowledges that if there are unresolved priority one problems or a significant number of priority two problems, the AMANDA system will not be ready for production until these problems are resolved.

17.8. Deliverables

- 17.8.1. Design Specifications
- 17.8.2. Interface Control Document
- 17.8.3. Test Plan
- 17.8.4. Code completed (configuration)
- 17.8.5. Work Instructions
- 17.8.6. Production, Test, Development on the cloud
- 17.8.7. Collaboration Tools (i.e., Project Site)
- 17.8.8. Tested Folders, batches and reports
- 17.8.9. Tested interfaces
- 17.8.10. Tested Portal
- 17.8.11. Converted data tested
- 17.8.12. Test Cases for various UAT types.
- 17.8.13. Analysis and Mapping documents.

18. GO-LIVE PLANNING ACTIVITIES

18.1. Go Live Activities (for each phase)

- 18.1.1. Contractor will lead the development of Go-Live and Contingency Plans with assistance from City Project Manager. Go-live plans will include technical and business related tasks that need to be accomplished.
- 18.1.2. Contractor reviews the Go-Live and Contingency Plans with City.
- 18.1.3. Contractor prepares system for live operation, including migration of system to production environment and in conjunction with the Cloud Managed Services Agreement (Exhibit D-3), and the Managed Services Catalogue roles and responsibilities (Appendix A.9, Section 3.1).
- 18.1.4. Contractor will lead the Mock Go-Live (staging environment) and Go-Live in coordination with the City Project Manager.
- 18.1.5. Mock Go-Lives are performed as appropriate (at least one full mock go live and a second partial go live); Contingency and Go-Live plans are finalized.

- 18.1.6.** Contractor together with City shall complete all tasks and testing prior to rolling into cloud production for the Go-Live date as defined in the Preliminary Project Schedule Appendix A.4. These activities include:
- 18.1.6.1. Go-Live Readiness Assessment. Conduct Go Live Readiness Assessment for infrastructure, application, data, operations and business rules including Cut-Over Plan and “go”, “no-go” criteria.
 - 18.1.6.2. Final Data Conversion. Execute final data conversion scripts in the cloud Production Environment.
 - 18.1.6.3. Lead mock and go-live in coordination with the City Project Manager. Identify issues that will need to be resolved prior to Go-Live.
 - 18.1.6.4. Upon City approval to proceed with Cut-Over Plan to production, conduct Go Live transition (Cutover) to cloud Production Environment in coordination with City over a weekend.
 - 18.1.6.5. Go-Live Data Conversion Data Load & Validation, including audit report that documents the results of the agreed upon conversion validation parameters for both the source and target data.
 - 18.1.6.6. Go-Live Support. Support production users post go-live. Address any Go-Live issues
- 18.1.7.** Contractor shall verify the cloud production infrastructure and the system is rolled out to the cloud production environment. Contractor shall work closely with City staff to ensure that the transition to the new operational AMANDA System is well planned and that operational changes are managed efficiently.
- 18.1.8.** Contractor shall execute final data conversion over a weekend or a scheduled downtime to provide a short interval between ‘freezing’ the prior system and switching to the new system.

18.2. Post Go-Live Activities (for each phase)

- 18.2.1. Contractor shall provide post go-live assistance and on-site support to City for 5 business days after Go-Live and on-call for an additional 30 days (configuration support) after.
- 18.2.2. City signs off on the Final Acceptance (Appendix A.10) at the end of this period.
- 18.2.3. Contractor completes a closure and lessons learned report at the end of this period. Contractor and City shall provide input to the lessons learned report. The transition of lessons learned takes place between the Contractor Implementation Team and the City’s support staff during this period.
- 18.2.4. After this transition, the City will be responsible for Level 1 support, and CSDC/Unisys will be responsible for Level 2 and 3 (see Cloud Managed Services, Appendix A.9 for Level support details).

18.3. Deliverables

- 18.3.1.** Final data conversion scripts
- 18.3.2.** Detailed Cut-over (Go-live) plan (including tasks and schedule)
- 18.3.3.** Configured cloud Production environment
- 18.3.4.** Converted data in cloud production

19. ACCEPTANCE PROCESS

The following acceptance policies will be utilized during the duration of the project lifecycle:

- 19.1.** The only method for indicating acceptance or rejection of a deliverable shall be a completed Project/Deliverables Milestone Acceptance Form (Appendix A.10) that indicates acceptance or rejection and is signed by the City Approver.
- 19.2.** The City Approver will review and provide edits/comments, accept or reject the Deliverable within five (5) business days from the receipt of the Project Milestone/Deliverable Acceptance Form.
- 19.3.** If City Approver does not accept or reject the deliverable within five (5) business days from the receipt of the Milestone Acceptance Form and does not communicate a timeframe in which a decision will be made:
 - 19.3.1.** The acceptance/rejection decision will be logged, tracked and escalated as a project issue. In the event of rejection and if necessary, the issue giving rise to the rejection may be escalated to the Parties' Executives.
 - 19.3.2.** Work will progress to maintain the established project schedule, with the understanding that any work dependent upon a rejected deliverable or service is at risk of rework.
- 19.4.** Acknowledgement of receipt of deliverable provided to the Contractor Project Manager shall be confirmed by email back to the City Project Manager.

20. ACCEPTANCE CRITERIA

- 20.1.** All analysis milestones will be considered complete upon approval by both Contractor and City that the analysis documents meet the needs described in the SOW for that deliverable. The details in these documents represent the approved scope of the solution against which changes in scope that subsequently occur will be measured. Such changes in scope will be managed according to the change control procedure described in Section 7 of the Agreement.
- 20.2.** Contractor project team members will complete the AMANDA system configuration including unit testing based on the approved analysis documents. These milestones/deliverables as described in this scope of work (Section 13 Needs Analysis)

are considered complete upon delivery of the configuration in the Contractor's cloud development/test/production environment. A brief demonstration of the functionality will be given to the City project team to demonstrate completeness. Detailed and thorough system testing will take place as described in Section 17 and during the User Acceptance Testing steps of the project as provided in the Preliminary Project Schedule (Appendix A.4).

20.3. To prepare for go-live, CSDC and the City shall jointly conduct the following mock go-live activities, as described in the cut-over (go-live) plan:

- Load cloud production system with Permitting specific configuration data
- Run full data conversion into cloud production system
- Test all functions in cloud production system, including performance, permissions, security, Back Office functionality, Public Portal and interfaces

All data loading and conversion activities will be timed. The timings will help update and finalize the detailed go-live plan.

20.4. Contractor shall provide on-site training to City Staff to run the acceptance tests on all installed components. Contractor will maintain an issue log report with anticipated resolution date.

20.5. During the warranty period as defined in Section 21, Contractor shall repair AMANDA malfunctions at no additional cost. Through the ten day post Go-Live period, the Contractor's PM will continue to act as primary resource for all issues.

20.6. Final System Acceptance. After the 45 calendar days of post go-live period and the City is satisfied with all test results and all previously identified issues are resolved, the City will proceed with execution of the Final System Acceptance Certificate, Exhibit A, Appendix A.10. The City shall have a Production Support team ready and the required AMANDA Administrators in place to provide an effective transition from Contractor staff support to the City's staff support.

20.7. Upon Final System Acceptance, the City shall transition to the Contractor's Customer Service and Support Department as per the Software Subscription Maintenance and Support Agreement (D-2).

20.8. Deliverables

20.8.1. Final System Acceptance Certificate

21. WARRANTY

21.1. Contractor shall provide a ONE YEAR warranty on software to commence upon each phase/product/module Go-Live. Contractor will provide post Go-Live on-site support for 5 days to correct any issues that are identified during the go-live period. The one year warranty includes bug fixes, but does not include new software releases or software support.

21.2. After the ONE YEAR warranty, City must purchase annual maintenance and support which includes:

- Bug fixes and patches
- Software updates and upgrades
- 1800 telephone support
- Support Portal access for submitting bugs and software enhancements.
- Download FTP site for software updates and bug fixes
- Eligibility to attend our annual users conference
- Access to CSDC documentation and training materials
- Access to CSDC business partners
- L3 Support hours 8AM – 5PM Pacific Time, Monday through Friday, excluding public holidays.
- L2 (Unisys) Support hours 6AM – 6PM Pacific Time, Monday through Friday, excluding public holidays (See Appendix A.9 'AMANDA Cloud Service Catalogue).

22. TECHNICAL SUPPORT AND MAINTENANCE

22.1. Contractor shall provide maintenance and support beyond the initial ONE YEAR warranty period to commence upon each phase/product/module Go-Live in accordance with the Software License and Maintenance Agreements in Exhibits D-1 and D-2, including interfaces between the software provided under this Agreement.

22.2. Contractor shall provide support for the software during regular City business hours (8:00AM – 5:00PM Pacific Time, Monday – Friday, with the exception of public holidays). This support must consist of an on-call person or center where problems can be reported and immediate help is available based on severity of the issue.

22.3. Contractor shall supply upgrades to software provided under this Agreement at no charge for the life of the software as long as there is a valid maintenance agreement in place. In addition, the software provided under this Agreement must support the hardware, operating system and other related software components as they are upgraded. The City understands that it must pay for any customization and interface modifications on a time and materials basis.

22.4. The Service Levels consistent for the hosted software are described in Appendix A.9.

23. EXIT STRATEGY

23.1. The City will own the data contained in the System and upon termination of the Agreement, Contractor agrees to provide all data through database export to the City in a format that is compatible with the City's enterprise database platform.

23.2. At the termination of the Agreement, all data at the Contractor's facilities shall be purged when City determines that it has satisfactory copies of the data.

APPENDIX A.1 – AMANDA SOLUTION OVERVIEW

WHAT IS AMANDA?

AMANDA is open regulatory case management platform that automates many of the daily functions conducted by the City. This level of automation will enhance data validation and standardization, improve communication between departments, and enforce senior management priorities and policies.

The AMANDA platform supports seven major business areas:

- Local Planning and Land Development including Engineering
- Compliance and Code Enforcement
- Freedom of Information Request Management
- Licensing and Registries
- Courts and Justice Case Management
- Citizen Relationship Management
- Public Safety including Fire and Health

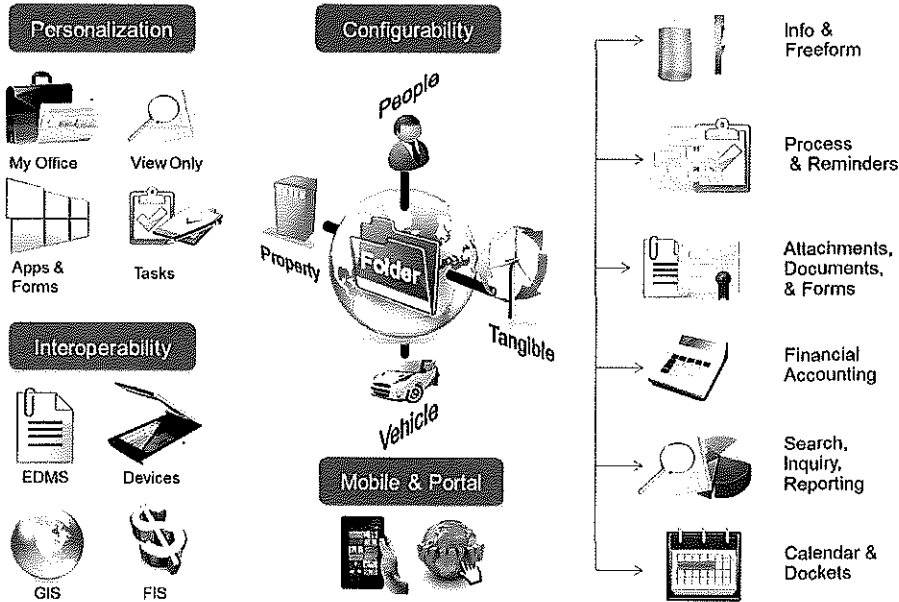
AMANDA engages citizens and stakeholder through mobile apps and portals that provide instant access to information in AMANDA.

AMANDA APPLICATION ARCHITECTURE

AMANDA maintains relationships among Property (Address), People (Organizations), and Folder (Case) records in a central database. Folders are configurable AMANDA components that can be defined with as much detail as required for each transaction type by trained administrative users. Some examples are: Permit types, Case types, Application types, Code Enforcement types, Environmental Control types, Inspection types, Health and Fire Inspections, etc.

AMANDA supports an unlimited number of Folder types and an unlimited number of folder-to-folder relationships. Folders are classified and stored according to groups. Each folder may be linked to locations, processes, people and other folders. It is through these relationships that all related activity on a property can be tracked and managed. For example, an establishment (a location or property) may have a permit, but also other property-related activities, including violations and code enforcement cases.

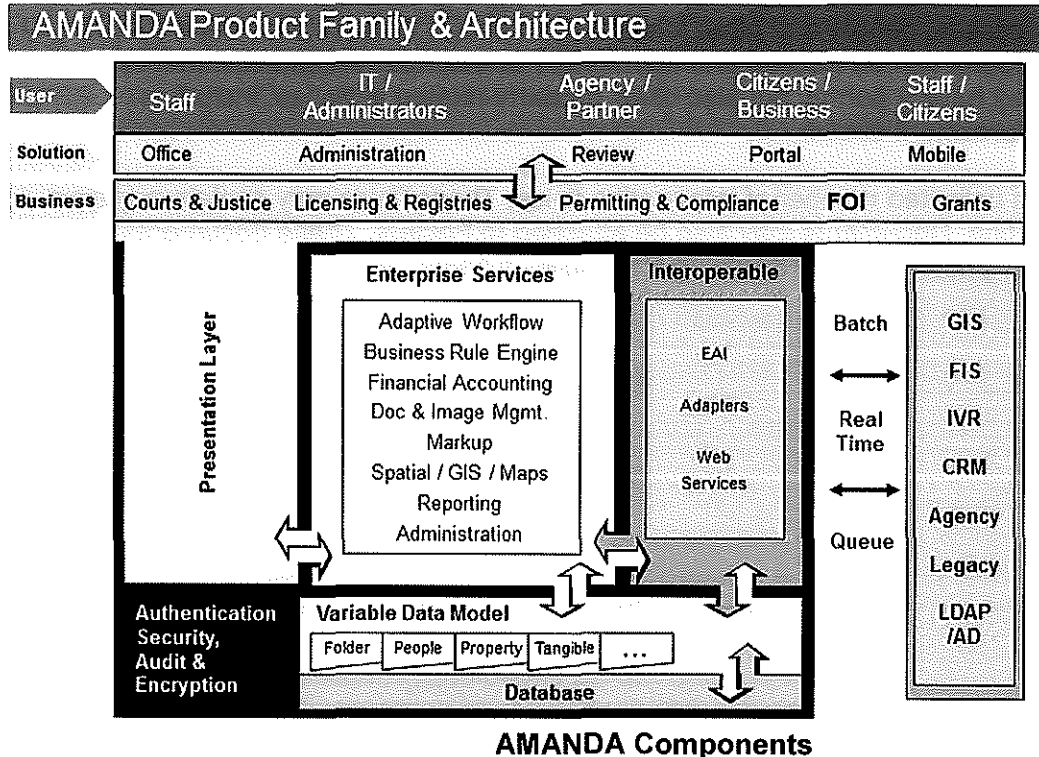
Folders may contain an unlimited number of information fields. These fields may contain any type of user-defined information. Documents may also be attached to Folders. These documents can include plans, images or photos, word processing files, spreadsheets, etc.



AMANDA Application Architecture

AMANDA COMPONENTS

The diagram below shows AMANDA application layers, external systems, interfaces and integrated components and their general functions when they operate as an integrated system. The AMANDA variable data model allows the City to include many user-defined components when automating new business areas. Also, there are many supported methods for data transfers, which may be done in real time or in batches. Compliance with standards also ensures that the audit and security components will protect access to the integrated database elements.



AMANDA MODULES

AMANDA Core System (existing City owns 220, plus new incremental 100)

User access licenses provide access to the AMANDA core system. The core system's capabilities include a dynamic workflow engine, the ability to generate complex merge documents, integration with email and calendaring tools such as exchange and google, a sophisticated financial subsystem including the ability to do daily balances of cash drawers, notification tools such as alerts, task management tools, my office home page including business specific apps and bookmarks, a wide range of standard reports with the ability to build ad-hoc reports, contact (individual and business) database, property / location database, document and attachment database, georeferenced and geolocation including geospatial links, time and activity tracking and much more.

The core system also includes the AMANDA Administration Console. This is used to configure the AMANDA software platform to meet the specific business needs of our clients and is used by clients to evolve the AMANDA system as legislation and policies and practices change. As business specific data is not impacted by point software upgrades, there is little need to alter configuration information once the setup is approved for production.

AMANDA is a fully response web-based application that is WCAG and Section 508 compliant for both customers and staff. Customer access to AMANDA functionality through the Internet is available through the Public Portal.

AMANDA Permits (existing City owns), AMANDA Planning (included in proposal)

AMANDA automates all functions within land management, planning, building, inspections, bylaw & code enforcement, fire inspections, and others. There are extensive property management functions to handle every requirement associated with the subdivision and consolidation of parcels or the demolition and renovation of heritage buildings. AMANDA maintains a complete history of changes in land tenure and building ownership.

These modules support an unlimited number of application and permit types, eliminates redundant data entry and automates business processes and activities. It is used to automate all regulatory enforcement activities under government jurisdiction.

AMANDA Licenses (existing City owns Business, Professional part of proposal)

This module will handle business and professional licenses. AMANDA Licenses is a product designed for a web browser interface for all AMANDA Intranet users and for those who enter license queries over the Internet. The AMANDA system can also verify that specific active licenses have been issued before allowing other types of approvals. There are standard reports to help manage the status of the different types of licenses. Statistical reports summarize the revenue by date and type.

AMANDA Licenses is the application software used to implement licensing, registry and audit functionality. It is based on a unique database design that allows very flexible implementation of an unlimited number of licenses, and related certifications.

AMANDA RFS (existing City owns)

The Requests for Service (RFS) module is an integrated request call center and complaints management system designed to automate the receipt, scheduling and dispatching of service requests. Interfaces to 311 response systems are supported. Complaint resolution is tracked by assigning and completing tasks effectively and on time. Inspections following complaints can

automatically insert violation records with fines and workflow controls. A complete record of code enforcement activities is maintained in AMANDA.

AMANDA Development Conditions Management (part of proposal)

This module enhances the conditions management capability available within standard AMANDA planning applications and building permits. It allows controlled inheritance or cascading of conditions established at the planning stage of a project to be enforced in subsequent stages, such as permits, cases, code enforcement actions, etc., which are part of the overall sequence of phases in development projects.

AMANDA Enhanced Inspections (Deficiencies) (part of proposal)

The AMANDA Enhanced Inspections module extends the system's inspection abilities to track non-compliant items found during inspections more effectively. Using this module, inspectors can display any number of deficiencies under each category or sub-category. Inspectors can modify or add to all descriptions and note the location to ensure accuracy. Inspectors can also set the severity and track the status of a deficiency until it is resolved. Remedies can be automatically associated with each deficiency. Default remedies can be set to ensure consistency among inspectors. This module makes for quick, easy, and standardized data entry, which is especially useful for inspectors using AMANDA Mobile.

AMANDA Analytics (part of proposal)

AMANDA Analytics provides an easy to use yet powerful tool for building dashboards to present key performance indicators (KPI), trends, and warnings with the ability to drill down into details. This is a reporting tool to web-enable existing and new management reports as KPI monitors. Monitors are used to track trends, alerts, summaries, warnings, ticklers and other reminders. Information can be presented in a line graph, bar graph, pie chart, list, table, speedometer, etc. Managers can drill down to get details from AMANDA folders.

AMANDA Enterprise Application Interface (EAI) (existing City owns server and 1-connect)

This Application Program Interface (API) product can be used to develop real-time interfaces to the AMANDA system. Data transfers are based on XML technology and can be done online as the data are generated. The use of this module ensures that the AMANDA database is updated efficiently and without compromising the integrity of the AMANDA tables and relationships. This module includes one concurrent interface connect, additional connects will have to be purchased.

AMANDA Batch Scheduler (existing City owns)

This module automates repetitive tasks and ensures key workflow processes are performed automatically, such as sending of monthly invoices, license renewal emails, late fee reminders, generation of management reports, and the import or export of AMANDA data to other systems. The design of this API takes into account the batch transfer requirements to update external systems or update AMANDA tables with external data sources. The use of this module ensures that the AMANDA database is updated efficiently and without compromising the integrity of the AMANDA tables and relationships.

Large print jobs, security monitoring or maintenance tasks can be set to run at off-peak hours, improving system performance and saving resources. Batch scheduler can also automate the output of documents as a PDF file and send them automatically in an email, as well as output information as an HTML file for posting on the web. Financial and cashiering interfaces are two common types of batch data transfers.

AMANDA HTML5 GIS Viewer (part of proposal)

AMANDA is tightly integrated with ESRI's ArcGIS and through our GIS Widget and uses the ArcGIS Feature Service. Either ESRI's WebApp Builder and Latitude's GeoCortex HTML 5 viewer

is support out of the box. Other HTML5 viewers can be embedded as a custom implementation using CSDC GIS JavaScript API.

AMANDA EDMS Adaptor (existing City owns)

This Electronic Document Management System (EDMS) adaptor will be configured to store and retrieve documents from external document repositories. Some examples are Alfresco, Laserfiche, OpenText, OnBase, FileNET, Hummingbird, High View, etc. The AMANDA EDMS Adaptor module is required to support the real-time interface between an EDMS product and the AMANDA software. Associated AMANDA documents can be retrieved from the EDMS for viewing and printing.

AMANDA Web Services (part of proposal)

The AMANDA system has expanded its support for Application Program Interfaces (APIs) by offering new Web Services methods. AMANDA supports the Simple Object Access Protocol (SOAP) for exchanging structured information for the implementation of web services in computer networks. The web services are secured by end-to-end encryption using the WS- security standards. AMANDA exposes two web services: 1) AMANDA security web service, which exposes various methods for back office and public portal authentication, as well as session validation, and 2) AMANDA web services, which exposes several methods to do transactions in AMANDA for tasks such as retrieving data from AMANDA, adding records into the AMANDA system, searching for information, and updating existing records in the AMANDA system.

AMANDA Enterprise Authentication Adaptor (existing City owns)

This module is used to support single-sign-on with Kerberos protocol as well as the manual Active Directory/LDAP authentication using the Kerberos protocol. Multiple domains are supported using the Enterprise Authentication Adaptor.

AMANDA Mobile (part of proposal)

The AMANDA Mobile module is an easy-to-use field data collection system that fully validates information entered and ensures accurate updating and synchronization with the main AMANDA database server. It operates online for immediate wireless access but when communications are interrupted, off-line operation ensures that inspectors continue working without interruption.

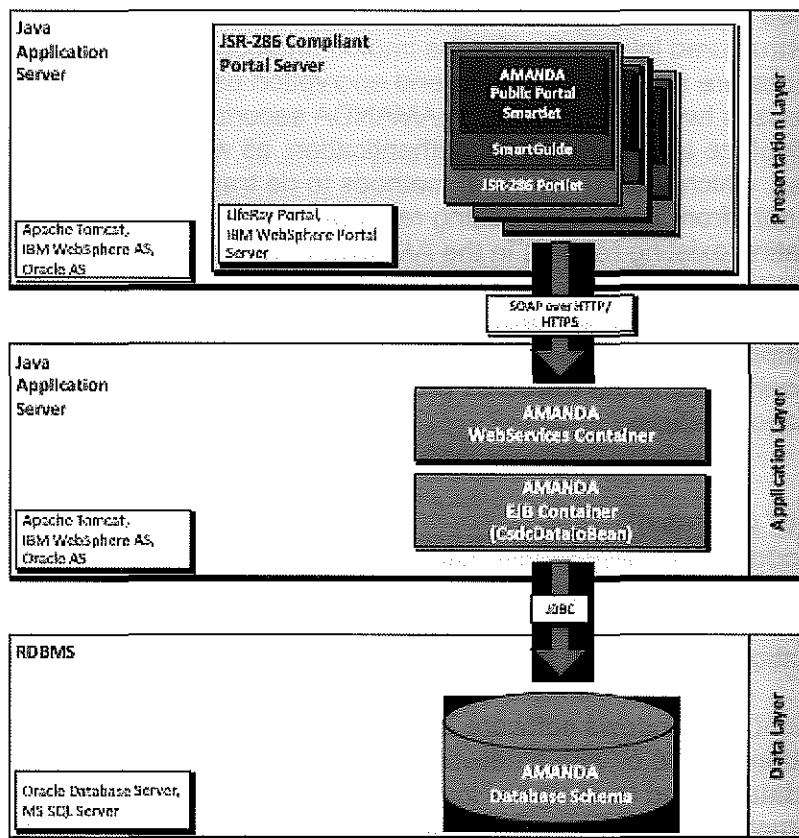
The AMANDA mobile client for Windows software is loaded on a mobile computer (laptop or tablet PC) which can operate stand-alone or with a network connection. Its primary purpose is to allow inspectors to download data related to assigned inspections and to carry inspection data to the inspection site. At the remote site, the inspector enters the field data for upload to the central database when next connected. The data transfers can be by any form of reliable data communications (LANs, telephones, wireless, etc.). There is also a real-time web-based mode of operation that requires wireless communication services. AMANDA Mobile allows inspectors to access the AMANDA database directly from the field when communications services are available. All permit and case details and documents are available to the inspector. If GPS functionality is purchased, the most efficient and optimized route is proposed to complete all the desired inspections. AMANDA Mobile also offers the functionality to conduct an unscheduled/drive-by inspection.

AMANDA Public Portal (part of proposal)

This module supports all on-line Internet access to the AMANDA database. Web pages are designed to allow citizens and contractors to apply for licenses, permits and enter cases, view license, permit and case status, renew licenses, enter inspection requests, see inspection results and pay for any associated fees. Public search pages allow citizens to search for licenses, permits, or other public information contained in AMANDA.

AMANDA's Public Portal is highly configurable in terms of visual presentation (themes, branding, etc.) and web functionality such as page flow, displayed elements, exposed platform features and functions. Public Portal configuration is managed by a web-based drag-and-drop WYSIWYG (what you see is what you get) graphical design tool called the SmartGuide Designer. The Public Portal can be rapidly configured by purchasing configuration packages (portletlets or Smartlets) to enable Internet functionality for desired features, such as user registration, public search, license applications, renewal, permits, complaints, online payments, etc.

The AMANDA Public Portal is based on three core technologies: Java Portal Server (hosting JSR-286 compliant Portlets), SmartGuide Web Application Platform and Web Services. All three core technologies play complementary roles in the technology stack.



AMANDA Cashier (included in price proposal)

This module offers numerous payment-related advantages. Citizens can quickly pay all of their bills at one time, at one place, and with one payment. Staff can accept payments without having to know how to use other AMANDA modules such as License, Permit, etc. In addition, payments can be accepted for both AMANDA and non-AMANDA products (like photocopies, parking tickets, etc.). The Cashiering option can be configured for access to an external system. AMANDA Cashier allows users to post batch jobs to the general ledger from several systems and also allows distribution across multiple GL accounts.

AMANDA Time & Activity Tracking (existing City owns)

In addition to the configuration of AMANDA processes to track the time required to complete every process attempt, this module tracks all other time dedicated to work external to the AMANDA system. Users may elect to enter all their time records using this optional AMANDA module.

AMANDA Time and Activity Module automatically records time on individual time sheets for tasks performed within AMANDA as well as non-AMANDA tasks such as vacation, holiday or perhaps training time. This module displays the timesheet for the employee to review and modify if necessary and allows for a manager review prior to the processing of the time sheet. AMANDA Time and Activity Module is available for all AMANDA users on the system and increased productivity by limiting the amount of time staff needs to prepare their time sheets.

AMANDA Trust Accounts (Escrow Accounts) (existing City owns)

Manage fee accounts for external organizations such as developers, contractors and consultants using AMANDA Trust Accounts. Make draws to pay for permits against escrow accounts and keep an accurate record of payments, reflecting the real-time account balance. A statement of the trust account is prepared at the end of every month.

AMANDA Securities and Letters of Credit (included in price proposal)

This module is required to link multiple securities or bonds to a development project, which may include one or more properties. It also tracks all approvals of draws and releases for each security and related information about the main contacts such as the property owner and the bank involved.

AMANDA Milestone Monitor (existing City owns)

When planners need to review the overall status of all completed and pending activities, they make use of the Milestone Monitor module. This module provides a management view of the scheduled steps needed to complete the review process. Milestone Monitor helps track the goals set for staff and outside agencies and to monitor if those goals are being met. It breaks up the time spent on a process into the time the process was waiting in queue to be reviewed, the time taken to review the process, and the time the process was paused awaiting additional information from the applicant. Milestone Monitor can be used to highlight processes about to fail their time target, allowing the client to shift resources to maintain service levels. Additionally, it can benchmark performance to compare process times between users and even across projects.

Public Works:

Automate Public Works Utility Permit, Special District, and Traffic count Business Processes. Integrate with Public Works Traffix Traffic modeling software, convert a minor FoxPro database.

OPTIONAL MODULES / WORK

AMANDA Audit

Audit is an add-on module that can be used with the AMANDA core products like Permit and License. Using the Audit module, users can track: The history of changes made in some tabs; Large, unauthorized exports from within AMANDA.

Public Portal Dashboard:

To include GIS wizard-based permit applications (such as "Open Counter").

Automated Scheduling

Automated scheduling of inspections IVR and 311/CRM integrations

APPENDIX A.2 – FUNCTIONAL SYSTEM REQUIREMENTS

The functional requirements of the Integrated Permitting System are as listed in below matrix.

Notes for 'In Scope' column:

Y: In scope

N: Not in scope.

I: In scope for new configurations. New Folder Types developed as part of this project (e.g. Public Works, Code Enforcement and Planning) may use this functionality if determined it is required during Requirements Analysis. In addition, during the AMANDA Redesign Phase and the AMANDA Mobile Phase some of this functionality may be implemented as determined by the Project Team.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
Section 1: Plan Review Functional Requirements							
1.1	System shall assign each Project with a unique project ID to indicate plan review, permitting inspection phases, etc.	X				Y	AMANDA automatically assigns a unique record number to each folder or AMANDA can be configured to assign a uniquely identifiable City permit # based on any set of criteria, such as sequential, a combination of date, alpha, or numeric text, etc.
1.2	System shall be able to assign jobs to project coordinator by code discipline. (Building, Electrical, Mechanical, Plumbing, Fire, Hazmat, etc.)	X				I	Processes can be assigned to individuals or teams based on record type and discipline.
1.3	System shall provide the ability to automatically assign projects and allocate time to review staff based on defined values (i.e. staff availability, staff profile, project type or other pre-defined methodology). To be done with a timeline/ calendar type interface that will allow for supervisor/manager to approve/edit. Timeline/ calendar to automatically update to accommodate changes. Timeline/ calendar shall automatically update status based upon inputted project status by all users and shall be configurable.		X			I	Each step in the workflow has several key pieces of information that drive assignment and queuing: assigned user (or group), scheduled start date, scheduled end date, actual start date, and actual end date. The method by which the task is assigned can be as simple or complex as needed. At one end of the spectrum, tasks can be configured to always assign to the same user. It is very common that more complex rules are necessary to model the business properly. As each task is inserted business rules validate the data to determine how the assignment should be handled. Examples of this are tasks being assigned based on user availability/workload, user expertise/certifications, geography, application type, etc.
1.4	System shall provide automatic time & date stamp of submittal.	X				Y	The proposed AMANDA solution meets this requirement. Application Submission Date is

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							automatically recorded when the folder is created for any new application.
1.5	System shall provide automatic email notification of approval to staff or council district-related email addresses identifying scope of work, project address, and other related info.		X			I	AMANDA can notify external sources through email and SMS based on any action on a permit record or based on a Batch Scheduler job that runs periodically. Alerts can be configured according to City requirements. AMANDA can interface with the City's messaging system to send message alerts. AMANDA supports notification of stakeholders through various methods. AMANDA users are notified using a Task List, Email, or Alerts.
1.6	System shall conduct data check for "critical" fields for inconsistencies (i.e. address, owner, building name, location, etc.)	X				Y	Fields can be marked as mandatory to ensure completeness. Additionally, validation procedures can be used to ensure data is in the correct format and all required elements are present (such as People, Properties, Information, Fees, and Workflow approvals).
1.7	System shall automatically add items to the conditions for a Certificate of Occupancy or a Temporary Certificate of Occupancy (as appropriate) when requirements are deferred to plan review.		X			I	The AMANDA Conditions Management Module allows an end-user to associate a development condition with an address (Property record) or permit and have that condition cascade down to all child addresses/permits until the condition is met.
1.8	System shall be able to assign a new project number for existing projects and maintain project history summary, file number, etc.	X				Y	Assigning a new project number would not affect the other related data of an existing record.
1.9	System shall provide ability to view all development projects and identify assigned staff and reassign to other staff for all reviews.	X				Y	AMANDA Folder records can be linked in a parent/child relationship to link a master project to multiple subordinate projects or permits. AMANDA will track complex projects, with multiple permits, multiple parcels, split parcels, roads, commercial and residential developments, multiple addresses. Pre-plan submissions, plan reviews, permits, inspections, fees, payments, project team and assignments, are supported. The AMANDA folder records (permits, cases,

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							applications) are configured according to the detailed requirements documented by City staff. When users access an AMANDA folder, they may also retrieve all related folders that have been added as 'children' or as 'parent' records. A completed project, including all related permits, can be quickly viewed and analyzed, when required. The folder process tab will be configured to include the tasks and activities assigned to users responsible for project completion. Comprehensive project tracking will be used by users according to specific City business rules coded in stored procedures.
1.10	System shall be able to access plan review comments from all department and agencies	X					Any department that is on the City's network and is assigned a task in the system will have access to contribute to the workflow of an application. For users that are not internal to the network, the AMANDA Review module will send the user an email with a link to a custom Portal for reviewers. They have access to all application data and document/plan attachments and can submit their comments securely over the web.
1.11	System shall provide ability to automatically flag projects if inactive after a certain period time.		X			I	When necessary the status of a permit or the expiration of a particular certification or insurance can affect the workflow of associated projects. For example, if a contractor goes inactive during the permitting process, this can hold up issuance, inspection scheduling or C/O depending on where they are in the process.
1.12	System shall be able to prompt applicant to upload documents or complete affidavit to meet program specific requirements.	X				Y	AMANDA's Public Portal is designed to be a self-service solution for citizens/ licensees/permit holders or businesses. Standard functionality in Public Portal includes the ability to set up an account, retrieve or reset passwords, update account information, apply for a license or permit, schedule inspections, view details such as status for applications, licenses, or permits; upload or download attachments, renew a

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							license, submit complaints, and submit payments.
1.13	System shall allow customers to select submittal type from drop-down menu for proper workflow routing (i.e. Public Projects; Building; Mechanical; Simple Permits, etc.)	X				Y	Data entry screens for both portal and back office can be configured using text, drop down boxes (pick or choose lists), Boolean, date, numeric and alphanumeric fields.
1.14	System shall capture if the submittal is an original or a modification through a dropdown menu. (versioning)	X				Y	All data and business rules are stored in the database and therefore include inherent versioning capabilities of the database.
1.15	System shall accept PDF format, and/or other industry accepted standards.	X				Y	Since AMANDA is browser-based, AMANDA supports any file type supported by the browser, including JPG, GIF, TIF, PDF, etc.
1.16	System shall provide confirmation to customer upon successful uploading of an application, plans, and individual documents.	X				Y	Clients can be notified via the Public Portal of activity completion, application status changes and requests for additional information that occur within an AMANDA workflow. In addition, AMANDA Public Portal allows registered users to upload electronic attachments in response to information requests.
1.17	System shall provide notification to staff upon receipt of documents.	X				Y	Clients can be notified via the Public Portal of activity completion, application status changes and requests for additional information that occur within an AMANDA workflow.
1.18	System shall have a prescribed sheet numbering and sheet (drawing) title scheme for document file names. Must be able to verify submitted documents comply and prompt customer of error.	X				Y	This is a feature of ProjectDox
1.19	System should pre-populate customer defined fields based on previous input data for online applications.		X			Y	The design of the web pages for entering applications incorporates the routines to auto-populate specified data fields from internal or external sources. AMANDA People record data will be used in forms, reports and other AMANDA output documents. When applying for new permits, inspections, etc. a link to the associated master record is created, rather than entering information again.

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1.20	System shall provide a compiled list of plans in the queue in order of date submitted.	X				Y	ProjectDox Plan queue has this feature.
1.21	System shall notify reviewers if and what types/categories of changes have been made to revised plans, etc.	X				Y	ProjectDox can do an automated compare of revised plan sheets and indicate what has changed.
1.22	System shall provide ability for supervisor / manager of a Review Team to assign and override assignment of specific documents for review.	X				Y	The AMANDA workflow engine can assign the original reviewers and pass them to ProjectDox for ePlan review. While working in ProjectDox supervisors can reassign reviews if necessary as well as include new departments entirely. All of this is synced in real-time with AMANDA.
1.23	System shall accept input/interface from third party review software (i.e. Bluebeam review).		X			Y	CSDC is proposing integration with Avolve's ProjectDox software. Avolve is the market leader in ePlan Solutions and is a strategic partner of CSDC. This is a full ePlan Review solution and not just a document markup tool.
1.24	System shall provide integrated plan review module to provide equivalent feature set provided by industry standard review/ markup programs. (i.e. Bluebeam Review)		X			Y	CSDC is proposing integration with Avolve's ProjectDox software. Avolve is the market leader in ePlan Solutions and is a strategic partner of CSDC. This is a full ePlan Review solution and not just a document markup tool.
1.25	System shall provide ability to review other reviewers' comments, annotate and redact on the electronic plans without modifying revising the plan. (i.e. Building can add comments for Building, Mechanical can add comments for Mechanical, etc., but Building cannot add comments for Mechanical, etc.) Supervisor control shall be given to add comments and to allow other reviewers to comment on other groups drawings. All comments shall be readily traceable to the specific user.	X				Y	All comments, markups, redactions, and annotations will be completed in ProjectDox without modifying the plan provided by the customer. Supervisors have the ability to updated/add comments to their staff's projects traceable back to each update.
1.26	System shall allow multiple users to open and edit drawings concurrently. Upon saving, system shall notify other users editing drawings that changes have been made and request them for acceptance.	X				Y	This a standard feature of ProjectDox

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	Program shall provide a means for other reviewers to quickly identify changes.						
1.27	System shall be able to scan and print multiple sizes of document up to 36 x 42.	X				Y	AMANDA supports importing from a scanning source as well as printing to multiple destinations.
1.28	System shall allow applicants to submit revised plans and notify reviewers of changes for resubmittals only.		X			Y	The applicant will submit revised plans on the AMANDA Public Portal. All appropriate reviewers will be notified of the resubmittal.
1.29	System shall provide the following functions: a. Reviewer comments and plan annotations must be attached to protected project files (read only). b. Project Coordinator consolidation of all review comments. c. Notification of review completion must be submitted to Project Coordinator and customer – including reviewer contact information, review comments and response required.	X				Y	This a standard feature of ProjectDox
1.30	System shall provide ability for reviewers to verify and approve requirements.	X				Y	This a standard feature of ProjectDox
1.31	System shall store complete history and current status of requirements provided to applicant.	X				Y	This a standard feature of ProjectDox
1.32	System shall enable secure public access to all City-approved sets of plans and associated supporting documentation for retrieval and printing by the customer during active duration of building permit activity. This shall be accessible only to the applicant of record of building permit.	X				Y	The AMANDA Public Portal requires a registered login of the applicant to view their approved plans and other documentation.
1.33	System shall store approved plans for minimum time required by the City of San Jose's approved retention schedule.	X				Y	AMANDA will comply with the City's data retention policies.
1.34	System shall provide secure means to transfer files between plan reviewer and applicant outside of formal submittal/ resubmittal process.	X				Y	The AMANDA Public Portal requires a registered login of the applicant to view and/or upload all plans and documentation.
1.35	System shall provide automatic file backup solution with daily, incremental backup.		X			Y	The AMANDA system is fully compliant with the methods used by Oracle and Microsoft SQL Server to backup, recover and restart database applications. Backup procedures

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							will be documented as part of the standard RDBMS administration policies set up by the City. The participation of the City's Database Administrator (DBA) is crucial to ensure that all risks are addressed properly. AMANDA is compliant with newer technologies that provide complete and continuous application availability solutions to ensure business-critical systems are protected.
1.36	System shall provide ability to access archived documents (view/print).		X			Y	Final approved versions of electronic plans will be archived in the City's content management system.
1.37	System shall provide the ability to define type of project (installation, alteration, repair, reconstruction, etc.)	X				Y	The AMANDA Folder Work Type field is used for this purpose. Types can be defined by the City to meet each applications needs.
1.38	System shall provide an automatically calculated estimated cost of application and permit.		X			Y	For the public, special Public Portal windows can be designed for this purpose. For Back Office users, Elements can be configured to provide fee estimates.
1.39	System shall allow staff to directly attach files associated with submittal.	X				Y	The AMANDA Attachment table will be used to store and link all associated images, videos, diagrams, photos, site plans, letters, citations, and other attachment types. As many formats are compatible as there are agents to handle the attachments supported, including audio files.
1.40	System shall be able to track the entity or person who took action (i.e. reviewer staff name).	X				Y	All actions in AMANDA are logged with action, user and time stamp data.
1.41	System shall have the ability to automatically send internal notification once reviews are complete. The ability to base these e-mails on conditional items/triggers is required. (i.e. only send e-mail if event occurs after or before another event has taken place)		X			I	Each workflow can trigger new workflow steps / processes that can be done in parallel or serially, these can range from new assigned processes to different users, notifications, alerts, automatic generation and email of documents or notices etc. Through the use of task lists, workflow assignments, and/or email notification, users will be notified whenever there are outstanding business processes that need attention. AMANDA can automatically notify participants by assigning the review to their

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							task list (internal users) or to an assigned external review process (using AMANDA Review).
1.42	System shall include a time stamp function for all activity by the applicant or City.	X				Y	AMANDA Audit maintains a comprehensive audit trail of all user activity and actions performed on data within the application. AMANDA Audit adopts extensive logging for auditing and troubleshooting. Each log statement is logged with time, user, session ID and IP address. The Audit Logs include standard information such as User ID, Date/Time, Data Changed From, Data Changed To. AMANDA Audit has standard audit functionality to capture user activity such as logins, timeouts or terminations.
1.43	System shall have the ability to import and/or create checklists, standard comments, custom/interactive comments to be utilized for review and integration into comment document. Ability to make checklist/ comments change content/ options based on inputted information. A general library function shall be available for all users as well as a user specific library.	X				Y	AMANDA will store standard clauses for reviews and comments. In the AMANDA Permit modules staff comments are generated during plan review or inspections as part of the normal workflow. The AMANDA Permits module also provides a standard area for pre written standard clauses or conditions that the review can select to avoid unnecessary typing. The AMANDA Conditions module provides for the cascading of conditions from property to folder or folder to folder or folder back up to property. The AMANDA Conditions Module also provides for review of conditions, addition or modification to conditions depending on the client's requirements. Using this module, AMANDA users can associate conditions, clauses, or any other regulatory text with Folder or Property records. Conditions are linked to child Property or a Folder, and can be managed ('met') at any level. During the complete land development lifecycle, reminders about unmet conditions will be provided as needed.

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							For Inspections AMANDA provides a deficiency section that allows the inspector to select what is deficient and automatically include the requirements to remedy the deficiency if desired. An unlimited number and type of deficiencies can be setup and tracked using this module, which can then be accessed or printed in reports. Each AMANDA client can preset their desired Clauses, Conditions or Deficiencies.
1.44	System shall include a public-facing portal for online permits that provides the following information: project information and status available on a customer web based dashboard available 24/7 (pending review, disapproved, subject to review comments and field inspection, approved subject comment, closed, out of jurisdiction, approved, under review, etc.) System shall provide interpretive analysis/information for the provided information.		X			Y	AMANDA Public Portal II allows citizens to access and view public information. In addition, citizens, businesses and organizations can register, build a profile, apply for, renew and pay for a permit or license and schedule or cancel an inspection. The Portal can be accessed via a web browser on a desktop or a mobile device (smartphone, tablet). AMANDA Public Portal II allows customers to view permit and license information including application status, transaction history and upcoming workflow process milestones and outstanding tasks. Documents generated within AMANDA for a specific permit or license can be made available to (registered) customers via the Portal and distributed electronically via the AMANDA Batch Scheduler. Clients can be notified via the Public Portal of activity completion, application status changes and requests for additional information that occur within an AMANDA workflow. The visibility of permit and license attributes, folder information fields and workflow processes is managed through configurations using the AMANDA Administration Console.
1.45	The public portal for online permits shall also be accessible from the self-help computers in the City's Permit Center during business hours.	X				Y	As the Public Portal is a public facing web page, it can be made available on any computers, including those in the City's Permit Center.

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1.46	System shall have the ability to manage, verify and apply digital signatures. System shall be able to communicate with outside digital signature vendors for verification/ application of digital signatures.		X			Y	The design of the AMANDA web pages incorporates the capability to support electronic signatures when required by the City. Electronic signatures can be implemented for defined application types and the verification routines can be configured for the application types selected.
1.47	Permit approval: Allowable uses by zoning designation shall be listed in a table, and the System shall stop permit issuance if zoning and unpermitted uses are incompatible. The system will allow user override with audit trail.		X			I	This validation would be included in the business rules where necessary in the workflow to achieve the desired outcome.
1.48	Permit issuance: The System shall generate permit packet to send to applicant; the System shall issue and print permit.		X			I	Issuance of a Permit is a standard process supported by AMANDA. There is an Issue Button on the main screen that runs all the validation rules necessary for the City. It can update the status, insert new workflow steps, ensure data is complete, ensure fees have been paid, communicate to the customer and generate an electric version of the Permit to be made available via email or download from the Public Portal.
Section 2: Permit Functional Requirements							
2.1	System shall have ability to reject a permit application with cause. Ability to list all open or expired permits / permit applications / and restrict the issuance of permits for certain parcels based on access authority during permit initializing process.		X			I	Permits can be rejected automatically based on a lack of data provided or based on the availability of that type of permit for the applicant. The rejection of an application can also be part of the workflow where City staff can review the application and reject it.
2.2	System shall allow customers to apply for permits online. System shall allow electronic submittal of permit applications and plans. System shall include an on-line fee estimator for proposed projects, as well as the ability to review permit information even if the permit is closed or expired.	X				Y	AMANDA Public Portal can be configured to meet these requirements. Public portal allows users to login, update information, apply for permits and applications, submit plan reviews, payments, attachments, and application materials. Authorized users can log in to their online account using AMANDA Public Portal to enter an application, to retrieve an application, or to make payments online. The web-based AMANDA system will automatically generate, print or email a

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2.3	System shall have Cradle-to-grave project tracking. Projects shall be tracked across departments. Applicants can determine the current stage of development review a project is in at any given time.	X				Y	<p>payment receipt and a permit to the applicant. AMANDA ensures the submitted application is complete and valid, before allowing any application to proceed to the next stage. AMANDA can ensure that all requirements are validated and information is presented as required.</p> <p>Within the AMANDA platform business rules will be configured that use data collected in pre-application and application Folders to automatically determine if permit and license bundling is applicable to a specific project. AMANDA will be configured to automatically create a hierarchy of related permit and licensing Folders that represent the "project bundle". Once the project bundle folder hierarchy has been created AMANDA will automatically assign workflow tasks to specific individuals and/or groups to initiate processing of the permits and licenses included in the project bundle using AMANDA Permits and AMANDA Licensing functionality.</p> <p>The project bundle approach described above will allow the City to have a global view" of permitting and licensing activity across specific types of projects. CSDC anticipates the project permit bundle will consist of a hierarchy of related permit and licensing Folders. Organizing permit bundles in this manner will facilitate querying of other permits and licenses included in the permit bundle.</p> <p>As all client (People) and permit/license (Folder) data is maintained in the AMANDA database, looking up information on other permits/licenses held by a Client will be accomplished via a basic AMANDA query. Each AMANDA Folder (permit, license, case, etc.) is associated with a (configurable) status to provide at-a-glance picture of the</p>

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							Folder's stage. Additionally, each Process (task in the lifecycle) has its own status.
2.4	System shall have a function that allows customers to update contact information online.	X				Y	The AMANDA Public Portal provides interactive public access to the solution. Members of the public can register online, apply for permits, licenses, etc. online, make payments online, follow the progress of their case online, schedule inspections online and much more. Standard functionality in public portal includes the ability to set up an account, retrieve or reset passwords, update account information, apply for a license or permit, schedule inspections, view details such as status for applications, licenses, or permits; upload or download attachments, renew a license, submit complaints, and submit payments.
2.5	Project information shall be simultaneously distributed to each person who needs to review plans and permits so that they can be processed concurrently.	X				I	AMANDA workflow supports concurrent or linear plan review or a combination thereof.
2.6	System shall ensure that the applicant has the required licenses to perform the work they request by linking Permitting and Licensing functionality. Where specific licensing is required system shall track contact information of contractors, applicants, property owners, etc.		X			I	Contacts have many-to-many relationship with application records. As many AMANDA People records can be associated with an application as necessary. As each record is added to the application, business rules execute to validate that particular record is allowed on that application. Examples of this include but are not limited to confirming the contractor added to the record has the proper licensure to pull the permit, limiting the number of a particular type of role that can be associated with an application, and confirm that enough data is stored with the record prior to adding it to the application (phone number, email, etc.).
2.7	System shall have Administrative capability to override required qualifications when processing permits in the permit office, i.e. Mechanical Contractor License with		X			I	Permissions can be defined such that only users with a specific permission can make changes to the permit, and only privileged users can override the list of required qualifications.

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	qualification exceptions with associated work etc.						
2.8	System shall confirm with California State Contractors License Board website if contractor's license is current and valid for requested permit / scope of work (i.e. plumbing Contractor license required for plumbing permits) where required.		X			I	AMANDA can validate licenses against external systems.
2.9	System shall verify owner information before a permit is issued.		X			I	Ownership can be validated that it hasn't changed hands during the application process or any other check that might be necessary prior to issuance.
2.10	System shall provide drop-down, check box options for customers to select the scope of work they are permitted to perform, with a comments field for any additional details an inspector might need.	X				Y	Data entry screens for both portal and back office can be configured using text, drop down boxes (pick or choose lists), Boolean, date, numeric and alphanumeric fields.
2.11	System shall provide a shopping cart function so customers are able to apply for and receive multiple permits during one user session.		X			Y	AMANDA Public Portal allows applicants to apply for multiple licenses using a shopping cart interface.
2.12	System shall generate unique permit numbers that follow the City's permit numbering sequence and standards (ability to enter manual files if necessary also per standard).	X				Y	AMANDA automatically assigns a unique record number to each folder or AMANDA has the ability to assign a uniquely identifiable City permit # based on any set of criteria, such as sequential, a combination of date, alpha, or numeric text, etc.
2.13	System shall track and manage all permit types.	X				Y	This is a standard AMANDA capability
2.14	System shall be able to lock permits for editing once issued. Any subsequent changes shall need to have a pre-defined controlled change process.	X				Y	Permissions can be defined such that once a permit is issued only users with a specific permission can make changes to the permit, and only privileged users can override the list of required inspections.
2.15	System shall prevent the issuance of a dependent permit until the primary permit or Plan Review has been issued / approved.		X			I	The proposed AMANDA solution meets this requirement. Permit folder contain an Issue procedure that checks for all requirements and can prevent a permit from being issued if a requirement has not been met.

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2.16	System shall have the ability to view historical permit data such as floor area or valuation within a certain date range issued for a particular structure.		X			Y	This is a standard AMANDA capability
2.17	System shall provide ability to track and relate multiple applications and/or permit file information on projects that contain multiple permits and types of permits or applications (building, electrical plumbing, etc.) System shall also have the ability to track multiple applications to a single master project and the ability to link records together creating parent-child relationships.		X			I	Within AMANDA one can link records in a wide variety of ways that allows the user to view records in the list view. AMANDA will track complex projects, with multiple permits, multiple parcels, split parcels, roads, commercial and residential developments, multiple addresses. Pre-plan submissions, plan reviews, permits, inspections, fees, payments, project team and assignments, are supported. The AMANDA folder records (permits, cases, applications) are configured according to the detailed requirements documented by City staff. When users access an AMANDA folder, they may also retrieve all related folders that have been added as 'children' or as 'parent' records. A complete project, including all related permits, can be quickly viewed and analyzed, when required. The folder process tab will be configured to include the tasks and activities assigned to users responsible for project completion. Comprehensive project tracking will be used by users according to specific City business rules coded in stored procedures.
2.18	System shall have the ability to link all types of permits within and between departments.	X				Y	Departmental and global views of AMANDA data can be configured using standard AMANDA permission settings.
2.19	System shall be able to generate a downloadable copy of permits after the permit has been approved and paid. The generated copies shall be in an edit-controlled format, such as Crystal Reports.	X				Y	The permit can be printed, emailed, or downloaded via Public Portal.
2.20	System shall track permit expirations, renewals and associated licenses and fees.		X			I	Expiration notices will be generated either by Microsoft Word merge letters or Crystal reports. The AMANDA Batch Scheduler can be configured to generate notices automatically.

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2.21	System shall track and keep License / Permit / Project Details – project specific scope; Dates; Classification; Activities etc.	X				Y	AMANDA Permits allows clients to manage full Permit lifecycle (end to end) including application intake, review, issuance, renewal, fees, complaints, investigations, and enforcement. Folders are automatically associated with Locations (Facility) and People (Applicant, Owner, Operator) records and permit data/workflow, contacts, and site data through folder views. These modules will allow staff to: submit and maintain permit applications track and manage permit and task status setup, manage, and track workflow and reviews; automate issuance and renewals; manage investigation and enforcement activities; generate reports and documents; retrieve audit and history information.
2.22	System shall and keep Contractor information (company name; address; contact information; licenses, etc.)	X				Y	A People record type of 'Contractor' will be configured in AMANDA. The Permit will be linked to the contractor People record that contains all the contact information for that person.
2.23	System shall have the ability to track the physical location of plans.	X				Y	The plan types and number of plan sets and their location are configurable in AMANDA.
2.24	System shall provide ability to add/delete/modify /apply project holds as needed and prevent permit issuance until all appropriate conditions are met.		X			I	Project/permit holds can be configured as part of the AMANDA workflow.
2.25	System shall be able to relate all applications and permits issued for a specific project.	X				Y	AMANDA Folder records can be linked in a parent/child relationship to link a master project to multiple subordinate projects or permits. AMANDA will track complex projects, with multiple permits, multiple parcels, split parcels, roads, commercial and residential developments, multiple addresses. AMANDA also has the ability to relate records to each other via the folder relation tab. This is another method of relationship outside the parent/child already described.

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2.26	System shall identify permit approver through a valid login.	X				Y	The account that issues the permit is stored in the "Issue User" field on the main folder screen.
2.27	System shall provide ability to automatically generate the necessary notices (i.e. notices to the applicant) and determine the geographical requirements for these notices (i.e. setbacks, preservation requirements, job cards, permit documents and any other related information.)		X			I	AMANDA can generate documents for each project/permit with data it gets from geographical requirements through the GIS interface.
2.28	System shall provide ability to monitor the expiration of permits and notify the applicant via e-mail.		X			I	Expiration notices will be generated either by Microsoft Word merge letters or reports. The AMANDA Batch Scheduler can be configured to generate notices automatically.
2.29	System shall provide automatic updates of current applicable fees for inactive permits that are re-activated.		X			I	Re-activating permits can be included in the workflow. This process can execute business rules to update fees based current fee schedules.
2.30	System shall have an Approvals/ Authorizations function that is project specific.		X			I	Each project/permit type can be configured with its own processes.
2.31	System shall have a function for Environmental Control Approvals such as: Zoning; Fire; District; Pollution Control; Noise Control; Soil Erosion; Flood Zone; Water Supply; Variance Granted.		X			I	These approval types can be configured just like other permit/project types.
2.32	System shall allow the input of use details, such as: Number of Stories; Use Group; Construction Type; Number of Occupants; Square Footage; Square Footage Calculations per floor.		X			I	The AMANDA Variable Data Model configured to record this information. Additional Folder info pick-lists will be setup for this purpose.
2.33	System shall provide the ability to determine the characteristics of buildings (Principal type of frame).		X			I	The AMANDA property records link to a Structure table to store this information for use by folders.
2.34	System shall automatically send a notice to the system user if a property has current or previous conditions of non-compliance with building or zoning codes.		X			I	This is a standard AMANDA capability.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
2.35	System shall provide the ability to determine the proposed use of a building (Residential or Non-residential).		X			I	AMANDA folder info or folder screen will be used to capture this information.
2.36	System shall allow for project specific permit fees and payment details, per the City of San Jose Adopted Fee Ordinance.		X			I	AMANDA Fee Engine allows for business rules to calculate the proper fee amount based on any business rules. Users can setup an unlimited number and type of fees. Fees can be based on flat rate, variable, formula based, escalating or any other type including penalty fees based on code enforcement. AMANDA provides a configurable financial subsystem that tracks fees, payments / partial payments, payment types, refunds, voids, adjustments and revisions.
2.37	System shall maintain permit history. i.e. Address, Violations, email, change of Status, Notes, fees, Holds with description of hold, equipment item, entered by.	X				Y	The entire permit history will be recorded in the AMANDA folder in the audit module.
2.38	System shall have ability to generate all manual holds / descriptions.		X			I	Project/permit holds can be configured as part of the AMANDA workflow.
2.39	System shall be able to assign update inspector's area based on pre-defined inspection area matrix that is GIS driven.		X			I	AMANDA's robust inspection scheduling automation capability includes assignment by geographic area.
2.40	System shall readily indicate status of dependent items.	X				Y	Folder status of dependent projects can be viewed in the Related View of folders. Process status can be viewed in list view to see the dependent tasks and their current status.
Section 3: Inspection Functional Requirements							
3.1	City shall have the ability to view the permit issued by the Solution.	X				Y	Attachments are available for view by any Back office users with the appropriate security rights.
3.2	System shall define and show dependencies among the required inspections identified for a project.		X			I	The order of inspections and scheduling will be configured in AMANDA. Inspections can be rescheduled as needed to coordinate activities with other departments.
3.3	System shall allow different checklists for each inspection type.	X				Y	Processes by default have Checklist items that can be mandatory or optional depending on the client requirements. Checklists can be Yes, No, or NA (not applicable), and

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							AMANDA ensures that the mandatory (required) checklist items are completed. Checklist will be configured as part of the Folder Process setup.
3.4	System shall have standard notes unique to each inspector and each inspection type.	X				Y	In the AMANDA Permits Modules staff comments are generated during plan review or inspections as part of the normal workflow. The AMANDA Permits Module also provides a standard area for pre written standard clauses or conditions that the review can select to avoid un necessary typing. For Inspections AMANDA provides a deficiency section that allows the inspector to select what is deficient and automatically include the requirements to remedy the deficiency if desired. Each AMANDA client can preset their desired Clauses, Conditions or Deficiencies.
3.5	System shall provide electronic distribution of related permit(s) and plan(s).	X				Y	Any document associated with a permit/project can be made available on the AMANDA Public Portal or sent via email to the customer.
3.6	System shall automate inspection assignments based on inspector availability, trade, Inspection Area, expertise, and familiarity with project. Ability to quickly re-assign a group of inspections to another Inspector.		X			I	Based on the request and inspection assignment rules, the inspection can automatically be routed and assigned to the appropriate inspector. Inspectors can be assigned based on a wide range of characteristics including role and geography.
3.7	System shall be able to view a centralized Work Calendar for all inspectors.		X			Y	The AMANDA Dispatch module and/or the AMANDA Task List can be used to see a view of scheduled processes across inspectors.
3.8	System shall be able to associate a unique amount of time with each inspection type, to allow for a daily "cap" of inspections.	X				I	Inspection types can be mapped to a time unit so the scheduling procedure can calculate a daily "cap".
3.9	System shall be able to reroute inspections from the Work Calendar by dragging and dropping to another Inspector's calendar;	X				Y	The AMANDA Task List calendar feature allows for drag and drop rescheduling of processes.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
	Drag and drop scheduled inspections from one calendar day/inspector to another.						
3.10	System shall be capable of batch scheduling inspections from a single screen for all inspection requests.		X			I	Inspection requests are typically automatically scheduled based on the scheduling rules. IF necessary unscheduled requests can be displayed on a single screen and batch scheduled by a user.
3.11	System shall not allow acceptance inspection if permit not issued.		X			I	Inspection scheduling routine can limit when inspections can be scheduled, including the fact that has been issued.
3.12	System shall provide ability to create a work queue based on inspection approval dates, trade of inspection, combination or other pre-defined methodology.		X			I	Each application type can have a unique workflow associated with it that is dynamically driven by the data on the application and other related data if necessary. Users utilize the AMANDA Task List to review their queue of assigned tasks in a list or calendar view and can then navigate directly to the record to review the process as necessary. Each step in the workflow has several key pieces of information that drive assignment and queuing: assigned user (or group), scheduled start date, scheduled end date, actual start date, and actual end date. The method by which the task is assigned can be as simple or complex as needed. At one end of the spectrum, tasks can be configured to always assign to the same user. It is very common that more complex rules are necessary to model the business properly. As each task is inserted business rules validate the data to determine how the assignment should be handled. Examples of this are tasks being assigned based on user availability/workload, user expertise/certifications, geography, application type, etc.
3.13	System shall track inspections by type, inspector, scheduled date, results, and completed date.	X				Y	Type, inspector, scheduled date, results and completed dates are all fields associated with each inspection and can be reported on.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
3.14	System shall have the ability to create inspection tasks based on the lifecycle of the project.		X			Y	Inspection tasks can be created based on timeframes and project type as necessary.
3.15	System shall provide a mechanism for communicating the estimated time of arrival determined by the Inspector via posting to the web, email. Initial inspection or delayed from estimated time frame.		X			Y	Notifications can be sent based on an action taken in the field. The Inspector can notify an applicant of a rescheduled inspection or of the timeline of their arrival.
3.16	System shall provide inspector with ability to view/plot a list of daily assigned inspections and their locations on a map.	X				Y	Using the device's GPS capability, AMANDA Mobile can route the inspectors scheduled inspections based on priority, zip code, inspectors discretion and other options.
3.17	System shall provide ability to manually select an inspector caseload; and up to 10 additional inspector's caseload. More if possible.	X				Y	Any inspector's caseload can be viewed on their task list. As many tasks as are currently assigned can be selected.
3.18	System shall be able to provide future workload estimates for managers based on accumulated projects in the development cycle, and inspector availability		X			I	Reports can be configured in AMANDA Analytics to determine future inspection workloads based on projects still in the development cycle.
3.19	Must provide ability for inspectors to create ad-hoc inspections on-site	X				Y	AMANDA Mobile allows for ad-hoc inspections.
3.20	System shall provide a travel route optimization tool showing street map level detail, locations(s). Able to use GIS information to automatically route an inspection to a default Inspector based on a geographic area.		X			Y	Inspection assignment will take into account GIS data and geographic area to assign an inspection. Once assigned the system can route using AMANDA Mobile.
3.21	System shall have the ability to post schedule to web and E-mail status to Contractor and/or applicant making request. System shall automatically email the contractor/developer of inspection results.		X			Y	Inspector's schedule can be made available via the AMANDA Public Portal. Inspection results can be automatically emailed to anyone associated with the permit/project based on business rules.
3.22	System shall be able to change the status codes of an inspection to the City's terminology.	X				Y	All dropdown fields in AMADNA, including status codes are customer specific and can be updated.
3.23	System shall make inspection reports and forms available electronically in the field (able to view forms, data, schedules, reports, notifications, etc.).	X				Y	All required reports, forms and documents related to an inspection are available to inspectors while in the field

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
3.24	System shall provide ability for inspectors to update/combine the scope of the inspection tasks during an inspection (while connected to network and offline, if network connectivity is not available).		X			Y	If one inspection needs to include the work of multiple on the same permit a freeform tab in AMANDA can be created to indicate which inspections are included. This would be available on and offline.
3.25	Users shall be able to add attachments to the permit from a camera.	X				Y	The AMANDA Mobile Module provides the ability to capture images in the field from a camera and transfer to the host as an attachment to the case. The camera integrated into the Mobile device is used for this purpose. There is no limitation to the camera type or file type as long as it is supported by the host operating system.
3.26	System shall provide ability for tracking inspection task details such as floors and number of units to be inspected.		X			Y	These fields can be configured in process info fields specific to each inspection type.
3.27	System shall provide ability for inspectors to generate a document and flag inspections with a note, violation, correction notice/order for potential issues, such as conflicts in inspection results and resolution of the conflicts. Ensuring that previous inspections are approved, before accepting the next inspection type.		X			I	Actions that are taken by Inspectors in the field can places holds on the permit they are working on or other related workflows. This can be by failing an inspection or recording a violation on the property the holds the record. Notifications can also be sent based on an action taken in the field. The Inspector can notify an applicant of a rescheduled inspection or of the timeline of their arrival.
3.28	System shall be able to automate alerts to other staff within Building Code Compliance to identify issues, such as other dependent inspection results.		X			I	Alerts can be achieved in several ways depending on the preference of the customer. Email notices can be sent. New processes in AMANDA can be assigned for users to see on their task lists. Lastly the AMANDA Alerts feature can be used which queues notifications to users as they log into the system. These notifications can be dismissed or snoozed for later review.
3.29	System shall provide comment field for additional inspection notes/observations to be viewed/accessible by all Building Code Compliance staff.	X				Y	The AMANDA solution meets this requirement. There are unlimited comments with each inspection.
3.30	System shall provide historical building / property summary sheet (i.e. bldg. type, year built, repairs, sprinkler, fire alarms, occupancy type, floor location, etc.)		X			Y	This data, if stored with the property record, can be viewed by the inspector or included in a summary sheet (report).

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
3.31	System shall provide permit real-time data exchange with field devices (mobile device, laptop, etc.)	X				Y	AMANDA Mobile is a store-and-forward software giving it the ability work in an online or offline mode. As long as internet access is available the data is exchanged real-time. If operating offline the application can automatically upload and download data as soon as a signal is detected.
3.32	System shall have the ability to track the progress of inspection results, and publish to the web for customers to view those inspections results.		X			I	Results can be emailed electronically and published to Public Portal for download.
3.33	System shall identify permits needed throughout the project lifecycle and must track the status and progress of inspections throughout different phases of the project.		X			Y	The parent/child relationship of permits allows the system to be configured to identify which permits are needed at the parent level and then confirm that they have been applied for during the lifecycle of the permit.
3.34	Must provide a digital Inspection card for recording completion and outcome of inspections (inspection results & violations). This shall include digital tracking function for inspection approvals.		X			Y	Inspection results are recorded digitally and stored in the AMANDA database. If a report needs to be generated and a PDF attached to the record, which can occur as well.
3.35	System shall use the coding on inspection form to indicate results such as Pass, fail, partial and corrections needed.	X				Y	Outcomes (attempt results) that are assigned to inspections are specific to each client and each inspection type. This is completely configurable.
3.36	System shall track assessed and additional fees needed for special activities such as, special inspection fees, TCO's, after hour and overtime inspection requests.		X			I	There are no restrictions to the type or number of fees defined for a folder type. Many folder types will involve the calculation of additional fees after the new folder (permit application, for example) has been accepted. The AMANDA system can separate the fees that are required during the initial insertion of a new folder, and the fees that are required as a result of further review of each individual application. The fees to be added after the folder has been initially recorded on the system can be implemented either by completion of a given process or by manually selecting the desired fee type. Fees can be based on flat rate, variable, formula based, escalating or any other type including penalty fees. Discounts, surcharges, and other fee

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							attributes can likewise be applied using fee procedures.
3.37	System shall provide ability for internal and external users to access and search for permit and inspection history by Address, Project ID, Contractor name, Permit number, fees paid, fees due, etc.	X				Y	User-friendly queries with wild card and partial searches are available for any field. This is a general feature in all AMANDA screens. The AMANDA Ad-Hoc query tool can be used to define standard query criteria that can be saved and reused as needed. The queries can include more than one address, project or person, and can be modified by the end user. External users would query AMANDA via the Public Portal.
3.38	System shall provide ability to view previously issued (paid for) permits, previous inspections results, and permit and inspection data.	X				Y	All previous applications, permits, previous inspections results, permit and inspection data will be Folders associated with the same parcel address.
3.39	System shall have ability to capture annual inspection information using a checklist.	X				I	Processes by default have Checklist items that can be mandatory or optional depending on the client requirements. Checklists can be Yes, No, or NA (not applicable), as well as space for comments if necessary. AMANDA ensures that the mandatory (required) checklist items are completed correctly. The standard inspection checklist is defined by the system administrator. It is not changeable by the end user. This is done on purpose to ensure consistent inspection results. The checklist will be configured as part of the Folder Process setup.
3.40	System shall provide warning if permit is in a status other than a status deemed 'active'.		X			I	Automatic warning flags are generated and displayed as required. Flags can be applied manually or generated automatically based on City defined business rules.
3.41	System shall have the ability to site a violation without a permit. A copy shall be available for print at the City, or by email to applicant or contractor.	X				Y	Violations can be entered in the field by inspectors or recorded by Code Enforcement office staff based on a complaint. A copy of the notice is available in the system for anyone with the proper security access to view.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
3.42	System shall have the ability to schedule inspections via client email (Outlook), and synchronize to the System's email, scheduling tool.	X				Y	AMANDA can be integrated with Outlook for calendaring and appointment functions and to coordinate scheduling.
3.43	System shall provide the ability for inspectors to issue correction orders, utilizing drop downs for common code violations and a field for manual entry for describing the corrections needed.	X				Y	Using checklists, info fields, comment boxes and deficiencies AMANDA will merge all relevant information into the notice to ensure no duplicate data entry is required.
3.44	System shall include a drop-down list for inspection deficiencies, corrections, and approvals to be utilized by supervisors or other authorized personnel to comply with correction orders individually or all open corrections for a permit with one entry.	X				Y	Using the AMANDA Enhanced Inspections module inspectors can display any number of deficiencies under each category or sub-category. Remedies can be automatically associated with each deficiency. Default remedies can be set to ensure consistency among inspectors. This module makes for quick, easy, and standardized data entry.
3.45	System shall provide access to the permit data and related property information through a map service in the field.		X			Y	The AMANDA GIS adapter can make available the AMANDA Permit data as a service layer to the City's GIS viewer available in the field.
3.46	System shall provide access to aerial photo information in the field.		X			Y	The AMANDA GIS adapter can make available the AMANDA Permit data as a service layer to the City's GIS viewer available in the field.
3.47	System shall provide the ability for field inspectors to print documents stored in the system in the field.	X				Y	For example, inspection results and reports can be printed in the field when necessary. AMANDA Mobile allows inspectors to print (assuming they have a printer attached to their mobile device) and electronically submit inspection reports while they are in the field. They can also download (with the appropriate connectivity) attachments from the AMANDA folder.
3.48	System shall provide the ability to configure security to assure that only authorized persons are allowed to sign off on an inspection.	X				Y	AMANDA's Security model allows for the structuring of roles and assignment of responsibilities for business functions in order to segregate user responsibilities or business functions. AMANDA Administrators can define an unlimited number of users, user types, and user profiles through the AMANDA Administration Console. The

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							AMANDA Administration Console is a web-based, integrated, table-based administration tool that allows administrators to easily setup, configure, update and manage all aspects of AMANDA Administration including user access and security. All user administration for internal (staff) and external (applicants) is conducted through AMANDA Administration. Administrators can assign, update roles, button permissions, or row-level security to users through a table-based interface with drop down lists, and radio buttons.
3.49	System shall have a mobile inspection function.	X				Y	The AMANDA Mobile module will be configured to support all field activities. Inspectors will be able to continue working regardless of data communications connectivity. When data transfers are interrupted, AMANDA Mobile will work off-line and automatically synchronize all transactions when communications are re-established.
3.50	System shall support remote data entry.	X				Y	The AMANDA Mobile Module will be used to support remote data entry of inspection details using laptops.
3.51	System shall be able to access all property information while mobile.	X				Y	All AMANDA data is linked together in a logical way for ease of retrieval. Since all folders in the Enterprise system are linked to Property and People information is easily displayed in a tree type structure to quickly provide a complete history and all information from all departments to inspectors in the field.
3.52	System shall provide the appropriate capabilities to allow users to operate in the field with either hand-held devices or with laptop computers.	X				Y	AMANDA Mobile is available for Windows based installs on laptops or tablets.
3.53	System shall provide support for field data collection, inspection, and remote access to GIS data using a tablet PC that contains a wireless access network card; Mobile field units allow field personnel to capture,	X				Y	This is a feature of AMANDA Mobile. GIS data would be copied as fields on the inspection or permit for ease of use by the inspector.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
	store, update, annotate, analyze, and display data in the field.						
3.54	Mobile mapping tablet-PC units should support viewing engineering drawings, floor plans, Aerial photography, photography, and allow Red-lining as a part of the application. Red-lining allows field personnel to sketch, write text, and draw on the map display to record edit changes.		X			Y	AMANDA Mobile can launch the ProjectDox interface to view and markup plans as long as there is an internet connection.
3.55	System shall provide support for Mobile mapping in the field using tablet-PCs.	X				Y	AMANDA Mobile has routing/GPS capabilities for the inspector to view their inspections on a map and automatically route the most efficient route. The inspector can reprioritize the waypoints as needed and added and delete inspections and then re-route if necessary.
3.56	Mobile Mapping tablet-PC units should support GPS technology to collect survey locations for any feature. Able to record, update, and validate real-world coordinates (x,y,z).	X				Y	AMANDA Mobile allows you to capture the GPS location of the inspection as well as the location of each deficiency.
3.57	Mobile mapping tablet-PC units will support viewing and editing fixed assets – GIS data. Able to add attachments to a feature such as a photograph, MS Word document, scanned image, digital voice recording, or video recording.		X			Y	AMANDA Mobile can launch the web version of the City's GIS viewer to meet this requirement.
Section 4: Addressing Functional Requirements							
4.1	System shall handle address validation for Site addresses located within the City's jurisdiction.		X			I	AMANDA contains information on what is considered a valid street type, including user-defined parameters, and can automatically perform address validation. The AMANDA system can be integrated with an external Enterprise Addressing System by configuring the Address Verification module this provides the ability to verify the validity of any property address entered in AMANDA. It can also provide any missing address elements (postal code or city and province/state) when the complete address is not available. To use this feature, a third-

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							party address checking service provider, e.g., Melissa data is required.
4.2	System shall provide auto-complete functionality for addressing (i.e. like street names).	X				Y	This is a standard AMANDA capability.
4.3	System shall provide an address drop-down list of similar street names and numbers to select from.	X				Y	This is a standard AMANDA capability.
4.4	System shall return all address fields (number, direction, street name, modifier and current owner)	X				Y	This is a standard AMANDA capability.
4.5	System shall provide the ability to identify all permits that have the same owners' names (or agents' names) and mailing addresses.	X				Y	This is a standard AMANDA capability. AMANDA Folder, Property and People records can be related in many-to-many relationships. They can also be connected in a parent/child relationship allowing multiple addresses to be tied to a parcel or several personnel records to be grouped under a company record. Also multiple projects can be tied to a single address or many addresses.
4.6	System shall provide address formats that support and conform to US Post Office addressing, international addressing and non-deliverable addresses.	X				I	This is a standard AMANDA capability.
4.7	System shall perform checks/ corrections for valid address.		X			I	This can be accomplished if an interface with an addressing service is available.
4.8	System shall provide location history, including subdivision and historical parcel numbers and addresses. All past, present, and future records need to be available for any location with the City. In some cases, this may include an index for finding paper files from 30 years ago, imaged records from 5 years ago, and current records online for one specific location.	X				Y	AMANDA will keep the historical property records and can also track the relationships as they change.
Section 5: Data Collection Functional Requirements							
5.1	System shall support international standard date format according to ISO 8601 (YYYY:MM:DD, +hh:mm:ss, etc.).	X				Y	This is a standard AMANDA capability.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
5.2	System shall provide the ability to assign business rules for data entry, and validation rules for all entry points (manual entry, data load from external sources). System shall have the ability to add, edit, delete rules and edits as the need arises.	X				Y	Data elements can be defined as alphanumeric, numeric, date, Boolean, or pick/choose lists. Fields can be marked as mandatory to ensure completeness. Additionally, validation procedures can be used to ensure data is in the correct format and all required elements are present (such as People, Properties, Information, Fees, and Workflow approvals). Data is automatically validated for type of data entry such as date, numeric etc. fields. If more detailed validation is required AMANDA has an information validation procedure for each folder that can define the validation and messages for the user within stored procedures. Workflow, Fees and other AMANDA procedures can also contain validation rules.
5.3	System shall provide the ability to conduct on-line collaboration, submit and identify comment by reviewer or group, version control, etc.		X			Y	This is a standard feature of the ProjectDox plan review software.
5.4	System shall provide the ability to perform mobile data collection on-line as well as an off-line with data synchronization.	X				Y	The AMANDA Mobile module will be configured to support all field activities. Inspectors will be able to continue working regardless of data communications connectivity. When data transfers are interrupted, AMANDA Mobile will work off-line and automatically synchronize all transactions when communications are re-established.
5.5	System shall have the ability to tie data records to free-form text. Notes and comments, word processing documents, and boiler plate coded text need to be able to be lined to data records. System shall have the ability to generate ad hoc or bath form letters from data records, and ability to comment on standard condition and use in word processing documents.	X				I	Free-form text fields are available in a variety of locations in the system. These comments can be used to merge info form letters.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
5.6	System shall store approved documents for minimum time required by the City's approved retention schedule. Electronic documents of buildings shall be kept for the life of building (absolute requirement).		X			Y	The AMANDA system shall conform to the City requirements relating to the retention, disposition and preservation of City records.
5.7	System shall maintain multiple years of data to generate necessary reports by year, and for any specific year via versioning.	X				Y	The AMANDA system shall conform to the City requirements relating to the retention, disposition and preservation of City records.
Section 6: Workflow and Tracking Functional Requirements							
6.1	System shall integrate with other Business Process Applications and Document Management Solutions.		X			Y	The AMANDA EDMS Adaptor can be used to integrate with any document management solution.
6.2	System shall have extensive mobile device compatibility (iPad, iPhone and Surface Pro, etc.) and incorporate mobile plan viewing, full inspection functionality and project management functions within the mobile platform.	X				Y	AMANDA 7 Back Office application is cross platform and device agnostic. It will work on all browsers and devices.
6.3	Able to perform Select, Copy and Paste typical Windows functions compatible with Microsoft Word, Excel and Access programs.	X				Y	This is a standard AMANDA capability.
6.4	System shall be able to configure business rules and workflows that mimic specific agency requirements without Contractor assistance or significant developer talent or time to make changes.	X				Y	This is a standard AMANDA capability. CSDC will train City administrators to configure and maintain lookups, libraries, data fields, screen layouts, application dependencies and business rules and workflows without further CSDC assistance.
6.5	System shall be able to access all project notes by unique Project-ID (i.e. exceptions to setbacks, etc.).	X				Y	This is a standard AMANDA capability.
6.6	System shall provide the ability to audit/validate workflow steps allowing supervisor to review value, work and/or task completion status.	X				Y	Supervisors have the access to audit any record they have security permissions on.
6.7	System shall provide the ability to show all open projects for an identified customer or location and all open/closed records for an identified customer, project or location.	X				Y	Each AMANDA Property or People record have a Folder tab that show all records in the system that they are related to.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
6.8	System shall be able to view multiple projects and screens simultaneously without having to cancel one to open another or without losing data when navigating between screens.	X				Y	AMANDA has a tabbed structure much like modern web browsers. You can view multiple records without having to close tabs and navigate back as necessary.
6.9	Able to resize and expand the permit program window, font size and viewing area with multiple windows to fully utilize the PC desktop.	X				Y	These are all features of the browser in use which AMANDA supports.
6.10	System shall provide ability to submit notifications for customer inactivity that will result in expiration or cancellation of permits (i.e. "Void Warnings"), etc.		X			I	AMANDA Batch Scheduler will be configured to submit notifications based on permit status and timeframes.
Section 7: Fee and Collection Functional Requirements							
7.1	System shall accept online and credit card payments; system must be compatible with Wells Fargo Merchant Services.	X				Y	The AMANDA Public Portal and Portal Payment Package are used to integrate the payment solution provider provided by the City for processing online credit card payments with the AMANDA system.
7.2	System shall interface with current City of San Jose cashing system (iNovah).		X			Y	AMANDA supports interfacing with external systems assuming they have an API that is available.
7.3	System shall interface with City of San Jose's Centralized (Wells Fargo Merchant Services) Electronic Payment Authorization System.		X			Y	AMANDA supports interfacing with external systems assuming they have an API that is available.
7.4	System shall provide real time payment verification.		X			Y	AMANDA will post the payment from a 3 rd party system as soon as it is notified of a successful payment.
7.5	System shall provide ability to add/ remove/ modify any fees and re-issue an invoice if necessary.	X				Y	All of these actions are available given the proper security permissions.
7.6	System shall be adaptable and flexible to incorporate any new fees and fee structures based on new ordinances and be adjusted by staff with permission if required.		X			Y	AMANDA Fee Engine allows user to setup an unlimited number and type of fees. AMANDA allows for the automatic calculation and processing of fees. All fees and payments have associated GL (accounting) codes. The AMANDA Fee records store accounting codes in several ways. In its simplest form a single code can be related to a fee. AMANDA also supports

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							splitting a fee across multiple accounting codes by set percentages. We will utilize the AMANDA FEES folder type which is a meta data layer maintained by our services department and deployed during implementations. This allows the designated admins (business or IT) to update fee amounts and multiplier without touching lookup tables or SQL code. It also allows for date ranges so new fee structures can be entered in advance to them switching over.
7.7	System shall be able to incorporate multiple formulas / algorithms for fee calculations (i.e. fees by the hour, by valuation, square footage, etc.) or combinations of.		X			I	Fees can be based on flat rate, variable, formula-based, escalating or any other type including penalty fees based on code enforcement. AMANDA allows for the automatic calculation and processing of fees and collection of payments based on user-defined business rules. AMANDA supports all mathematical calculations associated with permitting and licensing business processes. AMANDA will calculate fees, charges, surcharges, taxes and refunds.
7.8	System shall provide ability to predefine effective dates for permit fee changes (i.e. 1/1/2010).		X			I	We will utilize the AMANDA FEES folder type which is a meta data layer maintained by our services department and deployed during implementations. This allows the designated admins (business or IT) to update fee amounts and multiplier without touching lookup tables or SQL code. It also allows for date ranges so new fee structures can be entered in advance to them switching over.
7.9	System shall allow for customer refunds or credits (processing and tracking of permit / license / serial / plan review reimbursements or credits).	X				Y	AMANDA's financial engine allows for voids, refunds, partial refunds, adjustments and all other necessary actions.
7.10	System shall provide automated warnings and/or holds based on delinquent accounts (i.e. expired licenses, bounced checks, partial/down payment).		X			I	Flags or alerts can be set warning users of any delinquent accounts or other alerts as required. Flags can be applied manually or generated automatically based on City defined business rules.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							Warnings and holds are implemented in AMANDA as a special type of case (folder), and can be attached to another case or project (folder), Property record or People record. Warnings are de-activated by changing the status of the warning, not by deleting.
7.11	System shall allow partial or no payment options on permit applications and invoices. (i.e. Inter Account Billings).	X				Y	These are done as separate payment types to show the Inter account billing.
7.12	System shall allow for printing of receipt with breakdown of fees paid.	X				Y	AMANDA will automatically generate, print or email a payment receipt to the applicant.
7.13	System shall be able to define account details for each transaction type (configuration and transaction detail requirement).	X				Y	AMANDA fee and payment types are GL coded and the financial subsystem tracks all ledger entries.
7.14	System shall provide ability to search by transaction number.	X				Y	AMANDA provides the ability to search by any data element available in the system. User queries with wild card and partial searches are available.
7.15	System shall provide ability to bill customer for combination of standard fees + calculated fees (i.e. overtime, Administrative Action).	X				Y	Any fees associated with a record can be billed to a customer. The method by which they are calculated does not limit this.
7.16	System shall be able to show and print billing history on one screen.	X				Y	All bills associated with a record are available on one screen and can be printed.
7.17	System shall provide ability to record and manage bonds/deposits as related to the permit / license process.		X			I	AMANDA Trust Accounts (Escrow Accounts) module is used to manage fee accounts for external consultants. Contractors can make draws to pay for permits against escrow accounts and keep an accurate record of payments, reflecting the real-time account balance. A statement of the Trust Account is prepared at the end of every month. Depending on requirements, the AMANDA Securities and Letters of Credit module may be more appropriate. This module is required to link multiple securities or bonds to a development project, which may include one or more properties. It also tracks all approvals of draws and releases for each security and related information about the

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							main contacts such as the property owner and the bank involved.
7.18	System shall allow for multiple permits to be processed in a single order / session (shopping cart). An "order" or "payment" may contain multiple items such as permits, license renewals, late fees, re-inspection fees, and fines.	X				Y	The AMANDA Cashier module is a method for cashiers to pay multiple fees across multiple records in an easy-to-use POS interface.
7.19	System shall have the ability to capture renewal fees, late fees, examination fees, affiliation fees.	X				Y	All fee calculations are completely user defined. Fee wizards can be used to expedite set-up. Any type of fee formula can be used including look-up based, complex formula based, flat fee, or multiple fees.
7.20	System shall allow bills to be generated remotely using mobile devices.	X				Y	AMANDA Mobile provides the ability to generate bills in the field.
Section 8: Reports Functional Requirements							
8.1	List the report writing tool your solution offers and skill sets and training report writers will need.	X				Y	<p>AMANDA Analytics engine uses the Gartner Magic Quadrant recognized BI tool Yellow fin as the report and dashboard tool. The tool is designed to allow for users with limited knowledge of SQL to be able to create reports and dashboards without IT involvement. CSDC offers training courses on this tool.</p> <p>The AMANDA platform is integrated with SAP's Crystal Reports business intelligence suite. An instance of the Crystal Reports engine is embedded in the AMANDA platform. Crystal Report definitions will be created and deployed to the AMANDA server and executed interactively by users or via AMANDA Batch Scheduler.</p> <p>The AMANDA platform is also pre-integrated with Crystal Reports server. Crystal Reports server integration allows report execution to be "offloaded" to a dedicated (physical or virtual) reporting server as required. Third Party Reporting Tools such as Cognos, BI Publisher, etc. may also be used to develop reports and views. Access to results from these tools is available from within AMANDA.</p>

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							AMANDA also comes packaged with our proprietary ETL tool AMANDA Datamart which extracts and simplifies the AMANDA data into a more reporting friendly data structure.
8.2	Report writing tool shall be user-friendly.	X				Y	The tool is designed to allow for users with limited knowledge of SQL to be able to create reports and dashboards without IT involvement. CSDC offers training courses on this tool.
8.3	Report writing tool shall include at a minimum: Online preparation of report (e.g. word processing documents fed with information from the database); word processing integration (report becomes a permanent part of the project record); Accessibility of reports from database window.	X				Y	AMANDA Multi-merge documents meet this requirement.
8.4	System shall automatically close-out log/file once report is finalized.	X				Y	Once a multi-merge document is finalized and sent to EDMS the file is now read-only in AMANDA.
8.5	System shall be able to configure dashboard to track key performance metrics based on predetermined service levels for each functional area.	X				Y	AMANDA Analytics provides an easy to use yet powerful tool for building dashboards to present key performance indicators (KPI), trends, and warnings with the ability to drill down into details. This is a reporting tool to web-enable existing and new management reports as KPI monitors. Monitors are used to track trends, alerts, summaries, warnings, ticklers and other reminders. Information can be presented in a line graph, bar graph, pie chart, list, table, speedometer, etc. Managers can drill down to get details from AMANDA folders.
8.6	System shall provide ability for real-time monitoring of task / workflow status by location, project, functional group, date, ownership, customer/business name or any other field, as needed.	X				I	All data in the AMANDA database is available to view real-time.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
8.7	System shall provide dashboards on throughput / scorecard performance measures (i.e. projects completed by phase, permit issued, inspections conducted, review times, backlogs, trends, etc.).		X			I	AMANDA Analytics provides an easy to use yet powerful tool for building dashboards to present key performance indicators (KPI), trends, and warnings with the ability to drill down into details. This is a reporting tool to web-enable existing and new management reports as KPI monitors. Monitors are used to track trends, alerts, summaries, warnings, ticklers and other reminders. Information can be presented in a line graph, bar graph, pie chart, list, table, speedometer, etc. Managers can drill down to get details from AMANDA folders.
8.8	System shall provide summary / drill down capabilities such as; trail / reporting of all system activity, including open permits, inspections, licenses, customer history etc.	X				Y	Management dashboards and associated drill downs can be configured as required in AMANDA. The AMANDA Analytics will print information from configured dashboards and/or drill downs.
8.9	System shall be able to track time spent on all activities for each project by reviewer or functional group or other staff by level or division association.	X				Y	This is a standard AMANDA capability. For example, Reviewers record details of their review progress and time spent in FolderProcessAttempt records associated with the review process. Each record has a status code that either starts or stops the 'clock' to indicate hold or wait times. Using this technique a detailed analysis can be done to determine time spent internally versus time spent by the customer by review discipline and permit type.
8.10	System shall have the ability to generate a pass/fail report.		X			I	AMANDA includes a number of pre-defined reports. In addition, an administrator can develop any number of custom reports to be accessed from within AMANDA.
8.11	System shall be able to provide a means to generate user defined reports without significant end user training.	X				Y	AMANDA Analytics engine uses the Gartner Magic Quadrant recognized BI tool Yellow fin as the report and dashboard tool. The tool is designed to allow for users with limited knowledge of SQL to be able to create reports and dashboards without IT involvement. CSDC offers training courses on this tool.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
8.12	System shall have the ability to generate an Inspector Activity Report, viewable / printed to include Name of Applicant, Address (Job location), Date of inspection, Start and End time of inspection, Activity Type, Permit number, Inspection Location (City, Township), County, Type of Inspection, Violations, Issue Notice, V Corr Note, Notes and Inspection history.		X			I	AMANDA includes a number of pre-defined reports. In addition, an administrator can develop any number of custom reports to be accessed from within AMANDA.
8.13	System shall provide the ability to create an inspection due report.		X			I	Please see CSDC's response to requirement #8.12 above.
8.14	System shall provide ability to produce reports to support program, invoices due, invoices paid, invoices overdue, invoices voided, invoiced turned over to collections, inspection due report by county, zip or inspector, inspections done per inspector, per month per fiscal year, correction due report, corrections overdue report.		X			I	Please see CSDC's response to requirement #8.12 above.
8.15	System shall generate reports on processing times, construction/development activity, and workload data.		X			I	Please see CSDC's response to requirement #8.12 above.
8.16	System shall be able to compile Plan Review findings in a letter to be sent via email. Correspondence shall allow attachments.		X			I	The letter is produced by the ProjectDox application and includes all necessary markups and comments for the contractor/developer to submit revisions as necessary.
8.17	System shall be able to automatically generate cover letter with project specific information.		X			I	Please see CSDC's response to requirement #8.12 above.
8.18	System shall have ability to generate an Annual Inspection Report to record inspections / violations for certain permit or file types.		X			I	Please see CSDC's response to requirement #8.12 above.
8.19	System shall have ability to update Department name, Bureau name and any fixed text on all report documents.	X				Y	This is a standard AMANDA capability.
8.20	System shall allow the retrieval of information stored by a variety of technologies in a user-defined format.	X				Y	AMANDA can generate reports based on any data that it has access to in a format defined by the City of San Jose.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
8.21	System shall provide data export capabilities so that permit data can be easily transferred to an Excel spreadsheet for calculations and analysis.	X				Y	Reports and most AMANDA screens can be exported to Excel.
Section 9: Searching Functional Requirements							
9.1	System shall be able to search on all data and have full text search capability (PDF-files, etc.)	X				Y	All data in the AMANDA database is searchable. For full-text searching of PDF files we will integrate with Adlib as part of this project.
9.2	System shall provide the ability for user defined fields such as date ranges & selected codes, within standard queries.	X				Y	The AMANDA Advanced Search has this capability.
9.3	System shall be able to search on multiple criteria and generate ad-hoc reports on all fields and any combination of fields for a given date range (i.e. principal name, property identification/characteristics, permit types).	X				Y	The AMANDA Advanced Search has this capability.
9.4	System shall provide the ability to query aggregate data.	X				Y	The AMANDA Advanced Search has this capability.
9.5	System shall provide the ability to search by secondary identifiers including, but not limited to name, mailing address, postal code, and street address.	X				Y	The AMANDA Advanced Search has this capability.
9.6	System shall include word association (wildcard) search capabilities.	X				Y	This is a standard AMANDA capability. User-friendly queries with wild card and partial searches are available for any field. This is a general feature in all AMANDA screens.
9.7	System shall provide ability to run standard and ad-hoc queries.	X				Y	Standard queries can be stores as predefined Advanced searches or pre-configured AMANDA Analytics reports with filters available. Ad-hoc queries are handled by the AMANDA Advanced Search.
9.8	System shall be able to search for a Project / permit / license / serial by the following parameters: Project name/Title, Project ID, Customer Name/Login/ID, Company Name, Address, City, State, Zip, Account Number, Customer Email / Phone	X				Y	The AMANDA Advanced Search has this capability.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
	Number, Date Range, Check Number, Payment Amount, License Number, Invoice Number, other						
9.9	System shall be able to provide summary of all permits for a specific address for a specific year and from all departments working within the permit tracking system.		X			I	AMANDA includes a number of pre-defined reports. In addition, an administrator can develop any number of custom reports to be accessed from within AMANDA.
9.10	System shall provide integration with GIS maps as demographic reporting option where maps would help explain the requested tabular data (demographics).		X			Y	The embedded HTML5 GIS widget will be used for bi-directional data transfers between AMANDA and the ESRI spatial data. Google Maps and Bing Maps are also supported. The GIS widget may dynamically generate a map image that can be attached to an AMANDA folder for inclusion in a report (or notice) generated via Word. Any detailed map of a parcel or a group of parcels in AMANDA can be displayed. The two-way data access allows users to select AMANDA Property records for parcel map display or select parcels in a map for AMANDA processing. The specific components are dependent on the format of the GIS database. City staff will be responsible for maintaining all the GIS data to be accessed by the system. The GIS data needed to control permit issuance or processes can be extracted from the GIS database and loaded into the City's AMANDA Property Records on a regular basis or in real time. The AMANDA system will be able to properly evaluate applications against any parcel data.
9.11	System shall provide ability to create and modify standard reporting templates for each organization as applicable.	X				Y	Data from any AMANDA tables can be extracted with specially configured SELECT statements to merge the information with word processing templates for the generation of merged letters. Once generated, users can edit the document in Word and save changes, track dates the document was sent, and even email the document. Templates will be invoked interactively by a user to create "one-of" correspondence for

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							individual clients or via the AMANDA Batch Scheduler for a group of clients Notifications can occur based on user actions (approval, denial, withdrawal, etc.) or on a pre-defined interval by configuring the AMANDA Batch Scheduler Module.
9.12	System shall be able to create and save AD-hoc reporting templates under user profiles.	X				Y	This is a feature of AMANDA Analytics.
9.13	System shall sort options for batch print / email function. (i.e. address, permit number).	X				Y	All user generated reports are first available for preview in the AMANDA application. The user then has the option to select the format (PDF, XLS) and method of delivery (email or print / mail) for each of the query and report results. For automated reports, the Batch Scheduler shall be configured to automate the generation and distribution of reports via print, email, PDF etc.
9.14	System shall provide the ability to embed (cut & paste) digital images in reports.	X				Y	AMANDA Multi Merge can embed images from the AMANDA attachment tab.
9.15	System shall provide the ability to save user-generated reports either under user profile and/or public.	X				Y	This is a feature of AMANDA Analytics for the report writer licenses.
9.16	System shall provide the ability to generate reports listing withdrawn applications and scheduling changes.		X			I	AMANDA includes a number of pre-defined reports. In addition, an administrator can develop any number of custom reports to be accessed from within AMANDA.
9.17	System shall provide the ability to produce form letters, correspondence and notices associated with all development functions.	X				Y	Data from any AMANDA tables can be extracted with specially configured SELECT statements to merge the information with word processing templates for the generation of merged letters. Once generated, users can edit the document in Word and save changes, track dates the document was sent, and even email the document. Templates will be invoked interactively by a user to create "one-of" correspondence for individual clients or via the AMANDA Batch Scheduler for a group of clients Notifications can occur based on user actions (approval, denial, withdrawal, etc.) or

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							on a pre-defined interval by configuring the AMANDA Batch Scheduler Module.
9.18	System shall provide ability to distribute reports as e-mail attachment, electronic fax and through workflow.	X				Y	<p>All user generated reports are first available for preview in the AMANDA application. The user then has the option to select the format (PDF, XLS) and method of delivery (email or print / mail) for each of the query and report results.</p> <p>For automated reports, the Batch Scheduler shall be configured to automate the generation and distribution of reports via print, email, PDF etc. AMANDA can be integrated with the City's fax server to send copies.</p> <p>User generated or auto generated reports can also be made available online via AMANDA Public Portal. These can be general summary reports accessible by the general public or require login. These reports can also be permit or application specific thus only accessible by the permitted applicants.</p>
9.19	Must provide the ability to import or export data through different types of data formats: Non-editable PDF format (full text searchable). Editable format that can be exported into a spreadsheet (CSV) XML, etc.	X				Y	AMANDA batch scheduler can also export and import .csv files to/from MS Excel and MS Access.
9.20	System shall provide ability to "subscribe" to standards reports, etc.	X				Y	This is a feature of AMANDA Analytics.
9.21	System shall generate standard form letters, correspondence and mailing labels based on user-defined criteria. User must be able to create new form.	X				Y	<p>The AMANDA Multi merge documents module is an integrated Word application that is used to generate letters and notices by retrieving data directly from the AMANDA system.</p> <p>Data from any AMANDA tables can be extracted with specially configured SELECT statements to merge the information with word processing templates for the generation of merged letters. Once generated, users can edit the document in Word and save</p>

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							changes, track dates the document was sent, and even email the document. Templates will be invoked interactively by a user to create "one-of" correspondence for individual clients or via the AMANDA Batch Scheduler for a group of clients. Notifications can occur based on user actions (approval, denial, withdrawal, etc.) or on a pre-defined interval by configuring the AMANDA Batch Scheduler Module.
9.22	System shall provide samples of top 5 canned reports/functional area, user group, etc.	X				Y	Please refer to Appendix E – Standard Reports and Screen Layouts.
Section 10: Planning							
10.1	System shall automatically generate e-mails to applicants once a development permit application is assigned to a project manager.		X			I	AMANDA can generate emails based on any workflow action in the system
10.2	System shall have ability for the public to schedule application submittal appointments online, and synchronize with City staff's Outlook calendar.		X			Y	AMANDA is fully integrated with several calendaring systems including Outlook and Gmail. The proposed AMANDA solution shall meet this requirement.
10.3	Plan submittal. Identify conditions which need to be met for a project/development; calculate the appropriate fees based on the City's fee schedule; track managerial approval at multiple levels which are defined by permit type and project parameters; tickler file to keep track of the 30-day notification process once plans are submitted (keep a timeline and flags of all processes that must be done at certain times); online review of current property demographics, including land use information; assign file/project number; record and track all fees paid; schedule appointments for Planning applications based on type of permit; allow appointment scheduling phone or Internet with reminder from the system to customer (e-mail) to confirm.		X			I	AMANDA Planning's Variable Data Model allows staff to configure, capture, track, validate and manage any information/data required for the pre-application and application lifecycle. AMANDA's variable data model provides the flexibility for the client solution to meet all current and future data capture requirements. Beyond the standard data fields, custom fields can be defined and added to a registration folder. Configuration of the variable data model is a simple matter of defining the nature of the data and the data capture requirement. No application changes or customizations are required to add new data elements to folders in AMANDA. All business processes, functions, or workflow are configured as Processes in the Planning Folders using the AMANDA Dynamic Workflow Engine. A process allows

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							<p>users to track any type of workflow activity, who is assigned, due dates, completion dates, and outcomes.</p> <p>AMANDA Planning ensures the pre-application and application information is complete and valid, prior to allowing the application to proceed to the next stage. User defined business rules can be configured to set workflow dates and assignments. AMANDA Planning will allow staff to:</p> <ul style="list-style-type: none"> Capture all pre-application discussions and data; submit and maintain applications and plans; schedule, process and manage application workflow manage, and track reviews and correspondence; calculate and process fees and payments; manage and enforce development conditions; track associated applicants and people; generate reports and documents; and retrieve audit and history information.
10.4	<p>Plan data input. Interface with GIS to locate site's information; ability to input map location; automatically populate zoning, general plan, other designated zones or areas, and special district information based on location; ability to track and update historic landmark designations by location, with automatic indication of same on permit application for that location; ability to indicate requirement for environmental review and track completion and acceptance of environmental documents by permit and location.</p>		X			I	<p>AMANDA Planning is designed to automate all aspects of the Planning lifecycle including application intake, reviews, approvals, fees, electronic plans review, GIS mapping, and development conditions management. AMANDA Planning consolidates all of the planning data and workflow in a set of Planning Folders.</p> <p>The embedded HTML5 GIS widget will be used for bi-directional data transfers between AMANDA and the ESRI spatial data. With the proposed GIS Integration, staff can access and perform all their current GIS related activities and also access/link the maps to the project file.</p> <p>The two-way data access allows users to select AMANDA Property records for parcel map display or select parcels in a map for</p>

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							AMANDA processing. The specific components are dependent on the format of the GIS database. City staff will be responsible for maintaining all the GIS data to be accessed by the system. The GIS data needed to control permit issuance or processes can be extracted from the GIS database and loaded into the City's AMANDA Property Records on a regular basis or in real time. The AMANDA system will be able to properly evaluate applications against any parcel data.
10.5	Enter assignment of project planner, with ability to assign by geographic area (with override capability).		X			I	AMANDA will be configured to determine the best project planner for the job, with the ability to assign by geographic area. However, there are always exceptions to the rule. A project planner assignment can always be overridden by a supervisor as needed.
10.6	Returned comments. Electronically notify planner that comments have been received.		X			I	This is a standard AMANDA capability. Internal staff can be notified of tasks that are due via the AMANDA Task List or email.
10.7	Departmental review. Flag for projects close to end of 30-day response period; provide notification to project manager for projects near end of period.		X			I	Automatic warning flags are generated and displayed as required. Flags or alerts can be set warning users of any projects close to end of 30-day response period. Flags can be applied manually or generated automatically based on City defined business rules. Warnings and holds are implemented in AMANDA as a special type of case (folder), and can be attached to another case or project (folder), Property record or People record. Warnings are de-activated by changing the status of the warning, not by deleting.
10.8	Consolidation of comments. Generate a 30-day status letter to applicant; track items that have a time limit for compliance.		X			I	This is a standard AMANDA capability. Form letters and notices are generated using AMANDA mail merge functionality. Reports, emails and notifications are sent using the Batch Scheduler Module. Timeline information can be printed on a report or

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							displayed in a dashboard using the Executive Monitor Module.
10.9	Public notification. Automatically generate timelines for public notification based on target hearing date; generate posting notification to public; generate location map (GIS interface).		X			I	Each step in the workflow has several key pieces of information that drive assignment and queuing: assigned user (or group), scheduled start date, scheduled end date, actual start date, and actual end date. Using these dates, along with the tracking dates at the application level (Application Date, Issue Date, Expiry Date, and Final Date), business rules can drive the notification process. These can be notifications to staff indicating that the timeline for a task is running out or that one is overdue but can also be notifications to customers about key milestones as part of the application process. Notification for stakeholders can be configured any stage in the process. Users that have tasks assigned to them will be notified through their Task List. Other stakeholders can be a part of a communication list that is automatically sent notifications based on project timelines, this can be configured by application type allowing for some applications to provide more communication than others if necessary.
10.10	Appeal. Change status of application to indicate appeal is pending; track schedule of appeal process as pre-defined by user; incorporate comments and results of appeal process into data record.		X			I	Each application has a status associated with it that is dynamically changed based on the applications workflow and data. Appeals are tracked as either additional FolderProcess records or child appeal Folders, as needed.
Section 11: Code Enforcement							
11.1	Permitting system must be able to flag Planning applications and Building permits generated as a result of Code Enforcement cases.		X			I	The workflow as part of the Code Enforcement case to create the needed Planning application or Building permits will flag them automatically and allow for clearances or completion to update the Code Enforcement case if necessary.
11.2	System shall allow customer to select submittal type from drop-down menu for	X				Y	Data entry screens for both portal and back office can be configured using text, drop

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
	programs. (Eg. Residential Occupancy Permit, Off-Sale Alcohol Permit, Tobacco Retail License, Abandoned Shopping Cart Prevention Plan.)						down boxes (pick or choose lists), Boolean, date, numeric and alphanumeric fields. All information fields can be configured and edited by City staff as business needs change. The list of valid submittal types will be provided to the end user as a drop-down list to minimize errors.
11.3	System shall be able to search and view all planning, building, and code documents by address.	X				Y	AMANDA provides the ability to search by any data element available in the system. User queries with wild card and partial searches are available.
11.4	System shall be able to specify if new construction is an apartment or condominium.	X				Y	This is a standard AMANDA capability.
11.5	System shall have a web-based inspection module that includes the following features: 1. GIS for Inspector routing and scheduling purposes.	X				Y	With AMANDA Mobile, inspectors can search and access their assigned inspections, reschedule inspections, start new investigations, issue violations, print inspection reports, view inspection history, attach documents or images, and use GPS/GIS to efficiently route/schedule their inspections
	2. GIS for research purposes, including ability to view outline of building structures and property lines.		X			Y	The embedded GIS map in AMANDA has this functionality.
	3. Must be able to view history of code cases searchable by address.		X			Y	This is a standard AMANDA capability.
	4. Must be able to generate notices, letters, citations and other enforcement documents.		X			Y	This is a standard AMANDA capability.
	5. Must be able to view related planning, building and Code Enforcement documents.		X			Y	This is a standard AMANDA capability.
	6. Must be able to assign staff by variables including address; census tract/block group; program; Council district; etc.		X			I	AMANDA's Dynamic Workflow Engine allows full automation and configuration of any business process / workflow required by the business units, and allows for collaboration with other government departments. Workflow can be assigned based on user

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
	7. Must be able to upload and store pictures and pdf documents.	X				Y	<p>action, events, time, or thresholds. Processes are used to manage tasks, activities and events and their duration. A Process may be assigned to one or more persons who will keep track of each attempt at completing the task (Attempt Results). Processes (tasks) can have default users assigned. Stored procedures will be configured to assign tasks according to defined business rules.</p> <p>Inspectors can upload pictures and PDF documents associated with a Code Enforcement Case. The AMANDA Attachment table will be used to store and link all associated images, videos, diagrams, photos, site plans, letters, citations, and other attachment types. As many formats are compatible as there are agents to handle the attachments supported, including audio files.</p>
	8. Must be able to link Code Enforcement cases to an interactive map (Eg. google maps).		X			Y	<p>The embedded HTML5 GIS widget will be used for bi-directional data transfers between AMANDA and the ESRI spatial data. Google Maps and Bing Maps are also supported. The GIS widget may dynamically generate a map image that can be attached to an AMANDA folder for inclusion in a report (or notice) generated via Word. Any detailed map of a parcel or a group of parcels in AMANDA can be displayed. The two-way data access allows users to select AMANDA Property records for parcel map display or select parcels in a map for AMANDA processing. The specific components are dependent on the format of the GIS database. City staff will be responsible for maintaining all the GIS data to be accessed by the system. The GIS data needed to control permit issuance or processes can be extracted from the GIS database and loaded into the City's AMANDA Property Records on a regular basis or in real time. The AMANDA</p>

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
	9. Must be able to search cases by all fields, including owner, complaining party, etc.	X				Y	system will be able to properly evaluate applications against any parcel data. This is a standard AMANDA capability.
	10. Must be able to create and generate reports utilizing data in all fields.		X			Y	This is a standard AMANDA capability.
Section 12: Fire Development							
12.1	System shall have drop-down menus for each of the following: fire sprinkler system permit; fire alarm permit; underground permit; hazardous materials permits.		X			I	Data entry screens for both portal and back office can be configured using text, drop down boxes (pick or choose lists), Boolean, date, numeric and alphanumeric fields. All information fields can be configured and edited by City staff as business needs change. The list of valid permit types will be provided to the end user as a drop-down list to minimize errors.
12.2	System shall be capable of storing data on types/amounts of chemicals and hazardous materials stored in a certain address or buildings.		X			I	AMANDA data fields can be configured to store this data.
Section 13: Fire Non-Development							
13.1	System shall be able to store data on annual inspection reports (historical data) and generate chronological reports of previous inspection violations.		X			I	This is a standard AMANDA capability. All property information is maintained as well as historical records.
13.2	System shall be able to record or retrieve data on structural fires.		X			I	AMANDA data fields can be configured to store this data.
13.3	System shall be able to record data on special events such as the San Jose Jazz festival.		X			I	AMANDA data fields can be configured to store this data.
13.4	System shall have drop-down menus for each of the following: fire sprinkler system permit; fire alarm permit; underground permit; hazardous materials permits.		X			I	Data entry screens for both portal and back office can be configured using text, drop down boxes (pick or choose lists), Boolean, date, numeric and alphanumeric fields. All information fields can be configured and edited by City staff as business needs change.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							The list of valid permit types will be provided to the end user as a drop-down list to minimize errors.
13.5	System shall be capable of storing data on various types/amounts of chemicals and hazardous materials stored in a certain address or buildings.		X			I	AMANDA data fields can be configured to store this data.
13.6	Currently the Bureau of Fire Prevention (BFP's) Non-Development Services utilizes program called "Firehouse." The new System must have similar or better capability to support BFP's function on inputting inspection data on forms format, store/generate information such as code violations, and generate weekly, monthly, and annual performance reports. Must be able to retrieve info or interact with "Firehouse" database.		X			Y	AMANDA can integrate with the Firehouse solution, assuming that the Firehouse solution has an open API or the ability for AMANDA to query its database.
13.7	System shall be able to input fire inspection dates, required correction dates, initial inspection dates, required completion dates.		X			I	Annual fire inspections are supported in the AMANDA implementation. Folders can be configured to automate the scheduling process and store all of the necessary data as well as provide the method for inspectors to enter their results and generate reports.
13.8	Must be able to input in form format code violations, and required compliance date.		X			Y	AMANDA Enhanced Inspection module can store the code violations and compliance information.
13.9	Must be able to automatically generate required completion date for follow up inspection or issue citations.		X			Y	The completion of an inspection or the issuance of a notice/citation can automatically schedule the follow-up inspection.
13.10	System shall be able to input quantity and classification of hazardous and flammable liquids.		X			I	AMANDA data fields can be configured to store this data.
13.11	System shall be able to input types of inspections as described in California Fire Code, Section 105.6.		X			I	AMANDA can input any required inspection types as necessary per California Fire Code, Section 105.6 or any other needs of the department.
13.12	System shall be able to input structural fire data and information (cause and origin of fire), location of responding companies and		X			I	AMANDA data fields can be configured to store this data.

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
	date of incident, as well as generate reports.						
13.13	System shall be able to input data on complaints and California State Form 850.		X			I	AMANDA data fields can be configured to store this data.
13.14	System shall have a drop-down menu for Non-development fees associated with inspection activities.		X			I	AMANDA data fields can be configured to store this data.
13.15	System shall be able to interact with Fire Apparatus MDC's (mobile data computers) and/or tablet devices to provide relevant building information (hazardous materials, key plans, code violations, etc.) to firefighters responding to a call.		X			Y	AMANDA can integrate with the Firehouse solution, assuming that the Firehouse solution has an open API or the ability for AMANDA to query its database.
Section 14: Public Works							
14.1	System shall be able to incorporate Utility permitting process which can be flexibly based on locations or other methodologies beyond the typical parcel association.		X			Y	The AMANDA Property table can store any necessary records, not just Parcels or Addresses. Street Segments or Right of Way records are a common option for Public Works.
14.2	System shall incorporate Public Works Capital Improvement Program (CIP) building permitting/infrastructure approval and inspection capabilities. This shall be separate and parallel to the PBCE building permitting and inspection capabilities.		X			Y	This workflow can be done in parallel to the Building process. It can be stored in a separate record with its own workflow and output.
14.3	System shall have project management elements in addition to the standard project tracking functions.		X			Y	AMANDA's workflow engine can be used to track all elements of the project.
14.4	System shall have capacity to directly integrate with Public Works' web page interface or system.		X			Y	AMANDA can interface or publish data to a 3 rd party system.
14.5	System shall have ability to integrate or interface with traffic modeling software.		X			I	AMANDA can interface or publish data to a 3 rd party system.
Section 15: Miscellaneous Requirements							
15.1	System shall be easily and affordably upgradable to accommodate any increases in transaction volume and portable to the next generation of operation systems and user interfaces.	X				Y	The AMANDA system has been designed for a high volume of transactions. The data retrieval methods make extensive use of data caching to reduce network traffic. The primary screens in the AMANDA system have been optimized to deliver one second response times for basic queries. The City

#	Requirements	COTS Standard	Configuration	Customize	Not Available	In Scope?	Comments
							of Toronto has installed AMANDA to serve more than 1,400 total users. The AMANDA configuration for 700 concurrent users was analyzed by City staff who concluded that the average response time was one second for standard queries and retrievals. AMANDA is built on industry standards and as a result can be deployed on a standard application and database server clusters. AMANDA platform scalability is ensured by the ability to scale horizontally by adding more application and or database server nodes to respective database or application cluster. This offers a system capacity upgrade roadmap that is not limited by the capabilities of a single server.
15.2	System shall provide sufficient security and communications capability to allow options for remote access.	X				Y	Please refer to section 6.2 General System Requirements requirement #2.12.
15.3	All modules of the system shall provide online real time information. At any point in time, users shall be able to access up-to-date information from the system.	X				Y	CSDC provides comprehensive web-based access, both for customers, as well as for internal users. Internet access to AMANDA functionality is available by installing the Public Portal options for customer access, and the AMANDA options for City employees using web browsers. These fully complement other AMANDA products updating a single, protected database in real time, providing all system users with up-to-date and accurate information.
15.4	Security: System shall prevent unauthorized access and update; security level user controllable by department, user classification and individual user; security for Internet transactions.	X				Y	Please refer to section 6.2 General System Requirements requirement #2.12.

APPENDIX A.3 – AIM PROJECT APPROACH

Project Approach

Contractor will be utilizing the AMANDA Implementation Methodology (AIM), a proven methodology for implementing complex, multi-stakeholder, and public-sector agencies.

AIM consists of six key steps completed in three stages and summarized below.

1. Stage one is Plan.

Many planning activities occur in this period, including publishing the baseline project plan, installing the core software, scope verification and collection of existing documentation, discussing and creating a high level prototype of the solution.

- Prepare (planning, software delivery, pre-analysis)
- Scope Verification & Prototype (scope verification, prototype)

2. Stage two is Build.

During this stage all system components are analyzed and configured as per configuration management plan.

- Needs Analysis (product orientation, folder analysis, reports analysis, batch analysis, interfaces/integrations analysis, portal analysis, mobile analysis, data conversion analysis)
- Configuration (folder, reports, batch, interface, portal, mobile, data conversion)

3. Stage three is Rollout.

System is fully tested, training is executed and the system is migrated into production during this stage

- Train & Test (test case development, training for test, folder, batch & reports UAT, interfaces UAT, portal UAT, mobile UAT, data conversion UAT, final system test, end user training)
- Go-Live & Closure (infrastructure readiness, mock go-live, configuration rollout, final conversion, go-live, post go-live support)

APPENDIX A.4 – PRELIMINARY PROJECT SCHEDULE

This is a preliminary schedule which shall be updated upon completion of Phase 0 Project Planning for schedule development together with City, and shall reflect tasks in the appropriate order by phase with estimated dates and based on elapsed time if necessary.

ID	Task Name	Duration	Start	Finish	November 2016	January 2017	January 2018	January 2019
1	City of San Jose Permits - Planning, Building, Compliance, Code Enforcement	507.75 days	Mon 8/08/16	Wed 7/31/18				
2	Contract Execution	0 days	Mon 8/08/16	Mon 8/08/16				
3	AMANDA Implementation	507.75 days	Mon 8/08/16	Wed 7/31/18				
4	Phase 0 - Project Planning	20.5 days	Mon 8/08/16	Mon 9/13/16				
5	Prepare for Kickoff meeting	1.5 days	Mon 8/08/16	Fri 8/12/16				
6	Kickoff meeting	0.5 days	Mon 8/22/16	Mon 8/22/16				
7	Project Plan (Schedule Development and Review with SJ)	2.5 days	Mon 8/22/16	Mon 9/06/16				
8	M501 Payment - Project Schedule	0 days	Mon 9/13/16	Mon 9/13/16				
9	Phase 1 - Public Portal and e-Plans (Hatched)	162 days	Mon 9/13/16	Wed 5/03/17				
10	Public Portal (Hatched)	162 days	Mon 9/13/16	Wed 5/03/17				
11	Environment Planning	3 days	Mon 9/20/16	Thu 9/22/16				
12	Discovery Sessions	1 day	Mon 9/20/16	Tue 9/20/16				
13	Server Specs	1.5 days	Tue 9/20/16	Wed 9/21/16				
14	Server Hardware requirements	0.5 days	Tue 9/20/16	Tue 9/20/16				
15	Physical Hardware specs document	0.5 days	Tue 9/20/16	Tue 9/20/16				
16	Network Infrastructure	0.5 days	Tue 9/20/16	Tue 9/20/16				
17	Server Software requirements	1.5 days	Tue 9/20/16	Wed 9/21/16				
18	Operating System Specs	0.5 days	Tue 9/20/16	Tue 9/20/16				
19	ALPHABET License Request	0.5 days	Wed 9/21/16	Wed 9/21/16				
20	AMANDA Public Portal Application Server	0.5 days	Wed 9/21/16	Wed 9/21/16				
21	AMANDA Public Portal Data Portal Server	0.5 days	Wed 9/21/16	Wed 9/21/16				
22	Desktop Specs	0.5 days	Tue 9/20/16	Tue 9/20/16				
23	Operating System Specs	0.5 days	Tue 9/20/16	Tue 9/20/16				
24	Internet Explorer compatibility	0.25 days	Tue 9/20/16	Tue 9/20/16				
25	Java version	0.5 days	Tue 9/20/16	Tue 9/20/16				
26	Collect CG from Client to prepare data file	2 days	Tue 9/20/16	Thu 9/22/16				
27	Environment Setup	148 days	Thu 9/22/16	Tue 4/19/17				
28	Software Delivered to client FTP	1 day	Thu 9/22/16	Fri 9/23/16				
29	Software database	1 day	Thu 9/22/16	Fri 9/23/16				
30	Software Scripts	1 day	Thu 9/22/16	Fri 9/23/16				
31	Scenarios License File	1 day	Thu 9/22/16	Fri 9/23/16				
32	Weblogix download	1 day	Thu 9/22/16	Fri 9/23/16				
33	Blacey Download	1 day	Thu 9/22/16	Fri 9/23/16				
34	State Use Portal Theme	1 day	Thu 9/22/16	Fri 9/23/16				
35	Various Patches (if necessary)	1 day	Thu 9/22/16	Fri 9/23/16				
36	M501 Payment - Public Portal Software Delivered to SJ	0 days	Fri 9/23/16	Fri 9/23/16				
37	Remote Access available to CSJC	5 days	Thu 9/23/16	Thu 9/29/16				
38	Send over confidentiality agreements for VPN	1 day	Thu 9/23/16	Fri 9/23/16				
39	Setup users within client environment for VPN access	2 days	Fri 9/23/16	Tue 9/27/16				
40	Test VPN connection	2 days	Tue 9/27/16	Thu 9/29/16				
41	Configure Development Server	5 days	Fri 9/23/16	Fri 9/30/16				

ID	Task Name	Duration	Start	End	January 2016	January 2016	January 2017	January 2017	January 2017
42	Download software from FTP to the Development Server	1 day	Fri 9/23/16	Mon 9/26/16					
43	AMANDA IIS	1 day	Fri 9/23/16	Mon 9/26/16					
44	Portal Software Installation (Dev Server)	3 days	Mon 9/26/16	Thu 9/29/16					
45	Weblogic/WebSphere/Tomcat Install	0.5 days	Mon 9/26/16	Mon 9/26/16					
46	Library Install	0.5 days	Tue 9/27/16	Tue 9/27/16					
47	Scriptable Install	0.5 days	Tue 9/27/16	Tue 9/27/16					
48	AMANDA Web Services Install	0.5 days	Wed 9/28/16	Wed 9/28/16					
49	Configure Portal software to handle portal users	0.5 days	Wed 9/28/16	Wed 9/28/16					
50	Portal Admin tooling (outside the box functionality)	0.5 days	Thu 9/28/16	Thu 9/29/16					
51	Documentation Change Control	1 day	Thu 9/29/16	Fri 9/30/16					
52	Document any work-arounds needed	0.5 days	Thu 9/29/16	Thu 9/29/16					
53	Document version of 3rd party software install	0.5 days	Fri 9/30/16	Fri 9/30/16					
54	Portal Design	17 days	Fri 9/30/16	Tue 11/2/16					
55	Meeting with stakeholders and SME(s) to map requirements for configuration	1.5 days	Fri 9/30/16	Fri 10/21/16					
56	Create Solution Design Document based on discussions with stakeholders and SME(s)	1.5 days	Fri 10/21/16	Fri 11/11/16					
57	Send Solution Design document to stakeholders and SME(s) for review	1 day	Fri 11/11/16	Mon 11/14/16					
58	eCommerce (Webb Page) Design Document	2 days	Mon 11/14/16	Wed 11/16/16					
59	Solution Design Document walkthrough with stakeholders	1 day	Mon 11/14/16	Tue 11/15/16					
60	Review Solution Design Document with SI	5 days	Tue 11/15/16	Tue 11/22/16					
61	MS23 Payment - Approval of Prototype Portal Design Document	0 days	Tue 11/22/16	Tue 11/22/16					
62	Portal Analysis	11 days	Tue 11/22/16	Thu 1/05/17					
63	Detailed functional requirements with client(SME(s)) and CDC	1.5 days	Tue 11/22/16	Tue 11/02/17					
64	Submit draft of portal analysis to client	1 day	Tue 11/02/17	Wed 11/07/17					
65	Analysis feedback from client	5 days	Wed 11/07/17	Wed 11/14/17					
66	Review and incorporate feedback from client	10 days	Wed 11/14/17	Wed 11/28/17					
67	Update the Solution Design document with Functional Requirements Document as appendices	10 days	Wed 11/21/17	Wed 1/04/17					
68	Deliver finalized Solution Design Document to client	1 day	Wed 1/04/17	Thu 1/05/17					
69	MS24 Payment - Acceptance of Finalized Portal Solution Design Document	0 days	Thu 1/05/17	Thu 1/05/17					
70	Portal Configuration	17 days	Thu 1/05/17	Mon 2/12/17					
71	Configure Functionality of Portal	11.5 days	Thu 1/05/17	Tue 1/23/17					
72	Create Client Theme for Portal	2 days	Thu 1/05/17	Tue 1/30/17					
73	Baseline Configuration	1.5 days	Tue 1/30/17	Tue 1/31/17					
74	eCommerce (Webb Page) Configuration	2 days	Tue 1/30/17	Thu 1/12/17					
75	Integration Configuration	10 days	Tue 1/30/17	Tue 1/24/17					
76	Installation Package	1 day	Tue 1/24/17	Wed 1/25/17					
77	QA Review	7 days	Tue 1/23/17	Thu 1/09/17					
78	Baseline Configuration	5 days	Tue 1/23/17	Tue 2/07/17					
79	Integration Configuration	2 days	Tue 2/07/17	Thu 1/09/17					
80	QA Plan	2 days	Thu 1/09/17	Mon 2/13/17					
81	QA documentation	2 days	Thu 1/09/17	Mon 2/13/17					

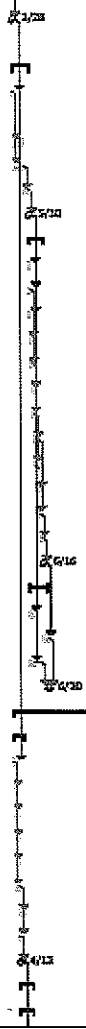
ID	Task Name	Duration	Start	Finish	January 2015	January 2016	January 2017	January 2018	January 2019
82	MIS06 Payment - Completion of Portal Configuration	0 days	Mon 2/23/17	Mon 2/23/17					
83	Configure Test Server	4.5 days	Mon 2/23/17	Fri 2/27/17					
84	Download software from FTP to the TEST Server	1 day	Mon 2/23/17	Tue 2/24/17					
85	AMANDA DB	1 day	Mon 2/23/17	Tue 2/24/17					
86	Portal Software Installation (Test Server)	2 days	Tue 2/24/17	Fri 2/27/17					
87	Weblogic/WebSphere/Tomcat Install	0.5 days	Tue 2/24/17	Tue 2/24/17					
88	Libray Install	0.5 days	Wed 2/25/17	Wed 2/25/17					
89	Smartguide Install	0.5 days	Wed 2/25/17	Wed 2/25/17					
90	AMANDA Web Services Install	0.5 days	Thu 2/26/17	Thu 2/26/17					
91	Connect Portal software to client portal theme	0.5 days	Thu 2/26/17	Thu 2/26/17					
92	Portal Admin testing (enable the basic functionality)	0.5 days	Fri 2/27/17	Fri 2/27/17					
93	Development to Test Transfer	0.5 days	Fri 2/27/17	Fri 2/27/17					
94	Secure Installation Package	0.5 days	Fri 2/27/17	Fri 2/27/17					
95	Training	5 days	Mon 2/28/17	Fri 3/04/17					
96	Prepare Custom Training Material (21 Staff)	5 days	Mon 2/28/17	Fri 3/04/17					
97	Portal Administration (Smartguide Training (6 per class, 2 classes, 1 day per class)	2 days	Mon 2/28/17	Tue 3/14/17					
98	AMANDA Portal Administration (6 per class, 1 class, 3 days per class)	3 days	Mon 2/28/17	Wed 3/02/17					
99	User Acceptance Testing	21 days	Mon 2/28/17	Tue 4/13/17					
100	Prepare Test Plans (20 Staff)	5 days	Mon 2/28/17	Fri 3/03/17					
101	UAT Training for Public Portal (6 users per class, 1 class, 1 day per class)	1 day	Mon 3/06/17	Mon 3/06/17					
102	Public Portal UAT testing	20 days	Tue 3/07/17	Mon 4/04/17					
103	Public Portal UAT Iteration	2 days	Tue 4/04/17	Wed 4/05/17					
104	Public Portal UAT final testing	2 days	Thu 4/06/17	Fri 4/07/17					
105	Public Portal Acceptance	2 days	Mon 4/10/17	Tue 4/11/17					
106	MIS07 Payment - Completion of Portal Training & UAT	0 days	Tue 4/11/17	Tue 4/11/17					
107	Configure Production Server	4.5 days	Wed 4/13/17	Tue 4/18/17					
108	Download software from FTP to the Development Server	1 day	Wed 4/13/17	Wed 4/13/17					
109	AMANDA DB	1 day	Wed 4/13/17	Wed 4/13/17					
110	Portal Software Installation	2 days	Thu 4/13/17	Mon 4/17/17					
111	Weblogic install	0.5 days	Thu 4/13/17	Thu 4/13/17					
112	Libray Install	0.5 days	Thu 4/13/17	Thu 4/13/17					
113	Smartguide Install	0.5 days	Fri 4/14/17	Fri 4/14/17					
114	AMANDA Web Services Install	0.5 days	Fri 4/14/17	Fri 4/14/17					
115	Connect Portal software to client theme	0.5 days	Mon 4/17/17	Mon 4/17/17					
116	Portal Admin testing (enable the basic functionality)	0.5 days	Mon 4/17/17	Mon 4/17/17					
117	Test to Production Transfer	0.5 days	Tue 4/18/17	Tue 4/18/17					
118	Secure Installation Package	0.5 days	Tue 4/18/17	Tue 4/18/17					
119	Portal Go-Live	11 days	Tue 4/18/17	Wed 5/03/17					
120	Portal II Go-Live	1 day	Tue 4/18/17	Wed 4/19/17					
121	Portal II Go-Live Support	20 days	Wed 4/19/17	Wed 5/03/17					
122	MIS07 Payment - Portal Go-Live Acceptance	0 days	Wed 5/03/17	Wed 5/03/17					

ID	Task Name	Duration	Start	Finish	January 2015	January 2016	January 2017	January 2018	January 2019
123	4-Phase (ProjectDoc - Issues)	149 days	Mon 9/29/16	Fri 4/14/17					
124	Software Delivery	1 day	Mon 9/29/16	Tue 9/29/16					
125	MIS0 Payment - ProjectDoc Software Delivery	0 days	Tue 9/29/16	Tue 9/29/16			9/29		
126	Environment Setup and Software Delivery	16 days	Tue 9/29/16	Wed 10/13/16					
127	Environment Setup	15 days	Tue 9/29/16	Tue 10/11/16					
128	Setup Development Environment	5 days	Tue 9/29/16	Tue 9/29/16					
129	Setup UAT Environment	5 days	Tue 9/29/16	Tue 10/04/16					
130	Setup Production Environment	5 days	Tue 10/04/16	Tue 10/11/16					
131	ProjectDoc Software Installation	11 days	Tue 9/29/16	Wed 10/12/16					
132	Development Environment Software Install	1 day	Tue 9/29/16	Wed 9/29/16					
133	Dev - Core SW Install	1 day	Tue 9/29/16	Wed 9/29/16					
134	Dev - Portal module install	1 day	Tue 9/29/16	Wed 9/29/16					
135	UAT Environment Software Install	1 day	Tue 10/04/16	Wed 10/05/16					
136	UAT - Core SW install	1 day	Tue 10/04/16	Wed 10/05/16					
137	UAT - Portal module install	1 day	Tue 10/04/16	Wed 10/05/16					
138	Production Environment Software Install	1 day	Tue 10/11/16	Wed 10/12/16					
139	Prod - Core SW Install	1 day	Tue 10/11/16	Wed 10/12/16					
140	Prod - Portal module install	1 day	Tue 10/11/16	Wed 10/12/16					
141	MIS0 Payment - ProjectDoc Software Installation	0 days	Wed 10/13/16	Wed 10/13/16			10/13		
142	AMANDA to ProjectDoc Analysis	15 days	Wed 10/13/16	Wed 11/03/16					
143	Analysis Sessions	5 days	Wed 10/13/16	Wed 10/19/16					
144	Preparation of Analysis Documentation	5 days	Wed 10/19/16	Wed 10/26/16					
145	Review and Approval of Analysis Documentation	5 days	Wed 10/26/16	Wed 11/02/16					
146	MIS0 Payment - Acceptance of AMANDA to ProjectDoc Analysis Documentation	0 days	Wed 11/02/16	Wed 11/02/16			11/02		
147	ProjectDoc Application & Workflow Analysis	20 days	Wed 11/02/16	Wed 11/30/16					
148	Analysis Sessions	8 days	Wed 11/02/16	Mon 11/14/16					
149	Preparation of Analysis Documentation	7 days	Mon 11/14/16	Wed 11/23/16					
150	Review and Approval of Analysis Documentation	5 days	Wed 11/23/16	Wed 11/30/16					
151	MIS11 Payment - Acceptance ProjectDoc Application & Workflow Documentation	0 days	Wed 11/30/16	Wed 11/30/16			11/30		
152	Configuration of AMANDA to ProjectDoc Interface	15 days	Wed 11/30/16	Wed 12/15/16					
153	MIS12 Payment - Acceptance of ProjectDoc/AMANDA Interface	0 days	Wed 12/15/16	Wed 12/15/16			12/15		
154	Configuration of ProjectDoc Application & Workflow	20 days	Wed 12/15/16	Wed 2/02/17					
155	MIS13 Payment - Acceptance of ProjectDoc Configuration	0 days	Wed 2/02/17	Wed 2/02/17			2/02		
156	UAT	18 days	Wed 2/02/17	Mon 2/27/17					
157	Prepare Test Plans (SI Staff)	5 days	Wed 2/02/17	Wed 2/08/17					
158	UAT Training for ProjectDoc (5 users per class, 1 class, 1 day per class)	1 day	Wed 2/08/17	Thu 2/09/17					
159	User Acceptance Testing	20 days	Thu 2/09/17	Thu 2/23/17					
160	UAT Corrections	2 days	Thu 2/23/17	Mon 2/27/17					
161	MIS14 Payment - Completion of ProjectDoc UAT	0 days	Mon 2/27/17	Mon 2/27/17			2/27		
162	Training	33 days	Mon 2/27/17	Thu 4/06/17					
163	Prepare Course Training Materials (SI Staff)	5 days	Mon 2/27/17	Mon 3/06/17					

ID	Task Name	Duration	Start	Finish	January 2015	January 2016	January 2017	January 2018	January 2019
164	Projector Application Connectivity Outreach (12 users per class, 2 classes, 1 day per class)	2 days	Mon 2/06/17	Wed 2/08/17					
165	Projector Application Floor Rollout (12 users per class, 2 classes, 1 day per class)	2 days	Wed 2/08/17	Fri 2/10/17					
166	Introduction to ProjectDoc (12 users per class, 2 classes, 1 day per class)	2 days	Fri 2/10/17	Tue 2/14/17					
167	Projector Migration (12 users per class, 2 classes, 1 day per class)	2 days	Tue 2/14/17	Thu 2/16/17					
168	Projector Project Administration (12 users per class, 2 classes, 1 day per class)	1 day	Thu 2/16/17	Fri 2/17/17					
169	Projector Project Administration (12 users per class, 1 class, 1 day per class)	1 day	Fri 2/17/17	Mon 2/20/17					
170	Projector Approval Process In-person Users (12 users per class, 2 classes, 1 day per class)	2 days	Mon 2/20/17	Wed 2/22/17					
171	Projector Approval Process Admin/Coordination (12 users per class, 1 class, 1 day per class)	2 days	Wed 2/22/17	Fri 2/24/17					
172	Projector GIS User Admin Training (12 users per class, 2 classes, 1 day per class)	2 days	Fri 2/24/17	Tue 2/28/17					
173	Projector Workflow Training (12 users per class, 2 classes, 1 day per class)	2 days	Tue 2/28/17	Thu 3/01/17					
174	MGIS Payment - Completion of ProjectDoc Training	0 days	Thu 3/01/17	Thu 3/01/17					
175	ProjectDoc Go-Live	11 days	Thu 3/02/17	Fri 3/10/17					
176	ProjectDoc Go-Live	1 day	Thu 3/02/17	Fri 3/03/17					
177	ProjectDoc Go-Live Support	30 days	Fri 3/03/17	Fri 4/14/17					
178	MGIS Payment - Completion of ProjectDoc Go-Live	0 days	Fri 4/14/17	Fri 4/14/17					
179	Phase 2 - GIS (GeoCortex Essentials) and AMANDA Mobile (1 user)	157 days	Mon 9/22/16	Wed 4/26/17					
180	GIS (GeoCortex)	85 days	Mon 9/22/16	Tue 1/17/17					
181	GeoCortex Software Delivery	0 days	Mon 9/22/16	Mon 9/22/16					
182	MGIS Payment - GeoCortex Essentials Software Delivery	0 days	Mon 9/22/16	Mon 9/22/16					
183	GeoCortex Analysis	11 days	Mon 9/22/16	Tue 10/04/16					
184	Analysis Sessions	15 days	Mon 9/22/16	Mon 10/10/16					
185	Preparation of Analysis Documentation	5 days	Mon 10/10/16	Mon 10/17/16					
186	Delivery and Acceptance of GIS Analysis Documentation	1 day	Mon 10/17/16	Tue 10/18/16					
187	MGIS Payment - GeoCortex Analysis Documentation	0 days	Tue 10/18/16	Tue 10/18/16					
188	GeoCortex Configuration	11 days	Tue 10/18/16	Wed 11/03/16					
189	Configuration	30 days	Tue 10/18/16	Tue 11/29/16					
190	Delivery and Acceptance of GeoCortex Configuration	1 day	Tue 11/29/16	Wed 11/30/16					
191	MGIS Payment - GeoCortex Configuration	0 days	Wed 11/30/16	Wed 11/30/16					
192	Training	11 days	Wed 11/30/16	Fri 12/16/16					
193	Prepare Custom Training Material (12 Staff)	2 days	Wed 11/30/16	Fri 12/02/16					
194	Getting Started with GeoCortex Essentials Core End User (6 users per class, 1 class, 3 days per class)	2 days	Fri 12/02/16	Tue 12/06/16					
195	Developing Workflows for GeoCortex Essentials Core End User (6 users per class, 1 class, 2 days per class)	2 days	Tue 12/06/16	Thu 12/08/16					
196	GeoCortex Training (12 Staff delivered)	6 days	Thu 12/08/16	Fri 12/16/16					
197	GeoCortex UAT	30 days	Tue 12/06/16	Tue 1/03/17					
198	Prepare Test Plans (12 Staff)	2 days	Tue 12/06/16	Thu 12/08/16					
199	UAT Training for GeoCortex (6 users per class, 1 class, 1 day per class)	1 day	Thu 12/08/16	Fri 12/09/16					
200	User Acceptance Testing	15 days	Fri 12/09/16	Fri 12/30/16					

ID	Task Name	Duration	Start	Finish	January 2012	January 2013	January 2017	January 2018	January 2019
201	UAT Corrections	2 days	Fri 12/30/16	Tue 1/03/17					
202	MISD Payment - Completion of GeoCortex Training & UAT	0 days	Tue 1/03/17	Tue 1/03/17			1/3		
203	GeoCortex Go-Live	30 days	Tue 1/03/17	Tue 1/31/17					
204	GeoCortex Go-Live	1 day	Tue 1/03/17	Wed 1/04/17					
205	GeoCortex Go-Live Support	9 days	Wed 1/04/17	Tue 1/31/17					
206	MIS1 Payment - Completion of GeoCortex Go-Live	0 days	Tue 1/31/17	Tue 1/31/17			1/17		
207	AMANDA Mobile	157 days	Mon 9/28/16	Wed 4/26/17					
208	Installation	2 days	Mon 9/28/16	Wed 9/29/16					
209	Mobile Server Software Installation	1 day	Mon 9/28/16	Tue 9/29/16					
210	Mobile Device Installation (3 Devices)	1 day	Tue 9/29/16	Wed 9/29/16					
211	Mobile Analysis	32 days	Tue 9/29/16	Thu 11/01/16					
212	Mobile Analysis Backdrops	2 days	Tue 9/29/16	Thu 9/29/16					
213	Mobile Documented and Approval including reports	8 days	Thu 9/29/16	Tue 10/04/16					
214	Mobile Folder/Process/User requirements for sync	20 days	Thu 9/29/16	Thu 10/20/16					
215	Client Review, Updates, Approval of Mobile Rept	30 days	Thu 10/20/16	Thu 11/01/16					
216	MIS2 Payment - Mobile Software Installation & Analysis Complete	0 days	Thu 11/01/16	Thu 11/01/16			11/1		
217	Mobile Configuration	24 days	Thu 11/01/16	Fri 1/06/17					
218	AMANDA Backoffice Configures for Mobile	15 days	Thu 11/01/16	Thu 11/24/16					
219	AMANDA Mobile Device Configuration (3 devices)	1 day	Thu 11/24/16	Fri 11/25/16					
220	Mobile Reports Configuration (up to 5 reports)	30 days	Fri 11/25/16	Fri 1/06/17					
221	MIS3 Payment - Mobile Configuration Complete	0 days	Fri 1/06/17	Fri 1/06/17			1/6		
222	Training	11 days	Fri 1/06/17	Wed 1/25/17					
223	Prepare Custom Training Materials (51 Staff)	35 days	Fri 1/06/17	Fri 1/20/17					
224	AMANDA Mobile Admin Training (6 per class, 1 class, 1 day per class)	1 day	Fri 1/20/17	Mon 1/23/17					
225	AMANDA Mobile Inspector Training Train the Trainer (6 per class, 1 class, 2 days per class)	2 days	Mon 1/23/17	Wed 1/25/17					
226	AMANDA Mobile UAT	33 days	Fri 1/25/17	Wed 2/15/17					
227	Prepare Test Plans (31 Staff)	5 days	Fri 1/25/17	Fri 1/27/17					
228	UAT Training for Mobile (6 classes per class, 1 class, 1 day per class)	1 day	Fri 1/27/17	Mon 1/30/17					
229	User Acceptance Testing	30 days	Mon 1/30/17	Mon 2/13/17					
230	UAT Corrections	2 days	Mon 2/13/17	Wed 2/15/17					
231	MIS4 Payment - Mobile UAT & Training Complete	0 days	Wed 2/15/17	Wed 2/15/17			2/15		
232	AMANDA Mobile Go-Live	30 days	Wed 2/15/17	Wed 4/26/17					
233	Mobile Training (51 Staff Delivered)	20 days	Wed 2/15/17	Wed 4/12/17					
234	Mobile Go-Live	1 day	Wed 4/12/17	Thu 4/13/17					
235	Mobile Go-Live Support	9 days	Thu 4/13/17	Wed 4/26/17					
236	MIS5 Payment - Completion of Mobile Go-Live	0 days	Wed 4/26/17	Wed 4/26/17			4/26		
237	Phase 3 - AMANDA 7 Upgrade & Code Enforcement, Public Works Implementation (located in Hoots)	200.25 days	Wed 3/15/17	Wed 7/19/18					
238	Environment Setup	9 days	Wed 3/15/17	Tue 3/21/17					
239	Set up AMANDA 7 Development Environment	2 days	Wed 3/15/17	Fri 3/17/17					
240	Import AMANDA 6 & Upgrade database to AMANDA 7 (Dev Environment)	5 days	Fri 3/17/17	Fri 3/24/17					

ID	Task Name	Duration	Start	Finish	January 2015	January 2016	January 2017	January 2018	January 2019
241	Upgrade AMANDA Application to Version 7 in Dev Environment	2 days	Fri 1/24/17	Tue 1/24/17					
242	MS20 Payment - Completion of AMANDA 7 Installation (Dev) & Delivery of new Machine	0 days	Tue 1/23/17	Tue 1/23/17					
243	AMANDA 7 Gap Analysis	21 days	Tue 1/23/17	Wed 5/15/17					
244	AMANDA 7 Core End User Back Office Orientation (6 users per class, 3 class, 1 day per class)	1 day	Tue 1/23/17	Wed 1/23/17					
245	Back Office Req/Gap Analysis including Customization	20 days	Wed 1/23/17	Wed 4/12/17					
246	Report Req/Gap Analysis	20 days	Wed 1/23/17	Wed 4/12/17					
247	Preparation of Req/Gap Analysis Documentation	20 days	Wed 1/23/17	Wed 4/12/17					
248	MS20 Payment - Acceptance of AMANDA 7 Req/Gap Documentation	0 days	Wed 5/10/17	Wed 5/10/17					
249	AMANDA 7 Interface Analysis (both new & old iterations)	27 days	Wed 5/10/17	Fri 6/16/17					
250	Portal	2 days	Wed 5/10/17	Fri 5/11/17					
251	OS (Geo Center)	2 days	Wed 5/10/17	Fri 5/11/17					
252	e-Plans (ProjectDoc)	2 days	Wed 5/10/17	Fri 5/11/17					
253	Financial Management System (FMS)	5 days	Fri 5/11/17	Fri 5/11/17					
254	PeopleSoft	5 days	Fri 5/11/17	Fri 5/11/17					
255	Capital Project Management System (CPMS)	5 days	Fri 5/11/17	Fri 5/11/17					
256	Revenue Receipts	5 days	Fri 5/11/17	Fri 5/11/17					
257	Branch Cashiering	5 days	Fri 5/11/17	Fri 5/11/17					
258	Wild Fargo e-Commerce	5 days	Fri 5/11/17	Fri 5/11/17					
259	Q-Works Calendar	5 days	Fri 5/11/17	Fri 5/11/17					
260	County Assessor	5 days	Fri 5/11/17	Fri 5/11/17					
261	Physician	5 days	Fri 5/11/17	Fri 5/11/17					
262	MS20 Payment - Acceptance of AMANDA 7 Interface Analysis Documentation	0 days	Fri 6/16/17	Fri 6/16/17					
263	AMANDA 7 Configuration	27 days	Wed 5/10/17	Fri 6/16/17					
264	Report Configuration (AMANDA BI & Database)	20 days	Wed 5/10/17	Wed 5/24/17					
265	Interface Configuration (if needed)	20 days	Fri 6/16/17	Fri 6/16/17					
266	Mobile Configuration (Upgrade to Mobile 7 - server and clients)	20 days	Wed 5/10/17	Wed 5/24/17					
267	MS20 Payment - AMANDA 7 Configuration	0 days	Fri 6/16/17	Fri 6/16/17					
268	Code Enhancement & Public Works Analysis (AMANDA 7)	147.25 days	Tue 1/23/17	Thu 10/19/17					
269	Pre-Analysis	21 days	Tue 1/23/17	Wed 4/26/17					
270	GDRC Checklist of Client Provided Data	1 day	Tue 1/23/17	Wed 1/23/17					
271	Client provides data of current business process	20 days	Wed 1/23/17	Wed 4/26/17					
272	Client Provides Sample Reports or mockups	20 days	Wed 1/23/17	Wed 4/26/17					
273	Client Sample Output Word Merge Document	20 days	Wed 1/23/17	Wed 4/26/17					
274	Client Provides Interface API Docs	20 days	Wed 1/23/17	Wed 4/26/17					
275	Client Provides list of source systems for Data Migration	20 days	Wed 1/23/17	Wed 4/26/17					
276	Review Current & Future Data Customization	20 days	Wed 1/23/17	Wed 4/26/17					
277	Walkthrough of Existing System (Demo by Client)	1 day	Wed 4/26/17	Thu 4/26/17					
278	MS20 Payment - Code Enhancement & Public Works Pre-Analysis Complete	0 days	Thu 4/26/17	Thu 4/26/17					
279	Scope Verification and Prototype	26.25 days	Thu 4/26/17	Fri 5/19/17					
280	Modeling & Prototype	26.25 days	Thu 4/26/17	Fri 5/19/17					



ID	Task Name	Duration	Start	Finish	January 2015	January 2016	January 2017	January 2018	January 2019
281	Transfer One Folder Setup (5 - split between CE and PW)	6 days	Thu 4/21/17	Fri 4/21/17					
282	Folder 1 Prototype content	2 days	Thu 4/21/17	Mon 4/23/17					
283	Folder 2 Prototype content	2 days	Thu 4/21/17	Mon 4/23/17					
284	Folder 3 Prototype content	2 days	Mon 4/23/17	Wed 4/25/17					
285	Folder 4 Prototype content	2 days	Mon 4/23/17	Wed 4/25/17					
286	Folder 5 Prototype content	2 days	Wed 4/25/17	Fri 4/27/17					
287	Schedule Modeling Workshops	0.25 days	Fri 4/27/17	Fri 4/27/17					
288	Modeling / Scope Verification Workshops	5 days	Fri 4/27/17	Fri 4/28/17					
289	Business Modeling consultation	21.25 days	Mon 4/27/17	Tue 5/16/17					
290	Document Business Models	5 days	Mon 4/27/17	Mon 4/28/17					
291	Folder 1	1 day	Mon 4/27/17	Tue 4/28/17					
292	Folder 2	1 day	Mon 4/27/17	Tue 4/28/17					
293	Folder 3	1 day	Wed 4/28/17	Thu 4/29/17					
294	Folder 4	1 day	Wed 4/28/17	Thu 4/29/17					
295	Folder 5	1 day	Fri 4/28/17	Mon 4/28/17					
296	Document-Order High Level Scope	2 days	Fri 4/28/17	Wed 5/03/17					
297	Document Output Details	1 day	Fri 4/28/17	Mon 5/01/17					
298	Document Data Conversion Schema List	1 day	Fri 4/28/17	Mon 5/01/17					
299	Document Communications and Interface List	1 day	Mon 5/01/17	Tue 5/02/17					
300	Document High Level Portal Scope List	1 day	Mon 5/01/17	Tue 5/02/17					
301	Document High Level Mobile Scope List	1 day	Tue 5/02/17	Wed 5/03/17					
302	Generate Initial Requirements Traceability Matrix	2 days	Wed 5/03/17	Fri 5/05/17					
303	Finalize Scope Verification/Business Model Documents	7 days	Fri 5/05/17	Tue 5/16/17					
304	Client Review, Updates, Approval - Sample Verif Doc	2 days	Tue 5/16/17	Fri 5/19/17					
305	MISL Payment - Code Enforcement & Public Works Scope Verification Complete	0 days	Fri 5/19/17	Fri 5/19/17					
306	Code Enforcement/Public Works Needs Analysis	109 days	Fri 5/19/17	Thu 7/20/17					
307	Product Orientation	21 days	Fri 5/19/17	Mon 6/19/17					
308	Prototype modifications from Scope Verification	5 days	Fri 5/19/17	Fri 5/26/17					
309	Schedule Prototype Demo	1 day	Fri 5/26/17	Mon 5/29/17					
310	Analysis & Folder Setup Workshops (Demo 1)	15 days	Mon 5/29/17	Mon 6/19/17					
311	MISL Payment - CE/PW Product Orientation Complete	0 days	Mon 6/19/17	Mon 6/19/17					
312	Fit-Gap Analysis	27 days	Mon 6/19/17	Wed 7/26/17					
313	Folder Analysis (5 - split between CE and PW)	27 days	Mon 6/19/17	Wed 7/26/17					
314	Generation of Folder Specification Reports (FSR)	17 days	Mon 6/26/17	Wed 7/12/17					
315	Folder 1 FSR content	5 days	Mon 6/26/17	Mon 6/26/17					
316	Folder 2 FSR content	5 days	Mon 6/26/17	Mon 6/26/17					
317	Folder 3 FSR content	5 days	Mon 6/26/17	Mon 7/03/17					
318	Folder 4 FSR content	5 days	Mon 6/26/17	Mon 7/03/17					
319	Folder 5 FSR content	5 days	Mon 7/03/17	Mon 7/24/17					
320	Finalize FSR after Workshops	5 days	Mon 7/03/17	Mon 7/24/17					
321	Finalize List of Reports, Outputs Merge Docs, Database, Interfaces	2 days	Mon 7/24/17	Wed 7/26/17					

ID	Task Name	Duration	Start	Finish	January 2016	January 2016	January 2017	January 2018	January 2018
322	Client Review of Approval of Folder Specifications Reports (FSR)	35 days	Wed 7/21/17	Wed 7/25/17					
323	MS12 Payment - Code Enforcement & Public Works Folder Analysis Complete	0 days	Wed 7/26/17	Wed 7/26/17					7/26
324	Reports Analysis (10 - split between CE and PW)	15.5 days	Wed 7/26/17	Thu 8/17/17					
325	Reports Analysis Workshops	30 days	Wed 7/26/17	Wed 8/30/17					
326	Report Documentation & Approval	2.5 days	Wed 8/9/17	Thu 8/17/17					
327	Crystal Report 1	0.5 days	Wed 8/9/17	Thu 8/10/17					
328	Crystal Report 2	0.5 days	Wed 8/9/17	Thu 8/10/17					
329	Crystal Report 3	0.5 days	Thu 8/24/17	Thu 8/24/17					
330	Crystal Report 4	0.5 days	Thu 8/24/17	Thu 8/24/17					
331	Crystal Report 5	0.5 days	Thu 8/24/17	Fri 8/25/17					
332	Crystal Report 6	0.5 days	Thu 8/24/17	Fri 8/25/17					
333	Crystal Report 7	0.5 days	Fri 8/25/17	Fri 8/25/17					
334	Crystal Report 8	0.5 days	Fri 8/25/17	Fri 8/25/17					
335	Crystal Report 9	0.5 days	Fri 8/25/17	Mon 8/28/17					
336	Crystal Report 10	0.5 days	Fri 8/25/17	Mon 8/28/17					
337	Client Review, Updates, Approval of Reports Reqs	3 days	Mon 8/28/17	Thu 8/31/17					
338	MS14 Payment - Code Enforcement & Public Works Report Analysis Complete	0 days	Thu 8/31/17	Thu 8/31/17					8/31
339	Output Merge Documents Analysis (10 - split between CE and PW)	7.5 days	Thu 8/31/17	Mon 9/11/17					
340	Word Merge Docs Analysis Workshops	2 days	Thu 8/31/17	Mon 9/11/17					
341	Output Docs Documentation & Approval	2.5 days	Mon 9/11/17	Mon 9/18/17					
342	Word Merge Documents 1	0.5 days	Mon 9/11/17	Mon 9/11/17					
343	Word Merge Documents 2	0.5 days	Mon 9/11/17	Mon 9/11/17					
344	Word Merge Documents 3	0.5 days	Mon 9/11/17	Tue 9/12/17					
345	Word Merge Documents 4	0.5 days	Mon 9/11/17	Tue 9/12/17					
346	Word Merge Documents 5	0.5 days	Tue 9/12/17	Tue 9/12/17					
347	Word Merge Documents 6	0.5 days	Tue 9/12/17	Tue 9/12/17					
348	Word Merge Documents 7	0.5 days	Tue 9/12/17	Wed 9/13/17					
349	Word Merge Documents 8	0.5 days	Tue 9/12/17	Wed 9/13/17					
350	Word Merge Documents 9	0.5 days	Wed 9/13/17	Wed 9/13/17					
351	Word Merge Documents 10	0.5 days	Wed 9/13/17	Wed 9/13/17					
352	Client Review, Updates, Approval of Word Merge Doc Reqs	3 days	Wed 9/13/17	Mon 9/18/17					
353	MS15 Payment - Code Enforcement & Public Works Merge Documents Analysis Complete	0 days	Mon 9/18/17	Mon 9/18/17					9/18
354	Batch Routines Analysis	8 days	Mon 9/25/17	Thu 9/27/17					
355	Batch Routine Analysis Workshops (5 - split between CE and PW)	3 days	Mon 9/25/17	Wed 9/26/17					
356	Batch Routine Documentation & Approval	6 days	Wed 9/26/17	Thu 9/27/17					
357	Batch Routine 1	1 day	Wed 9/26/17	Thu 9/27/17					
358	Batch Routine 2	1 day	Wed 9/26/17	Thu 9/27/17					
359	Batch Routine 3	1 day	Thu 9/27/17	Fri 9/28/17					
360	Batch Routine 4	1 day	Thu 9/27/17	Fri 9/28/17					
361	Batch Routine 5	1 day	Fri 9/28/17	Mon 9/29/17					

ID	Task Name	Duration	Start	Finish	January 2016	January 2016	January 2017	January 2018	January 2019
362	Client Review, Update, Approval of Batch Routine Req	3 days	Mon 9/04/17	Thu 9/07/17					
363	MSIS Payment - Code Enforcement & Public Works Batch Analyst Complete	0 days	Thu 9/07/17	Thu 9/07/17					
364	Integration Analyst	23 days	Thu 9/07/17	Thu 10/10/17					
365	Integration Analyst Workshop	3 days	Thu 9/07/17	Thu 9/12/17					
366	Interface Documentation and Approval	20 days	Thu 9/12/17	Thu 10/10/17					
367	Partial	1 day	Thu 9/12/17	Wed 9/13/17					
368	GIS (GeoContext)	1 day	Thu 9/12/17	Wed 9/13/17					
369	AI Process (CDMS)	1 day	Wed 9/13/17	Thu 9/14/17					
370	Financial Management System (FMS)	5 days	Wed 9/13/17	Wed 9/20/17					
371	PeopleSoft	5 days	Thu 9/14/17	Thu 9/21/17					
372	Capital Project Management System	2 days	Thu 9/14/17	Mon 9/18/17					
373	Revenue Receipt	2 days	Thu 9/21/17	Mon 9/25/17					
374	Event Calendar	2 days	Thu 9/21/17	Mon 9/25/17					
375	Q-Logic Calendar	5 days	Mon 9/25/17	Mon 10/02/17					
376	County Attorney	1 day	Mon 9/25/17	Tue 9/26/17					
377	Fireplace	1 day	Mon 10/02/17	Tue 10/03/17					
378	Client Review, Update, Approval of Custom Interface Req	5 days	Tue 10/03/17	Tue 10/10/17					
379	Partial Analyst (Code Enforcement Only)	7 days	Tue 10/10/17	Thu 10/19/17					
380	Partial Analyst Workshop	5 days	Tue 10/10/17	Tue 10/17/17					
381	Code Enforcement Partial Documentation & Approval	2 days	Tue 10/17/17	Thu 10/19/17					
382	Mobile Analyst (Code Enforcement Only)	2 days	Tue 10/17/17	Thu 10/19/17					
383	Mobile Analyst Workshop	1 day	Tue 10/17/17	Wed 10/18/17					
384	Code Enforcement Mobile Documentation & Approval	1 day	Wed 10/18/17	Thu 10/19/17					
385	MSIS Payment - Code Enforcement Interface/Integration, Portal & Mobile Analyst Complete	0 days	Thu 10/19/17	Thu 10/19/17					
386	Data Connection Analysis	30 days	Wed 7/26/17	Wed 9/06/17					
387	Analysis & Documentation	30 days	Wed 7/26/17	Wed 9/06/17					
388	Detailed Source Data Analysis from GIS & PW Applications	22 days	Wed 7/26/17	Fri 8/11/17					
389	Client Export source data to intermediate files (initial format)	5 days	Wed 7/26/17	Wed 8/02/17					
390	Investigation of source data, table structure, data fields, and orphan tables	3 days	Wed 8/02/17	Mon 8/07/17					
391	Review of data structure	1 day	Mon 8/07/17	Tue 8/08/17					
392	Identification of potential data standardization issues	1 day	Tue 8/08/17	Wed 8/09/17					
393	Identification of potential base data demands and data defaulting needs	1 day	Wed 8/09/17	Thu 8/10/17					
394	Data cleaning tasks	1 week	Wed 7/26/17	Wed 8/09/17					
395	Data load of cleaned data within immediate tables to begin data mapping	2 days	Wed 8/09/17	Fri 8/11/17					
396	Data Mapping	16 days	Fri 8/11/17	Mon 8/04/17					
397	Complete mapping document	2 days	Fri 8/11/17	Tue 8/15/17					
398	Walkthrough of mapping document	2 days	Tue 8/15/17	Thu 8/17/17					
399	Data standardization and data defaulting rules	2 days	Thu 8/17/17	Mon 8/21/17					
400	Sign off on final mapping document, including data standardization and data defaulting rules	30 days	Mon 8/21/17	Mon 9/04/17					

ID	Task Name	Duration	Start	Finish	January 2017	January 2017	January 2017	January 2017	January 2017
401	MISD Payment - CE & PW Data Conversion Analysis Complete	0 days	Mon 9/04/17	Mon 9/04/17					
402	Code Enforcement & Public Works Configuration (AMM/MSA 7)	310 days	Wed 7/06/17	Wed 12/27/17					
403	Folders Configuration	26 days	Wed 7/06/17	Thu 8/01/17					
404	Initial Folder Configuration and Unit Testing	15 days	Wed 7/06/17	Wed 8/09/17					
405	Folder 1 Initial Configuration	5 days	Wed 7/06/17	Wed 8/02/17					
406	Folder 2 Initial Configuration	5 days	Wed 7/06/17	Wed 8/03/17					
407	Folder 3 Initial Configuration	5 days	Wed 8/02/17	Wed 8/09/17					
408	Folder 4 Initial Configuration	5 days	Wed 8/02/17	Wed 8/09/17					
409	Folder 5 Initial Configuration	5 days	Wed 8/02/17	Wed 8/16/17					
410	Folder Unit Testing	5 days	Wed 8/16/17	Wed 8/23/17					
411	Client Folders Walkthrough and minor updates	5 days	Wed 8/23/17	Wed 8/30/17					
412	Deploy Folders for System Testing	1 day	Wed 8/30/17	Thu 8/31/17					
413	MISD Payment - Code Enforcement & Public Works Folder Configuration Complete	0 days	Thu 8/31/17	Thu 8/31/17					
414	Reports Configuration	29 days	Thu 8/31/17	Fri 9/22/17					
415	Initial Report Configuration and Unit testing	50 days	Thu 8/31/17	Thu 8/31/17					
416	Crystal Report 1	2 days	Thu 8/31/17	Mon 9/04/17					
417	Crystal Report 2	2 days	Thu 8/31/17	Mon 9/04/17					
418	Crystal Report 3	2 days	Mon 9/04/17	Wed 9/06/17					
419	Crystal Report 4	2 days	Mon 9/04/17	Wed 9/06/17					
420	Crystal Report 5	2 days	Wed 9/06/17	Fri 9/08/17					
421	Crystal Report 6	2 days	Wed 9/06/17	Fri 9/08/17					
422	Crystal Report 7	2 days	Fri 9/08/17	Tue 9/05/17					
423	Crystal Report 8	2 days	Fri 9/08/17	Tue 9/05/17					
424	Crystal Report 9	2 days	Tue 9/05/17	Thu 8/31/17					
425	Crystal Report 10	2 days	Tue 9/05/17	Thu 8/31/17					
426	Unit Testing	1 wks	Thu 8/31/17	Thu 9/14/17					
427	Crystal Reports Walkthrough with Client and minor changes	1 wk	Thu 9/14/17	Thu 9/21/17					
428	Deploy Reports for System Testing	1 day	Thu 9/21/17	Fri 9/22/17					
429	MISD Payment - Code Enforcement & Public Works Report Configuration Complete	0 days	Fri 9/22/17	Fri 9/22/17					
430	Outputs Merge Documents Configuration	21 days	Mon 9/04/17	Tue 9/19/17					
431	Initial Setup of Word Merge Document Configuration	35 days	Mon 9/04/17	Mon 9/11/17					
432	Word Merge Documents 1	2 days	Mon 9/04/17	Wed 9/06/17					
433	Word Merge Documents 2	2 days	Mon 9/04/17	Wed 9/06/17					
434	Word Merge Documents 3	2 days	Wed 9/06/17	Fri 9/08/17					
435	Word Merge Documents 4	2 days	Wed 9/06/17	Fri 9/08/17					
436	Word Merge Documents 5	2 days	Fri 9/08/17	Tue 9/05/17					
437	Word Merge Documents 6	2 days	Fri 9/08/17	Tue 9/05/17					
438	Word Merge Documents 7	2 days	Tue 9/05/17	Thu 9/07/17					
439	Word Merge Documents 8	2 days	Tue 9/05/17	Thu 9/07/17					
440	Word Merge Documents 9	2 days	Thu 9/07/17	Mon 9/11/17					

ID	Task Name	Duration	Start	End	January 2016	January 2016	January 2017	January 2018	January 2018
441	Word Merge Documents 1D	2 days	Thu 9/07/17	Mon 9/11/17					
442	Unit Testing	1 wk	Mon 9/11/17	Mon 9/18/17					
443	Word Merge Doc Walkthrough with Client and minor changes	1 wk	Mon 9/11/17	Mon 9/25/17					
444	Deploy Word Merge Docs for Systems Testing	1 day	Mon 9/25/17	Tue 9/26/17					
445	M543 Payment - Code Enforcement & Public Works Merge Documents Configuration Complete	0 days	Tue 9/26/17	Tue 9/26/17					
446	Batch Routine Configuration	23 days	Thu 9/07/17	Mon 10/09/17					
447	Batch Routine Configuration	6 days	Thu 9/07/17	Fri 9/15/17					
448	Batch Routine 1	2 days	Thu 9/07/17	Mon 9/11/17					
449	Batch Routine 2	2 days	Thu 9/07/17	Mon 9/11/17					
450	Batch Routine 3	2 days	Mon 9/11/17	Wed 9/13/17					
451	Batch Routine 4	2 days	Mon 9/11/17	Wed 9/13/17					
452	Batch Routine 5	2 days	Wed 9/13/17	Fri 9/15/17					
453	Unit Testing	2 wks	Fri 9/15/17	Fri 9/29/17					
454	Batch Routine Walkthrough with Client and minor updates	1 wk	Fri 9/29/17	Fri 10/06/17					
455	Deploy Batch Routines for Systems Testing	1 day	Fri 10/06/17	Mon 10/09/17					
456	M543 Payment - Code Enforcement & Public Works Batch Configuration Complete	0 days	Mon 10/09/17	Mon 10/09/17					
457	Integration Configuration	49 days	Thu 10/19/17	Wed 12/20/17					
458	Integration Development and Configuration	23 days	Thu 10/19/17	Tue 11/21/17					
459	Portal	5 days	Thu 10/19/17	Thu 10/26/17					
460	GIS (GeoContext)	2 days	Thu 10/19/17	Mon 10/23/17					
461	All Forms (EOLMS)	30 days	Thu 10/26/17	Thu 12/07/17					
462	Financial Management System (FMS)	5 days	Thu 10/26/17	Thu 11/02/17					
463	Proposals	5 days	Thu 11/02/17	Thu 11/16/17					
464	Capital Project Management System	2 days	Thu 11/09/17	Mon 11/13/17					
465	Revenue Ratchet	1 day	Thu 11/16/17	Fri 11/17/17					
466	Market Challenging	1 day	Thu 11/16/17	Fri 11/17/17					
467	Q-Block Calculating	1 day	Fri 11/17/17	Mon 11/20/17					
468	Courtesy Junction	1 day	Fri 11/17/17	Mon 11/20/17					
469	Reshore	1 day	Mon 11/20/17	Tue 11/21/17					
470	Unit Testing	23 days	Mon 11/20/17	Tue 12/19/17					
471	Custom Integration Walkthrough with Client and minor changes	5 days	Tue 12/19/17	Tue 12/26/17					
472	Deploy Integration for Systems Testing	1 day	Tue 12/26/17	Wed 12/27/17					
473	M543 Payment - Code Enforcement & Public Works Interface/Integration Configuration Complete	0 days	Wed 12/27/17	Wed 12/27/17					
474	Portals Configuration	28 days	Thu 10/19/17	Tue 11/28/17					
475	Portals Development and Configuration	5 days	Thu 10/19/17	Thu 10/26/17					
476	Code Enforcement Portal	5 days	Thu 10/19/17	Thu 10/26/17					
477	Unit Testing	23 days	Thu 10/26/17	Fri 11/24/17					
478	Portal Walkthrough with Client and minor changes	1 day	Fri 11/24/17	Mon 11/27/17					
479	Deploy Portals for Systems Testing	1 day	Mon 11/27/17	Tue 11/28/17					

ID	Task Name	Duration	Start	Finish	January 2015	January 2016	January 2017	January 2018	January 2019
480	M544 Payment - Code Enforcement Portal Configuration Complete	0 days	Tue 11/24/17	Tue 11/28/17					
481	Mobile Configuration	21 days	Thu 12/29/17	Fri 11/17/17					
482	Mobile Development and Configuration	25 days	Thu 12/14/17	Thu 11/05/17					
483	Back Office Configuration	2 days	Thu 12/14/17	Mon 12/11/17					
484	Mobile Output Document Configuration	5 days	Thu 12/14/17	Thu 12/06/17					
485	Mobile Inspection / Back Office Integration	5 days	Thu 12/14/17	Thu 11/09/17					
486	Unit Testing	5 days	Thu 12/14/17	Thu 11/09/17					
487	Mobile Walkthrough with Client and minor changes	5 days	Thu 12/06/17	Thu 11/16/17					
488	Deploy Mobile on System Testing	1 day	Thu 11/16/17	Fri 11/17/17					
489	M544 Payment - Code Enforcement Mobile Configuration Complete	0 days	Fri 11/17/17	Fri 11/17/17					
490	Data Conversion Configuration	71 days	Mon 9/04/17	Tue 11/13/17					
491	Client Data Conversion Activities	15 days	Mon 9/04/17	Mon 10/09/17					
492	Client Initial Data Extraction from Legacy Systems	1 wk	Mon 9/04/17	Mon 9/11/17					
493	Client Initial Data Cleaning	1 wk	Mon 9/11/17	Mon 9/18/17					
494	Client Data Cleaning through trials and testing	15 days	Mon 9/11/17	Mon 10/09/17					
495	Configured Unit Test	15 days	Mon 10/09/17	Mon 10/02/17					
496	Initial Scripting & Unit Test	11 days	Mon 10/02/17	Tue 11/12/17					
497	Initial scripting	15 days	Mon 10/02/17	Mon 11/06/17					
498	Unit test	15 days	Mon 11/06/17	Mon 11/13/17					
499	Release Migration Scripts for System Testing	1 day	Mon 11/13/17	Tue 11/13/17					
500	M566 Payment - Code Enforcement & Public Works Data Conversion Configuration Complete	0 days	Tue 11/13/17	Tue 11/13/17					
501	ESDC Code Enforcement & Public Works System Testing (ESDC below UAT)	20.25 days	Tue 11/13/17	Mon 11/27/17					
502	Configured Elements deployed for System Code to End testing	0 days	Tue 11/13/17	Tue 11/13/17					
503	Folders System Testing and modifications	5 days	Tue 11/13/17	Tue 11/14/17					
504	Folder 1	1 day	Tue 11/13/17	Wed 11/14/17					
505	Folder 2	1 day	Wed 11/14/17	Thu 11/14/17					
506	Folder 3	1 day	Thu 11/14/17	Fri 11/15/17					
507	Folder 4	1 day	Fri 11/15/17	Mon 11/19/17					
508	Folder 5	1 day	Mon 11/19/17	Tue 11/19/17					
509	Batch Reports System Testing and modifications	1.25 days	Tue 11/20/17	Wed 11/20/17					
510	Batch Reports 1	0.25 days	Tue 11/19/17	Tue 11/19/17					
511	Batch Reports 2	0.25 days	Wed 11/20/17	Wed 11/20/17					
512	Batch Reports 3	0.25 days	Wed 11/20/17	Wed 11/20/17					
513	Batch Reports 4	0.25 days	Wed 11/20/17	Wed 11/20/17					
514	Batch Reports 5	0.25 days	Wed 11/20/17	Wed 11/20/17					
515	Crystal Reports System Testing and modifications	1.5 days	Thu 11/21/17	Mon 11/25/17					
516	Crystal Reports 1	0.25 days	Thu 11/21/17	Thu 11/21/17					
517	Crystal Reports 2	0.25 days	Thu 11/21/17	Thu 11/21/17					
518	Crystal Reports 3	0.25 days	Thu 11/21/17	Thu 11/21/17					
519	Crystal Reports 4	0.25 days	Thu 11/21/17	Thu 11/21/17					
520	Crystal Reports 5	0.25 days	Fri 11/22/17	Fri 11/22/17					

ID	Task Name	Duration	Start	End	January 2015	January 2016	January 2017	January 2018	January 2019
521	Cyrel Report 6	0.25 days	Fri 11/21/17	Fri 11/22/17					
522	Cyrel Report 7	0.25 days	Fri 11/22/17	Fri 11/23/17					
523	Cyrel Report 8	0.25 days	Fri 11/23/17	Fri 11/24/17					
524	Cyrel Report 9	0.25 days	Mon 11/25/17	Mon 11/26/17					
525	Cyrel Report 20	0.25 days	Mon 11/25/17	Mon 11/26/17					
526	Word Merge Core System Testing and modifications	1.5 days	Mon 11/25/17	Wed 11/27/17					
527	Word Merge Document 1	0.25 days	Mon 11/25/17	Mon 11/26/17					
528	Word Merge Document 2	0.25 days	Mon 11/25/17	Mon 11/26/17					
529	Word Merge Document 3	0.25 days	Tue 11/26/17	Tue 11/26/17					
530	Word Merge Document 4	0.25 days	Tue 11/26/17	Tue 11/26/17					
531	Word Merge Document 5	0.25 days	Tue 11/26/17	Tue 11/26/17					
532	Word Merge Document 6	0.25 days	Tue 11/26/17	Tue 11/26/17					
533	Word Merge Document 7	0.25 days	Wed 11/27/17	Wed 11/27/17					
534	Word Merge Document 8	0.25 days	Wed 11/27/17	Wed 11/27/17					
535	Word Merge Document 9	0.25 days	Wed 11/27/17	Wed 11/27/17					
536	Word Merge Document 10	0.25 days	Wed 11/27/17	Wed 11/27/17					
537	Interface System Testing and modifications	5 days	Thu 11/16/17	Wed 11/22/17					
538	Portable System Testing and modifications	2 days	Thu 11/24/17	Fri 11/25/17					
539	Mobile System Testing and modifications	1 day	Mon 11/28/17	Mon 11/28/17					
540	Data Migration System Testing and modifications	10 days	Tue 11/28/17	Mon 11/23/18					
541	CC/C/PW and AT Training	0 days	Mon 11/23/17	Mon 11/23/17					
542	Code Enforcement & Public Works Training	21 days	Tue 11/21/17	Wed 11/24/18					
543	Prepare Content Training Material (21 Staff)	5 days	Tue 11/21/17	Tue 11/21/17					
544	AMANDA Administration Training for Code Enforcement & Public Works Staff (5 users per class, 1 class, 5 days per class)	5 days	Tue 11/19/17	Tue 11/26/17					
545	AMANDA Core End User Training, Train the Trainer for Code Enforcement & PW - 5 users per class, 1 class, 5 days per class)	5 days	Tue 11/16/17	Tue 11/21/17					
546	MSOP Payment - Code Enforcement, Public Works Train-the-Trainer and Administration training Complete	0 days	Tue 11/21/17	Tue 11/21/17					
547	AMANDA 7 Training	16 days	Tue 11/21/17	Wed 11/24/18					
548	Prepare Content Training Material	5 days	Tue 11/21/17	Tue 11/21/17					
549	AMANDA Administration Training for current AMANDA Administrators (5 users per class, 1 class, 4 days per class)	4 days	Tue 11/21/17	Mon 11/15/18					
550	AMANDA Analytics Report Writer (Yellowfile) Training (5 users per class, 1 class, 2 days per class)	1 day	Mon 11/21/17	Tue 11/16/18					
551	AMANDA Core End User Train the Trainer for AMANDA 7 - Other business users (6 users per class, 2 classes, 2 days per class)	6 days	Tue 11/16/17	Wed 11/24/18					
552	MSOP Payment - AMANDA 7 Train-the-Trainer and Administration training Complete	0 days	Wed 11/24/17	Wed 11/24/17					
553	CC/C/PW and AT User Acceptance Testing	16 days	Wed 11/24/17	Thu 11/15/18					
554	Code Enforcement & Public Works	16 days	Wed 11/24/17	Thu 11/15/18					

ID	Task Name	Duration	Start	Finish	January 2016	January 2016	January 2017	January 2016	January 2017
526	Prepare Test Plans (50 Staff)	5 days	Wed 1/24/16	Wed 1/31/16					
527	UAT Training for Code Entrepreneurs & Public Works (Gusers per class, 3 class, 1 day per class)	1 day	Wed 1/21/16	Thu 2/01/16					
528	User Acceptance Testing	30 days	Thu 1/03/16	Thu 3/01/16					
529	UAT Corrections	30 days	Thu 1/03/16	Thu 3/01/16					
530	AMANDA T	35 days	Wed 1/24/16	Thu 3/01/16					
531	Prepare Test Plans (50 Staff)	5 days	Wed 1/24/16	Wed 1/31/16					
532	UAT Training for AMANDA T (Gusers per class, 1 class, 1 day per class)	1 day	Wed 1/31/16	Thu 2/01/16					
533	User Acceptance Testing	30 days	Thu 1/03/16	Thu 3/01/16					
534	UAT Corrections	30 days	Thu 1/03/16	Thu 3/01/16					
535	M221 Payment - Completion of CE/PW and AT UAT	0 days	Thu 3/15/16	Thu 3/15/16					
536	CE/PW Data Migration User Acceptance Testing and Corrections	40 days	Thu 3/15/16	Thu 5/10/16					
537	User Acceptance Testing of data	20 days	Thu 3/15/16	Thu 4/01/16					
538	Verification of mapping documents on imported data to AMANDA	30 days	Thu 4/01/16	Thu 4/26/16					
539	Final Out of Data to Match Approved Mapping Document	20 days	Thu 4/26/16	Thu 5/10/16					
540	Fixes to any scripting errors	5 days	Thu 4/26/16	Thu 5/03/16					
541	Revisions to scripts to match approved mapping document, including data characterization and data refreshing roles	5 days	Thu 5/03/16	Thu 5/10/16					
542	M221 Payment - CE & PW Data Conversion UAT Complete	0 days	Thu 5/20/16	Thu 5/20/16					
543	CE and AT Go-Live Closure	40 days	Thu 5/20/16	Wed 7/01/16					
544	Deployment	24 days	Thu 5/20/16	Tue 7/03/16					
545	Infrastructure Readiness	2 wks	Thu 5/20/16	Thu 5/24/16					
546	CE and AT End User Training (50 Staff Delivered)	20 days	Thu 5/24/16	Thu 6/21/16					
547	Deploy to Production Environment	5 days	Thu 6/21/16	Thu 6/28/16					
548	Final Data conversion	2 days	Thu 6/28/16	Mon 7/02/16					
549	Final execution of scripts	1 day	Thu 6/28/16	Fri 6/29/16					
550	Customer(s) in Production Environment	1 day	Fri 6/29/16	Mon 7/02/16					
551	Integration/Incentives deployed to Prod	1 day	Mon 7/02/16	Tue 7/03/16					
552	Portal deployed to Prod	1 day	Mon 7/02/16	Tue 7/03/16					
553	Mobile deployed to Prod	1 day	Mon 7/02/16	Tue 7/03/16					
554	Go-Live	1 day	Tue 7/03/16	Wed 7/04/16					
555	M221 Payment - CE/PW and AT Go-Live Complete	0 days	Wed 7/04/16	Wed 7/04/16					
556	Post Go-Live Support	30 days	Wed 7/04/16	Wed 7/21/16					
557	Post Go-Live support	1 wk	Wed 7/04/16	Wed 7/08/16					
558	Data Migration Post Go-Live Support	30 days	Wed 7/04/16	Wed 7/21/16					
559	CCDC will research any Go-Live issues during the Support window and address all issues related to data mapping	30 days	Wed 7/04/16	Wed 7/21/16					
560	Customer will submit research of any Go-Live issues and perform resolution if root cause is related to data cleaning	30 days	Wed 7/04/16	Wed 7/21/16					
561	M221 Payment - CE/PW and AT Post Go-Live & Support	0 days	Wed 7/21/16	Wed 7/21/16					
562	Phase 4 - AMANDA and Workflow Redesign (Noted in 3 hours)	213 days	Mon 6/06/17	Thu 6/28/17					
563	AMANDA Redesign Projecting	65 days	Mon 6/04/17	Mon 07/03/17					

ID	Task Name	Duration	Start	Finish	January 2015	January 2016	January 2017	January 2018	January 2019
594	Business Process Modeling (CSDC)	14 days	Mon 9/04/17	Fri 9/22/17					
595	Business Process Modeling (SI Internal)	6 days	Fri 9/08/17	Mon 9/18/17					
596	MIS11 Payment - AMANDA Redesign Pre-Analysis Complete	0 days	Mon 10/02/17	Mon 10/02/17					
597	Scope Verification and Prototype (CSDC)	18 days	Mon 10/02/17	Mon 10/23/17					
598	Scope Verification and Prototype (SI Internal)	5 days	Mon 10/23/17	Mon 10/30/17					
599	MIS11 Payment - AMANDA Redesign Scope Verification Complete	0 days	Mon 10/30/17	Mon 10/30/17					
600	AMANDA Redesign Needs Analysis	33 days	Mon 10/30/17	Mon 1/15/18					
601	Folder Design PR-Gap Analysis (CSDC)	8 days	Mon 10/30/17	Tue 11/06/17					
602	Folder Design PR-Gap Analysis (SI Internal)	22 days	Tue 11/06/17	Mon 11/13/17					
603	MIS11 Payment - AMANDA Redesign Folder Analysis Complete	0 days	Mon 11/13/17	Mon 11/13/17					
604	Reports Analysis (CSDC)	5 days	Mon 11/13/17	Mon 11/18/17					
605	Reports Analysis (SI Internal)	5 days	Mon 11/18/17	Mon 11/25/17					
606	Output (Merge) Documents Analysis (CSDC)	5 days	Mon 11/21/17	Mon 11/28/17					
607	Output (Merge) Documents Analysis (SI Internal)	5 days	Mon 11/21/17	Mon 11/25/17					
608	Interface Analysis (CSDC)	10 days	Mon 11/25/17	Mon 1/08/18					
609	Portal Analysis (CSDC)	10 days	Mon 11/25/17	Mon 1/08/18					
610	Batch Reports Analysis (CSDC)	5 days	Mon 1/08/18	Mon 1/15/18					
611	Data Conversion Analysis (CSDC)	5 days	Mon 1/08/18	Mon 1/15/18					
612	MIS11 Payment - Analysis AMANDA Redesign Reports, Output Documents, Interfaces, Batches and Data Conversion Complete	0 days	Mon 1/15/18	Mon 1/15/18					
613	AMANDA Redesign Configuration	15 days	Mon 1/15/18	Mon 1/29/18					
614	Folder Configuration (CSDC)	10 days	Mon 1/15/18	Mon 1/29/18					
615	Folder Configuration (SI Internal)	15 days	Mon 1/29/18	Mon 2/05/18					
616	Reports Configuration (CSDC)	2 days	Mon 1/15/18	Wed 1/17/18					
617	Reports Configuration (SI Internal)	3 days	Wed 1/17/18	Mon 1/22/18					
618	Output Documents Configuration (CSDC)	2 days	Mon 1/29/18	Wed 1/31/18					
619	Output Documents Configuration (SI Internal)	2 days	Wed 1/31/18	Mon 2/05/18					
620	Interface Configuration (CSDC)	10 days	Mon 1/29/18	Mon 2/12/18					
621	Portal Configuration (CSDC)	5 days	Wed 1/31/18	Wed 2/07/18					
622	Batch Configuration (CSDC)	5 days	Wed 1/31/18	Wed 2/07/18					
623	Data Conversion Configuration (CSDC)	5 days	Wed 2/07/18	Wed 2/14/18					
624	MIS11 Payment - Configuration AMANDA Redesign Reports, Output Documents, Interfaces, Batches and Data Conversion Complete	0 days	Wed 2/14/18	Wed 2/14/18					
625	AMANDA Redesign Training	12 days	Wed 2/14/18	Mon 2/26/18					
626	Prepare Custom Training Material	5 days	Wed 2/14/18	Wed 2/21/18					
627	AMANDA Administration Training for Redesign (5 users per class, 3 class, 3 days per class)	2 days	Wed 2/21/18	Fri 2/23/18					
628	AMANDA Core End User Train-the-trainer for AMANDA Redesign (5 per class, 3 classes, 3 days per class)	6 days	Fri 2/23/18	Mon 2/26/18					
629	MIS11 Payment - AMANDA Redesign Train-the-Trainer and Administration training Complete	0 days	Mon 2/26/18	Mon 2/26/18					
630	AMANDA 7 Redesign UAT	11 days	Mon 2/26/18	Tue 3/13/18					

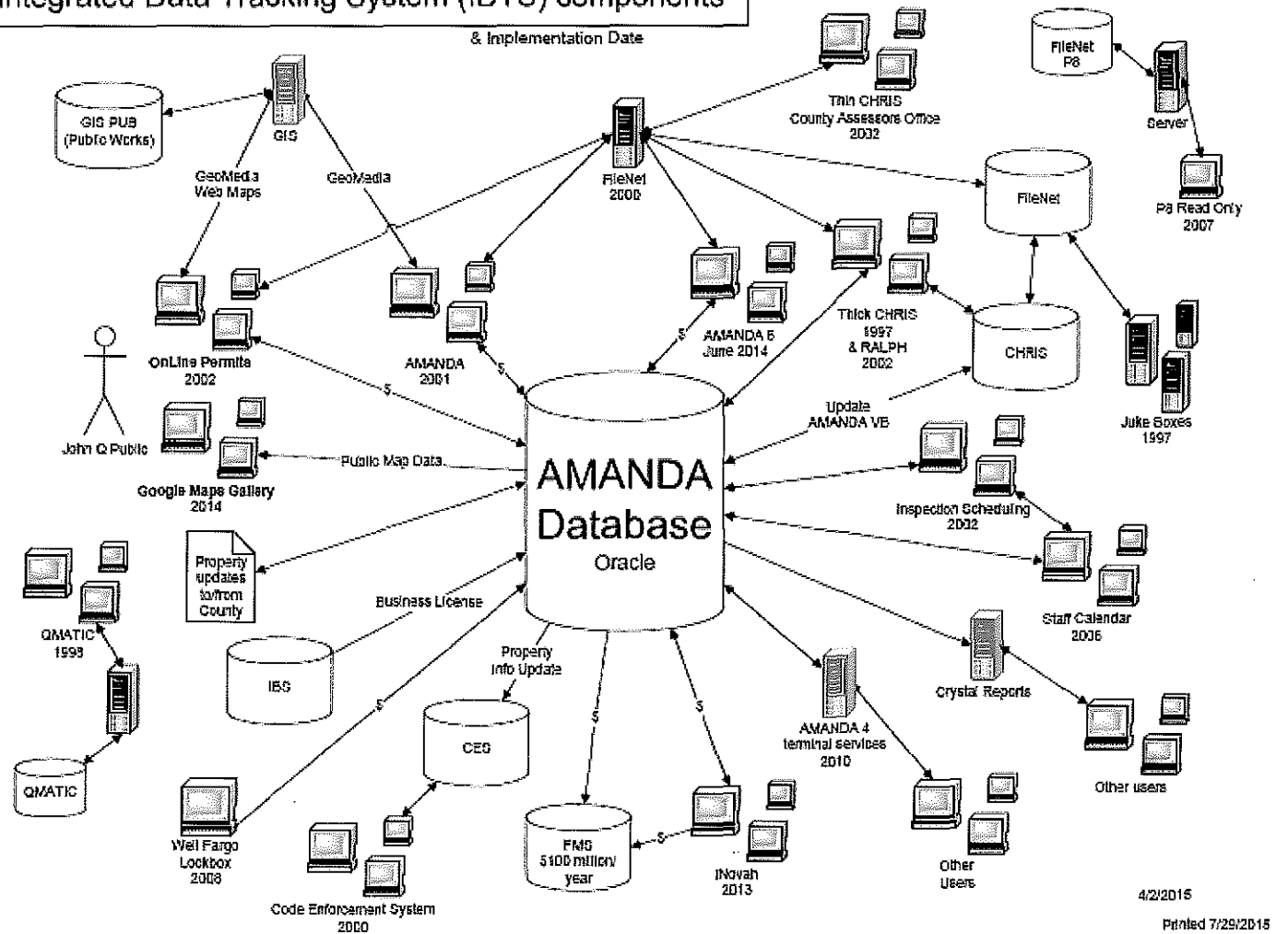
ID	Task Name	Duration	Start	Finish	January 2015	January 2016	January 2017	January 2018	January 2019
G31	Prepare Test Plans (SI Staff)	5 days	Mon 3/02/16	Mon 3/11/16					
G32	UAT Training for AMANDA Redesign (15 per class, 1 class, 1 day per class)	1 day	Mon 3/12/16	Tue 3/13/16					
G33	UAT Acceptance Testing	20 days	Tue 3/13/16	Tue 5/03/16					
G34	UAT Corrections	30 days	Tue 5/03/16	Tue 5/15/16					
G35	MISG Payment - AMANDA Redesign UAT Complete	0 days	Tue 5/15/16	Tue 5/15/16					
G36	AMANDA 7 Redesign Go-Live Occure	12 days	Tue 5/15/16	Tue 6/28/16					
G37	AMANDA 7 End-User Training (20 Staff Delivered)	20 days	Tue 5/15/16	Tue 6/21/16					
G38	Deploy to Production Environment	1 day	Tue 6/12/16	Wed 6/13/16					
G39	Go-Live	1 day	Wed 6/12/16	Thu 6/14/16					
G40	Post-Go-Live Support	30 days	Thu 6/14/16	Thu 6/28/16					
G41	Post-Go-Live support	30 days	Thu 6/14/16	Thu 6/28/16					
G42	MISG Payment - AMANDA Redesign Post-Go-Live & Support	0 days	Thu 6/28/16	Thu 6/28/16					
G43									
G44	Phase 1A - AMANDA Planning Network (limited to House)	406 days	Mon 9/28/16	Tue 4/25/18					
G45	Planning Prototyping	21 days	Mon 9/28/16	Wed 1/25/17					
G46	Planning Redesign Session 1	5 days	Mon 9/28/16	Mon 9/28/16					
G47	Business Process Modeling (San Jose Internal Staff)	5 days	Mon 9/28/16	Mon 9/28/16					
G48	Planning Redesign Session 2	5 days	Mon 10/24/16	Mon 10/24/16					
G49	Business Process Modeling (San Jose Internal Staff)	5 days	Mon 10/24/16	Mon 10/24/16					
G50	Business Process Modeling (CSDC BA)	2 days	Mon 10/24/16	Wed 10/26/16					
G51	Planning Redesign Session 3	5 days	Mon 11/28/16	Mon 12/05/16					
G52	Business Process Modeling (San Jose Internal Staff)	5 days	Mon 11/28/16	Mon 12/05/16					
G53	Business Process Modeling (CSDC BA)	2 days	Mon 11/28/16	Wed 11/30/16					
G54	Planning Redesign Session 4	5 days	Mon 1/02/17	Mon 1/09/17					
G55	Business Process Modeling (San Jose Internal Staff)	5 days	Mon 1/02/17	Mon 1/09/17					
G56	Business Process Modeling (CSDC BA)	2 days	Mon 1/02/17	Wed 1/04/17					
G57	Process Gap Design Document (CSDC BA)	5 days	Wed 1/04/17	Wed 1/11/17					
G58	Review Prototype Design Document (San Jose Internal)	10 days	Wed 1/11/17	Wed 1/25/17					
G59	MISG Payment - AMANDA Planning Prototype Design Document Approved	0 days	Wed 1/25/17	Wed 1/25/17					
G60	AMANDA Planning Detailed Needs Analysis	210 days	Wed 1/25/17	Wed 6/21/17					
G61	Folder Design Fit-Gap Analysis Session 1	5 days	Wed 1/25/17	Wed 2/01/17					
G62	Fit-Gap Analysis (San Jose Internal Staff)	5 days	Wed 1/25/17	Wed 2/01/17					
G63	Fit-Gap Analysis (CSDC BA)	3 days	Wed 1/25/17	Mon 1/30/17					
G64	Folder Design Fit-Gap Analysis Session 2	5 days	Wed 2/01/17	Wed 2/08/17					
G65	Fit-Gap Analysis (San Jose Internal Staff)	5 days	Wed 2/01/17	Wed 2/08/17					
G66	Fit-Gap Analysis (CSDC BA)	3 days	Wed 2/01/17	Mon 2/06/17					
G67	Folder Design Fit-Gap Analysis Session 3	5 days	Wed 2/08/17	Wed 2/15/17					
G68	Fit-Gap Analysis (San Jose Internal Staff)	5 days	Wed 2/08/17	Wed 2/15/17					
G69	Fit-Gap Analysis (CSDC BA)	3 days	Wed 2/08/17	Mon 2/13/17					
G70	Folder Design Fit-Gap Analysis Session 4	5 days	Wed 2/15/17	Wed 2/22/17					
G71	Fit-Gap Analysis (San Jose Internal Staff)	5 days	Wed 2/15/17	Wed 2/22/17					

ID	Task Name	Duration	Start	End	January 2015	January 2016	January 2017	January 2018	January 2019
672	Fin Gap Analysis (CSDC BA)	3 days	Wed 5/13/17	Mon 5/22/17					
673	Detailed FlyGap Planning Design (Folder Setup Reports) - CSDC	30 days	Wed 5/23/17	Wed 6/21/17					
674	Review Detailed FlyGap Design Documents (Folder Setup Reports) - SI	30 days	Wed 5/23/17	Wed 6/21/17					
675	MESG Payment - AMANDA Planning Folder Analysis Complete	0 days	Wed 6/21/17	Wed 6/21/17					
676	Reports Analysis	65 days	Wed 6/21/17	Wed 9/13/17					
677	Reports Analysis Session 1	5 days	Wed 6/21/17	Wed 7/05/17					
678	Reports Analysis (SI Internal)	5 days	Wed 6/21/17	Wed 7/05/17					
679	Reports Analysis (CSDC)	3 days	Wed 6/21/17	Fri 6/30/17					
680	Reports Analysis Session 2	5 days	Wed 6/21/17	Wed 6/30/17					
681	Reports Analysis (SI Internal)	5 days	Wed 6/21/17	Wed 6/30/17					
682	Reports Analysis (CSDC)	2 days	Wed 6/21/17	Fri 6/30/17					
683	Reports Analysis Session 3	5 days	Wed 6/21/17	Wed 6/30/17					
684	Reports Analysis (SI Internal)	5 days	Wed 6/21/17	Wed 6/30/17					
685	Reports Analysis (CSDC)	1 day	Wed 6/21/17	Thu 6/22/17					
686	Detailed Planning Report Design (SI)	30 days	Wed 6/21/17	Wed 7/27/17					
687	MESG Payment - AMANDA Planning Reports Analysis Complete	0 days	Wed 6/27/17	Wed 6/27/17					
688	Merge Document Analysis	65 days	Wed 6/27/17	Wed 12/07/17					
689	Output (Merge) Documents Analysis Session 1	5 days	Wed 6/27/17	Wed 10/04/17					
690	Output Document Analysis (SI Internal)	5 days	Wed 6/27/17	Wed 10/04/17					
691	Output Document Analysis (CSDC)	2 days	Wed 6/27/17	Fri 6/29/17					
692	Output (Merge) Documents Analysis Session 2	5 days	Wed 6/27/17	Wed 10/04/17					
693	Output Document Analysis (SI Internal)	5 days	Wed 6/27/17	Wed 10/04/17					
694	Output Document Analysis (CSDC)	2 days	Wed 6/27/17	Fri 6/30/17					
695	Output (Merge) Documents Analysis Session 3	5 days	Wed 6/27/17	Wed 10/11/17					
696	Output Document Analysis (SI Internal)	5 days	Wed 6/27/17	Wed 10/11/17					
697	Output Document Analysis (CSDC)	1 day	Wed 6/27/17	Thu 6/29/17					
698	Detailed Planning Report Design (SI)	30 days	Wed 6/27/17	Wed 10/27/17					
699	MESG Payment - AMANDA Planning Merge Documents Analysis Complete	0 days	Wed 6/27/17	Wed 6/27/17					
700	Database Analysis	30 days	Wed 6/27/17	Wed 1/05/18					
701	Database Analysis (SI Internal)	30 days	Wed 6/27/17	Wed 1/05/18					
702	Planning Folder Configuration	130 days	Wed 6/28/17	Thu 1/04/18					
703	Folder Configuration (CSDC)	25 days	Wed 6/28/17	Wed 6/03/17					
704	Reports Configuration (CSDC)	30 days	Wed 6/27/17	Wed 10/11/17					
705	Merge Documents Configuration (CSDC)	6 days	Wed 6/27/17	Thu 7/04/17					
706	MESG Payment - AMANDA Planning Configuration Complete	0 days	Thu 1/04/18	Thu 1/04/18					
707	Planning Training	5 days	Thu 1/04/18	Thu 1/11/18					
708	Prepare Custom Training Materials (SI Staff)	5 days	Thu 1/04/18	Thu 1/11/18					
709	Planning User Acceptance Testing (UAT)	11 days	Thu 1/11/18	Fri 2/02/18					
710	UAT Training for Planning (8 users per class, 1 class, 1 day per class)	1 day	Thu 1/11/18	Fri 2/02/18					
711	User Acceptance Testing (SI Staff)	20 days	Fri 2/02/18	Fri 2/09/18					
712	UAT Support (CSDC)	30 days	Fri 2/09/18	Fri 3/23/18					

ID	Task Name	Duration	Start	End	January 2016	January 2016	January 2017	January 2018	January 2019
713	MS&S Payement - AMANDA Planning MAT Complete	0 days	Fri 2/21/18	Fri 2/13/18					
714	Planning Go-Live Closure	30 days	Fri 2/23/18	Tue 4/10/18					
715	Planning User Training (21 Staff)	30 days	Fri 2/23/18	Fri 3/23/18					
716	Deploy to Production Environment (21 Staff)	1 day	Fri 2/23/18	Mon 2/26/18					
717	Go-Live (MS&S and 21 Staff)	1 day	Mon 2/26/18	Tue 2/27/18					
718	Post-Go-Live Support	30 days	Tue 2/27/18	Tue 4/10/18					
719	Post-Go-Live support (MS&S)	30 days	Tue 2/27/18	Tue 4/10/18					
720	MS&S Payement - AMANDA Planning Post-Go-Live & Support	0 days	Tue 4/10/18	Tue 4/10/18					

APPENDIX A.5 – INTEGRATED DTA TRACKING SYSTEM COMPONENTS

Integrated Data Tracking System (IDTS) components & Implementation Date

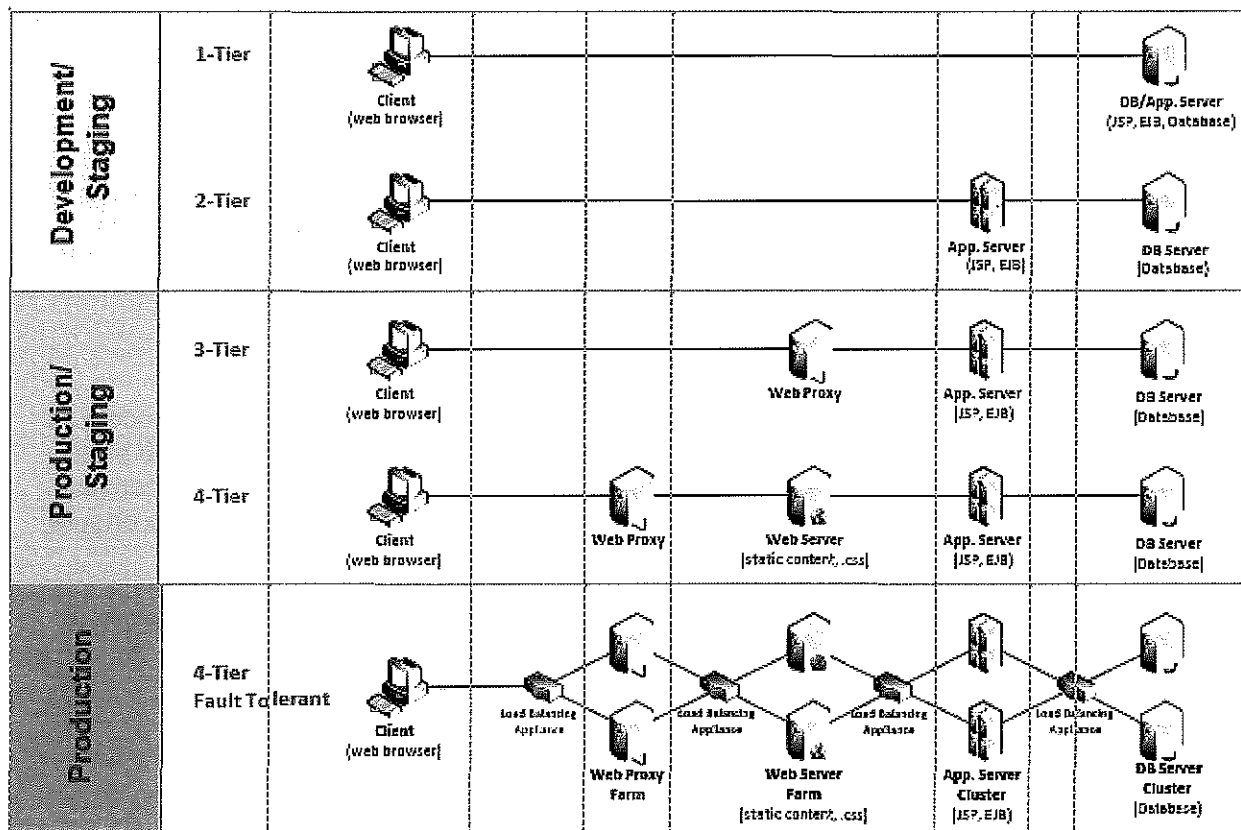


APPENDIX A.6 – DEPLOYMENT, NETWORK AND SECURITY

The AMANDA platform can be deployed on a physical, virtualized, or hybrid environment. The following diagram represents a hybrid type of deployment where the database is deployed on a physical server(s) while the other platform components (portal, application and web server, EDMS) are deployed in a virtual server environment.

Typical AMANDA production platform deployment follows a 3-tier deployment model – Web Proxy Server, Application Server, Database Server. However, AMANDA can also be deployed as a 1-tier, 2-tier or 4-tier system. One or two tier deployment model is not suitable for production deployment and is recommended for development and testing platforms only. The AMANDA platform can be deployed in either standard or a fault-tolerant environment (High- Availability or HA) when there is a need to ensure that the system remains operational in case of a physical server failure.

The following diagram provides a high-level view on various AMANDA platform deployment scenarios:

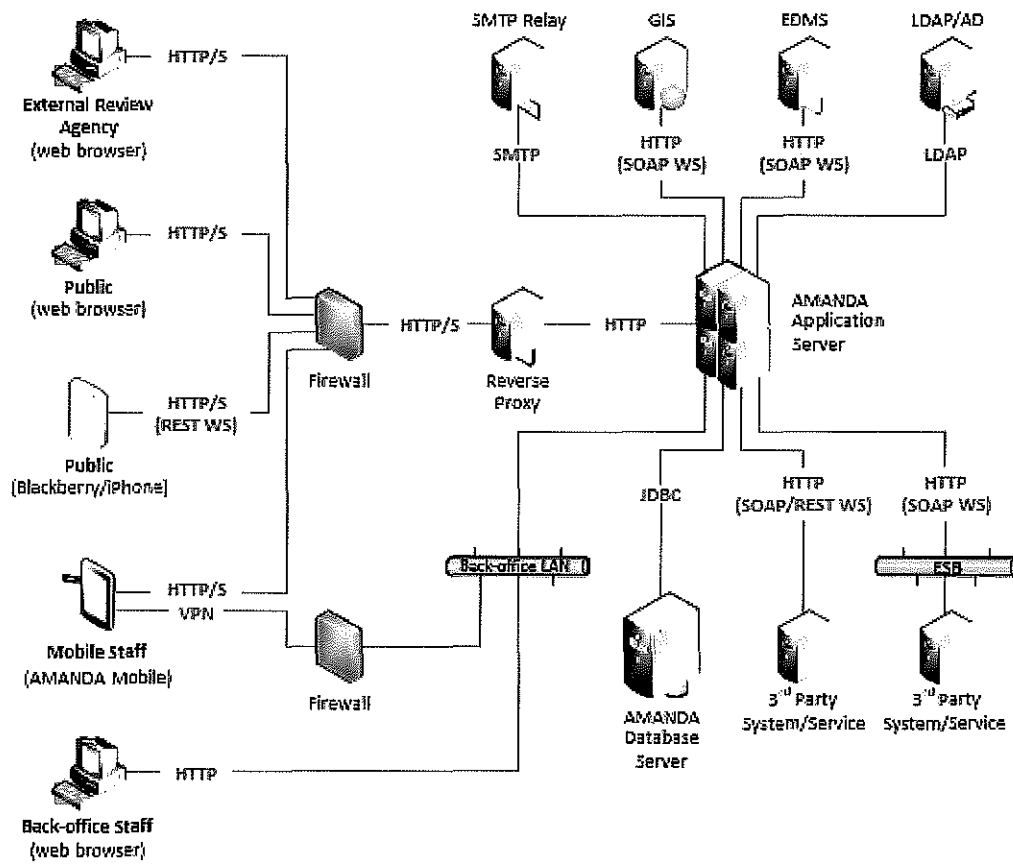


Network Topology and Protocols

The AMANDA platform uses industry standard communication protocols for communication between the platform components as well as with third-party applications, systems and services. This greatly enhances platform compatibility with most network environments and ensures seamless integration with any enterprise network environment.

Network communication protocols used by the AMANDA platform include HTTP/HTTPS, IIOP, JDBC, LDAP, SOAP Web Services (over HTTP/HTTPS).

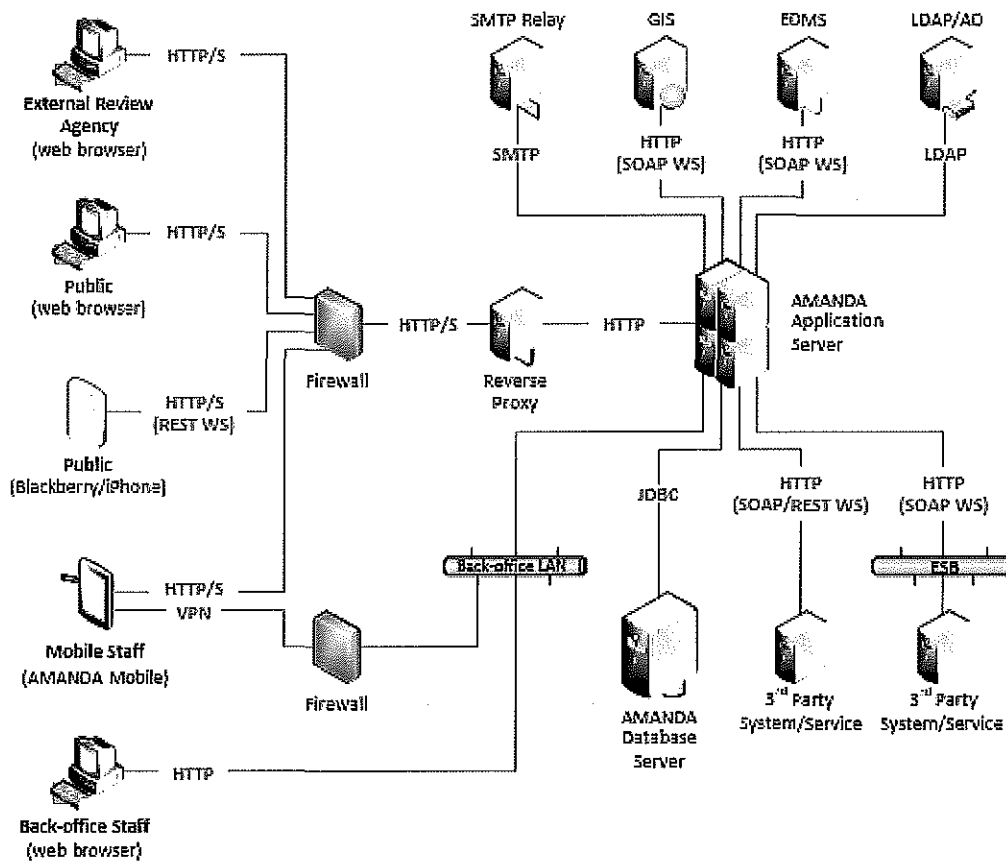
The following diagram provides a typical view of the AMANDA platform network topology along with utilized communication protocols:



Network Security

AMANDA platform network security is based on the use of encrypted communication protocols as well as on network protection and isolation, by the use of network firewall and reverse web proxy appliances. For a typical AMANDA platform 3-tier deployment model, the recommended network isolation configuration consists of three security layers subdivided to five security zones to ensure proper separation of the application components.

This network topology is a suggested layout and could be adjusted in accordance with the City's network governance and security policies.



The diagram above is based on a three security layers (A, B, C) and five security zones (A, B1, B2, C1 and C2):

- 1) Zone A (DMZ) – All internet-based UI is fronted by a cluster of web proxy servers. These are light-weight servers which proxy HTTP/HTTPS requests to the back-end application servers
- 2) Zone B1 (Extranet Application Servers) – This security zone hosts Internet-facing application servers, running AMANDA Public Portal and AMANDA Mobile components
- 3) Zone B2 (Intranet Application Servers) – This security zone hosts application servers which are used by the back-office clients and AMANDA Mobile clients when they are connected via back-office network
- 4) Zone C1 (Database) – AMANDA database server cluster
- 5) Zone C2 (Enterprise Services) – This security zone contains other enterprise services and/or 3rd party systems which are hosted internally and integrated with AMANDA, such as: Active Directory/LDAP, GIS servers, EDMS/CMS systems, SMTP relay servers, etc.

**APPENDIX A.7 – PCI-DSS/PA-DSS
PAYMENT CARD INDUSTRY DATA SECURITY STANDARD
AND PAYMENT APPLICATION DATA SECURITY STANDARD**

CONTRACTOR represents and warrants that any System used by the CONTRACTOR and the software applications it provides for the purpose of performing services related to storing, processing or transmitting payment cardholder data, at any point during the term of this contract shall be secured and certified to meet Payment Card Industry Data Security Standard (“PCI-DSS”) and Payment Application Data Security Standard (“PA-DSS”) established by the Payment Card Industry Security Standards Council as set forth online at <https://www.pcisecuritystandards.org>, as may be amended by the PCI Security Standards Council from time to time.

1. PERFORMANCE STANDARDS:

PCI-DSS is a multifaceted security standard comprised of twelve (12) general requirements including requirements for security management, policies, procedures, network architecture, software design and other critical protective measures. The following requirements are designed to build and maintain a secure network; protect cardholder data; ensure the maintenance of vulnerability management programs; implement strong access control measures; regularly monitor and test networks; and ensure the maintenance of information security policies:

1.1. Build and Maintain a Secure Network

- Install and maintain a firewall configuration to protect cardholder data
- Do not use vendor-supplied defaults for system passwords and other security parameters

1.2. Protect Cardholder Data

- Protect stored cardholder data using methods such as encryption, truncation, masking, hashing, and any other effective methods of protecting stored data to mitigate potential risks.
- Encrypt transmission of cardholder data over open, public networks

1.3. Maintain a Vulnerability Management Program

- Use and regularly update anti-virus software or programs
- Develop and maintain secure systems and applications

1.4. Implement Strong Access Control Measures

- Restrict access to cardholder data to ensure critical data can only be accessed by authorized personnel, systems and processes based on the least amount of data and privileges needed to perform a job
- Assign a unique identification (“ID”) to each person with computer access to maintain accountability and traced actions taken on critical data and systems to known and authorized users
- Restrict physical access to cardholder data

1.5. Regularly Monitor and Test Networks

- Track and monitor all access to network resources and cardholder data
- Regularly test security systems and processes

1.6. Maintain an Information Security Policy

- Maintain a policy that addresses information security for all personnel

2. CERTIFICATON:

CONTRACTOR agrees to promptly provide, from time to time at the request of the CITY, current evidence, in form and substance reasonably satisfactory to CITY, of compliance with PCI-DSS and PA-DSS, which has been properly certified by an authority recognized by the payment card industry for that purpose. If during the term of this Agreement, CONTRACTOR undergoes, or has reason to believe that it will undergo, and adverse change in its certification or compliance status with the PCI-DSS or PA-DSS or other material payment card industry standards, it will promptly notify the CITY of such circumstances.

3. AUDIT:

CONTRACTOR agrees to, at contractors own expense, perform an independent audit of any System used to store, process, or transmit payment cardholder data by an independent third party on a quarterly basis to ensure the System is and continues to satisfy PCI-DSS. At a minimum, the audit shall scan for all known methods used by hackers to access private information, vulnerabilities that would allow malicious software (i.e. viruses and worms) to gain access to or disrupt the network devices.

4. MATERIAL BREACH:

Failure by CONTRACTOR to comply with any provision of this Exhibit shall constitute a material breach of this Agreement.

5. NOTIFICATIONS:

Should the contractor have a failure of security protocols such that customer data is compromised, the Contractor shall immediately notify the City.

Appendix A.8 – AMANDA TRAINING COURSES

Contractor's general off-the-shelf AMANDA courses are listed below.

AMANDA End User
(All Users, 2 Days)

- Introduction to AMANDA
- Orientation
- Permitting application scenario
- Key terms
- Applying for a Permit Account
- Completing the Permit Account folder
- Approving the Permit Account
- Other frequently-performed user activities

Business Specific Training
(2 Days)

catered to each department's configured workflow

AMANDA Administrator
(Administrators, 2 Days)

- AMANDA Orientation
- Address Configuration
- Attachment Configuration
- People Configuration
- Property Configuration
- Designing Free-form pages
- Folder Configuration
- Process Configuration
- Procedure Configuration
- Custom Report Configuration
- Document and Clause
- Batch Scheduler

AMANDA Batch Scheduler
(Administrators, 1/2 Day)

- Configure Batch Scheduler
- Options under Batch Scheduler Configuration
- Using Batch Scheduler to run procedures
- Using Batch Scheduler to generate reports
- Using different output options of batch scheduler deliverables
- How to build the schedule pattern
- Testing the scheduled jobs instantly

AMANDA Row Level Security
(Administrators, 1/2 Day)

- Introduction to RLS
- Scenario Overview
- Configure RLS by creating security groups
- Configure RLS by creating procedures
- Verification of RLS on the user side

AMANDA Pubic Portal
(Administrators, 2 Days)

- Portal technology overview
- Scenario Context
- Register – creating a new Public Portal user
- Explore – Getting familiar with Public Portal

Appendix A.9 – Managed Services: Service Catalogue & Service Descriptions

1. INTRODUCTION

1.1. Background

CSDC Systems (CSDC) licenses software called "AMANDA." In collaboration and close coordination with CSDC Systems, Unisys offers services to provision, install, configure and set-to-work AMANDA Environments and AMANDA Business Applications, as well as services to manage AMANDA Environments and AMANDA Business Applications.

A customer's AMANDA Business Applications and associated AMANDA Environments are considered to be mission-critical to daily operations of the customer and its end-users. As such, customers require a high level of services to maintain the operational effectiveness of their AMANDA applications and environments as problems occur or changes are made.

1.2. Contents

This Service Catalogue and Service Descriptions document sets out the services that may be ordered from Unisys (Services), whether by an end-user licensee of the AMANDA software directly or by CSDC for an end user licensee of the AMANDA software indirectly. All orders for Services are subject to acceptance by Unisys. The entity that places the Customer Order on Unisys, which is later accepted by Unisys, is the "Customer," whether an end user licensee or CSDC.

This Service Catalogue and Service Descriptions (SD) provides definitions, scope, descriptions, service levels and other related terms and conditions of the Services that Customers may order from Unisys. It also identifies the roles and responsibilities of Customers and Unisys during both the transition and steady-state operational phases.

As described within the Customer Order and AMANDA Managed Services General Terms and Conditions, this document may be updated.

1.3. ITIL Version 3 (2011) as Reference Terminology

This document uses the Information Technology Infrastructure Library (ITIL) version 3 (2011) as a reference for defining and describing Unisys AMANDA Managed Services. Unisys is committed to continued use of ITIL to manage and improve service delivery, including coordinating service delivery between Unisys and other service providers.

1.4. Definitions

When used in this SD, the following terms have the meanings provided below:

Term	Description
AMANDA Software	The commercial off the shelf (COTS) software that is licenced by CSDC Systems.
AMANDA Business Application	The Customer's business application that is developed through the configuration and development of the AMANDA Software.
AMANDA Software Stack (Stack)	The prerequisite software that is required to run the AMANDA Software as approved compatible and supported by CSDC Systems. This includes operating systems (e.g. Windows, Linux), middleware, Java EE web server software (e.g. Tomcat), database software (e.g. Oracle or Microsoft SQL Server) and the AMANDA Software including the respective versions of each of the software.
Availability	Availability refers to the period during which the AMANDA Business Application is available for use. Availability is measured in hours, and fractions of an hour rounded to the nearest minute. The calculation of Availability specifically excludes unavailability: For any scheduled or emergency maintenance windows (See Scheduled Maintenance Windows, below); Caused by acts, errors, or omissions of any person or entity other than Unisys and the Unisys providers;

Caused by Customer Data or Customer's failure to address a bug, critical issue or other similar circumstance relating to Customer Data, an operating system, middleware, database AMANDA Application, or other items for which Customer is responsible;
 Due to commands, file transfers, or systems administration not initiated by Unisys or its providers. For example: user initiated file transfer that hangs a server and results in a reboot of a virtual machine; user intentionally taking down the AMANDA Business Application for its purposes;
 Due to Customer-directed or requested work;
 Due to any circumstance beyond the reasonable control of Unisys such as a force majeure event or occurrence;
 Due to any modification or recompiling of any third party software after suitable testing of such modified or recompiled software by Unisys;
 Due to bugs, critical issues or other circumstances that are to be addressed by a service patch, update or other fix from the applicable vendor, where such patch, update, or fix has not been provided or made available by such vendor to Unisys.
 The total potential availability of the AMANDA Business Application in hours during each calendar month, shall be deemed to be 744 hours each month.

For example:

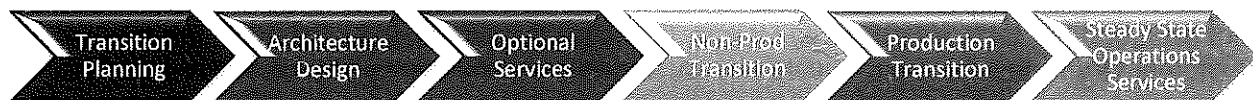
$$\frac{744 \text{ hours} - 7.44 \text{ hours}}{744 \text{ hours}} \times 100 = 99\% \text{ Availability}$$

Authorized Personnel	“Authorized Personnel” means personnel: (a) who are employees of Unisys; and (b) have a need to access Customer Data in order to perform their job tasks (provided that such job tasks are in furtherance of the Services required under the Customer Order).
Base Service Package	The Customer pre-selected virtual machines configurations, AMANDA Environments, AMANDA and other software, managed services and any custom services or criteria as identified in a Customer Order.
Change Request	A change request in the form provided in Exhibit 1, used for modifying the Base Service Package.
Customer Data	All software (including the AMANDA Business Application), data, text, audio, video, images, or other materials or information, including but not limited to source or compiled code, applications, HTML, streaming media and any other content that is uploaded to, hosted by, transferred, processed, used or run on the Services by Customer or its End User(s).
Demarcation Point	The Physical or Logical Demarcation Point beyond which Unisys is no longer in control of the environment required to deliver the Services. For the purposes of this definition, the Physical Demarcation Point is the external Unisys provided router(s), and the Logical Demarcation Point is the following: a) AMANDA Software for Managed Platform Services b) AMANDA Business Application for Managed Application Services Refer to the Customer Order for the type of Managed Services (Platform or Application) being provided.
Data Custodian	Customer official, who, by virtue of their position, is the fiduciary owner of Customer Data.
AMANDA Environment	A combination of virtual machines, networks, storage and other IT infrastructure components, services and AMANDA Software Stack deployed in a CSDC-approved configuration that hosts the AMANDA Software and runs a Customer’s AMANDA Business Application. An environment may be designated as a non-production or production environment.
Event	Any detectable or discernible occurrence that has significance for the provisioning of the AMANDA Environment(s), Business Application or the delivery of managed services and evaluation of the impact a deviation might cause to the services.

Incident	An occurrence reported by a Customer or a Customer's end users to the Unisys Service Desk which has adversely affected the Services covered within the scope of this SD and the Customer's Order and which requires investigation by Unisys.
Infrastructure	Data center services, network services including bandwidth, IP Addresses, VPN Gateways, and other supporting services from a public cloud infrastructure located in a Tier 3 data center.
AMANDA Patch	A revision to the AMANDA Software provided by CSDC System's that reflects a minor change to the AMANDA Software version (e.g. 6.X to 6.Y)
Compute	Quantity of information processing capability measured by the number of virtual CPU's specified for each virtual server in a Customer Order.
RAM	Random Access Memory provided with each virtual server specified in a Customer Order.
Storage	The information storage capacity for each virtual server specified in a Customer Order.
Resources	The set of Compute, RAM and Storage which in combination represent the specifications of a Virtual Machine.
Service Request	A request to change the specifications of Resources, or a request for ad-hoc services.
Third Party Provider	Third Party Provider means a provider of Infrastructure as a Service or Platform as a Service provisioned by Unisys and used for hosting AMANDA Environments and providing the Services.
AMANDA Upgrade	A revision to the AMANDA Software provided by CSDC System's that reflects a major change to the AMANDA Software version (e.g. 6.X to 7.Y)
Virtual Server, VM or Virtual Machine	Virtualized computer server Resources made available at an IP address.

2. Transition Services

This section describes the services offered by Unisys to provision, install, configure and set-to-work AMANDA Business Application and AMANDA Environments, hereafter referred to "Transition Services".



The Services noted in the above diagram are further described in the sections below.

2.1. Transition Planning

Unisys will work with the Customer, or its designee, to create a mutually agreed upon transition plan according to an agreed upon schedule giving consideration to the availability of the required personnel (Transition Plan). The Transition Plan will define the tasks and those responsible for the tasks to provision, install, configure and set-to-work the ordered AMANDA Environments for later management during the Steady State Operations Services period, described in below. The overall Architecture Design, Phase I and Phase II Transition timeframes will be outlined in the Transition Plan.

2.2. Architecture Design

Unisys will work with the Customer to develop the architecture diagram(s) and other specifications for the AMANDA environment(s) during the Transition phase.

2.3. Optional Services

2.3.1. Disaster Recovery Services

If Disaster Recovery Services are included in a Customer Order, a Disaster Recovery Plan (DRP) will be developed during the Transition phase. This document will consist of an overview of the disaster recovery plan, recovery objectives for each AMANDA production server, management and support staff escalation procedures, and the steps to be followed to

activate/recover AMANDA for a disaster recovery test event and in response to an actual disaster. Unless otherwise noted in Customer Order, Disaster Recovery Services only apply to Production AMANDA Environments.

2.3.2. Managed Scalability Services

If Managed Scalability Services are included in a Customer Order, a Scalability Plan (SP) will be developed during the Transition phase. This document's content may consist of an overview of the Customer's end-user experience objectives, strategy, scope, methods and thresholds, and other technical specifications for establishing managed scaling for the applicable AMANDA Environment (and related IT infrastructure and AMANDA Business Application) and the mechanisms and steps to monitor, activate and manage Services scaling in response to varying workloads and end-user demand. Unless otherwise noted in Customer Order, Managed Scalability Services only apply to Production AMANDA Environments.

2.4. Transition non-production environment(s) and associated managed services

Phase I Transition Services will establish the ordered AMANDA Environments as well as any associated managed services. The non-production AMANDA Environment configurations shall be defined in the agreed upon order between Customer and Unisys (the Customer Order).

2.5. Transition production environment(s) and associated managed services

Phase II Transition Services will establish the ordered AMANDA Environments as well as any associated managed services. The production AMANDA Environment configurations shall be defined in the agreed upon order between Customer and Unisys (the Customer Order). If Disaster Recovery Services are included in a Customer Order, Unisys will proactively test the DR plan at least once within the first six months following final completion of the Transition phase and once for every year thereafter. Additional testing can be requested by Customer and provided by Unisys at the then current rates.

2.6. Service Benchmarking

If included in a Customer Order, Unisys and Customer will perform qualification testing of the Production environment prior to Go-Live. This may include activities such as load and performance testing of the overall system, network, interfaces, service capacity, disaster recovery, or other tests agreed to by Unisys. If Service Benchmarking is not included in a Customer Order, this can be requested by Customer and provided by Unisys at the then current rates.

3. Managed Services

This section describes the services "Managed Services" offered by Unisys to manage AMANDA Business Applications and AMANDA Environments.

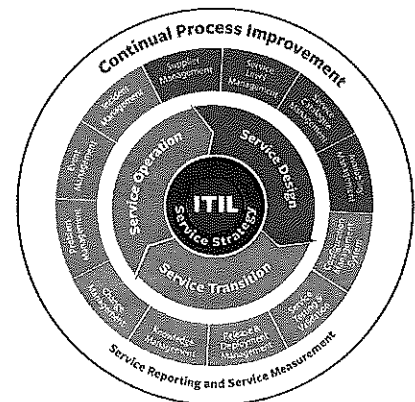
Information Technology Infrastructure Library (ITIL)

ITIL, is a set of practices for IT service management (ITSM) that focuses on aligning IT services with the needs of business. ITIL describes processes, procedures, tasks, and checklists which are not organization-specific, but can be applied by an organization for establishing integration with the organization's strategy, delivering value, and maintaining a consistent level of competency. It allows the organization to establish a baseline from which it can plan, implement, and measure. It is used to demonstrate compliance and to measure improvement.

For comprehensiveness and clarity, ITIL is used as a reference for defining and describing Unisys AMANDA Managed Services.

AMANDA Managed Services are therefore described in terms of:

- Service strategy
- Service Design
- Service Transition



- Service Operation
- Continual Service Improvement

3.1. Responsibility Matrix

The following matrix identifies the process that Unisys uses to support the definition, design, transition, and operation of the client's AMANDA environment. It also identifies the type of involvement and whether Unisys and/or the Customer is responsible for the process.

RACI – Responsible, Accountable, Consulted, Informed		Unisys	Customer	Agreement / Notes	
Service Strategy	Governance Processes	Financial Management	CI	RA	Unless otherwise identified in a Customer Order, Customer's are responsible for the Governance processes of their AMANDA Business Applications.
		Service Portfolio Management	CI	RA	
		Business Relationship Management	C	RA	
		Demand Management	C	RA	
		Strategy Generation	CI	RA	
Service Design	Operational Processes	Service Level Management	X	X	Unisys is responsible for the processes related to availability, capacity, continuity and service level management, only. Unisys Service Management will provide reports addressing activity/achievements for each (responsible) process.
		Availability Management	X		
		Capacity Management	X		
		IT Service Continuity Management	X		
		Service Catalog Management	X	X	
		Information Security Management	X	X	Unisys and Customer are jointly responsible for Information Security Management and Compliance Management.
		Supplier Management			
		Design Coordination			
		Architecture Management			
		Risk Management			
Service Transition	Operational Processes	Compliance Management	X	X	Unisys is responsible for the AMANDA Environments. Customer is responsible for their AMANDA Business Application, which includes configuration, code, reports, templates, etc. Change Management will be a joint responsibility.
		Change Management	X	X	
		Service Asset & Configuration Management	X		
		Release & Deployment Management	X		
		Transition Planning and Support	X		
		Service Validation and Testing	X		
		Change Evaluation	X		
		Knowledge Management	X		
Application Development	X				
Service Operation	Processes	Incident Management	X		Unisys may require support from Customer to execute on their responsibilities.
		Problem Management	X		
		Request Fulfilment	X		
		Access Management	X		
		Event Management	X		
	Functions	Technical Management	X		If the Customer Order specifies Managed Platform Services, Customer will have access to the AMANDA Admin module and all associated AMANDA Business Application configurations & code, but not to the VM's, etc.
		IT Operations Management	X		
		Applications Management	X		
Service Desk		X			
		X			
		X			
Continual Service Improvement	CSI	Service Improvement			
		Service Measurement			
		Service Reporting			

3.2. Service Strategy

The center and origin point of the ITIL Service Lifecycle, ITIL Service Strategy provides guidance on clarification and prioritization of service-provider investments in services. More generally, Service Strategy focuses on helping IT organizations improve and develop over the long term. In both cases, Service Strategy relies largely upon a market-driven approach. The Service Strategy lifecycle stage is often considered as the core of the service lifecycle. In Service Strategy stage, the strategic approach for the whole lifecycle is identified to provide values to the customers through IT service management. Key topics covered include service value definition, business-case development, service assets, market analysis, and service provider types.

Unisys will support a Customer's Service Strategy through Service Design, Service Transition, Service Operation and Continual Service Improvement processes, activities and functions, as defined in this SD, which inform and support a Customer's Service Strategy processes. However, unless otherwise stated in the Customer Order, Customers are responsible for these Service Strategy processes, which are:

3.2.1. Portfolio Management

The Customer's business end-users need services to achieve their objectives. Service Providers, should ensure they can provide these services. The purpose of Service Portfolio Management is ensuring these services are offered. The service portfolio contains the services managed by the Service Provider. The service portfolio comprises: the pipeline section, which contains the services that are yet to be offered; the service catalog section, which contains the details of operational services; and the retired section, which contains details of the services that are no longer offered.

Unless otherwise stated in the Customer Order, Customers are responsible for Portfolio Management.

3.2.2. Financial Management

IT Financial Management comprises the discipline of ensuring that the IT infrastructure & applications are obtained at the most effective price (which does not necessarily mean cheapest) and calculating the cost of providing IT services so that These costs may then be recovered from the end-users of the service. The three major activities which take place within financial management for IT services are:

- Accounting
- Budgeting
- Charging

Accounting involves applying cost accounting principles to IT spending to identify what it costs to provide each service. Budgeting illustrates the funding required to support the defined services at a given level of business activity. Charging is the process of assuring that IT Service Management will "capture" value. That is, that the consumers of services (end-users) are aware of the cost of providing services to them.

Unless otherwise stated in the Customer Order, Customers are responsible for Financial Management.

3.2.3. Business Relationship Management

Business relationship management helps organizations to inform and implement the strategy and service selection. Participants in this process seek to form a relationship with end-users to understand their needs for service. This involves:

- ensuring that services provided are delivering the value expected by the customer
- understanding the customer's environment well enough to identify opportunities for new services or new applications of existing services
- being aware of changes in the customer's business environment which may impact service needs

The most important key performance indicator (KPI) for business relationship management is customer satisfaction. Unless otherwise stated in the Customer Order, Customers are responsible for Business Relationship Management.

3.2.4. Demand Management

The purpose of demand management is to understand, anticipate, and influence end-user demand for services. Demand management rationalizes and optimizes the use of IT resources. It ensures that the amount of technical and human resources that has been budgeted matches the expected demand for the service. If the prediction is too low, the agreed-upon service levels may not be delivered. If the predictions are too high, resources will have been allocated to a service that will not be used (or paid for). Demand management

bridges the gap between service design, capacity management, and business relationship management to ensure that the predictions are accurate.

Unless otherwise stated in the Customer Order, Customers are responsible for Demand Management.

3.2.5. Strategy Generation

ITIL strategy generation seeks to enable IT to become a strategic asset to the organization. It's not enough to align IT with the business; IT should also integrate with the business. In order to be successful, IT must have a thorough understanding of the client environment. IT must know what their strengths and weaknesses as a provider are, as well as what opportunities are available through other service providers

Unless otherwise stated in the Customer Order, Customers are responsible for Strategy Generation.

3.3. Service Design

Service Design addresses the design of new or modified services for introduction into a production environment. Unisys will perform services design in order to deliver efficient and effective services and to inform the client regarding requirements for new or modified services. The client is responsible for specifying and authorizing all new and modified services.

3.3.1. Service Catalogue Management

Service Catalogue Management is intended to ensure that a Service Catalogue is produced and maintained, containing accurate information on all operational services and those being prepared to be run operationally. The Service Catalogue provides vital information for all Service Management processes: Service details, current status and the services' interdependencies.

Unisys will periodically update and maintain this AMANDA service catalog for AMANDA Managed Services and provide Customer the new revisions.

3.3.2. Service Level Management

Service Level Management is responsible for ensuring that all Operational Level Agreements and Underpinning Contracts are appropriate, and to monitor and report on service levels and service level targets.

Unisys in cooperation with the client will define, measure, report and review service levels, including through:

- Issuance and periodic update of a Service Level Agreement.
- Periodic service level reporting and review with the Customer.
- In the event of service level shortcomings, completion of service improvement actions to restore or improve service quality.
- Completion of customer satisfaction surveys with the client

Unisys will provide quarterly and annual service level reports. Reports will be provided within 15 Business Days of the end of the reporting period.

Unisys and the Client will meet quarterly to review service level performance. At least once per year this review will include review of the annual service level report(s).

Unisys will survey designated Client contact persons on their customer satisfaction level. Surveys will be conducted at least annually with a goal to be conducted quarterly. Customer Satisfaction Survey results will be included in quarterly and annual service level reports. Of a 10 point scale, the Customer Satisfaction target will be an average score of 8 (very good) or higher with no individual question average less than 5 (satisfactory)."

3.3.3. Availability and Capacity Management

Availability Management is responsible to define, analyze, plan, measure and improve all aspects of the availability of Services and ensuring that all IT infrastructure, processes, tools, roles etc. are appropriate for the agreed availability targets.

Capacity Management is responsible to ensure that the capacity of the Services and the IT infrastructure is able to deliver the agreed service level targets in a cost effective and timely manner.

Unisys will manage delivery of the Services in order to meet or exceed defined availability service levels and to support availability of the AMANDA Business Applications and AMANDA Environments and the AMANDA Software Stack, including:

- Measure and report application availability indicators.
- Measure and report key service utilization indicators to support client capacity planning
- Together with the Customer, investigate trends and causes of availability issues and recommend actions to improve service availability.

For Managed Platform Services, Unisys will provide proactive monitoring of various indices including: CPU utilization, memory usage, disks, logs, JVM, threads, garbage collection, user activity, network traffic, etc. in accordance to Unisys's learned best practices for the AMANDA Software Stack.

For Application Managed Services, Unisys will provide proactive monitoring of the Customer's AMANDA Business Application through various indices, including: web page and function availability, interface availability, page load times, etc. in accordance to Unisys's learned best practices for AMANDA Business Applications.

Customer's are responsible for Availability and Capacity Management for any external systems, applications or other components that are provisioned by Customer and needed by Unisys for the delivery of the Services.

3.3.3.1. Managed Scalability Services

If Managed Scalability Services are included in a Customer Order, Unisys will be responsible to activate, test, monitor and report on the Managed Scalability Services to regulate the delivery of Services in response to varying workloads and end-user demand.

3.3.4. IT Service Continuity Management

ITSCM is intended to manage risks that could seriously impact IT services. ITSCM ensures that the IT service provider can always provide minimum agreed Service Levels, by reducing the risk from disaster events to an acceptable level and planning for the recovery of IT services. ITSCM should be designed to support Business Continuity Management.

Regardless of whether Disaster Recovery Services are included in a Customer Order, at Unisys's discretion, Unisys will plan, prepare and test to ensure readiness to continue the Services, and restore IT infrastructure in extraordinary conditions such as severe problems, disaster or pandemic.

3.3.4.1. Disaster Recovery Services

If Disaster Recovery Services are included in a Customer Order, Unisys will be responsible for establishing, implementing, testing, and maintaining a Customer-specific Disaster Recovery Plan designed to provide continuous access to, and support for, the Customer's ordered Services. At a minimum, Unisys will: (i) back up Customer Data incrementally on a daily basis and fully on a weekly basis; (ii) archive and maintain duplicate or redundant systems; and (iii) establish and follow

procedures and frequency intervals for transmitting backup data and systems to Unisys' backup location. Such backup storage and systems will be located at a secure physical location other than the location of Unisys' primary system(s).

Customer's are responsible for IT Service Continuity Management for any external systems, applications or other components that are provisioned by Customer and needed by Unisys for the delivery of the Services.

3.3.5. Information Security Management

Information Security Management is responsible to ensure the confidentiality, integrity and availability of an organization's information, data and IT services. Information Security Management usually forms part of the wider organizational approach to security management. The terms in this section apply to all Services:

3.3.5.1. Security Incident Notification

If Unisys becomes aware of any unlawful access to any Customer Data stored on Unisys's provisioned equipment or in Unisys's provisioned facilities, or unauthorized access to such equipment or facilities resulting in loss, disclosure, or alteration of Customer Data (each a "Security Incident"), Unisys will promptly execute the Security Incident Response Plan. This plan includes steps to: (1) notify Customer of the Security Incident; (2) investigate the Security Incident and provide Customer with detailed information about the Security Incident; and (3) take reasonable steps to mitigate the effects and to minimize any damage resulting from the Security Incident.

Notification(s) of Security Incidents will be delivered to one or more of Customer's administrators by any means Unisys selects, including via email. It is Customer's sole responsibility to ensure Customer's administrators maintain accurate contact information on each applicable AMANDA Business Application. Unisys's obligation to report or respond to a Security Incident under this section is not an acknowledgement by Unisys of any fault or liability with respect to the Security Incident.

Customer must notify Unisys promptly about any possible misuse of its accounts or authentication credentials or any security incident related to an AMANDA Business Application.

Customer must provide security awareness training for their employees, inform their personnel about relevant security procedures and their respective roles. Customer's must also inform employees of possible consequences of breaching the security rules and procedures. Customer will only use anonymous data in any non-production environments.

Unisys will proactively test the Security Incident Response Plan at least once within the first six months following final completion of the Transition phase and once for every year thereafter. Additional testing can be requested by Customer and provided by Unisys at the then current rates.

3.3.5.2. Security Monitoring

Unisys will manage delivery of the Services in order to provide safeguards to protect the confidentiality, integrity and availability of an organization's information, data and IT services.

3.3.5.2.1. Intrusion Detection

Unisys or Unisys' Third Party Provider will utilize intrusion detection/prevention technologies and tools in all networks and computer systems provided by Unisys to provide the Services.

3.3.5.2.2. User access logs

Unisys will record and maintain user access records/logs ("System Logs") with respect to all electronic Customer Data for the purpose of audit and investigations by Customer.

System Logs will include, at a minimum, the following information:

- the time of each data entry, modification, and duplication of Customer Data and the user ID performing the function;
- the time in which Customer Data is accessed within the application, including the identity of the personnel gaining the access; and
- the identity of the Authorized Personnel and the time of such Authorized Personnel's log-on to and log-off from Secured Databases.

Systems Logs will be stored on Provider's or its Third Party Provider's designated Servers, in a readily accessible manner for a minimum of one (1) month, and backed up and archived, unless otherwise approved by Customer.

Archives of all System Logs will be treated as Customer's records, and Provider will have full access to such logs as required to deliver the Services, to investigate an incident, or for any reasonably related matter.

The System Logs will not be written to by any system other than the originating system.

3.3.5.2.3. Anti-virus and Anti-malware

Unisys will install, manage, patch and monitor anti-virus and anti-malware software on each virtual machine and will perform any investigative, corrective, restorative, decommissioning or any other action required, as deemed by the Vendor, to respond to any conditions noted by the anti-virus and anti-malware software.

3.3.5.3. Location of Data and Resources

Customer's instance of the Services (and related Customer Data) will be hosted and maintained from Unisys', or Unisys' Third Party Provider's, Tier 3 data centers located in the country identified in the Customer Order. As set out in the Order, Customer's instance (and related Customer Data) will not be moved from such data centers without Customer's consent, which consent will not be unreasonably withheld, conditioned or delayed, provided Unisys or the applicable Third Party Provider has given Customer notice of the move and the reasons therefor.

3.3.5.4. Privacy

3.3.5.4.1. Use of Customer Data

Customer Data will be used only to provide Customer the Services including purposes compatible with providing those Services. Unisys will not use Customer Data or derive information from it for any advertising or similar commercial purposes. As between the parties, Customer retains all right, title and interest in and to Customer Data. Unisys acquires no rights in Customer Data, other than the rights Customer grants to Unisys to provide the Services to Customer. This paragraph does not affect Unisys's rights in software or services Unisys licenses to Customer.

3.3.5.4.2. Disclosure of Customer Data

Unisys will not disclose Customer Data outside of Unisys or its controlled subsidiaries and affiliates except (1) as Customer directs, (2) with

permission from an end user, (3) as described in the OST, or (4) as required by law.

Unisys will not disclose Customer Data to law enforcement unless required by law. Should law enforcement contact Unisys with a demand for Customer Data, Unisys will attempt to redirect the law enforcement agency to request that data directly from Customer. If compelled to disclose Customer Data to law enforcement, then Unisys will promptly notify Customer and provide a copy of the demand unless legally prohibited from doing so.

Upon receipt of any other third party request for Customer Data (such as requests from Customer's end users), Unisys will promptly notify Customer unless prohibited by law. If Unisys is not required by law to disclose the Customer Data, Unisys will reject the request. If the request is valid and Unisys could be compelled to disclose the requested information, Unisys will attempt to redirect the third party to request the Customer Data from Customer.

Except as Customer directs, Unisys will not provide any third party: (1) direct, indirect, blanket or unfettered access to Customer Data; (2) the platform encryption keys used to secure Customer Data or the ability to break such encryption; or (3) any kind of access to Customer Data if Unisys is aware that such data is used for purposes other than those stated in the request.

In support of the above, Unisys may provide Customer's basic contact information to the third party.

3.3.5.4.3. Customer Responsibilities

Customer will prevent unauthorized access to or use of the Services and will notify Unisys promptly of any unauthorized use or access. Customer will use, and require each End User to use, the Services only in accordance with the terms of the Order, any Third Party Provider terms, guides, documentation, and policies for its cloud resources, and applicable laws and government regulations. Customer is responsible for: (i) protecting the names and passwords of the End Users of the Services; (ii) the legality of, and results obtained from, Customer Data submitted by Customer and its End Users to the Service; and (iii) each End User's use of, and access to, the Services. Customer will provide Unisys with cooperation, information, and assistance reasonably required by Unisys for performance of the Services.

3.3.5.4.4. Customer Data Deletion or Return

No more than 30 days after expiration or termination of Customer's use of a Service, Unisys will disable any accounts, access and delete all Customer Data.

3.3.5.4.5. Unisys Personnel

Unisys personnel will not process Customer Data without authorization from Customer. Unisys personnel are obligated to maintain the security and secrecy of any Customer Data as provided in this SD and this obligation continues even after their engagements end.

3.3.5.4.6. Subcontractor transfer

Any subcontractors to whom Unisys transfers Customer Data, even those used for storage purposes, will have entered into written agreements with

Unisys that are no less protective than this SD. Customer has previously consented to Unisys's transfer of Customer Data to subcontractors as described in this SD. Except as set forth in this SD, or as Customer may otherwise authorize, Unisys will not transfer to any third party (not even for storage purposes) personal data Customer provides to Unisys through the use of the AMANDA Business Application(s). At least 30 days before authorizing any new subcontractor to access Customer Data, Unisys will inform the Customer and provide Customer with a mechanism to obtain notice of that update. If Customer does not approve of a new subcontractor, then Customer may terminate the affected Service without penalty by providing, before the end of the notice period, written notice of termination that includes an explanation of the grounds for non-approval. After termination, Unisys will remove payment obligations for the terminated Services from subsequent Customer invoices.

3.3.5.5. General Security Practices

Unisys has implemented and will maintain and follow for the Services the following security the measures, which, in conjunction with the security commitments in this SD, are Unisys's only responsibility with respect to the security of Customer Data.

Domain	Practices
Organization of Information Security	<p>Security Ownership. Unisys has appointed one or more security officers responsible for coordinating and monitoring the security rules and procedures.</p> <p>Security Roles and Responsibilities. Unisys personnel with access to Customer Data are subject to confidentiality obligations.</p> <p>Risk Management Program. Unisys performed a risk assessment before processing the Customer Data or launching the Services service. Unisys retains its security documents pursuant to its retention requirements after they are no longer in effect.</p>
Asset Management	<p>Asset Inventory. Unisys maintains an inventory of all media on which Customer Data is stored. Access to the inventories of such media is restricted to Unisys personnel authorized in writing to have such access.</p> <p>Asset Handling</p> <ul style="list-style-type: none"> - Unisys classifies Customer Data to help identify it and to allow for access to it to be appropriately restricted. - Unisys imposes restrictions on printing Customer Data and has procedures for disposing of printed materials that contain Customer Data. - Unisys personnel must obtain Unisys authorization prior to storing Customer Data on portable devices, remotely accessing Customer Data, or processing Customer Data outside Unisys's facilities.
Human Resources Security	<p>Security Training. Unisys informs its personnel about relevant security procedures and their respective roles. Unisys also informs its personnel of possible consequences of breaching the security rules and procedures. Unisys will only use anonymous data in training.</p>
Physical Access Controls	<p>Physical access controls are provided by the Third Party Vendor</p>
Communications and Operations Management	<p>Operational Policy. Unisys maintains security documents describing its security measures and the relevant procedures and responsibilities of its personnel who have access to Customer Data.</p> <p>Data Recovery Procedures</p> <ul style="list-style-type: none"> - On an ongoing basis, but in no case less frequently than once a week (unless no Customer Data has been updated during that period), Unisys maintains multiple copies of Customer Data from which Customer Data can be recovered. - Unisys stores copies of Customer Data and data recovery procedures in a different place from where the primary computer equipment processing the Customer Data is located.

	<ul style="list-style-type: none"> - Unisys has specific procedures in place governing access to copies of Customer Data. - Unisys reviews data recovery procedures at least every six months. - Unisys logs data restoration efforts, including the person responsible, the description of the restored data and where applicable, the person responsible and which data (if any) had to be input manually in the data recovery process. <p>Malicious Software. Unisys has anti-malware controls to help avoid malicious software gaining unauthorized access to Customer Data, including malicious software originating from public networks.</p> <p>Data Beyond Boundaries</p> <ul style="list-style-type: none"> - Unisys encrypts, or enables Customer to encrypt, Customer Data that is transmitted over public networks. - Unisys restricts access to Customer Data in media leaving its facilities (e.g., through encryption). <p>Event Logging. Unisys logs, or enables Customer to log, access and use of information systems containing Customer Data, registering the access ID, time, authorization granted or denied, and relevant activity.</p>
Access Control	<p>Access Policy. Unisys maintains a record of security privileges of individuals having access to Customer Data.</p> <p>Access Authorization</p> <ul style="list-style-type: none"> - Unisys maintains and updates a record of personnel authorized to access Unisys systems that contain Customer Data. - Unisys deactivates authentication credentials that have not been used for a period of time not to exceed six months. - Unisys identifies those personnel who may grant, alter or cancel authorized access to data and resources. - Unisys ensures that where more than one individual has access to systems containing Customer Data, the individuals have separate identifiers/log-ins. <p>Least Privilege</p> <ul style="list-style-type: none"> - Technical support personnel are only permitted to have access to Customer Data when needed. - Unisys restricts access to Customer Data to only those individuals who require such access to perform their job function. <p>Integrity and Confidentiality</p> <ul style="list-style-type: none"> - Unisys instructs Unisys personnel to disable administrative sessions when leaving premises Unisys controls or when computers are otherwise left unattended. - Unisys stores passwords in a way that makes them unintelligible while they are in force. <p>Authentication</p> <ul style="list-style-type: none"> - Unisys uses industry standard practices to identify and authenticate users who attempt to access information systems. - Where authentication mechanisms are based on passwords, Unisys requires that the passwords are renewed regularly. - Where authentication mechanisms are based on passwords, Unisys requires the password to be at least eight characters long. - Unisys ensures that de-activated or expired identifiers are not granted to other individuals. - Unisys monitors repeated attempts to gain access to the information system using an invalid password. - Unisys maintains industry standard procedures to deactivate passwords that have been corrupted or inadvertently disclosed.

	<ul style="list-style-type: none"> - Unisys uses industry standard password protection practices, including practices designed to maintain the confidentiality and integrity of passwords when they are assigned and distributed, and during storage. <p>Session Timeout</p> <ul style="list-style-type: none"> - Unisys uses industry standard lengths of inactivity time that will trigger a user's session to terminate <p>Network Design. Unisys has controls to avoid individuals assuming access rights they have not been assigned to gain access to Customer Data they are not authorized to access.</p>
Information Security Incident Management	<p>Incident Response Process</p> <ul style="list-style-type: none"> - Unisys maintains a record of security breaches with a description of the breach, the time period, the consequences of the breach, the name of the reporter, and to whom the breach was reported, and the procedure for recovering data. - Unisys tracks, or enables Customer to track, disclosures of Customer Data, including what data has been disclosed, to whom, and at what time. <p>Service Monitoring. Unisys security personnel verify logs at least every six months to propose remediation efforts if necessary.</p>
Business Continuity Management	<ul style="list-style-type: none"> - Unisys maintains emergency and contingency plans for the facilities in which Unisys information systems that process Customer Data are located. - Unisys's redundant storage and its procedures for recovering data are designed to attempt to reconstruct Customer Data in its original or last-replicated state from before the time it was lost or destroyed.
Vulnerability Testing	<p>Vulnerability Scans</p> <ul style="list-style-type: none"> - Unisys will conduct external/internal scans of the AMANDA production environment at least once every 90-days and provide the summary results to Customer, upon request - Unisys will conduct Penetration Testing of the AMANDA production environment at least once every 90-days and provide the summary results to Customer, upon request <p>Auditing of Security Safeguards</p> <ul style="list-style-type: none"> - Unisys will a conduct Security Audit (firewall configurations, virtual machine hardening, ports disabling, access roles, etc.) of the AMANDA production environment at least once every 90-days and provide the summary results to Customer, upon request

3.3.6. Supplier Management

Supplier Management is intended to ensure that all contracts with suppliers support the needs of the business, and that all suppliers meet their contractual commitments.

Supplier management includes both Unisys managing its own suppliers and Unisys working with other customer's service suppliers. Specifically:

- Unisys will manage relationships with its suppliers to achieve agreed services. With the support of the Customer, Unisys will define its suppliers' Statements of Work and/or Operating Level Agreements to align to service level targets and other Service commitments.
- Unisys may work with other Customer service suppliers (e.g. partners or vendors) when requested by the Customer to aid in delivery of Services.

3.3.6.1. Use of subcontractors

Unisys may hire subcontractors to provide services on its behalf. Any such subcontractors will be permitted to obtain Customer Data only to deliver the services

Unisys has retained them to provide and will be prohibited from using Customer Data for any other purpose. Unisys remains responsible for its subcontractors' compliance with Unisys's obligations in the Customer Order and this SD. Customer has previously consented to Unisys's transfer of Customer Data to subcontractors as described in the Customer Order.

3.3.7. Design Coordination

Design Coordination is intended to coordinate all service design activities, processes and resources. Design coordination ensures the consistent and effective design of new or changed IT services, service management information systems, architectures, technology, processes, information and metrics.

Unless otherwise stated in a Customer Order, Design Coordination is the responsibility of the Customer.

3.3.8. Architecture Management

Architecture Management is intended to define a blueprint for the future development of the technological landscape, taking into account the service strategy and evolving technologies.

Unless otherwise stated in a Customer Order, Architecture Management is the responsibility of the Customer.

3.3.9. Risk Management

Risk Management is responsible to identify, assess and control risks. This includes analyzing the value of assets to the business, identifying threats to those assets, and evaluating how vulnerable each asset is to those threats.

Unless otherwise stated in a Customer Order, Risk Management is the responsibility of the Customer.

3.3.10. Compliance Management

Compliance Management is intended to ensure IT services, processes and systems comply with a client's policies, legal requirements, and agreed industry standards.

3.3.10.1. PCI-DSS Reports

Throughout the applicable Service period(s), Unisys will maintain, or will ensure that its Third Party Provider(s) maintain, any incremental cost at its own expense, a certification by a recognized outside security firm conforming with the Payment Card Industry Data Security Standard on ("PCI-DSS"), or its equivalent, and will provide or make available to Customer, at Customer's request (within a reasonable period of time thereafter), a copy of each of its reports, which will be updated at least annually. Provider's report maintained hereunder must, at a minimum, address the control environment and security practices relevant to the data center hosting Customer's instance of the Services (and any Customer Data). Customer's sole remedy and Unisys's sole liability for any failure to produce a PCI-DSS Report (or equivalent industry standard) at least annually will be Customer's right to terminate the Order immediately upon written notice to Unisys and receive a refund (without interest) from Unisys of the portion of Service fees paid in advance by Customer for the Services attributable to the period of time after the effective date of termination. At no time does Unisys store, process or transmit credit card holder data.

3.3.10.2. SAE16 / CSAE3416 Audit

Throughout the applicable Service period(s), Provider will maintain, or will ensure that its Third Party Provider(s) maintain, any incremental cost at its own expense, an audit certification by a recognized outside audit firm conforming with the Canadian

Standard on Assurance Engagements ("CSAE") 3416, or its equivalent, and will provide or make available to Customer, at Customer's request (within a reasonable period of time thereafter), a copy of each of its SOC 1 reports, which will be updated at least annually. Provider's audit certification and SOC 1 reports maintained hereunder must, at a minimum, address the control environment and security practices relevant to the Unisys Shared Infrastructure, or alternatively, as the case may be, to the data center hosting Customer's instance of the Services (and any Customer Data). Customer's sole remedy and Provider's sole liability for any failure to produce an CSAE 3416 (or equivalent industry standard) audit at least annually will be Customer's right to terminate the Order immediately upon written notice to Provider and receive a refund (without interest) from Provider of the portion of Service fees paid in advance by Customer for the Services attributable to the period of time after the effective date of termination.

3.4. Service Transition

Service Transition includes the management and coordination of the processes, systems and functions required for the packaging, building, testing and deployment of a release into production, and establish the service specified in the customer and stakeholder requirements.

The Client and Unisys agree to support one another in Service Transition, with the Client maintaining overall direction and authority. The associated Service Transition processes are described in the remainder of this section.

3.4.1. Change Management

The primary objective of Change Management is to enable changes with minimal or no disruption to service levels and availability.

For Platform Managed Services, Customers are responsible for Change Management of their AMANDA Business Applications while Unisys is responsible for the AMANDA Software Stack.

For Application Managed Services, Unisys is responsible for managing AMANDA Business Application and AMANDA Software Stack.

For both Platform and Application Managed Services, Unisys will engage Customer to participate in the processes for managing, directing and approving changes.

Routine service changes (i.e. Standard changes) that do not require Customer validation will be communicated by Unisys to the Customer via e-mail, as per the agreed Change Management Process.

Non-routine changes will be coordinated between the Customer and Unisys and adhere to agreed Change Management processes.

3.4.2. Service Asset and Configuration Management (SACM)

Service Asset and Configuration Management consists of activities to track and manage information on individual configuration items (e.g. infrastructure and software components) and their relationships, required to deliver the Service and maintain service levels.

For Platform Managed Services, Customers are responsible for SACM for their AMANDA Business Applications while Unisys is responsible for the AMANDA Software Stack.

For Application Managed Services, Unisys is responsible for SACM for the AMANDA Business Application and AMANDA Software Stack.

3.4.3. Release and Deployment Management

The primary goal of Release Management is to ensure that the integrity of the live environment is protected and that the correct components are released and to plan, schedule and control the movement of releases to test and live environments.

For Platform Managed Services, Customers are responsible for Release and Deployment Management for their AMANDA Business Applications while Unisys is responsible for the AMANDA Software Stack.

For Application Managed Services, Unisys is responsible for Release and Deployment Management for the AMANDA Business Application and AMANDA Software Stack.

Unisys will maintain a forward schedule of changes in consultation with the Customer.

3.4.4. Transition Planning and Support

To plan and coordinate the resources to deploy a Release within the predicted cost, time and quality estimates.

For Platform Managed Services, Customers are responsible for Transition Planning and Support for their AMANDA Business Applications while Unisys is responsible for the AMANDA Software Stack.

For Application Managed Services, Unisys is responsible for Transition Planning and Support for the AMANDA Business Application and AMANDA Software Stack.

3.4.5. Service Validation and Support

The primary purpose of Service Validation and Support is to ensure that deployed Releases and the resulting services meet customer expectations, and to verify that IT operations is able to support the new service.

For Platform Managed Services, Customers are responsible for Service Validation and Support for their AMANDA Business Applications while Unisys is responsible for the AMANDA Software Stack.

For Application Managed Services, Unisys is responsible for Service Validation and Support for the AMANDA Business Application and AMANDA Software Stack.

3.4.6. Change Evaluation

Change Evaluation involves assessing major Changes, like the introduction of a new service or a substantial change to an existing service, before those Changes are allowed to proceed to the next phase in their lifecycle.

To assess major Changes, like the introduction of a new service or a substantial change to an existing service, before those Changes are allowed to proceed to the next phase in their lifecycle.

For Platform Managed Services, Customers are responsible for Change Evaluation for their AMANDA Business Applications while Unisys is responsible for the AMANDA Software Stack.

For Application Managed Services, Unisys is responsible for Change Evaluation for the AMANDA Business Application and AMANDA Software Stack.

3.4.7. Knowledge Management

The primary purpose of Knowledge Management is to improve efficiency by reducing the need to rediscover knowledge and to gather, analyze, store and share knowledge and information within an organization.

For Platform Managed Services, Customers are responsible for Knowledge Management for their AMANDA Business Applications while Unisys is responsible for the AMANDA Software Stack.

For Application Managed Services, Unisys is responsible for Knowledge Management for the AMANDA Business Application and AMANDA Software Stack.

Unisys will maintain a Knowledge Management Database (KMDB) that shall contain a list of all Events, Incidents, Customer-specific documentations, architecture and installation documents.

3.4.8. Application Management

To make the AMANDA applications which provide the required functionality for end users. This process includes the development and maintenance of AMANDA applications and interfaces as well as the configuration of AMANDA and other related products from other software vendors.

Application Management is a function within Service Operations that addresses all phases of the application lifecycle, namely:

- • Requirements
- • Design
- • Build
- • Deploy
- • Operate
- • Optimize

For Platform Managed Services, Application Management is the primary function of Customer.

For Application Managed Services, the Unisys AMANDA team performs Application Management for the in-scope AMANDA applications.

AMANDA Application Management includes:

- Routine changes to AMANDA Application Configuration
- Routine changes to AMANDA Data Configurations
- Code Table Maintenance
- Minor data fixes, etc.
- Bug fixes
- Changes to Reports / Documents
- Minor software patches

If necessary and agreed by the Customer, Unisys will coordinate the application changes with the Customer and its end users to allow an opportunity to perform qualification and regression testing of the AMANDA application changes.

3.5. Service Operation

Service Operation processes, activities and functions provide and manage services to specified service levels, including managing technologies required to provide and support the services.

In the case of multiple service providers involved in Service Operations, the Client plays a key role and is responsible for leading and coordinating the activities provided by the multiple service providers.

3.5.1. Incident Management

The primary objective of Incident Management is to return the Service to users as quickly as possible and to manage the lifecycle of all Incidents.

Unisys will provide Incident Management Services for all active (not retired) Applications. Services include: (1) Incident Logging; (2) Classification and Initial Support; (3) Investigation and Diagnosis; (4) Incident Ownership; (5) Assignment and Resolution; (6) Closure.

Refer to Service Commitments and Service Availability for more information about service commitments for Incident Management. Unisys scope of responsibility is based on whether Customer has specified Platform or Application Managed Services in the Customer Order.

3.5.2. Problem Management

The primary objectives of Problem Management are to prevent Incidents from happening, to minimize the impact of incidents that cannot be prevented, and to manage the lifecycle of all Problems. Proactive Problem Management analyzes Incident Records, and uses data collected by other IT Service Management processes to identify trends or significant Problems.

For Incidents caused by Application/Platform faults, Unisys will track the Application/Platform fault through resolution including:

- Participate in Problem Management process.
- Identification and Recording - If accepted as a problem, record it as a problem record in the known error database.
- Assessment - provide recommendations for Applications such as functional changes and enhancements which could reduce occurrences of Incidents and Service Requests.

Unisys scope of responsibility is based on whether Customer has specified Platform or Application Managed Services. Problem Management activities will be performed by Unisys at Unisys's discretion to address recurring incidents or prevent disruptions to the Service commitments identified in Service Commitments and Service Availability.

3.5.3. Request Fulfillment

To fulfill Service Requests, which in most cases are minor (standard) Changes (e.g. requests to change a password) or requests for information.

Unisys will provide Request Fulfillment Services for supported Service Requests. Services include:

- Request Logging
- Classification and Initial Support
- Investigation
- Request Ownership
- Fulfillment
- Closure

Unless otherwise noted in the Customer Order, Services Request are billed as Time & Materials. Refer to Service Commitments and Service Availability for more information about service commitments for Request Fulfillment.

3.5.4. Access Management

To grant authorized users the right to use a service, while preventing access to non-authorized users. The Access Management processes essentially execute policies defined in Information Security Management.

The Customer Data Custodian is responsible for adjudicating all access request approvals, including user identification, roles definition, access authorization, application privileges, data ownership and data classification:

- Access Procedures - Maintain end user access rights for the designated Applications, as has been agreed to by the Parties.

- Access Control - Manage the access control for designated Applications, as has been agreed to by the Parties, with the objective that resources are only granted to those users who are entitled to them.
- Access Administration - Receive and facilitate end user access requests for designated Applications, as has been agreed to by the Parties.

As part of Incident Management and Request Fulfillment, Unisys will investigate and resolve an access Incident or investigate and fulfill access requests for AMANDA Administrator Access.

3.5.5. Event Management

Event Management is responsible for monitoring and responding to any detectable or discernible occurrences that have significance for the provisioning of the Services and AMANDA Environments.

Unisys will provide continuous monitoring of AMANDA Environment(s) and AMANDA Business Applications as required to achieve the commitments identified in Service Commitments and Service Availability. When appropriate, Unisys will notify the Customer of an Event and proceed to address the Event through the Incident Management process. Unisys scope of responsibility is based on whether Customer has specified Platform or Application Managed Services.

3.5.6. Technical Management

Technical Management provides technical expertise and support for the management of the IT infrastructure.

Unisys responsibilities include:

- Provisioning of application, network, systems, software, security and database expertise in the delivery of Services.
- Provisioning of administration and management of applications, network, systems, software, security and databases.
- Unisys is responsible to maintain the architecture diagrams(s) and other technical specifications prepared during the Architecture Design activities of the Transition Phase and to periodically audit them against the current deployed infrastructure.

3.5.7. IT Operations Management

IT Operations Management is responsible to monitor and control the IT services and their underlying infrastructure. IT Operations executes day-to-day routine tasks related to the operation of infrastructure component and applications. This includes job scheduling, backup and restore activities, output management, log management and other routine maintenance.

- Perform regular daily, weekly, monthly and other defined periodic production functions, including reports, data uploads and application availability checks (monitoring).
- Fulfill standard, application operations Service Requests.

3.5.7.1. Software Patching

Unisys will support the IT Operations Management by providing for software management, administration, maintenance and regular and emergency patching services to the AMANDA Software Stack, as patches are made available to Provider by the applicable developer. Unisys will coordinate any software patching with the Customer, as Customer and Provider determine, to permit the Customer an opportunity to perform qualification and regression testing of the AMANDA Software Stack, AMANDA Product Suite and their AMANDA Business Application. All system components and software will have the latest vendor-supplied security patches installed. All applicable critical security patches will be installed as soon as possible and within one month of release. All other relevant security patches will be applied as part of regularly scheduled patching cycles which will occur every 3-6 months.

3.5.7.2. Backup Services

The Base Service Package includes Backup Services. Unless otherwise identified in the Customer Order, backup services apply to both production and non-production virtual machines and database(s). The standard levels of service available for provisioning from Unisys are:

- Production Environments
 - Daily full database backups plus 15 minute incremental backups of the database transaction logs during the day. Backups are stored to a secondary Data Center on a 7 day rolling schedule
 - Daily and weekly and/or monthly full backups of all virtual machines to a secondary Data Center on a 7 day rolling schedule
- Non-Production Environments
 - Daily full database backups. Backups are stored on a 7 day rolling schedule
 - Daily full backups of all virtual machines on a 7 day rolling schedule

Unisys will perform routine monitoring of the backups and perform monthly verifications that the system notifications/logs confirmed the successful completion of the backups. Backups are typically performed during pre-scheduled maintenance windows and may be performed with no impact to working applications.

3.5.8. Applications Management

For Platform Managed Services, Customers are responsible for managing AMANDA Business Applications throughout their lifecycle. This includes routine and emergency application maintenance, bug fixes, etc.

For Application Managed Services, Unisys is responsible for managing AMANDA Business Applications throughout their lifecycle. This includes routine and emergency application maintenance, bug fixes, etc.

For both Platform and Application Managed Services, Unisys is responsible for managing the lifecycle of the AMANDA Software Stack. Unisys will perform (typically quarterly) patching to maintain all components of the AMANDA Software Stack to the current vendor-supported versions. This includes both routine periodic and emergency system patching.

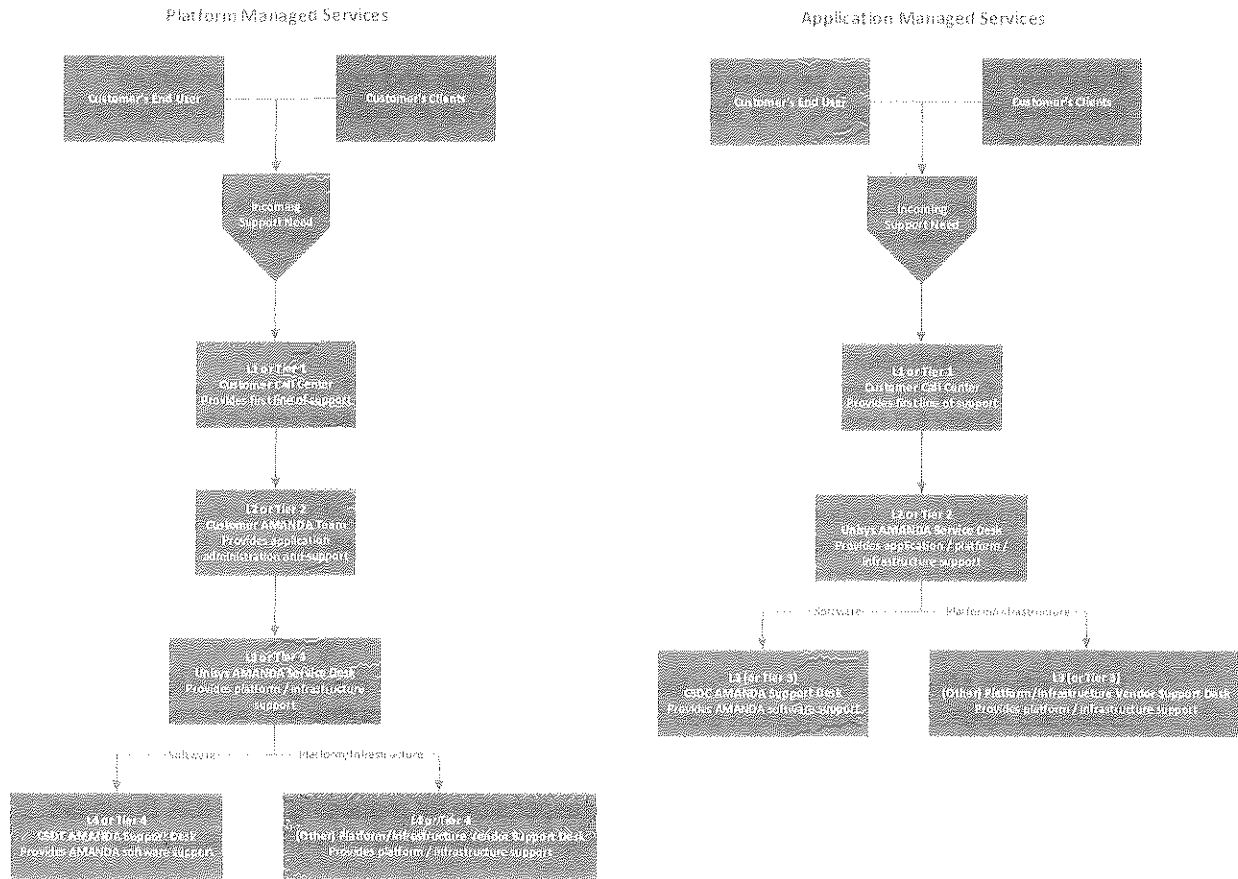
3.5.9. Service Desk

The Service Desk functions is primarily associated with the Service Operation lifecycle stage. Tasks include handling Incidents and Requests, and providing an interface for other information technology service management (ITSM) processes. Functions include:

- single point of contact (SPOC) and not necessarily the first point of contact (FPOC)
- single point of entry
- single point of exit

Unisys will operate a Service Desk accessible by telephone, voice mail, email and fax to accept calls transferred from the client Service Desk and to support direct contact from client customers, external partners, participating program representative and other departments and agencies (Authorized Service Desk Persons).

The Service Desk ensures that all Incidents and Service Requests are recorded, categorized, prioritized, assigned and tracked through resolution to closure.



3.6. Continual Service Improvement

3.6.1. Service Improvement

Continual process improvement is a shared responsibility fundamental to the success of the client portfolio of services. Together with client, Unisys will perform a Service Delivery Framework Review, that being, a review of service offerings and their delivery with a goal to maximize resource utilization, reduce duplication and cost of effort and to increase efficiencies in provisioning of Services.

3.6.2. Service Measurement

Unisys will provide their standard service measurement indicators/metrics as part of Service Level Management and Service Reporting. See the "Service Levels" section which describes several service metrics.

3.6.3. Service Reporting

Provider will provide monthly reports and/or access data via dashboards on availability, usage, invoicing, and status reporting of in-progress incidents and service requests. The Base Service Package may also include 'non-standard' reports for an extra charge as Customer and Provider may agree. Additionally, there may be a capability provided to allow Customers to extract data in a 'raw' format to use in their own processes.

4. INFRASTRUCTURE SERVICES

Each public cloud hosting service provider (called a "Third Party Provider" under the GTCs) determines the security, auditing, and notification standards, including any industry standards, applied to their catalogue services that Unisys provisions and resells under a Customer Order, which are services (such as infrastructure as a service, "IaaS", platform as a service, "PaaS" or software as a service "SaaS") that customers may purchase from Unisys, indirectly, or from and through the Third Party Provider's web portal, directly. Each catalogue service shall apply the then-current standards as determined by the Third Party Provider from time to time and as provided to its customers in general. Descriptions and explanations of these standards are typically included in the Third Party Provider's agreements, guides and policies, including any content at their website(s), which the Third Party Provider may freely change. Unisys shall not withhold any standards, notices, and reports provided by the Third Party Provider to Provider and its customers in general for the contracted service. Any additional or different security, auditing, or notification standards that a Customer wants to apply to a catalogue service, or any security, auditing or notification standards a Customer defines for a custom service, may be included in a statement of work for the service as Customer and Provider may agree.

4.1. Infrastructure - Responsibility Matrix

The following matrix identifies the components that are included in a Base Service Package, unless otherwise noted in a Customer Order. It also identifies whether Unisys or the Customer (is responsible for the provisioning of the infrastructure components. If the Customer has accepted responsibility for provisioning the infrastructure components in a Customer Order, then the Customer is the Third Party Provider and have assumed all responsibilities described herein this SD.

Unisys will supply one or more AMANDA environments which may contain the following features and options as noted on the Customer Order. All hosting infrastructure hardware and software components are fully supported by their respective manufacturers, at all times.

RACI – Responsible, Accountable, Consulted, Informed			Unisys	Customer	Agreement / Notes
Infra-structure	Compute	General Virtual Machines	X		<p>Unisys will setup, install, configure and set-to-work the Infrastructure during the Transition phase of the project.</p> <p>Unless otherwise identified in a Customer Order, Unisys is responsible for the procurement/acquisition of the infrastructure components and related software, services and support. If a Customer is provisioning any components of the Infrastructure, the Customer acknowledges that Customer has accepted, for those components, the responsibilities of the Third Party Provider as described in this SD.</p>
		IP Addresses	X		
	Data Storage	Disk Storage	X		
		File Storage	X		
		Backup Tools	X		
		Site Recovery Tools	X		
	Application Services	Scheduler			
		Automation			
		MFA			
		Key Vault			
	Network	VPN	X		
		Data Transfers			
		Traffic Manager			
		DNS			
		VNET Data Transfer			
	Misc	ExpressRoute			
		SSL Certificates	X		
		Azure Support	X		

4.2. AMANDA Environment(s)

Unisys shall provide an "AMANDA Environment" which consists of IT infrastructure such as compute, network and storage resources ordered from Unisys that reside in the Unisys' provider's Tier 3 data

centers. Compute, network and storage resources are combined and provided as a virtualized and logically segregated environment (each is an AMANDA Environment) to configure, manage and operate.

4.3. AMANDA Administrator Access

For orders containing Platform Managed Services, at the time of provisioning the ordered AMANDA Environment(s), Unisys will provide AMANDA Administrator accounts (usernames and default passwords) to individuals identified by the Customer which will enable access to the instances of AMANDA Software running in each AMANDA Environment. AMANDA Administrator accounts may be used to:

- Configure various aspects of an AMANDA Business Application.
- Create additional AMANDA Administrators, AMANDA end users, or other profiles.
- Configure access controls and permissions for these profiles to allow for the configuration or usage of the AMANDA Software and/or AMANDA Business Application.

4.4. Resources

4.4.1. Virtual Machines

Virtual servers (Virtual Machines or VMs) in pre-configured Resource sizes may be pre-selected and ordered. They are designed to provide various levels of capability to service different workload requirements. VM Resource configurations include predefined:

- number of Virtual Central Processing Units (vCPU) Cores;
- capacity of Random Access Memory (RAM) in Gigabytes; and,
- persistent storage in Gigabytes with either local data center redundancy or geographic redundancy across 2 data centers

4.4.2. IP Addresses

Unless Customer requests otherwise in a Customer Order, each Virtual Machine or VPN endpoint included in each AMANDA Environment will be connected to the Internet for the purpose of inbound and outbound Internet traffic

4.4.3. Data Storage

4.4.3.1. Disk Storage

Any Disk Storage acquired from Unisys will be attached to a VM in defined Gigabytes increments and presented to the VM as a Virtual Hard Drive. Unless specified in the Customer Order, all non-production environments will utilize redundant data storage (3 complete copies of all Customer Data in a single Data Center) and all production environments will utilize geo-redundant data storage (3 complete copies of all Customer Data in each of two Data Centers). A Customer Order may include additional redundant storage options.

4.4.3.2. File Storage

A Customer Order may include File Storage, to support applications that use the standard Server Message Block (SMB) Protocol (SMB 2.1 and SMB 3.0). This capability enables applications running in virtual machines or from on-premises Customers can mount a file share just as a desktop application mounts a typical SMB share. Any number of application components can then mount and access the File storage share simultaneously. File Storage is available in redundancy options similar to Disk Storage.

4.5. Network Services

4.5.1. Network Traffic

Internet connectivity usage is billable in accordance with the fees set out in the Customer Order. Customer is responsible for provisioning access to the Internet (via an Internet Service Provider "ISP") in order to access Unisys provided AMANDA Environments.

4.5.2. Virtual Network (VPN Gateway) Services

If specified in a Customer Order, the Base Service Package may include a Virtual Network (VNET) enabling the creation of a Virtual Private Network (VPN) within Unisys-provided AMANDA Environments and securely link these with Customer on-premises IT infrastructures.

4.5.3. Active Directory Services

The Base Service Package as identified in the Customer Order may include Active Directory Services that combine core directory services, user and group management, single-sign-on (SSO) and directory synchronization with Customer on premise SSO solutions.

4.5.4. Multi-Factor Authentication

The Base Service Package may include Multi-Factor Authentication services that help secure access to on-premises and cloud applications by providing an additional layer of authentication. It supports authentication through mobile app, phone call, or text message.

4.6. Software

4.6.1. AMANDA Software Stack Responsibility Matrix

The following matrix identifies the software components that are included in a Base Service Package, unless otherwise noted in a Customer Order. It also identifies whether Unisys or the Customer is responsible for the provisioning of the software components.

RACI – Responsible; Accountable; Consulted; Informed		Unisys	Customer	Agreement / Notes	
AMANDA Software Stack	Licenses	Operating Systems	X	Unisys will install, configure and set-to-work the software during the Transition phase of the project. Unless otherwise identified in a Customer Order, Unisys is responsible for the procurement/acquisition of all software licences and any necessary software maintenance from the respective software vendors.	
		Database	X		
		Web/Application Server	X		
		Life/Ray Portal	X		
		AMANDA Software			X
		Anti-virus, Anti-malware	X		

4.6.2. Operating Systems (Windows or Linux)

Unless otherwise specified in the Customer Order, the Base Service Package will include licences for the Standard edition of Windows Server or Linux as identified in the Customer Order.

4.6.3. Database (Oracle SQL Server)

Unless otherwise specified in the Customer Order, the Base Service Package will include licences for the Standard and/or Enterprise edition of the Oracle Database software or SQL Server Database software as identified in the Customer Order.

4.6.4. Web/Application Server (Apache Tomcat)

Unless otherwise specified in the Customer Order, the Base Service Package will include licences for the Apache Tomcat software.

4.6.5. LifeRay Portal

Unless otherwise specified in the Customer Order, the Base Service Package will include licences for the LifeRay Portal software.

4.6.6. AMANDA Software

Unless otherwise specified in the Customer Order, the Customer will procure the necessary licenses that allows Unisys to use the AMANDA software in the course of the Services and provide Unisys the license keys for all AMANDA related software and modules, subject to CSDC's agreement.

4.6.7. Anti-virus, Anti-malware

Unless otherwise specified in the Customer Order, the Base Service Package will include licences for anti-virus and anti-malware software.

5. Ad-Hoc Services

Ad hoc services may be provided by Unisys under a Customer Order and may consist of the following items, which are provided according to availability and charged on a time and materials basis at then-current applicable Unisys rates:

- AMANDA infrastructure services;
- Platform services and operations;
- AMANDA Software Upgrades;
- Support services; and,
- Other IT professional services.

6. SERVICE COMMITMENTS AND AVAILABILITY

6.1. Service Availability Hours

Unless otherwise specified in the Customer Order, all times identified below are based on **Eastern Time (EST)**.

The following table defines standard AMANDA Business Application availability.

Service	Summary	Sunday	Monday to Friday	Saturday
AMANDA Business Application (Production)	5 X 16 X 365	Not available	7am to 11pm EST	Not available
AMANDA Business Application (Non-production)	5 X 12	Not available	7am to 7pm EST	Not available

6.2. Service Restrictions

The following table defines when IT Services are scheduled to be unavailable for purposes of scheduled maintenance. Additional scheduled maintenance windows may be defined as required.

Scheduled Outage	Day(s)	Time
Weekly Maintenance Window	Sunday	4am to 8am EST
Daily Maintenance Window	Mon - Sat	3am to 3:30am EST
Emergency Maintenance Period	All	All

The weekly maintenance window is a scheduled service outage period during which system backups and other maintenance is performed. Major, non-emergency changes to online Services are completed during this maintenance window.

The daily maintenance window is a scheduled service outage period during which Services may be restarted for maintenance purposes such as to correct a processing error condition or to incorporate a minor change requiring a restart. Only Service changes that are low risk or urgent will be completed during the daily maintenance window.

The emergency maintenance period is an unscheduled service outage initiated by Unisys. Unisys reserves the right to perform emergency maintenance in order to prevent or mitigate circumstances that Unisys deems series. Examples may include investigation of possible security breaches, or other conditions. Unisys will inform the Customer as soon as reasonably possible about the outage, the anticipated length of the outage and the reasons why Unisys performed the maintenance activities.

6.3. Support Hours

The following table defines the periods for primary and secondary support hours.

Service	Summary	Sunday	Monday to Friday	Saturday
Primary Support Hours	5 X 12 X 365	Not available	7am to 7pm EST	Not available
Secondary Support Hours	7 X 16 X 365	7am to 11pm	7am to 11pm EST	7am to 11pm

Primary Support Hours address the key usage period for Services. L1 (Tier 1) support for Application Managed Services and L1/L2 (Tier 1 and 2) for Platform Managed Services are assumed available during these hours through Customer's Call Centre and Customer's AMANDA Support Team, respectively. The Unisys Service Desk will provide support for all Incident severity levels and Service Requests during this period.

Secondary Support Hours include times when the AMANDA Business Application is available to end users and is subject to automated monitoring, but is not supported by immediate access to support or by immediate response to service outages or other issues.

Support services during hours outside of the Primary and Secondary Support Hours are not guaranteed and are not subject to defined service levels. Instead, response may be provided on a "best efforts" basis. "Best efforts" means that the response is provided on a voluntary basis by the support team during this time. Provision of a "best effort" response service is not guaranteed.

6.4. Service Levels

Performance Standard	Measurement	Measurement Period	Target % Level	Service Credits
Application availability for Production environment(s)	Minimum of 99% during AMANDA Business Application availability period (excluding scheduled maintenance periods or Emergency Maintenance periods)	Monthly	>=99%	None
			<99%	Service credit against the Infrastructure provisioning fees based on the % of unavailability
Application availability for Non-Production environment(s)	Minimum of 95% for 5X10X365 (excluding approved scheduled maintenance periods and statutory holidays)	Monthly	>=95%	None
Service Desk Incident / Service Request Response	For Severity 1 Incidents, initiation of Incident Management Response within 1 hour 7X16X365 For Severity 2 Incidents, initiation of Incident Management Response within 4 hours 5X12 For Severity 3 Incidents, initiation of Incident Management Response within 1 business day 5X12 For Service Requests, initiation of Service Request Response within 1 business day 5X12	Annually	>=90%	None
			<90%	Service credit against the Service Desk fees based on the % of unavailability
Disaster Recovery Time Objective (RTO) for Production environment(s)	Maximum of 6 hours during 7X16X365 secondary support hours.	Monthly	>=80%	None

We will apply any Service Credits only against future payments otherwise due from Customer. Service Credits will not entitle Customer to any refund or other payment from Unisys.

6.5. Incident Priority Level Definitions

Level	Description
Priority 1 (Critical)	A high-priority service or application is not available to a functional group of users such as a department, agency, program or team.
Priority 2 (High)	A high-priority service or application is not available for one or more users while other users within the functional group are not affected.
Priority 3 (Medium)	A low-priority service or application is not available for one or more users or a high-priority service or application is only available through restrictions or work-arounds.
Priority 4 (Low)	The subject service or application is available, but assistance or guidance is required in order to enable effective access and use.
Priority 5 (Enhancement)	The subject service or application is available, but a suggestion has been made to improve the service or application or its effective access and use.
Priority 6 (Notification)	The subject service or application is available, but information has been provided pertaining to effective future access and use.

6.6. Service Request Priority Level Definitions

The following definitions apply to routine service requests (i.e. under 4 hours of total effort as estimated by Unisys, does not require engagement of the senior architecture team, etc.) Non-routine service requests will be negotiated on-demand through the Unisys Service Manager and will be subject to current staff availability.

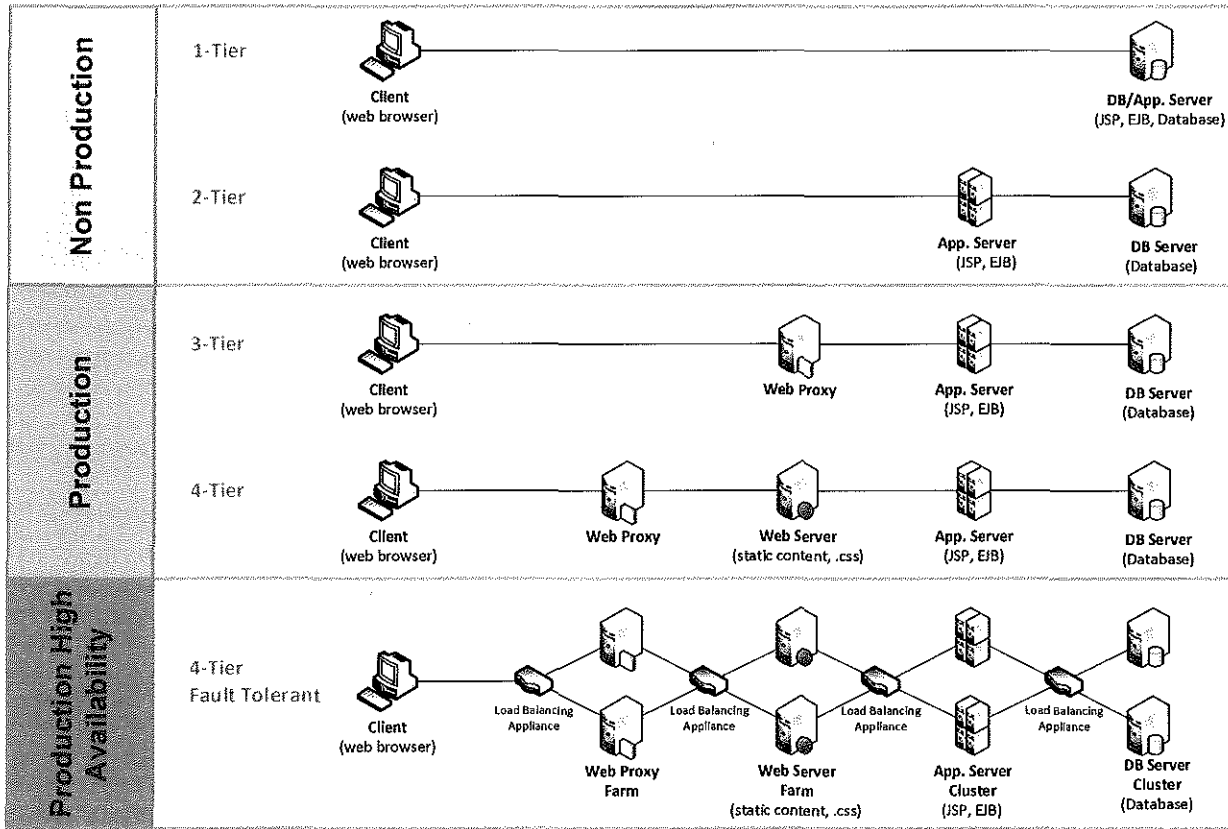
Level	Description
Priority 1 (Critical)	A high-priority request that is directly related to mitigating a situation where the application will not be available to a functional group of users such as a department, agency, program or team.
Priority 2 (High)	A high-priority request that is directly related to mitigating a situation where the application will not be available to one or more users while other users within the functional group are not affected.
Priority 3 (Medium)	A low-priority request that is directly related to mitigating a situation where the application is not available for one or more users or is only available through restrictions or work-arounds.
Priority 4 (Low)	A low-priority request that is directly related to mitigating a situation where the application is available, but assistance or guidance is required in order to enable effective access and use.
Priority 5 (Enhancement)	A suggestion has been made to improve the service or application or its effective access and use.
Priority 6 (Notification)	Information requested pertaining to effective future access and use.

7. AMANDA Environment Configurations*

*Configurations are subject to change at any time, with or without notice. Any changes shall apply prospectively to the applicable content under existing orders only with at least 30 day's advance notice.

The following AMANDA environment configurations are available to Customers:

7.1. AMANDA Environment Configurations



7.2. Virtual Server Image Specifications

Two virtual server image stacks are available for each environment. These consist of:

Virtual Machine	Software Stack	Oracle/Linux Stack	SQL Server/Windows Stack**
Database Server (Schema)	Operating System	Redhat Linux ES (64-bit)	Windows Server Std Edition (64-bit)
	Database AMANDA	Oracle AMANDA Schema	MS SQL Server AMANDA Schema
Application or Web Server	Operating System	Redhat Linux ES (64-bit)	Windows Server Std Edition (64-bit)
	Application Server Portal Server	Apache Tomcat Liferay Portal Community Edition	Apache Tomcat Liferay Portal Community Edition
	Portlet Server	AMANDA Portal (Alphinat SmartGuide)	AMANDA Portal (Alphinat SmartGuide)
Web Proxy Server	Operating System	Redhat Linux ES (64-bit)	Windows Server Std Edition (64-bit)
	Web/Proxy Server	Apache	Windows IIS

**only available upon customer special request

7.3. Virtual Server Specifications

AMANDA Specification	
Public Portal Application Server	
Processor Type	Intel Xeon CPU, 2 cores
Number of Processors	1
Memory (Gb)	16GB
Storage (Gb)	40GB
Web Server	
Processor Type	Intel Xeon CPU, 2 cores
Number of Processors	1
Memory (Gb)	16Gb
Storage (Gb)	40Gb
Back-Office Application Server	
Processor Type	Intel Xeon CPU, 2 cores
Number of Processors	1
Memory (Gb)	16Gb
Storage (Gb)	40Gb
Database Server	
Processor Type	Intel Xeon CPU, 8 cores
Number of Processors	4
Memory (Gb)	64Gb
Storage (Gb)	100Gb (RAID-10 or SAN)

**Appendix A.10 – Acceptance / Final System Acceptance Certificate
Example**

Check one:

- Project/Deliverables Milestone Acceptance Form
Milestone # _____
- Phase System Acceptance
Phase # _____
- Final System Acceptance

Customer Name: City of San José

Project Name: Integrated Permitting System

This System Acceptance Certificate memorializes the occurrences of System Acceptance. Contractor and City acknowledge that:

1. All System or product documentation promised under the Agreement has been provided.
2. The System is accepted, except for any items listed on the attached punch list, if applicable. The Parties will promptly complete their respective punch list (as attached) responsibilities according to a mutually-agreed schedule.
3. By acknowledging the Final Acceptance of this project the City agrees to pay any remaining invoices to the Contractor according to the **Integrated Permitting System Agreement**.
4. Upon signed acceptance by the City, access to the Customer Support Center providing Call-in Support Service will be made available during the hours designated in the Software License Subscription (Exhibit D-1) purchased with the Agreement for an **Integrated Permitting System**.

City of San José (“Customer”)

CSDC Systems, Inc. (“Contractor”)

By: _____
Name:
Title:
Date:

By: _____
Name:
Title:
Date:

Appendix A.11 – Price List

Description of Cost Elements	Initial Term						
	* Implementation (23 months)	Year 3	Year 4	Year 5	Year 6	Year 7	TOTAL
1. AMANDA Software:	\$736,776						\$736,776
2. Hosting Services** Early hosting for Portal, ProjectDox, Mobile, GeoCortex and YellowFin	\$78,000 \$321,725	\$449,100	\$449,100	\$449,100	\$449,100	\$449,100	\$2,645,225
3. Third-Party Software Licenses (if any)	\$365,130						\$365,130
4. Hardware (if any)	N/A						\$0
5. Professional Services: - Software Configuration - Data Conversion - Migration - Training - Testing & Final Acceptance - Implementation & Go- Live	\$2,706,000						\$2,706,000
6. Miscellaneous Expenses (if any)	Incl						\$0
7. Technical Support & Maintenance (include Software License Update/Support)	Incl	\$263,060	\$270,951	\$279,080	\$287,452	\$296,076	\$1,396,619
8. Termination/Expiration Services – Hosted Model only (if applicable)	N/A						\$0
SYSTEM TOTAL	\$4,207,631	\$712,160	\$720,051	\$728,180	\$736,552	\$745,176	\$7,849,750

*23 months achieved by parallelizing many tasks (i.e., 42 months' worth of work into 23 months), on-going services to start after initial implementation

** Hosting Services Pricing is based on agreement to following assumptions:

1. For On-line Portal (phase 1), ProjectDox (phase 1), GeoCortex (phase 2) , Mobile (phase 2) and YellowFin (phase 3)
 - a. CSDC will host Development & Test servers on cloud at project start-up for that phase
 - b. CSDC will host Production server on cloud as per the proposed phased go-live date
2. For AMANDA Planning rework (phase 1 a), AMANDA upgrade (phase 3), and AMANDA Workflow & Redesign (Phase 4)
 - a. City will host Development & Test servers on premise at project start-up for that phase and continue to host it for the remaining duration of the implementation period
 - b. City will host Production server on premise for AMANDA 7 upgrade and continue to host it for the remaining duration of the implementation period
3. In the event the implementation takes longer than 23 months, CSDC will continue to host On-line Portal, ProjectDox, GeoCortex, Mobile and YellowFin on cloud at no additional cost to the City, provided that the City has not requested change order(s) that would significantly impact the overall go-live schedule. Likewise City will continue to host AMANDA 7 on-premise for this additional duration.
4. After the completion of implementation phase (final go-live for all modules and tasks), the hosting of Development, Test & Production servers for all the software listed above are the responsibility of CSDC and the cost of such is included in the proposed "Hosting Services" cost

EXHIBIT B – COMPENSATION / PAYMENT SCHEDULE

1. Compensation

- 1.1. The maximum amount payable for all products and services provided under this Agreement shall not exceed Seven Million, Eight Hundred Forty Nine Thousand, Seven Hundred Fifty dollars (\$7,849,750) during the initial term. Any additional services requested by the City that would exceed the preceding maximum amount will be addressed in accordance with the Change Order Procedures. No additional services will be performed unless both parties execute a Change Order outlining the services requested and the compensation agreed for such services.
- 1.2. Progress payments shall be made to Contractor by City based on net thirty (30) days payment terms, following receipt of invoices that may be issued after acceptance of designated milestones as shown below in Table B1-Payment Schedule. All payments are based upon City's acceptance of Contractor's performance as evidenced by successful completion of all of the deliverables as set forth for each milestone. City shall have no obligation to pay unless Contractor has successfully completed and City has approved the Milestone for which payment is due.
- 1.3. Payment for any part or parts of the System provided hereunder, or inspection or testing thereof by City, shall not constitute acceptance or relieve Contractor of its obligations under this Agreement. City may inspect the components of the System when delivered and reject upon notification to Contractor any and all the System, which does not conform to the Specifications or other requirements of this Agreement. Components of the System, which are rejected shall be promptly corrected, repaired or replaced by Contractor. If City receives components of the System with defects or nonconformities not reasonably apparent on inspection, then City reserves the right to require prompt correction, repair or replacement by Contractor in accordance with Contractor's warranty obligations.

2. Project Performance & Payment Schedule

- 2.1. Work shall commence immediately upon execution of the Agreement for Integrated Permitting System.
- 2.2. Invoicing procedure: Contractor shall invoice the City at the completion of each milestone and annually according to Appendix A.11 Price List.
- 2.3. The City agrees to compensate the Contractor in accordance with the terms and conditions of this Agreement. Contractor shall invoice the City according to the Milestones in Table B1 listed below.

Table B1: Schedule of Performance and Payment

#	Project Milestones / Deliverables	Deliverables	Estimated Date (M/D/Y)	Amount	Payment (less Holdback)	Wt %
Phase 1 – Public Portal & E-Plans.						
2.	Software Delivered & Installed (Public Portal)	Delivered and Installed Public Portal software	9/23/2016	\$327,150	\$327,150	
8	Software Delivered (ProjectDox)	Delivered Software	9/20/2016	\$361,800	\$361,800	
Phase 1 “Software” Subtotal				\$688,950	\$688,950	
1.	Finalize/Deliver Project Schedule (complete System in ~23 months)	Jointly Approved Project Schedule	9/19/2016	\$54,900	\$36,382	
3.	Approval of Prototype Portal Design Document	Approved Prototype Portal Design Document	11/22/2016	\$88,200	\$58,449	
4	Acceptance of Finalized Portal Solution Design Document	Approved Portal Design Document	1/05/2017	\$66,600	\$44,135	
5.	Completion of Portal Configuration	Completed Portal Configuration	2/13//2017	\$72,000	\$47,714	
6	Completion of Portal Training & UAT	Completed Portal Training & UAT	4/11/2017	\$32,400	\$21,471	
7	Acceptance of Portal Go-Live	Live Portal	5/03/2017	\$10,800	\$7,157	
9	ProjectDox Installation	Installed Software	10/12/2016	\$19,800	\$13,121	
10	Acceptance of AMANDA to ProjectDox Analysis Documentation	Accepted Documentation	11/02/2016	\$54,000	\$35,785	
11	Acceptance ProjectDox Application & Workflow Documentation	Accepted Documentation	11/30/2016	\$54,000	\$35,785	
12	Acceptance of ProjectDox/AMANDA Interface	Accepted Interface	12/21/2016	\$36,000	\$23,857	
13	Acceptance of ProjectDox Configuration	Accepted Configuration	2/01/2017	\$54,000	\$35,785	
14	Completion of ProjectDox UAT	Completion of UAT	2/27//2017	\$16,200	\$10,736	
15	Completion of ProjectDox Training	Completion of Training	3/30/2017	\$41,400	\$27,435	
16	Completion of ProjectDox Go-Live	Go-Live	4/14/2017	\$19,800	\$13,122	
Phase 1 “Services” Subtotal				\$620,100	\$410,934	15%
Phase 2 – GIS and AMANDA Mobile						
17.	GIS (GeoCortex) Software Delivered	Delivered GeoCortex Software	9/19/2016	\$32,700	\$32,700	
Phase 2 “Software” Subtotal				\$32,700	\$32,700	
18.	GeoCortex Analysis Documentation	Accepted GeoCortex Analysis Documentation	10/18/2016	\$37,800	\$25,479	
19.	GeoCortex Configuration	Completed GeoCortex Configuration	11/30/2016	\$55,800	\$37,611	
20.	Completion of GeoCortex Training & UAT	Completed Training & UAT	1/03/2017	\$61,200	\$41,251	
21.	Completion of GeoCortex Go-Live	GeoCortex Go-Live	1/17/2017	\$19,800	\$13,346	
22.	Mobile Software Installation & Analysis Complete	Installed Mobile Software and Analysis Complete	12/01/2016	\$177,840	\$119,871	
23.	Mobile Configuration Complete	Completed Mobile Installation	1/06/2017	\$28,800	\$19,412	
24.	Mobile UAT & Training Complete	Completed Mobile Training & UAT	3/15/2017	\$19,800	\$13,346	
25.	Completion of Mobile Go-Live	Mobile Go-Live	4/26/2017	\$5,400	\$3,640	
Phase 2 “Services” Subtotal				\$406,440	\$273,956	10%

*Phase 3 – AMANDA 7 Upgrade & Module Implementations (*see footnote below)		Deliverables	Date (M/D/Y)	Amount	Payment (less Holdback)	%
26.	Completion of AMANDA 7 Installation (Dev) & Delivery of new Modules & Access Licenses	AMANDA 7 Installed in Dev with new modules & access licenses	3/28/2017	\$346,694	\$346,694	
Phase 3 "Software" Subtotal				\$346,694	\$346,694	
27.	Acceptance of AMANDA 7 Fit/Gap Documentation	Accepted AMANDA 7 Fit/Gap Documentation	5/10/2017	\$79,986	\$52,413	
28.	Acceptance of AMANDA 7 Interface Analysis Documentation	Accepted AMANDA 7 Interface Analysis Documentation	6/16/2017	\$86,385	\$56,607	
29.	AMANDA 7 Configuration	Accepted AMANDA 7 Configuration	6/30/2017	\$39,993	\$26,207	
30.	Code Enforcement & Public Works Pre-Analysis Complete	Completed CE Pre-Analysis	4/13/2017	\$11,198	\$7,338	
31.	Code Enforcement & Public Works Scope Verification Complete	Completed CE Scope Verification Document	5/19/2017	\$67,588	\$44,289	
32.	CE/PW Product Orientation Complete	Completed CE Orientation	6/19/2017	\$33,594	\$22,014	
33.	Code Enforcement & Public Works Folder Analysis Complete	Completed CE Folder Analysis	7/26/2017	\$51,191	\$33,545	
34.	Code Enforcement & Public Works Reports Analysis Complete	Completed CE Reports Analysis	8/17/2017	\$23,996	\$15,724	
35.	Code Enforcement & Public Works Merge Document Analysis Complete	Completed CE Merge Document Analysis	8/28/2017	\$11,198	\$7,338	
36.	Code Enforcement & Public Works Batches Analysis Complete	Completed CE Batch Analysis	9/07/2017	\$11,198	\$7,338	
37.	Code Enforcement Interfaces/Integrations, Portal & Mobile Analysis Complete	Completed CE Interface, Portal & Mobile Analysis	10/19/2017	\$60,789	\$39,834	
38.	CE & PW Data Conversion Analysis Complete	Completed CE Data Conversion Analysis	9/04/2017	\$70,388	\$46,124	
39.	Code Enforcement & Public Works Folder Configuration Complete	Completed CE Folder Config	8/31/2017	\$99,182	\$64,992	
40.	Code Enforcement & Public Works Report Configuration Complete	Completed CE Report Config	9/22/2017	\$57,590	\$37,738	
41.	Code Enforcement & Public Works Merge Document Configuration Complete	Completed CE Merge Document Config	9/26/2017	\$49,591	\$32,496	
42.	Code Enforcement & Public Works Batch Configuration Complete	Completed CE Batch Config	10/09/2017	\$41,593	\$27,255	
43.	Code Enforcement & Public Works Interface/Integration Configuration Complete	Completed CE Interface Config	12/27/2017	\$96,827	\$63,449	
44.	Code Enforcement Portal Configuration Complete	Completed CE Portal Config	11/28/2017	\$44,792	\$29,351	
45.	Code Enforcement Mobile Configuration Complete	Completed CE Mobile Config	11/17/2017	\$36,794	\$24,110	
46.	Code Enforcement & Public Works Data Conversion Configuration Complete	Completed CE Data Conversion	12/12/2017	\$70,388	\$46,124	
47.	Code Enforcement/Public Works Train-the-Trainer and Administration training Complete	Completed CE Training	1/02/2018	\$70,787	\$46,385	
48.	AMANDA 7 Train-the-Trainer and Administration training Complete	Completed A7 Training	1/24/2018	\$25,596	\$16,773	
49.	Completion of CE/PW and A7 UAT	Completed CE & A7 UAT	3/15/2018	\$31,994	\$20,965	
50.	CE & PW Data Conversion UAT Complete	Completed CE Conversion UAT	5/10/2018	\$31,994	\$20,965	
51.	CE/PW and A7 Go Live Complete	CE & A7 Go-Live	7/04/2018	\$9,598	\$6,289	
52.	CE/PW and A7 Post Go Live & Support	CE & A7 Post Go-Live Complete	7/18/2018	\$39,992	\$26,206	
Phase 3 "Services" Subtotal				\$1,254,222	\$821,869	30%

Phase 4 – AMANDA and Workflow Redesign		Deliverables	Date (M/D/Y)	Amount	Payment (less Holdback)	%
53.	AMANDA Redesign Pre-Analysis Complete	AMANDA Redesign Pre-Analysis Complete	10/02/2017	\$25,200	\$38,128	
54.	AMANDA Redesign Scope Verification Complete	Completed AMANDA Redesign Scope Verification Document	10/30/2017	\$27,000	\$40,850	
55.	AMANDA Redesign Folder Analysis Complete	Completed AMANDA Redesign Fit/Gap	12/11/2017	\$32,400	\$49,022	
56.	Analysis AMANDA Redesign Reports, Output Documents, Interfaces, Batches and Data Conversion Complete	Completed AMANDA Redesign Reports, Output Documents, Interfaces, Batches and Data Conversion Analysis	1/15/2018	\$72,000	\$108,937	
57.	Configuration AMANDA Redesign Reports, Output Documents, Interfaces, Batches and Data Conversion Complete	Completion of AMANDA Redesign Reports, Output Documents, Interfaces, Batches and Data Conversion	2/14/2018	\$70,200	\$106,214	
58.	AMANDA Redesign Train-the-Trainer and Administration training Complete	Completed AMANDA Redesign Train-the-Trainer and Administration training	3/05/2018	\$23,400	\$35,405	
59.	AMANDA Redesign UAT Complete	Completed AMANDA Redesign UAT	5/15/2018	\$18,000	\$38,990	
60.	AMANDA Redesign Post Go Live & Support	AMANDA Redesign Go-Live	6/28/2018	\$3,400	\$28,190	
Phase 4 "Services" Subtotal				\$271,600	\$445,736	15%

Phase 1A – AMANDA Planning Rework		Deliverables	Date (M/D/Y)	Amount	Payment (less Holdback)	%
61.	AMANDA Planning Prototype Design Document Approved	AMANDA Planning Prototype Design Document	1/25/2017	\$19,800	\$14,488	
62.	AMANDA Planning Folder Analysis Complete	Completed AMANDA Planning Redesign Fit/Gap	6/28/2017	\$39,600	\$28,976	
63.	AMANDA Planning Reports Analysis Complete	Completed AMANDA Planning Reports Analysis	9/27/2017	\$9,000	\$6,585	
64.	AMANDA Planning Merge Document Analysis Complete	Completed AMANDA Planning Merge Document Analysis	12/27/2017	\$9,000	\$6,585	
65.	AMANDA Planning Configuration Complete	Completed AMANDA Planning Configuration	1/04/2018	\$73,800	\$54,001	
66.	AMANDA Planning UAT Complete	Completed AMANDA Planning UAT	2/23/2018	\$18,000	\$13,171	
67.	AMANDA Planning Post Go Live & Support	AMANDA Planning Go-Live	4/10/2018	\$18,000	\$13,171	
Phase 1A "Services" Subtotal				\$187,200	\$136,977	5%

Post Go-Live / Final System Acceptance				
Final System Acceptance: The Signed Certificate triggers payment of holdback (25% of Services)				\$650,090 25%
Subtotal (all phases less 25% holdback)				\$2,089,472
Hosting Services (consumption based, allocate on quarterly basis as used)				\$78,000
Early hosting for Portal, ProjectDox, Mobile, GeoCortex, and YellowFin				\$321,725
Maximum Compensation – Implementation Total (23 months)				\$4,207,631 100%

* Phase 3 includes Folders for the City's business units: 1) Code Enforcement, 2) Planning, 3) Building, 4) Public Works, and 5) Fire. Each module implementation includes Scope Verification, folder analysis, Reports, Merge Docs, Batches, interfaces/integrations, portal, mobile analysis, data conversion, folder config, report config, merge doc config, batch config, interface/integration config, portal config, mobile config, data conversion config:

Table B2: Technical Support & Maintenance

On-Going Hosting & Software Subscription/Maintenance (after initial 23 month implementation / Go-Live)	Fixed Pricing	Estimated Dates (M/D/Y)	Annual Payment
Year 1 – Hosting & Software Subscription/Maintenance			
- Hosting	\$0	2/01/19 – 1/31/20	Included above
- Software Subscription/Maintenance (1 yr warranty)	\$0		
Year 2 – Hosting & Software Subscription/Maintenance			
- Hosting	\$449,100	2/01/20 – 1/31/21	\$712,160
- Software Subscription/Maintenance	\$263,060		
Year 3 – Hosting & Software Subscription/Maintenance			
- Hosting	\$449,100	2/01/21 – 1/31/22	\$720,051
- Software Subscription/Maintenance	\$270,951		
Year 4 – Hosting & Software Subscription/Maintenance			
- Hosting	\$449,100	2/01/22 – 1/31/23	\$728,180
- Software Subscription/Maintenance	\$279,080		
Year 5 – Hosting & Software Subscription/Maintenance			
- Hosting	\$449,100	2/01/23 – 1/31/24	\$736,552
- Software Subscription/Maintenance	\$287,452		
Year 6 – Hosting & Software Subscription/Maintenance			
- Hosting	\$449,100	2/01/24 – 1/31/25	\$745,176
- Software Subscription/Maintenance	\$296,076		
Total Hosting & Subscription (years 2-6)			\$3,642,119
GRAND TOTAL (INITIAL 7-YEAR TERM)			\$7,849,750

All amounts stated above are in United States Currency.

3. Renewal Period Compensation

- 3.1. Pursuant to Section 2.2 of the Agreement, the City reserves the right to extend the term of this Agreement for ten (10) additional one-year terms (“Option Periods”) for ongoing hosting and software subscription/maintenance services,
- 3.2. After the initial seven-year term, ongoing hosting and software subscription/maintenance services cost is estimated at \$793,404 per year with any future hosting and maintenance renewal cost adjustments capped at 3 percent annually pursuant to the CPI, if applicable. The Director of Finance is authorized to exercise options on behalf of the City.

4. Supplemental Services

“Supplemental Services” are ad hoc services related to those set forth in this Agreement, but not specifically identified herein. CSDC shall provide Supplemental Services on a level-of-effort basis as authorized in advance, in writing, by the Director of Finance pursuant to Section 7 Change Order Procedure and Authorization.

Job Title	Unit of Measure	Hourly Rate
Project Manager	Per Hour	\$250
Senior Business Analyst	Per Hour	\$220
Configuration Specialist	Per Hour	\$180
Reports Specialist	Per Hour	\$180
Project Coordinator	Per Hour	\$220
Enterprise Architect	Per Hour	\$250
Solutions Architect	Per Hour	\$220
Senior Configuration Specialist	Per Hour	\$200
Senior Reports Specialist	Per Hour	\$200
Senior Database Administrator	Per Hour	\$220
Senior Interface Specialist	Per Hour	\$200
Interface Specialist	Per Hour	\$180

EXHIBIT C – INSURANCE REQUIREMENTS

CONTRACTOR, at CONTRACTOR'S sole cost and expense, shall procure and maintain for the duration of this AGREEMENT, insurance against claims for injuries to persons or damages to property which may arise from, or in connection with, the performance of the services hereunder by the CONTRACTOR, its agents, representatives, employees or subcontractors or suppliers. The cost of such insurance shall be included in the CONTRACTOR'S bid.

1. Minimum Scope and Limit of Insurance

There shall be no endorsements reducing the scope of coverage required below unless approved by the City's Risk Manager.

Type of Insurance	Minimum Limit
1. Commercial General Liability The coverage provided by Insurance Services Office "occurrence" form CG 0001, including coverages for contractual liability, personal injury, broadform property damage, independent contractors, products and completed operations.	\$1,000,000 per occurrence for bodily injury, personal injury and property damage or \$2,000,000 annual aggregate.
2. Automobile Liability The coverage provided by Insurance Services Office form number CA 0001. Coverage shall be included for all owned, non-owned and hired automobiles.	\$1,000,000 combined single limit per accident for bodily injury and property damage.
3. Workers' Compensation and Employer Liability As required by the Labor Code of the State of California.	\$1,000,000 combined single limit per accident for bodily injury and property damage.
4. Professional Errors and Omissions Including coverages for negligent acts, errors or omissions arising from professional services provided under this contract, with any deductible not to exceed \$25,000 each claim	Not less than \$1,000,000 each claim and annual aggregate

2. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to, and approved by, the City's Risk Manager. At the option of the City, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the City, its officials, employees, agents and contractors; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses in an amount specified by the City's Risk Manager.

3. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

3.1. General Liability and Automobile Liability Coverages

- a) The City, its officials, employees, and agents are to be covered as additional insureds as respects: liability arising out of activities performed by, or on behalf of, the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the City, its officials, employees, and agents.

- b) The Contractor's insurance coverage shall be primary insurance as respects the City, its officials, employees, and agents. Any insurance or self-insurance maintained by the City, its officials, employees, and agents shall be excess of the contractor's insurance and shall not contribute with it.
- c) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the City, its officials, employees, or agents.
- d) Coverage shall state that the Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- e) Coverage shall contain a waiver of subrogation in favor of the City, its officials, employees, and agents.

3.2. Workers' Compensation and Employers Liability

Coverage shall be endorsed to state carrier waives its rights of subrogation against the City, its officials, and agents.

3.3. All coverages

Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days' prior written notice has been given to the City; except that ten (10) days' prior written notice shall apply in the event of cancellation for non-payment of premium.

4. Acceptability of Insurance

Insurance is to be placed with insurers acceptable to the City's Risk Manager.

5. Verification of Coverage

- 5.1. Contractor shall furnish the City with certificates of insurance and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf.
- 5.2. Copies of all the required ENDORSEMENTS shall be attached to the CERTIFICATE OF INSURANCE which shall be provided by the Contractor's insurance company as evidence of the stipulated coverages.
- 5.3. Proof of insurance shall be either emailed in pdf format to: Riskmgmt@sanjoseca.gov, or mailed to the following postal address (or any subsequent email or postal address as may be directed in writing by the Risk Manager):

City of San Jose – Finance Department
Risk & Insurance
200 East Santa Clara St., 14th Floor
San Jose, CA 95113-1905

6. Subcontractors

Contractors shall include all subcontractors as insureds under its policies or shall obtain separate certificates and endorsements for each subcontractor

EXHIBIT D1 – SOFTWARE LICENSE AGREEMENT

This Corporate Software License Agreement is entered into as of the City's execution date by and between City of San Jose, a California municipal corporation, and CSDC Systems Inc..

CSDC Systems Inc.

1705 Tech Avenue, Unit 1
Mississauga ON L4W 0A2
(hereafter referred to as "Licensor" or "CSDC")

City of San Jose

and 200 E. Santa Clara St.
San Jose, CA 95113
(hereafter referred to as "Licensee" or "Customer")

For the Software as identified in Appendix D1.A – Licensed Software attached hereto and incorporated by reference as written word for word. With the installation and or use of the Software as identified in Appendix D1.A – Licensed Software of this Agreement the Licensee accepts all the Terms and Conditions of this Agreement.

1. TERMS AND CONDITIONS

Licensor and the Licensee hereby agree that the following terms and conditions will apply to each license granted under this Agreement.

2. DEFINITIONS

- 2.1. "Agreement". Means this License Agreement and its appendices and any amendments thereto agreed upon by the Parties.
- 2.2. "Commencement Date". Shall mean the date on which the Licensee begins using all or part of the functions of the Licensed Software for Production purposes or 12 months after Installation date, whichever comes first. Commencement Date for additional software purchases not listed in Appendix D1.A shall mean thirty (30) days after receipt of the software by Licensee from Licensor.
- 2.3. "Effective Date". Shall mean seven (7) calendar days from the date the initially licensed software has been shipped by Licensor to the Licensee either by courier or electronic transfer or seven (7) calendar days from the date any subsequently licensed software has been shipped by Licensor to the Licensee either by courier or electronic transfer.
- 2.4. "Upgrade(s)". Shall mean improvements made by Licensor to the Licensed Software which relates to operating performance and does not change the basic function of the Licensed Software.
- 2.5. "Enhancement(s)". Shall mean Modifications made by Licensor to the Licensed Software which relate to operating performance but also change the basic function(s) of the Licensed Software.
- 2.6. "Modification(s)". Shall mean any programmatic or database schema changes made to the Licensed Software.
- 2.7. "Licensed Software". Shall mean information which directs a data processing system and associated equipment to perform a function or functions and which may be loaded into or

removed from such data processing system software owned or distributed by Licensor for which the Licensee is granted a license pursuant to this Agreement.

2.7.1. Licensed Software shall also, for purposes of this document, mean:

- A database schema and triggers resident on a server computer,
- Application Server Software
- The media containing the Licensed Software program(s) which is in machine readable form and which will operate on such data processing systems and includes all necessary manuals and documentation related to the Licensed Software as specified in Appendix D1.A of this License.

2.7.2. Licensed Software does not include site specific setup / configuration such as:

- business rules;
- converted data;
- output forms and reports;
- valid and default, tables and, lookup tables;
- merge documents and citizen facing web pages; and
- configuration of interfaces using Licensor's APIs or custom developed interfaces that are part of the Licensee's setup.

2.8. "Supported License". Shall mean a license for which the Licensee has an executed Licensor Maintenance and Support Agreement in place for the relevant time period and for which no payments are due and owing at the time.

2.9. "Software Bug(s) or Defects". Shall mean errors reported by the Licensee regarding the Licensed Software (as an error code) during its operation or the inability of the software to perform a function as described in the Licensed Software documentation provided by Licensor. This is exclusive of any faults or problems introduced by the Licensee due to modifications or related to any site specific configuration not mutually agreed upon between the Licensee and the Licensor.

2.10. "Designated Support Contact". Shall mean an employee of the Licensee that has been designated by the Licensee, with written notice to Licensor, with the authority of reporting Software Bugs, Defects, requesting Upgrades, requesting Enhancements, and requesting Modifications from Licensor.

2.11. "Installation Date". The date that the Licensed Software is installed on a server computer and/or a client computer at the Licensee's site.

2.12. "Technical Documentation". Shall mean a documentation that provides a descriptive summary of the source code for a particular AMANDA module or feature.

2.13. "Material Breach". Shall mean a breach that carries significant financial consequences or is affecting the intellectual property rights of a party or its reputation

3. SOFTWARE LICENSE

3.1. Rights Granted

- 3.1.1. Licensor hereby grants to the Licensee a non-exclusive perpetual license to use the Licensed Software. The Licensee obtains rights, pursuant to this Agreement, as follows:
 - 3.1.1.1. To use the Licensed Software on one server computer designated for production use, and one or more client computer(s) with limitations as defined in Appendix D1.A – Licensed Software;
 - 3.1.1.2. To copy the Licensed Software for archival, recovery or backup purposes. All archival and full backup copying of the Licensed Software is subject to the provisions of this Agreement, and all titles, trademarks, copyright and restricted rights notices shall be reproduced in such copies;
 - 3.1.1.3. To modify the Licensed Software only with Licensor's approval;
 - 3.1.1.4. To use the Licensed Software on the Licensee's development machines for the purposes of testing software upgrades.
- 3.1.2. The Licensee agrees not to cause or permit the reverse engineering, disassembly, or decompilation of the Licensed Software.
- 3.1.3. By virtue of this Agreement, the Licensee acquires only the right to use the Licensed Software and does not acquire any rights of ownership. All right, title and interest in the Licensed Software shall at all times remain the property of Licensor.

3.2. Transfer and Assignment

- 3.2.1. The Licensed Software may be transferred to a different operating system and/or upgraded CPUs or CPUs of like configuration or the designated CPUs may be transferred to other locations within the Licensee's organization.
- 3.2.2. The rights granted herein may not be assigned or transferred to a third party without the prior written permission of Licensor, which consent shall not be unreasonably withheld.

3.3. Documentation

Licensor will provide the Licensee with one (1) bound paper copies and one electronic, PDF, copy of all relevant user documentation in addition to one (1) bound paper copies and one electronic, PDF, copy of all relevant Technical Documentation. Help documentation is provided only in an electronic format on-line with the application. On-line help may be printed as required. The Licensee is authorized to make unlimited copies of the documentation and / or the on-line help in its entirety and / or extracted sections for internal staff training purposes only. Full printed documentation and / or any extracted sections and / or on-line help must include Licensor's copyright and confidential statements.

4. TECHNICAL SERVICES

4.1. Renewal of Licensor Maintenance and Technical Support Services

- 4.1.1. The Licensee must sign a Licensor Maintenance and Support Agreement for a term of one year from the anniversary date of the Commencement Date or 12 months from Installation Date, whichever date comes first.
- 4.1.2. Renewal of Licensor Maintenance and Support Agreement is optional. Maintenance and Support will not be provided should the Customer not renew the CSDC Maintenance and Technical Support Agreement.
- 4.1.3. Licensor will invoice the Licensee in writing at least thirty (30) calendar days prior to the expiry of each anniversary of the Licensor Maintenance and Support Agreement and the Licensee must notify Licensor in writing within 10 calendar days of receipt of invoice if it wishes to discontinue support services.

5. TERM AND TERMINATION

5.1. Term

This Agreement and each license granted hereunder have an initial one year term and unless otherwise terminated in accordance with this Agreement will renew for successive one year terms in perpetuity at no additional cost.

5.2. Termination by the Licensee

- 5.2.1. Termination without Cause: After final payment of Licensed Software fees, the Licensee may terminate this agreement without cause by giving 30 days written notice to Licensor.
- 5.2.2. Termination with Cause: The Licensee may terminate this Agreement or any license granted hereunder upon written notice if Licensor breaches this Agreement in a material way (Material Breach) and fails to correct the breach within sixty (60) calendar days following written notice specifying the breach, or such later period if Licensor can demonstrate that it is acting in a reasonable and diligent manner to correct the breach.

5.3. Termination by Licensor

Licensor may terminate this Agreement or any license granted hereunder upon written notice if the Licensee breaches this Agreement in a material way (Material Breach) and fails to correct the breach within sixty (60) calendar days following written notice specifying the breach, or such later period if the Licensee can demonstrate that it is acting in a reasonable and diligent manner to correct the breach.

5.4. Effect of Termination

Termination of this Agreement or any license granted hereunder shall not limit either party from pursuing any other remedies available to it, including injunctive relief, nor shall such termination relieve the Licensee's obligation to pay all fees that accrued prior to such termination. The indemnity contained in Section 6.1 will continue notwithstanding the termination of this Agreement.

6. WARRANTIES, REMEDIES, LIMITATION OF LIABILITY

6.1. Infringement Indemnity

- 6.1.1. Licensor will defend or settle, at its option and expense, any legal proceeding brought against Customer to the extent that it is based on a claim brought by a third party that materials and services as provided by CSDC to the Customer infringe such third party's Canadian or United States patent or copyright or misappropriates such third party's Canadian or United States trade secret ("IP Claim"), and will indemnify the Customer against all damages and costs attributable exclusively to such claim awarded by the court finally determining the case, provided that the Customer:
 - 6.1.1.1. gives written notice of the IP Claim to CSDC promptly after learning of the IP Claim;
 - 6.1.1.2. gives CSDC sole control of the defense and settlement of the IP Claim;
 - 6.1.1.3. provides to CSDC, at the expense of CSDC, all available information and assistance; and
 - 6.1.1.4. does not compromise or settle the IP Claim.
- 6.1.2. If such provided materials and/or services are found to infringe or misappropriate pursuant to an IP Claim, or in the reasonable opinion of CSDC are likely to be the subject of an IP Claim, CSDC will at its option:
 - 6.1.2.1. obtain for the Customer the right to use such provided materials and/or services;
 - 6.1.2.2. replace or modify such provided materials and/or services in such a way that (i) they become non-infringing and non-misappropriating and (ii) they substantially perform in the same manner or substantially provide the same results, or there is no material adverse effect in their overall performance; or
 - 6.1.2.3. if neither 1 nor 2 is reasonably achievable, remove such provided materials and/or services and refund to the Customer the original price paid therefor less net benefits realized by the Customer through accumulated depreciation or expensing thereof, up until the date of removal.
- 6.1.3. Notwithstanding anything to the contrary, and or the avoidance of doubt, Sections 6.1.1 and 6.1.2 do not apply to, and CSDC has no obligation or liability of any kind for any IP Claim arising from:
 - 6.1.3.1. any customization by customer when the customization is performed through CSDC;

- 6.1.3.2. modification of such provided materials and/or services that are not specifically authorized by a future written authorization signed by a Vice President of CSDC;
 - 6.1.3.3. use of an allegedly infringing version of such provided materials and/or services, if the alleged infringement could have been avoided by the use of a different version made available to the Customer;
 - 6.1.3.4. a violation of CSDC's license grant; or
 - 6.1.3.5. any separate or component hardware, software, plug-ins, add-ons or other materials which may be added by Customer to the extent it comprises any third party open source or freeware technology, or any derivatives or other adaptations thereof, and any combination that includes any of the foregoing.
- 6.1.4. This provision is excluded from any limitation of liability provision of this Agreement and states the entire liability of CSDC and the exclusive remedies of Customer for any proceedings or claims that any services, hardware, software, data or other materials infringe or misappropriate a third party's intellectual property.

6.2. Warranties and Disclaimers

6.2.1. Warranties

- 6.2.1.1. Software License Warranties. Unless otherwise agreed to the Agreement and Exhibit A and after go-live, Licensor warrants additional software licenses for a period of 90 days from the Installation Date (Warranty Period) or Until Commencement Date whichever comes first that the Licensed Software, unless modified by the Licensee without Licensor's approval, will perform the functions described in the documentation provided by Licensor when operated on the designated hardware and operating system. Licensor will undertake to correct any error condition within 10 business days from the date of report of such condition by the Licensee.
- 6.2.1.2. Ownership Warranty. Licensor warrants that it is the sole owner of the Licensed Software or has the full power and authority to affect Upgrades, Enhancements and Modifications referred to herein and will indemnify and hold the Licensee harmless from and against any loss, cost, liability and expense arising out of any breach or claimed breach of this warranty.

6.2.2. Limitations on Warranties

- 6.2.2.1. The warranties above are exclusive and in lieu of all other warranties, whether expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose.
- 6.2.2.2. From time to time, Licensor may supply the Licensee with pre-production releases of Licensed Software, labeled "Alpha" or "Beta". These releases

are not suitable for production use. Licensor does not warrant pre-production releases, these releases are distributed "as is".

6.2.2.3. All warranties are void if Licensee makes any modifications to the Licensed Software without express written approval by Licensor.

6.3. Escrow

For as long as this Agreement and the Maintenance and Support Agreement are active, associated Fees are paid in full; and upon receipt of written request from Licensee, CSDC will establish and then maintain for the remaining term of this Agreement (and for so long as CSDC is obligated to provide maintenance and support services for the Software, under this Agreement or any other agreement), the source code with the escrow agent identified in the Source Code Escrow Deposit Agreement with Licensee identified as a beneficiary. "Source Code" means the human-readable version of the Software that can be compiled into machine-readable code.

6.4. Exclusive Remedies

6.4.1. For any breach of the warranties contained in Section 6.2 above, the Licensee's exclusive remedy, and Licensor's entire liability, shall be:

6.4.2. The correction of Licensed Software errors or replacement of Licensed Software media. If Licensor is unable to make the Licensed Software operate as warranted, the Licensee shall be entitled to recover the full applicable License and Technical Support Services fees, if any, paid to Licensor. Should the Licensee choose to continue to use any of the Licensed Software or portions thereof, the recovery of the License and Technical Support Services fees shall be prorated accordingly.. In the event the Parties fail to agree on the prorated amounts, both Parties shall work together in a good faith effort to reconcile and resolve the source of the dispute.

6.5. Limitation of Liability

In no event shall either party be liable for any indirect, incidental, special or consequential damages including loss of profits, revenue, data, or use, incurred by either party or any third party, whether in an action in contract or tort, even if the other party or other person has been advised of the possibility of such damages. Licensor's liability for damages hereunder, other than damages suffered or incurred by the Licensee or its officers, employees, agents or persons for whom the Licensee is legally responsible due to an infringement specified in Section 6.1, which liability has no monetary limit, shall in no event exceed the amount of 1.5X the fees paid by the Licensee under this Agreement, and if such damages result from the Licensee's use of the Licensed Software, such liability shall be limited to license fees paid, prorated over a three-year term from the Effective Date of the relevant license. Both Parties will make a good faith effort to resolve any arising matter, including agreement on prorated amounts, and will consider alternate dispute resolution.

7. PAYMENT PROVISION

7.1. Invoicing and Payment

The license fees for the Licensed Software set out in Appendix D1.A – Section A are a one time fee to be paid in accordance with Exhibit B. The City shall make best efforts to

ensure timely payments. In the event invoices become overdue, the City shall promptly notify Licensor of the nature of the delay and both Parties shall make reasonable effort to reconcile and resolve the source of the delay concerning the payment in question. The liability of the City at any time shall be limited to the amount remaining under this agreement.

7.2. Annual Technical Support Services

- 7.2.1. First year standard Licensor maintenance and support service fees will apply from the expiry of the Warranty Period.
- 7.2.2. Fees for the Licensor Maintenance and Support Agreement for subsequent years shall be due in advance and will be those in effect at the beginning of the period for which the fees are paid. Maintenance and support services for subsequent years shall be at the option of the Licensee.
- 7.2.3. As long as Licensee has a valid, paid-up Maintenance and Support Agreement in place, any Updates provided to Licensee under such agreement shall, upon installation, replace earlier versions of the Software and shall be governed by this Agreement.

8. GENERAL TERMS

8.1. Non-disclosure

- 8.1.1. By virtue of this Agreement, the Parties may have access to information that is confidential to the other ("Confidential Information"). Confidential Information shall be limited to the Licensed Software and all information clearly marked as confidential.
- 8.1.2. A Party's Confidential Information shall not include information which: (a) is or becomes a part of the public domain through no act or omission of the other Party, or (b) was in the other Party's lawful possession prior to the disclosure and had not been obtained by the other Party either directly or indirectly from the disclosing party; (c) is lawfully disclosed to the other Party by a third party without restriction on disclosure; or (d) is subject to disclosure under United State federal or California state law, including but not limited to, California Public Records Act (Government Code section 6250 et seq.).
- 8.1.3. The Parties agree to forever hold each other's Confidential Information in confidence. The Parties agree not to make each other's Confidential Information available in any form to any third party or to use each other's Confidential Information for any purpose other than the implementation of this Agreement. Each Party agrees to take all reasonable steps to ensure that Confidential Information is not disclosed or distributed by its employees or agents in violation of the provisions of this Agreement.

8.2. Governing Law

This Agreement shall be exclusively construed and governed in all respects by the laws in force in the State of California.

8.3. Jurisdiction & Venue

In any legal action relating to this Agreement, the parties agree to the exercise of jurisdiction over them by courts of the State of California and that if the Licensee brings the action, it shall be instituted in a court in the County of Santa Clara, or where otherwise appropriate, exclusively in the United States District Court, Northern District of California, San Jose, California.

8.4. Notice

All notices, including notices of address change, required to be sent hereunder, shall be in writing and delivered by common carrier (for example: UPS, Federal Express, etc.) or delivered in person or by facsimile transmission to the then applicable address for the party receiving the same. Receipt of any notice will be deemed to be the earlier of five (5) calendar days after the date of mailing and the actual date of delivery unless service is interrupted.

Licensor CSDC Systems Inc. Attn: Director of Contract Administration 1705 Tech Ave, Unit 1 Mississauga ON L4W 0A2 Canada	and	Licensee City of San Jose Attention: Director of Finance 200 E. Santa Clara St. 13 th Floor San Jose, CA 95113
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8.5. Severability

In the event any provision of this Agreement is held to be invalid or unenforceable by a court of competent jurisdiction the same may be severed and the remaining provisions of this Agreement will remain in full force and effect.

8.6. Waiver

The waiver by either Party of any default or breach of this Agreement shall not constitute a waiver of any other or subsequent default or breach.

8.7. Force Majeure

If a party is delayed or interrupted in or prevented from the performance of its obligations hereunder by reason of an act of God, fire, flood, war, public disaster, governmental enactment, regulation or order or any other cause beyond its control, such party shall not be responsible or liable to the other party therefore and the time of the performance of the Parties obligations hereunder shall be extended for a period of time equal to the duration of the contingency that has occasioned the delay, interruption or prevention of performance.

8.8. Assignment

Neither Party shall assign this Agreement without the prior written consent of the other, except consent is not required if assignment is due to a merger or sale or other transfer of substantially all CSDC's assets, provided the new acquiring entity is fully able to perform the requirements of the Agreement.

8.9. Entire Agreement

8.9.1. This Agreement plus Appendix D1.A – Licensed Software as attached constitute the complete Agreement between the parties and supersede all previous agreements or representations, written or oral, with respect to the Licensed Software specified herein. This Agreement may not be modified or amended except in writing and signed by a duly authorized representative of each party.

8.9.2. It is expressly agreed that any terms and conditions of the Licensee's purchase order issued in respect of this Agreement shall be superseded by the terms and conditions of this Agreement.

8.10. Survival of License

The Licensee's rights under the License will not terminate upon but will survive any winding-up, liquidation, insolvency, bankruptcy or receivership of Licensor. No liquidator, trustee, receiver or receiver-manager of Licensor will have any power or right to prevent the Licensee from using the Licensed Software in the manner authorized by and subject to the terms of this License. Likewise, provided that the Licensee has paid the applicable license fee for the Licensed Software the license for the Licensed Software will survive any termination of this agreement, except for breach of Licensor's proprietary rights to the Licensed Software.

8.11. Enurement

The agreement will enure to and be binding upon the Parties, their successors and assigns.

8.12. Acceptance

Except for initial project software deliverables which shall be governed by the acceptance procedure set forth in the Agreement and Exhibit A, the Licensor provides a software module and / or an AMANDA release that contains additional AMANDA products and / or licenses to the Licensee, the deliverable will be deemed accepted unless the Licensor receives from the Licensee a notice within ten (10) business days of acquisition indicating detail about the failure of the deliverable's objective to conform to the specifications outlined in the product documentation.

8.13. Authorization

Both Parties agree that upon mutual consent, the appendices attached hereto can be modified by the authorized representatives listed in Section 8.4 above. Modified Appendices are required to be signed and dated by the authorized representatives listed in Section 8.4 above.

8.14. New Terms & Conditions

Licensor reserves the right to add and / or modify terms and conditions with the release or new AMANDA releases, versions or products.

SIGNED:

APPROVED AS TO FORM:

Senior Deputy City Attorney

City of San José ("Licensee")
a municipal corporation

By _____
Name: Mark Giovannetti
Title: Deputy Director, Finance
Date: _____

CSDC Systems Inc. ("Licensor")
a Delaware corporation authorized to
conduct business in California

1. By 
First Authorized Signature

Name: Mr. Dan Mishra
Title: Chairman and CEO
Date: August 16, 2016

2. By 
Second Authorized Signature

Name: Satish Ranganathan
Title: Chief Financial Officer
Date: AUGUST 16, 2016

APPENDIX D1.A – LICENSED SOFTWARE

A. Core Software

Item	Software Package	Unit
A. Back Office		
Server based licenses		
A.1	Permit	1
A.2	Business License Module	1
A.3	RFS Module	1
A.4	Dev Conditions Management	1
A.5	Multi-Merge documents	1
A.6	Professional License	1
A.7	Planning Module	1
A.8	Cashier	1
A.9	Time & Activity Tracking	1
A.10	Trust Account Module	1
A.11	Securities / Letter of Credit	1
A.12	Enhanced Inspection Module	1
A.13	Milestone Monitor	1
A.7	Access Licenses (concurrent)	100
B. Mobile		
B.1	Mobile Inspection Server	1
B.4	Named Mobile User for iPad	50
B.5	Named user licenses for Buildings	100
C. Middleware		
C.1	Web Services Toolkit	1
C.2	EDMS Adapter	1
C.3	Batch Scheduler	1
C.4	Outlook add-ins	1
D. Portal		
D.1	Enterprise Portal	1
D.2	User Registration	1
D.3	Payment	1
D.4	Public Search	1
D.5	RFS	1
D.6	Permit	1
D.7	Business License	1
D.8	Professional License	1
D.9	Inspection	1
D.20	SmartGuide Designer	2
E. Reporting & Analytics		
E.1	Analytics and BI Reporting	0
	300 Concurrent Users	1
	5 Named Report Editors	1
	3 Report Servers	1
F. Third Party		
F.1	ProjectDox – GIStream (two way Integration from ProjectDox to ESRI GIS)	1
	ProjectDox – Department Workflows Development Services (3=Building, Planning and PW)	3
	ProjectDox – Permit Connectors (2-way integration between ProjectDox & AMANDA)	1
	ProjectDox – Base, Unlimited User Enterprise License	1
F.2	Adlib	1
F.3	Latitude Geographics – GeoCortex Essetnial Std Edition (perpetual license)	1
	Latitude Geographics – GeoCortex Optimizer Std Edition	1

EXHIBIT D2 – SOFTWARE MAINTENANCE & TECHNICAL SUPPORT AGREEMENT

This Support Agreement is entered into as of the City's execution date by and between City of San Jose, a California municipal corporation, and CSDC Systems Inc.

CSDC Systems Inc.

1705 Tech Avenue, Unit 1
Mississauga ON L4W 0A2
(hereafter referred to as "Licensor" or "CSDC")

City of San Jose

and 200 E. Santa Clara St.
San Jose, CA 95113
(hereafter referred to as "Licensee" or "Customer")

Licensed Software as listed in Appendix D2.A is subject to the terms and conditions set forth herein.

1. DEFINITIONS

- 1.1. Support Agreement: Means this Licensor Maintenance and Technical Support Agreement, its Appendices and any amendments thereto agreed upon by the Parties.
- 1.2. Licensor: Means the company granting the License.
- 1.3. Licensee: Means the purchaser and user of the Software as defined in Appendix D2.A.
- 1.4. AMANDA Software: See Licensed Software.
- 1.5. Licensed Software: Means information which directs a data processing system and associated equipment to perform a function or functions and which may be loaded into or removed from such data processing system as identified in Appendix D2.A.

Licensed Software shall also, for purposes of this document, mean:

- 1.5.1. a database schema and triggers,
- 1.5.2. the media containing the Licensed Software programs which is in machine readable form and which will operate on such data processing systems and includes all necessary manuals and documentation related to the software programs as specified in Appendix D2.A of this License.
- 1.6. Software Bugs: Shall mean errors reported by the Licensed Software (as an error code) during its operation or the inability of the software to perform a function as described in the Licensed Software documentation provided by Licensor.
- 1.7. Corrections: Shall mean fixes made to Licensed Software to remove software bugs or workarounds acceptable to the Licensee.
- 1.8. Upgrade: Shall mean improvements made by the Licensor to the Licensed Software which relate to operating performance and does not change the basic functions of the Licensed Software.
- 1.9. Enhancements: Shall mean modifications made by the Licensor to the Licensed Software which relate to operating performance but also change the basic functions of the Licensed Software.
- 1.10. Modifications: Shall mean any programmatic or database schema changes made by the Licensor to the Licensed Software.
- 1.11. Designated Support Contact: Shall mean an employee of the Licensee that has been designated by the Licensee, with written notice to Licensor, with the responsibility of reporting Software Bugs, and requesting Upgrades from Licensor.

2. TERMS AND CONDITIONS

- 2.1. The initial Effective Date shall commence upon each respective Phase/Units acceptance and go-live which will be prorated until Final System Acceptance to effect the full annual maintenance. Each subsequent renewal period shall be for twelve month period each as provided in the base Agreement Section 2.
- 2.2. The Licensor hereby agrees to provide, at no additional cost beyond the fees set forth in Appendix D2.A, to the Licensee the following services:
 - 2.2.1. Support Services: AMANDA support services are provided in the following manner:
 - 2.2.1.1. Licensor will provide bug fixes to Software Bugs (excluding bugs related to configuration which will be fixed based on Time & Material basis) as reported by Licensee.
 - 2.2.1.2. Support hours are as provided in the Service Level Agreement (Appendix A.9).
 - 2.2.2. Corrections. Licensor will provide corrections to any and all defects in the Licensed Software covered by this Support Agreement, as identified in Appendix D2.A. Software Bugs must be reported by the Licensee to the Licensor using the Licensee's Standard Problem Report Form or through CSDC's web support site.
 - 2.2.3. Upgrades. Licensor will provide upgrades to all Licensed Software identified in Appendix D2.A as implemented from time to time for the improvement of the Licensed Software.
 - 2.2.4. Enhancements. Licensor will provide enhancements to all Licensed Software identified in Appendix D2.A as implemented from time to time for the improvement of the Licensed Software.
 - 2.2.5. Release Currency. Licensor will provide, at no additional charge, new versions and releases of all Licensed Software covered in Appendix D2.A, which may contain Corrections, Upgrades or Enhancements, which have been reported reasonably in advance of the version or release date, as new versions and releases become available. The Licensor will maintain release currency with the current database and operating system within ninety (90) days from the date the Licensee notifies Licensor they have obtained a new release of said software.
- 2.3. Licensor warrants that the Support to be provided hereunder will be performed to the standards of care and diligence normally practiced by recognized software firms performing services of a similar nature. The Licensee's recourse of remedy for any breach of this Support Agreement will be the right to require Licensor to re-perform the services without additional cost to the Licensee.
- 2.4. Service Escalation. If a problem is not addressed in a timely manner, the Licensee may escalate the Support process by first contacting the Support Service Manager, secondly, the Licensee may contact the Vice President of Client Services.
- 2.5. Support will only be provided for the current release of the Licensed Software covered in Appendix D2.A, subject to a period of eighteen (18) months after the availability of a new release. If fixes are available in the next release of the software the Licensee will be required to install that release to obtain them.
- 2.6. The Licensor agrees to make available to the Licensee the necessary staff or resources to handle requested modifications to the Licensed Software as outlined in Appendix D2.A, upon reasonable notice and at then current and standard labor and material rates.

- 2.7. Warranty: The Licensor warrants that it is the sole owner of the Licensed Software and has the full power and authority to effect the Corrections, Upgrades, Enhancements and Modifications referred to herein and will indemnify and hold the Licensee harmless from and against any loss, cost, liability and expense arising out of any breach or claimed breach of this warranty.
- 2.8. All warranties applicable to the original AMANDA Software covered under the CSDC Corporate Software License Agreement signed by the Licensee apply equally to all Corrections, Upgrades, Enhancements and Modifications as set forth in Appendix D2.A. All warranties are void if Licensee makes any modifications to the Licensed Software without express written approval by the Licensor. The extent of the liability accepted by the Licensor is as set out herein and does not include consequential damages or liability claims arising from the use of the AMANDA Software or efforts to correct the AMANDA Software.
- 2.9. The Licensee agrees to pay the Licensor additional fees at the Licensor's regularly published preferred rates if the Licensor is called upon to provide assistance in solving problems which are not caused by any defects in the AMANDA Software.
- 2.10. The Licensee is required to purchase maintenance support for the first year within 30 calendar days after the installation of the Licensed Software or the installation of additional AMANDA Software options that may be purchased subsequent to the original purchase. The fees for maintenance support shall be paid in advance annually and are due within 60 calendar days from date of installation or 70 (seventy) calendar days from date of shipment of Licensed Software.
- 2.11. If during the implementation of a project, the Licensee acquires new AMANDA software modules the maintenance costs will be governed by the Terms and Conditions outlined in this document. Once the Licensee is in production using some or all of the AMANDA software then if the Licensee acquires new AMANDA software modules, the maintenance costs for these newly acquired modules will take effect and will be billed 30 days from the installation date.
- 2.12. Maintenance support may be extended according to the terms outlined in Section 2 Term of Agreement Subsection 2.2 Options to Extend. The fees for the renewal year will be published in the Licensor's regular price list. Licensee will be given notice of any price changes at least thirty (30) days before the renewal of this Support Agreement. Should maintenance lapse, the Licensee may re-instate lapsed support for the Software by paying all maintenance support fees in arrears and all costs invoiced by the Licensor on a time and material basis for updating the AMANDA Software to the current version."
- 2.13. "All notices, including notices of address change, required to be sent hereunder, shall be in writing and shall be deemed to have been given when delivered by common carrier (for example: UPS, Federal Express, Purolator, etc) or delivered in person or by facsimile transmission to the then applicable address for the party receiving the same. Receipt of any notice will be deemed to be the earlier of five (5) days after the date of mailing and the actual date of delivery unless service is interrupted.

Licensor (CSDC Systems Inc.)

Attention: Director, Contract Management
 1705 Tech Avenue, Unit 1
 Mississauga ON L4W 0A2
 (hereafter referred to as "Licensor" or "CSDC")

Licensee (City of San Jose)

Attention: Director of Finance
 200 E. Santa Clara St.
 San Jose, CA 95113
 (hereafter referred to as "Licensee" or "Customer")

- 2.14. Both Parties agree that upon mutual consent, the appendices attached hereto can be modified by the authorized representatives listed in Section 2.14 above. Modified Appendices are required to be signed and dated by the authorized representatives listed in Section 2.14 above.
- 2.15. Payment: The Licensee will pay CSDC for the annual maintenance costs thirty (30) days from the date of the submitted CSDC invoice. The Licensee shall make best efforts to ensure timely payments. In the event invoices become overdue, the Licensee shall promptly notify CSDC of the nature of the delay and both Parties shall make reasonable effort to reconcile and resolve the source of the delay concerning the payment in question. The liability of the Licensee at any time shall be limited to the amount remaining under this agreement.

SIGNED:

APPROVED AS TO FORM:

Senior Deputy City Attorney

City of San José ("Licensee")
a municipal corporation

By _____
Name: Mark Giovannetti
Title: Deputy Director, Finance
Date: _____

CSDC Systems Inc. ("Licensor")
a Delaware corporation authorized to
conduct business in California

1. By 
First Authorized Signature

Name: Mr. Dan Mishra
Title: Chairman and CEO
Date: Aug. 16, 2016

2. By 
Second Authorized Signature

Name: Satish Ranganathan
Title: Chief Financial Officer
Date: August 16, 2016

APPENDIX D2.A—AMANDA SOFTWARE ANNUAL MAINTENANCE

AMANDA SOFTWARE ANNUAL MAINTENANCE & HOSTING CHARGES						
Description of Software	Initial Term					
	Initial Setup	Year 2**	Year 3	Year 4	Year 5	Year 6
Incremental New Licenses*						
• BackOffice		\$16,600	\$17,098	\$17,611	\$18,139	\$18,683
• Access Licenses		\$39,000	\$40,170	\$41,375	\$42,616	\$43,895
• Mobile		\$32,320	\$33,290	\$34,288	\$35,317	\$36,376
• Middleware		\$17,000	\$17,510	\$18,035	\$18,576	\$19,134
• Portal		\$57,000	\$58,710	\$60,471	\$62,285	\$64,154
• Reporting and Analytics		\$20,000	\$20,600	\$21,219	\$21,855	\$22,511
Subtotal (New Licenses)		\$181,920	\$187,378	\$192,999	\$198,788	\$204,753
Third Party Software						
• ProjectDox		\$72,000	\$74,160	\$76,385	\$78,676	\$81,037
• Adlib		\$2,600	\$2,678	\$2,758	\$2,841	\$2,926
• Latitude Geographics		\$6,540	\$6,736	\$6,938	\$7,147	\$7,361
Subtotal (3rd Party)		\$81,140	\$83,574	\$86,081	\$88,664	\$91,324
TOTAL (New Licenses)		\$263,060	\$270,951	\$279,080	\$287,452	\$296,076
Hosting Services						
• Annual Hosting						
• Early hosting for Portal, Project Dox, Mobile, GeoCortex and YellowFin	\$ 78,000 \$321,725	\$449,100	\$449,100	\$449,100	\$449,100	\$449,100
TOTAL (Hosting)	\$399,725	\$449,100	\$449,100	\$449,100	\$449,100	\$449,100

*does not include software maintenance for existing licenses under separate agreement.

**Above costs are based on general categories pursuant to CSDC's detailed cost proposal which provide further details for each category.

Annual maintenance for any optional items if acquired during the course of the project will be due upon expiry of the warranty period as outlined in Section 6.2.2.1 of the Corporate Software license Agreement. If any of the optional items are acquired once Licensee is under maintenance then maintenance for the new items is due 30 days from acquisition date.

Existing Licenses/Modules

Description	Qty	Licensed as:
User Licenses	200	Concurrent, perpetual
AMANDA License - Business	1	Per Production server, perpetual
Multiple Merge Document	1	Per Production server, perpetual
AMANDA RFS	1	Per Production server, perpetual
AMANDA Trust Account	1	Per Production server, perpetual
AMANDA Time and Activity Tracking	1	Per Production server, perpetual
Milestone Monitor	1	Per Production server, perpetual
Net Connect Licenses	120	Connections, per Production Server
AMANDA Mobile Server	1	Per Production server, perpetual
AMANDA Mobile Client	10	Named, perpetual
GIS Adaptor	1	Per Production server, perpetual
ECMS Adaptor	1	Per Production server, perpetual
Enterprise Authentication Adapter	1	Per Production server, perpetual

**EXHIBIT D-3 – AMANDA CLOUD MANAGED SERVICES (UNISYS)
GENERAL TERMS AND CONDITIONS (GTCs)**

1. Services

(a) Orders. The Services Catalogue, revision May 2016, describes the Services available from Provider for the AMANDA® Cloud Managed Services. Provider will provide Services according to an Order (Appendix D3.2). Only an order accepted by Provider will bind Provider and Customer. All orders submitted by Customer for AMANDA Cloud Managed Services will use the order form specified by Provider and shall specify the Service(s), any applicable Service period, and any other information reasonably required by Provider to provision, configure, implement, and manage the Services under the Order.

(b) Provider Responsibilities. Provider will (i) provide the Services according to applicable industry standards for similar Services, (ii) provide its standard support for the Services, which Provider may change from time to time, with or without notice, and (iii) use commercially reasonable efforts to allow the availability of the Third Party Provider cloud resources, according to the then-current AMANDA Cloud Managed Services Availability Schedule. Provider will implement reasonable and appropriate measures as determined by Provider and, in relation to Third Party Provider cloud resources, as and when available, designed to help Customers protect Customer Data against accidental or unlawful loss, access, or disclosure.

(c) Customer Responsibilities. Customer will prevent unauthorized access to or use of the Service and will notify Provider promptly of any unauthorized use or access. Customer will use, and require each End User to use, the Services only in accordance with the terms of the Order, any Third Party Provider terms, guides, documentation, and policies for its cloud resources, and applicable laws and government regulations. Unless explicitly included in the Services under the Order, whether as a described task of a standard Service Description or a described task of a custom Service, Customer is responsible for its implementation of the Services, any security/encryption applied to Customer Data and any backup/archival of Customer Data. Customer is responsible for: (i) protecting the names and passwords of the End Users of the Services, (ii) the legality of, and results obtained from, Customer Data submitted by Customer and its End Users to the Service, (iii) and Each User's use of, an access to, the Services and any software used/accessed in connection with the Services. Customer shall provide Provider with cooperation, information, and assistance reasonably required by Provider for performance of the Services.

(d) Usage Restrictions. Customer shall not, and shall not permit others to: (i) sell, resell, license, sublicense, rent, lease or distribute any of the Services or make them available for access by third parties, including in a service bureau, outsourcing or hosted service, except as provided in 1(d), below (ii) modify, alter, tamper with, repair, copy or create derivative works of any software included in the Services or based on the Services; (iii) disassemble, reverse engineer or decompile the Service or any part of the Services including software or another component, or otherwise attempt to derive source code, or to access it to copy any ideas, features, content, functions or graphics of the Service; (iv) remove any identification or notices of any proprietary or copyright restrictions from any software, documentation, or support material; (v) use the Services to store or transmit infringing, obscene, threatening, libelous, unlawful, or tortious material; (vi) use or send viruses or other malicious or harmful code; (vii) interfere with or disrupt the integrity or performance of any Services or third-party data; (viii) attempt to gain unauthorized access to the Service or its related software, systems, platforms or networks; (ix)

use any components provided with the Service separately from the Services; (x) permit direct or indirect access to or use of any Service in a way that circumvents a contractual usage limit; (xi) access any Services in order to build a competitive product or service; (xii) disable, hack or otherwise interfere with any security, digital signing, digital rights management, verification or authentication mechanisms implemented in or by the Service; (xiii) alter, disable or erase any computer data, computer programs or computer software without authorization; (xiv) use the Services to store or transfer any information in contravention of any applicable laws, including export control laws; (xv) use the Services: in a way prohibited by law, regulation, or governmental order or decree; (xvi) violate the rights of others; (xvii) falsify any protocol or email header information (e.g., "spoofing"); (xviii) distribute spam or malware; (xix) use of the Services in a way that could harm the Services or impair anyone else's use of them; or (xx) use the Services for any high risk use (where failure or fault of the Services could lead to death or serious bodily injury of any person, or to severe physical or environmental damage).

(e) Exception to Usage Restrictions. Customer may provide access to, and use of, a Customer Solution and Provider Managed Services Solution(s) to third parties provided Customer and End Users comply with these GTCs and the other documents referenced in Section 12(m) below.

(f) Verification. On behalf of itself and its End Users, Customer agrees that Provider or its agent may monitor the use of the Service to verify compliance with the terms of an Order. If Customer exceeds, or End Users exceed, the user limits in an Order, Customer agrees to pay the applicable fees for any excess/additional use.

2. Proprietary Rights and Licenses

(a) Proprietary Rights. Provider, its licensors, and Third Party Providers retain all right, title and interest in and to the Services and all related intellectual property and proprietary rights. No rights are granted to Customer except as expressly provided in an Order. Customer shall not grant to any End User any rights in Services in excess of the rights of an Order. The Services are protected by applicable copyright, trade secret, industrial and other intellectual property laws. Provider, its licensors, and Third Party Providers own all right, title and interest in all software, programming, documentation, templates, questionnaires, methodologies, models, charts, reports and any other items (exclusive of Customer Data) used to deliver the Services or made available to Customer as a result of the Services.

(b) Customer Data. Customer represents, warrants and covenants that it owns all right, title and interest in the Customer Data, or possesses all necessary rights in the Customer Data, to allow End User information to be uploaded, sent, received, or otherwise used in connection with the Services and to permit Provider to provide the Services, and that Customer Data and End User's use of the Services will not violate any of the terms and conditions of the Order or any applicable law, rule or regulation, breach any agreement with a third party, or infringe the intellectual property or other proprietary rights of any third party. On behalf of itself and each End User, Customer grants to Provider and its Third Party Provider(s) a worldwide, non-exclusive, right and license to use Customer Data to provide the Service to Customer and, as applicable and on behalf of Customer, to Customer's End Users. As between Provider and Customer, Customer owns all right, title and interest in and to Customer Data. Provider will use Customer Data only as necessary to provide the Services. Customer is responsible for complying with all legal and contractual requirements, including applicable privacy laws and regulations and its agreement with third parties who generate and/or process the Customer Data, relating to the collection, use, processing and transfer of Customer Data. Provider takes no responsibility for Customer Data processed on behalf of Customer or handling Customer Data in accordance with Customer or its End Users' instructions. Unless the Order explicitly

requires Customer Data to remain in the country where the Customer is located (based on the Customer Address of the Order), Customer agrees that Provider and its Third Party Provider(s) may transfer Customer Data to another country. Customer is solely responsible for transmitting Customer Data to Provider and the Service. Customer shall indemnify and hold harmless Provider from Customer's and its End Users' failure to comply with the obligations under this section.

(c) Suggestions. Customer grants Provider, its licensors and Third Party Providers a perpetual, irrevocable, worldwide, transferable, sub-licensable, royalty-free license to use or incorporate in any product or service any feedback, idea, suggestion, recommendation, correction or enhancement request provided by Customer or its End Users for the Services.

3. Fees and Payment

(a) Fees. The fees for the Services will be in the applicable Order. Except as otherwise provided in an Order, (a) fees for Services provided on other than a consumption basis are invoiced in advance, (b) fees for Services provided on a consumption basis (based on the variable Services consumed in a month) are invoiced monthly in arrears, and (c) any Services provided on a time and materials basis, including any reimbursable lodging and travel expenses, are invoiced monthly in arrears.

(b) Payment. Unless the Order provides a different payment term, Customer shall pay all invoiced amounts within thirty (30) days after the date of invoice, in the currency identified in the Order.

(c) Overdue Charges. The Customer shall make best efforts to ensure timely payments. In the event invoices become overdue, the Customer shall promptly notify Provider of the nature of the delay and both Parties shall make reasonable effort to reconcile and resolve the source of the delay concerning the payment in question. The liability of the Customer at any time shall be limited to the amount remaining under this agreement.

(d) Set-Off. All payments due under or in connection with an Order shall be made by Customer in full without any set-off or counterclaim.

(e) Taxes. Fees do not include any Taxes. Customer will pay or reimburse Provider for all Taxes, other than Taxes based solely on Provider's net income. Customer shall make all payments due without deduction of any Taxes, except when required by law, in which event the amount payable by Customer shall be increased so that the amount paid to Provider after any required deductions or withholding shall be equal to the amount it would have received if there had been no such deductions or withholding.

4. Protection of Confidential Information

(a) Confidential Information. Each party will protect all non-public proprietary or confidential information of the other party, its licensors, and customers ("Confidential Information") from disclosure to third parties and restrict its use as provided in an Order. Each party acknowledges that unauthorized disclosure of Confidential Information of the other party may cause substantial economic loss to the other party, its licensors, or customers. Confidential Information shall mean all information disclosed by a party to the other party, whether orally or in writing, that is marked or identified as "Proprietary", "Confidential", or in a manner which gives notice of its proprietary and confidential nature, or that reasonably should be understood to be confidential given the

nature of the information and the circumstances of its disclosure. Customer Confidential Information includes Customer Data. Provider Confidential Information includes the Services, these GTCs (and the other documents referenced in Section 12(m) below) and pricing. Confidential Information shall not include, and the parties shall have no obligation to protect, information that (i) was previously known to the receiving party before disclosure under an Order without any limitation on use or disclosure; (ii) is received by receiving party from a third party without any obligation of confidentiality; (iii) is or becomes publicly available without a breach of an Order by the receiving party, or (iv) is developed independently by the receiving party without use of or reference to Confidential Information received under an Order.

(b) Protection. Each party shall use at least the same degree of care to avoid disclosure of the other party's Confidential Information as it uses for its own Confidential Information of like importance, but in no event less than reasonable care, and will use the other party's Confidential Information to the extent reasonably necessary to exercise its rights or fulfill its obligations under an Order. The receiving party will include on each copy of the disclosing party's Confidential Information received under an Order, including its storage media, all notices that appear on the original. The receiving party shall not disclose the other party's Confidential Information to any third party or use the Confidential Information contrary to an Order, except that the receiving party may disclose the other party's Confidential Information to its employees and agents (and in the case of Customer, to its End Users) who have a need to know and to use the Confidential Information in the performance of an Order, provided that such persons/entities have legal obligations of confidentiality substantially the same (and in no case less protective) as the provisions of an Order.

(c) Disclosure. If the receiving party is required to disclose Confidential Information of the disclosing party by an order of a court or governmental agency, or pursuant to applicable law, it shall, if permitted by applicable law (i) notify the disclosing party of the order as soon as reasonably possible, but no later than five (5) business days after receipt of the order, so the disclosing party may intervene and try to prevent the disclosure of its Confidential Information; (ii) consult with the disclosing party on the scope of the disclosure ordered; (iii) if disclosure of the Confidential Information is required, furnish only that portion of the Confidential Information as the receiving party is advised by legal counsel it is required to disclose; and (iv) cooperate with the disclosing party in its efforts to limit or to oppose the order.

(d) Limitation. No license, copyright or other usage right, nor any other interest in Confidential Information is granted, directly or indirectly, by the disclosing party other than the restricted rights expressly granted under an Order.

5. Warranties and Disclaimers

(a) Service Limited Warranty. Provider warrants the Services as and when provided will conform to the applicable Service Description. If a Service does not conform to its description then provided Customer gives Provider written notice of any non-conforming Service within 15 days after the provision of the non-conforming Service then, at Provider option, Provider will re-perform the Service, repair the Service, or refund the fees paid for the Service. If Provider tries to re-perform or repair any non-conforming Service and the Service remains non-conforming despite the re-performance or repair then Customer may terminate the affected Service and Provider shall refund to Customer any prepaid fees for the terminated Service for the period after the termination. This section sets forth Customer's exclusive rights and remedies (and

Provider's sole liability) in connection with any failure of the Service to perform in accordance with the Service Description or in any other manner.

(b) Disclaimer. EXCEPT AS EXPRESSLY STATED IN THESE GTCs (OR THE OTHER DOCUMENTS REFERENCED IN SECTION 12(m) BELOW) AND AN ORDER, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, FOR THE SERVICES AND USE OF THE SERVICES. ALL SERVICES AND OTHER ITEMS ARE PROVIDED "AS IS" AND "AS AND WHEN AVAILABLE" WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY WARRANTY THAT SERVICES WILL BE UNINTERRUPTED, ERROR FREE OR WITHOUT DELAY. PROVIDER, ITS AFFILIATES, LICENSORS, AND THIRD PARTY PROVIDERS EXPRESSLY DISCLAIM ALL IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT. TO THE MAXIMUM EXTENT PERMITTED BY LAW, PROVIDER DISCLAIMS ALL LIABILITY, AND ANY INDEMNIFICATION OBLIGATIONS, FOR ANY HARM OR DAMAGES CAUSED BY ANY THIRD PARTY PROVIDER.

6. Remedies.

Customer's sole and exclusive remedies for damages from any cause related to or arising out of an Order, regardless of the legal theory, whether based on negligence, breach of contract, warranty, or other legal theory, will be those provided in these GTCs and the other documents referenced in Section 12(m) below.

7. Exclusion of Certain Damages.

IN NO EVENT WILL EITHER PARTY BE LIABLE WITH RESPECT TO ANY SUBJECT MATTER OF THIS AGREEMENT, WHETHER BASED ON NEGLIGENCE, BREACH OF CONTRACT, WARRANTY OR OTHER LEGAL THEORY, FOR: (I) ANY INCIDENTAL, INDIRECT, SPECIAL, OR CONSEQUENTIAL DAMAGES, (II) LOST PROFITS OR LOSS OF REVENUE (WHETHER DIRECT OR INDIRECT), (III) LOSS OF USE OR DAMAGE TO OR LOSS OF DATA, OR (IV) LOSS OF GOODWILL OR OTHER DIMINUTION IN THE VALUE OF THE OTHER'S BUSINESS, IN ALL CASES EVEN IF IT KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES. AMOUNTS FOR WHICH A PARTY IS INDEMNIFIED ACCORDING TO AN ORDER SHALL BE DEEMED DIRECT DAMAGES.

8. Limitation of Liability.

(a) THE TOTAL AGGREGATE LIABILITY OF EACH PARTY AND ITS AFFILIATES FOR ANY AND ALL CAUSES, WHETHER BASED ON NEGLIGENCE, BREACH OF CONTRACT, WARRANTY, OR OTHER LEGAL THEORY, SHALL NOT EXCEED THE AMOUNTS PAID BY CUSTOMER UNDER THE APPLICABLE ORDER DURING THE ONE YEAR PRECEDING THE EARLIEST EVENT GIVING RISE TO LIABILITY.

(b) THE FOREGOING LIMITATION OF LIABILITY IN PARAGRAPH 8 (a), IMMEDIATELY ABOVE, SHALL NOT APPLY TO (i) BODILY INJURY OR DEATH, (ii) INFRINGEMENT BY A PARTY OF THE OTHER PARTY'S INTELLECTUAL PROPERTY RIGHTS; (iii) CUSTOMER'S OBLIGATION TO PAY AMOUNTS OWED FOR SERVICES; AND, (iv) AMOUNTS FOR WHICH A PARTY IS INDEMNIFIED ACCORDING TO AN ORDER.

9. Patent, Copyright and Trade Secret Indemnification

(a) Indemnification by Provider. Provider, at its own expense, will defend Customer against any third party claims asserted against Customer that the Services furnished under an Order infringe any valid patent, copyright or trademark enforceable in, or are subject to claims of misappropriation of trade secrets protected under the laws of, the jurisdiction where the Services are supplied. Provider will pay and indemnify Customer against any court-ordered award of damages or settlement amount and reasonable attorney fees, provided Customer (i) gives Provider prompt written notice of the claim(s), (ii) permits Provider to defend or settle the claim(s), and (iii) provides all reasonable assistance to Provider in defending or settling the claims. If any portion of the Services becomes the subject of a claim, Provider may, at its option (1) obtain the right to continue using the Services, (2) replace or modify the Services to avoid the claim, or (3) terminate Customer's right to use the Services on thirty (30) days' notice and refund to Customer any prepaid fees covering the remaining portion of the Service period. Provider will not defend or indemnify Customer if any claim of infringement or misappropriation (i) is asserted by a parent, subsidiary or affiliate of Customer, (ii) results from any breach by Customer, (iii) results from any design or alteration of any Services by or at the request of Customer or any parent company, subsidiary, affiliate or contractor of Customer, or (iii) results from use of any Services in combination with any Customer Data. This section states the indemnifying party's entire liability and the indemnified party's sole and exclusive remedies for any intellectual property claim asserted against the indemnified party including any patent, copyright infringement, or trade secret misappropriation claim.

(b) Indemnification by Customer.

General. Customer will, at its own expense, defend, indemnify, and hold harmless Provider, Provider's affiliates and licensors, and Third-Party Providers, and each of their respective employee, officers, directors, and representatives from and against any claims, damages, losses, liabilities, costs, and expenses (including reasonable attorneys' fees) arising out of or relating to any third party claim concerning: (a) Customer use of the Service; (b) breach of this Agreement or violation of applicable law by Customer; (c) Customer's content or the combination of Customer's content with other applications, content or processes, including any claim involving alleged infringement or misappropriation of third party rights by Customer's content or by the use, development, design, production, advertising or marketing of Customer's content. If Provider or affiliates are obligated to respond to a third party subpoena or other compulsory legal order or process described above, Customer will also reimburse Provider for reasonable attorneys' fees, as well as Providers employees' and contractors' time and materials spent responding to the third party subpoena or other compulsory legal order or process at Provider's then current hourly rates.

Process. Provider will promptly notify Customer of any claim subject to Section 9(b) above, but Provider's failure to promptly notify Customer will only affect Customer's obligations under Section 9(b) to the extent that Providers failure prejudices Customer's ability to defend the claim. Customer may: (a) use counsel of Customer's own choosing to defend against any claim; and (b) settle the claim as Customer deems appropriate. Provider may assume control of the defense and settlement of the claim at any time.

10. Term and Termination

(a) Term. An Order will become effective on the date specified in the Order and will continue for the greatest Service period under the Order. Unless otherwise explicitly specified in an Order, recurring Services will renew for additional periods of one (1) year unless one party gives written

notice of non-renewal at least ninety (90) days before the end of the then-current Service period. The per-unit pricing for any consumption Service items shall be the then-current list price for the applicable Services.

(b) Termination for Convenience. Customer may terminate an Order without cause at any time upon thirty (30) days advance written notice, provided, however, that any termination of an Order shall not affect other Orders then in effect. Provider may change the Microsoft Terms (Appendix D3.1), the AMANDA Cloud Manager Services – Service Catalogue and Service Descriptions (including any Service or its elements, or end any Service or its elements), or the AMANDA Cloud Managed Services – Customer Order, each upon thirty (30) days advance written notice. If Customer does not want to continue the affected Services, Customer may terminate the Service(s) or the Order for its convenience upon thirty (30) days advance written notice.

(c) Termination for Bankruptcy or Insolvency. Either Provider or Customer may terminate an Order if permitted by, and only within the permitted conditions of applicable law, upon written notice to the other party if the other party becomes or is declared insolvent or bankrupt, is the subject of any proceeding relating to its liquidation, winding-up, insolvency or the appointment of a receiver, administrator or similar officer, makes a general assignment for the benefit of all or substantially all of its creditors, or enters into an agreement for the composition, extension, or readjustment of all or substantially all of its obligations.

(d) Termination for Cause. If either party breaches an Order, the other may cancel the Order upon thirty (30) days advance written notice unless the breach is cured within the thirty (30) day notice period.

(e) Suspension. Without prejudice to any other right, including any right to end an Order, Provider may immediately suspend access to Services under an Order: (i) if Customer materially breaches its obligations under an Order until such breach is cured; (ii) if Provider or its Third Party Provider determines Customer's or its End-User's use of the Services pose a security risk to the Services or any third party, (iii) Customer's or its End Users' use may adversely impact Provider or its Third Party Providers' systems, the Services or the systems or customer data of any other customer of Provider or a Third Party Provider; (iv) Customer's or its End Users' use may subject Provider or any third party to liability (other than liability solely attributable to Provider or the third party for its non-performance) ; or (v) Company's or any End Users' non-compliance with the acceptable use policy of the Third Party Provider. Upon a suspension: Customer remains responsible for all fees and charges incurred from the date of suspension; Customer remains responsible for any applicable fees and charges for any Service to which Customer continues to have access, as well as applicable data storage fees and charges and fees and charges for in-process tasks completed after the date of suspension; and Customer will not be entitled to any service credits under any service level agreements for any period of suspension.

(f) Effects of Termination. Upon any end of a Service or Order, Customer will stop using, and Provider will stop providing, the ended Service(s).

1. Termination for cause:

- i) If Customer ends an Order for cause, Provider shall refund to Customer within thirty (30) days following the effective date of termination any prepaid fees for the terminated Services after the termination date.
- ii) If the Order is terminated by Provider for cause, Customer shall pay to Provider within thirty (30) days following the effective date of termination the unpaid fees for non-

consumption based Services that would have been payable for any remaining portion of the terminated Services.

2. Termination for convenience:

- iii) If Customer terminates for convenience, Provider shall refund any prepaid fees paid by Customer, on a prorated basis.

(g) Termination Assistance. Upon any end of a Service or Order and at Customer's request, Provider shall provide termination assistance services at its then-current rates to assist Customer to insource the work and any applicable Customer Data or to move the work and any applicable Customer Data to an alternate service provider, each according to an agreed upon schedule.

(h) Download/Extract of Customer Data from Cloud Managed Services. Provider shall not withhold from Customer any facility/tool that the Third Party Provider makes available to download/extract Customer Data from the Cloud Managed Services. During the Services, and for not more than 30 days after the end of the Services, Customer may use any such Third Party Provider facility/tool to download/extract Customer Data. Further, Provider may make available to Customer additional Services to provide a download/extract of Customer Data in a standard format supported by the Third Party Provider facility/tool. If Customer does not download/extract Customer Data within the thirty (30) day period following the end the applicable Service, or contract with Provider to download/extract Customer data within the thirty (30) day period, Provider shall have no obligation to maintain or return Customer Data, and shall have the right to delete or remove Customer Data from its, and its Third Party Provider, systems.

(i) Survival. Upon the end of an Order, whether by expiration, termination, or cancellation, the rights and obligations of the parties that by their nature, context, intent, and meaning would reasonably be expected to survive the end of an Order shall survive and include Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 shall survive any expiration or termination of an Order.

11. Dispute Resolution

In the event of a dispute, the Parties shall work together in a good faith effort to reconcile and resolve the source of the dispute. If the Parties are unable to resolve the dispute at the Project Manager level, the Parties shall escalate the issue to the highest level executive of each Party.

12. Other Provisions

(a) **Governing Law.** THE FORMATION, PERFORMANCE, AND INTERPRETATION OF AN ORDER, AND ANY CONTROVERSY OR CLAIM (INCLUDING NON-CONTRACTUAL DISPUTES AND CLAIMS) ARISING OUT OF OR RELATING IN ANY WAY TO ANY ORDER, WHETHER IN CONTRACT, TORT OR OTHERWISE, WILL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH: THE LAW OF THE STATE OF CALIFORNIA, TO THE FULLEST EXTENT PERMITTED BY LAW, CONFLICT OF LAW RULES AND THE U.N. CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS SHALL NOT APPLY. In the event that suit is brought by either party to this Agreement, the parties agree that venue must be exclusively vested in the state courts of the County of Santa Clara, or where otherwise appropriate, exclusively in the United States District Court, Northern District of California, San Jose, California. Contractor further agrees that in the event of a lawsuit involving this Agreement is filed by City, Contractor will unconditionally accept the jurisdiction of a federal or state court located in Santa Clara County, California.

(b) **Relationship of the Parties.** The parties are independent contractors. Nothing in an Order shall be construed to create a partnership, agency or joint venture relationship. Neither party is authorized to act as the agent of the other. Neither party shall have the right to incur any obligation or liability other than on its own behalf. Provider shall be entitled to subcontract or delegate any or all of its obligations under an Order.

(c) **Section Headings.** Headings, whether section, paragraph or otherwise, are for reference only and shall not affect the construction of these GTCs or the other documents referenced in Section 12(m) below or an Order of which these GTCs are a part.

(d) **Waiver.** Failure of either party at any time to require performance of any provision of an Order shall not affect the right to require full performance at any later time. Any waiver by either party of a breach of any provision shall not be held to be a waiver of any later breach.

(e) **Recording.** If, for the protection of the interests of either party, an Order is required to be filed, recorded, or registered in a governmental or other office in any jurisdiction, Customer shall cause the applicable Order, or other documents sufficient to protect Provider' interests, to be filed, recorded or registered and Customer shall pay the entire cost of this, including all applicable fees, charges and taxes.

(f) **Force Majeure.** Except with respect to payment obligations, neither party will be liable for failure to fulfill its obligations under an Order when due to a Force Majeure Event. The party claiming an event of Force Majeure shall advise the other party in writing of the event.

(g) **Assignment.** Neither Party shall assign this Agreement without the prior written consent of the other, except consent is not required if assignment is due to a merger or sale or other transfer of substantially all CSDC's assets, provided the new acquiring entity is fully able to perform the requirements of the Agreement.

(h) **Notices.** The controlling language of these GTCs (or the other documents referenced in Section 12(m), each Order, and all communications shall be English. All notices required by an Order will be deemed sufficient if in writing and (i) sent by e-mail (with no error message or other evidence of non-delivery) to its e-mail address on the first page of the applicable Order (or such other e-mail address notified to Provider in writing by Customer for this purpose), (ii) delivered personally, or (iii) delivered by a reputable international courier service, or by

registered air mail (with return receipt requested), to the party's address on the first page of the applicable Order, to Customer's last address known to Provider, or such address notified by Provider to Customer in writing or by posting such address change to a website made available to Customer.

(i) Severability. Each provision of an Order is severable and if one or more provisions are declared invalid, the remaining provisions of the Agreement and each Order will remain in full force and effect.

(j) Compliance with Law. Each party shall comply with all applicable laws, including without limitation, government export control, privacy and data protection laws, and anti-bribery laws.

(k) Orders, Provisioned Third Party Provider Cloud Resources, and Customer End User Agreements. Provider shall provision the Third Party Provider cloud computing resources according to the applicable Order. The Order shall identify the Third Party Provider from whom Provider will provision the resources. Provider may change any Third Party Provider or any Third Party Provider resource at any time for any reason. Provider will give Customer as much advance written notice as is practicable under the circumstances. Customer shall, and Customer shall require and cause End Users to, comply with the Third Party Provider's standard commercial terms for its other customers in general for the use of the resources, which terms the Third Party Provider generally makes available through publicly available web sites. As an accommodation to Customer and End Users, Provider may, but is not required to, provide the Third Party Provider's standard commercial terms to Customer. Customer shall be solely responsible for the preparation of any agreements between it and its End Users and for the acceptance, performance and administration of, including collection of any payments due to Customer under, its agreements with End Users for the services it sells for the Customer Solution. Customer will include in its End User Agreements, and make its End Users aware of, the terms and conditions of any Third Party Provider for the Third Party Provider resources in any Services, and will obtain the End User's acceptance of the required agreement(s) before placing an order with Provider for the applicable Service.

(l) Software. (a) The Services may include software (and its media), and available documentation related to software and Services. Software may be provided as part of a Service at no charge or licensed separately subject to an additional charge; (b) Software is not sold. Title to all software products supplied to Customer will remain with its licensor and Customer will acquire no rights to any software product except to the extent Customer acquires the right to use software products as an end user customer, in which case it will be bound by the applicable end user license agreement; (c) a licensor may modify the terms and conditions of its end user license agreements, at any time upon written or electronic notice to Customer and Customer shall adhere to the licensor's then current end user license agreements.

(m) Documents Included. The then-current version of the following documents are incorporated into this Agreement:

- The GTCs listed in paragraphs 1 through 12 herein (which excludes the items referenced in the following three bullets below)
- Exhibit A – Microsoft Terms (attached hereto)
- AMANDA® Cloud Managed Services - Service Catalogue and Service Descriptions;
- AMANDA® Cloud Managed Services - Customer Order

(n) Definitions.

Customer means the customer entity named in the Order for Services for AMANDA Cloud Managed Services.

Customer Data means any software (including the Customer Solution and any machine images), data, text, audio, video, images or other content provided by Customer or its End Users and used in or with the Services.

Customer Solution means the CSDC AMANDA software Business Solution.

End User means any individual or entity that, directly or indirectly through another, accesses or uses the Services or Customer Data, or both.

Force Majeure Event means any circumstance beyond the reasonable control, and without the fault or negligence, of the party whose performance is prevented or delayed by the circumstance.

Order means an order, including a Order Form, for AMANDA Cloud Managed Services, submitted by a Customer and accepted by Provider. Each Order shall consist of the Order document, any documents incorporated in the Order, these GTCs, and any documents referenced by, or incorporated in, these GTCs.

Services mean the services available from Provider for AMANDA Cloud Managed Services, including those services in the Provider Service Catalogue and Service Descriptions, described in an Order. Services may include services of third parties. Any services of a third party provider made available through the Services shall be subject to the third party provider standard terms under which the provider makes its services available to its customers in general.

Taxes means any taxes, levies, duties or similar governmental assessments of any kind, including customs duties, value-added sale, goods and services, harmonized sale, use, excise or withholding taxes assessable by any jurisdiction.

Third Party Provider means a provider of infrastructure as a service or platform as a service provisioned by Provider and used for AMANDA Cloud Managed Services.

Provider means the entity that accepted the Order.

Appendix D3.1 -Microsoft Terms

The Services purchased may contain the following third party components and/or services. Each component and/or service is listed by name and version (if appropriate), followed by its copyright notice (if available) and governing terms. Click on the following links to view the full text of relevant terms.

Component / Service Name	Version	License & Attribution
Microsoft Windows Azure Cloud Services		Windows Azure Acceptable Use Policy and Services Terms-
		Windows Azure Services Use Rights -
		Windows Azure Privacy Statement- (a)
		Windows Azure Website Terms of Use-

Microsoft End User License Terms, Terms and Conditions Regarding Use of Microsoft Software (and the applicable terms in the Microsoft Service Provider User Rights, SPUR)

You, Customer, agree that the following Microsoft End User License Terms and the applicable terms contained in the Service Provider Use Rights, SPUR, regarding the use, modification, copying and/or distribution of Microsoft products are effective and binding on you and your End Users, in all applicable jurisdictions.

**MICROSOFT END USER LICENSE TERMS
TERMS AND CONDITIONS REGARDING USE OF MICROSOFT SOFTWARE**

This document governs the use of Microsoft software, which may include associated software, media, printed materials, and “online” or electronic documentation (individually and collectively, “Products”) provided by PROVIDER. Provider does not own the Products and the use thereof is subject to certain rights and limitations of which Provider must inform you. Your right to use the Products is subject to the terms of your agreement with Provider, and to your understanding of, compliance with, and consent to the following terms and conditions, which Provider does not have authority to vary, alter, or amend.

1. DEFINITIONS.

- 1.1. “Client Software” means software that is installed on a Device that allows the Device to access or utilize the Products.
- 1.2. “Device” means each of a computer, workstation, terminal, handheld PC, pager, telephone, personal digital assistant, “smart phone,” server or other electronic device.
- 1.3. “End User” means an individual or legal entity that obtains Software Services directly from Provider, or indirectly through a Software Services Reseller.
- 1.4. “Redistribution Software” means the software described in Paragraph 4 (“Use of Redistribution Software”) below.
- 1.5. “Software Services” means services that Provider provides to you that make available, display, run, access, or otherwise interact, directly or indirectly, with the Products. Provider

must provide these services from data center(s) through the Internet, a telephone network or a private network, on a rental, subscription or services basis, whether or not Provider receives a fee. Software Services exclude any services involving installation of a Product directly on any End User device to permit an End User to interact with the Product.

2. OWNERSHIP OF PRODUCTS.

The Products are licensed to Provider from an affiliate of the Microsoft Corporation (collectively "Microsoft"). Microsoft Products are protected by copyright and other intellectual property rights. Products and other Product elements including but not limited to any images, photographs, animations, video, audio, music, text and "applets" incorporated into the Products are owned by Microsoft or its suppliers. You may not remove, modify or obscure any copyright trademark or other proprietary rights notices that are contained in or on the Products. The Products are protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. Your possession, access, or use of the Products does not transfer any ownership of the Products or any intellectual property rights to you.

3. USE OF CLIENT SOFTWARE.

You may use the Client Software installed on your Devices only in accordance with your agreement with Provider and the terms under this document, and only in connection with the Software Services, provided to you by Provider. The terms of this document permanently and irrevocably supersede the terms of any Microsoft End User License Agreement that may be presented in electronic form during the installation and/or use of the Client Software.

4. USE OF REDISTRIBUTION SOFTWARE.

In connection with the Software Services provided to you by Provider, you may have access to certain "sample," "redistributable" and/or software development ("SDK") software code and tools (individually and collectively "Redistribution Software"). **YOU MAY NOT USE, MODIFY, COPY, INSTALL AND/OR DISTRIBUTE ANY CLIENT SOFTWARE AND/OR REDISTRIBUTION SOFTWARE.** Microsoft does not permit you to use any Redistribution Software unless you expressly agree to and comply with such additional terms, as provided to you by Provider.

5. COPIES.

You may not make any copies of the Products; provided, however, that you may (a) make one copy of Client Software on your Device as expressly authorized by Provider; and (b) you may make copies of certain Redistribution Software in accordance with Paragraph 4 (Use of Redistribution Software). You must erase or destroy all such Client Software and/or Redistribution Software upon termination or cancellation of your agreement with Provider, upon notice from Provider or upon transfer of your Device to another person or entity, whichever occurs first. You may not copy any printed materials accompanying the Products.

6. LIMITATIONS ON REVERSE ENGINEERING, DECOMPILATION AND DISASSEMBLY.

You may not reverse engineer, decompile, or disassemble the Products, except and only to the extent that applicable law, notwithstanding this limitation, expressly permits such activity.

7. NO RENTAL.

You may not rent, lease, lend, pledge, or directly or indirectly transfer or distribute the Products to any third party, and may not permit any third party to have access to and/or use the functionality of the Products except for the sole purpose of accessing the functionality of the

Products in the form of Software Services in accordance with the terms of this agreement and any agreement between you and Provider.

8. TERMINATION.

Without prejudice to any other rights, Provider may terminate your rights to use the Products if you fail to comply with these terms and conditions. In the event of termination or cancellation of your agreement with Provider or Provider's agreement with Microsoft under which the Products are licensed, you must stop using and/or accessing the Products, and destroy all copies of the Products and all of their component parts within thirty (30) days of the termination of your agreement with Provider.

9. NO WARRANTIES, LIABILITIES OR REMEDIES BY MICROSOFT.

Microsoft disclaims, to the extent permitted by applicable law, all warranties and liability for damages by Microsoft or its suppliers for any damages and remedies whether direct, indirect or consequential, arising from the Software Services. Any warranties and liabilities are provided solely by Provider and not by Microsoft, its affiliates or subsidiaries.

10. PRODUCT SUPPORT.

Any support for the Software Services is provided to you by Provider or a third party on Provider's behalf and is not provided by Microsoft, its suppliers, affiliates or subsidiaries.

11. NOT FAULT TOLERANT.

The Products are not fault-tolerant and are not guaranteed to be error free or to operate uninterrupted. You must not use the Products in any application or situation where the Product(s) failure could lead to death or serious bodily injury of any person, or to severe physical or environmental damage ("High Risk Use").

12. EXPORT RESTRICTIONS.

The Products are subject to U.S. export jurisdiction. Provider must comply with all applicable laws including the U.S. Export Administration Regulations, the International Traffic in Arms Regulations, as well as end-user, end-use and destination restrictions issued by U.S. and other governments. For additional information, see <http://www.microsoft.com/exporting/>.

13. LIABILITY FOR BREACH.

In addition to any liability you may have to Provider, you agree that you will also be legally responsible directly to Microsoft for any breach of these terms and conditions.

14. INFORMATION DISCLOSURE.

You must permit Provider to disclose any information requested by Microsoft under the Provider's agreement. Microsoft has the right to verify your compliance with your agreement with Provider.

Appendix D3.2 – Customer Order Form (Unisys)
(A completed Order Form must be processed through the Change Order process)

AMANDA® Managed Services
Customer Order

The following service provisioning options are included. Please refer to Appendix A.9 for details.

Base Service Package - Available for Order (check the box)

	Customer Selection	Additional Notes
Provisioning Option	<input checked="" type="checkbox"/> Platform Managed Services <input type="checkbox"/> Application Managed Services	
Non-production environments	Number of Environments: <u>2</u> Number of Application Servers: <u>8</u> Specify: <input checked="" type="checkbox"/> BackOffice/YellowFin <input checked="" type="checkbox"/> Portal / Mobile <input checked="" type="checkbox"/> GeoCortex/ADLIB <input checked="" type="checkbox"/> ProjectDox [Web/App/Job/SQL] Other(s): _____	
Production environments	Number of Environments: <u>1</u> Number of Application Servers: <u>8</u> Specify: <input checked="" type="checkbox"/> BackOffice <input checked="" type="checkbox"/> Portal / Mobile <input checked="" type="checkbox"/> YellowFin <input checked="" type="checkbox"/> Geocortex/ADLIB <input checked="" type="checkbox"/> ProjectDox [x4: Web/App/Job/SQL] Other(s): _____ High Availability Configuration (99.9%) <input type="checkbox"/> Disaster Recovery Services <input type="checkbox"/> Managed Scalability Services <input type="checkbox"/>	
Database Software	<input checked="" type="checkbox"/> Oracle <input checked="" type="checkbox"/> SQL Server	
Database Residency	<input checked="" type="checkbox"/> United States Specify Region: <u>US West</u> <input type="checkbox"/> Canada Specify Region: _____ Other, specify: _____	
Application Availability	Specify: <input type="checkbox"/> 5X9 <input type="checkbox"/> 7X16 <input type="checkbox"/> 5X12 <input checked="" type="checkbox"/> 7X24 Other(s): _____	
Software Licenses	Specify: _____	

Customer Responsibilities

The Customer is responsible for:

- AMANDA Governance** including identification users, roles, access authorization, application privileges, data ownership data classification, and compliance with all applicable laws, regulations, statutes, policies, standards, and best practices.
- AMANDA Administration** including managing users, permissions, schedules, list box entries, fees and other basic configurations and administrative tasks typically performed by customer administrators or managers who have received AMANDA administration training.
- AMANDA Application Management** including on-going application code/configurations maintenance and enhancements including Service Transition processes including Configuration Management and Change Management of Customer's AMANDA application code and configurations.

Customer Custom Criteria or Special Requests

Description	Price	Notes
N/A		

EXHIBIT E – CHANGE ORDER FORM

Pursuant to Section 7 of the Agreement for _____ between the City of San Jose and CSDC Systems Inc., the Agreement is hereby amended as follows:

(The following language is hereby provided as an example of how to complete this form.)

1. Contractor shall provide the following additional services at the costs indicated below:

TOTAL	

2. The following services, products or deliverables are hereby deleted and the associated costs in amounts set forth below are also deleted.

TOTAL	

3. EXHIBIT __ is hereby amended to read as set forth in the Revised EXHIBIT __ which is attached hereto.

4. All of the terms and conditions of the Agreement not modified by Change Order shall remain in full force and effect.

	Total Cost of Change	
	Total Credit of Change	0
	Previous Amendments and/or Change Orders	
	Original Contract	

ACCEPTANCE

Contractor hereby agrees to accept the amount set forth herein as payment in full of the work described and further agrees that Contractor is entitled to no additional time or compensation for such work other than as set forth herein.

CSDC Systems Inc., Contractor

Date

APPROVED AS TO FORM

Senior Deputy City Attorney

City of San José

Date

EXHIBIT F – NOTICE OF EXERCISE OF OPTION TO EXTEND AGREEMENT

AGREEMENT TITLE:	
CONTRACTOR CSDC Systems Inc.:	
DATE:	

(date the notice is sent must be consistent with the time for exercise set forth in Agreement)

Pursuant to Section 2.2 of the Agreement referenced above, the City of San José hereby exercises its option to extend the term under the following provisions:

OPTION NO.	
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NEW OPTION TERM

Begin date:	
End date:	

CHANGES IN RATE OF COMPENSATION

Percentage change in CPI upon which adjustment is based:	
---	--

Pursuant to Section ___ of the Agreement the Rates of Compensation are hereby adjusted as follows:

(use attachment if necessary)

MAXIMUM COMPENSATION for New Option Term:	
--	--

For the option term exercised by this Notice, City shall pay Contractor an amount not to exceed the amount set forth above for Contractor's services and reimbursable expenses, if any. The undersigned signing on behalf of the City of San José hereby certifies that an unexpended appropriation is available for the term exercised by this Notice, and that funds are available as of the date of this signature.

<p>APPROVED AS TO FORM:</p> <p>_____</p> <p>Senior Deputy City Attorney</p>	<p>CITY OF SAN JOSÉ a municipal corporation</p> <p>By _____</p> <p>Name: _____</p> <p>Title: _____</p> <p>Date: _____</p>
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Exhibit G – CSDC Proposal Response

{to be inserted}

Exhibit H – City of San Jose RFP #15-16-04 Integrated Permitting System

{to be inserted}