Ebix Insurance No. S200002211

AMENDMENT NO. 5 TO THE AGREEMENT FOR THE PERFORMANCE OF SERVICES BETWEEN THE CITY OF SANTA CLARA, CALIFORNIA, AND N. HARRIS COMPUTER CORPORATION

PREAMBLE

This agreement (Amendment No. 5) is entered into between the City of Santa Clara, California, a chartered California municipal corporation (City) and N. Harris Computer Corporation, a Canadian corporation (Contractor). City and Contractor may be referred to individually as a "Party" or collectively as the "Parties."

RECITALS

- A. The Parties previously entered into an agreement, entitled "Agreement for the Performance of Services by and between the City of Santa Clara, California, and Northstar Utilities Solutions', dated December 7, 2017 (Agreement) for the purpose of having Contractor provide professional services and software related to the Northstar Customer Information System;
- B. The Agreement was previously amended by Amendment No. 1, dated December 1, 2020, Amendment No. 2, dated December 16, 2020, Amendment No. 3, dated January 2, 2024, and Amendment No. 4, dated May 1, 2024. The Agreement and all previous amendments are collectively referred to herein as the "Agreement as Amended'; and
- C. The Parties now wish to amend the Agreement as Amended to increase the maximum compensation by \$112,174 for a revised not-to-exceed amount of \$649,230 for additional work supporting the NorthStar CIS migration and upgrade project.

NOW, THEREFORE, the Parties agree as follows:

AMENDMENT TERMS AND CONDITIONS

- Second Revised Exhibit A of the Agreement as Amended, entitled "Scope of Services", is hereby replaced with Third Revised Exhibit A, attached hereto and incorporated into the Agreement as Amended.
- Second Revised Exhibit B of the Agreement as Amended, entitled "Fee Schedule", is hereby deleted in its entirety and replaced with Third Revised Exhibit B, attached hereto and incorporated into the Agreement as Amended.

 Except as set forth herein, all other terms and conditions of the Agreement as Amended shall remain in full force and effect. In case of a conflict in the terms of the Agreement as Amended and this Amendment No. 5 the provisions of this Amendment No. 5 shall control.

The Parties acknowledge and accept the terms and conditions of this Amendment No. 5 as evidenced by the following signatures of their duly authorized representatives.

CITY OF SANTA CLARA, CALIFORNIA

a chartered California municipal corporation

Approved as to Form:

Signed by:

Marquerite Mulloy

GLEN R. GOOGINS

City Attorney

Dated:

5/9/2025 | 11:23 AM PDT

Signed by:

Jovan D. Grogan

SEADBBDED5C343A

City Manager

City of Santa Clara

1500 Warburton Avenue

Santa Clara, CA 95050

Telephone: (408) 615-2210

Fax: (408) 241-6771

"CITY"

N. HARRIS COMPUTER CORPORATION

A Canadian corporation

Dated:	5/1/2025 3:39 PM PDT	
	Signed by:	
By (Signature):	Vohn Bicconsall E36C19C46111468	
Name:	John Becconsall	
Title:	VP, Sales & Marketing	
Principal Place of		
Business Address:	1 Antares Dr., Ottawa, ON	
Email Address:	JBecconsall@harriscomputer.com	
Telephone:	1 404-307-4077	
Fax:		
	"CONTRACTOR"	

Amendment No. 5 to Agreement/N. Harris Computer Corporation Rev. 10/25/2019

THIRD REVISED EXHIBIT A SCOPE OF SERVICES

The Services to be performed for the City by the Contractor under this Agreement are more fully described in the Statements of Work referenced below. These statements of work are hereby incorporated into this Third Revised Exhibit A.

- 1. "Statement of Work, City of Santa Clara, Northstar Version 6.4 Upgrade" dated August 17, 2017, version 2.1, attached and incorporated into the Agreement executed on December 7, 2017;
- 2. "Statement of Work, City of Santa Clara, Core Automation Suite Subscription" dated August 17, 2017, version 2.1, attached and incorporated into the Agreement executed on December 7, 2017;
- 3. "Statement of Work: City of Santa Clara, Smart Energy Water Integration" dated July 13, 2020, version 1.5, attached and incorporated into Amendment No. 2;
- "Statement of Work: Discovery Engagement to Discuss and Redesign the Energy IP (EIP)" dated March 1, 2024, attached and incorporated into Amendment No. 4; and
- 5. "Statement of Work: Northstar CIS and Add Ons Migration (On Premise), Archive Purge" dated December 20, 2024, attached and incorporated into this Amendment No. 5.

THIRD REVISED EXHIBIT B FEE SCHEDULE

1. MAXIMUM COMPENSATION

Contractor shall bill at the rates and upon the schedules set forth in the five "Statements of Work" documents attached to Third Revised Exhibit A, and such payments are expressly subject to Section 34 of the Agreement, entitled "Retention".

In no event shall the amount billed to the City by Contractor for services under this Agreement exceed Six Hundred Forty-Nine Thousand Two Hundred Thirty Dollars (\$649,230), subject to budget appropriations.

Statement of Work	Total
Statement of Work, City of Santa Clara, Northstar Version 6.4	\$230,055
Upgrade, dated August 17, 2017, version 2.1	
Statement of Work, City of Santa Clara, Core Automation Suite	\$46,593
Subscription, dated August 17, 2017, version 2.1	
Statement of Work for Smart Energy Water Integration, dated July 13,	\$189,551
2020 version 1.5	
Statement of Work: Discovery Engagement to Discuss and Redesign	\$70,857
the Energy IP (EIP) Integration	
\$10,857 Authorized by Amendment No. 4	
Up to \$60,000 may be authorized using Task Order as specified in	
Amendment No. 4	
Statement of Work: Northstar CIS and Add Ons Migration (On	\$112,174
Premise), Archive Purge	
Maximum Compensation	\$649,230

NORTH|STAR™ UTILITIES SOLUTIONS

Statement of Work: NorthStar CIS and Add Ons Migration (On Premise), Archive Purge City of Santa Clara, CA

December 20, 2024

Revision Control

Document Title: Santa Clara – NorthStar CIS Migration

Version	Date Y-M-D	Author	Details / Comments
1	2024-09-05	Andrea Evans	Initial version of the document.
2	2024-10-18	A. Evans	Revisions from Santa Clara Review: Added UAT and post go live support, 1 extra database refresh, fit gap noted, training section added, included CC2 now as migrating to new servers, updated pricing, added discovery workshop, added Archive Purge scope and level of effort
3	2024-11-21	A. Evans	Revisions
4	2024-12-05	A. Evans	Verbiage updates
5		A. Evans	Final Sow reviewed with Luis + Gill Dec. 17 2024
6	2025-01-27	A. Evans	Draft revisions with SC amendment cover and edits, pricing updated for 45 UAT

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I Introduction

City of Santa Clara, hereafter referred to as "Santa Clara", will be migrating the NorthStar CIS, mCare legacy, RAW, CustomerConnect2 and specified add ons from the current OS and database 2012 environments to new Windows 2022 servers and the latest SQL server databases. Santa Clara will be updating the CIS to the most recent software release 6.X.X as part of the migration project. Reports Anywhere will also be updated as a part of this project with overview training, and an additional four weeks of user acceptance testing has been reflected in the level of effort of the project, as well as 1 additional data refresh and additional post go-live support. An archive and purge process has also been incorporated into this project.

Santa Clara will be engaging NorthStar Utilities Solutions, an unincorporated division of N. Harris Computer Corporation ("NorthStar") to assist with the migration to a new environment.

The purpose of this document is to provide information on the scope of work and level of effort associated with NorthStar's involvement with the NorthStar CIS migration.

1.1 Objective

This Statement of Work (SOW) defines the work to be performed by NorthStar, an unincorporated division of N. Harris Computer Corporation, for the NorthStar migration project. This SOW includes a high-level timeline, fees, and other terms and conditions specific to the services requested by Santa Clara. Any additional requests for services that are not defined within this SOW will result in change orders with applicable fees.

Changes to this document shall be made through a change management process as described later in this SOW.

2 Service Description

2.1 Areas within Scope

2.1.1 Migration Scope

All migration activities to be performed remotely, unless otherwise requested.

The scope of this statement of work is to migrate Santa Clara's NorthStar CIS and add on applications from the current 2012 servers to new 2022 servers. NorthStar will also be updating the CIS to the latest release level at the time of migration 6.X. The version release will be verified by the NorthStar Professional Services team during kickoff with Santa Clara.

NorthStar applications to be ported to the new Santa Clara environment include:

- NorthStar CIS Production, Test and Dev Environments
- CustomerConnect2
- mCare Legacy (mCare)
- Reports Anywhere (RAW)
- Executive Information System (EIS)
- Meter Exchange (MEX)
- Rest API
- Automation Platform (AP core)

Migration Notes:

- Additional effort has been added to this project for NorthStar to preserve all efforts to-date in Santa Clara's DEV environment that affect their SEW portal.
- Existing Santa Clara production Servers are:

VSRVPRDNSAP03 (NS Application Server)

VSRVPRDNSMC03 (Mcare)

VSRVPRDNSRA03 (Reports Anywhere)

VSRVPRDNSCC03 (Customer Connect)

2.1.2 Migration Approach

A NorthStar Project Manager (PM) will be the primary point of contact for Santa Clara on the NorthStar CIS migration. The PM has the overall accountability to successfully deliver the services required for a successful migration and software update within agreed upon timeframe and budget. The project team will directly report to the PM and the PM will have the authority and support to manage the project team in the best interest of the project. The PM is also accountable for the following high-level project activities:

- Interface with Santa Clara assigned PM.
- Conduct regular internal project meetings to ensure that all aspects of the project are understood by the team and that progress and risks are properly reported.

- Conduct regular project meetings with Santa Clara and provide regular status reports throughout the migration project.
- Review of project status, schedule, risks, resources as well as any other issues that may affect the success the project.

2.1.3 Additional Discovery Workshop on Custom Modifications and Automation Platform Workflows

- NorthStar and Santa Clara will engage in a discovery workshop to identify custom modifications and current automation platform workflows.
- The intent of this discovery is to confirm what workflows and custom modifications will be included in the migration project, and identify any that may be out of scope, at risk, or are no longer compatible with the upgrade.
- At this time NorthStar cannot guarantee that every current customization or workflow will be compatible and included in the migration project.

2.1.4 NorthStar CIS, EIS, DEV, mCare, CustomerConnect2 (CC2) and Cognos Installation

- Backup the NorthStar CIS, mCare, CustomerConnect2 and Cognos databases from the existing production servers.
- Restore backup and configure database access to new NorthStar servers.
- Install NorthStar CIS, CC2, Cognos, Meter Exchange, mCare Legacy, Executive Information System, Dev, Automation Platform Core applications, and REST API on new servers according to NorthStar 6.X CIS Software and Hardware specifications listed in Appendix A.
- Update applications and databases to NorthStar maintenance to latest release NorthStar CIS 6.X Release version to be determined with the NorthStar Project Manager.
- Install NorthStar Navs and configure access to NorthStar, EIS, RAW, CC2 & mCARe nonproduction instances.
- Perform installation sanity testing prior to turning the system over to Santa Clara for validation.

2.1.5 NorthStar CIS Data Refreshes

NorthStar will perform 3 data refreshes throughout the migration project. The initial data
refresh will be included with the installation of NorthStar 6.X.X for UAT. The second data
refresh will be on mock cutover or UAT and the third will be performed upon Go LIVE
production cutover. Any requests for additional data refreshes will be considered at an
additional cost/schedule impact to the project.

2.1.6 User Acceptance Testing

- Upon deployment and update of the NorthStar CIS into new environment, Santa Clara will
 have thirty (30) business days for acceptance testing, during which time, issues reported
 within the 30 days will be resolved at no charge provided they are part of the original scope
 of work. At that time the Go LIVE will be scheduled on agreement from Santa Clara.
- If a project delay is encountered due to external factors outside of NorthStar's control, and
 User Acceptance Testing needs to extend beyond the 30 business days window for UAT
 remediation testing NorthStar and Santa Clara will analyze the results of this external
 factor on the project timeline to determine if there is a need for a change request to reflect
 a substantial change to the project plan, budget, or timeline.

2.1.7 Training

- Beginning of project: Fit gap to review feature and functionality changes
- 6.4 to 6.X overview training
- Reports Anywhere / Cognos overview training

2.1.8 Go LIVE Cut Over Preparation

• NorthStar and Santa Clara will develop a full checklist of all cut over activities including timing and responsibilities.

2.1.9 Go LIVE Cut Over

- Go LIVE cut over for will be performed over a single weekend. As this work must be performed over a weekend an after-hours premium applies to this service.
- Restore CIS and add on databases backup from production.
- Update the databases to CIS 6.X.X. in test and promote to production.
- Redirect mCare, CC2, EIS and RAW production server(s) to new NorthStar CIS Production environment upon Go LIVE.
- Provide up to 4 hours of dedicated testing support to Santa Clara during Go LIVE weekend.
- Redirect CC2 production server to new NorthStar CIS LIVE environment upon Go LIVE.

2.1.10 Post LIVE

• Provide dedicated post LIVE support for forty-five business days after Go LIVE cut over prior to transition back to NorthStar Support Services.

- Install the NorthStar CIS, EIS, mCare, RAW and CustomerConnect2 applications on the new non-production servers.
- Backup the NorthStar CIS and add on databases from the new production servers.
- Restore backup and configure database access to new non-production server.
- Redirect NorthStar add ons non-production servers to new non-production servers.
- Install and configure EIS, Reports Anywhere, CustomerConnect2 and mCare add-on applications from the production to the non-production server.

2.1.11 Archive & Purge

- Two archive purges are included. One in TEST, one in GO LIVE
- NorthStar to perform the first archive purge post migration.
- The archive purge would be completed and testing NorthStar will begin.
- Includes first archive purge, if any subsequent purges are required or requested these will be billed at an additional 10 hours each
- In the event a data related issue is encountered which would involve a code change, additional billable hours will be required.
- Create new SQL database for the 6.X Archive instance.
- Install archive and purge scripts developed for SQL Server.
- Run archive scripts against existing non-production instance.
- Provide Customer with pre & post archive reports for validation purposes.
- Provide testing support during Customer validation of data archive.
- Once archive process is complete run purge scripts against NorthStar Non-production.
- Provide Customer with pre and post purge reports for validation purposes.
- Provide testing support during Customer validation of data purge.
- Upon Customer approval run archive and purge scripts against NorthStar Production instance.

2.1.12 Santa Clara Responsibilities

Following are the key responsibilities of Santa Clara under this agreement:

- Ensure that underlying infrastructure for NorthStar is acquired and installed by the required time per agreed upon project plan (Note: Minimum specifications for servers and workstations should be discussed and agreed upon at commencement of project.)
- Install server(s) with appropriate network connectivity.
- Install operating system and partition disk space.
- Install database software.
- Configure back up and maintenance routines for new database.
- Install Microsoft IIS.
- Create users at the operating system level.

- Ensure port 1433 has been enabled for communication with the database server.
- Configure peripheral devices (printers, scanners, cash drawers, etc.).
- Install VPN connection.
- Test hardware components and environment.
- Conduct migration testing.
- Ensure that Smart Energy Water (SEW) redirects their customer portal to the new CIS nonproduction environment

Engagement Completion Criteria

The Engagement is deemed completed once the NorthStar add ons have been deployed to the Santa Clara production environment for twenty business days and that any Priority 1 items raised during that period have been resolved. NorthStar has the exclusive right to classify call types according to the definitions below.

Call Type	Definition
Priority 1 – Urgent or High Priority	 System Down (Software Application, Hardware, Operating System, Database) Impacts Critical Business Function without a workaround Performance issues of severe nature impacting critical processes.
Priority 2 – Medium Priority	 System errors that have workarounds Impact to business function is not critical: Performance issues not impacting critical processes Usability issues Workstation connectivity issues (Workstation specific)
Priority 3 – Low Priority	 Minimal or no impact to critical business function Report formatting issues Training questions, how to, or implementing new processes Aesthetic issues Issues with workarounds for large majority of accounts Recommendations for enhancements on system changes Questions on documentation

2.2 Areas Out of Scope

Anything in this section and not listed in the above "Areas within Scope" is considered out of scope for this SOW. Specific items that are currently out of scope of this engagement include:

• Migrating any server and database related scheduled jobs or automated scheduled tasks.

3 ESTIMATED TIMELINE

The estimated duration of this engagement is approximately 4-5 months.

Timeline	Activities
Month 1	 Santa Clara Environment Preparation Project Kick Off NorthStar CIS, mCare, CC2, RAW, EIS Installation & Configuration NorthStar Internal Sanity Testing
Month 2-4	Santa Clara Testing & Issues Remediation
Month 4-6	 Go LIVE Cut Over Go LIVE Cut Over Post LIVE Support Create CIS and add ons Non-Production Instances (Dev + Test) Transition to Support Services Archive Purge - TBC

There are a number of factors to be considered that will have an associated un-planned increase in effort and will therefore impact the project schedule. These factors are typically not determined until project kick-off and will be a key input into the final Go LIVE date and may result in additional cost. NorthStar will notify Santa Clara of any increase in effort and will provide Santa Clara with a Change Order according to section 4 Change Management Process. These factors include:

Data:

- Data clean-up (if required) by Santa Clara.
- Amount of data consideration needs to be given to the amount of historical data required and how long it will take to obtain the data.

Peripherals:

- If Santa Clara has special print handling paper source, special commands, this will create additional effort.
- An increase or replacement of equipment with the migration (i.e. cash drawer).
- Project Resourcing:
 - In the event that Santa Clara staff is unable to be dedicated to the agreed upon project plan, resulting in an extension of the timeline, NorthStar will evaluate the need for a Change Order for additional Project Management and dedicated support services to extend the project timeframe.

4 CHANGE MANAGEMENT PROCESS

NorthStar will maintain the SOW with formal documentation denoting agreed upon changes. Santa Clara and NorthStar may propose changes to this SOW addressing services falling outside the scope of services described in this SOW ("Change"). The Change Order form must be used for all change requests. NorthStar shall have no obligation to commence work in connection with any change until the fee and schedule impact of the change is agreed upon in a written Change Order form signed by the designated representatives from both parties.

Upon identifying the need for a change, NorthStar shall submit the change on our standard Change Order form describing the change, including the impact of the change on the schedule, fees and expenses.

Within 5 consecutive business days of receipt of the change order form, Santa Clara shall either indicate acceptance or rejection of the proposed change by signing the Change Order form or any other period of time mutually agreed to by the parties. If NorthStar is advised not to perform the change, then NorthStar shall proceed only with the original services. In the absence of Santa Clara acceptance or rejection of the Change Order, NorthStar will not perform the proposed change.

FEES & PAYMENT SCHEDULE

5.1 Fees

Description	Pricing
Migration + Archive Purge - Professional Services: - Project Management - CIS, CC2, EIS, RAW, Dev, mCare Installation & Configuration - CIS 6.X Update - RAW version update and overview training - CIS overview training on latest version and a fit gap on feature and functionality comparison 6.4 to 6.X - Additional preservation of SEW setups in current TEST environment - Additional workshop – custom mods and workflows - Additional UAT time included – 45 days total - 1 additional data refresh included - Go LIVE Cut Over - Post LIVE Support - Archive and Purge	\$112,174
- Additional post Go Live support Project Total	\$112,174

5.2 Payment Schedule

The NorthStar fees for the scope of services described in this Statement of Work is \$112,174 USD based on fixed price plus any travel and logistics (T&L) which may be required. Any mutually agreed upon change controls will be billed at the standard NorthStar hourly rate at the time of delivery, 2025 hourly rates are \$250 (regular hours) or \$375 (overtime/after hours) when incurred. Price excludes any applicable taxes.

Services:

- 1. 25% upon completion of the Project Kick-Off meeting, to include Contractor's assigned Project Manager, and delivery of a detailed project schedule (\$28,044).
- 2. 25% due on software installed within Santa Clara's non-production environment (\$28,043)
- 3. 25% upon completion of fit gap and overview 6.4 to 6.X.X workshop (as referenced in 2.1.7) (\$28,044)
- 10% due upon software deployment to TEST for User Acceptance Testing and completion of the first included Archive and Purge process (as referenced in 2.1.6 & 2.1.11) (\$11,217)
- 5. 10% due upon completion of Go LIVE tasks and the second included Archive and Purge process (as referenced in 2.1.9 & 2.1.11) with successful cutover. (\$11,217)
- 6. 5% due upon 45 business days after going LIVE (as referenced in 2.1.10) (\$5,609)

Invoices are payable upon receipt.

Quote is valid for 60 days from date of delivery.

After 60 days the quote will be considered expired and would need to be reassessed and requoted if still required.

5.3 Travel and Living Expenses

The above-mentioned fees do not include any travel and per diem expenses incurred for on-site visits required for this engagement.

Any travel time will be billed at \$75/hour. Santa Clara shall also pay or reimburse travel expenses plus a per diem reasonably incurred in furtherance of NorthStar duties hereunder.

6 TERMINATION

Termination of this SOW is pursuant to the Agreement between the parties entered into on December 7, 2017.

Under no circumstances shall NorthStar be liable for any special, indirect, consequential, punitive or incidental damages of any kind and shall not be liable for loss of profits, works stoppage, system failure or malfunction, loss of data or any other damages or losses in connection with this statement of work, even if NorthStar has been advised of the possibility of such damages. In any event, NorthStar shall not be liable to pay any amount, in the aggregate, that is greater than the fees received by NorthStar under this statement of work.

7 PROJECT ASSUMPTIONS

The services, fees and delivery schedule for this engagement are based upon the following assumptions:

- Any items not explicitly identified within this document are considered out of scope. Any
 changes to those responsibilities and/or deliverables will be considered a change in scope
 for the engagement. Any proposed change to the engagement scope must be put into
 written format and be submitted to NorthStar during this engagement for review and
 consideration.
- This engagement currently has, and will continue to have, the support of senior Santa Clara management and will be assigned sufficient priority with respect to other projects to ensure its success.
- Santa Clara will assign a Lead to act as an internal resource and guide throughout this engagement.
- Santa Clara Lead will be responsible for securing the appropriate staff in a timely fashion
 in order to discuss or review the various materials produced when required. It is expected
 that the individuals involved will have experience in Santa Clara's day-to-day operations
 and will work closely with NorthStar Consultants to resolve issues as required. The main
 purpose of this interaction is to provide a quick and consistent response to procedural
 issues.
- Santa Clara will provide access and support from the IT group and any other stakeholder, as deemed necessary by NorthStar throughout this engagement.
- Santa Clara agrees to facilitate any required corporate logistics for the fulfillment of this agreement.
- NorthStar will require local administrator rights or root access to the NorthStar servers throughout the migration project.
- All project activities to be performed remotely, unless otherwise requested and scope for additional costs.
- Santa Clara will provide appropriate remote access to its network, facilities, and systems
 as may be required to perform activities from one of NorthStar's locations. NorthStar shall
 abide by all rules and directions of Santa Clara when accessing Santa Clara's network,
 facilities or systems.
- All documentation provided by Santa Clara shall be up-to-date and accurate or if that is not the case, advise NorthStar as such.
- All hardware, software, and network components supplied by Santa Clara are working properly and are free of defects and will meet minimum hardware standards provided during the engagement.
- The environment that has been installed, configured, and validated during the migration implementation will become the production environment at Go LIVE. In the event this production environment is required to be migrated to another server after the initial installation a Change Order may be applicable.
- Once the CIS and add on installations and CIS update has been completed and connectivity has been confirmed, NorthStar strongly recommends that the environment

remains static for the duration of the project. Troubleshooting performance or NorthStar functionality issues, resulting from environment changes, such as operating system updates and network modifications, is considered outside the scope of the migration project. Santa Clara will be issued a project change order for time incurred reviewing such issues. If at any point, it is confirmed that the issue is caused by NorthStar, all service charges will be waived.

- All third-party software and hardware products are assumed to perform correctly in Santa Clara environment, in accordance with the appropriate third-party vendor's specifications.
- To minimize project costs, majority of project work will be performed at one of the NorthStar's locations except for project activities where face-to-face is deemed more effective.
- Price does not include Santa Clara approved travel and living expenses that may be required as part of the delivery of the engagement. (i.e. airfare, car rental, gas, per diem and hotel) NorthStar will work with Santa Clara to identify most cost-effective accommodations for Santa Clara's onsite activities that are mutually agreed upon.
- Price for this proposal is based upon Santa Clara obtaining all hardware and associated operating/ database systems.
- All data provided will be complete and clean. It is the responsibility of Santa Clara to clean data if deemed required due to the identification of inaccurate entries.
- Santa Clara resources will be available as required for acceptance testing. It is expected
 that the individuals identified will have experience in the day-to-day operations and will
 work closely with the NorthStar Consultant to resolve issues as required. The main
 purpose for this interaction is to provide a quick and consistent response to procedural
 issues so that the NorthStar Consultant is not required to contact a large number of Users.
- Santa Clara is responsible for preparing the underlining IT infrastructure (hardware installation, operating system, and network connectivity) and supply the required servers based on the minimum server specifications. This must be in-place per agreed upon project plan.
- Santa Clara is responsible to provide the non-production and production environments.
- This project includes the migration of up to 10 automation platform workflows
- The NorthStar application will not point to the Archive database. Any validation queries will need to be run through SQL.
- The archive and purge processes for the production instance will need to be run over a weekend to ensure there is no impact to processing in the production environment.
- In the event a data related issue is encountered with the Archive Purge process which would involve a code change, additional billable hours will be required.

8 DOCUMENT ACCEPTANCE AND SIGNOFF

Please return signed copy to Andrea Evans aevans@harriscomputer.com

Accepted on this day by:	
City of Santa Clara, CA	NorthStar Utilities Solutions
Signature:	Signature:
Name:	Name:
Title:	Title:
Date:	Date:
Project Contact:	
Name:	
Email:	

9 APPENDIX A - HARDWARE & SOFTWARE SPECIFICATIONS

This document specifies the minimum recommended hardware and software for NorthStar software implementation, including CIS, mCare, SilverBlaze and other add-ons. This specification is for NorthStar CIS version 6.6 or higher only. It may not apply to other versions of NorthStar CIS software.

This specification is only Intended for sites with 50,000 active accounts or more.

Complete Server Inventory

CIS Application Server – Production
CIS – specification #1 in next section

CIS Application Server – Non-Production
CIS, Reports Anywhere, add-ons such as eDocs, EIS – specification #1 in next section

CIS Extension and Report Application Server – Production and Non-Production

Reports Anywhere, add-ons such as eDocs, EIS – specification #2 in next section

MCare External Access Web Application Server – Production mCare 6 – specification #3 in next section

MCare External Access Web Application Server – Non-Production mCare 6 – specification #3 in next section

SilverBlaze External Access Web Application Server – Production SilverBlaze – specification #3 in next section

SilverBlaze External Access Web Application Server – Non-Production SilverBlaze – specification #3 in next section

Database Server – Production

All databases – specification #4 in next section

Database Server – Non-Production

All databases - specification #4 in next section

Server Specifications

1. NorthStar CIS 6.X.X Application Servers for Production and Non-Production Environments

Minimum Hardware:

- 2 x Ouad-core Xeon Processor
- 32 GB Memory
- 400 GB 15K SSD/SSHD (RAID)

Minimum Software:

- Windows 2019 Standard 64-bit
- VMWare supported
- Wildfly to be installed by NorthStar
- Java to be installed by NorthStar
- Genero to be installed by NorthStar

2. NorthStar CIS 6.X.X Extension Servers for Production and Non-Production Environments

Minimum Hardware:

- 2 x Quad-core Xeon Processor
- 32 GB Memory
- 200 GB 15K SSD/SSHD (RAID)

Minimum Software:

- Windows 2019 Standard 64-bit
- VMWare supported
- Wildfly to be installed by NorthStar
- Java to be installed by NorthStar

3. MCare/SilverBlaze Application Servers for Production and Non-Production Environments

Minimum Hardware:

- Dual-core Xeon Processor
- 32 GB Memory
- 200 GB 15K SAS Drives (RAID)

Minimum Software:

- Windows 2019 Standard Edition 64-bit
- VMWare supported
- Apache Tomcat 9.0.4 or higher to be installed by NorthStar

- Apache HTTP Server 2.4 or higher to be installed by NorthStar
- Java to be installed by NorthStar
- Wildfly to be installed by NorthStar

4. Database Servers for Production and Non-Production Environments

Minimum Hardware:

- 2 x Quad-core Xeon Processor
- 32 GB Memory
- 1000 GB 15K SSD or SSHD (RAID) no local backup

Minimum Software:

- Windows 2019 Standard Edition 64-bit
- SQL Server 2019 Standard Edition
- VMWare supported

Client Device Specifications:

CIS Client Computer:

Minimum Hardware:

- Quad Core CPU (Intel Core2, AMD Phenom...)
- 40GB hard drive (or higher)
- 8GB Memory
- Minimal resolution: 1360 x 786

Minimum Software:

- Windows 10 64 Bit
- JRE 8.X
- Microsoft Office 2010

MCare Client Device:

Recommended Devices:

- Apple iPad Mini 48"
- Apple iPad 5th Gen 9.7"
- Galaxy Tab S2 8"
- Galaxy Tab S2 9.7"
- Surface Pro 4 12.3"

Minimum Hardware:

- Screen Size 8" (~320 ppi density) or 9.7" (~264) (4:3 ratio)
- 1536 x 2048 pixels, 4:3 ratio
- GPU (required for smooth user experience)
- CPU dual-core 1.5 GHz
- 2GB of RAM
- Back Facing Camera
- LTE or LTE adapter