

**AGREEMENT BETWEEN THE COUNTY OF SAN MATEO AND
PCMG, Inc. dba PCM Gov, Inc.**

THIS AGREEMENT, entered into this _____ day of _____ ,
20____, by and between the COUNTY OF SAN MATEO, hereinafter called
“County,” and PCMG, Inc. dba PCM Gov, Inc. hereinafter called “Contractor”;

W I T N E S S E T H:

WHEREAS, pursuant to Government Code Section 31000, County may contract with independent Contractors for the furnishing of such services to or for County or any Department thereof;

WHEREAS, it is necessary and desirable that Contractor be retained for the purpose of Managed Hosting Services for the County’s Property Tax System;

**NOW, THEREFORE, IT IS HEREBY AGREED BY THE PARTIES HERETO
AS FOLLOWS:**

1. Exhibits and Attachments

The following exhibits and attachments are attached to this Agreement and incorporated into this Agreement by this reference:

Exhibit A—Services

Exhibit B—Payments and Rates

2. Services to be performed by Contractor

In consideration of the payments set forth herein and in Exhibit B, Contractor shall perform services for County in accordance with the terms, conditions, and specifications set forth herein and in Exhibit A.

3. Payments

In consideration of the services provided by Contractor in accordance with all terms, conditions, and specifications set forth herein and in Exhibit A, County shall make payment to Contractor based on the rates and in the manner specified in Exhibit B. Any sum due Contractor for which a time for payment is not otherwise specified shall be due and payable within thirty (30) calendar days after receipt by County of the applicable invoice from Contractor.

County reserves the right to withhold payment if County determines that the quantity or quality of the work performed is unacceptable. If County gives notice of non-acceptance to Contractor, then the Contractor shall investigate the reported failure and complete such investigation within thirty (30) days. County shall provide to the Contractor reasonably detailed documentation and explanation, together with underlying data, if any, to substantiate the failure and to assist the Contractor in its efforts to understand and if necessary correct the failure. If Contractor contends that there was no material failure to perform or that the alleged failure to perform was not attributable to a defect in Contractor's services or an act of omission of Contractor, then Contractor shall give written notice to County explaining its determination in reasonable detail within the thirty (30) day investigatory period. If, within such period, Contractor does correct the failure, then Contractor shall give written notice to County verifying the failure has been corrected, and another thirty (30) day acceptance period shall commence

In no event shall County's total fiscal obligation under this Agreement exceed (\$758,256).

4. Term and Termination

Subject to compliance with all terms and conditions, the term of this Agreement shall be from April 1, 2015 through June 30, 2018. Two one-year extensions may be exercised at the sole option of the County, potentially extending the term through June 30, 2020.

This Agreement may be terminated by Contractor or the County (through the Controller or his/her designee) at any time without a requirement of good cause upon thirty (30) days' written notice to the other party.

In the event of termination, all finished or unfinished documents, data, studies, maps, photographs, reports, and materials (hereafter referred to as materials) prepared by Contractor under this Agreement shall become the property of County and shall be promptly delivered to County. Upon termination, Contractor may make and retain a copy of such materials. Subject to availability of funding, Contractor shall be entitled to receive payment for work/services provided prior to termination of the Agreement. Such payment shall be that portion of the full payment which is determined by comparing the work/services completed to the work/services required by the Agreement.

5. Availability of Funds

County may terminate this Agreement or a portion of the services referenced in the Attachments and Exhibits based upon unavailability of Federal, State, or County funds by providing written notice to Contractor as soon as is reasonably possible after County learns of said unavailability of outside funding.

6. Relationship of Parties

Contractor agrees and understands that the work/services performed under this Agreement are performed as an independent Contractor and not as an employee of County and that neither Contractor nor its employees acquire any of the rights, privileges, powers, or advantages of County employees.

7. Hold Harmless

7.1 General Hold Harmless. Contractor shall indemnify and save harmless County and its officers, agents, employees, and servants from all claims, suits, or actions of every name, kind, and description resulting from this Agreement, the performance of any work or services required of Contractor under this Agreement, or payments made pursuant to this Agreement brought for, or on account of, any of the following: (A) injuries to or death of any person, including Contractor or its employees/officers/agents; (B) damage to any property of any kind whatsoever and to whomsoever belonging; (C) any sanctions, penalties, or claims of damages resulting from Contractor's failure to comply, if applicable, with the requirements set forth in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and all Federal regulations promulgated thereunder, as amended; or (D) any other loss or cost, including but not limited to that caused by the concurrent active or passive negligence of County and/or its officers, agents, employees, or servants. However, Contractor's duty to indemnify and save harmless under this Section shall not apply to injuries or damage for which County has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence or willful misconduct.

The duty of Contractor to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

7.2 Intellectual Property Indemnification.

Contractor hereby certifies that it owns, controls, or licenses and retains all right, title, and interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and other technology relating to any part of the services it provides under this Agreement and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets ("IP Rights") except as otherwise noted by this Agreement. Contractor warrants that the services it provides under this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Contractor shall defend, indemnify, and hold harmless County from and against all liabilities, costs, damages, losses, and expenses (including reasonable attorney fees) arising out of or related to any claim by a third party that the services provided under this Agreement infringe or violate any third-party's IP Rights provided any such right is

enforceable in the United States. Contractor's duty to defend, indemnify, and hold harmless under this Section applies only provided that: (a) County notifies Contractor promptly in writing of any notice of any such third-party claim; (b) County cooperates with Contractor, at Contractor's expense, in all reasonable respects in connection with the investigation and defense of any such third-party claim; (c) Contractor retains sole control of the defense of any action on any such claim and all negotiations for its settlement or compromise (provided Contractor shall not have the right to settle any criminal action, suit, or proceeding without County's prior written consent, not to be unreasonably withheld, and provided further that any settlement permitted under this Section shall not impose any financial or other obligation on County, impair any right of County, or contain any stipulation, admission, or acknowledgement of wrongdoing on the part of County without County's prior written consent, not to be unreasonably withheld); and (d) should services under this Agreement become, or in Contractor's opinion be likely to become, the subject of such a claim, or in the event such a third party claim or threatened claim causes County's reasonable use of the services under this Agreement to be seriously endangered or disrupted, Contractor shall, at Contractor's option and expense, either: (i) procure for County the right to continue using the services without infringement or (ii) replace or modify the services so that they become non infringing but remain functionally equivalent.

Notwithstanding anything in this Section to the contrary, Contractor will have no obligation or liability to County under this Section to the extent any otherwise covered claim is based upon: (a) any aspects of the services under this Agreement which have been modified by or for County (other than modification performed by, or at the direction of, Contractor) in such a way as to cause the alleged infringement at issue; (b) any aspects of the services under this Agreement which have been used by County in a manner prohibited by this Agreement.

The duty of Contractor to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

8. Assignability and Subcontracting

Contractor shall not assign this Agreement or any portion thereof to a third party or subcontract with a third party to provide services required by Contractor under this Agreement without the prior written consent of County. Any such assignment or subcontract without County's prior written consent shall give County the right to automatically and immediately terminate this Agreement.

9. Insurance

Contractor shall not commence work or be required to commence work under this Agreement unless and until all insurance required under this Section has been obtained and such insurance has been approved by County's Risk Management, and Contractor shall use diligence to obtain such insurance and to obtain such approval. Contractor shall furnish County with certificates of insurance evidencing the required coverage, and there shall be a specific contractual liability endorsement extending Contractor's coverage to include the contractual liability assumed by Contractor pursuant to this Agreement. These certificates shall specify or be endorsed to provide that thirty (30) days' notice must be given, in writing, to County of any pending change in the limits of liability or of any cancellation or modification of the policy.

- (1) **Workers' Compensation and Employer's Liability Insurance.** Contractor shall have in effect during the entire term of this Agreement workers' compensation and employer's liability insurance providing full statutory coverage. In signing this Agreement, Contractor certifies, as required by Section 1861 of the California Labor Code, (a) that it is aware of the provisions of Section 3700 of the California Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code, and (b) that it will comply with such provisions before commencing the performance of work under this Agreement.
- (2) **Liability Insurance.** Contractor shall take out and maintain during the term of this Agreement such bodily injury liability and property damage liability insurance as shall protect Contractor and all of its employees/officers/agents while performing work covered by this Agreement from any and all claims for damages for bodily injury, including accidental death, as well as any and all claims for property damage which may arise from Contractor's operations under this Agreement, whether such operations be by Contractor, any subcontractor, anyone directly or indirectly employed by either of them, or by an agent of either of them. Such insurance shall be combined single limit bodily injury and property damage for each occurrence and shall not be less than the amount specified below.

Such insurance shall include:

(a)	Comprehensive General Liability	\$1,000,000
(b)	Motor Vehicle Liability Insurance	\$1,000,000
(c)	Professional Liability.	\$1,000,000

County and its officers, agents, employees, and servants shall be named as additional insured on any such policies of insurance, which shall also contain a provision that (a) the insurance afforded thereby to County and its officers, agents, employees, and servants shall be primary insurance to the full limits of liability of the policy and (b) if the County or its officers, agents, employees, and servants have other insurance against the loss covered by such a policy, such other insurance shall be excess insurance only.

In the event of the breach of any provision of this Section, or in the event any notice is received which indicates any required insurance coverage will be diminished or canceled, County, at its option, may, notwithstanding any other provision of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend all further work and payment pursuant to this Agreement.

10. Compliance With Laws

All services to be performed by Contractor pursuant to this Agreement shall be performed in accordance with all applicable Federal, State, County, and municipal laws, ordinances, and regulations, including but not limited to the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Federal Regulations promulgated thereunder, as amended (if applicable), the Business Associate requirements set forth in Attachment H (if attached), the Americans with Disabilities Act of 1990, as amended, and Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap in programs and activities receiving any Federal or County financial assistance. Such services shall also be performed in accordance with all applicable ordinances and regulations, including but not limited to appropriate licensure, certification regulations, provisions pertaining to confidentiality of records, and applicable quality assurance regulations. In the event of a conflict between the terms of this Agreement and any applicable State, Federal, County, or municipal law or regulation, the requirements of the applicable law or regulation will take precedence over the requirements set forth in this Agreement.

Further, Contractor certifies that Contractor and all of its subcontractors will adhere to all applicable provisions of Chapter 4.106 of the San Mateo County Ordinance Code, which regulates the use of disposable food service ware.

Contractor will timely and accurately complete, sign, and submit all necessary documentation of compliance.

11. Non-Discrimination and Other Requirements

- A. *General non-discrimination.* No person shall be denied any services provided pursuant to this Agreement (except as limited by the scope of services) on the grounds of race, color, national origin, ancestry, age, disability (physical or mental), sex, sexual orientation, gender identity, marital or domestic partner status, religion, political beliefs or affiliation, familial or parental status (including pregnancy), medical condition (cancer-related), military service, or genetic information.
- B. *Equal employment opportunity.* Contractor shall ensure equal employment opportunity based on objective standards of recruitment, classification, selection, promotion, compensation, performance evaluation, and management relations for all employees under this Agreement. Contractor's equal employment policies shall be made available to County upon request.

C. *Section 504 of the Rehabilitation Act of 1973.* Contractor shall comply with Section 504 of the Rehabilitation Act of 1973, as amended, which provides that no otherwise qualified handicapped individual shall, solely by reason of a disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination in the performance of this Agreement. This Section applies only to Contractors who are providing services to members of the public under this Agreement.

D. *Compliance with County's Equal Benefits Ordinance.* With respect to the provision of benefits to its employees, Contractor shall comply with Chapter 2.84 of the County Ordinance Code, which prohibits Contractors from discriminating in the provision of employee benefits between an employee with a domestic partner and an employee with a spouse. In order to meet the requirements of Chapter 2.84, Contractor must certify which of the following statements is/are accurate:

- ☒ Contractor complies with Chapter 2.84 by:
 - ☒ offering the same benefits to its employees with spouses and its employees with domestic partners.
 - ☐ offering, in the case where the same benefits are not offered to its employees with spouses and its employees with domestic partners, a cash payment to an employee with a domestic partner that is equal to Contractor's cost of providing the benefit to an employee with a spouse.
- ☐ Contractor is exempt from having to comply with Chapter 2.84 because it has no employees or does not provide benefits to employees' spouses.
- ☐ Contractor does not comply with Chapter 2.84, and a waiver must be sought.

E. *Discrimination Against Individuals with Disabilities.* The Contractor shall comply fully with the nondiscrimination requirements of 41 C.F.R. 60-741.5(a), which is incorporated herein as if fully set forth.

F. *History of Discrimination.* Contractor must check one of the two following options, and by executing this Agreement, Contractor certifies that the option selected is accurate:

- ☒ No finding of discrimination has been issued in the past 365 days against Contractor by the Equal Employment Opportunity Commission, Fair Employment and Housing Commission, or any other investigative entity.
- ☐ Finding(s) of discrimination have been issued against Contractor

within the past 365 days by the Equal Employment Opportunity Commission, Fair Employment and Housing Commission, or other investigative entity. If this box is checked, Contractor shall provide County with a written explanation of the outcome(s) or remedy for the discrimination.

G. *Violation of Non-discrimination provisions.* Violation of the non-discrimination provisions of this Agreement shall be considered a breach of this Agreement and subject the Contractor to penalties, to be determined by the County Manager, including but not limited to the following:

- i) termination of this Agreement;
- ii) disqualification of the Contractor from bidding on or being awarded a County contract for a period of up to 3 years;
- iii) liquidated damages of \$2,500 per violation; and/or
- iv) imposition of other appropriate contractual and civil remedies and sanctions, as determined by the County Manager.

To effectuate the provisions of this Section, the County Manager shall have the authority to examine Contractor's employment records with respect to compliance with this Section and/or to set off all or any portion of the amount described in this Section against amounts due to Contractor under this Agreement or any other agreement between Contractor and County.

Contractor shall report to the County Manager the filing by any person in any court of any complaint of discrimination or the filing by any person of any and all charges with the Equal Employment Opportunity Commission, the Fair Employment and Housing Commission, or any other entity charged with the investigation of allegations within 30 days of such filing, provided that within such 30 days such entity has not notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include the name of the complainant, a copy of such complaint, and a description of the circumstance. Contractor shall provide County with a copy of their response to the Complaint when filed.

12. Compliance with County Employee Jury Service Ordinance

Contractor shall comply with Chapter 2.85 of the County's Ordinance Code, which states that a Contractor shall have and adhere to a written policy providing that its employees, to the extent they live in San Mateo County, shall receive from the Contractor, on an annual basis, no fewer than five days of regular pay for jury service in San Mateo County, with jury pay being provided only for each day of actual jury service. The policy may provide that such employees deposit any fees received for such jury service with Contractor or that the Contractor may deduct from an employee's regular pay the fees received for jury service in San Mateo County. By signing this Agreement, Contractor certifies that it has and adheres to a policy

consistent with Chapter 2.85. For purposes of this Section, if Contractor has no employees in San Mateo County, it is sufficient for Contractor to provide the following written statement to County: "For purposes of San Mateo County's jury service ordinance, Contractor certifies that it has no employees who live in San Mateo County. To the extent that it hires any such employees during the term of its Agreement with San Mateo County, Contractor shall adopt a policy that complies with Chapter 2.85 of the County's Ordinance Code."

13. Retention of Records, Right to Monitor and Audit

(a) Contractor shall maintain all required records for three (3) years after County makes final payment and all other pending matters are closed, and Contractor shall be subject to the examination and/or audit of County, a Federal grantor agency, and the State of California.

(b) Reporting and Record Keeping: Contractor shall comply with all program and fiscal reporting requirements set forth by appropriate Federal, State, and local agencies, and as required by County.

(c) Contractor agrees upon reasonable notice to provide to County, to any Federal or State department having monitoring or review authority, to County's authorized representatives, and/or to any of their respective audit agencies access to and the right to examine all records and documents necessary to determine compliance with relevant Federal, State, and local statutes, rules, and regulations, to determine compliance with this Agreement, and to evaluate the quality, appropriateness, and timeliness of services performed.

14. Merger Clause & Amendments

This Agreement, including the Exhibits and Attachments attached to this Agreement and incorporated herein by reference, constitutes the sole Agreement of the parties to this Agreement and correctly states the rights, duties, and obligations of each party as of this document's date. In the event that any term, condition, provision, requirement, or specification set forth in the body of this Agreement conflicts with or is inconsistent with any term, condition, provision, requirement, or specification in any Exhibit and/or Attachment to this Agreement, the provisions of the body of the Agreement shall prevail. Any prior agreement, promises, negotiations, or representations between the parties not expressly stated in this document are not binding. All subsequent modifications or amendments shall be in writing and signed by the parties.

15. Controlling Law and Venue

The validity of this Agreement and of its terms or provisions, the rights and duties of the parties under this Agreement, the interpretation of this Agreement, the performance of this Agreement, and any other dispute of any nature arising out of this Agreement shall be governed by the laws of the State of California without regard to its choice of law rules. Any dispute arising out of this Agreement shall be venued either in the San Mateo County Superior Court or in the United States District Court for the Northern District of California.

16. Notices

Any notice, request, demand, or other communication required or permitted under this Agreement shall be deemed to be properly given when both: (1) transmitted via facsimile to the telephone number listed below or transmitted via email to the email address listed below; and (2) sent to the physical address listed below by either being deposited in the United States mail, postage prepaid, or deposited for overnight delivery, charges prepaid, with an established overnight courier that provides a tracking number showing confirmation of receipt.

In the case of County, to:

Name/Title: Shirley Tourel, Assistant Controller
Address: 555 County Center, FL4, Redwood City, CA 94063
Telephone: 650-599-1149
Facsimile: 650-363-7888
Email: stourel@smcgov.org

In the case of Contractor, to:

Name/Title: Danayet Gebremedhin, Contracts Administrator
Address: 1940 E. Mariposa Drive, El Segundo, CA 90245
Telephone: 310-354-5679
Facsimile: 703-378-4464
Email: Danayet.gebremedhin@pcmg.com

17. Electronic Signature

If both County and Contractor wish to permit this Agreement and future documents relating to this Agreement to be digitally signed in accordance with California law and County's Electronic Signature Administrative Memo, both boxes below must be checked. Any party that agrees to allow digital signature of this Agreement may revoke such agreement at any time in relation to all future documents by providing notice pursuant to this Agreement.

For County: ☐ If this box is checked by County, County consents to the use of electronic signatures in relation to this Agreement.

For Contractor: ☒ If this box is checked by Contractor, Contractor consents to the use of electronic signatures in relation to this Agreement.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives, have affixed their hands.

COUNTY OF SAN MATEO

By: _____
President, Board of Supervisors, San Mateo
County

Date: _____

ATTEST:

By: _____
Clerk of Said Board

Contractor

Cathy Balboa
Contractor's Signature

Date: 2/3/2015

(Revised 7/1/13)

Exhibit A

In consideration of the payments set forth in Exhibit B, Contractor shall provide the following services:

DEFINITIONS

Deliverable: For the purposes of this Scope of Work ("SOW"), the term 'deliverable' refers to one specific work product that is the outcome of the engagement. Collectively, deliverables are the product for which the price of this SOW is exchanged. Services or activities (work) will be performed as a part of this SOW in order to produce the deliverables (work product).

Documentation: The terms 'document' and 'documentation' as they relate to this SOW are intended to mean any notes, charts, graphs, diagrams, report outputs, network addresses, passwords, configuration logs, or any other discretionary information deemed by Contractor to be relevant to this effort. Documentation is not intended to be, or considered to be, complete, comprehensive, or exhaustive as it relates to the overall County network or information systems environment. Any documentation provided as a part of the execution of this SOW will be limited to systems, items, or topics specifically referenced in this SOW.

Knowledge Transfer: The term 'knowledge transfer', as it relates to this SOW, is intended to mean conversational discussions about various technical aspects of this effort. Knowledge transfer is not intended to be, expected to be, or considered to be complete, comprehensive, or exhaustive as it relates to the overall County network or information systems environment. Additionally, knowledge transfer is not intended to replace the need for formal instruction or vendor-supplied training in the operation of any systems installed or configured as part of this SOW.

Training: Unless otherwise specifically stated in this SOW, Contractor supplied training is not intended to convey any formal certification or credential and is provided on a 'best effort' basis as a courtesy to the County.

Best Effort: The term 'best effort' as it relates to this SOW is intended to mean services provided by Contractor to the County with no express warrantee or guarantee implied. A particular outcome of best effort service is not guaranteed, but every effort will be made to ensure the best result possible within the time allowed and with the resources available.

IN SCOPE: The work described in the Activities section of this document, and effort toward the fulfillment and delivery of items described in the Deliverables section of this document are considered to be 'IN SCOPE' as they relate to this effort. The contents of the Assumptions sections of this document provide specific clarification of the scope.

OUT OF SCOPE: Any items, components, materials, efforts, objectives, tasks, or services not described in either the Activities or Deliverables section of this

document are considered 'OUT OF SCOPE' as they relate to this effort. OUT OF SCOPE work will not be performed without written authorization by the County via the project change control process described herein.

Testing, Validation, Verification: The terms 'testing', 'validation' and 'verification' refer to the process of comparing measurements and observations of specific information systems to County provided expectations or criteria. The County is responsible to confirm that tests, validation, or verification is successful.

Introduction of Service (Description)

Contractor will migrate and provide hosting services for the County's Property Tax System. The following scope describes the key phase associated with on-boarding The County's IBM i workloads (SMCTAX, SMCTEST, SMCTWEB1, SMCTWEB2) to Contractor's infrastructure, including High Availability (HA) instances in another Contractor Data Center for SMCTAX, SMCTWEB1 and SMCTWEB2 systems.

Along with the migration of the workloads to Contractor, Operating System Upgrades are required on all 4 County IBM i systems. SMCTAX and SMCTEST are currently on IBM i V6.1 and will be upgraded to IBM i V7.1. SMCTWEB1 and SMCTWEB2 are currently on IBM i V5R4 and will be upgraded to IBM i V7.1.

Scope of Work

The following sections define the scope of this work effort. Only the items detailed here will be considered IN SCOPE to this project. Any other tasks, activities, services, or work products which may be requested by County throughout this engagement will be considered OUT OF SCOPE and may require additional costs or fees, changes of project schedule, or a project change order.

Responsibilities

Contractor has identified the following responsibilities which will be performed as a part of this engagement:

Contractor will provide a Project Manager who will:

- 1) Schedule and conduct the project kick off meeting.
- 2) Serve as primary project contact and escalation point
- 3) Own responsibility for scheduling of Contractor project resources
- 4) Provide periodic (typically weekly) project status reports

Contractor will provide Senior Technical Consultants & Installation Engineers who will:

- 1) Attend project kick off meeting

- 2) Report on the existing configuration and highlight recommendations and concerns
- 3) Perform the deliverables listed in this document

County will provide a Project Manager who will:

- 1) Ensure that all Contractor resources have proper and timely access to key systems and personnel
- 2) Attend project kick off meetings and ensure that key company personnel also attend this and other important status meeting events

Deliverables

The following items will be delivered to County and shall constitute the work product of this engagement.

1. Weekly status reports to include the progress of all major project components, concerns, tasks completed and tasks forthcoming.
2. Standard IBM report for object conversions that includes programs, modules, SQL packages, JAVA stream files and spooled files. This report will be useful in defining problems that require source code and County intervention before the upgrade is performed.
3. Analysis of existing PTFs that will include IBM recommendations for the application of additional fixes prior to the upgrade. IBM has identified specific problems that require fixes before the upgrade. Detailed analysis of these fixes as they pertain to your environment will be performed and a subsequent list will be submitted to the County.
4. If the system is managed by a Hardware Management Console (HMC), a firmware investigation will be performed to determine if it is functional with the new release and if additional firmware/HMC version is required.
5. DASD usage and available capacity inspected to insure sufficient space for upgrade.
6. System components such as DASD, IOPs and feature cards will be examined for compatibility with the V7 operating system.
7. IBM Release update from V5R4 to V7R1 of the Licensed Internal Code and V7R1 of the Operating System.
8. System information printouts before install.
9. Updated Cumulative PTF package including HIPER's and applicable group PTF's.
10. SAVSYS upon completion.
11. Confirm connectivity and system integrity is regained upon startup of QINTER and applicable subsystems.

12. Performance Reports and Reviews. During the Term:

a. For each calendar month, Contractor shall provide to County a written report comparing the actual performance of Basic Services with their applicable Performance Objectives. Such a report shall be submitted within 10 working days after the end of the reporting month.

b. At County's request, representatives of Contractor and County shall meet to review Contractor's performance of Services under this Agreement and to discuss technical plans, financial matters, system performance, service levels and for any other matters related to this Agreement that may be reasonably requested by either party.

13. Quality Assurance and Reporting. Contractor shall promptly report to County (a) all malfunctions in the System discovered by Contractor, (b) any knowledge of circumstances that could reasonably result in malfunction or lead to a delay in the performance of the Services described in this Agreement, and (c) Contractor's proposed solution to items (a) and (b), including a detailed description of all solutions to such problems.

14. One (1) day onsite County training included in agreement at no additional cost; travel expenses will not be covered by the County.

Assumptions

Contractor has identified the following assumptions which are relevant to the scope of this work effort:

1. It is assumed that all analysis work related to this engagement will be performed during normal business hours (Monday through Friday 8 a.m. – 6 p.m. County local time). Release updates, services encompassed within the terms of this contract, including the final migration, if performed during non-work hours to minimize the outage for business functions will not be billed at overtime rates.
2. All documentation will be provided in Microsoft Word™, Microsoft Excel™, Microsoft Visio™, or Adobe PDF™ electronic file formats at Contractor's discretion or in any format otherwise agreed by Contractor and County.
3. The current system(s) under a current SWMA agreement with IBM.
4. The latest cumulative PTF package has been loaded and applied for V5R4 on SMCTWEB1 and SMCTWEB2 systems.
5. Remote access to the systems/LPARs is provided for use by the Contractor system engineers.

6. An *ALLOBJ special authority user profile is available to Contractor for analysis.
7. County Users will be notified of outages (if applicable)
8. County supplies Media (tapes) for County current System saves.
9. Signed County Agreement prior to project start.

Contractor Infrastructure and Systems are provisioned and ready for OS Upgrade/Migration

Failure to realize above assumptions may result in a delay of project and additional costs being assessed.

Tasks/Responsibilities

Phase 1- Setup, OS Upgrades and Testing

- 1) Contractor Provisioning of resources defined in Exhibit A of the Contractor OSA (30-60 days to completion from agreement signature)(Contractor)
- 2) Contractor and County to establish VPN connectivity between Contractor and County (Contractor and County)
- 3) County to provide System and/or HMC profiles with QSECOFR or ALLOBJ Authority to perform discovery tasks (County)
- 4) Assist/perform PTF updates as required for pre-upgrade requirements and analysis dictates, following change management procedures (County)
- 5) Provide written analysis, consultation and recommendations for upgrading V5R4 to V7R1 IBM i5/OS, Licensed Program Products (LPP's) and 3rd party applications prior to OS upgrade tasks (Contractor)
- 6) Review written analysis and recommendations from Contractor for upgrading V5R4 to V7R1 i5/OS, Licensed Program Products (LPP's) and 3rd party applications and to contact noted 3rd party providers for V7R1 support requirements and document for the upgrade process (County)
- 7) Sign off on concerns and required steps for upgrading 3rd party applications (Contractor and County)
- 8) Schedule and perform full system saves (option 21) on the systems in scope (SMCTAX, SMCTEST, SMCTWEB1, SMCTWEB2) on LTO3 or LTO4 tape media (County)
- 9) Send full system save tapes to Contractor: 5080 Old Ellis Pointe, Roswell, GA 30076 attn: County of San Mateo Project (County)
- 10) Receive and mount County full system save tapes for OS Upgrade/Migration (Contractor)
- 11) Perform OS Upgrade/Migration to Contractor provisioned environments in scope (Contractor)
- 12) Validate successful migration and OS functionality for County and handoff (Contractor)
- 13) Provide test environments in an isolated network with configuration mutually agreed upon by Contractor and County for (30) days (Contractor)
- 14) Provide IBM i OS and IBM Licensed Program Products (Contractor)
- 15) Provide 3rd party application license keys (County)
- 16) Perform application testing and work with application support provider to resolve and document any problems (County)
- 17) Assist County with any network, system and operating system issues during application testing (Contractor)

Phase 2 – Migration While Active

- 18) Install QuickEDD on County Current Systems SMCTAX, SMCTWEB1, SMCTWEB2 at a time mutually agreed upon (though install is non-invasive, work with the County to determine appropriate time)(Contractor)
- 19) Install QuickEDD on Contractor Test/Production instances of SMCTAX, SMCTWEB1, SMCTWEB2 (Contractor)
- 20) Start replication to sync the current and new Test/Production instances (minimal impact to current San Mateo production instances, coordination to determine the appropriate time) (Contractor)
- 21) On-Board Contractor Managed Services: Backups and Monitoring (Contractor)

Phase 3 – Cutover

- 22) Plan for cutover from County current systems to new Test/Production systems:
 - a. Verify network connections/interfaces with County systems (County)
 - b. Verify new Test/Production system readiness for cutover (Contractor)
 - c. Plan for cutover date/time (County and Contractor)
 - d. Sign off on cutover readiness (County)
 - e. Create final cutover checklist for County application and processes (County)
 - f. Plan for SMCTEST cutover save (County and Contractor)
 - g. Setup Calendar/Bridge for cutover (Contractor)
- 23) Final Cutover:
 - h. Perform final full save on SMCTEST (County)
 - i. Ship final SMCTEST full save tape to Contractor via service required for SMCTEST cutover (County)
 - j. Open Bridge for final cutover (Contractor)
 - k. Verbal acknowledgement of readiness to cutover (County)
 - l. Failover production of SMCTAX, SMCTWEB1, SMCTWEB2, SMCTEST to new Contractor Production systems (Contractor)
 - m. Validate cutover of SMCTAX, SMCTWEB1, SMCTWEB2, SMCTEST from replication and IBM OS perspective (Contractor)
 - n. Test and validate cutover of SMCTAX, SMCTWEB1, SMCTWEB2, SMCTEST to new Contractor Production environment from County application and processes checklist (County)

Phase 4 – Replicate to HA in New Albany

- 24) Provision HA Instances for SMCTAX, SMCTWEB1, SMCTWEB2 in Contractor New Albany Ohio Data Center (Contractor)
- 25) Backup new instances of SMCTAX, SMCTWEB1, SMCTWEB2 and restore to HA instances in Contractor New Albany Ohio Data Center (Contractor)
- 26) Restore new instances of SMCTAX, SMCTWEB1, SMCTWEB2 to HA instances in Contractor New Albany Ohio Data Center (Contractor)
- 27) Install QuickEDD on the HA instances of SMCTAX, SMCTWEB1, SMCTWEB2 in Contractor New Albany Ohio Data Center (Contractor)
- 28) Establish replication between County current systems and new Production instances (replicating from 1 system to 2 targets)(Contractor)
- 29) Monitor replication between County current systems to new Test/Production and HA instances (Contractor)

Phase 5 – Failover finalization (in parallel)

- 30) Verify VPN connectivity to County HA instances from Contractor Roswell, Georgia and New Albany Ohio (County and Contractor)
- 31) Perform virtual failover tests:
 - o. Schedule failover test (County and Contractor)
 - i. Include Super Users for application testing and data verification (County)
 - p. Suspend replication and validate HA instance testing readiness (Contractor)
 - q. Test application and verify data (County)
 - r. Upon application testing and data is verified, restart replication (Contractor)
 - s. Discuss issues found during testing (County and Contractor)

Scope Exclusions

Contractor has identified the following items which will be specifically excluded from the scope of this engagement:

- 1) Contractor is not responsible to reset any clocks on any devices throughout the network or the County environment. Contractor will default all LPARs to Pacific Time.
- 2) Contractor will not provide any training beyond basic knowledge transfer for any of the managed services and solutions provided. It is the County's responsibility to provide necessary training to network administrators and IT staff.

- 3) Contractor is not responsible for third party object conversion issues.
County should be in contact with vendor to assure that all components are available for V7R1 and that applications are supported under IBM System i V7R1.

Services / Support / Component	County Provided	Managed Solution / Contractor Provided	Other Provider [note provider] or Technical comments
Cloud-Based Hardware Section			
IBM i Server LPAR #1 (SMCTAX): 1,575 CPW, 24 GB Memory, 1,228 GB DASD v7.1 OS 2 x 1 GB Ports		X	Production Environment, located in Roswell, GA
IBM i Server LPAR #2 (SMCTEST): 1,075 CPW, 8 GB Memory, 700 GB DASD v7.1 OS 2 x 1 GB Ports		X	Production Environment, located in Roswell, GA
IBM i Server LPAR #3 (SMCTWEB1): 1,575 CPW, 24 GB Memory, 200 GB DASD v7.1 OS 2 x 1 GB Ports		X	Production Environment, located in Roswell, GA
IBM i Server LPAR #4 (SMCTWEB2): 1,575 CPW, 12 GB Memory, 200 GB DASD v7.1 OS 2 x 1 GB Ports		X	Production Environment, located in Roswell, GA
IBM i Server LPAR #5 (SMCTAX): 1,575 CPW, 24 GB Memory, 1,228 GB DASD v7.1 OS 2 x 1 GB Ports		X	DR/HA Environment, located in New Albany, OH
IBM i Server LPAR #7 (SMCTWEB1): 1,575 CPW, 24 GB Memory, 200 GB DASD v7.1 OS 2 x 1 GB Ports		X	DR/HA Environment, located in New Albany, OH
IBM i Server LPAR #8 (SMCTWEB2): 1,575 CPW, 12 GB Memory, 200 GB DASD v7.1 OS 2 x 1 GB Ports		X	DR/HA Environment, located in New Albany, OH
Software			
IBM i OS and Licensed Program Products		X	IBM i i5/OS (5770-SS1), iSeries Access (5770-XW1), IBM Web Query Express (5733-WQE), IBM Portable Utilities (5733-SC1), Nation Language Version (5770-NLV), Performance Tools (5770-PT1), Query for i5/OS (5770-QU1), IBM WDS (5770-WDS), System i Access Family (5770-XW1), Zend Server (5639-ZC1), WebSphere Application Server – Enterprise Ed. V7.0
IBM i Third Party Applications	X		Including but not limited to Workright Software, Maani Charting Software and X-Analysis Software

Monitoring & Management Services			
System Monitoring and Management: SMCTAX Production		X	LEVEL: Advanced Monitoring & Management Services
System Monitoring and Management: SMCTEST Production		X	LEVEL: Advanced Monitoring & Management Services
System Monitoring and Management: SMCTWEB1 Production		X	LEVEL: Advanced Monitoring & Management Services
System Monitoring and Management: SMCTWEB2 Production		X	LEVEL: Advanced Monitoring & Management Services
System Monitoring and Management: SMCTAX HA/DR		X	LEVEL: Advanced Monitoring & Management Services
System Monitoring and Management: SMCTEST HA/DR		X	LEVEL: Advanced Monitoring & Management Services
System Monitoring and Management: SMCTWEB1 HA/DR		X	LEVEL: Advanced Monitoring & Management Services
System Monitoring and Management: SMCTWEB2 HA/DR		X	LEVEL: Advanced Monitoring & Management Services
WebSphere Support Services: SMCTAX		X	LEVEL: Advanced
WebSphere Support Services: SMCTEST		X	LEVEL: Advanced
WebSphere Support Services: SMCTWEB1		X	LEVEL: Advanced
WebSphere Support Services: SMCTWEB2		X	LEVEL: Advanced
IBM i Replication Services: SMCTAX		X	LEVEL: Advanced
IBM i Replication Services: SMCTWEB1		X	LEVEL: Advanced
IBM i Replication Services: SMCTWEB2		X	LEVEL: Advanced
Backup Services			
IBM i Backup Services: SMCTAX		X	i. Daily (30 Daily) ii. Weekly (4 Weekly) Full System Save iii. Monthly (12 Monthly) iv. Yearly (offsite for 7 years)
IBM i Backup Services: SMCTEST		X	i. Daily (30 Daily) ii. Weekly (4 Weekly) Full System Save
IBM i Backup Services: SMCTWEB1		X	i. Daily (30 Daily) ii. Weekly (4 Weekly) Full System Save
IBM i Backup Services: SMCTWEB2		X	i. Daily (30 Daily) ii. Weekly (4 Weekly) Full System Save
Network Section			
Internet: 20 Mbps (burstable 2x)		X	Roswell, GA / New Albany, OH (DR)

Site-to-Site VPN Tunnel – Qty –4		X	Roswell, GA / New Albany, OH (DR) Contractor will be providing (2) VPN tunnels one for each data center. Contractor will provide an additional (2) VPN tunnels at no additional recurring charge.
Managed Firewall Service (1 Port / 8 ip's)		X	Roswell, GA / New Albany, OH (DR)

For a full list of details please reference below:

Topic	SMCTAX	SMCTEST	SMCTWEB1	SMCTWEB2
HARDWARE REQUIREMENTS				
PRODUCTION, TEST OR DEVELOPMENT	Production	Development/Test	Production	Test/Fail Over
PROCESSOR	TBD	TBD	TBD	TBD
Processor SN				
CPW range for Batch Processing	1575	1075	1575	1575
CPW range for Interactive Processing	1575	1075	1575	1575
CPU Utilization	Assuming current is 1200, 19% Avg 72% Peak	Assuming current is 1200, 11% Avg 39% Peak	Assuming current is 1070, 10% Avg 41% Peak	Assuming current is 1070, 10% Avg 24% Peak
MEMORY GB	24 GB	8 GB	24 GB	12 GB
DASD TYPE				
Storage	1,228 GB	700 GB	200 GB	200 GB
% utilized	40%	38%	31%	32%
Data Protection	Raid 5	Raid 5	Raid 5	Raid 5
Number of Disk Arms	10	10	6	6
Disk Arm Utilization	TBD, Same arms, faster technology and throughput	TBD, +4 arms, faster technology and throughput	TBD, Same arms, faster technology and throughput	TBD, Same arms, faster technology and throughput
Disk Response Time	TBD, Same arms, faster technology and throughput	TBD, +4 arms, faster technology and throughput	TBD, Same arms, faster technology and throughput	TBD, Same arms, faster technology and throughput
System Response	TBD, Same arms, faster technology and throughput	TBD, +4 arms, faster technology and throughput	TBD, Same arms, faster technology and throughput	TBD, Same arms, faster technology and throughput
COMMUNICATIONS				
Physical LAN Ports	2 x 1 GB ports	2 x 1 GB ports	2 x 1 GB ports	2 x 1 GB ports
Virtual Lan Interfaces	Yes	Yes	Yes	Yes
Redundant Fail over yes or no	Yes	Yes	Yes	Yes
Console System Control (HMC, ASM)	HMC	HMC	HMC	HMC
NETWORK				
	Scope for 10 Mbps (burst x 2), recommend bandwidth assesment to validate	Scope for 10 Mbps (burst x 2), recommend bandwidth assesment to validate	Scope for 10 Mbps (burst x 2), recommend bandwidth assesment to validate	Scope for 10 Mbps (burst x 2), recommend bandwidth assesment to validate
Bandwidth	2GB+ through Multiple providers, 2 paths into Data Center	2GB+ through Multiple providers, 2 paths into Data Center	2GB+ through Multiple providers, 2 paths into Data Center	2GB+ through Multiple providers, 2 paths into Data Center
Current Service Provider	2GB+ through Multiple providers, 2 paths into Data Center	2GB+ through Multiple providers, 2 paths into Data Center	2GB+ through Multiple providers, 2 paths into Data Center	2GB+ through Multiple providers, 2 paths into Data Center
Internet Connection	20	20	20	20
Internet Access (per Mbps includes x2 bursting)	20	20	20	20
Site to Site VPN Services - Instances:	1	1	1	1
Firewall Service (1 Port /3 IP's) - Instances:	1	1	1	1
TAPE	3588-F4A or 3588-F5A	3588-F4A or 3588-F5A	3588-F4A or 3588-F5A	3588-F4A or 3588-F5A
Physical or virtual	Physical	Physical	Physical	Physical
Library, autoloader or single tape	TS3500 Library	TS3500 Library	TS3500 Library	TS3500 Library
Media Format	LTO4 or LTO5	LTO4 or LTO5	LTO4 or LTO5	LTO4 or LTO5
Capacity	1.6 TB or 3 TB	1.6 TB or 3 TB	1.6 TB or 3 TB	1.6 TB or 3 TB
SAS,SCSI,Fiber or Network Attached	Fibre	Fibre	Fibre	Fibre
Nightly Back Up,	Select Libraries Custom CL	Select Libraries Custom CL	Select Libraries Custom CL	Select Libraries Custom CL
Weekly Back Up	Full System	Full System	Full System	Full System
Monthly Back Up	Full System	N/A	N/A	N/A
Quarterly	Full System			
Annual Back Up, Incremental, Full, Opt 23	User Objects, Archived	N/A	N/A	N/A
Tape Rotation	30 D, 4 W Full Sys & 12 M	30 D, 4 W Full System	30 D, 4 W Full System	30 D, 4 W Full System
Off Site Tape Rotation	Yes, Daily	Yes, Daily	Yes, Daily	Yes, Daily
Tape Management	BRMS	BRMS	BRMS	BRMS

UPS				
Output KVA	Multiple UPS, redundant, +100 KVA ea	Multiple UPS, redundant, +100 KVA ea	Multiple UPS, redundant, +100 KVA ea	Multiple UPS, redundant, +100 KVA ea
Duration of output (minutes)	20 min, generator on full load within 15 sec. Redundant 400 KVA Generators	20 min, generator on full load within 15 sec. Redundant 400 KVA Generators	20 min, generator on full load within 15 sec. Redundant 400 KVA Generators	20 min, generator on full load within 15 sec. Redundant 400 KVA Generators
Number of output receptacles	N/A	N/A	N/A	N/A
Serial connection to server	N/A	N/A	N/A	N/A
SOFTWARE REQUIREMENTS				
Operating System	I5 OS OS/400	I5 OS OS/400	I5 OS OS/400	I5 OS OS/400
Version and Release	V7R1	V7R1	V7R1	V7R1
Cumm and Hiper fix levels	TR6+	TR6+	TR6+	TR6+
Users				
System Reported Concurrent Users	customer provided = 30	customer provided = 4	customer provided = 4	customer provided = 3
Licensed Users	Unlimited	Unlimited	Unlimited	Unlimited
IBM LICENSE				
5722 AC3 Cryptograph Acc Prov	Withdrawn, part of OS	Withdrawn, part of OS		
5722-CE3 Client Encryption	Withdrawn, part of OS	Withdrawn, part of OS		
5722 WE1 IBM Web Enablement Flat Fee OTC	Withdrawn, part of OS	Withdrawn, part of OS		
5722 XW1 I Series Access	Yes, Unlimited - 5770-XW1	Yes, Unlimited - 5770-XW1	Yes, Unlimited - 5770-XW1	Yes, Unlimited - 5770-XW1
5733 DR1 IBM Director For I5 OS	No	No	No	No
5761-CM1 Communications Utilities	Yes, Support ends 9/30/15	Yes, Support ends 9/30/15		
5722-QU2 IBM DB2 Web Query	Yes Qty 4	Yes Qty 4		
5733-SC1 IBM Portable Utilities I5/OS	Yes	Yes		
4904 Portal utilities I5/OS	Yes	Yes		
5761-NLV National Language Version	Yes, 5770-NLV	Yes, 5770-NLV		
5761 PT1 Performance Tools w Feat 2110 and 5911 Manager	Yes, 5770-PT1	Yes, 5770-PT1		
5761 QU1 Query For I5/OS	Yes, 5770-QU1	Yes, 5770-QU1		
5761-SS1 IBM I5/OS	Yes, 5770-SS1	Yes, 5770-SS1		
5761-WDS IBM WEBSPPHERE DEV Studio	Yes, 5770-WDS	Yes, 5770-WDS		
5761-XW1 System I Access Family	Yes, 5770-XW1	Yes, 5770-XW1		
5639 ZC1 Zend Server. W/ SWMA			Yes	Yes
5722-WDS WDS 400			Yes, 5770-WDS	Yes, 5770-WDS
5722-WE2 IBM WEB ENABLEMENT FOR I5/ OS	Yes	Yes	Yes	Yes
1536 WEB ENABLEMENT V6.0	Withdrawn, V7 or V8	Withdrawn, V7 or V8	Yes	Yes
1554 WEBSPPHERE EXPRESS 6.1			Withdrawn, V7 or V8	Withdrawn, V7 or V8
1556 IBM WEB ENABLEMENT FOR I5/ OS			Withdrawn, V7 or V8	Withdrawn, V7 or V8
2690 WEBSPPHERE EXPRESS V6.1 CD REF			Withdrawn, V7 or V8	Withdrawn, V7 or V8
2691 WEBSPPHERE EXPRESS V6.1 DVD REF			Withdrawn, V7 or V8	Withdrawn, V7 or V8
2692 WAS 6.0 REFRESH	Withdrawn, V7 or V8	Withdrawn, V7 or V8	Withdrawn, V7 or V8	Withdrawn, V7 or V8
2924 ENGLISH U/ L SBOS PRIMARY	Withdrawn, V7 or V8	Withdrawn, V7 or V8	Withdrawn, V7 or V8	Withdrawn, V7 or V8
5902 V5.3 WEBSPPHERE EXPRESS 6.0	Withdrawn, V7 or V8	Withdrawn, V7 or V8	Withdrawn, V7 or V8	Withdrawn, V7 or V8
5903 WEBSPPHERE EXPRESS 6.1 CD			Withdrawn, V7 or V8	Withdrawn, V7 or V8
5904 WEBSPPHERE EXPRESS 6.1 DVD			Withdrawn, V7 or V8	Withdrawn, V7 or V8
5905 EXP RUNTIME WEB ENV (CD)			Withdrawn, V7 or V8	Withdrawn, V7 or V8
5906 EXP RUNTIME WEB ENV (DVD)			Withdrawn, V7 or V8	Withdrawn, V7 or V8
5909 WEBSPPHERE EXPRESS 6.1 CD			Withdrawn, V7 or V8	Withdrawn, V7 or V8
3RD PARTY SOFTWARE¹				
PerZip4 by Workright				
Maani – Graphics Software				
X Analysis software.				
1. Third party product licenses and keys are customer responsibility				

Managed Server – IBM i

Scope and Responsibilities

Service Management Process	PCM Services	Managed Server – IBM iSeries Description (40200)
Capacity Management	Premier Services (40280)	PCM will review performance data with the customer to plan for future capacity requirements and make recommendations regarding resources of the device and its associated interfaces.
Performance Management		PCM will capture and trend performance data for the server and its associated interfaces. PCM will provide results of these performance metrics to the customer at desired at desired intervals. Performance reports provided are based on industry standard metrics and are generated upon request of the customer. Custom report generation is not included – Please see PCM Project Services.
Continuity Management		PCM will consult with the customer regarding this service and how it pertains to the customer's Disaster Recovery and Business Continuity plans. Note: the customer is responsible for developing and maintaining their DR and BCP plans.
Problem Management	Advanced Services (40260)	PCM will track the unknown causes of one or more related incidents, and will provide remediation of underlying issues. Performs Root Cause Analysis and publishes or reports on known errors. Problem management is limited to the hardware and operating system of the iSeries System or LPAR covered under this service.
Change Management		PCM will execute changes on this iSeries System or LPAR – (i.e. add memory or processors, add host bus adapters, etc.). For example, converting a server to a 2 or multi-node cluster is implemented via PCM Project Services outside of this service.
Incident Management		PCM will address interruption or degradation of service related to iSeries System or LPAR or operating systems covered under this service. Incidents are escalated via event management processes, and PCM is responsible for their remediation. The intention is to restore service, and not necessarily address underlying problems. Note: It is the customer's responsibility to maintain active hardware maintenance contracts for managed devices.
Patch Management	Essential Services (40240)	PCM will update PTF's for the operating system up to two (2) times per year or as required and following vendor-recommended best practices and PCM's patch management policy. Patch management does not include any desktops or client related items. Major software upgrades are not included – please see PCM Project Services.
Event Management		PCM will monitor for fault and performance events related to iSeries Systems or LPAR's covered under this service. Identified events are escalated, either to PCM engineering teams, or as defined in the customer escalation procedure, per contractual parameters.
Performance Reporting		PCM provides automated monthly reporting that includes statistics and counters that are tracked within monitoring and Event Management tools.
Configuration Management		PCM will maintain the configuration information of the server hardware and operating system device covered under this service.

Description of Services

The **Managed Server – IBM i** service is a managed service designed to provide County with the technology management processes and tools required to monitor, support, and maintain a server in an Enterprise network. The processes and efforts used to deliver this service span a range of activities and are bundled into the following tiers of service below. These tiers provide the County with options ranging from basic monitoring and alerting to complete performance and capacity management. The following sections are independent descriptions of each of the

server management tiers and can be repurposed for Contractor training, proposals, documentation, etc.

Managed Server, IBM i – Monitoring Services

The **Managed Server (Monitoring)** service is the most basic form of managed service for Server devices. It is comprised of Contractor monitoring of the County's physical or virtual server systems. As part of this level of service, Contractor will monitor operating system level services as well as key physical elements, which include but are not limited to hard drive, CPU and memory usage. Events captured in this monitoring service will be handled and escalated based on County escalation procedures. Services included within this offering apply to a single physical or virtual server instance.

The **Managed Server, IBM i (Essential)** extends the most basic form of managed service for IBM i by adding Program Temporary Fix (PTF) management services. It is comprised of Contractor monitoring and PTF management of a County's physical or virtual server systems. As part of the Essential level of service, Contractor will monitor operating system level services as well as key physical elements, which include but are not limited to hard drive, CPU and memory usage. Events captured in this monitoring service will be handled and escalated based on County escalation procedures. Also included in this level is patch management. Servers covered under this service will be reviewed with the County as IBM's cumulative PTF packages are released and/or semi-annually and as needed. Services included within this offering apply to a single physical or virtual server instance.

The **Managed Server, IBM i (Advanced)** service is comprised of Contractor monitoring and Contractor technical services related to management of a County's iSeries System or LPAR. As part of the Advanced level of service, Contractor will monitor operating system level services as well as key physical elements, which include but are not limited to hard drive, CPU and memory usage. Also included in this level is patch management, incident handling and remediation, change and problem management. Services included within this offering apply to a single physical or virtual server instance.

The **Managed Server, IBM i (Premier)** service is comprised of Contractor monitoring and Contractor technical services related to management of a County's iSeries System or LPAR. As part of the Premier level of service, Contractor will monitor operating system level services as well as key physical elements, which include but are not limited to hard drive, CPU and memory usage. Also included in this level is patch management, incident handling and remediation, change and problem management – as well as continuity, performance, and capacity management. Services included within this offering apply to a single physical or virtual server instance

Supported Technologies

- IBM i5/OS V5R4
- IBM i5/OS V6.1
- IBM i5/OS V7.1

Application Management, WebSphere

Description of Services

The **Application Management, WebSphere** service is a managed service designed to provide the County with the technology management processes and tools required to monitor, support, and maintain a WebSphere in an Enterprise network. The processes and efforts used to deliver this service span a range of activities and are bundled into the following tiers of service below. The WebSphere service must run on a version of server operating system supported by Contractor. The following sections are independent descriptions of each of the WebSphere application tiers and can be repurposed for Contractor training, proposals, documentation, etc.

Application Management, WebSphere – Advanced Services

The **Application Management, WebSphere (Advanced)** service provides key management services to ensure current health and functionality on a County's WebSphere application. As an Advanced-level offering, this service includes monitoring, patching, fulfillment of user requested changes, as well as incident remediation and root cause problem resolution. These services are specific to the managed application itself and are exclusive to any of the same services applied to the application's host server.

To receive this service, a WebSphere application must reside on the operating system of a Contractor managed server (Advanced or Premier level).

Scope and Responsibilities

Service Management Process	PCM Services	Managed Application - Webserver Description (51700)
Capacity Management	Premier Services	Not available
Performance Management		Not available
Continuity Management		Not available
Problem Management	Advanced Services (51760)	PCM will track the unknown causes of one or more related incidents, and will provide remediation of underlying issues. Performs Root Cause Analysis and publishes or reports on known errors. Problem management is limited to the webserver application under this service.
Change Management		PCM will execute requested changes to the webserver application, maintaining strict adherence to PCM change management policies to include obtaining proper authorizations for changes and agreeing to appropriate change windows. (Examples of changes may include but are not limited to: add/remove virtual directories, change application pool configurations, change user permissions, etc)
Incident Management		PCM will address interruption or degradation of service related to the webserver application. These incidents are reported via event management processes, and PCM is responsible for remediation of the incident. The intention is to restore service, and not necessarily address underlying problems.
Patch Management		PCM will patch the webserver application using management tools and following vendor-recommended best practices. Major software upgrades and Service Packs are not included – please see PCM Project Services.
Event Management	Essential Services (51740)	PCM will monitor for fault and performance events specific to the webserver application and separate from those associated with the application's host server.
Performance Reporting		PCM provides automated monthly reporting that includes statistics and counters that are tracked within monitoring and Event Management tools.
Configuration Management		PCM will track each managed webserver application as a distinct configuration item (CI) and maintain key configuration data and relationships with other assets and services.

Supported Platforms

- IBM i5/OS
- Windows

Supported Versions

- 6.1
- 7.0
- 8.5

Advanced Backup Services

For most businesses effective data protection is vital, and almost all enterprises implement some form of backup and recovery strategy. However, as organizations grow both organically and through acquisition, backup procedures can become fragmented, leading to inefficiency, high costs and, in some cases, loss of effective data protection.

Contractor's Advanced Backup Services provides a complete back-up solution from the business-level requirements, through back-up operations and procedures, to the supporting hardware and software infrastructure. Our experienced professionals manage all aspects of your back-up needs to ensure that your most critical enterprise assets are fully protected.

Partial data restores are included for all physical and virtual servers that carry Contractor Advanced or Outsourced Server Management services. Sufficient disk space must be available to restore individual files, directories, or databases. Not that full system restores will recover systems to previous point-in-time. Additional efforts related to a full system restore will be billable under normal hourly rates.

Restores requests that are still available from disk can be restored the same day at no charge. Managed Services restore requests that must come from tape, and needed by client the same day, will incur an Iron Mountain expedite charge. Tapes are delivered from Iron Mountain between 2pm and 6pm each day, however emergency courier service can be provided at an additional charge.

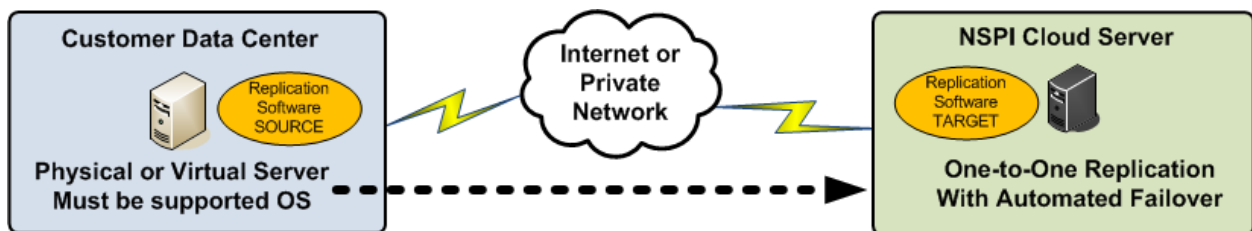
Key service elements include:

- Disk to Tape to Offsite Vault Rotation
- Offsite Vault Rotation of weekend full and weekday differentials
 - Weekday offsite for 1 week
 - Full offsite for 5 weeks
 - Monthly full offsite for 1 year

IBM i Advanced Replication Service

County leverages Contractor's IBM i Advanced Replication Service to facilitate disaster recovery capabilities through replication and automation. The "target server" must reside on a Managed Operating System to be supported. The "source server" may reside on a managed or non-managed server either in the Contractor cloud or at the County's data center. The supported applications (see Supported Technologies below) that provide the replication and failover automation can be licensed through Contractor's service provider license agreement or can be purchased as a perpetual license by the County. The One-to-one Disaster Recovery Replication Service is always deployed in a one-to-one replication scenario where a source server is replicated directly to a single, always-on target server. The application may reside either at the County data center, in one of the Contractor data centers, in the Contractor cloud computing environment, or in any combination.

This service is sold to provide the County with near "push-button" disaster recovery capabilities. The failover to the target DR system is automated; however, the failover must be initiated by a system administrator.



The Disaster Recovery solution described within this Service Definition follows three main modes of operation. They are as follows:

Operation Mode	Description	Included in Service
Normal Operation	Normal Operation is defined as the state of the service where the replication software is replicating from the Source Server to the Target Server and the system is not in a testing or failover state.	Yes

Operation Mode	Description	Included in Service
Testing Operation	Testing Operation is defined as the mode of operation where replication has been paused for a period of time so as to test and/or validate the target server is capable of handling production in a failover state.	Yes Contractor will perform one Test per year. Contractor will provide up to 8 hours of testing support services. Support services are defined as issues unrelated to the core management and replication services included in the contract. Additional support effort above the 8 hours will be billed at the Standard Contractor hourly rate.
Failover Operation	Failover Operation is defined as the mode of operation where the Source Server is no longer available and all production activities have been moved to the Target Server.	Yes

Disaster Declaration

Authorized County representatives can initiate a system failover by calling the IOC 24 hours per day 7 days per week. The following outlines responsibilities during a declared disaster.

IOC Responsibilities:

1. Verification that the County representative is authorized to request initiation of the failover
2. Initiate the failover to the Target Server via the application interface
3. If required, change IP address of the Target Server (typically scripted through application automation)
4. Ensure that the County representative can access the Target Server via IP address

County Responsibilities:

1. Maintain Disaster Recovery Plan
2. Update IOC when there are changes to the list of authorized County representatives
3. Maintain access to disaster recovery resources (VPN, Private WAN, etc.)
4. Test systems to ensure functionality
5. Management of Source Server
6. Notification by phone to IOC to initiate failover (e-mail is not an acceptable)

Scope and Responsibilities

Service Management Process	One-to-One Disaster Recovery Replication Service Description (17160)
Capacity Management	Not included
Performance Management	Not included
Continuity Management	Not included NOTE: Although “Continuity Management” by definition is not included in this service, this service is part of Continuity Management for the production instance of the application it is protecting. The customer is responsible for performing Business Impact Analysis (BIA) and Risk Assessment activities as well as producing the Contingency Plan. Additional recommended activities include testing, reviewing, and revising the plan on a regular basis.
Problem Management	PCM will track the unknown causes of one or more related incidents, and will provide remediation of underlying issues. Performs Root Cause Analysis and publishes or reports on known errors. Problem management is limited to the Disaster Recovery Application under this service.
Change Management	PCM will execute requested changes to the Disaster Recovery Application, maintaining strict adherence to PCM change management policies to include obtaining proper authorizations for changes and agreeing to appropriate change windows. (Examples of changes may include but are not limited to: change bandwidth throttling parameters, change replication settings, etc.) NOTE: Customer is responsible for initiating any failover requests through the IOC. PCM will not automatically fail over any system without authorization from the customer. Disaster declarations resulting in a request to failover to the replica system are not considered part of normal Change Management and can be initiated on-demand.
Incident Management	PCM will address interruption or degradation of service related to the Disaster Recovery Application. These incidents are reported via event management processes, and PCM is responsible for remediation of the incident. The intention is to restore service, and not necessarily address underlying problems.
Patch Management	PCM will patch the Disaster Recovery Application following vendor-recommended best practices. Major software upgrades are not included – please see PCM Project Services.
Event Management	PCM will monitor for fault and performance events specific to the Disaster Recovery Application and separate from those associated with the application’s host server.
Configuration Management	PCM will track each managed instance of the Disaster Recovery application as a distinct configuration item (CI) and maintain key configuration data and relationships with other assets and services. Configuration examples include the type of replication (continuous, point-in-time, system state, etc.) and the frequency of replication (nightly, real-time, bandwidth allocation requirements).

Supported Technologies

- Traders – Quick-EDD
- Vision Solutions – iTera
- Vision Solutions - Mimix

Service Level Agreement Chart

Response Minimums:

Request Type	Description	Priority	Business Impact Examples	SLA Target: First Response	SLA Target: Resolution
Incident	Service is not available, working at diminished capacity (broken – it was working but now it is not). Action is required to restore service.	1. Widespread Service Interruption	Enterprise wide outage, Significant Impact to business	15 Minutes (24/7)	1 Hour
		2. Widespread Service Degradation	Enterprise wide service degraded, Intermittent Impact to business	30 Minutes (24/7)	4 Hours
		3. Localized Service Interruption	Departmental/Group Outage with significant impact to multiple users	2 Hours (24/7)	24 Hours
		4. Localized Service Degradation	Departmental/Group service degraded, intermittent impact to multiple users	2 Hours (24/7)	24 Hours
		5. Isolated Service Interruption	Single User/Limited outage, significant impact to a single user	2 Hours (Business Hours)	24 Hours
		6. Isolated Service Degradation	Single User/Limited service degraded, significant impact to a single user	2 Hours (Business Hours)	24 Hours

Service Availability:

Contractor's Service Availability commitment for a given calendar month is 99.9%. The Service Availability per month will be calculated as follows:

- 1) Take the total number of minutes in the month and subtract the total minutes for Planned Outages during that same month, to derive a Total Minutes value.
- 2) The total Unplanned Outage minutes for that month is then divided by the Total Minutes value derived above.
- 3) The quotient is then multiplied by 100 to arrive at a percentage of downtime for the month.
- 4) The percentage of downtime is then subtracted from 100% to arrive at the Service Availability for the month.

Definitions:

Planned Outages include planned maintenance, daily backups, and full system saves.

Currently, planned maintenance is estimated at 6 hours per month. Times will vary based on needs and mutual agreement. However, the County has provided the following times when maintenance is prohibited:

- November 15 to December 20
- March 15 to April 20th

If actual maintenance exceeds the time allotted for planned maintenance, it is considered an Unplanned Outage. If actual maintenance is less than time allotted for planned maintenance, that time is not applied as a credit to offset any Unplanned Outage time for the month.

The measurement point for Service Availability is the availability of the County's systems at the Contractor's production data center's VPN connection points. County may request an availability report not more than once per month

IBM iSeries – Managed Services Roles Matrix

		P=Perform A=Assist N/A= Not Applicable					
		Essential		Advanced		Premier	
#	iSeries Support Tasks	Contr actor	County	Contr actor	County	Contr actor	County
Operations Support							
1	Perform 24 x 7 monitoring of the managed iSeries servers for actions and events			P	N/A		
2	Monitor County specified critical batch processes (includes up to 100)			P	A		
3	Provide a secure logical/software environment: all LPAR access is user id / password protected with appropriate permission levels for system operations to be performed			A	P		
4	Manage Operating system history files, system audit journals, and security audit journals (non-end user information)			P	A		
5	Maintain required documentation for iSeries server management and operation – including maintaining logs and document all system maintenance issues and outages			P	A		
6	Maintain current Software Maintenance support for all Managed Servers **			P	A		
7	Maintain operating system, system management agents, and additional base software components.			P	N/A		
8	Maintain all system startup programs			P	A		
9	Schedule mutually agreeable system downtime for change management and maintenance			A	P		
10	Perform initial program loads (IPLs)			P	A		
11	Root cause analysis of problems or issues encountered/caused by Contractor			P	N/A		
12	Move a job from one queue to another			N/A	P		
13	Provide problem determination and corrective measures and support for pre-defined alerts, error events and thresholds			P	A		
14	Perform clean-up of system logs and journals created by the agents and monitoring applications			P	N/A		
15	Monitor QSYSOPR and/or QSYSMSG message queues and Perform initial problem determination and resolution and inform necessary parties			P	N/A		
16	Prepare schedules for batch jobs			N/A	P		
17	Provide run book/sheets for batch jobs			N/A	P		
18	Input schedules for batch jobs to automated job scheduler			N/A	P		
19	Input scheduled additions, deletions or changes to scheduled jobs			N/A	P		
20	Meet with and coordinate production schedule/activities with departmental users			A	P		
21	Notify County of predefined critical messages (specified by County)			P	N/A		
22	Notify Contractor of a start/stop or change to monitored service			N/A	P		
23	Define monitoring parameters for County controlled services			A	P		
24	Provide criteria to monitor performance of the system			A	P		

		P=Perform A=Assist N/A= Not Applicable					
		Essential		Advanced		Premier	
#	iSeries Support Tasks	Contr actor	County	Contr actor	County	Contr actor	County
25	Monitor and document hardware, systems software and database usage and size and compare to established benchmarks			P	A		
26	Respond and correct all issues with County controlled services or applications			N/A	P		
27	Change the attributes of a spooled file			N/A	P		
28	Examine and respond to printer messages			N/A	P		
29	Setup print queues and print writers to print from Power System to network printers			A	P		
30	Setup virtual workstations and printers as requested			A	P		
31	Assist with device setup and support as requested			A	P		
32	Send a message to a single user, a group of users, or all users			N/A	P		
33	Send a spooled file to a user on another system			N/A	P		
34	Manage Operating system jobs and subsystems			P	A		
35	Perform OS performance and capacity monitoring.			P	A		
36	Monitor, analyze and report on system performance to assure established thresholds are not exceeded			P	A		
37	Install up to two cumulative PTF packages per year (standard level currency is current plus/minus one) as requested by County			P	A		
38	Perform benchmark performance testing before installation of cumulative PTF packages, OS/400 release upgrades, security fixes, and OS fixes			A	P		
39	Install supported release-to-release upgrade for OS/400 and Licensed Program Products for an additional fee (SOW- cost from \$2,500-\$5,000 depending on IBM dictated processes)			P	A		
40	Install/Upgrade IBM software / Vendor supplied Application software as requested (County or vendor provides instructions for installation and is available for installation and configuration support)			P	A		
41	Setup County notification for newly released OS fixes			P	A		
42	Perform install of individual or Group IBM PTFs as requested by County (Includes 2 per month)			P	A		
43	Provide risk acceptance for those PTFs that are released but will not be applied			A	P		
44	Record risk acceptance for those security and hot fixes that are released but will not be applied			P	N/A		
45	Maintain authorities, permissions, and ownership of all OS objects.			A	P		
46	Provide regularly scheduled batch jobs for DASD cleanup for application data			A	P		
47	Provide regularly scheduled batch jobs for DASD cleanup for application objects			A	P		
48	Provide regularly scheduled batch jobs for DASD cleanup for application journals and receivers			A	P		
49	Provide regularly scheduled batch jobs for DASD cleanup for application IFS objects and directories			A	P		
50	Provide regularly scheduled batch jobs for DASD cleanup for system logs and journals based upon County requests			P	A		

		P=Perform A=Assist N/A= Not Applicable					
		Essential		Advanced		Premier	
#	iSeries Support Tasks	Contr actor	County	Contr actor	County	Contr actor	County
51	Provide all user and group profile administration for privileged user profiles. This includes creation and deletion these of user profiles, password reset, profile expiration, and verification of ownership.			A	P		
52	Provide user and group profile administration for all application user profiles without special authorities. This includes creation and deletion of these user profiles, password reset, profile expiration, and verification of ownership.			A	P		
53	Prepare schedules for batch jobs			A	P		
54	Provide run book/sheets for batch jobs			A	P		
55	Input schedules for batch jobs to automated job scheduler			A	P		
56	Input scheduled additions, deletions or changes to scheduled jobs			A	P		
57	Provide password resets for all system users and group profiles			A	P		
58	Maintain line descriptions to support network connectivity			P	A		
59	Maintain TCP/IP configuration per supplied specifications			P	A		
60	Maintain iSeries Host Table			P	A		
61	Maintain OS/400 Performance tuning related to storage pools and activity levels			P	A		
62	Provide monitoring and management of disk space and alert upon defined threshold			P	A		
Hardware Management							
63	Maintain hardware service contracts on County supplied hardware (i.e. end user/County premise workstations, printers, etc.)			A	P		
64	Manage hardware maintenance events (Call and coordinate with County and IBM for replacement of defective parts)			P	A		
65	Manage all remotely attached devices including workstations, printers, and communications controllers.			A	P		
66	Implement County requested hardware and OS/400 configuration changes necessary to maintain satisfactory application Performance (additional fees may apply)			P	A		
67	Visually check the managed equipment to verify the status LED, LCD or display			P	A		
68	Add/remove and configure locally attached system devices such as system consoles, tape storage, and optical storage (does not include printers) as requested by County. Additional fees may apply.			P	A		
69	Loading CD/DVD media			P	A		
70	Provide physical access as needed for authorized IBM personnel, in a timely manner, to the hosting facility			P	A		
71	Install/enable capacity increases to file systems, disk array and any other systems components as requested / approved by County			P	A		
72	Provide an HMC (Hardware Management Console) and remote access to the HMC for remote support			P	A		

		P=Perform A=Assist N/A= Not Applicable					
		Essential		Advanced		Premier	
#	iSeries Support Tasks	Contr actor	County	Contr actor	County	Contr actor	County
Third Party Application Support							
73	Ensure application software is consistent with and will operate with systems software			A	P		
74	Maintain responsibility for application software and APIs			N/A	P		
75	Lead problem management process to address application problems			A	P		
76	Correct County application related errors logged in job logs, message queues, and/or the system history log			N/A	P		
77	Manage resolution of application related Performance and capacity problems			A	P		
78	Provide user and group profile administration for all application user profiles without special authorities. This includes creation and deletion of these user profiles, password reset, profile expiration, and verification of ownership.			N/A	P		
79	Stage programs into production			N/A	P		
80	Promote programs into production			N/A	P		
81	Research and resolve promotion failures			N/A	P		
Backup , Recovery and Tape Handling							
82	Configure scheduled backups of OS/400, configuration, security, licensed program products, and other IBM support objects			P	A		
83	Configure scheduled backups of County application and data objects (County to specify)			P	A		
84	Verify successful completion of scheduled backups			P	A		
85	Notify County of unsuccessful backups related to County data			P	N/A		
86	Perform object restores as requested (5 free per month)			P	A		
87	Verify the integrity of restored objects			A	P		
88	Maintain an independent copy of BRMS recovery report for system recovery			P	N/A		
89	Vary a tape or device online or offline			P	A		
90	Print the contents of a tape			P	A		
91	Reset a tape device			P	A		
92	Initialize a tape			P	A		
93	Make a copy of a tape			P	A		
94	System recovery as a result of a hardware failure			P	A		
95	System recovery as a result of operating system failure			P	A		
96	Tape insertion and removal			P	A		
97	Receiving and preparing off-site storage containers			P	A		
98	Tape condition inspected and replaced with new tape as needed			P	A		
99	Supply list of tapes to manage for off-site tape rotation			P	A		
100	Maintain inventory of replacement tapes			P	A		

		P=Perform A=Assist N/A= Not Applicable					
		Essential		Advanced		Premier	
#	iSeries Support Tasks	Contr actor	County	Contr actor	County	Contr actor	County
101	Offsite storage retention – County will determine retention schedules			P	A		
102	Create and catalogue archive tapes as requested or scheduled			P	A		

* Contractor can **Perform** in some instances

** County owned Assets. Contractor will be responsible for SWMA when hardware is provided as a service.

Application Management - WebSphere Roles Matrix

		P=Perform A=Assist N/A= Not Applicable					
		Essential		Advanced		Premier	
#	iSeries Support Tasks	Contr actor	County	Contr actor	County	Contr actor	County
Application Management - WebSphere							
1	Incident Management and escalation via phone or email (depending on severity)			P	N/A		
2	Capturing traces and sending them to IBM – manage escalation as required			P	N/A		
3	Maintenance and hot fix application (fix packs) as required			P	A		
4	Performance tuning			P	A		
5	Event Management via monitoring tools			P	A		
6	Documentation of technical issues and resolutions			P	A		

Service Account Manager (SAM)

		P=Perform A=Assist N/A= Not Applicable					
		Essential		Advanced		Premier	
#	Service Account Manager Role	Contr actor	SMC	Contr actor	SMC	Contr actor	SMC
1	Account lead and main point of contact for services delivery			P	A		
2	Ensure service delivery across Contractor teams			P	A		
3	Provide ongoing service improvement oversight			P	A		
4	Recommend backup strategies that provide optimum coverage			P	A		
5	Make recommendations for performance and capacity improvements			P	A		
6	Recommend necessary system software or hardware upgrades/replacements to maintain required performance			P	A		
7	Formulate and document plans for growth, expansion and replacement of hardware and system software			P	A		
8	Recommend best practices for Business Continuity, revise annually			P	A		

Exhibit B

In consideration of the services provided by Contractor in Exhibit A and subject to the terms of the Agreement, County shall pay Contractor based on the following fee schedule and terms:

MONTHLY RECURRING CHARGE, IMPLEMENTATION FEE, AND ADDITIONAL SERVICE RATES

MONTHLY RECURRING CHARGE for the period beginning of the “**OPERATIONAL DATE**” through the term of this agreement. Contractor assumes managed responsibilities of this agreement on this date provided system is in the Contractor facility and County’s implementation obligations have been completed.

MONTHLY RECURRING CHARGE (MRC)	\$19,174.00
NON RECURRING CHARGE (NRC) One Time Implementation Fee Due upon execution of this agreement.	\$67,992.00

MRC

- MRC fees to commence at go-live, no later than ninety (90) days after the start of the project. Total 36 month MRC fees not to exceed \$ 690,264.00.
- The County shall have the option to exercise one or both of two 12 month extensions at the same MRC not to exceed \$230,088.00 each; \$460,176.00 in total for two years.

NRC

\$67,992 will be paid on the following milestone completion schedule:

Phase 1 - Setup, OS Upgrades and Testing \$20,397

Phase 2 – Migration While Active \$16,998

Phase 3 – Cutover \$6,799

Phase 4 – Replicate to HA in New Albany \$13,598

Phase 5 – Failover finalization (in parallel) \$10,200

ADDITIONAL SERVICE RATES

The following rates shall apply for all Additional Services rendered based on the resource providing the Service:

1. CIO Consultant \$225 per man hour
2. iSeries Consultant \$200 per man hour
3. Program Application Consultant \$175 per man hour
4. Senior Network / Unified Communications Consultant \$175 per man hour
5. Network Engineer \$150 per man hour
6. Ad-hoc remote support services \$125 per man hour

Unless otherwise defined in this Agreement, Additional Services to be performed

will be during normal Contractor business hours, Monday through Friday 8:00am to 6:00pm, respective of time zone where work is performed, except for holidays, and mutually agreed upon periods. All work performed after hours, defined as those hours outside of these Business Hours, must be approved by the County in advance and shall be billed at 1.5 times the applicable rate above.

Major project work, such as version upgrades or new implementations, will require County's approval of a statement of work, to include scope of work, negotiated costs and timeline, required to complete the project.

SERVICE CREDITS

In the event of a failure by Contractor to meet the Service Availability and Service Response minimums as set forth in the SLA, at County's request, Contractor shall provide service credits in accordance to the following matrix:

- A. First (1) month of missed availability or response minimum: The parties shall meet to discuss possible corrective actions
- B. Second (2) time in a twelve month period of missed availability or response minimum: 10% of the MRC (listed above) paid for the applicable month for the affected Service
- C. Third (3) time in a twelve month period of missed availability or response minimum: 20% of the MRC (listed above) paid for the applicable month for the affected Service
- D. Fourth (4) or more occurrences in a twelve month period of missed availability or response minimum: 30% of the MRC (listed above) paid for the applicable month for the affected Service

ADDITIONAL STORAGE AND PROCESSING

In the event that additional disk storage or processing power is required to meet the agreement services up to 20% increase will be added at no cost. Increases above this threshold will be at the following monthly recurring rates (no setup or installation charges for the additional increases):

	Increase	For Prod	For HA	HA&Prod Combo
CPW	Per 100 CPW	\$31.00	\$27.90	\$58.90
Memory	Per 4 GB	\$132.00	\$118.80	\$250.80
Disk	100 Per GB	\$37.00	\$33.30	\$70.30

TRAVEL EXPENSES

Any travel expenses must be approved by the County in advance of the expense and will be within the provisions of the County's travel and expense policy.