Memorandum

To: Mayor Gaffino and Village Board of Trustees
CC: Steve Bosco, Village Administrator
From: David Arndt, IT Manager
Date: 2020-09-30
Re: Exchange Server and Active Directory Migration

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The Village's eleven year old Microsoft Exchange email server reached its end of life in October of 2020 as Microsoft no longer provides support for the product. Village staff met with Microsoft and several consulting companies who made recommendations based on our current environment and future direction of Microsoft technologies. Based on these meetings Village Staff identified a viable path to move the Village's network to the most current environment.

Village staff recommends migrating our Exchange email server to a hosted cloud based service provided by Microsoft while virtualizing the remainder of our in-house servers over time. Migrating the servers to the cloud provides protection from physical damage due to extreme weather, power or environmental failures, plus enhanced security with real-time updates and patches applied directly by Microsoft engineers.

Exchange Online biggest advantages is the ability to use all of the new security features available in the cloud, the most important of which by far is the ability to turn on two-factor authentication (2FA). Some additional enhanced security features include; Message Encryption, information rights management/compliance center, in-place archiving, and data loss prevention. Additionally the security filters provided by Microsoft can eliminate 99% of unwanted emails. Over the past 3 months the Village received 152,007 emails with a spam rate of 62.10%. Staff expects our spam rates to increase since the added protection will catch more, thus lowering our overall chances of exposing our network to a comprised email.

Staff released an RFP outlining the necessary requirements on July 26, 2021 and received four proposals.

Staff rated the RFPs on the following conditions

Evaluation Criteria	Portion
Functional and Technical Merit; Completeness of Proposed Solution	40%
Recent Experience with Projects of this Size and Scope in an Agency of Similar Size; Reference Information will be Taken into Consideration	30%
Cost of Proposal	26%
Local Regional Business	4%
Total	100%

After reviewing the proposals staff recommends the Village select Sentinel Technologies out of Downers Grove IL. Sentinel Technologies provided the most complete solution including all necessary Microsoft licensing, hardware and additional solutions not listing the RFP but are highly desired. Additionally sentinel was the only company headquarter in Illinois. Staff budged $75,000 for this project. Staff has previous positive experience with Sentinel. Staff contacted Sentinel's referrals and received positive reviews.

The other three RFPs were missing licensing which was a key component of the RFP. Staff estimated the missing licenses based on the other submissions or the average from those in order to make the best possible comparisons. Even with the estimates, Sentinel's proposal is still the leading solution. Binacr proposal was incomplete and shifted some aspects of the project which were part of the RFP onto Village Staff. Cost for additional Microsoft servers, licensing and cloud services were not included as well.

Sentinel Technologies	$73,311.21
Planet Technologies	$76,257.40 - Incomplete missing licensing
AgreeYa	$60,800 - Incomplete missing licensing
Binacr	$34,280.00 Incomplete missing licensing & MS Azure costs

The overall process requires additional portions of the Village's network to be upgraded to accommodate the latest release of Microsoft Exchange Server. The additional requirements are included in the RFP.

Moving forward the migration to a hosted cloud based solution will create new annual expenses to the Village in order to maintain the licensing and backups. The estimated yearly cost will be $7,908.75.

Please see the attached *Project Approach / Methodology (SOW), Master Service Agreement, and Billing Document (Appendix A)* provided by Sentinel Technologies.

MASTER SERVICES AGREEMENT

This Agreement is made by and between Sentinel Technologies, Inc. ("Contractor"), with principal offices at 2550 Warrenville Road, Downers Grove, Illinois 60515, and Village of North Aurora ("Customer"), with principal offices at 25 E State St., North Aurora, IL 60542. Contractor and Customer are collectively referred to as the "Parties."

Effective Date   09/20/2021   Agreement No.   001r1-DP-m-JeR

In consideration of the mutual promises described herein and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. PURPOSE OF THIS AGREEMENT

The purpose of this Agreement is to provide standard terms and conditions applicable whenever the Parties enter into specific projects for the provision of equipment and/or professional services (collectively referred to as the "Services"). Specific projects will be detailed in a Project Scope and Billing document (Appendix A). New Appendices A will be executed for each subsequent project between the Parties.   The existence of this Agreement relieves the Parties from having to renegotiate standard terms and conditions each time the Parties desire to do additional projects. In the event of a conflict between the provisions of any Appendices A and the provisions of this Agreement, the provisions contained in Appendices A will prevail.

2. CONFIDENTIAL INFORMATION

"Confidential Information" means any information and data of a confidential nature, including but not limited to proprietary, technical, developmental, business plan, marketing, sales, operating, performance, cost, pricing and/or pricing strategies, know-how, business and process information, computer programming techniques, software, micro-code, firmware and all record-bearing media containing or disclosing such information and techniques, which is disclosed by one party to this Agreement ("Disclosing Party") to the other Party ("Receiving Party") pursuant to this Agreement.   Any information received orally will be treated as confidential only if the Disclosing Party notifies the Receiving Party that the information is confidential or would be of such character that a reasonable person would believe it to be confidential in nature.   Notwithstanding the foregoing, Confidential Information will not include information that is (a) developed independently by the Receiving Party without reference to or use of the Disclosing Party's Confidential Information; (b) obtained from a source other than the Disclosing Party through no breach of confidence by the Receiving Party; (c) in the public domain when received or thereafter enters the public domain through no fault of the Receiving Party; (d) provided by the Disclosing Party without restriction; or (e) disclosed by the Receiving Party pursuant to statute, regulation, or the order of a court of competent jurisdiction, provided that the Receiving Party has notified the Disclosing Party in order to permit the taking of appropriate protective measures.

The Parties agree to use such Confidential Information of the Disclosing Party only as it relates to the performance of the obligations under this Agreement and to hold each other's Confidential Information in strict confidence and not to disclose it to any third party without the prior written consent of the Disclosing Party. Further, the Receiving Party will use the same degree of care it uses with respect to its own Confidential Information to prevent the unauthorized disclosure to a third party, but in no event less than reasonable care.

3. TERM AND TERMINATION

a. The Initial Term of this Agreement shall be for one (1) year from the Effective Date and shall automatically renew at the end of each yearly term, unless terminated as provided herein. In the event the Term expires before the term of any Appendix A or purchase order executed pursuant to this Agreement, the Term shall be extended to the expiration date of such Appendix A or purchase order.

b. After providing Contractor with written notice of defective service and, providing Contractor has failed to cure such defective service within thirty (30) days of receipt of such written notice, Customer may terminate this Agreement upon thirty (30) days written notice. In the event of such termination, Customer shall pay Contractor for the portion of the Services performed through the date of termination. Contractor shall cease to perform Services under this Agreement on the date of termination.

c. Contractor may terminate this Agreement upon written notice to Customer, if Customer fails to pay Contractor within sixty (60) days after Contractor notifies Customer in writing that payment is past due.

4. EMPLOYEES

a. For a period of one (1) year following the last active engagement between the Parties under this Agreement, each party agrees not to knowingly solicit for hire, or hire, directly or indirectly, any employee of the other party having any direct involvement with this Agreement, without the written consent of the other party. If this provision is violated, the affected party reserves the right to charge, and the violating party agrees to pay, an amount equal to one year of the employee's current salary.

b. Neither Contractor nor Contractor's employees are, nor shall they be deemed to be, employees of Customer. Contractor shall be solely responsible for the payment of its employees' compensation, including employment taxes, worker's compensation and any similar taxes associated with employment of Contractor personnel.

5. INDEMNIFICATION

Contractor and Customer shall indemnify and hold the other harmless (including their respective officers, directors, agents, employees and subcontractors) against any and all liabilities, damages, losses, expenses, claims, demands, suits, fines, or judgments (collectively "Claims"), including reasonable attorneys' fees, costs, and expenses incidental thereto, which may be suffered by, accrued against, charged, or recoverable by reason of any Claim arising out of or relating to any act of error or omission, or misconduct of the indemnifying party, its officers, directors, agents, employees, and subcontractors, during the performance of this Agreement.

6. WARRANTY

Contractor represents and warrants that each Project Scope shall be completed in a professional, workmanlike manner, with the degree of skill and care that is required by current, good and sound professional procedures and practices and in conformance with generally accepted professional standards for the completion of such Project Scope prevailing at the time. Further, Contractor represents and warrants that each Project Scope shall be completed in accordance with applicable specifications and shall be correct and appropriate for the purposes contemplated by this Agreement.

Product warranties and return policies are provided by the respective manufacturers or publishers of the Products sold under this Agreement and Contractor makes no warranties whatsoever with regard to said Product.

7. LIMITATION OF REMEDIES

THE SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY, EXPRESS OR IMPLIED INCLUDING WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS, AND THE SOLE REMEDY FOR CONTRACTOR'S LIABILITY OF ANY KIND, SHALL BE LIMITED TO THE RE-PERFORMANCE OF ANY DEFECTIVE SERVICE PROVIDED BY CONTRACTOR AND SHALL IN NO EVENT INCLUDE ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOST PROFITS.

The foregoing limitation will not apply to claims for personal injury or damage to real property and/or tangible personal property caused by Contractor's negligence.

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8. GENERAL PROVISIONS

a. <u>Sub-Contracting.</u> Contractor retains the right to subcontract any support service described herein to subcontractor(s) of Contractor's choosing, provided that such subcontractor(s) shall possess the technical qualifications to perform service and is approved in advance by the Customer.

b. <u>Severability.</u> In the event any provision of this Agreement shall be deemed to be invalid, illegal or unenforceable, the validity, legality, and enforceability of the remaining provisions shall not, in any way, be affected or impaired thereby. The Parties agree to replace any invalid provision with a valid provision, which most closely approximates the intent and economic effect of the invalid provision.

c. <u>Assignment.</u> A party may not assign or transfer this Agreement or any of the other rights or obligations under this Agreement, without the prior written consent of the other party.

d. <u>Waiver or Delay.</u> A waiver of any default, hereunder shall not be deemed to be a continuing waiver or a waiver of any other default or any other term or condition, but shall apply solely to the instance to which such waiver is directed.

e. <u>Notices.</u> All notices, requests and other communications hereunder shall be in writing, and shall be addressed to the representative designated below, and shall be considered given when (a) delivered personally, (b) sent by confirmed facsimile, (c) sent by commercial overnight courier with written verification receipt, (d) sent by e-mail to a designated recipient with return receipt and acknowledgment or (e) three (3) days after having been sent, postage pre-paid, by first class or certified mail.

    For Customer, Name and Address: Village of North Aurora
                                        25 E State St.
                                        North Aurora, IL 60542
    For Contractor, Name and Address: Sentinel Technologies, Inc.
                                        2550 Warrenville Road
                                        Downers Grove, IL 60515

f. <u>Dispute Resolution.</u> In the event of a material dispute between the Parties that is not resolved in the normal course of business, either party may initiate a dispute resolution process by notifying the other party in writing pursuant to the Notices provision, paragraph 8.e. herein. Within ten (10) days from the date of receipt of that notice, the matter will be submitted to senior executives of the Parties authorized to settle the same. In the event this process fails, the Parties agree that the Circuit Court of DuPage County, Illinois, and the United States District Court for the Northern District of Illinois shall be the sole and exclusive venues for any action, suit or proceeding arising out of or related to this Agreement. The prevailing party in any such proceeding shall be entitled to recover all costs and expenses and reasonable attorney's fees in addition to any other relief to which it may be entitled. The determination of what constitutes a "prevailing party" shall be determined by the trier of fact. This Agreement shall be construed in accordance with, and all disputes hereunder shall be governed by, the laws of the State of Illinois, excluding its conflict of law rules.

g. <u>Entire Agreement; Modification.</u> This Agreement including its Appendices, is the complete, final, and exclusive statement of the terms of the agreement between the parties and supersedes any and all other prior and contemporaneous negotiations and agreements, whether oral or written, between them relating to the subject matter hereof. This Agreement, including its Appendices, may not be varied, modified, altered, or amended except in writing signed by the Parties

9. RIGHTS OF MATERIALS

Customer shall own, upon payment of all fees incurred, any deliverables, including software programs, source and object code, files, tapes, disks, and related user documentation, originally developed solely for Customer under this Agreement. Such deliverables shall be owned by Customer for its own internal use. Contractor does not convey nor does Customer obtain any right in materials proprietary to Contractor which Contractor may utilize or provide pursuant to the Services, or other materials not developed solely for and paid in full for under this Agreement except as otherwise agreed upon in writing by the parties. Contractor shall be free to use its general knowledge, skills, and experience and any ideas, concepts, know-how and techniques related to Contractor's consulting and used in the course of providing the Services on other engagements. The parties will cooperate with each other to execute any documents necessary to achieve the objectives of this section.

10. POSSESSION AFTER TERMINATION OF AGREEMENT

No later than five (5) days after the termination of this Agreement for any reason, Customer shall return to Contractor any and all of Contractor's equipment located on Customer's property and used in connection with providing the support services. Contractor may physically take possession of any such equipment not delivered to Contractor after the expiration of such five (5) day period. Customer hereby authorizes Contractor and its agents to enter onto any location at which any such equipment is located for purposes of taking possession thereof.

In witness whereof, the Parties hereto have signed this Agreement as of the date signed below.

CUSTOMER:
  Village of North Aurora

Signature:_____

Printed Name:_____

Title:_____

Date:_____

CONTRACTOR:
  Sentinel Technologies, Inc.

Signature:_____

Printed Name:_____

Title:_____

Date:_____

APPENDIX A

Customer Name:	Village of North Aurora
Street Address:	25 E State St.
City, State, Zip:	North Aurora, IL 60542

The Agreement referenced below by and between Sentinel Technologies, Inc., (Contractor) with principal offices at 2550 Warrenville Road, Downers Grove, Illinois 60515, and Village of North Aurora (Customer) with principal offices at 25 E State St., North Aurora, IL 60542 is hereby appended to include the following:

Commencement Date	Agreement No.	Addendum No. 001-DP

Executive Summary

The Village of North Aurora is looking to upgrade their Active Directory Domain and migrate from an on- premises Microsoft Exchange infrastructure to Microsoft Exchange Online.

- The Village of North Aurora is soliciting vendors to migrate our On-Premise Exchange 2010 email environment to an Office 365 Government G1 platform and upgrade our current Active Directory Windows Server 2008R2 to Windows 2019.
- The project includes performing a readiness assessment of the current On-premise Exchange and Active Directory including gathering and developing requirements, developing a migration plan, and executing the approved plan.

It is the intent of this engagement is that Sentinel will architect, design, and implement the project according to Sentinel established best practices and in a manner ready for production computing. During this project, knowledge transfer of general administration tasks, points of scale, and the environment will be provided to prepare the customer staff moving forward after the engagement.

The next section "Project Overview" highlights the main phases involved in this project. The "Scope of Work" section then lays out in further detail what is covered as part of this project. Finally, "Customer Responsibilities and Assumptions" details important assumptions Sentinel has made in discussion with Village of North Aurora Team. A Pricing page is also included at the end of this document.

Project Overview

Project Phases

Phase 1 - Project Initiation Meeting
Sentinel Project Management will coordinate a kick-off meeting to review and approve the Scope of Work provided to the Customer. Customer and Sentinel provided resources will be introduced and their relevant roles for the project discussed. Sentinel Project Management will then coordinate a time for a site visit by Sentinel Engineers in order to draft a blueprint of all proposed work which will be provided to the Customer. High level timelines for project milestones will also be identified and discussed.

Phase 2 - Analysis & Design
Sentinel engineers will perform a high-level audit of the Customer's relevant infrastructure. The data collected from this audit will be used to generate a design for the implementation of the solution. Sentinel engineers will inform the Customer of any design requirements that will need to be completed by the Customer's IT staff prior to the start of the next phase (such as provisioning of storage space, acquisitions of licenses, and other essential design components not covered within this document). Upon acceptance of the work as detailed within the blueprint by the Customer, Sentinel engineers and project managers will then coordinate specific dates and times appropriate for accommodating the nature of the work involved (i.e. work which will require outages will be scheduled during appropriate maintenance windows).

Phase 3 - Staging
During the staging phase, equipment will be unboxed, burned-in, configured and tested off-site before being repacked and delivered for onsite implementation. This ensures maximum efficiency and quality while minimizing the disruptions and impacts to the Customer's environment.

Phase 4 - Implementation
Sentinel engineers will proceed with the implementation of all items specified within this Scope of Work and further detailed in the Customer approved Design Document.

Phase 5 - Post Support
Sentinel engineers will be dedicated to being available for the resolution of any problems or issues that arise during the post support portion of the project.

Phase 6 - Project Completion
Upon conclusion of all other phases of work Sentinel's engineers will provide the Customer with updated design documents for the project. Sentinel's project management team will then arrange for a meeting with the Customer to review the status of all project items. If no project items remain open Sentinel's project managers will request that the Customer sign off on the project, thus closing the project at that time.

Scope of Work

Planning and Pre-Engagement Preparation

- Identification of key Village of North Aurora project team members with whom Sentinel will work to accomplish the tasks defined in this Scope.
- Review required hardware, software, networking, and facilities required to successfully complete this engagement.

Analysis & Design

General
- Analyze the current environment to make sure the environment is ready for infrastructure implementation based upon the assumptions laid out in the next section.
- Engage with the Customer team to brainstorm the technical requirements and use case design for the implementation.
- Develop specific requirements, design and use case specifications blueprint document based upon Customer discussion.

Active Directory
- Gather and verify domain controller quantities and locations along with overall AD topology.
- Perform basic health check of AD domain, including the following:
  - Verify AD Replication Design & Topology along with Sys Vol integrity.
  - Verify if any dead or obsolete domain controller references still exist.
  - Validate current Domain Controller Group Policy settings.
  - Verify time synchronization.
  - Verify domain name services (DNS) configuration and overall health.
  - Establish which DHCP ranges and options are still utilized.
  - Confirm FSMO role & Global Catalog Services locations and status.
  - Confirm list of customer-provided AD/Exchange dependent applications.
  - Confirm list of customer-provided affected applications and services installed on present Domain Controllers/Exchange Servers.
  - NOTE: Sentinel assumes the customer AD to be in a fully healthy state prior to project commencement. The above basic health check analysis is conducted to help ensure a smooth and successful migration. Remediation of any problems identified during this basic health check is not in scope and will require additional hours. No formal deliverable will be part of this health check.
- Evaluate and determine appropriate Forest and Domain functional levels to upgrade to.
- Establish plan for migrating DNS, DHCP, and other affected services on the existing DCs.

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Implementation – Dell PowerEdge Server

- Rack, Cable, & connect the Dell PowerEdger Server to LAN, Apply Firmware Update
- Install VMWare ESXi HyperVisor, Install VMWare vCenter Server
- Create Virtual Server Template, Clone Template to Create Windows Server Virtual Machines for Active Directory DC & Exchange Server
- Sentinel will provide USAC compliant as-built documentation for each component included and provide basic knowledge transfer of the solution.

Implementation – Active Directory Upgrade

- Create Microsoft Windows Server 2016 and/or 2019 Virtualization Template for use in deploying up to (3) new Domain Controllers Server VMs.
- Validate that each server deployment meets the requirements necessary, and apply any further service packs, patches, or other baseline configuration necessary for Domain Controllers.
- Promote new servers as Microsoft Windows Server 2019 Domain Controllers.
- Microsoft Services Migration.
  - Establish Global Catalog functionality for new Domain Controllers.
  - Migrate FSMO roles.
  - Establish and Validate proper Time Synchronization for new DC's.
  - Setup and replicate DNS to the new Domain Controllers.
  - Setup and replicate DHCP Service with up to 10 scopes to the new Domain Controller servers.
- Perform Basic Testing & Validation of new Active Directory environment.
  - Ability to logon and authenticate via the new Domain Controllers.
  - Basic Active Directory OU and Sites & Services check.
  - Existence of sysvol replicated contents including any logon scripts and group policies.
  - FSMO Roles and Global Catalog health.
  - Time Synchronization functionality.
  - Proper operations of DNS.
- Coordinate with Customer resources to migrate/restore additional functionality of the previous Domain Controllers (e.g. Radius Services).
  - Please note assistance with restoring or migrating any additional services not defined in this Scope of Work will require a Project Change Request (PCR).
- Demote old Domain Controller Servers.
- Upgrade Forest and Domain Functional levels.

Note: No workstation visits are expected at this time and are not part of this Scope of Work. This Scope of Work is limited to the upgrade of a single domain (Any additional domain upgrades, including additional root or child domains, is out of scope).

Implementation – Exchange Online Migration

- Deploy a new M365 Tenant (GCC) for Village of North Aurora
- Configure AD Connect Sync to synchronize Active Directory Security Objects with Azure Active Directory (Free edition), and create a Hybrid Active Directory environment. Please note that your Domain Controllers will remain the authoritative source for identity and End-Users will authenticate/join against them, and not Azure Active Directory
- Assign subscription entitlements for Exchange Online Plan 1 to up-to 95 users
- Deploy Exchange 2016 server for the purpose of Microsoft hybrid environment supportability as well as access to the Exchange Admin Console (EAC). Hybrid Configuration Wizard (HCW) will be used for this purpose so an entitlement for Exchange 2016 will be provided at no extra cost. Please see here for details
  - Village of North Aurora are to provide resources to create Windows Virtual Machines with a currently supported Windows Server Operating System while Sentinel Technologies will handle the Exchange 2016 deployment
  - Village of North Aurora's existing Exchange 2010 server will be decommissioned as the final step of this engagement

- Update all necessary Records, and Certificates
- Migrate up-to 50GB of mail / user from Exchange 2016 on-premise to Exchange Online.
- BitTitan will be used to complete migration tasks carried out in batches
- 1st batch will consist of fifteen (15) Users to be designated by Village of North Aurora. It is recommended that Users who are 1st to be migrated are easily adaptable to new applications. Sentinel Technologies will test end-to-end messaging services
- 2nd batch will consist of the remaining eighty (80) Users
- Following the final eighty (80) User migration, Sentinel Technologies will carry out a 2nd end-to-end testing for mail flow to endure that it is working as intended
- Exchange Online Protection (EOP) will be enabled for mail hygiene purposes
- A "This message originated from an external source" header will be added for all incoming email
- Up to one (1) mail forwarding restriction policy will be enabled as a start to Village of North Aurora's DLP initiative
- Migrate ActiveSync profiles of up-to ninety-five (95) Users
- Implement Barracuda Cloud Archive services base installation and configuration with Barracuda Remote Implementation and Support Assistance

Cutover / Migration Strategy

Sentinel has provided Engineering and Project Management professional services to support a cutover/migration strategy. The project team will deploy the solution within an estimated two (2) cutover windows. Any additional cutovers, or phased installation work will be added into scope via the change order (PCR) process, and may require additional professional services to complete.

Cutover Planning Services Provided by Sentinel

Prior to any cutover, the Sentinel PM and Lead Engineer on the project will provide a "Solution Installation and Cutover Plan" which details the following:

- Start time and End time that is targeted for the maintenance window required for the cutover.
- Step by step plan for the work that is to be done prior to the installation, during the installation, and after the installation.
- Task ownership for each of the tasks identified.
- Task durations for each of the tasks identified.
- Back-out plan – along with a timeframe that identifies when we will initiate the back out plan.
- Test and Acceptance plans to be executed.

Once the cutover/installation plan has been created, the Sentinel Project Team and the Customer will meet to review and approve the plan. Prior to the cutover, a "go/no-go" call will take place to once again review the cutover plan, and ensure that all stakeholders involved in the cutover are available, and all pre-cutover tasks have been completed successfully in preparation for the maintenance window. If a Customer requests to cancel and reschedule a cutover, rescheduling charges may apply. Any impact to Customer resource schedules as a result of a "no-go" call, will be Customer responsibility.

Documentation and Knowledge Transfer

- Provide documentation of the setup including a revised Sentinel design doc as well as any available vendor-created administrative and/or best practices guides.
- Provide knowledge transfer including basic functional overviews of products implemented, demonstrating the normal operations as installed in the Customer's environment.
  - Note that knowledge transfer and functional overviews are not a substitute for formal vendor product Customer Education courses available. Sentinel strongly encourages attendance at Customer Education classes to gain further insight into the product architecture and its integration.

Sentinel welcomes Customer to be involved in all aspects of the project life cycle to achieve the highest level of knowledge transfer during the project. While there is no way to guarantee the level of knowledge transfer that will occur, additional time can be added to the staging, installation or testing portions of the project to try and accomplish this need. This request should be scheduled with the Project Manager. If additional time is added for this request, it will be handled through Sentinel's PCR process.

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Customer's that seek to get the most out of the knowledge transfer have had a higher degree of success by combining the specific deployment knowledge transfer with formal Cisco course training. When the course work is done prior to the project knowledge transfer Sentinel has seen the highest degree of self-support post installation. That knowledge transfer and functional overviews are not a substitute for formal vendor product Customer Education courses available. Sentinel strongly encourages attendance at Customer Education classes to gain further insight into the product architecture and its integration.

Project Management

Sentinel will provide a project manager committed to the success of the project. The project manager will be responsible for:
- Complete success of the project.
- Optimal coordination of all resources.
- Guiding the Customer on aspects of the project they are required to perform.
- Tracking and reporting of progress.
- Management of agreed to budget issues.
- Management of expected timelines for implementation.
- Changes to the project and communications of changes in writing using a Project Change Form.
- Post installation document gathering, assembly and presentation.
- Post installation project completion agreement and signature.

Project management will ensure complete project success. Communication is the cornerstone of project management and the project manager will be the central communication mechanism for all parties. This will assure all relevant parties are informed about decisions that may affect the success of their component of the solution.

Customer Responsibilities and Assumptions

General

The following is a list of responsibilities and/or tasks that Sentinel assumes have been completed or reviewed by Village of North Aurora to the execution of the above-mentioned project. If additional responsibilities are uncovered during the project, Sentinel will make sure that Village of North Aurora is made aware of any issues promptly to determine resolution.

Product Lead Times
Depending on the technologies quoted, orders may be direct or through distribution. Lead times should be expected to be 8 weeks but can exceed 8 weeks. Should expedited equipment requirements arise, there could be an additional charge to source through a warehousing distribution partner.

Site Readiness and Site Survey Requirement
Every effort has been made to ensure that proper power cords and patch cables have been included to match your environment's infrastructure. The notes section of the Bill of Materials (BOM) explicitly states the quantity and type of cords quoted.

Four options are available to ensure the accuracy of the selected items; please initial next to which method you agree to: (SELECT AND INITIAL ONLY ONE)

Note: In the absence of the Customer selecting one of the four options below, it is agreed that the contract will default to Option #1.

Initials

Option 1
Customer waives the opportunity to complete a site/closet checklist, has reviewed the BOM and agrees to quantity, type and length of the power and patch cables provided. [Financial obligation for labor and materials for changes identified post order will be the Customer's responsibility]

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Option 2
Customer has provided a site/closet review checklist document and confirms the quantity, type and length of the power and patch cables quoted. [Financial obligation for labor and materials for changes identified post order will be the Customer's responsibility, unless Sentinel provided the incorrect part based upon the provided checklist]

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Option 3
Customer elects a "for charge" onsite survey of the facilities and closets to determine the quantity, type and length of the power and patch cables required. In addition, Sentinel will assess each closet's cooling and UPS readiness for the proposed equipment being provided. [Financial obligation for labor and materials for changes identified post order will be Sentinel's full responsibility, unless changes to the site have taken place subsequent to the site assessment]

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Option 4
Not applicable. This SOW does not contain any work that would be performed in or impacted by the Customer's MDF, IDF or Data Center facilities.

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Permits & Access
Unless otherwise agreed, all permits, variances, access to facilities, roof access, building warranty concerns or other site specific information and procedures are the responsibility of the Customer. Sentinel can assist as needed, but will need to be informed of any requirements prior to the site survey to consider these within the validation process.

Remote Support
Sentinel's service estimate assumes remote access support through IP VPN or IP PPP connection. Without this access, additional services may be incurred for optimization and tuning required pre and post installation.

Travel Requirements and Cost
Unless specified within the proposal, all travel expenses and time are not included. Travel time shall be invoiced at pre-negotiated rates and expenses plus per diem at actual costs.

Existing Hardware Compatibility & Firmware Updates
Where Customer provides existing server or other hardware, it is assumed the Customer has verified all such hardware is compatible with the versions of the software specified within the scope. This includes relevant firmware updates. Sentinel will not be providing firmware updates to any servers as part of this Scope of Work.

3rd Party Integration
Unless noted otherwise, Sentinel assumes no reliance on 3rd Party applications, connections or plug-ins to software deployments and updates as specified in this scope. If during Analysis and Planning any required 3rd Party integration is uncovered, additional hours may be incurred.

Fiber
It is assumed that the Customer's existing fiber will support proposed transmission speeds (i.e. 1GB, 10GB, 40GB, etc.). Customer must ensure that the fiber optic cabling is within manufacturer tolerances for distance and loss in order to support the required transport speeds. In some cases, specialized equipment, such as attenuators and mode conditioning cables, may be required to properly support these speeds. This equipment will be at the expense of the Customer.

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Optics (SFP, SFP+, GBIC, etc...)
Every effort was made in the pre-sales process through white board sessions, BOM reviews and diagrams to identify any and all optics required. **OPTICS AS QUOTED AND SOLD ASSUME A STAND ALONE SYSTEM UNLESS OTHERWISE NOTED.** Migration items and integration items to existing equipment, if not noted, are not included nor is time for the interconnection, planning or design of same. Should any question exist as to the total number, types and use of the optics, Sentinel can set up a design review and white board session prior to the order upon request.

Power, Racks & Cooling
Like the optics, Sentinel has made a best effort to match any power requirements and answer any requests of the Customer related to equipment specifications, power cables included or other physical requirements. Any adjustments to fit in racks, connect to specific power terminal types, or secure electrician services to run a new service are beyond the fixed bid project price. Sentinel will respond to any inquiry and provide product literature. Any sizing charts provided are done so as a convenience to the Customer and DO NOT represent a commitment by Sentinel that, as sold, the equipment is ready for the Customer site. Sentinel offers Technology Area Design (TAD) consulting services should the Customer prefer a more formal and accurate solution.

Patch Cables / Cable Lengths
In most cases the BOM includes any note(s) on cable lengths included. Without the design validation of a formal TAD engagement, only a best effort is made to match the site requirements. Any changes to the cord lengths, connectors or other site readiness items will be in addition to the solution once the order is placed with the manufacturer(s). Many of the vendors offer the ability to select the appropriate items prior to order, but will charge for any replacements needed after the order and this offer will be extended to the Customer through the Sentinel Project Change Request (PCR) process. Unless specified, Sentinel assumes the Customer will provide all patch cables needed and can provide the product literature on any devices upon request.

Labor Union Requirements
Sentinel has NOT included any parameters for Union workers. Any requirement would require a subcontract arrangement to be determined up front and would increase the cost of deployment.

Patching and Equipment Cabling
Sentinel assumes, unless noted here, that the Customer will patch in all equipment to the cabling plant within the facility. Sentinel can perform this connection service at an additional charge with an approved PCR.

Pricing Summary

Active Directory Upgrade and Exchange Online Migration

Software

		Extended Price
Dell PowerEdge R640 Server, Intel 4208 2x2.1Ghz CPUs 16 Cores, 256GB RAM, Raid-1 HyperVisor, VMOS, & Data Drives	$	21,922.00
Hardware and Software Total	**$**	**21,922.00**

Solution Maintenance & Support

		Extended Price
Dell HW/SW Maintenance & Pro Support 5-Year 8x5xNBD Onsite	$	1,465.00
Maintenance & Support Total	**$**	**1,465.00**

Solution Subscriptions - Unless explicitly indicated otherwise within this contract, the below term for these subscription services will automatically renew, absent at least ninety (90) days' notice of cancelation by Customer before the start of the renewal term. For subscription services that do not automatically renew, Customer must provide Sentinel with at least ninety (90) days' notice of its intention to renew the services and shall hold Sentinel harmless from any service interruption to result from the cessation of services due to Customer's failure to provide timely notice as stated herein.

		Extended Price
Exchange Online GCC P1	$	4,454.55
BitTitan MigrationWiz Mailbox	$	1,090.60
Barracuda Cloud-to-Cloud	$	4,997.06
Subscriptions Total	**$**	**10,542.21**

TOTAL PROJECT - Project Total Cost is based on the combined purchase of all Hardware/Software, Professional Services and Solution Maintenance from Sentinel as detailed in the attached Bill of Materials. Unbundling or materially reducing any of these essential elements of the solution may result in modifications to the cost of the remaining elements.

		Extended Price
Hardware and Software	$	21,922.00
Solution Maintenance & Support	$	1,465.00
Solution Subscriptions	$	10,542.21
Professional Services	$	48,256.00
Project Total	**$**	**82,185.21**
One-Time Services Discount	**$**	**(8,874.00)**
Discounted Total	**$**	**73,311.21**

Quote is valid until 10/16/2021   *Plus applicable tax, shipping & handling*

HW-SW1 Dell R640

Dell PowerEdge R640 Server, Intel 4208 2x2.1Ghz CPUs 16 Cores, 256GB RAM, Raid-1 HyperVisor, VMOS, & Data Drives					
Description	**Qty**	**Unit Price**		**Ext Price**	**Special Notes**
PowerEdge R640 Server	1	$ 196.00	$	196.00	
PowerEdge R640 MLK Motherboard	1	$ -	$	-	
No Trusted Platform Module	1	$ -	$	-	
2.5 Chassis with up to 8 Hard Drives and 3PCIe slots	1	$ 47.00	$	47.00	
PowerEdge R640 Shipping	1	$ -	$	-	
PowerEdge R640 x8 Drive Shipping Material	1	$ -	$	-	
PowerEdge R640 CCC and BIS Marking No CE Marking	1	$ -	$	-	
Intel Xeon Silver 4208 2.1G 8C/16T 9.6GT/s 11M Cache Turbo HT (85W) DDR4-2400	1	$ 368.00	$	368.00	
Intel Xeon Silver 4208 2.1G 8C/16T 9.6GT/s 11M Cache Turbo HT (85W) DDR4-2400	1	$ 368.00	$	368.00	
Additional Processor Selected	1	$ -	$	-	
DIMM Blanks for System with 2 Processors	1	$ -	$	-	
Standard 1U Heatsink	1	$ 9.00	$	9.00	
Standard 1U Heatsink	1	$ 9.00	$	9.00	
3200MT/s RDIMMs	1	$ -	$	-	
Performance Optimized	1	$ -	$	-	
32GB RDIMM, 3200MT/s, Dual Rank 16Gb BASE	8	$ 667.00	$	5,336.00	8x32Gb, 256GB RAM
RAID 1 + Unconfigured RAID	1	$ -	$	-	
PERC H740P RAID Controller 8GB NV Cache Mini card	1	$ 537.00	$	537.00	Raid Controller
480GB SSD SAS Mixed use 12Gbps 512e 2.5in Hot-Plug PM5-V Drive 3 DWPD 2628 TBW	2	$ 887.00	$	1,774.00	VM OS Drive

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Dell PowerEdge R640 Server, Intel 4208 2x2.1Ghz CPUs
16 Cores, 256GB RAM, Raid-1 HyperVisor, VMOS, & Data Drives

Description	Qty	Unit Price	Ext Price	Special Notes
1.92TB SSD SAS Mixed use 12Gbps 512e 2.5in Hot-Plug PM5-V Drive 3 DWPD 10512 TBW	2	$ 1,819.00	$ 3,638.00	Data Volumes
BOSS controller card + with 2 M.2 Sticks 240G (RAID 1) LP	1	$ 411.00	$ 411.00	Hypervisor Boot Disk
Windows Server 2019 Standard 16CORE FI No Med No CAL Multi Language	1	$ 569.00	$ 569.00	2 Windows VMS
Windows Server\00C2\00AE 2019 Standard Edition Add License 16CORE NO MEDIA/KEY	1	$ 569.00	$ 569.00	2 Windows VMS
Windows Server 2019 Standard 16CORE Digitally Fulfilled Recovery Image Multi Language	1	$ -	$ -	
Windows Server 2019 Standard No Media WS2012R2 Std Downgrade DF Media Multi Language	1	$ -	$ -	
Windows Server 2019 Standard No Media WS2016 Std Downgrade DF Media Multi Language	1	$ -	$ -	
Windows Server 2019 Standard No Media WS2016 STD Downgrade Media Multi Language	1	$ 6.00	$ 6.00	
iDRAC9 Enterprise	1	$ 228.00	$ 228.00	
iDRAC Group Manager Disabled	1	$ -	$ -	
iDRAC Factory Generated Password	1	$ -	$ -	
Riser Config 4 2x16 LP	1	$ -	$ -	
Broadcom 5720 Quad Port 1GbE BASE-T rNDC	1	$ 35.00	$ 35.00	4x1GbE
DVD ROM SATA Internal	1	$ 23.00	$ 23.00	
8 Performance Fans for R640	1	$ 94.00	$ 94.00	
Dual Hot-plug Redundant Power Supply (1+1) 750W	1	$ 321.00	$ 321.00	
Power Cord - C13 3M 125V 15A (North America Guam North Marianas Philippines Samoa Vietnam)	2	$ -	$ -	
No Bezel	1	$ -	$ -	
Dell EMC Luggage Tag	1	$ -	$ -	
No Quick Sync	1	$ 19.00	$ 19.00	LCD Panel
Performance BIOS Settings	1	$ -	$ -	
UEFI BIOS Boot Mode with GPT Partition	1	$ -	$ -	
ReadyRails Sliding Rails Without Cable Management Arm	1	$ 70.00	$ 70.00	VMWare Option
Dell Optical Mouse MS116 - Black	1	$ 3.00	$ 3.00	
Black Dell KB216 Wired Multi-Media Keyboard English	1	$ 4.00	$ 4.00	
VMware vSphere 7 Essentials Kit for 3 hosts (Max 2 CPU per host 32 cores/CPU) 5 YR Lic and Sub	1	$ 863.00	$ 863.00	VMWare vSphere 5 Years
No Systems Documentation No OpenManage DVD Kit	1	$ -	$ -	
US Order	1	$ -	$ -	
C2G 6ft Cat5e Snagless Unshielded (UTP) Network Patch Ethernet Cable-Blue - patch cable - 6 ft - blue	1	$ 14.00	$ 14.00	
5-pack of Windows Server 2019/2016 User CALs (Standard or Datacenter)	1	$ 338.00	$ 338.00	5 Windows CALs
10-pack of Windows Server 2019/2016 User CALs (Standard or Datacenter)	4	$ 675.00	$ 2,700.00	40 Windows CALs
50-pack of Windows Server 2019/2016 User CALs (Standard or Datacenter)	1	$ 3,373.00	$ 3,373.00	50 Windows CALs
		Hardware and Software Sub-Total:		**$21,922.00**

M&S1 R640

Dell HW/SW Maintenance & Pro Support 5-Year 8x5xNBD Onsite

Description	Qty	Unit Price	Ext Price	Special Notes
Basic Next Business Day 36 Months	1	$ 94.00	$ 94.00	
ProSupport and Next Business Day Onsite Service Initial	1	$ 794.00	$ 794.00	
ProSupport and Next Business Day Onsite Service Extension	1	$ 577.00	$ 577.00	
		Maintenance & Support Sub-Total:		**$1,465.00**

Exchange Online GCC P1

Exchange Online GCC P1

Description	Qty	Unit Price	Ext Price	Initial Term	Billing Model	Renewal Term
Exchange Online P1-GCC-1Y	95	$ 46.89	$ 4,454.55	12 Months	Annually	12 Months
				Initial Term Subscriptions Sub-Total:		**$4,454.55**

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BitTitan MigrationWiz Mailbox

BitTitan MigrationWiz Mailbox						
Description	Qty	Unit Price	Ext Price	Initial Term	Billing Model	Renewal Term
MigrationWiz-Mailbox (One license/Mailbox per 50GB)	95	$ 11.48	$ 1,090.60	12 Months	Annually	12 Months
				Initial Term Subscriptions Sub-Total:		$1,090.60

Barracuda Cloud-to-Cloud

Barracuda Cloud-to-Cloud						
Description	Qty	Unit Price	Ext Price	Initial Term	Billing Model	Renewal Term
CLOUD TO CLOUD B/U 1-249U	1140	$ 3.03	$ 3,454.20	12 Months	Prepay	12 Months
CONSULTING SVC PHONE SUP PER DAY (Implementation)	1	$ 1,542.86	$ 1,542.86	Monthly	Prepay	N/A
				Initial Term Subscriptions Sub-Total:		$4,997.06

General Terms and Assumptions

- With regard to any software licenses installed by Contractor as necessary to effectuate the provision of services under this Agreement, thus not within the scope of the deliverables, Customer is hereby prohibited from duplicating said software in any form or fashion and is further restricted from using the software beyond the intended scope set forth herein. Moreover, Customer is restricted from licensing, sublicensing or transferring said software to any third party (except to a related party) without the express permission of Contractor, under which circumstance the software shall stay under the control and auspices of the Contractor. In the event Customer loses or damages the software, a copy may be provided at a nominal charge. Contractor may, at its discretion, remove said software upon the completion of its provision of services. Alternatively, at the end of this engagement or the license period, whichever occurs first, Customer is required to either destroy or return all copies of said software to Contractor, as expressly directed by Contractor.
- The manufacturer/support provider has the right to inspect any products that have either never had support coverage or have not had support coverage for an extended period to determine their eligibility for maintenance/support. Devices subject to inspection will be flagged as such and are subject to a non-refundable inspection fee, which shall be the responsibility of Customer. Sentinel will work with the manufacturer/support provider on Customer's behalf until device eligibility is determined. Devices that do not pass the inspection will be ineligible for support.
- For products purchased pursuant to this agreement, Contractor agrees to provide storage at no additional charge for up to 90 days. If the storage period exceeds 90 days, Customer agrees to the following: a.) Customer will be responsible to pay a fee of 2% per month for storage of purchased products from that point forward, b.) Customer will be invoiced and will be responsible to pay the unpaid balance for any products purchased from Contractor that have not been paid in full and, c.) Ownership will transfer from Contractor to Customer.
- For all products purchased, it is assumed that prior to order execution with Contractor, Customer has reviewed, understood, and agreed to each manufacturer's respective terms and conditions governing the purchase of products, including, but not limited to, applicable warranties, order cancellation, and return policies. In the event of a return request, Sentinel may assist Customer by facilitating the request between Customer and the manufacturer. In addition, product return requests will be subject to Sentinel's own return policies, which may include restocking fees and/or shipping and handling costs.
- Under no circumstances will Customer have the right to withhold payment to Sentinel due to an alleged breach of any express or implied warranties with regard to the products purchased herein. Any such claim shall be handled directly between the manufacturer and Customer. If Contractor receives any financial relief or incentives intended for Customer as a result of a settlement between Customer and the manufacturer, Contractor agrees to pass through the incentives or financial relief to Customer.
- Sentinel makes no guarantees with respect to this product's compliance with any local, state, or federal privacy laws, including, but not limited to, the Biometric Information Privacy Act (BIPA) and the California Consumer Privacy Act (CCPA), and Customer shall maintain all responsibility and bear all liability with regard to its compliance with such in relation to its use of this product. Customer shall indemnify and hold harmless Sentinel from any third party claims to arise out of any privacy violations with regard to this product.

SENTINEL

- Fixed Fee Services will be progress billed monthly based on percentage of completion. Generally, services for all non-business impacting tasks are quoted at a standard rate for labor from 9:00 a.m. – 5:00 p.m. If Customer requires, Contractor can perform some of these services outside of normal business hours at an overtime labor rate. Notwithstanding the above, services related to migrations, cutovers, or changes to critical core infrastructure are assumed to be performed outside of business hours and are included in the services pricing provided in this contract. For the fixed charges listed, the Contractor shall furnish all of the materials and perform all of the work shown on the drawings and/or described in the specifications entitled Appendix A, as annexed hereto as it pertains to work to be performed at designated customer locations. Any alteration or deviation from the above specifications, including but not limited to any such alteration or deviation involving additional material and/or labor costs, will be executed only upon a written order for same, signed by Customer and Contractor, and if there is any charge for such alteration or deviation, the additional charge will be added to the contract price detailed above.

Payment Terms

Hardware/Software: For orders over $100K, 50% at contract execution, balance upon shipment from manufacturer

All Invoices: Net 30

This quote is valid until 10 / 16 / 2021.

CUSTOMER:
Village of North Aurora

Signature:_____

Printed Name:_____

Title:_____

Date:_____

P.O. #:_____

CONTRACTOR:
Sentinel Technologies, Inc.

Signature:_____

Printed Name:_____

Title:_____

Date:_____