CONTRACT CHANGE NOTICE

Change Notice Number **11**
to
Contract Number **071B9200243**

CONTRACTOR	
	Memex, Inc.
	22636 Davis Drive
	Sterling, VA 22182
	Karyn Long
	703-556-4031
	karyn.long@sas.com
	*******9906

STATE			
Program Manager	Dave Roach	DTMB	
	517-241-2254		
	roachd2@Michigan.gov		
Contract Administrator	James Topping	DTMB	
	(517) 284-7000		
	ToppingJ@michigan.gov		

CONTRACT SUMMARY			
DESCRIPTION: Michigan Criminal Intelligence System			
INITIAL EFFECTIVE DATE	**INITIAL EXPIRATION DATE**	**INITIAL AVAILABLE OPTIONS**	**EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW**
June 16, 2009	June 16, 2014	2 - 2 Year	June 16, 2018
PAYMENT TERMS		**DELIVERY TIMEFRAME**	
ALTERNATE PAYMENT OPTIONS			**EXTENDED PURCHASING**
☐ P-card ☐ Direct Voucher (DV) ☐ Other			☐ Yes ☒ No
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☐		☐		Click here to enter a date.

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$4,659,356.45	$ 54,600	$4,713,956.45

DESCRIPTION: Effective 08/30/2016 the following Statement of Work is hereby incorporated into the contract for enhancements performed on their existing Cyber Case Tracking (CCT) and activity reporting module. These forms will be used to capture current business statistical needs of the expanding cyber section and to aid in streamlining case management and examinations. This includes: User Daily activities, Time Accounting of forensic examinations per device and user, Property management and Tracking with Auditing of non-MSP cases, Case Narrative/Import/Review, in addition to Case Priority Establishment. Please also note contractor contact has been updated.

All other terms, conditions, specifications, and pricing remain the same per Contractor and Agency agreement and DTMB Procurement approval.

INTRODUCTION

The Michigan State Police Cyber Section has requested a proposal from SAS for Professional Services related to the enhancement of the existing cyber case tracking and activity reporting module. This module is currently an integrated component of the existing MI-Intel system formally known as MCIS.

The Cyber Section consists of the Michigan Cyber Command Center (MC3), the Computer Crimes Unit (CCU) and the Michigan Internet Crimes Against Children (ICAC) Task Force. Over the last year the Cyber Section has developed and deployed a module designed to track investigative activities conducted by the cyber team in addition to the capture of time dedicated to each investigation by unit and investigator. See Appendix B for the forms developed by the cyber section that this new module will be based on. This proposal includes the tracking and disposal of property / evidence that has come into the possession of the cyber section as part of ongoing investigations. The intent of this project is to improve the solution by inserting a set of enhanced capabilities to support the current business needs of the Cyber Section

The solution will consist of the following items:

1. User Daily Activities
2. Property Management
3. Case Priority Establishment (Risk Scoring)
4. Case Narrative
5. Case Review / Supervision
6. Reporting
7. Enterprise Search

The cyber module will be enhanced to meet the following high-level requirements:

- Move or recreate the current Cyber module from the MIOC Data logical server on the MI-Intel production server to a new Cyber Section specific logical server called CCU_MC3.
- Modify forms to enhance the user experience and ensure consistency across the solution.
- Copy any data currently saved in the Cyber module under the MIOC Data logical server to the new logical server
- Include functionality as described in the MI-Intel Cyber Case Tracking and Activity Reporting Overview (Appendix A) with the exception of any references to barcoding for property management which may be added at a later date.
- Include reporting capabilities as described in MI-Intel Cyber Case Tracking and Activity Reporting Overview (Appendix A).
- Insert workflow automation for the cyber investigation approval process. This will include the modification of the user profiles, role groups, security groups and security rules associated with the cyber program.
- The development of MI-Intel Cyber Case Tracking and Activity Reporting print templates. The number of print templates is not to exceed the number of entities that make up the MI-Intel Cyber Case Tracking Module plus one print template for the final report.

PROJECT INITIATION

TASK
Requirements Finalization Memex consultants will work with MIOC Cyber Section project stakeholders to finalize requirements for the redevelopment of the cyber module previously implemented by the Cyber Section staff. At the conclusion of this task, the Memex project manager will sign off on the requirements and create a final project plan covering the delivery of the services and deliverables

SYSTEM DEVELOPMENT

TASK
Development and QA Environments Memex consultants will copy the current cyber module from the MI-Intel production server to a Memex development environment for the completion of initial development work. Once initial development and internal testing activities have been completed, the new cyber module will be copied to the MI-Intel QA server where the solution will be tested by MSP staff and configuration changes made if required.
Data Entry Functionality Development Memex consultants will modify the current forms within the Cyber Section developed cyber module to meet the requirements as outlined and provided by the MSP Cyber Section identified in Appendix A. The final content shall be mutually agreed upon by both Customer and Memex. Initial development will be carried out in a Memex development environment before being transferred to MI-Intel's QA servers for review and testing by MIOC Cyber personnel.
Reporting Memex consultants will work with Customer to enhance the existing MI-Intel reporting capabilities to accommodate the Cyber Section reporting requirements. A defined set of reports will be documented and signed off on.
Workflow for Cyber Module Memex Consultants will work with MIOC Cyber Section staff to develop an appropriate workflow process for the Cyber Module to support the case approval process: The MIOC Cyber section has provided diagrams **(Appendix B)** supporting their vision of the workflow they desire. Memex consultants will work with the MIOC Cyber staff to translate the Cyber Sections business processes to standard business process modeling and notation format that can be implemented into the new cyber module. A workflow diagram shall be provided that is based on the information provided in Appendix B but built using BMP diagraming tools.
Print Template Development Memex consultants will develop the print templates required to allow users to print from the new cyber module including, property details, daily activities, case narrative and reports. The number of print templates is not to exceed the number of entities that make up the MI-Intel Cyber Case Tracking Module plus one print template for the final report.

System Testing and Deployment Following the completion of the implementation activities, Memex Consultants will deploy the cyber module to the MI-Intel QA servers for testing. Upon completion of QA and user acceptance testing in the MI-Intel QA environment the cyber module will be moved to the MI-Intel Production environment where final acceptance testing will be conducted as stated in Section 2.087. Memex will demonstrate that the module is operating in the production environment accordance with its documentation. Memex personnel will be available to address issues identified during Customer led testing and will respond within 1 business day to assist with issues that have been raised as a result of testing. Assistance from MIOC and Cyber Section personnel throughout this task is necessary in order to have this task completed prior to the estimated delivery date of January 1, 2017. Driving QA and user acceptance testing are examples of the types of assistance Memex will require. Memex will provide a documented description of test cases carried out and the results of those tests at the conclusion of this task.

PROJECT COMPLETION

TASK
System Documentation Upon completion and acceptance of the cyber module by Cyber Section personnel, responsibility for its maintenance and future development will be turned over to MIOC's IT staff. Memex consultants will prepare documentation to assist MIOC personnel in understanding the architecture and maintenance of the deployed functionality.
System Handover Meeting Memex Consultants will carry out a half day meeting with MIOC IT and Cyber Section staff at a mutual decided location to hand-over the deployed functionality. The meeting will include configuration-walkthroughs and review of all documentation. Maintenance and support is available as provided for in the current active contract.

CONTRACT TYPE AND FEES

Services will be delivered on a Fixed Price basis whereby Customer will be invoiced upon completion of three project phases according to the following schedule. The sole Deliverables to be provided under this Change Notice shall be those items specified below and shall be subject to the acceptance procedures set forth in Section 2.087(A) of the Contract:

Payment Milestones	Deliverables	Amount
Phase 1 - Project Initiation	Final Project plan	$8,920.00
Phase 1 – Development	Final System test plan and results	$17,840.00
Phase 1 - Project Completion	Final System Documentation; Module implementation in production environment	$17,840.00
Site Visit Contingency Costs		$10,000.00
Phase 1 Total		
	Total contract:	**$54,600.00**

During the course of the project, the payment milestones will be invoiced as soon as the respective tasks have been completed, accepted and signed off and deliverables turned over to Customer in accordance with Section 2.087 of the Contract.

Site Visits

In order to avoid additional expenses, Memex can deliver services remotely using existing VPN connections to the State of Michigan network. Should MIOC require Memex consultants to be physically present for any or all of the delivery of the services, either by preference or because the existing VPN connections cannot support the required level of access to the necessary MIOC servers, Memex will invoice actual expenses to Customer only after prior approval has been obtained from MIOC for all site visit costs not to exceed $10,000.00 for this project.

ASSUMPTIONS AND RESPONSIBILITIES

The success and timely delivery of these Services is dependent upon the timely access to appropriate people, responsiveness of all parties and a shared understanding of the tasks. The Memex team will include various as-needed consultants and a project manager. From time to time Memex personnel may require access to and assistance from MIOC IT staff to provide technical assistance.

The following is a list of specific assumptions and responsibilities necessary for the successful and timely delivery of the services:

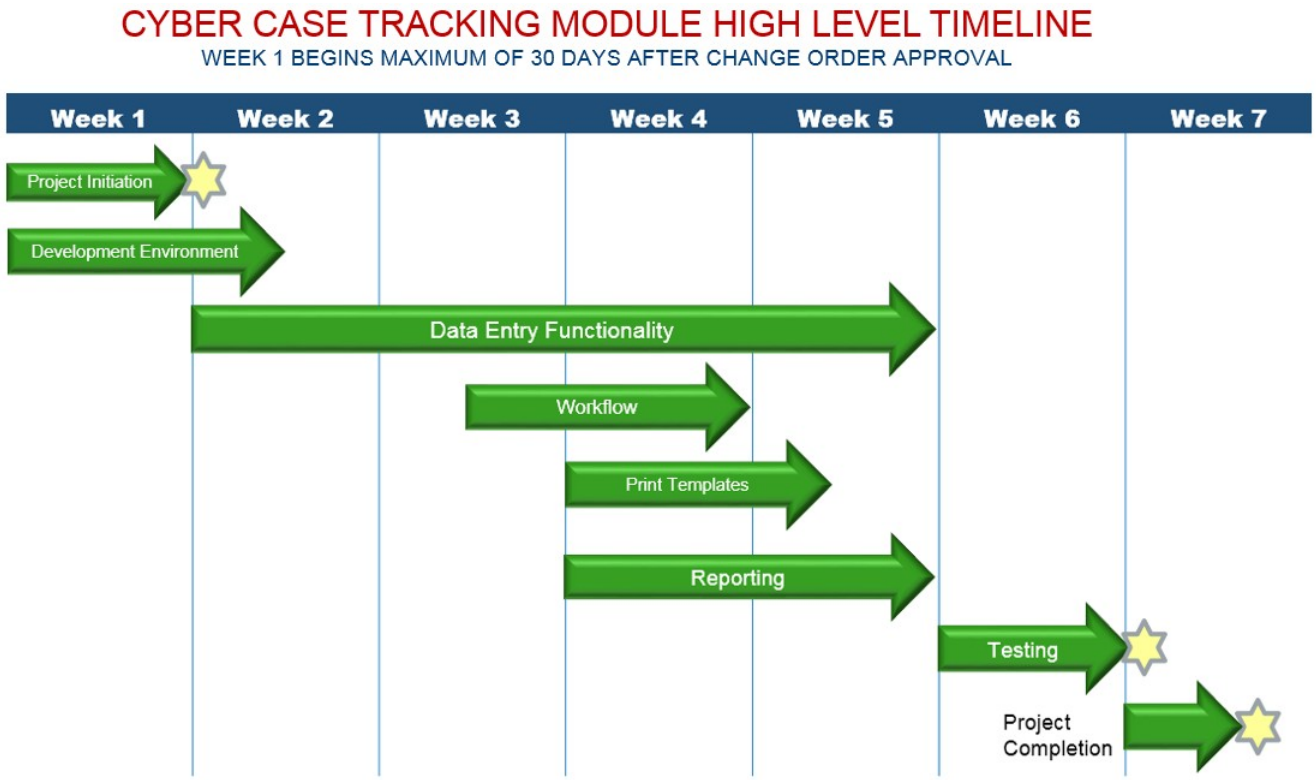
- The Memex project manager will produce a project timeline at the outset of the project. Both parties agree to adhere to the project timeline in all material respects once accepted by both Memex and MSP.
- Any material changes to this Change Notice must be formally requested by MIOC. Such changes will be assessed for its impact to the project by Memex and a revised effort estimate provided. MIOC must acknowledge the revised effort estimates before any such changes can be implemented. A contract amendment may be required prior to implementing any requested changes.
- The MIOC project manager will arrange meetings with appropriate personnel as needed throughout the implementation. Memex will require access to MIOC system administrators, network administrators, business users and/or the project executive sponsor.
- MIOC will provide background checks, systems access, including login IDs as required, needed to accomplish the tasks described in this document.
- MIOC will provide Memex with notice of any required confidentiality, security procedures and/or paperwork requirements prior to work commencement.
- Michigan State Police will grant suitably vetted Memex personnel remote access via VPN to all system hardware for the duration of the services. In the interest of minimizing travel costs, Memex personnel

will conduct as much of the services as possible from Memex locations using the provided remote access.

- Memex shall not be responsible for testing the delivered cyber module for compliance with any local, state or federal legislation regarding user accessibility. User accessibility will not change from the current MCIS solution that has been in place since 2010. If further testing is required it shall be conducted by MSP staff. If Memex is required to conduct this testing there will be an added cost as determined by Memex and agreed to by MSP.
- To support the requirements detailed in this Change Notice, the MI-Intel system will require an upgrade to version 2.21.1 or above of the Software. An enhanced Cyber module cannot be deployed to the MI-Intel environment until this upgrade has been completed which is currently scheduled for October 2016. There are no additional cost added to the upgrade, including costs relating to recurring maintenance and support for the software as provided for in the Contract.
- No barcoding functionality will be implemented as part of these Services

ESTIMATED TIMELINE:

The timeline provided below is for planning purposes only and represents estimates only of typical engagements similar to the Services described in this Change Notice. Actual delivery dates are dependent on the assumptions provided above, as well as information and activities of Customer, which include but are not limited to timely delivery of hardware, participation in design, planning, and requirements sessions, and completion of acceptance testing. Any project timeline may be adjusted during the project initiation stage upon mutual agreement of the parties. The parties estimate the Services will be completed by January 1, 2017. SAS will make reasonable efforts to begin Services within five (5) business days of execution of this Change Notice.



APPENDIX A – MI-Intel Cyber Case Tracking and Activity Reporting Overview

MI-Intel
Cyber Case Tracking and Activity
Reporting Overview

The MI-Intel Cyber Case Tracking application will allow for the tracking of:

1. User Daily Activities
2. Property Management
3. Case Priority Establishment
4. Case Narrative
5. Case Review
6. System Reporting

User Daily Activities
The goal of collecting information on a user's daily activity is to gain insight on the activity of each individual or collective users or group of users along with the type of work being performed on a daily basis. This information will allow for trend analysis, work flow analysis, metric collection, and user performance.
On a daily basis every user in the cyber section will be required to enter their activities they have worked throughout the day. They should be able to complete this within a 15 minute or less period at the end of each day. The time accounting for each activity should be hand entered and not automatically calculated. This module needs to track the amount of time spent on each activity regardless of other simultaneous activities being worked on. Within an 8 hour period a user may have logged 32 hours of time devoted to 4 cases, 8 hours each. Each of those cases may have been processing unattended.

Property Management
This module should track the possession of property that is taken in by the cyber section as evidence. The MSP AICS RMS system will not be used for the tracking of property with incidents that contain property and are assists to non-MSP agencies. All MSP originated incidents will be tracked in AICS.
This module will track property from intake to final disposition using many of the same rules in place for AICS. It will print property labels for entered property and allow property to be tracked by barcode. This module will be used for departmental property audits and inspections and must track chain of custody for departmental and judicial purposes.
The property module will also collect detailed information about each piece of property that the forensic examiner will be examining. Intake will enter a limited amount of information while the forensic examiner enters the detailed property information at the time of an examination.

Case Priority Establishment
This module will prioritize cases that are entered into the system that need to be examined. The prioritization will be based upon pre-determined variables that are selected during initial property entry or intake. This will be used so examiners are informed as to the next incident in the queue to be completed regardless of what office location they work from. Case priority is handled via the incident book.

Case Narrative
This module would allow the user to type a free text narrative of their investigative findings and allow the attachment of any type. The attachments do not need to be displayed within the narrative but could be simply viewed by having the appropriate third party viewer for the attachment file type on the user's computer as usual. The narrative should allow the user to change font size, type, bold, italicize, underline, spell check, preview, print, save, etc. as a simple word processor with basic functionality. Person information will be captured on a person tab.

System Reporting
This module will display a culmination of user (users or group of users) daily activity over a specified date range using selected activity criteria for output or a total cumulative of activities. This module will report what user has not submitted a daily activity report on any specified day over a date range. Reports will be needed that generate pending incidents that have been started and unassigned by age. A cyber section metric report will also be needed that contains the established metrics the section is required to collect based upon the work completed.

Required
Fields Daily
Activity
Function: Tracks user daily activity
Requirements: A daily report is required for every user. The daily report will reference and use data from all other tabs/segments. An empty daily will be auto created for each user every day and then it is the user's responsibility to enter data into the daily. A gridbox displays all activity related to a user, sorted by date any given date.
Fields:

1) User – Currently logged in
2) Date – prefilled with today's date
3) Incident number
4) Item number
5) Activity – dropdown of activities. Activities are based on whether or not an incident and/or item number is supplied
6) Sub-activity – dropdown. Changes based on the type of activity that is chosen
7) Value – A column that accepts a value. Value is dependent upon the type of activity that is chosen (Assigned based upon current need)
8) Time (duration)
9) Comments/Description (Free text)

Activities:

1) Meeting
2) Presentation
    a. Attend
    b. Present
3) Training
    a. In-State attend
    b. In-State instruct
    c. Out-State attend
    d. Out-State instruct
4) ICAC funded Training
    a. In-State attend
    b. In-State instruct
    c. Out-State attend
    d. Out-State instruct
5) Research
6) Project development

7) Product development
8) Operational support
9) Consult/Technical assist
10) Investigation
11) Search warrant
    a. State
    b. County
    c. Local
    d. Federal
    e. Tribal
12) On-scene previewing
13) On-scene imaging
14) On-scene evidence collection
15) Lab previewing
16) Lab imaging
17) Lab processing
18) Lab examination
19) Lab research
20) Lab reporting
21) Lab defense review
22) Court
    a. District
    b. Circuit
23) Case review
24) Cyber tip
    a. Review
    b. Investigate
25) Administrative Duties
26) Background Investigation
27) Lunch
28) Public Relations
29) Report Writing
30) Sergeant Admin Duties
31) Sergeant Property Room Admin

Property Management
Function: The property segment allows the tracking of property related to an incident.
Requirements: The property segment must allow for the following user functions:

1) Intake (add property)
2) Release (release property)
3) Update changes
4) Auditing and reports (completed from a separate tab)
5) Print property labels w/ barcode

6) Ability to delete property (due to erroneous or duplicate entry)
7) Gridbox – To view all property associated with a case and/or for property management

Fields:

1) Incident number – carried over from incident book tab generated by AICS
2) Item number – sequential number assigned to property item
3) User name – who is currently logged in and entering property
4) Item type – Current item types are CD/DVD/BluRay, Desktop, flash drive, flash media, floppy disk, gaming device, GPS, Hard drive (external), Hard drive (internal), Laptop, NAS/SAN, Phone, Tablet (We need the ability to Modify/Add list)
5) Quantity
6) Make
7) Model
8) Serial number
9) Operating System – Dependent upon the item type selected. Items such as flash media will not have an O/S and O/S selection for Desktops and Laptops will be different than phone.
10) Version – Dependent upon Operating System choice.
11) Capacity – This requires two fields, one for the integer value and the other to select either MB, GB, or TB. These fields will be used in calculating monthly and yearly totals within reports.
12) Primary color – Approx. 20 of more popular colors
13) Secondary color - Approx. 20 of more popular colors
14) Condition – Damaged, poor, good, very good, like new
15) Image (photo)
16) Comments – free text
17) Received by (intake) – Pull down consists of all users but defaults to logged in user
18) Received date (intake) – Auto filled when "add property" button is clicked
19) Received from (intake)
20) Location – Pull down consists of CCU/MC3 offices
21) Released by (release) - Pull down consists of all users but defaults to logged in user
22) Released date (release)
23) Released to (release)

Incident Book

Function: Provide a gridbox that contains a list of all incidents that can be sorted by date, incident, status or prioritization. Prioritization is calculated using the criteria captured from the Issue Incident screen and each incident is "scored" using this info. This is also where the status of the incident is maintained (opened or closed). Closed cases require disposition questions to be answered.

Requirements: Displays cases in gridview. When a user chooses an item from the incident book gridview it will populate all the fields from issue incident section above.

Fields: Same fields as Issue incident screen plus…

1) ICAC type - Manufactured, distribution, possession
2) Charges – State or Federal

Narrative

Function: Provide a user with the ability to type narrative reports tied to an incident

Requirements:

1) A field for a user to type a narrative into
2) Accepts different font sizes, bold, underling and italics
3) Allows a user to save multiple reports related to a single incident
4) Spell check

Person screen

Function: Capture information related to suspects shared by investigating agency.

Requirements:

1) Add persons
2) Update persons
3) Delete persons

Fields:

1) Incident number
2) User name - – who is currently logged in
3) Type – Suspect, victim, witness, other
4) Gender
5) Last name or business name
6) First name
7) Middle name
8) Address
9) Street
10) City
11) State
12) Zip
13) Phone1
14) Phone2

Issue Incident

Function: Allows a user to create a new case that consists of case information that will be used to prioritize the case.

Requirements:

1) Allow for the creation of a unique incident (no duplicates)

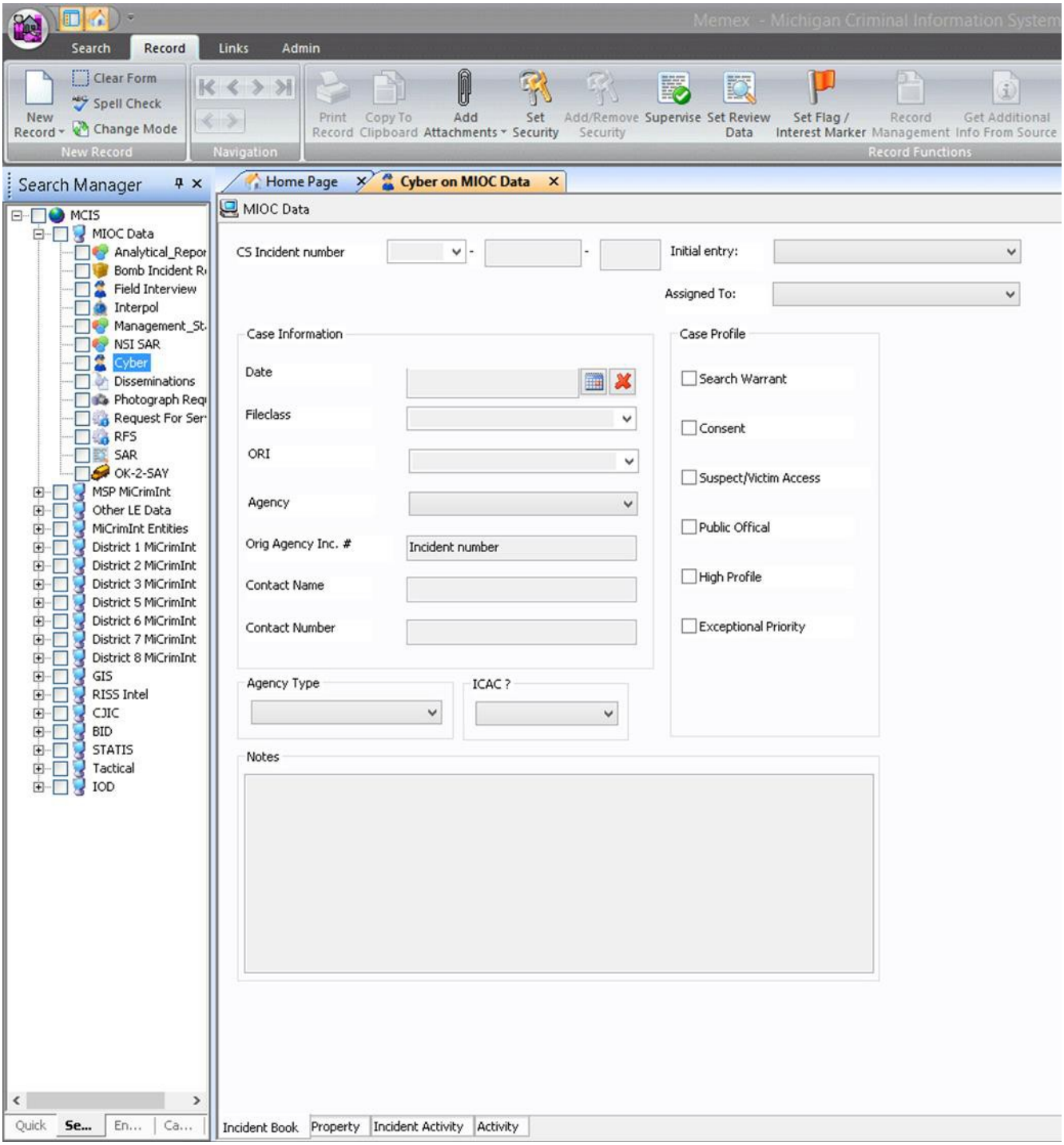
Fields:

1) Incident number (case info grouped) – an incident number is made up of a 3 character Juris identifier, an incident number and a year, ie. CCU-1234-16.
2) Initial entry (case info grouped) – This field defaults to the logged in user
3) Assigned to (case info grouped) – This field is a pull down that consists of user names
4) Date (case info grouped) – date of intake
5) File Class (case info grouped)
6) ORI (case info grouped) – after selecting the ORI the agency name is auto filled
7) Agency name (case info grouped) – Auto filled after supplying ORI
8) Original Agency incident number (case info grouped)

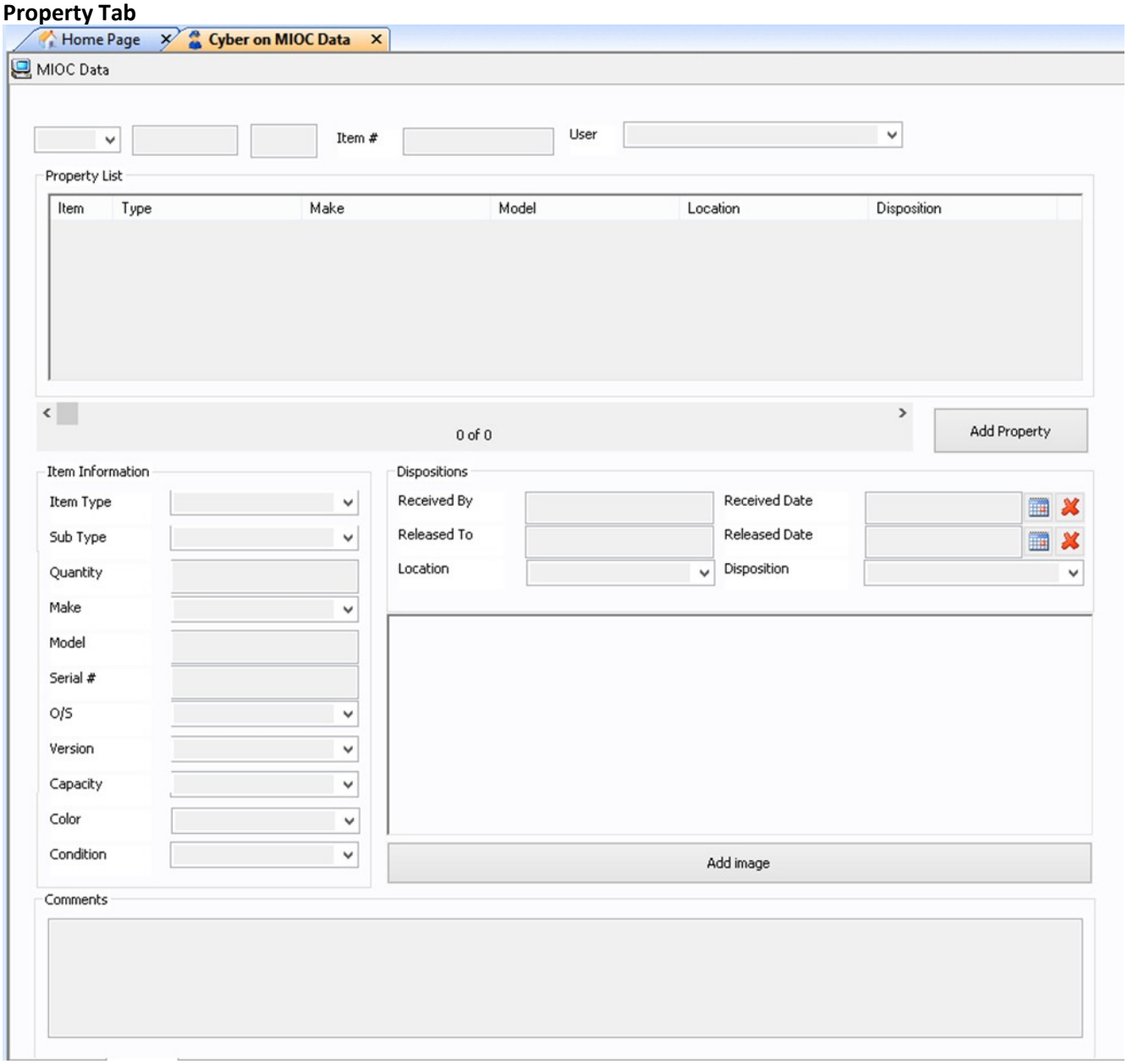
9) Contact name (case info grouped)
10) Contact telephone number (case info grouped)
11) Search warrant (case profile grouped - checkbox)
12) Consent (case profile grouped - checkbox)
13) Suspect/Victim access (case profile group -checkbox)
14) Public Official (case profile group -checkbox)
15) High Profile (case profile group -checkbox)
16) Exceptional priority (case profile group - checkbox)
17) Agency type – Federal, State, County, Local, Tribal
18) ICAC? Yes or no
19) Status – Open, open pending property and closed.
20) Notes – Text box for case comments

APPENDIX B – MI-Intel Cyber Case Tracking and Activity Reporting Screen Shots

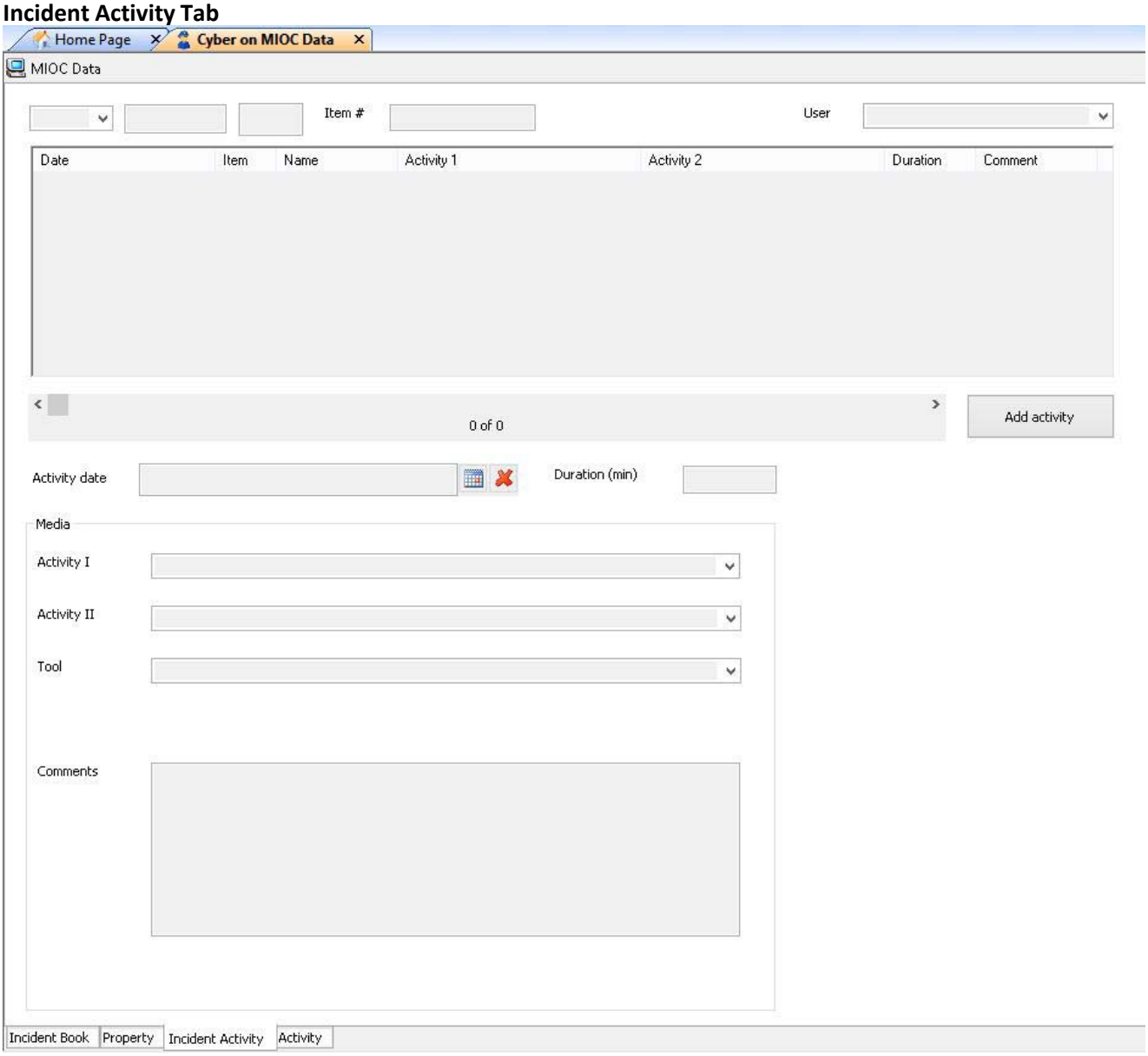
Incident Book Tab



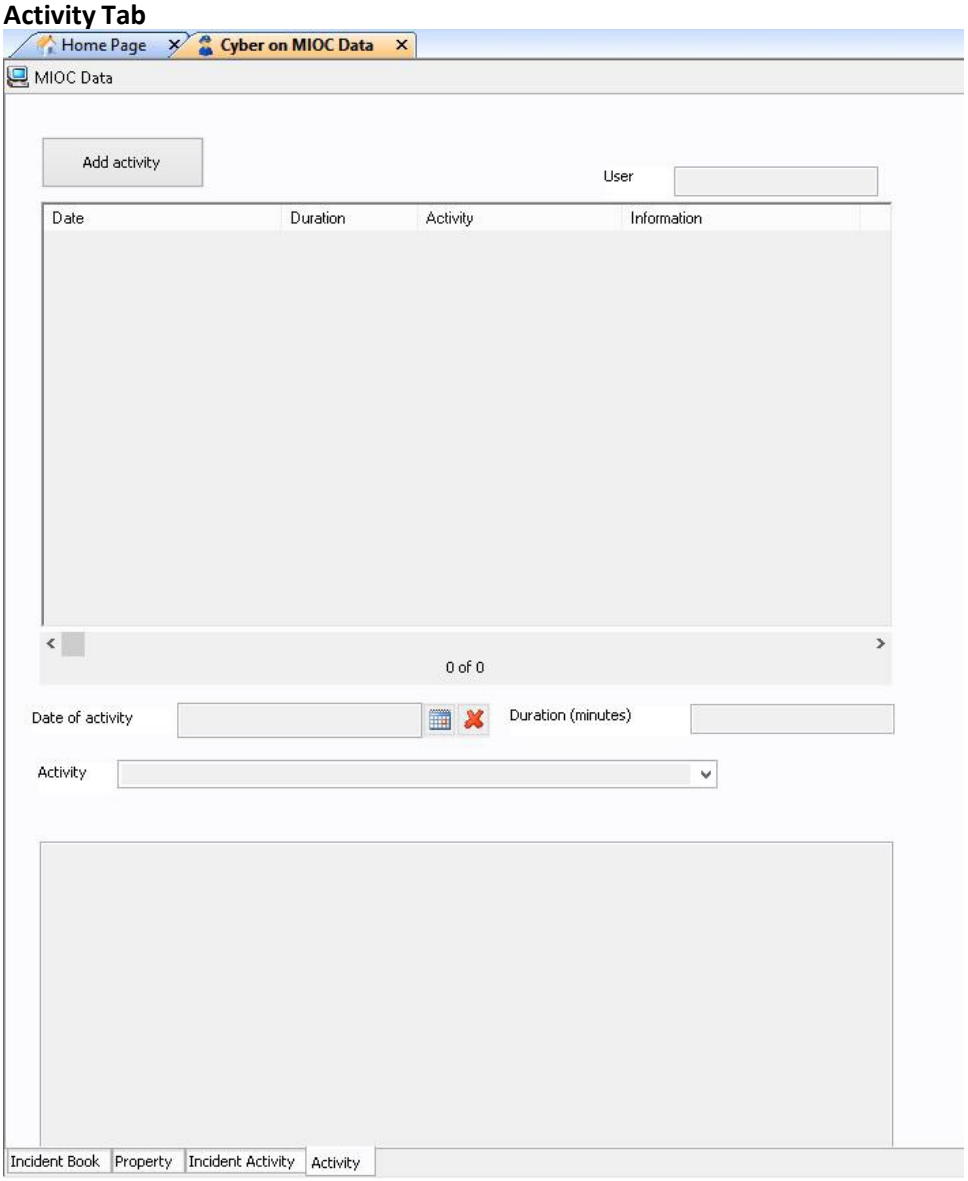
Property Tab



Incident Activity Tab



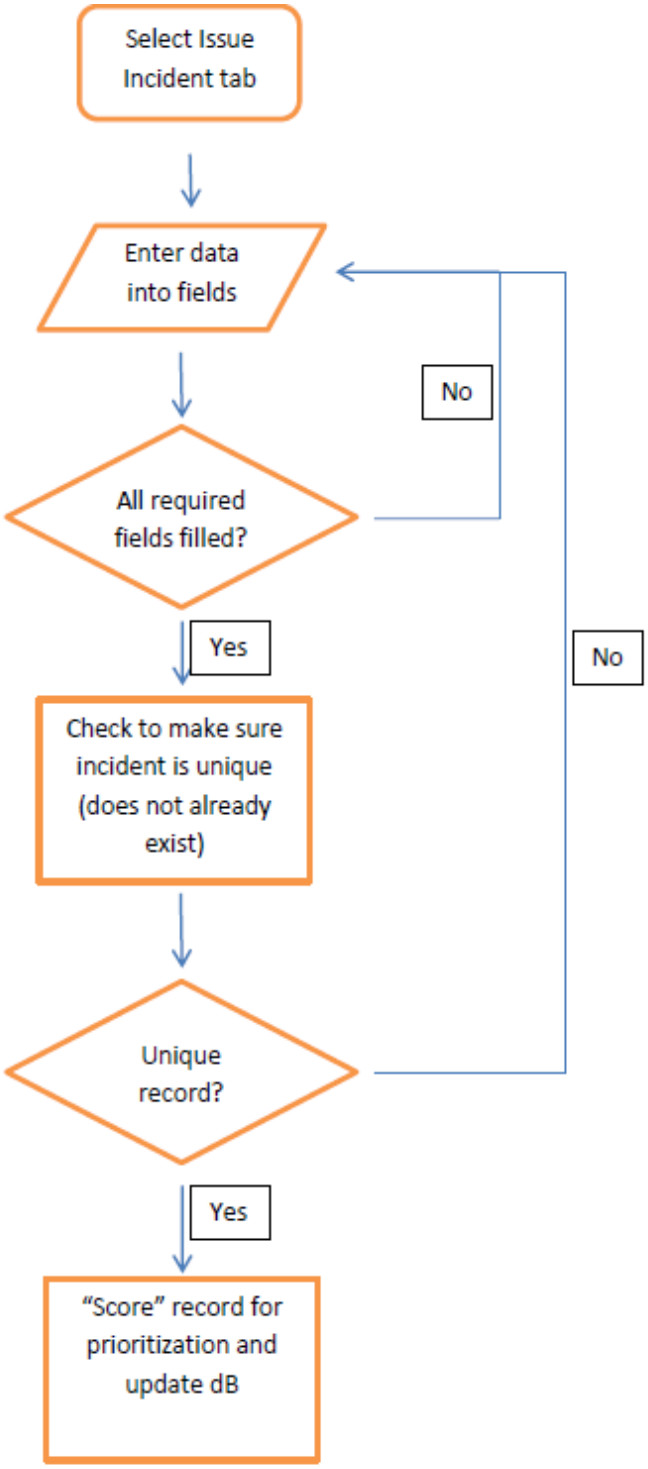
Activity Tab



APPENDIX C – MI-Intel Cyber Case Tracking and Activity Reporting Customer Provided Workflow

Issue Incident Work Flow

ISSUE INCIDENT - Enter case data



Incident Book Workflow

INCIDENT BOOK – Gridview is used to display and/or print incident data.

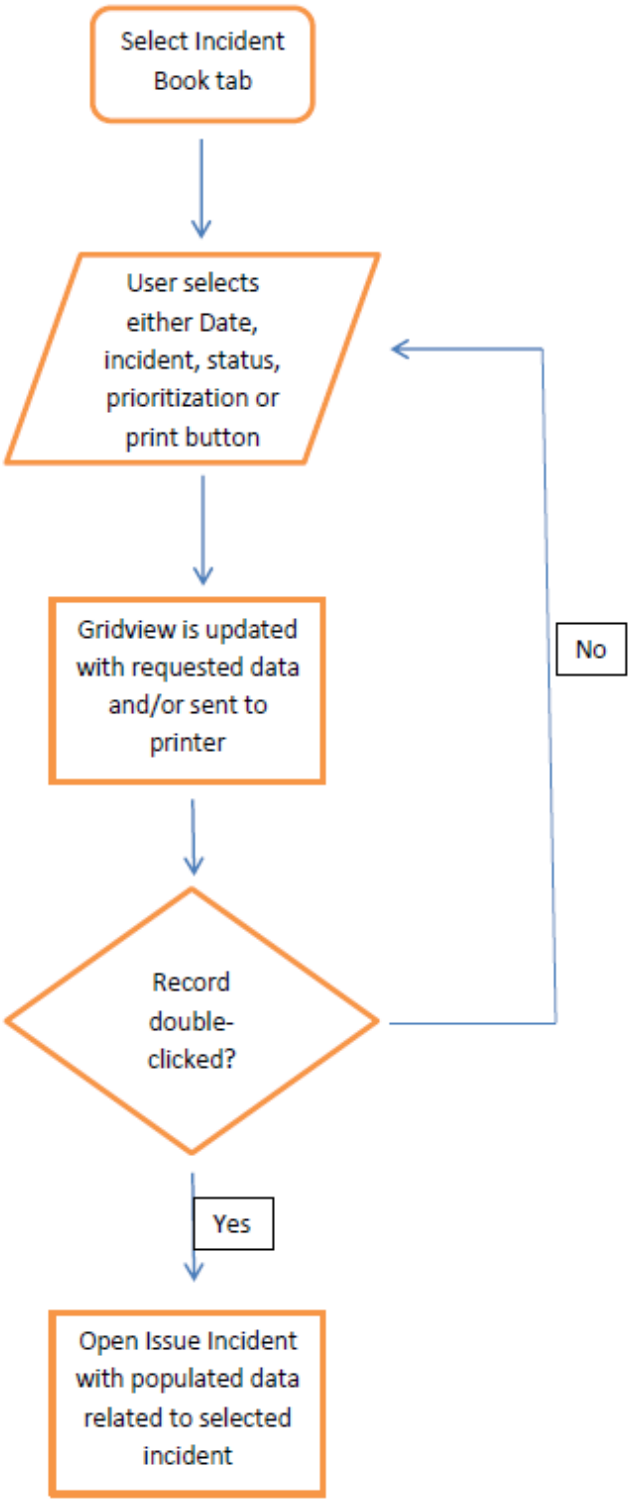
Date view – All incidents displayed by date record was created

Incident – All incidents displayed by incident number

Status – All incidents displayed by status

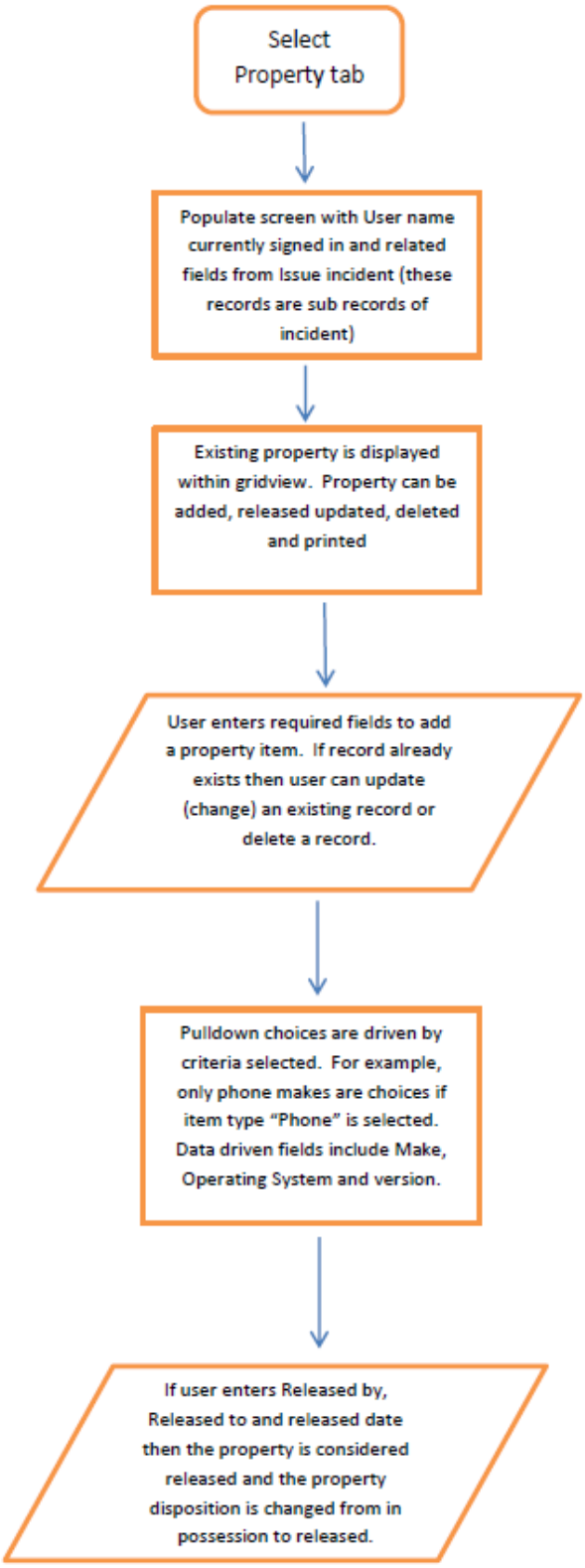
Prioritization – All incidents displayed by "score" that have not yet been assigned to an examiner

Print – Prints incident info from gridview



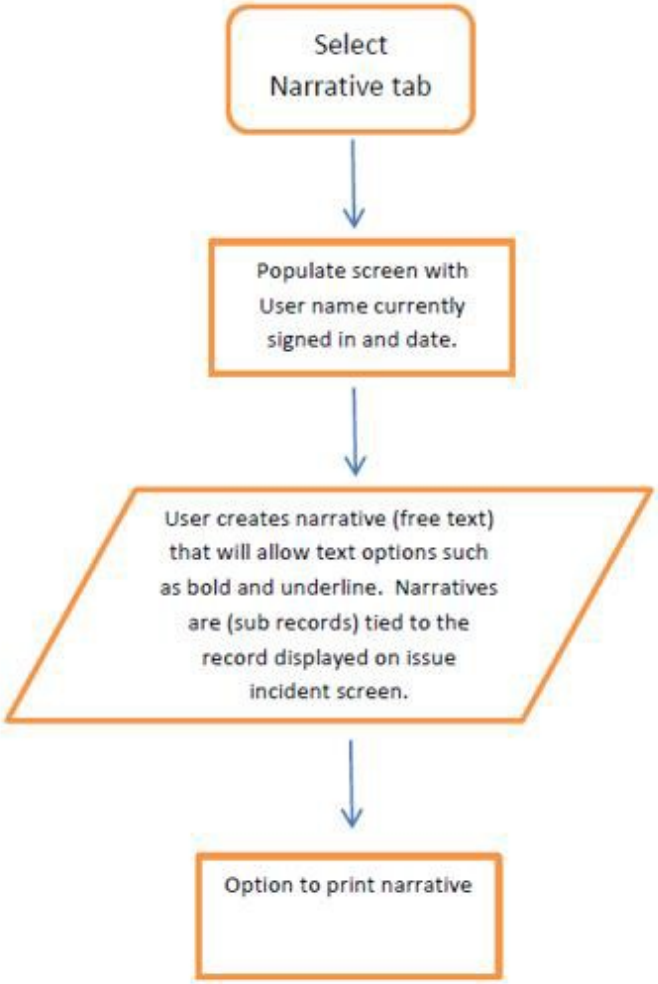
Property Segment Workflow

Property segment



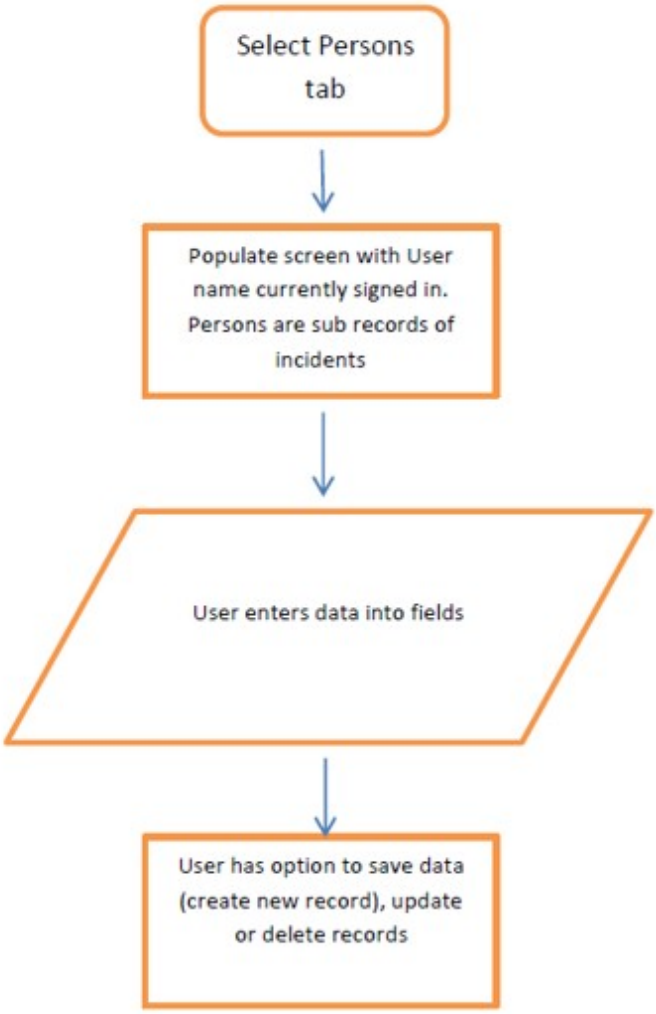
Narrative Workflow

Narrative

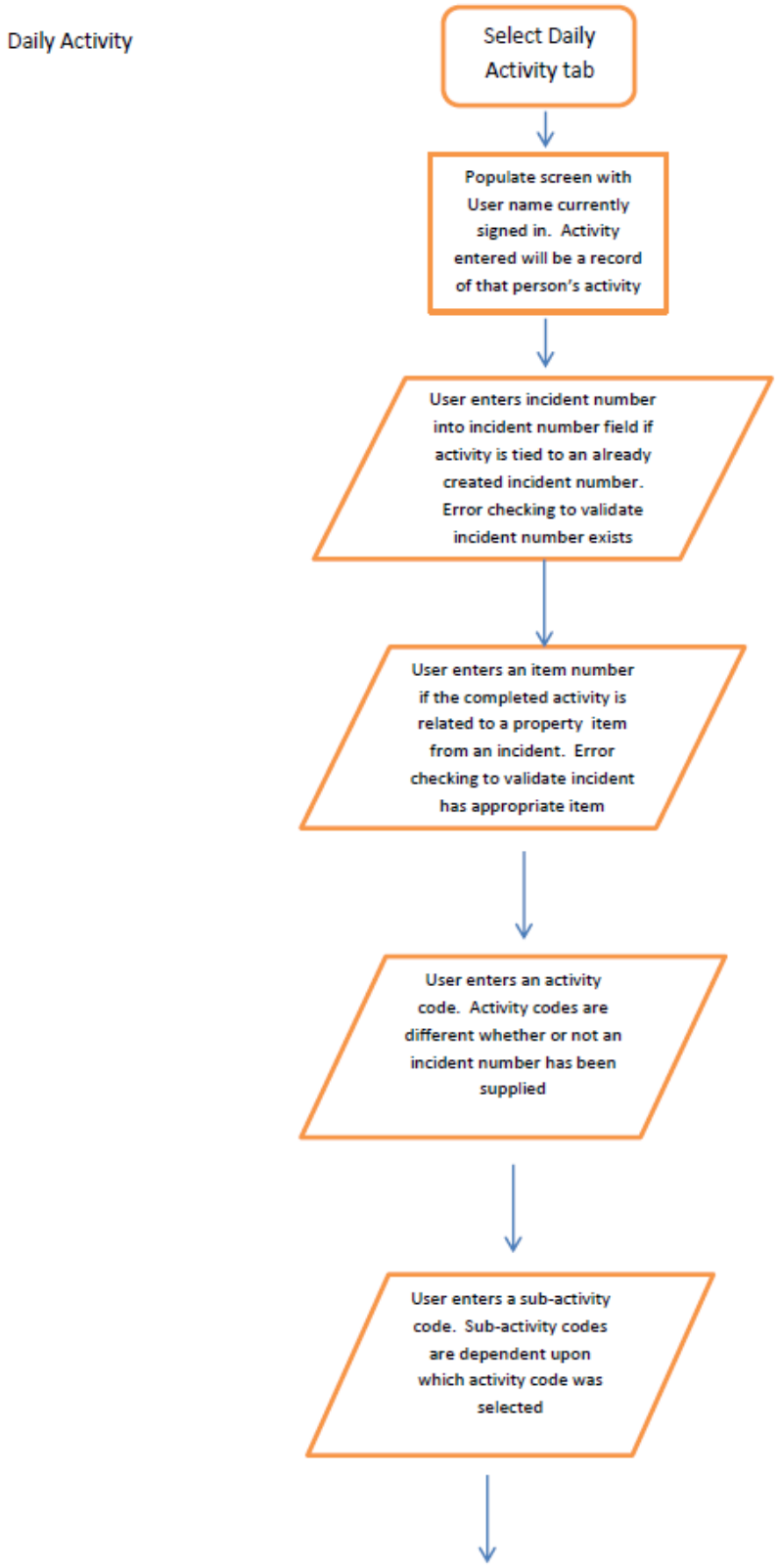


Person Screen Workflow

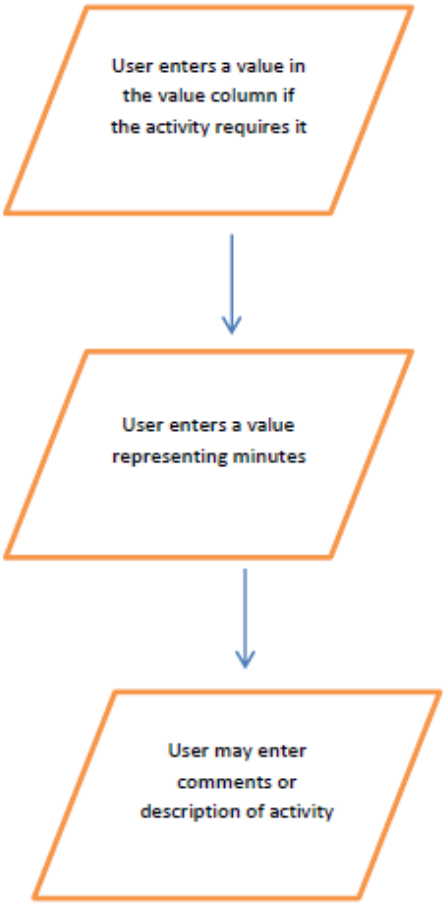
Person screen



Daily Activity Workflow



Daily Activity Workflow continued



CONTRACT CHANGE NOTICE

Change Notice Number **10**
to
Contract Number **071B9200243**

CONTRACTOR	
	Memex, Inc.
	22636 Davis Drive
	Sterling, VA 22182
	Bob Bonaventure
	703-556-4031
	bob.bonaventure@sas.com
	*******9906

STATE			
	Program Manager	Roach, Dave	MSP
		517-241-2254	
		roachd2@Michigan.gov	
	Contract Administrator	James Topping	DTMB
		(517) 284-7032	
		ToppingJ@michigan.gov	

CONTRACT SUMMARY			
DESCRIPTION: Michigan Criminal Intelligence System			
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MINIMUM DELIVERY REQUIREMENTS			
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DESCRIPTION OF CHANGE NOTICE				
OPTION	**LENGTH OF OPTION**	**EXTENSION**	**LENGTH OF EXTENSION**	**REVISED EXP. DATE**
☒	1 year, 5 months and 16 days.	☐		June 16, 2018

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$4,285,349.46	$ 374,006.99	$4,659,356.45

DESCRIPTION: Effective December 31, 2016, this contract is exercising the remaining time available from the second two year option year and is increased by $374,006.99. The revised contract expiration date is June 16, 2018. Please note the Contract Administrator has been changed to James Topping. All other terms, conditions, specifications, and pricing remain the same. Per agency request, DTMB Procurement approval, and State Administrative Board approval on June 21, 2016.

Form No. DTMB-3521 (Rev. 10/2015)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET

PROCUREMENT

525 W. ALLEGAN STREET
LANSING, MI 48933

P.O. BOX 30026
LANSING, MI 48909

CHANGE NOTICE NO. 9
to
CONTRACT NO. 071B9200243
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR	PRIMARY CONTACT	EMAIL
Memex, Inc.	Bob Bonaventure	bob.bonaventure@sas.com
22636 Davis Drive	PHONE	CONTRACTOR'S TAX ID NO. (LAST FOUR DIGITS ONLY)
Sterling VA, 22182	703-556-4031	*****9906

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
PROGRAM MANAGER / CCI	DTMB	Dave Roach	517-241-2254	Roachd2@michigan.gov
AGENCY CONTACT	MSP	Mike Nevin	517-241-4577	NevinM@michigan.gov
CONTRACT ADMINISTRATOR	DTMB	Jarrod Barron	517-284-7045	BarronJ1@michigan.gov

CONTRACT SUMMARY			
DESCRIPTION: Michigan Criminal Intelligence System			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
June 16, 2009	June 16, 2014	2 - 2 Year	June 16, 2016
PAYMENT TERMS		DELIVERY TIMEFRAME	
ALTERNATE PAYMENT OPTIONS			EXTENDED PURCHASING
☐ P-card	☐ Direct Voucher (DV)	☐ Other	☐ Yes ☒No
MINIMUM DELIVERY REQUIREMENTS			

DESCRIPTION OF CHANGE NOTICE				
EXERCISE OPTION?	LENGTH OF OPTION	EXERCISE EXTENSION?	LENGTH OF EXTENSION	REVISED EXP. DATE
☐	N/A	☒	6 months 14 days	December 31, 2016
CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE		
$4,038,683.00	$ 246,666.46	$4,285,349.46		

DESCRIPTION: Effective March 2, 2016, this Contract is extended 6 months, 14 days and increased by $246,666.46 for Maintenance and Support for the period of 01/01/2016 through 12/31/2016 as described in Change Notice 7. State Administrative Board approval was received for this term on December 16, 2014. All other terms, conditions, specifications, and pricing remain the same per Contractor and Agency agreement and DTMB Procurement approval.

Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 8

to

CONTRACT NO. 071B9200243

between

THE STATE OF MICHIGAN

and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Memex, Inc. 22636 Davis Drive, Ste 130 Sterling, Virginia 20164	Graeme Robinson	**Graeme.Robinson@sas.com**
	TELEPHONE	**CONTRACTOR #, MAIL CODE**
	(949) 394-7919	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR	DTMB	Dave Roach	517-241-2254	Roachd2@michigan.gov
AGENCY CONTACT	MSP	Mike Nevin	517-241-4577	NevinM@michigan.gov
BUYER	DTMB	Jarrod Barron	517-284-7045	barronj@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION: **COTS solution to provide Michigan Criminal Intelligence System for the Michigan State Police**

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
6/16/2009	6/16/2014	2	June 16, 2016
PAYMENT TERMS	**F.O.B**	**SHIPPED**	**SHIPPED FROM**
	N/A	N/A	N/A

ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MiDEAL PARTICIPANTS	
☐ P-card	☐ Direct Voucher (DV)	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS:

DESCRIPTION OF CHANGE NOTICE

EXERCISE OPTION?	LENGTH OF OPTION	EXERCISE EXTENSION?	LENGTH OF EXTENSION	REVISED EXP. DATE
☐	N/A	☐	N/A	June 16, 2016

CURRENT VALUE	VALUE OF CHANGE NOTICE	ESTIMATED AGGREGATE CONTRACT VALUE
$3,948,683.00	$90,000.00	$4,038,683.00

DESCRIPTION:

Effective August 7, 2015, the parties add $90,000.00 to this contract and the services detailed in the attached Statement of Work. All other terms, conditions, specifications, and pricing remain the same. Per Contractor and Agency agreement and DTMB Procurement approval.

STATEMENT OF WORK

The services ("Services") and deliverables identified below ("Deliverables") will be provided pursuant to the terms of the Memex Contract 071B9200243 effective as of the date of this Change Notice. The Services will be delivered on a Fixed Price basis, as defined in Section 2.087 of the Contract.

Scope of Services:

Unless otherwise stated, all upgrade activities described below will apply to each of the three current MSP SAS Memex Platform environments – Production, Test and Training (Training currently resides on a laptop and is a standalone system).

I. System Upgrade to Version 2.20+

TASK
1. Environment Assessment Memex will work with DTMB to assess MSP's current hardware and network environment to assess where upgrades may be necessary to support the upgraded SAS Memex system. The assessment will pay particular attention to the addition of the RDBMS elements of the server platform to the MSP Memex system and any revisions to the High Availability / Disaster Recovery plan for the Memex system this may lead to. Deliverable: The Deliverable of this activity will be an agreed hardware and network design for the upgraded MSP system covering all three environments.
2. High Availability / Disaster Recovery Plan Review With the introduction of the RDBMS option to the Memex Platform, a number of options for high availability / disaster recovery are now available. Memex will review the available options with DTMB personnel and then develop an agreed revised DA / HA plan for the Memex Platform System at MSP. Deliverable: DA/HA Plan for Memex Platform.
3. Pre-Upgrade System Health Check SAS consultants will carry out a review of the current MSP Memex system focusing on items that can help to ensure a successful upgrade. As part of this process, SAS will run system integrity and health checking tools. Deliverable: The outcome of this activity will be a list of activities SAS consultants will carry out prior to performing the upgrade.
4. System Interface Review Memex will carry out a review of all current system interfaces to assess the impact of the upgrade to 2.20+. Interfaces to be reviewed are:

- MICJIN Single Sign-On
- E-Guardian
- OK2Say
- Sex Motivated Crime Reporting (DD-79)
- Current Reporting export to Oracle

Deliverable:

The output of this activity will be an agreed list of revisions to be carried out by Memex to the existing system interfaces to ensure continued operation of the interfaces following the upgrade.

5. Transfer of System to New Hardware

Memex will transfer the current system to any new hardware deemed necessary in Task 1. Memex will carry out a series of tests to confirm the correct operation of the transferred system within the new hardware environment. Memex will transfer the training and development environments first to refine the process for MSP's specific deployment prior to transferring the production environment.

Deliverable:

The output from this activity will be a completed deployment checklist detailing the tests carried out and the outcome of those tests. Testing by Memex will show the transferred system is operating on the new hardware.

6. Pre-Upgrade Activities

Memex will perform all pre-upgrade activities identified in task 3.

Deliverable:

The output from this activity will be a completed checklist confirming each agreed pre-upgrade activity has been carried out.

7. Upgrade of Development Environment

Memex will upgrade the MCIS development environment. This upgrade will serve three purposes:

1. It will allow Memex to test and refine the upgrade process for MCIS's specific Memex deployment.
2. It will create an environment against which Memex can carry and test revisions to the system interfaces identified as being necessary in task 4.
3. To provide an indication of the likely required amount of downtime for the production upgrade.

Deliverable:

The output from this activity will be a MCIS specific upgrade process and checklist to be used during the subsequent upgrade of the production environment. Testing by Memex will show that the MCIS development environment has been upgraded in accordance with the criteria set forth above and is functioning correctly.

8. Upgrade of System Interfaces

Memex will implement and test any revisions to system interfaces identified and agreed in task 4. Initial testing of the revisions will be carried out against the upgraded test environment.

Deliverable:

The output of this activity will be documented test results for each updated interface.

9. Upgrade of Production Environment.

Memex will carry out the upgrade of the MCIS production environment using the processes finalized in step 6. This step will include testing of the upgraded system interfaces against the production environment.

Deliverable:

The output of this activity will be a completed post-upgrade checklist showing the test carried out by Memex to confirm the correct operation of the upgraded system. Testing by Memex will demonstrate the upgraded system is operational.

10. Upgrade of Training Environment.

Memex will carry out the upgrade of the MCIS training environment using the processes finalized in task 6. Currently MSP's training environment is self-contained on a single laptop serving as a server and all training laptops accessing via a router. To maintain this type of training environment may require the updating of this laptop to support the new solution. This will be discussed with MSP and DTMB to ensure adequate hardware is available to maintain the current training environment. All hardware is the responsibility of MSP and MDTMB.

Deliverable:

The output of this activity will be a completed post-upgrade checklist showing the test carried out by Memex to confirm the correct operation of the upgraded system. Testing by Memex will demonstrate the upgraded system is operational.

II. GIS Integration

TASK

1. GIS Environment Analysis

Memex will work with MSP and DTMB IT staff to identify the target ESRI server(s) to be used to provide GIS functionality to the SAS Memex platform. The items to be identified by this process include:

- Mapping layers to be displayed within the SAS Memex platform.
- Geocoding services to allow users of the SAS Memex platform to identify a location on a map by providing a street address.

The items above should already exist within the customer's network environment. Memex will not be responsible for the provision of any GIS software, servers or resources.

Deliverable:

The Deliverable resulting from this task will be a list of existing GIS servers and services to be used by the SAS Memex Platform to provide GIS functionality.

2. Geocoding Adaptor Development

Memex will develop an adaptor to allow the SAS Memex Platform to utilize the existing MSP geocoding service identified in the previous task. This adaptor will allow SAS Memex platform users to enter a street address and have that location identified on a map.

Deliverable:

The Deliverable from this task will be the inclusion of the functionality described above. Testing by Memex will show that the Geocoding service can be utilized as described by SAS Memex platform users. In the absence of any suitable geocoding service at MSP, this functionality will not be delivered.

3. GIS Functionality Activation

Memex will enable GIS functionality within the SAS Memex Platform in all environments by integrating the system with the existing GIS server and resources identified in the previous tasks. The following functionality will be enabled:

- SAS Memex Platform users will be able to associate a Memex record with a location by clicking on that location on a displayed map, or by entering a street address and using the geocoding adaptor developed in the previous task to identify the location of that address.
- SAS Memex Platform users will be able to select one or more records returned by a search and have the location(s) associated with those records displayed as pinpoints on a map. This functionality will only work with records previously associated with a location.
- SAS Memex platform users will be able to identify an area on a map and have the results of searches restricted to only those records previously associated with a location falling within the identified area.

Deliverable:

The Deliverable from this task will be a completed test checklist showing the above functionality has been tested and shown to work. The delivery of this functionality is dependent on the existence of an ESRI Arc Server 10.x within the MSP network environment along with suitable map layers and resources.

III. Workflow for Intel and Request For Service

TASK

1. Requirements Finalization

Memex will work with MSP project stakeholders to review the standard workflow processes associated with Intel and Request for Service modules in the SAS Memex Platform version 2.20 and later, and to highlight any new forms or changes to existing forms within MSP's SAS Memex Platform configuration to support the new workflow processes.

Deliverable:

The Deliverable resulting from this task will be a list of agreed changes to MSP's existing SAS Memex Platform necessary to support the deployment of the Intel and Request for Service workflow processes.

2. Workflow Deployment to Development Environment

Memex will deploy the Intel and RFS workflow functionality along with any necessary additions or changes to existing forms identified in task 1 to the MSP development environment and carry out testing of the functionality. The primary aim of this activity is to refine the deployment process prior to the production roll out.

Deliverable:

The Deliverable resulting from this task will be (i) a completed test checklist highlighting the testing carried out by Memex to confirm the correct operation of the Intel and RFS workflow processes within the development environment and (ii) a finalized process plan for the deployment of the Intel and RFS workflow functionality to the production environment.

3. Workflow Deployment to Production Environment

Using the deployment process finalized in step 2 above, Memex will deploy the RFS and Intel workflow functionality to MSP's production SAS Memex Platform environment.

Deliverable and Acceptance Criteria:

The Deliverable resulting from this task will be a completed test checklist highlighting the testing carried out by Memex to confirm the correct operation of the Intel and RFS workflow processes within the production environment.

IV. Web Based Field Contact Report and DD-200 Request for Service Submission

TASK

1. Requirements Finalization

Memex will work with MSP project stakeholders to finalize requirements for the Web Interface. In particular, focus will be placed on the design of the Filed Contact Report submission. Memex will also work with MSP project stakeholders to finalize requirements for the Web Interface in support of the DD-200 Request for Service submission interface.

Deliverable:

The Deliverable resulting from this task will be a list of final requirements for the Web Interface.

2. Target Hardware and Network Analysis

Memex will work with MSP and DTMB IT staff to identify the target hardware for the deployment of the interface and to inspect and verify that any required third party software or operating system requirements are in place. This task will be performed at the outset of the project to allow time for corrective actions, if required, to be carried out well in advance of the projected date of system deployment.

Deliverable:

The Deliverable resulting from this task will be a list of target hardware.

3. Authentication Functionality Development

Memex will develop the functionality required to ensure only correctly authorized users are granted access to the web interface. Authentication will be done via the existing MICJIN portal and follow a similar framework to that used within the existing SAS Memex Go-Global deployment at MSP.

During development of this functionality, Memex will require access to both the MICJIN test environment and MICJIN production environment (for final testing). Timely assistance from MSP and MDTMB IT personnel throughout this task will be essential in ensuring its completion within the estimated timeframes.

Deliverable:

The Deliverable from this task will be the inclusion of the functionality described above. Testing by Memex will show that only authorized users have access to the web interface.

4. Data Entry Functionality Development

Memex working with MSP staff will develop the data entry web pages required to enter new Field Contact Reports, DD-200 via the web interface. Initial development will be carried out in a Memex development environment before being transferred to MSP's development servers for review and testing by MIOC and CJIC personnel.

Deliverable:

The Deliverable from this task will be the creation of the data entry web pages meeting the specifications agreed to by the parties.

5. Search Functionality Development

Memex will develop the web pages required to allow users to perform a search of existing Field Contact records and to display the results of those searches. Initial development will be carried out in a Memex development environment before being transferred to MSP's development servers for review and testing by MIOC and CJIC personnel.

Deliverable:

The Deliverable from this task will be the development of web pages allowing the search function described above.

6. Print Functionality Development

Memex will develop the functionality required to allow users to print Field Contact Report information through the web interface. The print functionality will allow full details of an individual Field Contact Report record to be printed, and it will also allow summary information for a list of Field Contact Report records returned by a search to be printed. Initial development will be carried out in a Memex development environment before being transferred to MSP's development servers for review and testing by MSP personnel.

Deliverable:

The Deliverable relating to this task will be the inclusion of the print functionality described above.

7. Audit Functionality Development

Memex will develop the functionality required to maintain a full audit trail of activities carried out by users through the web interface. The information included in the audit trail will be to the same level of detail as that created by the Memex server in response to users carrying out functionally equivalent actions via the Memex client application. The audit information will be stored in a Relational Database – either PostgreSQL or Oracle depending on MSP's preference. Initial development will be carried out in a Memex development environment before being transferred to MSP's development servers for review and testing by MSP personnel.

Deliverable:

The Deliverable from this task will be the inclusion of the audit functionality described above.

8. System Testing and Deployment

Following completion of all areas of functionality, Memex will deploy the web interface to the target servers and make the site available initially through the MICJIN test (QA) portal for system testing and then through the production portal for final go-live testing. Timely assistance from MIOC and MDTMB IT personnel throughout this task will be essential in ensuring its completion within the estimated timeframes.

Deliverable:

The Deliverable from this task shall be the deployment of the web interface to the target servers. Testing by Memex will show the deployment meets the criteria described in this task. Upon completion of the deployment of the web interface, responsibility for its maintenance and future development will be the responsibility of MIOC.

9. System Documentation

Memex will prepare documentation to assist MIOC personnel in understanding the architecture of the deployed functionality. Documentation may be in form of comments within turned-over source code as well as stand-alone documents.

Deliverable:

The Deliverable associated with this task will be prepared documentation by Memex, in a form and format agreed to by the parties.

10. System Handover Meeting

Memex will hold a half day meeting, at a mutually agreeable time and location in the Lansing area, with MIOC IT staff to hand-over the deployed functionality. The meeting will include code-walkthroughs and review of all final documentation. There will also be a review of the servers where the functionality has been deployed to show the location of each component.

Deliverable:

The Deliverable will be the meeting with MIOC IT staff and provide code-walkthroughs, all final documentation and review of the servers where the functionality has been deployed to show the location of each component. Such Deliverable will be deemed complete upon completion of the meeting.

V. Training

TASK

1. Existing User Training

Memex will deliver 3, full day sessions, with a maximum of 20 students per class of on-site training for MSP staff with prior experience of the Memex system. The training will cover "What's New in Patriarch 2.20+."

Deliverable:

The Deliverable will be 3 full day training sessions of up to eight (8) hours each day. Training sessions will be held over three consecutive days. The Deliverable will be deemed accepted when all three sessions have been provided.

2. New User Training

SAS will deliver a three day on-site training sessions for MSP staff with no prior experience of the SAS Memex system. Training will cover all aspects of the system required for users to successfully use the system. Up to 10 MSP staff

members may attend the class.

Deliverable:

The Deliverable will be 3 full day training sessions of up to eight (8) hours each day. Training sessions will be held over three consecutive days. The Deliverable will be deemed accepted when all three sessions have been provided.

3. System Administrator Training

SAS will deliver one, one-day on-site training session for MCIS system administrative staff. UP to 8 State staff members may attend. The training will cover:

- Overall SAS Memex Platform architecture.
- Monitoring the system for correct operation.
- Day to day health check activities.
- Managing users and groups
- Troubleshooting

Deliverable:

The Deliverable will be a single full day training session of up to eight (8) hours. The Deliverable will be deemed accepted when all three sessions have been provided.

Assumptions:

Memex made the following assumptions in drafting the Services and Deliverables description described in this Change Notice. Any modification to these assumptions may affect the pricing provided herein.

- The success and timely delivery of these services is dependent upon the timely access to appropriate people, responsiveness of all parties and a shared understanding of the tasks.
- The Memex team will include various as-needed Consultants, Engineers and a Project Manager, as such resources are determined by Memex. From time to time Memex personnel may require access to and assistance from DTMB IT and networking staff and Memex's completion of the Services will be dependent on such access.
- Memex shall not be responsible for any delays caused by third parties outside Memex's control.
- As part of the tasks, remote access is required to Customer's servers. Customer should advise Memex of any background check processes required prior to Memex staff being granted access to these servers remotely. Any delays in being granted access to any of the servers, whether for security or other reasons, may delay completion of the tasks.
- During the process of upgrading MCIS and during the remainder of the project, there will necessarily be time where the MCIS system or parts of the system will be unavailable. Memex will work with Customer to schedule downtown in a way that minimizes operational impact.
- Customer will be responsible for all necessary network configuration associated with and for any software installations not specifically described in this proposal.

- The estimated costs quoted in the previous sections assume Memex personnel will carry out work associated with the services via remote connections whenever possible.
- Customer shall advise Memex immediately if there are any deadlines associated with funding sources for the services and provide specific details of when invoices must be provided to meet those deadlines.
- Costs associated with any training sessions in Section III above are based on three consecutive days in a single week. If training days are spread across multiple weeks, there will be additional costs to cover the added travel expenses.
- All training will be held onsite at a State location in the Lansing area.
- Customer shall be responsible for the procurement and deployments of any required hardware and for the procurement and installation of necessary Relational Database Management System (Oracle or PostgreSQL) licenses.
- The deployment of GIS functionality is dependent on the customer having an existing deployment of ESRI Arc Server 10.x including any necessary map layers and other content, and an appropriate geocoding service. Memex is not responsible for the quality or completeness of the maps available through the ESRI Arc GIS deployment nor the quality of the returns provided by the geocoding service.
- Memex will not attempt to bulk-geocode existing data in MSP's SAS Memex platform. GIS functionality will only be available to those records associated with locations by users following the deployment of the functionality.
- Intel and Request for Service workflow processes will be applied only to data created after the deployment of the functionality. No attempt will be made to retroactively apply workflow to existing data.

Acceptance Procedures:

The parties shall adhere to the acceptance procedures set forth in Section 2.087 of the Contract with respect to any Deliverables identified herein.

Preliminary Project Schedule:

Milestone Event	Associated Milestone Deliverable(s)	Estimated Level of Effort	Preliminary Project Schedule
I. System Upgrade to Version 2.20+	Tasks 1 -10	320 Hours	Execution of change notice plus 52 working days
II. GIS Integration	Tasks 1-3	40 Hours	Execution of change notice plus 59 working days
III. **Workflow for Intel and Request For Service**	Tasks 1-3	240 Hours	Execution of change notice plus 98 working days
IV. Web Based Field Contact Report and DD-	Tasks 1-10	480 Hours	Execution of change notice plus 176 working

	200 Request for Service Submission			days
V.	**Training**	Tasks 1-3	120 Hours	Execution of change notice plus 200 working days

** The hours listed above are estimates and are provided for reference purposes only. The delivery dates provided above are estimates only and are based upon assumptions made by Memex with respect to issues dependent on the State, including but not limited to timely delivery of hardware, participation in design and requirements sessions, and completion of acceptance testing. The Project Schedule may be adjusted during project initiation upon mutual agreement of the parties, within thirty days of the commencement of the Services.

Fixed Fee and Invoicing:

Memex will invoice the State a total of Ninety Thousand Dollars ($90,000.00) upon project completion after formal acceptance by the State. Travel costs are included the total amounts specified above.

Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
525 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 7

to

CONTRACT NO. 071B9200243

between

THE STATE OF MICHIGAN

and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Memex, Inc.	Bob Bonaventure	Bob.bonaventure@sas.com
22636 Davis Drive, Ste 130	TELEPHONE	CONTRACTOR #, MAIL CODE
Sterling, Virginia	703-556-4031	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR	DTMB	Dave Roach	517-241-2254	Roachd2@michigan.gov
BUYER	DTMB	Jarrod Barron	517-284-7045	Barronj1@michigan.gov

CONTRACT SUMMARY:

DESCRIPTION:
COTS solution to provide Michigan Criminal Intelligence System for the Michigan State Police

INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
June 16, 2009	June 16, 2014	2; two year	June 16, 2014
PAYMENT TERMS	**F.O.B**	**SHIPPED**	**SHIPPED FROM**
N/A	N/A	N/A	N/A

ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MiDEAL PARTICIPANTS	
☐ P-card	☐ Direct Voucher (DV)	☐ Other	☐ Yes	☒ No

MINIMUM DELIVERY REQUIREMENTS:
N/A

DESCRIPTION OF CHANGE NOTICE:

EXTEND CONTRACT EXPIRATION DATE	EXERCISE CONTRACT OPTION YEAR(S)	EXTENSION BEYOND CONTRACT OPTION YEARS	LENGTH OF OPTION/EXTENSION	EXPIRATION DATE AFTER CHANGE
☐ No ☒ Yes	☒	☐	2 Years	June 16, 2016

VALUE/COST OF CHANGE NOTICE:	ESTIMATED REVISED AGGREGATE CONTRACT VALUE:
$1,617.00	$3,948,683.00

Effective December 16, 2014:

1. The parties agree to exercise the first two-year renewal option and to add $1617.00 to the contract;
2. The parties amend the terms of the contract as stated in the attached Changes to Legal Terms and Conditions;
3. The parties agree the price for the first two-year renewal option will be:
   $239,482.00 for 1/1/2015 – 12/31/2015 and

$246,666.46 for 1/1/2016 – 12/31/2016 (to be added to the contract via a future Change Notice);

4. The parties agree that if in the future the State elects to exercise the second two-year renewal option, the price for that second two-year renewal option will be:

   $254,066.45 for 1/1/2017 – 12/31/2017 and

   $261,688.45 for 1/1/2018 – 12/31/2018;

All other terms, conditions, specifications, and pricing remain the same. Per vendor and agency agreement, DTMB Procurement approval, and the approval of the State Administrative Board on December 16, 2014.

Approved Ad Board Contract Value: $4,195,349.46

Changes to Legal Terms and Conditions
to
Contract No. 071B9200243, between the State of Michigan and Memex, Inc.

Section	Proposed Comment or Alternative Language
2.011, "Key Personnel"	Delete Definition of "Key Personnel" and replace with the following: (j) "Key Personnel" means the project manager specifically identified on any work order, statement of work, change notice, or other description of services issued in connection with any New Work delivered to the State under this Contract (any such engagement a "New Work Engagement"). Such identified individual acting as project manager shall only be considered "Key Personnel" for the duration of such New Contract Engagement. Key Personnel shall also include the primary point of contact specifically identified in Section 2.041(h).
2.041(b)-(g)	Delete in its entirety and replace with the following: (b) Key Personnel (i) In discharging its initial obligations under this Contract, Contractor shall provide the named Key Personnel on the terms indicated. **Article 1, Section 1.201 Contractor Staff, Roles and** **Responsibilities** provides an organization chart showing the roles of certain Key Personnel, if any. Key Personnel for any New Work shall be specifically identified on any Statement of Work (or other contract documentation) associated with a New Work Engagement. (ii) Key Personnel shall be dedicated as defined in **Article 1, Section 1.201 Contractor** **Staff, Roles and Responsibilities** to the Project through Phase 4, Implementation, in the applicable Statement of Work with respect to other individuals designated as Key Personnel for that Statement of Work. (iii) The State will have the right to recommend and approve in writing the initial assignment, as well as any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor will notify the State of the proposed assignment, will introduce the individual to the appropriate State representatives, and will provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. In the event the State finds a proposed individual unacceptable, the State will provide a written explanation including reasonable detail outlining the reasons for the rejection. Additionally, the State's request shall be based on legitimate, good-faith reasons. Proposed alternative for the individual denied, shall be fully qualified for the position. The State agrees that the Key Personnel listed in the Contractor Key Personnel Section of Article 1, are considered approved Key Personnel. (iv) Contractor shall not remove any Key Personnel from their assigned roles or the Contract without the prior written consent of the State not to be unreasonably withheld. If the Contractor does remove Key Personnel without the prior written consent of the State, it shall be considered an unauthorized removal ("Unauthorized Removal"). It shall not be considered an Unauthorized Removal if Key Personnel must be replaced for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency circumstances,

Section	Proposed Comment or Alternative Language
	resignation or for cause termination of the Key Personnel's employment. It shall not be considered an Unauthorized Removal if Key Personnel must be replaced because of promotions or other job movements allowed by Contractor personnel policies or Collective Bargaining Agreement(s) as long as the State receives prior written notice before shadowing occurs and Contractor provides thirty (30) days of shadowing unless parties agree to a different time period. The Contractor with the State shall review any Key Personnel replacements, and appropriate transition planning will be established. Any Unauthorized Removal may be considered by the State to be a material breach of the Contract, in respect of which the State may elect to exercise its rights under **Section 2.210**. (v) It is acknowledged that an Unauthorized Removal may interfere with the timely and proper completion of the Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to fix the actual damage sustained by the State as a result of any Unauthorized Removal. Therefore, Contractor and the State agree that in the case of any Unauthorized Removal in respect of which the State does not elect to exercise its rights under **Section 2.210**, the State may assess liquidated damages against Contractor as specified below. For the Unauthorized Removal of any Key Personnel designated in the applicable Statement of Work, the liquidated damages amount shall be the lesser of either (i) $10,000.00 per individual, or (ii) ten percent (10%) of the total Services cost as set forth on the applicable Statement of Work for such affected New Work Engagement, unless otherwise specified therein. Contractor will make reasonable efforts to provide a replacement to the Project to shadow the Key Personnel s/he is replacing for a period of at least fifteen (15) days prior to such Key Personnel's removal. (c) Re-assignment of non-Key Personnel. Prior to re-deploying to other projects, at the completion of their assigned tasks on the Project, teams of its non-Key Personnel who are performing Services on-site at State facilities or who are otherwise dedicated primarily to the Project, Contractor will give the State at least five (5) Business Days notice of the proposed re-deployment. (d) Re-assignment of Personnel at the State's Request. The State reserves the right to require the removal from the Project of Contractor personnel found, in the judgment of the State, to be unacceptable. The State's request shall be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request shall be based on legitimate, good-faith reasons. Replacement personnel for the removed person shall be qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed personnel, the State agrees to an equitable adjustment in schedule or other terms that may be affected by the State's required removal as such adjustments are mutually agreed upon by the parties. If any such incident with removed personnel results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Service will not be counted in **Section 2.076** for a time as agreed to by the parties. (e) Staffing Levels. (i) All staff requirements not specified in the applicable Statement of Work or State approved project plan as State personnel will be supplied by Contractor. This includes secretarial, clerical and Contract administration support staff necessary for Contractor to perform its obligations hereunder.

Section	Proposed Comment or Alternative Language
	(ii) Contractor shall provide sufficient personnel resources for the completion of Contract tasks indicated in Contractor's project plan approved by the State. If the level of personnel resources is insufficient to complete any Contractor Contract tasks in accordance with the Contract time schedule as demonstrated by Contractor's failure to meet mutually agreed to time schedules, Contractor shall promptly add additional qualified personnel resources to the performance of the affected tasks, at no additional charge to the State, in an amount sufficient to complete performance of Contractor's tasks in accordance with the Contract time schedule. (f) Personnel Turnover. The Parties agree that it is in their best interests to keep the turnover rate of employees of Contractor and its Subcontractors who are performing the Services to a reasonable minimum. Accordingly, if the State determines that the turnover rate of such employees is excessive and so notifies Contractor, Contractor will meet with the State to discuss the reasons for the turnover rate and otherwise use commercially reasonable efforts to minimize such turnover rate. Notwithstanding the turnover of personnel, Contractor remains obligated to perform the Services without degradation and in accordance with the State-approved Contract schedule. (g) Location. All staff assigned by Contractor to work on the Contract will perform their duties either primarily at Contractor's offices and facilities or at State facilities, as set forth on any Statement of Work (or other contract documentation) relating to a New Work Engagement. Without limiting the generality of the foregoing, Key Personnel will, at a minimum, spend at least the amount of time on-site at State facilities as required to complete the services described in the applicable Statement of Work. Subject to availability, selected Contractor personnel may be assigned office space to be shared with State personnel.
Add new 2.041(h)	The following shall be added as a new Section 2.041(h): Ongoing Contract Administration. As of the date of this Change Notice, the following individual shall serve as the primary point of contact for the State with respect to any matters relating to this Contract: Bob Bonaventure (703) 556-4031 Bob.Bonaventure@sas.com Contractor shall not replace such individual without prior written notice to the State of such change and shall provide the State with the contact name of any replacement individual. Any additional services engagements performed pursuant to future change notices to this Contract will identify a specific project manager with respect to such services engagement.
2.062	Add the following clarification statement: "The parties acknowledge and agree that as of the date of this Change Notice, no additional software licenses shall be provided by Contractor to the State without additional mutually agreeable software license fees."
2.073	Delete in its entirety and replace with the following: "Except with respect to Section 2.041(b), notwithstanding any other section in the Contract to the contrary, no Liquidated Damages shall be assessed against Contractor except to the extent expressly set forth in a separate Statement of Work entered into between the parties."
2.074	Delete the last sentence of the first paragraph.
Add new	The following shall be added as a new Section 2.087 "Additional Services to be Provided

Section	Proposed Comment or Alternative Language
2.087	to the State": Notwithstanding anything contained herein to the contrary, including but not limited to Section 1.5 and Section 2.080 of the Contract, respect to any new services provided by Contractor to the State following the date of this Change Notice, the following terms shall govern the delivery and acceptance of any Deliverables in lieu of those provisions otherwise set forth in Section 2.080. Software license fees shall be based on an annual period, beginning on the date any Change Notice is executed by the parties. The State shall be required to maintain such Software license on an annual basis thereafter, until expiration or termination of the Contract or relevant Change Notice. A. FIXED PRICE ENGAGEMENTS. With respect to specific fixed price engagements provided by Contractor to State hereunder, Contractor agrees to provide services on a fixed price basis ("Fixed Price"), which means a pre-defined project model where Memex provides the Services for a set fee within a set time period. The Services will not include continued support or maintenance of any Work Product unless such support or maintenance is detailed in connection with such specific engagement. Any Change Notice or subsequent purchase order issued by the State for additional services shall specify whether such Services are to be delivered on a Fixed Price basis. Travel and living expenses associated with any Fixed Price engagement under a Change Notice shall be additional and paid by the State, unless otherwise expressly agreed to by the parties as reflected in any Change Notice. With respect to any predefined Deliverables for such Fixed Price engagement, the following acceptance terms shall apply (except as otherwise may be set forth in any Change Notice): Each party agrees to respond to the other in a timely fashion when acceptance of a Deliverable is pending. After delivery, the State shall accept or reject a Deliverable within ten (10) business days. Failure to reject a Deliverable within this timeframe shall constitute acceptance of the Deliverable. Notice of the State's rejection of the Deliverable shall be provided to Memex in writing and shall specify the nature and scope of the deficiencies. In the case of rejection of the Deliverable, the parties agree to adhere to the following timeframes whenever reasonably possible in order to meet the schedule set forth above: Memex shall use reasonable efforts to respond to the State within five (5) business days after receipt of the rejection notice describing the manner and timeframe in which Memex proposes to correct any deficiencies, or by actually correcting the deficiencies. In the former case, the State shall use reasonable efforts to accept Memex's proposal for correcting any deficiencies within five (5) business days after receipt of Memex's proposal. Upon Memex's delivery of the corrected Deliverable, the State shall use reasonable efforts to accept the Deliverable within five (5) business days. The State's failure to accept a Deliverable or to accept Memex's proposal for correcting any deficiencies gives Memex the right to terminate the Services at issue and refund the fees paid for all Work Product the State returns to Memex. The parties acknowledge and agree that any Deliverables provided the State in connection with a Fixed Price engagement may also include mutually agreed upon billing milestones. B. TIME AND MATERIALS ENGAGEMENTS. Contractor will provide a specific services description for each time and materials engagements ("T&M") provided by Contractor to State hereunder. "Time and Materials" shall mean a consultative model under which: (a) SAS provides Services at the hourly rates identified in the Contract and (b) SAS' time and a limited license to any Work Product resulting from the Services are the only Deliverables. Travel and living expenses shall be additional and would not be reflected in the hourly rates, unless expressly stated in a

Section	Proposed Comment or Alternative Language
	Change Notice. The Services will not include continued support or maintenance of any Work Product unless such support or maintenance is detailed in connection with such specific engagement. Any Change Notice or subsequent purchase order issued by the State for additional services shall specify whether such Services are to be delivered on a T&M basis. Customer may use the Work Product only with the SAS software ("Software") with which the Work Product operates and only for as long as Customer maintains a license for such Software.
2.091(d)	Delete in its entirety and replace with the following: All time and material charges will be at the hourly rates specified in Article 1, Attachment A, Table 3, unless otherwise set forth in any Change Notice for any T&M engagements.
2.111	Add the following clarification statement: "All access to Contractor's premises and records set forth in this Contract are subject to Contractor's reasonable security and confidentiality policies and procedures."
2.161	Add the following clarification statement at the end of the first paragraph: "Contractor shall also retain ownership of any documentation relating to the Software, specific deliverables provided to the State in connection with the Services ("Deliverables"), as well as any computer code, or other materials contained in any Deliverables created in connection with the Services delivered hereunder ("Work Product")." Add the following clarification statement at the end of the second paragraph: "No source code from which the Software object code is derived ("Source Code") is being provided and is a trade secret of Contractor. The State shall not be permitted to attempt to recreate the Source Code in any manner, except and only to the extent applicable laws specifically prohibit such restriction."
2.162	Delete in its entirety.
2.166	Delete in its entirety.
2.171(a)	Delete "consistent with generally accepted industry practices" and replace with "and must meet the performance and operational standards required under this Contract. The exclusive warranty law remedy for breach of this warranty is refund of fees paid for the Services, Work Product, or Deliverable at issue."
2.171(c)	Add the following clarification statement: "The exclusive warranty law remedy for breach of this warranty is Contractor's intellectual property indemnification obligation set forth in this Contract."
2.171(g)	Delete the last sentence and replace with the following: "Contractor must notify the State about the nature of the conflict or appearance of impropriety within two days of learning about it."
2.171	Add the following clarification statement, which would apply to the entire section: "Except as otherwise expressly stated herein or therein, the exclusive warranty law remedy for breach of the warranties set forth in this Section 2.171, 2.172, or 2.174 shall be termination of this Contract and refund of fees paid hereunder. For purposes of clarification, the parties acknowledge that other provisions of this Contract may afford the State additional non-warranty law remedies."
2.172(a)	Delete in its entirety and replace with the following:

Section	Proposed Comment or Alternative Language
	"Contractor represents and warrants that it has the right to license the Software to Customer. The exclusive remedy for breach of this warranty is set forth in the Patent/Copyright Infringement Indemnification section of this Contract. Contractor also warrants that each commercially available release of the Software shall substantially conform to its Documentation including any updates thereto, and that the Software and the media on which it is installed shall be free of software viruses when received by the State. As the exclusive remedy for breach of these warranties, Contractor, at its option, shall: (a) repair the Software; (b) replace the Software; or (c) terminate the Software license and refund the fees paid for the Software at issue during the then-current annual license period. Contractor warrants that the Services will be performed by qualified personnel in a workmanlike manner and in accordance with the requirements set forth in the Contract. The exclusive remedy for breach of this warranty is refund of fees paid for the Services at issue. Contractor represents and warrants that it has the right to license the Work Product and any Deliverables to the State. The exclusive remedy for breach of this warranty is provided in the section of the Contract addressing Contractor's indemnification obligations for intellectual property infringement claims."
2.172(b)	Add the following clarification statement: "The parties acknowledge and agree that any product authorization code which may be provided by Contractor to the State shall not be subject to this Section. The exclusive warranty law remedy for breach of this warranty is refund of fees paid for the Software at issue."
2.173	Delete in its entirety.
2.175	Delete in its entirety and replace with the following: **"EXCEPT FOR THOSE WARRANTIES SPECIFICALLY SET FORTH IN THIS ARTICLE TWO OF THE CONTRACT WHICH RELATE FOR SERVICES, WORK PRODUCT, DELIVERABLES, OR SOFTWARE, CONTRACTOR DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING AS A RESULT OF CUSTOM OR USAGE IN THE TRADE OR BY COURSE OF DEALING. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, CONTRACTOR DOES NOT WARRANT OR REPRESENT THAT THE STATE'S USE OF ANY SOFTWARE WILL RESULT IN THE STATE'S COMPLIANCE, FULFILLMENT OR CONFORMITY WITH THE LAWS, RULES, REGULATIONS, REQUIREMENTS OR GUIDELINES OF ANY GOVERNMENTAL AGENCY.** **CONTRACTOR'S LICENSORS DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR ARISING AS A RESULT OF CUSTOM OR USAGE IN THE TRADE OR BY COURSE OF DEALING. CONTRACTOR'S LICENSORS PROVIDE THEIR SOFTWARE "AS IS."."**
2.181	Please add the following clarification statements or noted comments: Please add the following to the third paragraph of subsection (a): ", except with respect to any professional liability insurance." Add the following sentence at the paragraph beginning "Before the Contract is signed by both parties...": "Notwithstanding anything else contained in this paragraph to the contrary, parties acknowledge and agree that Memex shall only be required to provide the State with thirty (30) days prior written notice, or ten (10) days for non-payment of premium, of cancellation, material change, or non-renewal."

Section	Proposed Comment or Alternative Language
	With respect to subsection (5) on page 240, please update the reference from "$50,000" to a maximum deductible of "$100,000". With respect to subsection (8) on page 240, please delete the second to last sentence and replace with the following: "Such policy shall cover all risks of direct physical loss or damage, including flood and earthquake coverage and coverage for computer hardware and software." With respect to the last paragraph of subsection (c) of 2.181, delete the last sentence and replace with the following: "If Contractor fails to pay any premium for required insurance as specified in this Contract, or if any insurer cancels or significantly reduces any required insurance as specified in this Contract without the State's written consent, the State may terminate the Contract."
2.191	Add the following clarification statement: "The parties acknowledge and agree that any references to "equipment" or "commodity" are hereby deleted and replaced with "Software, Work Product or Deliverable." Add the following clarification statement at the end of the second to last sentence of the second paragraph of subsection (d): ", provided that such reimbursement for such losses or cost is subject to the Limitation of Liability set forth in this Contract."
2.193	In subsection (a), modify the reference to ten (10) days to "twenty (20) days, or such shorter period time with which any court of competent jurisdiction may order Contractor to comply."
2.201	The parties acknowledge and agree that this Limitation of Liability shall apply to the license of any Software, Work Product, or Deliverable, as well as the provision of any Services provided by Contractor hereunder.
2.221	Add the following clarification statement: "The parties acknowledge and agree that Contractor may immediately terminate this Contract in the event of a breach of its intellectual property rights, unless such breach is capable of being cured by the State within a reasonable period of time."
2.252(b)	Add the following clarification statement: "The parties acknowledge and agree that Section 2.250 shall not apply, in the discretion of the aggrieved party, to one party's breach of the other party's intellectual property rights. Further, either party may seek any remedy at law or equity following resort to the informal dispute resolution procedure if such party determines the resulting resolution is insufficient."
2.274	Add the following clarification statement: "This provision is not applicable to disputes relating to infringement of intellectual property that fall within the jurisdiction of U.S. federal courts located in Michigan."
2.296	Update the contact information for Contractor as follows: Memex Inc. SAS Campus Drive Cary, North Carolina 27513 Attn: General Counsel

Memex Inc.

22636 Davis Drive, Suite 130

Sterling, VA 20164-4492

November 6, 2014

Mr. David Roach
Department of Technology, Management & Budget Agency Services,
Supporting Michigan State Police & Military and Veterans Affairs
333 S. Grand Avenue
Lansing, Michigan 48933

Dear Mr. Roach,

Reference is made herein to that certain Contract No. 071B9200243 (as amended from time to time, the "Contract"), between Memex Inc. ("Memex") and the State of Michigan, Department of Technology Management and Budget Procurement ("State").

This letter confirms that Memex acknowledges the State intends to exercise its option to extend the term of the Contract for an additional two years ("Extended Term"). Memex confirms that the following software maintenance costs shall apply during the Extended Term:

2015 - $239,482
2016 - $246,666.46

Memex also provides software maintenance costs for the following optional two year term succeeding the Extended Term:

2017 - $254,066.45
2018 - $261,688.45

Sincerely,

Bob Bonaventure
Senior Manager
State and Local Government Memex Sales
SAS Institute Inc.

100.10.LBF001/06NOV14

Form No. DTMB-3521 (Rev. 4/2012)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract change will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 6

to

CONTRACT NO. 071B9200243

between

THE STATE OF MICHIGAN

and

NAME & ADDRESS OF CONTRACTOR:	PRIMARY CONTACT	EMAIL
Memex, Inc. 22636 Davis Drive, Ste 130 Sterling, Virginia 20164	Graeme Robinson	Graeme.Robinson@sas.com
	TELEPHONE	CONTRACTOR #, MAIL CODE
	(949) 852-5265	

STATE CONTACTS	AGENCY	NAME	PHONE	EMAIL
CONTRACT COMPLIANCE INSPECTOR	DTMB	Dave Roach	517-241-2254	Roachd2@michigan.gov
AGENCY CONTACT	MSP	Mike Nevin	517-241-4577	NevinM@michigan.gov
BUYER				

CONTRACT SUMMARY:			
DESCRIPTION: COTS solution to provide Michigan Criminal Intelligence System for the Michigan State Police			
INITIAL EFFECTIVE DATE	INITIAL EXPIRATION DATE	INITIAL AVAILABLE OPTIONS	EXPIRATION DATE BEFORE CHANGE(S) NOTED BELOW
6/16/2009	6/16/2014	2	
PAYMENT TERMS	F.O.B	SHIPPED	SHIPPED FROM
	N/A	N/A	N/A
ALTERNATE PAYMENT OPTIONS:			AVAILABLE TO MIDEAL PARTICIPANTS
☐ P-card ☐ Direct Voucher (DV) ☐ Other			☐ Yes ☐ No
MINIMUM DELIVERY REQUIREMENTS:			

DESCRIPTION OF CHANGE NOTICE:				
EXTEND CONTRACT EXPIRATION DATE	EXERCISE CONTRACT OPTION YEAR(S)	EXTENSION BEYOND CONTRACT OPTION YEARS	LENGTH OF OPTION/EXTENSION	EXPIRATION DATE AFTER CHANGE
☒ No ☐ Yes	☐	☐		
VALUE/COST OF CHANGE NOTICE:		ESTIMATED REVISED AGGREGATE CONTRACT VALUE:		

The parties agree that the SAS Service Agreement Number S5009-1 is now void, and all work to be performed, and which may have already been performed prior to the date of this Change Notice, will be pursuant to Purchase Order 084N3204310, the Statement of Work, and to the terms of the Memex Contract 071B9200243 effective as of the date of

this Change Notice. The services described herein ("Services") and deliverables identified below ("Deliverables") shall be delivered on a fixed price basis, which means a predefined project model where Memex provides the Services, including any Deliverables, for a set fee. The Services will not include continued support or maintenance of any Deliverable or work product.

Description of Service to be Provided	Deliverable Relating to Service	Acceptance Criteria
Patriarch Entity Creation Memex will work with the Michigan State Police, specifically the Michigan Intelligence Operation Center (MIOC) and DTMB personnel to design, create, test and deploy a new Patriarch entity to capture School Violence Tip (SVT) information. The entity will include mutually agreeable fields, which may include: • Fields to capture information received from the MIOC or DTMB maintained website, which may include information about multiple suspects, victims and vehicles. • Information about the target school(s), including the school name, location and point of contact details. This information will be obtained from reference tables maintained by DTMB in the Oracle staging database. • A unique ID allocated to specific tips by the staging database. • Fields to allow MIOC analysts to record MIOC instigated follow up and disposition details related to the tip. • A print template allowing the tip to be printed from within the Patriarch system. • Functionality to allow MIOC analysts to issue an email notification regarding the tip to other Patriarch users. This feature will be functionally equivalent to the email notification facility with the	Memex Server configuration files, which will include the following: • mxEntity table entry (this is the system meta-data description of the entity). • Entity form xml file • Entity icon file • Entity picklists • Entity MFX files (if any)	This task shall be deemed delivered when testing by Memex shows that the Patriarch entity has been created and deployed. Acceptance to be approved by MIOC in the manner set forth in the Acceptance Procedures immediately following this table.

Patriarch Suspicious Activity Report entity currently deployed at MIOC.		
ETL Process to Transfer Tip Information From the Staging Database to Patriarch Memex will work with DTMB to create an automated ETL process to identify newly submitted tips within the Oracle staging database and transfer those tips to Patriarch. Each tip transferred to Patriarch by this process will: • Include all information received from the website, including information about multiple suspects, victims and vehicles. • Include information about the target school(s), including the school name, location and point of contact details. This information will be obtained from reference tables independently maintained by DTMB in the Oracle staging database. • Include a unique ID allocated to the tip by the staging database. • Be updated within the staging database to indicate that it has been successfully transferred to Patriarch.	ETL Process source code files developed for MIOC. Such files shall not include any source code for software products or other proprietary or confidential information of Contractor. Filter or template files used to configure the Memex IMWSI webservices interface for use by the developed ETL process.	Acceptance to be approved by MIOC in the manner set forth in the Acceptance Procedures immediately following this table.
Provide Assistance in Creating Required Reports Memex will work with MIOC staff to assist in the creation of reports related to SVT, as such reports are specified by MIOC to Memex. Memex's role in this process will be to assist MIOC and/or DTMB, as applicable, (I) in the creation of views of SVT data within the Patriarch database by using existing reporting tools and (ii) with the appropriate means of accessing SVT data for such reporting purposes. MIOC will be solely responsibility for identifying the reports, as well as for the design and maintenance of those	Table and View SQL Create Statements, which will describe any tables or views created to support the reports identified by MIOC to Memex. Documentation providing the location of the created database tables and views, which may include server and schema / database names	Acceptance to be approved by MIOC in the manner set forth in the Acceptance Procedures immediately following this table.

reports using their reporting tool of choice.		
Creation of State Project Documentation Memex will work with MIOC and DTMB IT to create technical documentation related to the delivered work products required by the State's project methodology, as mutually discussed and agreed to by the parties.	Project Documentation, as mutually agreed upon by MIOC and Memex. Memex will allow for no more than three (3) days of no more than eight (8) hours each day, of effort associated with this task. Memex shall deliver only such documentation as can be reasonably completed within this timeframe. Memex reserves the right to not deliver requested documentation should the required level of effort to produce said documentation exceed the allotted time.	Acceptance to be approved by MIOC in the manner set forth in the Acceptance Procedures following this table.
Project Management Memex will assign a project manager to the project. The project manager's role will be to facilitate communication between MIOC, DTMB and Memex project personnel, track and report on project progress and to identify and mitigate project risks.	Project Completion Form: This document will confirm that all Services and related Deliverables have been delivered and completed in accordance with the terms contained herein.	Notwithstanding the Acceptance Procedures outlined below, this task will be deemed to be complete when all other tasks been accepted pursuant to the Acceptance Procedures set forth below. Customer will sign and return the Project Completion Form upon completion of all Services.

- Additional Requirements: The success and timely delivery of these services is dependent upon the timely access to appropriate people, responsiveness of all parties and a shared understanding of the tasks.
- The Memex team will include various as-needed Consultants, Engineers and a Project Manager, as such resources are determined by Memex. From time to time Memex personnel may require access to and assistance from DTMB IT and networking staff and Memex's completion of the Services will be dependent on such access.
- Memex shall not be responsible for any delays caused by third parties outside Memex's control.
- Memex personnel will require access to MIOC and Michigan IT systems, in particular the Oracle staging database. The timely granting of access to these systems and the establishment of network connectivity between the Oracle database and the Patriarch database servers will be the sole responsibility of MIOC and DTMB, and will be critical to the timely completion of the project.

- All technical and development work associated with the tasks will initially be carried out on Memex development hardware and the MIOC test environment. Following successful completion of testing of the delivered functionality within the MIOC test environment, Memex will transfer the delivered functionality to the MIOC production environment and carry out a further round of testing within the production environment. Final acceptance of the delivered functionality shall occur when testing is complete and shows that the functionality is available and ready for use within the MIOC production environment. There shall be no dependency on actual use of the functionality by MIOC or members of the public for final acceptance of the functionality to occur.
- MIOC should advise Memex immediately if there are any deadlines associated with funding sources for the services and provide specific details of when invoices must be provided to meet those deadlines.
- Memex reserves the right not to deliver requested documentation should the required level of effort to produce said documentation exceed the allotted time frame of completing the Services.
- MIOC should advise Memex of background check processes required prior to Memex consultants being granted access to State servers and systems on a remote basis. The timely completion of background check processes by MIOC is essential for the successful on-time completion of the services.

Acceptance Procedures:

Each party agrees to respond to the other in a timely fashion when acceptance of a Deliverable is pending. After delivery, MIOC will accept or reject a Deliverable within ten (10) business days. Failure to reject a Deliverable within this time frame will constitute acceptance of the Deliverable. Notice of MIOC's rejection of the Deliverable shall be provided to Memex in writing and shall specify the nature and scope of the deficiencies. In the case of rejection of the Deliverable, the parties agree to adhere to the following timeframes whenever reasonably possible in order to meet the schedule set forth above: Memex will use reasonable efforts to respond to MIOC within five (5) business days after receipt of the rejection notice describing the manner and timeframe in which Memex proposes to correct any deficiencies, or by actually correcting the deficiencies. In the former case, MIOC will use reasonable efforts to accept Memex's proposal for correcting any deficiencies within five (5) business days after receipt of Memex's proposal. Upon Memex's delivery of the corrected Deliverable, MIOC will use reasonable efforts to accept the Deliverable within five (5) business days. If MIOC does not accept a Deliverable or Memex's proposal for correcting any deficiencies, Memex may terminate this Change Notice. Similarly, if Memex cannot correct any deficiencies to the State's reasonable satisfaction within a reasonable period of time, the State may terminate this Change Notice.

The parties acknowledge and agree that the time frames set forth in these acceptance procedures may be suspended during any emergency mobilization events to which MIOC may be subject. MIOC agrees to provide prompt notice to Memex in the event any such event occurs.

Fixed Fee, Progress Payments, and Invoicing

Task	Progress Payment	Payment Due Date
1. **Patriarch Entity Creation** **Entity deployment resources**	1. $12,040	Upon completion and acceptance of the related task
2. **ETL Process to Transfer Tip Information From the Staging Database to Patriarch**	2. $17,200	Upon completion and acceptance of the related task

3. **Provide Assistance in Creating Required Reports**	3. $ 5,160	Upon completion and acceptance of the related task
4. **Project Documentation**	4. $ 5,160	Upon completion and acceptance of the related task
5. **Project Completion Form**	5. $ 3,040	Project Completion
Total Fixed Fee: $42,600		

Invoicing: Memex will invoice the State according to the listed payment due dates.

Provided this Change Notice is executed by both parties by June 1, 2014, Memex estimates that the Services will be completed by August 1, 2014 and will make good faith reasonable efforts to complete all Services and Deliverables by such date.

The parties agree that all work performed under this Change Notice will be pursuant to the Purchase Order 084N3204310, the Statement of Work and to the terms of the Memex contract 071B9200243. Any changes to the scope of Services described herein shall be pursuant to a modification to this Change Notice.

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY MANAGEMENT AND BUDGET **March 27, 2012**
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CONTRACT CHANGE NOTICE NO. 5
TO
CONTRACT NO. 071B9200243
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR **Memex, Inc.** **22636 Davis Drive, Ste 130** **Sterling, Virginia 20164** **Attention: Neil Schlisserman, VP Memex Americas** **Email: neil.schlisserman@memex.com**	TELEPHONE Neil Schlisserman **(703) 556-4031** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz**
Contract Compliance Inspector: Barb Suska **Michigan Criminal Intelligence System (MCIS)**	
CONTRACT PERIOD: **5 yrs. + 2 two-year options** From: **June 16th, 2009** To: **June 16th, 2014**	
TERMS **N/A**	SHIPMENT **N/A**
F.O.B. **N/A**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	
MISCELLANEOUS INFORMATION:	

NATURE OF CHANGE(S):

Effective immediately this Contract is amended to include upgrading the existing MCIS solution to license and incorporate the DD-79 Sex Motivated Crime Reporting requirements per the attached Statement of Work, which includes the one time solution cost as well as modifications to the pricing for maintenance years. The total value of this change is $135,962.00 which will be funded using the Reserved Bank of Hours ($146,500.00), leaving a remaining balance of $10,538.00 for other future enhancements. The funding for the Reserved Bank of Hours is already included in the Total Estimated Contract Value. All other terms, conditions, pricing and specifications remain unchanged.

AUTHORITY/REASON(S):

Per Contractor, MSP, and DTMB approval.

TOTAL ESTIMATED CONTRACT VALUE REMAINS: $3,947,066.00

DD-79 Reporting Requirements

Statement of Work

Introduction

The Michigan State Police (MSP) and Michigan Intelligence Operations Center (MIOC) have implemented the Memex Patriarch infrastructure in support of their operations. MSP would like to upgrade the single integrated Memex Patriarch framework to leverage this infrastructure/environment to include the DD-79 requirement. This will improve efficiencies in the collection, reporting and searching of DD-79 Sex Motivated Crime Reports, and eliminate an existing application

This project will accomplish a rapid deployment and a quick response in gathering information on all reported Sex Motivated Crimes throughout the State as well as providing a near real time search capability – as opposed to the current environment where users experience a backlog of 12-18 months per request.

The value of this project will be realized with data being collected in a more timely and efficient manner resulting in more accurate information that will be available for investigators across the State as they work to identify potential offenders of recently committed crimes. The Memex solution improves the quality of information at the time of entry while reducing the work load on MSP personnel – eliminating the need to open mail, review the current DD-79 for errors, scan the DD-79, and again checking for errors in the data uploaded to the database only to create a backlog of information.

In summary, Memex will deliver the following:

1. Services to define and implement modifications to the existing MCIS Patriarch system to allow entry, saving, searching, modification and deletion of DD79 data by authorized users.

2. Services to define and implement a process to automatically create an exception report detailing entries in the SOR that do not have a corresponding DD79 entry in the MCIS Patriarch system.

3. Process management services to define and document operating procedures to use the delivered functionality.

4. Training services on use of the delivered functionality.

Solution Overview

The proposed solution leverages the MIOC's existing network, hardware and application – Memex Patriarch and its various touch points to access MCIS throughout the State. Memex will integrate the DD-79 with existing data stores and applications available to the MIOC/MSP as defined herein. The solution will also leverage existing training and technologies already in place at the MIOC.

The solution will focus on:

- Documentation of existing MSP DD-79 processes
- Definition, standardization and configuration of new DD-79 processes
- A one-time migration of the then current DD-79 data files to the Memex DD-79 solution
- Procedure and business process documentation as part of training to support the new DD-79 solution

- Updating the existing Memex Patriarch for Intelligence solution to include the Sex Motivated Crimes configuration
- Creation of an automated process to compare the DD-79 data to be held in Memex with the Sex-Offender Registry;[1] The data to be made included in this comparison – if available in the SOR – is:
    - First Name
    - Middle Name
    - Last Name
    - Date of Birth
    - Sex
    - Race
    - SS#
    - Agency ORI#
    - Offense Date
    - State of conviction or offense (limited to Michigan)
- Creation of two new role groups within Memex Patriarch
    - Creation of DD-79 reports only
    - Management and Supervision of DD-79 reports, and specifically search, create and edit DD-79 reports
- Three ½ day onsite training sessions for SOR staff (estimated at nine people); these individuals may then train others
- Three days of onsite testing support during Solution Testing, with an optional two additional days should more time be required to complete testing (no additional charge)
- Incorporation into the existing, contracted customer support for the MCIS

In Scope

Memex and the SOR Unit will confirm the requirements, design, and configuration to implement the Michigan State Police Sex Motivated Crime Reporting program into the existing MCIS solution architecture using the same off-the-shelf software (Memex Patriarch) as used for the Michigan Criminal Intelligence System during a Working Group, the date of which to be agreed within ten days of project initiation.

Memex will update the existing MCIS documentation to include manage and deliver the service and solution items listed below using a similar approach to that used for the original MIOC MCIS project, contract # 071B9200243:

- Verification and validation of business requirements with MSP and DTMB Agency Services personnel in accordance with business operation, and the relevant sections from the Michigan Compiled Laws (MCL); this will be done as part of the first Working Group.
- Configure and host the system using the systems architecture agreed for the original MCIS project
- Installation and implementation of software required to compare DD-79 data and SOR data
- Services to install the software, configure the DD-79 solution, create the DD-79 and SOR comparison, integrate the solution into the existing MCIS environment and support MIOC testing of the solution
- A one-time conversion of data currently stored within the current DD-79 Sex Motivated Crime database for use within Memex Patriarch.[2][3]

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[1] The MIOC will make any APIs, documentation and other information pertaining to the Sex Offender Registry as required available by April 30, 2012

[2] Memex and the MIOC will agree a date prior to June 30, 2012, by which data will cease to be entered into the existing DD-79 system. The one-time conversion will occur subsequent to this date.

- Train SOR personnel in the use and operation of the DD-79 solution, as previously defined
- Documentation and training materials as agreed in the Documentation Deliverables section
- User and technical help desk support for the duration of the contract, consistent with the existing MCIS support agreement.

Out of Scope

The following items are out of scope:

- Equipment and application development services for any system(s) other than those specifically addressed in this proposal
- Installation of any MIOC related hardware i.e. desktops, and peripherals
- Hosting of the MCIS/CJIC/DD-79 solution
- Verification and validation of converted data
- All other hardware, software, or services not explicitly identified herein

Services

Project Management Services

Memex will develop and provide the required activities to implement the DD-79 module into a new project plan which has been adapted to comply with the specific controls and deliverables specified below of the State's Project Management Methodology (PMM) to deliver a solution that has been tailored to the specific needs of the Michigan State Police.

Requirements Validation and Design Services

Memex will provide requirement gathering and validation services by:

- Following the SUITE methodology for implementing new software into the State environment
- Facilitating a design and review workshop to verify the functional and system design requirements

Installation, Testing & Deployment Services

Memex in coordination with the DTMB, will configure and install the software to support the DD-79 project onto the current MCIS development environment in preparation for the design process. Once the design has been verified the entire solution will be migrated to the test environment in preparation for system and user testing. Finally, upon user approval the system will be transitioned to production level by Memex in preparation for Training and Go-Live events.

Data Conversion Services

Memex will work with the State to perform an analysis of the existing DD-79 data, identifying any gaps between it and the new database and recommend the optimal design for a migration of data between old and new DD-79 solutions. Once the design has been agreed, Memex will execute the agreed services to complete the migration per the final design after which it will be delivered to the customer for testing.

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[3] The MIOC is responsible for confirming and assuring the validity of the data captured in the DD-79 system; Memex can only be responsible for validating that the agreed-data in the source system was migrated to the agreed-data in the destination system.

PROJECT DELIVERABLES

Software Deliverables

1. The Sex Motivated Crime form, configuration, process and capabilities within the MCIS solution
2. The automated mechanism to compare the DD-79 data held in Memex with the Sex Offender Registry

Documentation Deliverables

Memex will update the existing MCIS documentation to include the DD-79 operations. Specifically, this will include updates – if appropriate – to the following documents:

1. Functional Design Document – SEM-0501
2. System Design Document – SEM-604
3. Test Plan – SEM-0602
4. Training Plan - SEM-0703
5. Transition Plan – SEM-0701
6. Data Conversion Plan – SEM-0601
7. Requirements Traceability Matrix – SEM-0401

Pricing Summary

Licensed Software	One-time License Fee	Annual Renewal (includes M&S)
Memex Patriarch for Sex Crimes (Server License	$43,000	included
Total Software License Fees	$43,000	
Professional Services/Deliverables	**Service Fee**	**Maintenance and Support**
Design Specification Document	$68,000	
Installation and Configuration of Memex Patriarch for Sex Crimes	$0	
Website Creation	$0	
Testing Plan	$0	
Training	$0	
Total Professional Services	$68,000	
Maintenance and Support	**Annual Support Renewal**	**Expiration Date**
January 1, 2011 to December 31, 2012	Included[4]	
April 1, 2013 to December 31, 2013	$6,450[5]	
January 1, 2014 to December 31, 2014	$9,030	
January 1, 2015 to December 31, 2015	$9,482	
Total M&S Fees through 12/31/2015	$24,962,[6]	
Total Purchase Fee (software, maintenance and services)	**$135,962**	

Note: The following optional capability has been added to the proposal. Removing this piece will reduce the total proposal cost by approximately $39,000.

Optional Scope

The SAS/Memex team understands that the following items are optional scope:

- DD-79 Integration with SOR database
  - Nightly batch process will run to check that each Sex Offender has an entry into DD-79 database
  - If the entry does not exists then DD-79 Admin team will be notified
  - DD-79 Solution will be able to generate a standard template of requesting an entry to be made in DD-79 database for those missing Sex Offenders.

[4] Software Support and Maintenance renewals will be included as part of the MIOC MCIS through December 31, 2011 and will be co-termed with MIOC MCIS Support and Maintenance payment schedule starting January 1, 2012
[5] Prorated for nine (9) months
[6] Software Support and Maintenance will be co-termed with current and existing renewal dates.

Updated Payment Schedule

The following details the revised payment schedule for the MIOC MCIS solution project contract # **071B9200243**. This includes the Maintenance and Update Fees associated with each of Years 3 – 5, inclusive of the MCIS, Tip Tool and DD-79 Projects.

TABLE 1 (Updated per Contract Change Notice No. 5)

Total Michigan Criminal Intelligence System Solution (One-time) Cost

Breakdown Provided In	Cost Categories	Cost ($)
Phase 1 Initiation	Total Solution Cost for **Phase 1**	$ 459,101.10 Completed and Paid
Phase 2 Design	Total Solution Cost for **Phase 2**	$ 647,752.75 Completed and Paid
Phase 3 Development	Total Solution Cost for **Phase 3**	$ 666,128.30 Completed and Paid
SAR Phase	Total Solution Cost for **SAR Phase**	$ 364,920.00 Completed and Paid
Phase 4, Part 1 Implementation (1st half)	Completion of **Phase 4, Part 1**	$ 400,000.00 Completed and Paid
Phase 4, Part 2 Implementation (final)	Completion of **Phase 4**	$ 247,218.85 Completed and Paid
Remote Location Testing Phase	Completion of **Remote Location Testing Phase**	$200,000.00 Completed and Paid
*** Total Solution (One-time) Cost**	Total Solution Cost for **Phase 1,2,3,4 Part 1, 4 Part 2, SAR Phase and Remote Location Testing Phase**	$ 2,985,121.00
Cyber Security Policy Project	Total Services Cost	$ 95,000 Invoice Date Completed and Paid
DD-79 Reporting (License)	License Begin Date	$43,000 Invoice Date March 31, 2012
DD-79 Reporting (Services)	DD-79 Services	$68,000 Invoice Date June 30, 2012

Maintenance and Update Cost (Year 3: January 1, 2013 – December 31, 2013)	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.	$236,450 Invoice Date December 1, 2012
Maintenance and Update Cost (Year 3: January 1, 2014 – December 31, 2014)	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.	$239,030 Invoice Date December 1, 2013
Maintenance and Update Cost (Year 3: January 1, 2015 – December 31, 2015)	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.	$239,482 Invoice Date December 1, 2014

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY MANAGEMENT AND BUDGET **December 13, 2011**
PROCUREMENT
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CHANGE NOTICE NO. 4
TO
CONTRACT NO. 071B9200243
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR **Memex, Inc.** **22636 Davis Drive, Ste 130** **Sterling, Virginia 20164** **Attention: Neil Schlisserman, VP Memex Americas** **Email: neil.schlisserman@memex.com**	TELEPHONE Neil Schlisserman **(703) 556-4031** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz**
Contract Compliance Inspector: Barb Suska **Michigan Criminal Intelligence System (MCIS)**	
CONTRACT PERIOD: **5 yrs. + 2 two-year options** From: **June 16th, 2009** To: **June 16th, 2014**	
TERMS **N/A**	SHIPMENT **N/A**
F.O.B. **N/A**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	
MISCELLANEOUS INFORMATION:	

NATURE OF CHANGE(S):

Effective immediately the Contract is INCREASED by $95,000.00 and amended to include Grant Consulting as an approved subcontractor. The Subcontractor will provide support for the Michigan Cyber Security Task Force and all related groups and individuals to prepare a professional caliber publication on the State of Michigan's Cyber Security initiative for public consumption as outlined in the attached Statement of Work.

All other terms, conditions, pricing and specifications remain unchanged.

AUTHORITY/REASON(S):

Per Contractor, MSP, and DTMB approval.

INCREASE: $95,000.00

TOTAL ESTIMATED REVISED CONTRACT VALUE: $3,947,066.00

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Payment Schedule

The following details the revised payment schedule for the MIOC MCIS solution project contract # **071B9200243**. This includes the Maintenance and Update Fees associated with each of Years 3 – 5, inclusive of the MCIS and Tip Tool Projects.

TABLE 1 (Updated per Contract Change Notice No. 4)
Total Michigan Criminal Intelligence System Solution (One-time) Cost

Breakdown Provided In	Cost Categories	Cost ($)
Phase 1 Initiation	Total Solution Cost for **Phase 1**	$ 459,101.10 Completed and Paid
Phase 2 Design	Total Solution Cost for **Phase 2**	$ 647,752.75 Completed and Paid
Phase 3 Development	Total Solution Cost for **Phase 3**	$ 666,128.30 Completed and Paid
SAR Phase	Total Solution Cost for **SAR Phase**	$ 364,920.00 Completed and Paid
Phase 4, Part 1 Implementation (1st half)	Completion of **Phase 4, Part 1**	$ 400,000.00 Completed and Paid
Phase 4, Part 2 Implementation (final)	Completion of **Phase 4**	$ 247,218.85 Completed and Paid
Remote Location Testing Phase	Completion of **Remote Location Testing Phase**	$200,000.00 Completed and Paid
*** Total Solution (One-time) Cost**	Total Solution Cost for **Phase 1,2,3,4 Part 1, 4 Part 2, SAR Phase and Remote Location Testing Phase**	$ 2,985,121.00
Cyber Security Policy Project	Total Services Cost	$ 95,000 Invoice Date October 5, 2011

Maintenance and Update Cost (Year 3: January 1, 2013 – December 31, 2013)	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.	$230,000 Invoice Date December 1, 2012
Maintenance and Update Cost (Year 3: January 1, 2014 – December 31, 2014)	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.	$230,000 Invoice Date December 1, 2013
Maintenance and Update Cost (Year 3: January 1, 2015 – December 31, 2015)	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.	$230,000 Invoice Date December 1, 2014

AMENDMENT TERMS

With regard to the additional work requested by the State and described in the attached proposal, the following terms are provided for inclusion into any Amendment to the existing Contract No. 071B9200143 ("Contract") between Memex and the State of Michigan.

1. Notwithstanding anything else contained in the Contract, with regard to the work contemplated by this Change Notice, Memex is required to flow down only the obligations in the following Sections of the Contract to its subcontractor for such work, Grant Consulting: Sections 2.040 (excluding 2.041 and 2.044), 2.110, 2.150, 2.171(c), 2.260, and 2.297. In addition, Grant Consulting will be required to flow down such provisions to its subcontractor.

2. The State agrees that Grant Consulting's insurance coverage provided to the State is sufficient for purposes of the services outlined in the attached Amendment.

3. The State hereby authorizes Grant Consulting to further subcontract portions of the Services relating to layout and printing.

Adjustments to the Performance and Reliability Evaluation (PARE)

1. The Contractor will issue the Phase 4, Implementation Deliverables – which the State will approve prior to December 27, 2010
2. The present, One-Time fees outstanding on the project are $447,218.85 (Phase 4, Implementation Deliverable). The Contractor will issue an invoice, which the State will accept and process, for $247,218.85 ($200,000 holdback)
3. The State will provide a, "Conditional" PARE signoff – the sole exception being explicitly identified as the external agency connectivity

    a. The Contractor will provide support to the State in preparation and during execution of the final PARE
    b. The final PARE signoff will be provided by the State after the successful completion of a 15-business-day PARE focused on external agency connectivity where the full range of access methods to MCIS will be tested from a group of pre-selected agencies. The method from which these agencies access the MICJIN portal will be representative of one of the following access mechanisms
        i. 1. From MSP Network Zone 3
        ii. 2. From State of Michigan (SOM) Network Zone 2
        iii. 3. From the internet with an RSA Token
        iv. 4. From the internet using a VPN and Token
        v. 5. From a local agency using LGNet
    c. The external agency selection criteria will be based upon the availability of prerequisite technical support that is needed to modify the local network configuration to align with the modifications made by the State
    d. A specific PARE plan for this phase of the project will be generated that will include the scope, preparatory activities and test scenarios that will be executed to confirm that the system is operating as expected.
    e. The Contractor may invoice the remaining $200,000 upon the earlier of:
        i. The successful completion of the 15-business-day PARE focused on external agency connectivity, or
        ii. The agreed-to date by which the State commits to complete the PARE provided that the State determines that the issues precluding the completion of the 15-business-day PARE are not related to the Contractor
        iii. The agreed-to date referenced in 3.c.ii will be provided to the Contractor no later than January 17, 2011
4. The Warranty Period will commence on January 1, 2011
    a. Should the State determine that the reason for the connectivity issue is the result of an error with the Memex software application, then the Warranty Period will restart upon the final PARE signoff

MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET
IT SERVICES
STATEMENT OF WORK

Project Title: **Michigan Cyber Security Initiative**	**Period of Coverage:** **16 Jun 2009 – 16 Jun 2014**
Requesting Department: **Michigan State Police**	**Date:** **14 Nov 2011**
Agency Project Manager: **Steve Schreier**	**Phone:** **241-4577**
DTMB Project Manager: **David M. Roach**	**Phone:** **241-2254**

Brief Description of Services to be provided:

BACKGROUND:

Michigan is developing a comprehensive cybersecurity strategy that encompasses all aspects of this issue as it pertains to state government, economic development, workforce development, Internet risks and threats to the state. The State is seeking a vendor to partner with government leaders and coordinate efforts from multiple public and private sector entities to deliver this strategic security document.

The role of the Michigan Intelligence Operations Center (MIOC) and corresponding State Police processes, which work within all aspects of the criminal justice community and state agencies, are an important and central part if this cyber strategy. The MIOC and State Emergency Management Center (SEOC) are core componenets to identify cyber threats, stopping cyber crime, responding to significant cyber incidents of national or state significance, mitigate risks and ensuring communications are coordinated.

The MIOC will be an essential component of the Michigan Cyber Coordination Center which will be managed by State Police. The Governor will be rolling out this plan, along with the vision of how cyber security is core to all aspects of critical infrastructure protection – a central function of the MIOC.

PROJECT OBJECTIVE:
The Michigan Cyber Security Initiative will secure Michigan's leadership role in the future of the cybersecurity industry and environment and is centered around four channels of effort:
Innovation –Culture of Technical Innovation in Information Technology. The State of Michigan has a proven framework for successful partnering and maintains the State as a priority.
Partnership – State Agency Cooperation along with State, Federal and Public/Private Partnerships.
Awareness – Provide community outreach programs.
Industry – Maintain a build Cybersecurity Infrastructure and Resource Portfolio.

SCOPE OF WORK:
The Vendor will be required to produce the CyberSecurity Initiative Document and assist the State Police, Governor's Office and DTMB with Public Relations and Promotion of the new initiative. The initiative will included representatives from across the public and private sector – with a focus on protecting Michigan citizens. The protection of Criminal Justice Information System (CJIS) along with the identification of risks and threats related to cyber crime, will be central to this effort.

TASKS:

Work with all of the government-identified stakeholders to coordinate input and facilitate input into the State's Cyber Strategy. These stakeholders include, MSP, DTMB, private sector technology companies, Military & Veterans Affairs and others.

Technical support is required to assist with the following tasks:
Produce Michigan's CyberSecurity Initiative Document to include:

- 1000 Tri-Fold Color Brochures
- 100 Full Strategy Documents for the Michigan Cyber Security Initiative.

Assists the State of Michigan with standing up a new CyberSecurity Website.
Assists the State of Michigan with Public Relations and Promotion of the new CyberSecurity Initiative.

DELIVERABLES:

Deliverables will not be considered complete until the Agency and DTMB Project Manager has formally accepted them. Deliverables for this project include:

- An acceptable final Michigan Cyber Initiative (MCI) document that has been coordinated with the the Governor's Office, DTMB and State Police. Several iterations of the document are likely.
- 1000 Tri-Fold Color Brochures
- 100 Full Strategy Documents
- New CyberSecurity Website is completed.

ACCEPTANCE CRITERIA:

The project manager will coordinate the MCI document acceptance with DTMB and the steering committee for final approval, following standards set by similar documents from other states. The document will be similar in scope to the Cyber Maryland document.

PROJECT CONTROL AND REPORTS:

A bi-weekly progress report must be submitted to the Agency and DTMB Project Managers throughout the life of this project. This report may be submitted with the billing invoice. Each bi-weekly progress report must contain the following:

1. **Hours**: Indicate the number of hours expended during the past two weeks, and the cumulative total to date for the project. Also state whether the remaining hours are sufficient to complete the project.

2. **Accomplishments**: Indicate what was worked on and what was completed during the current reporting period.

3. **Funds**: Indicate the amount of funds expended during the current reporting period, and the cumulative total to date for the project.

SPECIFIC DEPARTMENT STANDARDS:

Agency standards, if any, in addition to DTMB standards.

PAYMENT SCHEDULE:

Payment will be made on a Satisfactory acceptance of each deliverable basis. DTMB will pay CONTRACTOR upon receipt of properly completed invoice(s) which shall be submitted to the billing address on the State issued purchase order not more often than monthly. DTMB Accounts Payable area will coordinate obtaining Agency and DTMB Project Manager approvals. All invoices should reflect actual work completed by payment date, and must be approved by the Agency and DTMB Project Manager prior to payment. The invoices shall describe and document to the State's satisfaction a description of the work performed, the progress of the project, and fees. When expenses are invoiced, receipts will need to be provided along with a detailed breakdown of each type of expense.

Payment shall be considered timely if made by the DTMB within forty-five (45) days after receipt of properly completed invoices.

EXPENSES:

The State will NOT pay for any travel expenses, including hotel, mileage, meals, parking, etc.

PROJECT CONTACTS:

The designated Agency Project Manager is:

Name Steve Schreier
Department MSP
Area MIOC
Building/Floor MSP HQ's 3rd Floor
Address 333 S Grand Ave
City/State/Zip Lansing, MI 48933
Phone Number 241-4577
Fax Number
Email Address schreiers@michigan.gov

The designated DTMB Project Manager is:

Name David M. Roach
Department DTMB
Area AS – DMVA/MSP
Building/Floor MSP HQ's, 4th Floor
Address 333 S Grand Ave
City/State/Zip Lansing, MI 48933
Phone Number 241-2254
Fax Number
Email Address roachd2@michigan.gov

AGENCY RESPONSIBILITIES:

LOCATION OF WHERE THE WORK IS TO BE PERFORMED:

Consultants will work at Vendor Location in Lansing, Michigan.

EXPECTED CONTRACTOR WORK HOURS AND CONDITIONS:

Work hours are not to exceed eight (8) hours a day, forty (40) hours a week. Normal working hours of 8:00 am to 5:00 pm are to be observed unless otherwise agreed to in writing.

No overtime will be permitted.

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF TECHNOLOGY MANAGEMENT AND BUDGET **December 17, 2010**
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CONTRACT CHANGE NOTICE NO. 3
TO
CONTRACT NO. 071B9200243
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR **Memex, Inc.** **22636 Davis Drive, Ste 130** **Sterling, Virginia 20164** **Attention: Neil Schlisserman, VP Memex Americas** **Email: neil.schlisserman@memex.com**	TELEPHONE Neil Schlisserman **(703) 556-4031** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz**
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TERMS **N/A**	SHIPMENT **N/A**
F.O.B. **N/A**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	
MISCELLANEOUS INFORMATION:	

NATURE OF CHANGE(S):

Effective immediately the Performance and Reliability Evaluation (PARE) provisions in the Contract are hereby modified based on the conditional PARE signoff granted by the State as outlined in the attachment that follows.

All other terms, conditions, pricing and specifications remain unchanged.

AUTHORITY/REASON(S):

Per Contractor, MSP, and DTMB approval.

TOTAL ESTIMATED CONTRACT VALUE REMAINS: $3,852,066.00

Adjustments to the Performance and Reliability Evaluation (PARE)

5. The Contractor will issue the Phase 4, Implementation Deliverables – which the State will approve prior to December 27, 2010
6. The present, One-Time fees outstanding on the project are $447,218.85 (Phase 4, Implementation Deliverable). The Contractor will issue an invoice, which the State will accept and process, for $247,218.85 ($200,000 holdback)
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        v. 5. From a local agency using LGNet
    c. The external agency selection criteria will be based upon the availability of prerequisite technical support that is needed to modify the local network configuration to align with the modifications made by the State
    d. A specific PARE plan for this phase of the project will be generated that will include the scope, preparatory activities and test scenarios that will be executed to confirm that the system is operating as expected.
    e. The Contractor may invoice the remaining $200,000 upon the earlier of:
        i. The successful completion of the 15-business-day PARE focused on external agency connectivity, or
        ii. The agreed-to date by which the State commits to complete the PARE provided that the State determines that the issues precluding the completion of the 15-business-day PARE are not related to the Contractor
        iii. The agreed-to date referenced in 3.c.ii will be provided to the Contractor no later than January 17, 2011
8. The Warranty Period will commence on January 1, 2011
    a. Should the State determine that the reason for the connectivity issue is the result of an error with the Memex software application, then the Warranty Period will restart upon the final PARE signoff

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

May 18, 2010

CONTRACT CHANGE NOTICE NO. 2
TO
CONTRACT NO. 071B9200243
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR **Memex, Inc.** **22636 Davis Drive, Ste 130** **Sterling, Virginia 20164** **Attention: Neil Schlisserman, VP Memex Americas** **Email: neil.schlisserman@memex.com**	TELEPHONE Neil Schlisserman **(703) 556-4031** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz**
Contract Compliance Inspector: Barb Suska **Michigan Criminal Intelligence System (MCIS)**	
CONTRACT PERIOD: **5 yrs. + 2 two-year options** From: **June 16th, 2009** To: **June 16th, 2014**	
TERMS **N/A**	SHIPMENT **N/A**
F.O.B. **N/A**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	
MISCELLANEOUS INFORMATION:	

NATURE OF CHANGE(S):

Effective immediately this contract is hereby INCREASED by $560,920.00 to exercise the optional Tip Tool Software and Services per the attached Statement of Work, which includes the updated one time solution cost. The new contract value is $3,852,066.00. All other terms, conditions, pricing and specifications remain unchanged.

AUTHORITY/REASON(S):

Per State request, Vendor agreement and Administrative Board approval on May 18, 2010.

INCREASE: $560,920.00

TOTAL REVISED ESTIMATED CONTRACT VALUE: $3,852,066.00

TABLE 12
Tip Tool Solution Cost Table (Optional)

Cost Categories	Cost ($)	Comments
Software Cost	$274,920	This includes a 100 concurrent-user license.
Customization/Configuration Cost Cost of modification of the COTS and or solution development to meet business requirements.	$181,000	This is for configuration and implementation services. Data Conversion and Training and Documentation has been bundled into this number.
5 year Maintenance and Update Cost	$105,000	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (Appendix E). This includes Tier III Help Desk Support.
Interfaces Cost If required to interface with the MCIS solution.	$0	The Tip Tool is seamlessly integrated within the Memex platform thus eliminating the need for interfaces. The public-facing website costs are contained in Customization/Configuration.
Data Conversion Cost (Tip Tool Only)	Included in Customization and Configuration	This will load the data into a Memex entity. We assume this is a one-time activity.
Training and Documentation Cost	Included in Customization and Configuration	This will prepare and produce the training and documentation per specifications.
Hardware Cost	$0	The hardware proposed for MCIS will accommodate these additional users.
TOTAL Solution Cost	$560,920[7]	

[7] Memex has reduced the originally proposed Tip Tool cost from $705,798 to $560,920 representing a saving of $144,878. These savings are achieved by integrating the Tip Tool integration efforts with the MCIS integration plan.

Memex Inc

State of Michigan
Michigan Intelligence Operations Center
MCIS TIP TOOL Project
Contract # 071B9200243

STATEMENT OF WORK FOR THE MICHIGAN INTELLIGENCE OPERATIONS CENTER TIP TOOL MODULE

Project Identification

This Statement of Work addresses the request for the Michigan Intelligence Operations Center (MIOC) TIP TOOL as requested by the State of Michigan through the Michigan Department of Management & Budget (MDMB), with the assistance of the Michigan Department of Information Technology (MDIT). It is the intent of Memex, in partnership with Michigan State Police (MSP) and MDIT to deliver a TIP TOOL solution that will support and enhance MSP's capability to capture and process all-crime related tip information. It has been agreed that the TIP TOOL will be developed as an integral part of the MIOC MCIS solution that is currently being implemented at MSP and that the services required to deliver this component will be inserted as a certified addendum to the current MCIS project with the intention to deliver both solutions in parallel.

Background

In July 2009 Memex and the State of Michigan began the MIOC MCIS project to develop the Statewide Criminal Intelligence Management system that would allow the State to effectively deploy an intelligence management system to Michigan Law Enforcement Agencies that addressed the specific requirements of the MSP and complied with Federal Regulation 28 CFR Part 23.

As an optional component of MCIS, the requirement for a statewide TIP TOOL has been exercised and added as an addendum to the original intelligence management system project.

To take advantage of the current project environment it has been agreed by the State and Memex to extend the MCIS project to include the TIP TOOL component. The advantages of this plan are

1. Leverage the active project environment and processes
2. Leverage the existing project infrastructure
3. Leverage the existing project resources
4. Leverage the existing effort to integrate the MCIS solution with the state network and application deployment architecture
5. Gain economy of scale by integrating TIP TOOL development activities into the existing MCIS implementation activities such as user acceptance testing, training and solution deployment.

Project Objective

The State of Michigan has requested that Memex Inc provide software and services for the implementation of the MCIS TIP TOOL solution.

The specific objectives of the TIP TOOL solution are as follows

The Tip Tool must be able to separately store and process tip information received through different reporting methods. This includes telephone, e-mail, fax, text message, and via a public facing web page. MSP Operations currently receives tips from the public, other state departments and from other law enforcement agencies throughout the state regarding suspicious activity related to arson, methamphetamine labs, violent crime, missing persons, terrorism, etc. Tips usually come to MSP operations via telephone or fax. The tips are recorded manually and forwarded to various sections within MSP or to the agency having legal jurisdiction for follow-up.

As part of this effort, the State is considering the use of a public facing webpage that the general public can use to submit tip information to MIOC personnel. MIOC personnel will then analyze the tip information and forward it to the appropriate law enforcement agency for follow-up. In some cases, it may be desirable to have tips automatically routed to an agency based on location or the nature of the tip content. MIOC personnel will require the ability to manage tips received to include searching the tip database based on content, report on tip activity, tip status and tracking, as well as a reporting component which is able to report the number of tips received by date, time, and classification. The Tip Tool solution should provide the State the ability to collect, manage, route and track tip information received.

Scope of Work

In Scope

Memex will successfully confirm the requirements, design, configure, document, test, train and implement the Michigan TIP TOOL into the existing MCIS solution architecture using the same off-the-shelf software (Memex Patriarch) as used for statewide intelligence management system. Additionally, Memex will leverage of delivery similar projects within comparable environments within budget, to ensure that a quality solution is delivered to the State of Michigan within the predicted timeframes.

Memex will manage and deliver the service and solution items listed below using the same approach documented for the original MIOC MCIS project, contract # **071B9200243**:

- Verification and validation of business requirements with MSP and MDIT Agency Services personnel in accordance with business operation, and the relevant sections from the Michigan Compiled Laws (MCL).
- Conduct Gap Analysis document from verification and validation of business requirements between the vendor's product and the existing MSP/DIT requirements.
- Development and host the system using the systems architecture agreed for the original MCIS project
- Installation of all associated software
- Services to implement the software, including configuration, customization, modification, interfaces and integration and testing.
- Conversion of data currently stored within the current Tip Tool database.
- Interfacing the solution to the MiCJIN portal and the RISS-Intel database
- Application testing and integrated testing with the MiCJIN portal and RISS-Intel database.
- Transition of business operations to the new software
- Document software configuration management methodology
- Train MIOC personnel, DIT support staff, and technical staff in the use and operation of the MCIS solution.
- "Train the trainer" classes provided within each region as identified by the STATE.
- Training documentation and training materials
- Knowledge transfer to State as identified through the project
- System documentation to include user and technical manuals
- User help desk support for the duration of the contract.
- Technical help desk support for the duration of the contract.
- Maintenance, beginning two years from system implementation, of all software procured under this contract.
- Annual support and administration of the environment.
- Transition of support and administration of the environment to DIT.

Out of Scope

The Memex/EDS team understands that the following items are out of scope:

- Equipment and application development services for any system(s) other than those specifically addressed in this SoW.
- Installation of any MIOC related hardware i.e. desktops, and peripherals.
- Hosting of the MCIS
- Any other hardware, software, or services not explicitly requested in this SoW.

Deliverables

Project Management Services

Memex will integrate the required activities to implement the MCIS TIP TOOL module into the existing MCIS project plan and using the Sure Start Methodology which has been adapted to comply with the specific controls and deliverables of the States Project Management Methodology (PMM) to deliver a solution that has been tailored to the specific needs of MIOC.

Requirements Validation and Design Services

Memex will provide requirement gathering and validation services by:

- Following the SUITE methodology for implementing a new software module into the State environment

- Facilitating multiple design and review workshops to ensure that all functional and system design requirements are addressed and the interface is customized to support the specific needs of the MSP

Installation, Testing & Deployment Services
Memex in coordination with the MDIT, will perform the on-site installation of the off-the-shelf Memex software required to support the TIP TOOL project onto the current MCIS development environment in preparation for the design process. Once the design has been verified the entire solution will be migrated to the Test environment in preparation for system and user acceptance testing. Finally, upon user acceptance the system will be transitioned to production level by Memex in preparation for Training and Go-Live events

Software Deliverables
Software deliverables are as follows

1. An enterprise grade TIP TOOL solution that has been customized by MIOC and delivered through the States Software Engineering Methodology, will be integrated into the MIOC MCIS solution for use by register users of the MCIS system
2. A public facing TIP web site for use by the general public to submit suspicious activity reports

Documentation Deliverables
Memex will update the existing MCIS documentation to include the TIP TOOL operations. These will include

1. Project Charter PMM-02
2. Project Plan PMM-03
3. Functional Design Document – SEM-0501
4. System Design Document – SEM-604
5. Test Plan – SEM-0602
6. Training Plan - SEM-0703
7. Transition Plan – SEM-0701
8. Data Conversion Plan – SEM-0601
9. Requirements Traceability Matrix – SEM-0401

Data Conversion Services
Memex will work with the State to perform an analysis of the existing Tip data, identifying any gaps between it and the new database and recommend the optimal design for a migration of data between old and new Tip Tool solutions. Once the design has been agreed Memex will execute the services required to complete the migration per the final design after which it will be delivered to the customer for acceptance testing

Training
Memex recognize the importance of providing the State with all the tools and training to successfully use and support the new Michigan Intelligence Operations Center system. Memex will provide an experienced professional services consultant and trainer with expert knowledge of the new MIOC system to provide the detailed systems and technical training. Memex will customize the training to effectively present the MIOC solution to the required users and to develop the training materials that the users can carry back to the job.

Service Levels
Memex concurs with the service levels required for all the products, services, and deliverables identified within the associated contract:

1. System performance and response times as set forth in the Technical Requirements, in Article 1, Attachment G of the MCIS RFP

2. Once operational, all problems / outages as defined in Article 1, Section 1.104 (VI) (17), shall cause the vendor to respond to the problem or outage in the time frame as indicated based on the time the contractor was notified of the problem or outage.

3. The MCIS solution shall be accessible by users no less than 99.9% of the time based on a schedule of twenty-four (24) hours, seven (7) days per week. Scheduled maintenance and outages of infrastructure supplied by the state will not be included

4. Contractor shall provide TIER III, Technical and User Help Desk Support 8am to 5pm EST, Monday – Friday.

5. The contractor shall provide VPN technical support 8am to 6pm EST, Monday – Friday.

Acceptance Criteria
As this is an addendum to the existing MIOC MCIS project the terms and conditions governing the acceptance criteria can be found in Contract # **071B9200243** Section 1.501

Project Controls & Reports

Issue Management

The issue management activities will be governed by the agreed Risk Management Plan documented in the MIOC MCIS Risk Management Plan PMM-06 document.

Risk Management

The issue management activities will be governed by the agreed Risk Management Plan documented in the MIOC MCIS Risk Management Plan PMM-06 document.

Change Management
Scope control, including a structured change management process, is essential to successful implementation of software projects. Inevitably, new requirements surface as projects move toward completion, and managing changes to the baseline project schedule is accomplished by incorporating only approved changes, changes that are documented and approved through the change control process. This is an iterative process, triggered by formal change requests. Memex will include the following work elements in this process:

- Identify project changes and accept change requests
- Evaluate impact of change requests
- Review change requests
- Revise project plans and work products
- Communicate status of changes
- Review change control process.

Memex will use the State's tools as provided in the States Project Management Methodology to implement the project's change management process to capture and classify changes and to evaluate the impact of the change. The change management process and approvals are based on the size of the change in relationship to the total project.

Specific Agency Standards
Memex is aware of – and support – MSP's and MDIT's principles, policies and standards, which were developed to achieve consistency, efficiency, and effectiveness in the delivery of IT services to support the States business functions. We easily can integrate our software solution into the State's Unified Information Technology Environment (SUITE) and have reviewed/completed the following:

- Enterprise IT Policies, Standards and Procedures:
- IT Strategic Plan:
- IT eMichigan Web Development Standard Tools:
- The State Unified Information Technology Environment (SUITE):
- State of Michigan (SOM) Enterprise Architecture (EA) Solution Assessment

Reports

Memex will continue to provide project status reports on a bi-weekly basis as documented in the MIOC MCIS projects "Communication Plan PMM-08" and the "Communication Plan Matrix" documents

Payment Schedule

The following details the complete and revised payment schedule for the MIOC MCIS solution project contract # **071B9200243** . The rows highlighted indicate the inclusion of costs associated with the Tip Tool project.

TABLE 1 (Updated per Tip Tool Change Order)

Total Michigan Criminal Intelligence System Solution (One-time) Cost

Breakdown Provided In	Cost Categories	Cost ($)
Phase 1 Initiation	Total Solution Cost for **Phase 1**	$ 459,101.10 Completed and Paid
Phase 2 Design	Total Solution Cost for **Phase 2**	$ 647,752.75 Completed and Paid
Phase 3 Development	Total Solution Cost for **Phase 3**	$ 666,128.30 Completed Payment Pending
SAR Phase	Total Solution Cost for **SAR Phase**	$ 376,095.00 Inclusion of Tip Tool License acceptance and first half Tip Tool implementation Services
Phase 4 Implementation	Total Solution Cost for **Phase 4**	$ 836,043.85 Inclusion of second half of Tip Tool Services
*** Total Solution (One-time) Cost**	Total Solution Cost for **Phase 1,2,3,4 and SAR Phase.**	$ 2,985,121.00

Maintenance and Update Cost (Years 3,4,5)	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.	$105,000.00

Project Contacts

Please reference the "MIOC MCIS Project Plan Document PMM-03" for a full list of project contacts

Roles and Responsibilities

Contractor Staff, Roles and Responsibilities

The TIP TOOL project will leverage the contractor staff that is already in place for the MCIS project. The roles and responsibilities will remain the unchanged from the current MCIS project. Please reference the "MIOC MCIS Project Plan Document PMM-03"

State Staff, Roles and Responsibilities

The TIP TOOL project will leverage the current state staff that is already in place for the MCIS project. The roles and responsibilities will remain the unchanged from the current MCIS project. Please reference the "MIOC MCIS Project Plan Document PMM-03"

WORK LOCATIONS & CONDITIONS

Work will be performed from the following locations

1. On-site at MSP HQ Buildings
2. Memex Offices via secure VPN

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

November 12, 2009

CONTRACT CHANGE NOTICE NO. 1
TO
CONTRACT NO. 071B9200243
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR **Memex, Inc.** **22636 Davis Drive, Ste 130** **Sterling, Virginia 20164** **Attention: Neil Schlisserman, VP Memex Americas** **Email: neil.schlisserman@memex.com**	TELEPHONE Neil Schlisserman **(703) 556-4031** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz**
Contract Compliance Inspector: Barb Suska **Michigan Criminal Intelligence System (MCIS)**	
CONTRACT PERIOD: **5 yrs. + 2 two-year options** From: **June 16th, 2009** To: **June 16th, 2014**	
TERMS **N/A**	SHIPMENT **N/A**
F.O.B. **N/A**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	
MISCELLANEOUS INFORMATION:	

NATURE OF CHANGE(S):

Per Executive Directive 2009-3, the vendor has offered the following price concessions to the State of Michigan:

Effective immediately this contract value is hereby decreased by $61,365.00 per the attached Contractor correspondence, as a result of the following changes:

- Elimination of the NDPIX interface
- Reducing the State's PARE process from 90 days to 45 days
- Reducing the number of "Train-the-Trainer" classes and Refresher Training classes from 7 to 5

All other terms, conditions, specifications, and pricing remain the same.

Please note: The Contractor Address has been updated.

AUTHORITY/REASON(S):

Per Agency and Contractor Agreement.

DECREASE: $61,365.00

TOTAL REVISED ESTIMATED CONTRACT VALUE: $3,291,146.00

Memex

October 28, 2009

Mr. Steve Motz
Department of Management and Budget
Purchasing Operations
530 W. Allegan,
Lansing, MI 48909

Dear Mr. Motz,

Memex has a strong appreciation and respect for the relationship we have with the State of Michigan and the Michigan State Police (MSP). We recognize the fiscal situation that the State of Michigan is facing. In the spirit of partnership we are prepared to reduce services scope to provide savings to the State. Memex has one contract with the State of Michigan for which we have just completed a competitive procurement. As part of our proposal signed June 26, 2009 we provided the following:

- A 6% reduction providing the State of Michigan with a $250,000 savings with our Best and Final Offer (BAFO) proposed and accepted March 5, 2009.
- Memex has made a 21% ($150,000) reduction to our optionally proposed system for capturing tips and leads (Tip Tool). Although not an encumbered amount within our contract, this reduction was offered in recognition of the State's current financial situation

In addition to the savings provided above Memex is proposing an actual reduction of $61,365 to our existing contract with limited scope change to the contract. This reduction will be in exchange for the following – and have been discussed with MSP:

- Elimination of the NDPIX interface from our contract.
- Reducing the State's PARE process from 90 days to 45 days. This does not reduce the State's rights or Memex's obligations as defined during the PARE.
- Reducing the number of "Train-the-Trainer" classes and Refresher Training classes from 7 to 5 (Memex will accommodate more people in the existing 5 classes).

Please let me know if you have further questions. I may be reached at 908-412-9655.

Kind regards,

Neil T. Schlisserman
Vice President, Americas

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

June 26, 2009

NOTICE
OF
CONTRACT NO. 071B9200243
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR **Memex, Inc.** **1595 Spring Hill Rd. Suite 200** **Vienna, Virginia 22182** **Attention: Neil Schlisserman, VP Memex Americas** **Email: neil.schlisserman@memex.com**	TELEPHONE Neil Schlisserman **(703) 556-4031** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz**
Contract Compliance Inspector: Barb Suska **Michigan Criminal Intelligence System (MCIS)**	
CONTRACT PERIOD: **5 yrs. + 2 two-year options** From: **June 16th, 2009** To: **June 16th, 2014**	
TERMS **N/A**	SHIPMENT **N/A**
F.O.B. **N/A**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	
MISCELLANEOUS INFORMATION:	

Estimated Contract Value: $3,352,511.00

Form No. DMB 234 (Rev. 1/96)
AUTHORITY: Act 431 of 1984
COMPLETION: Required
PENALTY: Contract will not be executed unless form is filed

STATE OF MICHIGAN
DEPARTMENT OF MANAGEMENT AND BUDGET
PURCHASING OPERATIONS
P.O. BOX 30026, LANSING, MI 48909
OR
530 W. ALLEGAN, LANSING, MI 48933

CONTRACT NO. 071B9200243
between
THE STATE OF MICHIGAN
and

NAME & ADDRESS OF CONTRACTOR **Memex, Inc.** **1595 Spring Hill Rd. Suite 200** **Vienna, Virginia 22182** **Attention: Neil Schlisserman, VP Memex Americas** **Email: neil.schlisserman@memex.com**	TELEPHONE Neil Schlisserman **(703) 556-4031** VENDOR NUMBER/MAIL CODE BUYER/CA (517) 241-3215 **Steve Motz**
Contract Compliance Inspector: Barb Suska **Michigan Criminal Intelligence System (MCIS)**	
CONTRACT PERIOD: **5 yrs. + 2 two-year options** From: **June 16th, 2009** To: **June 16th, 2014**	
TERMS **N/A**	SHIPMENT **N/A**
F.O.B. **N/A**	SHIPPED FROM **N/A**
MINIMUM DELIVERY REQUIREMENTS **N/A**	
MISCELLANEOUS INFORMATION: **Estimated Contract Value: $3,352,511.00**	

THIS IS NOT AN ORDER: The terms and conditions of this contract are enclosed.

FOR THE CONTRACTOR:	**FOR THE STATE:**
Memex, Inc. Firm Name	Signature
Authorized Agent Signature **Neil Schlisserman, VP Memex Americas**	**Greg Faremouth, IT Division Director** Name/Title
Authorized Agent (Print or Type)	**IT Division** Division
Date	Date

STATE OF MICHIGAN
Department of Management and Budget
Purchasing Operations

Contract No. 071B9200243
Michigan Criminal Intelligence System (MCIS) for
The Michigan Intelligence Operations Center (MIOC)

Buyer Name: Steve Motz
Telephone Number: 517-241-3215
E-Mail Address: motzs@michigan.gov

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Article 1 – Statement of Work (SOW)

1.0 Project Identification

1.001 PROJECT REQUEST

The State of Michigan (the State), through the Michigan Department of Information Technology (MDIT), with assistance of the Michigan Department of Management & Budget (DMB), on behalf of the Michigan State Police (MSP) Michigan Intelligence Operations Center for Homeland Security (MIOC) have issued this contract to provide a **Michigan Criminal Intelligence System (MCIS).** The Contractor (Memex) will provide Memex Patriarch commercial off-the-shelf (COTS) solution to fully comply with the functional and technical requirements of this solution.

Services shall begin in June 2009 with complete implementation of the MCIS no later than March 2010.

Optional Services: The State may require the contractor to provide a Confidential Informant Solution and TIP Tool Solution. The background, requirements and pricing for both of these solutions are located in **Attachment I1** and **Attachment I2.** If the State elects to purchase one of these options, it will be incorporated into this contract through Article 1, Section 1.403 Change Management.

In addition to MCIS functionality, the Memex application architecture can integrate seamlessly with the two optional intelligence-related components – the Confidential Informants Database and TIP Tool – which allow information to be retrieved and analyzed as part of the wider data solution.

1.002 BACKGROUND

The role of the Michigan Department of State Police (MSP) is to provide general law enforcement services to the citizens of the State of Michigan. MSP also has the unique responsibility for the development and coordination of state-level programs, technologies, and specialized services that enhance enforcement and emergency response capabilities for the entire public safety community. Accordingly, given the events of September 11, 2001, MSP is working closely with the Department of Homeland Security to establish the MIOC for Homeland Security in East Lansing, Michigan with an operational node in the Detroit area. It is required that all MIOC personnel, regardless of physical location, have full access to MIOC software solutions.

The MIOC for Homeland Security is designed to serve multi-agency policing needs. The MIOC for Homeland Security will provide information to patrol officers, detectives, management, and other participating personnel and agencies on specific criminals, crime groups, and criminal activity. The MIOC for Homeland Security will support anti-terrorism and other crime-specific objectives by collecting, analyzing, and disseminating information to a number of communities of interest (COIs'). The success of the MIOC for Homeland Security is based on the secure collection and sharing of criminal intelligence information between concerned partners within the state regardless of the type of threat. To accomplish this will require the ability to provide access to the Michigan Criminal Intelligence System to those criminal justice entities and other authorized partners with a demonstrated need to know, proper security clearance and have sworn to protect the privacy rights of all American citizens.

The Michigan Criminal Intelligence System will serve as the primary criminal intelligence processing system in the state of Michigan and will potentially provide access to over 600 law enforcement agencies, 21,300 certified police officers, numerous state and federal departments as they identify and prevent criminal acts directed towards our citizens from both domestic and international threats.

Overview of Michigan Criminal Intelligence System Solution – The MIOC's Michigan Criminal Intelligence System will function as a statewide repository for intelligence information. The new system will replace MSP's existing legacy application Statewide Information System (STATIS) that currently houses approximately 54,000 intelligence records. It is envisioned that personnel from law enforcement organizations across the state will submit information to the Michigan Criminal Intelligence System, as they currently do via STATIS, for analysis and dissemination. Based on past experience, it is believed that the best method of collecting this intelligence data will be through the integration of the MCIS with the systems being used by local law enforcement for

records management or incident capture. MIOC personnel will then use the Michigan Criminal Intelligence System solution to analyze and disseminate information related to intelligence activities.

1.1 Scope of Work and Deliverables

1.101 IN SCOPE

Scope of Work and Deliverables

Contractor must provide the following services for the complete and successful implementation of the Michigan Criminal Intelligence System solution and the functionality required for MIOC for Homeland Security operations:

- Verification and validation of business requirements with MSP and MDIT Agency Services personnel in accordance with business operations, 28 CFR Part 23, and the relevant sections from the Michigan Compiled Laws (MCL). Refer to the following link for details on MCL: http://www.legislature.mi.gov/(S(0jphz555b1p2h245v5j50i55))/mileg.aspx?page=getObject&objectName=mcl-752-1
- Conduct Gap Analysis document from verification and validation of business requirements between the Contractor's product and the existing MSP/DIT requirements.
- Development of a systems architecture document
- Verify and validate technical specifications as developed by the solution for servers, desktops, and peripherals
- Procurement of software
- Installation of all associated software
- Services to implement the software, including configuration, customization, modification, interfaces, and integration and testing.
- Conversion of all data currently stored within STATIS to the Contractors MCIS solution.
- Interfacing the solution to the MiCJIN portal, RISS-Intel database, and NDPIX.
- Application testing and integrated testing with the MiCJIN portal, RISS-Intel database, and NDPIX
- Transition of business operations to the new software
- Document software configuration management methodology
- Train MIOC personnel, DIT support staff, and technical staff in the use and operation of the MCIS solution.
- "Train the trainer" classes provided within each region as identified by the State.
- Training documentation and training materials
- Knowledge transfer to State as identified through the project
- System documentation to include user and technical manuals
- User help desk support for the duration of the contract.
- Technical help desk support for the duration of the contract.
- Maintenance, beginning two years from system implementation, of all software procured through this contract.
- Annual maintenance and support for the solution.
- Transition of support and administration of the environment to DIT.
- Hardware requirements for the MCIS solution.
- Development of a state wide Confidential Informant Database (Optional)
- Development of a Tip Tool solution with public facing web page (Optional)

The State intends to have a suitable hosting environment for the MCIS fully operational 180 days after the final hardware configuration has been determined and agreed to by the State and the Contractor. This is the point in time that the Contractor can begin onsite installation and configuration of their solution.

The State seeks to have services upon execution of the contract with full implementation of the system to be completed by **March 2010**. The State expects that any subsequent annual maintenance payments that result from this procurement will begin no sooner than 2 years after completion of Performance and Reliability Evaluation (PARE) as described in 1.501 CRITERIA.

1.102 OUT OF SCOPE

The following are out of the scope for this Request for Proposals:

- Equipment and application development services for any system(s) other than those specifically addressed within this Contract.
- Installation of any MIOC related hardware i.e. desktops, and peripherals.
- Hosting of the MCIS
- Any other hardware, software, or services not explicitly requested in this Contract.

1.103 ENVIRONMENT

The Contractor's solution must be integrated effectively into the State's current technical environment and must continue to do so as this environment evolves. The links below provide information on the State's Enterprise IT policies, standards and procedures which includes security policy and procedures, the IT strategic plan and the State Unified Information Technology Environment (SUITE) methodology.

The Contractors services and products for the MCIS solution must conform to State IT policies and standards.

Enterprise IT Policies, Standards and Procedures:
http://www.michigan.gov/dit/0,1607,7-139-34305---,00.html

All software and hardware items provided by the Contractor must run on and be compatible with the MDIT Standard Information Technology Environment. Additionally, the State must be able to maintain software and other items produced as the result of this Contract. Therefore, non-standard development tools may not be used unless approved by MDIT. The Contractor must request, in writing, approval to use non-standard software development tools, providing justification for the requested change and all costs associated with any change. The State's Project Manager and MDIT must approve any tools, in writing, before use on any information technology project.

It is recognized that technology changes rapidly. The Contractor may request, in writing, a change in the standard environment, providing justification for the requested change and all costs associated with any change. The State's Project Manager and MDIT Project Manager must approve any changes, in writing, before work may proceed.

Enterprise IT Security Policy and Procedures:
http://www.michigan.gov/dit/0,1607,7-139-34305-108216--,00.html

The State's security environment includes:

- MDIT provided SQL security database.
- Secured Socket Layers.
- SecureID (State Security Standard for external network access and high risk Web systems)

Where software is being converted from an existing package, or a client-server application is being purchased, the security mechanism must be approved in writing by the State's Project Manager and MDIT's Office of Enterprise Security.

IT Strategic Plan:
http://www.michigan.gov/dit/0,1607,7-139-30637-135173--,00.html

IT eMichigan Web Development Standard Tools:
http://www.michigan.gov/documents/Look_and_Feel_Standards_2006_v3_166408_7.pdf

The State Unified Information Technology Environment (SUITE):
Includes standards for project management, systems engineering, and associated forms and templates – must be followed: http://www.michigan.gov/suite

The Contractors architecture, technology standards, and programming environment are located in the Technical Overview in **Article 1, Attachment E**.

The State reserves the right to purchase from other State contract vehicles any hardware/equipment and/or software identified as needed to complete the services identified in this Contract.

1.104 WORK AND DELIVERABLES

The Contractor must provide deliverables, services and staff, and otherwise do all things necessary for or incidental to the performance of work, as set forth in this Contract.

I. Requirements

1. Contractor must provide a commercial-off-the-shelf (COTS) product that must adhere to General, Technical, and Functional requirements for the MCIS, as provided in Article 1, Attachment G.

II. Service Levels – The following service levels have been established for the MCIS:

1. System performance and response times as set forth in the Technical Requirements. See Article 1, Attachment G.
2. Once operational, all problems / outages as defined in Article 1, Section 1.104.VI.B.3, shall cause the Contractor to respond to the problem or outage in the time frame as indicated based on the time the contractor was notified of the problem or outage.
3. The MCIS solution shall be accessible by users no less than 99.9% of the time based on a schedule of twenty-four (24) hours, seven (7) days per week. Scheduled maintenance and outages of infrastructure supplied by the state will not be included
4. Contractor shall provide TIER III, Technical and User Help Desk Support 8am to 6pm EST, Monday – Friday.
5. The Contractor shall provide VPN technical support 8am to 6pm EST, Monday – Friday.

   The Contractor will provide the State with a Proactive Customer Support model, and will identify Customer Satisfaction Consultant to work with the State. This will be a specific point-of-contact for the MIOC after successful implementation of the solution. This individual will familiarize themselves with the MCIS application and is responsible for establishing a semi-monthly (monthly at Customer's request) call to review any new and/or outstanding issues that exist with the application, as well as to perform a general, "health check". These calls will occur regardless of whether there are any customer issues. Additionally, there is a, "backup" Customer Satisfaction Consultant should the principal point-of-contact be unavailable (e.g., vacation). This will assure the MIOC – and Contractor – of frequent communication, which will permit all parties to resolve issues rapidly.

   The State will have three mechanisms of reporting issues and/or reaching out to Contractor for Support:

   1. **Phone** – The Contractor will have a phone number to contact their Customer Satisfaction Consultant directly, without having to go through a switchboard; this is in addition to their Professional Services contact (standard hours are 8:00 a.m. – 6:00 p.m. EST)
   2. **e-Mail** – The State will have the eMail address whereby all Customer Satisfaction Consultants receive the State's request
   3. **The contractor's online, self-service portal** – which will allow the State to submit issues and track its progress online; automated email notifications are sent to the Customer Satisfaction Consultant when these submissions occur

III. Delivery Conditions - The following delivery conditions have been established for the solution procured through this Contract:

1. The State and Contractor shall agree on a schedule of events regarding the delivery of required services and products to achieve the State's project plan.
2. All items shall be bid Free On Board (FOB) destination to the location specified in the Purchase Order.
   a. The term FOB destination shall mean delivered and accepted at the identified agency destination receiving site and with all charges for transportation and unloading paid by the Contractor. These charges are to be built into the price of each item bid.

b. "Accepted" means delivered as specified in a Purchase Order for purchase of the equipment. Mere acknowledgement by State personnel of the delivery or receipt of the equipment shall not be deemed or construed as accepted.

3. All deliveries shall be "Inside Deliveries."
4. The Contractor will pay title and risk of loss or damage charges.

IV. Training - see Attachment G, General Solution Requirements, Training (8-00 to 8-09) for the training requirements that have been established for this contract.

The contractor and subcontractor (EDS) recognize the importance of providing the State with all the tools and training to successfully use and support the new Michigan Criminal Intelligence System (MCIS). All contractor training courses are modular, allowing for customization of topics covered and course sequences to suit the State's requirements. The contractor will provide an experienced professional services consultant and trainer with expert knowledge of the new MIOC system to provide the detailed systems and technical training. The contractor and subcontractor will customize the training to effectively present the MIOC solution to the required users and to develop the training materials that the users can carry back to the job.

A copy of the contractor's Training Curriculum for Memex Patriarch as well as our System Administrator Training are provided as Appendix C. In addition to the System Administrator Training, the contractor, will provide at a minimum seven (7) regional training sessions for the users, and will provide the training materials, plans and documentation to the State in hardcopy and electronic versions.

Additionally, as indicated in the Preliminary Project Plan, the contractor will provide seven (7) multiple, two (2) day Refresher Training classes. These classes will be held approximately four (4) weeks from Implementation – as part of the Post Implementation Phase of the project.

V. Documentation– see Attachment G, General Solution Requirements, Documentation (10-00 to 10-16) for the documentation requirements that have been established for this contract.

The contractor will provide the requested user and technical-level documentation for the solution. The contractor will provide the following documentation in electronic and hard copy formats (two copies):

- System Site Guide (Architecture, specifications, configurations)
- Memex Technical and Installation Guides
- User Guides
- User Training Manual

The contractor will provide the following electronically:

- Online help
- Updates to documentation
- Test scripts

VI. Maintenance and Support - see Attachment G, Maintenance and Support (12-00 to 12-31) for the maintenance and support documentation for this contract.

The contractor will provide a Proactive Customer Support model as part of the contractor's Customer Satisfaction organization. The State will have a Customer Satisfaction Consultant assigned to their account that may be contacted with questions about the application, solution, upcoming software releases and general, "help-desk" type questions. This will be a specific point-of-contact for the MIOC after the solution is implemented. This individual will familiarize themselves with the MCIS application and is responsible for establishing – at minimum – a semi-monthly (monthly at Customer's request) call to review any new and/or outstanding issues that exist with the application, as well as to perform a general, "health check". These calls will also review software release schedules and – when appropriate – the processes for obtaining and implementing the upgraded software. These calls are scheduled to occur regardless of whether there are

any customer issues. Additionally, there is a, "backup" Customer Satisfaction Consultant should the principal point-of-contact be unavailable (e.g., vacation). This will assure the MIOC – and the contractor – of frequent communication which will permit all parties to resolve issues rapidly.

The contractor's Customer Satisfaction Consultants confer on a daily basis to assess whether there are any issues that have arisen affecting any of the contractor's customers that may affect their larger user-population. The contractor has integrated the Customer Satisfaction organization within the Professional Services organization – the latter being the group that will implement the MCIS solution – to facilitate internal communication and eliminate any boundaries when it comes to supporting our customers.

The MCIS will have three mechanisms of reporting issues and/or reaching out to the contractor for Support:

1. **Phone** – The MIOC will have a toll-free and direct phone number to contact their Customer Satisfaction Consultant directly, without having to go through a switchboard; this is in addition to their Professional Services contact (standard hours are 8:00 a.m. – 6:00 p.m. local time)
2. **e-Mail** – The MIOC will have the eMail address whereby all Customer Satisfaction Consultants receive the MIOC's request
3. **The contractor's online, self-service portal** – which will allow the MIOC to submit issues and track its progress online; automated email notifications are sent to the Customer Satisfaction Consultant as these submissions occur.

The contractor provides these mechanisms in their Prime Maintenance and Support program to facilitate transparency within their support organization. These mechanisms typically facilitate initial response time, often within minutes. VPN access also greatly assists in improving our resolution time for issues – and allows the system to remain accessible.

The contractor has proposed 40 hours of annual onsite support in accordance with this contract – as indicated in the Preliminary Project Plan. Maintenance and Support is available annually, and the contractor agrees to the penalties outlined in this contract.

PRIME TECHNICAL SUPPORT COVERAGE

Cost	Annual fee as agreed in Contract Attachment A, Table 2.
Hours Covered	8am to 6pm Monday to Friday excluding State of Michigan holidays. This facility may be extended to cover other times, by prior specific arrangements.
Telephone and Email Support	Contractor will use phone calls and email to answer most requests and work through most problems.
Remote Access	This is used where a problem cannot be resolved by telephone/email and it is felt that more progress can be made by accessing the system remotely. The method used to access CUSTOMER'S system will be agreed in advance, e.g. modem or Virtual Private Network (VPN), (pending State approval process) with putty, ssh or VNC. Formal Remote Access Requests are made when this method of support is required and the connection is maintained for a given period only. The changes to be made while accessing CUSTOMER'S system are agreed in advance and a log of work done provided.
On-site Visits	Contractor will provide a member of staff for emergency on-site technical support as described in Attachment A, Table 2b, if the above two services have proven unsuccessful, or if it is the most effective method of resolving the issue, as mutually agreed upon by the Contractor and MDIT Client Services Director.. If on-site support is provided, and the fault is found not to be due to a problem in Contractor software, CUSTOMER will be charged utilizing the firm, fixed hourly rate identified in Attachment A, Table 2. The MDIT Client Services Director will provide written prior approval to the Contractor, prior to any costs being incurred.

Knowledge Base:	Access to Contractor's Support Knowledge base is included.
Upgrade/Patch Software:	Contractor will issue to CUSTOMER all new upgrades and releases of the products free of charge, provided CUSTOMER is current on their Annual Maintenance and Technical Support contract. Contractor will issue upgrades to software for the duration of the product's life. Moderate faults reported to Contractor will be addressed during the next upgrade program following the date of notification of the fault to Contractor providing this date is before the inclusion deadline (eight weeks prior to upgrade date). The upgraded software will contain a notification of what faults have been addressed in that particular upgrade.
Upgrade/Patch Services:	Professional services to upgrade CUSTOMER'S Memex applications may be purchased. Contractor will work with CUSTOMER to ensure that changes are migrated in a manner so as to minimize user service disruption.
Health Check	An annual Memex system health check will be performed and a report of findings provided to CUSTOMER.
Customer Care	Quarterly meetings to review standard of service.

Memex will classify the fault in one of the four categories specified in B.3 Fault Classification of this Agreement. The PPOC must be advised of the category of fault at the time the call is logged. It the fault cannot be classified immediately, Memex shall notify the PPOC of the fault classification on the first business day after the call is logged. CUSTOMER will provide additional detailed information on the query, as requested by Memex.

New releases will be available from time to time. CUSTOMER will be notified of pending product releases and any associated costs. Installation of new releases is not mandatory and support for at least two prior releases shall continue under the terms of this Agreement

Escalation procedures exist to ensure that an appropriate level of Memex, and CUSTOMER's, management have visibility of the action plans for unresolved problems.

The escalation procedure will also ensure the availability of appropriate expertise and skilled support to resolve outstanding issues.

- All faults are assigned a classification in the HelpDesk system.
- Calls are tracked internally by the HelpDesk system and will be automatically escalated to the Support Manager if any response times are exceeded.
- Any outstanding calls will be re-prioritised.
- CUSTOMER may request that the status of a call be escalated at any time.

Support Charges are payable annually in advance, within thirty days of the invoice date, unless subject to prior agreement. For any on-site services requested by Customer, Customer shall pay Memex the then current charges for onsite services and will reimburse Memex for actual, reasonable travel and out-of-pocket expenses incurred. Support services will commence on receipt of payment. If full payment has not been received after thirty days of the invoice date, Memex reserves the right not to provide support services until full payment has been received.

B.2 PREMIUM COVERAGE
RESERVED

B.3 FAULT CLASSIFICATIONS

Faults will be classified by Memex in one of the four following categories:

Fault	Classification
Critical	**Definition:** A call is attributed a **critical** priority level if the associated problem causes the whole or a critical part of the application to be unavailable or causes significant loss of functionality to the user. **Response Time:** Work will commence on the problem immediately it is logged (if logged during supported hours) or on the next business day (if logged out with supported hours). **Resolution Time:** Memex shall work on the problem until a workaround can be provided that restores the availability of the affected application or functionality so that the Customer is not prevented from carrying out mission critical activities. If required, Memex shall remedy the critical fault in a patch release of the product.
Serious	**Definition:** A call is attributed a **serious** priority level if the associated problem affects the operational use of the application or provides the user with a degraded service, but where the user is not prevented from carrying out mission critical activities. **Response Time:** The problem will be investigated within two hours of the call being logged. **Resolution Time:** Memex will restore operational use of the application by way of a workaround or patch fix within one week and provide a solution to the problem in the next release of software.
Moderate	**Definition:** A call is attributed a **moderate** priority level if the associated problem is a non-urgent software fault which has a workaround, or is a minor defect which can be tolerated in the day-to-day operation of the application. **Response Time:** The problem will be investigated and, if possible, a solution or workaround proposed, within five days of the call being logged. **Resolution Time:** Moderate faults will be addressed at the latest during the subsequent 6 monthly upgrade program.
Cosmetic	**Definition:** A call is attributed a **cosmetic** priority level if the associated problem is deferrable, such as errors in the format of displays or printouts. **Response Time:** The problem will be investigated within five days of the call being logged. **Resolution Time:** Cosmetic defects will be fixed, where feasible, in the next release of the application.

Where Memex cannot achieve restoration of service for Critical faults within 10 (ten) business days, and it can be shown that the delay is caused by Memex, the State may assess liquidated damages calculated as set out below.

The Parties agree that the following liquidated damages ("Service Credits") have been calculated as and are a genuine pre-estimate of the loss likely to be suffered by the State as a result of failure to achieve the agreed Service Levels.

Liquidated damages for failure of performance of the Maintenance Services, in whole or in part, shall be limited in each annual period to not more than $40,000 ("Annual Cap") and service credits shall be payable as follows:

- Critical fault: For every such separate incident which fails to be rectified within 10 (ten) business days, a service credit of $5,000 per incident shall be provided.

Service Credits shall be paid by a corresponding credit being applied to the next invoice billable to the State from Memex. If no invoices are due to be billed to the State because the Agreement has reached the end of its term then Memex shall issue a check for the value of the Service Credit applicable to the State. At no time shall the Service Credits due in any one year exceed the Annual Cap.

PRODUCTS COVERED BY ANNUAL MAINTENANCE AND SUPPORT AGREEMENT

Product
Memex Patriarch
Web Services Interface
Memex i2-Pipe
Memex RISSConnect

ESCALATION PROCEDURE

The following Escalation Procedure will operate in the event that responses are falling below expectations or where there is an unresolved issue. The parties agree in good faith to resolve any issue or any dispute by negotiation.
In the first instance the unresolved issue should be escalated as follows:

	Memex escalation contact	Customer escalation point
Initial escalation	Neil Schlisserman, VP Americas 703-556-4031	Lt. Dale Peet (MSP) 517-335-4298 Deb McClung (MDIT) (517) 336-6182 Bill Badgero (MSP) 517-336-6223
Secondary escalation	David Carrick, Chief Executive Officer 011 44 1355 233 804	Dawn Brinningstaull (MSP) 517-336-2648 Sue Doby (MDIT) (517) 336-6422

Any issues that are the subject of such escalation must be submitted in writing by the notifying Party ("Escalation Request"), as the case may be, to the other Party, which will state as a minimum:-

- the originator and the date of the notice;
- full details of the matter; and
- the effect the unresolved issue is having on the Party.

The receiving Party will respond to the Escalation Request within five (5) Working Days.
If the response to the Escalation Request does not adequately address the issue, then the parties shall meet with a view to resolving the issue in good faith.

VII. Modification to Meet New Requirements

During the Contract period, if changes occur in federal or state systems standards which require modifications to hardware, software or components, such changes will be accepted through procedures outlined in Article 1, Section 1.403 Change Management Requests.

The contractor and subcontractor agree to provide any changes necessary as a result of changes that occur in federal or state system standards requiring modifications to hardware or software components. These required changes will be handled as a change request. The State will be responsible for the maintenance of the hardware and network for this solution. The contractor and subcontractor will inform the State of changes that might be required to the configuration to meet the new standards, however, the State will be responsible for procurement and installation of the hardware.

VIII. Warranties – see Attachment G, General Solution Requirements, Warranties (11-00 to 11-08)

The contractor will provide a warranty for all products and services provided under this contract. The solution includes a two-year warranty that will commence at the conclusion of the Performance and Reliability Evaluation (PARE). The contractor will correct elements of the system that fail to perform in accordance with the requirements of this Contract and/or published specifications at no cost to the State.

All third-party warranties associated with the contractor's solution will be assigned to the State.

IX. State and Agency Rules – see Article 1, Section 1.103 Environment

The contractor and subcontractor agree to follow the State/Agency policies for computer and Internet usage and will sign required agreements regarding the following:

a. Enterprise Security
b. Authentication Requirement for Access to Networks, Systems, Computers, Databases, and Applications
c. Authorization Prerequisite for Access to Protected Data Resources
d. Access Control Criteria for Right to Use Automated Information Resources
e. Secure Disposal of Installed and Removable Digital Media
f. Michigan State Government Network Security Policy
g. Enterprise Architecture Solution Assessment

X. Security and Confidentiality

The contractor and subcontractor understand the importance of security and confidentiality related to the information contained within the MIOC solution. The contractor and subcontractor will meet the following requirements for Security and Confidentiality:

1. The MSP and MDIT shall retain administration of data access security, including application security (granting of access, resetting of passwords, definition of password syntax rules, monitoring of access violation reports, etc.)
2. The MSP and MDIT shall administer all user security profiles.
3. The Contractor shall be responsible for the function of security software implementation and maintenance if the changes implemented under this Contract warrant a change from the current system.
4. Confidentiality of Data and Information
   a. All financial, statistical, personal, technical and other data and information relating to the State's operation which are designated confidential by the State and made available to the Contractor in order to carry out this Contract, or which become available to the Contractor in carrying out this Contract, shall be protected by the Contractor from unauthorized use and disclosure through the observance of the same or more effective procedural requirements as are applicable to the State.
   b. The identification of all such confidential data and information as well as the State's procedural requirements for protection of such data and information from unauthorized use and disclosure shall be provided by the State in writing to the Contractor. If the methods and procedures employed by

the Contractor for the protection of the Contractor's data and information are deemed by the State to be adequate for the protection of the State's confidential information, such methods and procedures may be used, with the written consent of the State, to carry out the intent of this section. The Contractor shall not be required under the provisions of this section to keep confidential, (1) information generally available to the public, (2) information released by the State generally, or to the Contractor without restriction, (3) information independently developed or acquired by the Contractor or its personnel without reliance in any way on otherwise protected information of the State. Notwithstanding the foregoing restrictions, the Contractor and its personnel may use and disclose any information which it is otherwise required by law to disclose, but in each case only after the State has been so notified, and has had the opportunity to obtain reasonable protection for such information in connection with such disclosure.

5. Remedies for Breach of Confidentiality
   a. The Contractor acknowledges that a breach of its confidentiality obligations as set forth in this Contract shall be considered a material breach of the Contract. Furthermore the Contractor acknowledges that in the event of such a breach the State shall be irreparably harmed. Accordingly, if a court should find that the Contractor has breached or attempted to breach any such obligations, the Contractor will not oppose the entry of an appropriate order restraining it from any further breaches or attempted or threatened breaches.

XI. Services to be Provided

The following is a list of major tasks the Contractor must provide for the project. The Contractor is not constrained from recommending additional tasks based on experience with similar engagements, to better accomplish the stated objectives of the contract.

1. **Project Management Methodology** - The services being provided must use the State's Project Management Methodology and are identified as phases or milestones with associated tasks/activities and deliverables.

   The contractor has compared and adapted its Sure Start Methodology with the State's methodology and approach, and will make the necessary adjustments for this engagement as reflected in our Preliminary Project Plan and overview.

   Additionally, the contractor will leverage the subcontractor's knowledge and experience with the State's PMM and System Development Life Cycle (SDLC) and adherence to the Project Management Institute's (PMI's) Project Management Body of Knowledge® (PMBOK) methodologies in providing successful delivery of the MIOC CIS solution. The contractor project manager will focus on implementing the solution according to standard project management guidelines by using a project schedule to deliver specific measurable business and technical outcomes. The project schedule will identify the phases, milestones, tasks, activities, and deliverables – as evidenced in the Preliminary Project Plan.

2. **Project Plan** – Within thirty (30) working days of the award of the Contract, the Contractor shall work with MSP and MDIT Agency Services to develop an agreed upon project plan of tasks and schedules. See Article 1, Section 1.301 Project Plan Management.

   The contractor and subcontractor will create a comprehensive project plan for this solution within 30 days of the contract award with MSP and MDIT during the Initiation Phase. Roles and responsibilities for the appropriate organizations will be clearly identified. The contractor and subcontractor will solicit input from MSP stakeholders to support the creation of the project schedule and confirm that the project schedule accounts for any State identified constraints. The contractor will base the project schedule primarily on the tasks, associated deliverables, and schedule constraints. The MSP will have an opportunity to approve the agreed project schedule prior to executing the plan.

   The contractor agrees that the approved project plan will become incorporated as part of the Contract and Scope of Services. The project plan will serve as the State's measurement tool, outlining all tasks, their delivery dates, together with testing periods and implementation dates. Each of the agreed to

deliverables will be subject to the liquidated damages as agreed in the contract, based on Article 2, Section 2.073.

3. **Requirements Validation** – The Contractor must:
   a. Follow the PMM/SUITE methodology to validate requirements with MSP and MDIT Agency Services.
   b. Ensure requirements meet federal, state and industry standards.
   c. Clarify any unclear or ambiguous requirements, which could have an impact on system design or implementation. The requirements validation activities must include, but are not limited to:
      i. Review and analysis of current system
      ii. System application and database requirements
      iii. Network WAN, LAN, and telecommunications requirements
      iv. Hardware and operating system requirements and technical specifications

   The contractor and subcontractor will meet the following requirements for Requirements Validation in the following ways:

   - The contractor and subcontractor will follow the SUITE methodology, as illustrated in the Preliminary Project Plan and described in Article 1 Section 1.104, XI (5) (d).

   - The contractor will facilitate multiple workshops – as indicated in the Preliminary Project Plan – to validate the technical, functional, and service requirements. The contractor has allocated key personnel to lead the workshops to confirm each requirement and validate that each has or will be addressed to a satisfactory standard by the State before or during the project. Three key areas exist within the implementation plan to validate and verify the MIOC requirements:

     - **Initiation Phase** – Clarify overall requirements including review of technical architecture during the Technical Environment Preparation
     - **Design Phase** – Working Group events to clarify and record specific user and system requirements
     - Development and execution of user case scenarios during User Acceptance Testing (UAT) to validate each requirement is addressed fully

   - The contractor and subcontractor will provide information and references on its compliance with both state and federal operational and technical requirements.
   - The contractor and subcontractor will confirm that all technical and functional requirements are individually reviewed and clarified with the appropriate MSP, MIOC, and MDIT staff during the Project Initiation Phase.

4. **Installation and Testing**
   a. The Contractor shall work with State personnel to conduct testing of all software components as well as to conduct system testing.
   b. The Contractor shall first test all components and once proper operation has been achieved will turn the system over to the State for additional testing prior to the system entering production.
   c. Once both parties have agreed, in writing, that the system is ready for production, the system will be placed into production.
   d. The Contractor, in cooperation with the State, shall monitor the operation closely and shall fix any problems related to improper operation within two (2) days of their identification unless otherwise agreed to by the State.
   e. The design specification shall act as the document that describes proper operation.
   f. The Contractor shall test the system to ensure that the requirements are satisfied.
   g. The Contractor shall correct all test errors, implement corrections, and re-execute tests in their entirety until the requirements are met to the State's satisfaction.
   h. The Contractor shall request the State's project manager approval of the content and completeness of the test scripts.

i. During testing, the State and the Contractor shall work together to measure response times and system performance.

The contractor in coordination with the MIOC IT Department, will perform the on-site installation of the commercial-off-the-shelf (COTS) Memex software required to support the project. The contractor will install the baseline Memex software on a Project Server provided by the contractor from which the software overview, workshops and configuration work may be executed. This will allow the project to proceed on schedule while the hardware is being ordered. The contractor will execute its standard installation test to verify that the COTS software is working as expected, and share the results with the State.

The contractor will later install the configured MIOC application in the test, training and production environments. The contractor and subcontractor will test the application based on the agreed design and testing plan, and confirm that the configured software is operating as expected in the technical environment owned and maintained by the MIOC. The contractor and subcontractor will then work with the State to conduct their testing of the solution, and will correct errors and resubmit for testing and confirmation. The contractor will execute a core test plan to verify compatibility and connectivity of the key components within the solution's ultimate setting.

Once the State confirms that the solution is ready for production, the State and the contractor will agree – in writing – that the system is ready to be placed into production. The contractor will execute the Maintenance and Support Turnover processes as we begin Post Implementation Support and monitoring the operation of the solution.

5. **Deliverables** – The following statements are applicable to the solution procured as a result of this Contract:
   a. Work for any deliverable shall not begin for this project until both parties have agreed to and signed off on written documentation which describes the final deliverable and shown acceptance of its terms.
      i. Work shall not begin on any deliverable until the State has provided the appropriate approvals, in writing to the Contractor.
      ii. The sign off process will be initiated by the Contractor and submitted to the State.
      iii. The State will have the ability to require any changes to the document and request resubmission of the document.
   b. Payments to the Contractor will be made upon the completion and acceptance of each phase, not to exceed contractual costs of the phase.
   c. A phase is defined as complete when all of the deliverables within the phase have been accepted by MSP MIOC IT Project Manager, MDIT Agency Services, and MSP Project Office.
   d. The following table identifies the milestones, deliverables, roles for the state and contractor for each phase of this contract, as well as the Contractors approach to providing the deliverables.

The Project Plan and schedule will be finalized during the Initiation Phase of the project. Work will not begin on any deliverable until it has been agreed by the State and the contractor.

The governance process for this project will mandate that the contractor obtain written approvals from the State before beginning work on a deliverable. The Contractor will work jointly with the State on defining the deliverables, to ensure a smooth process that will not cause any delays in the implementation schedule.

The Contractor will initiate the process for signoff. This has been identified in the Preliminary Project Plan.

The contractor agrees that the State may request changes to the documents that are delivered, and that we will make those changes within two (2) business days of the request, unless the Contractor notifies the State that the change will take longer. The contractor anticipates that these changes will be

identified during the Phase Review meetings (identified in the Preliminary Project Plan), and that once the agreed changes are made, the deliverable will be approved.

The contractor agrees that payments will be made upon completion and acceptance of the phased deliverables outlined in the contract. The contractor also acknowledges that the costs will not exceed the costs documented in the contract, unless mutually agreed to by the contractor and the State through the change control process.

The contractor's solution is broken into the project phases outlined in the contract. The contractor has explicitly identified the Phase deliverables within the Preliminary Project Plan. The contractor also acknowledges that the phase is not considered complete until the MSP MIOC IT Project Manager, MDIT Agency Services, and the MSP Project Office provide their written acceptance of the deliverables for that phase.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 1 Initiation	**Milestones**	**Deliverables**			
Preparation	Work planning and scheduling,	Project plan	Project Plan	Provide appropriate reviews and approvals	Each of the tasks listed in the Initiation Phase will be executed, as defined in the Preliminary Project Plan. The Project Plan is a deliverable of this phase, and will be used by the Project Manager and the State to track the status of the project. It should be noted that the Project Plan will be updated during the course of the project.
	Clarification of roles and responsibilities	Project management guidelines	PMM03 – Project Plan	Coordinate State resources needed	This deliverable will be used to refine and agree the Roles and Responsibilities of the Contractor, Subcontractor and the State. The Project Plan will contain participants' responsibilities and will specify the required activities and tasks within the project. Once project management guidelines are established, they will be shared with all project team members during the Project team meeting.
	Project report formats and frequency established	Project management guidelines	PMM13 – Project Status Report	Provide appropriate reviews and approvals	Contractor and Subcontractor will work with the State to determine the frequency and format of formal status updates.
	Control systems development	Project standards and controls		Define project standards and controls required by the State	Contractor and Subcontractor will share the project standard and controls with all project team members so that consistent practices are applied. Any unique controls required for this project will be reviewed as a team. The Subcontractor will provide a PMP-certified individual.
	Work environment preparation	Identify needs		Provide work area	The State will provide all required work space and facilities required to do the work described in the contract, while Contractor and Subcontractor will provide all other requirements to perform their jobs, such as laptops, and the appropriate development and project management and testing software. Contractor will be responsible for providing the work environment for any work performed outside of Michigan.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 1 Initiation	**Milestones**	**Deliverables**			
	Assess Project Risks	Issue resolution procedures Risk Management Plan	PMM06-Risk Management Plan	Provide appropriate reviews and approvals	See Section Article 1, Section 1.402 of Contract for a description of how Contractor will address Risks for the MCIS Project.
	Project team planning	Provide appropriate documentation for State approval when required.	Identification of Team	Provide appropriate reviews and approvals	Contractor and Subcontractor will participate in project team training prior to the Project Kickoff meeting and orient the project team members on the standards, controls and methods Contractor will be using for this project.
Technical Environment Preparation	Determine system requirements	Technical standards Security standards Technical procedures	EAS Solution DIT0170-Project Security Plan and Assessment	Schedule State staff required Ensure resources available as needed Adopt standards and procedures required	Contractor and Subcontractor have made recommendations regarding the technical platform and tools for the implementation of this project. Contractor has aligned them to the Michigan Department of Information Technology (MDIT) standards. During project Start-Up, Contractor will validate these recommendations with the State, and confirm the standards and procedures for this project. Contractor will also review the State's requirements for Security, Portability and IT Procedures.
Readiness Assessment and Project Kickoff	Assess the State's readiness to proceed with the project, identifying gaps	Readiness assessment Pre-project checklist	No Form Required	Review the readiness assessment and pre-project checklist	The Contractor's solution will be used as the baseline from which the project team will assess the State's readiness to proceed with the project.
	Conduct kickoff meeting	Project kickoff	No Form Required	Schedule and attend meetings	The objective of the Project Kickoff meeting is to ensure that all project participants and stakeholders are grounded regarding the project. The project charter acts as the foundation for all team members. The project schedule, roles and responsibilities, guideline and controls will be shared.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 1 Initiation	**Milestones**	**Deliverables**			
Stage Exit Review	Conduct Stage Exit Review	Prepare Stage Exit Sign Off documentation	SEM-0189-Stage Exit Approvals	Attend meetings Review Deliverables from Phase 1 Provide Approval	This will occur in the Initiation Phase Review meeting, which will occur five business days after the submission of the Initiation Deliverable. This will be the opportunity for the State to identify any issues with any of the deliverables submitted by Contractor. Should no issues exist, the State will be in a position to sign and accept the Initiation Deliverable.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 2 Design	**Milestones**	**Deliverables**		**Acceptance Criteria**	
Design Documentation	System Design	Software and Hardware (if applicable procurement and delivery)	No form required	Software and hardware (if applicable procured, delivered and installed)	Contractor and Subcontractor will confirm that the recommended hardware and/or technologies are in place, or in the process of being procured by the State. Contractor will install Memex Patriarch and other software on a Contractor-provided Project Server off of which the Software Orientation and User Workshops may run. This will eliminate any issues pertaining to the ordering and installation of hardware for the project to proceed on schedule. Contractor will perform its standard installation tests on this software to verify that it is working correctly. Contractor will submit a Memex licensed software installation completion deliverable (baseline software only) for acceptance and approval by the State. The State anticipates procuring the hardware and software required for this solution (and identified in Table 9) through existing State Contracts.
		System Security design document	DIT-0170-Project Security Plan and Assessment	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	The security set-up for the State user community will be established during the Design phase, including the definition of the various roles and permissions to be assigned.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 2 Design	**Milestones**	**Deliverables**		**Acceptance Criteria**	
		Interface Specification document	Incorporate into SEM-0402-Requirements Specifications	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	The Interface Specification Document (ISD) will be created to document the interface requirements, standards and record layouts. The method and frequency of the data transmission between the Contractor and the interfacing system will also be agreed and documented. The following systems will be included in the ISD: • MiCJIN • NDPIX • STATIS (for a one-time conversion) • RISS (based on Memex's RISSConnect software Additionally, at the State's request, Contractor will provide information for importing/exporting RMS and CAD data into/out of Memex using an NDEX-compliant XML Schema.
		Functional Specification/Design document	SEM-0401-Requirements Traceability Matrix SEM-0501-Functional Design Document	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	The functional specifications will be documented during this Phase of the project. Contractor will use this Phase to further understand the configuration required for the State, as well as the requirements for functionality that will require customization. Design documents will be created for any new custom development. These design documents will be reviewed and approved by the SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and the MSP Project Office before the development work begins.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 2 Design	**Milestones**	**Deliverables**		**Acceptance Criteria**	
		Development Plan to communicate development and customization activities and points requiring customer interaction and user acceptance.	SEM-0402-Requirement Specifications SEM-0501-Functional Design Document	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	This Phase will document the configuration and custom development required for the Contractors Solution, including any database changes, application changes and/or integration components. The testing team will participate in this activity also so that they can begin to build the Use Cases that will be part of system testing and user testing. These development plans will be reviewed and approved by the designate Michigan personnel prior to proceeding with development.
		Training Plan	SEM-0703-Training Plan	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	The preparation for Training begins early in the process. A training plan will be created that addresses the following training types: • User training for DIT MIOC support staff, and technical staff in use and operation of the system(s) of MSP MIOC personnel • “Train the trainer” training for MSP training personnel • Providing training documentation and training materials

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 2 Design	**Milestones**	**Deliverables**		**Acceptance Criteria**	
Software orientation	Introduce the processes of the software application to State stakeholders	Overview session agendas Overview session notes	No form Required	Ensure appropriate staff attends session. Review State current business functions and processes.	Contractor and Subcontractor will hold a detailed orientation of Memex Patriarch. The orientation will begin with a presentation on how Memex Patriarch may be used as a 28 CFR Part 23 compliant solution. This will include configuration examples of how Memex Patriarch has been successfully deployed at Fusion Centers and intelligence agencies around the United States. The Memex Patriarch orientation will include walkthroughs of the application process flows, best practices, reporting, search, notification, linking, purging, auditing and many other features/functions. Contractor and Subcontractor expect this session to be very interactive with the State participants sharing their existing business functions and process knowledge, as well as all parties asking questions to obtain a better understanding of the as-is, and to-be environments..
Business Process Review	Conduct detailed business process reviews for each of the business areas in the software and functionality to be implemented,	Business process agendas	No Form Required	Coordinate attendance of required State staff Provide access to the State's system Provide documents as required.	The Contractor will deploy a workshop-based approach for driving requirement validation, business process reviews, solution design, and "buy in" from our clients' user base. The Memex process includes working with the State to share the process designs inherent in Contractor, understand the workflows of the State, and configure an application that meets the needs of the State without increasing costs and risks associated with customization. Participation by the State in these process reviews is critical and will need to be scheduled early in the process so that we can ensure we have a firm understanding of the processes.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 2 Design	**Milestones**	**Deliverables**		**Acceptance Criteria**	
	Collect the data needed for implementation	Business process session notes	No Form Required	Provide requested information and participation as needed	The findings from the business process review sessions will be documented and delivered to the State. These will be in the form of business requirements documents.
Initial Configuration	Develop initial State configuration Make key configuration enhancements more closely resembling the production environment	Initial configuration document	SEM-0501-Functional Design Document	Review configuration document and verify accuracy	Memex Patriarch will have an initial configuration documented AND created (available) shortly after User Workshop 1. This will be based on the COTS configuration installed on the project server, updated with results from the aforementioned Workshop. The State will have an opportunity to review and validate the Initial Configuration as part of User Workshop 2 – where additional configuration changes will be captured, documented, agreed and applied as part of the State Configuration Deliverable.
Fit Analysis	Structured walk through of application features to map product to State's needs;	Module fit session agendas Module approach papers	SEM-0187-Structured Walkthrough Meeting Record SEM-0188-Project Metrics Collection	Provide resources and access required	The User Workshops will be the environment where the structured walkthrough of Memex Patriarch and the confirmation of its features for the State's requirements will occur. These sessions will be facilitated by the Contractor's Project Manager and Lead Business Analyst The Contractor and Subcontractor Team will document the outcomes of these sessions.
	Clarify interface and file transfer requirements; Identify issues and prepare plans to address.	Module configuration documents	SEM-0501-Functional Design Document	Review and verify the deliverables	The State will be able to review and verify the deliverables to clarify interface, file transfer and conversion requirements. This will also allow the team to identify issues and prepare plans to address any issues. Contractor's Technical Lead and the Subcontractor's Project Analyst will facilitate this discussion as part of a User Workshop, and – coupled with the Project Manager and Lead Business Analyst – discuss Contractor's existing interface software with RISS.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 2 Design	**Milestones**	**Deliverables**		**Acceptance Criteria**	
State Configuration	Configure software and/or equipment based on the State's unique business requirements. Define user training and documentation requirements.	Initial prototype system configuration.	SEM-0501-Functional Design Document SEM-0604-System Design Document	Assist with population of configuration. Review and verify accuracy of document	The aforementioned User Workshops will be the source of information for producing the State Configuration. Contractor will deploy an iterative approach to configuring its solutions. The Initial Configuration will provide the starting point for User Workshop 2, where additional configuration requirements and/or process needs will be identified, documented and implemented. As with User Group 1, it is imperative that a representative cross-section of users/supervisors participate in the Workshop. MSP staff will be available to assist at this early stage. The State will review and approve the configuration documentation provided by Contractor's team.
Module prototyping and testing	Setup tables	Module business process templates	SEM-0501-Functional Design Document SEM-0604-System Design Document	Assist in population of tables	Tables will be established and adjusted for modifications as confirmed in the User Workshops and Design.
	Update system configuration document	Conduct acceptance test of prototype's module business process	SEM-0803-Pre Acceptance Checklist SEM-0804-Testing Package Checklist SEM-0805-User Acceptance Checklist	Identify business process issues and suggestions for resolution	Contractor and Subcontractor will test the prototype's module business process and look to the State to identify business process issues for suggestions and resolution. These will be reviewed in the aforementioned Workshops.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 2 Design	**Milestones**	**Deliverables**		**Acceptance Criteria**	
	Create business test scenarios	Finalized module business process test scripts	SEM-0803-Pre Acceptance Checklist SEM-0804-Testing Package Checklist SEM-0805-User Acceptance Checklist	Participate in testing	Contractor and Subcontractor will work with the State to define the business requirements and use case scenarios for testing. These test cases are defined during the Design Phase so that all involved have expectations of the requirements and outcomes expected from the solution. Contractor will use existing test scenarios that they have delivered over past implementations. Contractor will then identify with the State, additional, specific test scenarios based upon the States specific workflows, data requirements and reporting requirements.
	Execute business test scenarios and adapt system to resolve discrepancies	Executed/accepted business process test scripts	SEM-0803-Pre Acceptance Checklist SEM-0804-Testing Package Checklist SEM-0805-User Acceptance Checklist	Assist with resolution of issues	Contractor and Subcontractor will execute business test scenarios and adapt the system to resolve discrepancies. During this process, issues will be documented, categorized, and resolved in accordance with the project management methodologies listed herein.
Stage Exit Review	Conduct Stage Exit Review	Prepare Stage Exit Sign off documentation.	SEM-0189-Stage Exit Approvals	Attend meetings Review Deliverables from Phase 2. Provide Approval.	This will occur in the Design Phase Review meeting, which will occur five business days after the submission of the Design Deliverable. This will be the opportunity for the State to identify any issues with any of the deliverables submitted by Contractor. Should no issues exist, the State will be in a position to sign and accept the Design Deliverable.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 3 Development	**Milestones**	**Deliverables**		**Acceptance Criteria**	
Planning	Generate the necessary planning documents to ensure all development activities have been properly planned	User Acceptance Test and PARE Plan	PARE plan completed by business owner	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	The planning for the User Acceptance Test and PARE plan will begin prior to Development to facilitate proper testing activities. A UAT Plan for the final configuration will be created by Contractor and Subcontractor with active involvement from the State. Contractor and Subcontractor each recognize the criticality of active involvement by the customer user community during this process. Ultimately, the State will review and approve these plans.
		Pilot Plan	Testing Documentation	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	The Team Leads will work with the Project Manager to develop the Pilot plan. We anticipate that the plan will include the features that will be deployed, the targeted audience, and the data that will be available. The plan will detail the security that must be established. The schedule of the pilot will include the start and end dates, and any checkpoints in between. Finally, the Pilot Plan also has to incorporate a plan for merging the converted data from the STATIS database, as well as the how the interfaces will be addressed.
		Data Migration Plan	Data Migration Plan	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	The Data Migration plan will detail the approach that the Contractor will take for migrating the data from the existing STATIS database into the new Memex database. Typically, these plans account for the data analysis / gap analysis, data mapping, data cleansing, conversion, testing and production conversion.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 3 Development	**Milestones**	**Deliverables**		**Acceptance Criteria**	
		User Documentation	Training and Technical Manuals	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	Memex Patriarch has existing user documentation, which will be used as the starting point for user documentation. Updates to the documentation will be made to incorporate the customization needed to meet MSP requirements.
		System Administrator Documentation	Training and Technical Manuals	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	Enhancements to existing documentation will be made by Contractor and Subcontractor as required to support any customization needed to meet MDIT and MSP requirements.
		User Training Materials	Training and Technical Manuals	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	Contractor and Subcontractor will use existing training material as the foundation for developing the user training materials for MIOC. Updates to the training materials will be made to incorporate the customization needed to meet MSP requirements.
		System Administrator Training Materials	Training and Technical Manuals	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	Contractor has developed a modular approach to developing and presenting Systems Administration Training. These modules may be combined in a variety of ways to meet client requirements. Contractor and Subcontractor will work with the State to establish the training requirements for the MDIT and MSP support staff and deliver the training and materials agreed upon.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 3 Development	**Milestones**	**Deliverables**		**Acceptance Criteria**	
		Deployment and Operations Guide	Training and Technical Manuals	Reviewed and approved by SOM MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office	Contractor and Subcontractor will leverage existing materials and work with the State to establish the requirements for the MDIT and MSP Standard Operating Procedures.
Interface design and development	Work with the State to design and develop interfaces identified in Fit Analysis	Interfaces	Deliver Interfaces	Provide resources to identify and test	Contractor has received and reviewed the interface specifications made available by the State. Contractor will work with the State to design and develop interfaces identified in the Fit Analysis.
		Develop, design, verify design of interface	SEM-0501-Functional Design Document SEM-0604-System Design Document	Test interface	Contractor will develop the interfaces to MICJIN and NDPIX as defined in the requirements and confirmed during the Fit Analysis. Contractor will use its RISS Connect product as the foundation for the interface with RISS Intel. The State will have an opportunity to confirm and approve the interfaces upon completion of the development work.
		Program and install interface	Deliver Interfaces	Verify each unit-tested interface meets requirements	Contractor will install the interface software when the interfaces have been completed, tested and verified.
Conversion design and development	Plan and design the conversion processes with plan and schedule for conversion.	Conversion design for data	SEM-0601-Conversion Plan	Provide resources and access Provide data extract Review and verify design	Contractor and Subcontractor will analyze, design, code and test the conversion of the existing STATIS data as part of a data conversion plan. The project schedule and plan will accommodate having converted data to test with during the system test period. The Contractor will be using the data model of the Memex Software Solution, and will need to do a data mapping to the new database structure. The State will be responsible for all data cleansing, and that they will provide the data extract from the Oracle system. The input of the States' experienced DBAs and Data Architects is important to ensure that Contractor's mapping is valid.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 3 Development	**Milestones**	**Deliverables**		**Acceptance Criteria**	
		Program and install conversion program Test conversion program		Test conversion program Verify each unit-tested conversion meets requirements Cleanse data	The conversion program will be tested multiple times. Minimally, it will be unit tested and then tested in the testing environment set-up and the training environment set-up. This will allow Contractor to "tweak" the plan and the steps to allow a smooth transition into the production database.
Queries and Reports design and development	Assist State in developing and applying skills necessary to use the system once implementation complete	Provide detailed information identifying available reports and assist the state with developing and applying skills to use the system	SEM-0501-Functional Design Document SEM-0604-System Design Document	Provide resources and access	Contractor will provide comprehensive training to users.
	Develop and test reports	Custom report development Assist with development of reports Program and install reports	SEM-0501-Functional Design Document SEM-0604-System Design Document	Test reports	As indicated in our Preliminary Project Plan, Contractor will review the reporting features of the Contractor solution and the requirements of the MSP during the Initiation and Design phases. If additional reports are required, they will be identified and – as agreed – created to the specifications detailed during this Phase. Any new reports will go through the full systems life cycle. Reports that are already available will be system tested so that converted data or data from new interfaces is accurately displayed and reported.
Security definition and setup	Prior to production, setup security as identified by State. Implement and test	Security template	DIT0170-Project Security Plan and Assessment	Provide resources and access	The Contractor's security model natively supports role-based, and permissions-based, compartmentalization. The security template and configuration will be established with input from the State, and the State Administrator(s) will be trained in how to update the security model.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 3 Development	**Milestones**	**Deliverables**		**Acceptance Criteria**	
Modification Development	If any additional modifications are requested by the State, subject to approved change order, design and develop modifications	Modification work as contracted	SEM-0501-Functional Design Document SEM-0604-System Design Document	Provide resources and access Review and verify design	Contractor will follow the agreed Change Control Process for any modification requests. Modifications may fall into maintenance or enhancement classifications, based upon complexity, scope and effort required.
		Program and install modifications	SEM-0501-Functional Design Document SEM-0604-System Design Document	Test modifications Verify each unit-tested modification meets requirements	Any changes that have been approved through the Change Control process will be designed, developed, coded and tested. Software modifications developed by the Contractor will proceed through the Systems Development Lifecycle, including user testing to confirm the successful completion of the modification.
End user training development	Develop training manuals to reflect that client's final requirements for using the module.	Baseline training manual templates Assist in the development of training manuals.	Training Manuals	Reviewed and approved by SOM MSP MIOC IT Project Manager, and MSP Project Office	The training manuals will reflect the application functionality, workflows, and processes that were defined during the requirements phase.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 3 Development	**Milestones**	**Deliverables**		**Acceptance Criteria**	
	Update the training manuals to reflect the system as configured for the State.	Tailored training manual templates Training plan	Training Manuals SEM-0703-Training Plan SEM-0704-Training Checklist	Establish appropriate training sessions and agenda. Provide and schedule training rooms	Training documentation will be tailored toward two audiences: Users and Technical Support Staff. The training plan will reflect the overall approach, class agenda, curriculum and schedule. Contractor and Subcontractor will work closely with the State to verify that the training materials are appropriate to the audience, and that the schedule is accommodating the user community, while still keeping to the overall project timeline. Since training will be provided at State facilities, the State will be responsible for scheduling the training rooms and providing the class equipment, such as PC's, projectors, and screens.
Stage Exit Review	Conduct Stage Exit Review Meeting	Prepare Stage Exit Sign off documentation	SEM-0189-Stage Exit Approvals	Attend meetings Review Deliverables from Phase 3 Provide approval	This will occur in the Development Phase Review meeting, which will occur five business days after the submission of the Development Deliverable. This will be the opportunity for the State to identify any issues with any of the deliverables submitted by the Contractor. Should no issues exist, the State will be in a position to sign and accept the Development Deliverable.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 4 Implementation	**Milestones**	**Deliverables**		**Acceptance Criteria**	

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 4 Implementation	**Milestones**	**Deliverables**		**Acceptance Criteria**	
	Implementation complete	Software and hardware (if applicable) procurement and delivery		Software and hardware (if applicable) procured, delivered, and installed.	This deliverable will be approved upon confirmation that the configured application is on the State of Michigan hardware. Contractor and Subcontractor will be prepared to order the hardware and software as soon as the contract is signed and technical review and agreement on the proposed technical environment is received from the State.
		User and System Administrator Training to perform user and system administrator training	Training Manuals	Users have a working knowledge and are prepared to leverage the application to complete daily tasks.	The technical training will address system administrator roles and functions, and operations support. The user training will address application feature functionality.
		User Acceptance and PARE-level Testing to facilitate User Acceptance Training	Training Manuals	Test results meet and/or exceed criteria outlined in User Acceptance Test and PARE Plans.	Contractor and Subcontractor will support the State during these testing phases. The Contractor will prepare the test database and verify that accurate and appropriate test data is loaded.
		Facilitate and Support Pilot Testing Support Plan to address alternative methods for providing user and administrator support.		SOM (MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office) confirms that System continues to meet and/or exceed criteria outlined in User Acceptance Test and PARE Plans.	Contractor and Subcontractor will facilitate and support this testing phase as outlined in the User Acceptance Test. Additionally, the team will support the plan to address alternative methods for providing user and administrator support.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 4 Implementation	**Milestones**	**Deliverables**		**Acceptance Criteria**	
		Deployment and installation of application and hardware (if applicable).	Install Software	System deployed successfully to all named SOM users.	Deployment and installation of software is the responsibility of Contractor and Subcontractor. The State will be responsible for the installation and deployment of the hardware.
		Data Conversion/Migration.		SOM (MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office) confirms that legacy data has been completely and accurately migrated according to Data Migration Plan	Contractor has reviewed the data conversion and migration requirements. Contractor's Technical Lead will work with the State to validate the data mapping from STATIS into Memex Patriarch. Contractor will then develop and test the scripts that will transform and load the data into the MCIS. Contractor will look to the State to verify and validate that the data as it existed in STATIS was appropriately loaded into the Memex solution, as agreed during the Conversion Design.
		Facilitate and support Final Testing	Testing documentation	SOM (MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office) confirms that System continues to meet and/or exceed criteria outlined in User Acceptance Test and PARE Plans.	Contractor will perform Regression Testing while UAT on the configuration is occurring. Defects will be corrected and retested, and then do a final pass prior to User Training and moving the application into production.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 4 Implementation	**Milestones**	**Deliverables**		**Acceptance Criteria**	
		System Support and Maintenance to provide ongoing support and maintenance of solution		SOM (MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office) confirms that Support Plan implemented per approved Support Plan.	Contractor's Project Plan includes deliverables as part of the Maintenance and Support turnover – including a review of the Memex Maintenance and Support processes, contact numbers, email addresses, Site Guide, self-service portal walkthrough, and verifying the VPN connection is in place. This is all part of Memex's Proactive Customer Support Model.
		Backup and Recovery Plan. Prescriptive guidance regarding proper system backup and recovery methodologies	SEM-0604-System Design Document	Backup and Recovery Plan reviewed and approved by SOM (MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office).	Contractor and Subcontractor will work with the State to fulfill this deliverable as prescribed in the requirements documents and as described in the Contract. Contractor will use Oracle and Memex tools to provide this capability, which will be documented and agreed in the plan.
		Post Project Analysis. Review engagement, outlining opportunities for improving ongoing communication and support		Post Project Analysis Document has been reviewed and approved by SOM (MSP MIOC IT Project Manager, MDIT AGENCY SERVICES, and MSP Project Office).	As indicated in the Preliminary Project Plan, Contractor has included a Project Review at the time of implementation – which is a standard part of the Contractor's implementation methodology. During this meeting, the Contractor, Subcontractor and the State will document lessons learned and produce a post project analysis for review by the State.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 4 Implementation	**Milestones**	**Deliverables**		**Acceptance Criteria**	
Build stage and production environments	Create the stage and production environments.	Stage – production planning meeting Completed stage – production planning meeting		Provide resources and access needed Develop, populate, modify stage environment.	Contractor and Subcontractor will conduct a stage-production planning meeting and a completed state-production planning meeting, during which a Punch List of activities will be developed as we move towards implementation.
	Define and establish security		DIT-0170-Project Security Plan and Assessment	Setup security	Contractor will define and establish the security roles and permissions via the User Management module for this activity. To the extent available, Contractor will include System Administrators in this process to reinforce training.
	Convert Data	Perform full conversion testing in stage environment	Testing documentation	Validate conversions	Contractor will convert the STATIS data in the stage environment for the State to review and validate, in according with the agreed-to test plans. Contractor will correct data mapping and/or load errors during this process until the State is in a position to verify that the agreed mappings are accurate and the data is accessible within the Memex solution.
Stage preparation and testing	Perform a dress rehearsal of the production environment prior to live date of the system, running parallel process cycles to be validated against the production systems.	Stage-production planning meeting agenda Completed stage – production planning meeting		Provide resources and access as required	As part of the stage preparation and testing, Contractor and Subcontractor will perform a dress rehearsal of the production environment prior to the live date of the system.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 4 Implementation	**Milestones**	**Deliverables**		**Acceptance Criteria**	
Acceptance Testing	Conduct system and acceptance testing	System Test Scripts Acceptance test scripts	Testing Documentation	Develop user acceptance test criteria Validate conversions Perform user acceptance test Conduct PARE-Level test cases	Contractor and Subcontractor will be responsible for conducting System and Inter-System Testing for the integration components. Contractor will look to the State to help us coordinate Inter-System Testing. Contractor and Subcontractor will work with the State to supplement existing test scripts with Michigan-specific scenarios. Contractor and Subcontractor will support the User Acceptance Test for the delivered MCIS configuration. This will be the State's opportunity to reinforce the initial training, and validate the configuration and solution to be implemented. Identified deficiencies will be corrected and made available to the State for testing and confirmation.
		Perform full conversion testing and system test Initial train the trainer sessions	Testing and Training Documentation	Validate Staged system signoff. Identify trainers to attend	Contractor and Subcontractor will be responsible for testing the database conversion. Contractor and State will verify that the valid data is converted and that the database is appropriately populated. Contractor and State will use scripts, utilities and standard Memex Tools to conduct these validations.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 4 Implementation	**Milestones**	**Deliverables**		**Acceptance Criteria**	
Conduct training	Provide train the trainer	Initial train the trainer sessions	Training Documentation	Identify trainers to attend Conduct end user training	Contractor and Subcontractor will deliver one Train the Trainer/user training course to each of the seven regions in accordance with the agreed Training Plan. This approach will enable the requesting agency to appoint trainers who will then be responsible for cascade training throughout the State. Train the trainer sessions will include training documentation provided by Contractor for all attendees. The State will schedule and provide facilities for this training. Contractor will return approximately four weeks after implementation to provide a two-day Refresher training for each of the seven regions.
	Provide training to technical staff	Technical training sessions	Training Documentation	Attend sessions	This class will provide instruction on the configuration, administration and maintenance of the entire solution. The course curriculum covers application and server level administration procedures. Contractor will coordinate with the State to assess and determine who is most appropriate to attend these classes, based upon the specific administration roles within the IT environment.
Migration	Coordinate tasks for cutover	Production setup plan Migration task list Populated production database Create and populate the production environment		Validate the production environment	The coordination of cutover will be planned well in advance of the cutover, and then will be refined over time. Contractor and Subcontractor will support the State staff responsible for maintaining the hardware and software with any technical questions throughout the cutover.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 4 Implementation	**Milestones**	**Deliverables**		**Acceptance Criteria**	
Production/Go-Live	Define production /Go-Live date	Provide recommended date		Schedule date	Contractor and Subcontractor will work with the State to define the production go-live date, based upon the project schedule, availability of State resources for training, and any other projects that might require coordination or alignment with this schedule.
	Deployment	Assign resources		Assign resources Production system signoff	Contractor and Subcontractor will work with the State to facilitate the deployment of the MCIS. This effort will be coordinated, planned and refined as the project approaches completion.
Stage Exit Review	Conduct Stage Exit Review Meeting	Prepare Stage Exit Sign off documentation	SEM-0189-Stage Exit Approvals	Attend meetings Review Deliverables from Phase 4 Provide approval	This will occur in the Implementation Phase Review meeting, which will occur five business days after the submission of the Implementation Deliverable. This will be the opportunity for the State to identify any issues with any of the deliverables submitted by Contractor. Should no issues exist, the State will be in a position to sign and accept the Implementation Deliverable.

Task	Description of Tasks	Contractor Role/ (Deliverable)	FORMS	State Role	Comments
Phase 5 Post Implementation	Costs covered by maintenance				
Conduct PARE	PARE testing and compliance.	Providing support and resolving problems and issues		Completing PARE. PARE Certification.	See Section 1.501 Criteria for additional roles and responsibilities.

Post Production Support	Provide maintenance and support.	Provide support to project team as required		Provide support to user community	One of the first activities contained in Post Implementation Support is the delivery of a two-day, "Refresher Training" for MCIS users. This will occur approximately four (4) weeks from implementation Additionally, Contractor has included 40 hours a year of onsite support in accordance with the requirements.
	Resolve issues and problems as detected.	Resolved issues/problems		Resolve system and process issues and provide user community with updated procedures.	Contractor will deploy a Proactive Customer Support Model that facilitates communications between our customers' and their dedicated Customer Satisfaction representative such that when issues arise someone is quickly able to evaluate – and usually resolve – the issue.
	Revise procedures as needed and communicate updated procedures to the user community.	Revise/update procedures.		Communicated project team decisions to user community.	Contractor will deploy a Proactive Customer Support Model that facilitates communications between our customers' and their dedicated Customer Satisfaction representative such that when procedures change, it is able to be rapidly communicated to the appropriate individual(s).
	Provide TIER III Technical and user help desk support 8am to 6pm EST Monday through Friday.	Provide support to SOM business and technical staff.		Maintain issues log to be resolved with Contractor	
Stage Exit Review	Conduct Stage Exit Review Meeting	Prepare Stage Exit Sign off documentation	SEM-0189-Stage Exit Approvals	Attend meetings Review Deliverables from Phase 3 Provide approval	This will occur in the Post Implementation Review meeting, which will occur five business days after the submission of the Post Implementation Deliverable. This will be the opportunity for the State to identify any issues with any of the deliverables submitted by Contractor. Should no issues exist, the State will be in a position to sign and accept the Post Implementation Deliverable.

6. Data Conversion

a. The following data file conversions are required for the MCIS solution:

System Title: **Statewide Intelligence System** (**STATIS)** - the existing intelligence database.
Description: The State will work with the Contractor to provide a flat file extract or other suitable format as agreed to from the STATIS database. STATIS is currently using a LINC application running on a UNISYS mainframe using DMSII Database. STATIS contains approximately 54,000 intelligence reports made up of 2.3 million records. The size of the database is approximately 2.2gb. The Contractor is required to convert the existing intelligence data from the STATIS database into the Michigan Criminal Intelligence System solution. Depending on the time frame of implementation of this solution, the current STATIS database is planned to be moved to an Oracle database in May of 2009 to ensure the availability of this data upon the decommissioning of the UNISYS Mainframe in July, 2009.

b. Contractor may be asked at a future date to provide a Confidential Informant Solution, and TIP Tool Solution. The requirements and pricing for these optional solutions are provided in **Attachment I1**, and **Attachment I2** respectively**.** If the State determines that these solution(s) are needed, the following data conversions will be required.

System Title: *Optional* **Confidential Informant Database –**
- Requirements provided in Attachment I1
Description: Currently the Confidential Informant Database is contained within an ACCESS 2002 database containing approximately 12110 records. Each records consist of 36 data fields. The total size of the database as of 12-11-08 is 9.62 MB. The state is expecting the contractor to convert the existing informant data from the ACCESS database into the Contractors Confidential Informant Database solution if awarded.

System Title: *Optional* **Tip Tool –**
- Requirements provided in Attachment I2
Description: The current Tip Tool in use by the MIOC was developed by the Michigan Department of Technology in conjunction with MIOC staff. The TIP Tool is a ASP.NET 2003 application hosted on a Windows 2003 server tied to an Oracle 9i database (9.2.0.8). The Tip Tool currently contains approximately 3000 records with a database size of less than 50mb.

The contractor and subcontractor will work with the State to perform an analysis of the existing data in the STATIS database, identifying any gaps between it and the new database. The contractor has reviewed the information related to the data conversion specifications and have outlined the process in the Preliminary Project Plan.

As part of the database conversion process, we will also run reports that will identify data discrepancies or issues, so that the State can correct the data prior to the conversion – as the State is the ultimate owner of the data and the only organization that can state the data itself is accurate. The contractor's team will design, develop, and test the data conversion program(s). The contractor's team will also execute the database conversion into production as part of the implementation plan.

Additionally, the contractor and subcontractor will perform the same functions for the Confidential Informant Database and the Tip Tool, should these options be exercised during the contract.

7. Interfaces

a. The following interfaces are **required** for the MCIS solution:

i. Interface Title: **MiCJIN Portal** – for user authentication
The Contractor must interface the MCIS solution to the Michigan Criminal Justice Information Network (MiCJIN) portal for user authentication. The MiCJIN Portal is compatible with both eDirectory and Active Directory LDAP directory structures, utilizing industry standard SAML 2.0. The solution must also be compliant with emerging standards in the criminal justice arena such as the National Information Exchange Model (NIEM), http://www.niem.gov and the Information

Sharing Environment Implementation Plan (ISE), www.ise.gov/docs/reports/ise-impplan-200611.pdf.

ii. Interface Title**: Regional Information Sharing System (RISS) Intel Database -**
The Contractor must provide a web service interface to RISS. RISS has been in operation for approximately 25 years providing services to support the investigative and prosecution efforts of law enforcement and criminal justice agencies. RISS was founded in response to specific regional crime problems and the need for cooperation and secure information sharing among law enforcement agencies.

iii. Interface Title**: National Drug Pointer Index System (NDPIX) -**
The Contractor and Subcontractor will work with the State to perform an analysis of the data to be interfaced, identifying any gaps between it and the new database. The contractor has reviewed the information related to the interface specifications and has outlined the process in the Preliminary Project Plan.

The contractor and subcontractor have the knowledge, processes, methodologies and experience to commit to a smooth integration of the requested interfaces with MiCJIN, RISS and NDPIX. The contractor and subcontractor recognize that the data to be interfaced is confidential and secure, and will design, develop/configure and test the interfaces as appropriate.

1.2 Roles and Responsibilities

1.201 CONTRACTOR STAFF, ROLES, AND RESPONSIBILITIES

Location of Work

1. The work is to be performed, completed, and managed at the following locations:
   a. Michigan State Police Headquarters, East Lansing, Michigan
   b. Michigan Department of Information Technology-DCO Lansing, Michigan
   c. Southeast Michigan location--TBD
   d. Contractor's offsite location as agreed upon by the State of Michigan.
   e. Train the trainer locations in each region as agreed to by the State and Contractor.

2. For work performed at State facilities, the State will provide work space which will include the following:
   a. Work space
   b. Desk
   c. Telephone
   d. Printer
   e. Access to copiers and fax machines
   f. Parking at MSP Headquarters, East Lansing, Michigan. NOTE: Payment for parking at locations other than MSP Headquarters, East Lansing, Michigan will be at the Contractor's expense. Beginning in January 2010 MSP Headquarters will be located in downtown Lansing and all parking expenses will be the responsibility of the Contractor.

Travel:

1. No travel expenses will be reimbursed by the State under this contract. This includes travel costs related to training provided to the State by Contractor.

2. Travel time will not be reimbursed.

Hours of Operation:

1. Normal State hours are 8:00 a.m. to 6:00 p.m., Monday through Friday, EST with work performed as necessary after those hours to meet project deadlines.

2. The State is not obligated to provide State management of assigned work outside of normal State working hours. The State does not pay for overtime.

3. Contractor shall observe the same standard holidays as State employees. The State does not compensate for holiday pay.

Background Checks/ Drug Testing Certification
The Contractor and/or staff must be able to pass a security clearance check and drug tests prior to assignment to this project. The Contractor must present certifications evidencing drug tests for all staff identified for assignment to this project. The Contractor shall authorize the investigation of its personnel proposed to have access to State facilities and systems on a case-by-case basis. The scope of the background check is at the discretion of the State and MSP. The results will be used to determine Contractor personnel eligibility for working within State facilities and systems. Such investigations will include Michigan State Police Background Checks including State and FBI (IAFIS) Fingerprint check.

The contractor must submit a completed Background Authorization Request (CJIS-008) to MSP's Information Security Officer for approval prior to the individual(s) starting of the project. As part of the background clearance, the contractor will be required to submit an RI-8 Fingerprint card or submission of fingerprints via a livescan device. Depending on the nature of a contract or work assignment, the contractor may also be required to include a security addendum as part of the contract. The contractor is responsible for any and all costs associated with the background clearance process.

IT Acceptable Use Policy and Security
All Contractor personnel will also be expected to comply with the State's security and acceptable use policies for State IT equipment and resources. Refer to the following documents for additional information:

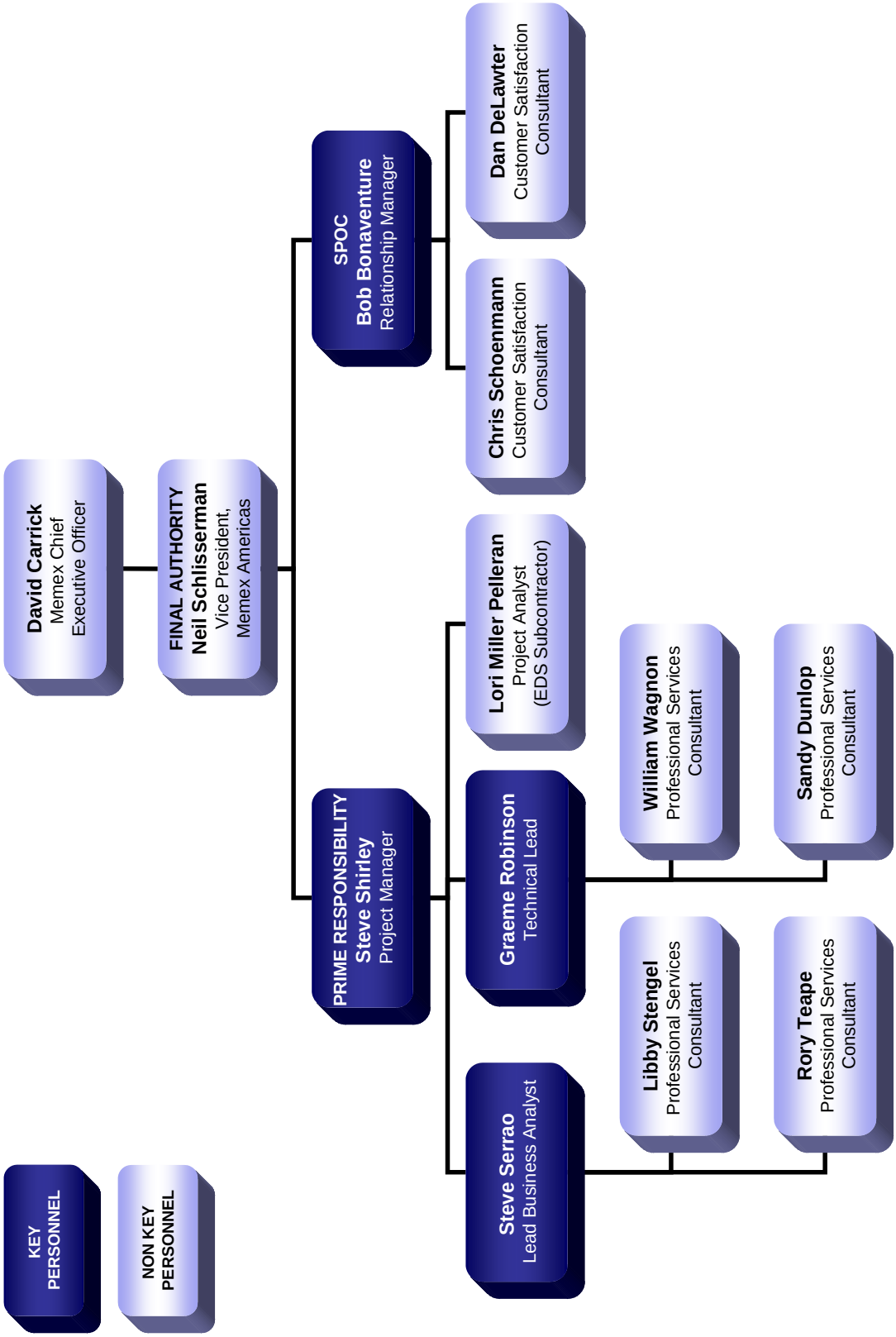
http://www.michigan.gov/dit/0,1607,7-139-34305-107739--00.html http://www.michigan.gov/dit/0,1607,7-139-34305-109932--,00.html
http://www.michigan.gov/documents/PCAcceptableUsePolicy1460_1_72034_7.pdf

Furthermore, Contractor personnel will be expected to agree to the State's security and acceptable use policies before the Contractor personnel will be accepted as a resource to perform work for the State. It is expected the Contractor will present these documents to the prospective employee before the Contractor presents the individual to the State as a proposed resource. Contractor staff will be expected to comply with all Physical Security procedures in place within the facilities where they are working.

The Contractor will provide, and update when changed, an organizational chart indicating lines of authority for personnel involved in performance of this Contract and relationships of this staff to other programs or functions of the firm. This chart must also show lines of authority to the next senior level of management and indicate who within the firm will have prime responsibility and final authority for the work.

Contractor Organization Chart
The following organizational chart outlines the Memex/EDS MIOC MCIS solution team.

Memex Project Organization Chart For the MICIS for the MIOC Project



Memex/EDS Project Team
The Contractor will commit that staff identified in the contract will actually perform the assigned work. Any staff substitution must have the prior written approval of the State.

Contractor Key Personnel
All Key Personnel may be subject to the State's interview and approval. This interview will be on-site at MSP or at a location agreed upon. Any costs for travel will be at the expense of the Contractor. Any staff substitution must have the prior written approval of the State. The percentage of time allocated to the project as indicated below for each of the key staff are estimates. The State understands that the actual time commitment will vary through the different phases of the project, however the Contractor shall ensure the key staff is committed through the completion of Phase 4, Implementation.

Project Manager (*KEY PERSONNEL)
Name: Steve Shirley
Contractor: Memex (prime)
Percentage of Time Allocated to Project: 75%

Required Skills for This Position
10 years of experience managing large scale application development and implementation projects.
5 years of experience in the criminal justice or related field implementing data management, and decision support tools is preferred.
2 years of experience in managing a project using the Contractor's proposed solution
Certification: Project Management Professional certification

The Contractors project manager will work closely with the designated personnel from the State to insure a smooth transition to the new system. The project manager will coordinate all of the activities of the Contractor personnel assigned to the project and create all reports required by State.

The project manager must be approved by MSP. The Contractor's project manager responsibilities include, at a minimum:

- Manage all defined Contractor responsibilities as identified in the final contract.
- Manage Contractor's subcontractors, if any
- Develop the project plan and schedule, and update as needed
- Serve as the point person for all project issues
- Coordinate and oversee the day-to-day project activities of the project team
- Assess and report project feedback and status
- Escalate project issues, project risks, and other concerns
- Review all project deliverables and provide feedback
- Proactively propose/suggest options and alternatives for consideration
- Utilize change control procedures
- Prepare project documents and materials
- Manage and report on the project's budget

Technical Lead / Programmer (*KEY PERSONNEL)
Name: Graeme Robinson
Contractor: Memex (Prime)
Percentage of Time Allocated to Project: 50%

Required Skills for This Position
5 years experience in developing software utilizing the contractor's proposed solution development tools or other similar software products
3 years of experience in developing software for the contractor's proposed solution.
2 years of experience integrating multiple, disparate criminal justice or related systems or comparable multi-business functional systems.
Education: Minimum 32 semester credit hours in an IT related field is preferred.

Lead Business Analyst (*KEY PERSONNEL)
Name: Stephen G. Serrao
Contractor: Memex (Prime)
Percentage of Time Allocated to Project: 40%

Required Skills for This Position
7 years of experience in analyzing and evaluating business systems and user needs.
5 years of experience in analyzing business needs in a criminal justice or related field.
2 years of experience in the contractor's proposed solution.
7 years of experience in analyzing and evaluating business systems and user needs.

Contractor Non-Key Personnel

Name	Role	Company
Bob Bonaventure	Single Point of Contact (SPOC)	Prime - Memex
Larry Zippi	Project Analyst	Subcontractor - EDS
Neil T. Schlisserman	Executive Sponsor	Prime - Memex
Rory Teape	Professional Services Consultant	Prime - Memex
Libby Stengel	Professional Services Consultant	Prime - Memex
William E. Wagnon	Professional Services Consultant	Prime - Memex
Sandy Dunlop	Professional Services Consultant	Prime - Memex
Daniel DeLawter	Customer Satisfaction Consultant	Prime - Memex
Chris Schoenmann	Customer Satisfaction Consultant	Prime - Memex
Sam Shah	Technical Consultant	Prime - Memex

Details for Non-Key Personnel are provided below:

Single Point of Contact (SPOC)
Name: Bob Bonaventure
Contractor: Memex (prime)
% of Time Allocated to Project: 10%-30%

The Contractor will identify a single point of contact (SPOC). The duties of the SPOC shall include, but not be limited to:

1. Supporting the management of the Contract
2. Facilitating dispute resolution
3. Advising the State of performance under the terms and conditions of the Contract. The State reserves the right to require a change in the current SPOC if the assigned SPOC is not, in the opinion of the State, adequately serving the needs of the State.

The SPOC shall be subject to the State's interview and approval. This interview will be on-site at MSP or at a location agreed upon. Any costs for travel will be at the expense of the Contractor.

Project Analyst
Name: Larry Zippi
Contractor: EDS (subcontractor)
% of Time Allocated to Project: 100%

<u>Description of duties and responsibilities:</u>

- *Provide expertise in State of Michigan project management tools and processes*
- *Provide assistance with development of project plan*
- *Maintain project plan*
- *Create / Oversight of creation of SEM documents*

Executive Sponsor
Name: Neil T. Schlisserman
Contractor: Memex (prime)
% of Time Allocated to Project: 5%

Description of duties and responsibilities:

- *Final Authority, Executive Sponsor, Quality Control*
- *Project Oversight/Reviews*
- *Deliverable Reviews*
- *Resource Allocation*
- *Escalation Point*

Professional Services Consultant
Name: Rory Teape
Contractor: Memex (prime)
% of Time Allocated to Project: 60%

Professional Services Consultant
Name: Libby Stengel
Contractor: Memex (prime)
% of Time Allocated to Project: 30%

Description of duties and responsibilities:

Solution Consultant

- *Assist with configuration of solution*
- *Participate in testing of configuration*
- *Provide train the trainer for users of system*
- *Finalized site guide for configuration*

Professional Services Consultant
Name: William E. Wagnon
Contractor: Memex (prime)
% of Time Allocated to Project: 60%

Professional Services Consultant
Name: Sandy Dunlop
Contractor: Memex (prime)
% of Time Allocated to Project: 25%

Description of duties and responsibilities:

- *Designing and project managing core technologies and middleware applications.*
- *Developing solutions in languages including C, C#, Java, Perl and Python.*
- *Documenting functionality and APIs for Memex database servers.*
- *Installation and integration of Memex systems at customer sites.*

Customer Satisfaction Consultant
Name: Daniel DeLawter
Contractor: Memex (prime)

Description of duties and responsibilities:

- *Will provide post implementation support*

Customer Satisfaction Consultant
Name: Chris Schoenmann
Contractor: Memex (prime)

Description of duties and responsibilities:

- *Will provide post implementation support*

The contractor and subcontractor staff supporting the MIOC project will work with the State to determine the appropriate locations based on the work to be performed. If the work is performed at the State site, the contractor and subcontractor will pay for parking and travel for any travel time required. The contractor and subcontractor will be available Monday through Friday, 8 a.m. to 6 p.m. EST, and will comply with the State's security and acceptable use policies for State IT equipment and resources.

For the work performed at the State site, the contractor's team understands that the State will provide the work space, desks, telephones, printer, and access to copiers and fax machines.

The State will also provide parking at MSP headquarters in East Lansing, Michigan. Parking at other sites will be at the expense of the contractor and subcontractor.

The contractor and subcontractor have reviewed and understand the security clearance check and drug tests required for all staff identified for assignment to this project. We will present certifications evidencing drug tests for all staff identified for assignment to this project. We also authorize the investigation of personnel proposed to have access to State facilities and systems on a case-by-case basis and understand that the scope of the background check is at the discretion of the State and MSP. The contractor and subcontractor will be responsible for costs associated with verifying our staff meets these requirements. We will use the results to determine personnel eligibility for working within State facilities and systems. Investigations will include Michigan State Police Background Checks including State and FBI (Integrated Automated Fingerprint Identification System [IAFIS]) Fingerprint check. The personnel may be required to complete and submit an RI-8 Fingerprint Card for the Fingerprint Check. Any request for background checks will be initiated by the State and will be reasonably related to the type of work requested.

Contractor's personnel will comply with the State's security and acceptable use policies for State IT equipment and resources and have reviewed the additional documents posted to the State's Web site regarding use policies.

The contractor will work closely together with the State to provide proper staff for the length of the contract. The contractor and subcontractor are confident that the experienced staff we present for this proposal will meet and exceed the expectations of the State. We will remove any employee the State deems as unsatisfactory within five (5) working days of written notification.

1.202 STATE STAFF, ROLES, AND RESPONSIBILITIES

The State project team will consist of a Steering Committee, Subject Matter Experts (SMEs), Project Support Personnel, a Project Manager from MSP, and a Technical Lead from MDIT Agency Services. MSP is the sponsoring agency and will chair the Steering Committee. MDIT Agency Services Technical Lead will be responsible for the State's infrastructure and will work together with the Contractor in determining the system configuration requirements.

The project steering committee will provide the following services:

- Approve the project schedule
- Authorize modifications for scope, resources, and budget of the project
- Ensure senior management commitment to the project
- Act as a final arbiter on proposed changes that significantly affect the business interests of the State

Subject Matter Experts

The Subject Matter Experts representing the business units involved will provide the vision for the business design and how the application shall provide for that vision. They shall be available on an as needed basis. The SME's will be empowered to:

- Resolve project issues in a timely manner
- Review project plan, status, and issues
- Resolve deviations from project plan

- Provide acceptance sign-off
- Utilize change control procedures
- Ensure timely availability of State resources
- Make key implementation decisions, as identified by the Contractor's project manager, within 48-hours of their expected decision date.

Name	Agency/Division	Title
Deb McClung	MDIT	Client Service Director, MSP
F/Lt. Dale Peet	MSP	MIOC Commanding Officer
TBD	MDIT	IT Manager
Julie Kluytman	MSP / MIOC	Department Analysts
Angie Yankowski	MSP / MIOC	Department Analysts
Sue Taylor	MSP / MIOC	Department Analysts
Additional … As Required		

State Project Manager- (MDIT and Agency)
The State will provide a MDIT and MSP Project Manager. MDIT will be responsible for the State's infrastructure and work together with the Contractor in determining the system configuration.

The State's Project Manager will provide the following services:

- Provide State facilities, as needed
- Coordinate the State resources necessary for the project
- Facilitate coordination between various external contractors
- Facilitate communication between different State departments/divisions
- Provide acceptance and sign-off of deliverable/milestone
- Review and sign-off of timesheets and invoices
- Resolve project issues
- Escalate outstanding/high priority issues
- Utilize change control procedures
- Conduct regular and ongoing review of the project to confirm that it meets original objectives and requirements
- Document and archive all important project decisions
- Arrange, schedule and facilitate State staff attendance at all project meetings.

In addition, the following State personnel may be required at stages of the project. The Contractor's Project Manager will make every effort to provide the State with advance notice of when those services may be required.

- Systems Analyst
- Application Administrator
- User Implementation Coordinator
- Network Administrator
- Database administrator

The MDIT is responsible for the administration of the services within the contract. MSP shall assign a Project Manager as a contact for all issues pertaining to the execution of services under the contract. As of the effective date for contract commencement the

MSP Project Manager shall be:

F/Lt. Dale Peet
MSP MIOC IT Project Manager
Michigan Department of State Police
714 S. Harrison Road
East Lansing, MI 48823
Phone: 517-335-4296
E-mail: Peetd@michigan.gov

As of the effective date for contract commencement the MDIT Project Manager shall be:

Deb McClung
MDIT Agency Services
Michigan Department of State Police
714 S. Harrison Road
East Lansing, MI 48823
Phone: 517-336-6182
E-mail: McClungD@michigan.gov

As of the effective date for contract commencement the MDIT Contract Administrator shall be:

Barbara J. Suska
Contract Administrator
Michigan Department of Information Technology
Enterprise Portfolio Management Office – Contracts and Standards
Constitution Hall 1st Floor North Tower
525 W. Allegan Street
Lansing, MI 48913
Phone: 517-335-4067
E-mail: SuskaB2@michigan.gov

The Department of Management & Budget (DMB), Purchasing Operations, serves as the State's Purchasing Operations Buyer. As of the effective date for contract commencement the DMB Purchasing Operations Buyer shall be:

Steve Motz
Purchasing Operations Buyer
Michigan Department of Management & Budget
Purchasing Operations
Mason Bldg, 2nd Floor
530 W. Allegan Street
Lansing, MI 48913
Phone: 517-241-3215
E-mail: Motzs@Michigan.gov

1.203 OTHER ROLES AND RESPONSIBILITIES - RESERVED

1.3 Project Plan

1.301 PROJECT PLAN MANAGEMENT

Preliminary Project Plan
Contractor has provided a Preliminary Project Plan included in this Contract as **Attachment D**.

Final Project Plan

Within thirty (30) working days of the award of the Contract, the Contractor shall work with MSP and MDIT Agency Services to develop an agreed upon project plan of tasks and schedules containing the following at a minimum

a. At a minimum, the final project plan will include the milestones and phases as identified in Article 1, Section 1.104, (XI) (5d)
b. The Contractor's project organizational structures
c. The Contractor's staffing table with names and title of personnel assigned to the project. This must be in agreement with staffing of accepted proposal. Substitutions due to change of employment status and other unforeseen circumstances may only be made with prior approval of the State.
d. The project breakdown showing sub-projects, activities and tasks, and resources required and allocated to each.
e. The time-phased plan, showing each event, task, and decision point in the work plan, such as:
   i. Customization requirements
   ii. Integration needed with other State systems
   iii. Establishment of goals and objectives for implementation
   iv. Delivery
   v. Training
   vi. Identifying designated trainers and acceptance testers
   vii. Any issues
   viii. Specification of configuration and communication paths
   ix. Definition of any modifications required
   x. Development of reports
   xi. Develop Training plan
   xii. Testing
   xiii. User and technical training sessions
   xiv. Implementation
   xv. Support
f. The Contractor agrees that the approved project plan shall become incorporated as part of the Contract and Scope of Services.
   i. The project plan will serve as the State's measurement tool, outlining all tasks, their delivery dates, together with testing periods and implementation dates.
      1. Each of the agreed upon tasks will become a Deliverable subject to the liquidated damages; specifically identified in **Article 2, Section 2.073**.

A. Orientation Meeting

1. Upon five (5) business days from execution of the Contract, the Contractor will be required to attend an orientation meeting to discuss the content and procedures of the Contract.
2. The meeting will be held in Lansing, Michigan, at a date and time mutually acceptable to the State and the Contractor.
3. The State shall bear no cost for the time and travel of the Contractor for attendance at the meeting.

B. Performance Review Meetings

1. The State will require the Contractor to attend monthly meetings, at a minimum, to review the Contractor's performance under the Contract.
2. The meetings will be held in Lansing, Michigan, or by teleconference, as mutually agreed by the State and the Contractor.
3. The State shall bear no cost for the time and travel of the Contractor for attendance at the meeting.

C. Project Control

1. The Contractor will carry out this project under the direction and control of the MSP MIOC IT Project Manager, MDIT Technical Lead, and MSP Project Office.
2. The Contractor will manage the project in accordance with State Unified Information Technology Environment (SUITE) methodology that includes standards for project management, systems engineering, and associated forms and templates, which is available at http://www.michigan.gov/suite.

a. Contractor will use an automated tool for planning, monitoring, and tracking progress and the level of effort of any Contractor personnel spent performing Services under the Contract.
b. Contractor shall use automated project management tools, as reasonably necessary, in order to perform the cited services, which shall include, through the end of the Contract, the capability to produce:
   i. Staffing tables with names of personnel assigned to Contract tasks.
   ii. Project plan showing tasks, subtasks, deliverables, and the resources required and allocated to each (including detailed plans for all services to be performed within the next sixty (60) calendar days, updated semi-monthly).
   iii. Updates must include actual time spent on each task and a revised estimate to complete.
   iv. Graphs showing critical events, dependencies and decision points during the course of the Contract.
c. Contractor must use Microsoft Project.

The contractor and subcontractor will focus on implementing the MIOC systems according to standard project management guidelines by using a project schedule to deliver the specific project requirements. The contractor has adapted its SureStart methodology to the State's Project Management Methodology, SUITE, and will leverage the existing templates and processes. The contractor will leverage the subcontractor (EDS') knowledge of State business processes, experience with the State's PMM and System Development Life Cycle (SDLC) processes, and adherence to the PMI's PMBOK methodologies to provide successful delivery of MSP's MIOC MCIS system.

The contractor and subcontractor will participate in an orientation meeting (Contractor Preparation Meeting) within five (5) business days from the execution of the contract to discuss the content and procedures of this contract. The contractor and subcontractor will also participate in monthly meetings to review performance of this contract. The contractor and subcontractor will put in place standard tools and processes related to the State of Michigan PMM to support the successful completion of work and deliverables for this contract. The contractor will create a comprehensive project schedule for the project – including the options CIDB and Tip Tool. The contractor will solicit input from the MSP and MDIT stakeholders to support the creation of the project schedule and confirm that the project schedule is complete and accurate. The contractor and subcontractor plan to develop and maintain the project schedule in Microsoft Project with clearly identified project milestones – as illustrated in the Preliminary Project Plan. The contractor and subcontractor team members are all experienced in Microsoft Project, the automated tool we will use for planning, monitoring, and tracking project progress and the level of effort of personnel performing work on the project. As a project management tool, Microsoft Project has the capability to produce:

- Project schedules that will include staffing tables with the team member names assigned to each task in the project schedule
- Project schedules showing the tasks, subtasks, deliverables, and assignments of key people. The contractor and subcontractor will monitor and update the Microsoft Project schedule as required. Updates to the project schedule will report actual effort spent on each task as well as the revised estimate to complete.
- Graphs showing critical events, dependencies, and decisions points for the project. These Microsoft Project formats will be in compliance with the State's standard as described in the SOW.

The contractor and subcontractor will base the project schedule primarily on the tasks, associated deliverables, and schedule constraints provided in the contract. The contractor and subcontractor will construct the project schedule by working with the State to estimate the work for each activity, task, and deliverable. Before executing the plan, The contractor and subcontractor will confirm that MSP and MDIT approve the project schedule. The project schedule will include, but is not limited to:

- Identification of each step of the work process – The schedule provides the period of time required for each task and subtask, distinguishes deliverables, and is communicated in calendar days.
- Milestones – The project schedule clearly illustrates significant milestones. The schedule establishes dependencies and linkages to these milestones and identifies review and sign-off points.

- Resource allocation – The project schedule identifies the support needed to accomplish the work in the project schedule as well as provides identification of and required timing of the MSP and MDIT personnel, tasks, and dependencies.

Project success is measured by delivering the projects on time, within budget and with the agreed-to functionality. Key components to repeated success are having processes in place for early identification and management of issues, risks, and changes. The contractor and subcontractor will use proven methodologies and processes to expedite management decisions and eliminate the roadblocks that issues, risks, and changes precipitate. The contractor and subcontractor will work with the MSP and MDIT to provide the best alternatives and resolutions to minimize overall impact to the project.

1.302 REPORTS

Reporting formats must be submitted to the State's Project Manager for approval **within ten (10) business days** after the effective date of the contract. Once both parties have agreed to the format of the report, it shall become the standard to follow for the duration of the contract.

Minimum reports to be furnished by the Contractor. Contractor may include additional reports or propose options/grouping of reports as listed below.

- Monthly Project status (due 5th of each month)
- Updated project plan
- Summary of activity during the report period
- Accomplishments during the report period
- Deliverable status
- Schedule status
- Action Item status
- Issues
- Change Control
- Repair status
- Maintenance Activity

Transparency of project status is vital to the success of projects and gives everyone affiliated with the project a clear view of where the project stands. The contractor and subcontractor will submit to the MSP within ten (10) business days after the effective date of the contract a comprehensive list of project reporting formats that will provide the MSP and MDIT management staff the data necessary to make critical business decisions. These will include developing required reports and establishing meetings that will become the standard for the duration of this contract.

1.4 Project Management

1.401 ISSUE MANAGEMENT

An issue is an identified event that if not addressed may affect schedule, scope, quality, or budget.

The Contractor shall maintain an issue log for issues relating to the provision of services under this Contract. The issue management log must be communicated to the State's MSP MIOC IT Project Manager on a regular basis. The issue log must be updated and must contain the following minimum elements:

- Description of issue
- Issue identification date
- Responsibility for resolving issue.
- Priority for issue resolution (to be mutually agreed upon by the State and the Contractor)
- Resources assigned responsibility for resolution
- Resolution date
- Resolution description

Issues shall be escalated for resolution from level 1 through level 3, as defined below:

Level 1 – Business or Technology Leads
Level 2 – Project Managers
Level 3 – Steering Committee

Problems are expected occurrences during the course of any project. An "issue" is any problem that has potential to affect progress or project outcome and can be any point of controversy, debate, or concern that could adversely affect success. Issue management captures, surfaces, escalates, and resolves these unplanned events to eliminate or minimize impact on the attainment of project milestones.

Issues can be identified at any level of the organization. Issues should be resolved at the lowest organizational level possible. An issue that cannot be resolved at any particular level of the organization must be escalated by the project manager to make sure the issue is brought to the attention of appropriate parties and resolved.

Project managers often raise issues as problems associated with delivery of a specific work package or function. The project manager will capture issues in a tool, evaluate them, and assign them for resolution.

1.402 RISK MANAGEMENT

A risk is an unknown circumstance or event that, if it occurs, may have a positive or negative impact on the project.

The Contractor is responsible for establishing a risk management plan and process, including the identification and recording of risk items, prioritization of risks, definition of mitigation strategies, monitoring of risk items, and periodic risk assessment reviews with the State.

A risk management plan format will be submitted to the State for approval **within twenty (20) business days** after the effective date of the contract. The risk management plan will be developed during the initial planning phase of the project, and be in accordance with the State's PMM methodology. Once both parties have agreed to the format of the plan, it shall become the standard to follow for the duration of the contract. The plan must be updated bi-weekly, or as agreed upon.

The Contractor shall provide the tool to track risks. The Contractor will work with the State and allow input into the prioritization of risks.

The Contractor is responsible for identification of risks for each phase of the project. Mitigating and/or eliminating assigned risks will be the responsibility of the Contractor. The State will assume the same responsibility for risks assigned to them.

The success of the project depends on diligent management of threats to the delivery of services to users, clients, and project support staff. The contractor and subcontractor apply a proactive risk management approach that identifies project risks and the actions to mitigate or eliminate those risks. The initial Risk Management Plan will be submitted within twenty (20) days of contract initiation.

The contractor and subcontractor risk management success is based on the following elements:

- A success-oriented approach to risk detection and solution strategies
- Expedited communication to encourage personnel at all levels to interact
- No-blame culture that brings problems and concerns into the open, allowing the team to respond, put plans in place, and reduce risks across the enterprise.

Risk Planning – Risk planning involves assessing project risk factors by identifying and documenting them. The contractor and subcontractor , and other stakeholders, will identify initial risks and assumptions. We will identify key players and invite them to the risk review session, because it is important to elicit concerns and assumptions that might jeopardize project success. We will capture these issues as risks and document them for further analysis, forming the initial risk management plan. As the project progresses, The contractor and

subcontractor will identify and document additional risks in a process that continues throughout the project life cycle.

Risk Assessment – The contractor and subcontractor , and the SMEs, will assess the documented risks for ranking from high to low. The ranking is the result of multiplying the impact rating times the probability rating. The risk value ranks individual risks in priority from 1 to 99 with 1 being the lowest rating. The higher the risk value, the higher the probability for managing the risk. This evaluation takes into consideration project attributes including size, effort, cost, structure, and technology. The project manager will enter the risks into the Risk Management Plan for tracking and status updates

The project manager will determine whether the risk should be accepted, mitigated, or avoided, and develop a risk management plan, as appropriate. The project manager will assess alternative mitigation strategies.

Risk Analysis — Although all risks are part of the risk management plan, those risks that have a high- or medium-level of risk exposure require documented project risk action and contingency plans. The risk action plan describes the actions The contractor and subcontractor will take to eliminate or minimize the impact. The contingency plan outlines the plan of action we will take if we cannot prevent or minimize the risk.

Low-ranked risks receive regular review with the owners to maintain the low rating. The contractor and subcontractor will refer significant risks, those that have the most immediate and ultimate impact on the project, to the project decision-makers to determine the appropriate action.

Risk Handling – Handling risk involves creating the actual risk mitigation plan for each of the identified risks. The process of risk handling requires the following steps:

- Identify actions that the contractor and subcontractor can take to avoid or mitigate each risk
- Determine which actions should be incorporated into the project plan
- Assign an owner and target dates for reduction in risk likelihood or impact
- Monitor risk status and mitigation actions identified on the risk mitigation plan by using the risk identification and project risk mitigation and contingency documents.

Having risk action plans in place provides a measure of confidence that we can manage the risk when it occurs. Once a risk has occurred, the project manager must determine the corrective action that needs to be taken to minimize the impact to the project.

Risk Reporting – The contractor and subcontractor will develop our risk reporting approach in accordance with the State's PMM methodology and the PMBOK to provide visibility into known project risks and to provide status on the mitigation progress. As risks are identified, assessed, and accepted, they become part of the Risk Identification Log that documents each risk, priority, impact, and exposure.

When risks with an exposure level of medium or high are identified, the project manager will enter the risk into the project risk mitigation and contingency plan. This plan documents the risk identification number, mitigation action, measurement, planning, tracking, and contingency actions. Once a risk no longer has the potential to impact project performance or the key measures (probability, impact, time, or proximity), we will document risk closure. The owner will communicate the resolution to the project team and affected groups, and the project manager will close the risk.

At the end of each project, the contractor and subcontractor will analyze the identified risks to assess their final impacts and to capture lessons learned for application to future projects.

The contractor and subcontractor have the reputation of delivering projects on time and within budget. One of the key elements in this success is the recognition of risk and the implementation of contingency plans to minimize them.

1.403 CHANGE MANAGEMENT

Change management is defined as the process to communicate, assess, monitor, and control all changes to system resources and processes. The State will employ a change management methodology in its administration of this Contract.

If a proposed contract change is approved by the Agency, the Contract Administrator will submit a request for change to the Department of Management and Budget, Purchasing Operations Buyer, who will make recommendations to the Director of Purchasing Operations regarding ultimate approval/disapproval of the change request. If the DMB Purchasing Operations Director agrees with the proposed modification, and all required approvals are obtained (including State Administrative Board), the Purchasing Operations Buyer will issue an addendum to the Contract, via a Contract Change Notice. **Contractors who provide products or services prior to the issuance of a Contract Change Notice by the DMB Office of Purchasing Operations, risk non-payment for the out-of-scope/pricing products and/or services.**

The Contractor must employ change management procedures to handle such things as "out-of-scope" requests or changing business needs of the State while the project is underway.

The Contractor will employ the change control methodologies to track changes in the processing environment, and to ensure those changes will not adversely affect performance or availability of the solution.

During the Contract period, if changes occur in federal or state systems standards, which require modifications to hardware, software or components, such changes will be accepted through procedures outlined in Change Management Requests.

Scope control, including a structured change management process, is essential to successful implementation of software projects. Inevitably, new requirements surface as projects move toward completion, and managing changes to the baseline project schedule is accomplished by incorporating only approved changes, changes that are documented and approved through the change control process. This is an iterative process, triggered by formal change requests. The contractor and subcontractor include the following work elements in this process:

- Identify project changes and accept change requests
- Evaluate impact of change requests
- Review change requests
- Revise project plans and work products
- Communicate status of changes
- Review change control process.

The contractor and subcontractor will use the State's tools as provided in the SUITE methodology to implement the project's change management process to capture and classify changes and to evaluate the impact of the change. The change management process and approvals are based on the size of the change in relationship to the total project.

1.5 Acceptance

1.501 CRITERIA

The following criteria will be used by the State to determine Acceptance of the services and/or deliverables provided in this contract.

The system shall be deemed accepted by the State and final payment will be paid by the State when the standard of performance is met as defined in this section. Acceptance testing identified in this section must be sufficiently detailed to demonstrate the system's compliance with key criteria of the Contract. At a minimum, the acceptance testing will confirm the following:

a. Functional – the capabilities of the system with respect to the functions and features described in the Contract.
b. Performance – the ability of the application to perform the workload throughput requirements. All problems should be completed satisfactorily within the allotted time frame.

The State is responsible for final acceptance of the software using an integrated Performance and Reliability Evaluation (PARE) as described below:

a. Determination of System Readiness Application
   i. Prior to the PARE, a committee of four (4) persons will be identified to evaluate the performance on a daily basis. The committee will consist of one Contractor representative, and three (3) state representatives.
   ii. The PARE will begin when the Contractor certifies in writing that the solution is ready for use by the State.
   iii. A functional benchmark demonstration will be run for the PARE Committee to confirm that the solution is operating and integrating per contract. This run must be completed to the satisfaction of the PARE Committee.
b. Standard of Performance
   i. The performance period (consisting of ninety (90) consecutive calendar days) shall commence when the system is fully operational and system is ready for full production use. The date and time of the start of the PARE will be agreed upon by the Contractor and the State.
      1. During the successful performance period, all rerun time resulting from State equipment failure shall be excluded from the performance period hours. Equipment failure downtime shall be measured by those intervals during the performance period between the time that the Contractor is notified of equipment failure and the time that the equipment is returned to the State in operating condition. Any solution failure within the ninety (90) consecutive calendar day PARE, will cause a re-start of the PARE.
      2. During the successful performance period, a minimum of two thousand one hundred sixty (2,160) hours of operational use time on each component will be required as a basis for computation of the average effectiveness level.
         a. The average effectiveness level is a percentage figure determined by dividing the total operational use time by the total operational use time plus associated downtime.
         b. If each component operates at an average level of effectiveness of 99.9 percent or more for a period of ninety (90) consecutive calendar days from the commencement date of the performance period, it shall be deemed to have met the State's standard of performance.
         c. The State shall notify the Contractor in writing of the successful completion of the performance period.
         d. The software shall operate in substantial conformance with the Contractor's published specifications applicable to such equipment on the date of this Agreement.
         e. If successful completion of the PARE is not attained within one hundred and eighty (180) consecutive calendar days from the original start date of the PARE, the State shall have the option of terminating the Contract, or continuing the performance tests. The State's option to terminate the contract shall remain in effect until such time as a successful completion of the performance period is attained. The Contractor shall be liable for all outbound preparation and shipping costs for contracted items returned under this clause.
         f. The PARE will be complete when the equipment has met the required effectiveness level of the prescribed time period.

<u>Document Deliverables</u>

1. Documents are dated and in electronic format, compatible with State of Michigan software standards.
2. Requirements documents are reviewed and updated throughout the development process to assure requirements are delivered in the final product.
3. Draft documents are not accepted as final deliverables.

4. The documents will be reviewed and accepted in accordance with the requirements of the Contract and Appendices.
5. MSP and MDIT will review documents within a mutually agreed upon timeframe.
    a. Approvals will be written and signed by both the MSP IT Project Manager and MDIT Project Manager.
    b. Issues will be documented and submitted to the Contractor.
    c. After issues are resolved or waived, the Contractor will resubmit documents for approval within 30 days of receipt.

Software Deliverables - Software includes, but is not limited to, software product, development tools, support tools, data migration software, integration software, and installation software. Software Deliverables does not include any Programs (also known as Software) listed on Exhibit C.

1. Beta software is not accepted as final deliverable.
2. The software will be reviewed and accepted in accordance with the requirements of the contract.
3. MDIT will review software within a mutually agreed upon timeframe for acceptance of functionality, usability, installation, performance, security, standards compliance, backup/recovery, and operation.
    a. Approvals will be written and signed by MDIT Project Manager.
    b. Unacceptable issues will be documented and submitted to the Contractor.
    c. After issues are resolved or waived, the Contractor will resubmit software for approval within 30 days of receipt.
4. Software is installed and configured, with assistance from MDIT, in an appropriate environment (e.g. development, conversion, QA testing, UAT testing, production, and training).
5. Contingency plans; de- installation procedures, and software are provided by the Contractor and approved by MDIT Project Manager.
6. Final acceptance of the software will depend on the successful completion of User Acceptance Testing (UAT).
7. Testing will demonstrate the system's compliance with the requirements of the Contract. At a minimum, the testing will confirm the following:
    a. Functional - the capabilities of the system with respect to the functions and features described in the Contract.
    b. Performance - the ability of the system to perform the workload throughput requirements. All problems should be completed satisfactorily within the allotted time frame.
8. MDIT will review test software, data, and results within a mutually agreed upon timeframe.
    a. Approvals will be written and signed by MDIT Project Manager.
    b. Unacceptable issues will be documented and submitted to the Contractor.
    c. After issues are resolved or waived, the Contractor will resubmit test software, data and results for approval within 30 days of receipt.
9. MDIT will review software license agreements within a mutually agreed upon timeframe.
    a. Approvals will be written and signed by MDIT Project Manager.
    b. Unacceptable issues will be documented and submitted to the Contractor.
    c. After issues are resolved or waived, the Contractor will resubmit the license agreement for approval and final signature by the authorized State signatory within 30 days of receipt
10. Software source code, where applicable, is reviewed by MDIT within a mutually agreed upon timeframe for readability, structure, and configuration management.
    a. Approvals will be written and signed by MDIT Project Manager.
    b. Unacceptable issues will be documented and submitted to the Contractor.
    c. After issues are resolved or waived, the Contractor will resubmit source code for approval.

1.502 FINAL ACCEPTANCE

Final acceptance is expressly conditioned upon completion of ALL Phase 4, Implementation deliverables.

1.6 Compensation and Payment

1.601 COMPENSATION AND PAYMENT

Compensation and payment shall be conducted in accordance with Article 1, Section 1.601. Cost Tables (**Article 1, Attachment A**) are attached, and identify all costs related, directly or indirectly, for services and deliverables including, but not limited to, costs, fees, prices, rates, bonuses, discounts, rebates, or the identification of free services, labor or materials.

Contractor agrees all the prices, terms, warranties, and benefits provided in this Contract are comparable to or better than the terms presently being offered by Contractor to any other governmental entity purchasing the same quantity under similar terms. If, during the term of this Contract, Contractor shall enter into contracts with any other governmental entity providing greater benefits or more favorable terms than those provided by this Contract, Contractor shall be obligated to provide the same to the State for subsequent purchases.

The Contractor may be asked to provide up to **800 hours** for major customizations, enhancements and modifications to the system. Hourly rates for these services are provided in **Article 1, Attachment A, Table 3**. These hours are proposed as a firm, fixed price and must be supported by a statement of work mutually agreed upon by the State and Contractor. Payment will be made based on acceptance by the state based on the criteria set forth in the statement of work. Deliverables will be either physical deliverables (documents, source code, etc) or service deliverables. Per this contract, the State will not pay for any travel expenses, including airfare, hotel, mileage, meals, parking, etc.

Statements of Work and Issuance Purchase Orders
Unless otherwise agreed by the parties, each Statement of Work will include:

- Background
- Project Objective
- Scope of Work
- Deliverables
- Acceptance Criteria
- Project Control and Reports
- Specific Agency Standards
- Payment Schedule
- Project Contacts
- Agency Responsibilities
- Location of Where the Work is to be Performed
- Expected Contractor Work Hours and Conditions

The parties agree that the Services/Deliverables to be rendered by Contractor pursuant to this contract (and any future amendments of it) will be defined and described in detail in Statements of Work or Purchase Orders (PO) executed under this contract. Contractor shall not be obliged or authorized to commence any work to implement a Statement of Work until authorized via a PO issued against this contract. Contractor shall perform in accordance with this contract, including Statements of Work/Purchase orders executed under it.

Invoicing
Contractor will submit properly itemized invoices to the “Bill to Address” on the purchase order:

Invoices shall provide and itemize, as applicable:

- Contract number
- Purchase Order number
- Contractor name, address, phone number, and Federal Tax Identification Number
- Description of any commodities/equipment, including quantity ordered
- Date(s) of delivery and/or date(s) of installation and set up
- Price for each item, or Contractor’s list Price for each item and applicable discounts
- Maintenance charges

- Net invoice Price for each item
- Shipping costs
- Other applicable charges
- Total invoice Price
- Payment terms including any available prompt payment discounts.

Milestone payments shall be linked to the completion of each of the four (4) project phases as identified in Article 1 Section 1.104, XI (5) (d), and Article 1, Attachment A.

The State shall pay maintenance and support charges on an annual basis. Payment of maintenance service/support of less than one (1) month's duration shall be prorated at 1/30th of the basic monthly maintenance charges for each calendar day.

Incorrect or incomplete invoices will be returned to Contractor for correction and reissue.

1.602 TAXES
Sales Tax:
For purchases made directly by the State, the State is exempt from State and Local Sales Tax and such taxes must not be included in the Contractors pricing. Exemption Certificates for State Sales Tax will be furnished upon request.

Federal Excise Tax:
The State may be exempt from Federal Excise Tax, or the taxes may be reimbursable, if articles purchased under any resulting contract are used for the State's exclusive use. Certificates showing exclusive use for the purposes of substantiating a tax-free or tax reimbursable sale will be sent upon request. If a sale is tax exempt or tax reimbursable under the Internal Revenue Code, prices must not include the Federal Excise Tax.

1.7 Additional Terms and Conditions Specific to this SOW

1.701 ADDITIONAL TERMS AND CONDITIONS SPECIFIC TO THIS SOW

A. Directives –

a. The projects described in this Statement of Work are being funded by a grant from the Homeland Security Grant Program (HSGP). Contractor must comply with all requirements of the federal grant program, as referenced at http://www.ojp.usdoj.gov/odp/grants_hsgp2007.htm.
b. Office of Management and Budget Circular A-102, "Grants and Cooperative Agreements with State and Local Governments." http://www.whitehouse.gov/omb/circulars/a102/a102.html

2. The Contractor shall agree that it will not volunteer, offer or sell its services to any litigant against the State with respect to any services that it has agreed to perform for the State, provided that this provision shall not apply either when the Contractor is issued a valid subpoena to testify in a judicial or administrative proceeding or when the enforcement of this provision would cause the Contractor to be in violation of any Michigan or Federal law.

B. Reservation of Selection of IT Product Standards:
MDIT reserves the right to consider all products proposed by the Contractor and accepted by the State as part of the selected Contractor 's proposal as a potential State IT Product Standard and may at its discretion ratify said products as IT Standards for the State of Michigan.

Article 1, Attachment A
Cost Tables

Travel expenses will NOT be reimbursed by the State under this contract. All pricing and hourly rates provided shall be fully loaded.

Summary Cost Table: Total 5 Years Michigan Criminal Intelligence System Solution

Breakdown Provided In	Cost Categories	Cost ($)	Comments
Table 1	**Total Solution (One-time) Cost for *Phases 1,2,3,4***	$2,591,011	This includes application software to be licensed for the MCIS, configuration, interfaces, training and document, STATIS data conversion, and implementation of MCIS
Table 2	**Five Years Recurring Cost: Updates and Maintenance (8x5 NBD) *Phase 5***	$585,000	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.
Table 2a	**TIER III Technical and User Help Desk Support 8am – 6pm EST Monday - Friday**	$0	Included in Five Years Recurring Cost: updates and maintenance
Table 2b	**Technical Help Desk Support: Per incident or hourly basis**	$30,000	$150 / hour not to exceed 200 hours over the 5 year contract period for emergency, onsite technical/ customer support not normally covered through Maintenance and Support.
Table 3	**Reserved Bank of Hours Estimated Cost**	$146,500	This is a bank of 800 hours.
Total 5 Years Solution Cost		**$3,352,511.00**	

TABLE 1
Total Michigan Criminal Intelligence System Solution (One-time) Cost

Breakdown Provided In	Cost Categories	Cost ($)
Phase 1 Initiation	Total Solution Cost for **Phase 1**	$ 459,101.10
Phase 2 Design	Total Solution Cost for **Phase 2**	$ 647,752.75
Phase 3 Development	Total Solution Cost for **Phase 3**	$ 677,303.30
Phase 4 Implementation	Total Solution Cost for **Phase 4**	$ 806,853.85
*** Total Solution (One-time) Cost**	Total Solution Cost for **Phase 1,2,3,4**	$ 2,591,011

* The Total Solution (One-time) Cost identified in Table 1 includes all-inclusive pricing for all milestones and deliverables identified within the Phases 1-4 of Article 1, Section 1.104 Work and Deliverables (XI) (5) (d), and the agreed system requirements as documented in Attachment, G and approved in Phase 2, Design..

TABLE 2

Five Years Recurring Cost: Updates and Maintenance

Cost Categories	Software Cost ($)	Hardware Cost ($)	Total Cost ($)	Comments
Application software update cost and Maintenance **(Includes licensing and updates each year)**				The software update and maintenance cost – including Help Desk Support during normal working hours 8AM – 6PM EST – include annual support for the following products:
1. * First Year	No Charge	Hardware Support Included	No Charge	
2. Second Year	No Charge	Hardware Support Included	No Charge	
3. Third Year	$195,000	Hardware Support Included	$195,000	
4. Fourth Year	$195,000	Hardware Support Included	$195,000	
5. Fifth Year	$195,000	Hardware Support Included	$195,000	
Total Five Years Recurring Cost: Updates, Maintenance and Support	**$585,000**	**$0**	**$585,000**	

* Year 1 shall commence on the first day following Performance and Reliability Evaluation (PARE), acceptance, and formal written acceptance by the State for a particular phase or software component.

Table 2a: LEVEL III Technical and User Help Desk Support

Level III Technical and User help Desk Support shall consist of questions and technical assistance as requested by MIOC or MDIT Agency Services Staff only. Users of the system will be provided level I and II support by MIOC and MDIT Staff.

No	Cost Category	8 x 5	Comments
	First Year		LEVEL III Technical and User Help Desk Support costs are included in the Five Years Recurring Cost: Updates and Maintenance (Table 2) above. The Contractor will provide Level III technical and user help desk support 8am to 6pm, Monday – Friday. Eastern Standard Time.
	Second Year		
	Third Year		
	Fourth Year		
	Fifth Year		
	Total Technical and User Help Desk Support Cost	**$ 0**	

Table 2b: Emergency Technical Support: hourly basis

Cost Category	Hourly Rate (on site) ($)	Funded Hours built into the contract for Emergency Technical Support	Total Cost ($)	Comments
Emergency Technical Support	$150/hr.	200 hours Available through the 5-year contract period	$30,000	During the contract period in the event of a major event or disaster, the State may require emergency onsite technical/customer support not covered through Maintenance and Support. In the event the State is not able to resolve a issue and would require the need for the Contractor's resource(s) to come on site, the State will utilize the firm, fixed hourly rate identified in this table that includes travel and expenses as the State does not reimburse for travel or expenses. The MDIT Client Services Director will be the only individual authorized to approve the use of emergency technical support.

TABLE 3
Reserved Bank of Hours

Staffing Category	Firm Fixed Hourly Rate	Est. Hrs (5 year total)	Extended Price
Project Manager	$195	200	$39,000
Business Analyst	$185	200	$37,000
Senior Software Developer	$180	200	$36,000
Technical Lead	$195	100	$19,500
Programmer	$150	100	$15,000
Reserved Bank of Hours Estimated Cost	N/A	800	$146,500

1. Hourly rates provided are firm, fixed rates for the duration of the contract. Travel and other expenses will not be reimbursed. "Estimated Hours" and "Extended Price" are non-binding The State will utilize the fully loaded hourly rates detailed above for each staff that will be used as fixed rates for responses to separate statements of work.

2. The State intends to establish funding for up to **800 hours** over the five-year life of the application for development. Actual funding for enhancements will occur on a yearly basis, and there is no guarantee as to the level of funding, if any, available to the project.

3. The State will utilize the fully loaded hourly rates provided in Table 3 as not to exceed rates for future responses to statements of work surrounding the optional interfaces described in Article 1, Section 1.104 (XI) (7) (a)(i-iii).

Supplemental Cost Tables

Tables 4,5,6,7,8,10, provide a detailed breakdown of key milestones/deliverables identified in Table 1. These costs are included in the Total Solution (One-time) Cost identified in Table 1.

Breakdown Provided In	Cost Categories	Cost ($)	Comments
Table 4	**Software Tools Enterprise License Cost** Including COTS package. Table 4: Summary	$1,491,011	This includes the Memex Patriarch (web) enterprise license for 450 concurrencies, and other ancillary Memex software for the MCIS.
Table 5	**Customization/Configuration of COTS Package Cost** Cost of modification of the COTS package to meet business requirements. Table 5: Summary	$0	The Memex Solution is a COTS application which does not require customization.
Table 6	**Interfaces Cost** Table 6: Summary	$96,382	Includes interfaces to 1. MiCJIN Portal 2 RISS-Intel Database 3. NDPIX
Table 7	**Training and Documentation Cost** Table 7: Summary	$131,301	
Table 8	**Data Conversion and Migration** Table 8: Summary	$39,111	This is a one-time conversion/migration of STATIS, the MSP existing Intelligence Data.
Table 9	**Server Hardware and Software Cost** Table 9: Summary	$0	The State will purchase the recommended hardware through another State contract.
Table 10	**Solution Implementation** Table 10: Summary	$833,206	This includes the implementation activities not identified herein, including the workshops, validation/verification, fit analysis, testing, project management, deployment, etc.
Total Solution (One-Time) Cost	**Total cost for Tables 4,5,6,7,8,10**	$2,591,011	

TABLE 4

Software Tools Licenses Cost

Software Tools licenses costs (One-time cost to purchase the following tools)	**Software Tool Name and version**	**License Type** (ie: enterprise, server or per user)	**Quantity** (number of licenses)	**Per Unit Price**	**Cost ($)**	**Comments**
COTS Package	Memex Patriarch	*Application Enterprise	450 Concurrent	N/A	$1,491,011	Software is a license bundle Additional Memex i2 Pipes are available for $1,872 per user
	Web Services Interface	Server	1	N/A	N/A	
	Memex i2-Pipe	User license	25	N/A	N/A	
	Memex RISSConnect	Server	1	N/A	N/A	
Database Software	N/A	N/A	N/A	N/A	N/A	
Report writers	N/A	N/A	N/A	N/A	N/A	
Report writers	N/A	N/A	N/A	N/A	N/A	
Requirement analysis tools	N/A	N/A	N/A	N/A	N/A	
Design tools	N/A	N/A	N/A	N/A	N/A	
Drawing tools	N/A	N/A	N/A	N/A	N/A	
Development environment tools	N/A	N/A	N/A	N/A	N/A	
Testing tools: (such as defect testing, load/stress testing, configuration management (List and provide cost separately for each item) (a)……. (b)……etc.	N/A	N/A	N/A	N/A	N/A	
Any other software (List): (a)……. (b)……etc.						
Total Cost of Software Tools Licenses					$1,491,011	

Contractor has provided in the table above, a list of all software required to implement the MCIS solution. No software is to be assumed as provided or available at the State. The State reserves the right to purchase any software off another contract to fulfill solution.

*** The Application/Enterprise License for Memex Patriarch is defined as follows**:

1. The State may have an unlimited number of Police Officers – whether from the Michigan State Police or municipal Police Departments – within the State of Michigan as licensed, registered users of Memex Patriarch on a single server to be housed at the Michigan State Police or a single site designated by the Michigan State Police.
2. The State may have a separate copy of Memex Patriarch on a Training Server, Test Server and/or Backup Server
3. There is a limit of 450 concurrent users of Memex Patriarch
4. The Application/Enterprise License does not permit Memex Patriarch to be installed on any servers other than those identified above.

TABLE 5

Customization/Configuration of COTS Package Cost

Customization or Application Development	Total # of resources	Total # of hours	Total cost ($)
1. Project manager			The Memex Solution is a COTS application which does not require customization.
2. Business analysts			
3. System analysts			
4. Programmer/developers			
5. System administrators			
6. Database administrators			
7. Q/A Manager			
8. Security specialist			
9. Testers			
10. Technical writers			
11. CM specialists			
12. System Architects			
13. Network engineer/administrator			
14. Software Architects			
15. CM specialists			
16. Project assistants			
17. Web developers			
18. Application trainers			
Others: (List) below):			
19. …….			
20. …….			
21. …….			
22. …….			
Total Cost of Customization / Application Development			$

TABLE 6

Total Interfaces Cost

Interfaces	Cost ($)	Comments
1. **MiCJIN Portal**	$45,397	Includes workshops, design, development, testing, and correction, and expenses across project.
2 **RISS-Intel Database**	$11,175	Includes workshops, design, development, testing, and correction, and expenses across project. The license fee associated with RISSConnect is provided in Table 4.
3. **NDPIX**	$39,810	Includes workshops, design, development, testing, and correction, and expenses across project.
Total Cost of Interfaces	$96,382	

TABLE 7
Training and Documentation Cost

Training and Documentation	Cost ($)	Comments
Train the Trainer training materials	$27, 937	Includes workshops, expenses across project, and training scenario/material development.
Train the Trainer training	$68,444	Includes seven (7) 4-day regional training classes, preparation of training environment/plan, and seven (7) “refresher” training classes post implementation
System Administrator and Technical training materials	$6,984	Includes workshops, expenses across project, and training scenario/material development.
System Administrator and Technical training	$6,984	Includes one (1) 3-day administration class, and preparation of training environment/plan.
Technical documentation	$20,952	Includes workshops, expenses across project, and training scenario/material development.
Total Cost of Training & Documentation	$131,301	

TABLE 8
Data Conversion and Migration Cost

Data Conversion and Migration	Total # of resources	Total # of hours	Cost ($)	Comments
1. STATIS - The existing intelligence data	1 for 28 days	224	$39,111	Includes workshops, design, development, testing, and correction, and expenses across project.
Total Cost of Data Conversion and Migration			$39,111	

TABLE 9
Server Hardware and Software Recommendations

Contractor has identified the required server hardware and software needed to implement the solution.

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Hardware	Operating System Name and version	Server Purpose	Quantity
Dell PowerEdge R900, 4x E7430 Xeon Quad Cores, 2.13 GHz, 12M Cache1066Mhz FSB (224-0679), 16 GB RAM, 6x 300 GB SAS in RAID 10 **Includes:** Upgrade to Four Quad Core E7430 Xeon 2.13GHz, 12M Cache 1066Mhz FSB (311-9173)	SUSE Linux Enterprise Server 10, SP2	Data Servers	2
Dell Poweredge 2950 III, 2x Quad Core Xeon E5405 Processor2X6MB Cache, 2.0GHz, 1333 MHz FSB, PE2950 (223-4818), 16 GB RAM, 6x 300GB SAS in RAID 10	SUSE Linux Enterprise Server 10, SP2	Development Data Server	1
Dell PowerEdge M600, 2x Quad Core Intel Xeon Processor E5440, 2X6MB Cache, 2.83GHz 1333MHz FSB, M600 (223-4254), 32GB RAM, 1x 73GB SAS	Windows Server 2003 R2 Enterprise Edition SP2.	Web Application Servers One Primary Web App Svr is required plus 1 Secondary Svr per 100 concurrent users supported	7

Dell PowerEdge M600, 2x Quad Core Intel Xeon Processor E5440, 2X6MB Cache, 2.83GHz 1333MHz FSB, M600 (223-4254), 32GB RAM, 1x 73GB SAS	Windows 2003 Server Enterprise (32 Bit)	Development Web Application Server This server is configured to allow virtualization into three separate instances	1
Blade Server Enclosure, No Blades, M1000E, PowerEdge (223-3244)		Web Application Server	8
Oracle Database STD ED One Processor Perpetual License		Data Servers (Production & Dev)	3
Crystal Reports Server 2008 – License – 20 – CALs – OLP – Win – 60 points		Web Application Server Production	1
Crystal Reports Server 2008 – License – 10 CALs – OLP – Win – 60 points		Web Application Server Dev	1
Oracle Maintenance (aggregate total for years 3, 4 and 5)		Data Servers	3
Crystal Reports Maintenance (aggregate total for years 3, 4 and 5)		Web App Svrs	1

TABLE 10
Solution Implementation Cost

Resources Required	Total # of resources	Total # of hours	Total cost ($)	Comments
1. Integration: (Integration of COTS/Application software product with customized code and external interfaces)	2.5 across entire project (pre-post implementation support)	3500		Includes configuration, workshops, planning, design, integration, project management, deliverable production, review meetings, Excludes training, documentation, interfaces, data conversion
2. Testing: (a) Unit, (b) System, (c) Integration, (d) Performance (load and stress), (e) Parallel Testing VERIS–VVRS), (f) UAT, (g) Other (List): …….	1.5 FTEs over 89 days	1072		Includes installation, workshops, design, development, planning, and correction, and expenses across the project.
3. Deployment / Cutover	1.3 FTEs over 45 days	480		Includes workshops, design, development, planning, and expenses across the project.
Other (List):				
Total Cost Solution Implementation		5052	$833,206	

Optional Solution Cost Tables

Contractor has completed Cost Table 11 and the requirements Attachment I1 for the Confidential Database Solution and Cost Table 12 and the requirements Attachment I2 for the Tip Tool Solution.

A detailed cost breakdown will be requested if the solution is selected for implementation.

TABLE 11
Confidential Database Solution Cost Table (Optional)
See Attachment I1 for requirements

Cost Categories	Cost ($)	Comments
Software Cost	$232,040	This includes a 50 concurrent-user license.
Customization/Configuration Cost Cost of modification of the COTS and or solution development to meet business requirements.	$97,778	This is for the configuration and implementation services, estimated to take 70 days.
5 year Maintenance and Update Cost	$104,418	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.
Data Conversion Cost (CI Database Only)	$8,381	This is a 1 time activity
Training and Documentation Cost	$33,524	This will prepare and produce the training and documentation per specifications.
Hardware Cost	$0	The hardware proposed for MCIS will accommodate these additional users.
TOTAL Solution Cost	$476,141	

TABLE 12
Tip Tool Solution Cost Table (Optional)
See Attachment I2 for requirements

Cost Categories	Cost ($)	Comments
Software Cost	$349,001	This includes a 100 concurrent-user license.
Customization/Configuration Cost Cost of modification of the COTS and or solution development to meet business requirements.	$167,619	This is for configuration and implementation services.
5 year Maintenance and Update Cost	$157,051	This includes the rights to new releases and upgrades to licensed Memex software as documented in Memex's Prime Maintenance and Support Agreement (1.104.VI). This includes Tier III Help Desk Support.
Interfaces Cost If required to interface with the MCIS solution.	$0	The Tip Tool is seamlessly integrated within the Memex platform thus eliminating the need for interfaces. The public-facing website costs are contained in Customization/Configuration.
Data Conversion Cost (Tip Tool Only)	$11,175	This will load the data into a Memex entity. We assume this is a one-time activity.
Training and Documentation Cost	$20,952	This will prepare and produce the training and documentation per specifications.
Hardware Cost	$0	The hardware proposed for MCIS will accommodate these additional users.
TOTAL Solution Cost	$705,798	

Article 1, Attachment D
Preliminary Project Plan

The following is the project plan from the original Memex proposal, which will be updated as a part of a Stage 1 deliverable.

Project Plan – Project Management

Task Name	Duration	Start	Finish
Project Management	**173 days**	**Mon 4/13/09**	**Fri 12/11/09**
Risk Management	173 days	Mon 4/13/09	Fri 12/11/09
April Status Report	0 days	Tue 5/5/09	Tue 5/5/09
May Performance Review Meeting	1 day	Tue 5/5/09	Tue 5/5/09
May Status Report	0 days	Fri 6/5/09	Fri 6/5/09
June Performance Review Meeting	1 day	Fri 6/5/09	Fri 6/5/09
June Status Report	0 days	Fri 7/3/09	Fri 7/3/09
July Performance Review Meeting	1 day	Tue 7/7/09	Tue 7/7/09
July Status Report	0 days	Wed 8/5/09	Wed 8/5/09
August Performance Review Meeting	1 day	Wed 8/5/09	Wed 8/5/09
August Status Report	0 days	Fri 9/4/09	Fri 9/4/09
September Performance Review Meeting	1 day	Fri 9/4/09	Fri 9/4/09
September Status Report	0 days	Mon 10/5/09	Mon 10/5/09
October Performance Review Meeting	1 day	Tue 10/6/09	Tue 10/6/09
October Status Report	0 days	Thu 11/5/09	Thu 11/5/09
November Performance Review Meeting	1 day	Thu 11/5/09	Thu 11/5/09
November Status Report	0 days	Fri 12/11/09	Fri 12/11/09
December Performance Review Meeting	1 day	Fri 12/11/09	Fri 12/11/09
Phase 1, Initiation	**26 days**	**Mon 4/13/09**	**Mon 5/18/09**
Phase 2, Design	**63 days**	**Mon 5/4/09**	**Fri 7/31/09**
Phase 3, Development	**74 days**	**Mon 6/15/09**	**Fri 9/25/09**
Phase 4, Implementation	**60 days?**	**Mon 9/21/09**	**Fri 12/11/09**
Phase 5, Post Implementation	**1491 days?**	**Mon 4/13/09**	**Wed 12/31/14**

Project Plan – Phase 1: Project Initiation

Task Name	Duration	Start	Finish
Project Management	**173 days**	**Mon 4/13/09**	**Fri 12/11/09**
Phase 1, Initiation	**26 days**	**Mon 4/13/09**	**Mon 5/18/09**
Preparation	**26 days**	**Mon 4/13/09**	**Mon 5/18/09**
Readiness Assessment and Project Kickoff	**15 days**	**Mon 4/13/09**	**Fri 5/1/09**
Prepare for Project Kickoff Meeting/Project Team Planning	3 days	Mon 4/27/09	Wed 4/29/09
Assess Project Risks	**14 days**	**Mon 4/13/09**	**Thu 4/30/09**
Identify initial project risks	3 days	Mon 4/13/09	Wed 4/15/09
Assess risks	2 days	Thu 4/16/09	Fri 4/17/09
Identify mitigation strategy	5 days	Mon 4/20/09	Fri 4/24/09
Define communication strategy	2 days	Mon 4/27/09	Tue 4/28/09
Define roles/responsibilities	1 day	Wed 4/29/09	Wed 4/29/09
Define Issue Resolution Procedures	1 day	Thu 4/30/09	Thu 4/30/09
Assess State's readiness to proceed with project	1 day	Fri 5/1/09	Fri 5/1/09
Conduct Project Kickoff Meeting	**3.75 days**	**Mon 4/27/09**	**Thu 4/30/09**
Communicate Outcomes of initial preparation meetings	2 hrs	Mon 4/27/09	Mon 4/27/09
Communicate project purpose, vision, and objectives	2 hrs	Thu 4/30/09	Thu 4/30/09
Communicate initial Workplan	1 hr	Thu 4/30/09	Thu 4/30/09
Obtain feedback	1 hr	Thu 4/30/09	Thu 4/30/09
Identify gaps	1 hr	Thu 4/30/09	Thu 4/30/09
Review/Finalize Project Checklist	1 hr	Thu 4/30/09	Thu 4/30/09
Initiation Phase Deliverable Preparation	**3 days**	**Mon 5/4/09**	**Wed 5/6/09**
Prepare Final Project Plan	4 hrs	Mon 5/4/09	Mon 5/4/09
Prepare Final Project Management Guidelines (PMM03)	3 hrs	Mon 5/4/09	Mon 5/4/09
Prepare Status Report	2 hrs	Mon 5/4/09	Tue 5/5/09
Prepare Project Standards Document	2 hrs	Tue 5/5/09	Tue 5/5/09
Confirm Work Environment Prepared	1 hr	Tue 5/5/09	Tue 5/5/09
Prepare Risk Management Plan (PMM06)	2 hrs	Tue 5/5/09	Tue 5/5/09
Confirm Project Team Identification, Roles/Responsibilities	1 hr	Tue 5/5/09	Tue 5/5/09
Prepare Technical Standards (EAS Solution)	1 hr	Tue 5/5/09	Tue 5/5/09
Prepare Initiation Phase component of Security Standards (DIT0170)	1 hr	Wed 5/6/09	Wed 5/6/09
Prepare Technical Procedures	1 hr	Wed 5/6/09	Wed 5/6/09
Prepare Readiness Assessment	1 hr	Wed 5/6/09	Wed 5/6/09
Prepare Checklist	2 hrs	Wed 5/6/09	Wed 5/6/09
Confirm Project Kickoff occurred	1 hr	Wed 5/6/09	Wed 5/6/09
Prepare Initiation Phase Signoff Documentation (DIT0189)	2 hrs	Wed 5/6/09	Wed 5/6/09
Initiation Phase Review	**7 days**	**Thu 5/7/09**	**Fri 5/15/09**
Submit Initiation Deliverable	0 days	Thu 5/7/09	Thu 5/7/09
Conduct Initiation Phase Review Meeting	1 day	Thu 5/14/09	Thu 5/14/09
Initiation Phase Acceptance and Signoff	1 day	Fri 5/15/09	Fri 5/15/09
Phase 2, Design	**63 days**	**Mon 5/4/09**	**Fri 7/31/09**
Phase 3, Development	**74 days**	**Mon 6/15/09**	**Fri 9/25/09**
Phase 4, Implementation	**60 days?**	**Mon 9/21/09**	**Fri 12/11/09**

Project Plan – Phase 2: Design

Task Name	Duration	Start	Finish
Phase 2, Design	**63 days**	**Mon 5/4/09**	**Fri 7/31/09**
Design Documentation and Installation	**15 days**	**Mon 5/4/09**	**Fri 5/22/09**
Hardware	**2 days**	**Mon 5/4/09**	**Tue 5/5/09**
Install and Configure Memex Project Software on Project Ser	**13 days**	**Wed 5/6/09**	**Fri 5/22/09**
Install Server Side	**4 days**	**Wed 5/6/09**	**Mon 5/11/09**
Memex Patriarch	1 day	Wed 5/6/09	Wed 5/6/09
Memex Web Services Interface	1 day	Thu 5/7/09	Thu 5/7/09
Memex RISSConnect	1 day	Fri 5/8/09	Fri 5/8/09
Transfer Installation to MIOC Development Server (if availabl	1 day	Mon 5/11/09	Mon 5/11/09
Install Client Side	**2 days**	**Wed 5/6/09**	**Thu 5/7/09**
Install Clients (Limited Deployment)	1 day	Wed 5/6/09	Wed 5/6/09
Install i2-Plugin	1 day	Thu 5/7/09	Thu 5/7/09
Execute Installation Test Scripts	**5 days**	**Mon 5/11/09**	**Fri 5/15/09**
Memex Partiarch/Patriarch Web	2 days	Mon 5/11/09	Tue 5/12/09
Memex i2-Plugin	1 day	Wed 5/13/09	Wed 5/13/09
Memex Web Services Interface	2 days	Thu 5/14/09	Fri 5/15/09
Submit Licensed Software Installation Completion Deliverable	0 days	Fri 5/15/09	Fri 5/15/09
Obtain Licensed Software Installation Approval Signoff	5 days	Mon 5/18/09	Fri 5/22/09
System Design Workshops	**35 days**	**Tue 5/12/09**	**Tue 6/30/09**
Prepare for User Workshops	**4 days**	**Tue 5/12/09**	**Fri 5/15/09**
Prepare Software Orientation/Overview Workshop Agendas	1 day	Tue 5/12/09	Tue 5/12/09
Prepare Business Process Workshop Agendas	1 day	Wed 5/13/09	Wed 5/13/09
Prepare Fit Analysis Agendas	2 days	Thu 5/14/09	Fri 5/15/09
Conduct Software Orientation/Stakeholder Overview Worksh	**4.88 days**	**Mon 5/18/09**	**Fri 5/22/09**
How Memex can be used as a 28CFR23 compliant system	1 day	Mon 5/18/09	Mon 5/18/09
Memex Patriarch Walkthrough	**3.88 days**	**Tue 5/19/09**	**Fri 5/22/09**
User Interface	1.5 hrs	Tue 5/19/09	Tue 5/19/09
Homepage	1.5 hrs	Tue 5/19/09	Tue 5/19/09
Data Entry	1.5 hrs	Tue 5/19/09	Tue 5/19/09
Search	1.5 hrs	Tue 5/19/09	Tue 5/19/09
Linking	1.5 hrs	Tue 5/19/09	Tue 5/19/09
Interfaces and NIEM compliance	1.5 hrs	Tue 5/19/09	Wed 5/20/09
Workflow/Action Management	1.5 hrs	Wed 5/20/09	Wed 5/20/09
Administrator Functions	**1.13 days**	**Wed 5/20/09**	**Thu 5/21/09**
Configuration options and controls	1.5 hrs	Wed 5/20/09	Wed 5/20/09
Security	1.5 hrs	Wed 5/20/09	Wed 5/20/09
Notifications and integration with email	1.5 hrs	Wed 5/20/09	Wed 5/20/09
Auditing	1.5 hrs	Wed 5/20/09	Thu 5/21/09
Error Logs	1.5 hrs	Thu 5/21/09	Thu 5/21/09
Purging	1.5 hrs	Thu 5/21/09	Thu 5/21/09
RISSConnect	1.5 hrs	Thu 5/21/09	Thu 5/21/09
Reporting	1.5 hrs	Thu 5/21/09	Thu 5/21/09
i2-Plugin (if necessary)	1.5 hrs	Thu 5/21/09	Thu 5/21/09
Tip Tool (if necessary)	1.5 hrs	Fri 5/22/09	Fri 5/22/09
Confidential Informants (if necessary)	1.5 hrs	Fri 5/22/09	Fri 5/22/09

Project Plan – Phase 2: Design *(continued)*

Task Name	Duration	Start	Finish
Reporting	1.5 hrs	Thu 5/21/09	Thu 5/21/09
i2-Plugin (if necessary)	1.5 hrs	Thu 5/21/09	Thu 5/21/09
Tip Tool (if necessary)	1.5 hrs	Fri 5/22/09	Fri 5/22/09
Confidential Informants (if necessary)	1.5 hrs	Fri 5/22/09	Fri 5/22/09
Consolidate Overview Session Notes	4 hrs	Fri 5/22/09	Fri 5/22/09
Conduct User Workshop 1	**4 days**	**Tue 5/26/09**	**Fri 5/29/09**
Conduct Business Process Review	**1 day**	**Tue 5/26/09**	**Wed 5/27/09**
Conduct detailed business process reviews	1 day	Tue 5/26/09	Tue 5/26/09
Consolidate Business Process Review Session Notes	0 days	Wed 5/27/09	Wed 5/27/09
Conduct Fit Analysis Review	**3 days**	**Wed 5/27/09**	**Fri 5/29/09**
Structured walkthrough of Patriarch's features	2 days	Wed 5/27/09	Thu 5/28/09
Administrator Functions	1 day	Fri 5/29/09	Fri 5/29/09
Clarify Interface and file transfer requirements	**5 days**	**Mon 6/1/09**	**Fri 6/5/09**
Finalize preparation for interface and file transfer session	1 day	Mon 6/1/09	Mon 6/1/09
Review and Confirm MiCJIN Interface Requirements	4 hrs	Tue 6/2/09	Tue 6/2/09
Review and Confirm NDPIX Interface Requirements	4 hrs	Tue 6/2/09	Tue 6/2/09
Review and Confirm STATIS Conversion Requirements	4 hrs	Wed 6/3/09	Wed 6/3/09
Review and Confirm RISS Interface Requirements, and that RISS(	4 hrs	Wed 6/3/09	Wed 6/3/09
Identify issues and prepare plans to address	4 hrs	Thu 6/4/09	Thu 6/4/09
Confirm and Document requirements, issues and responsibilities	1 day	Fri 6/5/09	Fri 6/5/09
Workshop One Review	**2 days**	**Fri 6/5/09**	**Mon 6/8/09**
Review Outcomes of User Workshop 1	2 days	Fri 6/5/09	Mon 6/8/09
Create Initial Configuration	**15 days**	**Mon 6/1/09**	**Fri 6/19/09**
Incorporate Configuration Changes from User Workshop 1	10 days	Mon 6/1/09	Fri 6/12/09
Test Changes and make corrections from User Workshop 1	5 days	Mon 6/15/09	Fri 6/19/09
Finalize Preparation for User Workshop 2	2 days	Mon 6/22/09	Tue 6/23/09
Conduct User Workshop 2	**5 days**	**Wed 6/24/09**	**Tue 6/30/09**
Demonstrate, Review and Agree on State Configuration Options	2 days	Wed 6/24/09	Thu 6/25/09
Consolidate for Functional Specifications/Design Document Delive	3 days	Fri 6/26/09	Tue 6/30/09
Consolidate Fit Analysis Notes	1 day	Fri 6/26/09	Fri 6/26/09
Finalize Communication Plan	1 day	Mon 6/29/09	Mon 6/29/09
State Configuration	**9 days**	**Mon 6/29/09**	**Fri 7/10/09**
Incorporate Configuration Changes from User Workshop 2	5 days	Mon 6/29/09	Mon 7/6/09
Test Changes and make corrections from User Workshop 2	3 days	Mon 7/6/09	Wed 7/8/09
Review Configuration changes and updates with MIOC Team	2 days	Thu 7/9/09	Fri 7/10/09
Confirm this is the initial prototype system configuration	0 days	Fri 7/10/09	Fri 7/10/09
Define user training and documentation requirements	**5 days**	**Mon 7/13/09**	**Fri 7/17/09**
Identify trainees	0 days	Mon 7/13/09	Mon 7/13/09
Verify training environment	1 day	Mon 7/13/09	Mon 7/13/09
Perform initial training analysis	1 day	Tue 7/14/09	Tue 7/14/09
Review Memex proposed/submitted training outlines	0.5 days	Wed 7/15/09	Wed 7/15/09
Update training curriculum as agreed	1 day	Wed 7/15/09	Thu 7/16/09
Identify training scenarios as agreed	1 day	Thu 7/16/09	Fri 7/17/09
Verify online help, existing Memex manuals and other documentation n	0.5 days	Fri 7/17/09	Fri 7/17/09
Module prototyping and testing	**10 days**	**Mon 7/13/09**	**Fri 7/24/09**
Verify configuration options to support business processes	2 days	Mon 7/13/09	Tue 7/14/09

Project Plan – Phase 2: Design *(continued)*

Task Name	Duration	Start	Finish
Verify online help, existing Memex manuals and other documentation n	0.5 days	Fri 7/17/09	Fri 7/17/09
Module prototyping and testing	**10 days**	**Mon 7/13/09**	**Fri 7/24/09**
Verify configuration options to support business processes	2 days	Mon 7/13/09	Tue 7/14/09
Test prototype	**7 days**	**Mon 7/13/09**	**Tue 7/21/09**
Create business test scenarios	3 days	Mon 7/13/09	Wed 7/15/09
Test and review prototype business processes with MIOC	3 days	Fri 7/17/09	Tue 7/21/09
Review outstanding issues	1 day	Wed 7/22/09	Wed 7/22/09
Finalize prototype	2 days	Thu 7/23/09	Fri 7/24/09
Design Phase Deliverable Preparation	**3 days**	**Mon 7/20/09**	**Wed 7/22/09**
Prepare/Complete Software and Hardware (if applicable) installation c	3 days	Mon 7/20/09	Wed 7/22/09
Update System Security Design Document (DIT-0170)	3 days	Mon 7/20/09	Wed 7/22/09
Prepare Interface Specification Document (SEM-0402)	3 days	Mon 7/20/09	Wed 7/22/09
Prepare Functional Specification/Design document (SEM-0401 and SEI	3 days	Mon 7/20/09	Wed 7/22/09
Prepare Communication Plan (SEM-0402 and SEM-0501)	3 days	Mon 7/20/09	Wed 7/22/09
Prepare Training Plan (SEM-0703)	3 days	Mon 7/20/09	Wed 7/22/09
Provide overview session agendas (from software orientation)	3 days	Mon 7/20/09	Wed 7/22/09
Provide overview session notes (from software orientation)	3 days	Mon 7/20/09	Wed 7/22/09
Proivde business process agendas (from business process review)	3 days	Mon 7/20/09	Wed 7/22/09
Provide business process session notes (from business process revi	3 days	Mon 7/20/09	Wed 7/22/09
Prepare Initial Configuration Document (SEM-0501)	3 days	Mon 7/20/09	Wed 7/22/09
Provide module fit session agendas (from Fit Analysis, DIT-0187)	3 days	Mon 7/20/09	Wed 7/22/09
Provide Module approach papers (from Fit Analysis, DIT-0188)	3 days	Mon 7/20/09	Wed 7/22/09
Prepare Module configuration documents (SEM-0501)	3 days	Mon 7/20/09	Wed 7/22/09
Deliver Initial prototype system configuration (SEM-0501 and SEM-060	3 days	Mon 7/20/09	Wed 7/22/09
Prepare module business process templates (SEM-0501 and SEM-060	3 days	Mon 7/20/09	Wed 7/22/09
Confirm acceptance test of prototype's module business process (SEI	1 day	Wed 7/22/09	Wed 7/22/09
Provide final module business process test scripts (SEM-0803, SEM-0	1 day	Wed 7/22/09	Wed 7/22/09
Provide executed business module test scripts (SEM-0803, SEM-0804	1 day	Wed 7/22/09	Wed 7/22/09
Prepare Design Phase Signoff Documentation (DIT0189)	1 day	Wed 7/22/09	Wed 7/22/09
Design Phase Review	**7 days**	**Thu 7/23/09**	**Fri 7/31/09**
Submit Design Deliverable	0 days	Thu 7/23/09	Thu 7/23/09
Conduct Design Phase Review Meeting	1 day	Thu 7/30/09	Thu 7/30/09
Design Phase Acceptance and Signoff	1 day	Fri 7/31/09	Fri 7/31/09
Phase 3, Development	**74 days**	**Mon 6/15/09**	**Fri 9/25/09**
Phase 4, Implementation	**60 days?**	**Mon 9/21/09**	**Fri 12/11/09**
Phase 5, Post Implementation	**1491 days?**	**Mon 4/13/09**	**Wed 12/31/14**

Project Plan – Phase 3: Development

Task Name	Duration	Start	Finish
Phase 3, Development	**74 days**	**Mon 6/15/09**	**Fri 9/25/09**
Development Planning, Training and Documentation	**15 days**	**Mon 6/15/09**	**Mon 7/6/09**
Create Data Migration Plan	**5 days**	**Mon 6/15/09**	**Fri 6/19/09**
Confirm Interface/Conversion Data being brought into Memex	2 days	Mon 6/15/09	Tue 6/16/09
Confirm initial load sequence	2 days	Wed 6/17/09	Thu 6/18/09
Confirm frequency	1 day	Fri 6/19/09	Fri 6/19/09
Create User Test and PARE Plan	**10 days**	**Mon 6/22/09**	**Mon 7/6/09**
Identify MIOC Participant testers	0 days	Mon 6/22/09	Mon 6/22/09
Verify testing environment	3 days	Mon 6/22/09	Wed 6/24/09
Review Memex proposed/submitted test scripts	2 days	Thu 6/25/09	Fri 6/26/09
Define and agree any additional test scripts	5 days	Mon 6/29/09	Mon 7/6/09
Schedule MIOC Participant testing	0 days	Mon 7/6/09	Mon 7/6/09
Interface and Conversion design and development	**54 days**	**Mon 6/29/09**	**Fri 9/11/09**
MiCJIN Portal Interface	**39 days**	**Mon 6/29/09**	**Fri 8/21/09**
Design Interface based on requirements confirmed in Design Phas	4 days	Mon 6/29/09	Thu 7/2/09
Review Design with MIOC	1 day	Mon 7/6/09	Mon 7/6/09
Develop Interface	19 days	Tue 7/7/09	Fri 7/31/09
Test Interface	**5 days**	**Mon 8/3/09**	**Fri 8/7/09**
Unit Test	2 days	Mon 8/3/09	Tue 8/4/09
Integration Test	2 days	Wed 8/5/09	Thu 8/6/09
System Test	1 day	Fri 8/7/09	Fri 8/7/09
Install interface in customer environment	1 day	Mon 8/10/09	Mon 8/10/09
Customer test interface	1 day	Tue 8/11/09	Tue 8/11/09
Correct and test per agreed specifications	8 days	Wed 8/12/09	Fri 8/21/09
NDPIX Interface	**35 days**	**Mon 7/6/09**	**Fri 8/21/09**
Design Interface based on requirements confirmed in Design Phas	4 days	Mon 7/6/09	Thu 7/9/09
Review Design with MIOC	1 day	Fri 7/10/09	Fri 7/10/09
Develop Interface	15 days	Mon 7/13/09	Fri 7/31/09
Test Interface	**5 days**	**Mon 8/3/09**	**Fri 8/7/09**
Unit Test	2 days	Mon 8/3/09	Tue 8/4/09
Integration Test	2 days	Wed 8/5/09	Thu 8/6/09
System Test	1 day	Fri 8/7/09	Fri 8/7/09
Install interface in customer environment	1 day	Mon 8/10/09	Mon 8/10/09
Customer test interface	1 day	Tue 8/11/09	Tue 8/11/09
Revise and correct per agreed specifications	8 days	Wed 8/12/09	Fri 8/21/09
STATIS Conversion (CIDB & Tips Tool if necessary)	**33 days**	**Mon 7/6/09**	**Wed 8/19/09**
Receive data & layouts	1 day	Mon 7/6/09	Mon 7/6/09
Build Entity databases in Memex	2 days	Tue 7/7/09	Wed 7/8/09
Design and Develop the Import Mechanisms	18 days	Wed 7/8/09	Fri 7/31/09
Test Conversion	**5 days**	**Mon 8/3/09**	**Fri 8/7/09**
Unit Test	2 days	Mon 8/3/09	Tue 8/4/09
Integration Test	2 days	Wed 8/5/09	Thu 8/6/09
System Test	1 day	Fri 8/7/09	Fri 8/7/09
Customer verify data from conversion	1 day	Fri 8/7/09	Fri 8/7/09
Revise and correct per agreed specifications	8 days	Mon 8/10/09	Wed 8/19/09
RISS Interface	**8 days**	**Thu 7/30/09**	**Mon 8/10/09**

Project Plan – Phase 3: Development *(continued)*

Task Name	Duration	Start	Finish
RISS Interface	**8 days**	**Thu 7/30/09**	**Mon 8/10/09**
Verify Memex RISSConnect installed	1 day	Thu 7/30/09	Thu 7/30/09
Review RISS mapping requirements with MIOC	1 day	Fri 7/31/09	Fri 7/31/09
Map RISSConnect Settings to State Configuration	5 days	Mon 8/3/09	Fri 8/7/09
Test RISSConnect	1 day	Mon 8/10/09	Mon 8/10/09
Modification Development (Change Orders)	**30 days**	**Mon 7/20/09**	**Fri 8/28/09**
Review Fit Analysis	2 days	Mon 7/20/09	Tue 7/21/09
Identify scope changes (if any)	2 days	Wed 7/22/09	Thu 7/23/09
Submit change orders (if necessary)	1 day	Fri 7/24/09	Fri 7/24/09
Design, develop and test modifications for approved Change Ord	25 days	Mon 7/27/09	Fri 8/28/09
Confirm Documentation based on Memex Patriarch	**15 days**	**Mon 7/27/09**	**Fri 8/14/09**
User Documentation	3 days	Mon 7/27/09	Wed 7/29/09
System Administrator Documentation	3 days	Thu 7/30/09	Mon 8/3/09
Deployment and Operations Guide	2 days	Tue 8/4/09	Wed 8/5/09
Update manuals as agreed	5 days	Thu 8/6/09	Wed 8/12/09
Produce soft copy	2 days	Thu 8/13/09	Fri 8/14/09
Queries and Reports design and development	**30 days**	**Mon 8/3/09**	**Fri 9/11/09**
Confirm Reporting Needs	2 days	Mon 8/3/09	Tue 8/4/09
Verify Stored Queries and other Patriarch query tools in training c	1 day	Wed 8/5/09	Wed 8/5/09
Identify 5 sample reports to incorporate in training	2 days	Thu 8/6/09	Fri 8/7/09
Confirm Reports Design	5 days	Mon 8/10/09	Fri 8/14/09
Develop reports	10 days	Mon 8/17/09	Fri 8/28/09
Test reports	5 days	Mon 8/31/09	Fri 9/4/09
Incorporate Report Design/Development in training classes	5 days	Mon 9/7/09	Fri 9/11/09
Create Pilot Plan	**5 days**	**Mon 8/3/09**	**Fri 8/7/09**
Prepare for Pilot Training	2 days	Mon 8/3/09	Tue 8/4/09
Establish Pilot Security Roles/Permissions	1 day	Wed 8/5/09	Wed 8/5/09
Establish Pilot Scenarios and success measures	1 day	Thu 8/6/09	Thu 8/6/09
Confirm Punch List structure	1 day	Fri 8/7/09	Fri 8/7/09
Create User and System Administrator Training Material	**25 days**	**Mon 7/27/09**	**Fri 8/28/09**
Identify trainees	0 days	Mon 7/27/09	Mon 7/27/09
Verify training environment	3 days	Mon 7/27/09	Wed 7/29/09
Perform training analysis	5 days	Thu 7/30/09	Wed 8/5/09
Review Memex proposed/submitted training outlines	1 day	Thu 8/6/09	Thu 8/6/09
Update training curriculum as agreed	1 day	Fri 8/7/09	Fri 8/7/09
Create/update training scenarios as agreed	10 days	Mon 8/10/09	Fri 8/21/09
Produce training documentation	5 days	Mon 8/17/09	Fri 8/21/09
Create and update training manuals	4 days	Mon 8/24/09	Thu 8/27/09
Review training manuals with MIOC	1 day	Fri 8/28/09	Fri 8/28/09
Security definition and setup	**5 days**	**Mon 8/31/09**	**Fri 9/4/09**
Review user management	1 day	Mon 8/31/09	Mon 8/31/09
Review roles and permissions with Security Administrator	1 day	Tue 9/1/09	Tue 9/1/09
Establish security as identified by the State	1 day	Wed 9/2/09	Wed 9/2/09
Implement and test	2 days	Thu 9/3/09	Fri 9/4/09
Configure Backup and Recovery Process	**5 days**	**Mon 8/31/09**	**Fri 9/4/09**
Confirm Requirements	1 day	Mon 8/31/09	Mon 8/31/09

Project Plan – Phase 3: Development *(continued)*

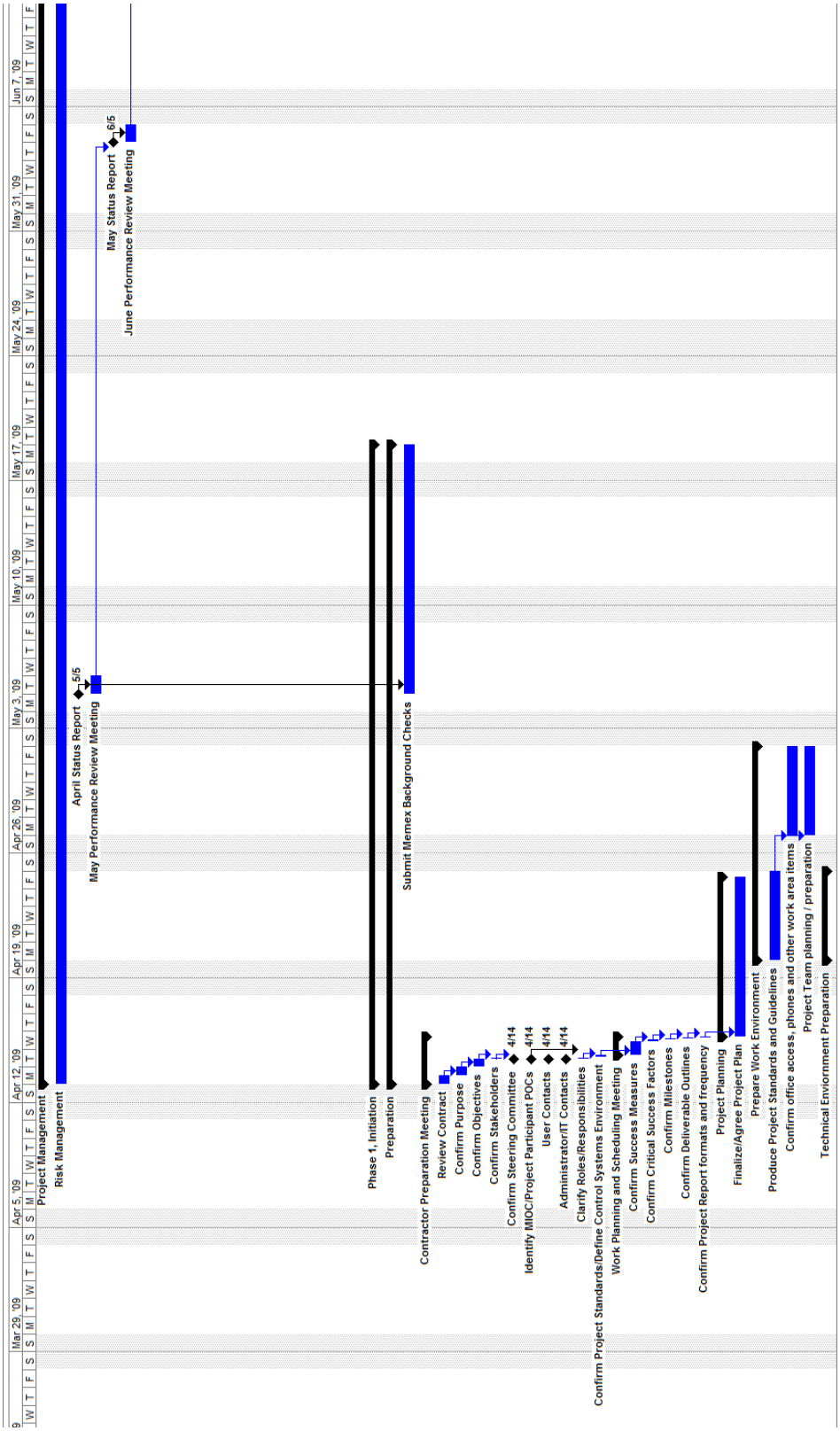
Task Name	Duration	Start	Finish
Establish security as identified by the State	1 day	Wed 9/2/09	Wed 9/2/09
Implement and test	2 days	Thu 9/3/09	Fri 9/4/09
Configure Backup and Recovery Process	**5 days**	**Mon 8/31/09**	**Fri 9/4/09**
Confirm Requirements	1 day	Mon 8/31/09	Mon 8/31/09
Develop Backup and Recovery Process	2 days	Tue 9/1/09	Wed 9/2/09
Test Backup and Recovery Process	1 day	Thu 9/3/09	Thu 9/3/09
Document Backup and Recovery Process	1 day	Fri 9/4/09	Fri 9/4/09
Configure Redundancy Process	**5 days**	**Mon 9/7/09**	**Fri 9/11/09**
Confirm Requirements	1 day	Mon 9/7/09	Mon 9/7/09
Configure Redundancy Functions	2 days	Tue 9/8/09	Wed 9/9/09
Test Redundancy Functions	1 day	Thu 9/10/09	Thu 9/10/09
Document Redundancy Process	1 day	Fri 9/11/09	Fri 9/11/09
Development Phase Deliverable Preparation	**3 days**	**Mon 9/14/09**	**Wed 9/16/09**
Prepare Final User/PARE Test plan	0 days	Mon 9/14/09	Mon 9/14/09
Prepare Pilot Plan	0 days	Mon 9/14/09	Mon 9/14/09
Prepare Data Migration Plan	0 days	Mon 9/14/09	Mon 9/14/09
Prepare User Documentation	0 days	Mon 9/14/09	Mon 9/14/09
Prepare System Administrator Documentation	0 days	Mon 9/14/09	Mon 9/14/09
Prepare User Training Materials (SEM-0703 and SEM-0704)	0 days	Mon 9/14/09	Mon 9/14/09
Prepare System Administrator Training Materials (SEM-0703 and SEM-	0 days	Mon 9/14/09	Mon 9/14/09
Prepare Deployment and Operations Guide	0 days	Mon 9/14/09	Mon 9/14/09
Produce Interface Designs (SEM-0501 and SEM-0604)	0 days	Mon 9/14/09	Mon 9/14/09
Confirm Interfaces completed	0 days	Mon 9/14/09	Mon 9/14/09
Produce Covnersion Deisgn (SEM-0601)	0 days	Mon 9/14/09	Mon 9/14/09
Confirm Conversion Software completed	0 days	Mon 9/14/09	Mon 9/14/09
Produce Report Designs (SEM-0501 and SEM-0604)	0 days	Mon 9/14/09	Mon 9/14/09
Confirm Reports Completed (SEM-0501 and SEM-0604)	0 days	Mon 9/14/09	Mon 9/14/09
Produce Security Template (DIT0170)	0 days	Mon 9/14/09	Mon 9/14/09
Produce agreed change order development (SEM-0501 and SEM-0604	0 days	Mon 9/14/09	Mon 9/14/09
Produce Development Deliverable Package	2.5 days	Mon 9/14/09	Wed 9/16/09
Prepare Development Phase Signoff Documentation (DIT0189)	0.5 days	Wed 9/16/09	Wed 9/16/09
Development Phase Review	**7 days**	**Thu 9/17/09**	**Fri 9/25/09**
Submit Development Deliverable	0 days	Thu 9/17/09	Thu 9/17/09
Conduct Development Phase Review Meeting	1 day	Thu 9/24/09	Thu 9/24/09
Development Phase Acceptance and Signoff	1 day	Fri 9/25/09	Fri 9/25/09
Phase 4, Implementation	**60 days?**	**Mon 9/21/09**	**Fri 12/11/09**
Phase 5, Post Implementation	**1491 days?**	**Mon 4/13/09**	**Wed 12/31/14**

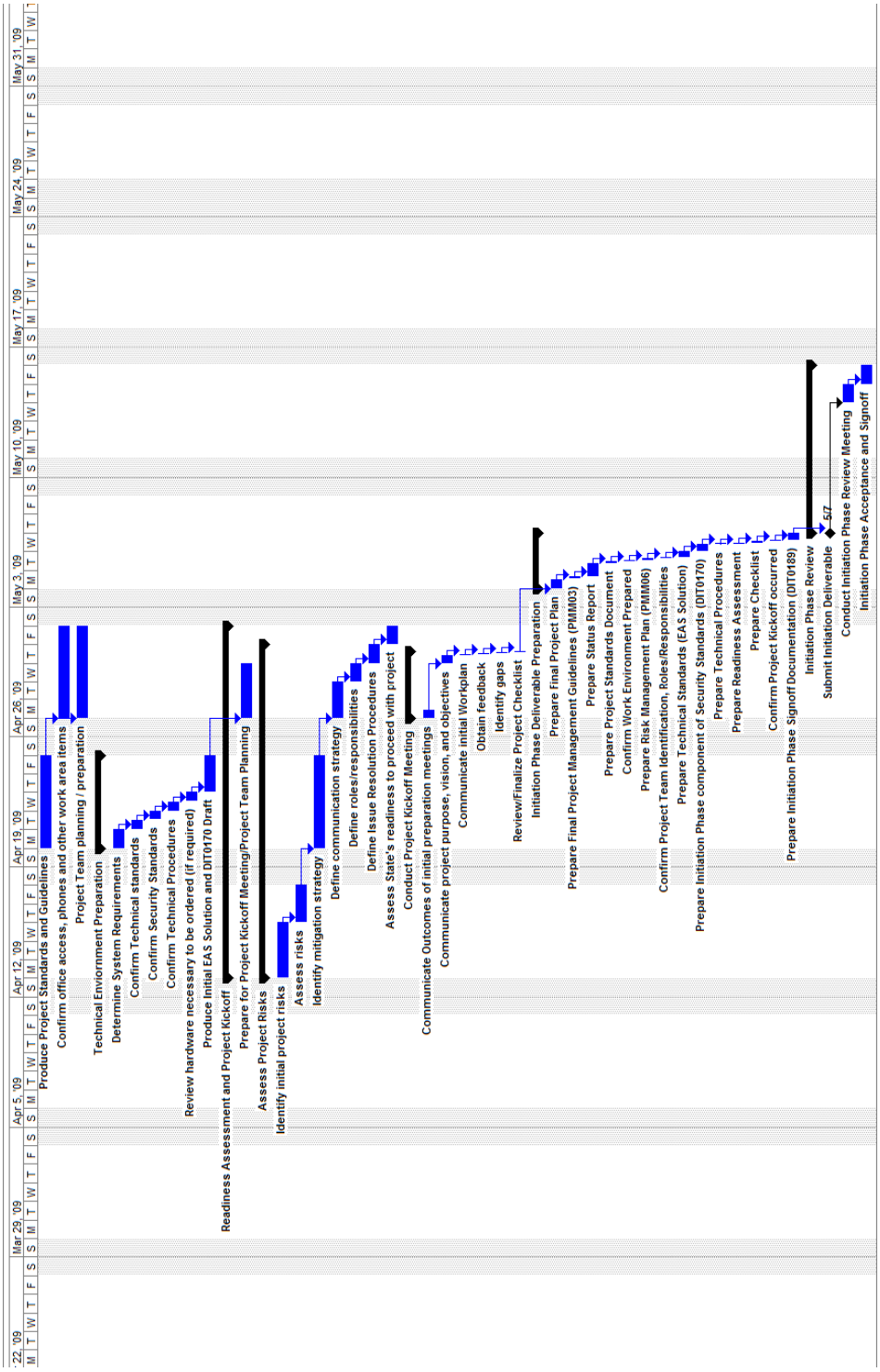
Project Plan – Phase 4: Implementation

Task Name	Duration	Start	Finish
Phase 4, Implementation	**60 days?**	**Mon 9/21/09**	**Fri 12/11/09**
Conduct Training	**31 days**	**Mon 9/21/09**	**Mon 11/2/09**
Schedule Training	0 days	Mon 9/21/09	Mon 9/21/09
Create Training Environment	2 days	Mon 9/21/09	Tue 9/22/09
Confirm Training Configuration	1 day	Wed 9/23/09	Wed 9/23/09
Define Training Security	2 days	Thu 9/24/09	Fri 9/25/09
Transfer Converted Data to Training Environment	5 days	Mon 9/28/09	Fri 10/2/09
Provide train the trainer to 7 regions	20 days	Mon 10/5/09	Fri 10/30/09
Provide System Admin Training	5 days	Mon 10/5/09	Fri 10/9/09
Verify training is completed	1 day	Mon 11/2/09	Mon 11/2/09
Stage preparation and testing	**25 days**	**Mon 9/28/09**	**Fri 10/30/09**
Create the system/user test environments	2 days	Mon 9/28/09	Tue 9/29/09
Confirm the testing configuration	1 day	Wed 9/30/09	Wed 9/30/09
Define the testing security	1 day	Thu 10/1/09	Thu 10/1/09
Confirm test data	1 day	Fri 10/2/09	Fri 10/2/09
Execute agreed test scripts	5 days	Mon 10/5/09	Fri 10/9/09
Support Pilot Testing	15 days	Mon 10/5/09	Fri 10/23/09
Validate results	5 days	Mon 10/26/09	Fri 10/30/09
Migration	**45 days**	**Mon 9/28/09**	**Fri 11/27/09**
Create and Finalize Memex Punch List	5 days	Mon 9/28/09	Fri 10/2/09
Create and Finalize MIOC Punch List	5 days	Mon 10/5/09	Fri 10/9/09
Execute Punch Lists	30 days	Mon 10/12/09	Fri 11/20/09
Review Punch List Changes	5 days	Mon 11/23/09	Fri 11/27/09
Build and stage Production environments, and Implement	**16 days**	**Mon 11/9/09**	**Mon 11/30/09**
Create the stage and production environments	2 days	Mon 11/9/09	Tue 11/10/09
Confirm all software/hardware installed as agreed	5 days	Mon 11/9/09	Fri 11/13/09
Define and establish security	5 days	Mon 11/16/09	Fri 11/20/09
Verify Backup and Recovery Process in Place	5 days	Mon 11/16/09	Fri 11/20/09
Provide Notification to MIOC that software is ready for use	0 days	Fri 11/20/09	Fri 11/20/09
Set GoLive Date	1 day	Mon 11/23/09	Mon 11/23/09
Convert data	3 days	Tue 11/24/09	Thu 11/26/09
Verify Data Converted	1 day	Fri 11/27/09	Fri 11/27/09
Commence Use of Memex	1 day	Mon 11/30/09	Mon 11/30/09
Project Review	**2 days?**	**Mon 11/23/09**	**Tue 11/24/09**
Prepare for Project Review	1 day	Mon 11/23/09	Mon 11/23/09
Project Review & Go Live Assessment	1 day?	Tue 11/24/09	Tue 11/24/09
Implementation Phase Deliverable Preparation	**3 days**	**Mon 11/30/09**	**Wed 12/2/09**
Confirm Software/Hardware delivered/installed	0 hrs	Mon 11/30/09	Mon 11/30/09
Confirm User (train the trainer) and System Administrator Training Deli	0 hrs	Mon 11/30/09	Mon 11/30/09
Provide executed test scripts	0 hrs	Mon 11/30/09	Mon 11/30/09
Confirm STATIS data converted/migrated to Memex Patriarch	0 hrs	Mon 11/30/09	Mon 11/30/09
Confirm Maintenance and Support Turnover completed	**0 days**	**Mon 11/30/09**	**Mon 11/30/09**
Manuals Turnover (online)	0 days	Mon 11/30/09	Mon 11/30/09
Review Maintenance and Support Processes	0 days	Mon 11/30/09	Mon 11/30/09
Ensure Contact Numbers are in Place	0 days	Mon 11/30/09	Mon 11/30/09

Project Plan – Phase 4: Implementation *(continued)* and Phase 5: Post Implementation

Task Name	Duration	Start	Finish
Confirm User (train the trainer) and System Administrator Training Deli	0 hrs	Mon 11/30/09	Mon 11/30/09
Provide executed test scripts	0 hrs	Mon 11/30/09	Mon 11/30/09
Confirm STATIS data converted/migrated to Memex Patriarch	0 hrs	Mon 11/30/09	Mon 11/30/09
Confirm Maintenance and Support Turnover completed	**0 days**	**Mon 11/30/09**	**Mon 11/30/09**
Manuals Turnover (online)	0 days	Mon 11/30/09	Mon 11/30/09
Review Maintenance and Support Processes	0 days	Mon 11/30/09	Mon 11/30/09
Ensure Contact Numbers are in Place	0 days	Mon 11/30/09	Mon 11/30/09
Verify VPN in place	0 days	Mon 11/30/09	Mon 11/30/09
Provide Site Guide (added deliverable)	0 days	Mon 11/30/09	Mon 11/30/09
Produce Backup and Recovery Plan (SEM-0604)	0 days	Mon 11/30/09	Mon 11/30/09
Document lessons learned	0 days	Mon 11/30/09	Mon 11/30/09
Confirm Production Planning Meeting occurred	0 days	Mon 11/30/09	Mon 11/30/09
Confirm Punch List Items Executed	0 days	Mon 11/30/09	Mon 11/30/09
Produce Implementation Deliverable Package	2.5 days	Mon 11/30/09	Wed 12/2/09
Prepare Implementation Phase Signoff Documentation (DIT0189)	0.5 days	Wed 12/2/09	Wed 12/2/09
Implementation Phase Review	**7 days**	**Thu 12/3/09**	**Fri 12/11/09**
Submit Implementation Phase Deliverable	0 days	Thu 12/3/09	Thu 12/3/09
Submit Project Completion Deliverable	0 days	Thu 12/3/09	Thu 12/3/09
Conduct Implementation Phase Review Meeting	1 day	Thu 12/10/09	Thu 12/10/09
Implementation Phase Acceptance and Signoff	0 days	Fri 12/11/09	Fri 12/11/09
Project Completion Signoff	1 day	Fri 12/11/09	Fri 12/11/09
Phase 5, Post Implementation	**1491 days?**	**Mon 4/13/09**	**Wed 12/31/14**
Post Production Support	**1323 days**	**Mon 12/7/09**	**Wed 12/31/14**
Provide seven (7), 2-day "refresher" training classes	25 days	Mon 1/4/10	Fri 2/5/10
Provide Maintenance and Support	**1323 days**	**Mon 12/7/09**	**Wed 12/31/14**
Resolve issues and problems as detected	1323 days	Mon 12/7/09	Wed 12/31/14
Revise procedures as needed and communicate updated procedi	1323 days	Mon 12/7/09	Wed 12/31/14
Provide TIER III Technical and user help desk support from 8am to	1323 days	Mon 12/7/09	Wed 12/31/14
Provide bi-weekly status reports	1323 days	Mon 12/7/09	Wed 12/31/14
Provide Administration Support	1323 days	Mon 12/7/09	Wed 12/31/14
Provide liaison functions with Memex	1323 days	Mon 12/7/09	Wed 12/31/14
Provide 40 hours onsite technical support (2010)	261 days	Fri 1/1/10	Fri 12/31/10
Provide 40 hours onsite technical support (2011)	260 days	Mon 1/3/11	Fri 12/30/11
Provide 40 hours onsite technical support (2012)	261 days	Mon 1/2/12	Mon 12/31/12
Provide 40 hours onsite technical support (2013)	259 days	Thu 1/3/13	Tue 12/31/13
Provide 40 hours onsite technical support (2014)	261 days	Wed 1/1/14	Wed 12/31/14
Post Implementation Support Review	**1491 days?**	**Mon 4/13/09**	**Wed 12/31/14**
Submit Post Implementation Support Deliverable (DIT-0189)	0 days	Wed 12/31/14	Wed 12/31/14
Conduct Post Implementation Support Review Meeting	1 day	Wed 12/31/14	Wed 12/31/14
Post Implementation Support Acceptance and Signoff	1 day	Wed 12/31/14	Wed 12/31/14


Mar 29, '09
Apr 5, '09
Apr 12, '09
Apr 19, '09
Apr 26, '09
May 3, '09
May 10, '09
May 17, '09
May 24, '09
May 31, '09
Jun 7, '09
Project Management
Risk Management
April Status Report
5/5
May Performance Review Meeting
May Status Report
6/5
June Performance Review Meeting
Phase 1, Initiation
Preparation
Submit Memex Background Checks
Contractor Preparation Meeting
Review Contract
Confirm Purpose
Confirm Objectives
Confirm Stakeholders
Confirm Steering Committee
4/14
Identify MIOC/Project Participant POCs
4/14
User Contacts
4/14
Administrator/IT Contacts
4/14
Clarify Roles/Responsibilities
Confirm Project Standards/Define Control Systems Environment
Work Planning and Scheduling Meeting
Confirm Success Measures
Confirm Critical Success Factors
Confirm Milestones
Confirm Deliverable Outlines
Confirm Project Report formats and frequency
Project Planning
Finalize/Agree Project Plan
Prepare Work Environment
Produce Project Standards and Guidelines
Confirm office access, phones and other work area items
Project Team planning / preparation
Technical Enviornment Preparation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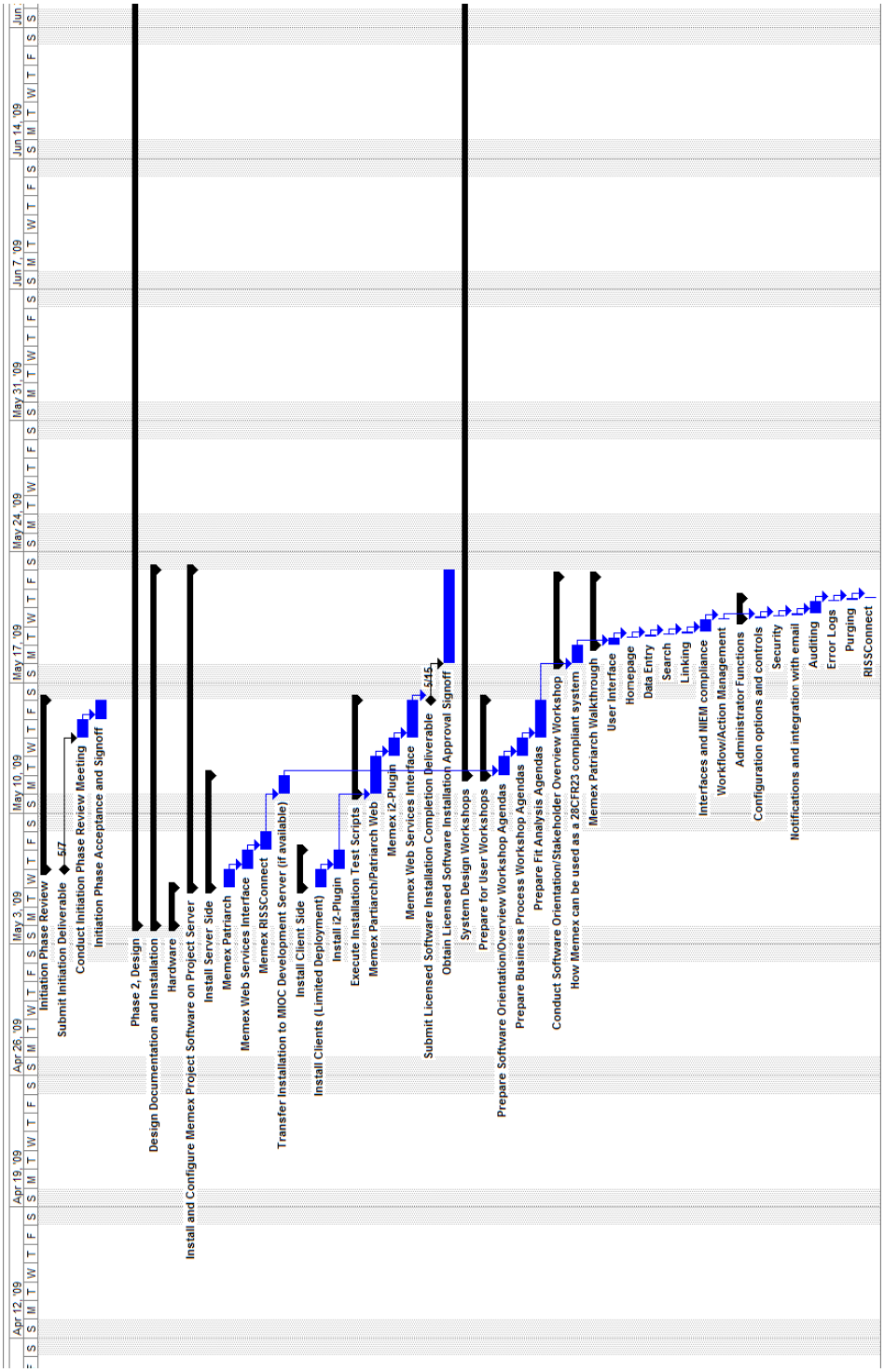
May 31, '09
Produce Project Standards and Guidelines
Confirm office access, phones and other work area items
Project Team planning / preparation
Technical Enviornment Preparation
Determine System Requirements
Confirm Technical standards
Confirm Security Standards
Confirm Technical Procedures
Review hardware necessary to be ordered (if required)
Produce Initial EAS Solution and DIT0170 Draft
Readiness Assessment and Project Kickoff
Prepare for Project Kickoff Meeting/Project Team Planning
Assess Project Risks
Identify initial project risks
Assess risks
Identify mitigation strategy
Define communication strategy
Define roles/responsibilities
Define Issue Resolution Procedures
Assess State's readiness to proceed with project
Conduct Project Kickoff Meeting
Communicate Outcomes of initial preparation meetings
Communicate project purpose, vision, and objectives
Communicate initial Workplan
Obtain feedback
Identify gaps
Review/Finalize Project Checklist
Initiation Phase Deliverable Preparation
Prepare Final Project Plan
Prepare Final Project Management Guidelines (PMM03)
Prepare Status Report
Prepare Project Standards Document
Confirm Work Environment Prepared
Prepare Risk Management Plan (PMM06)
Confirm Project Team Identification, Roles/Responsibilities
Prepare Technical Standards (EAS Solution)
Prepare Initiation Phase component of Security Standards (DIT0170)
Prepare Technical Procedures
Prepare Readiness Assessment
Prepare Checklist
Confirm Project Kickoff occurred
Prepare Initiation Phase Signoff Documentation (DIT0189)
Initiation Phase Review
5/7
Submit Initiation Deliverable
Conduct Initiation Phase Review Meeting
Initiation Phase Acceptance and Signoff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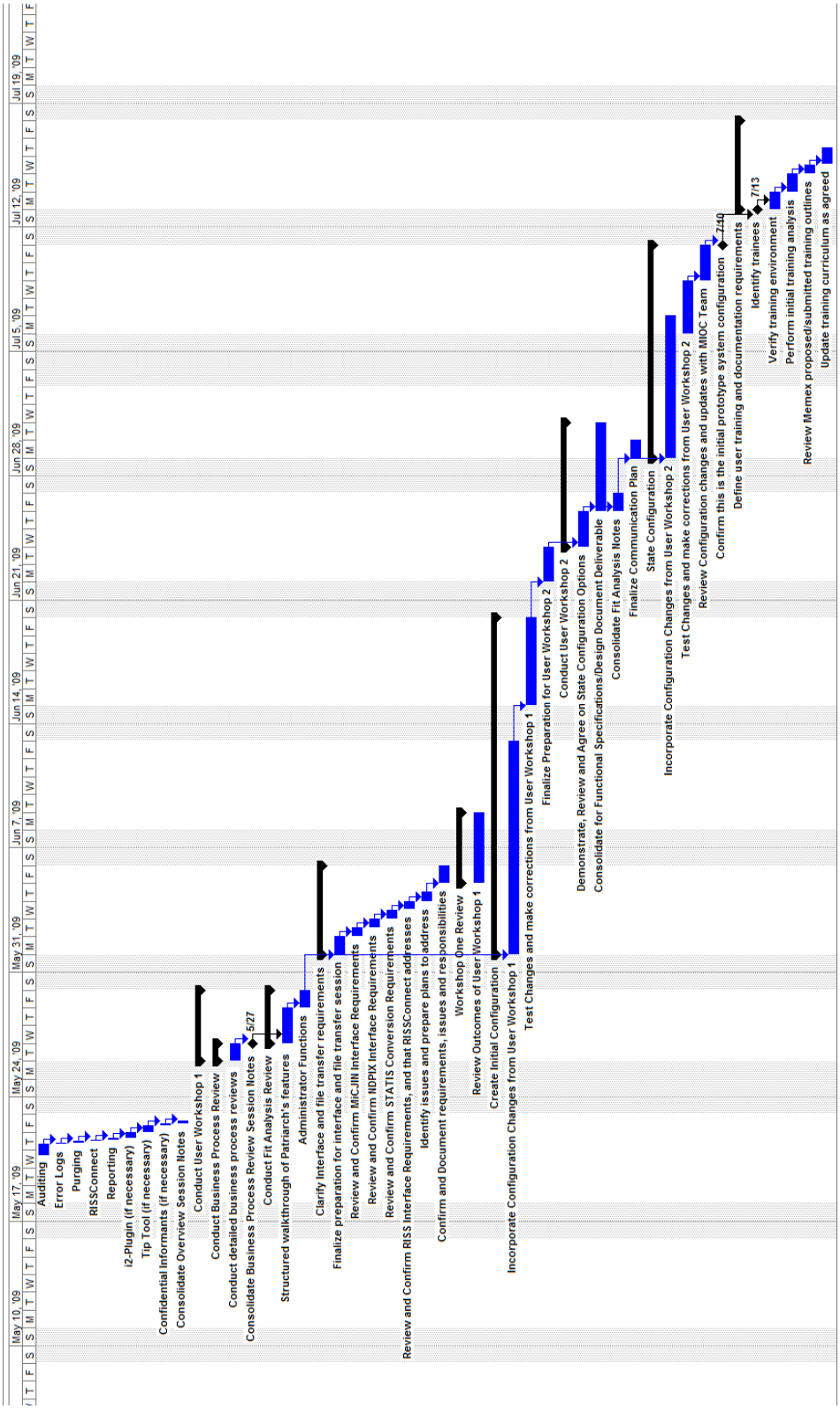
Jun 7, '09
Jun 14, '09
Initiation Phase Review
Submit Initiation Deliverable
5/7
Conduct Initiation Phase Review Meeting
Initiation Phase Acceptance and Signoff
Phase 2, Design
Design Documentation and Installation
Hardware
Install and Configure Memex Project Software on Project Server
Install Server Side
Memex Patriarch
Memex Web Services Interface
Memex RISSConnect
Transfer Installation to MIOC Development Server (if available)
Install Client Side
Install Clients (Limited Deployment)
Install i2-Plugin
Execute Installation Test Scripts
Memex Partiarch/Patriarch Web
Memex i2-Plugin
Memex Web Services Interface
Submit Licensed Software Installation Completion Deliverable
5/15
Obtain Licensed Software Installation Approval Signoff
System Design Workshops
Prepare for User Workshops
Prepare Software Orientation/Overview Workshop Agendas
Prepare Business Process Workshop Agendas
Prepare Fit Analysis Agendas
Conduct Software Orientation/Stakeholder Overview Workshop
How Memex can be used as a 28CFR23 compliant system
Memex Patriarch Walkthrough
User Interface
Homepage
Data Entry
Search
Linking
Interfaces and NIEM compliance
Workflow/Action Management
Administrator Functions
Configuration options and controls
Security
Notifications and integration with email
Auditing
Error Logs
Purging
RISSConnect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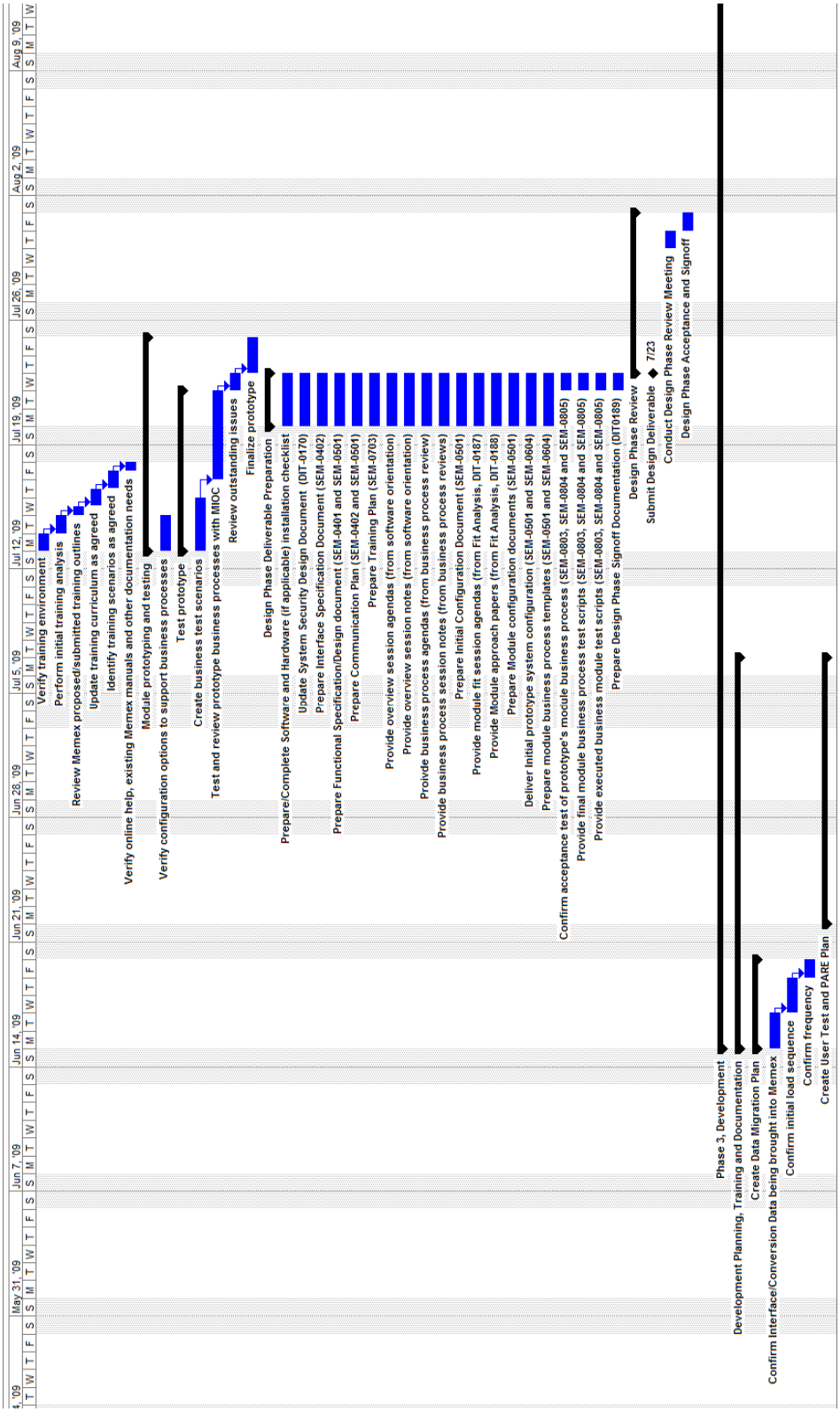
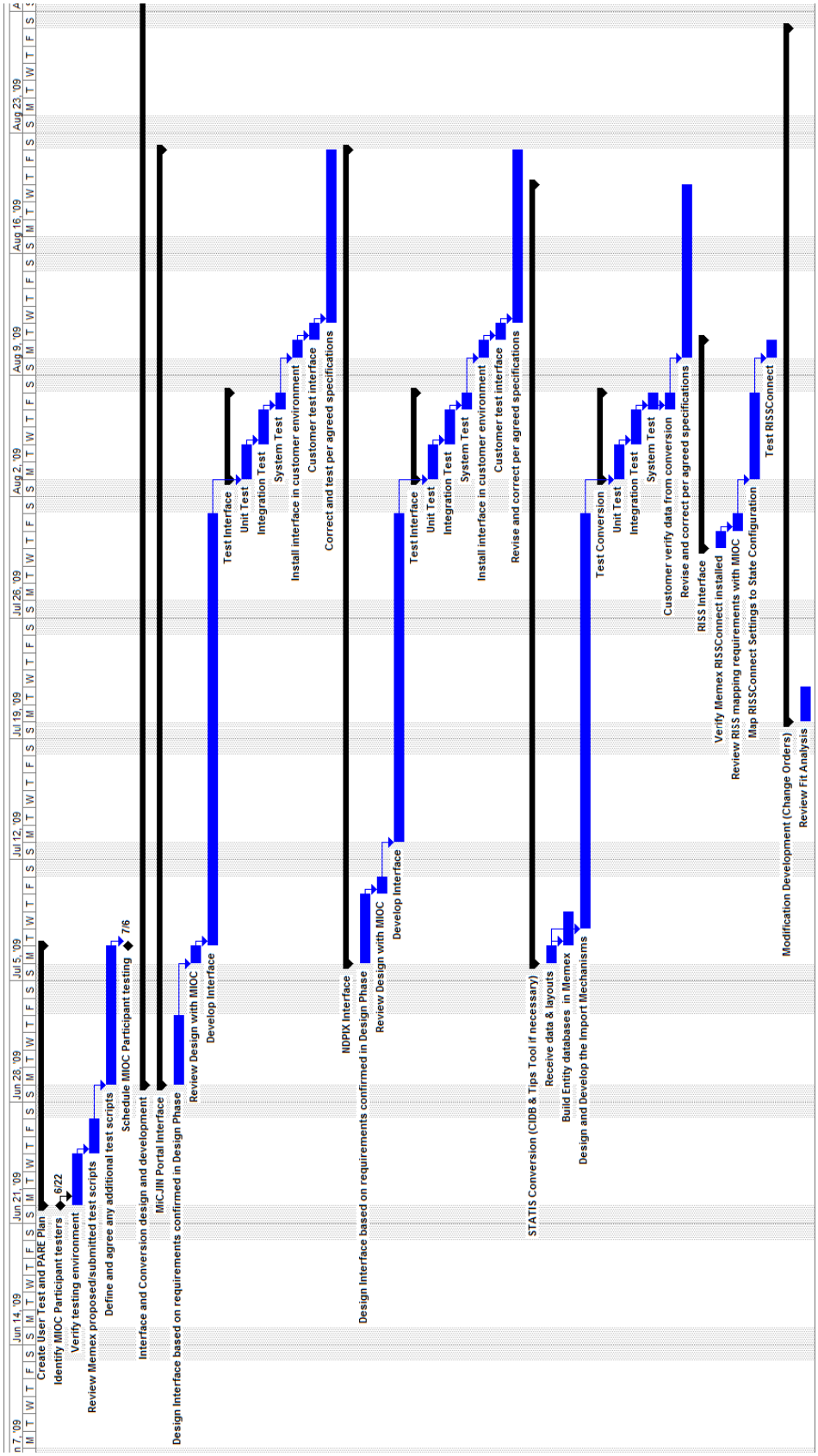
Jul 12, '09
Jul 19, '09
Auditing
Error Logs
Purging
RISSConnect
Reporting
i2-Plugin (if necessary)
Tip Tool (if necessary)
Confidential Informants (if necessary)
Consolidate Overview Session Notes
Conduct User Workshop 1
Conduct Business Process Review
Conduct detailed business process reviews
Consolidate Business Process Review Session Notes
5/27
Conduct Fit Analysis Review
Structured walkthrough of Patriarch's features
Administrator Functions
Clarify Interface and file transfer requirements
Finalize preparation for interface and file transfer session
Review and Confirm MiCJIN Interface Requirements
Review and Confirm NDPIX Interface Requirements
Review and Confirm STATIS Conversion Requirements
Review and Confirm RISS Interface Requirements, and that RISSConnect addresses
Identify issues and prepare plans to address
Confirm and Document requirements, issues and responsibilities
Workshop One Review
Review Outcomes of User Workshop 1
Create Initial Configuration
Incorporate Configuration Changes from User Workshop 1
Test Changes and make corrections from User Workshop 1
Finalize Preparation for User Workshop 2
Conduct User Workshop 2
Demonstrate, Review and Agree on State Configuration Options
Consolidate for Functional Specifications/Design Document Deliverable
Consolidate Fit Analysis Notes
Finalize Communication Plan
State Configuration
Incorporate Configuration Changes from User Workshop 2
Test Changes and make corrections from User Workshop 2
Review Configuration changes and updates with MIDC Team
7/10
Confirm this is the initial prototype system configuration
Define user training and documentation requirements
Identify trainees
7/13
Verify training environment
Perform initial training analysis
Review Memex proposed/submitted training outlines
Update training curriculum as agreed


Verify training environment
Perform initial training analysis
Review Memex proposed/submitted training outlines
Update training curriculum as agreed
Identify training scenarios as agreed
Verify online help, existing Memex manuals and other documentation needs
Module prototyping and testing
Verify configuration options to support business processes
Test prototype
Create business test scenarios
Test and review prototype business processes with MIOC
Review outstanding issues
Finalize prototype
Design Phase Deliverable Preparation
Prepare/Complete Software and Hardware (if applicable) installation checklist
Update System Security Design Document (DIT-0170)
Prepare Interface Specification Document (SEM-0402)
Prepare Functional Specification/Design document (SEM-0401 and SEM-0501)
Prepare Communication Plan (SEM-0402 and SEM-0501)
Prepare Training Plan (SEM-0703)
Provide overview session agendas (from software orientation)
Provide overview session notes (from software orientation)
Proivde business process agendas (from business process review)
Provide business process session notes (from business process reviews)
Prepare Initial Configuration Document (SEM-0501)
Provide module fit session agendas (from Fit Analysis, DIT-0187)
Provide Module approach papers (from Fit Analysis, DIT-0188)
Prepare Module configuration documents (SEM-0501)
Deliver Initial prototype system configuration (SEM-0501 and SEM-0604)
Prepare module business process templates (SEM-0501 and SEM-0604)
Confirm acceptance test of prototype's module business process (SEM-0803, SEM-0804 and SEM-0805)
Provide final module business process test scripts (SEM-0803, SEM-0804 and SEM-0805)
Provide executed business module test scripts (SEM-0803, SEM-0804 and SEM-0805)
Prepare Design Phase Signoff Documentation (DIT0189)
Design Phase Review
Submit Design Deliverable
7/23
Conduct Design Phase Review Meeting
Design Phase Acceptance and Signoff
Phase 3, Development
Development Planning, Training and Documentation
Create Data Migration Plan
Confirm Interface/Conversion Data being brought into Memex
Confirm initial load sequence
Confirm frequency
Create User Test and PARE Plan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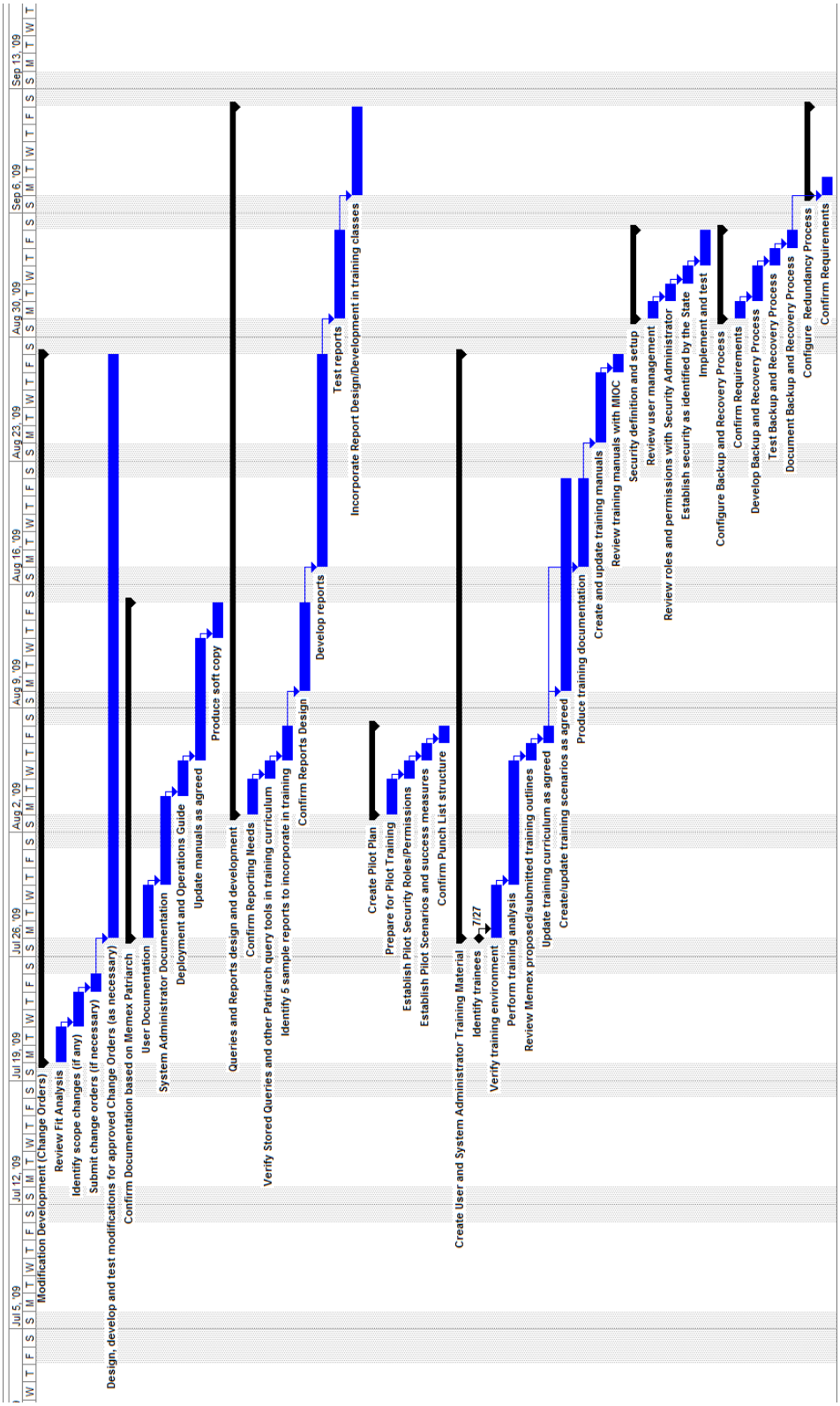
Aug 2, '09
Aug 9, '09
Aug 16, '09
Aug 23, '09
Create User Test and PARE Plan
Identify MIOC Participant testers
6/22
Verify testing environment
Review Memex proposed/submitted test scripts
Define and agree any additional test scripts
Schedule MIOC Participant testing
7/6
Interface and Conversion design and development
MiCJIN Portal Interface
Design Interface based on requirements confirmed in Design Phase
Review Design with MIOC
Develop Interface
Test Interface
Unit Test
Integration Test
System Test
Install interface in customer environment
Customer test interface
Correct and test per agreed specifications
NDPIX Interface
Design Interface based on requirements confirmed in Design Phase
Review Design with MIOC
Develop Interface
Test Interface
Unit Test
Integration Test
System Test
Install interface in customer environment
Customer test interface
Revise and correct per agreed specifications
STATIS Conversion (CIDB & Tips Tool if necessary)
Receive data & layouts
Build Entity databases in Memex
Design and Develop the Import Mechanisms
Test Conversion
Unit Test
Integration Test
System Test
Customer verify data from conversion
Revise and correct per agreed specifications
RISS Interface
Verify Memex RISSConnect installed
Review RISS mapping requirements with MIOC
Map RISSConnect Settings to State Configuration
Test RISSConnect
Modification Development (Change Orders)
Review Fit Analysis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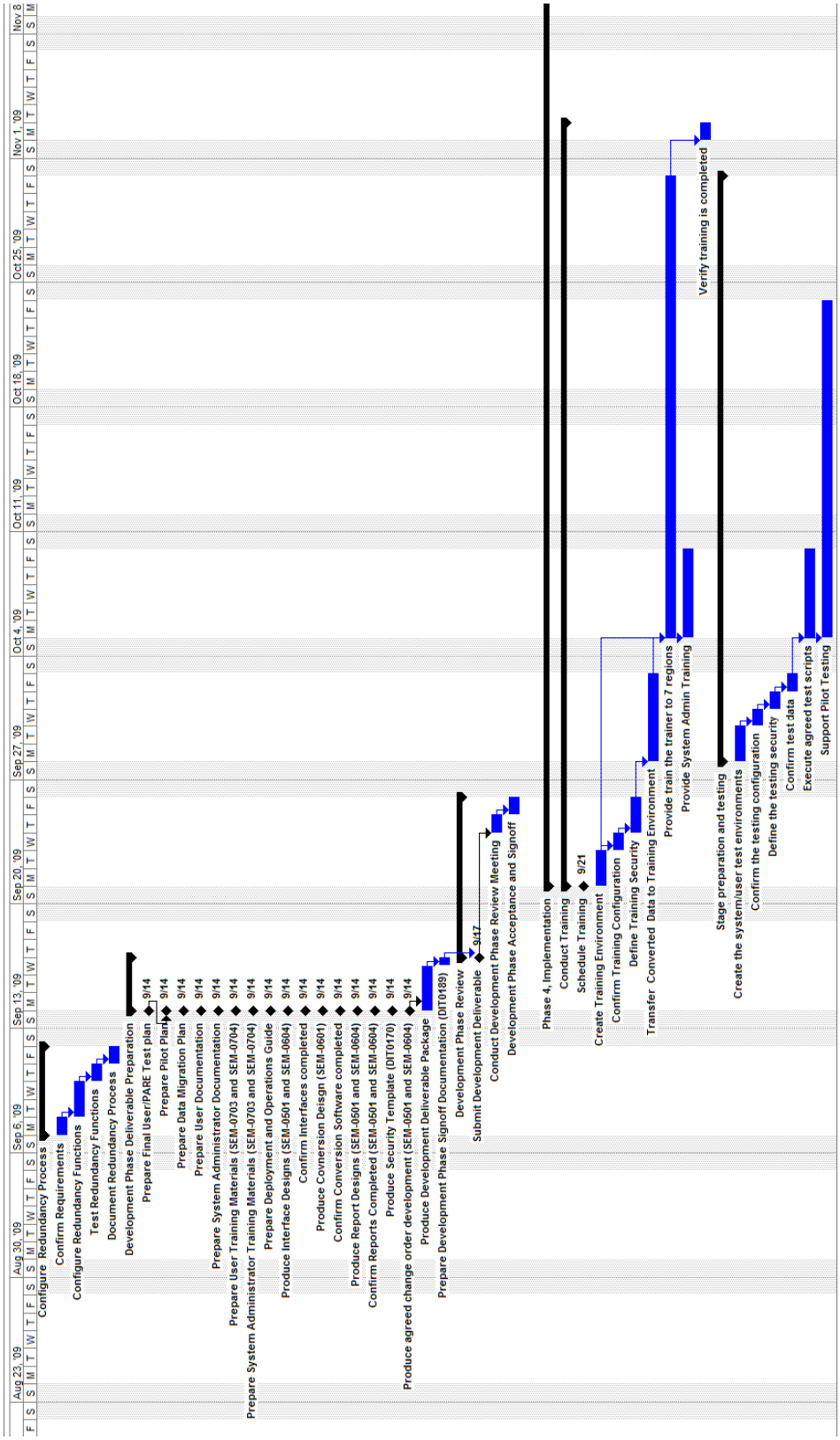
Aug 30, '09
Sep 6, '09
Sep 13, '09
Modification Development (Change Orders)
Review Fit Analysis
Identify scope changes (if any)
Submit change orders (if necessary)
Design, develop and test modifications for approved Change Orders (as necessary)
Confirm Documentation based on Memex Patriarch
User Documentation
System Administrator Documentation
Deployment and Operations Guide
Update manuals as agreed
Produce soft copy
Queries and Reports design and development
Confirm Reporting Needs
Verify Stored Queries and other Patriarch query tools in training curriculum
Identify 5 sample reports to incorporate in training
Confirm Reports Design
Develop reports
Test reports
Incorporate Report Design/Development in training classes
Create Pilot Plan
Prepare for Pilot Training
Establish Pilot Security Roles/Permissions
Establish Pilot Scenarios and success measures
Confirm Punch List structure
Create User and System Administrator Training Material
Identify trainees
7/27
Verify training environment
Perform training analysis
Review Memex proposed/submitted training outlines
Update training curriculum as agreed
Create/update training scenarios as agreed
Produce training documentation
Create and update training manuals
Review training manuals with MIOC
Security definition and setup
Review user management
Review roles and permissions with Security Administrator
Establish security as identified by the State
Implement and test
Configure Backup and Recovery Process
Confirm Requirements
Develop Backup and Recovery Process
Test Backup and Recovery Process
Document Backup and Recovery Process
Configure Redundancy Process
Confirm Requirements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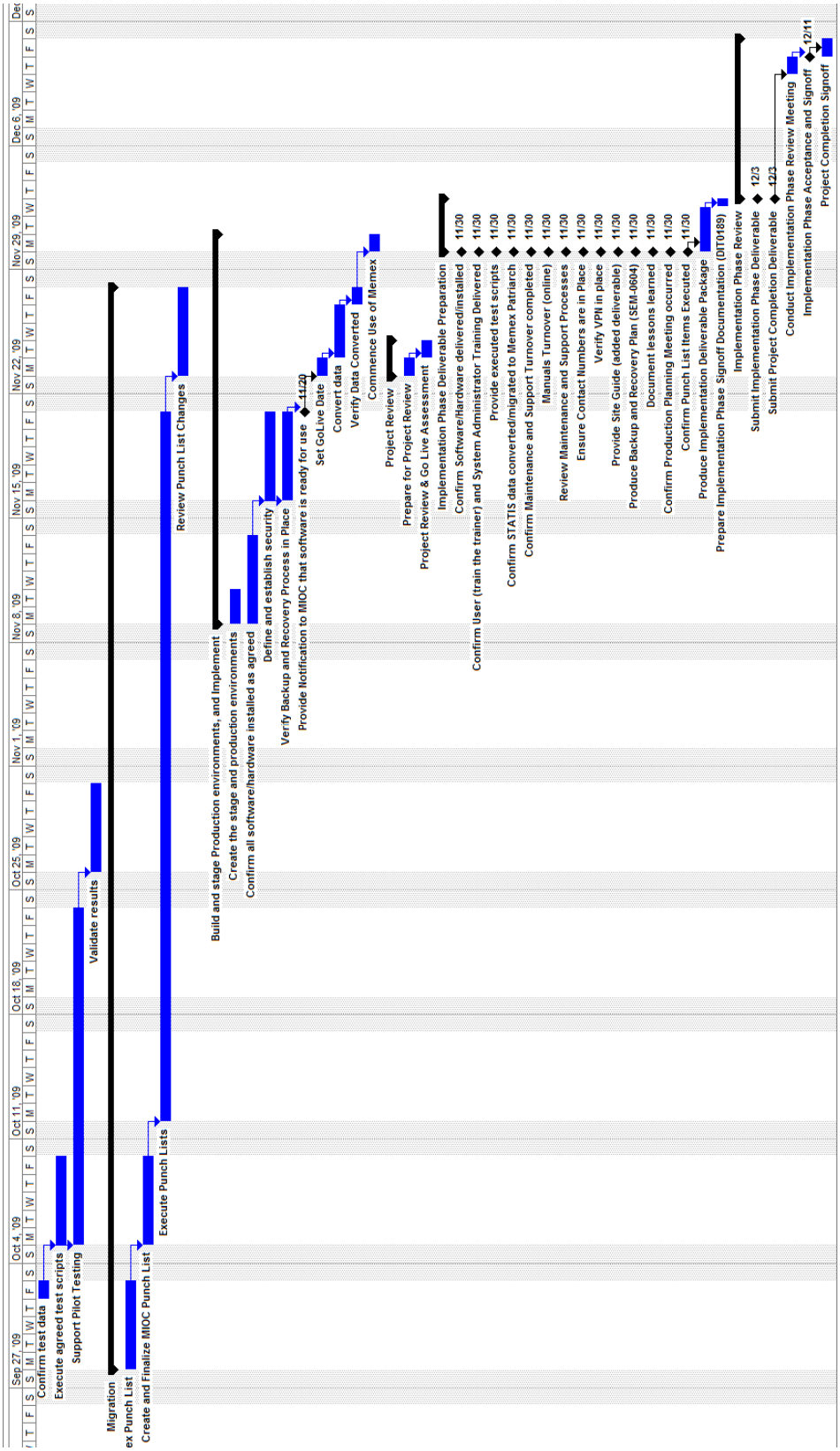
Oct 18, '09
Oct 25, '09
Nov 1, '09
Nov 8
Configure Redundancy Process
Confirm Requirements
Configure Redundancy Functions
Test Redundancy Functions
Document Redundancy Process
Development Phase Deliverable Preparation
Prepare Final User/PARE Test plan
9/14
Prepare Pilot Plan
9/14
Prepare Data Migration Plan
9/14
Prepare User Documentation
9/14
Prepare System Administrator Documentation
9/14
Prepare User Training Materials (SEM-0703 and SEM-0704)
9/14
Prepare System Administrator Training Materials (SEM-0703 and SEM-0704)
9/14
Prepare Deployment and Operations Guide
9/14
Produce Interface Designs (SEM-0501 and SEM-0604)
9/14
Confirm Interfaces completed
9/14
Produce Conversion Deisgn (SEM-0601)
9/14
Confirm Conversion Software completed
9/14
Produce Report Designs (SEM-0501 and SEM-0604)
9/14
Confirm Reports Completed (SEM-0501 and SEM-0604)
9/14
Produce Security Template (DIT0170)
9/14
Produce agreed change order development (SEM-0501 and SEM-0604)
9/14
Produce Development Deliverable Package
Prepare Development Phase Signoff Documentation (DIT0169)
Development Phase Review
9/17
Submit Development Deliverable
Conduct Development Phase Review Meeting
Development Phase Acceptance and Signoff
Phase 4, Implementation
Conduct Training
Schedule Training
9/21
Create Training Environment
Confirm Training Configuration
Define Training Security
Transfer Converted Data to Training Environment
Provide train the trainer to 7 regions
Provide System Admin Training
Verify training is completed
Stage preparation and testing
Create the system/user test environments
Confirm the testing configuration
Define the testing security
Confirm test data
Execute agreed test scripts
Support Pilot Testing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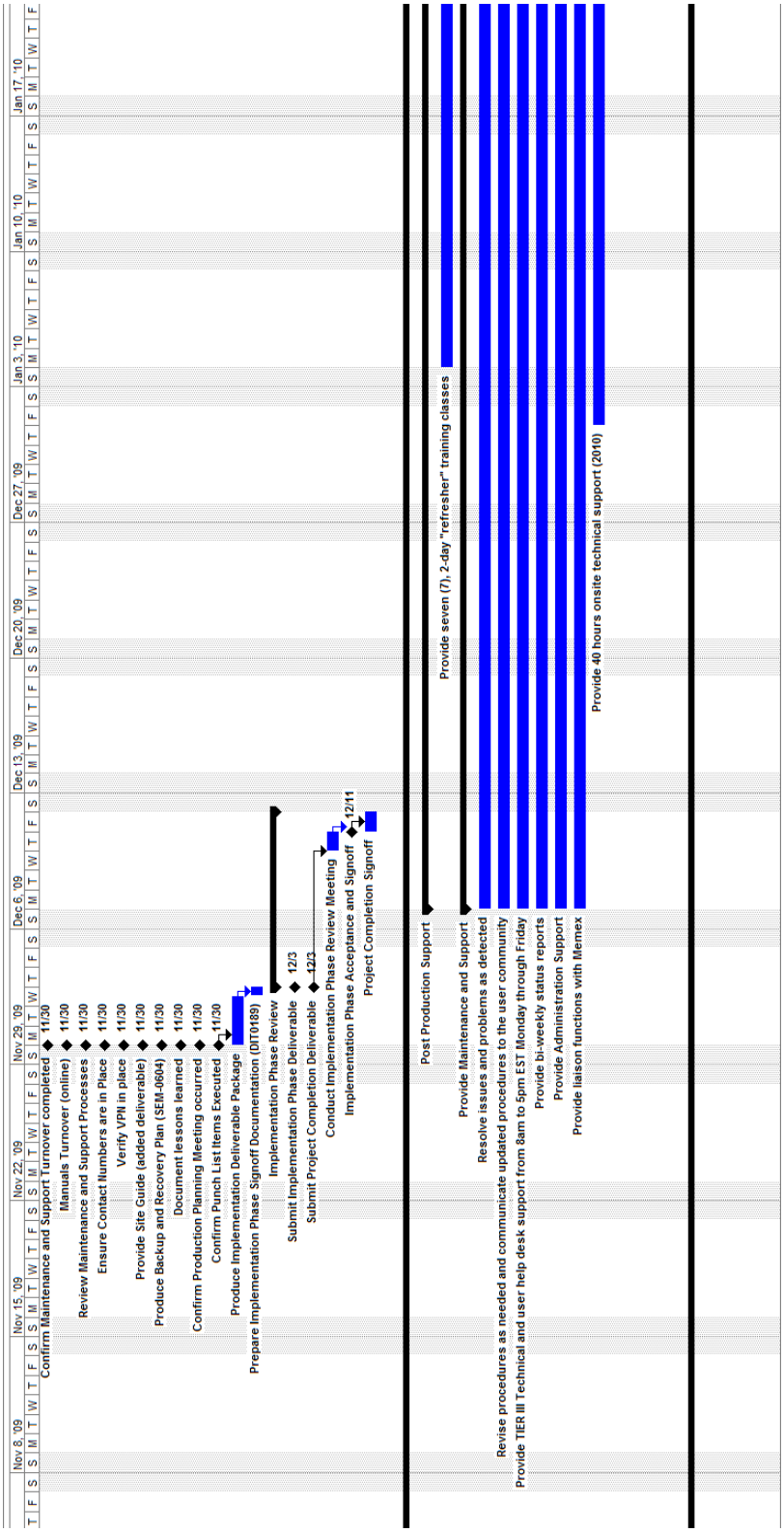
Nov 1, '09
Nov 8, '09
Nov 15, '09
Nov 22, '09
Nov 29, '09
Dec 6, '09
Confirm test data
Execute agreed test scripts
Support Pilot Testing
Validate results
Migration
ex Punch List
Create and Finalize MIOC Punch List
Execute Punch Lists
Review Punch List Changes
Build and stage Production environments, and Implement
Create the stage and production environments
Confirm all software/hardware installed as agreed
Define and establish security
Verify Backup and Recovery Process in Place
Provide Notification to MIOC that software is ready for use
11/20
Set GoLive Date
Convert data
Verify Data Converted
Commence Use of Memex
Project Review
Prepare for Project Review
Project Review & Go Live Assessment
Implementation Phase Deliverable Preparation
Confirm Software/Hardware delivered/installed
Confirm User (train the trainer) and System Administrator Training Delivered
Provide executed test scripts
Confirm STATIS data converted/migrated to Memex Patriarch
Confirm Maintenance and Support Turnover completed
Manuals Turnover (online)
Review Maintenance and Support Processes
Ensure Contact Numbers are in Place
Verify VPN in place
Provide Site Guide (added deliverable)
Produce Backup and Recovery Plan (SEM-0604)
Document lessons learned
Confirm Production Planning Meeting occurred
Confirm Punch List Items Executed
Produce Implementation Deliverable Package
Prepare Implementation Phase Signoff Documentation (DIT0189)
Implementation Phase Review
Submit Implementation Phase Deliverable
Submit Project Completion Deliverable
12/3
Conduct Implementation Phase Review Meeting
Implementation Phase Acceptance and Signoff
12/11
Project Completion Signoff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Dec 20, '09
Dec 27, '09
Jan 3, '10
Jan 10, '10
Jan 17, '10
Confirm Maintenance and Support Turnover completed 11/30
Manuals Turnover (online) 11/30
Review Maintenance and Support Processes 11/30
Ensure Contact Numbers are in Place 11/30
Verify VPN in place 11/30
Provide Site Guide (added deliverable) 11/30
Produce Backup and Recovery Plan (SEM-0604) 11/30
Document lessons learned 11/30
Confirm Production Planning Meeting occurred 11/30
Confirm Punch List Items Executed 11/30
Produce Implementation Deliverable Package
Prepare Implementation Phase Signoff Documentation (DIT0189)
Implementation Phase Review
Submit Implementation Phase Deliverable 12/3
Submit Project Completion Deliverable 12/3
Conduct Implementation Phase Review Meeting
Implementation Phase Acceptance and Signoff 12/11
Project Completion Signoff
Post Production Support
Provide seven (7), 2-day "refresher" training classes
Provide Maintenance and Support
Resolve issues and problems as detected
Revise procedures as needed and communicate updated procedures to the user community
Provide TIER III Technical and user help desk support from 8am to 5pm EST Monday through Friday
Provide bi-weekly status reports
Provide Administration Support
Provide liaison functions with Memex
Provide 40 hours onsite technical support (2010)

Article 1, Attachment E

RESERVED

Article 1, Attachment F

RESERVED

Article 1, Attachment G

Requirements Document – Michigan Criminal Intelligence System

Contractor Name: **Memex (EDS Subcontractor)**

Contractor shall provide deliverables, services and staff, and otherwise do all things necessary or incidental to provide the functionality required for the State's business operations, in accordance with the requirements as set forth below.

The Contractor's MCIS solution will comply with each requirement in as follows:

Each of the requirements for this solution will fully comply and the "method of compliance" has been identified in the columns according to the following criteria:

1. Column "1" checked under "Method of Compliance" if the solution will fully meet the requirement with no configuration nor customization.
2. Column "2" checked under "Method of Compliance" if the solution will fully meet the requirement through configuration.
3. Column "3" checked under "Method of Compliance" if the solution will fully meet the requirement through customization.

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	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
1-00	**Interfaces**			
1-01	Use of Department of Justice National Information Exchange Model (NIEM) is required for all data exchange interfaces. The Memex Patriarch solution provides both batch and transactional Web Services based tools for import and export of data in XML format. These tools can be configured to map any appropriate schema – including NIEM – to entities within the Memex Patriarch data repository.	**X**		
1-02	Provide the ability to exchange information with the National Drug Pointer Index (NDPIX). The Memex Patriarch solution includes Web Services based interfaces designed to allow the system to be integrated with external systems and for the creation of customer-specific functionality. Using a combination of these interfaces and the existing Web Services interface to NDPIX – details of which have been provided by the State and reviewed by the contractor. The contractor will build an interface between Memex Patriarch and NDPIX. This interface will allow users to use Memex Patriarch to indicate records that should be submitted to NDPIX and provide notifications to users when messages are received back from NDPIX. Notifications can be delivered to users either through the Memex Patriarch client interface, via email or both at the State's discretion.			**X**
1-03	Provide the ability to exchange information with the Department of Justice's Regional Information Sharing System (RISS) intelligence database RISS Intel. The solution includes a Web Services interface that conforms to RISS standards and allows sharing of data over the RISS network.	**X**		
1-04	Provide the ability to export specified data sets in a format compliant with other software tools such as I2, PenLink, and ArcGIS. Specified data sets can be exported from the Memex Patriarch solution for use in other applications. Data integration is done using NIEM-compliant structures via standard XML export and loading.	**X**		
1-05	Provide ability for users to be authenticated via MiCJIN portal. The Memex Patriarch solution will be customized to provide authentication via the MiCJIN portal. This will provide single sign-on Web access to the MCIS.			**X**
1-06	Support an interface to the state standard email client. (Novell GroupWise and MS Outlook) The Memex Patriarch solution will generate email notifications for a number of different system events such as new information matching predefined criteria being entered on to the system and records approaching their review dates. The system sends these emails via an SMTP-compliant mail server and will therefore be viable in GroupWise and Outlook.	**X**		
1-07	Provide an API to allow data transfer from other databases such as local, county, state, and federal data system including open source data. The Memex Patriarch will provide a web services interface that allows data to be transferred to and from other systems.	**X**		
1-08	Provide a GIS component or the ability to export data to and from ESRI ArcGIS component based on address or latitude and longitude. The Memex Patriarch solution provides the ability to export data to and from external ESRI ArcGIS components based on addresses or latitude and longitude. The contractor will provide lookup adaptors that can be added to the system to allow users to retrieve addresses, latitude/longitude data or other location-based information from any accessible external data source for which there is a published API.	**X**		

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
2-00	**Data Entry**			
2-01	Provide a Web 2.0 interface for users incorporating the use of tabs and a ribbon-like navigation bar. The Memex Patriarch solution has been redesigned with a modern interface that includes commonly used features that users will be familiar with from other modern applications – such as tabs, dynamic drop-down lists, pop-up calendar controls, and a "ribbon" for performing actions such as navigating between records in a set of search results.	X		
2-02	Provide the ability to enter data from different peripherals such as a keyboard, a mouse, GPS units, cell phone extractor equipment, PDA's, digital cameras, recording devices or a scanning device. The Memex Patriarch solution allows for data to be entered using standard keyboard and mouse interfaces. Additionally, electronic files – including scanned documents - can be added to the system. Any file type can be added including audio and video files. These can be added from any device that can be connected to the user's computer – including cell phones, PDAs, digital cameras, digital recording devices, etc. The contents of many types of file that contain text – including Microsoft Office files, Adobe Acrobat PDF documents, emails, WordPerfect files and scanned/OCR-processed documents – can be extracted and made searchable within the system. Files entered from peripherals appear as attachments to the associated database record. By clicking the attachment link, users can view the files in their associated applications. For example, clicking on a linked '.doc' file will cause the file to be displayed in Microsoft Word.	X		
2-03	Provide users with drop down boxes or pick lists to standardize data entry. Users are provided with drop-down lists where appropriate. These can either be bound (so that users can only select from the pick list) or unbound (so that the user can select from the list, or type in an alternative entry. Pick lists entries can be rule based, meaning the values in one pick list will depend on the value selected in another pick list. The List Manager module of the system allows application administrators to modify the contents of any pick list on the system or to configure the rule-based behavior, as required.	X		
2-04	RESERVED			
2-05	Allow system administrators to customize data entry screens by adding, deleting, or rearranging data elements on the screen. The Memex Patriarch solution contains a Form Designer application that is typically only available to system administrator(s). This is a graphical design tool that allows the administrator to click and drag any control on any form to rearrange the form as required. Form controls – including complete tabs – can easily be added or deleted. The administrator can also change any of the button text, colors, size of text entry boxes, etc. Additionally, the system uses administrator-configurable "form attribute rules" which can be used to change the properties of any form control, be it a simple label, a text field or complete tab. Criteria specified by the administrator can, for instance, hide certain controls, or make them read-only, depending on the content of fields or details within the user profile of the current user.	X		

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
2-06	As any identifiers are being entered, the solution must prompt the user to search the internal data for any duplicate or similar information and display that record in a manner that allows the user to link to that information. Avoiding duplicate data has been a high priority of the Memex Patriarch solution is designed to minimize duplicate data being entered wherever possible. The “match search” process forces users to search for existing data before completing a new record. For example, when entering a new person record, users may be forced to enter a first name and last name, perform a search for matching records, and review any matches that are found, before they can enter any more details on the form and submit the new record. If a match is found, the user can update the existing record rather than continuing to create a new record.	X		
2-07	As the initial entry is being made a record number must be automatically generated and date and time stamped. This record number must appear on any screen referring to the entered record. The Memex Patriarch solution will automatically generate a URN (unique reference number) when any new record is created. The URN is typically displayed on the first tab of the form used to display the record, but can be moved to another tab by the system administrator, if required. When a record is created it is automatically date and time stamped, with details saved in the sysdatecreated and systimecreated system fields. These can be displayed on forms if required. The name of the user who created the record is also automatically captured in the syscreatedby field. The date, time and user are also automatically captured when a record is updated. This allows a form to display the “Last updated” date/time and “Last updated by” user, if required.	X		
2-08	To support compliance with 28 CFR 23 the solution must prompt the user to enter a reason for entering or updating data in the system, solution should provide drop down menu pick lists so reasons are uniform. The Memex Patriarch solution will support compliance with 28 CFR 23. The solution can prompt users for record entry and update reasons. Throughout the solution, users are provided with drop-down lists where appropriate.	X		
2-09	While entering data, the solution must allow the user to select confidence levels and provide reason for level chosen to restrict access and source reliability levels. The Memex Patriarch solution will be configured to include fields to capture a confidence level and reason for the level chosen. These required fields can be specified as mandatory, so that the user cannot create a new record without setting a confidence level and giving a justification. The security rules feature of the system makes it possible for security to be set on a new record automatically when the record is created, based on the confidence level. As part of the initial configuration of the system during Phase 2 of the project the contractor will work with the State of Michigan to configure these fields and security rules as required.		X	

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
2-10	During the entry or edit process all screens should be available with page tabs to click on so user can toggle from screen to screen. Solution prompts user if any screens are skipped or if any data fields are left empty. Whenever a user creates or edits a record, all parts of the form are available by clicking on a tab, allowing users to toggle from screen to screen. The Memex Patriarch solution prompts the user if he/she attempts to create or update a record in which any of the mandatory fields are empty. Additionally, the contractor's solution Memex Advice Engine can be configured to perform actions based on values entered into form fields, either on the click of a button during data entry, or when the user submits the form. The Memex Patriarch solution form extensions (MFX) functionality can be leveraged to make complex forms easier to use by showing or hiding controls, or entire tabs, that are not relevant to a particular user.	X		
2-11	Drop down menus must exist for all pre-defined fields such as M/F, City, State, and County etc. Drop-down lists are used for all fields for which standard values exist – for example, Male or Female, names of states or counties, etc.	X		
2-12	Provide users the ability to access help information concerning each data field in a method that is immediately accessible with minimum effort by user. The Memex Patriarch solution has context-sensitive help, which allows the user to get help relating specifically to the screen or form he/she is looking at. The form-based help can be tailored to match any customer-specific configuration of forms, and the contractor will work with the State of Michigan to configure the context-sensitive help to match any such changes to the forms supplied as part of the contractor's solution.		X	
2-13	Provide ability for solution to differentiate victims, suspects, non-criminal associates, relatives and events and display the relationships to the entry. The Memex Patriarch solution uses an automated system of linking structured data records such as person records, vehicles, locations, etc. to the intelligence report in which the information in those structured data records was originally captured. For example, an intelligence report may mention a victim, suspects and non-criminal associates. When records for each of these people are created, or updated with information contained in the report, the solution automatically links each person record back to the intelligence report. The records can be shown on a link chart and the links labeled to describe the person in relationship to the report (e.g. victim or suspect).	X		
2-14	Ability to import, store, and index data from scanned files, MS Office files and PDF files. These files are imported as attachments to data records. For example, an intelligence report may have relevant scanned documents, image files, video and audio recordings etc. added as attachments. The text within files such as Microsoft Word documents, scanned/OCR-processed documents, PDFs etc, is stored within the database record so that a search for a particular word or phrase will find records where that word or phrase is contained within one of the attached files.	X		

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
2-15	When the final entry is complete, the solution must search within the database for similar data. The user can then link credible hits with the new record being entered. The Memex Patriarch solution's built-in Advice Engine includes the ability to perform automatic searches based on the data in a newly created record, such as an intelligence report. The Advice Engine searches for possibly related records and presents hyperlinks to these records, which users can use to review the records and, where appropriate, link them to the new record.	X		
2-16	As more data is entered and stored there must be no degradation of system performance. As data is added to the system, there will be no appreciable degradation of overall system performance for typical usage of the system. Depending on the volume of data and the nature of that data, users performing searches for very common terms across all available data may notice a slight reduction in the speed at which the contractor's solution returns results from a heavily populated database, compared to a sparsely populated database. This is true of all database search systems. However, users searching for uncommon terms or specific combinations of terms are unlikely to notice any difference in the speed of searching as more and more data is added to the system. The contractor ensures overall system performance will remain within acceptable boundaries as system data grows. The following figures illustrates required response times for a search run across the Memex Patriarch database containing over 10 million records (running 600 concurrent users on two Sun Microsystems™ servers): • 90% of searches completed in under 1 second • 96% of searches completed in under 2 seconds • 98% of searches completed in under 5 seconds It is important to note that the contractor's solution – unlike many other systems – does not wait until the entire search is complete before results are returned to the user. This means that the user can start viewing records returned by a search at the earliest possible opportunity, while more records are still being added to the results list.	X		
2-17	Defined users must be able to create additional forms / screens to support their work priorities. These forms can be shared with any database users to provide for uniform reporting of identified subjects. The Memex Patriarch solution contains a Form Designer application that is typically only available to system administrator(s) – although other users can be given access if required. Using this graphical design tool the administrator can create new forms or modify existing forms as required. These forms can be used by any database user. Access to forms is configured by system administrator(s) from within the solution's Entity Manager module.	X		

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
2-18	When an entity that is linked to another entity is purged, the link is dissolved. The Memex Patriarch solution has two levels of record deletion: archiving and purging (i.e. permanent deletion). When users with the appropriate permission delete a record, it is in fact covertly archived. This means it is no longer accessible to most users on the system and any links it had cannot be displayed. For most users the record and its links appear to have been purged. Specified users (senior officers and system administrators) can access archived records and restore them, or purge them, at which point any links to that record are also purged. If an archived record is restored its links are also restored, unless the record at the other end of the link has been archived or purged. Note: there is a configuration option to turn off the archive feature so that, when a user deletes a record it is immediately purged from the system, together with its links.	**X**		
3-00	**Data Search**			
3-01	The solution must provide a method of searching on last name, first name, DOB, Social security number, business name, organization name, address, telephone number, crime type, County, City, State, date/time frame, data source, record number, file originator and text. The ease and flexibility of searching are key strengths of the Memex Patriarch solution. Searching the database requires no knowledge of available fields or the database structure. The solution offers a variety of methods of searching. The simplest type of search is a free-text search where you can run a query without having to specify which fields you want to search. This allows you to search for records in a manner similar to searching on Google – just type some words into a search box and click the search button. For advanced users who need to build complex queries, the Memex Query Language includes an operator that allows queries to be restricted to any specified field within a database.	**X**		
3-02	Within the search fields the ability to use wildcards, begins with, contains, exact, Soundex, and Boolean logic. The Memex Patriarch solution allows users to use wildcards, begins with, exact matching, Soundex and Boolean logic within fields on a search form, or in the free-text search box. The Memex Patriarch solution also includes the following search features: • proximity searching allows you to find only records where the words you have specified occur near each other • m from n searching allows you to find records containing at a number of words from a larger list of words • synonym expansion allows you to find records containing the word you entered, or words with a similar meaning • garbled expansion allows you to find words that are possible misspellings of the word you entered. This helps you to find records in which the word you are looking for has been entered incorrectly. The Memex Patriarch contractor's solution also allows automated preprocessing of search queries, which can be customized to meet particular customer needs.	**X**		

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
3-03	Provide user ability to save predefined queries and pick those from a created menu available on the search screen. Each user will have their own Home Page where they can store their own queries for reuse. Saved queries are displayed on the Home Page as search links, with user-defined text that helps the user to remember the purpose of the search – for example, “My recently created records.” The user simply clicks a link to run the search. Searches saved on the Home Page can be set to “autorun” which means the search is run on a regular basis and the number of records returned by the query is shown alongside the search link.	X		
3-04	Query results must appear in a menu that displays the data that matched the query in a row format displaying the reason for the hit. The user picks from that menu the data they would like to view. The Memex Patriarch solution provides results to queries in a “Results Viewer.” Results are organized in column and row format with a breakdown of the number of records found for each type of record. The Result Viewer also allows users to organize the search results and to choose subsets of results they would like to list. Clicking a row within the results viewer displays the relevant record in a form. The data that matched the user’s query is highlighted in colored text within the form. Clicking the Next Query button selects the next matched data within the form. If this is on another tab of the form, the relevant tab page is displayed. By clicking the navigation buttons the user can page forwards or backwards through the results set, reviewing each record in turn.	X		
3-05	Query results must be able to be linked to other existing information in the database by the record owner. If the user is not the record owner the user can save the two linked entities in a temporary file to be reviewed and linked by the record owner. The Memex Patriarch solution is partially compliant with this requirement. The Memex Patriarch solution allows records to be linked together. In order to be able to link records, users must be a member of a group that has been allocated the “link” system permission. The system does not store suggested links in a temporary file. All users with “link” permission can link any two records they can access. All link operations are fully audited so that it is possible to see who linked two records, or to list all link operations performed by a particular user.	X		
3-06	The record owner must always maintain the final permission for any editing of information in their record. New data can be added by others but that information must be sent to the record owner for permission to automatically add data to original record Entities can be configured so that users who are not the owner of a particular record cannot modify the record except to request/suggest a change. To do this users enter their suggested change in a change request field, select a check box to confirm that they want to request the change and save the record. The record owner is then alerted of the change request via their Home Page. The owner can then review the request and either change the record accordingly or simply delete the change request.		X	
3-07	System administrators must have the ability to function as a proxy for record owners. System administrators can update records for which they are not the owner. They can, therefore, act as a proxy for the owner of any particular record.	X		
3-08	The solution must provide a method of reassigning records by a system administrator(s). The Memex Patriarch solution will be configured so that the owner of a record is specified in a field within the record. The system administrator(s) can change the user specified in this field as required, thereby reassigning the record.		X	

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
3-09	The solution must be able to search narrative text for key words.	X		
3-10	In the results screen the user should be able to pick what data fields should be displayed in columns of results. The user can choose which fields to display in the results viewer by right-clicking the column header and selecting from the list of fields that is displayed. The system administrator(s) can choose which fields to allow users to choose from for each type of record. For example, there may be system fields, or fields that are hidden to some users when the relevant form is displayed, which are not appropriate for users to display in the results viewer.	X		
4-00	**Administration, Security and Purging Data**			
4-01	Provide automated notification to the record owner or identified administrator when data requires a review for purging or renewal. All records within the Memex Patriarch solution can be assigned a review date either automatically (optionally based on the values of relevant fields in the record), or manually by users with the appropriate permissions. The system monitors for records approaching their review dates and a defined interval before the review is due (e.g. 30, 60, 90 days) it sends out a review notification via email to the specified user. This is typically the record owner but may be an administrator. Each user profile specifies a review email recipient. When that user creates a record, the reviewer is set according to the setting in his/her profile. The nominated reviewer for any record can be changed by users with appropriate permissions. If the reviewer does not either renew or purge the record from the system, he/she is sent an email reminder every day until the review is done. A reminder message is also displayed to the user every time he/she logs in to the system while reviews are overdue. A review alert can optionally be added to users' personal Home Page.	X		
4-02	Provide the original record owner the ability to give ownership to another user who requests to become record owner. The Memex Patriarch solution will be configured so that the owner of a record is specified in a field within the record. The current owner of a record can modify the contents of that field – choosing another user from the User Chooser control – thereby assigning ownership of the record to the specified user.		X	
4-03	Provide a report of pending records to be purged within a user designated timeframe The Memex Patriarch solution allows users to list records that may be approaching their mandatory review date, thus being subject to possible purging. This information can be formatted into a report. All users including system administrators can specify designated timeframe parameters for those records they want to include in this list. Links to the queries that produce these lists can be saved in the "System Searches" or "My Searches" section of the Home Page, making it extremely easy for users to display this information. For more complex statistical reporting, the contractor's solution uses Crystal Reports as its reporting engine. Users with appropriate access can use Crystal Reports to generate a report of pending records to be purged. Note: Reporting is not restricted to Crystal Reports. The contractor's solution allows other standard reporting tools to access data for statistical reporting purposes.		X	

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
4-04	User must be able to schedule systematic reports on a time basis of week, month, or year. The Memex Patriarch solution uses Crystal Reports as its reporting engine. Users with appropriate access can schedule reports to be generated on a weekly, monthly or yearly basis. Other users can view these reports via a browser.	X		
4-05	Users must be able to generate their own ad-hoc or parameter driven reports. Users can use the structured printout facility within the Memex Patriarch solution to produce a printed report at any time. This facility allows users to drag and drop combinations of records onto the Structured Printout Panel and then print a consolidated printout from the information in those records. Alternatively, users with appropriate access can use Crystal Reports for generating ad hoc reports based on data in the Memex Patriarch solution.	X		
4-06	Must be able to store personal identifiers such as those shown for the confidential informants The Memex Patriarch solution can store identifiers for any required information type. The solution allows system administrators to easily modify and add fields for each type of record. As part of the initial configuration of the system during Phase 2 of the project, the contractor will work with the State of Michigan to identify what fields should be collected for each record type and develop an initial set of form designs for use within the system. This will include all required personal identifiers. Following the initial implementation, system administrators will have received all training required to make any subsequent changes without support from the contractor.	X		
4-07	The solution must be able to store identifiers for all conveyances, such as vehicles, aircraft, and watercraft etc. The Memex Patriarch solution can store identifiers for all conveyances, such as vehicles, aircraft, and watercraft etc. As part of the initial configuration of the system during Phase 2 of the project, the contractor will work with the State of Michigan to identify what fields should be collected for each record type and develop an initial set of form designs for use within the system. This will include all required conveyance identifiers. After implementation, system administrators can easily modify and add fields for each type of record. This will allow the State, for example, to modify the system to account for new types of conveyance, without requiring support from the contractor.	X		
4-08	The solution must be able to store all identifiers for associates or electronic links between individuals, vehicles, crimes etc. The Memex Patriarch solution can store identifiers for all associates. Users with “link” permission can create links between records such as individuals, vehicles and crimes to record relationships that exist between entities mentioned in reports. User defined links can contain information that describes the nature of the links. Additionally, electronic links between can be system generated between records. For example when a record is updated it is automatically linked to the currently selected source information. As part of the initial configuration of the system during Phase 2 of the project, the contractor will work with the State of Michigan to identify what fields should be collected for each record type and develop an initial set of form designs for use within the system. This will include all required associate identifiers.	X		

	FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
4-09	The solution must be able to notify analyst and investigators by e-mail, cell phone, PDA, and pager as new records are added based on entered criteria Users have the ability to specify criteria and have the system periodically check for new records being added to the system that meet those criteria. As records are identified, alerts are sent to the relevant users via email. Using commercially available messaging services, it is possible to have those emails delivered to PDA's, pagers and cell phones.	X		
4-10	The solution must allow defined users to design custom reports. NOTE - Indicate clearly if a 3rd party reporting tool is being proposed and how data access will be accomplished. The Memex Patriarch solution has two methods of producing reports. Within the contractor's solution, users can use the structured printout facility to generate reports consisting of data collated from multiple records. For statistical reporting, users with appropriate access can use a standard third-party reporting tool, such as Crystal Reports.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
5-00	**Capacity**			
5-01	The solution must be able to support 450 concurrent web based users.	X		
5-02	The solution should be able to be licensed and installed in a development, Quality Assurance, and disaster recovery environment. The Memex Patriarch solution can be installed in Development, Quality Assurance and Disaster Recovery environments. The license for the solution will cover all agreed environments. The contractor will work with the State of Michigan during the initiation phase of the project (Phase 1) to determine and agree the environment requirements.	X		
5-03	All law enforcement personnel, regardless of physical location, must have full access to the MCIS. All law enforcement personnel, regardless of physical location, will have full access to the MCIS provided access to the MiCJIN portal is available from the location and personnel are able to authenticate successfully, The application is delivered to the user via a Web browser after the user has authenticated through the MiCJIN portal. Any access using the internet from a unsecured location will be through the use of a VPN and secure token accessing the MICJIN portal.	X		
6-00	**Solution Auditing**			
6-01	The solution has the ability to maintain a historical record of all changes made to any item within the solution (e.g., data element, business rule, process control, software program), the ID of the person or process that made the change, the before images of the affected data records, and the date and time the change was made. The Memex Patriarch solution includes comprehensive, system-wide auditing that audits all changes made by users within the solution (including changes to data, business rules, security settings, user profiles, etc.) The information gathered within an audit record is specific to the type of activity being performed, however the following information is recorded for all audits: • The ID and name of the user performing the action • The type of activity, e.g. EDIT, VIEW • The date the activity was performed • The time the activity was performed The Memex Patriarch solution also includes “record versioning” functionality which captures the exact details of all changes that are made to each record and allows authorized users to step back through each change. Auditors can also use the record versioning functionality to display a historical version of a record as it would have looked to a specified user at a specified point in time. The audit trail for the entire system is typically updated every minute, so there is no need to wait for an overnight process to update the audit database before you can search for details of user activity.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
6-02	The solution must ensure that all solution events for software, hardware, interfaces, operating solution, network, etc. are written to a solution event log in a manner that facilitates debugging of all solution problems. The Memex Series VI server software includes configurable event logging to facilitate the debugging of any solution problems. This logging can be set at a number of different levels of verbosity, or turned off. Typically the more verbose levels of logging – where more information is logged about more events – is never required as low-level event logging usually allows the cause of any problems to be identified.	X		
6-03	The solution offers the ability to query, view, filter, and sort the solution audit trail. The solution is able to store the queries. Users with permission to search the audit trail have at their disposal the full range of search capabilities offered throughout the contractor's solution – including fielded and free-text searches, Boolean operators, wildcards, proximity, etc. Results can be sorted and queries stored on the user's Home Page for later reuse within the Audit Management module. The Audit Management module provides a search form to make it easy to search for audit records relating to particular users or groups (by selecting from a User/Group chooser popup) or within a specified date range (by using a popup calendar to enter start and end dates).	X		
6-04	The solution has the ability to identify and track data back to its input source (e.g., imaged document, keyed from form, interface file, etc.). The Memex Patriarch's comprehensive auditing, with before and after details of changes shown field-by-field in an audit record, allows auditors to track the source of data.	X		
6-05	The solution has the ability to audit all override of edits and audits and identify the login ID, date, and time. The Memex Patriarch solution audits all edits to records, including the situation where an auditor-level user removes changes made to a record by another user. All logins are audited, with details including login ID, date and time of login and logout (either manual logout or automatically timed out logouts). Auditing operations themselves are fully audited and audit records cannot be edited. This provides confidence in the accuracy of the audit trail.	X		
7-00	**Error Handling**			
7-01	The solution must ensure that all errors are written to an error log. The Memex Series VI server software logs all errors in a text file. The error log also records configuration information about the system each time the Memex Series VI server software is started.	X		
7-02	The solution must allow for an administrator to view, filter, sort, and search the error log. The error log is plain text and can therefore be viewed, filtered, sorted and searched using any standard text processing application.	X		
7-03	The solution must allow for an administrator to archive error log entries based upon user-defined criteria. The error log is stored as plain text. A system administrator can therefore search this log for defined criteria, using a standard text editor, extract entries to a separate file and archive this. If this process needed to be automated, a simple script could be set up to perform this operation on a regular basis.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
7-04	The solution must allow for a user to define an alert message to be executed upon the occurrence of an error. A simple script could be configured to check the error log on a regular basis and send an administrator-defined email message to a specified individual, or group, if an error occurred.		X	
8-00	**Training**			
8-01	Train the Trainer will be provided on a regional basis with one train the trainer session held in each of the seven (7) regions across the state. Each train the trainer class will consist of up to 20 people per class. The contractor will provide train-the-trainer sessions: One session in each of seven (7) regions across the state. Each training session will take four (4) days. The State will be required to provide all facilities for each training session, including adequately sized rooms, a networked desktop/laptop PC per trainee and a server for the training environment. The contractor can accommodate classes of up to 20 people (given adequate facilities).	X		
8-02	Technical training is provided as part of the cost of the solution for individuals who will be working with the services Contractor to configure the applications including establishing databases and interfaces, data conversion, customization, and upgrading the customized software. Technical training will be provided for the Memex Patriarch solution covering the following (this is not an all-inclusive list): • Contractor's Database Administration and Integration • Installation and administration of the contractor's applications and utilities • Upgrade of the system • Expansion of system functionality • Associated search, analysis and data capture programs • Data backup and redundancy • User Interface Development • User Management The training is divided into two 3-day courses: • Systems Administrator Course This covers administration at the level of the core Database Management System. • Application Administrator Course This covers configuration (including database creation, form design, business rules, etc.), user management and other features that are controlled through modules within the user interface.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
8-03	Solution administration training for personnel who will be responsible for ongoing maintenance and administration of the solution, including security. This is provided as part of the cost of the solution. The contractor will provide administration training for personnel who will be responsible for ongoing maintenance and administration of the solution. This is encompassed in the Application Administrator Course described in the response to 8-02, above. This course includes information relating to the administration of record-level security, user/group security and permissions-based access to functionality.	X		
8-04	Upgrades and new versions to the solution that affect end-user functionality include training at no additional cost (e.g. classroom or online training, training flier, release features, etc.). Continual learning, and support for new functionality or changes to end-user features, are provided through the following means: • Additional classroom training, as deemed necessary • Updated documentation. • Release notices • Additional online help topics.	X		
8-05	The Contractor shall provide all training materials, training plans and other documentation to the State in hardcopy form as well as an electronic version.			
8-06	Training materials provided shall become the property of the State.			
8-07	Training shall be conducted at location(s) to be determined on a regional basis as identified in Attachment G, section 8-00.			
8-08	The State will be responsible for providing the classroom facility and necessary equipment.			
8-09	The Contractor as agreed upon with the State shall provide classroom style training for 60 users as identified by the state on significant upgrades and modifications of the system that affect end-user functionality at no additional cost to the State.			
9-00	**Knowledge Transfer**			
9-01	Mentoring and training of State staff is provided in preparation for transitioning the operation and support to the State of Michigan staff. The contractor will provide training as describe in the responses to requirements 8-01 through 8-04. The mentoring and training provided by the contractor will prepare State of Michigan staff for a smooth, low-impact transitioning of the system and will allow them to successfully operate the system and support of all MCIS users.	X		
10-00	**Documentation**			
10-01	Contractor will provide a minimum of two (2) hard copies of the User and Technical Manuals. Contractor will also provide electronically and make them available online. The contractor will provide two hard copies of the user and administration manuals, plus the technical manual for the database management system. The contractor will also provide these manuals electronically, in PDF format, and will give the State permission to publish these on its intranet. User and administration manuals is also available within the online help that is accessible to users from within the application.	X		
10-02	Contractor will provide a minimum of two (2) hard copies of the Operations Manual. Contractor will also provide electronically and make available online. The contractor will provide two hard copies of the administration manual for the contractor's solution, which provides operations instructions for the system. The contractor will provide this manual electronically, in PDF format. The administration manual is also available within the online help that is accessible to users from within the application.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
10-03	Contractor will provide a minimum of two (2) hard copies for all updates of documentation during the term of the Contract, software license, and maintenance agreement and will make them available online The contractor will provide two hard copies of all updates of documentation during the term of the Contract, software license, and maintenance agreement. Electronic copies, in PDF, will be made available online for download via FTP by system administrators, and these can be published on the State's intranet, if required, for wider accessibility. All updates to the online help system will be available, from within the application, in the updated version of the solution.	X		
10-04	Contractor shall supply manufacturer's software in original manufacturer packaging with complete manufacturer documentation, manuals, disk(s) or CD ROM and warranty enclosed. The contractor will supply its software in the original manufacturer packaging with complete manufacturer documentation, manuals, disk(s) or CD-ROMs and warranty enclosed.	X		
10-05	Solution-wide documentation and specifications will be provided for all modules and program development.	X		
10-06	Baseline End-User training manuals to be used as a basis for "User Manuals" and online help will be provided for all modules and program development. The contractor will provide the State with copies of the end-user training manual for Memex Patriarch. The Memex patriarch solution contains a comprehensive online help system that covers all modules of the application.	X		
10-07	Installation procedure will be provided for all modules and program development.	X		
10-08	Module configuration documents sufficient for configuration maintenance purposes will be provided for all modules and program development. The online help and administration manual contains comprehensive details of how the system is configured. This information covers all modules and is sufficient for configuration maintenance.	X		
10-09	Testing scripts will be provided for all modules and program development.	X		
10-10	Specification documentation will be provided for all modules and program development.	X		
10-11	Production migration will be provided for all modules and program development.	X		
10-12	The documentation of components, features, and use of the hardware/software shall be detailed such that resolution of most problems can be determined from the documentation, and most questions can be answered.	X		
10-13	All solution, operational, user, change, and issue documentation must be available in electronic format, published to an intranet website, accessible to State users, updated regularly, with unique numerical identifiers for each section and be consistent with the most current version of the application(s) and three (3) previous versions. The contractor is partially compliant with this requirement. All solution, operational, user, change, and issue documentation will be made available in electronic format, as PDF files.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
10-14	All solution, operations, user, change and issue documentation is to be organized in a format, which is approved by the State and facilitates updating and allows for revisions to the documentation to be clearly identified including the three (3) previous versions. The contractor is partially compliant with this requirement. All solution, operations, user, change and issue documentation that relates specifically and solely to the solution supplied to the State of Michigan will be organized in a format, which is approved by the State and facilitates updating and allows for revisions to the documentation to be clearly identified including the three (3) previous versions. The contractor cannot, however, commit to State approval of generic documentation of its solution.	X		
10-15	Contractor must develop and submit for State approval complete, accurate, and timely solution, operations, and user documentation. The contractor is partially compliant with this requirement. The contractor will develop complete, accurate, and timely solution, operations, and user documentation for the solution. Any solution, operations, or user documentation that relates specifically and solely to the solution supplied to the State of Michigan will be submitted to the State for approval. The contractor cannot, however, commit to State approval of generic documentation developed for its solution.	X		
10-16	Contractor must notify the State of any discrepancies or errors outlined in the solution, operations, and user documentation.	X		
11-00	**Warranties**			
11-01	The Contractor shall provide a warranty for all products and services resulting from this contract commencing on the first day following Performance and Reliability Evaluation (PARE), acceptance, and formal written acceptance by the State for a particular phase or software component.	X		
11-02	The minimum warranty period of two (2) years is required.	X		
11-03	The Contractor will be responsible for all parts, labor and travel expenses during the two (2) year warranty period following acceptance.	X		
11-04	The two (2) year warranty shall provide that the software is free from imperfections in design and free from any and all defects and is able to perform continuously and satisfactorily under normal operating conditions.	X		
11-05	All configurations are covered by the manufacturer's standard warranty.	X		
11-06	All applicable third party warranties for deliverables are assigned to the State.	X		
11-07	Any upgrades of the software made during the warranty period are supplied at no additional cost.	X		
11-08	During the warranty period, Contractor must correct any element of the system which fails to perform in accordance with the requirements of this Contract and/or published specifications, at no cost to the State. Corrective action by the Contractor shall include, but is not limited to, redesigning, repairing or replacing the nonconforming element			
12-00	**Maintenance and Support**			
12-01	Maintenance programs commence at the end of the warranty period.	X		
12-02	The software maintenance program includes all future software updates and solution enhancements applicable to solution modules licensed without further charge to all licensed users maintaining an annually renewable software support contract.	X		
12-03	Contractor shall provide TIER III, User and Technical Help Desk Support 8am to 6pm EST, Monday through Friday.	X		
12-04	Maintenance service options are defined and priced separately including onsite service, 2- (emergency), 4-, and 8-hour and next day response times.	X		
12-05	Guaranteed parts availability within the service response window at all times.	X		
12-06	Emergency assistance is available 24 hours a day, seven days a week upon notification by MDIT Technical Staff, based on hourly or incident cost identified in Cost Table 2b. The contractor confirms that emergency assistance will be available 24 hours a day, seven days a week upon notification by MDIT Technical Staff, based on hourly or incident cost identified in Cost Table 2b.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
12-07	The State will be provided with information on software problems encountered at other locations within or outside the State's solution, along with the solution to those problems, when such information is relevant to the Contractors solution. The release notes for the Memex Patriarch solution provide all customers with details of problems encountered by customers. The names of customers are not published in the release notes, but each issue has a reference number against it so that customers can identify their own issues. Wherever possible workarounds to issues are provided. If important issues arise between releases, customers are notified by the contractor's customer support, or by the customer's account manager, and provided with details of any remedial action that should be taken.	X		
12-08	Support is provided for superseded releases and back releases still in use by the State. The contractor will continue to support superseded releases and back releases still in use by the State, under the terms of the Support and Maintenance Agreement. The contractor's policy is to support the previous major release of a product and all subsequent minor releases of the product.	X		
12-09	For the first year and all subsequent Contract years, the following services are provided for the current version and one previous version of any Software provided with the deliverables, commencing upon installation of the deliverables or delivery of the Software: • **Error Correction:** Upon notice by State of a problem with the Software (which problem can be verified), reasonable efforts to correct or provide a working solution for the problem. • **Material Defects:** The State will be notified of any material errors or defects in the deliverables known, or made known to Contractor from any source during the Contract term that could cause the production of inaccurate, or otherwise materially incorrect, results and shall initiate actions as may be commercially necessary or proper to effect corrections of any such errors or defects • **Updates:** All new releases and bug fixes (collectively referred to as "Changes") for any software deliverable developed or published by Contractor and made generally available to its other customers at no additional charge will be provided to the State at no additional charge.	X		
12-11	Contractor shall provide maintenance for all associated software listed in Exhibit C, for the duration of this contract.	X		
12-12	The State classifies technical and user support as follows: TIER I Support: will be provided by the MICJIN Help Desk to answer questions and assist the user with the operation of the MCIS solution. They will also assist in determining if a problem is a hardware, software, or network problem and will elevate the issue as required. TIER II Support: will be provided by subject matter experts (SME) identified within the MIOC who will assist with user questions and technical issues that cannot be corrected by the MICJIN Help Desk. Hardware and network problems will be addressed by MDIT staff. TIER III Support: will be provided by the Contractor and identified sub-contractors only after being contacted by identified MIOC and MDIT Technical Staff.	X		
12-13	The Contractor at no charge to the State will correct any software defects as described in Article 1, Section 1.104.VI Maintenance and Support.	X		
12-14	The Contractor shall provide a toll free line for help desk support	X		
12-15	The Contractor shall provide TIER III Technical and User Help Desk Support, 8am to 6pm EST, Monday – Friday.	X		
12-16	The Contractor shall acknowledge receipt with a course of action for all requests for technical support service within the time frames as indicated in Article 1, Section 1.104.VI Maintenance and Support.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
12-17	Software upgrades or new versions of the Michigan Criminal Intelligence System shall be included within the cost of annual maintenance.	X		
12-18	If the addition of equipment and/or software, during the duration of this contract results in an increase in costs to be paid by the State under the Contract, the proposed increase will not be effective unless and until approved using the Change Management Process in Article 1, Section 1.403 or this contract.	X		
12-19	The Contractor shall provide online technical system documentation.	X		
12-20	The Contractor shall provide email user support with a maximum 24-hour turnaround on questions as defined below. The State is requiring user and technical support Monday thru Friday, 8am to 6pm. Turn around on times for e-mail request are expected to be received by 5:00PM EST of the next business day.	X		
12-21	The Contractor shall provide on-site technical support upon the State's request at the expense of the Contractor up to forty (40) hours per year in one or multiple trips.	X		
12-22	The Contractor shall provide an escalation process for technical support issues.	X		
12-23	The Contractor, with the State's approval, may provide remedial maintenance off-site via state approved VPN connection to the system.	X		
12-24	Qualified personnel who are familiar with the Memex software shall perform all maintenance.	X		
12-25	The Contractor shall have on staff at all times qualified personnel to maintain the Memex software.	X		
12-26	The Contractor shall provide remote diagnostic capabilities.	X		
12-27	The Contractor shall provide one (1) Point-of -Contact (POC) to report system malfunction whether malfunction is due to software or is of unknown origin. The Contractor shall be responsible for providing the appropriate remedy.	X		
12-28	RESERVED			
12-29	Contractor shall identify how bug fixes and software errors are reported and resolved via Contractor's online support portal.	X		
12-30	The Contractor shall make maintenance of the system available from the Contractor on an annually renewable Contract basis.	X		
12-31	The Contractor shall provide the following services for the system, for the term of the contract, commencing upon installation of the deliverable(s): • Error Correction. Upon notice by State of a problem with the system, the Contractor shall correct or provide a working solution for the problem. • The Contractor shall notify the State of any material errors or defects in the deliverables known, or made known to the Contractor from any source during the Contract term that could cause the production of inaccurate or otherwise materially incorrect results. • The Contractor shall initiate actions, as may be commercially necessary or proper to effect corrections of any errors or defects. • Annual maintenance and support of the system. The State will provide the day to day support and operation of the system once solution has been accepted. This section pertains to the annual maintenance and support if there were technical problems with the solution.	X		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
13-00	**Migration**			
13-01	Data, and related information, has a migration path to future revisions of the hardware and software and there is a guaranteed and reasonably straightforward "exit path" to solutions of other vendors. Developing, documenting and testing an upgrade path is a key component of any new version of the contractor's solution. In the unlikely event of an "exit path" being required, the contractor will work with the State to help migrate the State's data and related information to the solution of another vendor.	**X**		
13-02	Data will migrate smoothly to any future revision of the software and hardware ("smoothly" would be defined as having the solution administrator follow Contractor-supplied written instructions to run a Contractor-supplied program or programs in batch mode to convert data, or any process that is simpler or more automatic than this). At a minimum, for simple migration operations, a detailed procedural set of instructions is supplied. For more complex migrations, server-side scripts are supplied, with detailed instructions, for the administrator to run. Additionally, automated programs may be supplied, where appropriate, with a graphical interface, to allow the administrator to perform upgrade tasks from a Windows workstation, clicking through a "wizard"-type process and entering a minimum of details where these details are not available for detection by the software.	**X**		
14-00	**Delivery Requirements**	**-**		
14-01	For all orders placed by the State during the term of this Contract, delivery will be made within ten (10) business days of order. (Elapsed delivery time will be measured from the time an order is accepted, either verbally or in writing by the Contractor, to the time product is delivered to the site identified in the purchase order.)	**X**		
14-02	The deliverables shall be shipped F.O.B. Destination, freight prepaid and allowed, directly to each entity, unless otherwise requested, and to the exact locations shall be specified in the purchase order.	**X**		
14-03	If, during the term of the Agreement, the Contractor enters into a contract with any other customer for substantially the same quantity, equipment, software and services, terms and conditions for a lower cost, the Contractor will offer the same decrease in rate to the State	**X**		
15-00	**Backup and Recovery**			
15-01	The solution has the ability to provide point-in-time recovery of data to the last completed transaction. The contractor's disaster recovery mechanism operates at an atomic transactional level, writing a duplicate transaction instruction to a disaster recovery server after every transaction is processed on the production servers. In the event of a server failure, or a catastrophic system failure due to an external event, this allows data to be recovered back to the last atomic transaction, provided the replicated data survives. Each of the two production data servers will use the other server as its disaster recovery server, with transaction files being written across to the other server as each transaction is performed, and then the data being replicated into DR copies of databases, from the transaction files, on a regular basis. In the event of a single server failure, or similar problem, the replicated data can be recovered using the disaster recovery tables on the unaffected server. The Memex Patriarch solution includes a Data Integrity Checker which would be run after a recovery option. It checks the system and reports on any issues relating to data integrity – for example, missing links between records.	**X**		

	GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
15-02	The solution has the ability to allow for continued use of the solution during backup. The Memex Patriarch solution includes a backup tool that can be run without shutting down the system, allowing users to continue using the system while a backup of data tables is made. Backup of the auditing systems and configuration settings needs to be scheduled.	X		
15-03	The solution has the ability to provide a complete backup and recovery process for all database tables and solution files. The contractor has the ability to provide a complete backup and recovery process for all database tables and solution files.	X		
15-04	The solution has the ability to create on request backups.	X		
15-05	The back up and archival features of the solution proposed can be initiated automatically or by manual request.	X		
15-06	The solution software and data must be able to be restored to its previous operational status within four (4) hours after initiation of recovery process.	X		

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
16-00	**Solution Architecture**			
16-01	The solution employs web-based architecture that allows the application to be accessible from the most commonly used browsers. Examples: Internet Explorer, Netscape, Mozilla, and Fire Fox. The Memex Patriarch solution employs web-based architecture that allows the application to be accessible from current versions of the two most commonly used browsers: Microsoft Internet Explorer and Mozilla Firefox.	X		
16-02	The solution places no limit on record size. There is no practical limit to the size of records. The actual limit is in the region of 8GB per record. The contractor records are text-based (with images and other files stored separately and linked to records), and are stored as coded binary data which reduces the record size far below its equivalent size when stored as plain text.	X		
16-03	The software is expandable and portable, with specific reference to the solution capacity requirements presented in this contract. The scalability requirements contained within this contract are well within the capabilities of the software.	X		
16-04	The solution is fully self-contained and capable of being operated by State staff with no dependency on Contractor services for its routine operation. After completion of the appropriate training, State staff will be able to operate the system without dependency on contractor services for the routine, day-to-day operation of the system.	X		
16-05	The solution server is compatible with the State's technical and enterprise architecture and is sized suitable for the solution specified.	X		
16-06	The solution is an open solution, with no dependency on the use of specific models of equipment operating solutions.	X		

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
16-07	The solution is portable from one OS/RDBMS to another, i.e., from Unix to Windows 2000, or from one platform/OS to another, e.g., Sun Solaris to IBM AIX, etc. The Memex Patriarch solution can be operated, and is currently in production use, on selected current versions of Microsoft Windows, Red Hat and Suse Linux and Sun Solaris. The solution is portable between these operating systems. With respect to RDBMS, our indexing engine and database interoperate with Oracle, Microsoft SQL Server and MySQL.	X		
16-08	The solution keeps a log of each transaction which alters the database. Logs are date and time stamped to allow the solution to reconstruct activity for any period.	X		
16-09	The solution will interface with the State's monitoring solutions such as Compuware Vantage and CA Unicenter The Memex Patriarch solution includes a Web Service interface that can be used by external applications or services. This Web Service allows data to be accessed via a standard XML-based API.	X		
17-00	**Software Licensing**			
17-01	The software license is for perpetual use for a fixed fee without additional royalties or service fees, except for ongoing software maintenance.	X		
17-02	The software license is based on a server or enterprise license and not based on number of users The licenses supplied by the contractor will relate to specific servers, not to users. The contractor will license all servers required to deliver the solution – in practical effect giving the State an enterprise license	X		
18-00	**Programming Language**			
18-01	The solution's client applications are written in a standard web based programming language. The Memex Patriarch solution's client applications are written in standard .NET environment programming languages commonly used throughout the software industry for the development of web based applications.	X		
18-02	The solution must offer Application Programming Interfaces (APIs) that enable the State to develop custom interfaces to all modules. APIs enable data to be imported or exported from the solution. The Memex Patriarch solution includes a number of APIs and software integration frameworks that will allow the State to develop custom interfaces to all modules.	X		
19-00	**Hardware**			
19-01	All equipment supplied and/or supported under this contract must be configured in the most optimal manner and in conformance with MDIT standards. The contractor does not propose supplying hardware under this contract. The contractor will, however, help the State to configure the supported hardware in the most optimal manner and in conformance with MDIT standards.	X		
19-02	Contractor's recommended hardware platform/topology provides for optimal functioning in the following areas:			
19-02a	Contractor needs to demonstrate that their environment can support multiple modes of communications speeds (T1, 512K, dial-up) and demonstrate how the system will support user requests not hindered by limited network connectivity. Testing of the contractor's Web interface has shown that the interface is usable over a dial-up connection and its performance is consistent with, or exceeds, typical user expectations for Web sites operated over such a connection. Because almost all processing is happening on the system's Web and data servers, the speed of the user's connection to the Web servers has little or no impact on the length of time operations take	X		

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
	to complete – however, rendering of results within the browser may take longer. The following table compares the length of time taken to complete a number of typical operations in the contractors solution connecting to a test server using a variety of connection speeds: **Action** / **Corporate LAN** / **3G Aircard (Verizon Wireless)** / **56K Dial-Up** Log In To System / 7secs / 14 secs / 31 secs Time to display of first hit during free-text search of 10,000 incident reports for term 'terrorism'. / <1 sec / 6 secs / 21 secs Time to complete above search (4242 hits found) / 3.5 secs / 6.5 secs / 23 secs Time to display of first hit during free-text search of 10,000 incident reports for term 'Graham' or any phonetically similar terms / 1.5 secs / 7.4 secs / 23 secs Time to complete above search (1905 hits found) / 2.1 secs / 7.9 secs / 24 secs Load front page of **www.nytimes.com** (for comparison) / 12.6 secs / 17 secs / 68 secs The above test was carried out using a Windows XP virtual machine with 256MB of memory. By comparison, the same machine took 8.5 seconds to load Microsoft Word 2003. Using dial-up, the contractor's experience with the proliferation of high-speed corporate, DSL and cable connections found that Web performance now exceeds what is possible over dial-up.			
19-02b	Processing the volumes presented and any increases in volume that can be expected through the implementation of the solution.	**X**		
19-02c	Remote access and administration The contractor's recommended hardware platform/topology will provide for remote access and administration. At the Web application layer, Windows 2003 Server machines will be used, allowing remote access via RDP. At the data layer, SUSE Enterprise Linux Server will be used allowing multiple remote administration options including SSH, VNC and remote X Sessions.	**X**		
19-02d	Application installation, administration and support The contractor's recommended hardware platform/topology will allow application installation, administration and support to function in an optimal manner.	**X**		
19-02e	Support for a variety of TCP/IP network configurations The Memex Patriarch solution will function in an optimal manner in a variety of TCP/IP network configurations.	**X**		

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
19-02f	Support wireless LAN and WAN configurations that support TCP/IP. The Memex Patriarch solution will function in an optimal manner across wireless LANs or WANs over TCP/IP.	X		
20-00	**RDBMS / Applications / Database Management**			
20-01	The solution is available with State's standard relational database management solution. See the following web link for more information: http://www.michigan.gov/documents/dmb/1310.34_184491_7.pdf The Memex Patriarch solution stores all data entered by users in the Oracle 10g RDBMS (one of the State's standard database management systems for servers).	X		
20-02	Full-text indexing and a full-text database search feature are available to provide easy retrieval of records. The Memex Patriarch solution includes full-text indexing and a full-text database search feature, which makes it possible for users to find information by simply entering the words or phrases they are looking for and clicking the search button – without having to know anything about the structure of the data tables or how to create SQL queries. Users can search on any entity or data field, across both unstructured and structured text. The contractor's solution therefore provides total content access and, because the system's index is updated every time a record is created or changed, the results of search are accurate to the current state of the database rather than being minutes or hours out of date, depending on when the index was last updated.	X		
21-00	**Security**			
21-01	All computer information solutions and applications operate in a secure manner and comply with State and federal security standards and regulations including the MDIT 1350 **Enterprise Security Policy** and the 1410.17 **Michigan State Government Network Security Policy** as found on the website: http://www.michigan.gov/dit/0,1607,7-139-34305-108216--,00.html The Memex Patriarch solution can be operated by the State in a secure manner that complies with State and federal security standards and regulations including the MDIT 1350 Enterprise Security Policy and the 1410.17 Michigan State Government Network Security Policy.	X		
21-02	All computer information solutions and applications operate in a secure manner and comply with State and federal Criminal Justice Information Systems (CJIS) security standards and regulations as well as MCL 752.1, 28CFRpart 23 and MIOC privacy policy.	X		
21-03	All computer information solutions and applications operate in a secure manner be incompliance with SAML. The customization work that will be carried out to allow authentication and access to the Memex Patriarch solution via the MiCJIN portal will ensure that applications can be operated in a secure manner. The login/authentication process will use the SAML standard, as required, for integration with the MiCJIN portal.			X

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
21-04	The solution ensures that the integrity and confidentiality of data is protected by safeguards to prevent release of information without proper consent. The list below shows some of the sophisticated role-based compartmentalization which allows the contractor's solution to comply with this requirement: **Tiered Supervisory Process** • The option to initiate a single or multi-tier intelligence review process after submission of new information. • Automated acknowledgements and tracking of high priority or "hot" intelligence. **Role-Based Security** • A multi-level security model based on functional and security group membership. • Compartmentalized data options to support multi-jurisdictional operations • User or group-specific access restrictions can be maintained at server, database or record level. • Records can be made wholly or partly view-only, protected (i.e. data cannot be viewed), or completely covert to specified users or groups. **Auditing** • The system maintains a comprehensive audit trail that records all user and administrative activity.	X		
22-00	**Security / Access Control**			
22-01	The solution shall interface with the MiCJIN portal to provide secure access control based upon unique user login, for types of record (e.g., fund, order) as well as by function performed upon the record (e.g., Display, Add, Edit, Delete.) The Memex Patriarch solution will interface with the MiCJIN portal to provide users with secure access to the contractor's solution. Based on their unique ID, and their membership of role groups within the solution, users are able to access different types of record, particular database tables or specific records. Through their group memberships, users also inherit system permissions which govern their access to various modules within the system and determine the functions they can perform (e.g. View, Create, Update, Delete)			X
22-02	The solution shall interface with the MiCJIN portal to check each user's access privileges at login, and automatically disable or enables client functions (in real time) based upon the user's profile Users will log in to Memex Patriarch via the MiCJIN portal. The user's authenticated ID will be passed to the Memex Patriarch solution which, during the automatic login of the authenticated user into Memex Patriarch will check the user's profile (including group membership details), by matching the ID against secure data held within the contractors solution. Client functions are enabled or disabled at that point, so that, when the application is displayed to the user, he/she only sees areas of the applications, buttons, menu items and other functional options that are appropriate to the user's profile.			X
22-03	The solution shall interface with the MiCJIN portal to provide varying levels of access within the application, such as administrators, view only, or scheduling only. The Memex Patriarch solution will use the MiCJIN portal to provide access to Memex Patriarch. Users are assigned varying levels of access within the application by their membership of one or more role group. A user's group memberships determine, for example, their access to specific record types, particular database tables or individual records, as well as their ability to create, update or delete records, or to access administrative modules within the solution. These varying levels of access are established within Memex Patriarch by mapping the user's ID (authenticated through the MiCJIN portal) to user/group data that is securely stored within the contractor's solution.			X

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
24-00	**Security / Password Controls**			
24-01	The solution will interface with the MiCJIN portal for password administration. The contractor will customize the contractor's solution to allow it to interface with the MiCJIN portal for password administration.			**X**
25-00	**Security/Activity Logging**			
25-01	The solution logs unauthorized access attempts by date, time, user ID, device and location. The Memex Patriarch solution, which includes its own login screen and internal authentication system, logs all failed login attempts by date, time, user ID and workstation. However, as authentication for the MCIS will be handled via a single point of authentication outside the Memex solution (i.e. the centralized authentication provided by the MiCJIN portal), the Memex solution will not log authentication errors. It will, however, audit failed logins where the credentials of a MiCJIN-authenticated user who has attempted to access Memex Patriarch do not match up with any existing Memex Patriarch user account. In this situation the user will be refused entry to Memex Patriarch and their ID plus the date and time of the failed login will be audited within the contractor's solution.			**X**
25-02	The solution maintains an audit trail of all security maintenance performed by date, time, user ID, device and location, with easy access to information. The Memex Patriarch solution includes a comprehensive audit trail that records all user and administrative activity. Users with permission to access the audit trail can retrieve audit records by searching within the built-in Audit Management module of Memex Patriarch. This has an easy-to-use form that helps users find records with particular values in particular fields. There is also a free-text query box that allows you to enter a query that will find matching text in any field in an audit record.	**X**		
25-03	Provides security reports of users and access levels. The Memex Patriarch solution allows administrators to display all users who belong to each security group (i.e. users with specific levels of access to data). All changes to group memberships are logged and the Audit Manager module also allows administrators to view details of these changes within the Memex Patriarch application.	**X**		
25-04	Provides detailed reports of backups completed and backups failed. The system's backup utility can generate a verbose output listing all the files it has backed up. If the utility fails to backup a file, this is shown in the output.	**X**		
26-00	**Software Package Specifications**			
26-01	The software uses an industry-standard relational database management solution. See the following web link for more information. http://www.michigan.gov/documents/dmb/1310.34_184491_7.pdf The Memex Patriarch solution stores all data entered by users in the Oracle 10g RDBMS which is one of the State's standard database management systems for servers.	**X**		
26-02	The software will operate effectively on State hardware as recommended by the Contractor with Contractor-supplied upgrade recommendations The contractor has supplied hardware recommendations for the proposed solution in Article 1, Attachment E - Technical Overview. The software will operate effectively on State hardware that conforms or exceeds these specifications. The contractor will recommend upgrade specifications as and when necessary.	**X**		

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
26-03	The software operates in a recognized industry standard operating environment. Memex server-side software can be operated, and is currently in production use, on selected current versions of Microsoft Windows, Red Hat and SUSE Linux and Sun Solaris. The data layer functionality of the contractor's solution can be deployed on Linux (Red Hat Enterprise 5 or SUSE Enterprise 10), Windows Server 2003 or Sun Solaris 10. Based on the contractor's interpretation of the security requirements, anticipated usage levels of the system, and the State's IT standards, the contractor recommends the data layer is deployed on SUSE Enterprise Linux 10. For the Web application layer the contractor's deployment will use a cluster of relatively small servers running Windows 2003 Server. Internet Information Services (IIS) is used as the Web server technology. The supported operating systems for desktop PCs used to access Memex Patriarch Web are Windows XP (with SP2 or SP3) and Windows Vista (SP1). The supported browsers are currently Internet Explorer 6 or later (7 is recommended) and Firefox 2 or later.	X		
26-04	The software allows the State, from PC workstations, to access and update all necessary information to complete a transaction.	X		
26-05	The software allows for the accurate and timely input and extraction of data.	X		
26-08	The software provides a Graphical User Interface (GUI) that is user-friendly and provides data, calculation, reporting, and communication capabilities to all users.	X		
26-09	The solution is modular in design to accommodate phased implementation and future expansion. The Memex Patriarch solution is comprised of various modules, such as Entity Manager, Action Management, Query Builder and so on. Access to these modules is permissions based and can be limited to certain groups of users, or made available to users in a phased manner, if required. New modules have been introduced over time – for example, the Federated Search module is one of the more recent additions to the solution. Similarly, modules can be updated without impacting on other modules.	X		
26-10	The modularity allows the capabilities of the core solutions to function without the entire solution complement. The Memex Patriarch solution can function with a reduced, core set of functionality, if required. For example, the Federated Search module can be removed and users still have the full power of the solutions search functions for searching data within the solution.	X		
26-11	Additional modules may be integrated into the solution without a major impact to the installed components. The Memex Patriarch solution is a modern .NET application with a development framework that allows additional modules to be developed and introduced into the solution without a major impact to the installed components. Experience over recent years has proved that new modules (either generic additions to the contractor's solution, or customer-specific add-ons) can be successfully added to Memex Patriarch with minimum impact to existing implementations of the solution.	X		
26-12	All modules of the solution are integrated and designed to work together using a single input and a common database with no redundant data entry or data storage. All modules of the Memex Patriarch solution are integrated and designed to work together. All modules write and retrieve data in the same way, within a common database system, using the same database engine to control data input. The solution has been designed to avoid redundant entry or storage of data.	X		

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
26-13	The solution supports paperless processing through the use of electronic documents that are routed for electronic signatures through user-defined approval paths. The Memex Patriarch solution's MFX (Memex Form Extensions) functionality can be used to route newly entered records for approval and electronic "signature" by specified users. The behavior is highly configurable.		X	
26-14	Response times, at local and remote sites, for the major on-line processes stated above will meet business requirements.	X		
26-15	The solution provides the capability to access scanned images that are attached to various elements of the database. Memex Patriarch makes it easy for users to save and display scanned images. Images are typically saved to the system as attachments on records, but where appropriate (for example, for photos of people) can be embedded within an image control directly on a form.	X		
26-16	The solution provides the capability for expansion in order to take advantage of technology such as imaging and OCR in order to reduce data entry workload.	X		
27-00	**Reporting**			
27-01	The software delivers standard reports. Reports produced by the system fall into three categories: **Query based reports** The system can have a number of predefined queries that can be run on-demand or at scheduled intervals and report on data within the system currently meeting the specified criteria. **Printed reports** These comprise: printouts of records, disseminations (where the content of the report and its recipient are recorded) and "structured printouts" compiled from information in multiple data records. **Management and usage statistics** Crystal Reports (or other standard external reporting tool) is used to generate reports based on data within the contractor's solution. Because the precise requirements for reports always varies between one law enforcement organization and another, the contractors solution does not contain preconfigured reports. Rather the contractor works with the customer to define and create standard reports during the course of system deployment.		X	
27-02	The solution includes ad-hoc query and reporting tools.	X		
27-03	The solution will support remote connections to other databases for report generation by a third party package per State standards. See the following web link - http://www.michigan.gov/documents/131040_40944_7.pdf The Memex Patriarch solution supports connections from third-party packages such as those recommended in the referenced State's standards document. Crystal Reports is typically used for the generation of standard statistical or structured reports. Reporting tools access data directly from the underlying Oracle 10g tables.	X		

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
27-04	The online query capability enables non-technical end-users to extract information. The ease and flexibility of searching are key strengths of the Memex Patriarch solution. The solution offers a variety of methods of searching. Features of searching within the Memex Patriarch solution include: • Users require no knowledge of available fields or the database structure. • Memex allows a full range of Boolean searching for keywords, including regular expressions, m from n searching, proximity searching, phrasing, date ranges and character/numeric ranges. • Memex supports four kinds of query expansion: • Garbling – the query is expanded by adding, removing and reordering letters within the search text. This is very good at finding misspellings, or alternative spellings, of the word the user is searching for. • Trigram – finds words that share a specified number of trigrams (three contiguous characters) within the search text entered by the user. This broadens a search by finding words that have a commonality with the word the user entered. • Sounds like – a soundex algorithm is used to find words that sound like the word entered by the user. This finds records where the wrong word was used (e.g. gorilla instead of guerrilla). • Synonym – a thesaurus lookup facility finds words with similar meaning to the word entered by the user. This broadens a search by finding similar words (e.g. records containing “explosive” when “bomb” was searched for).	**X**		
27-05	Standard reports to be scheduled, executed, viewed on-line, printed (centrally or remotely) and dispersed (including the use of report distribution management software)	**X**		
27-06	The State has the ability to control the information that appears on standard reports so that data security is maintained. Report generation within the Memex Patriarch solution follows the principle that the user generating the report can only include in the report information the user could have found by performing a search. Access to data stored in the Memex Patriarch solution from Crystal Reports, or from other third-party tools, for the purpose of generating reports, will be limited to privileged users. It is the responsibility of these users, who design and publish reports, to ensure that data security is maintained.	**X**		
27-07	The solution provides methods for retaining and modifying previously built queries by an administrator or user. All users have a personal Home Page where they can store their own queries for later reuse. These saved queries can be modified at any time.	**X**		
27-08	The solution provides the use of transaction databases, external files, or a "data warehouse" for ad-hoc reporting.	**X**		
28-00	**Audit Trail**			
28-01	The solution enables the user to modify data entry transactions that have already been posted to the database while maintaining an audit trail of the change. Memex Patriarch maintains a comprehensive audit trail in which all user activity is audited, including the modification of previously submitted data.	**X**		
28-02	The solution's internal control functionality ensures that the data entry and processing associated with a business event has been completed before updating the database.	**X**		

	TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
29-00	**Edit and Validation Control**			
29-01	The solution includes comprehensive field edits to prevent incomplete or incorrect data from entering the solution The Memex Patriarch solution updates complete units of information, at record level, to prevent incomplete or inconsistent data being introduced into the system.	**X**		
29-02	The solution ensures data integrity and controls processing without hard-coded logic The Memex Patriarch solution provides facilities to control data entry. For example, mandatory fields, masked edit controls and data validation. Some controls processing relies on elements of hard-coded logic and the contractor will discuss the State's requirements for altering such code.			**X**
30-00	**Physical Security**			
30-01	For any activities not performed on State sites or facilities, the Contractor will provide effective physical security measures for all proposed equipment sites, all processing and operations areas (including the mailroom), and secured storage areas through a card key or other comparable solution. At a minimum, the Contractor will: • Restrict perimeter access to equipment sites, State-specified processing and storage areas, and storage areas through a card key or other comparable solution. • Provide accountability control to record access attempts, including attempts of unauthorized access.	**X**		
30-02	Physical security shall include additional features designed to safeguard site(s) through required provision of fire retardant capabilities, as well as other electrical alarms, monitored by security personnel on a twenty-four (24) hours a day, seven (7) days a week basis.	**X**		
30-03	Maintain a current annual security rating as audited by an independent third party auditing firm that certifies that they meet federal and State guidelines for the handling of confidential data.	**X**		
31-00	**Interfaces**			
31-01	The solution has the ability to exchange data with other solutions using one or more of the following mechanisms: online application to application, web services interface, SFTP, message queuing. The Memex Patriarch solution allows data to be exchanged, in both directions, with other solutions. The Memex Patriarch solution has a Web services architecture using data exchange and data expansion via Global Justice XML Data Model (GJXDM). Plugins are available to allow full client applications such as i2 Analyst's Notebook to access data within the system. The Federated Search facility has an adaptor-based architecture that allows adaptors to be developed and slotted into the solution to allow users within Memex Patriarch to retrieve information from external data sources.	**X**		
31-02	The solution must provide real-time data transfer of identified data.	**X**		

Article 1, Attachment H

RESERVED

Article 1, Attachment I1 (OPTIONAL)

Requirements Document – Confidential Informant Database

Contractor shall provide deliverables, services and staff, and otherwise do all things necessary or incidental to provide the functionality required for the State's business operations, in accordance with the requirements as set forth below.

The contractor's Confidential Informant Tracking System Database solution will comply with each requirement as follows:

Each of the requirements for this solution will fully comply and the "Method of Compliance" has been identified in the columns according to the following criteria:

4. Column "1" under "Method of Compliance" if the solution will fully meet the requirement with no configuration or customization.
5. Column "2" under "Method of Compliance" if the solution will fully meet the requirement through configuration.
6. Column "3" under "Method of Compliance" if the solution will fully meet the requirement through customization.

The Confidential Informant Tracking System Database (CIDB) should be able to document and manage information regarding the registering, documenting reliability, recording informant payments, and supervising of confidential informants. Currently all Confidential Informants used by MSP are required to be properly documented as to their activities and who is responsible for them while being utilized by the department. Currently there is no statewide capability to document and track confidential informants between jurisdictions. The lack of this capability has the potential to put at risk the investigators who rely on informants to conduct many types of covert operations. **The CIDB is an optional solution.**

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	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
1-00	**Interfaces**			
1-01	Provide the ability to exchange information with external data sources through the use of Department of Justice National Information Exchange Model (NIEM). The Memex (contractor) solution offers the ability to exchange data with external sources, such as NDEX, RISS, and the ISE. These data exchange processes utilize the NIEM data schema.	X		
1-02	Provide the ability to export specified data sets in a standard format. The contractor's solution includes an exporter facility which allows specified data sets to be exported as XML.	X		
1-03	Provide ability for users to be authenticated via MiCJIN portal. The COTS solution will be customized to provide authentication via the MiCJIN portal. This will provide single sign-on Web access to the MCIS.			X
1-04	Support an interface to the state standard email client. (Novell GroupWise and MS Outlook) The contractor's solution generates email notifications for a number of different system events such as new information matching predefined criteria being entered on to the system and records approaching their review dates. The system sends these emails via an SMTP-compliant mail server and will therefore be viable in GroupWise and Outlook.	X		
2-00	**Data Entry**			
2-01	Provide a Web 2.0 interface for users incorporating the use of tabs and a ribbon-like navigation bar. Memex's Patriarch application (the framework application within which the Confidential Informant Tracking System has been developed) has been redesigned with a modern interface that includes commonly used features that users will be familiar with from other modern applications – such as tabs, dynamic drop-down lists, pop-up calendar controls, and a "ribbon" for performing actions such as navigating between records in a set of search results. The ribbon navigation, (as well as the system's online help) is context sensitive – which means they are dynamic controls that present the proper information based on the screen/actions being utilized.	X		
2-02	Provide the ability to enter data from different peripherals such as a keyboard, a mouse, digital cameras, recording devices or a scanning device. The contractor's solution allows for data to be entered using standard keyboard and mouse interfaces. Additionally, electronic files – including scanned documents - can be added to the system. Any file type can be added including audio and video files. These can be added from any device that can be connected to the user's computer – including cell phones, PDAs, digital cameras, digital recording devices, etc. The contents of many types of file that contain text – including Microsoft Office files, Adobe Acrobat PDF documents, emails, WordPerfect files and scanned/OCR-processed documents – can be extracted and made searchable within the system. Files entered from peripherals appear as attachments to the associated database record. By clicking the attachment link, users can view the files in their associated applications. For example, clicking on a linked '.doc' file will cause the file to be displayed in Microsoft Word.	X		

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
2-03	Provide users with drop down boxes or pick lists to standardize data entry. Users are provided with drop-down lists where appropriate. These can either be bound (so that users can only select from the pick list) or unbound (so that the user can select from the list, or type in an alternative entry. Drop-down lists help to reduce keying for users. Bound pick lists help to improve data quality by reducing errors introduced by users keying in data. Pick lists entries can be rule based, meaning the values in one pick list will depend on the value selected in another pick list. For example, a vehicle form may set the 'model' pick list to only contain Ford models if 'Ford' is selected in the 'make' pick list. The List Manager module of the system allows application administrators to modify the contents of any pick list on the system or to configure the rule-based behavior, as required.	X		
2-04	Allow system administrators to customize data entry screens for each participating agency or system wide by adding, deleting, or rearranging data elements on the screen. The contractor's solution contains a Form Designer application that is typically only available to system administrator(s). This is a graphical design tool that allows the administrator to click and drag any control on any form to rearrange the form as required. Form controls – including complete tabs – can easily be added or deleted. The administrator can also change any of the button text, colors, size of text entry boxes, etc. System administrators can configure different entities, with specifically designed forms, for each participating agency. However, from experience with other multi-agency customers, the contractor would advise that, where the same type of information is being collected, it is less confusing for users who may be working collaboratively across agencies to use the same forms. The contractor's solution also offers "form attribute rules" which can be used to change the properties of any form control, be it a simple label, a text field or complete tab. Criteria specified by the administrator can, for instance, hide certain controls, or make them read-only, depending on the content of fields or details within the user profile of the current user.	X		
2-05	As the initial entry is being made a CI record number must be automatically generated and date and time stamped. This record number must appear on any screen referring to the entered Confidential Informant. Memex Patriarch automatically generates a URN (unique reference number) when any new record is created. The URN is typically displayed on the first tab of the form used to display the record, but can be moved to another tab by the system administrator, if required. The URN can appear on any screen referring to the entered Confidential Informant. When a record is created it is automatically date and time stamped, with details saved in the sysdatecreated and systimecreated system fields. These can be displayed on forms if required. The name of the user who created the record is also automatically captured in the syscreated by field. The date, time and user are also automatically captured when a record is updated. This allows a form to display the "Last updated" date/time and "Last updated by" user, if required.	X		

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
2-06	During the entry or edit process all screens should be available with page tabs to click on so user can toggle from screen to screen. Solution prompts user if any screens are skipped or if any data fields are left empty. Whenever a user creates or edits a record, all parts of the form are available by clicking on a tab, allowing users to toggle from screen to screen. The contractor's solution prompts the user if he/she attempts to create or update a record in which any of the mandatory fields are empty. Additionally, the Memex Advice Engine can be configured to perform actions based on values entered into form fields, either on the click of a button during data entry, or when the user submits the form. Examples of the use of the Advice Engine include advising the user on their next course of action, or directing the user to records that contain similar information. Finally, the contractor's form extensions (MFX) functionality can be leveraged to make complex forms easier to use by showing or hiding controls, or entire tabs, that are not relevant to a particular user.	X		
2-07	Drop down menus must exist for all pre-defined fields such as M/F, City, State, and County etc. Drop-down lists are used for all fields for which standard values exist – for example, Male or Female, names of states or counties, etc. Where possible drop-down lists are set up to force selection from the list, preventing the user from typing in another value. This helps to improve data quality by standardizing the values entered in these fields. Pick lists entries can be rule based, meaning the values in one pick list will depend on the value selected in another pick list.	X		
2-08	Provide user the ability to mouse over every field for an explanation of that field and what is expected or allowed. Memex Patriarch has context-sensitive help, which allows the user to get help relating specifically to the screen or form he/she is looking at. For example, when entering data, if the user clicks the Help button on the form (or presses F1 on the keyboard) a pop-up help topic is displayed explaining how to complete the form. This method of delivering help information – where the help topic describes all the fields on the tab, or the whole form - was introduced after consultation with existing customers and their users. who found this easier to use than systems where users have to repeatedly click individual fields to see help relating to just one field. Typically, the user needs to understand how to complete the form and needs to find out about more than one field. This level of help is additional to the online help system that provides user assistance for all other areas of the solution. The form-based help can be tailored to match any customer-specific configuration of forms, and the contractor will work with the State of Michigan to configure the context-sensitive help to match any such changes to the forms supplied as part of the COTS solution.		X	

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
2-09	As more data is entered and stored there must be no degradation of system performance. As data is added to the system, there will be no appreciable degradation of overall system performance for typical usage of the system. Depending on the volume of data and the nature of that data, users performing searches for very common terms across all available data may notice a slight reduction in the speed at which Memex Patriarch returns results from a heavily populated database, compared to a sparsely populated database. This is true of all database search systems. However, users searching for uncommon terms or specific combinations of terms are unlikely to notice any difference in the speed of searching as more and more data is added to the system. The contractor is confident that overall system performance will remain within acceptable boundaries as system data grows. The following figures illustrate the response times for a search run across a Memex Patriarch database containing over 10 million records (running 600 concurrent users on two Sun Microsystems™ servers): • 90% of searches completed in under 1 second • 96% of searches completed in under 2 seconds • 98% of searches completed in under 5 seconds It is important to note that Memex Patriarch – unlike many other systems – does not wait until the entire search is complete before results are returned to the user. This means that the user can start viewing records returned by a search at the earliest possible opportunity, while more records are still being added to the results list.	X		

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
3-00	**Data Search**			
3-01	The solution must provide a method of searching on last name, first name, DOB, Social security number, business name, organization name, address, telephone number, crime type, County, City, State, date/time frame, data source, record number, file originator and text. The ease and flexibility of searching are key strengths of the contractor's solution. Searching a Memex database requires no knowledge of available fields or the database structure. The system offers a variety of methods of searching. The simplest type of search is a free-text search where you can run a query without having to specify which fields you want to search. This allows you to search for records in a manner similar to searching on Google – just type some words into a search box and click the search button. The following screenshot shows the simple free-text search box on the "ribbon," plus the pop-up search dialog box, which provides more space to type a complex query, and includes buttons easy access to common query operators. When searching in this way, the contractor's solution searches across all fields in the selected record types. Using this approach, users can search for "Thomas" without having to decide whether to search the First Name field, the Last Name field, the Text field etc. When users want to restrict their search to a particular field (including all of those mentioned in this requirement), the simplest way to do so is by using a form. The same form used for entering and displaying data can be used for searching. The user simply enters a word (or other query) into one or more fields, clicks the search button and the search that is performed only returns records where the query text matches within the appropriate field. For advanced users who need to build complex queries, the Memex Query Language includes an operator that allows queries to be restricted to any specified field within a database.	X		
3-02	Within the search fields the ability to use wildcards, begins with, contains, exact, Soundex, and Boolean logic. These fields should also contain the ability to mouse over for explanation of what is expected and allowed. The contractor's solution allows users to use wildcards, begins with, exact matching, Soundex and Boolean logic within fields on a search form, or in the free-text search box. Memex Patriarch also includes other search features – for example: • proximity searching allows you to find only records where the words you have specified occur near each other • m from n searching allows you to find records containing at a number of words from a larger list of words • synonym expansion allows you to find records containing the word you entered, or words with a similar meaning • garbled expansion allows you to find words that are possible misspellings of the word you entered. This helps you to find records in which the word you are looking for has been entered incorrectly. The contractor's solution incorporates context-sensitive help. By either clicking the Help button on a form or dialog box, or by pressing F1, the user is shown a help topic relevant to the form or function they are using. The context-sensitive help is customizable by the system administrator and can be set up to offer agency-specific guidance on form completion.	X		

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
3-03	Query results must appear in a menu that displays the data that matched the query in a row format displaying the reason for the hit. The user picks from that menu the data they would like to view. The contractor's solution provides results to queries in a "Results Viewer." Results are organized in column and row format with a breakdown of the number of records found for each type of record. The Result Viewer also allows users to organize the search results and to choose subsets of results they would like to list. Clicking a row within the results viewer displays the relevant record in a form. The data that matched the user's query is highlighted in colored text within the form. Clicking the Next Query button selects the next matched data within the form. If this is on another tab of the form, the relevant tab page is displayed. By clicking the navigation buttons the user can page forwards or backwards through the results set, reviewing each record in turn.	X		
3-04	Query results must be able to be linked to other existing information in the database by the record owner. If the user is not the record owner the user can save the two linked entities in a temporary file to be reviewed and linked by the record owner. The COTS solution is partially compliant with this requirement. Memex Patriarch allows records to be linked together. In order to be able to link records, users must be a member of a group that has been allocated the "link" system permission. The system does not store suggested links in a temporary file. All users with "link" permission can link any two records they can access. All link operations are fully audited so that it is possible to see who linked two records, or to list all link operations performed by a particular user.	X		
3-05	The record owner must always maintain the final permission for any editing of information in their record. New data can be added by others but that information must be sent to the record owner for permission to automatically add data to original record Entities can be configured so that users who are not the owner of a particular record cannot modify the record except to request/suggest a change. To do this users enter their suggested change in a change request field, select a check box to confirm that they want to request the change and save the record. The record owner is then alerted of the change request via their Home Page. The owner can then review the request and either change the record accordingly or simply delete the change request.		X	
3-06	System administrators must have the ability to function as a proxy for record owners. System administrators can update records for which they are not the owner. They can, therefore, act as a proxy for the owner of any particular record.	X		
3-07	The solution must provide a method of reassigning records by a system administrator(s). The solution will be configured so that the owner of a record is specified in a field within the record. The system administrator(s) can change the user specified in this field as required, thereby reassigning the record.		X	

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
3-08	The solution must be able to search narrative text for key words Searching narrative text for key words is an extremely common action performed by users of any criminal intelligence application. Users simply choose which tables or type(s) of record they want to search, enter the key words they want to search for and click the search button. Key word searches can include the full range of Boolean operators, wildcards, *m* from *n* searching, proximity searching, phrasing, and textual or numeric ranges.	X		
4-00	**Administration, Security and Purging Data**			
4-01	Provide the original record owner the ability to give ownership to another user who requests to become record owner. The solution will be configured so that the owner of a record is specified in a field within the record. The current owner of a record can modify the contents of that field – choosing another user from the User Chooser control – thereby assigning ownership of the record to the specified user.		X	
4-02	Provide a report of pending records to be purged within a user designated timeframe The contractor's solution allows users to list records that may be approaching their mandatory review date, thus being subject to possible purging. This information can be formatted into a report. All users including system administrators can specify designated timeframe parameters for those records they want to include in this list. Links to the queries that produce these lists can be saved in the "System Searches" or "My Searches" section of the Home Page, making it extremely easy for users to display this information. For more complex statistical reporting, the contractor's solution uses Crystal Reports as its reporting engine. Users with appropriate access can use Crystal Reports to generate a report of pending records to be purged. Reporting is not restricted to Crystal Reports. The contractor's solution allows other standard reporting tools to access data for statistical reporting purposes.		X	
4-03	User must be able to schedule systematic reports on a time basis of week, month, or year. The contractor's solution uses Crystal Reports as its reporting engine. Users with appropriate access can schedule reports to be generated on a weekly, monthly or yearly basis. Other users can view these reports via a browser.	X		
4-04	Users must be able to generate their own ad-hoc or parameter driven reports. Users can use the structured printout facility within Memex Patriarch to produce a printed report at any time. This facility allows users to drag and drop combinations of records onto the Structured Printout Panel and then print a consolidated printout from the information in those records. Alternatively, users with appropriate access can use Crystal Reports for generating ad hoc reports based on data in the contractor's solution.	X		

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
4-05	Must be able to store personal identifiers such as those shown in the table at the end of the Functional Requirements Section. The contractor's solution can store identifiers for any required information type. The solution allows system administrators to easily modify and add fields for each type of record. As part of the initial configuration of the system during Phase 2 of the project, the contractor will work with the State of Michigan to identify what fields should be collected for each record type and develop an initial set of form designs for use within the system. This will include all required personal identifiers. Following the initial implementation, system administrators will have received all training required to make any subsequent changes without support from the contractor or subcontractor.	X		
4-06	The solution must be able to store all identifiers for associates or electronic links between individuals, vehicles, crimes etc. The contractor's solution can store identifiers for all associates. Users with "link" permission can create links between records such as individuals, vehicles and crimes to record relationships that exist between entities mentioned in reports. User defined links can contain information that describes the nature of the links. Additionally, electronic links between can be system generated between records. For example when a record is updated it is automatically linked to the currently selected source information. As part of the initial configuration of the system during Phase 2 of the project, the contractor will work with the State of Michigan to identify what fields should be collected for each record type and develop an initial set of form designs for use within the system. This will include all required associate identifiers.	X		
4-07	The solution will support remote connections to other databases for report generation by a third party package per State standards. See the following web link - http://www.michigan.gov/documents/131040_40944_7.pdf The contractor's solution supports connections from third-party packages such as those recommended in the referenced State's standards document. Crystal Reports is typically used for the generation of standard statistical or structured reports. Reporting tools access data directly from the underlying Oracle 10g tables.	X		
5-00	**Confidential Informant Processing Requirements**			
5-01	The solution must provide the capability of supporting a Multi-Jurisdictional Confidential Informant (C/I) database with access to each area controlled by each jurisdiction. The contractor's solution uses a role-based security model. This model supports: • A multi-level security model based on functional and security group membership. • Compartmentalized data options to support multi-jurisdictional operations • User or group-specific access restrictions can be maintained at server, database or record level. Records can be made wholly or partly view-only, protected (i.e. data cannot be viewed), or completely covert to specified users or groups.	X		

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
5-02	The solution must assign a unique identifier to each C/I added to the solution. The unique identifier must always stay with that C/I for the life span of the record. The contractor's solution automatically generates a URN (unique reference number) when any new record is created. The URN is typically displayed on the first tab of the form used to display the record, but can be moved to another tab by the system administrator, if required. This number never changes and will remain with the record for its entire lifecycle in the system.	X		
5-03	The solution must allow the control officer and supervisor to assign a security and confidentiality level to each CI record. The ability to set security on records is permission-based. This ability can, therefore, be given to certain users (for example, the control officer and supervisor) and not others. This allows the control officer and supervisor to determine which users get to see particular CI records. Users with permission to set security can also change or remove the security setting on a record at any time. The CI record has a "Confidentiality Level" field and this can be made read-only to users other than the control officer and supervisor, if required. The field also contains a default value from the drop-down list for this field, so that new CI records always have an initial confidentiality level. This provides a simple way of finding new records. Additionally, the contractor's solution security rules allow security to be automatically set on new or updated records based on the data in the record (for example, the confidentiality level) or the user who is creating/updating the record (for example, the role/group of the user). As part of the initial configuration of the system during Phase 2 of the project, the contractor will work with the State of Michigan to configure the security rules and the available confidentiality levels shown in the drop-down list, as required.	X		
5-04	The solution must provide for a unique agency identifier to be used by each participating agency approved by the state. The contractor's solution assigns unique identifiers to all users and user groups. This information is stored in the user database and can be accessed by the system's rule-based functionality. In many of our current deployments, agency-specific information is automatically transferred to records as they are created by users. This information can include a unique agency identifier, such as ORI, or some other unique identifier as approved by the State.	X		

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
5-05	The solution must provide the following capabilities relative to informant data: i. Query ii. Alert Notifications iii. Email Notifications iv. Record Access Controls v. Sequential Confidential Informant (CI) number issuance and automated routing of records. All of the required capabilities are available in the contractor's solution. • Querying is one of the key strengths of the system and has been designed with ease of use in mind. • There are numerous different types of alert notifications within the system. One example is the review date notification a user is shown after login when they need to review a record • Email notifications are also commonly used in the system – for example, the covert hit notification that alerts you of users whose searches matched specified covert records • Access to informant data is restricted by the use of security locks applied to CI records either manually or automatically • CI records can be numbered sequentially as they are added to the system • Particular users or groups can be alerted of records needing certain action – for example via workflow queries on the Home Page.	X		
5-06	The solution must capture and report data related to: i. Confidential Informant activities. ii. Financial payments iii. Reliability factors. The contractor's solution will capture and report all data relative to CI activities, payments, and reliability factors. Data elements on records are organized onto single or multi-tab data entry forms and include fields that can contain evaluative data, narrative text content, and numerical values such as financial payments	X		
5-07	The solution must control access to informant data through the use of security roles established within the solution and based on MSP's MICJIN Portal. The contractor's solution will interface with the MiCJIN portal to provide users with secure access to Memex Patriarch. Based on their unique ID, and their membership of role groups within the solution, users are able to access different types of record, particular database tables or specific records. Through their group memberships, users also inherit system permissions which govern their access to various modules within the system and determine the functions they can perform (e.g. View, Create, Update, Delete). The contractor's solution offers a multi-level role-based security based on: • Functional and security group membership • Compartmentalized data options to support multi-jurisdictional operations • User or group-specific access restrictions can be maintained at server, database or record level. Records can be made wholly or partly view-only, protected (i.e. data cannot be viewed), or completely covert to specified users or groups.			X

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
5-08	The solution must be able to provide control officer contact information as part of any query results. The Confidential Informant control officer contact information is captured on the CI record form and is displayed as part of the search results in the Results Viewer list. The information shown in the Results Viewer is very easily configurable by an administrator and can be changed post-implementation without reference to the contractor or subcontractor, should this be required.	X		
5-09	The solution must provide support for searches based on the following data fields but not limited to: i. Name. ii. Date of birth (DOB). iii. Sex. iv. Race. v. Social security number. vi. Driver's license number (DLN). vii. Confidential informant number. viii. Active or inactive status. The ease and flexibility of searching are key strengths of the Memex system. The system offers a variety of methods of searching. The simplest way of searching on any specific field (including all of those mentioned in this requirement) is by using a form. The same form used for entering and displaying data can be used for searching. The user simply enters a word (or other query) into one or more fields, clicks the search button and the search that is performed only returns records where the query text matches within the appropriate field. An even simpler way of searching is to use a free-text search. This allows the user to search through all the fields in the CI record, or other selected record type(s), without having to specify which fields he/she wants to search. This enables users to search for records in a manner similar to searching on Google – just type some words into a search box and click the search button.	X		
5-10	The solution will have a method of facilitating a 6 month review of C/I records allowing notification of the control officer as well as a system administrator concerning all reviews required by Official Orders and or Department Policy. All records within the contractor's solution can be allocated a review date either automatically (or optionally based on the values of relevant fields in the record), or manually by users with the appropriate permissions. The system monitors for records approaching their review dates and a defined interval before the review is due it sends out a review notification via email to the specified user (i.e. control officer). This is typically the record owner but may be an administrator. Each user profile specifies a review email recipient. When that user creates a record, the reviewer is set according to the setting in his/her profile. The nominated reviewer for any record can be changed by users with appropriate permissions. If the reviewer does not either renew or purge the record, he/she is sent an email reminder every day until the review is done. A reminder message is also displayed to the user every time he/she logs in to the system while reviews are overdue. A review alert can optionally be added to users' personal Home Page.	X		

	Optional Confidential Informant Database FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
5-11	Must be able to maintain a log of all inquiries, actions etc. for a minimum period as identified by the MIOC Commander. The contractor's solution includes comprehensive, system-wide auditing that maintains a log of all inquires, actions, and changes made by users within the solution (including changes to data, business rules, security settings, user profiles, etc.) The information gathered within an audit record is specific to the type of activity being performed, however the following information is recorded for all audits: • The ID and name of the user performing the action • The type of activity, e.g. QUERY,EDIT, VIEW • The date the activity was performed • The time the activity was performed The system also includes "record versioning" functionality which captures the exact details of all changes that are made to each record and allows authorized users to step back through each change. For each EDIT-type audit record, authorized auditor users can view the contents of each changed field before and after the change. This is done in the Record Changes tab of the audit record: Auditors can also use the record versioning functionality to display a historical version of a record as it would have looked to a specified user at a specified point in time.	X		
5-12	Must be able to merge current CI records when duplicate records are identified. There shall be no loss of information as a result of this action. Solution must alert control officer if someone conducting a search of the CI database hits on their CI as an entry or a query. (CI info, agency, user and date) The data in current CI records will be migrated to the contractor's solution. The contractor's solution has a feature called "covert hit notification." This alerts the control officer via email if someone runs a query against the CI database that would have returned that record as a hit had it not been hidden from the user who ran the search. This behavior includes the match search that is performed as part of data entry. The information that is passed to the control officer identifies the user who ran the search, the date and time of the search and the CI record that was hit. Similarly, users have the ability to set individual alerts ("flags") on records they have an interest in and have the system notify them via email as those records are viewed by other users (assuming those users had the appropriate permission to view the record).	X		
5-13	Sample fields to be contained in the C/I database record are in the table as follows: The contractor's solution supports the sample fields noted below.	X		

Report Field	Data Type	Clarification
Solution Reference Number	Text	Auto-generated
CI Number	Numeric	Next available C/I number
Activation Date	Date	May be frequently updated
Deactivation Date	Date	May be frequently updated
Deactivation Alert	Code Table	Deactivation codes
Deactivation Comments*	Text	Only with deactivation date
CI Record Access	Code Table	Security levels or role based access

Report Field	Data Type	Clarification
Last, First, Middle Name	Text	
Alias	Text	
DOB	Date	
Age	Calculated	If DOB is unknown age will be estimated
Occupation	Text	
Race	Code Table	Race Codes
Ethnicity	Code Table	Ethnicity Codes
Nationality	Code Table	
Citizenship	Code Table	
VISA Information	Code Table	
Alien Status	Code Table	
Sex	Code Table	Sex Codes
Height	Numeric	
Weight	Numeric	
Build	Code Table	
Hair	Code Table	Hair Color Codes
Eye	Code Table	Eye Color Codes
Corrective Lenses	Y/N	
Teeth	Code Table	
Complexion	Code Table	
Scars, Marks, Tattoos	Code Table	
Detail	Code Table	
Driver State	Code Table	State Codes
DLN	Alpha Numeric	Text
SSN	Alpha Numeric	
FBI#	Alpha Numeric	
SID	Alpha Numeric	
Prison ID	Alpha Numeric	
MISC ID	Alpha Numeric	
Address	Table for multiple addresses over time	Each entry in the table must be date and time stamped.
City, State, Zip	Table for multiple addresses over time	Each entry in the table must be date and time stamped.
Phone Type	Code Table, Grid Box	Phone type codes, Date Stamp
Phone Number	Table for multiple phone numbers. Alpha Numeric	Each entry in the table must be date and time stamped.
Criminal Specialty	Code Table	
Places Frequented	Text	
Control Officer 1	Code Table	Personnel Codes
Control Officer 2	Code Table	Personnel Codes
ORI	Code Table	Personnel Codes
Agency Information	Code Table	ORI Codes
Notes	Text	Multiple entries, user IDs, and each entry must be date and time stamped.
Photograph Available	Y/N	
Photograph	Link to image	Multiple images each must be date and time stamped.

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
6-00	**Capacity**			
6-01	The solution must be able to support 50 concurrent web based users.	X		
6-02	The solution should be able to be licensed and installed in a development, quality assurance, and disaster recovery environment. The contractor's solution can be installed in Development, Quality Assurance and Disaster Recovery environments. The license for the contractor's solution will cover all agreed environments. The contractor will work with the State of Michigan during the initiation phase of the project (Phase 1) to determine and agree the environment requirements.	X		
6-03	All law enforcement personnel, regardless of physical location, must have full access to the CIDB All law enforcement personnel, regardless of physical location, will have full access to the Confidential Informant Tracking System, provided access to the MiCJIN portal is available from the location and personnel are able to authenticate successfully, The application is delivered to the user via a Web browser after the user has authenticated through the MiCJIN portal. Any access to using the internet from an unsecured location will be through the use of a VPN and secure token accessing the MICJIN portal.	X		
7-00	**Solution Auditing**			
7-01	The solution has the ability to maintain a historical record of all changes made to any item within the solution (e.g., data element, business rule, process control, software program), the ID of the person or process that made the change, the before images of the affected data records, and the date and time the change was made. Memex Patriarch includes comprehensive, system-wide auditing that audits all changes made by users within the solution (including changes to data, business rules, security settings, user profiles, etc.) The information gathered within an audit record is specific to the type of activity being performed, however the following information is recorded for all audits: • The ID and name of the user performing the action • The type of activity, e.g. EDIT, VIEW • The date the activity was performed • The time the activity was performed The system also includes "record versioning" functionality which captures the exact details of all changes that are made to each record and allows authorized users to step back through each change. For each EDIT-type audit record, authorized auditor users can view the contents of each changed field before and after the change. This is done in the Record Changes tab of the audit record: Auditors can also use the record versioning functionality to display a historical version of a record as it would have looked to a specified user at a specified point in time. The audit trail for the entire system is typically updated every minute, so there is no need to wait for an overnight process to update the audit database before you can search for details of user activity.	X		
7-02	The solution must ensure that all solution events for software, hardware, interfaces,	X		

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
	operating solution, network, etc. are written to a solution event log in a manner that facilitates debugging of all solution problems. The Memex Series VI server software includes configurable event logging to facilitate the debugging of any solution problems. This logging can be set at a number of different levels of verbosity, or turned off. Typically the more verbose levels of logging – where more information is logged about more events – is never required as low-level event logging usually allows the cause of any problems to be identified.			
7-03	The solution offers the ability to query, view, filter, and sort the solution audit trail. The solution is able to store the queries. Users with permission to search the audit trail have at their disposal the full range of search capabilities offered throughout the contractor's solution – including fielded and free-text searches, Boolean operators, wildcards, proximity, etc. Results can be sorted and queries stored on the user's Home Page for later reuse within the Audit Management module. The Audit Management module provides a search form to make it easy to search for audit records relating to particular users or groups (by selecting from a User/Group chooser popup) or within a specified date range (by using a popup calendar to enter start and end dates).	X		
7-04	The solution has the ability to identify and track data back to its input source (e.g., imaged document, keyed from form, interface file, etc.) Memex Patriarch's comprehensive auditing, with before and after details of changes shown field-by-field in an audit record, allows auditors to track the source of data. For example, if a document is attached to an intelligence report and, based on information contained in the attachment, a Person record is updated, the auditor can easily trace what was updated on the Person record, the date/time of the change, the details of the user who made the change, and the source document in which the information was originally contained.	X		
7-05	The solution has the ability to audit all override of edits and audits and identify the login ID, date, and time. Memex Patriarch audits all edits to records, including the situation where an auditor-level user removes changes made to a record by another user. All logins are audited, with details including login ID, date and time of login and logout (either manual logout or automatically timed out logouts). Auditing operations themselves are fully audited and audit records cannot be edited. This provides confidence in the accuracy of the audit trail – for example, for professional standards investigations.	X		
8-00	**Error Handling**			
8-01	The solution must ensure that all errors are written to an error log. The Memex Series VI server software logs all errors in a text file. The error log also records configuration information about the system each time the Memex Series VI server software is started.	X		
8-02	The solution must allow for an administrator to view, filter, sort, and search the error log. The error log is plain text and can therefore be viewed, filtered, sorted and searched using any standard text processing application.	X		
8-03	The solution must allow for an administrator to archive error log entries based upon user-defined criteria. The error log is stored as plain text. A system administrator can therefore search this log for defined criteria, using a standard text editor, extract entries to a separate file and archive this. If this process needed to be automated, a simple script could be set up to perform this operation on a regular basis.	X		

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
8-04	The solution must allow for a user to define an alert message to be executed upon the occurrence of an error. A simple script could be configured to check the error log on a regular basis and send an administrator-defined email message to a specified individual, or group, if an error occurred. The contractor will discuss with the State the precise requirement for this alert message during the initiation phase of the project.		X	
9-00	**Training**			
9-01	Train the Trainer will be provided on a regional basis with one train the trainer session held in each of the seven (7) regions across the state. Each train the trainer class will consist of up to 20 people per class. The contractor will provide train-the-trainer sessions: one session in each of seven (7) regions across the state. Each training session will take four (4) days. The State will be required to provide all facilities for each training session, including adequately sized rooms, a networked desktop/laptop PC per trainee and a server for the training environment. The contractor can accommodate classes of up to 20 people (given adequate facilities). However, we would advise that previous experience shows smaller classes to be more effective. The contractor has priced this option based on the specified seven train-the-trainer sessions but would be happy to discuss additional sessions to allow for smaller class sizes, if required.	X		
9-02	Technical training will be provided for the contractor solution covering the following (this is not an all-inclusive list): Memex Database Administration and Integration a. Installation and administration of Memex applications and utilities b. Upgrade of the system c. Expansion of system functionality d. Associated search, analysis and data capture programs e. Data backup and redundancy f. User Interface Development g. User Management The training is divided into two (2) three (3) day courses: h. Systems Administrator Course This covers administration at the level of the core Database Management System. i. Application Administrator Course This covers configuration (including database creation, form design, business rules, etc.), user management and other features that are controlled through modules within the user interface. The course format for both courses is lecture, discussion, hands-on laboratory style, to fit the training to the expertise of the trainees.	X		

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
9-03	Solution administration training for personnel who will be responsible for ongoing maintenance and administration of the solution, including security. This is provided as part of the cost of the solution. The contractor will provide solution administration training for personnel who will be responsible for ongoing maintenance and administration of the solution. This is encompassed in the Application Administrator Course. This three (3) day course covers configuration (including database creation, form design, business rules, etc.), user management (including record-level security, user/group security and permissions-based access to functionality) and other features that are controlled through modules within the user interface. The course format for both courses is lecture, discussion, hands-on laboratory style, to fit the training to the expertise of the trainees.	x		
9-04	Upgrades and new versions to the solution that affect end-user functionality include training at no additional cost (e.g. classroom or online training, training flier, release features, etc.). Continual learning, and support for new functionality or changes to end-user features, are provided through the following means: • Additional classroom training, as deemed necessary. • Updated documentation. • Release notices. • Additional online help topics.	X		
9-05	Training is provided in a variety of formats for product installation, use, and administration for a variety of levels (e.g. basic, advanced, refresher, etc.) Training is provided in a variety of different formats as described above. Additionally, the comprehensive online help system helps users to remember what they learnt during training and to further develop their proficiency.	X		
10-00	**Knowledge Transfer**			
10-01	Mentoring and training of State staff is provided in preparation for transitioning the operation and support to State of Michigan staff. The contractor will provide training as describe in the responses to requirements 9-01 through 9-05. The mentoring and training provided by the contractor will prepare State of Michigan staff for a smooth, low-impact transitioning of the system and will allow them to successfully operate the system and support of all users of the Confidential Informant Tracking System.	X		
11-00	**Documentation**			
11-01	Contractor will provide a minimum of two (2) hard copies of the User and Technical Manuals. Contractor will also provide electronically and make them available online. The contractor will provide two hard copies of the user and administration manuals, plus the technical manual for the database management system. The contractor will also provide these manuals electronically, in PDF format, and will give the State permission to publish these on its intranet. All information in the Memex Patriarch user and administration manuals is also available within the online help that is accessible to users from within the application.	X		

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
11-02	Contractor will provide a minimum of two (2) hard copies of the Operations Manual. Contractor will also provide electronically and make available online. The contractor will provide two hard copies of the administration manual for Memex Patriarch, which provides operations instructions for the system. The contractor will provide this manual electronically, in PDF format. All information in the Memex Patriarch administration manual is also available within the online help that is accessible to users from within the application.	X		
11-03	Contractor will provide a minimum of two (2) hard copies for all updates of documentation during the term of the Contract, software license, and maintenance agreement and will make them available online. The contractor will provide two hard copies of all updates of documentation during the term of the Contract, software license, and maintenance agreement. Electronic copies, in PDF, will be made available online for download via FTP by system administrators, and these can be published on the State's intranet. All updates to the online help system will be available, from within the application, in the updated version of the solution.	X		
11-04	Contractor shall supply manufacturer's software in original manufacturer packaging with complete manufacturer documentation, manuals, disk(s) or CD ROM and warranty enclosed. The contractor will supply its software in the original manufacturer packaging with complete manufacturer documentation, manuals, disk(s) or CD-ROMs and warranty enclosed.	X		
11-05	Solution-wide documentation and specifications will be provided for all modules and program development. The contractor will make available solution-wide documentation and specifications for all modules and for program development.	X		
11-06	Baseline End-User training manuals to be used as a basis for "User Manuals" and online help will be provided for all modules and program development. The contractor will provide the State with copies of the end-user training manual for Memex Patriarch. The solution contains a comprehensive online help system that covers all modules of the application.	X		
11-07	Installation procedure will be provided for all modules and program development. The contractor will provide documented installation procedures for all modules and program development.	X		
11-08	Module configuration documents sufficient for configuration maintenance purposes will be provided for all modules and program development. The online help and administration manual contains comprehensive details of how the system is configured. This information covers all modules and is sufficient for configuration maintenance.	X		
11-09	Testing scripts will be provided for all modules and program development.	X		
11-10	Specification documentation will be provided for all modules and program development.	X		
11-11	Production migration will be provided for all modules and program development.	X		
11-12	The documentation of components, features, and use of the hardware/software shall be detailed such that resolution of most problems can be determined from the documentation, and most questions can be answered.	X		

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
11-13	All solution, operational, user, change, and issue documentation must be available in electronic format, published to an intranet website, accessible to State users, updated regularly, with unique numerical identifiers for each section and be consistent with the most current version of the application(s) and three (3) previous versions.	X		
11-14	All solution, operations, user, change and issue documentation is to be organized in a format, which is approved by the State and facilitates updating and allows for revisions to the documentation to be clearly identified including the three (3) previous versions. The contractor is partially compliant with this requirement. All solution, operations, user, change and issue documentation that relates specifically and solely to the solution supplied to the State of Michigan will be organized in a format, which is approved by the State and facilitates updating and allows for revisions to the documentation to be clearly identified including the three (3) previous versions. The contractor cannot, however, commit to State approval of generic documentation of its COTS solution.	X		
11-15	Contractor must develop and submit for State approval complete, accurate, and timely solution, operations, and user documentation. The contractor is partially compliant with this requirement. The contractor will develop complete, accurate, and timely solution, operations, and user documentation for the solution. Any solution, operations, or user documentation that relates specifically and solely to the solution supplied to the State of Michigan will be submitted to the State for approval. The contractor cannot, however, commit to State approval of generic documentation developed for its COTS solution.	X		
11-16	Contractor must notify the State of any discrepancies or errors outlined in the solution, operations, and user documentation.	X		
12-00	**Warranties**			
12-01	The Contractor shall provide a warranty for all products and services resulting from this contract commencing on the first day following Performance and Reliability Evaluation (PARE), acceptance, and formal written acceptance by the State for a particular phase or software component.	X		
12-02	The minimum warranty period of two (2) years.	X		
12-03	The Contractor will be responsible for all parts, labor and travel expenses during the two (2) year warranty period following acceptance.	X		
12-04	The two (2) year warranty shall provide that the software is free from imperfections in design and free from any and all defects and is able to perform continuously and satisfactorily under normal operating conditions.	X		
12-05	All configurations are covered by the manufacturer's standard warranty.	X		
12-06	All applicable third party warranties for deliverables are assigned to the State.	X		
12-07	Any upgrades of the software made during the warranty period are supplied at no additional cost.	X		
13-00	**Maintenance and Support**			
13-01	Maintenance programs will commence at the end of the warranty period.	X		
13-02	The software maintenance program includes all future software updates and solution enhancements applicable to solution modules licensed without further charge to all licensed users maintaining an annually renewable software support contract.	X		
13-03	Contractor shall provide TIER III, User and Technical Help Desk Support, 8am to 6pm EST, Monday through Friday.	X		
13-05	Guaranteed parts availability within the service response window at all times.	X		

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
13-08	The State will be provided with information on software problems encountered at other locations within or outside the State's solution, along with the solution to those problems, when such information is relevant to the contractor's solution. The release notes for the contractor's solution provide all customers with details of problems encountered by customers. The names of customers are not published in the release notes, but each issue has a reference number against it so that customers can identify their own issues. Wherever possible workarounds to issues are provided. If important issues arise between releases, customers are notified by Memex Support, or by the customer's account manager, and provided with details of any remedial action that should be taken.	X		
13-09	Support is provided for superseded releases and back releases still in use by the State. The contractor will continue to support superseded releases and back releases still in use by the State, under the terms of the Support and Maintenance Agreement The contractor's policy is to support the previous major release of a product and all subsequent minor releases of the product.	X		
13-10	For the first year and all subsequent contract years, the following services are provided for the current version and one previous version of any Software provided with the deliverables, commencing upon installation of the deliverables or delivery of the Software:	X		
13-11a	**Error Correction.** Upon notice by State of a problem with the Software (which problem can be verified), reasonable efforts to correct or provide a working solution for the problem.	X		
13-11b	**Material Defects.** The State will be notified of any material errors or defects in the deliverables known, or made known to Contractor from any source during the Contract term that could cause the production of inaccurate, or otherwise materially incorrect, results and shall initiate actions as may be commercially necessary or proper to effect corrections of any such errors or defects	X		
13-11c	**Updates.** All new releases and bug fixes (collectively referred to as "Changes") for any software deliverable developed or published by Contractor and made generally available to its other customers at no additional charge will be provided to the State at no additional charge.	X		
14-00	**Migration**			
14-01	Data, and related information, has a migration path to future revisions of the hardware and software and there is a guaranteed and reasonably straightforward "exit path" to solutions of other vendors. The contractor knows that data within intelligence systems must be accessible for many years. The contractor has experience migrating its software seamlessly and with zero impact on the data itself from one version of a solution to the next, or through a number of versions, and/or through changes in hardware. Developing, documenting and testing an upgrade path is a key component of any new version of the contractor's solution. In the unlikely event of an "exit path" being required, the contractor will work with the State to help migrate the State's data and related information to the solution of another vendor.	X		

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
14-02	Data will migrate smoothly to any future revision of the software and hardware ("smoothly" would be defined as having the solution administrator follow Contractor-supplied written instructions to run a Contractor-supplied program or programs in batch mode to convert data, or any process that is simpler or more automatic than this) The contractor works hard to ensure that upgrades to solutions occur smoothly. At a minimum, for simple migration operations, a detailed procedural set of instructions is supplied. For more complex migration, at a minimum, server-side scripts are supplied, with detailed instructions, for the administrator to run. Additionally, automated programs may be supplied, where appropriate, with a graphical interface, to allow the administrator to perform upgrade tasks from a Windows workstation, clicking through a "wizard"-type process and entering a minimum of details where these details are not available for detection by the software.	X		
15-00	**Delivery Requirements**			
15-01	For all orders placed by the State during the term of this Contract, delivery will be made within ten (10) business days of order. (Elapsed delivery time will be measured from the time an order is accepted, either verbally or in writing by the Contractor, to the time product is delivered to the site identified in the purchase order.)	X		
15-02	The deliverables shall be shipped F.O.B. Destination, freight prepaid and allowed, directly to each entity, unless otherwise requested, and to the exact locations shall be specified in the purchase order.	X		
15-03	If during the term of the contract the Contractor enters into a contract with any other customer for substantially the same quantity, equipment, software and services, terms and conditions for a lower cost, the Contractor will offer the same decrease in rate to the State.	X		
16-00	**Backup and Recovery**			
16-01	The solution has the ability to provide point-in-time recovery of data to the last completed transaction. The contractor's solution disaster recovery mechanism operates at an atomic transactional level, writing a duplicate transaction instruction to a disaster recovery server after every transaction is processed on the production servers. In the event of a server failure, or a catastrophic system failure due to an external event, this allows data to be recovered back to the last atomic transaction, provided the replicated data survives. Each of the two production data servers will use the other server as its disaster recover server, with transaction files being written across to the other server as each transaction is performed, and then the data being replicated into DR copies of databases, from the transaction files, on a regular basis. In the event of a single server failure, or similar problem, the replicated data can be recovered using the disaster recovery tables on the unaffected server. The solution includes a Data Integrity Checker which would be run after a recovery option. It checks the system and reports on any issues relating to data integrity – for example, missing links between records.	X		
16-02	The solution has the ability to allow for continued use of the solution during backup. The solution includes a backup tool that can be run without shutting down the system, allowing users to continue using the system while a backup of data tables is made. Backup of the auditing systems and configuration settings needs to be scheduled.	X		
16-03	The solution has the ability to provide a complete backup and recovery process for all database tables and solution files. The solution includes a backup tool that can be run without shutting down the system, allowing users to continue using the system while a backup of data tables is made. Backup of the auditing systems and configuration settings needs to be scheduled.	X		

	Optional Confidential Informant Database GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
16-04	The contractor's solution includes a backup tool that creates backups on request.	X		
16-05	The back up and archival features of the solution proposed can be initiated automatically or by manual request.	X		
16-06	The solution software and data must be able to be restored to its previous operational status within four (4) hours after initiation of recovery process.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
17-00	**Solution Architecture**			
17-01	The contractor's solution employs web-based architecture that allows the application to be accessible from the most commonly used browsers. Example: Internet Explorer, Netscape, Mozilla.	X		
17-02	The solution places no limit on record size. There is no practical limit to the size of records. The actual limit is in the region of 8GB per record. The contractor records are text-based (with images and other files stored separately and linked to records), and are stored as coded binary data which reduces the record size far below its equivalent size when stored as plain text.	X		
17-03	The software is expandable and portable, with specific reference to the solution capacity requirements presented in this contract.	X		
17-04	The solution is fully self-contained and capable of being operated by State staff with no dependency on Contractor services for its routine operation.	X		
17-05	The solution server is compatible with the State's technical and enterprise architecture and is sized suitable for the solution specified.	X		
17-06	The solution is an open solution, with no dependency on the use of specific models of equipment operating solutions. The solution has no dependency on any one specific model of equipment. Memex Patriarch and its supporting database management system, server utilities and associated software are currently in use on a wide variety of hardware across our customer base.	X		
17-07	The solution is portable from one OS/RDBMS to another, i.e., from Unix to Windows 2000, or from one platform/OS to another, e.g., Sun Solaris to IBM AIX, etc. The contractor's solution can be operated, and is currently in production use, on selected current versions of Microsoft Windows, Red Hat and SUSE Linux and Sun Solaris. The solution is portable between these operating systems. With respect to RDBMS, our indexing engine and database interoperate with Oracle, Microsoft SQL Server and MySQL.	X		
17-08	The solution keeps a log of each transaction which alters the database. Logs are date and time stamped to allow the solution to reconstruct activity for any period.	X		
17-09	The solution will interface with the State's monitoring solutions such as Compuware Vantage and CA Unicenter The contractor's solution includes a Web Service interface that can be used by external applications or services. This Web Service allows data to be accessed via a standard XML-based API.	X		
18-00	**Software Licensing**			
18-01	The software license is for perpetual use for a fixed fee without additional royalties or service fees, except for ongoing software maintenance.	X		
18-02	The software license is based on a server or enterprise license and not based on number of users The licenses supplied by the contractor will relate to specific servers, not to users. The contractor will license all servers required to deliver the solution – in practical effect giving the State an enterprise license	X		
19-00	**Programming Language**			
19-01	The solution's client applications are written in a standard web based programming language. The solution's client applications are written in standard .NET environment programming languages commonly used throughout the software industry for the development of web based applications.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
19-02	The solution must offer Application Programming Interfaces (APIs) that enable the State to develop custom interfaces to all modules. APIs enable data to be imported or exported from the solution. The contractor's solution includes a number of APIs and software integration frameworks that will allow the State to develop custom interfaces to all modules.	X		
20-00	**Hardware**			
20-01	All equipment supplied and/or supported under this contract must be configured in the most optimal manner and in conformance with MDIT standards. The contractor does not propose supplying hardware under this contract. The contractor will, however, help the State to configure the supported hardware in the most optimal manner and in conformance with MDIT standards.	X		
20-02	Contractor's recommended hardware platform/topology provides for optimal functioning in the following areas:			
20-02a	Communication line speed for distributed entry functions and major online processes of departments and offices located in various areas of the State. Testing of the Memex Patriarch Web interface has shown that the interface is usable over a dial-up connection and its performance is consistent with, or exceeds, typical user expectations for Web sites operated over such a connection. Because almost all processing is happening on the system's Web and data servers, the speed of the user's connection to the Web servers has little or no impact on the length of time operations take to complete – however, rendering of results within the browser may take longer. The following table compares the length of time taken to complete a number of typical operations in Patriarch Web connecting to a test server using a variety of connection speeds:	X		

Action	Corporate LAN	3G Aircard (Verizon Wireless)	56K Dial-Up
Log In To System	7secs	14 secs	31 secs
Time to display of first hit during free-text search of 10,000 incident reports for term 'terrorism'.	<1 sec	6 secs	21 secs
Time to complete above search (4242 hits found)	3.5 secs	6.5 secs	23 secs
Time to display of first hit during free-text search of 10,000 incident reports for term 'Graham' or any phonetically similar terms	1.5 secs	7.4 secs	23 secs
Time to complete above search (1905 hits found)	2.1 secs	7.9 secs	24 secs
Load front page of **www.nytimes.com** (for comparison)	12.6 secs	17 secs	68 secs

The above test was carried out using a Windows XP virtual machine with 256MB of memory. By comparison, the same machine took 8.5 seconds to load Microsoft Word 2003. Using dial-up, The contractor's experience is that with the proliferation of high-

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
	speed corporate, DSL and cable connections, many users' expectations of general Web performance now exceeds what is possible over dial-up and that, unless they use dial-up on a regular basis, they may be frustrated with overall Web performance if they are presented with a dial-up connection. This applies to all Web sites the user may access, not just Memex Patriarch Web. While the contractor warrants that Memex Patriarch Web is functional over dial-up connections, we typically recommend users have access to a 128Kbit connection or better. • Processing the volumes presented and any increases in volume that can be expected through the implementation of the proposed solution. • Remote access and administration • Application installation, administration and support • Support for a variety of TCP/IP network configurations • Support wireless LAN and WAN configurations that support TCP/IP.			
20-02b	Processing the volumes presented and any increases in volume that can be expected through the implementation of the proposed solution.	X		
20-02c	Remote access and administration. The contractor's recommended hardware platform/topology will provide for remote access and administration. At the Web application layer, Windows 2003 server machines will be used, allowing remote access via RDP. At the data layer, SUSE Enterprise Linux Server will be used allowing multiple remote administration options including SSH, VNC and remote X sessions	X		
20-02d	Application installation, administration and support.	X		
20-02e	Support for a variety of TCP/IP network configurations.	X		
20-02f	Support wireless LAN and WAN configurations that support TCP/IP.	X		
21-00	**RDBMS / Applications / Database Management**			
21-01	The solution is available with State's standard relational database management solution. See the following web link for more information - http://www.michigan.gov/documents/dmb/1310.34_184491_7.pdf The contractor's solution stores all data entered by users in the Oracle 10g RDBMS one of the State's standard database management systems for servers. .	X		
21-02	Full-text indexing and a full-text database search feature are available to provide easy retrieval of records. The contractor's solution includes full-text indexing and a full-text database search feature which makes it possible for users to find information by simply entering the words or phrases they are looking for and clicking the search button – without having to know anything about the structure of the data tables or how to create SQL queries. Users can search on any entity or data field, across both unstructured and structured text. The contractor's solution therefore provides total content access and because the system's index is updated every time a record is created or changed, the results of search are accurate to the current state of the database rather than being minutes or hours out of date, depending on when the index was last updated.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
22-00	**Security**			
22-01	All computer information solutions and applications operate in a secure manner and comply with State and federal security standards and regulations including the MDIT 1350 **Enterprise Security Policy** and the 1410.17 **Michigan State Government Network Security Policy** as found on the website: http://www.michigan.gov/dit/0,1607,7-139-34305-108216--,00.html	X		
22-02	All computer information solutions and applications operate in a secure manner and comply with State and federal Criminal Justice Information Systems (CJIS) security standards and regulations as well as MCL 752.1, 28 CFR Part 23 and MIOC privacy policy. The contractor's experience with federal and State law-enforcement agencies will allow us to comply with this requirement. The contractor has received an A+ rating from IIR within the State of Delaware for its adherence to federal standards such as US Section 28 CFR Part 23.	X		
22-03	All computer information solutions and applications operate in a secure manner be incompliance with SAML. The customization work that will be carried out to allow authentication and access to Memex Patriarch via the MiCJIN portal (see responses to requirements 1-05, 22-01 through 22-03 and 24-01) will ensure that applications can be operated in a secure manner. The login/authentication process will use the SAML standard, as required, for integration with the MiCJIN portal.			X
22-04	The solution ensures that the integrity and confidentiality of data is protected by safeguards to prevent release of information without proper consent. The list below shows some of the sophisticated role-based compartmentalization which allows the contractor's solution to comply with this requirement: **Tiered Supervisory Process** • The option to initiate a single or multi-tier intelligence review process after submission of new information. • Automated acknowledgements and tracking of high priority or "hot" intelligence. **Role-Based Security** • A multi-level security model based on functional and security group membership. • Compartmentalized data options to support multi-jurisdictional operations • User or group-specific access restrictions can be maintained at server, database or record level. • Records can be made wholly or partly view-only, protected (i.e. data cannot be viewed), or completely covert to specified users or groups. **Auditing** • The system maintains a comprehensive audit trail that records all user and administrative activity.	X		
23-00	**Security / Access Control**			
23-01	The solution shall interface with the MiCJIN portal to provide secure access control based upon unique user login, for types of record (e.g., fund, order) as well as by function performed upon the record (e.g., Display, Add, Edit, Delete.) The solution will interface with the MiCJIN portal to provide users with secure access to Memex Patriarch. Based on their unique ID, and their membership of role groups within the solution, users are able to access different types of record, particular database tables or specific records. Through their group memberships, users also inherit system permissions which govern their access to various modules within the system and determine the functions they can perform (e.g. View, Create, Update, Delete).			X

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
23-02	The solution shall interface with the MiCJIN portal to check each user's access privileges at login, and automatically disable or enables client functions (in real time) based upon the user's profile. Users will log in to Memex Patriarch via the MiCJIN portal. The user's authenticated ID will be passed to the contractor solution which, during the automatic login of the authenticated user into Memex Patriarch will check the user's profile (including group membership details), by matching the ID against secure data held within the contractor's solution. Client functions are enabled or disabled at that point, so that, when the application is displayed to the user, he/she only sees areas of the applications, buttons, menu items and other functional options that are appropriate to the user's profile.			X
23-03	The solution shall interface with the MiCJIN portal to provide varying levels of access within the application, such as administrators, view only, or scheduling only. The contractor's solution will use the MiCJIN portal to provide access to Memex Patriarch. Users are assigned varying levels of access within the application by their membership of one or more role group. A user's group memberships determine, for example, their access to specific record types, particular database tables or individual records, as well as their ability to create, update or delete records, or to access administrative modules within the solution. These varying levels of access are established within Memex Patriarch by mapping the user's ID (authenticated through the MiCJIN portal) to user/group data that is securely stored within the contractor's solution.			X
24-00	**Security / Password Controls**			
24-01	The solution will interface with the MiCJIN portal for password administration. Some customization of the current COTS solution is required to allow it to interface with the MiCJIN portal for password administration. The contractor will undertake to carry out this work, after award of contract, to ensure compliance with this requirement.			X
25-00	**Security/Activity Logging**			
25-01	The solution logs unauthorized access attempts by date, time, user ID, device and location. The current COTS solution, which includes its own login screen and internal authentication system, logs all failed login attempts by date, time, user ID and workstation. However, as authentication for the MCIS will be handled via a single point of authentication outside the contractor's solution (i.e. the centralized authentication provided by the MiCJIN portal), the contractor's solution will not log authentication errors. It will, however, audit failed logins where the credentials of a MiCJIN-authenticated user who has attempted to access Memex Patriarch do not match up with any existing Memex Patriarch user account. In this situation the user will be refused entry to Memex Patriarch and their ID plus the date and time of the failed login will be audited within the contractor's solution.			X
25-02	The solution maintains an audit trail of all security maintenance performed by date, time, user ID, device and location, with easy access to information. The contractor's solution includes a comprehensive audit trail that records all user and administrative activity. Users with permission to access the audit trail can retrieve audit records by searching within the built-in Audit Management module of Memex Patriarch. This has an easy-to-use form that helps users find records with particular values in particular fields. There is also a free-text query box that allows you to enter a query that will find matching text in any field in an audit record.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
25-03	Provides security reports of users and access levels. The contractor's solution allows administrators to display all users who belong to each security group (i.e. users with specific levels of access to data). All changes to group memberships are logged and the Audit Manager module also allows administrators to view details of these changes within the Memex Patriarch application.	X		
25-04	Provides detailed reports of backups completed and backups failed. The system's backup utility can generate a verbose output listing all the files it has backed up. If the utility fails to backup a file, this is shown in the output.	X		
26-00	**Software Package Specifications**			
26-01	The software uses an industry-standard relational database management solution. See the following web link for more information - http://www.michigan.gov/documents/dmb/1310.34_184491_7.pdf The contractor's solution stores all data entered by users in the Oracle 10g RDBMS which is one of the State's standard database management systems for servers.	X		
26-02	The software will operate effectively on State hardware as recommended by the Contractor with Contractor-supplied upgrade recommendations. The contractor has supplied hardware recommendations for the solution in Attachment E – Technical Proposal. The software will operate effectively on State hardware that conforms or exceeds these specifications. The contractor will recommend upgrade specifications as and when necessary.	X		
26-03	The software operates in a recognized industry standard operating environment. The contractor 's server-side software can be operated, and is currently in production use, on selected current versions of Microsoft Windows, Red Hat and SUSE Linux and Sun Solaris. The data layer functionality of the contractor's solution can be deployed on Linux (Red Hat Enterprise 5 or SUSE Enterprise 10), Windows Server 2003 or Sun Solaris 10. Based on the contractor's interpretation of the security requirements, anticipated usage levels of the system, and the State's IT standards, the contractor recommends that the data layer is deployed on SUSE Enterprise Linux 10. For the Web application layer the contractor's deployment will be using a cluster of relatively small servers running Windows 2003 Server. Internet Information Services (IIS) is used as the Web server technology. The supported operating systems for desktop PCs used to access Memex Patriarch Web are Windows XP (with SP2 or SP3) and Windows Vista (SP1). The supported browsers are currently Internet Explorer 6 or later (7 is recommended) and Firefox 2 or later.	X		
26-04	The software allows the State, from PC workstations, to access and update all necessary information to complete a transaction. The contractor's solution will allow users to access and update all necessary information to complete a transaction from their PC workstations or laptops.	X		
26-05	The software allows for the accurate and timely input and extraction of data.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
26-06	The software provides a Graphical User Interface (GUI) that is user-friendly and provides data, calculation, reporting, and communication capabilities to all users. Memex Patriarch has a modern, easy to use interface. Following extensive usability testing conducted by Microsoft for its Office 2007 suite, Memex Patriarch was recently redesigned to include the same “ribbon”-style control bar used by Microsoft, to present users with a clean, uncluttered application where the controls users are most likely to need at any point while they are working in the system are shown most prominently. The following list represents just a few of the features that make Memex Patriarch easy to use: • Easily customizable personal Home Page for each user • Google-like simple searching • Automated link creation • A graphical link chart on which new links can be drawn • “Wizards” to guide users through more complex tasks • Pop-up, context-sensitive help • Spelling checker • Email other users from within Memex Patriarch • Highlighting of matched text in records returned by a search • Clear highlighting of mandatory fields in data input forms • Automatic record review reminders • Rule-based warning messages on records • User-defined interest marker pop-ups on records	X		
26-07	The solution is modular in design to accommodate phased implementation and future expansion. The contractor’s solution is comprised of various modules, such as Entity Manager, Action Management, and Query Builder and so on. Access to these modules is permissions based and can be limited to certain groups of users, or made available to users in a phased manner, if required. New modules have been introduced over time – for example, the Federated Search module is one of the more recent additions to the solution. Similarly, modules can be updated without impacting on other modules. An example of this is the Form Designer module which was recently entirely redesigned.	X		
26-08	The modularity allows the capabilities of the core solutions to function without the entire solution complement. The contractor’s solution can function with a reduced, core set of functionality, if required. For example, the Federated Search module can be removed and users still have the full power of the contractor search functions for searching data within the solution.	X		
26-09	Additional modules may be integrated into the solution without a major impact to the installed components. The solution is a modern .NET application with a development framework that allows additional modules to be developed and introduced into the solution without a major impact to the installed components. Experience over recent years has proved that new modules (either generic additions to the COTS solution or customer-specific add-ons) can be successfully added to Memex Patriarch with minimum impact to existing implementations of the solution.	X		
26-10	All modules of the solution are integrated and designed to work together using a single input and a common database with no redundant data entry or data storage. All modules of the contractor’s solution are integrated and designed to work together. All modules write and retrieve data in the same way, within a common database system, using the same database engine to control data input. The solution has been designed to avoid redundant entry or storage of data.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
26-11	The solution supports paperless processing through the use of electronic documents that are routed for electronic signatures through user-defined approval paths. The solution's MFX (Memex Form Extensions) functionality can be used to route newly entered records for approval and electronic "signature" by specified users. The behavior is highly configurable. One example would be a record type that must be signed off before being made available to a wide user community. In this situation, after entry of the new record it can be automatically secured, preventing it from being accessed by most users, or it can be made read only. A specified user, or a group of users, is alerted that there is a record requiring approval. After reviewing the record the supervisor can enter his/her name in an approval field, update the record and it is automatically released for viewing by general users.		X	
26-12	Response times, at local and remote sites, for the major on-line processes stated above will meet business requirements. The contractor is confident that response times will meet the State's business requirements both at local and remote sites, assuming a standard acceptable level of network throughput is available.	X		
26-13	The solution provides the capability for expansion in order to take advantage of technology such as imaging and OCR in order to reduce data entry workload. As described in the response to 26-09, the solution can be expanded by the addition of new modules, plug ins or adaptors that provide additional functionality. An example of this is an optional OCR feature for Memex Patriarch, which the State may wish to add to the contracted solution.	X		
27-00	**Reporting**			
27-01	The software delivers standard reports. Reports produced by the system fall into three categories: • Query based reports The system can have a number of predefined queries that can be run on-demand or at scheduled intervals and report on data within the system currently meeting the specified criteria. • Printed reports These comprise: printouts of records, disseminations (where the content of the report and its recipient are recorded) and "structured printouts" compiled from information in multiple data records. • Management and usage statistics Crystal Reports (or other standard external reporting tool) is used to generate reports based on data within the contractor solution. Because the precise requirements for reports always varies between one law enforcement organization and another, the COTS solution does not contain preconfigured reports. Rather the contractor works with the customer to define and create standard reports during the course of system deployment.		X	
27-02	The solution includes ad-hoc query and reporting tools. The contractor's solution provides some of the most advanced querying capabilities available. For instance, the querying engine can accommodate queries with up to 32,000 search terms, which is highly desirable for broad-scope and list-based querying. In addition, all of the report types described in the response to 27-01 can be generated on an ad-hoc basis.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
27-03	The solution will support remote connections to other databases for report generation by a third party package per State standards. See the following web link - http://www.michigan.gov/documents/131040_40944_7.pdf The contractor's solution supports connections from third-party packages such as those recommended in the referenced State's standards document. Crystal Reports is typically used for the generation of standard statistical or structured reports. Reporting tools access data directly from the underlying Oracle 10g tables.	X		
27-04	The online query capability enables non-technical end-users to extract information. The ease and flexibility of searching are key strengths of the contractor's system. The system offers a variety of methods of searching. Basic searching can be performed easily, without training. But with a few hours of training users can leverage the more advanced aspects of the contractor's querying tools. Features of searching within the contractor's solution include: • Users require no knowledge of available fields or the database structure. • The contractor allows a full range of Boolean searching for keywords, including regular expressions, m from n searching, proximity searching, phrasing, date ranges and character/numeric ranges. • The contractor supports four kinds of query expansion: 1. **Garbling** – the query is expanded by adding, removing and reordering letters within the search text. This is very good at finding misspellings, or alternative spellings, of the word the user is searching for. 2. **Trigram** – finds words that share a specified number of trigrams (three contiguous characters) within the search text entered by the user. This broadens a search by finding words that have a commonality with the word the user entered. 3. **Sounds like** – a soundex algorithm is used to find words that sound like the word entered by the user. This finds records where the wrong word was used (e.g. gorilla instead of guerrilla). 4. **Synonym** – a thesaurus lookup facility finds words with similar meaning to the word entered by the user. This broadens a search by finding similar words (e.g. records containing "explosive" when "bomb" was searched for).	X		
27-05	Standard reports to be scheduled, executed, viewed on-line, printed (centrally or remotely) and dispersed (including the use of report distribution management software) Where standard reports are generated on a regular basis and need to be viewed and manipulated online, the contractor recommends that such reports are designed using Crystal Reports. This tool allows reports to be published as Web pages (e.g. on a secure intranet), or saved as PDF files for distribution via email or at a download site.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
27-06	The State has the ability to control the information that appears on standard reports so that data security is maintained. Report generation within the contractor's solution follows the principle that the user generating the report can only include in the report information that he/she could have found by performing a search. Access to data stored in the contractor's solution from Crystal Reports, or from other third-party tools, for the purpose of generating reports, will be limited to privileged users. It is the responsibility of these users, who design and publish reports, to ensure that data security is maintained. The issues of trust and risk are much the same here as for any user who is permitted to print hard copies of information stored on the system.	X		
27-07	The solution provides methods for retaining and modifying previously built queries. All users have a personal Home Page where they can store their own queries for later reuse. These saved queries can be modified at any time, as required.	X		
27-08	The solution provides the use of transaction databases, external files, or a "data warehouse" for ad-hoc reporting. Ad-hoc reports can be generated using the solution's underlying Oracle transaction database. This is done by connecting Crystal Reports (or an alternative RDBMS reporting tool) to the Oracle database and retrieving data into the reporting tool for processing/manipulation.	X		
28-00	**Audit Trail**			
28-01	The solution enables the user to modify data entry transactions that have already been posted to the database while maintaining an audit trail of the change. Memex Patriarch maintains a comprehensive audit trail in which all user activity is audited, including the modification of previously submitted data. Audit records themselves cannot be modified or deleted as this would compromise the credibility of the audit trail. When data Is modified, the audit trail records details of what was altered, the date and time of the update, and the name or the user who made the change, amongst other details.	X		
28-02	The solution's internal control functionality ensures that the data entry and processing associated with a business event has been completed before updating the database.	X		
29-00	**Edit and Validation Control**			
29-01	The solution includes comprehensive field edits to prevent incomplete or incorrect data from entering the solution The contractor's solution always updates complete units of information, at record level, to prevent incomplete or inconsistent data being introduced into the system.	X		
29-02	The solution ensures data integrity and controls processing without hard-coded logic			X
30-00	**Physical Security**			
30-01	For any activities not performed on State sites or facilities, the Contractor will provide effective physical security measures for all proposed equipment sites, all processing and operations areas (including the mailroom), and secured storage areas through a card key or other comparable solution. At a minimum, the Contractor will: The contractor is not intending for any work relating to the MCIS occurring on non-State sites or facilities. However, in the event of this changing, the contractor confirms that it will comply with these requirements. We have therefore responded to these requirements as compliant.			
30-01a	Restrict perimeter access to equipment sites, State-specified processing and storage areas, and storage areas through a card key or other comparable solution. The contractor views this as not an applicable requirement (see the response to 30-01 above), but agrees to comply with this requirement in the event of activities being performed on non-State sites or facilities.	X		

	Optional Confidential Informant Database TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
30-01b	Provide accountability control to record access attempts, including attempts of unauthorized access. The contractor views this as not an applicable requirement (see the response to 30-01 above), but agrees to comply with this requirement in the event of activities being performed on non-State sites or facilities.	X		
30-02	Physical security shall include additional features designed to safeguard site(s) through required provision of fire retardant capabilities, as well as other electrical alarms, monitored by security personnel on a twenty-four (24) hours a day, seven (7) days a week basis. The contractor views this as not an applicable requirement (see the response to 30-01 above), but agrees to comply with this requirement in the event of activities being performed on non-State sites or facilities.	**X**		
30-03	Maintain a current annual security rating as audited by an independent third party auditing firm that certifies that they meet federal and State guidelines for the handling of confidential data. The contractor views this as not an applicable requirement (see the response to 30-01 above), but agrees to comply with this requirement in the event of activities being performed on non-State sites or facilities.	X		

Article 1, Attachment I2 (OPTIONAL)

Requirements Document – Tip Tool

Contractor shall provide deliverables, services and staff, and otherwise do all things necessary or incidental to provide the functionality required for the State's business operations, in accordance with the requirements as set forth below.

The contractor TIP Tracking System (TIP) will comply with each requirement in as follows:

Each of the requirements for this solution will fully comply and the "Method of Compliance" has been identified in the columns according to the following criteria:

1. Column "1" under "Method of Compliance" the solution will fully meet the requirement with no configuration or customization.
2. Column "2" under "Method of Compliance" the solution will fully meet the requirement through configuration.
3. Column "3" under "Method of Compliance" if the solution will fully meet the requirement through customization.

The Tip Tool must be able to separately store and process tip information received through different reporting methods. This includes telephone, e-mail, fax, text message, and via a public facing web page. MSP Operations currently receive tips from the public, other state departments and from other law enforcement agencies throughout the state regarding suspicious activity related to arson, methamphetamine labs, violent crime, missing persons, terrorism, etc. Tips usually come to MSP operations via telephone or fax. The tips are recorded manually and forwarded to various sections within MSP or to the agency having legal jurisdiction for follow-up.

As part of this effort, the State is considering the use of a public facing webpage that the general public can use to submit tip information to MIOC personnel. MIOC personnel will then analyze the tip information and forward it to the appropriate law enforcement agency for follow-up. In some cases, it may be desirable to have tips automatically routed to an agency based on location or the nature of the tip content. MIOC personnel will require the ability to manage tips received to include searching the tip database based on content, report on tip activity, tip status and tracking, as well as a reporting component which is able to report the number of tips received by date, time, and classification. The optional Tip Tool solution should provide the State the ability to collect, manage, route and track tip information received.

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	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
1-00	**Interfaces**			
1-01	Provide the ability to exchange information with external data sources through the use of Department of Justice National Information Exchange Model (NIEM). The contractor's solution offers the ability to exchange data with external sources, such as NDEX, RISS, and the ISE. These data exchange processes utilize the NIEM data schema.	X		
1-02	Provide the ability to export specified data sets in a format compliant with other software tools such as I2, PenLink, and ArcGIS. Specified data sets can be exported from the contractor's solution for use in other applications. The contractor's data integration is done using NIEM-compliant structures via standard XML export and loading/ The use of standard XML schemas, plus the ability to export data in CSV format, makes it possible to share data with many other applications, such as PenLink. In addition to this capability, the contractor has developed and implemented interfaces to allow direct information exchange to both ESRI ArcGIS and i2 Analyst Notebook 7.0 full client applications.	X		
1-03	Provide ability for users to be authenticated via MiCJIN portal. The contractor's solution will be customized to provide authentication via the MiCJIN portal. This will provide single sign-on Web access to the MCIS.			X
1-04	Support an interface to the state standard email client. (Novell GroupWise and MS Outlook) The contractor's solution generates email notifications for a number of different system events such as new information matching predefined criteria being entered on to the system and records approaching their review dates. The system sends these emails via an SMTP-compliant mail server and will therefore be viable in GroupWise and Outlook.	X		
1-05	Provide an API to allow data transfer from and to other databases such as local, county, state, and federal data system including open source data. The contractor's solution provides a Web Services interface that allows data to be transferred to and from other systems. The solution also included a Federated Search facility that allows users to search external databases – including the ability to perform a single search across data in the MCIS and other federal, state, county or local data sources. Data returned from federated searches can be stored within the MCIS.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
1-06	Provide a GIS component or the ability to export data to and from a GIS component based on address and or latitude / longitude. The contractor's solution provides the ability to export data to and from external ESRI ArcGIS components based on addresses or latitude and longitude. The contractor has a published application programming interface (the Intelligence Manager Web Services Interface) that allows data within the contractor's solution to be accessed from external systems such as ArcGIS applications. This makes it possible for these applications to have real-time access to location-based information stored in the contractor's solution. Memex Patriarch also supports lookup adaptors that can be added to the system to allow users to fetch addresses, latitude/longitude data or other location-based information from any accessible external data source for which there is a published API. Additionally, Memex Patriarch supports the use of maps within the application itself, using in-built ESRI Arc GIS or Oracle Spatial GIS components. Memex Patriarch's mapping capabilities allow users to associate records with locations by pointing and clicking on a map. The mapping functionality can also be used to select a geographical area within which a search is limited. Should the State wish to include the use of maps directly within Memex Patriarch, the implementation of this feature will depend on the State having the appropriate Arc GIS or Oracle Spatial GIS licenses and map files.	X		
1-07	Provide the state with a public facing web page for tip collection and dissemination that meets e-Michigan web page standards. The contractor will provide the State with a public-facing Web page for the submission of tips. This will take information entered by the public and store it in the Tips database. After tips are stored within the solution, they can be searched for, linked to records in the Intelligence system and disseminated, as required. The contractor will design and supply a simple Web page that meets e-Michigan standards and makes it as easy as possible for the public to enter tips. In order to avoid confusing people who want to use this service (who are not trained users), the only interface elements visible to members of the public will be those appropriate for the submission of tips. Note: This Web page will be hosted by the State of Michigan.			X
1-08	Provide the ability to transfer Tip information to the Michigan Criminal Intelligence System (MCIS) using an automated process. The contractor's solution provides functionality for the automated transfer of tip information to the Criminal Intelligence System. If a user desires to create an intelligence record from an existing tip record, this is as simple as clicking a button. This automatically creates a new intelligence record from the tip and pre-populates selected fields of data, while offering the user the ability to enhance that data as well as grade and evaluate the data as per 28 CFR Part 23. This is accomplished through the contractor's unique "Form Fill Down" functionality.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
2-00	**Data Entry**			
2-01	Provide a Web 2.0 interface for users incorporating the use of tabs and a ribbon-like navigation bar. Memex's Patriarch application (the framework application within which the Tip Tracking System has been developed) has been redesigned with a modern interface that includes commonly used features that users will be familiar with from other modern applications – such as tabs, dynamic drop-down lists, pop-up calendar controls, and a "ribbon" for performing actions such as navigating between records in a set of search results. The ribbon navigation, (as well as the system's online help) is context sensitive – which means they are dynamic controls that present the proper information based on the screen/actions being utilized.	X		
2-02	Provide the ability to enter data from different peripherals such as a keyboard, a mouse, GPS units, cell phone extractor equipment, PDA's, digital cameras, recording devices or a scanning device. The contractor's solution allows for data to be entered using standard keyboard and mouse interfaces. Additionally, electronic files – including scanned documents - can be added to the system. Any file type can be added including audio and video files. These can be added from any device that can be connected to the user's computer – including cell phones, PDAs, digital cameras, digital recording devices, etc. The contents of many types of file that contain text – including Microsoft Office files, Adobe Acrobat PDF documents, emails, WordPerfect files and scanned/OCR-processed documents – can be extracted and made searchable within the system. Files entered from peripherals appear as attachments to the associated database record. By clicking the attachment link, users can view the files in their associated applications. For example, clicking on a linked '.doc' file will cause the file to be displayed in Microsoft Word.	X		
2-03	Provide users with drop down boxes or pick lists to standardize data entry. Users are provided with drop-down lists where appropriate. These can either be bound (so that users can only select from the pick list) or unbound (so that the user can select from the list, or type in an alternative entry. Drop-down lists help to reduce keying for users. Bound pick lists help to improve data quality by reducing errors introduced by users keying in data. Pick lists entries can be rule based, meaning the values in one pick list will depend on the value selected in another pick list. For example, a vehicle form may set the 'model' pick list to only contain Ford models if 'Ford' is selected in the 'make' pick list. The List Manager module of the system allows application administrators to modify the contents of any pick list on the system or to configure the rule-based behavior, as required.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
2-04	Allow system administrators to customize data entry screens for each participating agency or system wide by adding, deleting, or rearranging data elements on the screen. The contractor's solution contains a Form Designer application that is typically only available to system administrator(s). This is a graphical design tool that allows the administrator to click and drag any control on any form to rearrange the form as required. Form controls – including complete tabs – can easily be added or deleted. The administrator can also change any of the button text, colors, size of text entry boxes, etc. System administrators can configure different entities, with specifically designed forms, for each participating agency. However, from experience with other multi-agency customers, the contractor would advise that, where the same type of information is being collected, it is less confusing for users who may be working collaboratively across agencies to use the same forms. The contractor's solution also offers "form attribute rules" which can be used to change the properties of any form control, be it a simple label, a text field or complete tab. Criteria specified by the administrator can, for instance, hide certain controls, or make them read-only, depending on the content of fields or details within the user profile of the current user.	X		
2-05	As the initial entry is being made a record number must be automatically generated and date and time stamped. This record number must appear on any screen referring to the entered incident. Memex Patriarch automatically generates a URN (unique reference number) when any new record is created. The URN is typically displayed on the first tab of the form used to display the record, but can be moved to another tab by the system administrator, if required. The URN can appear on any screen referring to the entered incident. When a record is created it is automatically date and time stamped, with details saved in the sysdatecreated and systimecreated system fields. These can be displayed on forms if required. The name of the user who created the record is also automatically captured in the syscreatedby field. The date, time and user are also automatically captured when a record is updated. This allows a form to display the "Last updated" date/time and "Last updated by" user, if required.	X		
2-06	During the entry or edit process all screens should be available with page tabs to click on so user can toggle from screen to screen. Solution prompts user if any screens are skipped or if any data fields are left empty. Whenever a user creates or edits a record, all parts of the form are available by clicking on a tab, allowing users to toggle from screen to screen. The contractor's solution prompts the user if he/she attempts to create or update a record in which any of the mandatory fields are empty. Additionally, the contractor Advice Engine can be configured to perform actions based on values entered into form fields, either on the click of a button during data entry, or when the user submits the form. Examples of the use of the Advice Engine include advising the user on their next course of action, or directing the user to records that contain similar information.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
2-07	Drop down menus must exist for all pre-defined fields such as M/F, City, State, and County etc. Drop-down lists are used for all fields for which standard values exist – for example, Male or Female, names of states or counties, etc. Where possible drop-down lists are set up to force selection from the list, preventing the user from typing in another value. This helps to improve data quality by standardizing the values entered in these fields. Pick lists entries can be rule based, meaning the values in one pick list will depend on the value selected in another pick list. For example, a vehicle form may set the 'model' pick list to only contain Ford models if 'Ford' is selected in the 'make' pick list.	X		
2-08	Provide user the ability to mouse over every field for an explanation of that field and what is expected or allowed. Memex Patriarch has context-sensitive help, which allows the user to get help relating specifically to the screen or form he/she is looking at. For example, when entering data, if the user clicks the Help button on the form (or presses F1 on the keyboard) a pop-up help topic is displayed explaining how to complete the form. This level of help is additional to the online help system that provides user assistance for all other areas of the contractor's solution. The form-based help can be tailored to match any customer-specific configuration of forms, and the contractor will work with the State of Michigan to configure the context-sensitive help to match any such changes to the forms supplied as part of the contractor's solution.		X	
2-09	Ability to import, store, and index data from scanned files, MS Office files and PDF files. Memex Patriarch can import, store and index many different common file types, including scanned files, Microsoft Office files and PDF files. These are imported as attachments to data records. The text within files such as Microsoft Word documents, scanned/OCR-processed documents, PDFs etc, is stored within the database record so that a search for a particular word or phrase will find records where that word or phrase is contained within one of the attached files.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
2-10	As more data is entered and stored there must be no degradation of system performance. As data is added to the system, there will be no appreciable degradation of overall system performance for typical usage of the system. Depending on the volume of data and the nature of that data, users performing searches for very common terms across all available data may notice a slight reduction in the speed at which Memex Patriarch returns results from a heavily populated database, compared to a sparsely populated database. This is true of all database search systems. However, users searching for uncommon terms or specific combinations of terms are unlikely to notice any difference in the speed of searching as more and more data is added to the system. The contractor is confident that overall system performance will remain within acceptable boundaries as system data grows. The following figures illustrate the response times for a search run across a Memex Patriarch database containing over 10 million records (running 600 concurrent users on two Sun Microsystems™ servers): • 90% of searches completed in under 1 second • 96% of searches completed in under 2 seconds • 98% of searches completed in under 5 seconds It is important to note that Memex Patriarch – unlike many other systems – does not wait until the entire search is complete before results are returned to the user. This means that the user can start viewing records returned by a search at the earliest possible opportunity, while more records are still being added to the results list.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
3-00	**Data Search**			
3-01	The solution must provide a method of searching on last name, first name, DOB, Social security number, business name, organization name, address, telephone number, crime type, County, City, State, date/time frame, data source, record number, file originator and text. The ease and flexibility of searching are key strengths of the contractor's solution. Searching a Memex database requires no knowledge of available fields or the database structure. The system offers a variety of methods of searching. The simplest type of search is a free-text search where you can run a query without having to specify which fields you want to search. This allows you to search for records in a manner similar to searching on Google – just type some words into a search box and click the search button. The following screenshot shows the simple free-text search box on the "ribbon," plus the pop-up search dialog box, which provides more space to type a complex query, and includes buttons easy access to common query operators. When searching in this way, Memex Patriarch searches across all fields in the selected record types. Using this approach, users can search for "Thomas" without having to decide whether to search the First Name field, the Last Name field, the Text field etc. When users want to restrict their search to a particular field (including all of those mentioned in this requirement), the simplest way to do so is by using a form. The same form used for entering and displaying data can be used for searching. The user simply enters a word (or other query) into one or more fields, clicks the search button and the search that is performed only returns records where the query text matches within the appropriate field. For advanced users who need to build complex queries, the contractor's Query Language includes an operator that allows queries to be restricted to any specified field within a database.	X		
3-02	Within the search fields the ability to use wildcards, begins with, contains, exact, Soundex, and Boolean logic. These fields should also contain the ability to mouse over for explanation of what is expected and allowed. The contractor's solution allows users to use wildcards, begins with, exact matching, Soundex and Boolean logic within fields on a search form, or in the free-text search box. Memex Patriarch also includes other search features – for example: • proximity searching allows you to find only records where the words you have specified occur near each other • m from n searching allows you to find records containing at a number of words from a larger list of words • synonym expansion allows you to find records containing the word you entered, or words with a similar meaning • garbled expansion allows you to find words that are possible misspellings of the word you entered. This helps you to find records in which the word you are looking for has been entered incorrectly. The contractor's solution incorporates context-sensitive help. By either clicking the Help button on a form or dialog box, or by pressing F1, the user is shown a help topic relevant to the form or function they are using. The context-sensitive help is customizable by the system administrator and can be set up to offer agency-specific guidance on form completion.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
3-03	Query results must appear in a menu that displays the data that matched the query in a row format displaying the reason for the hit. The user picks from that menu the data they would like to view. The contractor's solution provides results to queries in a "Results Viewer." Results are organized in column and row format with a breakdown of the number of records found for each type of record. The Result Viewer also allows users to organize the search results and to choose subsets of results they would like to list. Clicking a row within the results viewer displays the relevant record in a form. The data that matched the user's query is highlighted in colored text within the form. Clicking the Next Query button selects the next matched data within the form. If this is on another tab of the form, the relevant tab page is displayed. By clicking the navigation buttons the user can page forwards or backwards through the results set, reviewing each record in turn.	X		
3-04	Query results must be able to be linked to other existing information in the database by the system administrator. The contractor's solution allows for the linking of individual records to each other as well as linking records sets (or query results) to other records or each other. This functionality can be made available to selected users on the system as well as the system administrator.	X		
3-05	The record owner (Agency with Jurisdiction) must always maintain the final permission for any editing of information in their record. New data can be added by others but that information must be sent to the record owner for permission to automatically add data to original record. Entities can be configured so that users who are not the owner of a particular record cannot modify the record except to request/suggest a change. To do this users enter their suggested change in a change request field, select a check box to confirm that they want to request the change and save the record. The record owner is then alerted of the change request via their Home Page. The owner can then review the request and either change the record accordingly or simply delete the change request.		X	
3-06	The solution must provide a method of reassigning records by a system administrator(s). The contractor's solution will be configured so that the owner of a record is specified in a field within the record. The system administrator(s) can change the user specified in this field as required, thereby reassigning the record.		X	
3-07	The solution must be able to search narrative text for key words. The contractor's solution includes "Total Content Access"; one of our primary strengths is the ability to search key words in all fields, in all records. This allows searches for key words to be performed by users on an ad-hoc basis or at scheduled intervals with email alerts notifying nominated users of newly matching information in all fields, including narrative text.	X		
3-08	In the results screen the user should be able to pick what data fields should be displayed in columns of results. The user can choose which fields to display in the results viewer by right-clicking the column header and selecting from the list of fields that is displayed. The administrator(s) can choose which fields to allow users to choose from for each type of record. For example, there may be system fields, or fields that are hidden to some users when the relevant form is displayed, which are not appropriate for users to display in the results viewer.	X		

	Optional Tip Tool FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
3-09	The solution provides the capability to access scanned images that are attached to various elements of the database. Memex Patriarch makes it easy for users to save and display scanned images. Images are typically saved to the system as attachments on records, but where appropriate (for example, for photos of people) can be embedded within an image control directly on a form. To add images, the user simply browses to the location of the image on their PC, or to a network location, selects the file and it is uploaded into the system. To access an image that has been saved as an attachment, the user simply clicks the Attachments hyperlink on the relevant record form and then, in the Attachments dialog box that is displayed, double-clicks the icon of the image they want to view. The appropriate application opens, depending on the file type, displaying the scanned image.	X		
4-00	**Administration, Security and Purging Data**			
4-01	Provide automated notification to the identified administrator when data requires a review for purging or renewal. All records within Memex Patriarch can be allocated a review date either automatically (optionally based on the values of relevant fields in the record), or manually by users with the appropriate permissions. The system monitors for records approaching their review dates and a defined interval before the review is due (e.g. 30, 60, 90 days) it sends out a review notification via email to the specified user. This is typically the record owner but may be an administrator. Each user profile specifies a review email recipient. When that user creates a record, the reviewer is set according to the setting in his/her profile. The nominated reviewer for any record can be changed by users with appropriate permissions. If the reviewer does not either renew or purge the record from the system, he/she is sent an email reminder every day until the review is done. A reminder message is also displayed to the user every time he/she logs in to the system while reviews are overdue. A review alert can optionally be added to users' personal Home Page.	X		
4-02	Provide the original record owner the ability to give ownership to another user who requests to become record owner. The contractor's solution will be configured so that the owner of a record is specified in a field within the record. The current owner of a record can modify the contents of that field – choosing another user from the User Chooser control – thereby assigning ownership of the record to the specified user.		X	
4-03	Provide a report of pending records to be purged within a user designated timeframe. The contractor's solution allows users to list records that may be approaching their mandatory review date, thus being subject to possible purging. This information can be formatted into a report. All users including system administrators can specify designated timeframe parameters for those records they want to include in this list. Links to the queries that produce these lists can be saved in the "System Searches" or "My Searches" section of the Home Page, making it extremely easy for users to display this information. For more complex statistical reporting, the contractor's solution uses Crystal Reports as its reporting engine. Users with appropriate access can use Crystal Reports to generate a report of pending records to be purged. Reporting is not restricted to Crystal Reports. The contractor's solution allows other standard reporting tools to access data for statistical reporting purposes.		X	

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
4-04	User must be able to schedule systematic reports on a time basis of week, month, or year. The contractor's solution uses Crystal Reports as its reporting engine. Users with appropriate access can schedule reports to be generated on a weekly, monthly or yearly basis. Other users can view these reports via a browser.	X		
4-05	Must be able to store personal identifiers such as those shown at the end of the Functional Requirements Section. The contractor's solution can store identifiers for any required information type. The solution allows system administrators to easily modify and add fields for each type of record. As part of the initial configuration of the system during Phase 2 of the project, The contractor will work with the State of Michigan to identify what fields should be collected for each record type and develop an initial set of form designs for use within the system. This will include all required personal identifiers. Following the initial implementation, system administrators will have received all training required to make any subsequent changes without support from the contractor and subcontractor.	X		
4-06	The solution must be able to store identifiers for all conveyances, such as vehicles, aircraft, and watercraft etc. The contractor's solution can store identifiers for all conveyances, such as vehicles, aircraft, and watercraft etc. As part of the initial configuration of the system during Phase 2 of the project, the contractor will work with the State of Michigan to identify what fields should be collected for each record type and develop an initial set of form designs for use within the system. This will include all required conveyance identifiers. After implementation, system administrators can easily modify and add fields for each type of record.	X		
4-07	The solution must be able to store all identifiers for associates or electronic links between individuals, vehicles, crimes etc. The contractor's solution can store identifiers for all associates. Users with "link" permission can create links between records such as individuals, vehicles and crimes to record relationships that exist between entities mentioned in reports. User defined links can contain information that describes the nature of the links. Additionally, electronic links between can be system generated between records. For example when a record is updated it is automatically linked to the currently selected source information. As part of the initial configuration of the system during Phase 2 of the project, the contractor will work with the State of Michigan to identify what fields should be collected for each record type and develop an initial set of form designs for use within the system. This will include all required associate identifiers.	X		
4-08	The solution must be able to notify analyst and investigators by e-mail, cell phone, PDA, and pager as new records are added based on entered criteria. Users have the ability to specify criteria and have the system periodically check for new records being added to the system that meet those criteria. As records are identified, alerts are sent to the relevant users via email. Using commercially available messaging services, it is possible to have those emails delivered to PDA's, pagers and cell phones.	X		

	Optional Tip Tool FUNCTIONAL REQUIREMENTS	Method of Compliance		
		1	2	3
4-09	The solution must allow defined users to design custom reports. NOTE - Indicate clearly if a 3rd party reporting tool is being proposed and how data access will be accomplished. The contractor's solution has two methods of producing reports. Within Memex Patriarch, users can use the structured printout facility to generate reports consisting of data collated from multiple records. For statistical reporting, users with appropriate access can use a standard third-party reporting tool, such as Crystal Reports. Defined users can design templates either for Memex structured printouts or for Crystal Reports. For designing custom reports, access to data from within Crystal Reports (and similar standard reporting tools) is achieved via an ODBC connection to the relational database system in which data is stored. To establish a connection to the data held in the Memex Patriarch solution. Crystal Reports users use the Oracle connection wizard, specifying the server name, user name and password. Once they are connected they can generate reports based on the available data and publish these for other users to view.	X		
5-00	**Tip Processing Requirements**			
5-01	The solution must support the entry, evaluation, automatic routing of tips to the agency having jurisdiction as well as closure of tip information. The contractor's solution supports a supervision or assessment methodology where restricted security is automatically placed on newly entered tips until they have been evaluated. Tip records can be automatically routed on entry based on the information in the tip. For example, certain users or groups can be alerted of certain types of tips, or tips containing certain key words or phrases. If required these tips can also be automatically secured based on their content.	X		
5-02	The solutions must have an "internal criminal justice community" facing web based component for the processing and reporting of tip data. The contractor's Tip Tracking System is web based and integrates seamlessly with other Memex solutions for the effective processing and reporting of tip data.	X		
5-03	The entry portion of the solution must have the ability to capture relevant information regarding a potential Subject/Person of interest. Relevant information is considered to be, but not limited to; first name, middle name, last name, alias, personal descriptors such as scars/marks/and tattoos, sex, race, age range, height, weight, hair color, and eye color, audio or visual clips. The contractor's solution allows for the capture of all relevant data regarding Subject/Person of interest. Furthermore, this functionality is completely configurable by the system administrator upon deployment or as needs change. The contractor currently utilizes the ISE SAR standard as a baseline for relevant fields of information regarding suspicious activity reporting, which include those mentioned in this requirement.	X		
5-04	The entry portion of the solution must also have the ability to capture the location of activity in terms street location, city, state, and zip, category of tip, and some method of adding a free form textual description of the tip. The contractor's solution allows for the capture of all relevant data regarding location of activity. Furthermore, this functionality is completely configurable by the system administrator upon deployment or as needs change. The contractor currently utilizes the ISE SAR standard as a baseline for relevant fields of information regarding location of activity information, which include those mentioned in this requirement.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
5-05	In cases where the tip information is being entered by MSP, for example, the solution must have a method of tracking the source of the tip, i.e. tip was called in, faxed, electronic submission, e-mail or mailed. The contractor's solution allows for the tracking of all relevant data regarding the source of the tip. This is generally accomplished through the use of form fields populated with drop-down information that allows for the categorization or tracking of tips by source type. In addition to the contractor's configuration containing relevant values, including those mentioned in this requirement, the system administrator and/or a designated user can modify these values as needs change.	X		
5-06	The solution must support customizable formats of tip entry screens based on the type of tip. The contractor's solution offers customizable formats utilizing the following functionality: • Form attribute rules These govern whether fields, buttons and other controls on a tip entry form are visible and/or active (i.e. read-only text or editable) depending on data entered in the record – e.g. type of tip. • Memex form extensions (MFX) These can be used to process and manipulate data, retrieve other data and insert it into the form, display particular messages etc. when the user clicks a button or saves the form.	X		
5-07	The solution must support a central and a decentralized method of processing tips. Memex Patriarch is an extremely configurable and adaptable system. The workflow for processing tips is one example of this. Tips may be subject to a centralized initial triage or assessment process where supervisory users are alerted of new tips that need to be assessed and assigned to a particular user or group. This process can be automated, in which case, on entry of a new tip, the system automatically secures the tip to a particular group of users (perhaps based on the nature of the tip), and those users are alerted via a "query profile" email or via a Home Page link. Alternatively, new tips may be freely accessible by all system users. If the initial COTS setup does not suit the State, or if requirements change after deployment, a large range of configuration options can be changed by administrators from within the user interface itself, without assistance from the contractor and subcontractor. The administrator training course will show administrators how to reconfigure the system to fit the State's required processing methodology, in case this should ever become necessary.	X		
5-08	The solution must interface with the State standard email software to support the sending, receiving, and routing of tip information. The contractor's solution generates email notifications for a number of different system events such as new information matching predefined criteria being entered on to the system and records approaching their review dates. The system sends these emails via an SMTP-compliant mail server, so the emails will therefore be viable in GroupWise and Outlook.	X		
5-09	The solution must allow tips to be routed to a central location for evaluation as well as being automatically routed based on type/category of tip to the responsible agencies. The contractor's solution incorporates business process rules into the configuration of the tip (Suspicious Activity Report) entity. Whenever a record is added or updated, and based on the contents of specific fields (i.e. type/category, agency, and location), users at responsible agencies can be notified of the record's existence.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
5-10	The solution must provide the ability to route tips to multiple agencies or multiple units within the same agency. Tips may be subject to a centralized initial triage or assessment process where supervisory users are alerted of new tips that need to be assessed and assigned to a particular user or group – or to multiple groups (each of which may represent a different agency or a unit within an agency). Users are alerted that there are new tips requiring attention via a "query profile" email or via a link on their Home Page.	X		
5-11	The solution must have the capability to be configured to support multiple law enforcement agencies. Memex Patriarch is an extremely configurable and adaptable system. It can be configured to support multiple law enforcement agencies – for example, with specific record types being added for particular agencies and access to these record types being restricted on an agency basis. If the initial COTS setup does not suit the State, or if new requirements arise after deployment to support new agencies, a large range of configuration options can be changed by administrators from within the user interface itself, without assistance from the contractor and subcontractor. The administrator training course will show administrators how to reconfigure the system to fit the State's required processing methodology, in case this should ever become necessary.	X		
5-12	The solution must have a means of identifying tips as being active or inactive. The tip entity (Suspicious Activity Report) includes a status field which allows for records to be identified as either "Active" or "Inactive." New tips are automatically "Active" and remain so until this value is changed and the record updated.	X		
5-13	The solution must have a means of tracking the disposition of the tips, for example, "Referred to Lansing PD for follow-up". The tip entity (Suspicious Activity Report) includes a disposition field which allows for the current disposition of the tip to be indicated. Users can select from a predefined list, or enter their own disposition text. As a configuration option, changes to the disposition can be logged within the record, if required. When the user changes the disposition they must give a reason for the change. This information is date/time-stamped and the details are added to the top of a list within a logging field. This provides a means of tracking the changes to the disposition of the tip over time, rather than simply displaying the current disposition.	X		
5-14	The solution must have the ability to capture the name, address, and method of delivery to appropriate agencies/units. The tip entity (Suspicious Activity Report) includes assignment and notification fields which allow records to be identified as being assigned or forwarded to the appropriate agencies or units.	X		
5-15	The solution must provide the ability to provide immediate acknowledgement/notification to the reporting individual. After submission of a tip by a member of the public, via the Web page, a message is displayed acknowledging that the tip has been submitted successfully.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
5-16	The acknowledgement should contain a predefined configurable message and a unique reference number that is assigned to the tip. In the Web page deployed by the contractor the tip submission acknowledgement message will be preconfigured. It will contain a Unique Reference Number for the tip, which the reporter can use if he/she later contacts the State concerning the tip they supplied. The State's Web application administrators will be able to change the text of this message, if required.	X		
5-17	The solution must have the capability to interface with the other MIOC solutions such Criminal Analytical Solution. The Tip Tracking Tool will be fully integrated with the Criminal Intelligence solution and the Confidential Informants solution. The Federated Search facility – which can be added to Memex Patriarch-based solutions, such as the Tip Tracking Tool – will allow users, from within Memex Patriarch, to retrieve data from non-Memex solutions used at the MIOC. The contractor's Intelligence Manager Web Services Interface (IMWSI) is an API that allows external solutions to access and update records held within Memex Patriarch-based solutions.	X		
5-18	The solution must be able to collect information regarding a potential means of conveyance such as an auto, motorcycle, aircraft etc. The contractor's is capable of storing identifiers on all means of conveyance. This can be accomplished in at least two ways. A single entity can be used to capture the requisite fields of data based on the users choice of what type of conveyance is subject of data entry. Alternatively, separate entities can be configured to capture the data on specific conveyances. A combination of both approaches can be used at the same time.	X		
5-19	The solution must be able to collect contact information on the subject such as home address, telephone number, place of business, etc. The contractor's solution is capable of storing contact information on the subject such as home address, telephone number, place of business, etc. In fact the contractor's solution is capable of storing such information on all persons related to a specific tip or incident.	X		
5-20	The solution must allow for tips to be categorized by tip type from a configurable drop down box. Some sample tip types would be Terrorism, Violent Crime, Narcotics, Child Abuse, Arson, etc. Tips can be categorized by type by selecting from entries in a drop-down list. This is a "bound" pick list, meaning that users can only select from the pick list (although this can be very easily changed to an unbound list by an administrator). Drop-down lists help to reduce keying for users. Bound pick lists help to improve data quality by reducing errors introduced by users keying in data.	X		
5-21	The solution must be able to search narrative text for key words. Searching narrative text for key words is an extremely common action performed by users of any intelligence-based application. Memex Patriarch has been designed to make performing such searches as easy as possible. Users simply choose which tables or type(s) of record they want to search, enter the key words they want to search for and click the search button. Key word searches can include the full range of Boolean operators, wildcards, m from n searching, proximity searching, phrasing, and textual or numeric ranges.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
5-22	The solution must have the option of capturing information regarding the submitter such as name, address, phone number, email address, etc. The contractor's solution is capable of storing submitter information such as home address, telephone number, place of business, etc. The contractor's solution is capable of storing such information on all persons related to a specific tip or incident.	X		
5-23	The solution must allow the submitter to indicate whether or not they desire to be contacted by an agency official. The submitter or originator of information can indicate whether or not he/she wishes to be contacted by an agency official by selecting a check box on the tip entry form.	X		
5-24	The solution must provide the ability to establish purge criteria for different types of tips. The contractor's solution allows Home Page links to be set up (either organization-wide, for all members of a particular group, or individual by users) which serve as workflow indicators. For example, a link may be configured to show all tips of a particular type that meet a specified set of criteria and therefore need to be reviewed with a view to purging those tips.	X		
5-25	The solution must provide the ability to produce reports based on type of tip, frequency, etc. Searches stored on the Home Page allow users to configure a search that will list all tips that meet certain criteria. This, in effect, produces a simple report that is displayed with just a single click of the link on the user's Home Page. For more complex statistical reporting, the contractor's solution uses Crystal Reports as its reporting engine. Users with appropriate access can use Crystal Reports to generate a report of pending records to be purged. Reporting is not restricted to Crystal Reports. The contractor's solution allows other standard reporting tools to access data for statistical reporting purposes.	X		
5-26	The solution must have the ability to, either natively or through integration with another commercial solution, to map tips in a spatial manner. The contractor's solution can integrate with mapping tools either natively within the application or by interfacing with an external, third-party solution. The Web Services interface allows GIS data stored within the contractor's solution to be displayed on an external mapping system and, if appropriate, updated. Alternatively, Memex Patriarch supports the use of maps within the application itself, using in-built ESRI Arc GIS or Oracle Spatial GIS components. Memex Patriarch's mapping capabilities allow users to associate records with locations by pointing and clicking on a map. The mapping functionality can also be used to select a geographical area within which a search is limited. Should the State wish to include the use of maps directly within Memex Patriarch, the implementation of this feature will depend on the State having the appropriate Arc GIS or Oracle Spatial GIS licenses and map files.	X		

	Optional Tip Tool **FUNCTIONAL REQUIREMENTS**	Method of Compliance		
		1	2	3
5-27	Any agency that has been assigned a tip must have access to the tips database only for their assigned tips so the status can be changed and disposition can be entered by them. Memex Patriarch allows administrators to define “security rules” which will automatically apply specified covert or protected security to a new record when it is submitted. In this way, all tips will have some level of security applied and users who are members of a particular agency will only be able to access tips that have been secured for their agency. Additional security groups may be given access to specific tips, opening it up to a wider audience. However, users who only belong to one security group will only be able to access and update tips that are either secured for their security group, or where all security has been removed.	X		
5-28	There must be an alert to the administrator if a tip status has not been updated within a given time frame from the tip being assigned and an automatic notice must go to the tip's agency and request the status be updated. The contractor is currently partially compliant with this requirement. “Query profiles” can be set up within Memex Patriarch to supply most of this functionality. A query profile is a user-defined search that is batched and typically run overnight. Query profiles generate an email that is sent to a specified email address or mailing list if matching records are found. A set of query profiles could be configured by the administrator, with criteria for a specific tip status and a specific number of days since the date the tip was assigned (as captured on the tip form). If the status is still set to the same specified value at the end of the period an email message is automatically sent. Customization is required to allow the administrator to define the text of the resulting email – i.e. to allow the message to be a specific request to the agency that they update the tip status.			X
5-29	The solution must have the ability to link tips together based on common identifiers such as name, vehicle, address, etc. Linking records is extremely easy to do within Memex Patriarch. There are two ways that users can manually link records based on information within both records: In the Results Viewer From a Results Viewer the user can browse a set of search results, then select two or more records and click Link Records. A Link Creation Wizard is displayed to guide the user through the simple steps involved in linking records. In a link chart This offers a very intuitive way to draw links from one record to another on a link chart, or to select several records and link them all. Again the Link Creation Wizard is used to help the user enter the characteristics of the link(s).	X		

TIP FIELDS	DATA TYPE	CLARIFICATION
TIP Reference Number	Text	Auto-generated
TIP Number	Numeric	Next available C/I number
Tip Date / Time	Date	Date & Time Tip Received Auto Generated
TIP Information	Text	
Incident Type	Code Table	To be defined
Date & Time of Incident	Date	Date & Time Incident occurred
Incident Location	Text	
Tip Status	Code Table	
TIP Record Access	Code Table	Security levels or role based access
SUSPECT INFORMATION		
Suspect Last, First, Middle Name	Text	
Alias	Text	
Street Name	Text	
DOB	Date	
Age	Calculated	If DOB is unknown age will be estimated
Occupation	Text	
Gang / Group Affiliation	Text	
Race	Code Table	Race Codes
Ethnicity	Code Table	Ethnicity Codes
Nationality	Code Table	
Sex	Code Table	Sex Codes
Height	Numeric	
Weight	Numeric	
Build	Code Table	
Hair Color	Code Table	Hair Color Codes
Eye Color	Code Table	Eye Color Codes
Glasses	Y/N	
Teeth	Code Table	
Complexion	Code Table	
Scars, Marks, Tattoos	Code Table	
SSN	Alpha Numeric	
Address	Table for multiple addresses over time	Each entry in the table must be date and time stamped.
City, State, Zip	Table for multiple addresses over time	Each entry in the table must be date and time stamped.
Phone Number	Table for multiple phone numbers. Alpha Numeric	Each entry in the table must be date and time stamped.
Criminal Specialty	Code Table	
Places Frequented	Text	
Agency with Jurisdiction	Code Table	ORI Codes
Vehicle Make/Model Color	Text	
Vehicle Registration Number / State	Alpha Numeric	
Employer	Text	
Suspect Notes	Text	
VICTIM INFORMATION		
Last, First, Middle	Text	
Age	Numeric	
Date of Birth	Date	

Race	Code Table	Race Codes
Sex	Code Table	Sex Code
Address	Alpha Numeric	
City, State, Zip	Alpha Numeric	
Telephone	Numeric	
Injury	Text	
Victim Notes	Text	
TIPSTER INFORMATION		
Name	Text	
Address	Alpha Numeric	
City, State, Zip	Alpha Numeric	
Telephone	Numeric	
e-mail address	Text	
Relationship to Suspect	Code Table	
Witnessed Crime	Yes/No	
Tipster want to be contacted	Yes/No	
Notes	Text	

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
6-00	**Capacity**			
6-01	The solution must be able to support 100 concurrent web based users from multiple agencies and locations on a statewide basis. The solution will support 100 concurrent web based users. Users will be able to use the system from any agency/location provided a secure connection is available and they can authenticate successfully through the MiCJIN portal.	X		
6-02	The solution should be able to be licensed and installed in a development, quality assurance, and disaster recovery environment. The solution can be installed in Development, Quality Assurance and Disaster Recovery environments. The license for the solution will cover all agreed environments. The contractor will work with the State of Michigan during the initiation phase of the project (Phase 1) to determine and agree the environment requirements.	X		
6-03	All law enforcement personnel, regardless of physical location, must have full access to the MCIS. All law enforcement personnel, regardless of physical location, will have full access to the MCIS provided access to the MiCJIN portal is available from the location and personnel are able to authenticate successfully. The application is delivered to the user via a Web browser after the user has authenticated through the MiCJIN portal. Any access to using the internet from an unsecured location will be through the use of VPN and secure token accessing the MiCJIN portal.	X		

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
7-00	**Solution Auditing**			
7-01	The solution has the ability to maintain a historical record of all changes made to any item within the solution (e.g., data element, business rule, process control, software program), the ID of the person or process that made the change, the before images of the affected data records, and the date and time the change was made. Memex Patriarch includes comprehensive, system-wide auditing that audits all changes made by users within the solution (including changes to data, business rules, security settings, user profiles, etc.) The information gathered within an audit record is specific to the type of activity being performed, however the following information is recorded for all audits: • The ID and name of the user performing the action • The type of activity, e.g. EDIT, VIEW • The date the activity was performed • The time the activity was performed The system also includes “record versioning” functionality which captures the exact details of all changes that are made to each record and allows authorized users to step back through each change. For each EDIT-type audit record, authorized auditor users can view the contents of each changed field before and after the change. This is done in the Record Changes tab of the audit record: Auditors can also use the record versioning functionality to display a historical version of a record as it would have looked to a specified user at a specified point in time. For example, the following screenshot from the Record Versions tab of the Audit Management module, shows a record that has been submitted and then updated four times: When the auditor double-clicks an entry in this list, the record – as it was at that point in time – is shown in a form. A note at the top left of the form shows the date and time of this historical view of the record: The audit trail for the entire system is typically updated every minute, so there is no need to wait for an overnight process to update the audit database before you can search for details of user activity.	X		
7-02	The solution must ensure that all solution events for software, hardware, interfaces, operating solution, network, etc. are written to a solution event log in a manner that facilitates debugging of all solution problems. The Memex Series VI server software includes configurable event logging to facilitate the debugging of any solution problems. This logging can be set at a number of different levels of verbosity, or turned off. Typically the more verbose levels of logging – where more information is logged about more events – is never required as low-level event logging usually allows the cause of any problems to be identified.	X		

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
7-03	The solution offers the ability to query, view, filter, and sort the solution audit trail. The solution is able to store the queries. Users with permission to search the audit trail have at their disposal the full range of search capabilities offered throughout the contractor's solution – including fielded and free-text searches, Boolean operators, wildcards, proximity, etc. Results can be sorted and queries stored on the user's Home Page for later reuse within the Audit Management module. The Audit Management module provides a search form to make it easy to search for audit records relating to particular users or groups (by selecting from a User/Group chooser popup) or within a specified date range (by using a popup calendar to enter start and end dates).	X		
7-04	The solution has the ability to identify and track data back to its input source (e.g., imaged document, keyed from form, interface file, etc.) Memex Patriarch's comprehensive auditing, with before and after details of changes shown field-by-field in an audit record, allows auditors to track the source of data. For example, if a document is attached to an intelligence report and, based on information contained in the attachment, a Person record is updated, the auditor can easily trace what was updated on the Person record, the date/time of the change, the details of the user who made the change, and the source document in which the information was originally contained.	X		
7-05	The solution has the ability to audit all override of edits and audits and identify the login ID, date, and time. Memex Patriarch audits all edits to records, including the situation where an auditor-level user removes changes made to a record by another user. All logins are audited, with details including login ID, date and time of login and logout (either manual logout or automatically timed out logouts). Auditing operations themselves are fully audited and audit records cannot be edited. This provides confidence in the accuracy of the audit trail – for example, for professional standards investigations.	X		
8-00	**Error Handling**			
8-01	The solution must ensure that all errors are written to an error log. The Memex Series VI server software logs all errors in a text file. The error log also records configuration information about the system each time the Memex Series VI server software is started.	X		
8-02	The solution must allow for an administrator to view, filter, sort, and search the error log. The error log is plain text and can therefore be viewed, filtered, sorted and searched using any standard text processing application.	X		
8-03	The solution must allow for an administrator to archive error log entries based upon user-defined criteria. The error log is stored as plain text. A system administrator can therefore search this log for defined criteria, using a standard text editor, extract entries to a separate file and archive this. If this process needed to be automated, a simple script could be set up to perform this operation on a regular basis.	X		
8-04	The solution must allow for a user to define an alert message to be executed upon the occurrence of an error. A simple script could be configured to check the error log on a regular basis and send an administrator-defined email message to a specified individual, or group, if an error occurred.		X	

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
9-00	**Training**			
9-01	Train the Trainer will be provided on a regional basis with one train the trainer session held in each of the seven (7) regions across the state. Each train the trainer class will consist of up to 20 people per class. The contractor will provide train-the-trainer sessions: one session in each of seven (7) regions across the state. Each training session will take four (4) days. The State will be required to provide all facilities for each training session, including adequately sized rooms, a networked desktop/laptop PC per trainee and a server for the training environment. The contractor can accommodate classes of up to 20 people (given adequate facilities).	X		
9-02	Technical training is provided as part of the cost of the solution for individuals who will be working with the solution. Contractor to configure the applications including establishing databases and interfaces, data conversion, customization, and upgrading the customized software. Technical training will be provided for the contractor's solution covering the following (this is not an all-inclusive list): • Memex Database Administration and Integration • Installation and administration of Memex applications and utilities • Upgrade of the system • Expansion of system functionality • Associated search, analysis and data capture programs • Data backup and redundancy • User Interface Development • User Management • The training is divided into two 3-day courses: • Systems Administrator Course This covers administration at the level of the core Database Management System. • Application Administrator Course This covers configuration (including database creation, form design, business rules, etc.), user management and other features that are controlled through modules within the user interface. The course format for both courses is lecture, discussion, hands-on laboratory style, to fit the training to the expertise of the trainees.	X		
9-03	Solution administration training for personnel who will be responsible for ongoing maintenance and administration of the solution, including security. This is provided as part of the cost of the solution. The contractor will provide solution administration training for personnel who will be responsible for ongoing maintenance and administration of the solution. This is encompassed in the Application Administrator Course. This 3-day course covers configuration (including database creation, form design, business rules, etc.), user management (including record-level security, user/group security and permissions-based access to functionality) and other features that are controlled through modules within the user interface. The course format for both courses is lecture, discussion, hands-on laboratory style, to fit the training to the expertise of the trainees.	X		

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
9-04	Upgrades and new versions to the solution that affect end-user functionality include training at no additional cost (e.g. classroom or online training, training flier, release features, etc.). Continual learning, and support for new functionality or changes to end-user features, are provided through the following means: • Additional classroom training, as deemed necessary. • Updated documentation. • Release notices. • Additional online help topics.	X		
9-05	Training is provided in a variety of formats for product installation, use, and administration for a variety of levels (e.g. basic, advanced, refresher, etc.) Training is provided in a variety of different formats as described above. Additionally, the comprehensive online help system helps users to remember what they have learned during training and to further develop their proficiency.	X		
10-00	**Knowledge Transfer**			
10-01	Mentoring and training of State staff is provided in preparation for transitioning the operation and support to State of Michigan staff. The contractor will provide training as described in the responses to requirements 9-01 through 9-05. The mentoring and training provided by the contractor will prepare State of Michigan staff for a smooth, low-impact transitioning of the system and will allow them to successfully operate the system and support of all users of the Tip Tracking system.	X		
11-00	**Documentation**			
11-01	Contractor will provide a minimum of two (2) hard copies of the User and Technical Manuals. Contractor will also provide electronically and make them available online. The contractor will provide two hard copies of the user and administration manuals, plus the technical manual for the database management system. The contractor will provide these manuals electronically and in PDF format, and will give the State permission to publish these on its intranet. All information in the Memex Patriarch user and administration manuals is also available within the online help that is accessible to users from within the application.	X		
11-02	Contractor will provide a minimum of two (2) hard copies of the Operations Manual. Contractor will also provide electronically and make available online. The contractor will provide two hard copies of the administration manual for Memex Patriarch, which provides operations instructions for the system. The contractor will provide this manual electronically and in PDF format. All information in the Memex Patriarch administration manual is also available within the online help that is accessible to users from within the application.	X		
11-03	Contractor will provide a minimum of two (2) hard copies for all updates of documentation during the term of the Contract, software license, and maintenance agreement and will make them available online. The contractor will provide two hard copies of all updates of documentation during the term of the Contract, software license, and maintenance agreement. Electronic copies, in PDF, will be made available online for download via FTP by system administrators, and these can be published on the State's intranet, if required, for wider accessibility. All updates to the online help system will be available, from within the application, in the updated version of the solution.	X		

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
11-04	Contractor shall supply manufacturer's software in original manufacturer packaging with complete manufacturer documentation, manuals, disk(s) or CD ROM and warranty enclosed. The contractor will supply its software in the original manufacturer packaging with complete manufacturer documentation, manuals, disk(s) or CD-ROMs and warranty enclosed.	X		
11-05	Solution-wide documentation and specifications will be provided for all modules and program development. The contractor will make available solution-wide documentation and specifications for all modules and for program development.	X		
11-06	"User Manuals" and online help will be provided for all modules and program development. Printed user documentation and comprehensive online help will be provided for all modules and program development.	X		
11-07	Installation procedure will be provided for all modules and program development. The contractor will provide documented installation procedures for all modules and program development.	X		
11-08	Module configuration documents sufficient for configuration maintenance purposes will be provided for all modules and program development. The online help and administration manual contains comprehensive details of how the system is configured. This information covers all modules and is sufficient for configuration maintenance.	X		
11-09	Testing scripts will be provided for all modules and program development.	X		
11-10	Specification documentation will be provided for all modules and program development.	X		
11-11	Production migration will be provided for all modules and program development.	X		
11-12	The documentation of components, features, and use of the hardware/software shall be detailed such that resolution of most problems can be determined from the documentation, and most questions can be answered.	X		
11-13	All solution, operational, user, change, and issue documentation must be available in electronic format, published to an intranet website, accessible to State users, updated regularly, with unique numerical identifiers for each section and be consistent with the most current version of the application(s) and three (3) previous versions. The contractor is partially compliant with this requirement. All solution, operational, user, change, and issue documentation will be made available in an electronic format, as PDF files. The contractor proposes that these files are published by the State on its website. Memex Patriarch user and operational documentation is available online in the form of the online help system. This is built into the application and is available to users directly within Memex Patriarch.	X		
11-14	All solution, operations, user, change and issue documentation is to be organized in a format, which is approved by the State and facilitates updating and allows for revisions to the documentation to be clearly identified including the three (3) previous versions. The contractor is partially compliant with this requirement. All solution, operations, user, change and issue documentation that relates specifically and solely to the solution supplied to the State of Michigan will be organized in a format, which is approved by the State and facilitates updating and allows for revisions to the documentation to be clearly identified including the three (3) previous versions. The contractor cannot, however, commit to State approval of generic documentation of its COTS solution.	X		

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
11-15	Contractor must develop and submit for State approval complete, accurate, and timely solution, operations, and user documentation. The contractor is partially compliant with this requirement. The contractor will develop complete, accurate, and timely solution, operations, and user documentation for the solution. Any solution, operations, or user documentation that relates specifically and solely to the solution supplied to the State of Michigan will be submitted to the State for approval. The contractor cannot, however, commit to State approval of generic documentation developed for its COTS solution.	X		
11-16	Contractor must notify the State of any discrepancies or errors outlined in the solution, operations, and user documentation.	X		
12-00	**Warranties**			
12-01	The Contractor shall provide a warranty for all products and services resulting from this contract commencing on the first day following Performance and Reliability Evaluation (PARE), acceptance, and formal written acceptance by the State for a particular phase or software component.	X		
12-02	The minimum warranty period of two (2) years is required.	X		
12-03	The Contractor will be responsible for all parts, labor and travel expenses during the two (2) year warranty period following acceptance.	X		
12-04	The two (2) year warranty shall provide that the software is free from imperfections in design and free from any and all defects and is able to perform continuously and satisfactorily under normal operating conditions.	X		
12-05	All configurations are covered by the manufacturer's standard warranty.	X		
12-06	All applicable third party warranties for deliverables are assigned to the State.	X		
12-07	Any upgrades of the software made during the warranty period are supplied at no additional cost.	X		
13-00	**Maintenance and Support**			
13-01	Maintenance programs commence at the end of the warranty period.	X		
13-02	The software maintenance program includes all future software updates and solution enhancements applicable to solution modules licensed without further charge to all licensed users maintaining an annually renewable software support contract.	X		
13-03	Contractor shall provide TIER III Technical and User Help Desk Support 8am to 6pm EST, Monday through Friday.	X		
13-04	Guaranteed parts availability within the service response window at all times.	X		
13-05	Emergency assistance is available 24 hours a day, seven days a week upon notification by MDIT Technical Staff, based on hourly or incident cost identified in Cost Table 2b.	X		
13-06	The State will be provided with information on software problems encountered at other locations within or outside the State's solution, along with the solution to those problems, when such information is relevant to the Contractors solution. The release notes for the solution provide all customers with details of problems encountered by customers. The names of customers are not published in the release notes, but each issue has a reference number against it so that customers can identify their own issues. Wherever possible workarounds to issues are provided. If important issues arise between releases, customers are notified by Memex Support, or by the customer's account manager, and provided with details of any remedial action that should be taken.	X		
13-07	Support is provided for superseded releases and back releases still in use by the State. The contractor will continue to support superseded releases and back releases still in use by the State, under the terms of the Support and Maintenance Agreement. The contractor's policy is to support the previous major release of a product and all subsequent minor releases of the product.	X		

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
13-08	For the first year and all subsequent Contract years, the following services are provided for the current version and one previous version of any Software provided with the deliverables, commencing upon installation of the deliverables or delivery of the Software:			
13-09a	**Error Correction:** Upon notice by State of a problem with the Software (which problem can be verified), reasonable efforts to correct or provide a working solution for the problem.	X		
13-10b	**Material Defects:** The State will be notified of any material errors or defects in the deliverables known, or made known to Contractor from any source during the Contract term that could cause the production of inaccurate, or otherwise materially incorrect, results and shall initiate actions as may be commercially necessary or proper to effect corrections of any such errors or defects.	X		
13-10c	**Updates:** All new releases and bug fixes (collectively referred to as “Changes”) for any software deliverable developed or published by Contractor and made generally available to its other customers at no additional charge will be provided to the State at no additional charge.	X		
14-00	**Migration**			
14-01	Data, and related information, has a migration path to future revisions of the hardware and software and there is a guaranteed and reasonably straightforward "exit path" to solutions of other vendors. The contractor knows that data within intelligence systems must be accessible for many years. Developing, documenting and testing an upgrade path is a key component of any new version of a Memex solution. In the unlikely event of an "exit path" being required, the contractor will work with the State to help migrate the State’s data and related information to the solution of another vendor.	X		
14-02	Data will migrate smoothly to any future revision of the software and hardware (“smoothly” would be defined as having the solution administrator follow Contractor-supplied written instructions to run a Contractor-supplied program or programs in batch mode to convert data, or any process that is simpler or more automatic than this). The contractor works hard to ensure that upgrades to solutions occur smoothly. At a minimum, for simple migration operations, a detailed procedural set of instructions is supplied. For more complex migration, at a minimum, server-side scripts are supplied, with detailed instructions, for the administrator to run. Additionally, automated programs may be supplied, where appropriate, with a graphical interface, to allow the administrator to perform upgrade tasks from a Windows workstation, clicking through a “wizard”-type process and entering a minimum of details where these details are not available for detection by the software. For example, for a recent release of Memex Patriarch, where the underlying structure of forms had changed, a click-through program was supplied for quick and easy migration to the new forms.	X		
15-00	**Delivery Requirements**			
15-01	For all orders placed by the State during the term of this Contract, delivery will be made within ten (10) business days of order. (Elapsed delivery time will be measured from the time an order is accepted, either verbally or in writing by the Contractor, to the time product is delivered to the site identified in the purchase order).	X		
15-02	The deliverables shall be shipped F.O.B. Destination, freight prepaid and allowed, directly to each entity, unless otherwise requested, and to the exact locations shall be specified in the purchase order.	X		
15-03	If, during the term of the Agreement, the Contractor enters into a contract with any other customer for substantially the same quantity, equipment, software and services, terms and conditions for a lower cost, the Contractor will offer the same decrease in rate to the State.	X		

	Optional Tip Tool GENERAL SOLUTION REQUIREMENTS	Method of Compliance		
		1	2	3
16-00	**Backup and Recovery**			
16-01	The solution has the ability to provide point-in-time recovery of data to the last completed transaction. The contractor's solution disaster recovery mechanism operates at an atomic transactional level, writing a duplicate transaction instruction to a disaster recovery server after every transaction is processed on the production servers. In the event of a server failure, or a catastrophic system failure due to an external event, this allows data to be recovered back to the last atomic transaction, provided the replicated data survives. Each of the two production data servers will use the other server as its disaster recovery server, with transaction files being written across to the other server as each transaction is performed, and then the data being replicated into DR copies of databases, from the transaction files, on a regular basis. In the event of a single server failure, or similar problem, the replicated data can be recovered using the disaster recovery tables on the unaffected server. The solution includes a Data Integrity Checker which would be run after a recovery option. It checks the system and reports on any issues relating to data integrity – for example, missing links between records.	X		
16-02	The solution has the ability to allow for continued use of the solution during backup. The solution includes a backup tool that can be run without shutting down the system, allowing users to continue using the system while a backup of data tables is made. Backup of the auditing systems and configuration settings needs to be scheduled.	X		
16-03	The solution has the ability to provide a complete backup and recovery process for all database tables and solution files. The contractor's solution has the ability to provide a complete backup and recovery process for all database tables and solution files.	X		
16-04	The solution has the ability to create on request backups.	X		
16-05	The back up and archival features of the solution proposed can be initiated automatically or by manual request.	X		
16-06	The solution software and data must be able to be restored to its previous operational status within four (4) hours after initiation of recovery process. Under the current proposed architecture and anticipated volume of data, and depending on the circumstances of the failure (for example, availability of replacement hardware), the contractor expects to be able to meet this requirement.	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
17-00	**Solution Architecture**			
17-01	The solution employs web-based architecture that allows the application to be accessible from the most commonly used browsers. Example: Internet Explorer, Netscape, Mozilla. The solution employs web-based architecture that allows the application to be accessible from current versions of the two most commonly used browsers: Microsoft Internet Explorer and Mozilla Firefox.	X		
17-02	The solution places no limit on record size. There is no practical limit to the size of records. The actual limit is in the region of 8GB per record. Memex records are text-based (with images and other files stored separately and linked to records), and are stored as coded binary data which reduces the record size far below its equivalent size when stored as plain text.	X		
17-03	The software is expandable and portable, with specific reference to the solution capacity requirements presented in this contract. The contractor's solution operates in environments with 2000+ concurrent users. The scalability requirements contained within this contract are well within the capabilities of the contractor's solution.	X		
17-04	The solution is fully self-contained and capable of being operated by State staff with no dependency on Contractor services for its routine operation. After completion of the appropriate training, State staff will be able to operate the system without dependency on the contractor for the routine, day-to-day operation of the system.	X		
17-05	The solution server is compatible with the State's technical and enterprise architecture and is sized suitable for the solution specified.	X		
17-06	The solution is an open solution, with no dependency on the use of specific models of equipment operating solutions.	X		
17-07	The solution is portable from one OS/RDBMS to another, i.e., from Unix to Windows 2000, or from one platform/OS to another, e.g., Sun Solaris to IBM AIX, etc. The contractor's solution can be operated, and is currently in production use, on selected current versions of Microsoft Windows, Red Hat and SUSE Linux and Sun Solaris. The solution is portable between these operating systems. With respect to RDBMS, our indexing engine and database interoperate with Oracle, Microsoft SQL Server and MySQL.	X		
17-08	The solution keeps a log of each transaction which alters the database. Logs are date and time stamped to allow the solution to reconstruct activity for any period.	X		
17-09	The solution will interface with the State's monitoring solutions such as Compuware Vantage and CA Unicenter. The solution includes a Web Service interface that can be used by external applications or services. This Web Service allows data to be accessed via a standard XML-based API.	X		
18-00	**Software Licensing**			
18-01	The software license is for perpetual use for a fixed fee without additional royalties or service fees, except for ongoing software maintenance.	X		
18-02	The software license is based on a server or enterprise license and not based on number of users. The licenses supplied by the contractor will relate to specific servers, not to users. The contractor will license all servers required to deliver the solution. Giving the State an enterprise license.	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
19-00	**Programming Language**			
19-01	The solution's client applications are written in a standard web based programming language. The solution's client applications are written in standard .NET environment programming languages commonly used throughout the software industry for the development of web based applications.	X		
19-02	The solution must offer Application Programming Interfaces (APIs) that enable the State to develop custom interfaces to all modules. APIs enable data to be imported or exported from the solution. The contractor's solution includes a number of APIs and software integration frameworks that will allow the State to develop custom interfaces to all modules.	X		
20-00	**Hardware**			
20-01	All equipment supplied and/or supported under this contract must be configured in the most optimal manner and in conformance with MDIT standards. The contactor does not propose supplying hardware under this contract. The contractor, however, will help the State to configure the supported hardware in the most optimal manner and in conformance with MDIT standards.	X		
20-02	Contractor's recommended hardware platform/topology provides for optimal functioning in the following areas:			

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
20-02a	Communication line speed for distributed entry functions and major online processes of departments and offices located in various areas of the State. Testing of the Memex Patriarch Web interface has shown that the interface is usable over a dial-up connection and its performance is consistent with, or exceeds, typical user expectations for Web sites operated over such a connection. Because almost all processing is happening on the system's Web and data servers, the speed of the user's connection to the Web servers has little or no impact on the length of time operations take to complete – however, rendering of results within the browser may take longer. The following table compares the length of time taken to complete a number of typical operations in Patriarch Web connecting to a test server using a variety of connection speeds:	X		

Action	Corporate LAN	3G Aircard (Verizon Wireless)	56K Dial-Up
Log In To System	7secs	14 secs	31 secs
Time to display of first hit during free-text search of 10,000 incident reports for term 'terrorism'.	<1 sec	6 secs	21 secs
Time to complete above search (4242 hits found)	3.5 secs	6.5 secs	23 secs
Time to display of first hit during free-text search of 10,000 incident reports for term 'Graham' or any phonetically similar terms	1.5 secs	7.4 secs	23 secs
Time to complete above search (1905 hits found)	2.1 secs	7.9 secs	24 secs
Load front page of **www.nytimes.com** (for comparison)	12.6 secs	17 secs	68 secs

The above test was carried out using a Windows XP virtual machine with 256MB of memory. By comparison, the same machine took 8.5 seconds to load Microsoft Word 2003. Using dial-up, Memex's experience is that with the proliferation of high-speed corporate, DSL and cable connections, many users' expectations of general Web performance now exceeds what is possible over dial-up and that, unless they use dial-up on a regular basis, they may be frustrated with overall Web performance if they are presented with a dial-up connection. This applies to all Web sites the user may access, not just Memex Patriarch Web. While the contractor warrants that Memex Patriarch Web is functional over dial-up connections, we typically recommend users have access to a 128Kbit connection or better.

20-02b	Processing the volumes presented and any increases in volume that can be expected through the implementation of the proposed solution. Based on the contractor's experience the recommended hardware platform/topology will meet this requirement.	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
20-02c	Remote access and administration. The contractor's recommended hardware platform/topology will provide for remote access and administration. At the Web application layer, Windows 2003 Server machines will be used, allowing remote access via RDP. At the data layer, SUSE Enterprise Linux Server will be used allowing multiple remote administration options including SSH, VNC and remote X Sessions.	X		
20-02d	Application installation, administration and support. The contractor's recommended hardware platform/topology will allow application installation, administration and support to function in an optimal manner.	X		
20-02e	Support for a variety of TCP/IP network configurations.	X		
20-02f	Support wireless LAN and WAN configurations that support TCP/IP.	X		
21-00	**RDBMS / Applications / Database Management**			
21-01	The solution is available with State's standard relational database management solution. See the following web link for more information - http://www.michigan.gov/documents/dmb/1310.34_184491_7.pdf The solution stores all data entered by users in the Oracle 10g RDBMS. This is one of the State's standard database management systems for servers.	X		
21-02	Full-text indexing and a full-text database search feature are available to provide easy retrieval of records. The contractor's solution includes full-text indexing and a full-text database search feature which makes it possible for users to find information by simply entering the words or phrases they are looking for and clicking the search button – without having to know anything about the structure of the data tables or how to create SQL queries. Users can search on any entity or data field, across both unstructured and structured text. The contractor's solution therefore provides total content access and, because the system's index is updated every time a record is created or changed, the results of search are accurate to the current state of the database rather than being minutes or hours out of date, depending on when the index was last updated.	X		
22-00	**Security**			
22-01	All computer information solutions and applications operate in a secure manner and comply with State and federal security standards and regulations including the MDIT 1350 Enterprise Security Policy and the 1410.17 Michigan State Government Network Security Policy as found on the website: http://www.michigan.gov/dit/0,1607,7-139-34305-108216--,00.html	X		
22-02	All computer information solutions and applications operate in a secure manner be incompliance with SAML. The customization work that will be carried out to allow authentication and access to Memex Patriarch via the MiCJIN portal (see responses to requirements 1-05, 22-01 through 22-03 and 24-01) will ensure that applications can be operated in a secure manner. The login/authentication process will use the SAML standard, as required, for integration with the MiCJIN portal.			X

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
22-03	The solution ensures that the integrity and confidentiality of data is protected by safeguards to prevent release of information without proper consent. The list below shows some of the sophisticated role-based compartmentalization which allows the contractor's solution to comply with this requirement: **Tiered Supervisory Process** • The option to initiate a single or multi-tier intelligence review process after submission of new information. • Automated acknowledgements and tracking of high priority or "hot" intelligence. **Role-Based Security** • A multi-level security model based on functional and security group membership. • Compartmentalized data options to support multi-jurisdictional operations • User or group-specific access restrictions can be maintained at server, database or record level. • Records can be made wholly or partly view-only, protected (i.e. data cannot be viewed), or completely covert to specified users or groups. **Auditing** • The system maintains a comprehensive audit trail that records all user and administrative activity.	X		
23-00	**Security / Access Control**			
23-01	The solution shall interface with the MiCJIN portal to provide secure access control based upon unique user login, for types of record (e.g., fund, order) as well as by function performed upon the record (e.g., Display, Add, Edit, Delete.) The contractor's solution will interface with the MiCJIN portal to provide users with secure access to Memex Patriarch. Based on their unique ID, and their membership of role groups within the solution, users are able to access different types of record, particular database tables or specific records. Through their group memberships, users also inherit system permissions which govern their access to various modules within the system and determine the functions they can perform (e.g. View, Create, Update, Delete).			X
23-02	The solution shall interface with the MiCJIN portal to check each user's access privileges at login, and automatically disable or enables client functions (in real time) based upon the user's profile. Users will log in to Memex Patriarch via the MiCJIN portal. The user's authenticated ID will be passed to the contractor's solution which, during the automatic login of the authenticated user into Memex Patriarch will check the user's profile (including group membership details), by matching the ID against secure data held within the contractor's solution. Client functions are enabled or disabled at that point, so that, when the application is displayed to the user, he/she only sees areas of the applications, buttons, menu items and other functional options that are appropriate to the user's profile.			X
23-03	The solution shall interface with the MiCJIN portal to provide varying levels of access within the application, such as administrators, view only, or scheduling only. The solution will use the MiCJIN portal to provide access to Memex Patriarch. Users are assigned varying levels of access within the application by their membership of one or more role group. A user's group memberships determine, for example, their access to specific record types, particular database tables or individual records, as well as their ability to create, update or delete records, or to access administrative modules within the solution. These varying levels of access are established within Memex Patriarch by mapping the user's ID (authenticated through the MiCJIN portal) to user/group data that is securely stored within the contractor's solution.			X

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
24-00	**Security / Password Controls**			
24-01	The solution will interface with the MiCJIN portal for password administration. Some customization of the current COTS solution is required to allow it to interface with the MiCJIN portal for password administration.			X
25-00	**Security/Activity Logging**			
25-01	The solution logs unauthorized access attempts by date, time, user ID, device and location. The current COTS solution, which includes its own login screen and internal authentication system, logs all failed login attempts by date, time, user ID and workstation. However, as authentication for the MCIS will be handled via a single point of authentication outside the contractor's solution (i.e. the centralized authentication provided by the MiCJIN portal), the solution will not log authentication errors. It will, however, audit failed logins where the credentials of a MiCJIN-authenticated user who has attempted to access Memex Patriarch do not match up with any existing Memex Patriarch user account. In this situation the user will be refused entry to Memex Patriarch and their ID plus the date and time of the failed login will be audited within the solution.			X
25-02	The solution maintains an audit trail of all security maintenance performed by date, time, user ID, device and location, with easy access to information. The solution includes a comprehensive audit trail that records all user and administrative activity. Users with permission to access the audit trail can retrieve audit records by searching within the built-in Audit Management module of Memex Patriarch. This has an easy-to-use form that helps users find records with particular values in particular fields. There is also a free-text query box that allows you to enter a query that will find matching text in any field in an audit record.	X		
25-03	Provides security reports of users and access levels. The solution allows administrators to display all users who belong to each security group (i.e. users with specific levels of access to data). All changes to group memberships are logged and the Audit Manager module also allows administrators to view details of these changes within the Memex Patriarch application.	X		
25-04	Provides detailed reports of backups completed and backups failed. The system's backup utility can generate a verbose output listing all the files it has backed up. If the utility fails to backup a file, this is shown in the output.	X		
26-00	**Software Package Specifications**			
26-01	The software uses an industry-standard relational database management solution. See the following web link for more information - http://www.michigan.gov/documents/dmb/1310.34_184491_7.pdf The solution stores all data entered by users in the Oracle 10g RDBMS. This is one of the State's standard database management systems for servers.	X		
26-02	The software will operate effectively on State hardware as recommended by the Contractor with Contractor-supplied upgrade recommendations. The contractor has supplied hardware recommendations for the solution in Attachment E – Technical Proposal. The software will operate effectively on State hardware that conforms or exceeds these specifications. The contractor will recommend upgrade specifications as needed or when necessary.	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
26-03	The software operates in a recognized industry standard operating environment. The contractor's server-side software can be operated, and is currently in production use, on selected current versions of Microsoft Windows, Red Hat and SUSE Linux and Sun Solaris. The data layer functionality of the solution can be deployed on Linux (Red Hat Enterprise 5 or SUSE Enterprise 10), Windows Server 2003 or Sun Solaris 10. Based on the contractor's interpretation of the security requirements, anticipated usage levels of the system, and the State's IT standards, the contractor recommends that the data layer be deployed on SUSE Enterprise Linux 10. For the Web application layer the contractor plans to deploy using a cluster of relatively small servers running Windows 2003 Server. Internet Information Services (IIS) is used as the Web server technology. The supported operating systems for desktop PCs used to access Memex Patriarch Web are Windows XP (with SP2 or SP3) and Windows Vista (SP1). The supported browsers are currently Internet Explorer 6 or later (7 is recommended) and Firefox	X		
26-04	The software allows the State, from PC workstations, to access and update all necessary information to complete a transaction. The solution will allow users to access and update all necessary information to complete a transaction, from their PC workstations or laptops.	X		
26-05	The software allows for the accurate and timely input and extraction of data. Memex Patriarch has been designed specifically to make it easy for users to add, retrieve and update intelligence data and related information quickly and accurately.	X		
26-06	The software provides a Graphical User Interface (GUI) that is user-friendly and provides data, calculation, reporting, and communication capabilities to all users. Memex Patriarch has a modern, easy to use interface. Following extensive usability testing conducted by Microsoft for its Office 2007 suite, Memex Patriarch was recently redesigned to include the same "ribbon"-style control bar used by Microsoft, to present users with a clean, uncluttered application where the controls users are most likely to need at any point while they are working in the system are shown most prominently. The following list represents just a few of the features that make Memex Patriarch easy to use: • Easily customizable personal Home Page for each user • Google-like simple searching • Automated link creation • A graphical link chart on which new links can be drawn • "Wizards" to guide users through more complex tasks • Pop-up, context-sensitive help • Spelling checker • Email other users from within Memex Patriarch • Highlighting of matched text in records returned by a search • Clear highlighting of mandatory fields in data input forms • Automatic record review reminders • Rule-based warning messages on records • User-defined interest marker pop-ups on records	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
26-07	The solution is modular in design to accommodate phased implementation and future expansion. The contractor's solution is comprised of various modules, such as Entity Manager, Action Management, and Query Builder and so on. Access to these modules is permissions based and can be limited to certain groups of users, or made available to users in a phased manner, if required. New modules have been introduced over time – for example, the Federated Search module is one of the more recent additions to the solution. Similarly, modules can be updated without impacting on other modules. An example of this is the Form Designer module which was recently entirely redesigned.	X		
26-08	The modularity allows the capabilities of the core solutions to function without the entire solution complement. The solution can function with a reduced, core set of functionality, if required. For example, the Federated Search module can be removed and users still have the full power of the Memex search functions for searching data within the solution.	X		
26-09	Additional modules may be integrated into the solution without a major impact to the installed components. The contractor's solution is a modern .NET application with a development framework that allows additional modules to be developed and introduced into the solution without a major impact to the installed components. Experience over recent years has proved that new modules (either generic additions to the COTS solution or customer-specific add-ons) can be successfully added to Memex Patriarch with minimum impact to existing implementations of the solution.	X		
26-10	All modules of the solution are integrated and designed to work together using a single input and a common database with no redundant data entry or data storage. All modules of the contractor's solution are integrated and designed to work together. All modules write and retrieve data in the same way, within a common database system, using the same database engine to control data input. The solution has been designed to avoid redundant entry or storage of data.	X		
26-11	The solution supports paperless processing through the use of electronic documents that are routed for electronic signatures through user-defined approval paths. The solution's MFX (Memex Form Extensions) functionality can be used to route newly entered records for approval and electronic "signature" by specified users. The behavior is highly configurable. One example would be a record type that must be signed off before being made available to a wide user community. In this situation, after entry of the new record it can be automatically secured, preventing it from being accessed by most users, or it can be made read only. A specified user, or a group of users, is alerted that there is a record requiring approval. After reviewing the record the supervisor can enter his/her name in an approval field, update the record and it is automatically released for viewing by general users.		X	
26-12	Response times, at local and remote sites, for the major on-line processes stated above will meet business requirements. The contractor is confident that response times will meet the States business requirements both at local and remote sites, assuming a standard acceptable level of network throughput is available.	X		
26-13	The solution provides the capability for expansion in order to take advantage of technology such as imaging and OCR in order to reduce data entry workload. As described in the response to 26-09, the solution can be expanded by the addition of new modules, plug ins or adaptors that provide additional functionality. An example of this is an optional OCR feature for Memex Patriarch, which the State may wish to add to the solution.	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
27-00	**Reporting**			
27-01	The software delivers standard reports. Reports produced by the system fall into three categories: **Query based reports** The system can have a number of predefined queries that can be run on-demand or at scheduled intervals and report on data within the system currently meeting the specified criteria. **Printed reports** These comprise: printouts of records, disseminations (where the content of the report and its recipient are recorded) and "structured printouts" compiled from information in multiple data records. **Management and usage statistics** Crystal Reports (or other standard external reporting tool) is used to generate reports based on data within the contractor's solution. Because the precise requirements for reports always varies between one law enforcement organization and another, the COTS solution does not contain preconfigured reports. Rather the contractor works with the customer to define and create standard reports during the course of system deployment.		X	
27-02	The solution includes ad-hoc query and reporting tools. The solution provides some of the most advanced querying capabilities available. In addition, all of the report types described in the response to 27-01 can be generated on an ad-hoc basis.	X		
27-03	The solution will support remote connections to other databases for report generation by a third party package per State standards. See the following web link - http://www.michigan.gov/documents/131040_40944_7.pdf The solution supports connections from third-party packages such as those recommended in the referenced State's standards document. Crystal Reports is typically used for the generation of standard statistical or structured reports. Reporting tools access data directly from the underlying Oracle 10g tables.	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
27-04	The online query capability enables non-technical end-users to extract information. The ease and flexibility of searching are key strengths of the Memex system. The system offers a variety of methods of searching. Basic searching can be performed easily, without training. But with a few hours of training users can leverage the more advanced aspects of the solution's querying tools. Features of searching within the solution include: • Users require no knowledge of available fields or the database structure. • The contractor allows a full range of Boolean searching for keywords, including regular expressions, m from n searching, proximity searching, phrasing, date ranges and character/numeric ranges. • The contractor supports four kinds of query expansion: • **Garbling** – the query is expanded by adding, removing and reordering letters within the search text. This is very good at finding misspellings, or alternative spellings, of the word the user is searching for. • **Trigram** – finds words that share a specified number of trigrams (three contiguous characters) within the search text entered by the user. This broadens a search by finding words that have a commonality with the word the user entered. • **Sounds like** – a soundex algorithm is used to find words that sound like the word entered by the user. This finds records where the wrong word was used (e.g. gorilla instead of guerrilla). • **Synonym** – a thesaurus lookup facility finds words with similar meaning to the word entered by the user. This broadens a search by finding similar words (e.g. records containing "explosive" when "bomb" was searched for).	X		
27-05	Standard reports to be scheduled, executed, viewed on-line, printed (centrally or remotely) and dispersed (including the use of report distribution management software) Where standard reports are generated on a regular basis and need to be viewed and manipulated online, the contractor recommends that such reports are designed using Crystal Reports. This tool allows reports to be published as Web pages (e.g. on a secure intranet), or saved as PDF files for distribution via email or at a download site.	X		
27-06	The State has the ability to control the information that appears on standard reports so that data security is maintained. Report generation within the solution follows the principle that the user generating the report can only include in the report information that he/she could have found by performing a search. Access to data stored in the solution from Crystal Reports, or from other third-party tools, for the purpose of generating reports, will be limited to privileged users. It is the responsibility of these users, who design and publish reports, to ensure that data security is maintained. The issues of trust and risk are much the same here as for any user who is permitted to print hard copies of information stored on the system.	X		
27-07	The solution provides methods for retaining and modifying previously built queries. All users have a personal Home Page where they can store their own queries for later reuse. These saved queries can be modified at any time.	X		
27-08	The solution provides the use of transaction databases, external files, or a "data warehouse" for ad-hoc reporting. Ad-hoc reports can be generated using the solution's underlying Oracle transaction database. This is done by connecting Crystal Reports (or an alternative RDBMS reporting tool) to the Oracle database and retrieving data into the reporting tool for processing/manipulation.	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
27-09	Users must be able to generate their own ad-hoc or parameter driven reports. Users can use the structured printout facility within Memex Patriarch to produce a printed report at any time. This facility allows users to drag and drop combinations of records onto the Structured Printout Panel and then print a consolidated printout from the information in those records. Alternatively, users with appropriate access can use Crystal Reports for generating ad hoc reports based on data in the solution.	X		
28-00	**Audit Trail**			
28-01	The solution enables the user to modify data entry transactions that have already been posted to the database while maintaining an audit trail of the change. Memex Patriarch maintains a comprehensive audit trail in which all user activity is audited, including the modification of previously submitted data. Audit records themselves cannot be modified or deleted as this would compromise the credibility of the audit trail. When data Is modified, the audit trail records details of what was altered, the date and time of the update, and the name or the user who made the change, amongst other details.	X		
28-02	The solution's internal control functionality ensures that the data entry and processing associated with a business event has been completed before updating the database.	X		
29-00	**Edit and Validation Control**			
29-01	The solution includes comprehensive field edits to prevent incomplete or incorrect data from entering the solution. The solution always updates complete units of information, at record level, to prevent incomplete or inconsistent data being introduced into the system.	X		
29-02	The solution ensures data integrity and controls processing without hard-coded logic. The solution provides facilities to control data entry. For example, mandatory fields, masked edit controls and data validation. Some controls processing relies on elements of hard-coded logic and The contractor will discuss the State's specific requirements for altering such code.			X
30-00	**Physical Security**			
30-01	For any activities not performed on State sites or facilities, the Contractor will provide effective physical security measures for all proposed equipment sites, all processing and operations areas (including the mailroom), and secured storage areas through a card key or other comparable solution. At a minimum, the Contractor will: The contractor is not proposing that any work relating to the MCIS occur on non-State sites or facilities. However, in the event of this changing, the contractor confirms that it would comply with these requirements.			
30-01a	Restrict perimeter access to equipment sites, State-specified processing and storage areas, and storage areas through a card key or other comparable solution. The contractor views this as not an applicable requirement, but agrees to comply with this requirement in the event of activities being performed on non-State sites or facilities.	X		
30-01b	Provide accountability control to record access attempts, including attempts of unauthorized access. The contractor views this as not an applicable requirement, but agrees to comply with this requirement in the event of activities being performed on non-State sites or facilities.	X		

	Optional Tip Tool TECHNICAL REQUIREMENTS	Method of Compliance		
		1	2	3
30-02	Physical security shall include additional features designed to safeguard site(s) through required provision of fire retardant capabilities, as well as other electrical alarms, monitored by security personnel on a twenty-four (24) hours a day, seven (7) days a week basis. The contractor views this as not an applicable requirement (see the response to 30-01 above), but agrees to comply with this requirement in the event of activities being performed on non-State sites or facilities.	X		
30-03	Maintain a current annual security rating as audited by an independent third party auditing firm that certifies that they meet federal and State guidelines for the handling of confidential data. The contractor views this as not an applicable requirement (see the response to 30-01 above), but agrees to comply with this requirement in the event of activities being performed on non-State sites or facilities.	X		

Article 2 – General Terms and Conditions

2.010 Contract Structure and Administration

2.011 Definitions

Capitalized terms used in this Contract (including its Exhibits) shall have the meanings given below, unless the context requires otherwise:

(a) "Days" means calendar days unless otherwise specified.
(b) "24x7x365" means 24 hours a day, seven days a week, and 365 days a year (including the 366th day in a leap year).
(c) "Additional Service" means any Services/Deliverables within the scope of the Contract, but not specifically provided under any Statement of Work, that once added will result in the need to provide the Contractor with additional consideration. "Additional Service" does not include New Work.
(d) "Amendment Labor Rates" means the schedule of fully loaded hourly labor rates attached as **Article 1, Attachment A, Table 3**.
(e) "Audit Period" has the meaning given in **Section 2.111**.
(f) "Business Day," whether capitalized or not, shall mean any day other than a Saturday, Sunday or State-recognized legal holiday (as identified in the Collective Bargaining Agreement for State employees) from 8:00am EST through 5:00pm EST unless otherwise stated.
(g) "Incident" means any interruption in Services.
(h) "Business Critical" means any function identified in any Statement of Work as Business Critical.
(i) "Deliverable" means physical goods and/or commodities as required or identified by a Statement of Work
(j) "Key Personnel" means any Personnel designated in **Article 1, Section 1.201,** Contractor Staff, Roles and Responsibilities as Key Personnel.
(k) "New Work" means any Services/Deliverables outside the scope of the Contract and not specifically provided under any Statement of Work, that once added will result in the need to provide the Contractor with additional consideration. "New Work" does not include Additional Service.
(l) "Services" means any function performed for the benefit of the State.
(m) "State Location" means any physical location where the State performs work. State Location may include state-owned, leased, or rented space.
(n) "Subcontractor" means a company Contractor delegates' performance of a portion of the Services to, but does not include independent contractors engaged by Contractor solely in a staff augmentation role.
(o) "Work in Process" means a Deliverable that has been partially prepared, but has not been presented to the State for Approval.
(p) Software: is the Contractor's commercial off-the-shelf software listed in Exhibit C.
(q) Software Deliverable: is defined in Section 1.501.

2.012 Attachments and Exhibits

All Attachments and Exhibits attached to any, and all Statement(s) of Work, attached to, or referencing this Contract, are incorporated in their entirety into, and form part of, this Contract.

2.013 Statements of Work

(a) The parties agree that the Services/Deliverables to be rendered by Contractor pursuant to this Contract (and any future amendments of it) will be defined and described in detail in Statements of Work or Purchase Orders (PO) executed under this Contract. Contractor shall not be obliged or authorized to commence any work to implement a Statement of Work until authorized via a PO issued against this Contract, or an amendment to this Contract (see 2.106). Contractor shall perform in accordance with this Contract, including the Statements of Work/Purchase Orders executed under it.

(b) Unless otherwise agreed by the parties, each Statement of Work (as defined in Article 1) will include, or incorporate by reference to the appropriate Contract Article 1 containing, the following information:
- a description of the Services to be performed by Contractor under the Statement of Work;
- a project schedule (including the commencement and completion dates for all tasks, subtasks (for all projects of sufficient duration and complexity to warrant sub task breakdown), and Deliverables;
- a list of the Deliverables to be provided, if any, including any particular specifications and acceptance criteria for such Deliverables, and the dates on which the Deliverables are scheduled to be completed and delivered to the State;
- all Deliverable price schedules and other charges associated with the Statement of Work, the overall fixed price for such Statement of Work and any other appropriate pricing and payment terms;
- a specification of Contractor's and the State's respective performance responsibilities with respect to the performance or completion of all tasks, subtasks and Deliverables;
- a listing of any Key Personnel of Contractor and/or its Subcontractors for that Statement of Work and any future Statements of Work;
- any other information or provisions the parties agree to include.

(c) Reserved.

(d) The initial Statements of Work, as of the Effective Date, are attached to this Contract.

2.014 Issuing Office

This Contract is issued by the Department of Management and Budget, Office of Purchasing Operations and the Michigan Department of Information Technology on behalf of the Michigan Department of State Police (collectively, including all other relevant State of Michigan departments and agencies, the "State"). Purchasing Operations is the sole point of contact in the State with regard to all procurement and contractual matters relating to the Contract. **Purchasing Operations is the only State office authorized to change, modify, amend, alter or clarify the prices, specifications, terms and conditions of this Contract.** The Contractor Administrator within the Office of Purchasing Operations for this Contract is:

Steve Motz
Office of Purchasing Operations
Department of Management and Budget
Mason Bldg, 2nd Floor
PO Box 30026
Lansing, MI 48909
Email: 517-241-3215
Phone: motzs@michigan.gov

2.015 MDIT Contract Administrator

Upon receipt at Purchasing Operations of the properly executed Contract, it is anticipated that the Director of DMB Purchasing Operations, in consultation with MSP and MDIT, will direct that the person named below, or any other person so designated, be authorized to monitor and coordinate the activities for the Contract on a day-to-day basis during its term. However, monitoring of this Contract implies **no authority to change, modify, clarify, amend, or otherwise alter the prices, terms, conditions and specifications of such Contract as that authority is retained by the Office of Purchasing Operations**. The MDIT Contract Administrator for this Contract is:

Barbara J. Suska
Contract Administrator
Michigan Department of Information Technology
Constitution Hall 1st Floor North Tower
525 W. Allegan Street
Lansing, MI 48913
Phone: (517) 335-4067
E-mail: SuskaB2@michigan.gov

2.016 Project Manager

The following individual will oversee the project:

Dale Peet
MSP MIOC IT Project Manager
Michigan Department of State Police
714 S. Harrison Road
East Lansing, MI 48823
Phone: 517-336-6663
E-mail: Peetd@michigan.gov

2.020 Contract Objectives/Scope/Background

2.021 Background

See Article 1

2.022 Purpose

See Article 1

2.023 Objectives and Scope

See Article 1

2.024 Interpretation

Sections 2.021 through 2.023 are intended to provide background and context for this Contract and are not intended to expand the scope of the obligations under this Contract or to alter the plain meaning of the terms and conditions of this Contract. However, to the extent the terms and conditions of this Contract are unclear or otherwise ambiguous, such terms and conditions are to be interpreted and construed in light of the provisions of this Section.

2.025 Form, Function and Utility

If the Contract is for use of more than one State agency and if the Deliverable/Service does not the meet the form, function, and utility required by that State agency, that agency may, subject to State purchasing policies, procure the Deliverable/Service from another source.

2.030 Legal Effect and Term

2.031 Legal Effect

Except as otherwise agreed in writing by the parties, the State assumes no liability for costs incurred by Contractor or payment under this Contract, until Contractor is notified in writing that this Contract (or Change Order) has been approved by the State Administrative Board (if required), approved and signed by all the parties, and a Purchase Order against the Contract has been issued.

2.032 Contract Term

This Contract is for a period of five (5) years commencing on the date that the last signature required to make the Contract enforceable is obtained. All outstanding Purchase Orders shall also expire upon the termination (cancellation for any of the reasons listed in 2.210) of the Contract, unless otherwise extended pursuant to the Contract. Absent an early termination for any reason, Purchase Orders issued but not expired, by the end of the Contract's stated term, will remain in effect for the balance of the fiscal year for which they were issued.

2.033 Renewal(s)

The decision to renew will be based upon the acceptable performance of the selected Contractor as determined by the State and availability of funding. This Contract may be renewed in writing by mutual agreement of the parties not less than thirty (30) days before its expiration. The Contract may be renewed for

an additional two (2), two (2) year periods. Successful completion of negotiations surrounding the terms of the extension, will be a pre-requisite for the exercise of any option(s).

2.040 Contractor Personnel

2.041 Contractor Personnel

(a) Personnel Qualifications. All persons assigned by Contractor to the performance of Services under this Contract shall be employees of Contractor or its majority-owned (directly or indirectly, at any tier) subsidiaries (or a State-approved Subcontractor) and shall be qualified to perform the work assigned to them. For the purposes of this Contract, independent contractors engaged by Contractor solely in a staff augmentation role shall be treated by the State as if they were employees of Contractor for this Contract only; however, the State understands that the relationship between Contractor and Subcontractor is an independent contractor relationship.

(b) Key Personnel

(i) In discharging its obligations under this Contract, Contractor shall provide the named Key Personnel on the terms indicated. **Article 1, Section 1.201 Contractor Staff, Roles and Responsibilities** provides an organization chart showing the roles of certain Key Personnel, if any.

(ii) Key Personnel shall be dedicated as defined in **Article 1, Section 1.201 Contractor Staff, Roles and Responsibilities** to the Project through Phase 4, Implementation, in the applicable Statement of Work with respect to other individuals designated as Key Personnel for that Statement of Work.

(iii) The State will have the right to recommend and approve in writing the initial assignment, as well as any proposed reassignment or replacement, of any Key Personnel. Before assigning an individual to any Key Personnel position, Contractor will notify the State of the proposed assignment, will introduce the individual to the appropriate State representatives, and will provide the State with a resume and any other information about the individual reasonably requested by the State. The State reserves the right to interview the individual before granting written approval. In the event the State finds a proposed individual unacceptable, the State will provide a written explanation including reasonable detail outlining the reasons for the rejection. Additionally, the State's request shall be based on legitimate, good-faith reasons. Proposed alternative for the individual denied, shall be fully qualified for the position. The State agrees that the Key Personnel listed in the Contractor Key Personnel Section of Article 1, are considered approved Key Personnel.

(iv) Contractor shall not remove any Key Personnel from their assigned roles or the Contract without the prior written consent of the State not to be unreasonably withheld. If the Contractor does remove Key Personnel without the prior written consent of the State, it shall be considered an unauthorized removal ("Unauthorized Removal"). It shall not be considered an Unauthorized Removal if Key Personnel must be replaced for reasons beyond the reasonable control of Contractor, including illness, disability, leave of absence, personal emergency circumstances, resignation or for cause termination of the Key Personnel's employment. It shall not be considered an Unauthorized Removal if Key Personnel must be replaced because of promotions or other job movements allowed by Contractor personnel policies or Collective Bargaining Agreement(s) as long as the State receives prior written notice before shadowing occurs and Contractor provides thirty (30) days of shadowing unless parties agree to a different time period. The Contractor with the State shall review any Key Personnel replacements, and appropriate transition planning will be established. Any Unauthorized Removal may be considered by the State to be a material breach of the Contract, in respect of which the State may elect to exercise its rights under **Section 2.210**.

(v) It is acknowledged that an Unauthorized Removal will interfere with the timely and proper completion of the Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to fix the actual damage sustained by the State as a result of any Unauthorized Removal. Therefore, Contractor and the

State agree that in the case of any Unauthorized Removal in respect of which the State does not elect to exercise its rights under **Section 2.210**, the State may assess liquidated damages against Contractor as specified below.

For the Unauthorized Removal of any Key Personnel designated in the applicable Statement of Work, the liquidated damages amount shall be $15,000.00 per individual provided Contractor identifies a replacement approved by the State pursuant to **Section 2.041** and assigns the replacement to the Project to shadow the Key Personnel s/he is replacing for a period of at least thirty (30) days prior to such Key Personnel's removal.

If Contractor fails to assign a replacement to shadow the removed Key Personnel for at least thirty (30) days, in addition to the $15,000.00 liquidated damages for an Unauthorized Removal, Contractor shall pay the amount of $1,500.00 per day for each day of the thirty (30) day shadow period that the replacement Key Personnel does not shadow the removed Key Personnel, up to $15,000.00 maximum per individual. The total liquidated damages that may be assessed per Unauthorized Removal and failure to provide thirty (30) days of shadowing shall not exceed $30,000.00 per individual.

(c) Re-assignment of non-Key Personnel. Prior to re-deploying to other projects, at the completion of their assigned tasks on the Project, teams of its non-Key Personnel who are performing Services on-site at State facilities or who are otherwise dedicated primarily to the Project, Contractor will give the State at least ten (10) Business Days notice of the proposed re-deployment to give the State an opportunity to object to the re-deployment if the State reasonably believes such team's Contract responsibilities are not likely to be completed and approved by the State prior to the proposed date of re-deployment.

(d) Re-assignment of Personnel at the State's Request. The State reserves the right to require the removal from the Project of Contractor personnel found, in the judgment of the State, to be unacceptable. The State's request shall be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request shall be based on legitimate, good-faith reasons. Replacement personnel for the removed person shall be qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed personnel, the State agrees to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any such incident with removed personnel results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Service will not be counted in **Section 2.076** for a time as agreed to by the parties.

(e) Staffing Levels.

(i) All staff requirements not specified in the applicable Statement of Work or State-approved project plan as State personnel will be supplied by Contractor. This includes secretarial, clerical and Contract administration support staff necessary for Contractor to perform its obligations hereunder.

(ii) Contractor shall provide sufficient personnel resources for the completion of Contract tasks indicated in Contractor's project plan approved by the State. If the level of personnel resources is insufficient to complete any Contractor Contract tasks in accordance with the Contract time schedule as demonstrated by Contractor's failure to meet mutually agreed to time schedules, Contractor shall promptly add additional qualified personnel resources to the performance of the affected tasks, at no additional charge to the State, in an amount sufficient to complete performance of Contractor's tasks in accordance with the Contract time schedule.

(f) Personnel Turnover. The Parties agree that it is in their best interests to keep the turnover rate of employees of Contractor and its Subcontractors who are performing the Services to a reasonable minimum. Accordingly, if the State determines that the turnover rate of such employees is excessive and so notifies Contractor, Contractor will meet with the State to discuss the reasons for the turnover rate and otherwise use commercially reasonable efforts to minimize such turnover rate. If requested to do so by the State, Contractor will submit to the State its proposals for reducing the turnover rate to an acceptable level. In any event, notwithstanding the turnover of personnel, Contractor remains obligated to perform the Services without degradation and in accordance with the State-approved Contract schedule.

(g) Location. All staff assigned by Contractor to work on the Contract will perform their duties either primarily at Contractor's offices and facilities or at State facilities. Without limiting the generality of the foregoing, Key Personnel will, at a minimum, spend at least the amount of time on-site at State facilities as indicated in the applicable Statement of Work. Subject to availability, selected Contractor personnel may be assigned office space to be shared with State personnel.

2.042 Contractor Identification

Contractor employees shall be clearly identifiable while on State property by wearing a State-issued badge, as required. Contractor employees are required to clearly identify themselves and the company they work for whenever making contact with State personnel by telephone or other means.

2.043 Cooperation with Third Parties

Contractor agrees to cause its personnel and the personnel of any Subcontractors to cooperate with the State and its agents and other contractors including the State's Quality Assurance personnel, and, as reasonably requested by the State, to provide to the State's agents and other contractors with reasonable access to Contractor's Project personnel, systems and facilities to the extent they relate to activities specifically associated with this Contract and will not interfere or jeopardize the safety or operation of the systems or facilities and provided Contractor receives reasonable prior written notice of such request. The State acknowledges that Contractor's time schedule for the Contract is very specific and agrees not to unnecessarily or unreasonably interfere with, delay or otherwise impede Contractor's performance under this Contract with such requests for access.

2.044 Subcontracting by Contractor

(a) Contractor shall have full responsibility for the successful performance and completion of all of the Services and Deliverables. The State will consider Contractor to be the sole point of contact with regard to all contractual matters under this Contract, including payment of any and all charges for Services and Deliverables.

(b) Contractor shall not delegate any duties under this Contract to a Subcontractor unless the Department of Management and Budget, Office of Purchasing Operations has given written consent to such delegation. The State agrees that EDS is the proposed and approved subcontractor for this Contract. The State shall have the right of prior written approval of all Subcontractors, whose consent shall not be unreasonably withheld, and to require Contractor to replace any Subcontractors found, in the reasonable judgment of the State, to be unacceptable. The State's request shall be written with reasonable detail outlining the reasons for the removal request. Additionally, the State's request shall be based on legitimate, good-faith reasons. Replacement Subcontractor(s) for the removed Subcontractor shall be fully qualified for the position. If the State exercises this right, and the Contractor cannot immediately replace the removed Subcontractor, the State will agree to an equitable adjustment in schedule or other terms that may be affected by the State's required removal. If any such incident with a removed Subcontractor results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Work will not be counted in **Section 2.076** for a time agreed upon by the parties.

(c) In any subcontracts entered into by Contractor for the performance of the Services, Contractor shall require the Subcontractor, to the extent of the Services to be performed by the Subcontractor, to be bound to Contractor by the terms of this Contract and to assume toward Contractor all of the obligations and responsibilities that Contractor, by this Contract, assumes toward the State. The State reserves the right to receive copies of and review all subcontracts, although Contractor may delete or mask any proprietary information, including pricing, contained in such contracts before providing them to the State. The management of any Subcontractor will be the responsibility of Contractor, and Contractor shall remain responsible for the performance of its Subcontractors to the same extent as if Contractor had not subcontracted such performance. Contractor shall make all payments to Subcontractors or suppliers of Contractor. Except as otherwise agreed in writing by the State and Contractor, the State will not be obligated to direct payments for the Services other than to Contractor. The State's written approval of any Subcontractor engaged by Contractor to perform any obligation under this Contract shall not relieve Contractor of any

obligations or performance required under this Contract. Attached as **Exhibit A** is a list of the Subcontractors, if any, approved by the State as of the execution of this Contract, together with a copy of the applicable subcontract.

(d) Except where specifically approved in writing by the State on a case-by-case basis, Contractor shall flow down the obligations in **Sections 2.040, 2.110, 2.150, 2.160, 2.171(c), 2.172(b), 2.180, 2.260, 2.276, 2.297** in all of its agreements with any Subcontractors.

2.045 Contractor Responsibility for Personnel

Contractor shall be responsible for all acts and omissions of its employees, as well as the acts and omissions of any other personnel furnished by Contractor to perform the Services.

2.050 State Standards

2.051 Existing Technology Standards

See Article I

2.052 PM Methodology Standards

See Article I

2.053 RESERVED - Adherence to Portal Technology Tools

2.054 Acceptable Use Policy

To the extent that Contractor has access to the State computer system, Contractor must comply with the State's Acceptable Use Policy, see Article 1, section 1.103 Environment. All Contractor employees must be required, in writing, to agree to the State's Acceptable Use Policy before accessing the State system. The State reserves the right to terminate Contractor's access to the State system if a violation occurs.

2.060 Deliverables

2.061 Ordering

(a) Any Services/Deliverables to be furnished under this Contract shall be ordered by issuance of written Purchase Orders/Blanket Purchase Order by the State after approval by the Contract Administrator or his/her designee. All orders are subject to the terms and conditions of this Contract. In the event of conflict between an order and this Contract, the Contract shall take precedence as stated in **Section 2.293**. In no event shall any additional terms and conditions contained on a Purchase Order/Blanket Purchase Order be applicable, unless specifically contained in that Purchase Order/Blanket Purchase Order's accompanying Statement of Work.

(b) DIT will continue to oversee the use of this Contract by End Users. DIT may, in writing, delegate to agencies the authority to submit requests for certain services directly to the Contractor. DIT may also designate, in writing, some services as non-delegated and require DIT review and approval before agency acquisition. DIT will use Contractor provided management reports and periodic random agency audits to monitor and administer contract usage for delegated services.

2.062 Software

Exhibit C lists the items of software the State is required to purchase for execution the Contract. The list in **Exhibit C** includes all software required to complete the Contract and make the Deliverables operable; if any additional software is required in order for the Deliverables to meet the requirements of this Contract, such software shall be provided to the State by Contractor at no additional charge (except where agreed upon and specified in a Statement of Work or Contract Change Notice). **Exhibit C** also identifies certain items of software to be provided by the State. Exhibit C lists the items of Contractor proprietary software. Article 1, Attachment A, Table 4 lists the licensed number of authorized users for the Software listed in Exhibit C, and Article 1, Attachment A, Table 9 lists third part software that is to be procured by the State.

2.063 Hardware

The purchase of equipment is not anticipated under this contract. If the State and Contractor amend the contract to allow for equipment purchase, the language of this section shall apply as mutually agreed between the parties.

Exhibit B lists the items of hardware the State is required to purchase for execution of the Contract. The list in **Exhibit B** includes all hardware required to complete the Contract and make the Deliverables operable; if any additional hardware is required in order for the Deliverables to meet the requirements of this Contract, such hardware shall be provided to the State by Contractor at no additional charge (except where agreed upon and specified in a Contract Change Notice). **Exhibit B** also identifies certain items of hardware to be provided by the State. The parties need to agree what hardware is set forth on Exhibit B.

2.064 Equipment to be New and Prohibited Products

(a) Equipment to be New

If applicable, all equipment provided under this Contract by Contractor shall be new where Contractor has knowledge regarding whether the equipment is new or assembled from new or serviceable used parts that are like new in performance or has the option of selecting one or the other. Equipment that is assembled from new or serviceable used parts that are like new in performance is acceptable where Contractor does not have knowledge or the ability to select one or other, unless specifically agreed otherwise in writing by the State.

(b) Prohibited Products

The State will not accept salvage, distressed, outdated or discontinued merchandise. Shipping of such merchandise to any State agency, as a result of an order placed against the Contract, shall be considered default by the Contractor of the terms and conditions of the Contract and may result in cancellation of the Contract by the State. The brand and product number offered for all items shall remain consistent for the term of the Contract, unless Purchasing Operations has approved a change order pursuant to **Section 2.106**.

2.070 Performance

2.071 Performance, In General

The State engages Contractor to execute the Contract and perform the Services/provide the Deliverables, and Contractor undertakes to execute and complete the Contract in its entirety in accordance with the terms and conditions of this Contract and with the participation of State representatives as specified in this Contract.

2.072 Time of Performance

(a) Contractor shall use commercially reasonable efforts to provide the resources necessary to complete all Services and Deliverables in accordance with the time schedules contained in the Statements of Work and other Exhibits governing the work, and with professional quality.

(b) Without limiting the generality of **Section 2.072(a)**, Contractor shall notify the State in a timely manner upon becoming aware of any circumstances that may reasonably be expected to jeopardize the timely and successful completion of any Deliverables/Services on the scheduled due dates in the latest State-approved delivery schedule and, in such event, shall inform the State of the projected actual delivery date.

(c) If Contractor believes that a delay in performance by the State has caused or will cause Contractor to be unable to perform its obligations in accordance with specified Contract time periods, Contractor shall notify the State in a timely manner and shall use commercially reasonable efforts to perform its obligations in accordance with such Contract time periods notwithstanding the State's failure. Contractor will not be in default for a delay in performance to the extent such delay is caused by the State.

2.073 Liquidated Damages

The parties acknowledge that Unauthorized Removal of Key Staff as defined in Section 2.041 (b) will interfere with the timely and proper completion of the Contract, to the loss and damage of the State, and that it would be impracticable and extremely difficult to fix the actual damage sustained by the State as a result of any such

delay. Therefore, Contractor and the State agree that in the case of any such Unauthorized Removal of Key Staff in respect of which the State does not elect to exercise its rights under Section 2.191, the State may assess liquidated damages against Contractor as specified in Section 2.041 (b)

The State will assess a $1,000 penalty for each calendar day beyond the agreed upon delivery date of an acceptable key deliverable. If a Key Deliverable Date is exceeded by more that thirty (30) calendar days from the date the Key Deliverable is originally due or is otherwise agreed-upon, then by written notice to the Contractor, the State may immediately terminate the right of Contractor to deliver the services and the State may obtain substitute services from another Contractor. In this event, the Contractor shall solely be liable for fixed and agreed liquidated damages, in lieu of all other damages due to such delay by Contractor, in the amount specified above for a maximum of sixty (60) calendar days from the original Delivery Date – not to exceed $60,000.

2.074 Bankruptcy

If Contractor shall file for protection under the bankruptcy laws, or if an involuntary petition shall be filed against Contractor and not removed within thirty (30) days, or if the Contractor becomes insolvent, be adjudicated bankrupt, or if it should make a general assignment for the benefit of creditors, or if a receiver shall be appointed due to its insolvency, and Contractor and/or its affiliates are unable to provide reasonable assurances that Contractor and/or its affiliates can deliver the services provided herein, the State may, without prejudice to any other right or remedy, terminate this Contract, in whole or in part, and, at its option, may take possession of the "Work in Process" and finish such Works in Process by whatever appropriate method the State may deem expedient subject to Section 2.161 Ownership. Contractor will fix appropriate notices or labels on the Work in Process to indicate ownership by the State subject to Section 2.161 Ownership. To the extent reasonably possible, materials and Work in Process shall be stored separately from other stock and marked conspicuously with labels indicating ownership by the State subject to Section 2.161 Ownership.

To secure the State's progress payments before the delivery of any services or materials required for the execution of Contractor's obligations hereunder, and any work which Contractor may subcontract in the support of the performance of its obligations hereunder, title shall vest in the State to the extent the State has made progress payments hereunder subject to Section 2.161 Ownership.

2.075 RESERVED - Time is of the Essence

This section is not applicable to this contract.

2.076 Service Level Agreements (SLAs)

(a) SLAs will be completed with the following operational considerations:

(i) SLAs will not be calculated for individual Incidents where any event of Excusable Failure has occurred as defined in **Section 2.202**,

(ii) SLAs will not be calculated for individual Incidents where loss of service is planned and where the State has received prior notification and/or coordination.

(iii) SLAs will not apply if the applicable Incident could have been prevented through planning proposed by Contractor and not implemented at the request of the State. In order to invoke this consideration, complete documentation relevant to the denied planning proposal must be presented to substantiate the proposal.

(iv) Time period measurements will be based on the time Incidents are received by the Contractor and the time that the State receives notification of resolution based on 24x7x365 time period, except that the time period measurement will be suspended based on the following ("Stop-Clock Conditions"):

1. Time period(s) will not apply where Contractor does not have access to a physical State Location and where access to the State Location is necessary for problem identification and resolution.

2. Time period(s) will not apply where Contractor needs to obtain timely and accurate information or appropriate feedback and is unable to obtain timely and accurate information or appropriate feedback from the State.

(b) Chronic Failure for any Service(s) will be defined as three (3) unscheduled outage(s) or interruption(s) on any individual Service for the same reason or cause or if the same reason or cause was reasonably discoverable in the first instance over a rolling thirty (30) day period.

(c) Root Cause Analysis will be performed on any Business Critical outage(s) or outage(s) on Services when requested by the Contract Administrator. Contractor will provide its analysis within two (2) weeks of outage(s) and provide a recommendation for resolution.

(d) All decimals shall be rounded to two decimal places with 5 and greater rounding up and 4 and less rounding down unless otherwise specified.

2.080 Delivery and Acceptance of Deliverables

2.081 Delivery of Deliverables

Article 1 Section 1.104, XI (5) (d) contains a list of the Deliverables to be prepared and delivered by Contractor including, for each Deliverable, the scheduled delivery date and a designation of whether the Deliverable is a document ("Written Deliverable") or a Software Deliverable. All Deliverables shall be completed and delivered for State review and written approval and, where applicable, installed in accordance with the State-approved delivery schedule and any other applicable terms and conditions of this Contract.

Prior to delivering any Deliverable to the State, Contractor will first perform all required quality assurance activities, and, in the case of Software Deliverables, System Testing to verify that the Deliverable is complete and in conformance with its specifications. Before delivering a Deliverable to the State, Contractor shall certify to the State that (1) it has performed such quality assurance activities, (2) it has performed any applicable testing, (3) it has corrected all material deficiencies discovered during such quality assurance activities and testing, (4) the Deliverable is in a suitable state of readiness for the State's review and approval, and (5) the Deliverable/Service has all Critical Security patches/updates applied.

2.082 Contractor System Testing

Contractor will be responsible for System Testing each Software Deliverable in Contractor's development environment prior to turning over the Software Deliverable to the State for User Acceptance Testing and approval.

Contractor will be responsible for performing Unit Testing and incremental Integration Testing of the components of each Software Deliverable.

Contractor's System Testing will also include Integration Testing of each Software Deliverable to ensure proper inter-operation with all prior software Deliverables, interfaces and other components that are intended to inter-operate with such Software Deliverable, and will include Regression Testing, volume and stress testing to ensure that the Software Deliverables are able to meet the State's projected growth in the number and size of transactions to be processed by the Application and number of users, as such projections are set forth in the applicable Statement of Work.

Contractor's System Testing will also include Business Function Testing and Technical Testing of each Application in a simulated production environment. Business Function Testing will include testing of full work streams that flow through the Application as the Application will be incorporated within the State's computing environment. The State shall participate in and provide support for the Business Function Testing to the extent reasonably requested by Contractor. Within ten (10) days before the commencement of Business Function Testing pursuant to this Section, Contractor shall provide the State for State review and written approval Contractor's test plan for Business Function Testing.

Within five (5) Business Days following the completion of System Testing pursuant to **Section 2.080**, Contractor shall provide to the State a testing matrix establishing that testing for each condition identified in the System Testing plans has been conducted and successfully concluded. To the extent that testing occurs on

State premises, the State shall be entitled to observe or otherwise participate in testing under this Section as the State may elect.

2.083 Approval of Deliverables, In General

All Deliverables (Written Deliverables Software Deliverables) require formal written approval by the State, in accordance with the following procedures. Formal approval by the State requires that the Deliverable be confirmed in writing by the State to meet its specifications which, in the case of Phase 4, Implementation, will include the successful completion of State User Acceptance Testing, to be led by the State with the support and assistance of Contractor. The parties acknowledge that the approval process set forth herein will be facilitated by ongoing consultation between the parties, visibility of interim and intermediate Deliverables and collaboration on key decisions.

The State's obligation to comply with any State Review Period is conditioned on the timely delivery of Deliverables being reviewed. If Contractor fails to provide a Deliverable to the State in a timely manner, the State will nevertheless use commercially reasonable efforts to complete its review or testing within the applicable State Review Period.

Before commencement of its review or testing of a Deliverable, the State may inspect the Deliverable to confirm that all components of the Deliverable (e.g., software, associated documentation, and other materials) have been delivered. If the State determines that the Deliverable is incomplete, the State may refuse delivery of the Deliverable without performing any further inspection or testing of the Deliverable. Otherwise, the review period will be deemed to have started on the day the State receives the Deliverable and the applicable certification by Contractor in accordance with **Section 2.080**.

The State will approve in writing a Deliverable upon confirming that it conforms to and, in the case of a Phase 4, Implementation, performs in accordance with, its specifications without material deficiency. The State may, but shall not be required to, conditionally approve in writing a Deliverable that contains material deficiencies if the State elects to permit Contractor to rectify them post-approval. In any case, Contractor will be responsible for working diligently to correct within a reasonable time at Contractor's expense all deficiencies in the Deliverable that remain outstanding at the time of State approval.

If, after three (3) opportunities (the original and two repeat efforts), Contractor is unable to correct all deficiencies preventing State approval of a Deliverable, the State may: (i) demand that Contractor cure the failure and give Contractor additional time to cure the deficiencies at the sole expense of Contractor; or (ii) keep this Contract in force and return the unaccepted Deliverable; or (iii) terminate this Contract for default, either in whole or in part by notice to Contractor (and without the need to afford Contractor any further opportunity to cure). Notwithstanding the foregoing, the State shall not use, as a basis for exercising its termination rights under this Section, deficiencies discovered in a repeat State Review Period. Contractor shall only be obligated to correct any material deficiencies of the Deliverables to conform with the applicable specifications that are identified by the State in writing during the initial review period for such Deliverable.

The State, at any time and in its own discretion, may halt the UAT or approval process if such process reveals deficiencies in or problems with a Deliverable in a sufficient quantity or of a sufficient severity as to make the continuation of such process unproductive or unworkable. In such case, the State may return the applicable Deliverable to Contractor for correction and re-delivery prior to resuming the review or UAT process and, in that event, Contractor will correct the deficiencies in such Deliverable in accordance with the Contract, as the case may be.

Approval in writing of a Deliverable by the State shall be final. Any such approval shall not affect the State's rights to any warranty for such Deliverable as set forth in this Contract.

2.084 Process for Approval of Written Deliverables

The State Review Period for Written Deliverables will be the number of days set forth in the applicable Statement of Work following delivery of the final version of the Written Deliverable (failing which the State Review Period, by default, shall be five (5) Business Days for Written Deliverables of one hundred (100) pages

or less and ten (10) Business Days for Written Deliverables of more than one hundred (100) pages). The duration of the State Review Periods will be doubled if the State has not had an opportunity to review an interim draft of the Written Deliverable prior to its submission to the State. The State agrees to notify Contractor in writing by the end of the State Review Period either stating that the Written Deliverable is approved in the form delivered by Contractor or describing any deficiencies that must be corrected prior to approval of the Written Deliverable (or at the State's election, subsequent to approval of the Written Deliverable). If the State delivers to Contractor a notice of deficiencies, Contractor will correct the described deficiencies and within five (5) Business Days resubmit the Deliverable in a form that shows all revisions made to the original version delivered to the State. Contractor's correction efforts will be made at no additional charge. Upon receipt of a corrected Written Deliverable from Contractor, the State will have a reasonable additional period of time, not to exceed the length of the original State Review Period, to review the corrected Written Deliverable to confirm that the identified deficiencies have been corrected.

2.085 Process for Approval of Software Deliverables

Except for the Contractor's software listed on Exhibit C and to be included as a deliverable in Phase 2, Design Documentation, Software and Hardware, the State will conduct UAT of all Software Deliverables simultaneously (the "Program") in a test environment at the completion of Phase 3 and before the commencement of PARE in accordance with the procedures to determine whether it meets the criteria for State approval – i.e., whether it conforms to and performs in accordance with its specifications without material deficiencies as outlined below.
Within thirty (30) days (or such other number of days as the parties may agree to in writing) prior to Contractor's delivery of the Program to the State for approval, Contractor shall provide to the State a set of proposed test plans, including test cases, scripts, data and expected outcomes, for the State's use (which the State may supplement in its own discretion) in conducting UAT of the Program. Contractor, upon request by the State, shall provide the State with reasonable assistance and support during the UAT process.

For the Software Deliverables listed in **Article 1 Section 1.104, XI (5) (d),** the State Review Period for conducting UAT will be as indicated in **Article 1 Section 1.104, XI (5) (d).** For any other Software Deliverables not listed in **Article 1 Section 1.104, XI (5) (d),** the State Review Period shall be the number of days agreed in writing by the parties (failing which it shall be forty-five (45) days by default). The State Review Period for each Software Deliverable will begin when Contractor has delivered the Software Deliverable to the State accompanied by the certification required by **Section 2.080** and the State's inspection of the Deliverable has confirmed that all components of it have been delivered.

The State's UAT will consist of executing test scripts from the proposed testing submitted by Contractor, but may also include any additional testing deemed appropriate by the State. If the State determines during the UAT that the Program contains any deficiencies, the State will notify Contractor of the deficiency by making an entry in an incident reporting system available to both Contractor and the State. Contractor will modify promptly the Program to correct the reported deficiencies, conduct appropriate System Testing (including, where applicable, Regression Testing) to confirm the proper correction of the deficiencies and re-deliver the corrected version to the State for re-testing in UAT. Contractor will coordinate the re-delivery of corrected versions of Program with the State so as not to disrupt the State's UAT process. The State will promptly re-test the corrected version of the Program after receiving it from Contractor.

Within three (3) business days after the end of the State Review Period, the State will give Contractor a written notice indicating the State's approval or rejection of the Program according to the criteria and process set out in this **Section 2.085**.

2.086 Final Acceptance

See Article 1, Section 1.502 Final Acceptance

2.090 Financial

2.091 Pricing

(a) Fixed Prices for Services/Deliverables

Each Statement of Work/PO issued under this Contract shall specify (or indicate by reference to the appropriate Contract Exhibit) the firm, fixed prices for all Services/Deliverables, and the associated payment milestones and payment amounts. To the extent the parties agree that certain specific Services will be provided on a time and materials basis, such Services shall be provided at the Amendment Labor Rates (**Article 1, Attachment A, Table 3**). The State may make progress payments to the Contractor when requested as work progresses, but not more frequently than monthly, in amounts approved by the Contract Administrator, after negotiation. Contractor must show verification of measurable progress at the time of requesting progress payments.

(b) Adjustments for Reductions in Scope of Services/Deliverables

If the scope of the Services/Deliverables under any Statement of Work issued under this Contract is subsequently reduced by the State, the parties shall negotiate an equitable reduction in Contractor's charges under such Statement of Work commensurate with the reduction in scope, using the rates in **Article 1, Attachment A u**nless specifically identified in an applicable Statement of Work.

(c) Services/Deliverables Covered

For all Services/Deliverables to be provided by Contractor (and its Subcontractors, if any) under this Contract, the State shall not be obligated to pay any amounts in addition to the charges specified in this Contract.

(d) Labor Rates

All time and material charges will be at the rates specified in **Article 1, Attachment A, Table 3**.

2.092 Invoicing and Payment Procedures and Terms

(a) Invoicing and Payment – In General

(i) Each Statement of Work issued under this Contract shall list (or indicate by reference to the appropriate Contract Exhibit) the prices for all Services/Deliverables, equipment and commodities to be provided, and the associated payment milestones and payment amounts.

(ii) Each Contractor invoice will show details as to charges by Service/Deliverable component and location at a level of detail reasonably necessary to satisfy the State's accounting and charge-back requirements. The charges for Services billed on a time and materials basis shall be determined based on the actual number of hours of Services performed, at the applicable Labor Rates specified in **Article 1, Attachment A, Table 3**. Invoices for Services performed on a time and materials basis will show, for each individual, the number of hours of Services performed during the billing period, the billable skill/labor category for such person and the applicable hourly billing rate. Prompt payment by the State is contingent on the Contractor's invoices showing the amount owed by the State minus any holdback amount to be retained by the State in accordance with **Section 2.094**.

(iii) Correct invoices will be due and payable by the State, in accordance with the State's standard payment procedure as specified in 1984 Public Act No. 279, MCL 17.51 et seq., within forty-five (45) days after receipt, provided the State determines that the invoice was properly rendered.

(b) Taxes (See Section 2.305 for additional)

The State is exempt from Federal Excise Tax, State and Local Sales Taxes, and Use Tax with respect to the sale to and use by it of tangible personal property. Such taxes shall not be included in Contract prices as long as the State maintains such exemptions. Copies of all tax exemption certificates shall be supplied to Contractor, if requested.

(c) Out-of-Pocket Expenses

Contractor acknowledges that the out-of-pocket expenses that Contractor expects to incur in performing the Services/ providing the Deliverables (such as, but not limited to, travel and lodging, document reproduction and shipping, and long distance telephone) are included in Contractor's fixed price for each Statement of Work. Accordingly, Contractor's out-of-pocket expenses are not separately reimbursable by the State unless, on a case-by-case basis for unusual expenses, the State has agreed in advance and in writing to reimburse Contractor for such an expense at the State's current travel reimbursement rates. See http://www.mi.gov/dmb/0,1607,7-150-9141_13132---,00.html for current rates.

(d) Pro-ration

To the extent there are any Services that are to be paid for on a monthly basis, the cost of such Services shall be pro-rated for any partial month.

(e) Antitrust Assignment

The Contractor assigns to the State any claim for overcharges resulting from antitrust violations to the extent that those violations concern materials or services supplied by third parties to the Contractor, toward fulfillment of this Contract.

(f) Final Payment

The making of final payment by the State to Contractor does not constitute a waiver by either party of any rights or other claims as to the other party's continuing obligations under the Contract, nor will it constitute a waiver of any claims by one party against the other arising from unsettled claims filed in writing on a timely basis and still unsettled or failure by a party to comply with this Contract before the completion of the warranty period including claims for Services and Deliverables not reasonably known until after acceptance and before the completion of the warranty period to be defective or substandard. Contractor's acceptance of final payment by the State under this Contract shall constitute a waiver of all claims by either party against the other party for payment under this Contract, other than those claims previously filed in writing on a timely basis, and still unsettled, and as set forth above.

2.093 State Funding Obligation

The State's obligation under this Contract is payable only and solely from funds appropriated for the purpose of this Contract. Contractor acknowledges and agrees that all funds for payments after the end of the current fiscal year are subject to the availability of a legislative appropriation for the purpose of this Contract. Events of non-appropriation are addressed further in **Section 2.210** of this Contract.

2.094 RESERVED - Holdback

2.095 Electronic Payment Availability

Public Act 533 of 2004 requires that payments under this contract be processed by electronic funds transfer (EFT). Contractor is required to register to receive payments by EFT at the Contract & Payment Express website http://www.cpexpress.state.mi.us.

2.100 Contract Management

2.101 Contract Management Responsibility

(a) Contractor shall have overall responsibility for managing and successfully performing and completing the Services/Deliverables, subject to the overall direction and supervision of the State and with the participation and support of the State as specified in this Contract. Contractor's duties will include monitoring and reporting the State's performance of its participation and support responsibilities (as well as Contractor's own responsibilities) and providing timely notice to the State in Contractor's reasonable opinion if the State's failure to perform its responsibilities in accordance with **Article 1, Attachment D** (Project Plan) is likely to delay the timely achievement of any Contract tasks.

(b) The Services/Deliverables will be provided by the Contractor either directly or through its affiliates, subsidiaries, subcontractors or resellers. Regardless of the entity providing the Service/Deliverable, the Contractor will act as a single point of contact coordinating these entities to meet the State's need for Services/Deliverables. Nothing in this Contract, however, shall be construed to authorize or require any party to violate any applicable law or regulation in its performance of this Contract.

2.102 Problem and Contract Management Procedures

Problem Management and Contract Management procedures will be governed by the Contract and the applicable Statements of Work.

2.103 Reports and Meetings

(a) Reports.

Within thirty (30) days after the Effective Date, the parties shall determine an appropriate set of periodic reports to be issued by Contractor to the State. Such reports may include:

(i) separately address Contractor's performance in each area of the Services;

(ii) for each area of the Services, assess the degree to which Contractor has attained or failed to attain the pertinent objectives in that area, including on-time completion and delivery of Deliverables;

(iii) explain the reasons for any failure to achieve on-time completion and delivery of Deliverables and include a plan for corrective action where appropriate;

(iv) describe any circumstances that Contractor anticipates will impair or prevent on-time completion and delivery of Deliverables in upcoming reporting periods;

(v) include plans for corrective action or risk mitigation where appropriate and describe the status of ongoing problem resolution efforts;

(vi) provide reports setting forth a comparison of actual hours spent by Contractor (including its augmented personnel and Subcontractors) in performing the Project versus hours budgeted by Contractor.

(vii) set forth a record of the material personnel changes that pertain to the Services and describe planned changes during the upcoming month that may affect the Services.

(viii) include such documentation and other information may be mutually agreed to verify compliance with, and meeting the objectives of, this Contract.

(ix) set forth an updated schedule that provides information on the status of upcoming Deliverables, expected dates of delivery (or redelivery) of such Deliverables and estimates on timing for completion of the Project.

(b) Meetings.

Within thirty (30) days after the Effective Date, the parties shall determine an appropriate set of meetings to be held between representatives of the State and Contractor. Contractor shall prepare and circulate an agenda sufficiently in advance of each such meeting to give participants an opportunity to prepare for the meeting. Contractor shall incorporate into such agenda items that the State desires to discuss. At the State's request, Contractor shall prepare and circulate minutes promptly after a meeting.

2.104 System Changes

Contractor is not responsible for and not authorized to make changes to any State systems without written authorization from the State. Any changes Contractor makes to State systems with the State's approval shall be done in accordance with applicable State procedures, including security, access and configuration management procedures.

2.105 Reserved

2.106 Change Requests

The State reserves the right to request from time to time, any changes to the requirements and specifications of the Contract and the work to be performed by the Contractor under the Contract. During the course of ordinary business, it may become necessary for the State to discontinue certain business practices or create Additional Services/Deliverables. At a minimum, to the extent applicable, the State would like the Contractor to provide a detailed outline of all work to be done, including tasks necessary to accomplish the services/deliverables, timeframes, listing of key personnel assigned, estimated hours for each individual per task, and a complete and detailed cost justification.

If the State requests or directs the Contractor to perform any Services/Deliverables that are outside the scope of the Contractor's responsibilities under the Contract ("New Work"), the Contractor must notify the State promptly, and before commencing performance of the requested activities, that it believes the requested activities are New Work. If the Contractor fails to notify the State before commencing performance of the requested activities, any such activities performed before notice is given by the Contractor shall be conclusively considered to be in-scope Services/Deliverables, not New Work.

If the State requests or directs the Contractor to perform any services or provide deliverables that are consistent with and similar to the Services/Deliverables being provided by the Contractor under the Contract, but which the Contractor reasonably and in good faith believes are not included within the Statements of Work, then before performing such services or providing such deliverables, the Contractor shall notify the State in writing that it considers the services or deliverables to be an Additional Service/Deliverable for which the Contractor should receive additional compensation. If the Contractor does not so notify the State, the Contractor shall have no right to claim thereafter that it is entitled to additional compensation for performing that service or providing that deliverable. If the Contractor does so notify the State, then such a service or deliverable shall be governed by the Change Request procedure in this Section.

In the event prices or service levels are not acceptable to the State, the Additional Services or New Work shall be subject to competitive bidding based upon the specifications.

(a) Change Requests

(i) State Requests

If the State should require Contractor to perform New Work, Additional Services or make changes to the Services that would affect the Contract completion schedule or the amount of compensation due Contractor (a “Change”), the State shall submit a written request for Contractor to furnish a proposal for carrying out the requested Change (a “Change Request”).

(ii) Contractor Recommendations

Contractor shall be entitled to propose a Change to the State, on its own initiative, should it be of the opinion that this would benefit the Contract.

(iii) Upon receipt of a Change Request or on its own initiative, Contractor shall examine the implications of the requested Change on the technical specifications, Contract schedule and price of the Deliverables and Services and shall submit to the State without undue delay a written proposal for carrying out the Change. Contractor’s proposal will include any associated changes in the technical specifications, Contract schedule and price and method of pricing of the Services. If the Change is to be performed on a time and materials basis, the Amendment Labor Rates shall apply to the provision of such Services. If Contractor provides a written proposal and should Contractor be of the opinion that a requested Change is not to be recommended, it shall communicate its opinion to the State but shall nevertheless carry out the Change as specified in the written proposal if the State directs it to do so.

(iv) By giving Contractor written notice within a reasonable time, the State shall be entitled to accept a Contractor proposal for Change, to reject it or to reach another agreement with Contractor. Should the parties agree on carrying out a Change, a written Contract Change Notice shall be prepared and issued under this Contract, describing the Change and its effects on the Services and any affected components of this Contract (a “Contract Change Notice”).

(v) No proposed Change shall be performed until the proposed Change has been specified in a duly executed Contract Change Notice issued by the Department of Management and Budget, Office of Purchasing Operations.

(vi) If the State requests or directs Contractor to perform any activities that Contractor believes constitute a Change, Contractor must notify the State that it believes the requested activities are a Change prior to commencing the performance of the requested activities. If Contractor fails to so notify the State prior to commencing performance of the requested activities, such activities shall be considered to be performed gratuitously by Contractor, and Contractor shall not have any right thereafter to assert any claim for additional compensation or time for the performance of such activities. If Contractor commences performance of gratuitous services outside the scope of this Contract and subsequently elects to stop performing such out-of-scope services, Contractor must, at the request of the State, back out or reverse any changes resulting from such performance that would adversely affect the Contract.

2.107 Management Tools

Contractor will use an automated tool for planning, monitoring and tracking the Contract’s progress. In addition, Contractor shall use automated project management tools as reasonably necessary to perform the Services, which tools shall include the capability to produce through the end of the Contract: (i) staffing tables with names of personnel assigned to Contract tasks, (ii) project plans showing tasks, subtasks, Deliverables

and the resources required and allocated to each (including detailed plans for all Services to be performed within the next sixty (60) days, updated semi-monthly) and (iii) graphs showing critical events, dependencies and decision points during the course of the Contract. Any tool(s) used by Contractor for such purposes must produce information of a type and in a manner and format that will support reporting in compliance with the State's standard to the extent such information is described with reasonable detail in the Statements of Work and to the extent the related work is of sufficient project complexity and duration to warrant such reporting.

2.110 Records and Inspections

2.111 Records and Inspections

(a) Inspection of Work Performed. The State's authorized representatives shall at all reasonable times and with ten (10) days prior written request, have the right to enter Contractor's premises, or any other places, where the Services are being performed, and shall have access, upon reasonable request, to interim drafts of Deliverables or work-in-progress. Upon ten (10) Days prior written notice and at all reasonable times, the State's representatives shall be allowed to inspect, monitor, or otherwise evaluate the work being performed and to the extent that such access will not reasonably interfere or jeopardize the safety or operation of the systems or facilities. Contractor must provide all reasonable facilities and assistance for the State's representatives.

(b) Examination of Records. Contractor agrees that the State, including its duly authorized representatives, until the expiration of seven (7) years following the creation of the material (collectively, the "Audit Period"), shall, upon twenty (20) days prior written notice, have access to and the right to examine and copy any of Contractor's books, records, documents and papers pertinent to establishing Contractor's compliance with the Contract and with applicable laws and rules, including the State's procurement rules, regulations and procedures, and actual performance of the Contract for the purpose of conducting an audit, examination, excerpt and/or transcription but the State shall not have access to any information deemed confidential to Contractor to the extent such access would require such confidential information to become publicly available. This provision also applies to the books, records, accounts, documents and papers, in print or electronic form, of any parent, affiliated or subsidiary organization of Contractor, or any Subcontractor of Contractor performing services in connection with the Contract.

(c) Retention of Records. Contractor shall maintain at least until the end of the Audit Period all pertinent financial and accounting records (including time sheets and payroll records, and information pertaining to the Contract and to the Services, equipment, and commodities provided under the Contract) pertaining to the Contract in accordance with generally accepted accounting principles and other procedures specified in this Section. Financial and accounting records shall be made available, upon request, to the State at any time during the Audit Period. If an audit, litigation, or other action involving Contractor's records is initiated before the end of the Audit Period, the records must be retained until all issues arising out of the audit, litigation, or other action are resolved or until the end of the Audit Period, whichever is later.

(d) Audit Resolution. If necessary, the Contractor and the State shall meet to review each audit report promptly after issuance. The Contractor will respond to each audit report in writing within thirty (30) days from receipt of such report, unless a shorter response time is specified in such report. The Contractor and the State shall develop, agree upon and monitor an action plan to promptly address and resolve any deficiencies, concerns, and/or recommendations in such audit report.

2.112 Errors

(a) If the audit demonstrates any errors in the statements provided to the State, then the amount in error shall be reflected as a credit or debit on the next invoice and in subsequent invoices until the amount is paid or refunded in full. However, a credit or debit may not be carried for more than four (4) quarterly statements. If a balance remains after four (4) quarterly statements, then the remaining amount will be due as a payment or refund within forty-five (45) days of the last quarterly statement that the balance appeared on or termination of the contract, whichever is earlier.

(b) In addition to other available remedies, the difference between the payment received and the correct payment amount is greater than ten percent (10%), then the Contractor shall pay all of the reasonable costs of the audit.

2.120 State Responsibilities

2.121 State Performance Obligations

(a) Equipment and Other Resources. To facilitate Contractor's performance of the Services/Deliverables, the State shall provide to Contractor such equipment and resources as identified in the Statements of Work or other Contract Exhibits as items to be provided by the State.

(b) Facilities. The State shall designate space as long as it is available and as provided in the Statement of Work, to house Contractor's personnel whom the parties agree will perform the Services/Deliverables at State facilities (collectively, the "State Facilities"). Contractor shall have reasonable access to, and unless agreed otherwise by the parties in writing shall observe and comply with all rules and regulations relating to, each of the State Facilities (including hours of operation) used by Contractor in the course of providing the Services. Contractor agrees that it will not, without the prior written consent of the State, use any State Facilities or access any State information systems provided for Contractor's use, or to which Contractor otherwise gains access in the course of performing the Services, for any purpose other than providing the Services to the State.

(c) Return. Contractor shall be responsible for returning to the State any State-furnished equipment, facilities and other resources when no longer required for the Contract in the same condition as when provided by the State, reasonable wear and tear excepted.

(d) Except as otherwise provided in **Section 2.220**, the State's failure to perform its responsibilities as set forth in this Contract shall not be deemed to be grounds for termination by Contractor. However, Contractor will not be liable for any default or delay in the performance of its obligations under this Contract to the extent such default or delay is caused by nonperformance of the State's obligations under this Contract, provided Contractor provides the State with reasonable written notice of such nonperformance and Contractor uses commercially reasonable efforts to perform notwithstanding the State's failure to perform. In addition, if the State's nonperformance of its responsibilities under this Contract materially increases the time required for Contractor's performance or Contractor's cost of performance, Contractor shall be entitled to seek an equitable extension via the Change Request process described in **Section 2.106**.

2.130 Security

2.131 Background Checks

The Contractor shall authorize the investigation of its personnel proposed to have access to State facilities and systems on a case by case basis. The scope of the background check is at the discretion of the State and the results will be used to determine Contractor personnel eligibility for working within State facilities and systems. Such investigations will include Michigan State Police Background checks (ICHAT) and may include the National Crime Information Center (NCIC) Finger Prints. Proposed Contractor personnel may be required to complete and submit an RI-8 Fingerprint Card for the NCIC Finger Print Check. Any request for background checks will be initiated by the State and will be reasonably related to the type of work requested.

All Contractor personnel will also be expected to comply with the State's security and acceptable use policies for State IT equipment and resources. See http://www.michigan.gov/documents/PCAcceptableUsePolicy1460_1_72034_7.pdf . Furthermore, Contractor personnel will be expected to agree to the State's security and acceptable use policies before the Contractor personnel will be accepted as a resource to perform work for the State. It is expected the Contractor will present these documents to the prospective employee before the Contractor presents the individual to the State as a proposed resource. Contractor staff will be expected to comply with all Physical Security procedures in place within the facilities where they are working.

2.140 Reserved

2.150 Confidentiality

2.151 Freedom of Information

All information in any proposal submitted to the State by Contractor and this Contract is subject to the provisions of the Michigan Freedom of Information Act, 1976 Public Act No. 442, as amended, MCL 15.231, et seq (the "FOIA").

2.152 Confidentiality

Contractor and the State each acknowledge that the other possesses and will continue to possess confidential information that has been developed or received by it. As used in this Section, "Confidential Information" of Contractor shall mean all non-public proprietary information of Contractor (other than Confidential Information of the State as defined below) which is marked confidential, restricted, proprietary or with a similar designation. "Confidential Information" of the State shall mean any information which is retained in confidence by the State (or otherwise required to be held in confidence by the State pursuant to applicable federal, state and local laws and regulations) or which, in the case of tangible materials provided to Contractor by the State pursuant to its performance under this Contract, is marked as confidential, proprietary or with a similar designation by the State. In the case of information of either Contractor or the State "Confidential Information" shall exclude any information (including this Contract) that is publicly available pursuant to the Michigan FOIA.

2.153 Protection of Confidential Information

The State and Contractor will each use at least the same degree of care to prevent disclosing to third parties the Confidential Information of the other as it employs to avoid unauthorized disclosure, publication or dissemination of its own confidential information of like character, but in no event less than reasonable care. Neither Contractor nor the State will (i) make any use of the Confidential Information of the other except as contemplated by this Contract, (ii) acquire any right in or assert any lien against the Confidential Information of the other, or (iii) if requested to do so, refuse for any reason to promptly return the other party's Confidential Information to the other party. Each party will limit disclosure of the other party's Confidential Information to employees and Subcontractors who must have access in order to fulfill the purposes of this Contract. Disclosure to, and use by, a Subcontractor is permissible where (A) use of a Subcontractor is authorized under this Contract, (B) such disclosure is necessary or otherwise naturally occurs in connection with work that is within such Subcontractor's scope of responsibility, and (C) Contractor obligates the Subcontractor in a written Contract to maintain the State's Confidential Information in confidence. At the State's request, any employee of Contractor and of any Subcontractor having access or continued access to the State's Confidential Information may be required to execute an acknowledgment that the employee has been advised of Contractor's and the Subcontractor's obligations under this Section and of the employee's obligation to Contractor or Subcontractor, as the case may be, to protect such Confidential Information from unauthorized use or disclosure.

2.154 Exclusions

Notwithstanding the foregoing, the provisions of this Section will not apply to any particular information which the State or Contractor can demonstrate (i) was, at the time of disclosure to it, in the public domain; (ii) after disclosure to it, is published or otherwise becomes part of the public domain through no fault of the receiving party; (iii) was in the possession of the receiving party at the time of disclosure to it without an obligation of confidentiality; (iv) was received after disclosure to it from a third party who had a lawful right to disclose such information to it without any obligation to restrict its further disclosure; or (v) was independently developed by the receiving party without reference to Confidential Information of the furnishing party. Further, the provisions of this Section will not apply to any particular Confidential Information to the extent the receiving party is required by law to disclose such Confidential Information, provided that the receiving party (i) promptly provides the furnishing party with notice of the legal request, and (ii) assists the furnishing party in resisting or limiting the scope of such disclosure as reasonably requested by the furnishing party.

2.155 No Implied Rights

Nothing contained in this Section shall be construed as obligating a party to disclose any particular Confidential Information to the other party, or as granting to or conferring on a party, expressly or impliedly, any right or license to the Confidential Information of the other party.

2.156 Remedies

Each party acknowledges that, if it breaches (or attempts or threatens to breach) its obligations under this Section, the other party may be irreparably harmed. Accordingly, if a court of competent jurisdiction should find that a party has breached (or attempted or threatened to breach) any such obligations, the non-breaching party shall be entitled to seek an injunction preventing such breach (or attempted or threatened breach).

2.157 Security Breach Notification

In the event of a breach of this Section, Contractor shall take (i) prompt corrective action to cure any such deficiencies and (ii) any action pertaining to such unauthorized disclosure required by applicable federal and state laws and regulations. Contractor and the State will cooperate to mitigate, to the extent practicable, the effects of any breach, intrusion, or unauthorized use or disclosure. Contractor shall report to the State in writing any use or disclosure of Confidential Information, whether suspected or actual, other than as provided for by the Contract within ten (10) days of becoming aware of such use or disclosure or such shorter time period as is reasonable under the circumstances.

2.158 Survival

The parties' respective obligations under this Section shall survive the termination or expiration of this Contract for any reason.

2.159 Destruction of Confidential Information

Promptly upon termination or cancellation of the Contract for any reason, Contractor shall certify to the State, upon written request to Contractor, that Contractor has destroyed all State Confidential Information.

2.160 Proprietary Rights

2.161 Ownership

Contractor owns all right, title and interest in and to the Software Deliverables and the Software. Contractor owns all United States and international copyrights, trademarks, patents or other proprietary rights in the Software Deliverables and the Software.

Subject to the State's performance of its obligations hereunder, including payment of all fees under this Agreement, Contractor shall grant to the State a non-exclusive, non-transferable, royalty-free, perpetual license to use the Software Deliverable or Software, within the State's organization solely for the State's internal business purposes. The State shall not, without the written consent of the Contractor: (a) decompile, disassemble or otherwise reverse engineer the Software Deliverable or Software or any portion thereof; (b) rent, lease, sublicense, sell, transfer or otherwise grant rights in or to the Software Deliverable and Software (in whole or in part) to any third party in any form; or (c) use the Software Deliverable or Software for third-party training, commercial time-sharing or service bureau use.

2.162 Source Code Escrow

(a) Definition. "Source Code Escrow Package" shall mean:

(i) A complete copy in machine-readable form of the source code and executable code of the Licensed Software (excluding any third party software) including any updates or new releases of the product;

(b) Delivery of Source Code into Escrow. Contractor shall deliver a Source Code Escrow Package to the National Computing Centre("NCC") in the United Kingdom on the basis of the terms set out in the NCC Standard Escrow Agreement, within thirty (30) days of the execution of this Contract.

(c) Delivery of New Source Code into Escrow. If at anytime during the term of this Contract, the Contractor provides a maintenance release or upgrade version of the Licensed Software, Contractor shall deposit with the Escrow Agent, in accordance with the Escrow Contract set forth above, a Source Code Escrow Package for the maintenance release or upgrade version .

(d) Verification. The State reserves the right at any time, but not more than once a year, either itself or through a third party contractor, upon thirty (30) days written notice, to seek verification of the Source Code Escrow Package.

(e) Escrow Fees. Deposit fees and expenses charged by the Escrow Agent will be paid by the Contractor. Verification fees and expenses charged by the Escrow Agent will be paid by the State.

(f) Release Events. The Source Code Escrow Package may be released from escrow to the State, temporarily or permanently, upon the occurrence of one or more of the following:

(i) The Contractor becomes insolvent, makes a general assignment for the benefit of creditors, files a voluntary petition of bankruptcy, suffers or permits the appointment of a receiver for its business or assets, becomes subject to any proceeding under bankruptcy or insolvency law, whether domestic or foreign;
(ii) The Contractor has wound up or liquidated its business voluntarily and the State has reasonable basis to believe that such events will cause the Contractor to fail to meet its warranties and maintenance obligations in the foreseeable future;
(iii) The Contractor voluntarily fails to be in the business of supporting the products in accordance with its maintenance obligations and warranties.

(g) Release Event Procedures. If the State has paid in full all amounts then due and owing under this Contract and it desires to obtain the Source Code Escrow Package from the Escrow Agent upon the occurrence of an Event in **Section 2.162(f)**, then:

(i) The State shall comply with all procedures in the Escrow Contract;
(ii) The State shall maintain all materials and information comprising the Source Code Escrow Package in confidence in accordance with this Contract;
(iii) If the release is a temporary one, then the State shall promptly return all released materials to Contractor when the circumstances leading to the release are no longer in effect.

(h) License. Upon release from the Escrow Agent pursuant to an event described in **Section 2.162(f)**, the Contractor automatically grants the State a non-exclusive, **.**license to use, reproduce, modify, maintain, support, update, have made, **.**. from the Source Code Escrow Package solely to maintain and support the Licensed Software so that it can be used by the State as set forth in this Contract.

2.163 Rights in Data

(a) The State will be and remain the owner of all data made available by the State to Contractor or its agents, Subcontractors or representatives pursuant to the Contract. Contractor will not use the State's data for any purpose other than providing the Services, nor will any part of the State's data be disclosed, sold, assigned, leased or otherwise disposed of to the general public or to specific third parties or commercially exploited by or on behalf of Contractor, nor will any employee of Contractor other than those on a strictly need to know basis have access to the State's data. Contractor will not possess or assert any lien or other right against the State's data. Without limiting the generality of this Section, Contractor shall only use personally identifiable information as strictly necessary to provide the Services and shall disclose such information only to its employees who have a strict need to know such information. Contractor shall comply at all times with all laws and regulations applicable to such personally identifiable information.

(b) The State is and shall remain the owner of all State-specific data pursuant to the Contract. The State may use the data provided by the Contractor for any purpose. The State will not possess or assert any lien or other right against the Contractor's data. Without limiting the generality of this Section, the State shall only use personally identifiable information as strictly necessary to utilize the Services and shall disclose such information only to its employees who have a strict need to know such information, except as provided by law. The State shall comply at all times with all laws and regulations applicable to such personally identifiable information.

2.164 Ownership of Materials

State and Contractor will continue to own their respective proprietary technologies developed before entering into the Contract. Any hardware bought through the Contractor by the State, and paid for by the State, will be owned by the State. Any software licensed through the Contractor and sold to the State, will be licensed directly to the State.

2.165 Standard Software

All Software used in performing the Services shall be provided to the State under a separate license agreement between the State and the owner (or authorized licensor) of such software. Software to be licensed to the State is listed in **Exhibit C**.

2.166 Pre-existing Materials for Custom Software Deliverables

Neither Contractor nor any of its Subcontractors shall incorporate any preexisting materials (including Standard Software) into Custom Software Deliverables or use any pre-existing materials to produce Custom Software Deliverables if such pre-existing materials will be needed by the State in order to use the Custom Software Deliverables unless (i) such pre-existing materials and their owners are identified to the State in writing and (ii) such pre-existing materials are either readily commercially available products for which Contractor or its Subcontractor, as the case may be, has obtained a license (in form and substance approved by the State) in the name of the State, or are materials that Contractor or its Subcontractor, as the case may be, has the right to license to the State and has licensed to the State on terms and conditions approved by the State prior to using such pre-existing materials to perform the Services.

2.167 General Skills

Notwithstanding anything to the contrary in this Section, each party, its Subcontractors and their personnel shall be free to use and employ its and their general skills, know-how and expertise, and to use, disclose and employ any generalized ideas, concepts, know-how, methods, techniques or skills gained or learned during the course of performing the Services, so long as it or they acquire and apply the foregoing without disclosure of any confidential or proprietary information of the other party.

2.170 Warranties And Representations

2.171 Warranties and Representations

The Contractor represents and warrants:

(a) It is capable in all respects of fulfilling and shall fulfill all of its obligations under this Contract. The performance of all obligations under this Contract shall be provided in a timely, professional, and workman-like manner consistent with generally accepted industry practices.

(b) The Contract Appendices, Attachments and Exhibits identify the equipment and software and services necessary for the Deliverable(s) to perform and Services to operate in compliance with the Contract's requirements and other standards of performance.

(c) It is the lawful owner or licensee of any Deliverable licensed or sold to the State by Contractor or developed by Contractor under this Contract, and Contractor has all of the rights necessary to convey to the State the ownership rights or licensed use, as applicable, of any and all Deliverables.

(d) If, under this Contract, Contractor procures any equipment, software or other Deliverable for the State (including equipment, software and other Deliverables manufactured, re-marketed or otherwise sold by Contractor under Contractor's name), then in addition to Contractor's other responsibilities with respect to such items in this Contract, Contractor shall assign or otherwise transfer to the State or its designees, or afford the State the benefits of, any manufacturer's warranty for the Deliverable.

(e) The contract signatory has the power and authority, including any necessary corporate authorizations, necessary to enter into this Contract, on behalf of Contractor.

(f) It is qualified and registered to transact business in all locations where required.

(g) Neither the Contractor nor any Affiliates, nor any employee of either, has, shall have, or shall acquire, any contractual, financial, business, or other interest, direct or indirect, that would conflict in any manner or degree with Contractor's performance of its duties and responsibilities to the State under this Contract or otherwise create an appearance of impropriety with respect to the award or performance of this Agreement. Contractor shall notify the State within two (2) business days of any such interest that may be incompatible with the interests of the State.

(h) Neither Contractor nor any Affiliates, nor any employee of either has accepted or shall accept anything of value based on an understanding that the actions of the Contractor or Affiliates or employee on behalf of the State would be influenced. Contractor shall not attempt to influence any State employee by the direct or indirect offer of anything of value.

(i) Neither Contractor nor any Affiliates, nor any employee of either has paid or agreed to pay any person, other than bona fide employees and consultants working solely for Contractor or such Affiliate, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Contract.

(j) The prices proposed by Contractor were arrived at independently, without consultation, communication, or agreement with any other bidder for the purpose of restricting competition; the prices quoted were not knowingly disclosed by Contractor to any other bidder; and no attempt was made by Contractor to induce any other person to submit or not submit a proposal for the purpose of restricting competition.

(k) All financial statements, reports, and other information furnished by Contractor to the State as part of its response to the RFP or otherwise in connection with the award of this Contract fairly and accurately represent the business, properties, financial condition, and results of operations of Contractor as of the respective dates, or for the respective periods, covered by such financial statements, reports, other information. Since the respective dates or periods covered by such financial statements, reports, or other information, there have been no material adverse change in the business, properties, financial condition, or results of operations of Contractor.

(m) All written information furnished to the State by or behalf of Contractor in connection with this Contract, including its bid, it true, accurate, and complete, and contains no untrue statement of material fact or omits any material fact necessary to make such information not misleading.

(n) It is not in material default or breach of any other contract or agreement that it may have with the State or any of its departments, commissions, boards, or agencies. Contractor further represents and warrants that it has not been a party to any contract with the State or any of its departments that was terminated by the State or such department within the previous five (5) years for the reason that Contractor failed to perform or otherwise breached an obligation of such contract.

2.172 Software Warranties

(a) Performance Warranty

The Contractor represents and warrants that Deliverables, after Final Acceptance, will perform and operate in compliance with the requirements and other standards of performance contained in this Contract (including all descriptions, specifications and drawings made a part of the Contract) for a period of two (2) years. In the event of a breach of this warranty, Contractor will promptly correct the affected Deliverable(s) at no charge to the State.

The State must report any breach of the foregoing warranty to Contractor in writing within the applicable Deliverable warranty period. The State's exclusive remedy for a breach of this warranty is the correction of any material reproducible nonconformity in the Deliverable so that it conforms to this warranty. If Contractor determines that it is unable to correct the Deliverable after using commercially reasonable efforts to do so, then Contractor's sole and exclusive obligation shall be to refund the fees actually paid for such Deliverable provided that the State discontinues all use of the Deliverable and certifies that it has done such and has destroyed all copies in the State's control

(b) No Surreptitious Code Warranty

The Contractor represents and warrants that no copy of licensed Software provided to the State contains or will contain any Self-Help Code or any Unauthorized Code as defined below. This warranty is referred to in this Contract as the "No Surreptitious Code Warranty."

As used in this Contract, "Self-Help Code" means any back door, time bomb, drop dead device, or other software routine designed to disable a computer program automatically with the passage of time or under the positive control of a person other than the licensee of the software. Self-Help Code does not include Software routines in a computer program, if any, designed to permit an owner of the computer program (or other person acting by authority of the owner) to obtain access to a licensee's computer system(s) (e.g. remote access via modem) for purposes of maintenance or technical support.

As used in this Contract, "Unauthorized Code" means any virus, Trojan horse, spy ware, worm or other Software routines or components designed to permit unauthorized access to disable, erase, or otherwise harm software, equipment, or data; or to perform any other such actions. The term Unauthorized Code does not include Self-Help Code. Unauthorized Code does not include Software routines in a computer program, if any, designed to permit an owner of the computer program (or other person acting by authority of the owner) to obtain access to a licensee's computer system(s) (e.g. remote access via modem) for purposes of maintenance or technical support.

In addition, Contractor will use up-to-date commercial virus detection software to detect and remove any viruses from any software prior to delivering it to the State.

(c) Calendar Warranty

The Contractor represents and warrants that all software for which the Contractor either sells or licenses to the State of Michigan and used by the State prior to, during or after the calendar year 2000, includes or shall include, at no added cost to the State, design and performance so the State shall not experience software abnormality and/or the generation of incorrect results from the software, due to date oriented processing, in the operation of the business of the State of Michigan.

The software design, to insure calendar year rollover compatibility, shall include, but is not limited to: data structures (databases, data files, etc.) that provide 4-digit date century; stored data that contain date century recognition, including, but not limited to, data stored in databases and hardware device internal system dates; calculations and program logic (e.g., sort algorithms, calendar generation, event recognition, and all processing actions that use or produce date values) that accommodates same century and multi-century formulas and date values; interfaces that supply data to and receive data from other systems or organizations that prevent non-compliant dates and data from entering any State system; user interfaces (i.e., screens, reports, etc.) that accurately show 4 digit years; and assurance that the year 2000 shall be correctly treated as a leap year within all calculation and calendar logic.

(d) Third-party Software Warranty

The Contractor represents and warrants that it will disclose the use or incorporation of any third-party software into the Deliverables, subject to Contractor's confidentiality obligations to third party vendors. Contractor represents that it has the right to license to the State any third party software products incorporated into the Deliverables. All such software shall be set forth in Article 1, Attachment A, Table 9.

2.173 Equipment Warranty

The purchase of equipment is not anticipated under this contract. If the State and Contractor amend the contract to allow for equipment purchase, the language of this section shall apply as mutually agreed between the parties. The warranty to be provided, will be the one provided by the hardware vendor.

To the extent Contractor is responsible under this Contract for maintaining equipment/system(s), Contractor represents and warrants that it will maintain such equipment/system(s) in good operating condition and will undertake all repairs and preventive maintenance in accordance with the applicable manufacturer's recommendations for the period specified in this Contract.

The Contractor represents and warrants that the equipment/system(s) shall be in good operating condition and shall operate and perform to the requirements and other standards of performance contained in this Contract, when installed, at the time of Final Acceptance by the State, and for a period of three (3) years commencing upon the first day following Final Acceptance.

Within three (3) business days, unless otherwise agreed to by the State, of notification from the State, the Contractor shall adjust, repair or replace all equipment that is defective or not performing in compliance with the Contract. The Contractor shall assume all costs for replacing parts or units and their installation including transportation and delivery fees, if any.

The Contractor shall provide a toll-free telephone number to allow the State to report equipment failures and problems to be remedied by the Contractor.

The Contractor agrees that all warranty service it provides under this Contract shall be performed by original equipment manufacturer (OEM) trained, certified and authorized technicians.

The Contractor shall act as the sole point of contact for warranty service. The Contractor warrants that it shall pass through to the State any and all warranties obtained or available from the original equipment manufacturer, including any replacement, upgraded, or additional equipment warranties.

2.174 Physical Media Warranty

Contractor represents and warrants that each licensed copy of the Software provided by the Contractor is free from physical defects in the media that tangibly embodies the copy. This warranty does not apply to defects discovered more than thirty (30) days after delivery of the Software to the State. This warranty does not apply to defects arising from acts of Excusable Failure. If the Contractor breaches this warranty, then the State shall be entitled to replacement of the non-compliant copy by Contractor, at Contractor's expense (including shipping and handling).

2.175 DISCLAIMER

EXCEPT FOR THE WARRANTIES EXPRESSLY SET FORTH IN THIS CONTRACT, THE SOFTWARE, HARDWARE, PROFESSIONAL SERVICES, TRAINING SERVICES, DELIVERABLES, AND MAINTENANCE SERVICES, ARE PROVIDED "AS IS" AND CONTRACTOR EXPRESSLY DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTIES AND CONDITIONS (INCLUDING THOSE BY CONTRACTOR'S SUPPLIERS), INCLUDING ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, NON-INFRINGEMENT OR QUIET ENJOYMENT, AS WELL AS ANY WARRANTIES THAT THE SOFTWARE, HARDWARE, PROFESSIONAL SERVICES, TRAINING SERVICES, DELIVERABLES, AND MAINTENANCE SERVICES WILL BE FREE OF INTERRUPTIONS OR ERRORS.

2.176 Consequences For Breach

In addition to any remedies available in law, if the Contractor breaches any of the warranties contained in this section, such breach may be considered as a default in the performance of a material obligation of this Contract.

2.180 Insurance

2.181 Liability Insurance

(a) Liability Insurance

The Contractor is required to provide proof of the minimum levels of insurance coverage as indicated below. The purpose of this coverage shall be to protect the State from claims which may arise out of or result from the Contractor's performance of services under the terms of this Contract, whether such services are performed by the Contractor, or by any subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable.

The Contractor waives all rights where specifically noted below against the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents for recovery of damages to the extent these damages are covered by the insurance policies the Contractor is required to maintain pursuant to this Contract.

All insurance coverages provided relative to this Contract/Purchase Order are PRIMARY and NON-CONTRIBUTING to any comparable liability insurance (including self-insurances) carried by the State.

The insurance shall be written for not less than any minimum coverage specified in this Contract or required by law, whichever is greater.

The insurers selected by Contractor shall have an A.M. Best rating of A or better, or as otherwise approved in writing by the State, or if such ratings are no longer available, with a comparable rating from a recognized insurance rating agency. All policies of insurance required in this Contract shall be issued by companies that have been approved to do business in the State.

Where specific limits are shown, they are the minimum acceptable limits. If Contractor's policy contains higher limits, the State shall be entitled to coverage to the extent of such higher limits.

Before the Contract is signed by both parties or before the purchase order is issued by the State, the Contractor must furnish to the Director of Purchasing Operations, certificate(s) of insurance verifying insurance coverage ("Certificates"). The Certificate must be on the standard "accord" form or equivalent. **THE CONTRACT OR PURCHASE ORDER NO. MUST BE SHOWN ON THE CERTIFICATE OF INSURANCE TO ASSURE CORRECT FILING.** All Certificate(s) are to be prepared and submitted by the Insurance Provider. All Certificate(s) with the exception of the PI and Umbrella GL policies, shall contain a provision indicating that coverage afforded under the policies WILL NOT BE CANCELLED, MATERIALLY CHANGED, OR NOT RENEWED without THIRTY (30) days prior written notice, except for ten (10) days for non-payment of premium, having been given to the Director of Purchasing Operations, Department of Management and Budget. In the case of the Umbrella GL and PI policies Memex will undertake to provide Thirty (30) days prior written notice to the Director of Purchasing Operations, Department of Management and Budget The notice must include the Contract or Purchase Order number affected and be mailed to: Director, Purchasing Operations, Department of Management and Budget, P.O. Box 30026, Lansing, Michigan 48909. Failure to provide evidence of coverage, may, at the State's sole option, result in this Contract's termination.

The Contractor is required to pay for and provide the type and amount of insurance checked ☑ below:

☑ 1. Commercial General Liability with the following minimum coverage:
$2,000,000 General Aggregate Limit other than Products/Completed Operations
$2,000,000 Products/Completed Operations Aggregate Limit
$1,000,000 Personal & Advertising Injury Limit
$1,000,000 Each Occurrence Limit
$500,000 Fire Damage Limit (any one fire)

The Contractor must list the State of Michigan, its departments, divisions, agencies, offices, commissions, officers, employees and agents as ADDITIONAL PROTECTED PERSONS CLAUSE on the Commercial General Liability certificate. The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company up to the limits noted above.

☑ 2. If a motor vehicle is used to provide services or products under this Contract, the Contractor must have vehicle liability insurance on any auto including owned, hired and non-owned vehicles used in Contractor‘s business for bodily injury and property damage as required by law.

☑ 3. Workers' compensation coverage must be provided in accordance with applicable laws governing the employees and employers work activities in the state of the Contractor's domicile. If the applicable coverage is provided by a self-insurer, proof must be provided of approved self-insured authority by the jurisdiction of domicile. For employees working outside of the state of qualification, Contractor must provide appropriate certificates of insurance proving mandated coverage levels for the jurisdictions where the employees' activities occur.

Any certificates of insurance received must also provide a list of states where the coverage is applicable.

The Contractor also agrees to provide evidence that insurance policies contain a waiver of subrogation by the insurance company. This provision shall not be applicable where prohibited or limited by the laws of the jurisdiction in which the work is to be performed.

☑ 4. Employers liability insurance with the following minimum limits:
$100,000 each accident
$100,000 each employee by disease
$500,000 aggregate disease

☑ 5. Employee Fidelity, including Computer Crimes, insurance, providing coverage for direct loss to the State and any legal liability of the State arising out of or related to fraudulent or dishonest acts committed by the employees of Contractor or its Subcontractors, acting alone or in collusion with others, in a minimum amount of one million dollars ($1,000,000.00) with a maximum deductible of fifty thousand dollars ($50,000.00).

☑ 6. Umbrella or Excess Liability Insurance in a minimum amount of ten million dollars ($10,000,000.00), which shall apply, at a minimum, to the insurance required in Subsection 1 (Commercial General Liability) above.

☑ 7. Professional Liability (Errors and Omissions) Insurance with the following minimum coverage: three million dollars ($3,000,000.00) each occurrence and three million dollars ($3,000,000.00) annual aggregate.

☐ 8. Fire and Personal Property Insurance covering against any loss or damage to the office space used by Contractor for any reason under this Contract, and the equipment, software and other contents of such office space, including without limitation, those contents used by Contractor to provide the Services to the State, up to the replacement value thereof, where such office space and its contents are under the care, custody and control of Contractor. Such policy shall cover all risks of direct physical loss or damage, including without limitation, flood and earthquake coverage and coverage for computer hardware and software. The State's interest in the policy shall be endorsed as and when required.

(b) Subcontractors

Except where the State has approved in writing a Contractor subcontract with other insurance provisions, Contractor shall require all of its Subcontractors under this Contract to purchase and maintain the insurance coverage as described in this Section for the Contractor in connection with the performance of work by those Subcontractors. Alternatively, Contractor may include any Subcontractors under Contractor's insurance on the coverage required in this Section. Subcontractor(s) shall fully comply with the insurance

coverage required in this Section. Failure of Subcontractor(s) to comply with insurance requirements does not limit Contractor's liability or responsibility.

(c) Certificates of Insurance and Other Requirements

Contractor shall furnish to the Office of Purchasing Operations certificate(s) of insurance verifying insurance coverage or providing satisfactory evidence of self-insurance as required in this Section (the "Certificates"). Before the Contract is signed, and not more than 14 days after the insurance expiration date every year thereafter, the Contractor shall provide evidence that the State and its agents, officers and employees are listed as additional protected persons under the commercial general liability policy as noted above. In the event the State approves the representation of the State by the insurer's attorney, the attorney may be required to be designated as a Special Assistant Attorney General by the Attorney General of the State of Michigan.

Contractor shall maintain all required insurance coverage throughout the term of the Contract and any extensions thereto and, in the case of claims-made Commercial General Liability policies, shall secure tail coverage for at least three (3) years following the expiration or termination for any reason of this Contract. The minimum limits of coverage specified above are not intended, and shall not be construed, to limit any liability or indemnity of Contractor under this Contract to any indemnified party or other persons. Contractor shall be responsible for all deductibles with regard to such insurance. If Contractor fails to pay any premium for required insurance as specified in this Contract, or if any insurer cancels or significantly reduces any required insurance as specified in this Contract without the State's written consent, at the State's election (but without any obligation to do so) after the State has given Contractor at least thirty (30) days written notice, the State may pay such premium or procure similar insurance coverage from another company or companies; and at the State's election, the State may deduct the entire cost (or part thereof) from any payment due Contractor, or Contractor shall pay the entire cost (or any part thereof) upon demand by the State.

2.191 Indemnification

(a) General Indemnification

To the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the State from liability, including all claims and losses, and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties), accruing or resulting to any person, firm or corporation (i.e. bodily injury, or damage to real or tangible personal property) that may be injured or damaged by the Contractor in the performance of this Contract and that are attributable to the negligence or tortious acts of the Contractor or any of its subcontractors, or by anyone else for whose acts any of them may be liable.

(b) Code Indemnification

To the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the State from any claim, loss, or expense arising from Contractor's breach of the No Surreptitious Code Warranty.

(c) Employee Indemnification

In any and all claims against the State of Michigan, its departments, divisions, agencies, sections, commissions, officers, employees and agents, by any employee of the Contractor or any of its subcontractors, the indemnification obligation under the Contract shall not be limited in any way by the amount or type of damages, compensation or benefits payable by or for the Contractor or any of its subcontractors under worker's disability compensation acts, disability benefit acts or other employee benefit acts. This indemnification clause is intended to be comprehensive. Any overlap in provisions, or the fact that greater specificity is provided as to some categories of risk, is not intended to limit the scope of indemnification under any other provisions.

(d) Patent/Copyright Infringement Indemnification

To the extent permitted by law, the Contractor shall indemnify, defend and hold harmless the State from and against all losses, liabilities, damages (including taxes), and all related costs and expenses (including reasonable attorneys' fees and costs of investigation, litigation, settlement, judgments, interest and penalties) incurred in connection with any action or proceeding threatened or brought against the State by a third-party to the extent that such action or proceeding is based on a claim that any piece of equipment, software, commodity or service supplied by the Contractor or its subcontractors, or the operation of such equipment,

software, commodity or service, or the use or reproduction of any documentation provided with such equipment, software, commodity or service infringes any United States patent, copyright, trademark or trade secret of any person or entity, which is enforceable under the laws of the United States.

In addition, should the equipment, software, commodity, or service, or its operation, become or in the State's or Contractor's opinion be likely to become the subject of a claim of infringement, the Contractor shall at the Contractor's sole expense (i) procure for the State the right to continue using the equipment, software, commodity or service or, if such option is not reasonably available to the Contractor, (ii) replace or modify to the State's satisfaction the same with equipment, software, commodity or service of equivalent function and performance so that it becomes non-infringing, or, if such option is not reasonably available to Contractor, (iii) accept its return by the State with appropriate credits to the State against the Contractor's charges and reimburse the State for any losses or costs incurred as a consequence of the State ceasing its use and returning it. The foregoing is the State's exclusive remedy and Contractor's obligation regarding any third-party intellectual property claims.

Notwithstanding the foregoing, the Contractor shall have no obligation to indemnify or defend the State for, or to pay any costs, damages or attorneys' fees related to, any claim based upon (i) equipment developed based on written specifications of the State; or (ii) use of the equipment in a configuration other than implemented or approved in writing by the Contractor, including, but not limited to, any modification of the equipment by the State; or (iii) the combination, operation, or use of the equipment with equipment or software not supplied by the Contractor under this Contract.

2.192 Continuation of Indemnification Obligations

The Contractor's duty to indemnify pursuant to this Section continues in full force and effect, notwithstanding the expiration or early cancellation of the Contract, with respect to any claims based on facts or conditions that occurred prior to expiration or cancellation.

2.193 Indemnification Procedures

The procedures set forth below shall apply to all indemnity obligations under this Contract.

(a) After receipt by the State of notice of the action or proceeding involving a claim in respect of which it will seek indemnification, the State shall promptly notify Contractor of such claim in writing and take or assist Contractor in taking, as the case may be, any reasonable action to avoid the imposition of a default judgment against Contractor. No failure to notify Contractor shall relieve Contractor of its indemnification obligations except to the extent that Contractor can demonstrate damages attributable to such failure. Within ten (10) days following receipt of written notice from the State relating to any claim, Contractor shall notify the State in writing whether Contractor agrees to assume control of the defense and settlement of that claim (a "Notice of Election"). After notifying Contractor of a claim and prior to the State receiving Contractor's Notice of Election, the State shall be entitled to defend against the claim, at Contractor's expense, and Contractor will be responsible for any reasonable costs incurred by the State in defending against the claim during such period.

(b) If Contractor delivers a Notice of Election relating to any claim: (i) the State shall be entitled to participate in the defense of such claim and to employ counsel at its own expense to assist in the handling of such claim and to monitor and advise the State about the status and progress of the defense; (ii) Contractor shall, at the request of the State, demonstrate to the reasonable satisfaction of the State, Contractor's financial ability to carry out its defense and indemnity obligations under this Contract; (iii) Contractor shall periodically advise the State about the status and progress of the defense and shall obtain the prior written approval of the State before entering into any settlement of such claim or ceasing to defend against such claim and (iv) to the extent that any principles of Michigan governmental or public law may be involved or challenged, the State shall have the right, at its own expense, to control the defense of that portion of such claim involving the principles of Michigan governmental or public law. Notwithstanding the foregoing, the State may retain control of the defense and settlement of a claim by written notice to Contractor given within ten (10) days after the State's receipt of Contractor's information requested by the State pursuant to clause (ii) of this paragraph if the State determines that Contractor has failed to demonstrate to the reasonable satisfaction of the State Contractor's financial ability to carry out its defense and indemnity obligations under this Section. Any litigation activity on behalf of the State of Michigan, or any of its subdivisions pursuant to this Section, must be

coordinated with the Department of Attorney General. In the event the insurer's attorney represents the State pursuant to this Section, the insurer's attorney may be required to be designated as a Special Assistant Attorney General by the Attorney General of the State of Michigan.

(c) If Contractor does not deliver a Notice of Election relating to any claim of which it is notified by the State as provided above, the State shall have the right to defend the claim in such manner as it may deem appropriate, at the cost and expense of Contractor. If it is determined that the claim was one against which Contractor was required to indemnify the State, upon request of the State, Contractor shall promptly reimburse the State for all such reasonable costs and expenses.

2.200 Limits of Liability and Excusable Failure

2.201 Limits of Liability

The Contractor's total and aggregate liability to the State, for any and all claims arising out of this Agreement whether in contract, tort or otherwise, shall be limited to the value of the Contract. The foregoing limitation of liability shall not apply to claims under Section 2.191 for infringement of United States patent, copyright, trademarks or trade secrets; to claims under Section 2.191 for personal injury or damage to property caused by the gross negligence or willful misconduct of the Contractor; to claims covered by other specific provisions of this Contract calling for liquidated damages; or to court costs or attorney's fees awarded by a court in addition to damages after litigation based on this Contract.

The State's liability for damages to the Contractor shall be limited to the value of the Contract.

Neither the Contractor nor the State shall be liable to each other, regardless of the form of action, for consequential, incidental, indirect, or special damages. This limitation of liability shall not apply to Contractor's liability under Section 2.191 for claims for infringement of United States patent, copyright, trademark or trade secrets; to liability under Section 2.191 for claims for personal injury or damage to property caused by the gross negligence or willful misconduct of the Contractor; to claims covered by other specific provisions of this Contract calling for liquidated damages; or to court costs or attorney's fees awarded by a court in addition to damages after litigation based on this Contract.

2.202 Excusable Failure

Neither party will be liable for any default, damage or delay in the performance of its obligations under the Contract to the extent such default, damage or delay is caused by government regulations or requirements (executive, legislative, judicial, military or otherwise), power failure, electrical surges or current fluctuations, lightning, earthquake, war, water or other forces of nature or acts of God, delays or failures of transportation, equipment shortages, suppliers' failures, or acts or omissions of common carriers, fire; riots, civil disorders; strikes or other labor disputes, embargoes; injunctions (provided the injunction was not issued as a result of any fault or negligence of the party seeking to have its default or delay excused); or any other cause beyond the reasonable control of such party; provided the non-performing party and its Subcontractors are without fault in causing such default or delay, and such default or delay could not have been prevented by reasonable precautions and cannot reasonably be circumvented by the non-performing party through the use of alternate sources, workaround plans or other means, including disaster recovery plans.

In such event, the non-performing party will be excused from any further performance or observance of the obligation(s) so affected for as long as such circumstances prevail and such party continues to use its commercially reasonable efforts to recommence performance or observance whenever and to whatever extent possible without delay and provided further that such party promptly notifies the other party in writing of the inception of the excusable failure occurrence, and also of its abatement or cessation.

If any of the above-enumerated circumstances substantially prevent, hinder, or delay Contractor's performance of the Services/provision of Deliverables for more than ten (10) Business Days, and the State determines that performance is not likely to be resumed within a period of time that is satisfactory to the State in its reasonable discretion, then at the State's option: (a) the State may procure the affected Services/Deliverables from an alternate source, and the State shall not be liable for payment for the unperformed Services/ Deliverables not

provided under the Contract for so long as the delay in performance shall continue; (b) the State may terminate any portion of the Contract so affected and the charges payable there under shall be equitably adjusted to reflect those Services/Deliverables terminated; or (c) the State may terminate the affected Statement of Work without liability to Contractor as of a date specified by the State in a written notice of termination to Contractor, except to the extent that the State shall pay for Services/Deliverables provided through the date of termination.

Contractor will not have the right to any additional payments from the State as a result of any Excusable Failure occurrence or to payments for Services not rendered/Deliverables not provided as a result of the Excusable Failure condition. Defaults or delays in performance by Contractor which are caused by acts or omissions of its Subcontractors will not relieve Contractor of its obligations under the Contract except to the extent that a Subcontractor is itself subject to an Excusable Failure condition described above and Contractor cannot reasonably circumvent the effect of the Subcontractor's default or delay in performance through the use of alternate sources, workaround plans or other means.

2.203 Disaster Recovery

Contractor and the State recognize that the State provides essential services in times of natural or man-made disasters. Therefore, except as so mandated by Federal disaster response requirements, Contractor personnel dedicated to providing Services/Deliverables under this Contract will provide the State with priority service for repair and work around in the event of a natural or manmade disaster.

2.210 Termination/Cancellation by the State

The State may terminate this Contract without further liability or penalty to the State, its departments, divisions, agencies, offices, commissions, officers, agents and employees for any of the following reasons:

2.211 Termination for Cause

(a) In the event that Contractor breaches any of its material duties or obligations under this Contract which are either not capable of or subject to being cured, or are not cured within the time period specified in the written notice of breach provided by the State (such time period not to be less than thirty (30) days), or pose a serious and imminent threat to the health and safety of any person, or the imminent loss, damage or destruction of any real or tangible personal property as set forth in Section 2.191 (a), the State may, having provided written notice of termination to Contractor, terminate this Contract in whole or in part, for cause, as of the date specified in the notice of termination.

(b) In the event that this Contract is terminated for cause, in addition to any legal remedies otherwise available to the State by law or equity, Contractor shall be liable for direct damages proven by the State up to the Limitation of Liability in Section 2.201. Reasonable, customary and ordinary re-procurement costs shall be considered direct damages for purposes of this Contract., and shall not be considered by the parties to be consequential, indirect or incidental damages, and shall not be excluded by any other terms otherwise included in this Contract, provided such costs shall be limited to the damages, and shall be subject to the Limitation of Liability in Section 2.201..

(c) In the event the State chooses to partially terminate this Contract for cause, charges payable under this Contract will be equitably adjusted to reflect those Services/Deliverables that are terminated and the State shall pay for all Services/Deliverables for which acceptance has been granted provided up to the termination date. Services and related provisions of this Contract that are terminated for cause shall cease on the effective date of the termination.

(d) In the event this Contract is terminated for cause pursuant to this Section, and it is determined, for any reason, that Contractor was not in breach of contract pursuant to the provisions of this section, that termination for cause shall be deemed to have been a termination for convenience, effective as of the same date, and the rights and obligations of the parties shall be limited to that otherwise provided in this Contract for a termination for convenience.

2.212 Termination for Convenience

The State may terminate this Contract for its convenience, in whole or part, if the State determines that such a termination is in the State's best interest. Reasons for such termination shall be left to the sole discretion of

the State and may include, but not necessarily be limited to (a) the State no longer needs the Services or products specified in the Contract, (b) relocation of office, program changes, changes in laws, rules, or regulations make implementation of the Services no longer practical or feasible, (c) unacceptable prices for Additional Services or New Work requested by the State, or (d) falsification or misrepresentation, by inclusion or non-inclusion, of information material to a response to any RFP issued by the State. The State may terminate this Contract for its convenience, in whole or in part, by giving Contractor written notice at least thirty (30) days prior to the date of termination. If the State chooses to terminate this Contract in part, the charges payable under this Contract shall be equitably adjusted to reflect those Services/Deliverables that are terminated. Services and related provisions of this Contract that are terminated for cause shall cease on the effective date of the termination.

2.213 Non-Appropriation

(a) Contractor acknowledges that, if this Contract extends for several fiscal years, continuation of this Contract is subject to appropriation or availability of funds for this Contract. If funds to enable the State to effect continued payment under this Contract are not appropriated or otherwise made available, the State shall have the right to terminate this Contract and all affected Statements of Work, in whole or in part, at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The State shall give Contractor at least thirty (30) days advance written notice of termination for non-appropriation or unavailability (or such time as is available if the State receives notice of the final decision less than thirty (30) days before the funding cutoff).

(b) If funding for the Contract is reduced by law, or funds to pay Contractor for the agreed-to level of the Services or production of Deliverables to be provided by Contractor are not appropriated or otherwise made available, the State may, upon thirty (30) days written notice to Contractor, reduce the level of the Services or the change the production of Deliverables in such manner and for such periods of time as the State may elect. The parties will negotiate a new Statement of Work and fees in the event this clause is exercised.

(c) In the event the State terminates this Contract, eliminates certain Deliverables, or reduces the level of Services to be provided by Contractor pursuant to this Section, the State shall pay Contractor for all Work-in-Process performed through the effective date of the termination or reduction in level, as the case may be and as determined by mutual agreement of the parties, to the extent funds are available. For the avoidance of doubt, this Section will not preclude Contractor from reducing or stopping Services/Deliverables and/or raising against the State in a court of competent jurisdiction, any claim for a shortfall in payment for Services performed or Deliverables finally accepted before the effective date of termination.

2.214 Criminal Conviction

The State may terminate this Contract immediately and without further liability or penalty in the event Contractor, an officer of Contractor, or an owner of a 25% or greater share of Contractor is convicted of a criminal offense incident to the application for, or performance of, a State, public or private Contract or subcontract; convicted of a criminal offense, including any of the following: embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property, attempting to influence a public employee to breach the ethical conduct standards for State of Michigan employees; convicted under State or federal antitrust statutes; or convicted of any other criminal offense which in the sole discretion of the State reflects upon Contractor's business integrity.

2.215 Approvals Rescinded

The State may terminate this Contract without further liability or penalty in the event any final administrative or judicial decision or adjudication disapproves a previously approved request for purchase of personal services pursuant to Constitution 1963, Article 11, § 5, and Civil Service Rule 7-1. Termination may be in whole or in part and may be immediate as of the date of the written notice to Contractor or may be effective as of the date stated in such written notice.

2.216 Rights and Obligations Upon Termination

(a) If this Contract is terminated by the State for any reason, Contractor shall (a) stop all work as specified in the notice of termination, (b) take any action that may be necessary, or that the State may direct, for preservation and protection of Deliverables or other property derived or resulting from this Contract that

may be in Contractor's possession, (c) return all materials and property provided directly or indirectly to Contractor by any entity, agent or employee of the State, (d) in the event that the Contractor maintains title in Deliverables that is intended to be transferred to the State at the termination of the Contract, Contractor will transfer title in, and deliver to, the State, unless otherwise directed, all Deliverables intended to be transferred to the State at the termination of the Contract and which are resulting from the Contract (which shall be provided to the State on an "As-Is" basis except to the extent the amounts paid by the State in respect of such items included compensation to Contractor for the provision of warranty services in respect of such materials), and (e) take any action to mitigate and limit any potential damages, or requests for Contractor adjustment or termination settlement costs, to the maximum practical extent, including terminating or limiting as otherwise applicable those subcontracts and outstanding orders for material and supplies resulting from the terminated Contract.

(b) In the event the State terminates this Contract prior to its expiration for its own convenience, the State shall pay Contractor for all charges due for Services provided prior to the date of termination and, if applicable, as a separate item of payment pursuant to this Contract, for Work In Process, on a percentage of completion basis at the level of completion determined by the State. Regardless of the basis for the termination, the State shall not be obligated to pay, or otherwise compensate, Contractor for any lost expected future profits, costs or expenses incurred with respect to Services not actually performed for the State.

(c) Upon a good faith termination, and to the extent permitted under the terms of the relevant subcontracts and agreements for services and Deliverables, the State shall have the right to assume, at its option, any and all subcontracts and agreements for services and deliverables provided under this Contract, and may further pursue completion of the Services/Deliverables under this Contract by replacement contract or otherwise as the State may in its sole judgment deem expedient.

2.217 Reservation of Rights

Any termination of this Contract or any Statement of Work issued under it by a party shall be with full reservation of, and without prejudice to, any rights or remedies otherwise available to such party with respect to any claims arising prior to or as a result of such termination.

2.218 Contractor Transition Responsibilities

In the event this contract is terminated, for convenience or cause, dissolved, voided, rescinded, nullified, expires or is otherwise rendered unenforceable, the Contractor agrees to comply with direction provided by the State to assist in the orderly transition of equipment, services, software, leases, etc. to the State or a third party designated by the State. In the event of termination or the expiration of this Contract, the Contractor agrees to make all reasonable efforts to effect an orderly transition of services within a reasonable period of time that in no event will exceed one hundred eighty (180) days. These efforts shall include, but are not limited to, the following:

(a) Personnel - The Contractor shall work with the State, or a specified third party, to develop a transition plan setting forth the specific tasks and schedule to be accomplished by the parties, to effect an orderly transition. The Contractor shall allow as many personnel as practicable to remain on the job to help the State, or a specified third party, maintain the continuity and consistency of the services required by this Contract. In addition, during or following the transition period, in the event the State requires the Services of the Contractor's subcontractors or Contractors, as necessary to meet its needs, Contractor agrees to reasonably, and with good-faith, work with the State to use the Services of Contractor's subcontractors or Contractors. Contractor will notify all of Contractor's subcontractors of procedures to be followed during transition. Payments shall be made pursuant to Article 1, Attachment A, Table 3.

(b) Information - The Contractor agrees to provide reasonable detailed specifications in the applicable SOW for all Services/Deliverables needed by the State, or specified third party, to properly provide the Services/Deliverables required under this Contract. The Contractor will provide the State with asset management data generated from the inception of this Contract through the date on which this Contractor is terminated in a comma-delineated format unless otherwise requested by the State. The Contractor will deliver to the State any remaining owed reports and documentation still in Contractor's possession subject to appropriate payment by the State.

(c) Software. - The Contractor shall reasonably assist the State in the acquisition of any Contractor software required to perform the Services/use the Deliverables under this Contract. This shall include any

documentation being used by the Contractor to perform the Services under this Contract. If the State transfers any software licenses to the Contractor, those licenses shall, upon expiration of the Contract, transfer back to the State at their current revision level. Upon notification by the State, Contractor may be required to freeze all non-critical changes to Deliverables/Services.

(d) Payment - If the transition results from a termination for any reason, reimbursement shall be governed by the termination provisions of this Contract. If the transition results from expiration, the Contractor will be reimbursed for all reasonable transition costs (i.e. costs incurred within the agreed period after contract expiration that result from transition operations) at the rates specified by **Article 1, Attachment A, Table 3**. The Contractor will prepare an accurate accounting from which the State and Contractor may reconcile all outstanding accounts.

2.219 State Transition Responsibilities

In the event that this Contract is terminated, dissolved, voided, rescinded, nullified, or otherwise rendered unenforceable, the State agrees to perform the following obligations, and any others upon which the State and the Contractor agree:

(a) Reconciling all accounts between the State and the Contractor;
(b) Completing any pending post-project reviews
(c) Pay outstanding fees and expenses.

2.220 Termination by Contractor

2.221 Termination by Contractor

If the State materially breaches its obligation to pay Contractor undisputed amounts due and owing under this Contract in accordance with **Section 2.090**, or if the State breaches its other obligations under this Contract to an extent that makes it impossible or commercially impractical for Contractor to perform the Services, and if the State does not cure the breach within the time period specified in a written notice of breach provided to the State by Contractor (such time period not to be less than thirty (30) days), then Contractor may terminate this Contract, in whole or in part based on Statement of Work for cause, as of the date specified in the notice of termination; provided, however, that Contractor must discharge its obligations under **Section 2.250** before any such termination.

2.230 Stop Work

2.231 Stop Work Orders

The State may, at any time, by written stop work order to Contractor, require that Contractor stop all, or any part, of the work called for by the Contract for a period of up to ninety (90) calendar days after the stop work order is delivered to Contractor, and for any further period to which the parties may agree. The stop work order shall be specifically identified as such and shall indicate that it is issued under this **Section 2.230**. Upon receipt of the stop work order, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the stop work order during the period of work stoppage. Within the period of the stop work order, the State shall either: (a) cancel the stop work order; or (b) terminate the work covered by the stop work order as provided in **Section 2.210**.

2.232 Cancellation or Expiration of Stop Work Order

If a stop work order issued under this **Section 2.230** is canceled or the period of the stop work order or any extension thereof expires, Contractor shall resume work. The parties shall agree upon an equitable adjustment in the delivery schedule, the Contract price, or both, and the Contract shall be modified, in writing, accordingly, if: (a) the stop work order results in an increase in the time required for, or in Contractor's costs properly allocable to, the performance of any part of the Contract; and (b) Contractor asserts its right to an equitable adjustment within thirty (30) calendar days after the end of the period of work stoppage; provided that, if the State decides the facts justify the action, the State may receive and act upon a Contractor proposal submitted at any time before final payment under the Contract. Any adjustment will conform to the requirements of **Section 2.106.**

2.233 Allowance of Contractor Costs

If the stop work order is not canceled and the work covered by the stop work order is terminated for reasons other than material breach, such termination shall be deemed to be a termination for convenience under **Section 2.212**, and the State shall allow reasonable costs resulting from the stop work order in arriving at the termination settlement. For the avoidance of doubt, the State shall not be liable to Contractor for loss of profits because of a stop work order issued under this **Section 2.230**.

2.240 Reserved

2.250 Dispute Resolution

2.251 In General

Any claim, counterclaim, or dispute between the State and Contractor arising out of or relating to the Contract or any Statement of Work shall be resolved as follows. For all Contractor claims seeking an increase in the amounts payable to Contractor under the Contract, or the time for Contractor's performance, Contractor shall submit a letter executed by Contractor's single point of contact (SPOC) or his designee certifying that (a) the claim is made in good faith, (b) the amount claimed accurately reflects the adjustments in the amounts payable to Contractor or the time for Contractor's performance for which Contractor believes the State is liable and covers all costs of every type to which Contractor is entitled from the occurrence of the claimed event, and (c) the supporting data provided with such an affidavit are current and complete to Contractor's best knowledge and belief.

2.252 Informal Dispute Resolution

(a) All operational disputes between the parties shall be resolved under the Contract Management procedures developed pursuant to **Section 2.100**. If the parties are unable to resolve any disputes after compliance with such processes, the parties shall meet with the Director of Purchasing Operations, DMB, or designee, for the purpose of attempting to resolve such dispute without the need for formal legal proceedings, as follows:

(i) The representatives of Contractor and the State shall meet as often as the parties reasonably deem necessary in order to gather and furnish to each other all information with respect to the matter in issue which the parties believe to be appropriate and germane in connection with its resolution. The representatives shall discuss the problem and negotiate in good faith in an effort to resolve the dispute without the necessity of any formal proceeding.

(ii) During the course of negotiations, all reasonable requests made by one party to another for non-privileged information reasonably related to the Contract will be honored in order that each of the parties may be fully advised of the other's position.

(iii) The specific format for the discussions will be left to the discretion of the designated State and Contractor representatives, but may include the preparation of agreed upon statements of fact or written statements of position.

(iv) Following the completion of this process within sixty (60) calendar days, the Director of Purchasing Operations, DMB, or designee, shall issue a written opinion regarding the issue(s) in dispute within thirty (30) calendar days. The opinion regarding the dispute shall be considered the State's final action and the exhaustion of administrative remedies.

(b) This **Section 2.250** will not be construed to prevent either party from instituting, and a party is authorized to institute, formal proceedings earlier to avoid the expiration of any applicable limitations period, to preserve a superior position with respect to other creditors, or pursuant to **Section 2.253**.

(c) The State will not mediate disputes between the Contractor and any other entity, except state agencies, concerning responsibility for performance of work pursuant to the Contract.

2.253 Injunctive Relief

The only circumstance in which disputes between the State and Contractor will not be subject to the provisions of **Section 2.252** is where a party makes a good faith determination that a breach of the terms of the Contract by the other party is such that the damages to such party resulting from the breach will be so immediate, so

large or severe and so incapable of adequate redress after the fact that a temporary restraining order or other immediate injunctive relief is the only adequate remedy.

2.254 Continued Performance

Each party agrees to continue performing its obligations under the Contract while a dispute is being resolved except to the extent the issue in dispute precludes performance (dispute over payment shall not be deemed to preclude performance) and without limiting either party's right to terminate the Contract as provided in **Section 2.210** and **2.220**, as the case may be.

2.260 Federal and State Contract Requirements

2.261 Nondiscrimination

In the performance of the Contract, Contractor agrees not to discriminate against any employee or applicant for employment, with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, religion, national origin, ancestry, age, sex, height, weight, marital status, physical or mental disability. Contractor further agrees that every subcontract entered into for the performance of this Contract or any purchase order resulting from this Contract will contain a provision requiring non-discrimination in employment, as specified here, binding upon each Subcontractor. This covenant is required pursuant to the Elliot Larsen Civil Rights Act, 1976 PA 453, MCL 37.2101, *et seq*., and the Persons with Disabilities Civil Rights Act, 1976 PA 220, MCL 37.1101, *et seq*., and any breach of this provision may be regarded as a material breach of the Contract.

2.262 Unfair Labor Practices

Pursuant to 1980 PA 278, MCL 423.231, *et seq*., the State shall not award a Contract or subcontract to an employer whose name appears in the current register of employers failing to correct an unfair labor practice compiled pursuant to section 2 of the Act. This information is compiled by the United States National Labor Relations Board. A Contractor of the State, in relation to the Contract, shall not enter into a contract with a Subcontractor, manufacturer, or supplier whose name appears in this register. Pursuant to section 4 of 1980 PA 278, MCL 423.324, the State may void any Contract if, subsequent to award of the Contract, the name of Contractor as an employer or the name of the Subcontractor, manufacturer or supplier of Contractor appears in the register.

2.263 Workplace Safety and Discriminatory Harassment

In performing Services for the State, the Contractor shall comply with the Department of Civil Services Rule 2-20 regarding Workplace Safety and Rule 1-8.3 regarding Discriminatory Harassment. In addition, the Contractor shall comply with Civil Service regulations and any applicable agency rules provided to the Contractor. For Civil Service Rules, see http://www.mi.gov/mdcs/0,1607,7-147-6877---,00.html.

2.270 Litigation

2.271 Disclosure of Litigation

(a) Disclosure. Contractor must disclose any material criminal litigation, investigations or proceedings involving the Contractor (and each Subcontractor) or any of its officers or directors or any litigation, investigations or proceedings under the Sarbanes-Oxley Act. In addition, each Contractor (and each Subcontractor) must notify the State of any material civil litigation, arbitration or proceeding which arises during the term of the Contract and extensions thereto, to which Contractor (or, to the extent Contractor is aware, any Subcontractor hereunder) is a party, and which involves: (i) disputes that might reasonably be expected to adversely affect the viability or financial stability of Contractor or any Subcontractor hereunder; or (ii) a claim or written allegation of fraud against Contractor or, to the extent Contractor is aware, any Subcontractor hereunder by a governmental or public entity arising out of their business dealings with governmental or public entities. Any such litigation, investigation, arbitration or other proceeding (collectively, "Proceeding") must be disclosed in a written statement to the Contract Administrator within thirty (30) days of its occurrence. Details of settlements which are prevented from disclosure by the terms of the settlement may be annotated as such.

Information provided to the State from Contractor's publicly filed documents referencing its material litigation will be deemed to satisfy the requirements of this Section.

(b) Assurances. In the event that any such Proceeding disclosed to the State pursuant to this Section, or of which the State otherwise becomes aware, during the term of this Contract would cause a reasonable party to be concerned about:

(i) the ability of Contractor (or a Subcontractor hereunder) to continue to perform this Contract in accordance with its terms and conditions, or

(ii) whether Contractor (or a Subcontractor hereunder) in performing Services for the State is engaged in conduct which is similar in nature to conduct alleged in such Proceeding, which conduct would constitute a breach of this Contract or a violation of Michigan law, regulations or public policy, then Contractor shall be required to provide the State all reasonable assurances requested by the State to demonstrate that:

(A) Contractor and/or its Subcontractors hereunder will be able to continue to perform this Contract and any Statements of Work in accordance with its terms and conditions, and

(B) Contractor and/or its Subcontractors hereunder have not and will not engage in conduct in performing the Services which is similar in nature to the conduct alleged in such Proceeding.

(c) Contractor shall make the following notifications in writing:

(1) Within thirty (30) days of Contractor becoming aware that a change in its ownership or officers has occurred, or is certain to occur, or a change that could result in changes in the valuation of its capitalized assets in the accounting records, Contractor shall notify the Office of Purchasing Operations.

(2) Contractor shall also notify the Office of Purchasing Operations within thirty (30) days whenever changes to asset valuations or any other cost changes have occurred or are certain to occur as a result of a change in ownership or officers.

(3) Contractor shall also notify Purchasing Operations within thirty (30) days whenever changes to company affiliations occur.

2.272 Governing Law

The Contract shall in all respects be governed by, and construed in accordance with, the substantive laws of the State of Michigan without regard to any Michigan choice of law rules that would apply the substantive law of any other jurisdiction to the extent not inconsistent with, or pre-empted by federal law.

2.273 Compliance with Laws

Contractor shall comply with all applicable state, federal, and local laws and ordinances ("Applicable Laws") in providing the Services/Deliverables.

2.274 Jurisdiction

Any dispute arising from the Contract shall be resolved in the State of Michigan. With respect to any claim between the parties, Contractor consents to venue in Ingham County, Michigan, and irrevocably waives any objections it may have to such jurisdiction on the grounds of lack of personal jurisdiction of such court or the laying of venue of such court or on the basis of forum non conveniens or otherwise. Contractor agrees to appoint agents in the State of Michigan to receive service of process.

2.280 Environmental Provision

2.281 Environmental Provision

For the purposes of this Section, "Hazardous Materials" is a generic term used to describe asbestos, ACBMs, PCBs, petroleum products, such construction materials as paint thinners, solvents, gasoline, oil, etc., and any other material the manufacture, use, treatment, storage, transportation or disposal of which is regulated by the federal, state or local laws governing the protection of the public health, natural resources or the environment. This includes, but is not limited to, materials such as batteries and circuit packs, and other materials that are regulated as (1) "Hazardous Materials" under the Hazardous Materials Transportation Act, (2) "chemical

hazards" under the Occupational Safety and Health Administration standards, (3) "chemical substances or mixtures" under the Toxic Substances Control Act, (4) "pesticides" under the Federal Insecticide Fungicide and Rodenticide Act, and (5) "hazardous wastes" as defined or listed under the Resource Conservation and Recovery Act. This Contract does not cover the handling, removal, or disposal of all Hazardous Materials.

(a) The Contractor shall use, handle, store, dispose of, process, transport and transfer any material considered a Hazardous Material in accordance with all federal, State and local laws. The State shall provide a safe and suitable environment for performance of Contractor's Work. Prior to the commencement of Work, the State shall advise Contractor of the presence at the work site of any Hazardous Material to the extent that the State is aware of such Hazardous Material. If the Contractor encounters material reasonably believed to be a Hazardous Material and which may present a substantial danger, the Contractor shall immediately stop all affected Work, give written notice to the State of the conditions encountered, and take appropriate health and safety precautions.

(b) Upon receipt of a written notice, the State will investigate the conditions. If (a) the material is a Hazardous Material that may present a substantial danger, and (b) the Hazardous Material was not brought to the site by the Contractor, or does not result in whole or in part from any violation by the Contractor of any laws covering the use, handling, storage, disposal of, processing, transport and transfer of Hazardous Materials, the State shall order a suspension of Work in writing. The State shall proceed to have the Hazardous Material removed or rendered harmless. In the alternative, the State shall terminate the affected Work for the State's convenience.

(c) Once the Hazardous Material has been removed or rendered harmless by the State, the affected Work shall be resumed as directed in writing by the State. Any determination by the Michigan Department of Community Health and/or the Michigan Department of Environmental Quality (whichever is applicable) that the Hazardous Material has either been removed or rendered harmless shall be binding upon the State and Contractor for the purposes of resuming the Work. If any such incident with Hazardous Material results in delay not reasonable anticipatable under the circumstances and which is attributable to the State, the applicable SLAs for the affected Work will not be counted in **Section 2.076** for a time as mutually agreed by the parties.

(d) If the Hazardous Material was brought to the site by the Contractor, or results in whole or in part from any violation by the Contractor of any laws covering the use, handling, storage, disposal of, processing, transport and transfer of Hazardous Material, or from any other act or omission within the control of the Contractor, the Contractor shall bear its proportionate share of the delay and costs involved in cleaning up the site and removing and rendering harmless the Hazardous Material in accordance with Applicable Laws to the condition approved by applicable regulatory agency(ies). If the Contractor fails to take appropriate action pursuant to Applicable Laws and consistent with the State requirements, then the State may take appropriate action.

2.290 General

2.291 Amendments

The Contract may not be modified, amended, extended, or augmented, except by a writing executed by the parties.

2.292 Assignment

(a) Neither party shall have the right to assign the Contract, or to assign or delegate any of its duties or obligations under the Contract, to any other party (whether by operation of law or otherwise), without the prior written consent of the other party; provided, however, that the State may assign the Contract to any other State agency, department, division or department without the prior consent of Contractor and Contractor may assign the Contract to an affiliate so long as such affiliate is adequately capitalized and can provide adequate assurances that such affiliate can perform the Contract. Any purported assignment in violation of this Section shall be null and void. It is the policy of the State of Michigan to withhold consent from proposed assignments, subcontracts, or novations when such transfer of responsibility would operate to decrease the State's likelihood of receiving performance on the Contract or the State's ability to recover damages. The foregoing shall not apply in the event that Contractor changes its corporation's name or assigns the Contract to an entity acquiring all or substantially all of the assets or outstanding capital stock of Contractor. Contractor will provide written

notification to the State of Michigan Contract Administrator within 10 business days of the name change or acquisition.

(b) Contractor may not, without the prior written approval of the State, assign its right to receive payments due under the Contract. In the event of any such permitted assignment, Contractor shall not be relieved of its responsibility to perform any duty imposed upon it herein, and the requirement under the Contract that all payments shall be made to one entity shall continue.

2.293 Entire Contract; Order of Precedence

(a) The Contract, including any Statements of Work, Attachments, Appendices and Exhibits, to the extent not contrary to the Contract, each of which is incorporated for all purposes, constitutes the entire agreement between the parties with respect to the subject matter and supersedes all prior agreements, whether written or oral, with respect to such subject matter and as additional terms and conditions on the purchase order shall apply as limited by **Section 2.061**.

(b) In the event of any inconsistency between the terms of the Contract and a Statement of Work, the terms of the Statement of Work will take precedence (as to that Statement of Work only); provided, however, that a Statement of Work may not modify or amend the terms of **Sections 2.110 through 2.220** of the Contract, which may be modified or amended only by a formal Contract amendment.

2.294 Headings

Captions and headings used in the Contract are for information and organization purposes. Captions and headings, including inaccurate references, do not, in any way, define or limit the requirements or terms and conditions of the Contract.

2.295 Relationship of the Parties (Independent Contractor Relationship)

The relationship between the State and Contractor is that of client and independent Contractor. No agent, employee, or servant of Contractor or any of its Subcontractors shall be or shall be deemed to be an employee, agent or servant of the State for any reason. Contractor will be solely and entirely responsible for its acts and the acts of its agents, employees, servants and Subcontractors during the performance of the Contract.

2.296 Notices

(a) Any notice given to a party under the Contract shall be deemed effective, if addressed to such party as addressed below, upon: (i) delivery, if hand delivered; (ii) receipt of a confirmed transmission by facsimile if a copy of the notice is sent by another means specified in this Section; (iii) the third (3rd) Business Day after being sent by U.S. mail, postage pre-paid, return receipt requested; or (iv) the next Business Day after being sent by a nationally recognized overnight express courier with a reliable tracking system.

State of Michigan
Office of Purchasing Operations
Steve Motz
PO Box 30026
530 West Allegan
Lansing, Michigan 48909

with a copy to:
State of Michigan
Department of Information Technology
Barb Suska
Constitution Hall 1st Floor North Tower
525 W. Allegan Street
Lansing, MI 48913

Contractor(s): Memex, Inc.
Neil Schlisserman
1595 Spring Hill Road, Suite 200
Vienna, VA 22182 USA

Either party may change its address where notices are to be sent by giving notice in accordance with this Section.

(b) Binding Commitments

Representatives of Contractor identified in **Article 1, Section 1.201 Contractor Staff, Roles and Responsibilities** shall have the authority to make binding commitments on Contractor's behalf within the bounds set forth in such table. Contractor may change such representatives from time to time upon written notice.

2.297 Media Releases and Contract Distribution

(a) Media Releases

Neither Contractor nor the State will make any news releases, public announcements or public disclosures, nor will they have any conversations with representatives of the news media, pertaining to the Contract, the Services or the Contract without the prior written approval of the other party, whose approval shall not be unreasonably withheld and then only in accordance with explicit written instructions provided by that party. In addition, neither Contractor nor the State will use the name, trademarks or other proprietary identifying symbol of the other party or its affiliates without such party's prior written consent. Prior written consent of the Contractor must be obtained from authorized representatives.

(b) Contract Distribution

Purchasing Operations shall retain the sole right of Contract distribution to all State agencies and local units of government unless other arrangements are authorized by Purchasing Operations.

2.298 Reformation and Severability

Each provision of the Contract shall be deemed to be severable from all other provisions of the Contract and, if one or more of the provisions of the Contract shall be declared invalid, the remaining provisions of the Contract shall remain in full force and effect.

2.299 Consents and Approvals

Except as expressly provided otherwise in the Contract, if either party requires the consent or approval of the other party for the taking of any action under the Contract, such consent or approval shall be in writing and shall not be unreasonably withheld or delayed.

2.300 No Waiver of Default

The failure of a party to insist upon strict adherence to any term of the Contract shall not be considered a waiver or deprive the party of the right thereafter to insist upon strict adherence to that term, or any other term, of the Contract.

2.301 Survival

Any provisions of the Contract that impose continuing obligations on the parties including the parties' respective warranty, indemnity and confidentiality obligations, shall survive the expiration or termination of the Contract for any reason. Specific references to survival in the Contract are solely for identification purposes and not meant to limit or prevent the survival of any other section.

2.302 Covenant of Good Faith

Each party agrees that, in its dealings with the other party or in connection with the Contract, it shall act reasonably and in good faith. Unless stated otherwise in the Contract, the parties will not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required of them in order for the other party to perform its responsibilities under the Contract.

2.303 Permits

Contractor shall obtain and pay any associated costs for all required governmental permits, licenses and approvals for the delivery, installation and performance of the Services. The State shall pay for all costs and expenses incurred in obtaining and maintaining any necessary easements or right of way.

2.304 Website Incorporation

State expressly states that it will not be bound by any content on the Contractor's website, even if the Contractor's documentation specifically referenced that content and attempts to incorporate it into any other communication, unless the State has actual knowledge of such content and has expressly agreed to be bound by it in a writing that has been manually signed by an authorized representation of the State.

2.305 Taxes

Contractors are expected to collect and pay all applicable federal, state, and local employment taxes, including the taxes defined in Section 3.022 for all persons involved in the resulting Contract.

The State may refuse to award a contract to any Contractor who has failed to pay any applicable State taxes. The State may refuse to accept Contractor's bid, if Contractor has any outstanding debt with the State. Prior to any award, the State will verify whether Contractor has any outstanding debt with the State.

2.306 Prevailing Wage

The rates of wages and fringe benefits to be paid each class of individuals employed by the Contractor, its subcontractors, their subcontractors, and all persons involved with the performance of this Contract in privity of contract with the Contractor shall not be less than the wage rates and fringe benefits established by the Michigan Department of Labor and Economic Development, Wage and Hour Bureau, schedule of occupational classification and wage rates and fringe benefits for the local where the work is to be performed. The term Contractor shall include all general contractors, prime contractors, project managers, trade contractors, and all of their contractors or subcontractors and persons in privity of contract with them.

The Contractor, its subcontractors, their subcontractors, and all persons involved with the performance of this contract in privity of contract with the Contractor shall keep posted on the work site, in a conspicuous place, a copy of all wage rates and fringe benefits as prescribed in the contract. You must also post, in a conspicuous place, the address and telephone number of the Michigan Department of Labor and Economic Development, the office responsible for enforcement of the wage rates and fringe benefits. You shall keep an accurate record showing the name and occupation of the actual wage and benefits paid to each individual employed in connection with this contract. This record shall be available to the State upon request for reasonable inspection.

If any trade is omitted from the list of wage rates and fringe benefits to be paid to each class of individuals by the Contractor, it is understood that the trades omitted shall also be paid not less than the wage rate and fringe benefits prevailing in the local where the work is to be performed.

2.307 Call Center Disclosure

Contractor and/or all subcontractors involved in the performance of this Contract providing call or contact center services to the State must disclose the location of its call or contact center services to inbound callers. Failure to disclose this information shall be a material breach of this Contract. The state may require all call center staff to complete background checks.

2.308 Future Bidding Preclusion

Contractor acknowledges that, to the extent this Contract involves the creation, research, investigation or generation of a future RFP, it may be precluded from bidding on the subsequent RFP. The State reserves the right to disqualify any bidder if the State determines that the bidder has used its position (whether as an incumbent Contractor, or as a Contractor hired to assist with the RFP development, or as a Contractor offering free assistance) to gain a leading edge on the competitive RFP.

2.310 Reserved

2.320 Extended Purchasing

2.321 MiDEAL

Public Act 431 of 1984 permits DMB to provide purchasing services to any city, village, county, township, school district, intermediate school district, non-profit hospital, institution of higher education, community, or junior college. A current listing of approved program members is available at: http://www.michigan.gov/localgov . Unless otherwise stated, it is the responsibility of the Contractor to ensure that the non-state agency is an authorized purchaser before extending the Contract pricing.

The Contractor will supply Contract Services and equipment at the established State of Michigan contract prices and terms to the extent applicable and where available. Inasmuch as these are non-state agencies, all invoices will be submitted to and payment remitted by the local unit of government on a direct and individual basis.

To the extent that authorized local units of government purchase quantities of Services and/or equipment under this Contract, the quantities of Services and/or equipment purchased will be included in determining the appropriate rate wherever tiered pricing based on quantity is provided.

2.322 RESERVED - State Employee Purchases

2.330 Federal Grant Requirements

2.331 Federal Grant Requirements

The following links contain certifications and terms which may be required for some purchases paid via Federal funds. They are included here to be utilized as required.

Lobbying Certifications are usually for agreements over $100,000. The debarment certification is required for all agreements. The last link is where you can go and search for debarred or suspended contractors.

http://straylight.law.cornell.edu/uscode/html/uscode31/usc_sec_31_00001352----000-.html

http://www.archives.gov/federal_register/codification/executive_order/12549.html

http://www.archives.gov/federal-register/executive-orders/

http://www.epls.gov

Exhibit A
Approved Subcontractors

Electronic Data Systems, LLC (EDS)
930 West Holmes Road
Lansing, MI 48910

Exhibit B

Approved Hardware

Reserved for Contract

Exhibit C

Approved Software

Memex Patriarch
Web Services Interface
Memex i2-Pipe
Memex RISSConnect

Appendix B

Memex Site Guide Outline

Site Guide Section	Overview of Customer and Mission	
Customer Overview and Mission:		
Contact Details 1. Key personnel at site 2. Organization chart		
Locations **1. Customer site** **2. Server sites** **3. User sites**		
Observations		
	Facilitator Assistance Required ☐	**MIOC Reviewer**
Site Guide Section	**Architecture Details**	
Server Hardware Details **1. Hardware type** **2. Hardware specifications** **3. OS and version** **4. Physical access details** **5. Remote access details, if applicable** **6. Server user name and password** **7. Server name, IP address and port number(s)**		

Software Details

1. Installed Memex products with versions
2. License numbers
3. License expiry date
4. Installation date an name of installer
5. Configuration notes (unusual or non-standard)

Client Hardware Details

1. **OS and version**
2. **General description of work stations**
3. **Network infrastructure (local, remote, VPN, etc)**
4. **Standard screen resolution**

Observations

	Facilitator Assistance Required ☐	**MIOC Reviewer**
Site Guide Section	**Procedures and Logistics**	

Backup and Recovery

Location Security

Dress Code and Hotel Logistics

Observations

	Facilitator Assistance Required ☐	**MIOC Reviewer**

Appendix C

Standard Training Outline

Course Outline

Course Title: Memex Patriarch User Training Course

This course is designed for people with no previous experience of the Memex Patriarch application. A basic knowledge of the Windows environment would be useful but is not mandatory. Trainees will be introduced to all the main user functions within Memex Series VI and by the end of the course should have enough expertise to start using the product in a live environment.

DAY ONE
MEMEX SERIES VI Introduction

- Logging In
- Screen elements
- Exiting Memex Patriarch

Working with Records

- Creating reports
- Checking spelling
- Creating Risk Assessments
- Confidential Source Register
- Creating records based on reports
- Updating records
- Flags and interest markers
- Disseminating data

DAY TWO
Searching

- Basic query operators
- Field-based searching
- Free-text searching
- Custom queries
- Reverse searching
- URN searches
- Query History

Linking Records

- Link Charts
- Adding records to link charts
- Linking records
- Unlinking records
- Hiding links
- Deleting links

DAY THREE
Cases

- Creating cases
- Adding records to a case
- Granting write-access to a case
- Deleting records from a case
- Editing other case properties
- Working cases
- Searching cases
- Deleting cases

Security

- Security overview
- Securing records
- Unsecuring records
- Securing cases

Action Management

- Action Manager Overview
- Raising actions
- Responding to actions
- Raising bulletins
- Searching the actions database

DAY FOUR
Query Builder

- Query Builder overview
- Synonym Expansion
- Synonym Verify expansion
- Sound-alike expansion
- Garbled expansion
- Vocabulary expansion
- Editing the personal thesaurus

User Profiles

- Viewing your user profile
- Changing user passwords
- Repeating a query from the query history
- Adding a query profile

Recap

- Summary of topics learned
- Requested topics re-visited
- User forum

Additional Topics

- Supervising reports
- Weeding
- Map Search

Course Outline

Course Title: Memex Series VI System Administrator/Support Training

This course is designed for System Administrators and those intending to install/support the Memex Series VI products. Although no knowledge of Memex Series VI is required, attendees must be familiar with the software platforms involved, e.g. NT, Solaris.

DAY ONE
Getting Started

- Preparing to Install the MIE
- Extracting and Installing the Software
- Obtaining a License Key
- Entering License Details
- Configuring the MIE
- Starting the Memex Servers Automatically

Server Installation

- Installing the Memex Series VI Server
- Installing an Archive Server
- Installing the AppServer
- Server Text Files

Client Installation

- Configuring Network Services
- Installing the Client

DAY TWO
User Management

- User Permissions
- Adding User Groups
- Adding Users
- Modifying Permissions
- Deleting Groups
- Deleting Users

Entity Management

- The Entity Manager
- Changing Entity Properties
- Creating Entities
- Editing Entities
- Forms Designer
- Subrecords

Memex Incorporated
1595 Spring Hill Road, Suite 200, Vienna, VA 22182
703 556 4031 / Fax 703 556 4282
www.memex.com / info@memex.com

Appendix E
SLSA

SOFTWARE LICENSE AND SERVICES AGREEMENT

This Software License and Services Agreement ("Agreement") is between Memex, Inc. (“Memex”) and the Customer identified below. The terms of this Agreement shall apply to each Software license granted and to all services provided by Memex under this Agreement, which will be identified on one or more Ordering Schedules.

Memex Incorporated
1595 Spring Hill Road, Suite 200, Vienna, VA 22182
703 556 4031 / Fax 703 556 4282
www.memex.com / info@memex.com

I. DEFINITIONS

1.1. **"Software"** means the software in object code form distributed by Memex for which Customer is granted a license pursuant to this Agreement, and the media, Documentation and Upgrades therefor.

1.2. **"Documentation"** means the user guides and manuals for installation and use of the Software. Documentation is provided in whatever form is generally available.

1.3. **"Upgrade"** means a change to the Software which Memex generally makes available for Software licenses at no additional license fee other than media and handling charges, provided Customer has ordered Technical Support for such licenses for the relevant time period. Upgrade shall not include any new release, option or future product which Memex licenses separately to the general public.

1.4. **"Ordering Schedule"** means the document in hard copy or electronic form by which Customer orders Software licenses and services, and which is agreed to by the parties. The Ordering Schedule shall reference the Effective Date of this Agreement.

1.5. **"Technical Support"** means Software support provided under Memex's policies, as set forth in Exhibit B, in effect on the date Technical Support is ordered.

1.6. **"Delivery Date"** means the date on which the Software is delivered by Memex to Customer, or if no delivery is necessary, the Effective Date set forth on the relevant Ordering Schedule.

1.7. **"Services"** means Technical Support, training, or consulting services provided by Memex to Customer under this Agreement.

II. SOFTWARE LICENSE

2.1. **Rights Granted**

A. Memex grants to Customer a perpetual, non-exclusive, non-transferrable license to use the Software specified on an Ordering Schedule under this Agreement as of the Delivery Date, as follows:

i. to use the Software solely for Customer's internal operations consistent with the use limitations specified or referenced in this Agreement, an Ordering Schedule, or the Documentation. Customer may not relicense, rent or lease the Software or use the Software for third-party training, commercial time-sharing or service bureau use;

ii. to use the Documentation provided with the Software in support of Customer's authorized use of the Software;

iii. to copy the Software for archival or backup purposes, or as specifically authorized by Memex in an Ordering Schedule. All titles, trademarks, and copyright and restricted rights notices shall be reproduced in such copies;

Customer shall not copy documentation except as specified in this Agreement or an Ordering Schedule.

B. Customer agrees not to: (i) translate, alter, modify, adapt, cause or permit the reverse engineering (unless required by law for interoperability), disassembly or de-compilation or derivative works of the Software; (ii)remove or modify any program markings or any notice of Memex's or its licensors' proprietary rights or (iii) disclose results of any program benchmark tests without Memex's prior written consent.

C. Memex shall retain all title, copyright and other proprietary rights in the Software, Documentation and technical information provided by Licensor relating exclusively to the use or application of the Software, together with any developments or improvements in respect of the same. Customer does not acquire any rights, express or implied, in the Software, other than those specified in this Agreement.

D. Government End Users. The Software was developed solely at private expense and contains proprietary data belonging to Memex and its licensors. Any Software provided to United States Government agencies is provided with "Restricted Rights", and supporting documentation and data to such Software is provided with "Limited Rights", both as defined in FAR 52.227-14. Use, duplication or disclosure of the Software is subject to restrictions set forth in the Commercial Computer Software -- Restricted Rights clause of FAR 52.227-19. For U.S. Department of Defense agencies, the Software is subject to restrictions for commercial computer software, commercial computer software documentation, and technical data pursuant to DFARS 22.227-7015 and DFARS 227.7202.

E. Memex reserves all rights not expressly granted by this Agreement

2.2. **Assignment**

See Section 2.292, Assignment in Contract Number 071B9200243

2.3. **Verification and Audit**

At Memex's written request, not more frequently than annually, Customer shall furnish Memex with a signed certification verifying that the Software are being used pursuant to the provisions of this Agreement and applicable Ordering Schedules.

Memex may audit Customer's use of the Software. Any such audit shall be conducted during regular business hours at Customer's facilities and shall not unreasonably interfere with Customer's business activities. If an audit reveals that Customer has underpaid fees to Memex,

Customer shall be invoiced for such underpaid fees. Audits shall be conducted no more than once annually.

III. TECHNICAL SERVICES

3.1. Technical Support Services
Technical Support services ordered by Customer will be provided as set forth in Exhibit B.

3.2. Consulting and Training Services RESERVED

3.3. Incidental Expenses RESERVED

IV. TERM AND TERMINATION

4.1. Term
The term of this Agreement is set forth in Section 2.032, Contract Term and Section 2.033, Renewal(s), in Contract Number **071B9200XXX**

4.2. Termination for Default
If either party breaches a material term of this agreement and fails to correct the breach within 30 days of written specification of the breach, the other party may terminate this agreement. Except for non-payment of fees, the parties agree to extend the 30 day period for so long as the breaching party continues reasonable efforts to cure the breach. Further, either party shall also have the right to terminate this Agreement immediately if the other party files for liquidation under Chapter 7 of U.S. Bankruptcy law.

4.3. Effect of Termination
Termination of this Agreement or any license shall not limit either party from pursuing other remedies available to it, including injunctive relief, nor shall such termination relieve Customer's obligation to pay all fees that have accrued or are otherwise owed by Customer under any Ordering Schedule. The parties' rights and obligations under Sections 2.1., and Articles IV, V, VI and VII shall survive termination of this Agreement. Upon termination of the license, Customer shall cease using, and shall return or destroy, all copies of the applicable Software.

V. INDEMNITY, WARRANTIES, REMEDIES

5.1. Infringement Indemnity is set forth in Section 2.191 (d), Patent/Copyright Infringement Indemnification in Contract Number 071B9200243

5.2. Warranties and Disclaimers is set forth in Section 2.171 (a), (b), (c) and (d) Warranties and Representations, Section 2.172 (a) Software Warranties, Section 2.174, Physical Media Warranty and Section 2.175, Disclaimer in Contract Number 071B9200243

A.

5.3. Exclusive Remedies See comments to Section 5.2 above

VI. PAYMENT PROVISIONS

6.1. Invoicing and Payment is set forth in Section 1.6 Compensation and Payment in Contract Number 071B9200243

VII. GENERAL TERMS

7.1. Nondisclosure is set forth in Section 2.150 Confidentiality in Contract Number 071B200XXXX

7.2. Governing Law in Section 2.272, Governing Law **in Contract Number 071B200XXXX**

7.3. Jurisdiction in Section 2.274, Jurisdiction **in Contract Number 071B9200243**

7.4. Notice in Section 2.296, Notices **in Contract Number 071B9200243**

7.5. Limitation of Liability in Section 2,201 Limits of Liability **in Contract Number 071B9200243**

7.6. Severability in Section 2.298 Reformation and Severability **in Contract Number 071B9200243**

7.7. Waiver
The waiver by either party of any default or breach of this Agreement shall not constitute a waiver of any other or subsequent default or breach. Except for actions for nonpayment or breach of Memex's proprietary rights in the Software, no action, regardless of form, arising out of this Agreement may be brought by either party more than two years after the cause of action has accrued.

7.8. Export Administration
Export laws and regulations of the United States and any other relevant local export laws and regulations apply to the programs. Customer agrees that such export control laws govern its use of the programs (including technical data) and any services deliverables provided under this agreement, and you agree to comply with all such export laws and regulations (including "deemed export" and "deemed re-export" regulations). Customer agrees that no data, information, program and/or materials resulting from services (or direct product thereof) will be exported, directly or indirectly, in violation of these laws, or will be used for any purpose prohibited by these laws including, without limitation, nuclear, chemical, or biological weapons proliferation, or development of missile technology.

7.9 Force Majeure in Section 2.202 Excusable Failure in Contract Number071B9200243

7.10. UCITA
The Uniform Computer Information Transactions Act does not apply to this agreement.

7.11 Entire Agreement
This Agreement and any Statement of Works and/or Order Schedules attached hereto constitute the complete agreement between the parties and supersedes all prior or contemporaneous agreements or representations, written or oral, concerning the subject matter of this Agreement. This Agreement may not be

modified or amended except in a writing signed by a duly authorized representative of each party; no other act, document, usage or custom shall be deemed to amend or modify this Agreement. It is expressly agreed that the terms of this Agreement and any Ordering Schedule shall supersede the terms in any Customer purchase order or other ordering document.

7.12 **PUBLICITY in Section 2.297 Media Releases and Contract Distribution in Contract Number 071B9200243**

7.13 **Counterparts**
This Agreement may be executed in counterparts by manual or facsimile signature or, all of which shall be regarded as one and the same instrument.

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Memex Incorporated
1595 Spring Hill Road, Suite 200, Vienna, VA 22182
703 556 4031 / Fax 703 556 4282
www.memex.com / info@memex.com

The Effective Date of this Agreement shall be _____.

Executed by Customer:

Authorized Signature:_____

Name:_____

Title:_____

Address:_____

Executed by Memex Inc:

Authorized Signature:_____

Name:_____

Title:_____

Address: 1595 Spring Hill Rd #200,Vienna, VA 22182

EXHIBIT A RESERVED

Memex Incorporated
1595 Spring Hill Road, Suite 200, Vienna, VA 22182
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Exhibit B

Technical Support is covered in Section 1.104 VI, Maintenance and Support