TriTech Software Systems
9477 Waples Street, Ste. 100
San Diego, CA 92121
Phone: 858.799.7000
Fax: 858.799.7011
www.tritech.com

SYSTEM PURCHASE AGREEMENT

TRITECH SOFTWARE SYSTEMS

FOR

COUNTY OF MONTEREY

SYSTEM PURCHASE AGREEMENT

TABLE OF CONTENTS

SYSTEM PURCHASE AGREEMENT

Client:	County of Monterey Emergency Communications
Address:	1322 Natividad Road
City, State, Zip:	Salinas, CA 93906
Phone, Fax:	831.769.8880 / fax 831.769.8896
Contact Name:	William Harry, Director of Emergency Communications

1.0 INTRODUCTION

1.1 This Agreement, is made by and between TriTech Software Systems, referred to as "TriTech", with offices at 9477 Waples Street, Ste. 100, San Diego, California 92121, and the entity named above, referred to as "Client" (who together are referred to as the "Parties" herein), with reference to the following facts:

1.2 This Agreement is for the purchase of an integrated Computer System (the "System") consisting of a Computer-Aided Dispatch System (Inform CAD); Mobile Data System (Inform Mobile); Records Management System (Inform RMS); and Field-Based Reporting system (Inform FBR), including applicable Interfaces, software, equipment and services (the "Project") as more fully described in this Agreement and the Addenda hereto.

1.3 In consideration of the terms, promises, mutual covenants and conditions contained in this Agreement, Client and TriTech agree as follows:

2.0 ADDENDA

2.1 The following documents are attached as Addenda to this Agreement and incorporated by reference as though set forth in full:

(a)	Addendum A-1	Statement of Work
(b)	Addendum A-2	Number of TriTech Software Licenses, Installation and Shipping Instructions
(c)	Addendum A-3	Interfaces

(d)	Addendum A-4	TriTech Services, Support and Maintenance Fees, and Miscellaneous
(e)	Addendum A-5	Equipment and System Software
(f)	Addendum A-6	Subcontractor Software, Hardware and Services, if applicable
(g)	Addendum A-7	Payment Terms
(h)	Addendum A-8	Contract Price Summary
(i)	Addendum A-9	System Planning Document
(j)	Addendum B	TriTech Master Three Party Source Code Escrow Agreement
(k)	Addendum C	Subcontractor Warranty, Support and Maintenance Agreements, if applicable
(l)	Addendum D	Subcontractor License Agreements, if applicable
(m)	Addendum E	Critical and Urgent Priority Software Errors
(n)	Addendum F	TriTech.com Subscription Service License & Use Agreement (if applicable)

3.0 DEFINITIONS

3.1 "Acceptance" or "Accept" means the processes described in the ACCEPTANCE section of this Agreement.

3.2 "Archive Server" or "Reporting Server" means a Server or other storage unit on which Client's data resides for archival purposes.

3.3 "Concurrent Licensing" means the number of authorized, simultaneous users allowed to access the TriTech Software applications as stated in Addendum A-2.

3.4 "Contract Price" means the total of the purchase price of the items as specified in Addendum A-8, including, as applicable, equipment, software licenses, services, fees, expenses and other items acquired under this Agreement, and if included as a line item in Addendum A-8, any applicable sales, use, value added, or other such governmental charges.

3.5 "Deliverable" means an item of equipment, software, services and other items acquired under this Agreement as listed in the addenda hereto.

3.6 "Delivery" with respect to the System means physical delivery of substantially

all components of each Subsystem to the Designated Location. Delivery shall be deemed to have occurred despite the absence of incidental components provided that Installation of the Subsystem, training and system configuration can begin with the items then delivered. A separate Delivery shall occur with respect to each such Subsystem.

3.7 "Demonstration of Licensed Functionality ("DOLF")" means the verification of configuration procedures for a Subsystem, conducted as described in the Statement of Work.

3.8 "Designated Location(s)" means the physical site(s) at which a Subsystem is Installed as specified in Addendum A-1, Statement of Work.

3.9 "Disaster Recovery Computer System" (with reference to the CAD System) means a server operating in a standby mode used to maintain a duplicate copy of the program and data contained in the Primary Computer System.

3.10 "Documentation" means any standard user manuals or other related instructional and/or reference materials, provided by TriTech or other Software Vendors, including on-line help information and Release Notes issued in connection with Updates. In case of a conflict between written documentation (user manuals or Release Notes in printed or CD-ROM format) and on-line help information, the printed and CD ROM documentation will control.

3.11 "Equipment" means the computer system equipment specified in Addendum A-5 of this Agreement. TriTech may substitute equipment for that specified in Addendum A-5 provided that such equipment will meet the requirements of the Specifications and this Agreement. A change in such Equipment will be processed through a change order to be signed by TriTech and Client. (For Definitional purposes, Equipment (Addendum A-5) is differentiated from hardware supplied by Subcontractors (Addendum A-6).)

3.12 "Functional Acceptance Test ("FAT")" means the pre-Go Live test process for a Subsystem as further defined in Section 10.2 and the Statement of Work.

3.13 "Go Live" means the event that occurs when the Client first uses a Subsystem for Live Operations. A separate Go Live may take place with respect to each Subsystem, each Interface, and each Modification.

3.14 "Help Desk" means the TriTech function consisting of receiving calls from Client concerning System problems and assisting Client with respect to the manufacturers of Equipment, Software and other items acquired under this Agreement under the applicable warranties and/or maintenance support agreements.

3.15 "Installation" with respect to Subsystems means the process of running the Subsystem under a procedure to demonstrate basic interoperability of the applicable Subsystem components at the Designated Location for that Subsystem. "Installation", with respect to the Modifications, means the process of running each Modification under a procedure to demonstrate basic interoperability with the applicable Subsystem at its Designated Location(s). "Installation", with respect to the Interfaces, means the process of running each Interface under a procedure to demonstrate basic interoperability of the Interface with the applicable Subsystem and the hardware and/or Software with which it is interfaced at its Designated Location(s).

3.16 "Interface", collectively or individually, means the interface software described in Addendum A-3.

3.17 "Live Operations" means use of a Subsystem (e.g., the TriTech Software less Interfaces and Modifications) as the primary means of performing its functions. Use of a Subsystem in parallel with Client's existing system for a period not in excess of thirty (30) days where the existing system is the primary means of performing its functions and the Subsystem is being run in a test environment shall not be deemed Live Operations.

3.18 "Modifications" means changes or additions to Software from the standard version thereof prepared hereunder. The Modifications, if applicable, are described in the appropriate Statement of Work, Addendum A-1. The TriTech Software is not custom software, and as such, at TriTech's discretion Modifications or enhancements to the standard version will be made available in a subsequent version release available to all TriTech clients; or as applicable, made available as a separate module or function, separately licensed and priced.

3.19 "Object Code" means any instruction or set of instructions of a computer program in machine-readable form.

3.20 "Primary Computer System" means the live operations production system.

3.21 "Prime Contractor" means that TriTech shall (i) act as the central point of contact, providing project management services, including coordination and monitoring of all Subcontractor activities with respect to the Project, (ii) subcontract with certain Vendors that provide hardware, Software and/or services in connection with the Project (as more fully described in the Statement of Work), and (iii) pass through to Client warranties received from the Vendors thereof. Prior to Acceptance, should any Subcontractor hereunder be in default, through no fault of Client or its agents, a third party, or an event of Force Majeure, TriTech shall either continue to perform the duties of the Subcontractor to fulfill the obligations for the Subcontractor in accordance with the Statement of Work, or provide an alternative solution.

3.22 "Project Implementation Support" means the services provided to the Client by TriTech during normal TriTech Business Hours, for implementation of the Project, including assistance with code files, prior to Go Live which services are managed by TriTech's Project Manager.

3.23 "Project Manager" means the individual assigned as the primary point of contact during the Project implementation process. The TriTech Project Manager will manage TriTech's resources and, if applicable, TriTech's Subcontractors as more fully defined in the Statement of Work. The Client will assign a counterpart Project Manager to manage the Client's responsibilities and resources for Project implementation as further defined in the Statement of Work.

3.24 "Project Schedule" means the schedule developed in conjunction with the Statement of Work that provides the schedule for tasks to be completed by TriTech and the Client, and all Deliverable items to be provided by TriTech hereunder.

3.25 "Server" means a computer in a local area network that runs administrative software which controls access to all or part of the network and its resources and makes such resources available to computers acting as workstations on the network. With respect to the CAD System, this term includes, without limitation, the Primary Computer System and the Disaster Recover Computer System.

3.26 "Software" means collectively or individually the computer programs provided under this Agreement, including, without limitation, the programs for each Subsystem.

3.27 "Software Error" means an error in coding or logic that causes a program not to substantially function as described in the applicable Specifications. In the event TriTech (or another Software Vendor) is unable to reproduce the Software Error at its facilities, TriTech will, at Client's request, visit Client's premises at Client's expense. If it is determined that the problem was caused by Equipment, Software, services , network or other items not supplied or not authorized by TriTech, Client shall reimburse TriTech for its labor costs for such on site visit, at TriTech's then current rates for consulting.

3.28 "Software Support" means Telephone Support, Software Error Correction, and Software Update services provided by TriTech (and/or other Software Vendors) for the Software, either under warranty or under an annual Software Support Agreement, as more fully described in said Agreement.

3.29 "Software Support Agreement" means collectively or individually agreements of that name (or a similar name) for the rendering of Software Support services entered into between the parties coincident with this Agreement and renewed from time to time thereafter.

3.30 "Source Code" means the original mnemonic or high-level statement version of Software.

3.31 "Specifications" means (i) the functional requirements and Functional Acceptance Test document(s) ("FAT") with respect to each Subsystem; (ii) the Interface Requirements Document ("IRD") and applicable acceptance test document for each Interface, or Operational Scenario Document(s) for each Modification; and (iii) the published specifications for the Equipment, which documents are incorporated by reference herein as though set forth in full.

3.32 "Statement of Work" means the document that defines the implementation process for the Project, including specific tasks that are the responsibility of TriTech and the Client.

3.33 "Subcontractor" means one of the entities identified in the Statement of Work as subcontractors to TriTech, if applicable.

3.34 "Subcontractor Hardware" means the hardware supplied by a Subcontractor as part of its Subsystem, and identified in Addendum A-6, if applicable.

3.35 "Subcontractor Software" means software supplied by a Subcontractor as part of its Subsystem and listed in Addendum A-6, if applicable.

3.36 "Subsystem" means each of the applications described in the Statement of Work, including its Equipment, other hardware and software. In most cases, the Subsystem software will share Equipment. (For the avoidance of doubt, the CAD System is a Subsystem under this Agreement.)

3.37 "Subsystem Software" means individually or collectively the Software provided under this Agreement for each of the Subsystems.

3.38 "System" means collectively all Subsystems that make up the integrated Computer System referred to in paragraph 1.2 of this Agreement and more fully described in the Statement of Work.

3.39 "System Software" means the software identified in Addendum A-5 which includes, without limitation, operating system software, DBMS Software, and communications software.

3.40 "Task Completion Report" or "TCR" means the document presented by TriTech's Project Manager to the Client for signature upon completion of a Deliverable.

3.41 "Telephone Support" means the service provided by TriTech for access to the TriTech Customer Service Department by telephone, on a twenty-four (24) hour a day, seven (7) day per week basis, or as applicable on a Normal Customer Service Business Hour basis (7:30 a.m. through 7:30 p.m., Monday through Friday, excluding TriTech holidays).

3.42 "TriTech Business Hours" means TriTech's corporate business hours of 8:30 a.m. to 5:30 p.m. (Pacific Time), Monday through Friday, excluding TriTech holidays (New Year's Day, President's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving (2 days), Christmas (2 days), Floating Holiday (to be determined each calendar year).

3.43 "TriTech Software" means the Object Code version of the software specified in Addendum A-2 and A-3 of this Agreement, and any Modifications provided hereunder.

3.44 "Update" means revisions or additions to Software provided by the Vendor thereof. The term "Update" does not include separate modules or functions that are separately licensed and priced, or new products that are developed and marketed as separate products by the Vendor.

3.45 "Use" means copying of any portion of Software from a storage unit or media into a computer or Server and execution of the software thereon. This term shall be construed to refer to a grant of reproduction rights under 17 U.S.C. 106(1), and shall not be construed to grant other rights held by the copyright owner, including without limitation the right to prepare derivative works.

3.46 "User" means the operator of a Subsystem Workstation that is configured to access and/or utilize the capabilities and features of the Subsystem Software.

3.47 "Vendor" means any supplier of hardware, software or services under this Agreement, including TriTech, Subcontractors, System Software suppliers and Equipment suppliers. With respect to software, this term means the owner of the intellectual property rights, including copyright, to the software.

3.48 "Warranty Period" means the period starting at Final System Acceptance as defined in Section 10.3 for the TriTech Software and ending one (1) year thereafter. The Warranty Period for Interfaces and any Modifications will also end on the same date.

3.49 "Workstation" means any computer input station that utilizes the functionality of a Subsystem, whether the software resides locally or on a Server.

4.0 PRICES AND PAYMENT

4.1 All dollar amounts contained in this Agreement are in U.S. dollars. The Contract Price for the purchased and/or licensed items hereunder is $2,400,333.87 as more completely specified in Addendum A-8. Client shall pay all undisputed invoices or portions thereof without deduction or offset pursuant to the payment milestones specified in Addendum A-7 within thirty (30) days of receipt of invoice unless otherwise stated in the invoice. Upon resolution of any such dispute, Client shall remit the appropriate payment to TriTech.

4.1.1 For each payment milestone identified in Addendum A-7, TriTech's Project Manager will provide the Client with a TCR for signature. The Client signed TCR will initiate TriTech's invoicing of the payment milestone.

4.1.2 The Contract Price for the Deliverables and Services defined in Addendum A-2 through Addendum A-8 is based on a firm fixed price, subject to the following adjustments. In the event that Client in its sole discretion chooses to delay implementation of any Deliverable for more than six (6) months beyond the Go Live date set forth in the Project Schedule, and the then current pricing for such Deliverable(s) including applicable Services has increased since the date of execution of this Agreement, such then current pricing will apply. A change order for signature by both parties will be processed to adjust the Contract Price.

4.2 TriTech reserves the right not to deliver the purchased and/or licensed items, or any part thereof, until credit approval and/or lease approval (if applicable) has occurred.

4.3 All amounts due and payable to TriTech hereunder shall, if not paid when due, bear a late charge equal to one and one-half percent (1-1/2%) per month, or the highest rate permitted by law, whichever is less, from forty-five (45) days after their due date until paid. The **remittance address for payments** only is:

TriTech Software Systems
P.O. Box 203223
Dallas, TX 75320-3223

4.3.1 In the event that Client is in arrears on payments due to TriTech of more than sixty (60) days from the due date, TriTech in its sole discretion may elect to stop work on the Project for non-payment until Client becomes current on payments due. In such event the Project Schedule will be adjusted accordingly, and TriTech shall not be considered to be in default for delays caused by Client's non-payment.

4.4 If Client desires to finance the Contract Price or any part thereof, it shall notify TriTech as soon as possible, but no later than the date of contract signing, and shall work diligently to secure said financing so as not to delay Delivery. TriTech shall be under no obligation to deliver any item hereunder until it receives a valid purchase order or firm letter of commitment from such financing company. Should Client finance the Contract Price, TriTech shall not be obligated to refund any deposit until the lease or loan has been funded and TriTech has been paid in full. For purposes of this Agreement, the term "finance" includes but is not limited to leasing.

4.5 If Client desires to purchase any of the items specified in this Agreement via a lease or other financing option, this Agreement shall be incorporated by reference in the lease agreement or financing agreement and the terms and conditions herein shall supersede such agreements or any purchase order, assignment agreement, or other contract of the lessor or lender. Notwithstanding a lease or other financing option, Client shall continue to be fully obligated under this Agreement.

5.0 SOFTWARE LICENSES

5.1 In consideration for, and subject to, the payment of the license fee(s) specified in Addendum A-8 of this Agreement, and the other promises, covenants and conditions herein, Client is granted the following licenses to the Software:

5.1.1 The TriTech Software: A nontransferable, nonexclusive right and license to Use the TriTech Software and the Documentation for said Software for Client's own internal use for the applications described in the Statement of Work, at the Designated Location, in the quantity set forth in Addendum A-2, and on the Equipment set forth in Addendum A-5. Client may make additional copies of the TriTech Software as reasonably required for archival, or backup purposes, provided that such copies contain all copyright notices and other proprietary markings contained on the original, and are kept confidential in accordance with Section 11.0 herein. Additional TriTech Software licenses purchased after the execution of this Agreement shall also be licensed in accordance with the provisions of this Section 5.0. The Client shall be responsible for ensuring that the number of authorized users is not exceeded based on the number of TriTech Software licenses granted (per seat or concurrent) as stated in Addendum A-2 and Addendum A-3.

5.1.1.1 Each copy of the TriTech Software provided under this license that is not identified in Addendum A-2 or Addendum A-3 of this Agreement as a Disaster Recovery license may be used on only one Primary Computer System at any one time.

5.1.1.2 Each copy of the TriTech Software provided under this license and identified in Addendum A-2 or Addendum A-3 of this Agreement as a Disaster Recovery license may be used in a standby mode on only one Disaster Recovery System at any one time as a backup in the event of a failure, malfunction or other out of service condition of its Primary Computer System. In the event its Primary Computer System fails to operate, the Disaster Recovery System and the Designated Application Software identified as a Disaster Recovery license may be enabled to function in its place. When the Primary Computer System returns to its normal operational mode, the Disaster Recovery System and the Designated Application Software identified as a Disaster Recovery license must be returned to its standby mode.

5.1.1.3 Client shall be entitled to have a copy of the TriTech Software residing on the Primary Server(s), and the Archive or Reporting Server.

5.1.1.4 Notwithstanding anything to the contrary in this Section, the TriTech Software is designed to enable Client to develop original applications which interface with the TriTech Software. The development and use of such interfacing applications is specifically permitted under the licenses herein and shall not be deemed derivative works provided that they are not, in fact, derived from the TriTech Software or the ideas, methods of operation, processes, technology or know-how implemented therein. Other than the licenses granted herein, Client shall not acquire any right, title or interest in the TriTech Software by virtue of the interfacing of such applications, whether as joint owner, or otherwise. Likewise, TriTech shall not acquire any right, title or interest in such Client developed non-derived applications, whether as owner, joint owner or otherwise.

5.1.2 TriTech.com IQ and TriTech.com Analytics Subscription: The terms and conditions for use of the TriTech.com IQ and TriTech.com Analytics Subscription service are set forth in the TriTech.com Subscription Service Use & License Agreement attached as Addendum F, if applicable.

5.1.3 Subcontractor Software: The licenses set forth in the License Agreements included in this Agreement in Addendum E, if applicable.

5.1.4 System Software: The licenses set forth in the applicable vendor's license agreements that accompany such software. Third party products providing supplemental software code to the TriTech Software and not subject to separate licensing provisions shall be licensed in accordance with the provisions of this Section 5.

5.2 Each Workstation and Server that is configured to utilize the functionality of any Subsystem Software must have a full-user license under this Agreement.

5.3 Title to all Software provided to Client under this Agreement remains with the Vendor of such Software. The applicable software Vendor retains all rights to its specific Subsystem Software and the associated Documentation not expressly granted in this Agreement.

5.4 Software (including without limitation Subsystem Software) may not be used to operate a service bureau or time-sharing service, outsourcing service, application service provider service or other services or businesses that provide computer-aided vehicle dispatching to third parties. Notwithstanding the above, Client shall be entitled to Use Subsystem Software at the applicable Designated Location for the purpose of the application(s) described in the Statement of Work for itself and other agencies/entities in the area within Monterey County, CA, provided that the Subsystem Software is installed and operated at only one physical location. The Software shall not be used for other than the application(s) described in the Statement of Work.

5.5 Client shall not Use, copy, rent, lease, sell, sublicense, create derivative works from/of, or transfer the Software or any Subsystem Software or Documentation, or permit others to do said acts, except as provided in this Agreement or the applicable software license agreement. Any such unauthorized Use shall be void and may result in immediate and automatic termination of the applicable license, at the option of the applicable Vendor. In such event, Client shall not be entitled to a refund of the license fees paid hereunder.

5.6 The Software licenses granted in this Agreement or in connection with it are for Object Code only and do not include a license or any rights to Source Code except as otherwise provided under Section 14.0 (Source Code Escrow). Without limiting the generality of the foregoing, except as provided in Section 14.0, Client is specifically prohibited from accessing, copying, using, modifying, distributing or otherwise exercising any rights to such Source Code, even if such Source Code is loaded on the Equipment. The loading and/or using of Source Code to any Subsystem Software by TriTech or its employees, agents or Subcontractors on the Equipment or any other computer system equipment at the Designated Location or any other location associated with Client shall not constitute a waiver of this provision, or any express or implied license or other permission to copy, use or exercise other rights to the Source Code.

5.7 Client may not export any Software or Documentation outside the United States without further prior written agreement of TriTech or the applicable Subcontractor. In the event of such agreed export, Client agrees to comply with the requirements of the United States Export Administration Act of 1979 and any amendments thereto, and with all relevant regulations of the Office of Export Administration, U.S. Department of Commerce.

5.8 These licenses are effective until surrendered or terminated hereunder or under the terms of the applicable software license agreements.

5.9 Client may surrender any software licenses provided in connection with this Agreement at any time by performing the actions described in paragraph 15.4 of this Agreement, or the applicable software license agreement. Such surrender shall not affect TriTech's right to receive and retain the Contract Price and other fees, charges and expenses earned hereunder.

6.0 DELIVERY, INSTALLATION, TITLE AND RISK OF LOSS

6.1 TriTech will Deliver the items purchased and/or licensed hereunder and perform the services pursuant to the Statement of Work, subject to the provisions of the FORCE MAJEURE/EXCUSABLE DELAY section (22.0) of this Agreement, and further subject to delays caused by the actions or omissions of Client, including, but not limited to, delays in approval of the Specifications and/or Acceptance Test Procedures, training, system configuration, DOLF participation and/or Acceptance testing. Unless specifically identified as a TriTech task in the Statement of Work, Installation of Workstations into consoles, furniture or similar work area components at Client's Designated Location is the responsibility of Client.

6.1.1 TriTech resources are allocated for each project based upon the mutually agreed upon Project Schedule. Client requested changes to the Project Schedule, including but not limited to training dates, or the Go Live date, or additional on-site meetings requested by Client will require TriTech to reallocate resources to accommodate the schedule change. Such changes to the Project Schedule must be mutually agreed upon in writing, and may result in additional fees for reallocation of resources, including applicable travel expenses.

6.2 TriTech will provide the Client with training for the System as specified in the Statement of Work and according to the agreed upon Project Schedule. If the Client is not available for training at the scheduled time, a revised training schedule will be established based upon the mutual agreement of TriTech and the Client. Any delay in performance of this Agreement resulting from such changes to the training schedule shall be deemed to be an Excused Delay under Section 22.0 herein and shall not result in a breach of this Agreement by TriTech.

6.3 Implementation of Live Operations with any Subsystem shall not occur (except for operations necessary to conduct Acceptance Tests pursuant to the Acceptance Test Procedure referred to in Section 10.0) until completion of the applicable Acceptance Test Procedure and Acceptance of the Subsystem by Client.

6.4 Implementation of the Interfaces and Modifications will be based upon the mutually agreed upon Project Schedule.

6.5 Client shall perform the Client Required Actions described in the Statement of Work in a timely manner.

6.6 Title to all Software provided under this Agreement shall remain with the Vendor thereof. TriTech retains a security interest in the items acquired hereunder as more fully provided in the SECURITY INTEREST section of this Agreement.

6.7 Risk of loss of any Deliverable shall be borne by TriTech until Delivery of the Deliverable to Client. Thereafter, the risk of loss shall be borne by Client.

6.8 Client shall pay all freight charges associated with Delivery of the System (including initial delivery to TriTech (or, if applicable, Subcontractor) facilities and final Delivery to the applicable Designated Location). If such charges are included as a line item in

the Contract Price (Addendum A-8), they shall be paid according to the payment terms in Addendum A-7. Otherwise, they shall be paid on receipt of TriTech's invoice for such charges.

7.0 SITE PREPARATION

7.1 Client agrees to provide, at its own expense, those required facilities and equipment specified in Addendum A-9 (the System Planning Document), or in the applicable Documentation or otherwise specified by TriTech in writing, to meet the hardware/software configuration requirements and the requirements for proper electrical power quality and other computer facility resources. Client shall also provide and maintain during the term of this Agreement, a high speed data connection (as more fully defined in the System Planning Document), a separate data quality telephone modem line and a dedicated voice line (in each case as reasonably specified by TriTech) for maintenance and software support purposes in each physical area where a Server or interface equipment is located. Such facilities and equipment shall be in place and operational prior to Delivery of the items purchased and/or licensed under this Agreement.

7.2 TriTech shall assist Client in meeting its obligations under this section by providing the necessary guidelines and specifications for site preparation.

8.0 SECURITY INTEREST

8.1 TriTech retains and Client hereby grants to TriTech a purchase money security interest in the Software licenses, Equipment, and other items acquired hereunder and in all accessions to, replacement of, and proceeds from said items, as security for the payment of the Contract Price. Such security interest shall not apply to software licenses, equipment, and other items acquired by Client separately, but in furtherance of an in compliance with the terms of this Agreement. As used in this paragraph, "proceeds" include whatever is receivable or received when proceeds or collateral is sold, collected, exchanged or otherwise disposed of, whether such disposition is voluntary or involuntary, and includes, without limitation, all rights to payment, including return premiums, with respect to any insurance related thereto. (Nothing herein shall be deemed to grant or constitute a right to Client to transfer any Software licensed hereunder to any third party.) Client shall, at TriTech's request, sign a financing statement and such other documents as TriTech reasonably requires to perfect its security interest. Such security interest shall be released upon full payment of the Contract Price.

8.2 Until full payment of the Contract Price is made, Client shall maintain the items purchased/licensed under this Agreement through TriTech in good order and repair at Client's expense, except as otherwise provided under the warranty provisions of this Agreement or any applicable third party warranty, and shall use such items in a manner that will not subject them to waste or deterioration.

8.3 Client shall not, without the prior written consent of TriTech, sell, lease, encumber or otherwise dispose of the items purchased under this Agreement through TriTech until TriTech's security interest hereunder has been released. (Nothing in the foregoing shall be

deemed to grant or imply any license or other right to Client to sell, lend, rent, lease or otherwise transfer the TriTech Software to a third party.)

8.4 Should Client (i) fail to pay any amount specified in this Agreement when it becomes due, (ii) fail to perform any provision of this Agreement to be performed by it, (iii) make an assignment for the benefit of creditors, (iv) suffer the appointment of a receiver for any substantial part of its assets, (v) institute any proceedings for dissolution or full or partial liquidation, or (vi) commence proceedings in bankruptcy for liquidation or reorganization, Client shall be in default of this Agreement under Division 9 of the Uniform Commercial Code, and TriTech shall have the rights and remedies afforded a secured party by the chapter of "Default" of Division 9 of the Uniform Commercial Code then in effect, subject to paragraph 15.1 herein. In conjunction with the above-named chapter, but not by way of limitation, TriTech may:

8.4.1 Require Client to disassemble the Equipment, other hardware, and permanently remove the Software from Client's computers or other storage media or locations and make all such items available to TriTech at Client's premises or such other location as is mutually agreed by the parties.

8.4.2 Render said Software unusable.

8.4.3 Apply the proceeds received from the sale or other disposition of the equipment or software acquired hereunder, in addition to the items specified in Division 9 of the Uniform Commercial Code, against payment of reasonable attorneys' fees and legal expenses incurred by TriTech as a result of Client's default.

9.0 SERVICES

9.1 TriTech and/or its Subcontractors will provide those services specified in the Statement of Work, which is attached hereto and incorporated herein by reference. Any services desired by Client in addition to those specified in this Agreement or the Statement of Work will be subject to the availability and scheduling of TriTech (or Subcontractor) personnel and to TriTech's (or the Subcontractor's) then-current rates, plus expenses. Prior to performing any of the aforementioned additional services, TriTech will provide a written quotation detailing the associated price to be paid for such services, and said services shall be subject to a written change order or amendment signed by both parties.

9.2 The work to be performed shall include the furnishing of all labor, materials, Equipment, drawings, engineering and services specified in this Agreement or Statement of Work. (Nothing herein shall be construed as providing Source Code to any Software except as provided in Section 14.0 of this Agreement (Source Code Escrow).

9.3 TriTech shall appoint a competent TriTech Project Manager to act as its representative and single point of contact, and to monitor its employees and Subcontractors in the Delivery and Installation of the Subsystems provided under this Agreement. TriTech's Project Manager will coordinate and meet with the Client Project Manager as may be reasonably required to discuss any operational issues or the status of the Project. TriTech shall not change

TriTech Project Managers without Client's prior written approval, which approval shall not be unreasonably withheld or delayed. In the event of unforeseen circumstances such as, but not limited to, termination, illness, or death, TriTech may appoint a replacement TriTech Project Manager of equivalent skill level, and shall notify Client with as much written notice as is reasonably possible.

9.4 Travel costs incurred by TriTech in connection with services rendered under this Agreement are a fixed fee and incorporated in the payment milestones set forth in Addendum A-7.

10.0 ACCEPTANCE

10.1 General. Testing of the System and Subsystems shall occur throughout the Project life cycle as further defined in the Statement of Work (SOW). Prior to conducting the Functional Acceptance Test ("FAT") process as defined below, the Client shall receive for review, standard FAT documents for the System and Subsystems. Upon review by the Client of the FAT documents, TriTech shall conduct the FAT with the Client's participation in accordance with the Project plan. Individual test cases within the FAT shall have a pass/fail criteria and with results reported to the Client when the individual tests are complete with a Test Report. Client shall not suspend testing when problems are experienced and restart an FAT when the problems are corrected unless the problems prevent continuing with FAT testing. If FAT testing must be suspended pending corrective action, Client shall promptly advise TriTech by the fastest available means.

10.2 FAT. Following completion of the DOLF process (which is further defined in the SOW) for the applicable Subsystem, the FAT process, as further defined in the SOW will begin. During the FAT process, any FAT issues detected will be mutually defined and agreed upon as Pre-Go Live Issues to be corrected prior to Go Live, or Post Go Live Issues that do not affect the Go Live readiness of the System and will be corrected following Go Live. TriTech and the Client will mutually agree upon the Go Live date for the System.

10.3 Final System Acceptance – Inform CAD and Inform Mobile Subsystems. Upon Go Live, the Client shall utilize the Subsystem for a thirty (30) day Acceptance test period ("the Acceptance Test Period") to verify operational system and Subsystem functionality in a live environment. If no Critical Priority or Urgent Priority Software Errors (as those terms are defined in Addendum E) are reported during such thirty (30) day period, the Subsystems shall be deemed to have achieved Final Acceptance. In the event that a Critical Priority or Urgent Priority Software Error occurs during the Acceptance Test Period, TriTech shall commence actions in accordance with the Software Support Agreement to correct the reported error.

10.3.1 In the event that a Critical Priority Software Error occurs between day one (1) and day thirty (30) of the Acceptance Test Period, the Acceptance Test Period will be stopped and restarted at day one (1) once the Software Error has been resolved in accordance with the Software Support Agreement.

10.3.2 In the event that an Urgent Priority Software Error occurs between day one (1) and day fifteen (15), the Acceptance Test Period will be stopped and restarted from day one (1) once the Software Error has been resolved in accordance with the Software Support Agreement. If the Software Error occurs between day fifteen (15) and day thirty (30), the Acceptance Test Period will be stopped and restarted from the day the resolution has been provided in accordance with the Software Support Agreement.

11.0 CONFIDENTIALITY AND PROPRIETARY RIGHTS

11.1 The copyright to the Software and Documentation (including without limitation the Subsystem Software and Documentation) is owned by the Vendor thereof. Said software and documentation is licensed, not sold. Nothing in this Agreement shall be construed as conveying title in the Software or Documentation to Client.

11.2 Provided that Client's confidential business information and confidential data is marked with the legend "CONFIDENTIAL INFORMATION", "PROPRIETARY INFORMATION", or a substantially similar legend, TriTech agrees to maintain Client's confidential business information and confidential data, including patient identifying data, to which TriTech gains access in confidence and to not disclose such information except as required to perform hereunder or as required by law. If such confidential or proprietary information is disclosed to TriTech orally, Client shall, within five (5) business days of the disclosure, document the disclosure in writing, which writing shall be marked with the above-described legend. Notwithstanding the above, the applicable Vendor shall own the copyrights, trade secrets, patent rights and other proprietary rights in and may use without restriction knowledge, information, ideas, methods, know-how, and copyrightable expression learned or acquired as a result of or in connection with this Agreement to make modifications and enhancements to Software or Documentation. Client shall acquire no intellectual property ownership rights to Software or Documentation as a result of such use, whether as author, joint author, or otherwise.

11.2.1 TriTech maintains a security program for security managing access to client data – particularly HIPAA and CJIS information ("Security Approved Personnel"). This includes 1) a pre-employment background check; 2) security training required by Federal CJIS regulations; and 3) criminal background checks/fingerprints required by Federal or State regulations. TriTech will work with the Client to provide required documentation (such as the CJIS Security Addendum Certification form and VPN documents).

11.2.1.1 If required by the Client, TriTech will provide paper fingerprint cards for such Security Approved personnel with the fingerprinting performed in the state of the TriTech staff's job assignment. If the Client requires fingerprints submitted in a form other than paper prints (such as Live Scan) or that such fingerprints be performed at the Client's site, the Client will reimburse TriTech for the cost of TriTech Security Approved Personnel traveling to the Client's site or for a vendor (such as Live Scan) to travel to the applicable TriTech office location. This provision will apply during the installation of the Project and for the duration of the Client's Software Support Agreement.

11.3 Client understands and agrees that the Software and Documentation (including without limitation Subsystem Software and Documentation) including, but not limited to, the Source Code, Object Code, the OSDs, IRDs and ATPs, the Statement of Work, the software design, structure and organization, software screens, the user interface and the engineering know-how implemented in the software (collectively "Vendor Proprietary Information") constitute the valuable properties and trade secrets of the Vendor thereof, embodying substantial creative efforts which are secret, confidential, and not generally known by the public, and which secure to the vendor a competitive advantage.

11.3.1 The material presented in TriTech's training courses represents the confidential and proprietary information of TriTech, not intended for public disclosure or disclosure to third parties. Clients may videotape training sessions provided on-site at the Client's facilities by TriTech staff for the Client's own internal use only; provided, however, that the TriTech training staff have consented in writing to such videotaping. The Client is responsible for managing access to and copying of any TriTech provided training materials or Client-made videotapes of TriTech training sessions.

11.4 Client agrees during the term of this license, and thereafter, to hold the Vendor Proprietary Information, including any copies thereof and any documentation related thereto, in strict confidence and to not permit any person or entity to obtain access to it except as required for Client's exercise of the license rights granted hereunder.

11.4.1 Without limiting the generality of the foregoing, except as provided in Section 14.0 (Source Code Escrow), in the event Source Code is loaded on the Equipment, or other computer system equipment at any Designated Location or any other location in connection with TriTech's performance under this Agreement, or for any other purpose, Client shall keep such Source Code strictly confidential and shall not, without the written authorization of TriTech (and, if applicable, the concerned Subcontractor), access, use, copy, modify, distribute, disclose or otherwise exercise or permit the exercise of any rights to such Source Code by any person, including but not limited to Client's employees, agents or contractors. This provision is intended by the parties to prohibit, among other things, Client access to Source Code by any person and for any reason unless expressly authorized by Section 14.0 (Source Code Escrow) herein.

11.5 Client shall not attempt or authorize others to attempt to learn the trade secrets, technology, ideas, processes, methods of operation, know-how and/or confidential information contained in the Software by duplication, decompilation, disassembly, other forms of reverse engineering, or other methods now known or later developed.

11.6 Client shall inform TriTech promptly in writing of any actual or suspected unauthorized Use, copying, or disclosure of the Vendor Proprietary Information.

11.7 Client acknowledges that the information contained in Addenda to this Agreement which is marked with the legend "PROPRIETARY DATA" is likewise Vendor Proprietary Information which may not be copied, disclosed, distributed or otherwise disseminated to third parties without the written authorization of TriTech or the concerned

Subcontractor. Client shall comply with said legend in all respects and shall promptly inform TriTech of any unauthorized disclosure of such information.

11.8 If any Vendor Proprietary Information is subject to any Federal or State statutes(s) providing for public access or disclosure of public records, documents or other material, Client shall (i) provide to TriTech (and, if applicable the concerned Subcontractor) written notice of any request or other action by a third party under said statute(s) for release, access, or other disclosure thereof, (ii) provide to TriTech (and, if applicable the concerned Subcontractor) a reasonable opportunity to respond to and/or oppose such action in the appropriate forum and (iii) take such steps as are permitted under said statutes to assert in response to such action any exemptions or other protections available thereunder to prevent, restrict and/or control the public release, access and/or disclosure of the Vendor Proprietary Information.

11.9 The obligations specified under the CONFIDENTIALITY AND PROPRIETARY RIGHTS section of this Agreement shall survive the termination or rescission of this Agreement.

12.0 LIMITED WARRANTIES

12.1 The TriTech Software. TriTech warrants that, during the Warranty Period, the TriTech Software will perform in substantial conformity with the Specifications. If, during the Warranty Period, Client determines that a warranty defect exists in the TriTech Software, Client shall notify TriTech during Normal TriTech Customer Service Hours (7:30 a.m. to 7:30 p.m., CST, Monday through Friday, excluding TriTech holidays). TriTech shall, at its option, correct the defect, or replace the TriTech Software.

12.1.1 TriTech further warrants and represents that the TriTech Software does not contain any "back door", "time bomb", "Trojan horse", "worm", "drop dead device" or other program routine or hardware device inserted and intended by TriTech to provide a means of unauthorized access to, or a means of disabling or erasing any computer program or data, or otherwise disabling the TriTech Software. (Nothing herein shall be deemed to constitute a warranty against viruses. The provisions of paragraph 12.1.2.5, below, shall constitute the agreement of the parties with respect to viruses.) Client's sole remedy with respect to the foregoing warranty shall be to receive an Update to the TriTech Software that does not contain any of the above-described routines or devices.

12.1.2 If the TriTech Software is unable to function as warranted due to any one or more of the following factors, additional charges may be imposed by TriTech for actions necessary to correct or work around such factors:

12.1.2.1 Modification of the TriTech Software, System Software or Equipment by Client or a third party whether or not permitted hereunder.

12.1.2.2 Misuse or neglect, including without limitation failure to use the TriTech Software as described in the Documentation, or other instructions provided by TriTech.

12.1.2.3 Software not provided by TriTech, not specified as compatible in the Documentation, or Client not following the procedures for loading third party software on a Workstation or Server as set forth in paragraph 13.5 of this Agreement and further defined in the System Planning Document (Addendum A-9 hereto).

12.1.2.4 Equipment which does not meet the configuration requirements specified in the Documentation, by failure of Client to provide and maintain the site and facility requirements described in Section 7.0 herein, or the use of "clones" (generic "look-alike" equipment) as substitutes for the Equipment listed in Addendum A-5.

12.1.2.5 Computer viruses that have not been introduced into Client's system by TriTech. Client shall maintain up-to-date virus checking software and shall check all software received from TriTech or any other person or entity for viruses before introducing that software into any part of the System including, but not limited to, Workstations or Servers. If desired by Client, TriTech will provide Updates on media rather than direct downloading to facilitate this virus checking. If, despite such check, a virus is introduced by TriTech, TriTech will provide a virus-free copy of the TriTech Software, and will, at its expense, reload said software (but not Client's data) on Client's Equipment. Client shall be responsible for reloading its data and, to that end, shall practice reasonable back-up procedures for the System to mitigate the consequences of any virus. Notwithstanding the foregoing TriTech will assist the Client in reloading its data from the Clients' backup media.

12.1.2.6 Equipment or software provided by third parties with which the TriTech Software interfaces or operates (including but not limited to system software), including but not limited to problems caused by changes in such equipment or software. If such changes occur which require modifications or other actions with respect to the TriTech Software, such modifications or actions shall (unless identified in the Addendum A-4 as a line item in this Agreement) be subject to the mutual written agreement of the parties, including but not limited to, additional charges by TriTech at its then current rates for engineering and technical support.

12.1.2.7 After the Warranty Period, TriTech's obligations with respect to operation of the items purchased and/or licensed hereunder shall be as specified in the MAINTENANCE AND SOFTWARE SUPPORT section of this Agreement.

12.1.2.8 If mapping information is supplied with the TriTech Software, TriTech makes no representation or warranty as to the completeness or accuracy of the mapping data provided with the TriTech Software. The completeness or accuracy of such data is solely dependent on the information supplied by the Client or the mapping database vendor to TriTech.

12.2 Problems in the TriTech Software or transmission of data caused by wireless services are not warranted by TriTech, or covered under the terms of this Agreement. Client's

use of services provided by wireless service providers or carriers, and the security, privacy, or accuracy of any data provided via such services is at Client's sole risk.

12.3 Client is responsible for maintaining the required certifications for access to Client's state CJIS system(s), NCIC and/or other local state, federal and/or other applicable systems.

12.4 TriTech.com IQ and TriTech.com Analytics. Any warranties for the TriTech.com IQ and TriTech.com Analytics subscription service are set forth in the TriTech.com Subscription Service Use & License Agreement provided at Addendum F, if applicable.

12.5 Equipment, System Software and Subcontractor Hardware and Software, and any other items provided under this Agreement and not manufactured by TriTech (collectively "Third Party Items"). Third Party Items are warranted by the manufacturers or Vendors thereof, not by TriTech. TriTech shall pass through to Client any warranties on Third Party Items granted to it. If, during the warranty period for Third Party Items Client determines that they do not perform as warranted, Client shall contact TriTech using the procedures described in the Software Support Agreement. TriTech shall perform Help Desk functions by receiving calls and providing reasonable assistance to Client in determining the causes of the reported problem and in assisting Client in making claims under applicable third party warranties. Reasonable assistance consists of an evaluation of the reported problem in order to determine if the problem is being caused by a TriTech Software issue or an issue with a Third Party Item that needs to be addressed by the applicable Vendor. As part of the evaluation process, TriTech will share with the Client non-proprietary information related to the diagnosis such as error messages, database trace information and other information that led TriTech to diagnose the Third Party Item as the likely cause and which may aid the Client in seeking a resolution from the applicable manufacturer or Vendor. For issues involving Windows O/S software (Microsoft) that generally affect the operation of the TriTech Software and are not caused by a Client specific installation or configuration of the O/S, TriTech will work with Microsoft to coordinate the resolution. Notwithstanding the foregoing, TriTech warrants that, during the Warranty Period for the TriTech Software, the TriTech Software shall be compatible with the Third Party Items (i.e., shall communicate, share data and otherwise work together without additional software or hardware not provided under this Agreement) provided that all Subsystem components are used and maintained by Client as specified or instructed by TriTech, or the respective Vendors thereof, provided further that such items have not been changed since the Delivery thereof such that the TriTech Software is no longer compatible without modification.

12.5.1 Notice: The design of keyboards, computer desks, chairs and other items in the workplace ("ergonomic characteristics") affect the comfort, efficiency and safety of such items with respect to people who use them. Such ergonomic characteristics are determined by the manufacturer of such items, and the manner of their use in the workplace. To the extent allowed by law, TriTech disclaims all warranties, express or implied, with respect to the ergonomic characteristics of said items. Client shall adopt and regularly practice generally accepted workplace safety practices to promote safety and prevent injury from the use of such items and shall hold TriTech harmless from and against all claims, actions or proceedings related to the ergonomic characteristics of such items and injuries related to or caused therefrom.

12.6 EXCEPT AS SET FORTH HEREIN, TRITECH MAKES AND CLIENT RECEIVES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

13.0 MAINTENANCE AND SOFTWARE SUPPORT

13.1 The TriTech Software. Annual Software Support shall begin upon the date of first Go Live for the TriTech Software and end twelve (12) months thereafter, under the terms of the Software Support Agreement to be entered into between the Client and TriTech coincident with this Agreement. On or before expiration of the then current support term, and at each annual anniversary thereof, TriTech shall provide to Client a Software Support Renewal Agreement for signature and payment of the then-current Software Support fees. TriTech reserves the right to change the terms and conditions for Software Support at the time of renewal by written notice to Client. The rendering by TriTech of Software Support for the coming year shall be subject to Client executing the Software Support Renewal Agreement and paying the applicable Software Support fee(s).

13.1.1 If Client fails to keep an annual Software Support Agreement for the TriTech Software in effect, any later resumption of annual Software Support services by TriTech shall be subject to payment by Client of all past unpaid annual Software Support fees in addition to the Software Support fee for the current support year. Client acknowledges and agrees that the preceding clause is reasonable in light of the fact that the expenses incurred and resources devoted by TriTech to further development, enhancement and support of the TriTech Software must be spread over TriTech's customer base and fairly shared by all TriTech Software users.

13.1.2 Notwithstanding anything to the contrary herein, Software Support for the TriTech Software shall be subject to and conditional on Client's implementation and use of a version of the TriTech Software that is the most current production version thereof made available to Client. If Client does not implement the most current production version when it is made available, TriTech shall only be obligated to provide Software Support for Client's version of the TriTech Software for a period of twelve (12) months thereafter.

13.1.3 Unless listed as a line item in Addendum A-4, TriTech Software Support shall not include design, engineering, programming, testing, implementation or other services rendered necessary by changes in Equipment, System Software or Subcontractor Hardware or Software ("Third Party Changes'). Any such services shall be subject to additional charges by TriTech and the mutual written agreement of the parties as to the terms and conditions under which such services are rendered. Absent such agreement, TriTech shall be under no obligation, express or implied, with respect to Third Party Changes or modifications to the TriTech Software resulting therefrom.

13.2 TriTech.com IQ and TriTech.com Analytics. Support terms for the TriTech.com IQ and TriTech.com Analytics subscription service are set forth in the TriTech.com Subscription Service Use & License Agreement provided at Addendum F, if applicable.

13.3 System Software. Maintenance and support for System Software sold or licensed hereunder shall be subject to and provided in accordance with any maintenance agreements between Client and the supplier thereof, or other third party maintenance providers. If Client determines that an item of System Software provided under this Agreement does not perform as provided in the applicable specifications, Client may, provided that a current Software Support Agreement with TriTech is in force, contact TriTech using the procedures described in the Software Support Agreement. TriTech shall thereupon provide Help Desk services to Client with respect to the reported problem. For issues involving Windows O/S software (Microsoft) that generally affects the operation of the TriTech Software and is not caused by a Client specific installation or configuration of the O/S, TriTech will work with Microsoft to coordinate the resolution. Notwithstanding the above, TriTech is not and shall not be a party to such third party maintenance agreements nor shall TriTech have any obligation or liability thereunder, other than as stated above. Client is responsible for maintaining licensing, including updates for System Software.

13.4 Subcontractor Hardware and Software. The initial twelve (12) month maintenance and support period for those Vendors identified in Addendum A-6 will be provided to Client by the respective vendors as Subcontractors to TriTech. Client shall contact TriTech in accordance with the procedures in the Software Support Agreement to report any errors or defects detected with respect to such items. TriTech shall assist Client in determining the nature of the problem, and will contact the appropriate Vendor for resolution. TriTech will follow-up with the Vendor, and maintain contact with both the Vendor and Client to coordinate problem resolution within a commercially reasonable time. Support and maintenance will be provided in accordance with the respective Vendor's support and maintenance agreements, attached hereto at Addendum C. At the conclusion of such initial annual maintenance and support period, annual maintenance and support shall be subject to and provided in accordance with any maintenance agreements between Client and the respective Vendors. TriTech shall not be a party to such maintenance and support agreements. Thereafter, provided that Client maintains in force an annual TriTech Software Support Agreement, Client may contact TriTech in accordance with the Software Support Agreement, and TriTech shall provide Help Desk services to Client with respect to the reported problem.

13.5 Equipment. Maintenance and support for all other Equipment sold hereunder is not included under this Agreement. However, since proper computer equipment maintenance is required for proper system operation, Client agrees to acquire and keep in force computer and peripheral equipment maintenance agreements for the equipment used to operate the TriTech Software or to provide such maintenance in-house with qualified personnel. If Client determines that an item of Equipment provided under this Agreement does not perform as provided in the applicable specifications, Client may, provided that a current Software Support Agreement with TriTech is in force, contact TriTech using the procedures described in the Software Support Agreement. TriTech shall thereupon provide Help Desk services to Client with respect to the reported problem. Notwithstanding the above, TriTech is not and shall not be a party to such third party maintenance agreements nor shall TriTech have any obligation or liability thereunder.

13.6 If, at any time after installation of the System, Client desires to load on a Workstation or Server any software not provided by TriTech, it shall, before loading such software, follow the procedures regarding third party software compatibility in the TriTech

Documentation, and contact the TriTech Customer Service Department at the telephone numbers listed in the Software Support Agreement for assistance as required. **Such action shall not constitute approval, express or implied, for the loading of specific software on a Workstation or Server, nor any express or implied warranty, representation or other obligation by TriTech with respect to such software, including but not limited to its suitability, operability or capability to meet Client's needs or expectations.** Client agrees that if the loading of such third party software degrades the performance of the System, Client shall immediately uninstall such software. Client shall absolve, discharge and release TriTech from any obligations or liabilities related to operation or performance of the System, the TriTech Software, Subcontractor Software, or any other item provided by TriTech under this Agreement, including but not limited to any liabilities for damages related thereto in connection with the installation of such third party software.

14.0 SOURCE CODE ESCROW

14.1 TriTech Software. Subject to payment of the applicable escrow fees by Client and Client's execution of the applicable escrow documents, TriTech shall, on or before the occurrence of Go Live for the TriTech Software (less Interfaces and Modifications), enroll Client as a Preferred Beneficiary of the applicable TriTech Source Code escrow account with Iron Mountain Intellectual Property Management (the "Escrow Agent"). A copy of TriTech's Master Preferred Escrow Agreement with Iron Mountain is attached at Addendum B. The location of the escrow shall be Iron Mountain's storage facilities in Norcross, GA. Client shall pay all escrow fees and expenses associated with the Escrow, including but not limited to first year fees (which are included as a line item in the Contract Price), renewal year fees, and fees for additional services, if any, selected by Client. Each month, TriTech shall deposit in Escrow updated Source Code containing (i) all Updates to the TriTech Software released during the preceding month and (ii) any TriTech Software Modification and/or Interfaces released for live operations during the preceding month. Source Code Escrow shall be kept in effect until (i) Client gives TriTech written notice of termination of the escrow, (ii) the escrow is canceled by the Escrow Agent due to non-payment of escrow charges by Client, or (iii) this Agreement is terminated. Source Code released under the terms of the Source Code Escrow Agreement shall be deemed part of the TriTech Software hereunder, subject to the terms and conditions of this Agreement, including but not limited to the license terms in Section 5.0, except as modified below.

14.1.1 Source Code shall be released to Client only upon the occurrence of and only during the duration of one of the following conditions:

14.1.1.1 TriTech's persistent and uncured failure to carry out or provide for the carrying out of material warranty obligations imposed upon it pursuant to this Agreement or any Software Support Agreement between the parties with respect to the TriTech Software, which failure persists for a period of 30 days after written notice from Client to TriTech asserting such failure and the intention to demand a release of Source Code from escrow, or

14.1.1.2 TriTech's failure to continue to do business in the ordinary course without providing an alternate source of warranty or Software Support by a ready, willing and able assignee.

14.1.2 The escrowed Source Code and other material released to Client hereunder shall be subject to all of the terms and conditions of this Agreement, including without limitation the Confidentiality provisions herein, except as specifically modified in this paragraph. Without limiting the generality of the foregoing, the Source Code shall, except for periods of actual use, be kept in a secure, locked container and/or a secure protected computer file with access limited only to those with a need to know for purposes of software maintenance. Any person or entity granted access shall be required to agree in writing to comply with this paragraph. TriTech shall, upon request, be provided with a copy of such agreement(s).

14.1.3 Provided that a release of Source Code is rightfully made hereunder, Client is granted a license to copy and Use the Source Code for the sole purpose of software maintenance. For purposes of these Source Code Escrow provisions, the term "software maintenance" means correction of software errors and preparation of software modifications and enhancements. If Client creates new and original computer code not derived from the TriTech Software or the ideas, processes, methods of operation, technology or know-how implemented therein, in the process of software maintenance, the intellectual property rights (including copyright, patent and trade secret) in and to that specific new and original code shall be owned by Client. However, if Client's enhancements or other modifications result in the creation of a derivative work from the TriTech Software, or a work based upon the ideas, processes, methods of operation, technology or know-how implemented therein, the intellectual property rights (including copyright, patent and trade secret) in and to such work shall be owned by TriTech and Client's rights to use such work shall be limited to those granted with respect to the TriTech Software in this Agreement. No rights to distribute Source Code or derivative works therefrom are granted hereunder.

14.2 Subcontractor Source Code Escrow. If Client desires to enter into Source Code escrow agreements for the Subcontractor Software provided hereunder, such agreements shall be entered into directly between Client and the licensors thereof. TriTech shall not be a party to such Subcontractor Source Code escrow agreements.

15.0 DEFAULT AND TERMINATION

15.1 TriTech may terminate this Agreement and the TriTech Software licenses granted herein at any time if (i) Client fails to comply with any material term or condition of this Agreement unless (a) in the case of failure to pay monies due to TriTech, Client cures such failure within fifteen (15) days after written notice of such failure by TriTech or (b) in other cases, Client cures such failure(s) within thirty (30) days of such notice or in the case of failures not reasonably susceptible to cure within thirty (30) days, Client commences action to cure such failure within such period and continues such action with due diligence until the failure is cured, or (ii) Client's normal business operations are disrupted or discontinued for more than thirty (30) days by reason of insolvency, bankruptcy, receivership or business termination. Such

termination shall not affect TriTech's right to receive and retain the Contract Price and other fees, charges and expenses earned hereunder.

15.1.1 In the event of termination in accordance with paragraph 15.1 above, TriTech's subcontractors providing software licenses hereunder may also terminate such licenses granted to Client with respect to this Agreement.

15.2 Client may terminate this Agreement if (i) TriTech (or a Subcontractor) fails to comply with any material term or condition of this Agreement unless (a) TriTech (or the applicable Subcontractor) cures such failure within thirty (30) days after written notice thereof from Client or (b) in the case of failures not reasonably susceptible to cure within thirty (30) days, TriTech (or the applicable Subcontractor) commences action to cure such failure within such period and continues such action with due diligence until the failure is cured, or (ii) TriTech's normal business operations are disrupted or discontinued for more than thirty (30) days by reason of insolvency, bankruptcy, receivership or business termination and no successor or assignee is appointed who is ready, willing and able to assume and perform TriTech's executory obligations under this Agreement.

15.3 Termination for Non-Appropriation of Funds. Notwithstanding anything contained in this Agreement to the contrary, if insufficient funds are appropriated, or funds are otherwise unavailable in the budget for Client for any reason whatsoever in any fiscal year, for payments due under this Agreement, Client will immediately notify TriTech of such occurrence, and this Agreement shall terminate after the last day during the fiscal year for which appropriations shall have been budgeted for Client or are otherwise available for payments. Such termination shall affect TriTech's right to receive payment for fees and expenses earned up to the date of such termination.

15.4 Termination Without Cause. In the event that Client desires to terminate this Agreement without cause, Client shall provide thirty (30) days prior written notice to TriTech. In such event TriTech shall be paid for all fees and expenses earned under this Agreement up to the date of such termination, in addition to a termination fee of 10% of the Contract price or, a maximum of $10,000, whichever is less. Any resumption of the Project shall be subject to negotiation of a new Agreement.

15.5 Upon termination, Client shall permanently remove and destroy all copies of the Software from its computer system, media, or other locations, destroy all copies of the Documentation and associated materials and certify to TriTech in writing that Client has performed said actions and has not retained or permitted others to retain any such copies whether on a computer system or Server, hard copy or CD-ROM, magnetic or other media, backup or archival copies, or otherwise. Client shall perform these same procedures for removal and destruction of System Software and Subcontractor Software, and the associated Documentation, and so notify TriTech.

16.0 LIABILITY

16.1 TriTech shall indemnify, defend, save, and hold Client harmless from any and all claims, lawsuits or liability, including attorneys' fees and costs, allegedly arising out of, in

connection with, or incident to any loss, damage or injury to persons or property or arising from a wrongful or negligent act, error or omission of TriTech, its employees, agents, contractors, or any subcontractor as a result of TriTech's or any subcontractor's performance pursuant to this Agreement; however, TriTech shall not be required to indemnify Client for any claims or actions caused to the extent of the negligence or wrongful act of Client, its employees, agents, or contractors. Notwithstanding anything to the contrary in the foregoing, if a claim, lawsuit or liability results from or is contributed to by the actions or omissions of Client, or its employees, agents or contractors, TriTech's obligations under this provision shall be reduced to the extent of such actions or omissions based upon the principle of comparative fault.

16.2 Notwithstanding the foregoing, the total liability of TriTech for any claim or damage arising from or otherwise related to this Agreement, whether in contract, tort, by way of indemnification or under statute shall be limited to direct damages which shall not exceed (i) the Contract Price or (ii) in the case of bodily injury, personal injury or property damage for which defense and indemnity coverage is provided by TriTech's insurance carrier, the coverage limits of such insurance.

16.3 Except for actions for copyright, trade secret, or trademark infringement, no arbitration, action or proceeding arising out of any claimed breach of this Agreement or transaction may be brought by either party more than four (4) years after the cause of action has accrued.

16.4 Client shall indemnify and hold TriTech harmless from any and all claims, lawsuits or liability, including attorneys' fees and costs, allegedly arising out of, in connection with, or incident to any loss, damage or injury to persons or property or arising from a wrongful or negligent act, error or omission of Client's or, its employees, agents, contractors, or any subcontractor's as a result of the use or misuse of the TriTech Software.

16.5 IN NO EVENT SHALL EITHER PARTY OR ITS SUBCONTRACTORS OR SUPPLIERS BE LIABLE WHETHER IN CONTRACT OR IN TORT FOR LOST PROFITS, LOST SAVINGS, LOST DATA, LOST OR DAMAGED SOFTWARE, OR ANY OTHER CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING OUT OF, OR OTHERWISE RELATED TO THIS AGREEMENT, REGARDLESS OF WHETHER A PARTY HAS NOTICE OF THE POSSIBILITY OF ANY SUCH LOSS OR DAMAGE.

17.0 INSURANCE AND PERFORMANCE BOND

17.1 Beginning at the start of TriTech's performance under this Agreement, and ending when TriTech is no longer providing to Client annual Software Support, TriTech shall maintain in force the following insurance coverages and provide Client with an annual certificate of insurance naming Client as an additional insured under the Commercial General Liability and Automobile policies, and provide for thirty (30) days' notice of cancellation to Client:

> Commercial General Liability Insurance, including but not limited to premises and operations, including for Bodily Injury and Property Damage, Personal Injury, Contractual Liability, Broad Form Property Damage, Independent

Contractors, Products and Completed Operations, with a combined single limit for Bodily Injury and Property Damage of not less than $1,000,000 per occurrence.

Business Automobile Liability Insurance, covering all motor vehicles, including owned, leased, non-owned, and hired vehicles, used in providing services under This Agreement, with a combined single limit for Bodily Injury and Property Damage of not less than $1,000,000 per occurrence.

Workers' Compensation Insurance, in accordance with California Labor Code section 3700 and with Employer's Liability limits not less than $1,000,000 each person, $1,000,000 each accident, and $1,000,000 each disease.

Professional Liability Insurance, if required for the professional services being provided, (e.g., those persons authorized by a license to engage in a business or profession regulated by the California Business and Professions Code), in the amount of not less than $1,000,000 per claim and $2,000,000 in the aggregate, to cover liability for malpractice or errors or omissions made in the course of rendering professional services. If professional liability insurance is written on a "claims-made" basis rather than an occurrence basis, TriTech shall, upon the expiration or earlier termination of this Agreement, obtain extending reporting coverage ("tail coverage") with the same liability limits. Any such tail coverage shall continue for at least three years following the expiration or earlier termination of this Agreement.

17.2 All coverages shall be issued by companies which hold a current policy holder's alphabetic and finance size category rating of not less than A-VII, according to the current Best's Key Rating Guide or a company of equal or financial stability that is approved by the Client's Purchasing Manager.

17.3 All insurance required by this Agreement shall be with a company acceptable to Client and issued and executed by an insurer admitted or authorized to transact Insurance business in the State of California. Unless otherwise specified by this Agreement, all such insurance shall be written on an occurrence basis, or, if the policy is not written on an occurrence basis, such policy with the coverage required herein shall continue in effect for a period of three years following the date TriTech completes its performance of services under this Agreement.

17.4 Commercial general liability and automobile liability policies shall provide an endorsement naming the County of Monterey, its officers, agents, and employees as Additional Insureds with respect to liability arising out of TriTech's work, including ongoing and completed operations, and shall further provide that such insurance is primary insurance to any insurance or self- insurance maintained by the County and that the insurance of the Additional Insureds shall not be called upon to contribute to a loss covered by TriTech's insurance. The required endorsement form for Commercial General Liability Additional Insured is ISO Form CG 20 10 11-85 or CG 20 10 10 01 in tandem with CG 20 37 10 01 (2000). The required endorsement form for Automobile Additional Insured endorsement is ISO Form CA 20 48 02 99.

17.5 Any Subcontractors under this Agreement shall be required to provide a separate certificate of insurance to the Client meeting the provisions of this section 17.

17.6 Within ten (10) days of execution of this Agreement, TriTech shall provide a performance bond to Client for the Contract Price. The Performance Bond shall not include software support and maintenance, and warranty.

17.6.1 The Performance Bond shall provide that in the event (i) Client terminates this Agreement for breach by TriTech pursuant to Section 15.0, Client may have recourse to the surety thereunder, on notice to the surety and TriTech, to pay the reasonable costs, losses or damages which Client may sustain by reason of such breach, less amounts that TriTech proves could have reasonably been avoided by Client.

17.6.2 Upon successful completion of Acceptance of the TriTech Software pursuant to Section 10.3, Client shall unconditionally release the bond by written notice to the surety and TriTech and the surety shall be exonerated by such Acceptance. In the absence of such written notice, TriTech shall be entitled to present to the surety written evidence of Acceptance, signed by Client, and the Performance Bond shall thereupon be deemed released and the surety exonerated.

18.0 COPYRIGHT & TRADE SECRET INFRINGEMENT

18.1 TriTech will at its expense defend against any claim, action or proceeding by a third party ("Action" herein) for infringement by the TriTech Software of copyright or trade secrets, provided that Client immediately notifies TriTech in writing of such Action and cooperates fully with TriTech and its legal counsel in the defense thereof. TriTech may in its discretion (i) contest, (ii) settle, (iii) procure for Client the right to continue using the TriTech Software, or (iv) modify or replace the TriTech Software so that it no longer infringes (as long as the functionality and performance described in the Specifications substantially remains following such modification or replacement.) Client may participate in the defense of such Action at its own expense. If TriTech concludes in its sole judgment that none of the foregoing options are commercially reasonable, and Client's use of the TriTech Software is permanently enjoined as a result of a judgment of a court of competent jurisdiction in such Action, then TriTech will return to Client the TriTech Software license fee(s) paid by Client under this Agreement less a prorated portion of said fee(s) for Client's use of the TriTech Software (calculated by multiplying the ratio of the number of months of actual Use in Live Operations to thirty-six (36) months times the license fees paid) and the licenses granted in this Agreement shall terminate. In addition, in the event such Action results in a money judgment against Client which does not arise, wholly or in part, from the actions or omissions of Client, its officers, directors, employees, contractors, agents, or elected officials, or a third party, TriTech will, subject to Section 16.0 herein, indemnify Client therefrom to the extent indemnification for such judgment is not provided under Client's insurance policies (unless Client is self-insured in which case the preceding clause shall not apply).

18.2 Notwithstanding the above, TriTech shall have no duty under this section 18.0 with respect to, and Client shall hold TriTech harmless from and against any claim, action or

proceeding arising from or related to infringements (i) by System Software, Subcontractor Hardware or Software, or Equipment, (ii) arising out of modifications to the TriTech Software and/or Documentation not made by or under the direction of TriTech, (iii) resulting from use of the TriTech Software to practice any method or process which does not occur wholly within the TriTech Software, or (iv) resulting from modifications to the TriTech Software or Documentation prepared pursuant to specifications or other material furnished by or on behalf of Client. This section 18.0 states the entire obligation of TriTech regarding infringement of intellectual property rights, and it will survive the termination of this Agreement.

19.0 INTENTIONALLY DELETED

20.0 SALES, USE AND PROPERTY TAX

20.1 Unless exempt from such taxes, Client shall be solely responsible for payment or reimbursement to TriTech of all sales, use, value added or similar taxes imposed upon this Agreement by any level of government, whether due at the time of sale or asserted later as a result of audit of the financial records of either Client or TriTech. If exempt, Client shall provide to TriTech written evidence of such exemption. Client shall also pay any personal property taxes levied by government agencies based upon Client's use or possession of the items acquired or licensed in this Agreement. This provision shall not apply to income taxes or fees generated on TriTech's income or the employment of its employees.

21.0 ACCESS TO AND AUDIT OF RECORDS

21.1 Client shall have the right, with reasonable prior written notice to TriTech, to examine, monitor and audit all records, documents, conditions, and activities of TriTech and its subcontractors related to services provided under this Agreement. The parties to this Agreement may be subject, at the request of Client or as part of any audit of Client, to the examination and audit of the State Auditor pertaining to matters connected with the performance of this Agreement for a period of three years after final payment under the Agreement. Any such audit will be conducted at TriTech's premises during TriTech's normal working hours. The Client shall be responsible for its expenses related to such audit. TriTech's financial records and information shall be treated as Confidential Information.

22.0 SEVERABILITY

22.1 If any term, clause, sentence, paragraph, article, subsection, section, provision, condition or covenant of this Agreement is held to be invalid or unenforceable, for any reason, it shall not affect, impair, invalidate or nullify the remainder of this Agreement, but the effect thereof shall be confined to the term, clause, sentence, paragraph, article, subsection, section, provision, condition or covenant of this Agreement so adjudged to be invalid or unenforceable.

23.0 MAJEURE/EXCUSABLE DELAY

23.1 Neither party shall be responsible for failure to fulfill its obligations hereunder or liable for damages resulting from delay in Delivery or performance as a result of war, acts of terrorism, fire, strike, riot or insurrection, natural disaster, delay of carriers, governmental order

or regulation, complete or partial shutdown of plant, unavailability of equipment or software from suppliers, default of a subcontractor or vendor (if such default arises out of causes beyond its reasonable control), the actions or omissions of the other party or its officers, directors, employees, agents, contractors or elected officials and/or other similar occurrences beyond the party's reasonable control ("Excusable Delay" herein). In the event of any such Excusable Delay, Delivery or performance shall be extended for a period of time as may be reasonably necessary to compensate for such delay. The party affected by an Excusable Delay hereunder, shall provide written notice to the other party of such delay as soon as reasonably possible.

24.0 CONSTRUCTION AND HEADINGS

24.1 The division of this Agreement into sections and the use of headings of sections and subsections are for convenient reference only and shall not be deemed to limit, construe, affect, modify, or alter the meaning of such sections or subsections.

25.0 WAIVER

25.1 The failure or delay of any party to enforce at any time or any period of time any of the provisions of this Agreement shall not constitute a present or future waiver of such provisions nor the right of either party to enforce each and every provision.

25.2 No term or provision hereof shall be deemed waived and no breach excused unless such waiver or consent shall be in writing and signed by the party claimed to have waived or consented. Any consent by any party to, or waiver of, a breach by the other, whether expressed or implied, shall not constitute a consent to, waiver of or excuse for any other, different or subsequent breach.

26.0 ENTIRE AGREEMENT

26.1 This Agreement and its Addenda or Amendment(s) represent the entire agreement between the parties hereto and a final expression of their agreements with respect to the subject matter of this Agreement and supersedes all prior written agreements, oral agreements, representations, understandings or negotiations with respect to the matters covered by this Agreement.

27.0 APPLICABLE LAW

27.1 Except to the extent that this Agreement is governed by the laws of the United States, this Agreement shall be governed, interpreted and enforced in accordance with the laws of the State of California without regard to its conflict of laws provisions.

28.0 ASSIGNMENT

28.1 Neither this Agreement nor any rights or obligations hereunder shall be assigned or otherwise transferred by Client without the prior written consent of TriTech, which consent will not be unreasonably withheld. For purposes of this Agreement, it is agreed, but not by way of limitation, that TriTech's withholding of consent is not unreasonable if the proposed assignee

is a person, company or other entity which competes with TriTech directly or indirectly, whether itself or through a parent, subsidiary, or entity which is owned or controlled by a competitor of TriTech. Further, TriTech may require the proposed assignee to execute and agree to be bound by this Agreement. TriTech may assign this Agreement to an entity ready, willing and able to perform TriTech's executory obligations hereunder, upon the express written assumption of the obligations hereunder by the assignee.

28.2 In the event that Client's dispatch operations are consolidated or assigned to another entity, including but not limited to assignment to a Joint Powers Authority, Client shall provide reasonable advance notice to TriTech so that a consent to assignment agreement authorizing assignment of this Agreement and the TriTech Software licenses to such entity may be prepared and entered into between the parties.

29.0 NOTICES

29.1 All notices required to be given under this Agreement shall be made in writing by (i) first-class mail, postage prepaid, certified, return receipt, (ii) by regularly scheduled overnight delivery, (iii) by facsimile or e-mail followed immediately by first-class mail, or (iv) by personal delivery, to the address set forth herein, or such other address as provided in writing. Such notices shall be deemed given three (3) days after mailing a notice or one (1) day after overnight delivery thereof.

30.0 ORDER OF PRECEDENCE

30.1 The following documents shall comprise the Agreement between the parties concerning the subject matter of this Agreement, and in the event of any dispute arising from or related to this Agreement, shall have the following order of precedence:

A. This Agreement and all Addenda and other documents attached to or incorporated by reference herein. In the event of a conflict between this Agreement and an Addendum, this body of this Agreement shall take precedence;

B. The applicable Client approved OSDs, IRDs and ATPs.

31.0 GENERAL TERMS

31.1 This Agreement shall be binding on and shall inure to the benefit of the heirs, executors, administrators, successors and assigns of the parties hereto, but nothing in this paragraph shall be construed as a consent to any assignment of this Agreement by either party except as provided in the ASSIGNMENT section of this Agreement.

31.2 This Agreement shall not become a binding contract until signed by an authorized officer of each party, and it is effective as of the date so signed.

31.3 This Agreement may be executed in any number of identical counterparts, and each such counterpart shall be deemed a duplicate original thereof.

31.4 The provisions contained herein shall not be construed in favor of or against either party because that party or its counsel drafted this Agreement, but shall be construed as if all parties prepared this Agreement.

31.5 Whenever the singular number is used in this Agreement and when required by the context, the same shall include the plural, and the use of any gender, be it masculine, feminine or neuter, shall include all of the genders.

31.6 A facsimile of this Agreement, its exhibits and amendments, and notices and documents prepared under this Agreement, generated by a facsimile machine (as well as a photocopy thereof) shall be treated as an original.

31.7 This Agreement is made for the benefit of the Parties, and is not intended to benefit any third party or be enforceable by any third party. The rights of the parties to terminate, rescind, or agree to any amendment, waiver, variation or settlement under or relating to this Agreement are not subject to the consent of any third party.

31.8 EACH PARTY'S ACCEPTANCE HEREOF IS EXPRESSLY LIMITED TO THE TERMS OF THIS AGREEMENT AND NO DIFFERENT OR ADDITIONAL TERMS CONTAINED IN ANY PURCHASE ORDER, CONFIRMATION OR OTHER WRITING SHALL HAVE ANY FORCE OR EFFECT UNLESS EXPRESSLY AGREED TO IN WRITING BY THE PARTIES.

COUNTY OF MONTEREY

Debra Wilson
Accepted By (Signature)

Mike Derr / Debra Wilson
Printed Name

Contracts / Purchasing Officer / Supervisor
Title

15 Dec 2015
Date

TRITECH SOFTWARE SYSTEMS

Accepted By (Signature)

Tony Eales, President and CEO
Printed Name and Title

12/14/2015
Date

Accepted By (Signature)

Blake Clark, Secretary and CFO
Printed Name and Title

12/14/2015
Date

APPROVED AS TO FORM
COUNTY COUNSEL
COUNTY OF MONTEREY
12-15-15

Approved for Form and Text
12-15-15

ADDENDUM A

PROPRIETARY INFORMATION[1]

SUMMARY OF CONTENTS

Addendum No.	Description
A-1	Statement of Work, with attached Subcontractor Statements of Work which are incorporated herein by reference
A-2	Number of TriTech Software Licenses, Installation and Shipping Instructions
A-3	Interfaces
A-4	TriTech Services, Support and Maintenance Fees, and Miscellaneous
A-5	Equipment and System Software
A-6	Subcontractor Software, Hardware and Services, if applicable
A-7	Payment Terms
A-8	Contract Price Summary
A-9	System Planning Document

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

ADDENDUM A-1

PROPRIETARY INFORMATION[1]

STATEMENT OF WORK

(Attached)

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

STATEMENT OF WORK

Monterey County, CA – Inform CAD/ Inform Mobile

Version 3.0

TRITECH
SOFTWARE SYSTEMS

TriTech Software Systems
9477 Waples Street, Suite 100
San Diego, CA 92121
Fax: 858.799.1010
Technical Services: 1.888.VISI.CAD (847.4223)

Document Control

Date	Version	Details/Changes	Author
November 13, 2015	1.0	Initial Project Draft	TriTech
November 18, 2015	2.0		TriTech and Monterey County
November 19, 2015	3.0	Final draft	TriTech and Monterey County

Table of Contents

1 OVERVIEW

1.1 Statement of Work

In accordance with the terms and conditions of the System Purchase Agreement (the "Agreement") between TriTech Software Systems (TriTech) and will be providing to Monterey County, California ("Client"), this Statement of Work (SOW) defines the services and deliverables that TriTech will be providing under the Agreement.

This project description includes the services and Deliverables specified by the Purchase Agreement, including if applicable, TriTech Software and services, Subcontractor activities, Third Party products and services for the implementation of the System and Subsystems specified in the Purchase Agreement (collectively the "Project").

Statement(s) of Work for applicable TriTech Subcontractor(s) are presented in Appendix E - Subcontractor(s) Statement(s) of Work.

In some cases, the framework of Deliverables documented by this SOW for this Project is further defined through additional documents such as: Operational Scenario Documents (OSD); Interface Requirements Documents (IRD); User and Administrator Documentation and Training Materials.

The number and type of software licenses, products, or services provided by TriTech or its Subcontractors are specifically listed in the Purchase Agreement and any reference within this document as well as Subcontractors' SOWs (if applicable) does not imply or convey a software, license, or services that are not explicitly listed in the Purchase Agreement.

1.2 Project Implementation Definitions

Unless otherwise defined herein, capitalized terms within this document have the meanings described in the Definitions section of the Purchase Agreement and where applicable Software Support Agreement.

The following terms are used in this document. Since these terms may be used differently in other settings, these definitions are provided for clarity.

- Project Schedule means the schedule providing dates and timeframes for completion of tasks and Deliverables during the course of this Project. The Project Schedule is subject to change at the mutual agreement of TriTech and the Client as further described in this SOW.
- Project Management Plan means collectively the Communications Management Plan; Risk Management Plan; and Change Management Plan that provide the criteria for managing those tasks within the Project.
- The OSD provides an operational description of a capability or feature within the applicable TriTech solution in sufficient detail that both Client and TriTech team mutually agree to the expected deliverable. The OSD provides the "what", "how," and the information flow (including data flow and data elements, when appropriate) of the capability or feature. The OSD does not provide the technical or internal design of how TriTech's Development team will accomplish the requested feature. An OSD will be provided for each contracted product customization to be developed. Once approved by the Client, the OSD becomes the basis for TriTech's development. Once approved, any further changes requested by the Client to the OSD and/or design may incur additional costs to the Client.
- Standard Interface Requirement Document (IRD) defines the functionality of the Standard Interfaces. These documents are standard, published TriTech documents, and are not specific to a Client.

1.3 System Acceptance Process

TriTech has created a standard Acceptance Test methodology which is designed to allow our clients to thoroughly evaluate and verify the functionality, performance, and reliability of TriTech System and Subsystems. These procedures include several steps that are described in later sections of this SOW. Upon successful completion of these procedures the system is deemed Accepted.

1.3.1 Functional Acceptance Testing

Functional Acceptance Testing (FAT) is conducted on each of the Subsystems prior to conducting the User Training on these applications and staging them for Go Live. The focus of these tests to verify that each Subsystem meets the functions as described in TriTech's standard FAT documents, which have been created based on TriTech's standard product specifications.

The Functional Acceptance Tests are performed based upon standard TriTech FAT documents that have a standard content and format. These standard FAT documents will be submitted to the Client for review prior to testing.

During the scheduled FAT and according to the FAT documents, TriTech and Client project personnel will work to identify any errors where the Subsystem does not conform materially to the FAT documents. Any such errors will be documented by TriTech on the FAT exceptions list. Errors listed on the FAT exception list will be classified as follows:

1) Pre-Go Live Issues: Issues in the Subsystem that prevent the Client from performing normal daily and monthly operations and therefore must be corrected prior to Go Live. TriTech and the Client will jointly assess the issues and ultimately the Client shall determine the operational impact and the criticality of the identified issue.
2) Post Go Live Issues: Issues identified in the FAT testing that do not prevent the Client from performing normal daily and monthly processes and therefore can be corrected after the Subsystem Go Live. These issues will not be used as part of the criteria for Acceptance.

In the event that the Client chooses not to follow the Acceptance Test processes defined in the Statement of Work, the Client's cutover to live production status (i.e., productive use) of any TriTech supplied Subsystem constitutes the Client's acceptance of the Subsystem.

1.3.2 Integration Testing

Once the FAT is successfully concluded for all subsystems that are scheduled to go live together and in preparation for Go Live, TriTech and the Client will conduct a one day Integration Test. Typically Inform CAD, Inform Mobile, and CAD interfaces Go Live together.

The Integration Testing for CAD and its Subsystems will be conducted based on a number of scenarios that test the call flow from the call creation to disposition in CAD. These scenarios include Mobile and Interfaces that can be tested in the pre-production environment and are scheduled to go live at the same time. A small group of the Client staff (at least 1-2 dispatchers and at least 1-2 Mobile field users) will participate in this test with TriTech. TriTech will work with the Client to define a set of test scenarios that test the CAD system based on the Client's practices. It is recommended that the Client utilize sample CAD calls from their legacy system.

Integration Test scenarios must be signed off prior to commencement of Integration Testing. At the successful completion of Integration Testing, without any issues that prevent the System to be taken Live, the Client shall provide written approval that the System is ready for Go Live.

1.4 General Client Responsibilities

In addition to those Client responsibilities stated elsewhere in this SOW, the Client is responsible for:

1) Electrical facilities (e.g., outlets, generator and other electrical infrastructure facilities) required for this project, including necessary maintenance.
2) Cabling (e.g., power, network, interface and other electrical and data transmission lines) required for this project, including necessary maintenance.
3) Network/communications connections (e.g., LAN/WAN, commercial wireless, telephone, VPN, and other voice/data connections), or ongoing network/communications charges associated with installation, operation or support of the proposed system including the establishment and maintenance of security accounts.
4) Configuration and/or programming of network routers, switches and bridges – this includes providing information to TriTech staff on any firewalls within the overall network that the system will operate and necessary port access for the system to operate in accordance with TriTech documentation.
5) The installation, configuration, maintenance (including patch management and upgrades of Microsoft software required by the System (With the exception of the installation services that has been contracted through TriTech).
6) The installation of servers into racks and the connection of such servers to network switches.
7) The assignment of machine names and IP addresses for servers to be utilized by the System. This includes joining the servers to the network and the assignment of security accounts as specified by TriTech documentation.
8) Any hardware and third party software or services necessary for implementing the System that is not listed in the Purchase Agreement as a TriTech Deliverable (not listed as a line item in the Price and Payment section of the Purchase Agreement). This includes workstations, server hardware, network equipment, telephone or TDD equipment, performance test software, Microsoft licenses, Disaster Recovery Software, and services required to extract legacy data and convert into acceptable data formats.
9) Configuration, maintenance, testing, and supporting the Third Party Systems that the Client operates and which will be interfaced with as a part of this project. Specifically, the Client operates and supports the Telestaff system, Fire Station Alerting system, Firehouse RMS system, ESO system, Emergency Reporting Systems, incumbent 911 system, ProQA EMS, TracNet system, Push to Talk via Harris console, AMR, First Watch. The Client is responsible for maintaining and supporting these systems in good working order. The Client is responsible for providing Application Programming Interface (API) documentation to these systems that document the integration process for the level of interface integration defined by TriTech's response to the RFP, as described by TriTech responses to the RFP as well as Interface IRD and approved OSDs. The Client is also responsible for any cost associated with the development, or configuration of the Third Party System Vendor side of the Interfaces.
10) Consoles, furniture or fixtures as well as any modifications to install equipment used for Systems or Subsystems specified by the Purchase Agreement into existing consoles, furniture, vehicles or existing facilities. Installation of Workstations into consoles, furniture, vehicles or like items, is the responsibility of the Client.
11) Active participation of the appropriate personnel with the necessary background knowledge and availability in the Project implementation meetings and working sessions during the course of the Project. Examples of such implementation sessions are System Orientation, DOLF, Acceptance

Testing, Training, regular Project meetings, discussion regarding Interfaces, system installation planning, and the like.

12) The provision of Code Files and GIS data as requested by TriTech staff. This information must be provided on a timely basis in order to meet the project timelines. This information will be provided in a format requested by TriTech staff in accordance with TriTech Documentation.

13) The timely review and approval of Functional Acceptance Testing (FAT) documents, OSDs, IRDs, Task Completion Reports (TCR) and/or other project documentation as further defined in this SOW.

14) Provide a facility with the required computer and audio-visual equipment for training.

15) Timely completion of acceptance testing for each of the TriTech Subsystems.

16) TriTech pricing for this Project assumes that all Client supplied products and services required to support the project will be delivered according to this agreed to Statement of Work, based upon a mutually agreed upon project schedule. This timeline will require a commitment by Client staff to attend project meetings, attend training, and execute action items in a timely fashion. Should the Client find that it is unable to support the agreed to schedule, TriTech reserves the right to execute a mutually agreed to Project Change Order. The Change Order will make the necessary modifications to schedule and/or scope of the project and, if applicable, allow TriTech to recoup any additional costs which may be incurred by TriTech as a result of Client delays.

17) The Client is responsible for providing remote connectivity to TriTech for the purpose of installation, configuration, testing, and troubleshooting of TriTech's applications at the Client site. TriTech's approved remote connectivity methods are described in the System Planning Document.

18) Connect and configure any Third Party hardware (such as Bar Code Scanners, Bar Code Printers, Biometric Fingerprint Scanners, and Signature Pads) to Client workstations, if these services are not explicitly sold in the System Purchase Agreement.

1.5 Project Exclusions

1) TriTech Software Systems provides software applications that it develops. These applications are sold as and are considered to be "Commercial Off the Shelf" (COTS) software packages. The functionality of these products will be based on TriTech's current design and functionality of these COTS products, unless otherwise indicated in the Purchase Agreement, or if applicable, TriTech's responses to the RFP.

2) Work, software, services, hardware, Systems, Subsystems, product/software modifications, or any other deliverables not explicitly stated in the Purchase Agreement will not be included in the Project.

3) Any modification to TriTech standard products or customizations to such products that are not explicitly stated in the Purchase Agreement are excluded from the scope of this Project.

4) Changes in scope will only be executed through a mutually agreed upon Change Management Process, as described in the Project Management Plan.

5) TriTech is not responsible for the deficiencies in the Client's internal or contracted network to support remote Inform CAD, or other subsystem workstations.

6) TriTech is not responsible for the deficiencies in a Client's internal or contracted network to support some of the extended features of Inform Mobile and Inform Field Based Reporting products due to bandwidth or limitations in wireless coverage.

7) TriTech is not responsible for the removal of the old (legacy) equipment, hardware, furniture, consoles, cabling, as part of the Project implementation unless specifically stated in the Purchase Agreement and this SOW.

2 PROJECT DELIVERABLES

2.1 Overview of Project Deliverables

This project will provide a combination of software and services that comprise the System for use by the Client's Public Safety Organization(s). The individual Subsystems to be provided comprise the overall System. The Purchase Agreement specifies the software licenses included in this Project by the quantity and environment in which licensed. This includes all Server and User Licenses, Standard and Custom Interfaces, as well as other TriTech tools and utilities.

The Purchase Agreement for this project incorporates the following major Subsystems [edit to match the Purchase Agreement]:

1) Inform CAD (Production, Test/ Training)
2) Inform Mobile (Production,, Test/Training)
3) TriTech.com IQ Search subscription
4) TriTech.com Analytics subscription
5) Inform CAD Browser
6) Inform CAD GISLink
7) Inform CAD Archive and Reporting Server
8)
9) Inform Me.
10) System Interfaces as listed in the Appendices to this SOW

Implementation of different components of the System is performed in a series of interrelated processes. Some processes can be performed concurrently while others are sequential in nature. TriTech has implemented process gates to ensure successful completion of tasks in the optimal order before a subsequent activity begins.

The only reference for the number and type of software licenses is the Purchase Agreement. Any reference within this document to services associated with a specific software product does not imply or convey a software license for products that are not listed in the Purchase Agreement.

2.1.1.1 Standard TriTech Software Deliverables

The functionality provided by Standard TriTech Software Products, including Interfaces (the core TriTech Software and Interfaces without any Modifications) is defined by TriTech Standard documentation such as User and Administration Guides for TriTech's major Subsystems such as Inform CAD, Inform Mobile, Inform CAD Browser, TriTech.com IQ, TriTech.com Analytics, Inform CAD GISLink and other Standard Software products. Standard Interface Requirement Documents (IRD) define the functionality of the Standard Interfaces. These documents are standard, published TriTech documents, and are not specific to a Client.

Standard TriTech Interface Software to be delivered through this Project is identified as software licenses in the Purchase Agreement. The functionality provided by Standard TriTech Interface Software is defined by TriTech IRDs.

Any Modification to the functionality of Standard TriTech Software within the System, or Subsystems, shall follow the Change Management Process as described in Section 5.2, Change Management Process. The

scope of the Modification will be described in an OSD. Release of all Modifications to TriTech's Standard Interfaces will follow Subsystem release cycles (i.e., Inform CAD, Inform Mobile, and the like).

2.1.1.2 Contracted Modifications to Standard TriTech Software Products

Any Modifications to Standard TriTech Software Products including Inform CAD, Inform Mobile, TriTech.com IQ, TriTech.com Analytics, Inform CAD GISLink, and Standard System Interfaces that are to be delivered through this Project are listed in the Purchase Agreement. The functional scope of any Modification procured through the Purchase Agreement will be summarized in this Statement of Work and defined by an OSD for all items listed under Appendix B - Contracted Modifications to Standard TriTech Software Products for Inform CAD, Inform Mobile, and other major TriTech Subsystems; and under Appendix C - Standard TriTech Interfaces, for modifications to Standard Interfaces. Any and all modifications or enhancements that are not explicitly listed in the Purchase Agreement or TriTech's responses to the RFP are not within the scope of this Project.

Any changes in the requirements documented in the System OSDs, post approval of the OSDs are subject to formal Change Order.

Note: All enhancements and modifications to any of TriTech's Standard products (including the Standard Interfaces) will only be released with a major version of the applicable subsystem (i.e., Inform CAD, Inform Mobile, and the like) based upon the relevance and dependency to these products.

Note: Software versioning is the process of assigning either unique version names or unique version numbers to unique states of computer software while a **service pack or patch** is a piece of **software** designed to fix problems with, or update a computer program or its supporting data. This includes fixing security vulnerabilities and other bugs.

2.1.1.3 Contracted Custom Interface Software

Custom Interfaces to be created by TriTech are identified as individual software licenses in the Purchase Agreement. A high level description of the intended functionality and scope is attached as part of Appendix D - Custom TriTech Interfaces to this SOW. The detailed functional scope of any custom Interface procured through the Purchase Agreement will be defined by an OSD, which will be developed and delivered to the Client during the project.

Any changes in the requirements documented in the System OSDs, post approval of the OSDs are subject to formal Change Order.

3 TRITECH PROJECT ROLES AND RESPONSIBILITY

3.1 Overview

TriTech will appoint a team of specialized personnel that will implement the Project under the direction of TriTech's Project Manager. The team will be multi-disciplinary and the team members may specialize in different products or Subsystems. Team members may be engaged in different phases of the Project as necessary and in some cases are involved in the Project for a limited timeframe. Any personnel changes by TriTech will be discussed with and agreed upon by the Client in advance. Such agreement will not be

unreasonably withheld. TriTech will work with the Client to assure that the assigned personnel do have the required capabilities and competencies to successfully complete the project.

The descriptions of personnel roles noted below provide an overview of typical Project team members. Other personnel may be involved under the direction of the TriTech Project Manager in order to complete the requirements of the Project.

3.2 TriTech Project Manager

TriTech has appointed a TriTech Project Manager as the principal TriTech contact who will be responsible for managing TriTech's responsibilities related to the implementation of the Project, as described in this SOW and within the scope of the Purchase Agreement. The Project Manager is also responsible for managing the Deliverables for TriTech's subcontractors.

Each of TriTech's Subcontractors may appoint a Project Manager to manage their portion of the Project Deliverables and activities. However, the TriTech Project Manager will have the overall responsibility for coordinating all activities and supervising the progress of each sub-Project. The TriTech Project Manager will manage all communications between the Client and each of TriTech's Subcontractors. TriTech's Project Manager is responsible for Project scheduling and management of TriTech Project personnel and subcontractor/supplier resources.

The Project Manager utilizes a standardized methodology for project implementation, project management, and risk identification and management. TriTech's Project Manager is responsible for Project scheduling and management of TriTech Project personnel and applicable Subcontractor/supplier resources, budget management, identification and management of Project risks, and communication with the Client's Project team. The TriTech Project Manager will be responsible for the collaborative coordination of Client resources in an effort to ensure that avoidable Project delays will be minimized.

The Project Manager is involved in the Project beginning with the SOW development and continuing through post Go Live Project closure activities. The Project Manager will be an active participant in many of the milestone events through the course of the Project including System Orientation, DOLF, and Go Live. The Project Manager will organize a bi-weekly Project status call with the Client and necessary Project team members. Additionally, the Project Manager will provide the Client with a written Project status report on a monthly basis, as further defined in this SOW.

3.3 Systems Engineer

The Systems Engineer is responsible for two primary functions, within the scope of the Project: 1) configuration of Standard TriTech Interfaces (including configuration documentation); and 2) development of software requirements documentation for Custom Interfaces. The Systems Engineer will additionally participate in testing of each of these Subsystems. In some cases, Development Engineers may perform the role of the Systems Engineer for specialized interfaces.

3.4 Inform CAD Business Analyst

The Inform CAD Business Analyst is responsible for the configuration of the CAD based on the Client's system requirements, business rules, configuration data, and reporting needs. The Business Analyst will provide consultation services to the Client with regard to the configuration and operation of CAD. The Inform CAD Business Analyst is also responsible for conducting the CAD System Orientation, Demonstration of Licensed Functionality (DOLF), performing the Acceptance Testing and providing consulting support throughout the Project implementation life cycle.

After the completion of the DOLF session, ownership for continued Code File configuration and maintenance transfers to the Client. At this stage, the Business Analyst will serve as a consultant for the

Client's further configuration of the Client's CAD system until the Client's System is in live operation. These activities are described in later sections of this SOW.

The Business Analyst will be an active participant in many of the milestone events through the course of the Project and will participate in bi-weekly Project status calls, as needed.

3.5 Inform Mobile Business Analyst

The Inform Mobile Business Analyst is responsible for the configuration of the Inform Mobile based on the Client's system requirements and the dispatch and field users' operations. The Business Analyst will provide consultation services to the Client with regard to the configuration and operation of Inform Mobile. These consultation services includes working with the Client team to determine and define the Inform Mobile baseline configurations. The Inform Mobile Business Analyst is also responsible for conducting the Inform Mobile System Orientation, performing the Acceptance Testing, delivery of Train the Trainer and Inform Mobile Administration Class, as well as providing consulting support throughout the Project implementation life cycle.

3.6 GIS Analyst

As part of the implementation team, TriTech utilizes a GIS Analyst that specializes in geographical Information technology. The GIS Analyst is responsible for: 1) performing an analysis and preparing a report regarding the Client's GIS source data including street centerline data, routability, and response area polygon data based on TriTech specified requirements for Inform CAD, Inform Mobile; 2) consultation services regarding converting the GIS source data for use in Inform CAD, Inform Mobile; 3) providing training for applicable TriTech GIS tools; and 4) preparing the one-time GIS data import for Inform CAD and Inform Mobile.

These GIS activities are intended to provide information that will allow the Client to optimize the accuracy and quality of Client GIS data during Project implementation.

3.7 Training Specialist

Training for TriTech applications is provided by TriTech Training Specialists. Training staff for other products and functions will vary by the type of product and training proposed.

This process is described in greater detail in the training sections of this document, related to each of these products.

3.8 Client Installation Services Team

TriTech's Client Installation Services (CIS) team is responsible for installation and integration of TriTech Software onto the system hardware that is identified for this Project. This team works closely with the Client's staff to coordinate IP and network addressing, security accounts, network connections, and remote access to the System.

This process is described in greater detail in Section 7.2, System Installation of the SOW.

3.9 Technical Services Group

Customer service functions and technical support for the Client's System during the Project is coordinated by the TriTech Project Manager. After Go Live, TriTech's Technical Services Group is responsible for providing on-going support for the Client's System as defined in the Purchase Agreement and the Software Support Agreement.

3.10 Account Executive

The Account Executive is an important resource to the Client throughout the life of their System. The Account Executive will be the primary contact and liaison for non-technical support issues, system changes and billing questions. They provide support for general customer service requests, manage requests for new software and services, and provide assistance with planning technology upgrades post System Go Live.

Having the Account Executive participate as a key Project member provides an enhanced level of continuity for the Client as they continue their relationship with TriTech.

4 RECOMMENDED CLIENT ROLES AND RESPONSIBILITIES

4.1 Overview

Implementation of the Subsystems in a manner that meets the Client's operational needs requires collaboration with the Client's team. In general, the Client's Project team should include staff experienced in the operation and administration of the Client's current public safety technology systems as applicable to the scope of this project. Such teams may include representatives from the Inform CAD, and Inform Mobile users and stakeholders. These "subject matter experts" need to be engaged through the course of the Project from initiation until live operations, and may be involved in the support and maintenance of the System and Subsystems after Go Live.

These recommendations do not speak to specific positions. Rather, this information defines specific responsibilities and estimated time commitment. The Client may elect to create individual positions, combine responsibilities, and/or assign responsibilities within their current organizational structure. The Client needs to periodically assess its staffing needs based on changes in the Client's operational use of this technology.

Often, there is overlap with these core responsibilities - therefore, the team can generally be kept to a small group, dependent upon the complexity of the system being implemented and the number of Subsystems.

In addition, it is recommended that the Client, early within the implementation process, identify those persons that will be responsible for the ongoing maintenance of the Client's System to include the technical and business processes. The application Administrators (Inform CAD, and Inform Mobile,), as well as the System Administrator, are very key to the success of the Project. It is paramount that the Client develops this team during the implementation process so that the Client successfully achieves a degree of self-reliance with the understanding of each of the Systems in addition to the generalized technical responsibilities.

4.2 Project Manager

The Client's Project Manager is the principal Client contact who will manage a team of Client Project personnel. The Client's Project Manager manages and coordinates Client's resources responsible for completing assigned Project tasks and activities.

Activities include facilitating Project Schedules and meetings, timely approval and processing of invoices, review and approval of Task Completion Reports ("TCRs"), Project management plans, applicable configuration sheets, OSDs and IRDs, approval of the Project documentation and FAT, and management of the Client's staff. Additionally the Client's Project Manager is responsible for coordinating the efforts, activities, and communications between TriTech and third party vendors that are not TriTech Subcontractors, as well as any deliverables from these vendors to the Project.

4.3 System Administrator

The Client's System Administrator is the individual primarily responsible for managing the technical back-end of the System including Windows, SQL Server, network, hardware, data back-ups and log management. This individual is the primary technical point of contact representing the Client.

As identified in the Purchase Agreement and the Software Support Agreement, following the initial system installation, administration, and support for hardware (including the software operating system) and network components are the responsibility of the Client. The Client needs to plan for support and maintenance

through the development of Client resources, other departments within the Client's organization, or by contracting for such services. The Client should establish procedures for managing warranty service of hardware.

Activities for this position include 1) management of Microsoft Windows Operating System including patches and service packs; 2) management of Microsoft SQL Server including patches and service packs; 3) implementation of software prerequisites (in accordance with TriTech Documentation) on computers as needed for current operations and System upgrades; 4) monitoring, management and maintenance of the Client's network including LANs, WANs, wireless networks, security accounts and support connectivity (in accordance with TriTech Documentation); and 5) hardware maintenance and troubleshooting; file and data back-ups and software and error log management.

Time commitment will vary with the number of computers on the system, the complexity of the network (including the use of a WAN) and the number of personnel to be managed in network access. If the System LAN is connected to the Client's administrative LAN/WAN[1], coordination will be important to avoid problems with the Client's network traffic. Personnel involved in System Administration should attend the applicable TriTech System Administrator Course(s). Where a large team is involved, a core team should attend a System Administrator Course and then the Client's System Administration team should conduct a smaller version of the training for local staff.

4.4 Inform CAD Administrator

The Client's Inform CAD Administrator is the individual primarily responsible for managing the Inform CAD application software settings to ensure efficient operation. This individual is the primary CAD configuration point of contact representing the Client.

Activities include TriTech software setup, assignment, and management of TriTech Software modular security, maintenance of the Code Files, evaluation and implementation of version updates, reporting, prioritization, and management of support issues.

Within the Multi-Agency environment, separate CAD administration staff may be required to manage the components used by each operation - under the direction of an overall System-Wide CAD Administrator. Any personnel involved in CAD administration should participate in the DOLF session so they are prepared to maintain the CAD Code Files post DOLF. The CAD Administrator should additionally attend Inform CAD User Training.

4.5 Inform Mobile Administrator

The Client Inform Mobile Administrator must possess a set of skills necessary to support the Client's implementation of the Mobile System. The Inform Mobile Administrator will be responsible setting up and maintaining the users, and vehicles as well as minor configuration changes to the Inform Mobile product. The desired administrator should possess a working knowledge of:

HTML/XML, CSS, and JavaScript.

SQL, especially views, stored procedures, and database schema.

Standard GPS protocol (TAIP and NMEA).

The Inform Mobile Administrator should attend the Inform Mobile Train-the-Trainer course and the Inform Mobile Administration course.

This individual should work closely with the System Administrator in order to manage file and data back-ups and System administration of the hardware and network.

[1] TriTech recommends a dedicated LAN for CAD as documented in the System Planning Document.

4.6 GIS Analyst

The GIS Analyst is responsible for the mapping components required for Inform CAD, and Inform Mobile. Activities include providing the initial GIS files for use within Inform CAD, and Inform Mobile. The GIS Analyst will be responsible for updating the Inform CAD and Inform Mobile Streets data using GIS Link.

During scheduled activities, the Client should have a fully dedicated person or persons. Post implementation workload will be based upon the number and type of GIS data edits that will be necessary for the local operations. This person should participate in portions of the System Orientations and DOLF. Additionally, this person (or group of people) should attend GISLink training.

4.7 Inform CAD/Mobile Users/Supervisors

Input from the Users/Supervisors is important to ensure that the configuration settings approved by the Client's team will be perceived as usable by users of the each of the Subsystems. These Users/Supervisors should participate in meetings defining and evaluating the requirements and configuration of their respective products, such as System Orientation and Administration Training.

It is recommended that the CAD Supervisors attend Inform CAD User Training, including the session designated for the Supervisors. It is recommended that Mobile Supervisors attend Inform Mobile Train the Trainer class.

During scheduled activities, the Client should have a fully dedicated person or persons. Post implementation should be maintenance only. These personnel should attend the applicable User trainings.

4.8 Subject Matter Experts

Input from subject matter experts in all applicable areas (Inform CAD, Inform Mobile, and each of the Interfaces and external Systems that integrate with TriTech Systems) is essential to successful implementation of the system. The subject matter expert(s) in each area are the individuals who are knowledgeable about the current operational and technical specifications of the system, the data flow between and among different applications, and any limitations associated with each application.

For Standard and Custom Interfaces, subject matter experts may be from the Client Agency, and third party vendors. If the vendors are not TriTech Subcontractors, the Client will be responsible for engaging them in necessary discussions and documentation of the requirements.

The Client should involve a fully dedicated person or persons during the scheduled activities, such as requirements analysis, demonstration of the applications (if applicable), review of requirements documentation, the testing process, and other events that are described in later sections of this SOW. Post implementation, the involvement of the subject matter experts should be limited to maintenance only.

4.9 Application Trainers

A team of trainers is needed for training the Client staff on TriTech Software on an on-going basis. Trainers will be responsible for reading TriTech Software release notes and maintaining an understanding of new and existing features.

It shall be required that CAD trainers attend Inform CAD User Training, and Train the Trainer session. It shall be required that Mobile trainers attend Inform Mobile Train the Trainer class.

The Client should involve a fully dedicated person or persons during scheduled activities such as training sessions. Post implementation, the involvement of the application trainers should be limited to maintenance only. These personnel should attend the applicable product specific training courses.

5 PROJECT CONTROLLING PROCESSES

5.1 Overview

Project Controlling Processes are established early in the Project life cycle during the Planning Phase and described within the Project Management plans. Project Control is the process that includes completing regularly scheduled Project progress meetings and the use of regularly delivered Project progress reports, as well as implementing the processes needed for Communication Management, Risk Management, and Change Management. The process begins during the initiation process and concludes at the end of the Project.

The establishment of defined processes for Client communication (contact persons and reporting methods) provides a basis for effective and regular communication. This supports the previously noted processes necessary for successful Project outcome.

As part of the Controlling Processes, TriTech utilizes a series of measurements and management reviews to mitigate the effect of these variances. Checkpoints or milestones are planned into each phase of the Project to measure performance and determine if the Project is ready for the next phase.

Checkpoints are key tasks that act as gates to the next phase of a project. A delay in a milestone may cause a delay in starting or completing subsequent tasks; in effect creating a risk to the overall Project. Therefore, TriTech's Project staff closely monitors checkpoint tasks and milestones and promptly notifies the Project Manager of any delay or failure with a milestone task. Milestone delays on the part of either party will trigger an overall review of Project activities so that risks can be assessed and properly managed. In the event that either party becomes aware of a delay, notification shall be provided to the other party as soon as reasonably possible.

Evaluation of overall Project status at each checkpoint is essential to ensure that the Project is effectively progressing toward completion and that new risks are not being introduced. In many cases, Project activities leading to a checkpoint are interrelated to later scheduled tasks. Success at checkpoints diminishes the risk to the Project going forward.

Incomplete actions at a checkpoint may prompt delays and a rescheduling of the Project. For example, delays in completing or approving Custom Interface OSDs will delay the start and completion of the Interface development work, which may ultimately have an impact on the projected Go Live date. Depending upon the importance of the Deliverable, these kinds of delays can have a cascading effect upon the Project Schedule including training and Go Live Task Completion Reports

As part of the Project controlling process, upon completion of significant milestones and or tasks, TriTech will submit a Task Completion Report ("TCR") to the Client. The TCR serves as a formal tool for the purpose of verifying with the Client that the work has been performed, services rendered, and products delivered according to the requirements specified within the SOW and/or related documents.

TCRs are presented to the Client by TriTech's Project Manager for signature. Some TCRs may trigger a Project payment, in accordance with the payment terms within the Purchase Agreement. Upon execution of a TCR that is tied to a Project payment milestone, the Client will receive an invoice from TriTech's accounting department which must be paid based on the terms and conditions of the Purchase Agreement.

As the Prime Contractor, TriTech is responsible for processing TCRs for all Subcontractor activities, under the Contract.

The TCR will include the following information:

1. Description of Work performed and products delivered.
2. Comments noting any special circumstances.

3. Product/Service deliverables listing the contract line items that are being recognized as delivered and will be invoiced.
4. Related Payment Terms in accordance with the Purchase Agreement, for contract line items that will be invoiced relative to the TCR.

5.1.1 TriTech Responsibilities

a) TriTech will prepare and submit TCRs for Client's signature upon completion of the applicable task.

b) The TCR will cite the appropriate SOW reference.

c) TCRs that trigger a payment will include the payment amount in accordance with the Purchase Agreement payment schedule.

5.1.2 Client Responsibilities

a) Client will review and approve TCRs within a five (5) business day period from the time of receipt less any challenges to the validity of the report.

b) In the event that Client disagrees with a TCR, Client shall submit to TriTech a written explanation detailing why the Client believes that the subject of the TCR and/or tasks have not been completed in accordance with the Purchase Agreement or this SOW. Such notification from the Client shall be provided to the TriTech Project Manager within five (5) business days of receipt of the TCR.

5.2 Change Management Process

Either party can request changes to the scope of the project at any time. Since a change may affect the price, project deliverables, this SOW, the supporting project schedule, and/or the terms of the Purchase Agreement for this SOW, both parties must approve each change in writing and agree on the impact each change may have on the Purchase Agreement and related attachments.

The purpose of the Change Management Process is to manage any significant changes to the Project as described in this SOW or related documents as referenced within the SOW. These changes may include, but are not limited to a modification to Project scope, Standard or Custom products' functionality, TriTech and Client's identified roles and responsibilities, Project payment terms, and modifications to the scope or delivery location of services within the Project. All significant changes must be documented through the Change Management Process. The type of documentation needed will depend on the nature and significance of the change.

A Project Change Order will be the vehicle for communicating and approval of the changes. Whether initiated by the Client or TriTech, all Change Orders will be documented by the TriTech Project Manager. The Change Order shall describe the requested change, the party requesting the change, and the effect the change will have on the project, including the price, project deliverables, this SOW, the supporting project schedule, and/or the terms of the Purchase Agreement for this SOW.

All Change Orders must go through the TriTech's internal approval process before they can be presented to the Client for review and approval. Once the Change Order is generated, the Client Project Manager and TriTech Project Manager will review the proposed change and communicate as necessary to answer any questions, and/or work to resolve any issues preventing acceptance of the Change Order by both parties. Upon the approval by both parties the Change Order will be authorized for implementation.

The creation of some Change Orders may, depending upon the scope of the requested change, require fees in order for TriTech to properly investigate and scope the requested change. An example of this situation may include investigating the development of a custom interface and creating a detailed OSD prior to the Clients decision regarding the purchase of the interface. If additional fees are required by TriTech to create a Change Order, those fees will be identified and communicated to the Client Project Manager prior to

TriTech's investigation of the requested change. In such situations, TriTech will only proceed with the investigation required to create the Change Order if the Client has agreed to pay the additional fees associated with creation of the Change Order.

Additional deliverables or Project deletions in terms of Software and services will require a mutually agreed upon Change Order. It must be noted that the later in the Project that a change is requested, the greater the likely impact in terms of costs, risks, and timescale. It is recommended that the Client not delay any review activity as it is a best practice to discover potential changes as early as possible. In some cases, it may be more appropriate to plan modifications for post Go Live delivery.

5.2.1 TriTech Responsibilities

a) Change Orders will be prepared for submission to the Client when required.

b) Where Project changes require Engineering-level modifications, TriTech will perform requirements capture necessary to prepare required documentation including a high level description of the change for Client review and approval.

c) Where Project changes require Engineering-level modifications, Client will be informed of the delivery mechanism (version and schedule).

5.2.2 Client Responsibilities

a) When applicable, the Client will identify the services or deliverables that will be subject to a Change Order, per the Purchase Agreement between both parties.

b) When applicable, the Client will identify changes to features or functionality related to CAD, Mobile, Interfaces or any other Subsystems that will require a change order. This process may also include participation with the requirements process.

c) Client will approve and process Change Orders as in a timely manner.

5.3 Project Reporting

TriTech will provide Monthly Status Reports advising the Client Project Manager and key Client Project Stakeholders of the progress and status of project activities. This report will include the significant accomplishments, planned activities, issues, and potential risks associated with TriTech and TriTech's Subcontractors' Deliverables. The Project Status Reports will include the following:

a) Accomplishments during the Reporting Period.

b) Planned upcoming activities.

c) Issues.

d) Risks.

e) Key Action Items.

In addition, the TriTech Project Manager will hold bi-weekly status meetings/conference calls to update the Client on the status of the Project and key action items and deliverables.

During the course of the Project, one or more Project journals will be created to document Project issues and action items. These journals are generally product specific and are used by the Project Manager and other team members to facilitate successful Project completion. Project journals are reviewed with the Client during bi-weekly Project status calls and on an as needed basis through the course of the Project. The Project Manager is responsible for periodically providing copies of updated journals.

TriTech will provide an updated Project Schedule advising the Client Project Manager of the progress of project activities. The Project Schedule may be lacking the detailed tasks for the Client team, and the Client may add such tasks, owners, and durations to the Project in collaboration with TriTech Project Manager. The Project Schedule will consist of the following:

a) Major Tasks.

b) Task Responsibility.

c) Task Duration.

d) Major Milestones.

e) Tasks Completed.

f) Tasks in Progress.

5.3.1 TriTech Responsibilities

a) Provide a written report of Project status once a month.

b) Track issues and action items to closure through product specific journals. The Client will be periodically provided with updated copies of the journal.

c) Conduct status meetings/conference calls every two weeks.

d) Maintain an up-to-date Project Schedule.

5.3.2 Client Responsibilities

a) Review the written report of Project status and provide feedback within five (5) business days in order to ensure that the documentation is correct.

b) Participate in Project status meetings.

c) Ensure participation of personnel in tasks and meetings.

5.4 Document Review

In the course of the Project, TriTech will deliver several documents to the Client for review. These documents will include but are not limited to the Acceptance Test Procedure, Project Schedule, DOLF report, OSD, and Interface Requirement Documents for the Project. Approved documents are returned to the TriTech Project Manager. For paper documents, the TriTech Project Manager will retain the original copy and will provide an unbound copy suitable for reproduction. For soft copy documents, the TriTech Project Manager will retain a copy and provide Client with a copy.

Should the Client find any document unacceptable, the Client must provide specific reasons in writing to the TriTech Project Manager. TriTech can then assess any required corrective measures and make revisions or modifications to provide acceptable documents within a mutually satisfactory timeframe.

Status Reports are not subject to approval.

In order to ensure compliance with the Project Implementation Schedule, the Client is responsible for the review of such documents and providing any comments to TriTech within five (5) business days.

5.4.1.1 Documents Subject to Client Approval

a) Change Orders

b) Operational Scenario Documents (OSD)

c) Application Configuration Sheet

d) Functional Acceptance Test Procedure documents

e) Task Completion Reports

5.4.1.2 Documents Subject to Client Review not Requiring Approval

a) Project Schedule

Note: The Project Schedule and any changes hereto are to be mutually agreed upon between the Client and TriTech.

b) Project Status Reports

c) DOLF Reports for Inform CAD

d) Project Journals

e) Interface Requirements Documents (IRD)

5.4.2 TriTech Responsibilities

a) Distribute the documents to the Client.

b) Coordinate the process to consolidate comments and edit documents.

c) Manage the signoff process for applicable documents and the distribution of originals to the Client and TriTech for filing.

5.4.3 Client Responsibilities

a) Review the documents presented and provide the appropriate information back to TriTech within five (5) business days for configuration sheets, Change Orders and/or Sales Orders.

b) Review the documents presented and provide the appropriate information back to TriTech within ten (10) business days for requirements documents defined above. Unless unanticipated changes to the Project Schedule would warrant a shortened turn around.

5.5 Third Party Management

TriTech will be responsible for the management of third parties that have been identified as Subcontractors or executed Change Orders to the Purchase Agreement. The identified TriTech Subcontractors under the Contract are the following:

- Athena Advanced Networks
- Deccan

As part of the Subcontractor agreement, all communications between those third parties and the Client will be managed by TriTech. Any communication directly between the Client and third parties that may require or imply the promise of a material change in scope or responsibilities will not be acknowledged by TriTech unless an appropriate Change Order has been prepared.

Conversely, the Client will be responsible for the management of third parties that TriTech is not responsible for. The Client will be responsible for the facilitation of discussions and the acquisition of materials from those third parties that are necessary for the configuration and development of the Client's System.

5.5.1 TriTech Responsibilities

a) Assume responsibility for third parties that are the responsibility of TriTech within the terms of the Purchase Agreement between TriTech and the Client.

b) Process any Change Orders that may arise from a material change in scope where third parties are concerned.

c) Inform the Client when configuration and or programming will require interaction and/or documentation from a third party which is not the responsibility of TriTech under the Purchase Agreement between TriTech and the Client.

5.5.2 Client Responsibilities

a) Work directly through TriTech with regard to third parties that are the responsibility of TriTech.

b) Review, sign and process any Change Orders that may arise from a material change in scope where third parties are concerned.

c) Facilitate interaction between TriTech and third parties not the responsibility of TriTech to include conference calls, answers to questions and documentation as requested.

6 PROJECT INITIATION AND PLANNING

6.1 Overview

Project Initiation and Planning involves gathering the necessary Project specific information in order to produce a Project Management Plan and a Project Schedule. In short, Project Planning consists of those processes designated to establish when and how the Project will be implemented while further elaborating on Project Deliverables. Most of the information exchange between the Client and TriTech during this process is at a high level and consists of interaction between both Project Managers and a small group of Project stakeholders.

Major Deliverables for the Project Planning phase are the specific Project Management Plans, and a baseline Project Schedule.

The project must be managed in a manner that will allow for the adjusting the Project Management Plan and Project Schedule to address the circumstances that affect a project during Project Execution. As a result of these changes during the Project life cycle, Project Planning will overlap each subsequent process during the Project. Typically, Project Planning tasks will decrease in frequency as checkpoints are successfully completed and as the Project nears Go Live and Project completion.

Note: The Project Schedule is a living document, subject to change during the course of the Project due to several factors such as change in Project scope, scheduling conflicts, delay in approving project documents, resource availability, etc. All changes to the Project Schedule will be discussed between both parties and will be incorporated within a published schedule upon approval from the Client and TriTech.

6.1.1 TriTech Responsibilities

a) Assign a Project Manager to the Project to participate in Initiation phase activities.

b) Produce required documentation to support Initiation activities (such as Standard IRDs, System Planning Document, etc.)

c) Review and finalize the SOW with the Client.

d) Identify and engage the TriTech Project team responsible for carrying out Project Execution.

e) In collaboration with the Client, develop the Project Management Plan (includes the Communication Management Plan, Risk Management Plan, and Change Management Plan).

f) Baseline the Project Schedule.

g) Prepare and submit the TCRs for Client acceptance of the Project Management Plan as defined above.

h) Develop and submit invoice for payment due at execution of the Purchase Agreement.

6.1.1.1 Client Responsibilities

a) Assign a Project Manager for the Project to participate in Initiation phase activities.

b) Identify and engage the Client's Project team.

c) Review and comment on the TriTech Project Management Plan and the Project Schedule.

d) Review and comment on TriTech provided documentation to support Initiation activities.

e) Finalize and approve the SOW with TriTech.

f) Approve the TCRs for the Project Management Plan within 5 business days.

6.1.2 Project Kick Off

During the planning phase, the TriTech Project Manager will hold a Kick-Off meeting with the Client's Project team. During the Kick-Off meeting, the TriTech Project Manager will provide an overview of the following:

1. The TriTech Execution Process.
2. A high level description of Project Deliverables.
3. Roles and responsibilities for the Project team members.
4. A high level review of the preliminary Project Schedule including projected Project milestones and checkpoints.
5. Describe the work that has been either completed, is in progress or is due to begin within the immediate future.
6. Review any project related questions from the Client's team.

Note that separate kick-offs may be conducted before initiating the activities for each of the subcontractors. These follow up kick-off meetings may be conducted over the phone and involve a small group of individuals who will be involved in the implementation of that specific system.

6.1.2.1 TriTech Responsibilities

a) Prepare the agenda and set a date for the Kick-Off that is convenient to the Client and TriTech Team.

b) Distribute any documents that the Client should review in advance of the Kick-Off meeting.

c) Conduct the Kick-Off meeting.

6.1.2.2 Client Responsibilities

a) Work with the TriTech Project Manager to facilitate scheduling a date for the Kick-Off meeting.

b) Schedule the appropriate personnel from the Client's team to attend. This should also include key stakeholders that may not participate routinely in Project operations, but who have authority or responsibility over the Project.

c) Provide adequate accommodations to include adequate seating and audio-visual equipment including a projector(s), screen, and whiteboard.

7 PROJECT EXECUTION

7.1 Overview

Project Execution focuses on the development and delivery of Project Deliverables. Processes will be iterative and consist of: 1) a review of Deliverable documents; 2) Development, configuration, Installation and testing of software and hardware deliverables, and 3) Delivery of Project related services such as Project related training. These processes are iterative in nature with a number of checkpoints to evaluate Project progress and where applicable, to initiate Change Management processes. Each Deliverable has a closing process which consists of specific completion criteria. These Deliverable closing processes are independent from the closing process of the Project.

7.2 System Installation (Inform CAD, Inform Mobile, and Interfaces)

System installation is one of the early processes in the Project implementation phase, and has a great impact on and critical dependency on a number of key activities. All tasks and activities related to System Installation are included in this section and will occur in the order presented. Note that other project activities can occur concurrently or between these steps.

7.2.1 Review Hardware Specifications

TriTech and Client will review the specifications to ensure that the correct hardware and third software components are procured and installed. TriTech will only be responsible for procurement of the hardware and third party software that is explicitly listed under the Agreement, as TriTech Deliverables, or Deliverables of TriTech's Subcontractors.

7.2.1.1 TriTech Responsibilities

1) Provide hardware and Third Party specifications to Client.

7.2.1.2 Client Responsibilities

1) Review and validate hardware and Third Party specifications.

7.2.2 Hardware and Equipment Procurement Process

TriTech and Client will procure hardware, third party software, and equipment per TriTech's recommended Specifications. TriTech is only responsible for procurement of the hardware and third party software that is identified as TriTech Deliverables in the Purchase Agreement.

If the hardware and third party software is procured by the Client, it is the Client's responsibility to procure the required equipment based on TriTech approved specifications, and to ensure the timely delivery of the hardware and third party software to the site to allow timely implementation of the System and Subsystems.

Where the Client is responsible for procuring the server hardware, the Client will be responsible for completing the following steps:

1) Fully configuring the servers with memory and disks.
2) Loading Microsoft Windows or VMware.
3) Partitioning disk drives partitioned and the implementing applicable Raid level based upon TriTech documentation.
4) Assigning the computer name and IP address based upon TriTech documentation.

7.2.2.1 Non-Stratus Servers

System servers are procured by TriTech through Athena Advanced Networks. TriTech will ensure that the hardware and third party software matches or exceeds the specifications listed in the Purchase Agreement. The following work will be completed before the server is delivered to the Client site:

1) The servers fully configured with memory and disks.
2) Windows Operating System or VMware is loaded.(TriTech is not responsible for providing Microsoft operating system licenses)
3) Disk drives partitioned and the applicable Raid level implemented.
4) The machine name and IP address assigned. (Note: The machine names will be assigned only if the servers are ordered from HP. If the hardware vendor is Dell, TriTech will not be able to assign the machine names, and this task must be completed by the Client once the servers arrive at the Client site).

7.2.3 Hardware Staging and Preparation for Installation

The Client will be performing basic server integration for all servers. Basic server integration includes placing the servers in the racks, joining them to the existing domain, with the Domain Controller in place, running the TriTech pre-requisite DVD on Inform CAD and Inform Mobile servers, and establishing remote connectivity capability (VPN and Remote Desktop) for authorized TriTech personnel to perform configuration. These activities will be coordinated between TriTech and the Client IT staff. Guidance will be provided by TriTech's Client Installation Services (CIS) team as required. If the Client is not willing to complete the basic server integration, this task may be performed by TriTech or TriTech's Subcontractors at additional cost.

In order to start configuration, the Client must provide remote connectivity to TriTech. The Client must also provide the server names, IP addresses, Administrator Account Information (User Name, Password), Services Account Information, and the location of 3rd Party Software media (such as SQL). An Installation Service Request (ISR) will be provided to the Client that organizes this information in to the TriTech preferred format. The Client is responsible for providing the completed ISR to TriTech no later than two (2) weeks prior to the installation activities.

The Client is responsible for ensuring that the site is prepared and ready for the installation of hardware, third party software, and TriTech software as detailed in TriTech's documentation including the System Planning Document no later than two (2) weeks prior to the scheduled Installation date. Delay in providing this information in its complete form will result in a delay in the Installation and the activities that follow installation of the System.

At least one (1) week prior to installation, a member of the TriTech CIS team will verify: (i) connectivity to the Client site via VPN, (ii) connectivity to each of the servers, and (iii) access to all required security accounts.

If the servers, accounts and connectivity are not ready the delay will have an impact on the Project schedule.

7.2.4 TriTech Responsibilities

a) Provide the System Planning Document.

b) Facilitate a hardware review prior to hardware/OS procurement.

c) Procure equipment and third party software if included in the Purchase Agreement as a TriTech deliverable.

d) Provide guidance and assistance as necessary if the system equipment is procured by the Client.

e) Distribute the Installation Service Request (ISR) document to the Client.

f) Assist the Client in completing the ISR.

g) Assist the Client with the preparation of a network diagram.

h) Review the completed ISR prior to the installation.

i) Test the remote connectivity to the site prior to installation of the hardware and software.

j) Install the Microsoft SQL software.

k) Work with the client to create a network diagram

l)

m) Prepare and submit a TCR for Client review and approval upon completion of these activities.

7.2.4.1 Client Responsibilities

a) Complete the Installation Service Request (ISR) document and provide to TriTech.

b) Assist and work with TriTech with creation of a network diagram.

c) Perform site preparation, as specified in the System Planning Document and ISR.

d) Assign the computer name(s) and IP address(es) based upon TriTech documentation.

e) Establish remote connectivity capability (VPN and Remote Desktop) for authorized TriTech personnel to perform software installation and configuration.

f) Run TriTech Pre-Requisite DVD on all applicable Inform servers prior to any installation work being performed.(This task will be performed by Athena Advanced Networks)

g) Provide all horizontal and vertical cable runs, pathways, coring, access points, floor cutting or drilling, and related tasks related to cable and equipment installation.

h) Provide all Client-supplied telephone, external interface connection points, electrical power and other receptacles within manufacturer recommended distance of the equipment and all peripheral components.

i) Provide and install all data communication lines, modems, hubs and routers, cabling, equipment and other components necessary for system operation and maintenance and for remote sites and connection to other systems. All lines will be clearly identified and tested.

j) Provide TCP/IP communications and connection to the hub equipment provided in support for any existing networks, workstations and printers that are to have access to the TriTech applications.

k) Obtain all necessary IP addresses and schemes.

l) Allow remote access to TriTech to all development and system "root" accounts on all servers running TriTech licensed Software.

m) Procure equipment and third party software if it is the responsibility of the Client according to the Purchase Agreement.

n) Install operating system software for Client procured hardware unless the service is specified as a TriTech responsibility in the Purchase Agreement.

o) Perform basic server integration including, but not limited to:

i. Installation of servers in applicable racks.

ii. Joining servers to the existing domain with the domain controller in place.

p) Provide TriTech with all necessary configuration documentation which includes machine naming, IP addresses, Administrator Account information, Service(s) Account information, naming convention, and connectivity as prescribed.

q) Provide TriTech with a high level network diagram. The diagram should be provided prior to TriTech Software installation.

r) Install all peripheral equipment, including scanners, printers, barcode readers, etc.

s) Approve the applicable TCR.

7.2.5 Basic Server preparation and Network Services

Performing the services listed in this section is a responsibility of the Client.

7.2.5.1 Client Responsibilities

a) Provide the facility suitable to house Server hardware and network infrastructure.

b) Have a member of the Client's IT staff available while software/network configuration is being performed.

a) .

b) .

c) .

d) If required, deploy the Domain Controller by adding the member server to an existing Domain or create a new Domain, promote the member server to Domain Controller, enable and configure DNS, enable and configure DHCP if required.

e) Create domain account(s) for TriTech's remote support connectivity and access so that TriTech can assist Client with installation and ongoing maintenance

f) Perform all necessary network configurations, to include but not limited to determining the network design routing protocols, subnet mask, redundancy, router and switch configuration.

g) Create Networking/Server documentation to illustrate intended configuration.

Note: VMware, vMotion and HA require a SAN or a way to present shared storage to the physical host servers in a VMware virtual farm.

Note: Network and Server security are always a responsibility of the client.

7.2.6 System Installation

Once TriTech and the Client have prepared the site based on TriTech documentation, to include the System Planning Document and the applicable ISR form is completed, a TriTech Client Installation Services specialist will perform the TriTech installation services.

These services will be performed remotely, unless otherwise specified in the Purchase Agreement, and include installation of the contracted TriTech Software products on the quantity of servers and workstations as specified in the Purchase Agreement.

These installation activities will be coordinated between TriTech and the Client.

Note 1: All SQL server licenses will be installed by TriTech.

Note 2: The Installation services for different components of the System may be performed at different times, based on the implementation and deployment timelines for each Subsystem.

Note 3: The scope of installation services and the number of servers and workstations to be installed and configured by TriTech is limited to the servers and workstations that have been explicitly listed in the Purchase Agreement. If the Client has been granted Site Licensing for selected TriTech Software, TriTech is only responsible for the initial installation services, and installation of additional servers will be subject to additional charges.

Note 4: If Client does not follow the processes and procedures detailed in the TriTech System Planning Document and this results in a need for reinstallation of the hardware or software, the reinstallation effort will be performed at additional cost to the Client.

Note 5: At TriTech's discretion, TriTech may perform installation activities for certain components of the system on-site.

The following pre-requisites must be in place prior to the start of TriTech Software installation:

a) Site preparation is complete as outlined in the sections above.

b) Hardware has been installed at Client site.

c) Client has provided TriTech with remote connectivity to all applicable servers.

d) Client had provided TriTech all relevant documentation as outlined in the sections above to include licensing keys, IP addresses, username/passwords, and the completed ISR.

7.2.6.1 TriTech Responsibilities

a) Install and configure Microsoft SQL to operate with each of the applicable TriTech product(s).

b) Configure the System servers in the applicable environments (Production, Test, Training, and Disaster Backup environments, if provisioned by the Purchase Agreement).

c) Install and configure the applicable TriTech system(s), such as Inform CAD, and Inform Mobile on the designated servers and applicable environments as specified in the Purchase Agreement.

d) Provide verbal support to the Client with self-installation procedures for the workstations using the TriTech provided Prerequisite Installation DVD and applicable Launch configurations.

e) After completion of the initial installation and configuration of the Inform CAD server, a member of Technical Services team provides a technical hand-off to designated staff from the Client's information Technology team via a conference call. The following major topics will be discussed during this technical hand-off:

i. Proper procedures for performing Inform CAD System Backups:

- File Structure – Inclusions and exclusions
- Databases
- Moving Backups to media

ii. Proper procedures for refreshing Test/Training system (and related documentation)

iii. Approved configuration and use of Virus Scan software

iv. Approved procedure for application of Windows updates

v. System Upgrade process and procedures

vi. Support Website and TriTech list server access

vii. Managing/Reviewing system logs (CAD, SQL and Event Logs)

f) Prepare and submit a TCR upon completion of the installation tasks and activities.

7.2.6.2 Client Responsibilities

a) Allocate appropriate onsite Project personnel to support TriTech personnel during configuration tasks as necessary and designate a primary point of contact to be available to address and answer questions that arise during the installation of the baseline application software. Appropriate Client personnel include the necessary IT personnel and database administrator(s) as needed during installation.

b) Complete the configuration of workstations (after the installation of the limited number of workstations by TriTech) using the Prerequisite Installation DVD and applicable Launch configurations.

c) Put in place TriTech's recommended backup procedures as outlined in the System Planning Document and ensure backup procedures are consistently follow beginning at the completion of this task.

d) Install and configure virus scanning software as outlined in the System Planning Document.

e) Provide Web Security Certificates for all TriTech web-enabled applications that require a certificate.

f) After completion of the initial installation and configuration of System servers, the Client will be responsible for maintaining the System based on TriTech System Document, and the technical hand-off from TriTech Technical Services department. Specifically, the Client's IT staff is responsible completing the following activates related to Inform Subsytem servers:

- Updating Training/Test Systems with fresh data (from Production) as needed
- Continued updating and monitoring of virus scan software
- Application of Windows updates
- Following the procedures for System Upgrade
- Managing/Reviewing system logs (SQL and Event Logs)
- Management of Microsoft and other Third Party Software include patch applications and upgrades as needed for new Subsystem versions.
- Deployment and use of the Prerequisite Installation DVD for Subsystem upgrades as required.

g) Review and approve the applicable TCRs.

7.3 Implementation of Inform CAD

Inform CAD is implemented through a series of standard steps and process gates. These steps are designed to ensure that the operational needs of the Client are identified, the configurations are verified, and the system is tested to validate the proper functionality of the system prior to deployment. The following sections describe the implementation process for Inform CAD.

7.3.1 Inform CAD System Orientation

The Inform CAD System Orientation is conducted at the Client's site and led by a TriTech Business Analyst. The duration of the Inform CAD System Orientation is generally between 3 to 4 days and includes a Business Process Review of the Client's operations.

Some key discovery points for the Inform CAD System Orientation are as follows:

a) Work Flow – Understanding the setup for work flow from first receipt of an incident through incident completion. This may include time observing Dispatch Staff and Ride-Alongs with field units.

b) Agency Type Setup – The segmentation of operational processes including incidents, units, and call-taker/dispatcher roles and responsibilities.

c) Review reporting requirements (geographic reporting segmentation and the like).

d) Event numbering (Incidents) including master incident numbers, response numbers and case numbers.

It is recommended that the number of attendees in the System Orientation is limited to 10-15 to allow for more effective communication during the session. Based on the key discovery points during this session, it is necessary that the attendees include individuals who can properly address these key points and make configuration decisions.

During the System Orientation session the Business Analyst will facilitate an operational review of Inform CAD by demonstrating various System functionality and start gathering the configuration information.

A System Module Setup worksheet (SMS) and other reference material will be provided to the Client to assist in gathering the required Code Files. Information that cannot be produced during the meeting must be sent to TriTech as specified by the mutually agreed upon schedule.

Note: The Client's provision of Code File information is an early Project checkpoint. Remote Web sessions will be scheduled as a follow up to System Orientation to guide the Client through the Code File data collection process. This information is needed to prepare the DOLF and incomplete, inaccurate or delayed Code File information can have a cascading effect on the Project Schedule.

7.3.1.1 TriTech Responsibilities

a) Schedule the System Orientation meeting in accordance with the Client's availability and the Project Schedule.

b) Prepare and distribute the meeting agendas and documents for Client review or completion two weeks prior to each meeting.

c) Conduct the meetings based on the distributed agenda.

d) Document the Client's requirements and configuration specifications resulting from the System Orientation discussions.

e) Send the System Module Setup worksheet (SMS) and other reference material to the Client.

f) Document and assign owners and due dates to any action items and track all action items to closure.

g) Document any gaps between the standard functionality of the System and functionality required by the Purchase Agreement for further analysis and discussion and/or facilitate the change control process. Client requested changes for changes beyond the scope of the Purchase Agreement will be evaluated at this phase, but will have to be evaluated for the potential impact on the Project Schedule and for additional project charges to be paid by the Client.

h) Schedule one or more Remote Web sessions as a follow up to System Orientation to guide the Client through the Code File data collection process.

i) Produce a System Orientation Report with the key decisions and configuration points as a result of the System Orientation.

j) Prepare and submit a TCR upon completion of relevant activities.

7.3.1.2 Client Responsibilities

a) Provide adequate facilities to comfortably hold the System Orientation to include a computer projector, whiteboards, and adequate seating. Two projectors are preferred.

b) Ensure participation of key stakeholders and decision-makers in the System Orientation process.

a) Provide subject matter experts that can explain the communication center's current call flow and agency structure. These persons should have the ability to make decisions regarding any changes in work flow that may arise through the use of the new Inform CAD System.

c) Provide subject matter experts with the ability to gather and provide the data elements used to build Code Files to TriTech.

d) Provide subject matter experts that will be able to explain the agency's geopolitical/operational boundaries. This person (or persons) should be able to articulate the specific response requirements that will be built within CAD response plans.

e) Provide subject matter experts that will be the CAD super users, as well as a person or persons that will be responsible for the ongoing maintenance of the CAD Code Files and configuration (CAD Administrator).

f) Provide subject matter experts that will be responsible for translating the geopolitical/operational boundaries into data (ESRI shape files) suitable for use within the CAD.

g) Provide subject matter experts that will be responsible for the maintenance of the agency's street centerline data.

h) Provide subject matter experts that can provide information on technical Systems (Interfaces and Hardware/Network) or field-related functions (Inform Mobile or other mobile systems, station alerting and the like).

i) Review and approve applicable TCRs.

7.3.2 Inform CAD Base System Code File Entry

After completion of the Inform CAD System Orientation and receiving requested data from the Client, the assigned TriTech Business Analyst will start and supervise the initial Code File building process. The Business Analyst also configures the system hierarchy based on Client's call flow and operational processes as defined in the System Orientation. The Client will be actively involved at each step of the Code File configuration process through periodic reviews including conference calls and remote web sessions.

A Code File review is completed prior to TriTech initiating the Code File entry process. The review is initiated via one or more web meetings as the Client submits the requested Code File information. The Code File review validates the accuracy and completeness of the information and ensures that there is a mutual understanding of how the information is to be used within Inform CAD.

TriTech will complete the Code File entry for Inform CAD System to a level that will allow for an evaluation of call flow and incident management. Code file build to the level described in Appendix A - Required Inform CAD DOLF Code File build of this SOW establishes a foundation that will validate basic functions such as call-taking layout, System hierarchy, incident numbering, and Incident/Unit displays. Validation through the DOLF process allows for the completion of Code File setup while limiting the risk of rework. This task is considered to have been completed when the Business Analyst has demonstrated that Code Files are complete to the level documented in Appendix A - Required Inform CAD DOLF Code File build.

TriTech personnel will participate in the Code File building process. Some Code Files that require local knowledge of the geography and the physical location of business and high-risk areas of the community (such as response plans, premise, and caution note/hazard information) cannot be built by TriTech. The Client will be responsible for entering or geo-verifying some Code File elements such as premises. The Code Files prepared by TriTech and the Code Files prepared by the Client are described in Appendix A - Required Inform CAD DOLF Code File build. The responsibility for building and maintenance of the System Code Files will transfer to the Client after DOLF with assistance from TriTech's Business Analyst.

7.3.2.1 TriTech Responsibilities

a) Monitor and evaluate Code File submitted by the Client and provide guidance as needed.

b) Conduct one or more web meetings to validate the completeness and applicability of Client submitted Code File information, prior to initiating the Code file entry.

c) Perform a preliminary Code File build of the Client's Inform CAD System at TriTech. This Code File build will be completed based upon the applicable requirements described in Appendix A - Required Inform CAD DOLF Code File build.

d) Facilitate updates to the System Module Setup (SMS) building sheet.

e) Prepare and submit a TCR to confirm the delivery of the SMS worksheet by the Client.

7.3.2.2 Client Responsibilities

a) Provide timely input and updates to the SMS sheet to support the Code File building timelines.

b) Participate in the Code File validation conference call.

c) Continue building the System Code Files (those not built by TriTech) after DOLF (refer to Appendix A - Required Inform CAD DOLF Code File build).

d) Review and approve applicable TCRs.

7.3.3 Geographical Information Services

7.3.3.1 Data Evaluation

The TriTech GIS Analyst will work with the Client to perform a one-time evaluation and initial conversion of the Client provided street center-line GIS data. GIS data must be from a single integrated source when delivered to TriTech for conversion. This analysis will include the following:

a) Routing and Navigability - The data will be analyzed to ensure that there are no breaks in the road network and that an acceptable percentage of addresses[2] within the service area are routable with

[2] The phrase "acceptable percentage" refers to a decision that the Client must make regarding the acceptable level of navigability needed within the street centerline network. Since editing and maintaining the street data is a Client responsibility, the Client will have to evaluate and make a judgment regarding the impact of the level of accuracy and the cost associated with increasing the navigability of the data.

impedances or speed limits, applicable turn restrictions (one way data), elevations for overpasses and street types.

b) Addressing – Evaluate data for the presence of block ranges, street types, and city designators.

c) Supplemental Coverage - An evaluation of GIS data that may be available for response areas, ESRI compatible overlays including satellite image, and applicable point data to ensure compatibility.

A report will be presented to the Client upon completion of the GIS analysis prior to the import of GIS data into one or more Systems or Subsystems. If there are significant problems with the data, additional GIS work and analysis may have to be added to the project via Change Order. Additional project costs may apply.

7.3.3.2 TriTech Responsibilities

a) Evaluate Client-supplied GIS data to ensure it is formatted correctly for street-centerline display, address point usage and address functions. A report will be generated based on this analysis.

b) Evaluate Client-supplied GIS data to ensure it is formatted correctly for routable functions. A report will be generated based on this analysis.

c) Evaluate Client-supplied GIS data to ensure it is formatted correctly for Inform CAD Quickest Path Unit Recommendations functionality.

d) Review the Client-supplied GIS layers for Inform CAD and Inform Mobile for viewing and execute the initial basic map configuration.

e) Provide a report which summarizes the findings from applicable GIS analysis services.

f) Prepare and submit a TCR upon delivery of the GIS analysis report.

7.3.3.3 Client Responsibilities

a) Provide data in the required format, and per Project Schedule.

b) Provide data to include 1) Centerline data; 2) response areas; 3) viewable/cosmetic layers.

c) Based on the analysis report provided by TriTech, make needed changes to mapping data to allow the resulting GIS data to meet TriTech's mapping data requirements.

d) Review and approve the appropriate TCR.

7.3.3.4 Mapping Data Conversion and Import

TriTech will perform a Mapping Data Import that provides maps for the Inform CAD system. This process does not include making any corrections to the Client GIS data. If the GIS data consists of data from more than one source, TriTech will not be responsible for joining these areas, or "stitching" the areas to create a uniform geographic area.

7.3.3.5 Configuration of Mapping Layers

A TriTech GIS Analyst will configure up to 7 standard GIS layers each for viewing on Inform CAD and Inform Mobile. Such conversion activities will be part of the training process to allow the Client to add their own layers to the map displays in Inform CAD and Inform Mobile. Additional conversion work by TriTech staff is an additional charge and must be authorized by the Purchase Agreement or a Change Order. The standard layers may include the following:

1- Water line features (rivers, streams, creeks)
2- Water polygon features (ocean, lakes, ponds)
3- Airports
4- Railroads

5- Parks
6- City Boundaries
7- County Boundaries

7.3.3.6 Response Area Import Service

If the Client provides Response Area data to TriTech at the time of CAD map conversion, TriTech GIS Analyst will import the Response Areas into Inform CAD. GISLink training will provide the Client with the capability to add, delete, or modify Response Areas for ongoing GIS maintenance.

7.3.3.7 TriTech Responsibilities

a) Provide the initial configuration services to enable use of Inform CAD Quickest Path Unit Recommendations functionality.

b) Perform a mapping data conversion and import of the Client-supplied data into applicable licensed Systems and Subsystems.

c) Provide the initial configuration services to enable use of Inform CAD Quickest Path Unit Recommendations functionality.

d) Prepare and submit a TCR upon completion of the mapping conversion activities.

7.3.3.8 Client Responsibilities

a) After initial GIS conversion, assume responsibility for updating the data using TriTech provided GIS tools to ensure that data is up to date for Go Live.

b) Review and approve the applicable TCR.

7.3.4 Inform CAD Demonstration of Licensed Functionality (DOLF)

Once the initial Code File and configuration phase is complete, CAD is installed at the Client site, and the initial GIS map conversion is complete, a Demonstration of Licensed Functionality (DOLF) is conducted. This working meeting includes a review of the preliminary Code Files and configuration, a review of imported GIS data, and hands-on training on software utilities for completing the Code File build and on-going Code File management. The DOLF for Inform CAD will be 3-4 days and will be held at the Client's facilities, and on the Client's system hardware, after it has been configured by TriTech.

Client will be responsible for supplying the requested data to TriTech no later than four (4) weeks prior to DOLF to allow sufficient configuration time. The data will be requested as a follow up to the System Orientation for the Inform CAD. The configuration of some CAD modules may be delayed based on the Client's decision, and consultation with TriTech Business Analyst.

It is also required that the Client's centerline conversion be completed at no later than four (4) weeks prior to DOLF. In order to meet this deadline, all GIS data must be delivered to TriTech in required format per the agreed upon schedule. Any delays will result in a cascading effect on the project timelines.

Participants include key members of TriTech's implementation team and should not generally exceed ten (10) core members of the Client's implementation team. The Client's team should include representatives of dispatch, field operations and administration (reporting). At the conclusion of the session, a DOLF report is produced which documents the core software configuration, Code Files, and activities to be completed by the Client. Any issues that require follow-up action, including any outstanding Go Live issues will be documented in the applicable Project journal. Any issue that is determined to be outside the scope of this Project, as defined herein, requiring a modification or enhancement to the TriTech Software will be addressed through the Change Control process.

In preparation for the execution of the DOLF, the Client system should be built to a level that will allow for the demonstration of modules and features that the Client has licensed. The Code Files completed pre-

DOLF are defined in Appendix A - Required Inform CAD DOLF Code File build. Based upon this level of Code File build, system functionality and workflow will be examined during the DOLF.

Additional Code Files (as specified in Appendix A - Required Inform CAD DOLF Code File build) will be configured during the DOLF.

Following the DOLF process, ownership of Code Files transfers to the Client. Post DOLF, the Client will enter the balance of the Code Files (not built by TriTech). These are typically geo-centric items that require local knowledge of the community. The Client also becomes responsible for maintaining Code Files (personnel, unit, premise, caution notes and the like) that must be continuously updated to keep the Code Files in GO-Live ready status. During this phase, the assigned TriTech Business Analyst will provide consultation services.

Note: Inform CAD DOLF is an event applicable to Inform CAD only. No other Systems or Subsystems will be demonstrated during this session.

7.3.4.1 TriTech Responsibilities

a) Schedule the DOLF meeting in accordance with the Client's availability and the Project Schedule.

b) Prepare and distribute the meeting agendas to all required attendees a week prior to each meeting.

c) Conduct the meetings based on the distributed agenda.

d) Provide initial hands on training on the applicable system and introduction to different modules and their configurations.

Note: This training is not meant to be comprehensive for end user understanding of the Subsystem. The purpose is to give the participant an understanding of basic features, call flow and how the configuration files influence them.

e) Review the maps for Inform CAD.

f) Introduce the Client to and begin documentation within the Subsystem Journal.

g) Document and assign owners and due dates for any action items and track all action items to closure.

h) Develop and deliver the DOLF report which serves as an "as built" document describing the build of the system following the DOLF.

i) Handoff the management the Code Files to the Client.

j) Provide the Client team with a copy of the Inform CAD User and Administration Guides.

k) Prepare and submit a TCR upon completion of the DOLF, and upon delivery of the DOLF report to the Client.

7.3.4.2 Client Responsibilities

a) Provide adequate facilities to comfortably hold the DOLF to include an overhead projector. Two projectors are preferred. DOLF also requires workstations for each participant.

b) Provide subject matter experts that can examine the hierarchy build as articulated to the Business Analyst in terms of the agency structure.

c) Provide subject matter experts that can examine the proposed call flow. These persons should have the ability to make decisions regarding any changes in call flow that may arise through the use of the new Subsystem.

d) Provide participants that are versed with the ability to continue the configurations, or Code File build once ownership transfers.

e) Provide participants that will be able to verify the agency's geopolitical/operational boundaries.

f) Provide participants that were responsible for translating the geopolitical/operational boundaries into data (ESRI shape files) suitable for use within the Subsystem, and are able to validate those boundaries.

g) Provide participants that will be responsible for the maintenance of the agency's street centerline data.

h) Assume ownership for the continued build and maintenance of the system under the guidance of the TriTech project team.

i) Ensure participation of key stakeholders and decision-makers in the DOLF process.

j) Observe the change control process for any requested software changes.

k) Review and approve the applicable TCRs.

7.3.5 Inform CAD Functional Acceptance Testing (FAT)

TriTech will execute the Functional Acceptance Testing (FAT) of the Inform CAD, after DOLF and prior to User Training. This process is completed prior to Final Acceptance of the System. The purpose of the FAT is to test specific functionality of the CAD System and to formally document that the Inform CAD meets the required functionality according to the Purchase Agreement between the Client and TriTech.

Since the focus of the Functional Acceptance Testing is the functionality of the System and not a validation of the Code Files, it is not necessary that all Code Files are built prior to conducting this test process. This Functional Test process consists of running a number of tests designed to verify the functionality of the Inform CAD.

The Functional Acceptance Tests are performed based upon standard TriTech FAT documents that have a standard content and format. The standard TriTech FAT documents will be submitted to the Client prior to testing.

Before the FAT is administered the Client must sign-off on the receipt of the standard FAT documents and verify that these tests will be used of validation of the System functionality for Pre-Production and Post Go Live assessment of features for Software Acceptance.

After delivery of the Inform CAD system to the Client's site and completion of DOLF, a TriTech Business Analyst will conduct the FAT on the Client's Inform CAD system, at the Client site and on the Client System hardware. The purpose of this process is to validate that Inform CAD features are working correctly per Standard System functionality as described in the FAT documents. The testing will be fully completed and problems with individual tests will be documented, if applicable.

This process tests Inform CAD features as installed and configured at the Client site, therefore it is important that this process is executed early within the implementation cycle so that any issues discovered may be resolved. Since installation of the hardware is a predecessor to conducting the FAT, any delays to the installation of the Client's system could impair TriTech's ability to resolve issues without affecting project timelines. Other significant tasks and processes are dependent upon the Inform CAD passing the FAT process. TriTech will not train the Client's end users until the Inform CAD has passed the FAT.

Once the FAT has been successfully completed the Client's Inform CAD system will have been considered to have completed Pre-Production Acceptance (see note below). A TCR will be submitted that affirms that the Inform CAD has passed this test. Upon completion of FAT, the Client and TriTech will review the list of FAT failures (if any), perform an assessment of the errors, and determine the timeline for remedying the issues (pre versus post Go Live).

TriTech will repeat any failed FAT test following the correction of any issues which has caused the test to fail. A full retest of the System will not be conducted to verify the FAT exceptions.

Note: TriTech may organize at its discretion, separate breakout FAT sessions for subsections of the FAT documents that are applicable only to one agency (for example, applicable only to Law or Fire agencies). Each test will be executed once, and all applicable users and agencies must attend the FAT session and observe the tests.

Note: Successful completion of the FAT as part of the Pre-Go Live testing process does not constitute Final System Acceptance if such a Post-Go Live Reliability Testing is defined in the Purchase Agreement.

7.3.5.1 TriTech Responsibilities

a) Deliver TriTech's standard FAT documents to Client for review no later than four weeks prior to conducting the FAT.

b) Provide a TCR to the Client to approve the receipt of the FAT documents.

c) Assist the Client in conducting FAT based upon the FAT documents.

d) Identify and document any issues and exceptions discovered during the Acceptance Test Procedures

e) Upon successful completion of the FAT, provide a TCR to the Client, to be signed and returned to TriTech. All FAT exceptions will be noted in the TCR.

f) Schedule follow up testing for validation of any exceptions to the FAT after such exceptions have been resolved, and document the results.

7.3.5.2 Client Responsibilities

a) Work toward the timely completion of all predecessor tasks to include the base system installation.

b) Provide adequate facilities to execute the FAT.

c) Review and signoff on the FAT documents that have been delivered by TriTech no later than one week prior to commencement of the FAT. (through approval of a TCR)

d) Participate in the FAT by providing operational subject matter experts that have the authority to provide validation that the tests have passed.

e) Assist TriTech in documenting FAT findings and results.

f) Review and approve the applicable TCRs.

Note: Inform CAD User Training may only be conducted after successful completion of the FAT, and if the identified exceptions are not critical in nature. The details of Inform CAD related training is included in later sections of this SOW.

7.3.6 Inform CAD Legacy Data Conversion

TriTech will implement a structured methodology for Inform CAD data conversion. For the purposes of this Project, TriTech will arrange the extraction of the data from the legacy Tiburon CAD, and delivery to TriTech for the data conversion. This task will not include data cleaning or scrubbing. Formats suitable for import into can include Excel, MDB, CSV, and ODBC access from MS SQL; however, the specific format to be used for this Project should be reviewed between the respective TriTech and Client teams.

This Project provides the following Legacy data conversion services for Inform CAD:

1) CAD Premise Conversion

2) CAD Caution Notes Conversion

3) Up to two years of CAD Historical Incident Conversion.

The conversion of prior CAD data is a process that involves several steps. TriTech develops a data conversion plan to the Client detailing the data mapping between the legacy System and TriTech Inform CAD. During this phase of work, TriTech will work closely with the appropriate individuals from the Client to map each data element in each legacy application to the appropriate target data element in the Inform CAD databases and reflect this information in the data conversion plan.

Generally, there is an initial conversion to bring the data set close to Go Live, a second conversion just before Go Live and a last conversion after Go Live. Each step does not involve a re-conversion of previously converted data. These steps do not include ongoing maintenance of imported data. The scope of data conversion is limited to converting the Premises, Caution notes, Incidents and units. As long as the legacy data elements have a relevant counterpart in the target Inform CAD databases, TriTech can map the data and import it into the Inform CAD database structure.

Conversion of Premises and Caution notes can be performed independent from the Prior Incident data. A small sub-set of the data will be initially converted and loaded to validate the process. Upon successful completion of this test, the Premise and Caution notes data will be converted and imported to the system close to Go Live, as a onetime process. Additions to Premises and Caution notes in the old system, between the time of data conversion and Go Live will be manually entered to the new system.

It is imperative that a member of the Client's staff be available to support the data conversion effort. Many operational questions will arise that depend on the data and operational expertise of the Client's staff.

This process is considered complete once the last set of data has been converted for the new Inform CAD system. The Client is responsible for the validation of the data.

Note: Legacy data conversion will not include conversion of attachments to Premises or Historical Incidents into TriTech databases.

7.3.6.1 TriTech Responsibilities

a) Extract the data from the legacy Tiburon CAD application

b) With assistance from the Client, define a data mapping for each legacy application.

c) Work with the Client to plan the data migration and develop a data conversion plan.

d) Complete the data conversion, based on the defined scope of the Project and based on the phases that are defined for this process.

e) Prepare and submit a TCR upon completion of the initial data conversion (pre-Go Live).

f) Prepare and submit a TCR upon completion of the final data conversion (Post-Go Live).

Note: TriTech does not perform data scrubbing or cleaning on the Client's legacy data.

7.3.6.2 Client Responsibilities

a) Identify all legacy applications containing data that must be migrated to the new System.

b) Review the extracted data and approve it for use for data conversion.

c) Perform any data cleaning and modification activities that may be necessary prior to conversion of the legacy data into Inform CAD.

d) Assist TriTech in defining a data mapping for each legacy application by providing the following:

e) Legacy application software architecture (operating system; application software; database management system)

f) Database schema (if data resides in a DBMS) or file layouts (if data resides in flat file formats)

g) Data definition for each data element (data format, description of data field use, etc.)

h) Data relationships between data files and data elements

i) Obtain cooperation from any third party vendors for the legacy application that may have an impact on the data conversion process.

j) Perform validation for the data conversion.

k) Review and approve the applicable TCRs.

Note: Due to the need for specific knowledge of the Client's area, the geo validation process for the converted data is the responsibility of the Client.

7.3.7 Inform CAD Training

Note: Training classes are conducted based on the quantities that are specified in the Purchase Agreement. The appearance of a course description in this Statement of Work does not mean a course will be conducted – it must be listed in the Purchase Agreement.

Inform CAD Training is generally conducted on consecutive weekdays during business hours (Tuesday-Friday, during business hours). Alternate training schedules (e.g., Monday class starts, multiple classes per day, evening and weekend classes) will be subject to an additional charge.

TriTech and the Client have made arrangements for a modified Inform CAD training schedule to include 12 hour sessions as well as weekend and night classes. A modified pricing has been created for these classes.

The training classes related to Inform CAD and its subsystems are classified into three general groups:

a) Classes that are dependent upon specific Client configurations and requirements; therefore they are only conducted on the Client System after completion of the Functional Acceptance Test (FAT) and in preparation of Go Live. Inform CAD Call Taker/Dispatcher User Training Course is an example of these classes.

b) Classes such as GISLink that are delivered to a specialized group within the Client's team during the course of the Project to assist them with implementation and maintenance of the System on a routine basis.

c) Classes such as System Administration Training and CAD API Training that are not dependent upon individual Client configurations and are generic in nature. These classes are held at TriTech facilities based on a regular schedule, and are offered to attendees from different agencies.

The Inform CAD Demonstration of Licensed Functionality (DOLF) session is not listed as a training class, but includes certain training elements on the CAD setup utilities.

A detailed description of these classes is provided below.

7.3.7.1 TriTech Responsibilities (for all Inform CAD training activities)

a) Conduct a training orientation via conference call between the assigned TriTech Training personnel and the designated Client representative. The objective of this session is to define the curriculum for the Training, based on the configurations of the Subsystem.

b) Conduct the training in increments of one (1), eight (8) hour days.(Certain Inform CAD training sessions for this Project has been modified to accommodate 12 hour days.)

c) Provide feedback to Client Supervision as to the progress of the students.

d) For the Training classes that are held at TriTech, provide adequate training facilities and equipment.

e) Prepare and submit a TCR upon completion of each class or group of consecutive classes.

7.3.7.2 Client Responsibilities (for all Inform CAD training activities)

a) Participate with the training orientation by providing a decision maker that can articulate the specific business practices that have been used in guiding the build of the Client's System.

b) Provide adequate facilities for the execution of the training to include adequate seating for each workstation and an overhead projector.

c) Provide a supervisor for each class that can answer agency specific questions as related to the build of the Client's system.

d) Review and approve the applicable TCRs.

7.3.7.3 Inform CAD Call Taker/Dispatcher User Training Course (Client site)

The Inform CAD User Training course is generally a four (4) day class, and training days are a maximum of eight (8) hours in length. TriTech and the Client have mutually modified this training based on a three day class which include some 12 hour sessions. Prior to training, TriTech will hold a training orientation to develop an Inform CAD training plan for the Client. This plan will take into consideration the multi-agency and multi-site setup of the System. The training orientation should be held between TriTech Training personnel and designated Client personnel. Client personnel should include person(s) who can articulate the specific Client business processes related to configuration of the Client's System. TriTech Training personnel will tailor the training curriculum to include those business practices where applicable. Given that questions may arise for specific agency procedures during the course of the training, TriTech recommends that the Client have a supervisor present at each training class. Ideally, this supervisor would have participated in part with the implementation process.

The number of students attending the User Training course will be limited to ten (10) students per class.

This class will be held at the Client's site. The Client is responsible for providing adequate training facilities, including a conference room with adequate space and seating/conference table space, white board, projector, and computer projector (capable of 1024x768 resolution).

7.3.7.4 Inform CAD Dispatch Supervisor Training (Client site)

The Inform CAD Dispatch Supervisor Training class has been designed as a five (5) day class that includes a four (4) day Inform CAD Call Taker/Dispatcher User Training followed by a one (1) day Inform CAD Supervisor training. This class is designed for the Dispatch Supervisors with the goal of preparing them to support the users after Go Live by answering their questions and addressing post-Go Live common problems. This class will include topics such as PowerLine configuration, Premise building and maintenance, Personnel maintenance, Vehicle Manager, and other areas that may require assistance from the supervisors. This class is recommended only for the supervisors.

The class size will be limited to ten (10) students.

7.3.7.5 Inform CAD Train-the-Trainer (Client site)

The focus of this three (3) day course is to prepare selected Client personnel to train new dispatch and administrative personnel in the use of Inform CAD. Attendees will learn to apply principles of adult learning such as non-verbal communication skills, presentation skills, methods of delivery and objective writing skills. The goal is to prepare these personnel to apply TriTech's concepts of training. The course does not

include Inform CAD user training for the participants. Prior to attending this class the participants must attend an Inform CAD Call Taker/Dispatcher User Training Course.

Training classes will be conducted between Tuesday and Friday. The number of students attending the User Training course will be limited to five (5) students per class.

This class will be held at the Client's site. The Client is responsible for providing adequate training facilities, including a conference room with adequate space and seating/conference table space, white board, and computer projector (capable of 1024x768 resolution).

Prerequisites: Completion of the Inform CAD Call Taker/Dispatcher User Training Course.

7.3.7.6 GISLink Utility Training Course (Client site)

The focus of this course, conducted at Client's site, is to prepare selected Client personnel to import and use existing GIS data in Inform CAD and manage the GIS data used by Inform CAD and Inform Mobile. GISLink is an Inform CAD Utility that provides a way for Clients to intelligently import Client GIS data into the Inform CAD databases. It consolidates GIS data related tools for maintaining and using GIS data in TriTech products. It consists of a Windows Forms application, a command line console application, and a programming API that consists of a set of reusable publicly exported classes and methods.

Training classes will be conducted between Tuesday and Thursday, based on mutual availability of the TriTech and Client staff. Training course will be limited to two (2) students per class.

This class will be held at the Client's site. The Client is responsible for providing adequate training facilities, including at least one Inform CAD console with GISLink utility installed on it.

Prerequisites: GIS knowledge and background; familiarity with ESRI tools.

No other activities (including but not limited to TriTech performing follow up changes to the Client's maps, development of special material for the Client, or a follow-up one-on-one session with the Client's GIS staff) are within the scope of this class.

7.3.7.7 Inform CAD System Administration Training (TriTech Site)

The System Administration Training course provides an overall administrative perspective of the system including operating system and database management software and equipment components. This comprehensive 4-5 day course is held at TriTech headquarters, and trains System Administrators and staff members on how to set up and administer infrastructure configurations for the Client-configured Inform CAD System. The class will also provide attendees with sufficient skills to perform system maintenance manage and monitor interfaces, manage system operation and database settings for application support, maintenance and backup, and general troubleshooting skills.

Attendance of the Client-designated individuals should be coordinated and scheduled through TriTech's Project Manager and should be coordinated in such a way that does not interfere with progress of the Project. System Administration classes are held regularly in TriTech's training facility in San Diego and may have attendees registered from agencies other than the Client.

Training classes start on a Monday and end on Friday. The number of attendees will be based on the number of seats that have been purchased by the Client. If more than one seat is purchased by the Client, the Client has the option to send their attendees to one class or different classes.

The Client is responsible for the travel fees and out of pocket expenses for their staff attending this class in TriTech's facility.

Prerequisites: Basic Windows and SQL Server knowledge

No other deliverables or follow up activities, including creating special material or applications for the Client, are included within the scope of this class.

7.4 Implementation of Inform Mobile and Inform Me

7.4.1 Inform Mobile System Orientation

The Inform Mobile System Orientation is conducted by a TriTech Inform Mobile Business Analyst. Inform Mobile is an Inform CAD-Integrated System, meaning that a significant amount of mobile functionality is dependent upon CAD functions as well as the configuration of the Client's Inform CAD system. Given this interdependency, the Inform Mobile System Orientation generally will follow Inform CAD System Orientation, and occasionally is deferred until after verification of the hierarchy at DOLF.

During the Inform Mobile System Orientation, the Business Analyst will give a demonstration of the Mobile product. It is suggested that Client personnel who will be responsible for facilitating Mobile end user training should also take part in the configuration of Mobile.

The TriTech Business Analyst will document the Client's configuration options in a Configuration worksheet which will be presented to the Client team for review and approval prior to configuring the application. Timely review and approval of this document by each agency is key to timely completion of the configuration work. Functional Acceptance Testing of the Mobile system is based on a standard set of FAT test documents, as they are applicable to specific configurations of the system.

7.4.1.1 TriTech Responsibilities

a) Schedule the Inform Mobile System Orientation meeting in accordance with the Client's availability and the Project Schedule.

b) Prepare and distribute the meeting agendas and documents for Client review or completion to all required attendees two weeks prior to each meeting.

c) Conduct the meetings based on the distributed agenda.

d) Document the Client's requirements and configuration specifications resulting from the System Orientation discussions for Mobile.

e) Provide documentation and subject matter expertise to assist the Client with provisioning the mobile infrastructure.

f) Document and assign owners and due dates to any action items and track all action items to closure.

g) Document any gaps between the standard functionality of the System and functionality required by the Purchase Agreement for further analysis and discussion and/or facilitate the change control process. Client requests for functionality beyond the scope of the Purchase Agreement will be reviewed at this phase, but will have to be evaluated for the potential impact on the Project Schedule and for additional project charges to be paid by the Client.

h) Complete the configuration worksheets and deliver to the Client for review and approval.

i) Prepare and submit a TCR upon completion of the System Orientation activities, and upon delivery of the configuration worksheets to the Client.

7.4.1.2 Client Responsibilities

a) Provide adequate facilities to comfortably hold the System Orientation to include a computer projector, whiteboards, and adequate seating. Two projectors are preferred.

b) Provide communications center and participating agencies representatives authorized to make decisions with regard to the interrelationship between Mobile use and dispatcher control functions such as status updates; traffic stops and the like.

c) Provide subject matter experts that can describe operational requirements of field users.

d) Provide a subject matter expert for Mobile WAN connectivity, firewall and network configuration and in-vehicle computer hardware.

e) Ensure that requested information such as data elements necessary to begin the Subsystem build are provided within a timely manner.

f) Upon receiving the Mobile configuration worksheet, review and provide approval, or any necessary changes to TriTech in a timely manner.

g) Participate in the Change Management Process for any requested software changes.

h) Review and approve the applicable TCRs.

7.4.2 Inform Mobile Map Data Import

The process of Inform Mobile Map Data Map Import converts the Inform CAD streets data into a format that can be used by Mobile. This process also includes adding necessary map layers for the Client.

7.4.3 Inform Mobile Configuration

Inform Mobile Business Analyst will configure the Mobile based upon the options that have been documented in the Mobile configuration sheet, once the servers have been installed at the Client site. The Business Analyst will also use these configurations for preparing the FAT document. These activities will be performed remotely.

7.4.4 Inform Mobile and Inform Me Functional Acceptance Testing (FAT)

Inform Mobile Functional Acceptance Testing (FAT) follows a similar approach as described under Inform CAD. A Mobile Business Analyst performs the FAT with the Client, prior to Train-the-Trainer. TriTech and the Client will ensure participation of all participating agencies and variations of configurations in this testing process. This process will be based on the standard TriTech FAT documents. The FAT documents have a standard content and format. The standard TriTech FAT documents will be sent to the Client for review prior to conducting the tests. The FAT results are documented in a TCR for verification and approval by the Client.

TriTech will repeat any failed FAT tests following the correction of any issues which has caused the test to fail.

7.4.4.1 TriTech Responsibilities

a) Deliver TriTech's standard FAT documents to the Client no later than two weeks prior to conducting the FAT.

b) Provide a TCR to the Client to approve the receipt of the FAT documents.

c) Install at least five Mobile clients (device) to conduct the FAT.(In the event that more devices are required to test all configurations TriTech and the Client will work together to appropriately install sufficient devices in preparation for testing.)

d) Assist the Client in conducting the FAT in accordance with the FAT documents.

e) Identify and document any issues discovered during the FAT.

f) Prepare and submit a TCR upon completion of FAT, documenting any exceptions to the FAT.

7.4.4.2 Client Responsibilities

a) Work toward the timely completion of all predecessor tasks to include the base system installation.

b) Provide adequate facilities to execute the FAT.

c) Conduct the FAT by providing operational subject matter experts.

d) Assist TriTech in documenting FAT findings and results.

e) Review and approve the applicable TCRs.

7.4.5 Inform Mobile Training

Inform Mobile Training classes are conducted based on the quantities that are specified in the Purchase Agreement. These classes are conducted on consecutive days, on the weekdays during business hours (Tuesday-Friday, during business hours). Alternate training schedules (multiple classes per day, evening, and weekend classes) will be subject to additional charge. Training classes will only be delivered after the FAT have been completed and the results are documented in a TCR.

Typically TriTech trains a group of the trainers from the Client field users, and that group completes training the balance of the field users.

A detailed description of these classes is provided below.

7.4.5.1 Inform Mobile Administration Course

Mobile Administration training is a hands-on course provided by experienced trainers who have both training and public safety experience. This half (½) day course prepares the Mobile Administrator to configure and maintain the Mobile Server and Mobile Interface(s). Access to the Mobile Server and Interface(s) is required. During this process TriTech Business Analyst/System Engineer will instruct the client on installation of Mobile Clients and provides assistance for installation of up to five (5) Mobile devices. The Client will be responsible for installation of the balance of Mobile devices.

The course includes the operation of the Mobile system including customization of specific screen layouts, Active & Waiting Incident Queue, Unit Queue, and agency-specific screens.

Training classes will be conducted between Tuesday and Friday. The number of students attending the Administration Training course will be limited to eight (8) students per class.

Prerequisites: Knowledge of: 1) HTML/XML, CSS, and JavaScript 2) SQL, especially views, stored procedures, and database schema; and 3) Standard GPS protocol (TAIP and NMEA)

7.4.5.2 Inform Mobile Train-the-Trainer Course

Mobile Train-the-Trainer training is a hands-on course provided by experienced trainers who have both training and public safety experience. The course prepares personnel to use Inform Mobile and teach others how to use Inform Mobile. The course can accommodate up to eight (8) students with working and configured Mobile devices. It is desirable that each participant have their own configured Mobile device.

The course includes user operation including starting and stopping the application, updates, screen layouts, messaging, status changes, mobile maps, incident assignments and incident updates. Hands-on training and agency scenarios may vary by Agency. The duration of this class may be between four and six (4-6) hours. Training classes will be held between Tuesday, and Friday. The number of students attending the User Training course will be limited to eight (8) students per class.

This class will be held at the Client's site. The Client is responsible for providing adequate training facilities, including a conference room with adequate space and seating/conference table space, white board, projector, and computer projector (capable of 1024x768 resolution).

Prerequisites: Completion of a Microsoft Windows Tutorial (this may be waived upon demonstrated ability to work with Windows), typing skills of a minimum of 25 words/minute and Mobile field user experience.

7.5 Integration Testing of Inform CAD, Inform Mobile, Inform Me, and Interfaces

Once the FAT is concluded for all subsystems (Inform CAD, Inform Mobile, and each of the interfaces) and in preparation for Go Live, TriTech and the Client will conduct a one day Integration Testing. The Integration testing will be conducted based on a number of scenarios that test the call flow from the call creation to disposition in CAD. These scenarios include the Inform CAD, Inform Mobile, Inform Me and Interfaces that can be tested in the pre-production environment and are scheduled to Go Live at the same time. A small group of the Client staff (at least 1-2 dispatchers of each discipline and 6 Mobile field users) should participate in this test with TriTech. TriTech will work with the Client on defining a set of test scenarios that test the system based on the Client's practices. It is recommended that the Client utilize sample calls from their legacy System. These scenarios must be signed off prior to commencement of the integration testing. At the successful completion of Integration Testing without any issues that prevent the System to be taken Live the Client shall provide written approval that the System is ready for Go Live.

7.5.1.1 TriTech Responsibilities

a) Schedule an Integration Testing with the Client.

b) Assist the Client in preparing test scenarios that can be used during this test and closely simulates the normal Client's call flow.

c) Prepare and submit a TCR to the Client documenting the tests that will be used for Integration Testing.

d) Participate in the Integration Testing with the Client.

e) Participate in the resolution of identified issues.

f) Prepare and submit TCRs upon successful completion of the Integration Testing.

7.5.1.2 Client Responsibilities

a) Provide test scenarios that closely simulate the Client's normal call flow.

b) Conduct the Integration Testing.

c) Review and approve the applicable TCRs.

7.6 Implementation of TriTech.com IQ and Analytics

TriTech.com IQ and Analytics are implemented through a series of standard steps and process gates. These steps are designed to ensure that the operational needs of the Client are identified, the configurations are verified, and the system is tested to validate the proper functionality of the system prior to deployment. The following sections describe the implementation process for TriTech.com IQ and Analytics.

7.6.1 Historical Data Import and Synchronization

The historical data import is a process by which TriTech extracts applicable data from TriTech applications and imports that data into TriTech.com IQ. The data is then available for search, reporting, analytics and dashboard design functionality subject to subscriptions purchased.

The Historical data import includes up to two (2) years of data from each of the following TriTech source applications. Note: Each application must be on release versions designated as TriTech.com IQ compatible.

- TriTech's Inform CAD

The data available in IQ from Inform CAD is listed in each applications' IQ Field Mapping Guide.

7.6.1.1 TriTech Responsibilities

a) Deliver the TriTech.com Client Readiness Checklist to Client and review with Client once completed and returned.

b) Install and Configure Synchronization.

c) Perform historical Bulk Import.

d) Configure TriTech.com IQ:

- Provision Agencies within IQ
- Provision Administrator Users within IQ

e) Prepare and submit Task Completion Reports (TCR) to the Client for approval to document delivery of products and services.

7.6.1.2 Client Responsibilities

a) Complete the TriTech.com Client Readiness Checklist, return and review with TriTech once completed, address any necessary requirements.

b) Provide remote access to TriTech's implementation team to Client servers.

c) Make appropriate Client staff available during the installation to assist TriTech's implementation team in resolving any issues during the process.

d) Review and approve the applicable TCRs.

7.6.2 TriTech.com IQ and Analytics Administration Training (Remote)

This TriTech instructor led class is designed for those individuals who will be responsible for the administration of TriTech.com IQ. Participants will be instructed on how to configure, administer, and operate TriTech.com IQ in an administration role. The recommended class size for this training is up to 9 participants.

This training is up to 4 hours and is delivered in one remote session.

At the completion of the training, participants will be able to perform the following:

- Access and successfully login to IQ
- Understand the TriTech.com IQ site
- Understand the management console for TriTech.com IQ
- Create and manage roles
- Create and manage users

7.6.2.1 TriTech Responsibilities

a) Schedule the Administration training in accordance with the Client's availability and the Project Schedule.

b) Provide standard Administration training sessions for Client personnel

c) Prepare and submit TCRs upon completion of the training.

7.6.2.2 Client Responsibilities

a) Schedule appropriate personnel to attend Administration training.

b) Ensure participation of the appropriate personnel.

c) Review and approve the applicable TCRs.

7.6.3 TriTech.com IQ Core End User Training (Remote)

This TriTech instructor led class is designed for the end users of TriTech.com IQ. End users include roles such as officers, records clerks, dispatchers, dispatch supervisors, managers, and agency administrators. This class may be attended by the end users, or trainers who will be training the end users within the agency(ies). The recommended class size for this training is up to 12 participants.

This training is up to 4 hours and is delivered in one remote session. This session may be recorded for future reference.

At completion of this training, participants will be able to perform the following:

- Access and successfully login to IQ
- Understand the TriTech.com IQ site
- Use links within the site
- Use Online Help
- Use Search Filters
- Save searches and manage saved searches
- View Search History
- View Search Details
- Set up Search Alerts and manage alerts
- Create and access reports

These half day courses are conducted remotely and trains a core set of end users on the TriTech.com IQ System. Typically, the remaining end users will be trained via Client delivered training sessions.

The number of students attending the User Training course will be limited to no more than twelve (12) students per class.

Note: All remaining TriTech.com IQ end users must complete Client provided end user training.

7.6.3.1 TriTech Responsibilities

a) Schedule the TriTech.com IQ Core End User Training class(es) in accordance with the Client's availability and the Project Schedule.

b) Conduct the training session(s) on a mutually agreed to schedule.

c) Provide training material including, if available, recorded training.

d) Prepare and submit a TCR to the Client upon completion of the training.

7.6.3.2 Client Responsibilities

a) Provide adequate facilities to comfortably hold the training activities.

b) Ensure participation of the appropriate personnel.

c) Ensure that all TriTech.com IQ core end-users attend the end-user training provided by TriTech.

d) Provide TriTech.com IQ training to all other end users.

e) Ensure that each TriTech.com IQ end-user completes relevant training before assigning the end-user a username and password to access the TriTech.com IQ.

f) Review and approve the appropriate TCR.

7.6.4 TriTech.com IQ Analytics End User Dashboard Training (Remote)

This TriTech instructor led class is designed for individuals who will be using Analytics Dashboard. The recommended class size for this training is up to 9 participants.

This training is up to 8 hours and is delivered in one remote session.

At completion of this course, participants will be able to perform the following:

- Access Analytics Dashboard
- Successfully Login to Analytics Dashboard
- Filter Data
- Use Analytical Combo Controls
- Use interactive data selection to identify trends and key relationships
- Perform operational trending and historical analysis
- Expedite and enhance reporting activities
- Measure performance against work plan or work productivity levels

This courses is conducted remotely and trains a core set of end users on the TriTech.com Dashboard System. Typically, the remaining end users will be trained via Client delivered training sessions.

Note: All remaining TriTech.com Analytics Dashboard end users must complete Client provided end user training.

7.6.4.1 TriTech Responsibilities

a) Schedule the TriTech.com IQ Core Analytics Dashboard Training class(es) in accordance with the Client's availability and the Project Schedule.

b) Conduct the training session(s) on a mutually agreed to schedule.

c) Prepare and submit a TCR to the Client upon completion of the training.

7.6.4.2 Client Responsibilities

a) Provide adequate facilities to comfortably hold the training activities.

b) Ensure participation of the appropriate personnel.

c) Ensure that all TriTech.com Analytics Dashboard core end-users attend the end-user training provided by TriTech.

d) Provide TriTech.com Analytics Dashboard training to all other end users.

e) Ensure that each TriTech.com Analytics Dashboard end-user completes relevant training before assigning the end-user a username and password to access the TriTech.com Analytics Dashboard.

f) Review and approve the appropriate TCR.

7.6.5 TriTech.com Analytics End User Report Training (Remote)

This TriTech instructor led class is designed for individuals who will be using TriTech.com IQ reporting. The recommended class size for this training is up to 9 participants.

Typical time length for this training is up to 4 hours and is delivered in one remote session.

At completion of this course, participants will be able to perform the following:

- Access IQ Reports

- View reports
- Edit reports
- Copy reports
- Export reports
- Use the Report Writer (if applicable)
- Use filtering options
- Sort, Group, and generate Total Counts
- Share reports

This course is conducted remotely and trains a core set of end users on the TriTech.com Analytics Report System. Typically, the remaining end users will be trained via Client delivered training sessions.

Note: All remaining TriTech.com Analytics Report end users must complete Client provided end user training.

7.6.5.1 TriTech Responsibilities

a) Schedule the TriTech.com IQ Core Analytics Report Training class(es) in accordance with the Client's availability and the Project Schedule.

b) Conduct the training session(s) on a mutually agreed to schedule.

c) Prepare and submit a TCR to the Client upon completion of the training.

7.6.5.2 Client Responsibilities

a) Provide adequate facilities to comfortably hold the training activities.

b) Ensure participation of the appropriate personnel.

c) Ensure that all TriTech.com Analytics Report core end-users attend the end-user training provided by TriTech.

d) Provide TriTech.com Analytics Report training to all other end users.

e) Ensure that each TriTech.com Analytics Report end-user completes relevant training before assigning the end-user a username and password to access the TriTech.com Analytics Report.

f) Review and approve the appropriate TCR.

7.7 Implementation of System Interfaces

7.7.1 Inform Standard Interfaces' Requirement Gathering and Configuration

The functionality and applicable configuration options for each of the TriTech Standard Interfaces are described in the Interface Requirements Documents (IRD).

A TriTech Systems Engineer will review the IRDs for each of the applicable Standard Interfaces with the Client's subject matter experts and prepare a configuration worksheet (ICD) detailing the parameters that will be set to meet the desired functionality for the Interface. This process may be performed for different interfaces at different times. This process will be performed remotely via phone conference. The Client is responsible for engaging the third party vendors whose systems are being interfaced with, so that an end to end flow of the data is discussed.

TriTech Systems Engineer will configure and install the Standard interfaces on Client's system hardware. IRDs are not Client specific documents, and not subject to edits, changes, or approval. Client specific

configurations for Standard Interfaces are documented in configuration worksheets (ICD) and must be approved prior to configuration of the interface.

Installation and configuration of Standard Interfaces can only be performed by qualified members of TriTech System Engineering or Engineering teams, using proprietary tools. Any changes to the requirements of the Records Check Interface from the approved Configuration worksheet will be subject to additional cost and configuration time. Once each of the Standard Interfaces are installed and configured, they can be staged for FAT.

TriTech is not responsible for coordination, management, or covering the cost of any software, work, customization, coding or testing that is required to be performed by the third party vendors engaged in the implementation of the standard or custom interfaces, unless the work is defined under a subcontract with TriTech within the scope of this Purchase Agreement.

Note 1: Standard Interfaces are developed and enhanced within the TriTech product version process for TriTech software products (such as Inform CAD). Changes to standard Interfaces will require adherence to the development life cycle therein. Changes to standard Interfaces that are delivered within this life cycle will require the Client's system to be on a compatible version.

Note 2: The Client's provision of Interface Requirements for Standard Interfaces is an early Project checkpoint. This information is needed to prepare the configuration sheets for Standard Interfaces. Incomplete, inaccurate or delayed information can have a cascading effect on the Project Schedule, and may result in a significant delay in completion of the project, since modification to Standard Interfaces are only released with a major version of Inform CAD.

Note 3: Any changes to the configuration of Standard Interfaces made by the Client makes the Interface non-supportable, and all troubleshooting efforts resulted by such changes will be subject to additional cost.

Note 4: The Client is responsible for any services or software needed from such Third Party Systems to allow for interaction with the Third Party System or for connecting to TriTech Interfaces Software in the absence of a Third Party API. TriTech is not responsible for any cost associated for the API, any required third party lab or certification testing, cost associated with required programming or custom work by the third party vendors, or any license fees that may be required by the third party vendors.

7.7.2 Custom Interfaces' Requirement Gathering and Configuration

A TriTech Systems Engineer will review requirements specified by the Purchase Agreement applicable to Custom Interfaces, and lead gathering detailed operational requirements within the scope of the Purchase Agreement. This process may be performed for different interfaces at different times. This process will be performed remotely via phone conference.

Once sufficient information has been gathered to describe the operational functionality of the Interface, the Systems Engineer will create Operational Scenario Documents (OSD) detailing the operation of the Interface. Client's input in detailing all relevant information regarding the operations of these interfaces and interactions with the external systems are essential to timely and accurate development of the OSDs. The

completed OSDs will be provided for Client's review. This document must be approved by both the Client and TriTech prior to development. The Client will be given a TCR that the document was provided, meets the requirements and has been reviewed with the Client. The Client must review the OSD within 10 days from delivery by TriTech, and provide comments and questions back to TriTech or provide approval if no changes or edits is necessary.

The Client is responsible for obtaining the API for each of the third party vendors that TriTech applications are interfacing with. The API must be for the version of the third party software that TriTech will be interfacing with. The timelines for providing these documents to TriTech is concurrent with development of the OSD, so that any limitations associated with the level of integration with the third party application can be taken into consideration.

Delays in review and approval of the OSDs can impact timely development of the interfaces, and ultimately delay the Go Live of the system. All requirement changes for Custom Interfaces after approval of the OSD shall follow the Change Management process, and may be subject to additional cost and development time.

Upon approval of the OSD the custom interfaces are developed by TriTech engineering team. Once developed, these interfaces will be installed on Client equipment and go through testing with the Client and applicable third party vendors who own and administer the vendor side of the interface.

The Client is also responsible for coordinating execution of a mutual Non-Disclosure Agreement (NDA) between the third party vendors and TriTech before any technical information or documentation can be exchanged or testing can commence.

TriTech is not responsible for coordination, management, or covering the cost of any software, work, customization, coding or testing that is required to be performed by the third party vendors engaged in the implementation of the standard or custom interfaces, unless the work is defined under a subcontract with TriTech within the scope of this Purchase Agreement.

Note 1: The Client's provision of Interface requirements for each of the Custom Interfaces is an early Project checkpoint. This information is needed to develop the OSDs for Custom Interfaces. Incomplete, inaccurate, or delayed information can have a cascading effect on the Project Schedule, and may result in a significant delay in completion of the project.

Note 2: The Client is responsible for providing Application Programming Interface (API) documentation for the Third Party Systems. The API must document the integration process for the level of interface integration defined by TriTech's response to the RFP. The Client is responsible for any services or software needed from such Third Party Systems to allow for integration with the third party system.

Note 3: The scope of functionality for the custom interfaces is limited to 1) the capability of the TriTech System being interfaced and 2) the Application Programming Interface (API) capabilities of the external system being interfaced.

Note 4: High level descriptions of each of the custom interfaces in Appendix D - Custom TriTech Interfaces, will become the basis for the scope of detailed requirements, described in the OSD. Any changes in the requirements documented in the System OSDs, post approval of the OSDs are subject to formal Change Order.

Note 5: The Client is responsible for coordinating the development of the vendor side of all interfaces to the third party applications for the interfaces that the vendor is not a TriTech Subcontractor, based on the Purchase Agreement.

Note 6: TriTech is not responsible for any cost associated for the API, any required third party lab or certification testing, cost associated with required programming or custom work by the third party vendors, or any license fees that may be required by the third party vendors.

7.7.3 Interface Functional Acceptance Testing (FAT)

All Standard and Custom Interfaces are subject to Functional Acceptance Testing (FAT). FAT for Standard Interfaces is based on a standard set of TriTech FAT documents for each interface, as they are applicable to Client's configurations.

FAT for Custom Interfaces are based on the functionality described in the approved OSD for the interface. This process will be based on an FAT document developed by the Systems Engineer. The test source will be the provided IRDs; therefore all Standard Interfaces will be tested against standard, predefined TriTech FAT documents. These tests have a standard format and will be sent to the Client for review prior to conducting the FAT.

TriTech will repeat any failed FAT test following the correction of any issues which has caused the test to fail.

7.7.3.1 TriTech Responsibilities

a) Provide the IRD to the Client for review for each of the Standard Interfaces.

b) Prepare and submit a TCR to the Client, documenting the delivery of the IRDs to the Client for Standard Interfaces.

c) Review the IRD with the Client for each of the Standard Interfaces and gather and document the configuration options for the Interface.

d) Install and Configure the Standard Interfaces based on the agreed upon configurations.

e) Gather the operational requirements for each of the Custom Interfaces and develop and OSD.

f) Provide the OSD to the Client for review and approval. (for custom interfaces only)

g) Prepare and submit a TCR to the Client, documenting Client's approval of the OSD for each of the Custom Interfaces.

h) Develop the Custom Interfaces based on the approved OSD.

i) Install and configure the Custom Interfaces.

j) Prepare and submit TCRs upon installation of the Interfaces.

k) Develop FAT documents reflecting feature descriptions found within the provided and applicable OSDs.

l) Provide the FAT documents to the Client for review prior to conducting the FAT for each interface.

m) Provide a TCR to the Client to approve the receipt of the FAT documents.

n) Assist the Client in conducting Acceptance Testing in accordance with FAT documents.

o) Prepare and Submit a TCR, documenting completion of FAT including any exceptions to FAT.

p) Resolve FAT issues and re-run tests as required.

7.7.3.2 Client Responsibilities

a) Participate in the review of the IRDs and provide the configuration information to TriTech in a timely manner.

b) Provide the information that are necessary for development of the OSD for each Custom Interface.

c) Obtain the API for each of the third party applications that TriTech interfaces with and provide the document to TriTech.

d) Review and approve the OSDs based on the required timelines.

e) Engage the third party vendors in the requirement gathering, development, testing and other interface development activities.

f) Review and approve the FAT documents.

g) Participate in the FAT.

h) Assist TriTech in documenting FAT findings and results.

i) Review and approve the applicable TCRs.

7.8 System and Subsystem Go Live

The "cut over" of each of the Inform CAD, Inform Mobile, Inform Me and Inform CAD Browser Subsystems and Interfaces into the production environment is a highly orchestrated activity that will require a number of resources from both the Client and TriTech teams. It is recommended that Inform CAD, Mobile, and the Inform CAD Subsystems (such as the Go Live interfaces) are taken into production at one time.

7.8.1 Inform CAD, Mobile, and Inform CAD Subsystem Go Live

The "cut over" of the Inform CAD, Inform Mobile, Inform Me, Inform CAD Browser and Interfaces into the production environment is a team approach. It is the intent of the Project to take all these Subsystems Live at the same time.

TriTech utilizes a pre-Go Live checklist for Inform CAD with various activities to ensure readiness of the System prior to Go Live. There are some tasks that must be performed by the Client, which are detailed in the pre-Go Live checklist. This activity begins several weeks in advance of Go Live.

TriTech will provide the Client with a standard Go Live authorization letter that must be approved by the Client no later than 3 weeks prior to Go Live. This letter will list all the Subsystems that are scheduled for the Go Live, and any exceptions to Go Live applications. It also memorializes the date and time of Go Live, as well as the Client's confirmation that the System and staff are ready for Go Live.

TriTech will provide the Client with a Go Live authorization letter, detailing the date and time of Go Live and those components that will be taken into Live operations. It is necessary that the Client approves this letter no later than 2 weeks prior to the scheduled Go Live to secure the Go Live support resources.

Prior to Go Live the pre-production test data will be purged from the Client's system. The equipment is staged to move into the communications center and/or units. Units and personnel are logged into the System and Interfaces are activated.

At Go Live, the TriTech and Client implementation teams will support the users in the transition to the new System. Any issues are logged and resolved through TriTech Technical Services. A more detailed Go Live plan will be provided with adequate lead time.

The duration of the Go Live support for Inform CAD and its subsystems for this project will be 3 days (to include pre and post cutover) by 2 people, supplemented by 2 additional days of support by one person. The

Project Manager will be an active participant in the Go Live process. The breakdown of onsite Go Live Services is as follows:

Inform CAD, Mobile, and Inform CAD Interfaces:

2 people for 3 days covering 24 hour shifts.

1 person for 2 days covering 24 hour shifts.(As an extension to the initial Go Live support)

7.8.1.1 TriTech Responsibilities

a) Provide to the Client a Go Live check list with adequate time for review.

b) Prepare and submit a Go Live authorization letter to the Client.

c) Identify the participants for the Go Live in accordance with the terms of the Purchase Agreement.

d) Have specified personnel onsite in advance of the Go Live date to begin the final inspection of the Client's system as part of the Go Live check list.

e) Provide System monitoring resources following the actual System cut over as specified within the Purchase Agreement.

f) Prepare and submit a TCR upon first Go Live operation of the Inform CAD.

7.8.1.2 Client Responsibilities

a) Timely review of the Go Live checklist.

b) Complete Mobile roll out process in sufficient time to allow for testing prior to Go Live.

c) Review and approve the Go Live authorization letter no later than 3 weeks prior to the scheduled Go Live.

d) Provide adequate persons for the supervision and monitoring of the Client's Inform CAD end users 24/7 beyond the participation of the TriTech staff.

e) Provide dedicated workstations (preferably 2 workstations) for TriTech support staff during Go Live support period.

f) Provide 24/7 support by the Client's IT department.

g) Develop a process for the reporting and resolution of field mobile issues.

h) Review and approve the applicable TCR.

7.9 Reliability Acceptance Period

Reliability testing for each of the Subsystems will start upon the Go Live for that Subsystem and will end 30 days post Go Live, based on successful satisfaction of below criteria. The Reliability Acceptance Period of each Subsystem is independent from other Subsystems, and Subsystems that are taken Live in later phases of the Project.

Upon Go Live, the County will use the system for a thirty (30) consecutive day Reliability Test period to verify operational system and system functionality in a live environment. If no Critical or Urgent Priority Software Errors are reported during such thirty (30) consecutive day period, the system shall be deemed to have achieved Final Acceptance.

If a Critical or Urgent Priority Software Error occurs during the first fifteen (15) days, TriTech will restart the thirty (30) consecutive day period. If the error occurs after the fifteenth (15th) day, the test will resume from the point when the error occurred.

At the conclusion of the Reliability Acceptance Test, the Subsystem will be deemed accepted by the County.

8 PROJECT CLOSURE

When all pre and post go live project deliverables have been completed, Project Closure activities will take place. Support of the System and Subsystems are transitioned to TriTech's Technical Services Group. Any remaining Project related administrative tasks are completed by TriTech and Client. Project documentation is archived and primary Client interaction is officially handed over from the TriTech Project Manager to the TriTech Account Executive.

8.1 System Transition

Following Go Live, there is a transition period where the Client moves from the implementation team to the support team. This transition will change the Client's primary point of contact from the Project Manager back to the Account Executive. Software support will be handled through the Technical Services Group. The Client's issues will be entered, tracked, and managed via a computerized and web-enabled issues tracking system. This tracking system will become available to the Client at system installation.

8.1.1.1 TriTech Responsibilities

a) Provide payment reconciliation, final TCRs and final invoices.

b) Transition the TriTech point of contact from the Project Manager to the Account Executive and Technical Support Department.

c) Provide continued support based on terms of Purchase Agreement.

8.1.1.2 Client Responsibilities

a) Provide approval of Project TCRs within five (5) business days.

b) Provide payment reconciliation and payment of final invoices.

9 APPENDIX A - REQUIRED INFORM CAD DOLF CODE FILE BUILD

The purpose of this table is to identify specific portions of the System Code files, and modules that must be built and configured prior to Inform CAD System DOLF.

Note: Items identified with asterisk (*) are optional, and will be built as specified, only if the Client chooses to use them.

Code File Item	Must Be Built by TriTech Prior to DOLF	To Be Built at DOLF	To Be Built After DOLF by the Client, Under TriTech's Supervision
Advisor		Build 2 completely	X
Assigned Incident Queue		Build 2 completely	
Assigned Units Queue		Build 2 completely	
Audit Reasons *	Build up to 10		X
Bolo Type [Law agencies only] *	Build up to 20		X
Burn Permit Type*	If provided prior to DOLF, build up to 10	X	X
Call Response Disposition *	Build up to 10	X	
Call Taking		X	
Caller Types *		Review functionality	X
Cancellation Reasons	Build up to 15		X
Capability Types *		Review functionality	X
Cardfile *		Review functionality	X
Cardfile categories *		Review functionality	X
Caution note category		Review functionality	X

Caution Note Source		Review functionality	X
Caution Notes		Review functionality	X
Change Destination Reason *		Review functionality	X
Color Assignment		X	
Confidential Information*		Review functionality	
Controlling Dispatcher		X	
Custom Data Field Builder *		Review functionality	X
Custom Timestamp Builder *		Review functionality	X
Customer Information		X	
Dispatch levels *		Review functionality	X
Employee Certification Type *		Review functionality	X
Employee Positions *		Review functionality	X
Employee Schedule Change *	Build up to 10		X
Explorer Setup Utility		X	
Eye Description [Law agencies only]	(TriTech uses NCIC standard)		
Facility Warning Reasons *		Review functionality	X
Gender Description- [Law agencies only] *	(TriTech uses NCIC standard)		
GIS REQ. Cities Tables	X (Part of GIS Conversion)		
GIS REQ. County Tables	X (Part of GIS Conversion)		

GIS REQ. Map Layers (parks, water, rails, etc.)	X (Part of GIS Conversion)		
GIS REQ. Response Areas	At least one will be built for DOLF. If Provided to TriTech prior to DOLF, this information will be imported to Inform CAD	Review functionality	X
GIS REQ. State Tables	X (Part of GIS Conversion)		
GIS REQ. Streets Database	X (Part of GIS Conversion)		
Hair Description [Law agencies only]	(TriTech uses NCIC standard)		
Hierarchy	X		
Hydrant Class Type *	One to be built prior to DOLF if applicable	Review functionality	X
Incident Types	Build all Incient types that are provided to TriTech prior to DOLF	Review functionality	X
Inter-Agency security and comment sharing (if applicable)		X	
Late Response Reasons *		Review functionality	X
License Plate Types [Law Agencies only] *	(TriTech uses NCIC standard)		
Location Type Utility	Build all Incident types that are provided to TriTech prior to DOLF	Review functionality	X
Message Audit Utility		Review functionality	
Method Call Received *		Review functionality	X
MSI - Call Taking Settings		Review functionality	X
MSI - Global Settings		X	
MSI - Priority Builder		X	
MSI - Toggles		X	

MSI- Miscellaneous Functionality		X	
MSI-Nomenclature		X	
MSI-Odometer *		X	
Multi Agency Setup *		Review functionality	X
New Messaging		X	
Number Setup Utility	X		
Out of Service Reasons		Review functionality	X
Paging		Review functionality	X
Password Security		Build 2 completely	X
Pending Incident Queue		Build 2 completely	
People as Capabilities *		Review functionality	X
Permission Security Manager		Build 2 completely	
Permit Status*		Review functionality	X
Permit Type*		Review functionality	X
Personnel Manager	Build up to 50 prior to DOLF		X
Powerline Setup Utility		Review functionality	
Premise Utility		Review functionality	X
Protocol Module		Review functionality	X
Prescheduling Cal Taking Thresholds		Review functionality	X

Priority Builder	Build up to 10 prior to DOLF		X
Problem (Incident Sub-Type)	20		X
PSAP Codes		Review functionality	
Race Description [Applicable to Law agencies only] *	(TriTech uses NCIC standard)		
Radio Channels *		Review functionality	X
Reset Timer Reasons *		Review functionality	X
Resource Group Manager *		Review functionality	X
Resource Icon Assignment	Build up to 20 prior to DOLF	Review functionality	X
Response Area Builder	Build at least one prior to DOLF	Review functionality	X
Response Plan Manager		Review functionality	X
Response-Incident Editor Queue		X	
Roster Cancellation Reasons*		Review functionality	X
Roster Exception Reasons *		Review functionality	X
Roster Setup Utility *		Review functionality	X
Roster Template Builder *		Review functionality	X
Rotation Categories *		Review functionality	X
Rotation Suspension Reasons		Review functionality	
Shift Type	X		
Shorthand Comment Builder *		Review functionality	X

SOP Module		Review functionality	X
Sound Manager *		Review functionality	X
SSM Plan Manager *		Review functionality	X
Station Post Manager	X		X
Status Names		X	
Street Finder alias Utility		Review functionality	X
Timers and Warnings Utility *		Review functionality	X
Toggle on-off		X	
Transport Priority Types	X		X
Transport Protocol Types	X		X
Unit Cross Staffing		Review functionality	X
Unit Names	Build up to 50 prior to DOLF		X
Unit Status Queue		Build 2 completely	
Upgrade- Downgrade Reasons	X		X
User Functionality Groups	Build up to 5 prior to DOLF	Review functionality	X
Vehicle Certification Type *		Review functionality	X
Vehicle Manager	Build up to 50 prior to DOLF		X
Vehicle Types *			X

10 APPENDIX B - CONTRACTED MODIFICATIONS TO STANDARD TRITECH SOFTWARE PRODUCTS

Note: Any changes in the requirements documented in the System OSDs, post approval of the OSDs are subject to formal Change Order.

List of Product Modification OSDs:

There are no product modifications proposed for this project.

11 APPENDIX C - STANDARD TRITECH INTERFACES

Note: The scope of functionality for these Standard interfaces is limited to 1) the capability of the TriTech System being interfaced and 2) the capabilities of the external system being interfaced.

Note: High level descriptions of each of the custom interfaces below will become the basis for the scope of detailed requirements, described in the OSD. Any changes in the requirements documented in the System OSDs, post approval of the OSDs are subject to formal Change Order.

Note: The Client is responsible for coordinating the development of the vendor side of all interfaces to the third party applications for the interfaces that the vendor is not a TriTech Subcontractor, based on the Purchase Agreement.

List of Project's Standard Interface:

Production Environment:

a) One (1) Standard ANI/ALI Interface

b) One (1) Standard Alpha numeric Paging Interface

c) One (1) Standard Station Alerting Interface (Note: Standard Station Alerting Interfaces for TriTech include WestNet, Zetron M25 and M26, US Digital Design, and Locution)

d) One (1) Standard TeleStaff Interface

e) One (1) Standard Push to Talk Interface (limited to standard PTT and Emergency notification functionality with GPS)

Note: The scope of this Push to Talk interface may grow beyond the Standard functionality. TriTech and the Client will work on obtaining the operational and technical requirements and provide a cost estimate for the additional scope. These changes will change this interface from a Standard Interface to a Custom Interface, shall the Client choose to add it to the scope of the Project.

f) Three (3) licenses for the Standard Integration with ProQA

g) Three (3) Standard CAD to External System Data Transfer (FireHouse, ESO, and ERS)

h) One (1) NCIC/CLETS Interface as defined below.

Test Environment:

None

NCIC State Message Server

The Standard NCIC State Message Server includes the following Queries and Connections:

1. Standard Queries

   The following standard queries/masks will be included in the project, subject to applicable access (State switch access in most States and County access in California). These standard queries can be performed via Inform CAD PowerLine, Inform CAD Query screen, and Inform Mobile Query screen.

   - Driver's License Query
   - Firearms Query (If available through State/NCIC, this may include historical registration and stolen entry; historical wants)
   - License Plate Query (If available through State/NCIC, this may include LoJack)
   - Name/DOB Query (If available through State/NCIC MS, this may include Warrant or Missing/Unidentified person Information)
   - Property Lookup Query
   - VIN Lookup Query (Information on specialty vehicles, such as boat, aircraft and the like is only available based upon data available through State/NCIC. Specialty vehicle databases and quires can be added as custom connections or quires.)
   - Administrative Messages (available through State/NCIC for CAD only)

   Note: None of above queries include updates (Cancel, Clear, Locate, Modify), or new entries.

   Note: Above queries are included as long as they can run against Standard Connections, or Custom connections specified by the Purchase Agreement.

2. Custom Queries

   Custom queries can be performed via Inform CAD Query screen and Mobile Query screen only. For an additional cost, custom PowerLine commands can be developed for these queries.
   Examples of custom queries include, but are not limited to the following:

   - New record entries (For each of Standard or Custom queries)
   - Updates (Clear, Cancel, Locate, Modify)- (For each of Standard or Custom queries)
   - Boat queries to separate databases not available through standard connections
   - Restraining order

   Custom Queries included in this Purchase Agreement.
   None

3. Standard Connections

   The following standard connections will be included in the project, subject to applicable access (State switch access in most states and County access in California). Queries can be configured to access the following connections:

   - State Justice Switch (County in California)
   - One Police RMS System
   - Inform CAD (BOLO and Plate History)

4. Custom Connections

   Local Warrants Databases

12 APPENDIX D - CUSTOM TRITECH INTERFACES

Note: The Client is responsible for providing Application Programming Interface (API) documentation to these Third Party Systems that document the integration process for the level of interface integration defined by TriTech's response to the RFP. The Client is responsible for any services or software needed from such Third Party Systems to allow for interaction with the Third Party System API or for connecting to TriTech Interfaces Software in the absence of a Third Party API.

Note: The scope of functionality for these custom interfaces is limited to 1) the capability of the TriTech System being interfaced and 2) the Application Programming Interface (API) capabilities of the external system being interfaced.

Note: High level descriptions of each of the custom interfaces below will become the basis for the scope of detailed requirements, described in the OSD. Any changes in the requirements documented in the System OSDs, post approval of the OSDs are subject to formal Change Order.

Note: The Client is responsible for coordinating the development of the vendor side of all interfaces to the third party applications for the interfaces that the vendor is not a TriTech Subcontractor, based on the Purchase Agreement.

List of Project's Custom Interfaces (OSDs to be provided):

There are no Custom Interfaces proposed for this Project.

13 APPENDIX E - SUBCONTRACTOR(S) STATEMENT(S) OF WORK

List of attachments:

1. Athena Advanced Networks Statement of Work
2. Deccan Statement of Work

ATHENA Advanced Networks
"The Wise Choice"

4497 Brownridge Terrace - Suite 107
Medford, OR 97504

www.athenaadvancednetworks.com
541-899-9596

Scope of Services

Finalize the configuration

Once selected, Athena will work with TriTech project management and the client staff to finalize the configuration. *All parties agree that the scope and price of the configuration may change as a result of this process.*

Procure the hardware/software

Athena will order, track and receive the equipment and software as agreed upon during the finalization process.

Install, Rack, and Configure VMware Infrastructure

Athena personnel will be onsite to perform the following tasks outlined below. These tasks provide the general steps for creating the necessary environment to support the TriTech project.

Tasks to be performed by Athena

Equipment:

1. Inventory and verify received hardware order
2. Install equipment into new or existing rack
3. Cable and label all equipment
4. Configure KVM switch

Network Configuration:

1. Install network switches
2. Configure switches with proper vlans needed for virtualization (management, iSCSI, vMotion) and LAN connectivity

SAN Configuration:

1. Configure SAN storage
2. Create disk groups and LUNs to be used for VMware datastores
3. Assign LUNs to the Dell servers for VMware
4. Configure SAN replication

VMware Configuration:

1. Install VMware ESXi on the host servers
2. Create virtual switches for management, iSCSI, vmotion

4497 Brownridge Terrace - Suite 107
Medford, OR 97504

www.athenaadvancednetworks.com
541-899-9596

3. Build virtual machine for vCenter on one of the servers
4. Install and configure vCenter
5. Create a cluster in vCenter
6. Add VMware hosts to the cluster
7. Present the shared SAN LUNS to servers
8. Create the necessary virtual machines for the TriTech Systems (CAD, database, etc.)
9. Configure VMware site recovery manager (SRM)
    a. Includes SAN replication tasks
10. Test SRM
11. Document and diagram the configuration

Tasks to be performed by TriTech / Monterey CO

TriTech Software Systems and / or Loveland CO is responsible for the following tasks:

1. Notify Athena when equipment has arrived to schedule installation
2. Provide network cabling
3. Ensure power in the server room is available
4. Provide KVM ports and cables for ESXi host servers

DECCAN INTERNATIONAL

Decision-support software solutions for Fire & EMS

Monterey Emergency Communications Department

LiveMUM 2.0 Statement of Work

December 1, 2015

Disclaimer

The information in this document is subject to change without notice. This document is provided under license in connection with an update version of the software named on the front page hereof. The software version to which this document relates is subject to the License and other terms and conditions of the contract under which the software was originally provided. This document is part of the Deccan documentation referred to in that contract and is likewise subject to the terms and conditions thereof, including, without limitation, the License and Confidentiality terms. **THIS DOCUMENT AND THE SOFTWARE VERSION PROVIDED HEREWITH, IS PROVIDED AS IS, WITHOUT WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED.** Software Errors (as that term is defined and used in said contract) encountered in said software will be corrected pursuant to the terms and conditions of the Software Support Agreement currently in force with respect to said software and your sole remedy with respect to this software update version and this document is to receive the software support services provided under said Software Support Agreement. Companies, names, and/or data used in screens and sample output are fictitious unless otherwise noted.

Deccan International™

5935 Cornerstone Court West
Suite 230
San Diego, California 92121
858.764.8400
FAX: 858.764.8401

Change History

Version	Date Modified	Published By	Notes
1.0	12/01/15	Julie Desmarais – Deccan International	

Table of Contents

1. Purpose of Statement of Work

This statement of work has been created to define the work to be performed by Deccan International for the **Monterey Emergency Communications Department (ECD)** therein after referred to as the "Client" to build Deccan International's LiveMUM 2.0 application.

1.1 General Client Responsibilities

In addition to those Client responsibilities stated elsewhere in this SOW, the Client is responsible for:

a) Network/communications connections (e.g., Online Meeting, telephone, VPN, and other voice/data connections), or ongoing network/communications associated with installation, operation or support of the proposed system including the establishment and maintenance.

b) Unless specified as a defined service to be delivered by Deccan International, the installation, configuration, maintenance (including patch management and upgrades of Microsoft software required by the System) shall be completed by the client.

c) Unless specified as a defined service to be delivered by Deccan International, the configuration of machine names and IP addresses for servers to be utilized by the System.

d) The provision of code files and GIS data as requested by Deccan International staff. This information must be provided on a timely basis in order to meet the project timelines. This information will be provided in the format specified in Appendix A and Appendix B

e) The timely review and approval of the Acceptance Test Procedures (ATP), and other project documentation as further defined in this SOW.

f) Active timely reviews of code file data and GIS data.

g) Making the appropriate personnel available for scheduled training sessions

h) Provide a training facility with the required computer and audio-visual equipment for training.

1.2 Project Exclusions

Work, software, services, hardware, Systems, Subsystems, product/software modifications or any other deliverables not described in this SOW or the Agreement will not be included in the Project. Changes in scope will only be executed through a mutually agreed upon Change Management Process, as described in the Project Management Plan. The Agreement will be the governing document, and any deliverables that are not explicitly stated in the Agreement shall not be delivered in the Project.

2. LiveMUM 2.0 Application

Live Move-Up Module (LiveMUM 2.0) is a software tool that interfaces with a live CAD system to display to Communication Center dispatchers current coverage and offer move-up recommendations based on various criteria (business rules and/or operational procedures) set by the Communication Center. LiveMUM 2.0 does the following:

- Takes the guesswork out of move-ups.
- Eliminates dependence on pre-plans, which are of limited use.
- Allow dispatchers to test out and evaluate the effectiveness of planned move-ups.
- Equips dispatchers with move-up rationale to show field units why a move-up is necessary.
- Ensures a consistency of move-up quality across all the dispatchers.

2.1 General Specifications

1. LiveMUM 2.0 analyzes CAD data and displays color-coded maps for specified unit types, which illustrate coverage, thus allowing dispatchers to view weaknesses and strengths in coverage.
2. LiveMUM 2.0 makes tactical redeployment (move-up) recommendations based on criteria set by the Communication Center.
3. Communications center staff may test the effectiveness of their own move-ups, taking into account information not available to the LiveMUM 2.0.
4. LiveMUM 2.0 incorporates an extensive list of business rules and/or operational procedures and strategies that dispatchers utilize when dispatching and redeploying units.
5. LiveMUM 2.0 allows dispatchers to manually adjust a unit's expected time until available to ensure recommendations are accurate.
6. A user may make alternate recommendations beyond LiveMUM 2.0's standard recommendations. LiveMUM 2.0 features the ability to calculate coverage scores and what the impact may be by using the user's recommendation.

2.2 Software Specifications

1. LiveMUM 2.0 offers a user-friendly interface employing a Graphic User Interface (GUI) operating in a Windows environment.

2. Once installed, Communication Center staff may use LiveMUM 2.0 to perform area coverage & redeployment analysis in a convenient fashion without the assistance of analysts or other external personnel. Please see sections below for details on area coverage and redeployment analysis.

3. User inputs and actions are intuitive and utilize a pointing device, pull-down menus and standardized tables.

4. The primary display is the client's map with the client's response areas displayed. The display supports zoom features for selected response areas and/or grids.

5. LiveMUM 2.0 permits the storage and retrieval of logs on disk for later analysis.

6. LiveMUM 2.0 allows the application to be run in three settings: Live, Static, and Replay.

7. Live setting allows for move-up recommendations to be determined using real-time data from the CAD system and customized by client's business rules.

8. Static setting allows the client to create scenarios and specific move-up recommendations for testing purposes. Feedback from this testing will be provided to Deccan to incorporate business rules.

9. Replay setting allows client to replay past log files to review move-up recommendations or configure LiveMUM 2.0 for future scenarios. This tool is useful to determine performance during extreme settings such as multi-alarm fires.

10. LiveMUM 2.0 allows multiple map layers to be included such as water layers, major roads or highways, hospitals, and major landmarks. These layers may help make the visual map easier to navigate for end users.

11. LiveMUM 2.0 features the ability to analyze call volume to predict when move-ups may not be required due to low call volume. This tool helps minimize unnecessary move-ups in addition to the regular business rules configured by the user.

12. Calculations are made based on all capabilities so as to not negatively impact one capability while positively impacting another. Also, this will help minimize the number of move-ups and maximize the effectiveness of move-ups.

13. LiveMUM 2.0 supports AVL for real-time data tracking. Units may be posted to their current real-time location based on X/Y coordinates and not solely on unit status messages received from the CAD system.

2.3 Current Coverage (Area Coverage) Specifications

Current coverage is displayed in the form of Current Coverage window. This window includes a tab for each capability whose current coverage is to be displayed. This window's specifications are listed below:

1. Coverage is displayed as color-coded response zones based on Client specified criteria.

2. Unit availability is displayed using color-coded stations.
3. Zooming in and out is supported in the coverage map display.
4. The user is allowed to click and see which units are present in a station. Unit attributes displayed are listed below:
    a. ID
    b. Status
    c. Estimated Time Back in service (ETB)
    d. Last Status Date-Time.
5. The user may switch on and off the map's station labels.
6. The Coverage Performance is displayed above the map as percentages.
7. A list of units and their ETBs are displayed in their corresponding tabs (based on capability). User may modify these ETBs.
8. CAD messages and some Coverage Window User Actions are logged for analysis.

2.4 Recommendation (Redeployment Analysis) Specifications

1. The concept of station depth is used to illustrate coverage.
2. Units with multiple capabilities are supported.
3. Cross-staffed units are supported.
4. The Move-Up methods of nearest neighbor, leapfrog, & bump and cover are all supported and may be used individually by capability modeled.
5. Unmovable units are supported.
6. Preferred move-up stations are supported.
7. Preferred move-up units are supported.
8. Minimum score increase is supported to eliminate ineffective move-ups or maximize the score impact of move-ups. For example, a move-up may only be triggered if it increases the coverage score by 10% or more.
9. Coverage Drop thresholds are used to ensure that moved-up-from areas do not worsen too much.

10. LiveMUM 2.0 may be configured to automatically recommend units back to their home station once coverage is increased in the area they were moved to.

11. Specific event types can be configured to prompt move-up recommendations.

12. A user-defined constraint on the move-up travel time may be implemented.

13. The user is alerted to move-up recommendation with a pop up window.

14. When a recommendation is generated, the following are displayed and enabled:

    a. Maps displaying the coverage before and after the evaluated move-up are shown.

    b. The recommendation is displayed in a grid for easy view.

    c. The user can check or uncheck a recommendation and see the effects.

    d. The user can append recommendations and see the effects.

15. All recommendations are logged. Some user activities in the Recommendation windows are also logged. Client may combine recommendation log files to review daily, weekly, or monthly recommendations to determine problematic areas for coverage or which units are most useful for recommendations.

3. Project Implementation

3.1 Client's Points of Contact

Successful implementation of the LiveMUM 2.0 application needs active participation and collaborative effort between the Client and Deccan. The support needed is primarily in the form of ability to ensure that the data is provided to Deccan in a timely fashion. As such, Deccan expects the Client to assign a primary point of contact familiar with the dispatch and move-up operations to partner with Deccan International in building applications. Since move-ups impact field operations, a field person experienced with move-ups should be assigned to participate in discussions. Please see the document titled "Deccan Project Resources Worksheet – LiveMUM 2.0" for additional details.

3.2 Web Meetings

Throughout the install process, the Client needs to have periodic meetings with Deccan International, which will occur remotely, via an online meeting tool such as JoinMe. These meetings will be scheduled with the Client as and when they are needed. For this purpose the Client is expected to provide a computer connected to Internet, a speakerphone, and a projector that can project the computer screen for convenient viewing by multiple people.

3.3 Project Phases

The application will be built and delivered in three phases. The application requires of Client's relevant business rules to be provided in a tabular format. Each phase involves dialog and feedback between Deccan and the Client to ensure that the business rules built into LiveMUM 2.0 meet the Client's needs. Project phases are employed to ensure accuracy for the application. Each of these phases, in the order of occurrence, is outlined below with associated tasks and responsibilities.

3.3.1 Phase I – Collection of Incident Data and Map Data

During this phase Deccan International will work closely with the Client to retrieve the necessary data from its CAD system that is required to build the application. Deccan International will also work with the Client to obtain the necessary GIS data such as streets, stations and polygon layers.

The Tasks in Phase I are as follows:

Deccan International's Responsibilities:

1. Project Kickoff. An initial meeting summarizing expected timelines and data requirements will be held between Deccan Project Manager and client.

Client's Responsibilities:

1. Identify and assign one key contact as project manager for the agency and a single point of contact for GIS and CAD data. This may be the same individual.

2. Retrieve raw Incident, Activity and CAD data from CAD System in specified format (Appendix A). Place CAD Data on Deccan FTP site.

3. Retrieve and upload raw map data from client in specified format (Appendix B).

4. Retrieve all necessary unit information and initial business rules for agency's move-up policies.

3.3.2 Phase II – Building of LiveMUM 2.0 Static Scenario Evaluator

Deccan International's Responsibilities:

1. Convert data into the standard format used by Deccan International.

2. Import data into mapping software for use with LiveMUM 2.0.

3. Build ETB (Estimated Time Back) table, defaulted station depths, station and unit information, and other client specific data into the application.

4. Work with Client to gain an understanding of current move-up procedures and strategies. These are known as "Business Rules" throughout this document.

5. Build "Depth" tables, one for each capability to be modeled in the application that reflects agency's tradeoff between coverage and doing too many move-ups. If possible, these will be built through business rules.

6. Build "Coverage Drop Thresholds" tables, which reflect the agency's tolerance for coverage worsening in moved-from areas.

7. Setup initial Business Rules if provided by client.

8. Deliver LiveMUM 2.0 SSE to client via Deccan FTP site.

9. Provide client with download and installation instructions for LiveMUM 2.0 SSE.

10. Provide client with training of Static/Offline LiveMUM 2.0 application via the online meeting tool JoinMe.

Client's Responsibilities:

1. Download and installation of LiveMUM 2.0 SSE.

2. Schedule time to be trained about application's functionality and test configurations.

3. Provide feedback to Deccan based off initial offline testing for future changes.

3.3.3 Phase III – CAD Testing & Acceptance

During the third phase Deccan International will setup and test LiveMUM 2.0. Deccan International and the Client will schedule regular feedback sessions that will be used to define and tune the coverage and business rules. The following work will be performed:

Deccan International's Responsibilities:

1. Make configuration changes as required after feedback provided by client. Client will provide feedback after testing LiveMUM 2.0 in Test/Production CAD environment.

2. Assist client with testing the CAD/LiveMUM 2.0 interface by analyzing the initial Synchronization and Tracking logs received by the application.

3. Schedule formal acceptance testing

4. Perform acceptance with client or provide acceptance testing document for client to test application with individually.

Client's Responsibilities:

1. Provide Deccan International with VPN connection to Test\Production CAD workstation if available.
2. Work independently, or with Deccan, to verify successful interfacing with CAD system in test and/or production environment.
3. Verify configuration of business rules is acceptable and closely matches requirements outlined by client.
4. Perform acceptance testing with Deccan Project Manager or independently and provide signed acceptance test document to Deccan PM.

3.4 Payment Terms

As a subcontractor to TriTech, payment for this Project will be made by TriTech to Deccan in accordance with the Subcontract Agreement between TriTech and Deccan.

If the Client terminates LiveMUM 2.0 prior to the execution of Appendix D (LiveMUM 2.0 Acceptance Testing Document), Deccan will cease work on LiveMUM 2.0 and TriTech will not be required to pay any further Milestone payments. However, any Milestone that has already been signed off on and paid by TriTech is non-refundable to either TriTech or the Client.

3.5 Warranty Period & Annual Maintenance

The Warranty period begins upon acceptance of LiveMUM 2.0 (execution of Appendix D) by the client. The first year Annual Maintenance period for LiveMUM 2.0 begins as of the date of the LiveMUM 2.0 SSE delivery. The first year Warranty and Maintenance fees are payable at the time of installation of LiveMUM 2.0.

3.6 Services offered as a part of Warranty & Maintenance

3.6.1 Bi-Annual Data Refreshes of LiveMUM 2.0

LiveMUM 2.0 uses CAD data from actual events to analyze past coverage holes and call volume to best recommend move-ups. As such, the currency of the application is dependent on the currency of the CAD data on which it is based. To keep the application current, it will have to be regularly updated with CAD data built up since the last update. This task involves, among others, updating ETBs, identifying new units, stations, incident types, and unit types in the new CAD data and updating LiveMUM 2.0 Code Tables and business rules to reflect them.

As part of the warranty and annual maintenance plan, these tasks will be performed bi-annually by Deccan International. In between updates, it is possible for the Client to add units; Deccan does not currently support a convenient utility for this task, but will assist the client in adding units at any time. If the Client prefers to add units directly to a Units table themselves, Deccan International will train the Client on this task. Since directly adding units to tables is not a foolproof task, the Client will have to do this with care.

3.6.2 Technical Support

As part of the warranty and maintenance plan, Deccan will provide technical support via phone and email during normal business hours 0900 to 1700 Pacific Time Monday thru Friday with the exception of Deccan-observed holidays.

3.6.3 Applications upgrades

As part of its goal to ensure that LiveMUM 2.0 continues to meet client needs, Deccan adds features to the application on a continual basis. As part of the warranty and maintenance plan, we will offer these feature updates to the Client when they are completed.

3.6.4 Services offered requiring additional cost

Occasionally, the Client might require additional tasks in addition to those included within the scope of this Project. These additional tasks will require additional cost. Below are some of the additional tasks that may be performed at additional cost.

3.6.5 Updating LiveMUM 2.0 to Reflect Complicated Business Rules

LiveMUM 2.0 code tables reflect the Client's current requirements of its move-up strategy. If the Client's move-up strategy changes, the application will have to be updated to reflect this strategy modification. Changes that involve updating tables consistent with the current rules contained in Client's LiveMUM 2.0 implementation are part of warranty and normal maintenance. If the rules contained in Client's LiveMUM 2.0 implementation are modified or new rules are added, then additional coding will be required at additional cost. Deccan will quote a fixed cost for the task.

3.6.6 Updating the LiveMUM 2.0 Interface to Reflect Available Business Rules

The various features and configurations available within the LiveMUM 2.0 System are dependent upon specific data points being successfully transmitted from the CAD system to LiveMUM 2.0 via the established interface; this includes, but is not limited to: initial sync of unit id, unit status, unit location, and event message (with associated event id and event type); as well as continued track messages of unit id, unit status, unit location, and event messages (with associated event id and event type).

3.6.7 Changing Zones

Deccan will assist the client with changing LiveMUM 2.0 zones during the bi-annual refresher. Zones changes between bi-annual refreshers will be at additional cost.

3.6.8 Changing Streets

Currently, changing streets in LiveMUM 2.0 is a process that requires data to be sent by the Client to Deccan. Deccan will always have to assist with changing streets, and this service is included during the bi-annual refresher. Updating the street network under any other circumstances will require additional cost.

3.6.9 Changing CAD

LiveMUM 2.0 interfaces with CAD. If the Client changes its CAD at any point during the build process or warranty period or during maintenance, then Deccan will have to rewrite the interface at additional cost to Client.

3.7 Project Services

3.7.1 Project Manager

Deccan will appoint a project manager to coordinate all project-associated tasks with the Client's assigned project manager.

Through periodic meetings, Deccan will create the project plan and project schedule, review the project and its progress, and review the current task list and upcoming milestones.

3.7.2 Training Services

Training for LiveMUM 2.0 is completed during the installation of the application at the Client's site. These courses are required as a part of the installation process.

All training will be provided via the web using an online meeting tool such as JoinMe. Trainings will be scheduled by the Deccan Project Manager on a day/time that is convenient for both Deccan and the Client. Each training course may last a maximum of 4 hours in length for up to 6 users.

See the attached document *"Template LiveMUM 2.0 Training Plan"* for additional training details.

3.8 Installation

Deccan will install the LiveMUM 2.0 application as outlined in the Statement of Work only. The installation program will be made available to the Client via FTP and/or shipped via CD/DVD.

Deccan is not responsible for installing or configuring any hardware or other third party software components not outlined in this document.

4. Appendix

4.1 APPENDIX A – CAD data needed by Deccan

To build and update LiveMUM 2.0, Deccan needs certain data from the Client's CAD.

1. **Incident Data**

    a. Deccan needs incident data for the past 2 years. The incident data contains incident-specific information especially:

        i. Incident Number

        ii. Incident Type

        iii. Incident Location

        iv. Incident Date-Time

2. **Unit Activity Data**

    a. The Unit Activity data contains Unit Activity related data especially:

        i. Incident Number

        ii. Unit Status (e.g. Responding)

        iii. Date-Time Stamp

        iv. Vehicle ID

        v. Unit Name

        vi. Unit's Current Station

The Client should provide incident and Unit Activity data for the past 2 years. The Incident and Activity data should be provided as it appears in the Client's CAD without filtering of any fields in delimited ASCII text, DBF or Access (.mdb) format. Excel format cannot be used because of its size limitations and tendency to convert text fields to dates.

Field descriptions for the data should also be provided.

3. **Other CAD data**

    a. In addition to the CAD incident and response data specified above, the Client must provide Deccan with the data in the code tables in Client's CAD or any documents describing the following:

i. All Unit Statuses and their corresponding descriptions (e.g. DISP = Dispatched, RESP = Responding, OS = On Scene etc.) specifically:

1. ID
2. Code
3. Description

b. All CAD Incident Types codes and their corresponding descriptions (e.g. FIB = Fire in Building, FIV = Fire in Vehicle, BRSH = Brush Fire etc.) specifically:

i. ID
ii. Code
iii. Description

c. All Station information, specifically:

i. Station ID
ii. Station Code
iii. Station Name

d. Vehicle Information:

i. ID
ii. Name
iii. Type (Engine, Ladder, Truck, Brush Rig, Chief, Tender, ALS, etc.)
iv. Associated Unit

e. Vehicle Types

i. Code
ii. Description

f. Unit Information

i. ID
ii. Code
iii. Radio Name (If applicable)

iv. Description

v. Capability

vi. Home Station

4.2 APPENDIX B – Map data needed by Client

The Client must provide any available map layers to be used in LiveMUM 2.0. The maps can be provided in ESRI shape file format or ESRI ArcInfo export format or MapInfo tab file format. Deccan also needs the projection system on which the maps are based.

The following is a list of Map layers which can be used in LiveMUM 2.0:

1. **Streets**

    a. This is the most significant map layer that is needed for this implementation, since LiveMUM 2.0 uses the streets file to perform routing. The following data must be provided for each street line:

        i. Street name

        ii. Co-ordinates of starting and ending nodes

        iii. From and to address ranges for the left and right sides of the segment

        iv. Alias street name, if any

        v. One-way info

        vi. Speed limit

        vii. F-level and Z-level, if any

The Client must ensure that the street network provided has good connectivity and very close to the actual street network in THE CLIENT's service area.

2. **Jurisdiction Boundary**

    a. The polygon layer that defines the jurisdiction boundary or the service area boundary.

3. **Fire Dispatch Grids**

    a. This polygon layer is used to build LiveMUM 2.0 response zones.

4. **Fire Stations**

a. A map layer corresponding to the current fire station locations in the Client's jurisdictions and any mutual aid station locations that need to be modeled in LiveMUM 2.0

4.3 APPENDIX C – Providing the data to Deccan

The Client can send the data to Deccan in two ways – via FTP or via mail. Deccan prefers data to be sent via FTP because it is more secure and able to handle larger amounts of data.

Via FTP: (Preferred)
The data can be uploaded to our FTP site.

The Client will be provided with access to our FTP site upon project kick off.

4.4 APPENDIX D – LiveMUM 2.0 Acceptance Testing Document

Introduction

This document will describe the test plans to ensure proper install and functionality of LiveMUM 2.0. The test plans would be performed on the LiveMUM 2.0 installed on the Client workstations. The workstations used for this test purposes can be either test or production systems.

Test Case 1 – LiveMUM 2.0 launches successfully

On the workstation, double click on either the LiveMUM 2.0 shortcut available on desktop or by clicking on MUM.exe available in LiveMUM 2.0 install folder.

LiveMUM 2.0 launches successfully without errors Yes _____ No _____

Test Case 2 – LiveMUM 2.0 Stations, Units and Capabilities Displayed

Launch LiveMUM 2.0 and verify the following:

1.	*Correct capabilities modeled*	Yes _____ No _____
2.	*Correct stations being displayed*	Yes _____ No _____
3.	*Correct units being displayed under each capability*	Yes _____ No _____
4.	*Correct maps being displayed under each capability*	Yes _____ No _____

Test Case 3 – Graphical Display toolbar

For any given capability, all the buttons in the graphical display toolbar should work as follows:

1.		*button allows zooming into an area on the map window.*	Yes _____ No _____
2.		*button allows zooming out of an area on the map window.*	Yes _____ No _____
3.		*button allows panning the map window in any direction.*	Yes _____ No _____
4.		*button allows to switch to the entire map layer.*	Yes _____ No _____
5.		*button allows selecting a station on the map to display the units in that station and their current statuses, in the "Station and Unit Info" pane.*	Yes _____ No _____
6.		*button allows turning the station labels on and off.*	Yes _____ No _____

Test Case 4 – Change ETB in coverage window

Select a given unit under a given capability and modify its ETB in coverage window to 100. Click on "Change ETB". LiveMUM 2.0 should update the coverage map for that capability based on the new ETB.

Change ETB Works Yes _____ No _____

Test Case 5 – Zone and station legends

Launch LiveMUM 2.0. Create a Structure Fire incident or high emergency incident in CAD and dispatch units. LiveMUM 2.0 should display the correct coverage on the maps as shown in the zone legend. The more units you dispatch, the more variation of colors you would see in the coverage.

LiveMUM 2.0 updates coverage as necessary. Yes _____ No _____

Also, you will notice that stations are changing colors according to the station legend shown.

LiveMUM 2.0 updates the station colors as shown in station legend Yes _____ No _____

Test Case 6 – Move-Up Recommendations

Launch LiveMUM 2.0. Create a structure Fire incident or high emergency incident in CAD and dispatch units. Dispatch units till you see holes in coverage in LiveMUM 2.0 (red regions). Depending on the client's configuration, either the recommendation pop-up should appear or recommendation button should turn red for all capabilities with coverage holes, when applicable.

Is a recommendation made for each capability as needed? Yes _____ No _____

Test Case 7 – Recommendation window

Launch LiveMUM 2.0. Create a structure Fire incident or high emergency incident in CAD and dispatch units. Dispatch units till you see holes in coverage in LiveMUM 2.0 (red regions). Depending on the client's configuration, either the recommendation pop-up should appear or recommendation button should turn red for all capabilities with coverage holes, when applicable. Click on each pop-up window or recommendation button to view the recommendation window. On each recommendation window:

Does LiveMUM 2.0 display the from coverage map and to coverage map? Yes _____ No _____

Does LiveMUM 2.0 display the recommendation(s)? Yes _____ No _____

Test Case 8 – Alternate recommendations

Launch LiveMUM 2.0. Create a structure Fire incident or high emergency incident in CAD and dispatch units. Dispatch units till you see holes in coverage in LiveMUM 2.0 (red regions). Depending on the client's configuration, either the recommendation pop-up should appear or recommendation button should turn red for all capabilities with coverage holes, when applicable. Click on each pop-up window or recommendation button to view the recommendation window. On the alternate recommendations, select a unit and station of your choice and click "Evaluate".

LiveMUM 2.0 updates the to coverage map (right map) taking into account the alternate recommendations selected for evaluation? Yes _____ No _____

4.5 APPENDIX E – LiveMUM 2.0 Task Schedule

*NOTE: These task durations are dependent upon availability of Client resources, and are only provided as a general reference. The actual project duration may vary **significantly**, based upon project constraints, timelines, client availability, CAD Vendor support, and other factors.*

	Task / Phase	**Estimated Work Days for each Sub-task**	**Estimated Work Days for Each Task**	**Estimated Work Days from Phase Start date**
1)	**Project Initialization – Phase 1** *(3.3.1)*		**1**	**1**
	1. Project Kick-Off *(1)*	1		
2)	**Getting CAD/MAP data – Phase 1** *(3.3.1)*		**17**	**18**
	Data Requirements Provided to Client *(1)*	1		
	Data Upload to Deccan International *(2)*	14		
	Data Analysis *(3,4)*	2		
3)	**Building of LiveMUM 2.0 SSE – Phase 2** *(3.3.2)*		**24**	**42**
	Data Conversion *(1)*	5		
	Building of ETB Tables and CAD Data *(2, 3)*	3		
	Business Rule Discussions *(4)*	3		
	Building of Station Depths and Unit Files *(5)*	3		
	Implementation of Business Rules *(7)*	8		
	Delivery of LiveMUM 2.0 SSE *(9)*	1		
	Installation and Training of LiveMUM 2.0 SSE (9, 10)	1		
4)	**CAD Testing & Acceptance – Phase 3** *(3.3.3)*		**18**	**60**
	Configuration Changes to Business Rules *(1)*	4		
	CAD Interface Set-Up by CAD Vendor *(2)*	10		
	Initial Synchronization and Tracking Testing *(2)*	1		
	Feedback Provided from Initial Testing *(1,2)*	2		
	Acceptance Testing *(4)*	1		

4.6 APPENDIX F – Hardware and Software Requirements

LiveMUM 2.0 is a web-based application and does not require any complex hardware/software installations prior to LiveMUM 2.0 install.

Given below are recommended specifications for LiveMUM 2.0/WallMap and LiveMUM 2.0 Server to operate.

LiveMUM 2.0

Hardware Requirements

Specification	Minimum
Processor	1 GHz or faster 32-bit (x86) or 64-bit (x64) processor
Memory	1 GB RAM (32-bit) or 2 GB RAM (64-bit)
Disk	16 GB available disk space (32-bit) or 20 GB (64-bit) -- just for the OS, not applications or data files
Video Card	DirectX 9 graphics processor with Windows Display Driver Model (WDDM) 1.0 or higher
Operating System	Windows 7 32-bit or Windows 7 64-bit, Other Windows Versions should work but not recommended

Software Requirements

Specification	Minimum	Optimal
Internet Browser	Microsoft Internet Explorer	Mozilla Firefox or Google Chrome
Microsoft .NET Framework	v4.0.0	v4.5.2 or latest

LiveMUM Server 2.0

Hardware Requirements

(Does not need to be installed on a server OS machine)

Specification	Minimum	Optimal
Processor	Dual Core 2.4 GHz (or better)	Quad Core 3.0 and above
Memory	12 GB RAM	32 GB Ram
Disk	120 GB (50 GB working space free 7200 RPM)	120 GB (50 GB working space free 7200 RPM)
Operating System	Windows 7 64-bit	Windows Server 2010 or later

Software Requirements

Specification	Minimum
Microsoft OLE DB driver	Visual FoxPro
Microsoft .NET Framework	v4.0.30319
Microsoft Visual C++	2012 Redistributable (x86)

Notes

The Internet Information Services (a standard component of Microsoft Windows Operating Systems) will need to be accessed and enabled.

The amount of processing power and available memory required to run LiveMUM Server is dependent in part on the total volume of message traffic that is transmitted across the interface (<1,000,000/day is ideal) and the user-defined amount of logging files created.

The LiveMUM server should not be installed on a Laptop unless the Laptop will be physically connected to the network during operation hours. This is due to the unreliability of wireless connections for a roaming device (machine).

TriTech VisiCAD 4.X is only compatible up to Server 2008/32 bit environment. Inform 5.X is compatible up to Server 2012/64 bit.

ADDENDUM A-2

PROPRIETARY INFORMATION[1]

NUMBER OF TRITECH SOFTWARE LICENSES,
INSTALLATION AND SHIPPING INSTRUCTIONS

Product Name	Unit Price	QTY	List Price	Upgrade Discount	Total Price
Inform CAD Position	$10,000.00	26	$260,000.00	$65,000.00	$195,000.00
Inform CAD Server Software (C - 21-40 Positions)	$35,000.00	1	$35,000.00	$8,750.00	$26,250.00
Inform CAD Browser (B - 41-100 Concurrent Users)	$15,000.00	1	$15,000.00	$0.00	$15,000.00
Inform CAD Routing Server	$18,700.00	1	$18,700.00	$0.00	$18,700.00
Inform CAD Rotation Provider	$10,000.00	1	$10,000.00	$0.00	$10,000.00
Inform CAD the Archive Server Software	$2,500.00	1	$2,500.00	$0.00	$2,500.00
Inform CAD Test or Training System	$0.00	1	$0.00	$0.00	$0.00
Inform CAD The GISLink Utility Position	$5,000.00	1	$5,000.00	$0.00	$5,000.00
NCIC/State Message Switch Software - Inform CAD/Inform Mobile	$50,000.00	1	$50,000.00	$0.00	$50,000.00
NCIC/State Query Position for Inform CAD	$500.00	26	$13,000.00	$0.00	$13,000.00
NCIC/State Message Switch Additional Connection	$7,500.00	1	$7,500.00	$0.00	$7,500.00
			Inform CAD Subtotal		$342,950.00

Product Name	Unit Price	QTY	List Price	Upgrade Discount	Total Price
Inform Mobile Base Position (Site License)	$ 1,200.00	80	$ 96,000.00	$24,000.00	$ 72,000.00
Inform Mobile Base Position with CJIS/NCIC Forms (Site License)	$ 1,500.00	225	$337,500.00	$84,375.00	$253,125.00
Inform Mobile Server Software (D - 251-500 Positions) The Site license has a not to exceed 500 mobile units.	$75,000.00	1	$ 75,000.00	$18,750.00	$ 56,250.00
Inform Me Companion (500 Concurrent)	$ 0.00	1	$ 0.00	$ 0.00	$ 0.00
Inform Mobile Test or Training System	$ 0.00	1	$ 0.00	$ 0.00	$ 0.00
			Inform Mobile Subtotal		$381,375.00

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

PROPRIETARY INFORMATION[1]

INSTALLATION AT DESIGNATED LOCATION AND SHIPPING INSTRUCTIONS

Deliver To:

County of Monterey
Emergency Communications
1322 Natividad Rd.
Salinas, CA 93906

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

ADDENDUM A-3

PROPRIETARY INFORMATION[1]

INTERFACES

Product Name	Unit Price	QTY	List Price	Upgrade Discount	Total Price
Standard ANI/ALI Interface	$9,000.00	1	$9,000.00	$0.00	$9,000.00
Standard EMD Integration	$500.00	3	$1,500.00	$0.00	$1,500.00
Standard Inform CAD to External System Incident Data Transfer Interface	$15,000.00	3	$45,000.00	$0.00	$45,000.00
Inform CAD Protocol	$7,500.00	1	$7,500.00	$0.00	$7,500.00
Inform CAD TeleStaff Interface	$9,500.00	1	$9,500.00	$0.00	$9,500.00
Inform CAD Standard Operating Procedure (SOP)	$7,500.00	1	$7,500.00	$0.00	$7,500.00
Standard Push to Talk Interface (Harris)	$15,000.00	1	$15,000.00	$0.00	$15,000.00
Standard Alpha Numeric Paging Interface	$9,000.00	1	$9,000.00	$0.00	$9,000.00
Standard Station Alert/Printing (Rip and Run) Interface	$30,000.00	1	$30,000.00	$0.00	$30,000.00
			Interfaces Subtotal		$134,000.00

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

ADDENDUM A-4

PROPRIETARY INFORMATION[1]

TRITECH SERVICES, SUPPORT AND MAINTENANCE FEES
AND MISCELLANEOUS

Inform CAD Services

Product Name	Unit Price	QTY	List Price	Total
Custom CAD Mapping Conversion Services (Client supplied data)	$ 20,125.00	1	$ 20,125.00	$ 20,125.00
Base CAD Server Configuration (Includes installation of the Database server, Web server, and Comm server)	$ 3,500.00	1	$ 3,500.00	$ 3,500.00
Browser Server Configuration	$ 1,400.00	1	$ 1,400.00	$ 1,400.00
CAD Archive Server Configuration	$ 2,100.00	1	$ 2,100.00	$ 2,100.00
CAD Business Analysis and Consultation Services	$ 21,000.00	1	$ 21,000.00	$ 21,000.00
CAD Data Conversion Services (Caution Notes, Premises and Historical Data Conversion). This includes up to 2 years (8 quarters) of historical data from a single source. Over 2 years, or multiple data sources will require a custom quote.	$ 40,000.00	1	$ 40,000.00	$ 40,000.00
CAD Position Configuration (up to 5 workstations)	$ 875.00	1	$ 875.00	$ 875.00
CAD System Configuration & DOLF (C - per DOLF Session, 21-40 Positions)	$ 49,000.00	1	$ 49,000.00	$ 49,000.00
CAD System Orientation/Analysis (C - 21-40 Positions)	$ 21,000.00	1	$ 21,000.00	$ 21,000.00
NetClock Configuration	$ 875.00	1	$ 875.00	$ 875.00
Onsite Go Live Support Services for CAD and Mobile (1 person - 2 days, 24 hour coverage)	$ 8,500.00	1	$ 8,500.00	$ 8,500.00
Onsite Go Live Support Services for CAD and Mobile (2 people - 3 days, 24 hour coverage)	$ 28,000.00	1	$ 28,000.00	$ 28,000.00
CAD Test/Training Server Configuration	$ 2,800.00	1	$ 2,800.00	$ 2,800.00
Test and/or Training Configuration Service: Unit Swap	$ 875.00	1	$ 875.00	$ 875.00
Unit Swap Server Configuration	$ 875.00	1	$ 875.00	$ 875.00
Weekend/After Hours Training - per day	$ 7,700.00	1	$ 7,700.00	$ 7,700.00
GISLink Training Course (3 day on-site)	$ 4,200.00	1	$ 4,200.00	$ 4,200.00
CAD Follow-up Training Course (Per class - 3-days, up to 10 students)	$ 4,200.00	1	$ 4,200.00	$ 4,200.00

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

PROPRIETARY INFORMATION[1]

CAD Train-The-Trainer Course (Pre-requisite User Training - Per class 3-day class up to 10 students)	$ 4,200.00	1	$ 4,200.00	$ 4,200.00
CAD User Training Course (Per class - 4-day class up to 10 students)	$ 5,600.00	4	$ 22,400.00	$ 22,400.00
CAD Supervisor Training (Five days, up to 10 students)	$ 7,000.00	2	$ 14,000.00	$ 14,000.00
CAD System Administration Training Course (Per student - 4-5 days at TriTech)	$ 1,450.00	2	$ 2,900.00	$ 2,900.00
		Inform CAD Services Subtotal		$ 260,525.00

Product Name	Unit Price	QTY	List Price	Total Price
Custom Mobile Mapping Conversion Services (Client supplied data)	$ 8,400.00	1	$ 8,400.00	$ 8,400.00
Mobile Interface Server Configuration (per Interface Server)	$ 1,750.00	2	$ 3,500.00	$ 3,500.00
Mobile Position Configuration (5 units)	$ 1,750.00	1	$ 1,750.00	$ 1,750.00
Mobile Server Configuration (per Server)	$ 1,750.00	2	$ 3,500.00	$ 3,500.00
Mobile System Configuration and BA services (C - 251-500 Licenses)	$ 35,000.00	1	$ 35,000.00	$ 35,000.00
Inform Me Installation and Training Services	$ 1,400.00	1	$ 1,400.00	$ 1,400.00
Mobile Administration Training Course (Per class - 1-day up to 3 students)	$ 1,800.00	1	$ 1,800.00	$ 1,800.00
Mobile Train-The-Trainer (Per class - 1-day up to 8 students) 1 Day	$ 1,800.00	7	$ 12,600.00	$ 12,600.00
		Inform Mobile Services Subtotal		$ 67,950.00

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

PROPRIETARY INFORMATION[1]

Product Name	Unit Price	QTY	List Price	Total Price
TRITECH.COM IQ 1/2 Day Admin Training (Remote)	$ 700.00	1	$ 700.00	$ 700.00
TRITECH.COM IQ 1/2 Day End User Training (Remote)	$ 700.00	1	$ 700.00	$ 700.00
TRITECH.COM IQ ANALYTICS 1 Day Dashboard End User Training (Remote)	$ 1,400.00	1	$ 1,,400.00	$ 1,400.00
TRITECH.COM IQ ANALYTICS 1/2 Day Reporting End User Training (Remote)	$ 700.00	1	$ 700.00	$ 700.00
TRITECH.COM IQ ANALYTICS Set Up Services (Remote)	$ 700.00	1	$ 700.00	$ 700.00
TRITECH.COM IQ Setup and Conversion Services (Up to 5 years for TT Products)	$ 1,100.00	1	$ 1,100.00	$ 1,100.00
				$ 5,300.00

Recurring Fees Year 1*

Product Name	Unit Price	QTY	List Price	Upgrade Discount	Total Price
TRITECH.COM IQ ANALYTICS 5 Concurrent User Bundle One Year Subscription	$ 2,500.00	2	$ 5,000.00	$ 0.00	$ 5,000.00
TRITECH.COM IQ Search (B - 11-40 Concurrent Users) One Year Subscription	$ 4,800.00	1	$ 4,800.00	$ 0.00	$ 4,800.00
TRITECH.COM Data Vault Disaster Recovery Option 50GB Annual Subscription	$ 2,950.00	1	$ 2,950.00	$ 0.00	$ 2,950.00
			TriTech.com Subscription fees year 1 Subtotal		$12,750.00

*Beginning with year 2, recurring subscription fees will be invoiced at the time of annual Software Support renewal, and prorated if applicable, in order to provide a single renewal term for Software Support and Subscription fees.

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

PROPRIETARY INFORMATION[1]

Annual Software Support Year 1**

Product Name	Support Type	Total Price
Inform CAD Disaster Recovery System Maintenance (B - 6-20 Users)		$ 1,980.00
Inform CAD Browser (B - 41-100 Concurrent Users)	24 x 7	$ 3,300.00
Inform CAD Position	24 x 7	$ 57,200.00
Inform CAD Protocol	24 x 7	$ 1,650.00
Inform CAD Rotation Provider	24 x 7	$ 2,200.00
Inform CAD Routing Server	24 x 7	$ 4,114.00
Inform CAD Server Software (C - 21-40 Positions)	24 x 7	$ 7,700.00
Inform CAD Standard Operating Procedure (SOP)	24 x 7	$ 1,650.00
Inform CAD the Archive Server Software	24 x 7	$ 550.00
Inform CAD The GISLink Utility Position	24 x 7	$ 1,100.00
NCIC/State Message Switch Additional Connection	24 x 7	$ 1,650.00
NCIC/State Message Switch Software - Inform CAD/Inform Mobile	24 x 7	$ 11,000.00
NCIC/State Query Position for Inform CAD	24 x 7	$ 2,860.00
Standard Alpha Numeric Paging Interface	24 x 7	$ 1,980.00
Standard ANI/ALI Interface	24 x 7	$ 1,980.00
Standard Deccan Commit (MUM) Integration	24 x 7	$ 3,300.00
Standard EMD Integration	24 x 7	$ 330.00
Standard Inform CAD to External System Incident Data Transfer Interface	24 x 7	$ 9,900.00
Standard Push to Talk Interface (Harris)	24 x 7	$ 3,300.00
Standard Station Alert/Printing (Rip and Run) Interface	24 x 7	$ 6,600.00
Inform Me Companion (D - 251-500 Devices) Maintenance 24x7		$ 33,000.00
Inform Mobile Mapping Annual Support		$ 7,625.00
Inform Mobile Test or Training System Maintenance		$ 2,090.00
Inform Mobile Base Position	24 x 7	$ 21,120.00
Inform Mobile Base Position with CJIS/NCIC Forms	24 x 7	$ 74,250.00
Inform Mobile Server Software (D - 251-500 Positions)	24 x 7	$ 16,500.00
Annual Software Support Fees (Year 1) Total		**$ 278,929.00**
Annual Software Support Fees (Year 1) Discount		**($278,929.00)**

**The Software Support fee for the initial term of TriTech annual Software Support, beginning at Go Live and ending 12 (twelve) months thereafter, is included as a line item in the Contract Price of this Agreement. Thereafter, annual Software Support fees will be invoiced in accordance with the Software Support Agreement entered into between TriTech and Client coincident with this Agreement.

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

ADDENDUM A-4 (Continued)

PROPRIETARY INFORMATION[1]

System Services, Travel and Performance Bond Fee

Escrow Fees (Annual –Year 1)	$850.00	1	$850.00	$850.00
TriTech Software Source Code Escrow Set Up	$250.00	1	$250.00	$250.00
Performance Bond	$ 82,644.00	1	$ 82,644.00	$ 82,464.00
System Integration Fee	$ 109,405.20	1	$ 109,405.20	$ 109,992.00
Project Management Fee	$ 301,306.88	1	$ 301,306.88	$ 301,306.88
Fixed Fee Travel Expenses	$ 66,527.50	1	$ 66,527.50	$ 66,527.50
				$561,390.38

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

ADDENDUM A-5

PROPRIETARY INFORMATION[1]

EQUIPMENT AND SYSTEM SOFTWARE

CAD/MOBILE PRIMARY/PROTECTED SITE (Production Environment)

Application Virtualization Server Hosts

3 ea Cisco UCS C220 M4S Server, with: $ 91,860.00
- Two (2) 2.60 GHz E5-2660 v3/105W 10C/25MB Cache (UCS-CPU-E52650B)
- 128 GB RAM (Eight 16GB DDR4-2133-MHz; UCS-MR-1X162RZ-A)
- Cisco 12G SAS Modular Raid Controller
- Two (2) 32GB SD Card for UCS servers (UCS-SD-32G=)
- Two (2) Qlogic Ethernet Converged Network Adapter (UCSC-PCIE-Q8362)
- Two (2) Cisco 3 Meter 10GBASE-CU SFP+ Cable (SFP-H10GB-CU3M)
- Redundant (2) 650W AC Hot-Plug Power Supply (UCSC-PSU-650W)
- Three (3) Year 24X7X4 Cisco SMARTNET Warranty (CON-SNTP-C220M4S)
- Windows Server 2012 R2 Datacenter 2-Proc Government 3-Year SA (P71-07275)
- NO Windows Server 2012 Client Access Licenses are Included

Network Switches

2 ea Cisco Nexus 9372 48-Port Layer 3 Switch, with: $ 55,512.00
- Chasis with 48-10GBase-T Slots and 6-40G QSFP+ Uplink Slots (N9K-C9372TX)
- Redundant Components, I/O Modules and Cables
- Three (3) Year Cisco 24X7X4 SmartNet Warranty (CON-3SNTP-9372TX)

Storage Area Network Array

1 ea EMC VNXe3200 Storage Area Network, with: $ 33,444.00
- EMC Disk Processor Enclosure (DPE) w/6x600GB 15K(V32D12AN2PM6)
- One (1) EMC 2U DAE with 12 x 3.5inch drive slots (V32-DAE-12)
- Three (3) VNXe 3200 100GB FAST CACHE 12X3.5 (FLV6PS6F-100)
- Six (6) Additional VNXe 3200 600GB 15K SAS 12X3.5 (V6-PS15-600)
- Nine (9) VNXe 3200 2TB NL SAS 12X3.5 (V6-PS07-020)
- Two (2) C13 PWRCRD W/ NEMA 5-15 PLUGS 125V 10A (V32-PWR-12)
- EMC VNXE License Solution PSNT AS LAC (VNXE-LS-SN)
- EMC VNXE3200 Base Dual SP Ecosystem Software (456-104-905)
- EMC VNXE3200 Fast Suite Software (456-104-909)
- Seventeen (17) EMC VNXE OE PER TB HI CAP FOR VNXe3200 (VNXECAPTB)
- Three (3) VNXE OE PER TB PERFOR FOR VNXe3200 (VNXEPERFTB)
- Three (3) Years EMC Premium Hardware Support (WU-PREHWE-02 x 3)
- Three (3) Years EMC Premium Software Support (M-PRESWE-002 x 3)

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

PROPRIETARY INFORMATION[1]

Enterprise Components		
1 ea	System Virtualization Software, with: • VMware vSphere with Operations Management Enterprise Acceleration Kit - 6 Processor (VS5-VENT-AK-C) • Three (3) Years Production Support vSphere with Operations Management Enterprise Acceleration Kit - 6 Processor (VS5-VENT-AK-P-SSS-C) • VMware vCenter Server 5 Standard Edition Unlimited Hosts (VCS5-STD-C) • Three (3) Year x2 vCenter Server Production Support (VCS5-STD-3P-SSS-C)	$ 45,743.00
3 ea	Production Relational Database Management System, with: • Two (2) SQL Server 2014 Std 2-Core Govt 3-Year SA (per database; 7NQ-00287)	$ 25,722.00
25 ea	Test/Training Relational Database Management System, with: • SQL Server 2014 Developer Edition - 1 User (E32-01185)	$ 975.00
2 ea	Serial Terminal Server, with: • Digi PortServer TS 4 Device Server (70002045) • Four (4) Digi 76000693 Network Cable Kit (4 per device server)	$ 1,384.00
1 ea	Miscellaneous Hardware and Expendables for Installation	$ 2,250.00
Installation and Configuration Services		
1 ea	Installation and Configuration at Primary Site	$ 60,550.00
Shipping Primary Site		
1 ea	Shipping (charged at actual cost)	$ 1,500.00
	Total Primary/Protected Site (Production Environment) Hardware/System Software	**$ 318,940.00**

		Cost
Production Site		
Dispatch Workstation PCs		
24 ea	Lenovo ThinkCentre M93p Desktop Computer (10A7003QUS), with: • Mini-tower Case - Business Black • Intel Core i5-4590 3.30 GHz processor • 4 GB DDR3 SDRAM RAM • 500 GB HDD • Integrated Gigabit LAN • DVD-Writer DVD-RAM/±R/±RW • Windows 8.1 Pro 64-bit downgradable to Windows 7 Professional	$ 17,424.00
24 ea	Lenovo Service for M93p - 3 Year Upgrade - Warranty - Next Business Day - On-site - Maintenance - Parts & Labor - Physical Service (5WS0D80925)	$ 1,488.00
24 ea	Lenovo 4GB PC3-12800 DDR3-1600 Memory (0A65729)	$ 1,488.00
24 ea	Lenovo Ultraslim Keyboard and Mouse - USB Wireless RF Keyboard - USB Wireless RF Mouse (0A34032)	$ 1,152.00
48 ea	Lenovo Quadro NVS 315 Graphic Card - 1 GB - PCI Express 2.0 x16 (4X60F17422)	$ 5,520.00
72 ea	Lenovo ThinkVision E2323 23" LED LCD Monitor - 16:9 with 3-Year Limited Warranty (60B0HAR1US)	$ 11,376.00

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

PROPRIETARY INFORMATION[1]

Shipping Primary Site

24 ea	Shipping (Estimate - charged at actual cost)	$ 1,392.00
	Total Primary/Protected Site Hardware/Commercial Software	**$ 39,840.00**
1	CAD Workstation Installation Services	$ 7,860.00

Equipment and Third Party OS Tax		1	$27,213.49

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

NOTE: Additional Client responsibilities regarding licensing requirements for System Software for continued maintenance, including system expansion, are provided in the System Planning Document.

ADDENDUM A-6

PROPRIETARY INFORMATION[1]

SUBCONTRACTOR SOFTWARE, HARDWARE AND SERVICES

Product Name	Unit Cost	QTY	Total
Deccan LiveMUM	$ 225,240.00	1	$ 225,240.00
Standard Deccan Commit (MUM) Integration	$ 15,000.00	1	$ 15,000.00
			$240,240.00

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

ADDENDUM A-7

PROPRIETARY INFORMATION[1]

PAYMENT TERMS

	Payment Milestones	
8.15%	Project Total due upon Contract Execution - Project Initiation Fee (Source Code Escrow, Performance Bond, System Integration Fee)	$ 195,627.21
15.62%	Project Total due at Notice to Proceed for Hardware and System Software Procurement and Delivery	$ 374,932.15
17.9%	Project Total due at Delivery of core Inform CAD and Inform Mobile Software	$ 429,659.76
8.25%	Project Total due at Completion of Inform CAD FAT	$ 198,027.54
6.15%	Project Total due at Completion of Inform Mobile FAT	$ 147,620.53
16.6%	Project Total due at Completion of Inform CAD Pre-Go Live End User Training	$ 398,455.42
16.6%	Project Total due at Inform CAD and Inform Mobile Go Live	$ 398,455.42
10.73%	Due at Final System Acceptance	$ 257,555.82
	Project Implementation Total	$ 2,400,333.87

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

ADDENDUM A-8

PROPRIETARY INFORMATION[1]

CONTRACT PRICE SUMMARY[2]

Contract Price Summary

TriTech Software	$ 858,325.00
TriTech Services	$ 746,173.88
Recurring Subscription Fees Year 1	$ 12,750.00
Hardware and Third Party System Software (including tax)	$ 393,853.49
Subcontractor Software	$ 240,240.00
TriTech Performance Bond Fee	$ 82,464.00
Travel - Fixed Fee	$ 66,527.50
Project Implementation Total	$ 2,400,333.87

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

[2] **Shipping costs, travel costs and any applicable sales, use value added or similar taxes shall be paid by Client. Unless such costs or taxes are listed as a line item herein, they shall be invoiced separately, payable on receipt of the invoice therefor.**

ADDENDUM A-9

PROPRIETARY INFORMATION[1]

SYSTEM PLANNING DOCUMENT

Attached

[1] **THESE ADDENDA CONTAIN TRADE SECRET AND OTHER PROPRIETARY INFORMATION OF TRITECH SOFTWARE SYSTEMS. THE INFORMATION CONTAINED HEREIN SHALL NOT BE COPIED OR DISCLOSED TO THIRD PARTIES OR USED FOR ANY PURPOSE NOT DIRECTLY RELATED TO PERFORMANCE OF THIS AGREEMENT WITHOUT THE WRITTEN CONSENT OF AN OFFICER OF TRITECH SOFTWARE SYSTEMS.**

TRITECH
SOFTWARE SYSTEMS

SYSTEM PLANNING GUIDE

Inform CAD and Mobile

Version 5.7

9477 Waples Street, Suite 100
San Diego, CA 92121
Main: (858) 799-7000
Technical Services: (800) 987-0911

Version 5.7.0.0

Published for TriTech Software Systems

Disclaimer

The information in this document is subject to change without notice. This document is provided under license in connection with an update version of the software named on the front page hereof. The software version to which this document relates is subject to the License and other terms and conditions of the contract under which the software was originally provided. This document is part of the TriTech Documentation referred to in that contract and is likewise subject to the terms and conditions thereof, including, without limitation, the License and Confidentiality terms. THIS DOCUMENT AND THE SOFTWARE VERSION PROVIDED HEREWITH, IS PROVIDED AS IS, WITHOUT WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED. Software errors (as that term is defined and used in said contract) encountered in said software will be corrected pursuant to the terms and conditions of the Software Support Agreement currently in force with respect to said software and your sole remedy with respect to this software update version and this document is to receive the software support services provided under said Software Support Agreement. Companies, names, and information used in screens and sample output are fictitious unless otherwise noted.

Trademarks

Microsoft, Windows, Microsoft Access, Microsoft Excel, Microsoft Exchange, and Microsoft Word are either registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.

Inform 911, Inform Mobile, Inform Browser, and GISLink are trademarks of TriTech Software Systems.

ArcGIS, ArcMap and ArcCatalog are registered trademarks of Environmental Systems Research Institute in the United States and other countries.

Total Response and CACH are registered trademarks of PowerPhone Corp.

ProQA and ProQA Paramount are registered trademarks of Priority Dispatch Corp.

LOWCODE is a registered trademark of Priority Solutions, Inc.

911Advisor is a registered trademark of Smart Horizons under license of APCO.

TABLE OF CONTENTS

CHAPTER 1 - OVERVIEW AND FORECAST

1. OVERVIEW

This document covers a diverse set of topics ranging from product architecture information, approval for Microsoft platforms, security and support communications, system component hardware and third party software and system restart checklists. This is intended as the primary reference point for system administrators and system planners. This information includes previously released information from a variety of documents including the Site Preparation Guide and Support Connectivity Guide and the Platform Planning Document.

In many cases, more detailed information is listed in product documentation and release notes and may change from version to version.

This document will be updated periodically and made available to all customers.

This document supersedes all previous versions of the Site Preparation Guide and Support Connectivity Guide, Site Preparation Guide or Site Prep Guide issued by TriTech. These documents are referenced by TriTech license agreements. This document also supersedes all previous versions of the Platform Planning Document.

2. INFORM CAD/INFORM ARCHITECTURE OVERVIEW (5.3 AND LATER)

2.1 INFORM CAD OVERVIEW

An Inform CAD system operates across multiple software tiers and server-based or workstation-based environments. Physically, these are deployed across the following components:

- Inform CAD Database Server
- Inform CAD Business Servers
- Inform CAD Interface Servers
- Inform CAD Workstations

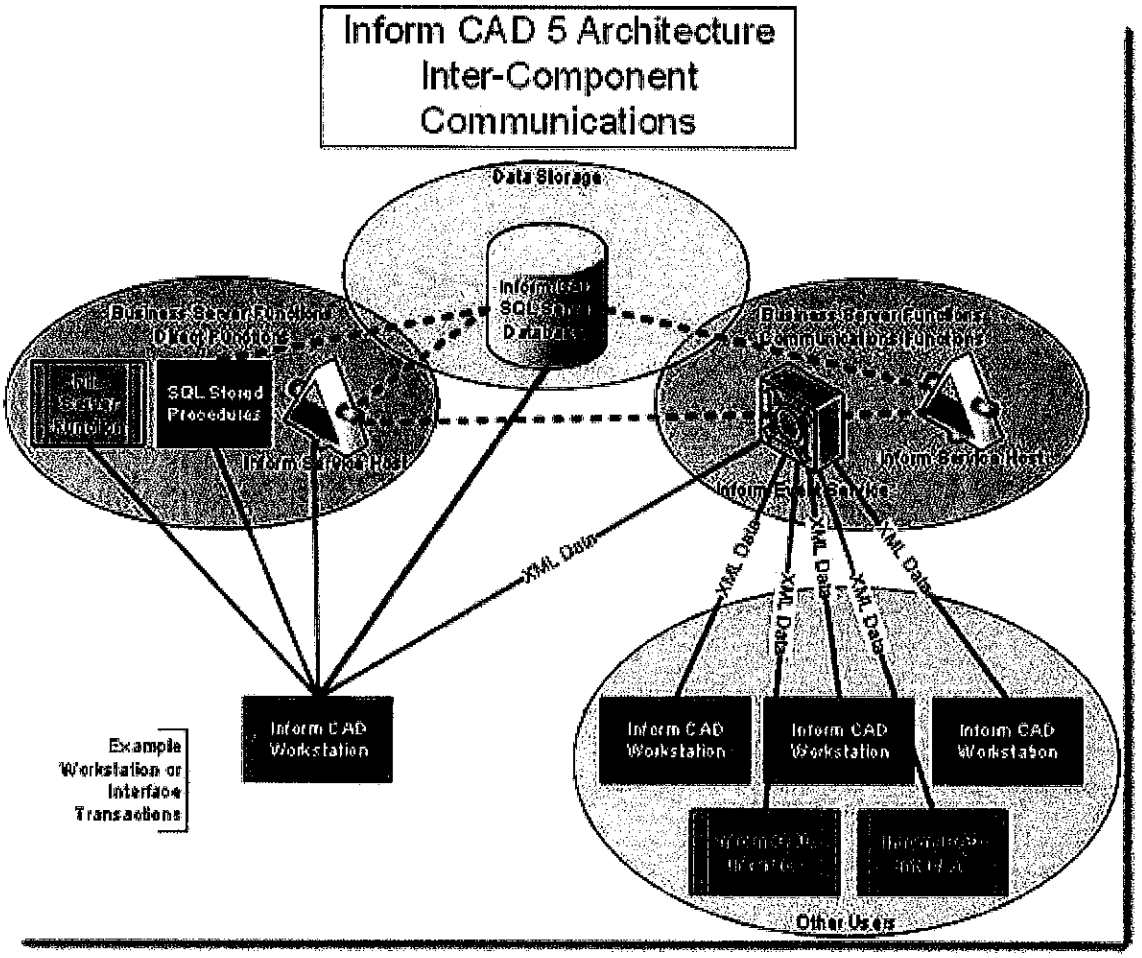
The Inform CAD System operates through the interaction of several applications, software services and database components that are spread across a multi-tier architecture. As this section will explain, these applications, services and components can be distributed in different ways across a mix of computers.

In its simplest terms, the following core principles explain the architecture of Inform CAD:

- Database Server - Generally, data is stored in the databases housed on the Production Database Server. This includes incident, activity and setup information. Workstations, interfaces and subsystems such as Mobile and Browser update data into these databases either directly or through an intermediate business server. The Database Server also performs the file server function via the Inform CAD share and also performs some functional transactions through stored procedures activated in support of workstation, business server or interface server transactions.
  - Data stored outside of Inform CAD databases include routing data and other mapping layers stored in files on the Inform CAD share (server and workstation) and some setup data on the Inform Mobile Server.

- Inform CAD Business Servers – Inform CAD Business Servers perform activities in support of the functions executed by workstations, interfaces or other business servers. These can generally be divided into two categories – direct functions or coordination/communications functions.
  - Direct functions support a particular activity executed by a user, such as providing information for an Inform CAD Recall Window (Web Server), retrieving or updating information into the databases from Browser users (Web Server), providing driving directions to Inform CAD or Inform Mobile users (Web Server) or processing a user message (Event Service).
  - Coordination/communication functions provide information that allows the collective group of users to be presented information in a consistent format and in "sync" with the actions of others, such as inter-process communications to keep workstations and interfaces in sync (Inform CAD Communication Service or Event Service), timers and warnings and other scheduled notifications and actions (CAD Monitor, the Inform CAD Communication Event Service, or Inform Database Event Service) or transmitting messages across and between systems (multiple server based components (Communication Event Service, interface messaging components and eventually the Inform Event Service).
- Inform CAD Interface Servers – Inform CAD Interface applications (and eventually services) provide automated functions that execute selected CAD actions based upon interactions with external systems. The interface functions either import data from an external source (911, justice databases, alarm systems and the like), export data to an external source (RMS, paging, station alerting and printing systems and the like), or perform both import and export functions (CAD to CAD, mobile systems and the like).

- Workstation Software – In addition to the user interface for the system, workstation software for CAD and Mobile include software components that perform system processing and manage data to and from the computer. Workstations utilize updates from Business Servers and the Database Server in order to maintain operational data on the local workstation in order to allow the user and the workstation to act upon current system data. As previously noted, updates based upon other user actions are processed through the actions of Business Servers.



Changes in technology including hardware speed and the approved use of virtualization allow for a reduced number of servers for core system components. This document will present recommended deployment plans that may be very different than previous recommendations or your actual system layout. This document will provide recommendations that leverage high powered multi-core processors and virtualization. Customers may continue deployments in a manner that utilizes standard server configurations.

This section also explains a phased series of architecture changes across Inform CAD's two versions –, 4.x and 5,x. It is vital that customer system administrators understand these changes as the most critical server based components of Inform CAD are being updated or replaced by new components. Therefore, the process to maintain, support and restart Inform CAD server components will substantially change between 4.x and 5.x.

Operation of an Inform CAD system requires:

1. a functioning Database Server
2. a working group of business applications operating across one or more servers
3. one or more workstations

4. A functioning Windows Active Directory domain.
5. A functioning Domain Naming Service (DNS).

The core changes in 5.x are focused upon replacing the majority of the business server applications that support Inform CAD.

Note: The following version specific overview includes information on components approved for virtualization. Virtualization of components is described in greater detail in Section 18.

2.1.1 INFORM CAD DATABASE SERVER OVERVIEW

The Production (live) Database Server operates as a file server and a data repository for both setup and operational data. The file server function serves as a file repository for workstations and interfaces; files are synchronized at the launch of workstation and interface applications in order to ensure that the latest files are being used. This facilitates initial installation, upgrades and updating of data stored in file formats (routing files, shape files and the like). Workstations and interfaces also synchronize their time with the Database Server (refer to Section 6 for additional information).

SQL Server provides data storage in the form of six (6) databases (4.5 and later) as well as server-based architecture components in the form of stored procedures. Examples of server-based functions include timers and warnings as managed by the CAD Monitor function in the form of stored procedures.

Note: Stored procedures installed by TriTech are a form of TriTech software code and are subject to the same licensing protections described under the source code provisions of the TriTech license agreement. A customer shall not alter these stored procedures. Non-TriTech developed stored procedures or triggers are not recommended to be utilized on the Production Database Server as these can introduce problems including, but not limited to, performance problems and application problems.

Inform CAD 5.7 includes one component that has been designed to operate on the Production Database Server – the Inform Event Service. Inform CAD 5.7 also includes VisiNet Service in Services windows service that can be hosted on one or more Inform CAD Business Servers. VisiNet Service in Services windows service executes and manages one or more service features for Inform CAD.

In its current design, Inform CAD requires a functioning Production Database Server in order for workstations to operate. Therefore, the Production Database Server is recommended to operate on a fault-tolerant server.

In lieu of full Fault-Tolerance other high availability technologies can be utilized such as VMWare (High Availability (HA), Fault Tolerance (FT) and Site Recovery Manager (SRM) or other approved hypervisor technologies. Additionally, Arcserve is a TriTech approved solution for disaster recovery (DR) and Hot Standby (HSB) to replicate databases and provide partially automated failover.

2.1.2 INFORM CAD 5.7 COMPONENT OVERVIEW

Since Inform CAD 5.3 the functionality of TCP socket-based Inform CAD Communication Service was replaced with WCF (Windows Communication Foundation) -based Inform Event Service. This is a mission critical component for the system.

Since Inform CAD 5.3 the majority of server-based business functionalities such as Inform Communication Event Service (for CAD Monitor and Messaging), TriTech Web Services (like Driving Directions Web Service, and Document Web Service, etc.) are consolidated into service features hosted inside one or more VisiNet Service in Services windows services. Each hosted service feature (with the exception of Logging Service) can be configured through Inform Configuration Utility to run within one of the concurrently running VisiNet Service in Services windows services on-demand.

- **Inform 5.7 Workstation/Interface Prerequisite Changes** – New versions of MSXML and .net Framework will be utilized with Inform 5.7 workstations and interface applications. Carefully review the release notes and utilize the version specific prerequisite CD. Refer to Technical Advisory - GA08-020 - Inform CAD Prerequisite Installer.
- Inform CAD, since 4.5 and continuing with 5.7, sends error/debug/instrumentation log entries from workstations and servers to the Logging Service through MSMQ (Microsoft Message Queue). This provides asynchronous logging functionality for all Inform CAD applications, comparing to the legacy file-based logging. Logging Service collects and bulk insert all log entries into the Log database which can be queried for troubleshooting and reporting purposes. File-based logging is kept as an additional option which is turned off by default.

2.1.3 OTHER SYSTEM COMPONENTS

Optional Business Servers (Citrix servers, Reporting Servers, Test/Training Servers, and the like) and Interface applications (NCIC/State Message Server, Paging, Station Alerting, and the like) are deployed based upon the operational needs of the customer. These are described in greater detail later in this document.

An effective functioning Windows network is essential for optimal operation of an Inform CAD system. The components described in this document rely upon components such as domain controllers, DNS servers, properly functioning network switches, and properly configured Windows security settings. This document addresses these topics in order to prepare the customer's system administrator to effectively support their system.

Note: The hardware recommendations within this document are provided based on TriTech's internal testing of the Inform CAD software. Performance on customer systems may vary from system to system, depending on the site's call volume, number of interfaces, network configuration and overall system complexity.

Customers routinely inquire about changes in hardware requirements between versions. TriTech's internal test systems are periodically refreshed with new hardware. This makes it difficult for TriTech to predict performance on older workstations and servers. TriTech's experience with upgrades in the 5.7 track has been that if the customer's existing equipment provides acceptable performance for Inform CAD, the next major version upgrade is not likely to significantly change performance unless the customer elects to activate new functionality or implements some other significant change (expanded workload, workstations, interfaces or OS/DB change). Nevertheless, TriTech will provide recommendations based upon the equipment with which TriTech tests.

Note: *Version specific requirements for Operating System, Database and supporting software (MDAC, MSXML and the like) are hard requirements and must be met for an upgrade.*

2.2 OTHER NETWORK AND SERVER TECHNOLOGIES

TriTech has approved the following technologies for use with Inform CAD:

1. Network Speed based on number of workstations and potential incident/AVL/Mail Volumes. If a customer satisfies ALL the following criteria, then 100MB network is sufficient

a. Less than 16 Inform CAD workstations.
b. On average, less than 600 incidents per day.
c. On average, less than 100 on-duty units.
d. On average, less than 3000 mails per day.
e. GIS data (Streets network and map display files) on Q:\ does not exceed 500MB.
f. On average, attachments are less than 4MB and no streaming media is used.

For everything else, the customer should be on a 1GB network.

2. Blade servers
3. Storage area networks (SAN) – Customers are cautioned that some forms of SAN do not provide the high speed connectivity needed for the load that some Inform CAD systems operate under. SANs used with Inform CAD should have a direct connection to the Production Database Server through fiber or similar connection.
4. Terminal port server – Many recent model servers do not have serial ports. Some external systems communicate to the CAD through a serial connection including many 911 systems, paging systems and station alerting systems. A terminal port server is a network based device that provides a virtual serial port that is translated to IP that can be configured to be accessed from an interface server.
5. Microsoft Windows Server Update Services - Microsoft Windows Server Update Services (WSUS) allows system administrators to deploy Microsoft product updates.
6. Approval for Citrix software, disaster recovery software and virtualization software is described in greater detail in Sections 12 and 18.

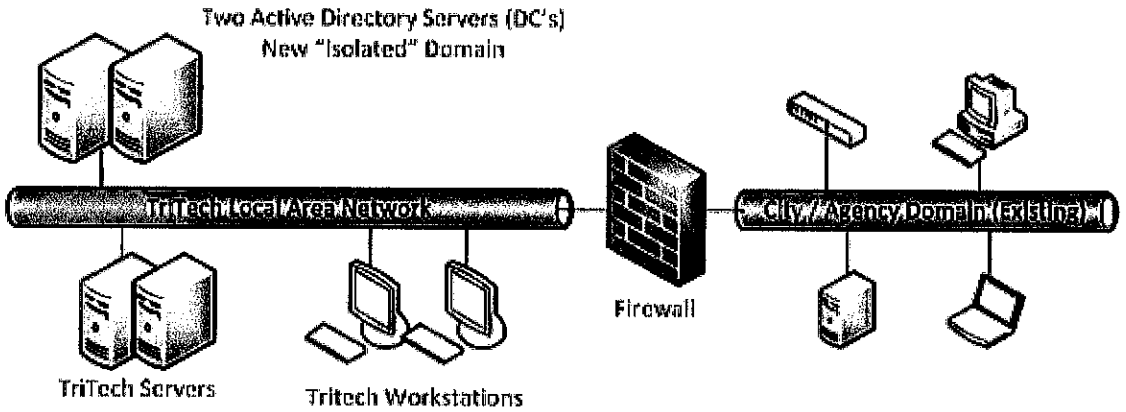
CHAPTER 2 – NETWORKING, SECURITY, AND SUPPORT CONNECTIVITY

3. NETWORKING AND SECURITY ACCESS FOR INFORM CAD/INFORM SYSTEMS

3.1 INFORM CAD AND ACTIVE DIRECTORY

The server and workstation-based components of a TriTech system rely upon an effectively functioning Windows-based network. TriTech strongly recommends that Inform CAD systems be implemented on an isolated network and not to attach the CAD domain to the customer's existing Active Directory infrastructure.

Recommended Example:



TriTech's network recommendations are as follows:

- **Group Policies** - Newly deployed Group Policies from the WAN side Active Directory can interfere with Inform CAD/Inform application(s).

  TriTech has identified significant problems with TriTech applications, including Inform CAD, at customer sites due to a Group Policy that was applied. Group Policy related issues may sometimes be difficult to identify and troubleshoot.
- **Organizational Unit** - If the CAD system is part of an existing Active Directory, all the CAD users/groups and computers should be moved to a separate Organizational Unit (OU). 'Block Policy inheritance' should then be enabled on that OU.
- **Firewalls** - TriTech recommends separating the CAD network from the rest of the WAN and using firewall(s) between the CAD network and the WAN.
- **Security Patches** - TriTech cannot always guarantee that the latest operating system service packs and security patches will be compatible with TriTech applications. Therefore, systems running Inform CAD may become vulnerable and if they are art of an existing Active Directory infrastructure/network, exposed to possibility of being affected by a virus or an Internet worm.
- **Static IP Addresses** - Based upon problems experienced at customer sites, TriTech strongly recommends the use of static IP addresses for an Inform CAD System.

- **NIC Cards** – NIC cards should not be set to "auto"; they should be set to the highest matching speed applicable for the network and set to "full duplex."

Due to the mission critical nature of CAD, TriTech strongly recommends an isolated network.

While some TriTech customers have implemented their Inform CAD system as part of a broader network infrastructure, most of these customers have experienced problems secondary to outages and changes that had an unexpected and undesirable impact on the CAD system.

TriTech recommends that two (2) active directory servers/domain controllers (DC) be deployed on the Inform CAD network for redundancy. Both DC's should be running on servers with RAID 1 or RAID 5 disk configurations. Both DC's should be Global Catalogs, per Microsoft's "best practices" recommendation.

- **DNS** - TriTech recommends that the CAD system have its own DNS servers for name resolution and not rely upon a shared server used by the broader City network. DNS should be installed on both domain controller servers.
- **DHCP** – While TriTech does not recommend the use of dynamic IP addresses, if DHCP is utilized, each DC should have its own scope.

3.2 SERVER/WORKSTATION PERMISSIONS

Windows user accounts used to log in to servers and workstations should not be the same accounts utilized for the Inform Database Server or Inform Business Servers that maintain running applications if account lockouts are enforced due to password retries or other user-related security. Accounts should be specific to an individual or group of machines and not accessible for systems outside of the Inform CAD system. (Email, Web Sites, Other agency resources).

The Inform CAD and Inform Systems have been developed to operate within a defined framework of network security access. The following are the minimum standards.

3.2.1 SUPPORT AND INSTALLATION ACCOUNT

TriTech requires a domain account that is also a local administrator in order to install, upgrade and support the overall system. This account is typically named "TriTech". This account should be separate from the account used below for the Server Based Applications.

3.2.2 INFORM CAD DATABASE SERVER

TriTech requires a domain account that is also a local administrator (same as the support account) in order to install, upgrade and support the Inform CAD Database Server. TriTech recommends a separate domain account. If necessary, the domain account can be the same account used below for the Server Based Applications.

TriTech requires access to the SQL Server (TCP port 1433). The System Administrator (SA) account for Microsoft SQL Server is required by TriTech for installation, support and upgrades.

3.2.3 INFORM CAD AND INFORM INTERFACE AND BUSINESS SERVERS

There are two (2) types of network accounts needed for these types of servers:

- Services - TriTech requires a domain account that is also a local administrator for components within Inform CAD and Inform systems that operate as services. Examples include the VisiNet Service in Services windows service. This is account typically named "serviceacct".
- Server Based Applications - TriTech requires a domain account that is also a local administrator (the same as the support account, but separate from the service account) in order to operate server based console applications, such as Interface Applications and Mobile Server. This account is typically named "TriTech".

As noted previously, the account used for installations, upgrades and support can be the same account used for the Server Based Applications or it can be a separate account.

3.2.4 DISASTER RECOVERY SERVER ACCOUNTS

TriTech requires a user account with Domain Administrative permissions to run the Arcserve Engine service which is installed on the Production, HSB, and DR SQL Database servers. This account is used to update the DNS record on a Domain Controller running DNS, and other features; it is not used to log into any servers or to facilitate a failover to the Production, HSB, or DR SQL Database servers. This requirement applies to the following configurations:

- Production and Hot Standby
- Production, Hot Standby, and DR

TriTech requires a user account with local administrative permissions to run the Arcserve Engine service which is installed on the Production and DR SQL Database servers. This account is used to start SQL and to perform administrative tasks pertinent to the failover process. This requirement applies to the following configuration:

- Production and DR

TriTech required accounts:

ACCOUNT PURPOSE	ACCOUNT RIGHTS	TYPICAL ACCOUNT NAME
TriTech Console account Installs, Support, Upgrades and Interface apps	Domain and Local Administrator	TriTech
Inform CAD Service account	Domain and Local Administrator	serviceacct
Arcserve services account	HSB – Domain Administrator DR – Local Administrator	arcsvcacct

3.2.5 INFORM CAD WORKSTATIONS

TriTech requires a domain account that is also a local administrator in order to install, upgrade and support workstations (same as the support account). As noted previously, the account used for installations, upgrades and support can be the same account used for the Server Based Console Applications or it can be a separate account.

TriTech does not support nor recommend the use of a single Domain user account to facilitate the logging in of Dispatchers or Call Takers to more than one Inform CAD Workstation. The ramification for this configuration could lead to Dispatchers or Call Takers being locked out of CAD. The account can become locked out if there is a Group Policy configured to lock accounts after "n" times of entering wrong credentials, all users who are logged into Windows under the locked out account will not be able to access CAD resources such as SQL or the VisiCAD share.

TriTech recommends for each Inform CAD dispatch workstation an individual account be used to allow the Dispatcher or Call Taker to log in their workstation. Alternatively, each Dispatcher or Call Taker is assigned his or her own individual user account to log into the workstation.

The customer's Inform CAD users need a defined level of security access at the workstation level in order for Inform CAD to successfully operate. This is generally setup via Power User security access. The following levels of access are required for an Inform CAD user:

- User must have 'Modify' permissions to the local hard drive (Read & Execute, List Folder Contents, Read, and Write).
- User must be able to write to the registry
- User must be able to register COM components
- User must be able to create desktop icon(s)
- User must be able to communicate on TCP ports
- User must be able to ability to set the system time
- User must be able to map and access the Q: drive
- User must be able to make ODBC and OLE/DB connections to the SQL Server(s)
- User must be able to write messages to Microsoft message Queue (MSMQ)

Note: User interface functions that support the above noted options can be disabled, but the Power User account must have the ability to implement these functions through Inform CAD. For Inform CAD to function, it is also very important to turn User Account Control off on Windows 7-based workstations.

3.2.6 INFORM MOBILE WORKSTATIONS

The customer's Inform Mobile users need a Windows account that allows the application to synchronize device time with a compatible GPS time sync signal in Inform CAD 5.7. Since time stamps for actions such as status changes are performed based upon the device time, failed time synchronization will cause unexpected results.

3.3 INFORM CAD OPERATION VIA WIDE AREA NETWORK

WAN bandwidth requirements for Inform CAD workstations to run remotely will vary based upon the overall size of the system and the utilization level for interfaces and features.

VPN is not recommended for connecting a workstation via a WAN. This is due to orphaned connections of Microsoft components that can cause the failure of system components. Please consult with TriTech before activating one or more remote workstations.

TriTech recommends the use of Citrix or ClearCube for running Inform CAD workstations across a WAN connection that is less than 100Mbps to the desktop or where the connection must be established via VPN. The use of Citrix with Inform CAD is described later in this document in Section 12.

4. MACHINE NAME GUIDELINES

TriTech works with the customer to establish an effective deployment plan for machine names. The following guidelines are recommended for machine names:

1. Hyphens (-) are not supported in either workstation or server machine names.
2. SQL Server machines names cannot begin with numerical values.
3. RFC 1034 states that domain names cannot have underscore ("_") characters. As such, VMware and possibly other software do not support the underscore. To keep things simple, TriTech does not recommend the use of ("_") in any machine names
4. The server host name must be unique. For example: CCLLTT##
   a. CC refers to an abbreviation for the customer city - this should consist of three (2) alpha characters. (example, SD for San Diego)
   b. For customers with multiple locations, LL refers to the location, usually based on the local of the site (chars. e.g. PB for Public Safety Building, CH for City Hall) - this must consist of two characters. Please make them letters.
   c. TT refers to the machine's primary function. These are designated with the following:
      - DC for a Domain Controller
      - CADS – CAD SQL
      - CADI – CAD Interface
      - MBLS – Mobile SQL
      - MBLI – Mobile Interface
      - MBLC – Mobile SQL combined with Mobile Interface
      - RPTS – Reporting/Archive SQL
      - DWHS – Reporting/Data warehouse/Archive SQL
      - RMSS – Records Management System SQL
      - RMSA – Records Management System Application
      - RMSW - Records Management System Web
      - FBRS – Field Base Reporting SQL
      - FBRA – Field Base Reporting Application
      - FBRW – Field Base Reporting Web
      - JALS – Jail SQL
      - JALA – Jail Application
      - IQSQ – IQ SQL
      - IQWB – IQ Web
      - IQAP – IQ Application
      - IQAN – IQ Analytics
      - INTF – Interface Server
      - WEBR – Web Recall Browser
      - BRWS – Browser
      - TTMS – TriTech Message Switch
      - PRXY – Proxy
      - ARR – Application Request Routing
      - 911A – Inform 911 Application
      - 911S – Inform 911 SQL
   d. ## are numeric values to resolve the multiple instances of the same type of machine. This will generally be two (2) numbers. They should not be random, but should reflect a first dispatch station (01), a second dispatch station (02) or a third station (03), etc….

5. FIREWALL PORT CONFIGURATION

The following diagram outlines the firewall port configuration to operate those products that require internet access and to provide support access. This diagram is based upon Inform CAD 5.7 and Inform Mobile 5.7.

With version 5.7, Inform Browser is integrated with Inform CAD's core business components and its hosting Web Server needs to be on the same domain as that of Inform CAD for OS Authentication when accessing network resources hosted inside the secured network. Starting with version 5.3 Inform Browser is installed with TriTech.Launch.

With version 5.7, TriTech recommends placing Microsoft's IIS with the ARR (Application Request Routing) plugin into the DMZ, shown as the ARR Web Server in the following diagram. ARR Web Server functions as the reverse proxy and HTTP/HTTPS network traffic filter for Inform Browser hosted inside the secured CAD network. If needed, ARR Web Server supports end-to-end SSL communication, in addition to the light-weighted SSL offloading.

In addition to the ARR Web Server for Inform Browser, TriTech's Inform Relay Server can be installed in the same host to relay TCP/UDP traffics between Inform Mobile Client and Inform Mobile Server.

With Inform Browser and Inform Mobile Server installed in the secured CAD network and ARR Web Server and Inform Relay Server installed in the DMZ, there is no longer need to open SQL Server and MSMQ ports between the DMZ and CAD network.

There are customers who purchase a second Archiving & Reporting Server to allow other organizations to report on data. Previously this was allowed to be placed in the DMZ. For security reasons TriTech no longer recommends this configuration. There may be customers who need to place this second Archiving & Reporting Server in the DMZ, if that is the case the agencies do so at their own risk and against the recommendation of TriTech.

Note: Ports identified for support purposes include the most common forms of connectivity. Additional ports for less common access tools are identified in Section 7.

6. TIME SYNCHRONIZATION

TriTech products operate using the Windows time of the applicable machine. Time synchronization occurs through several components as a part of an Inform CAD – Inform System operating within a Windows network. Windows Active Directory also synchronizes time with computers through the Domain Controller. The system administrator should evaluate system components to ensure that time sync problems do not cause unexpected system behavior.

1. Within an Active Directory with Windows time service enabled, Windows will sync workstation and server times to the Domain Controller time. It is recommended that the Domain Controller is synched to desired reliable time source.
2. Based upon code within the applications, all Inform CAD interface/business servers and workstations will automatically synchronize their time to the Inform CAD Database Server once every 60 minutes.
3. Inform Mobile Clients will get their time from the GPS (AVL). Therefore, it does not require any special configuration.
4. Please note: TriTech highly recommends customers utilize a precision time source (i.e., NetClock) and associated software to precision time synchronization. Please consult the installation guides applicable to your chosen time source device.

5. For customers not utilizing a precision time source device TriTech recommends the use of Windows Time Synchronization. However, some customers may choose to disable the Microsoft Time Synchronization feature and use the TriTech component commonfuntion.exe instead. Please see Inform CAD Technical Advisory TA15-009 regarding disabling Windows Time Synchronization.

7. SUPPORT COMMUNICATIONS AND CONNECTIVITY

Remote connectivity to the customer system is essential for the research, diagnosis and resolution of issues in a timely and efficient manner. This connectivity is also utilized during the implementation of new systems/components and during the upgrade process for new TriTech software versions and service packs.

TriTech recommends both a primary and a secondary method of connectivity to ensure the ability of TriTech to connect to the customer system to provide critical support services. Connectivity options approved by TriTech are described in this section.

7.1 TRITECH SECURITY PROGRAM FOR REMOTE CONNECTIVITY

TriTech operates a CJIS–level security program for its personnel, facilities and infrastructure consistent with Federal Standards for "Criminal Justice Information[1]" and "Protected Health Information[2]" provisions for remote connectivity in order to provide data security.

TriTech infrastructure security for Security Authorized personnel includes personal passwords and Advanced Authentication to gain access to the TriTech network. Personnel must first successfully login to their computer with Advanced Authentication before they can connect to a customer site with secure access login to the customer system and/or to remotely access the secure servers/storage where customer data/information is stored.

TriTech domain passwords meet or exceed CJIS standards including rules for length, complexity, reuse, expiration and exclusions.

Advanced Authentication, as deployed at TriTech, utilizes a variety of techniques including an issued building access card (HID), the employee's fingerprint, or an issued YUBIKEY device (depending on implementation site). Remote access to TriTech's network and secure servers requires an additional level of Advanced Authentication through a DUO/Cisco validation. Other methods of approved Advanced Authentication may be used at the discretion of the TriTech Director of Information Services and in accordance with the FBI CJIS Security Policy.

7.2 TRITECH APPROVED METHODS OF CONNECTIVITY

TriTech has approved VPN (virtual private network) connectivity as the sole primary form of support connectivity for Inform CAD and Inform CAD Subsystems (Inform Mobile and the like) deployed by TriTech. Each customer under a Software Maintenance and Support Agreement shall establish a dependable VPN form of access for TriTech use in order to be supported. VPN access must allow for multiple simultaneous connections from TriTech.

---

[1] Including Criminal Justice Information (CJI), National Crime Information Center (NCIC) data, and State specific CJI as described in the U. S. Department of Justice - Federal Bureau of Investigation - Criminal Justice Information Services Division's Criminal Justice Information Services (CJIS) Security Policy.

[2] Federal Health Information Portability and Accountability of Act (HIPAA) of 1996.

VPN is a network that is constructed by using public telecommunications infrastructure to connect network nodes. For example, there are a number of systems that enable the creation of networks using the Internet as the medium for transporting data. These systems use encryption and other security mechanisms to ensure that only authorized users can access the network and that the data cannot be intercepted.

For information on setting up VPN access for remote support services contact TriTech Customer Support.

7.2.1 APPROVED VPN CONNECTIVITY METHODS AND CLIENTS

a) TriTech must be able to connect to the customer site using one of the following:
   a. Microsoft PPTP (typically requires Microsoft VPN Server)
   b. Cisco VPN IPSec client (requires Cisco VPN enabled device, such as PIX firewall, router or dedicated VPN concentrator) - The Cisco VPN enabled device allows the customer to restrict access to the remote user to a specific series of computers or sub-net of the customer's network. TriTech recommends the use of these devices and prefers that TriTech's access be limited to the specific areas of the network where TriTech software components are in use.
   c. Cisco Appliance-to-Appliance VPN tunnels – TriTech has approved Cisco appliance-to-appliance VPN tunnels and has deployed this form of connectivity at a limited number of customer sites. This will be done using TriTech's firewall.

   Note: Customers utilizing the Appliance-to-Appliance connectivity should plan for a backup solution in case of a TriTech network outage to allow for a secondary method of connection.

b) Other TriTech Inform Products

TriTech Inform Law RMS, FBR and Jail Products are supported using VPN connectivity. Some of these customers use GoToAssist for support connectivity. These customers are charged an additional fee to offset the additional licensing costs. The GoToAssist fee based option is not currently available for Inform CAD and Mobile remote connectivity. An option for such a fee-based system is under discussion at the time of this document's publication.

7.2.2 ALTERNATE FORMS OF VPN CONNECTIVITY

Customers that utilize non-recommended forms of VPN or other connectivity are taking responsibility for any delays associated with TriTech's ability to provide remote support services. TriTech will work with the customer to provide support in these situations, however, there have been instances where a customer's alternate method of connectivity has not worked or had limitations that prevented TriTech from rapidly resolving a critical problem.

7.3 REMOTE ACCESS AND TCP PORTS

In order to support TriTech applications and services, TriTech staff needs access to the remote computers' desktop (console). TriTech utilizes the following methods of access:

- Microsoft Remote Desktop Connection (RDP) – TCP port 3389
- VNC – TCP port 5900
- PCAnyware – TCP port 5631 and UDP port 5632
- Dameware – TCP port 6129
- Microsoft NetMeeting (limited support, should be discussed between customer and TriTech before it is approved) – TCP ports 522, 389, 1503, 1720 and 1731. UDP ports: dynamically assigned ports (1024-65535).

TriTech staff needs direct access to CAD SQL servers (TCP port 1433) with the SQL System Administrator (SA) account.

7.4 FILE TRANSFERS

TriTech staff needs to have the ability to transfer files to computers running TriTech applications at a customer site. With most customers, TriTech staff is allowed to map drives directly over the VPN connections after being successfully authenticated in the CAD domain. The following ports need to be open to allow file sharing in Microsoft environment: TCP ports 139 and 445, UDP ports 137 and 138. These ports are identified in the Firewall Port Configuration Diagram in Section 5.

An alternate, but not recommended method of transferring files is via Microsoft Remote Desktop Connection (RDP). This method is not meant for large file transfers and could significantly delay support efforts (double the time to transfer files) in the case of a critical issue with the CAD system, including CAD down.

8. SECURE SUPPORT ACCESS

TriTech has implemented procedures and technology safeguards to limit access to customer systems and customer data. These procedures are described below:

8.1 TRITECH PERSONNEL AUTHORIZED FOR SUPPORT CONNECTIVITY

TriTech hiring process includes a background check to evaluate individuals who will have access to restricted and highly confidential information, customer records, technology and restricted sections of the building and/or customer sites via physical or electronic means. These individuals are typically members of the Customer Service, Product Management, Engineering, or Project Operations departments.

Individuals lacking such approved security access are not provided access to customer login information, servers or devices containing customer data, or sections of the facility where such computers reside.

As noted in Section 7.x.x, all Security Authorized personnel must logon to machines utilizing advanced authentication methods prior to initiating a connection to a customer site.

8.2 CUSTOMER DATA SECURITY

Customer data is entrusted to TriTech Software Systems with the expectation that the data will be managed, kept strictly confidential and disposed of in such a manner as to prevent access by any non-TriTech personnel or non-authorized TriTech personnel. Secure management of customer data is managed according to the following procedures:

TriTech has deployed a secure technology infrastructure hosted at secure TriTech corporate facilities. TriTech facilities have the following protection features on site:

- Monitored by security cameras.
- Card key authentication required for building access.
- Alarm system with individual staff access.
- Secure server facilities with limited access (subset of TriTech Security personnel).
- Secure sub-networks for storage of Client data and Client information.

If customer data must be downloaded or installed on TriTech secure servers, such data is only utilized for testing, implementation and support purposes as authorized by the customer. Customer data is not shared with non-authorized TriTech personnel or third parties including other customers.

8.3 USER ACCESS AND PASSWORDS

TriTech needs both VPN access and a user account on the customer's network (this is separate from the TriTech account within Inform CAD or Inform systems).

VPN accounts are typically issued individually to TriTech Security Authorized personnel. Such accounts are infrequently utilized and often need a password reset before the person can connect.

Note: If a customer requires TriTech to have individual VPN accounts, the customer must have staff available on a 24x7 basis to issue passwords when TriTech contacts the customer to perform remote support tasks.

Some customers alternatively have a few generic accounts that are locked out all of the time – they enable these VPN accounts only when the TriTech person has contacted them to request access. In this case, passwords are set to expire the same day.

Note: The customer **should not disable** the accounts defined in Section 5.6 that are used to operate the system—specifically:

- The local administrator domain services account for components within Inform CAD and Inform systems that operate as services;
- The local administrator Windows account needed to support the system and to operate server based console applications; and
- The TriTech account within Inform CAD or Inform systems. Disabling one or more of these accounts could disable system components.

Note: TriTech distributes a listing of approved TriTech personnel that are authorized to remotely connect to a customer system. Please contact TriTech to be added to this e-mail distribution list. TriTech requests that the distribution list be limited to one person per customer site.

Note: Due to the large number of customer sites and the large number of TriTech staff involved in the provision of remote implementation, upgrade and support services (including after-hours support), **TriTech will not accept key generating devices (tokens) for security access.** Customers that use password generating devices will hold these with the IT staff or the dispatch supervisor who can then provide access to TriTech staff when necessary.

CHAPTER 3 - SYSTEM COMPONENTS

Note: The hardware requirements outlined in this section may have alternate recommendations for customer's operating systems under a significant load. The term "Large Site" or "Large Sites" is used to describe such systems. Large Sites are those with forty (40) or more CAD workstations in regular use, with 200 or more on-duty units with AVL/mobile devices or heavy call volume (over 2000 incidents a day).

9. INFORM CAD DATABASE SERVER

The Inform CAD Database Server operates primarily Microsoft products – that is, Microsoft Windows and SQL Server. TriTech recommends against the use of other applications on the Inform CAD Database Server.

9.1 DATABASE SERVER OVERVIEW

9.1.1 DATABASE SERVER HARDWARE PLATFORMS

Inform CAD Database Server may be deployed in a single server environment, a clustered environment (for server redundancy), or on a fault tolerant platform.

- Single Server

  Single server systems do not have an option for automatic system failover. The Hot Standby/Disaster Server solution described in a later section of this document can provide for a rapid manual failover to a back-up server for single server systems.

- Dual Server

  TriTech has previously deployed two different dual server systems – Octopus and Microsoft Cluster Server (MSCS). TriTech no longer deploys these systems for new projects TriTech does not directly support either of these systems. If a customer elects to deploy this type of a software redundancy solution, they will need to provide or arrange for support of such a system.

- Inform CAD Fault Tolerant Server (Stratus ftServer)

  TriTech offers fault tolerant server systems from Stratus. Fault tolerant systems offer hardware with no single point of failure – providing 99.999% hardware up time (not more than five minutes of unplanned hardware down-time in a year). The Stratus ftServers utilize Windows and SQL Server without the use of MSCS.

  Note: Fault tolerant systems may still require periodic down time for OS, DB, and firmware upgrades. Customers should review the information on the Hot Standby/Disaster Server to be used in conjunction with fault tolerant servers to manage rolling upgrades of OS, DB, and firmware with minimal CAD down time.

Stratus offers an optional Active Service Architecture to allow for a process called Active Upgrade. This allows for splitting the Stratus server components when performing some forms of system maintenance. This allows the system to operate on one "slice" while working on the other slice. This option is described in more detail in Section 13.

Please contact your Account Executive (AE) for more information on server replacement options.

9.1.2 DATABASE SERVER HARDWARE REQUIREMENTS

- Database Server Processor
  - Small to Medium Sites: A minimum of one quad-core 2.26 GHz Intel processor or equivalent.
  - Large Sites: Should consider scaling processor speed up to two (2) quad-core processors.
- Database Server Memory
  - Low to Medium volume systems: Memory of 8GB of RAM is recommended.
  - Large Volume Sites: Should consider operating with 12GB or more of RAM.

> **Note:** The amount of RAM assigned to the OS and DB will vary by the version of OS in use; 32bit vs 64bit. Please carefully review the Microsoft documentation prior to purchasing or attempting to configure additional RAM for a SQL Server.

- Database Server Disk Space

  Hard drive requirements vary with the size of the customer's code files and streets database, the use of interfaces such as AVL, and the volume of incidents managed annually. TriTech utilizes a formula for estimating disk space for new systems – however, the most effective method for analyzing future hard disk needs is periodic analysis of the size of your system's database and its growth over time.

  Inform CAD SQL Servers typically have multiple disk drives split into several partitions. The recommended configuration is as follows:

  - C: partition is on its own controller.
  - D: data partition is on its own controller. The D: drive should only contain the MDF data files and the Inform CAD share.
  - L: Log partition is on its own controller. The L: drive should only contain transaction logs (LDF) files.

  TriTech suggests that system administrators ensure drive redundancy utilizing RAID or other technologies as appropriate to their site. Some system features can significantly impact disk space growth.

  - AVL updates of unit positions.

    Snapshot logging in some cases requires double the disk space of AVL logging – customers should carefully monitor their settings.
  - The "Documents" functionality in 5.7 and above allows for adding documents as attachments to caution notes, premises and incidents. Extensive use of this feature can consume disk space quickly and should carefully be monitored.
  - Activity Log growth can consume large amounts of disk space over time and should be monitored.

> **Note:** Insufficient disk space is still one of the most common causes of system down events.

TriTech offers optional advanced tools for database management which provide for purging of the live database and archiving of this data on the Inform CAD Archiving and Reporting Server. Please contact your (AE)Account Executive (AE) for information on these new data management tools.

9.1.3 DATABASE RE-INDEXING

Re-indexing is of particular importance to your site. Database growth and the data archiving process can cause indexes to be progressively less effective. This affects the speed at which data is retrieved and ultimately slows down your system. TriTech recommends that customers re-index their system frequently. Large customers, especially those that aggressively archive data, should closely monitor data fragmentation and may need to re-index daily or weekly depending on the index fragmentation level and their performance requirements. When using SQL Server Standard Edition, the re-indexing process currently requires the system to be taken offline. This is especially important for sites that utilize the archiving feature of the Archive and Reporting Server and for high call volume sites. Depending on the level of fragmentation their might be a need to regularly take the system offline to perform a database reindexing maintenance to maintain an acceptable database performance level.

SQL Server 2008 Enterprise Edition introduces the ability to re-index your databases without taking the system offline and running a manual re-index– however, this important feature is only available in the Enterprise version.

Please note that even with the Enterprise Edition there are certain tables that cannot be re-indexed online due to limitations of SQL Server data types. Even though re-indexing online is an option with Enterprise Editions, some performance degradation may be experienced and as such, even online re-indexing operations should be scheduled around non-peak usage times.

Each customer will need to determine the relative value of this feature compared to the additional cost of the enterprise version of SQL Server. TriTech recommends that sites with a large number of workstations and/or high call volume implement the enterprise version of SQL Server in order to take advantage of this important capability.

TriTech has implemented a reindexing job that will run daily/weekly for each CAD database depending on the client's performance requirements. The job will defragment the indexes based on fragmentation threshold daily and rebuild the indexes weekly (Enterprise version will attempt to do Online indexing; Standard version will only defragment the indexes). It is recommended that job be implemented in low user activity window to limit the performance impact that the process may induce.

9.1.4 DATABASE SERVER AND DOMAIN CONTROLLER FUNCTIONS

TriTech does not support utilizing the Database Server as a Domain Controller. Doing so raises security and performance issues. Domain Controllers are typically run with a privileged account, which could conceivably allow an attacker access to the Active Directory. Running a Database Server on a Domain Controller can increase resource demands and degrade performance of the SQL Server. Finally, SQL Server is not supported on a read-only domain controller.

10. INFORM CAD BUSINESS/INTERFACE SERVERS

Inform CAD Business/Interface Servers (for most installations) operate a mixture of Microsoft and TriTech applications. With the availability of more powerful servers (with and without virtualization), there is now an opportunity to consolidate server based applications and servers used for your Inform CAD-Inform System. For customers desiring to minimize the number of physical servers, TriTech recommends the use of more powerful servers for Inform CAD Business/Interface Servers – we refer to these as Multi-Application Servers (specifications below). Standard servers can be utilized (specifications below), but more resources may be needed to operate the system.

TriTech has successfully implemented systems with either dedicated physical servers or consolidated server based applications onto limited, but more powerful servers. The decision will be based upon the customer's particular goals for system administration costs, redundancy, and impact to the operation. Remember to consider that a single server running multiple applications (interfaces or mobile applications) may prompt all of the applications to be stopped when troubleshooting a problem with a particular application, rebooting the server or applying OS patches to the server.

For Inform CAD Business / Interface Servers General Hardware recommendations refer to the TriTech Hardware Specification Guidelines.

10.1 CD / DVD DRIVE

Many recent model servers do not have CD / DVD drives by default. When planning server replacements, make sure that one or more servers for your Inform CAD network will have CD / DVD drives.

10.2 INFORM WEB SERVER

Inform CAD has several related software applications/services that are web-based. These include Inform Browser and Recall. These applications and services operate through Internet Information Services (IIS).

- **Inform Browser** operates under the control of Inform CAD Security and provides access to unit and incident information and selected Inform CAD functions (such as paging, messaging, and basic rostering). It displays in Internet Explorer. Inform Browser utilizes Microsoft .NET technology. This server also operates the Remote Processor that is needed for Browser Rostering and Call-Taking functions.
- **Inform CAD Recall** works as a component of Inform CAD 5.7 and provides information displays to support certain CAD functions. It utilizes Internet Explorer technology, but displays in its own form on the Inform CAD workstation. Placing the Web Server with Inform CAD Recall installed into the DMZ is not a supported configuration due to security concerns
- **TriTech Media Service** – FTP Component needed for Document Attachment feature in 5.7. If the customer will utilize the Document Attachment feature (specifically streaming video), disk space for this server should be carefully monitored and expanded as needed. Placing the Web Server with TriTech Media Service installed into the DMZ is not a supported configuration due to security concerns.

Each of these web-based functions is supported by a Inform Web Server operating Internet Information Server (IIS Server) with IIS 6 Management Compatibility. These can be supported from the same server in most cases - with volume and security being the primary factors.

10.2.1 INFORM BROWSER NETWORK CONFIGURATION

The Inform Browser server needs to reside on the CAD Domain in order to be installed or upgraded. Inform Browser can function as an Internet or Intranet application. However, Inform Recall and Web Services are not designed as secure Internet applications and should be limited to an Intranet environment. Therefore, the Inform Web Server for Recall and Inform Web services must be inside of the customer's firewall.

If Inform Browser will be accessible from the Internet, TriTech recommends that the Inform Browser server be placed in the Inform CAD trusted network and a reverse proxy be placed in the DMZ to proxy the request to the Inform Browser server. TriTech also recommends that a web certificate be created (self signed) or purchased by a trusted Certificate Authority to secure http traffic between the Inform Browser client and the Inform Browser server. TriTech has tested Microsoft IIS 7 Application Request Routing v3 to fulfill this recommendation.

10.2.2 INFORM WEB SERVER HARDWARE / THIRD PARTY SOFTWARE REQUIREMENTS

The Inform Web Server operates on a Standard Inform CAD Business Server with the installation of Internet Information Server (IIS) in IIS 6.0 compatibility mode.

Additional hard disk space may be needed for the FTP functions associated with the Documents and Attachment functions that are available in 5.7. Streaming video is stored on the Web Server through the FTP function. If this feature is utilized, disk space should be increased based upon customer use and these files should be backed up as part of the customer's daily data back-up program.

Note: Due to hardware constraints, some customers have operated their IIS server on the Inform CAD Reporting Server. For security reasons, Microsoft strongly recommends that IIS servers not be mixed with servers running other applications, such as SQL Server. TriTech recommends customers to plan for a separate server to operate as the Inform Web Server in the future.

10.3 UNIT SWAP/AUTO DISPATCH

A pair of optional CAD functions – Unit Swap and Auto Dispatch - operate with a server based architecture. These functions are running constantly and require significant processor capacity. These components can be co-located on a Business Server running VisiNet Service in Services for small to medium size sites. A dedicated server is recommended for Large Sites.

10.4 INFORM CAD REPORTING SERVER

TriTech now offers two types of Reporting Server (previously referred to as Data Warehouse), the Inform CAD Reporting Server and the Inform CAD Data Archiving & Reporting Server (both described in detail below). The Reporting Server is primarily used for reporting purposes.

- Inform CAD offers a configuration that allows retrieving Premise History, Incident Snapshot, and AVL Playback information from the Reporting Server and for searching for incidents through Incident Editor from the Reporting Server.
- Inform Browser allows for searches of Reporting Server data from the Incident Search, Unit History and Unit Activity functions. Additionally, the new Browser Drill-Down Reports can access Reporting Server data.
- Inform Mobile can also be configured to run some queries from the Reporting Server.

10.4.1 INFORM CAD REPORTING SERVER (DAILY RESTORE OF PREVIOUS NIGHTS BACK-UP)

The Inform CAD Reporting Server database (DB) is a copy of the customer's production databases. The reporting DBs are automatically backed up to a remote SQL Server and restored each night from a backup of the production databases. Once the reporting database is restored, report writers will be able to extract data to support management decisions using Third Party report writer applications (e.g. SQL Server Reporting Services, MS Access, Crystal Reports, and the like).

10.4.2 INFORM CAD DATA ARCHIVING & REPORTING SERVER – (SQL REPLICATION WITH COMPREHENSIVE DATA PURGING)

This version of SQL replication combines near real-time automatic duplication of the Inform Database data with comprehensive data purging. Comprehensive data purging allows the customer to remove data not needed for daily operations while retaining appropriate, contractual amounts of data (like 90, 180, or 365 days) to create a smaller, faster-reacting production database.

In the case where the Archive & Reporting Server is not the same version of SQL as the Inform Database server and Distribution database resides on the Archive & Reporting server; the Archive & Reporting server needs to be the higher version of SQL.

Note: The aggressive use of purging can increase the need for database re-indexing.

The purging tools are installed in a way that allows data on the destination (Subscribing) databases to build up over time for historical ad-hoc reporting purposes, while maintaining a smaller and quicker production databases for CAD operations. This functionality is achieved by keeping production database deletions from being carried out on the destination databases.

Note: The use of the Premise History look-up from the Reporting Server can make the production CAD susceptible to performance issues from the Reporting Server. Large or complex reports or queries on the Reporting Server can slow the retrieval of Premise History and slow the call-taking process for all users. Customers that do such reporting and desire to use the Premise History look-up from the Reporting Server should consider adding a second Reporting Server.

Note: When deploying an Archiving and Reporting Server it is important to plan for data backups of the databases on this server. Data that has been purged from the Production Database Server only exists on the Archiving and Reporting Server. Some customers have purchased a second Archiving & Reporting Server to allow other organizations to report on data. Previously this was allowed to be placed in the DMZ, for security reasons TriTech no longer recommends this configuration. There may be customers who need to place this second Archiving & Reporting Server in the DMZ, if that is the case the agencies do so at their own risk and against the recommendation of TriTech. Please refer to the firewall port recommendations earlier in this document for configuration settings needed for this product.

10.5 INFORM CAD TRAINING/TESTING SERVER

The Training/Testing Server is designed to allow clients to perform training or testing of new versions of Inform CAD and configuration changes. The OS version and DB version should match the production version. The only exception to this is when the customer is testing a new version of Inform with a new OS/DB configuration.

The Training/Testing System is an excellent setting to test new OS versions, security profiles and third party software prior to deploying in the production environment.

10.5.1 TRAINING/TESTING SERVER HARDWARE/THIRD PARTY SOFTWARE REQUIREMENTS

For small Training/Testing CAD networks with limited workstations, the Training/Testing Server can operate on a Standard Inform CAD Business Server with the addition of SQL Server. Disk space needs to be sized to accommodate the production databases and Inform CAD File Share. For larger Training/Testing systems, the server hardware may need to be scaled up in terms of both processor and RAM.

10.6 INFORM CAD INTERFACE SERVER

The Inform CAD Interface server supports TriTech interface applications. The number of applications that can be hosted on a single server will vary based upon CAD incident volume and the type of interfaces.

10.6.1 INTERFACE SERVER HARDWARE/THIRD PARTY SOFTWARE REQUIREMENTS

The Interface Server operates on a Standard Inform CAD Business Server.

Some high volume interfaces, such as AVL/mobile interfaces, may require higher processor and RAM requirements. Stratus is now offering a smaller fault tolerant server that may be applicable for mission critical interfaces. Please contact your Account Executive (AE) for additional information.

10.6.2 MULTIPLE INTERFACES PER INTERFACE SERVER

TriTech has successfully tested standard interface configurations in an environment where a number of the standard interfaces are running on a single server. Based upon the test results, our standard interfaces can successfully operate on a single server. With the availability of low cost fault tolerant computers, this presents an opportunity to reduce hardware and administrative costs while improving protection from hardware failure.

11. INFORM NCIC / STATE MESSAGE SERVER

Inform NCIC/State Message Server performs justice queries for law enforcement agencies including queries to state and federal law enforcement databases, local databases, such as courts and records management systems and the CAD database (BOLO). TriTech products, including CAD and Mobile, can activate queries and receive "returns" containing data from these various data sources.

12. INFORM CAD CITRIX SUPPORT

12.1 INFORM CAD CITRIX OVERVIEW

TriTech approves Citrix for use with remote Inform workstations over limited bandwidth WAN or wireless connections. TriTech created a special code path to support Citrix users and this is a separately licensed function. This special code path allows each of the Citrix workstations to manage their own separate messaging, view controller and other settings like a normal Inform CAD session.

The number of workstations that can be served is related to size and complexity of the CAD system and the capability of the servers, as well as the call volume.

12.2 APPROVED WINDOWS SERVER AND CITRIX VERSIONS

TriTech has approved the following versions of Citrix XenApp for Inform CAD version 5.7.

Inform Version	Windows Server Version (32 bit or 64 bit)	Citrix Server Version	Citrix Client Version
Inform CAD 5.7	Windows Server 2008 R2 Enterprise Edition SP1 Windows Server 2008 Enterprise SP2	Citrix XenApp 6.5 Enterprise or Platinum Edition Hotfix Rollup Pack 1	Clients 12.3
Currently Testing but not yet certified	Windows Server 2008 R2 SP1 Windows Server 2012 R2	Citrix XenApp 7.6 Enterprise or Platinum Edition	Receiver 4.2

Note: TriTech does not currently support the use of Citrix with PowerPhone CACH, or Pictometry.

Note: TriTech now supports the use of Citrix with ProQA Paramount, see the Inform Product 5.7 Release notes for installation and configuration instructions.

Citrix is licensed by the workstation with each workstation needing a license for both Citrix XenApp Server and Windows Terminal Server 2008 CALS/Remote Desktop Services 2012 CALS (Citrix runs "on top" of Terminal Server). Each workstation also will need an Inform CAD license.

12.3 INFORM CAD CITRIX SCALABILITY

The scalability of Citrix with Inform CAD was tested for 1) the number of workstations that can be supported per Citrix Server and 2) the per workstation bandwidth needed to communicate with the Citrix Server.

The approved Inform CAD Citrix Server (with the specifications listed below) supports 8-12 Inform workstations for a small to medium size site. Large Sites should adjust the number of workstations down to (5-8) and test the configuration before implementing. Large Sites should test the configuration under load before implementing and adjust the number of workstations down where applicable.

TriTech recommends the use of the Platinum or Enterprise Edition of Citrix XenApp in order to take advantage of a setting called CPU Utilization Management. This setting prevents individual users and processes from taking too much CPU at any given time. This setting is only available with the Platinum, Enterprise, and Fundamentals editions of Citrix (TriTech has tested the Platinum edition).

Additionally, TriTech recommends that hyper-threading for processors be activated on Citrix Servers for Large Systems or sites attempting to have 8 or more simultaneous users.

12.4 INFORM CAD CITRIX BANDWIDTH REQUIREMENTS - WORKSTATIONS

The bandwidth needed to operate CAD in this configuration is a minimum of 128Kbps (bandwidth) per Citrix Inform client. It may be possible to operate with less than 128Kbps through the use of an accelerator device. Based upon these estimates, up to 12 Citrix Inform users could connect via a T1 connection (1.544Mbps).

Please note that Inform CAD Queue displays can affect bandwidth and the frequency of updates and bandwidth consumption. This would include countdown timers (time since status change) and the like. Please consider your bandwidth when enabling new features that will affect the frequency of Citrix updates.

Large Sites with complex mapping displays particularly with Geo may require additional bandwidth beyond 128Kbps.

12.5 INFORM CAD CITRIX SERVER CONFIGURATION

12.5.1 STANDARD INFORM CITRIX SERVER

TriTech recommends only one level of server for Citrix utilization for Inform CAD. This recommendation has evolved from previous recommendations based upon more information from testing in TriTech's lab as well as operations at customer sites.

The approved Citrix Server supports 8-12 Inform workstations for small to medium size sites. Large Sites should adjust the number of workstations down to (typically to 5-8) and test the configuration before implementing or increase the server processor/memory.

Note: Additional processor and RAM is often needed to extend the number of workstations. Hyper-threading is recommended if attempting to operate 8 or more workstations on a server.

12.6 INFORM CAD CITRIX SERVERS AND UPGRADES

During an upgrade of CAD software (versions, service pack and patches), all users have to exit from that specific CAD Citrix server in order for the upgrade prerequisites to take effect, and run "TriTech.Launch" from the desktop of the Citrix server to pull down new software components from the database server. Sites should plan for sufficient server capacity to allow for continued operation during an upgrade. This can be in the form of additional production Citrix servers or the ability to re-point a test/training Citrix server on a temporary basis to production.

Sites with a single Citrix server will need to plan for some downtime during an upgrade.

12.7 INFORM CAD CITRIX SERVERS AND SEPARATE ENVIRONMENTS

CAD Citrix servers can only operate on a single environment – that is, a CAD Citrix server can be on the production system or the test/training system, but not both at the same time. The Multi-Environment selector does not work with Citrix servers as the CAD users on a Citrix server are effectively sharing the same software and connections to a single environment. Therefore clients should plan for separate Citrix servers for test/training and disaster recovery.

12.8 INFORM CAD CITRIX WORKSTATION

Citrix workstations should generally be the same hardware specifications as the standard for the same version of Inform CAD with the following differences:

1. Citrix workstation needs to be added to the Machine_Info table of the System database.
2. Citrix workstations do not require Inform CAD Prerequisites from the Prerequisite CD.
3. Citrix workstations do not require Power User windows permissions. They should have the permissions necessary for them to interact with the Citrix server.

12.9 INFORM CAD CITRIX USER TROUBLESHOOTING

Citrix users should be trained on how to utilize the Citrix Connection Center to manage problems with their Citrix session. This can be accessed from the Citrix icon in the Windows tray.

13. INFORM CAD AND INFORM MOBILE BACK-UP SERVER AND DISASTER RECOVERY OPTIONS

Inform CAD and Inform Mobile Systems have a variety of options for deploying back-up and Disaster Recovery. For Inform CAD, these include 1) for Stratus customers, the use of the Active Service Architecture; 2) on-site Hot Standby Servers; and remote Disaster Recovery Systems. Mobile can be configured with a remote Disaster Recovery site option that can be managed manually by the System Administrator or have automated updates through TriTech approved Disaster Recovery Software.

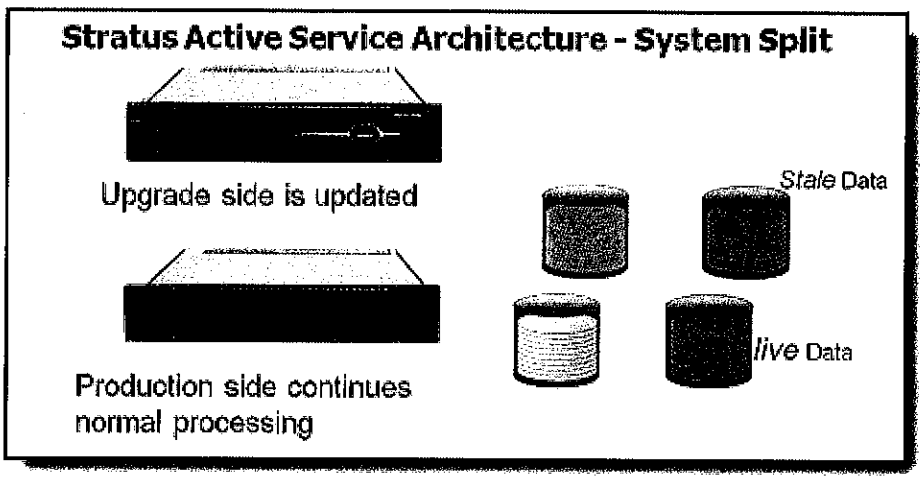
13.1 STRATUS ACTIVE SERVICE ARCHITECTURE

Note: This information includes proprietary information from Stratus Technologies.

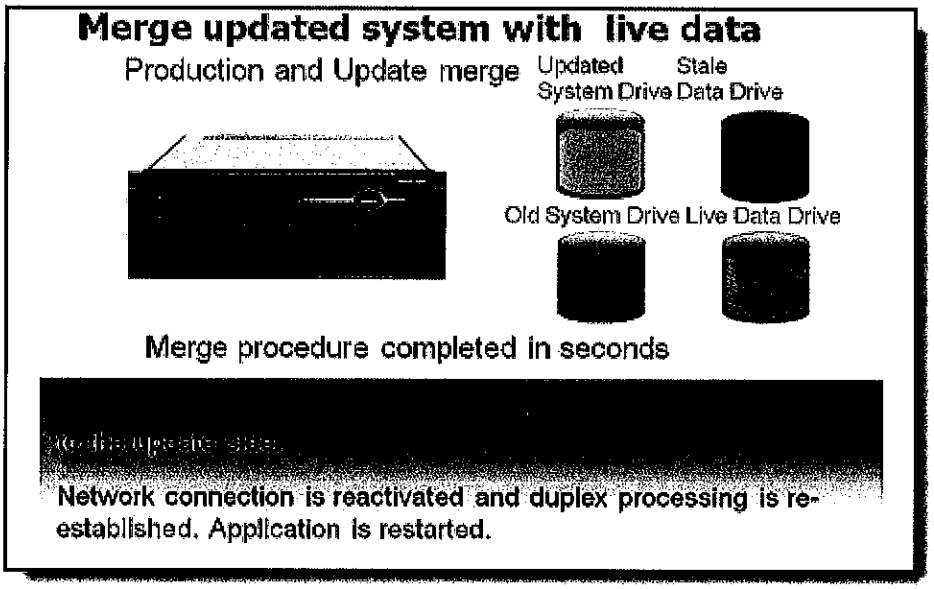
Newer models of Stratus can be ordered with an optional Active Service Architecture from Stratus that allows for Active Upgrade. This process allows a system administrator to "split" the two operating Stratus slices while continuing to operate the system. As noted in the following diagram, one slice continues to operate and updates system databases. The offline slice can have OS and firmware updates performed.

Note: SQL Server updates are not recommended as these may impact database formats and may cause problems when the data is resynchronized. While many OS updates can be performed (patches, service packs or versions), some changes by Microsoft can require Stratus firmware updates. Whether you use Active Update or not, always consult with Stratus regarding OS updates prior to implementing them on your system.

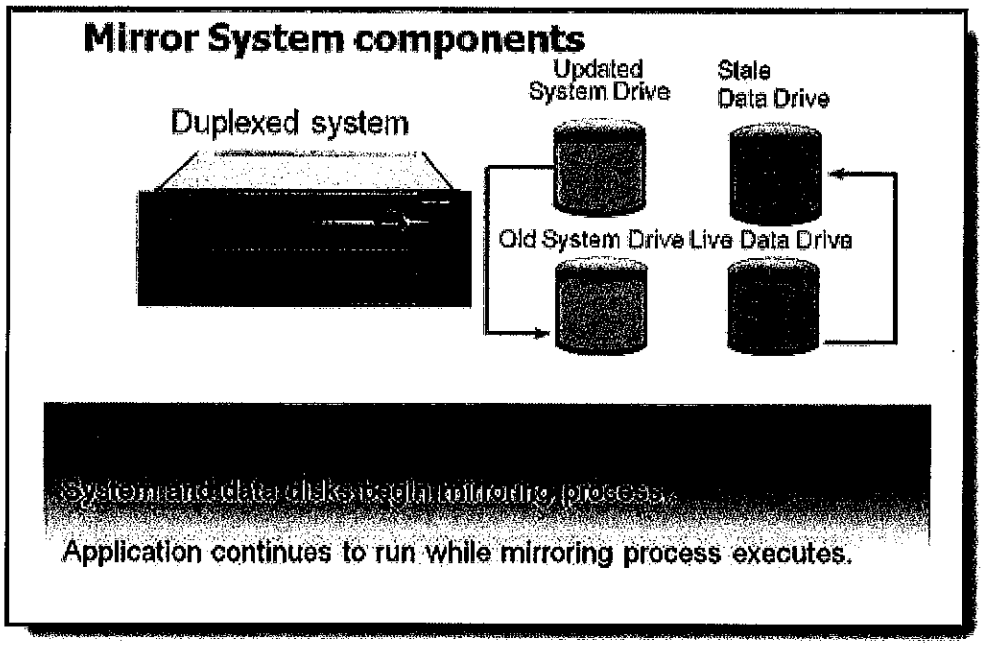
When the split occurs between the slices, Inform CAD does not need to be taken down. Users can continue to operate. During this time, the Stratus system is not fault tolerant. Therefore, System Administrators should limit the time planned for the system to run in this mode. This is illustrated in the diagram below:



When the update work is complete, the slices are remerged, the Inform CAD System will have to be taken down and restarted.



The System Drives (with the OS and firmware updates) are synchronized as are the Data Drives. This normally takes only a short time, but can be longer depending upon how long the system was operated in split mode.



Please consult your Stratus representative before attempting to perform an Active Upgrade.

13.2 INFORM CAD HOT STANDBY/DISASTER SERVER

TriTech has approved a third party Disaster Recovery software that is used to automatically update Inform CAD Database information and Inform CAD File Share information between the production database server on either an on-site Hot Standby Server (HSB) or remote Disaster Server.

13.2.1 INFORM CAD HOT STANDBY

An on-site HSB acts as a replacement for the production database server. This provides an on-site redundant server for those sites that operate standard servers and a third level of redundancy for sites that operate Stratus fault tolerant servers. The HSB Server reuses the production server's business server(s) and workstation(s) and there are minimal manual configurations that have to be executed on the production database server, such as database consistency check. This is facilitated by the Disaster Recovery Software Arcserve High Availability's (HA) ability to update the DNS record of the production server in DNS. The update of the DNS record allows the business server(s) and workstation(s) to continue to point to the production database server's host name and launch CAD.

At this time, TriTech configures the system for manual intervention to initiate a failover. The System Administrator can do manual activation of the failover process remotely. The TriTech.Launch icon on the workstations and interfaces are pointed to the HSB database server's name and no workstation change or re-direction is needed after a successful failover to the HSB Server. Once the manual server failover has been activated, the Inform CAD workstations and interfaces are restarted. To failback – the replication between the Master and Replica is reversed and another failover is manually triggered once the two servers are back in sync. The system is then reset to the original configuration to synchronize files and data.

While the Stratus Active Service Architecture would be the recommended method, the HSB Server has been tested to allow for rolling upgrades of OS service packs and server firmware on the primary server. This would reduce system downtime during such scheduled upgrades to a few minutes. Upgrades of full OS versions may be so extensive that a rolling upgrade may not be possible in all situations. Please contact TriTech for additional information regarding specific OS versions.

13.2.2 INFORM CAD DISASTER SERVER

A remote Disaster Server acts as a replacement for the production database server. This provides an off-site redundant server, but the system requires its own set of business server(s) to operate the system from the remote site.

The WAN connection between production and Disaster Server sites should be a minimum of T1 (1.544Mbps) speed to allow for the timely update of files and data. This is only for the data update and is not sufficient bandwidth to operate a substantial number workstations and interfaces from one site connected to another.

At this time, the system will be configured for a manual intervention to activate a failover. Manual activation of failover can be done remotely by the System Administrator.

There are manual steps that are needed to activate a remote Disaster Center. TriTech will configure Arcserve to perform many of the manual steps such as copying preconfigured files and executing batch files. These are based upon the need to change certain database and file settings before the system can be activated. These settings can be pre-configured in advance to allow for a simplified process for the System Administrator. These include the following:

- Preconfigured Files – These files must be preconfigured for the Disaster System and should be stored on the Disaster Server. Arcserve post failover will copy the files into their respective location in the Inform CAD File Share.
  - Launch - Maintaining a preconfigured Launch

- TriTech Config.
- System Ini
- ANIAll.ini (if necessary)

- ISQL Files - TriTech will preconfigure ISQL files that can be stored on the Disaster Server and are executed via batch files. These will activate functions within SQL Server that will update server configuration information that is stored within the Inform CAD databases. There are two different ISQL files that need to be run before activating the system.
- Manually execute a database consistency check. (Optional)

Once the manual server failover has been activated and the previous steps are completed, the Inform CAD workstations and interfaces are restarted based upon the applicable restart checklist.

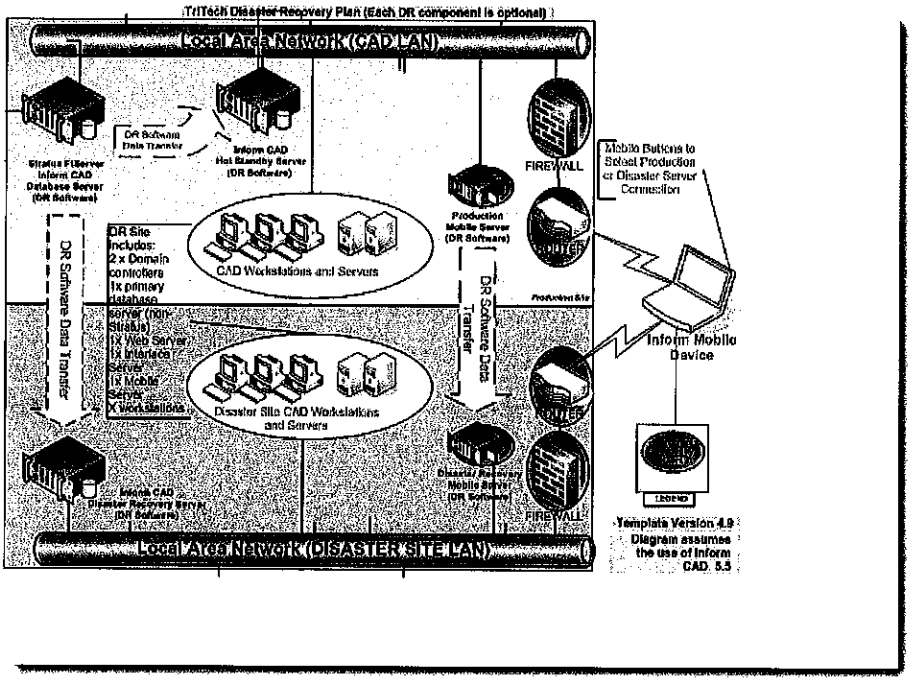
To failback, the replication between the Master and Replica is reversed and another failover is manually triggered once the two servers are back in sync. The same steps have to be followed when failing back to the production system. The system is then reset to the original configuration to synchronize files and data.

13.2.3 INFORM MOBILE

A remote Disaster Recovery Mobile server acts as a replacement for the production Mobile server. This provides and off-site redundant server which can only be activated against the Disaster Recovery Inform CAD server. The Disaster Recovery Mobile server can be deployed in two methods:

1. The first method is with the use of Arcserve HA, the production Mobile database and directory can be synchronized with the DR Mobile server in real time. Any updates to the Production Mobile server such as adding a device, modifying a HTML page, changing a Mobile database setting is automatically synchronized with the DR Mobile Server. The failover process with the use of Arcserve HA in this configuration is a manual process. During the failover process, Arcserve HA will copy configuration files to their respective locations in the Mobile directory. To failback, the replication between the Master and Replica is reversed and another failover is manually triggered once the two servers are back in synch. The system is then reset to the original configuration to synchronize files and data.

2. The second method is without the use of Arcserve HA. In this configuration, all Disaster Mobile server configuration files are configured to launch against the Disaster Recovery Inform CAD server. There is no manual failover process nor are changes performed on the Production Mobile server being sent to the Disaster Recovery Mobile server. As a result, any changes to the Production Mobile server such as adding additional devices, modifying HTML files, or changing Mobile database settings have to manually be performed against the Disaster Recovery Mobile Server.



13.3 HOT STANDBY/DISASTER SERVER BEST PRACTICES

The Hot Standby/Disaster Server data may not be actively utilized for reporting purposes (like a Reporting Server) when it is in the Target mode. Additionally, replication may need to be restarted after each server failover.

The system has been tested through both LAN and WAN connections. The network connectivity for LAN or WAN should be 100Mbps or greater.

TriTech has identified some challenges related to customer use of Arcserve for Disaster/Hot Standby Server functionality. These best practices have been developed to prevent problems with this system.

Recommended Actions:

1. Always perform synchronization prior to failing back to the production database server.
2. Do not failover to your Hot Standby Server in order to do database maintenance. Arcserve works by copying data from the disk level. Changes made to your offline database – including reindexing or database defrag – will be overwritten when you resynchronize your servers.
3. If you have problems with a failover or a failback, please contact Technical Services, including after hours. Do not attempt to failback and forth between servers if you have a problem as you may damage your most current database if you have missed a step or had an interruption in the process.
4. Always contact Technical Services before elective failovers. This will allow for the designation of a configuration engineer in advance to support you if a problem is experienced.
5. For elective failovers, have users exit CAD and stop interfaces before the cutover.
6. Follow the Arcserve maintenance document before you apply Microsoft updates, SQL service pack, or hot fixes.

13.3.1 DISASTER/HOT STANDBY SERVER HARDWARE/THIRD PARTY SOFTWARE REQUIREMENTS

Disaster/Hot Standby Server hardware and third party software should match the Production Database Server.

Please contact your Client Account Manager for more information on implementing Arcserve HA.

14. INFORM CAD WORKSTATIONS

Inform CAD Workstations operate a mixture of Microsoft and TriTech applications. Optimal performance and functionality requires adherence to hardware, software and configuration standards.

14.1 STANDARD INFORM CAD WORKSTATION CONFIGURATION

- Computer configuration: Business workstation class machine
- Processor: One dual core 2.0 GHz or faster processor minimum
- RAM: 4GB recommended
- Disk: 120 GB minimum
- Operating System: Windows 7 (32 or 64-bit) or Windows 8.1 (32 or 64-bit)
- Supporting Software Components: Specific to the type of application or software service being operated. Review the TriTech release notes and version documentation.

Note: TriTech issues CDs that facilitate the installation of software prerequisites of for interface servers and CAD workstations.

In order to deploy Inform CAD on OS versions within the mainstream support cycle for windows, TriTech will be routinely moving to newer OS versions. **In anticipation of an evolving OS environment, customers are encouraged to budget for workstation hardware replacement every three years.** Many customers now buy new hardware for the dispatch center and rotate older dispatch center equipment to stations or headquarters for administrative use.

Note: TriTech recommends a clean installation of an OS version rather than upgrading between major OS versions.

15. INFORM BROWSER WORKSTATIONS

Inform Browser operates on a variety of Windows OS platforms. It requires the applicable version of Microsoft Internet Explorer for the version of Inform Browser. The workstation needs to be configured with the Windows OS compatible with the customer's network and which will operate the required version of Internet Explorer (9.0 or higher). Please refer to Inform Browser documentation for specific Internet Explorer and security settings.

16. INFORM GISLINK WORKSTATIONS

Inform GISLink Workstation.

- Computer configuration: Business workstation class machine
- Processor: One dual core 2.0 GHz or faster processor minimum
- RAM: 4GB recommended
- Disk: 120 GB minimum
- Operating System: Windows 7 (32 or 64-bit) or Windows 8.1 (32 or 64-bit)
- Supporting Software Components: Specific to the type of application or software service being operated. Review the TriTech release notes and version documentation.

Inform 5.7 Prerequisite CD needs to be run on the GISLink Workstations. The Prerequisite CD will install needed software such as ArcGIS Engine Runtime Version 10.2.

Please refer to Inform GISLink documentation for specific prerequisites as versions change.

17. INFORM MOBILE

17.1 MOBILE SERVER OVERVIEW

The Inform Mobile Server provides the functionality necessary for interaction between Mobile workstations and is the integration point between other systems such as Inform CAD (along with the Mobile interface) and for the Inform NCIC/State Message Server.

17.1.1 MOBILE SERVER CONFIGURATION

- Operating System: Windows Server 2008 SP2 (32-bit), Windows Server 2008 R2 SP1 (64-bit), Windows Server 2012 R2 (64-bit)
- Supporting Software Components: Specific to the type of application or software service being operated. Review the TriTech release notes and version documentation.
- Database Management: SQL Server 2008 R2 32 bit or 64 bit SP1 Standard, Enterprise, or Express Edition, SQL Server 2012 SP1 64 bit Standard, Enterprise, or Express Edition.

17.2 MOBILE INTERFACE SERVER

- Operating System: Windows Server 2008 SP2 (32-bit), Windows Server 2008 R2 SP1 (64-bit), Windows Server 2012 R2 (64-bit)
- Supporting Software Components as distributed on the specific version Prerequisite installation media.

The Inform Mobile Interface server supports the interaction between Mobile users and Inform CAD. The Mobile Interface Server operates on a standard Inform CAD business server/interface server.

For small Mobile systems (less than 75 units or less than 75), the Mobile Interface can successfully be co-located on the same server as the Mobile Server.

For medium Mobile systems (less than 400 units or less than 400 incidents), the Mobile Interface server needs to reside on its own business class server.

For large Mobile system (greater than 400 units or greater than 400 incidents), two separate Mobile Interface servers need to reside on separate business calls servers. The current maximum concurrent users per Mobile interface are as follows:

- Law Agencies: 150 Units
- Fire / EMS (alone or combined): 250 Units

A Mobile Server can be linked to multiple Mobile Interfaces. This is done when the number of concurrent users exceeds recommended levels for a Mobile Interface.

17.3 MOBILE WORKSTATION REQUIREMENTS

Inform Mobile Workstations operate a mixture of Microsoft and TriTech applications. Optimal performance and functionality requires adherence to hardware, software and configuration standards.

17.3.1 STANDARD INFORM MOBILE WORKSTATION CONFIGURATION

- Computer configuration: Business workstation class machine or business class or ruggedized laptop.
- Processor: One 1.06 GHz or faster processor minimum
- RAM: 2GB recommended
- If other applications are going to run on the workstation, TriTech recommends additional RAM on the workstation.
- Disk: 12 GB minimum
- Operating System: Windows 7 SP1 (32 or 64-bit) or Windows 8.1 (32 or 64-bit)
- Supporting Software Components: Specific to the type of application or software service being operated. Review the TriTech release notes and version documentation.
- Other requirements:
  - 800x600 pixel minimum display; 1024x768 recommended. Touch screen computers are recommended.
  - Wireless access - commercial wireless or IP enabled radio system. It is important that your review the capabilities of your wireless/radio system with TriTech before initially deploying Mobile or making post-Go-Live changes.
  - Ethernet connectivity or CD drive for initial installation.

17.4 MOBILE SERVER AND INTERFACE NETWORK CONFIGURATION

TriTech requires that both the Mobile Server and the Mobile Interface Server(s) be located inside of the firewall within the secure CAD network.

The Relay server can be deployed in the DMZ, allowing all Mobile clients to connect to the Relay server while the Mobile Server is located within the secure CAD network.

18. INFORM CAD – INFORM COMPONENT VIRTUALIZATION

TriTech has approved the use of a Hypervisor product to host specific business and interfaces servers utilized with the Inform CAD and Inform product suite.

Approved Virtualization Product

TriTech has approved VMware's vSphere ESXi as a supported hypervisor for Production use with the Inform CAD suite. Support for the vSphere Hypervisor will be through VMware. Customers should ensure that their personnel have been trained in the installation and management of this software and that software support and services has been purchased for this system.

http://www.vmware.com/support/

The following servers are approved for virtualization:

- Inform CAD
- Inform Archive & Reporting server(s)
- Citrix server running Inform CAD
- Business/Interface servers such as:
  - ANI/ALI
  - Paging
  - Inform CAD Web Server
  - Inform CAD Browser Server
  - Inform CAD Mobile Server

Note: Some interfaces may require a Serial port to connect an interface to a third party vendor such as the Zetron Station Alerting Interface. TriTech has successfully used PortServer by Digi to connect high-speed serial ports to any TCP/IP Ethernet Network.

During testing of a virtual Citrix server under simulated load, TriTech determined that a single Citrix user uses approximately the resources of a physical or hyper-threaded processor on the physical host. For a small deployment of Citrix users, a virtual Citrix server may be sufficient but for a large deployment of Citrix users, physical hardware is recommended.

TriTech tested and approved Arcserve HA as the Disaster Recovery software solution. Some TriTech clients have opted to use VMware SRM in conjunction with SAN to SAN replication as their DR solution. TriTech will work with our clients on a consulting basis to assist with the failover process and testing. Maintaining the failover process and solution is the responsibility of the client.

The free version of vSphere ESXi is approved for Training/Testing systems. However please note there is no support from VMWare available on the free version.

Customers electing to deploy vSphere ESXi in their Production environment should carefully assess server capacity and should perform a limited rollout of VMware Server with a preplanned roll-back strategy. It should be understood by the customer that when planning a virtual solution, performance for a VM is measured in MHz and MB of RAM. Although a single virtual 2.26GHz CPU may be allocated to the VM, the server will only consume the amount of vCPU resources needed to perform its task. However, great care must be taken to not over-subscribe host server resources to VMs as performance issues will likely be incurred. TriTech also recommends the use of Shared Storage.

Customers should also be aware of software licensing models. Understand how VMware licenses their product as well as the benefits of using Microsoft Data Center licensing 2012 VS Windows Server 2012 Standard licensing.

With proper planning and server capacity, vSphere ESXi can be used effectively in a Production environment. TriTech has not tested Microsoft's Hyper-V Hypervisor solution. Customers who are comfortable with Microsoft's Hyper-V solution can deploy it at their own risk.

19. CLIENT VIRTUAL DESKTOP INFRASTRUCTURE (VDI)

TriTech is working on a standardized and TriTech supported VDI solution utilizing VMWare Horizon View. Until a solution is fully developed, customers desiring to implement VDI should work directly with TriTech Systems Architects to design a TriTech supported solution on a case by case bases.

20. COMPATIBILITY WITH THIRD PARTY PRODUCTS

Customers often want to operate Third Party software applications on the same workstation as their TriTech software products. Some TriTech applications are more tolerant of Third Party products – such as Browser workstations or Citrix Inform CAD workstations. Inform CAD workstations and Inform Mobile workstations should be treated more carefully for Third Party product compatibility. Inform CAD workstations are particularly sensitive to a specific operating environment due to the need for high volume traffic between workstations and servers and because of the time sensitive nature of dispatch. Third Party products can introduce changes to that environment that can cause unexpected results.

TriTech does test some popular Third Party products for collocation with Inform CAD Command such as ProQA and its sister products and Microsoft Office. But it is impractical to attempt to test every product requested by TriTech's customers. TriTech also recognizes that customers have valid needs to use some Third Party products.

For these reasons, TriTech has developed a process that will allow customers to take responsibility for testing and utilizing Third Party products with Inform CAD Command workstations and Inform Mobile workstations. This process does not mean that TriTech will support Inform CAD or Inform Mobile with these Third Party products. If a problem occurs, TriTech may request the removal of the Third Party product in order to resolve the problem or rule out a conflict. But this process does provide a relatively safe method for customers to test and safely utilize Third Party products. Many customers have successfully utilized this process.

If the customer desires to load Third Party software (not required by Inform CAD) on a CAD workstation, such as office automation software like Microsoft Office, the customer should first review the applicable Inform CAD release notes for compatibility information (i.e., ProQA, Microsoft Office). If information is not available, the customer should contact the TriTech Technical Services department to determine if compatibility information is available for this specific type of software.

20.1 THIRD PARTY PRODUCT COMPATIBILITY TESTING PROCEDURE

If no compatibility information is available, the customer is responsible for making a determination regarding loading of the Third Party software. Inform CAD or Mobile problems caused by the Third Party software are not covered items under the support agreement. If the customer assumes responsibility and elects to proceed with the installation, TriTech recommends that the customer successfully complete a recent Inform CAD System Administration course and be competent in the installation and reinstallation of Inform CAD Software at the workstation level. When the customer has this foundation of technical skills, the following procedure is recommended for testing a Third Party software application:

1. Select a single workstation for testing purposes. The workstation should not be needed for use in dispatching purposes.
2. Load the new application following installation instructions from the manufacturer. Reference applicable TriTech Technical Advisories for known conflicts (e.g., Crystal Reports versions) with components that are used by Inform CAD to determine what optional items may be installed.
3. Following the installation, restart the workstation. Review the information in Add/Remove Programs paying particular attention to common perquisites to make sure newer versions have not been installed by the Third Party software. Uninstall inappropriate supporting components (MDAC, MSXML, .NET Framework and the like). Reinstall the applicable version of prerequisites and review ODBC connections.

4. Launch the applicable TriTech application (Inform CAD or Inform Mobile) and test both the TriTech application and the Third Party application for functionality. If there are Inform CAD or Mobile problems, consider uninstalling Inform CAD or Mobile (remember to not leave components in the Recycle Bin) and reinstalling. If the two applications are working properly, run the single workstation for one to two weeks to determine if problems occur under load. If no problems occur, consider loading the Third Party software on additional workstations as part of a phased roll-out.

Please note that compatibility may change with each version release of Inform CAD/Mobile or with new versions of the Third Party software as dependent components change. Therefore, the Third Party application may not work with an upgrade and may need to be uninstalled by the customer to troubleshoot Inform CAD problems. Additionally, performance issues may occur with all applications if the customer adds additional applications without adding additional memory.

> **Note:** One of the most common problems affecting Inform CAD performance are errors related to workstation or network configurations. Errors occurring during computer start-up from Third Party applications can negatively affect Inform CAD functionality and performance.

20.2 TRITECH SUPPORT OF THIRD PARTY PRODUCTS

TriTech's support agreement covers software developed by TriTech (such as Inform CAD, Inform Mobile, Interfaces, special database tools, WebView and Voyager products). The base support agreement does not cover support for third party products, including third party hardware and software (such as Microsoft). More specifically, any third party hardware or software defects or upgrades, as well as network setup, domain management, and base mapping data is not covered under TriTech's standard support agreement.

To assist customers with specific needs, TriTech has implemented custom support agreements to provide support for some third party hardware and / or software. For example, for some customers TriTech has contracted to be first point of contact for help desk and issue tracking for third party products, such as Fire RMS, Police RMS, and the like. For other customers, TriTech has contracted to provide direct support for selected hardware products, including cases where we contract with a local vendor to maintain the customer's hardware. If you are interested in such a custom support program, please contact your Account Executive.

20.3 VIRUS PROTECTION SOFTWARE CONFIGURATION

TriTech strongly recommends the implementation of Virus Protection software with TriTech systems including Inform CAD, Inform Mobile and Inform RMS.

This includes but is not limited to the servers, workstations, and Mobile MDC units. The implementation of Virus Protection software can have a significant impact on the operation and performance of software systems including the noted TriTech systems. Therefore, the Client should carefully follow these guidelines when deploying or upgrading Virus Protection software. Depending on how it is implemented, Virus Protection software has been known to cause problems on networks such as performance degradation and dropped Inform CAD inter-process messages which can result in out-of-sync workstations. Additionally, improper scanning activities for viruses can negatively impact Microsoft's SQL Server and other third party software including Computer Associates (CA) Arcserve RHA.

TriTech has provided the following recommendations to assist system administrators with the implementation of Virus Protection software to minimize the risk of virus infection as well as to minimize performance degradation as a result of virus scanning activities. These recommendations are provided as a reference point for the initial installation and are not necessarily all-inclusive. As with most technologies, additional or ongoing configuration is required to achieve optimal performance. It is important to emphasize that the improper implementation of Virus Protection software can impede a system's performance.

20.3.1 PLATFORM SPECIFIC RECOMMENDATIONS

1. For all Windows OS-based equipment in your system, please follow the Microsoft guidelines which can be found at http://support.microsoft.com/kb/822158.
2. For all servers running Microsoft SQL Server, please follow the recommendations in the Microsoft article "Guidelines for choosing antivirus software to run on the computers that are running SQL Server" at http://support.microsoft.com/kb/309422.
3. For customers using Arcserve RHA (an CA software application), CA recommends that the "%winddir%\CASpool" (folder and all of the folders or files that are being synchronized by Arcserve must be excluded from active and scheduled virus scans. This includes the TriTech file structure on the server.
4. If your system uses Microsoft Cluster Server, please consult with your Virus Protection software vendor to determine its compatibility with Cluster services. Because Virus Protection software drivers reside above the file system, they may not properly address the nuances related to a clustered environment. For more information on this topic, please refer to: http://support.microsoft.com/kb/250355.
5. If you use Microsoft Access for reporting, do not scan these database files while in use as they too can be corrupted by active virus scanning. For more information see Symantec Document ID: 2002091913503748 on their website.
6. Customers utilizing VMWare products should consult the VMWare best practices for additional Antivirus and Security. For more information see VMWare websites:
   http://kb.mit.edu/confluence/display/istcontrib/VMware+Security+Recommendations+and+Best+Practices
   http://www.vmware.com/files/pdf/VMware-View-AntiVirusPractices-TN-EN.pdf

20.3.2 GENERAL VIRUS PROTECTION RECOMMENDATIONS

1. The frequency for Virus Definition file updates should be configured to run daily. Virus Definition files are essentially databases that hold information pertaining to viruses. The updating of both the Virus Definition files and the Virus Scan engine should be permitted. This is considered a best practice.
2. Machines should scan only their local drives (not network drives); therefore, do not set active or scheduled scanning of the Inform CAD Q: drive other than the server hosting the file share.
3. Virus Protection software needs to be disabled when software updates occur, whether the updates are from Microsoft, TriTech, or any other software vendor. This will prevent file locking problems from occurring and is considered a best practice.
4. Port activities within the Virus Protection software have to be managed, for example, you would want to allow VNC packets to be sent and received without each packet being scanned. Disrupting VNC packets could impede the VNC application and slow the network.
5. The implementation and management of Virus Protection software requires regular monitoring of security related websites for the purpose of staying informed on virus threats, technical tips, and security related advisories. Please monitor your Virus Protection software provider's site. Other reference sites include the following:
   a. http://us.mcafee.com/virusInfo/default.asp
   b. http://www.sarc.com
   c. http://www.cert.org
6. Other management activities include the regular review of Virus Scan log files for each computer, which contain statistical information about the scanning activities on that machine.
7. Another important consideration is the implementation and management of Firewall and IP Ports. Many security breaches can be prevented through effective IP Port management, for example, IP Ports should be closed except for the ones being used. Often this is not the case, as many systems are vulnerable because most IP Ports are open. Please refer to the firewall port recommendations earlier in this document for configuration settings needed for this product.

8. As with any network/system change, it is a good practice to install the software initially on a limited number of computers and then monitor for performance or any other anomalies that were not occurring prior to the installation of the software. Monitor for a one to two week period of time. If everything appears to be fine, deploy on the rest of your system and monitor for problems.

20.3.3 SCHEDULED VIRUS PROTECTION RECOMMENDATIONS

1. Definition files should be updated before the scheduled scans are started.
2. Nightly scans should be configured so that they do not interfere with normal call activity or the nightly maintenance routines (i.e. Backups, etc.).
3. All TriTech folders and files can be scanned during a scheduled virus protection scan. This includes the Inform CAD file structure on the File Server, and the TriTech folder and all of its subfolders on business servers and workstations, the Inform CAD file structure on Mobile Servers, and the Inform RMS file structure on Law RMS Servers and Workstations. As noted in the general recommendations network and/or mapped drives should not be scanned. Do not scan the Inform CAD Q: (network drive) from a workstation.)
4. As noted in the Platform Specific Recommendations, Microsoft and EMC require files to be excluded from any virus scanning to protect against data corruption.
   a. UNDER NO CIRCUMSTANCES should the SQL Server's "Data" directory ever be scanned. Configure your virus scan activities to exclude this directory, which on a typical SQL Server installation will be the "\Program Files\Microsoft SQL Server\MSSQL\Data" directory. Disabling the scanning of the SQL Server "Data" files by type is also acceptable, they can be identified by having one of the following file extensions -*.mdf, .ndf, and *.ldf. The full Microsoft guidelines for configuring SQL Server with Virus Protection software can be found at: http://support.microsoft.com/kb/309422.
   b. EMC recommends that the RepliStor "C:\Documents and Settings\All users\Application Data\Legato Replistor Data" be excluded from active and scheduled scans. Refer to the RepliStor Administration Guide for additional information.
5. Expect performance impacts during the scan.
6. Stagger scans across the system so that performance impacts will be dispersed.
7. Notify users about the scan and expected performance impacts.

20.3.4 ACTIVE SCANNING RECOMMENDATIONS

1. When implementing on-access scanning, it should be done in a conservative manner. Heuristics should NOT be used. Typically, the default configuration will have heuristics disabled.
2. Perform active scanning at the Network level where vulnerability of a virus infection is most likely, this is generally where access to or from an outside source is possible such as an E-mail server or an Internet server.
3. As noted in the Platform Specific Recommendations, Microsoft and EMC require files to be excluded from any virus scanning to protect against data corruption.
   a. UNDER NO CIRCUMSTANCES should the SQL Server's "Data" directory ever be scanned. Configure your virus scan activities to exclude this directory, which on a typical SQL Server installation will be the "C:\Program Files\Microsoft SQL Server\MSSQL\Data", D:\\MSSQL\DATA and L:\MSSQL\Logs directories. Disabling the scanning of the SQL Server "Data" files by type is also acceptable, they can be identified by having one of the following file extensions -*.mdf, .ndf, and *.ldf. The full Microsoft guidelines for configuring SQL Server with virus protection software can be found at: http://support.microsoft.com/kb/309422

b. Arcserve recommends that the Arcserve RHA engine process should be excluded whenever possible from anti-virus 'On Read Access' or Scanning all-together. This will alleviate additional IO overhead on the read access of the files that we need to capture changes from and also the amount of IO that occurs when we create our journal files for replication within the RHA "Spool" directory. (Usually L:\CAspool). Many popular anti-virus solutions allow for an entire process to be excluded from scanning or at the very least "On read access" scans. These are below with information pertaining to how to enable such exclusions.

c. Required Exclusions:

- At a bare minimum the spool folder on the MASTER, REPLICA and CONSOLE servers needs to be excluded from anti-virus 'On-Access Scanning'. The default location for the spool folder is:
- Master, Replica, and Console Servers:
- '%SYSTEMDRIVE%\Program Files\CA\Arcserve RHA\
- Master and Replica Servers:
- CASpool Directory (Usually L:\CAspool)

4. The TriTech file structure should be excluded from active or on demand scanning. This will prevent file locking problems from occurring (refer to the table below).
5. The table below is provided as a guide for configuring scanning activities and file exclusions within the Virus Protection software across key TriTech computer platforms.

INFORM CAD SQL/FILE SERVER	INFORM CAD WORKSTATIONS AND INTERFACES	INFORM CAD WEB SERVER
Active Scanning should use default settings, NO heuristics should be used	Active Scanning should use default settings, NO heuristics should be used	Active Scanning should use default settings, NO heuristics should be used
Exclude the Inform CAD File structure databases and transactional log files from Virus scan activities. Usually: D:\Visicad (TriTech File share) D:\MSSQL\DATA (TriTech Database's) L: MSSQL\LOGS (TriTech transaction Logs) C:\Program Files\Microsoft SQL Server\ (Microsoft SQL server Databases and Transaction Logs) For Arcserve - Exclude the following folders and subfolders from Virus scan	Exclude the following folders and subfolders from Virus scan activities. 1. Q:\, and subfolder 2. C:\TriTech, and subfolders 3. C:\WINDOWS\system32\config, and subfolders (EventLog storage) 4. C:\WINDOWS\system32\msmq, and subfolders (MSMQ storage) 5. C:\Program Files\ TriTech Software Systems	Exclude the following folders and subfolders from Virus scan activities. 1. Q:\, and subfolder (if available) 2. C:\TriTech, and subfolders 3. C:\WINDOWS\system32\config, and subfolders (EventLog storage) 4. C:\WINDOWS\system32\msmq, and subfolders (MSMQ storage) 5. C:\WINDOWS\Microsoft.NET, and subfolders (ASP.NET on-the-fly compilation cache) 6. Media Archive folder 7. Media Stream folder 8. C:\Program Files\ TriTech Software Systems For Arcserve - Exclude the following folders and subfolders from Virus scan activities

activities 1)Arcserve Application folder '%SYSTEMDRIVE%\Program Files\CA\Arcserve RHA\ 2) CAspool Directory		1)Arcserve Application Folder %SYSTEMDRIVE%\Program Files\CA\Arcserve RHA\
Exclude the following file types from Virus scan activities: 1. .mdf 2. .ndf 3. .ldf 4. .mdb	Exclude the following file types from Virus scan activities: 1) .mdb	Exclude the following file types from Virus scan activities: 1) None

MOBILE SERVER(S)	MOBILE CLIENT(S)	MOBILE INTERFACE
Active Scanning should use default settings, NO heuristics should be used	Active Scanning should use default settings, NO heuristics should be used	Active Scanning should use default settings, NO heuristics should be used
Exclude the following folders and subfolders from Virus scan activities. C: or D\Program files\ TriTech Software Systems and subfolder(s) (Mobile Server Application and Logs)	Exclude the following folders and subfolders from Virus scan activities. C: \Program files\ TriTech Software Systems and subfolder(s) (Mobile Client Application and Logs)	Exclude the following folders and subfolders from Virus scan activities. 1. Q:\, and subfolder 2. C:\TriTech, and subfolders 3. C:\Program Files\TriTech and subfolders 4. C:\WINDOWS\system32\config, and subfolders (EventLog storage) 5. C:\WINDOWS\system32\msmq, and subfolders (MSMQ storage) 6. C:\Program Files\ TriTech Software Systems
Exclude the following file types from Virus scan activities: 1. .mdf 2. .ndf 3. .ldf 4. .mdb	Exclude the following file types from Virus scan activities: 1. .mdb	Exclude the following file types from Virus scan activities: 1. .mdb

CHAPTER 4 - SITE PREPARATION

21. CUSTOMER RESPONSIBILITIES FOR INSTALLATION AND TRAINING

21.1 SUPPORT CONNECTIVITY INSTALLATION

Prior to the arrival of equipment for installation on site, all support connectivity specified in the Support Communications and Connectivity section of this document should be installed and in working order.

21.2 NETWORK CABLES

Prior to the arrival of equipment, all necessary network cables should be in place. Each workstation and server on the network will require at least one network cable. Each cable should be able to reach from the network switch to the location for the workstation or server. The Inform CAD network requires the use of Category 5e or, where applicable, Category 6 network cable with male RJ-45 connectors on each end. TriTech can provide network cabling services; however the cable is not covered under the TriTech Software Maintenance and Support Agreement. Please contact your Account Executive (AE) for further details.

The customer will purchase any necessary adapters or wall plates to facilitate installation of the network cable. It will be the customer's responsibility to place the cable in walls, floors, ceilings, and through radio console furniture. The customer may also need a "short" set of cables to be used during training, until the CAD system is moved to its permanent location. Please review the training requirements with your project manager.

Note: If multiple network switches will be linked to support the number of computers needed for the Inform CAD system, these should be linked through a high speed interconnect cable and not by bridging from port to port with a CAT 5e cable.

21.3 STAGING AREA

TriTech requires a secure area for storage and staging of equipment during the installation phase of the project.

21.4 TRAINING SCHEDULE

User Training schedules will vary based upon the type of training and the type of application being trained (i.e., CAD vs Mobile). Classes are not more than eight (8) hours a day in length. The class size is limited to a maximum of 10 students with no more than two (2) students per workstation. One student per workstation is preferred whenever possible. It is preferred that classes are held during typical business hours, however, special class times/days can be arranged through your project manager on a case-by-case basis.

21.5 TRAINING LOCATION

The training classes should be held in a classroom environment that is outside of the live Dispatch Center. Training in the environment of the Dispatch Center proves to be a distraction for both the students and the on-duty personnel. The training room should be secured when not in use.

The customer is required to provide a projector capable of 1024 X 768 or greater resolution for use throughout the User Training class. Two (2) projectors are preferred.

21.6 WINDOWS/MOUSE EXPERIENCE

All students are required to have basic typing skills and exposure to Windows and mouse functions prior to attending Inform CAD User Training class. It is highly recommended that all students complete a Microsoft Windows computer-based training (CBT) program prior to attending training. There are several commercial products that are inexpensive, easy to use and provide excellent exposure to basic Microsoft Windows functionality. It is the responsibility of the customer to ensure that employees meet the minimum requirements prior to attending the training.

21.7 TRAINING GROUND RULES

Students should be dedicated to the class for the entire duration of the course – especially for multi-day courses. Distractions with normal work duties should be avoided while students are participating in the training.

It is preferred that a customer System Administrator or other customer team member attend each User Training class. This person is a valuable asset to answer questions regarding agency decisions on the system's set up.

All students are expected to fully participate in the training, which consists of lecture, hands on, and written coursework. A written and practical exam will be given at the conclusion of the class. Students that do not perform well in the class will be referred to the System Administrator for remediation. As it is necessary to maintain a positive learning environment, students who create a distraction in the class will be referred to the System Administrator.

22. PHYSICAL AND ENVIRONMENTAL REQUIREMENTS FOR COMPUTER ROOM

22.1 COMPUTER ROOM

CHARACTERISTIC	DESCRIPTION
Spatial	Provide adequate space and working area for equipment and personnel
Fire Protection	Provide smoke detectors, fire suppressant
Dust/Static Free	Maintain clean and static free environment
Limit Access	Restrict entry, minimize foot traffic
Uninterruptible Power	Provide UPS and line conditioning for computer room equipment
Voice Telephone Line	Provide outside access to contact support
Modem Telephone Line	Provide RAS support for disaster contingency dial-up
Computer Cabinet	Provide storage and access for equipment

Note: Typical equipment in computer room may consist of: server(s), monitor(s), keyboard(s), mouse, hub(s), printer, scanner, modem, and interface/message switch(s). This preparation guide is only intended to provide general information. For detailed specifications please refer to each equipment specification supplied by the manufacturer. All manufacture specifications are subject to change without notice.

22.2 ENVIRONMENTAL SPECIFICATIONS

CHARACTERISTIC	DESCRIPTION
Storage temperature	0 degrees C to 40 degrees C (30 degrees F to 104 degrees F)
Storage humidity	8% to 80% (relative)
Operating temperature	10 degrees C to 28 degrees C (50 degrees F to 82 degrees F)
Operating humidity	15% to 80% (relative)
Maximum thermal dissipation	91 kcal per hour (360 BTU per hour)

Note: Operating temperature and humidity ranges may vary depending upon the mass storage devices installed. High humidity levels can cause improper operation of disk drives. Low humidity ranges can aggravate static electricity problems and cause excessive wear of the disk surface.

22.3 ELECTRICAL AND PHYSICAL SPECIFICATIONS FOR EQUIPMENT

Please refer to the following manufacturer websites for up to date system specifications:

Stratus

Servers

http://www.stratus.com/Products/ftServerSystems

HP/Compaq

Servers

http://welcome.hp.com/country/us/en/prodserv/servers.html

VMware

Virtualization

http://www.vmware.com/products

Desktop PCs

http://welcome.hp.com/country/us/en/prodserv/desktops.html

Networking

http://welcome.hp.com/country/us/en/prodserv/networking.html

Dell

Servers

http://www.dell.com/us/business/p/enterprise-products?~ck=mn

Desktop PCs

http://www1.us.dell.com/content/products/category.aspx/workstations

Networking

http://www1.us.dell.com/content/products/category.aspx/networking

Cisco

Switches

http://cisco.com/en/US/products/hw/switches/index.html

Routers

http://cisco.com/en/US/products/hw/routers/index.html

VPN Solutions

http://cisco.com/en/US/products/hw/vpndevc/index.html

Note: Most servers are configured with dual power supplies and dual power cords. We strongly recommend that customers provide separate circuits for the two power cords. If uninterrupted power supplies (UPSs) are selected, two will be provided by the customer (i.e., one for each power cord). This configuration should enable the server to continue to function on one power supply if the circuit breaker on the second power supply is tripped.

INDEX

1

2

3

4

5

6

7

8

9

C

ADDENDUM B

TRITECH MASTER PREFERRED
SOURCE CODE ESCROW AGREEMENT

(ATTACHED)

MASTER THREE-PARTY ESCROW SERVICE AGREEMENT

Master Deposit Account Number: 10514

1. **Introduction.**

This Escrow Service Agreement (the "**Agreement**") is entered into by and between **TriTech Software Systems**, located at 9860 Mesa Rim Road, San Diego, CA 92121 (check either ☒ "**Depositor**" or ☐ "**Beneficiary**") and its affiliates and subsidiaries, and by any additional party signing the Acceptance Form attached as Exhibit E to this Agreement (check either ☐ "**Depositor**" or ☒ "**Beneficiary**") and by Iron Mountain Intellectual Property Management, Inc. ("**Iron Mountain**") on this __ day of _____, 2006 (the "**Effective Date**"). Beneficiary, Depositor, and Iron Mountain may be referred to individually as a "Party" or collectively as the "Parties" throughout this Agreement.

The use of the term "**Services**" in this Agreement shall refer to Iron Mountain Services that facilitate the creation, management, and enforcement of software and/or other technology escrow accounts as described in Exhibit A attached hereto. A Party shall request Services under this Agreement (i) by submitting a work request associated for certain Iron Mountain Escrow Services via the online portal maintained at the Website located at www.ironmountainconnect.com or any other Websites or Web pages owned or controlled by Iron Mountain that are linked to that Website (collectively the "**Iron Mountain Website**"), or (ii) by submitting a written work request attached hereto as Exhibit A (each, individually, a "**Work Request**"). The Parties desire this Agreement to be supplementary to the License Agreement and pursuant to Chapter 11 United States [Bankruptcy] Code, Section 365(n).

2. **Depositor Responsibilities.**

(a) Depositor shall provide all information designated as required to fulfill a Work Request ("**Required Information**") and may also provide other information ("**Optional Information**") at their discretion to assist Iron Mountain in the fulfillment of requested Services.

(b) Depositor must authorize and designate one or more persons whose action(s) will legally bind the Depositor ("**Authorized Person(s)**" who shall be identified in the Authorized Person(s)/Notices Table of this Agreement) and who may manage the Iron Mountain escrow account through the Iron Mountain Website or via written Work Request. Authorized Person(s) will maintain the accuracy of their name and contact information provided to Iron Mountain during the Term of this Agreement (the "**Depositor Information**").

(c) Depositor shall make an initial deposit that is complete and functional of all proprietary technology and other materials covered under this Agreement ("**Deposit Material**") to Iron Mountain within ninety (90) days of the Effective Date. Depositor may also update Deposit Material from time to time during the Term of this Agreement provided a minimum of one (1) complete and functional copy of Deposit Material is deposited with Iron Mountain at all times. At the time of each deposit or update, Depositor will provide an accurate and complete description of all Deposit Material sent to Iron Mountain via the Iron Mountain Website or using the form attached hereto as Exhibit B.

(d) Depositor consents to Iron Mountain's performance of any level(s) of verification Services described in Exhibit A attached hereto and further consents to Iron Mountain's use of a subcontractor (who shall be bound by the same confidentiality obligations as Iron Mountain and who shall not be a direct competitor to either Depositor or Beneficiary) to provide such Services as needed.

(e) Depositor represents that it lawfully possesses all Deposit Material provided to Iron Mountain under this Agreement free of any liens or encumbrances as of the date of their deposit. Any Deposit Material liens or encumbrances made after their deposit will not prohibit, limit, or alter the rights and obligations of Iron Mountain under this Agreement;

(f) Depositor represents that all Deposit Material is readable and useable in its then current form; if any portion of such Deposit Material is encrypted the necessary decryption tools and keys to read such material are deposited contemporaneously.

(g) Depositor represents that all Deposit Material is provided with all rights necessary for Iron Mountain to verify such proprietary technology and materials upon receipt of a Work Request for such Services; and

(h) Depositor warrants that Iron Mountain's use of the Deposit Material or other materials supplied by Depositor to perform the verification Services described in Exhibit A is lawful and does not violate the rights of any third parties. Depositor agrees to use commercially reasonable efforts to provide Iron Mountain with any necessary use rights or permissions to use materials necessary to perform verification of the Deposit Material. Depositor agrees to reasonably cooperate with Iron Mountain by providing its facilities, computer software systems, and technical personnel for verification Services whenever reasonably necessary.

3. **Beneficiary Responsibilities.**

(a) Beneficiary shall provide all information designated as required to fulfill any Beneficiary Work Request ("**Required Information**") and may also provide other information ("**Optional Information**") at their discretion to assist Iron Mountain in the fulfillment of requested Services.

(b) Beneficiary must authorize and designate one or more persons whose action(s) will legally bind the Beneficiary ("**Authorized Person(s)**" who shall be identified in the Authorized Person(s)/Notices Table of this Agreement) who shall manage the Iron Mountain escrow account through the Iron Mountain Website or via written Work Request. Authorized Person(s) will maintain the accuracy of their name and contact information provided to Iron Mountain during the Term of this Agreement (the "**Beneficiary Information**").

(c) Beneficiary acknowledges, in the absence of a Work Request for verification Services, that it assumes all responsibility for the completeness and/or functionality of all Deposit Material. Beneficiary may submit a verification Work Request to Iron Mountain for one of more of the Services defined in Exhibit A attached hereto and further consents to Iron Mountain's use of a subcontractor if needed to provide such Services.

(d) Beneficiary warrants that Iron Mountain's use of any materials supplied by Beneficiary to perform the verification Services described in Exhibit A is lawful and does not violate the rights of any third parties.

4. **Iron Mountain Responsibilities.**

(a) Iron Mountain agrees to use commercially reasonable efforts to provide the Services requested by authorized Depositor and Beneficiary representatives in a Work Request. Iron Mountain may reject a Work Request (in whole or in part) that does not contain all Required Information at any time upon notification to the Party originating the Work Request.

(b) Iron Mountain will conduct a deposit inspection upon receipt of any Deposit Material and associated Exhibit B. If Iron Mountain determines that the Deposit Material does not match the description provided by Depositor represented in Exhibit B attached hereto, Iron Mountain will provide Depositor with notice by electronic mail, telephone, or regular mail of such discrepancies. Iron Mountain will work directly with the Depositor to resolve any such discrepancies prior to accepting Deposit Material. Iron Mountain will provide Depositor with notice from time to time during the first ninety (90) days from the Effective date as a reminder that submission of initial Deposit Material is required. Iron Mountain may also send notices every ninety (90) days thereafter to Depositor and/or Beneficiary related to Deposit Material activity if such Services are requested in a Work Request.

(c) Iron Mountain will provide notice by electronic mail, telephone, or regular mail to the Beneficiary of all Deposit Material that is accepted and deposited into the escrow account under this Agreement.

(d) Iron Mountain will work with a Party who submits any verification Work Request for Deposit Material covered under this Agreement to either fulfill any standard verification Services Work Request or develop a custom Statement of Work ("**SOW**"). Iron Mountain and the requesting Party will mutually agree in writing to a SOW on the following terms and conditions that include but are not limited to: description of Deposit Material to be tested; description of verification testing; requesting Party responsibilities; Iron Mountain responsibilities; Service Fees; invoice payment instructions; designation of the Paying Party; designation of authorized SOW representatives for both the requesting Party and Iron Mountain with name and contact information; and description of any final deliverables prior to the start of any fulfillment activity. After the start of fulfillment activity, each SOW may only be amended or modified in writing with the mutual agreement of both Parties, in accordance with the change control procedures set forth therein.

(e) Iron Mountain will hold and protect all Deposit Material in physical and/or electronic vaults that are either owned or under the direct control of Iron Mountain.

(f) Iron Mountain will permit the replacement and/or removal of previously submitted Deposit Material upon Work Request that may be subject to the written joint instructions of the Depositor and Beneficiary.

(g) Iron Mountain will strictly follow the procedures set forth in Exhibit C attached hereto to process any Beneficiary Work Request to release Deposit Material.

5. **Payment.**

The Paying Party shall pay to Iron Mountain all fees as set forth in the Work Request form attached hereto as Exhibit A ("**Service Fees**"). Except as set forth below, all Service Fees are due to Iron Mountain within thirty (30) calendar days from the date of invoice in U.S. currency and are non-refundable. Iron Mountain may update Service Fees with a ninety (90) calendar day written notice to the Paying Party during the Term of this Agreement. The Paying Party is liable for any taxes related to Services purchased under this Agreement or shall present to Iron Mountain an exemption certificate acceptable to the taxing authorities. Applicable taxes shall be billed as a separate item on the invoice, to the extent possible. Any Service Fees not collected by Iron Mountain when due shall bear interest until paid at a rate of 1.25% per month (15% per annum) or the maximum rate permitted by law, whichever is less. Delinquent accounts may be referred to

a collection agency at the sole discretion of Iron Mountain. Notwithstanding, the non-performance of any obligations of Depositor to deliver Deposit Material under the License Agreement or this Agreement, Iron Mountain is entitled to be paid all Service Fees that accrue during the Term of this Agreement. All Service Fees will not be subject to offset except as specifically provided hereunder.

6. **Term and Termination.**

(a) The initial "**Term**" of this Agreement is for a period of one (1) year from the Effective Date and will automatically renew for additional one (1) year Terms and continue in full force and effect until one of the following events occur: (i) Depositor and Beneficiary provide joint written instructions of their intent to cancel this Agreement within sixty (60) days to Iron Mountain; (ii) Beneficiary provides a sixty (60) day written notice regarding cancellation of this Agreement to both Depositor and Iron Mountain; or (iii) Iron Mountain provides a sixty (60) day written notice to the Depositor and Beneficiary Authorized Persons that it can no longer perform the Services under this Agreement.

(b) In the event this Agreement is terminated under Sections 6(a)(i) or 6(a)(iii) above, Depositor and Beneficiary may provide Iron Mountain with joint written instructions authorizing Iron Mountain to forward the Deposit Material to another escrow company and/or agent or other designated recipient. If Iron Mountain does not receive joint written instructions within sixty (60) calendar days after the date of the notice of termination, Iron Mountain shall return or destroy the Deposit Material.

(c) In the event of the nonpayment of Service Fees owed to Iron Mountain, Iron Mountain shall provide all Parties to this Agreement with notice by electronic mail and/or regular mail. Any Party to this Agreement shall have the right to make the payment to Iron Mountain to cure the default. If the past due payment is not received in full by Iron Mountain within thirty (30) calendar days of the date of such notice, then Iron Mountain shall have the right to terminate this Agreement at any time thereafter by sending notice by electronic mail and/or regular mail of termination to all Parties. Iron Mountain shall have no obligation to take any action under this Agreement so long as any Iron Mountain invoice issued for Services rendered under this Agreement remains uncollected.

7. **General Indemnity.**

Each Party shall defend, indemnify and hold harmless the others, their corporate affiliates and their respective officers, directors, employees, and agents and their respective successors and assigns from and against any and all claims, losses, liabilities, damages, and expenses (including, without limitation, reasonable attorneys' fees), arising under this Agreement from the negligent or intentional acts or omissions of the indemnifying Party or its subcontractors, or the officers, directors, employees, agents, successors and assigns of any of them.

8. **Warranties.**

(a) Iron Mountain. ANY AND ALL SERVICES PROVIDED HEREUNDER SHALL BE PERFORMED IN A WORKMANLIKE MANNER. EXCEPT AS SPECIFIED IN THIS SECTION, ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS, AND WARRANTIES INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, SATISFACTORY QUALITY, AGAINST INFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE, ARE HEREBY EXCLUDED TO THE EXTENT ALLOWED BY APPLICABLE LAW. AN AGGRIEVED PARTY MUST NOTIFY IRON MOUNTAIN PROMPTLY OF ANY CLAIMED BREACH OF ANY WARRANTIES AND SUCH PARTY'S SOLE AND EXCLUSIVE REMEDY FOR BREACH OF WARRANTY SHALL BE RETURN OF THE PORTION OF THE FEES PAID TO IRON MOUNTAIN BY PAYING PARTY FOR SUCH NON-CONFORMING SERVICES. THIS DISCLAIMER AND EXCLUSION SHALL APPLY EVEN IF THE EXPRESS WARRANTY AND LIMITED REMEDY SET FORTH ABOVE FAILS OF ITS ESSENTIAL PURPOSE. THE WARRANTY PROVIDED IS SUBJECT TO THE LIMITATION OF LIABILITY SET FORTH IN SECTION 11 HEREIN.

(b) Depositor. Depositor warrants that all Depositor Information provided hereunder is accurate and reliable and undertakes to promptly correct and update such Depositor Information during the Term of this Agreement.

(c) Beneficiary. Beneficiary warrants that all Beneficiary Information provided hereunder is accurate and reliable and undertakes to promptly correct and update such Beneficiary Information during the Term of this Agreement.

9. **Insurance.**

Iron Mountain shall, at its sole cost and expense, throughout the term of this Agreement, procure and maintain in full force and effect, the following insurance coverage, with an insurance carrier that is rated B+ or better by A.M. Best.

TYPE OF INSURANCE	COVERAGE AMOUNT	TYPE OF INSURANCE	COVERAGE AMOUNT
General Liability	$2,000,000 General Aggregate	Crime Insurance	$2,000,000 Each Occurrence
General Liability	$1,000,000 Each Occurrence	Umbrella Coverage	$5,000,000 General Aggregate
Professional Liability	$1,000,000 Each Occurrence		

All certificates of insurance shall name the Parties as additional beneficiaries with respect to General Liability coverage. All certificates of insurance shall require that the Parties be provided with advance written notice of cancellation of the stated coverage, and Iron Mountain shall request that its insurer use its best efforts to provide at least thirty (30) days' advance written notification of such cancellation.

10. Confidential Information.

Iron Mountain shall have the obligation to reasonably protect the confidentiality of the Deposit Material. Except as provided in this Agreement Iron Mountain shall not disclose, transfer, make available or use the Deposit Material. Iron Mountain shall not disclose the terms of this Agreement to any third Party. If Iron Mountain receives a subpoena or any other order from a court or other judicial tribunal pertaining to the disclosure or release of the Deposit Material, Iron Mountain will immediately notify the Parties to this Agreement unless prohibited by law. It shall be the responsibility of Depositor and/or Beneficiary to challenge any such order; provided, however, that Iron Mountain does not waive its rights to present its position with respect to any such order. Iron Mountain will not be required to disobey any order from a court or other judicial tribunal, including, but not limited to, notices delivered pursuant to Section 13(g) below.

11. Limitation of Liability.

NOTWITHSTANDING ANYTHING ELSE HEREIN, ALL LIABILITY, IF ANY, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, OF ANY PARTY TO THIS AGREEMENT SHALL BE LIMITED TO THE AMOUNT EQUAL TO ONE YEAR OF FEES PAID OR OWED TO IRON MOUNTAIN UNDER THIS AGREEMENT. IF CLAIM OR LOSS IS MADE IN RELATION TO A SPECIFIC DEPOSIT OR DEPOSITS, SUCH LIABILITY SHALL BE LIMITED TO THE FEES RELATED SPECIFICALLY TO SUCH DEPOSITS. THIS LIMIT SHALL NOT APPLY TO ANY PARTY FOR: (I) ANY CLAIMS OF INFRINGEMENT OF ANY PATENT, COPYRIGHT, TRADEMARK OR OTHER PROPRIETARY RIGHT; (II) LIABILITY FOR DEATH OR BODILY INJURY; (III) DAMAGE TO TANGIBLE PROPERTY (EXCLUDING THE DEPOSIT ITEMS); (IV) THEFT; OR (V) PROVEN GROSS NEGLIGENCE OR WILLFUL MISCONDUCT.

12. Consequential Damages Waiver.

IN NO EVENT SHALL ANY PARTY TO THIS AGREEMENT BE LIABLE TO ANOTHER PARTY FOR ANY INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, LOST PROFITS OR LOST DATA OR INFORMATION, ANY COSTS OR EXPENSES FOR THE PROCUREMENT OF SUBSTITUTE SERVICES, OR ANY OTHER INDIRECT DAMAGES, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE EVEN IF THE POSSIBILITY THEREOF MAY BE KNOWN IN ADVANCE TO ONE OR MORE PARTIES.

13. General.

(a) Incorporation of Work Requests. All Depositor and/or Beneficiary Work Requests are incorporated into this Agreement. Any Work Requests submitted for an additional deposit account ("Auxiliary Deposit Account") will be incorporated by reference into this Agreement and governed by the same terms and conditions that govern the initial deposit account ("Initial Deposit Account").

(b) Purchase Orders. The terms and conditions of this Agreement prevail regardless of any conflicting or additional terms on any Purchase Order or other correspondence for any Initial Deposit Account or Auxiliary Deposit Account. Any contingencies or additional terms contained on any Purchase Order are not binding upon Iron Mountain. All Purchase Orders are subject to approval and acceptance by Iron Mountain.

(c) Right to Make Copies. Iron Mountain shall have the right to make copies of all Deposit Material as reasonably necessary to perform this Agreement. Iron Mountain shall copy all copyright, nondisclosure, and other proprietary notices and titles contained on Deposit Material onto any copies made by Iron Mountain. Any copying expenses incurred by Iron Mountain as a result of a Work Request to copy will be borne by the Party requesting the copies. Iron Mountain may request Depositor's reasonable cooperation in promptly copying Deposit Material in order for Iron Mountain to perform this Agreement.

(d) Choice of Law. The validity, interpretation, and performance of this Agreement shall be controlled by and construed under the laws of the State of California, United States of America, as if performed wholly within the state and without giving effect to the principles of conflicts of laws.

(e) Right to Rely on Instructions. Iron Mountain may act in reliance upon any instruction, instrument, or signature reasonably believed by Iron Mountain to be genuine. Iron Mountain may assume that any employee of a Party to this Agreement who gives any written notice, request, or instruction has the authority to do so. Iron Mountain will not be required to inquire into the truth or evaluate the merit of any statement or representation contained in any notice or document. Iron Mountain shall not be responsible for failure to act as a result of causes beyond the reasonable control of Iron Mountain.

(f) Force Majeure. Except for the obligation to pay monies due and owing, no Party shall be liable for any delay or failure in performance due to events outside the defaulting Party's reasonable control, including without limitation acts of God, earthquake, labor disputes, shortages of supplies, riots, war, acts of terrorism, fire, epidemics, or delays of common carriers or other circumstances beyond its reasonable control. The obligations and rights of the excused Party shall be extended on a day-to-day basis for the time period equal to the period of the excusable delay.

(g) Notices. All notices regarding Exhibit C shall be sent by commercial express mail. All other correspondence, including invoices, payments, and other documents and communications, shall be sent by (i) electronic mail; (ii) via regular mail to the Parties at the addresses specified in the Authorized Persons/Notices Table which shall include the title(s) of the individual(s) authorized to receive notices; or (iii) via the online portal maintained at the Iron Mountain Website. It shall be the responsibility of the Parties to notify each other as provided in this Section in the event of a change of physical or e-mail addresses. The Parties shall have the right to rely on the last known address of the other Parties. Any correctly addressed notice or last known address of the other Parties that is relied on herein that is refused, unclaimed, or undeliverable because of an act or omission of the Party to be notified as provided herein shall be deemed effective as of the first date that said notice was refused, unclaimed, or deemed undeliverable by electronic mail, the postal authorities by mail, through messenger or commercial express delivery services.

(h) No Waiver. No waiver of rights under this Agreement by any Party shall constitute a subsequent waiver of this or any other right under this Agreement.

(i) Assignment. No assignment of this Agreement by Depositor and/or Beneficiary or any rights or obligations of Depositor and/or Beneficiary under this Agreement is permitted without the written consent of Iron Mountain, which shall not be unreasonably withheld or delayed.

(j) Severability. In the event any of the terms of this Agreement become or are declared to be illegal or otherwise unenforceable by any court of competent jurisdiction, such term(s) shall be null and void and shall be deemed deleted from this Agreement. All remaining terms of this Agreement shall remain in full force and effect. Notwithstanding the foregoing, if this paragraph becomes applicable and, as a result, the value of this Agreement is materially impaired for either Party, as determined by such Party in its sole discretion, then the affected Party may terminate this Agreement by notice to the others.

(k) Independent Contractor Relationship. Depositor and Beneficiary understand, acknowledge, and agree that Iron Mountain's relationship with Depositor and Beneficiary will be that of an independent contractor and that nothing in this Agreement is intended to or should be construed to create a partnership, joint venture, or employment relationship.

(l) Attorneys' Fees. In any suit or proceeding between the Parties relating to this Agreement, the prevailing Party will have the right to recover from the other(s) it's costs and reasonable fees and expenses of attorneys, accountants, and other professionals incurred in connection with the suit or proceeding, including costs, fees and expenses upon appeal, separately from and in addition to any other amount included in such judgment. This provision is intended to be severable from the other provisions of this Agreement, and shall survive and not be merged into any such judgment.

(m) No Agency. No Party has the right or authority to, and shall not, assume or create any obligation of any nature whatsoever on behalf of the other Parties or bind the other Parties in any respect whatsoever.

(n) Disputes. Any dispute, difference or question relating to or arising among any of the Parties concerning the construction, meaning, effect or implementation of this Agreement or any Party hereof will be submitted to, and settled by arbitration by a single arbitrator of the American Arbitration Association in accordance with the Commercial Rules of the American Arbitration Association. Unless otherwise agreed by the Parties, arbitration will take place in San Diego, California, U.S.A. Any court having jurisdiction over the matter may enter judgment on the award of the arbitrator. Service of a petition to confirm the arbitration award may be made by regular mail or by commercial express mail, to the attorney for the Party or, if unrepresented, to the Party at the last known business address. If however, Depositor and/or Beneficiary refuse to submit to arbitration, the matter shall not be submitted to arbitration and Iron Mountain may submit the matter to any court of competent jurisdiction for an interpleader or similar action. Unless adjudged otherwise, any costs of arbitration incurred by Iron Mountain, including reasonable attorney's fees and costs, shall be divided equally and paid by Depositor and Beneficiary.

(o) Regulations. All Parties are responsible for and warrant - to the extent of their individual actions or omissions - compliance with all applicable laws, rules and regulations, including but not limited to: customs laws; import; export

and re-export laws; and government regulations of any country from or to which the Deposit Material may be delivered in accordance with the provisions of this Agreement.

(p) Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument.

(q) Survival. Sections 6 (Term and Termination), 7 (General Indemnity), 8 (Warranties), 10 (Confidential Information), 11 (Limitation of Liability), 12 (Consequential Damages Waiver), and 13 (General) of this Agreement shall survive termination of this Agreement or any Exhibit attached hereto.

NOTE: SIGNATURE BLOCKS, AUTHORIZED PERSONS/NOTICES TABLE, AND BILLING CONTACT INFORMATION TABLE FOLLOW ON THE NEXT PAGE

The Parties agree that this Agreement is the complete agreement between the Parties hereto concerning the subject matter of this Agreement and replaces any prior or contemporaneous oral or written communications between the Parties. There are no conditions, understandings, agreements, representations, or warranties, expressed or implied, which are not specified herein. Each of the Parties herein represents and warrants that the execution, delivery, and performance of this Agreement has been duly authorized and signed by a person who meets statutory or other binding approval to sign on behalf of its business organization as named in this Agreement. This Agreement may only be modified by mutual written agreement of the Parties.

Note: If contracting electronically via the online portal, clicking the "I Accept" button displayed as part of the ordering process, evidences ☐ **"Depositor's"** or ☐ **"Beneficiary's"** agreement to the preceding terms and conditions (the "Agreement"). If you are entering into this Agreement via the online portal on behalf of a company or other legal entity, you represent that you have the authority to bind such entity to these terms and conditions, in which case the terms "you" or "your" shall refer to such entity. If you do not have such authority, or if you do not agree with these terms and conditions, you must select the "I Decline" button.

CHOOSE ONE: ☒ **DEPOSITOR** or ☐ **BENEFICIARY**

SIGNATURE:	
PRINT NAME:	Christopher D. Maloney
TITLE:	President and CEO
DATE:	13 July 06
EMAIL ADDRESS	chris.maloney@tritech.com

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

SIGNATURE:	
PRINT NAME:	Paula Smith
TITLE:	Mgr. Client Svcs
DATE:	July 26, 2006
EMAIL ADDRESS:	ipmcontracts@ironmountain.com

AUTHORIZED PERSON(S)/NOTICES TABLE

Please provide the name(s) and contact information of the Authorized Person(s) under this Agreement. All Notices will be sent electronically and/or through regular mail to the appropriate address set forth below.

PRINT NAME:	Roxanne Lerner		PRINT NAME:	
TITLE:	Contracts & Proposals Mgr		TITLE:	
EMAIL ADDRESS	roxanne.lerner@tritech.com		EMAIL ADDRESS	
STREET ADDRESS 1	9860 Mesa Rim Road		STREET ADDRESS 1	
PROVINCE/CITY/STATE	San Diego, CA		PROVINCE/CITY/STATE	
POSTAL/ZIP CODE	92121		POSTAL/ZIP CODE	
PHONE NUMBER	858.799.7372		PHONE NUMBER	
FAX NUMBER	858.799.7015		FAX NUMBER	

BILLING CONTACT INFORMATION TABLE

Please provide the name and contact information of the Billing Contact under this Agreement. All Invoices will be sent electronically and/or through regular mail to the appropriate address set forth below.

PRINT NAME:	Roxanne Lerner
TITLE:	Contracts & Proposals Mgr.
EMAIL ADDRESS	roxanne.lerner@tritech.com
STREET ADDRESS 1	9860 Mesa Rim Road
PROVINCE/CITY/STATE	San Diego, CA
POSTAL/ZIP CODE	92121
PHONE NUMBER	858.799.7372
FAX NUMBER	858.799.7015

Approved as to Operational Content:
Iron Mountain Operations
Karen Gustave
Name: Karen Gustave
Contracts Administrator
Date: July 14, 2006

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

All notices should be sent to ipmcontracts@ironmountain.com OR Iron Mountain, Attn: Contract Administration, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA.

EXHIBIT A ESCROW SERVICE WORK REQUEST

Account Number 1054

SERVICE Check box (es) to order service	SERVICE DESCRIPTION	ONE-TIME FEES	ANNUAL FEES	PAYING PARTY Check box to identify the Paying Party for each service below.
☐ Add and Manage New Escrow Account	Iron Mountain will open a new escrow deposit account that includes a minimum of one (1) Depositor and one (1) complete set of Deposit Material. All Deposit Material will be securely stored in controlled vaults that are owned and/or operated by Iron Mountain. Account services include unlimited deposits, electronic vaulting, access to Iron Mountain Connect™ Escrow Management Center for secure online account management and submission of electronic Work Requests, and secure destruction of deposit materials upon account termination. Iron Mountain will assign a Client Manager for each escrow account. These Managers will provide training from time to time to facilitate secure Internet access to escrow account(s). Assigned Managers will also ensure timely fulfillment of Work Requests (e.g., deposit updates, new beneficiary enrollment) and communication of status.	$2,050	$950	☐ Depositor - OR - ☐ Beneficiary
☐ Add and Manage Auxiliary Account	Iron Mountain will open and manage an Auxiliary Deposit Account for a new product or depositor in accordance with the service description immediately above and the Agreement that governs the Initial Deposit Account # _____.	N/A	$950	☐ Depositor - OR - ☐ Beneficiary
☐ Add Beneficiary	Iron Mountain will fulfill a Work Request to add a new Beneficiary to an escrow account, where possible, and provide notice as appropriate to all relevant Parties.	N/A	$650	☐ Depositor - OR - ☐ Beneficiary
☐ Add Deposit Tracking Notification	Iron Mountain will send periodic notices to Depositor and/or Beneficiary related to Deposit Material as specified within the terms of the Agreement.	N/A	$350	☐ Depositor - OR - ☐ Beneficiary
☐ Add File Comparison and Analysis Test	Iron Mountain will fulfill a Work Request to perform a File Comparison and Analysis Test, which includes a final report sent to Client, on Deposit Material to ensure consistency between Depositor's representations (i.e., Exhibit B and Supplementary Questionnaire) and stored Deposit Material.	$2,500	N/A	☐ Depositor - OR - ☐ Beneficiary
☐ Add Deposit Compile Test	Iron Mountain will fulfill a Work Request to perform a Deposit Compile Test, which includes a final report sent to Client, on Deposit Material. Client and Iron Mountain will agree on a custom Statement of Work ("SOW") prior to the start of fulfillment.	Custom Quote	N/A	☐ Depositor - OR - ☐ Beneficiary
Add Deposit Usability Test – Binary Comparison	Iron Mountain will fulfill a Work Request to perform one a Deposit Compile Test Binary Comparison which includes a final report sent to Client, on Deposit Material. Client and Iron Mountain will agree on a custom Statement of Work ("SOW") prior to the start of fulfillment.	Custom Quote	N/A	☐ Depositor - OR - ☐ Beneficiary
Add Deposit Usability Test – Full Usability Test	Iron Mountain will fulfill a Work Request to perform one a Deposit Compile Test Full Usability which includes a final report sent to Client, on Deposit Material. Client and Iron Mountain will agree on a custom Statement of Work ("SOW") prior to the start of fulfillment.	Custom Quote	N/A	☐ Depositor - OR - ☐ Beneficiary
☐ Add Dual Vaulting	Iron Mountain will fulfill a Work Request to store deposit materials in one additional location as defined within the Service Agreement. Duplicate storage request may be in the form of either physical media or electronic storage.	N/A	$500	☐ Depositor - OR - ☐ Beneficiary
☐ Release Deposit Material	Iron Mountain will process a Work Request to release Deposit Material by following the specific procedures defined in Exhibit C "Release of Deposit Materials" the Escrow Service Agreement.	$500	N/A	☐ Depositor - OR - ☐ Beneficiary
☐ Add Custom Services	Iron Mountain will provide its Escrow Expert consulting Services based on a custom SOW mutually agreed to by all Parties.	$150/hour	N/A	☐ Depositor - OR - ☐ Beneficiary
☐ Delete Account	Iron Mountain will fulfill a Work Request to terminate an existing escrow account by providing notice to all Parties to the Agreement, removing Deposit Material from the vault and then either securely destroying or returning the Deposit Material via commercial express mail carrier as instructed. All accrued Services Fees must be collected by Iron Mountain prior to completing fulfillment to terminate an existing escrow account.	No Charge	No Charge	No Charge
☐ Replace/Delete Deposit Materials	Iron Mountain will replace/delete deposit material in accordance with the terms of the Agreement. Materials will be returned as directed by depositor or destroyed using Iron Mountain Secure Shredding.	No Charge	No Charge	No Charge

Upon Escrow Service Agreement execution, please provide your initials below in the appropriate location to indicate your acceptance of this Escrow Services Work Request inclusive of agreed Services pricing and indication of which Party is financially responsible for payment of specific Services.

DEPOSITOR INITIALS_____ BENEFICIARY INITIALS_____

Note: Work Requests may be submitted electronically through their escrow account online OR may complete this form along with any other supporting exhibits required and email and/or fax this Work Request to their assigned Client Manager at Iron Mountain for fulfillment.

VERIFICATION SERVICES OPTIONS

1. **File Comparison and Analysis.**

   1.1. This series of verification tests provides insight into whether the materials that have been deposited have basic information in a form that allows for additional testing to be performed. These tests detect errors that often inhibit effective use of the escrow deposit.

   1.2. *Steps include:* Analyzing deposit media readability, file listing, creation of file classification table, virus scan, assurance of completed deposit questionnaire, analysis of completed deposit questionnaire.

   1.3. *Deliverables:* At completion of testing, Iron Mountain will distribute a report to all parties detailing Iron Mountain's results. This report will include readability results, file listing, file classification table(s), virus scan results, completed deposit questionnaire, and an analysis of the completed deposit questionnaire.

2. **Deposit Compile Test.**

   2.1. This series of tests includes a standard effort to compile the Deposit Material and build executable code.

   2.2. *Steps include:* Analyzing deposit media readability, file listing, creation of file classification table, virus scan, assurance of completed deposit questionnaire, analysis of completed deposit questionnaire, recreating the Depositor's software development environment, compiling source files and modules, linking libraries and recreating executable code, pass/fail determination, creation of comprehensive build instructions.

   2.3. *Deliverables:* Iron Mountain will provide a report detailing the steps necessary to recreate the software/hardware development environment, problems encountered with testing, and Iron Mountain's analysis of the deposit. In addition, the report will list required software development materials, including, without limitation, required source code languages and compilers, third-Party software, libraries, operating systems, and hardware, as well as Iron Mountain's analysis of the deposit. When identifying materials required to re-create Depositor's software development environment, Iron Mountain will rely on information provided in Depositor's completed questionnaire (obtained via a Iron Mountain verification representative) and/or information gathered during Iron Mountain's testing experience.

   2.4. Deposit Usability Test.

   2.5. This series of tests includes testing the functionality of the compiled Deposit Material (in a production setting or similar environment) and can be accomplished through one of the following two options:

      2.5.1. *Binary Comparison* – a comparison of the files built from the Deposit Compile Test to the actual licensed technology on the customer's site to ensure a full match in file size.

      2.5.2. *Full Usability Test* – a confirmation that the built applications work properly when installed.

      2.5.3. Services may be provided by Iron Mountain or individuals or organizations employed by or under contract with Iron Mountain, at the discretion of Iron Mountain.

EXHIBIT B
DEPOSIT MATERIAL DESCRIPTION

COMPANY NAME: _____ ESCROW ACCOUNT NUMBER: 10514

DEPOSIT NAME _____ AND DEPOSIT VERSION _____ (Deposit Name will appear in account history reports)

DEPOSIT MEDIA (PLEASE LABEL ALL MEDIA WITH THE DEPOSIT NAME PROVIDED ABOVE)

MEDIA TYPE	QUANTITY		MEDIA TYPE	QUANTITY
☐ CD-ROM / DVD			☐ 3.5" Floppy Disk	
☐ DLT Tape			☐ Documentation	
☐ DAT Tape			☐ Hard Drive / CPU	
			☐ Circuit Board	

	TOTAL SIZE OF TRANSMISSION (SPECIFY IN BYTES)	# OF FILES	# OF FOLDERS
☐ Internet File Transfer			
☐ Other (please describe below):			

DEPOSIT ENCRYPTION (Please check either "Yes" or "No" below and complete as appropriate)

Is the media or are any of the files encrypted? ☐ **Yes or** ☐ **No**

If yes, please include any passwords and decryption tools description below. Please also deposit all necessary encryption software with this deposit.

Encryption tool name_____ Version _____

Hardware required _____

Software required _____

Other required information_____

DEPOSIT CERTIFICATION (Please check the box below to Certify and Provide your Contact Information)

☐ I certify for Depositor that the above described Deposit Material has been transmitted electronically or sent via commercial express mail carrier to Iron Mountain at the address below.	☐ Iron Mountain has inspected and accepted the above described Deposit Material either electronically or physically. Iron Mountain will notify Depositor of any discrepancies.
NAME:	NAME:
DATE:	DATE:
EMAIL ADDRESS:	
TELEPHONE NUMBER:	
FAX NUMBER:	

Note: If Depositor is physically sending Deposit Material to Iron Mountain, please label all media and mail all Deposit Material with the appropriate Exhibit B via commercial express carrier to the following address:

Iron Mountain Intellectual Property Management, Inc.
Attn: Vault Administration
2100 Norcross Parkway, Suite 150
Norcross, GA 30071
Telephone: (770) 239-9200
Facsimile: (770) 239-9201

EXHIBIT C

RELEASE OF DEPOSIT MATERIAL

Deposit Account Number: 10514

Iron Mountain will use the following procedures to process any Beneficiary Work Request to release Deposit Material.

1. Release Conditions. Depositor and Beneficiary agree that Iron Mountain will provide notice via commercial express mail to the Depositor if a Beneficiary under this Agreement submits a Deposit Material release Work Request based on one or more of the following conditions (defined as **"Release Conditions"**):
   (i) Breach of the License Agreement by the Depositor for the Deposit Material covered under this Agreement; or
   (ii) Failure of the Depositor to function as a going concern or operate in the in the ordinary course; or
   (iii) Depositor is subject to voluntary or involuntary bankruptcy.
2. Release Work Request. A Beneficiary may submit a Work Request to Iron Mountain to release the Deposit Material covered under this Agreement. Iron Mountain will send a written notice of this Beneficiary Work Request within five (5) business days to the authorized Depositor representative(s).
3. Contrary Instructions. From the date Iron Mountain mails written notice of the Beneficiary Work Request to release Deposit Material covered under this Agreement, Depositor representative(s) shall have ten (10) business days to deliver to Iron Mountain contrary instructions ("Contrary Instructions"). Contrary Instructions shall mean the written representation by Depositor that a Release Condition has not occurred or has been cured. Contrary Instructions shall be on company letterhead and signed by an authorized Depositor representative. Upon receipt of Contrary Instructions, Iron Mountain shall send a copy to an authorized Beneficiary representative by commercial express mail. Additionally, Iron Mountain shall notify both Depositor representative(s) and Beneficiary representative(s) that there is a dispute to be resolved pursuant to the Disputes provisions of this Agreement. Iron Mountain will continue to store Deposit Material without release pending (i) joint instructions from Depositor and Beneficiary that accept release of Deposit Material; or (ii) dispute resolution pursuant to the Disputes provisions of this Agreement; or (iii) receipt of an order from a court of competent jurisdiction.
4. Release of Deposit Material. If Iron Mountain does not receive Contrary Instructions from an authorized Depositor representative, Iron Mountain is authorized to release Deposit Material to the Beneficiary or, if more than one Beneficiary is registered to the deposit, to release a copy of Deposit Material to the Beneficiary. Iron Mountain is entitled to receive any uncollected Service fees due Iron Mountain from the Beneficiary before fulfilling the Work Request to release Deposit Material covered under this Agreement. This Agreement will terminate upon the release of Deposit Material held by Iron Mountain.
5. Right to Use Following Release. Beneficiary has the right under this Agreement to use the Deposit Material for the sole purpose of continuing the benefits afforded to Beneficiary by the License Agreement. Notwithstanding, the Beneficiary shall not have access to the Deposit Material unless there is a release of the Deposit Material in accordance with this Agreement. Beneficiary shall be obligated to maintain the confidentiality of the released Deposit Material.

EXHIBIT D

AUXILIARY DEPOSIT ACCOUNT TO MASTER ESCROW AGREEMENT

(NOTE: TO BE COMPLETED ONLY IF DEPOSITOR ESTABLISHED A MASTER ESCROW AGREEMENT)

Master Deposit Account Number:_____

Auxiliary Account Number_____

_____ ("**Depositor**") has entered into a Master Escrow Agreement with Iron Mountain Intellectual Property Management, Inc. ("**Iron Mountain**"). Pursuant to that Agreement, Depositor may deposit certain Deposit Material with Iron Mountain.

Depositor desires that new Deposit Material be held in a separate account and be maintained separately from the initial account. By execution of this Exhibit D, Iron Mountain will establish a separate account for the new Deposit Material. The new account will be referenced by the following name: _____.

Depositor hereby agrees that all terms and conditions of the existing Master Escrow Agreement previously entered into by Depositor and Iron Mountain will govern this account. The termination or expiration of any other account of Depositor will not affect this account.

CHOOSE ONE: ☐ **DEPOSITOR** or ☐ **BENEFICIARY**

SIGNATURE:	
PRINT NAME:	
TITLE:	
DATE:	
EMAIL ADDRESS	

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

SIGNATURE:	
PRINT NAME:	
TITLE:	
DATE:	
EMAIL ADDRESS:	ipmcontracts@ironmountain.com

AUTHORIZED PERSON(S)/NOTICES TABLE

Please provide the name(s) and contact information of the Authorized Person(s) under this Agreement. All Notices will be sent electronically and/or through regular mail to the appropriate address set forth below.

PRINT NAME:			PRINT NAME:	
TITLE:			TITLE:	
EMAIL ADDRESS			EMAIL ADDRESS	
STREET ADDRESS 1			STREET ADDRESS 1	
PROVINCE/CITY/STATE			PROVINCE/CITY/STATE	
POSTAL/ZIP CODE			POSTAL/ZIP CODE	
PHONE NUMBER			PHONE NUMBER	
FAX NUMBER			FAX NUMBER	

EXHIBIT E
ENROLLMENT FORM

Deposit Account Number: _____

Depositor, Beneficiary and Iron Mountain Intellectual Property Management, Inc. ("Iron Mountain"), hereby acknowledge that _____ is the ☐ **"Depositor"** or ☐ **"Beneficiary"** referred to in the Escrow Agreement that supports Deposit Account Number: _____with Iron Mountain as the escrow agent and _____ is the ☐ **Depositor** or ☐ **Beneficiary** enrolling under this Agreement. ☐ **"Depositor"** or ☐ **"Beneficiary"** hereby agrees to be bound by all provisions of such Agreement.

BENEFICIARY COMPANY NAME: _____

AUTHORIZED PERSON(S)/NOTICES TABLE

Please provide the name(s) and contact information of the Authorized Person(s) under this Agreement. All Notices will be sent electronically and/or through regular mail to the appropriate address set forth below. Please complete all information as applicable. Incomplete information may result in a delay of processing.

PRINT NAME:			PRINT NAME:	
TITLE:			TITLE:	
EMAIL ADDRESS			EMAIL ADDRESS	
STREET ADDRESS			STREET ADDRESS	
PROVINCE/CITY/STATE			PROVINCE/CITY/STATE	
POSTAL/ZIP CODE			POSTAL/ZIP CODE	
PHONE NUMBER			PHONE NUMBER	
FAX NUMBER			FAX NUMBER	

PAYING PARTY COMPANY NAME: _____

BILLING CONTACT INFORMATION TABLE

Please provide the name and contact information of the Billing Contact under this Agreement. All Invoices will be sent to this individual at the address set forth below.

PRINT NAME:	
TITLE:	
EMAIL ADDRESS	
STREET ADDRESS 1	
PROVINCE/CITY/STATE	
POSTAL/ZIP CODE	
PHONE NUMBER	
FAX NUMBER	

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

All notices should be sent to ipmcontracts@ironmountain.com OR Iron Mountain, Attn: Contract Administration, 2100 Norcross Parkway, Suite 150, Norcross, Georgia, 30071, USA.

NOTE: SIGNATURE BLOCKS FOLLOW ON THE NEXT PAGE

DEPOSITOR

SIGNATURE:	
PRINT NAME:	
TITLE:	
DATE:	
EMAIL ADDRESS	

BENEFICIARY

SIGNATURE:	
PRINT NAME:	
TITLE:	
DATE:	
EMAIL ADDRESS:	

IRON MOUNTAIN INTELLECTUAL PROPERTY MANAGEMENT, INC.

SIGNATURE:	
PRINT NAME:	
TITLE:	
DATE:	
EMAIL ADDRESS:	ipmcontracts@ironmountain.com

EXHIBIT Q
ESCROW DEPOSIT QUESTIONNAIRE

Introduction

From time to time, technology escrow beneficiaries may exercise their right to perform verification services. This is a service that Iron Mountain provides for the purpose of validating relevance, completeness, currency, accuracy and functionality of deposit materials.

Purpose of Questionnaire

In order for Iron Mountain to determine the deposit material requirements and to quote fees associated with verification services, a completed deposit questionnaire is requested. It is the responsibility of the escrow depositor to complete the questionnaire.

Instructions

Please complete the questionnaire in its entirety by answering every question with accurate data. Upon completion, please return the completed questionnaire to the beneficiary asking for its completion, or e-mail it to Iron Mountain Intellectual Property Management to the attention of Shane Ryan at *shaneryan@ironmountain.com*.

Escrow Deposit Questionnaire

General Description

1. What is the general function of the software to be placed into escrow?
2. On what media will the source code be delivered?
3. What is the size of the deposit in megabytes?

Requirements for the Execution of the Software Protected by the Deposit

1. What are the system hardware requirements to successfully execute the software? (memory, disk space, etc.)
2. How many machines are required to completely set up the software?
3. What are the software and system software requirements, to execute the software and verify correct operation?

Requirements for the Assembly of the Deposit

1. Describe the nature of the source code in the deposit. (Does the deposit include interpreted code, compiled source, or a mixture? How do the different parts of the deposit relate to each other?)
2. How many build processes are there?
3. How many unique build environments are required to assemble the material in the escrow deposit into the deliverables?
4. What hardware is required for each build environment to compile the software? (including memory, disk space, etc.)

5. What operating systems (including versions) are used during compilation? Is the software executed on any other operating systems/version?

6. How many separate deliverable components (executables, share libraries, etc.) are built?

7. What compilers/linkers/other tools (brand and version) are necessary to build the application?

8. What, if any, third-party libraries are used to build the software?

9. How long does a complete build of the software take? How much of that time requires some form of human interaction and how much is automated?

10. Do you have a formal build document describing the necessary steps for system configuration and compilation?

11. Do you have an internal QA process? If so, please give a brief description of the testing process.

12. Please list the appropriate technical person(s) Iron Mountain may contact regarding this set of escrow deposit materials.

Please provide your contact information below:

Name: _____
Telephone: _____
Company: _____
Address: _____
City, State _____ Postal Code _____
Country: _____
E-mail: _____

For additional information about Iron Mountain Technical Verification Services, please contact Shane Ryan at **978-667-3601 ext. 100** or by e-mail at **mailto: shancryan@ironmountain.com**.

www.ironmountain.com

ADDENDUM C

SUBCONTRACTOR WARRANTY, SUPPORT AND MAINTENANCE AGREEMENTS

(ATTACHED)

Not applicable to this Project.

ADDENDUM D

SUBCONTRACTOR LICENSE AGREEMENTS

(ATTACHED)

Not applicable to this Project.

ADDENDUM E

DEFINITION OF CRITICAL AND URGENT PRIORITY SOFTWARE ERRORS

The following table defines Critical and Urgent Priority Software Errors. Software Errors will be corrected in accordance with the Software Support Agreement.

Inform CAD and Inform Mobile

Priority	Issue Definition	Response Time
Priority 1 – Critical Priority	24x7 Support for live operations on the production system: A system down event which severely impacts the ability of Users to dispatch emergency units. This is defined as the following: • Inform CAD, Inform Mobile, or Interfaces are down as further defined in the Special Note #1 below. • Critical servers inoperative, as listed in Special Note #1. • Complete interruption of call taking and/or dispatch operations • Loss of data & data corruption This means one or more critical server components are non-functional disabling Inform CAD or Inform Mobile workstations. These Software Errors are defined in *Special Note #1*, below.	Normal Customer Service Hours: Telephone calls to 800. 987.0911 will be immediately answered and managed by the first available representative but not longer than 5 minutes. After Normal Customer Service Hours: Thirty (30) minute callback after client telephone contact to 800. 987.0911. Priority 1 issues must be called in via 800. 987.0911 in order to receive this level of response.
Priority 2 – Urgent Priority	24x7 Support for live operations on the production system: A serious Software Error with no workaround not meeting the criteria of a Critical Priority, but which severely impacts the ability of Users to enter incoming calls for service and/or dispatch emergency units. Such errors will be consistent and reproducible. A significant number of the Inform CAD or Inform Mobile workstations are negatively impacted by this error (e.g., does not apply to a minimal set of Inform CAD or Inform mobile workstations). These Software Errors are defined in more detail in Special Note #2, below.	Normal Customer Service Hours: Telephone calls to 800. 987.0911 will be answered and managed by the first available representative but not longer than 5 minutes. After Normal Customer Service Hours: One (1) hour callback after client telephone contact to 800. 987.0911. Priority 2 issues must be called in via 800. 987.0911 in order to receive this level of response.

Special Note #1: Priority 1 - Critical Priority issues meeting the previously noted criteria are defined as follows:

1. Inform CAD:
    a. The Inform CAD System is down and all workstations will not launch or function.
    b. The Inform CAD System is inoperable due to data corruption caused by TriTech Software.
    c. The Inform CAD Reporting and Archiving Server is down and the system is configured to use the Reporting Server for dispatching functions (e. g., Premise History).
    d. Law enforcement users are unable to send or receive justice queries (this priority applies if the functionality is available through no other available methods).
2. Inform Mobile:
    a. The Inform Mobile System is down and all unit mobile devices are unable to log in or function.
    b. The Inform Mobile System is inoperable due to data corruption caused by TriTech Software.
    c. Law enforcement users are unable to send or receive justice queries (this priority applies if the functionality is available through no other available methods).

Special Note #2: Priority 2 - Urgent Priority issues, meeting the previously noted criteria, are defined as follows:

1. Inform CAD:
    a. Inform CAD users are severely impacted due to one of the following conditions:
        i. Unable to enter new requests for service via the emergency or scheduled call-taking screen (using all available methods).
        ii. A user is unable to verify an address from within the emergency or scheduled call-taking screen. The inability to view/edit premise or caution note information.
        iii. The inability to send and receive text messaging (within CAD, CAD to Mobile, or Mobile to Mobile).
        iv. The system does not perform unit recommendations.
        v. Inability to assign a unit to an incident (using all available methods).
        vi. Inability to change a unit's status (using all available methods).
        vii. Inability to close an incident (using all available methods).
        viii. Inability to view incident information needed to dispatch an incident (using all available methods).
        ix. Disaster Recovery System, following a test failover is inoperable for more than one (1) business day
2. Inform Mobile:
    a. Inform Mobile users are severely impacted due to one of the following conditions:
        i. Inability to receive new requests for service from TriTech CAD (using all available methods).
        ii. Inability to view incident information needed to dispatch an incident (using all available methods).
        iii. The inability to send and receive text messaging (within CAD, CAD to Mobile, or Mobile to Mobile).
        iv. Inability to enter a traffic stop or on-view incident.
        v. The inability to view premise or caution note information.
        vi. Disaster Recovery System, following a test failover is inoperable for more than one (1) business day.
3. Inform CAD/Mobile Interfaces:
    a. An Inform CAD Station Alerting Interface is down or Inform CAD Station Alerting Interface repeatedly fails to process a station alert, as part of a unit assignment, or if there is a reoccurring significant delay in the interface processing a station alert as part of a unit assignment (once it is diagnosed that is not being caused by the station alerting system).
    b. An Inform CAD Paging Interface is down.
    c. An interface used for personnel rostering is down.
    d. A CAD-to-CAD interface is down or repeatedly fails to process information into an incident.
    e. An Inform CAD Paging Interface repeatedly fails to process a unit alert as part of a unit assignment.
    f. An ANI/ALI interface repeatedly fails to process information into an incident.
    g. An interface to an external rostering system used to logon units is down.
    h. An AVL interface fails to process updates for over 50% of units.
    i. A mobile interface (MDT or MDC) repeatedly fails to process incident or status change information.
    j. A Standard CAD to External System Incident Data Transfer Interface License (RMS) is down.

ADDENDUM F

TRITECH.COM SUBSCRIPTION SERVICE USE & LICENSE AGREEMENT

(Attached if applicable)