Request for Proposal

Local Area Network and Wireless LAN Upgrade

RFP Issued: 11/21/2018
Response Due Date: 1/4/2018
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REQUEST FOR PROPOSAL

1 RFP OVERVIEW

1.1 INTRODUCTION

Hartnell College (Hartnell, College, or Customer) is soliciting Proposals from qualified Vendors (Vendor, VAR, or Installer) of various Manufacturers (Manufacturer or Supplier) to replace its aging Local Area Network (LAN) and Wireless Local Area Network (WLAN) with new networking hardware from a major provider at all its sites in Salinas and King City, CA. The project will consist of about 64 Stackable Access Switches with approximately 3000 ports, 7 Chassis Switches with approximately 1700 ports, and 400 Wireless Access Points with 2 Controllers. Hartnell has retained Communication Strategies (Consultant), an independent technology consulting firm, to assist in the design, evaluation, and implementation management of this new platform.

1.2 BACKGROUND

Hartnell College is a community college and one of the oldest educational institutions in California, founded in 1920 as Salinas Junior College. Today Hartnell College has nearly 10,000 enrolled students and 543 staff, administrators and faculty. The current campus consists of three locations: 1) the main campus in Salinas, 2) Hartnell College Alisal campus located less than 2 miles away, and 3) King Hartnell Campus located approximately 48 miles away.

The current networking infrastructure was installed in 2008 and consists predominately of a combination of HP 29xx stackable, and 54xx Chassis switches. The current network gear has reached between 85-95% of port capacity.

The staff and student population has adopted more wireless devices, and the current 802.11 Wi-Fi wireless network has reached its saturation point. Hartnell has over 7000 wireless devices active on their network any given point in the day. The Wireless LAN consists of older Meraki, newer Ruckus, and recent Aruba wireless networking gear. New wireless infrastructure and additional wireless access points will need to be installed to increase capacity and extend coverage throughout the campuses. Software maintenance support on the WLAN will run out soon, which will prevent Hartnell to do additional configuration changes on the switches. There are currently 150 Meraki Wireless Access Points (WAP) throughout all the campuses, 52 Ruckus WAPs in the new Science Building at the main campus, and the King City campus; and 21 Aruba WAPs in building C in Alisal.

1.3 DESIRED OUTCOMES

The goal of this project is to prepare the College for the future by bringing all their critical networking infrastructure up to date and on supported software releases, to increase redundancy and resiliency, increase bandwidth and throughput, and provide users with reliable data communication into the future.

The network upgrade is needed to support the growth of additional wireless users and equip the College for the next generation of students in a more mobile and connected world with new learning and teaching methods. There will be high density environments with many users logging simultaneously into the network for test taking, web-based learning, cloud delivery of learning content and other needs.

An overall network that is easier to manage and administer, reliable and secure; and a Vendor that is knowledgeable about the needs of Higher Education institutions and is a valuable Partner for technology recommendations will be key to the success of the project.

Hartnell’s LAN infrastructure does not change very much, however the WLAN infrastructure requires a lot of management that Hartnell hopes to reduce with the replacement system. Specifically, Hartnell would like to establish 802.1x Single Sign On (SSO) from Domain computers, as well as a captive portal with MAC authentication allowing Students to register 3 devices for a semester, Teachers to register 5 devices for a year, and Guests to register for 1 day at a time. Registration should be authenticated against Active Directory which synchronizes with “Colleague”, the College’s Student Information System (SIS). Lastly, Hartnell needs to increase the density of users per WAP, as well as the number of WAPs deployed.

Please note; Hartnell has attended technology briefings from multiple vendors, manufacturers, and other experts and has decided at this time to not implement Software Defined Networking (SDN) policy and profile-based networking. As defined in this RFP – SDN is generically used for OpenFlow, SD-Access, and other Manufacturer specific modalities that allow for Single or Zero touch provisioning of LAN ports and WLAN devices, where these devices get assigned a policy based on the profile
assigned to them upon authentication. Hartnell currently uses Layer 2 VLANs, ACLs, and SSID to configure security on the network. It has been determined that while Hartnell would like to consider the ability of the quoted system to support SDN, that it is not internally prepared to undertake this architecture change.

1.4 TECHNOLOGY PREFERENCE

1.4.1 Hartnell expects that vendors will bid a solution based on the specific requirements outlined in this document.

1.4.2 Hartnell will only consider factory-new (not used, refurbished, or previously sold but returned) equipment on a system platform that is currently supported by the manufacturer of such equipment and represents the current “Go to market” platform for the manufacturer for our solution requirements.

1.4.3 EoS/EoL – Products or Solutions that have been announced or are being planned on being announced as End of Sale, End of Life, and/or End of Service will not be considered and should not be proposed.

1.4.4 Products and software versions that have been announced, but are not commercially available for purchase, should not be proposed, as Hartnell expects to deploy a ‘mainstream’ solution that has been well tested in actual deployments.

1.4.5 Hartnell would prefer to standardize on as few model types as possible – all other things being equal, and cost being a concern.

1.5 PROCUREMENT VEHICLES

Vendors are allowed (but not required) to provide pricing and commercial terms based on Public Sector approved Procurement vehicles with pre-negotiated discounted pricing. Vendors should quote pre-negotiated pricing or better in their response to this RFP. It is expected that authorized VARs will work with their Manufacturer/Distributor to obtain the maximum discount and then provide a RFP response that best shows why the Vendor would be the best choice for installing the new system. Customer expects that Vendors will provide pricing and discounts like what is offered to other Customers with similar size and configuration purchases that are purchased in a competitive market. Vendor should include any fees or costs to use pre-negotiated contracts and pricing, into their proposal price.
1.6 **VENDOR RFP AUTHORIZATION**

To receive consideration, proposals shall be made in accordance with the following general instructions:

1.6.1 The signature of all persons signing the proposal shall be in longhand and the primary signer shall have the authority to bind the proposer to the offer. The completed proposal shall not alter the questions and specifications provided, nor add/delete/modify the text provided in the RFP request.

1.6.2 The submission of a proposal shall be an indication that the proposer has investigated and fully satisfied themselves as to Hartnell’s requirements and site conditions that will be encountered, and the scope of the work to be performed.

1.6.3 The pricing provided by this proposal is all-inclusive pricing for the turnkey installation of the solution proposed, including but not limited to all discovery, design, implementation, integration, testing, training, trouble shooting, hardware, software, and licenses. Pricing must remain valid for ninety (90) days after RFP response due date.

1.6.4 This RFP, your response to the RFP, Appendices, Schedules, Addenda and written modifications to the RFP requirements will be incorporated into the final contract as indicative of the overall scope of work under which you are awarded the contract (and as a material inducement for Hartnell to enter into contract), further defining the contractual responsibilities of the Vendor.

<table>
<thead>
<tr>
<th>Full Legal Name of Vendor:</th>
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</thead>
<tbody>
<tr>
<td>Signer’s Name and Title:</td>
</tr>
<tr>
<td>Address:</td>
</tr>
<tr>
<td>Phone:</td>
</tr>
<tr>
<td>Email:</td>
</tr>
<tr>
<td>Contractor’s License Number and/or Federal ID Number:</td>
</tr>
</tbody>
</table>

The following individual is an authorized officer of the company with the authority to commit the company to the terms and requirements of this RFP. This individual, or their agent, has had the opportunity to review this RFP and asserts compliance with the requirements therein; except where noted otherwise.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and make an Offer to Contract according to the terms of the RFP response:

<table>
<thead>
<tr>
<th>Signature Authorizing Vendor RFP Response</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical or Electronic signature is required.</td>
<td></td>
</tr>
</tbody>
</table>
1.7 EXECUTIVE OVERVIEW

In this section, the Vendor should deliver an introduction to, and summary of, the RFP response and its specific fit for Hartnell. It should be structured so anyone reading only this section will have a clear understanding of the response and why the Vendor and their solution best fits Hartnell’s specific requirements. Hartnell requires a Visio (or equivalent) drawing in this section that shows the internetworking of all equipment quoted. Please limit this response to no more than four (4) pages and directly address Hartnell stated requirements, not just your copied marketing collateral.

Response:
2 VENDOR INSTRUCTIONS FOR RESPONSE

This RFP is not an offer by Hartnell to enter into a contract under these or any other terms. Hartnell shall have the right to make its selection decision on any basis, in its sole discretion. All costs for proposal preparation are the responsibility of the Vendor. RFP responses are bound by California Public Records Act and may not be marked as confidential. Vendor will be assumed to have Read, Understood, and Comply with each section below unless if they note otherwise by adding a Comply response line, and explain any Exceptions.

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

2.1 SCHEDULE OF EVENTS

<table>
<thead>
<tr>
<th>Dates</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/21/18</td>
<td>RFP distribution</td>
</tr>
<tr>
<td>11/28/18</td>
<td>Intent to Bid</td>
</tr>
<tr>
<td>11/30/18 @ 10am</td>
<td>Bidder’s Conference</td>
</tr>
<tr>
<td>1/4/19 @ 1 PM</td>
<td>Responses Due</td>
</tr>
<tr>
<td>1/16/19</td>
<td>Vendor Interviews</td>
</tr>
<tr>
<td>1/30/19</td>
<td>Contract Award</td>
</tr>
<tr>
<td>2/13/19</td>
<td>Board Approval and Contract signed</td>
</tr>
<tr>
<td>2/25/19 – 3/15/19</td>
<td>Deployment Start - Consultation and Design</td>
</tr>
<tr>
<td>3/1/19 – 4/1/19</td>
<td>Equipment delivered, installed, programmed, and Vendor tested</td>
</tr>
<tr>
<td>4/1/19 – 4/30/19</td>
<td>User Acceptance Testing, Pilot Trials, Rolling Deployments</td>
</tr>
<tr>
<td>5/1/19</td>
<td>Installation Complete</td>
</tr>
</tbody>
</table>

2.2 INTENT TO BID

Vendors must notify Hartnell of their intention to bid, or not to bid, by the date noted above. You should use the form below for your Intent to Bid and it may be copied into an email response to Communication Strategies and Hartnell. If an intent to bid is not received by the due date, Vendor may be excluded from further consideration. Addendum communications will be delivered to the contacts delineated in the Intent to Bid.

Vendor Company Name:  
Sales representative name, telephone number and email address:  
Technical advisor name, telephone number and email address:  
# of people who will attend the Bidder’s Conference:

2.3 CONTACTS
Vendors may contact Communications Strategies for any questions related to this RFP. Salient responses will be emailed to all Vendors as addendums to the RFP. Telephone calls are permitted; however, verbal communications are not binding and should not be relied upon until confirmed in writing. Direct communication with any other person at the Customer regarding this RFP is not permitted.

Contact Name: Nicolas Olivares, Nick@Com-Strat.com, 650-474-0508

2.4 BIDDER’S CONFERENCE

An optional bidder’s conference will take place via Teleconference with the bridge to be supplied after receiving the vendors’ intent to bid. Each responding vendor should have a representative participate in this conference call. Please note that not all items or questions brought up during the conference will necessarily be released in an addendum.

2.5 RFP RESPONSE FORMAT

2.5.1 Hartnell’s requirements are summarized in this RFP Word Document, as well as the RFP Excel Spreadsheet Schedules. Both documents should be reviewed in order to engineer a solution that is fully compliant.

2.5.2 Schedule A Pricing Worksheet, and Schedule B Counts and Capacities are Mandatory Response documents. Instructions for completing these forms are included on the respective spreadsheets in text boxes or Comments that appear when you hover your cursor over the title of a row or column.

2.5.3 Bill of Material – Vendor must also provide an itemized Bill of Material (BoM) detailing parts, quantities, model numbers, and list price organized in a similar fashion to Schedule A but on Vendor’s normal proposal documents. **Vendor must ensure that the total cost on the Bill of Material matches the Schedule A including all discounted pricing.** Vendor should include Pro Forma calculations for Sales Tax, Shipping, other Taxes, and Regulatory/Usage Fees on their BoM.

2.5.4 Attachments – Vendors should respond with all documents listed in Section Attachments in electronic, searchable form. Please use file names that use the section number and/or document name listed in the Attachments.

2.5.5 Appendices/Brochures – The RFP response document and RFP Schedules must stand without appendices or reference to brochures, or technical documents, and these additional documents will not be read as part of the evaluation.

2.5.6 Vendor should respond in the Word and Excel documents provided, with inline responses. Where the option is given, Vendor should respond to each question with its stated compliance, choosing from the following options:

- **Comply, Included** - Feature/Functionality is included in the proposed solution and price.
- **Partial Comply, Included** - Feature/Functionality is included in the base pricing provided, and generally (though not exactly) provides the functionality requested. Explanation of deviance from requested description is provided in the response.
- **Optional Cost, Not Included** - Feature/Functionality is available at additional cost and is not included in the base price for the proposed solution. Pricing is defined on Schedule A in the Options section at the bottom of the spreadsheet.
- **DO NOT Comply** - Feature/Functionality is not available in the proposed solution.

2.5.7 Responses should be stated in the body of the document following the specific questions. Please indicate your compliance (use the provided check boxes - click on the correct box to change it to ☒) and provide the requested response underneath the compliance line in **BLUE**. The following styles have been created for your convenience. Please note your compliance in bold and explain only as necessary on the next line.

**Response:** ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

Response text – Vendor should answer the question, explain compliance or describe their solution on the next line, still in blue, but not bolded. Where a blank line is not provided already, the correct Style can be obtained by hitting [Enter] at the end of the “Response:” line above.

It is important to note that any material modification to the questions in this RFP by the Vendor will result in immediate rejection of that proposal. Do not add or delete rows or columns, change formulas, or re-label any cell in the Excel documents. If an error in the RFP is noted, please bring it to Communication Strategies’ attention as soon as possible.
2.6 **RESPONSIVENESS AND COMPLIANCE**

2.6.1 RFP responses may be disqualified if they do not meet the RFP requirements; upon review of any workaround or alternate strategy recommended by the Vendor. Disqualification is not automatic and may be tempered by the overall compliance of the proposed solution, at Hartnell’s sole discretion. If a Vendor responds as compliant, and it is later discovered that a Vendor is non-compliant to one of the RFP requirements, Vendor may be considered to be in material breach of contract, and Hartnell will have access to all remedies provided by the contract, this RFP, and rule of law, including cancellation of the contract with a full refund. Vendor may (within reason) submit a written response/answer to any of the following sections prior to the official due date and the evaluation committee will determine if your response will be considered materially compliant to the requirement if there is ambiguity.

Pricing must be provided for each element in the RFP and any proposal that does not provide pricing in the base price or optional price section (as defined by Schedule A) will be considered non-responsive and may be excluded from consideration. If Vendors require any further information or discovery in order to respond, it is important that they provide all questions as early as possible in the RFP process to allow Hartnell to research and reply. Pricing should be turnkey including discovery, design, implementation, integration, testing, training, hardware and software – as defined in this RFP. Any responses along the lines of “Further information is required to provide firm pricing”, or “Pricing will be provided upon further discovery” will be considered non-compliant.

2.7 **ADD/DELETE SCHEDULE – ON SCHEDULE A**

2.7.1 Add Schedule – Hartnell IT and Purchasing departments require ongoing fixed pricing from the Vendor and Manufacturer/Distributor as a requirement of this RFP. Understanding that the Vendor and Manufacturer may be able to secure ‘special’ up front discounted pricing for equipment purchased in conjunction with the initial deployment, we have added an Add/Delete schedule to Schedule A. Discount from List Price should cover both Specified and Non-Specified items.

2.7.2 Delete schedule – Equipment/Software/Licensing/etc. that is purchased but not required for the project should be returned for full credit by the Vendor through prior arrange with the Manufacturer/Distributor. Vendor can assume that any equipment returned will be shipped at Hartnell cost and in unopened boxes. Software and licensing will be de-provisioned from the Solution as required by the Vendor.

2.7.3 List Price – The current (or future) Published List Price for the line item as determined from the Bill of Material or from published Price Lists that are available to the Vendor.

2.7.4 Pre-cutover Discount % – should include hardware/software/licensing/etc. costs that can be added or deleted during the installation process, prior to final Cutover Acceptance, and closure of the project.

2.7.5 Post-cutover Discount % – should include discounted pricing for hardware/software/licensing costs that would be added or deleted after the Installation Cutover and Formal Acceptance. These prices should remain valid for 5 years after cutover, barring pricing changes or product discontinuance from the Manufacturer that are beyond its control.

2.7.6 Specified Items – During the contract term including all renewal periods, the successful bidder shall sell all specified items to Hartnell at either the discounted rate as calculated from the Manufacturer List Price and discount % shown on the Vendor’s Bill of Material or discounted from the actual Manufacturer List Price at the time of subsequent purchase, whichever is lower.

2.7.7 Non-Specified Items – During the contract term, including all renewal periods, the successful bidder shall sell all non-specified items to Hartnell at the Manufacturer Published List Price in effect at the time of the bid or the List Price in effect at the time of the order, whichever is lower, less the discount offered in the original bid for similar equipment. Non-specified items include items that are in the published price lists for the successful bidder’s entire product line, but are not listed in Schedule B. Discount % should be noted on the row provided in Schedule A.

2.7.8 Labor rates shall remain firm for 12 months after the award of the contract at the rates shown on Schedule A, and then constrained to not exceed the inflation rate as defined by the CPI.

2.8 **MANUFACTURER’S GUARANTEE OF PRICE SUPPORT IN ABSENCE OF VAR**

Vendor should provide a signed and dated letter from the Manufacturer that confirms the following. That the Successful Vendor is currently an authorized Value Added Reseller (VAR). That if the Successful Vendor loses its authorized VAR status, or upon Hartnell request due to Contract Breach by the Vendor, the Manufacturer will honor the prices and discounts offered to the Successful Vendor in its response to the RFP, through an alternate vendor of Manufacturer’s and Hartnell mutual
acceptance, for the remaining term of its contract with Hartnell. Manufacturer should also agree to accept any hardware or software purchased that was not installed, or was not needed, for return with no restocking or other fees and for full refund.

2.9 PROPOSAL DELIVERY

A soft-copy of the RFP and response documents are required and should be in Microsoft Office format allowing us to save a copy as an editable file for internal review. Please email 1 soft-copy of your response documents to each of the contacts listed previously (limiting emails to 10Mb or smaller), to allow for internal distribution of your response. Responses larger than 10Mb should be zipped before sending or sent by Dropbox or similar service. File/folder names should be kept very short so that we can save to project folders without exceeding 255 characters total path length. Vendor is responsible for ensuring timely delivery, and Com-Strat will acknowledge receipt of responses as they come in. If a response is not received, vendor should contact Com-Strat to ensure that the message was not blocked for some reason.

2.10 EVALUATION PROCESS

All proposals received by the specified deadline will be reviewed by the Evaluation Committee for content, proposed service costs, and capabilities of the Vendor. After initial screening, the Evaluation Committee may shortlist, for further evaluation, those Vendors deemed most qualified based on a review of the proposals. Vendors are advised that Customer, at its option, may award a contract strictly based on the initial proposals. The proposals will be evaluated on the following (in descending order of importance):

2.10.1 Solution Proposed (50%): A proposed solution that complies with the RFP requirements for Reliability, Functionality, Administration and all Requirements. Complete and concise response to the RFP

2.10.2 Capacity to Deliver (25%): A solution from a viable Manufacturer by a Vendor with demonstrated ability to design, install, and maintain the system. Vendor and Manufacturer capabilities and Experience will be gauged by their references as well as their responses that meet the specific needs of Hartnell.

2.10.3 Cost Effectiveness (25%): A cost effective solution when considering Total Cost of Ownership (TCO) as defined by Schedule A over the first five (5) years.

2.11 PAYMENT SCHEDULE

Hartnell requires the following payment terms, payable net 30 upon receipt of invoice from the Vendor:

- 25% due upon contract execution
- 25% due upon equipment delivery (including hardware, software, and licensing) to specified client site and inventory. Title of equipment shall pass to Hartnell upon payment of delivery milestone.
- 40% due as progress payments - invoiced by Vendor after Installation and User Acceptance Testing of the phases delineated in Schedule A and Schedule of Events
- 10% due within 30 days of Delivery and Acceptance, net of any additions or deletions approved by Hartnell.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

2.12 RECOMMENDED OPTIONAL UPGRADES

In answering this type of Request for Proposal, Communication Strategies recommends that Vendors provide pricing on the minimum cost alternatives that allow for full compliance with the RFP. However, we would be interested to know what options or upgrades you would recommend to your base configuration. Please name, define, describe, and price each upgrade that you would recommend in your hardware, software, or feature functionality. Please place the brief description and price for these in the applicable section of Schedule A.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply
3 COMPANY INFORMATION

3.1 CONTACT INFORMATION

<table>
<thead>
<tr>
<th>Bidding Company Name:</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Head Office Address:</td>
<td></td>
</tr>
<tr>
<td>Branch Office (responding or closest to Hartnell) Address:</td>
<td></td>
</tr>
<tr>
<td>Sales Representative name, telephone number and email address:</td>
<td></td>
</tr>
<tr>
<td>Technical Advisor name, telephone number and email address:</td>
<td></td>
</tr>
<tr>
<td>Will the Vendor sub-contract any portion of their Scope of Work; if so, to whom, and for which part?</td>
<td></td>
</tr>
<tr>
<td>Which Warranty/Maintenance Level or Package is included in the base proposal for the first year (and additional years if different)?</td>
<td></td>
</tr>
<tr>
<td>Who will provide first level warranty/maintenance service and who will Hartnell call when service is needed (Vendor, Manufacturer, Joint, other, etc.)?</td>
<td></td>
</tr>
</tbody>
</table>

3.2 VENDOR/VAR BACKGROUND

3.2.1 Provide a brief (two or three paragraphs) overview and history of the company responding to the RFP.
Response:

3.2.2 Please state how many years your company has been selling or installing this manufacturer, this system, and/or the solution that you are quoting. Please summarize your certifications, annual sales volume with the provider of the solution, Distributor tier and any special recognition awarded by the system Provider of each component (UC, Collaboration, Contact Center, Data Network, SaaS, etc.) you are proposing.
Response:

3.2.3 How many Customers or installations does the Vendor have with this exact same systems and version, installed within 150 miles of College’s head office?
Response:

3.2.4 Briefly summarize the typical Scope of Work, Project Plan, and process for deploying a Solution such as the one described in this RFP (Four paragraph maximum).
Response:

3.2.5 Briefly describe Vendor’s standard procedures for cutover coverage, trouble identification/reporting, and punch list resolution. (Two paragraphs maximum, details can be provided in following sections.)
Response:

3.2.6 How many offices does the Vendor have? What number of manufacturer certified technician does the Vendor directly employ within a 2-hour drive of Customer’s main Campus? How many total technicians does the Vendor have certified on this solution? How will the Vendor provide sales, installation, warranty and maintenance support in cities where they have no on-site personnel?
Response:

3.2.7 Customer prefers (but does not require) that the project manager and lead engineer for this project be based within a 2-hour drive of Customer. Will Vendor be able to meet this requirement? If not, how will you organize the project to ensure onsite attendance during key discovery meetings and installations/cutovers.
Response:

3.3 **MANUFACTURER QUESTIONS**

3.3.1 Provide a brief (two or three paragraphs max) overview and history of the Manufacturer of the system(s) being proposed. Include Market Share position and %, industry awards and acknowledgements, analyst rankings etc.

Response:

3.3.2 Briefly summarize the history of the solution platform being quoted that has brought it to its current point of development. Summarize the future vision of the system.

Response:

3.4 **REFERENCE ACCOUNTS**

3.4.1 Provide contact information for a minimum of three (3) local references, using the same Solution being quoted. Please endeavor to make these references as similar to Hartnell as possible, ideally including: having a similar set of features/functionality, same industry, same size, installing the same system, and located within 2 hour drive from Hartnell.

<table>
<thead>
<tr>
<th>Company name and location</th>
<th>Contact name, position and phone number</th>
<th>Solution/Products installed</th>
<th>Size of system</th>
<th>How long installed</th>
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</tbody>
</table>

In addition, provide at least one reference account that has experienced negative service issues. Please describe how your organization responded to the issue(s) and possibly improved internal processes.

<table>
<thead>
<tr>
<th>Company name and location</th>
<th>Contact name, position and phone number</th>
<th>Solution/Products installed</th>
<th>Size of system</th>
<th>How long installed</th>
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</tr>
</tbody>
</table>

Company name and location
Contact name, position and phone number
Solution/Products installed
Size of system
How long installed
<table>
<thead>
<tr>
<th>How long installed</th>
</tr>
</thead>
</table>

**Response:**
4 RFP REQUIREMENTS

For each section below please respond whether the solution being proposed will operate in the environment being described. If the solution is non-compliant with any section below, please copy a Response line beneath the section and explain the non-compliance. If there are no notes under a section, it will be understood to be “Read, Understood and Comply, Included”

Response: ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

4.1 CAMPUS LOCATIONS

4.1.1 Hartnell College Main Campus 411 Central Ave, Salinas CA 93901
4.1.2 Hartnell College Alisal Campus, 1752 E. Alisal St. Salinas CA 93905
4.1.3 King City Education Center, 117 North Second St. King Hartnell CA 93930

4.2 CURRENT NETWORK TOPOLOGY

Please refer to the following diagrams for an overview of the current network topology.

![NETWORK DIAGRAM - Hartnell College 10-23-18.pdf](image)

4.3 INFRASTRUCTURE AND ENVIRONMENT

4.3.1 IT Architecture Upgrade

Customer has a fairly straightforward LAN/WAN architecture with a variety of chassis and stackable switches throughout. Most of this network equipment is End of Life and does not support Power over Ethernet or advanced Layer 3 routing. Customer intends to replace most of the switching infrastructure as part of this RFP.

Hartnell currently uses Microsemi PowerDsine PoE Power Injectors to supply power to VoIP telephones where the current Access layer switch does not support PoE. These PoE injectors are positioned below the corresponding network switch and provide passive power injection as a patch-through connection from the Access switch to the patch panel and Ethernet house cabling. These Power Injectors will be removed as part of this project.

Please review the required switch counts on Schedule B and, as well as in-depth requirements noted later in the RFP.

4.3.2 LAN Summary

Hartnell’ Access layer LAN consists of new 2 x HP 5412zl core switches networked together through VSF (Virtual Switch Fabric) and managed as a single entity. The Core switches also act as the Routing core for the network and about 150 VLANs. Most of these VLANs are configured for the Data Center that is directly connected to the Core or Aggregation switches. Most VLANs are ‘Direct Connect’ so do not require dynamic routing at the Core. There are about 12 remote VLANs that are routed and distributed to the rest of the network through Static Routes. There is no immediate intention to move to dynamic routing protocols, nor move routing down to the Access layer. At the remote campuses, all Layer 3 routing is aggregated at the campus.

Each switch at the main campus is independently connected to the Core over a single or multiple 10G or 1G uplinks. Where an IDF is connected by multiple uplinks to the Core LACP (Link Aggregation Control Protocol) 802.3ad is used to allow active/active uplink and a single logical interface to the 2 connected Cores. Alisal and King City both use a single 1G uplink from the Aggregation switch. The Access Layer consists of a number of 8 port HP 25xx switches, 24 and 48 port 29xx switches, and 54xx Chassis switches. Note that the 8 port 2530 switches, some 48 port 2920 and 2930 switches, and a new 5412 switch will be retained as they are new and have not been written down yet. A complete list of switches deployed and being replaced is included in Schedule B, but is also summarized for your convenience in the body of this RFP in the Requirements section.

4.3.3 WAN Summary
The main campus is connected by an AT&T provided 1Gb GigaMAN Service. The King City and Alisal campuses are both connected by 1Gb AT&T GigaMAN Service. The circuit is connected to Customer Premise Equipment (CPE) Routers at each location. Intra-campus traffic is carried over multi-mode fiber and secured using IP-Sec through a static route to the default gateway. A site-to-site VPN over the internet is created for WAN Failover of inter-office data traffic.

4.3.4 Internet Summary
Hartnell currently has a 1 Gb internet service from CENIC as their primary internet connection. AT&T provides the last mile.

4.3.5 Firewall Summary
Hartnell currently passes all Internet traffic through a Checkpoint firewall, which will soon be upgraded to a pair of Palo Alto Networks 5220 firewalls. There is a DMZ configured. There are no Firewalls deployed ‘within’ the network or locations.

4.3.6 Wireless LAN (WLAN and WiFi) Summary
Client currently has a mix of 150 Meraki WAP (mostly N with MR24, but also MR34, MR53, and MR84) deployed throughout the campuses, and approximately 52 Ruckus (mostly AC with R710, R700) in the STEM building at the main campus and at the King City campus. There are 21 Aruba WAP on loan in Building C in Alisal for a trial. Each WLAN above has its own Controller and Admin portal.

4.3.7 Telephony
Hartnell has recently installed a Mitel Connect (formerly ShoreTel) premises-based system with a combination of Voice over IP (VoIP) phones and analog devices. The VoIP devices use standards-based Quality of Service (QoS) and Power over Ethernet (PoE) to support these endpoints.

4.3.8 Data Center
The main Hartnell Data Center is located in the Library building at the Main Campus. In addition to physical servers, Hartnell has 23 VMware hosts running approximately 100 virtual servers, and a Tegile 60TB SAN.
5 NETWORK UPGRADE REQUIREMENTS

5.1 WIRED AND WIRELESS NETWORK REQUIREMENTS

5.1.1 The solution proposed should support the following standards or their generic (open standards) equivalent across both the Wired LAN and the Wireless WLAN:

5.1.1.1 Fully managed from a centralized management platform
5.1.1.2 All copper Ethernet ports must support 802.11at or PoE+, and the switch should be configured with a Power Supply that will allow all ports to run 30w PoE+ simultaneously.
5.1.1.3 LACP (Link Aggregation Control Protocol) 802.3ad compatible uplinks
5.1.1.4 MC-LAG (Multi-Chassis Link Aggregation) or equivalent, that allows for 2 uplinks to be aggregated and act as a single large uplink when connected to 2 Core or Aggregation switches that are stacked together to act as a single switch
5.1.1.5 Switches connected by stacking cables should be configured as one logical unit
5.1.1.6 Multicast
5.1.1.7 Jumbo Frames – required on the LAN and preferred on the WLAN
5.1.1.8 Port Mirroring (Local Monitoring and RMON)
5.1.1.9 SNMP polling, monitoring and traps
5.1.1.10 VLANs, VLAN Pruning, and Rapid Spanning Tree
5.1.1.11 Quality of Service: DSCP, IP Precedence, 802.1p, 802.1q, at least 4 internal queues, Low Latency Queue, Strict Priority Queue, Weighted Round Robin Best Effort Queue, Sub-Rate Interfaces, Traffic Shaping, and Packet Prioritization
5.1.1.12 All quoted switches designated as Core or Aggregation or Routing switches should support advanced dynamic routing features including EIGRP, RIP, OSPF, BGP, iBGP, VLANs, Rapid Spanning Tree, Per VLAN Rapid Spanning Tree, Access Control Lists, and sub-rate interface traffic shaping in the proposed software load. Although, as described elsewhere not all of these features will be deployed upon implementation.
5.1.1.13 All Access Layer and Distribution switches should support Layer 3 Stub Routing protocols without having to upgrade the software including Static Routes, VLAN pruning, RST, RIP, etc.
5.1.1.14 802.1x Radius Authentication and Authorization of all wired and wireless connected ports and devices. If ports or devices do not authenticate through Radius they should fail to the captive portal for manual login. Ports should only be allowed a default (restricted) network access until AAA has completed successfully.
5.1.1.15 This switching solution should support RADIUS authentication for wired devices/clients through Single Sign On, a captured portal, or static IP address;
5.1.1.16 Lifetime Warranty with Next Business Day Advanced Hardware Replacement
5.1.1.17 Included software support and upgrades for bug fixes and security updates included for 5 years.
5.1.1.18 If there are any other recurring software licensing fees, they should be included on Schedule A for the next 5 years.
5.1.1.19 All speeds requested in this RFP, and Vendor’s compliance with the request, should be counted as Bi-Directional, unless noted otherwise (example 10G uplink is 10G bi-directional speed, not 20G).
5.1.1.20 Please provide additional specifications for all switches as Appendices and/or provide inline links to the specifications page on the Manufacture’s website for each switch in the sections below.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.1.2 Redundant Power Supply (P/S) - All critical single points of failure should be configured with hot swappable power supplies. Redundancy should be configured as:

5.1.2.1 Chassis or Stacked switches that can share power: N+1 P/S that will power the whole cabinet or stack with the failure of a single PS.
5.1.2.2 Switches (Chassis or Stacked) that can’t share power: 1+1 hot-swappable P/S in the “Master” switch of the stack that can be moved to another switch in the stack in the case of a P/S failure. Failure of a single switch in a stack should not affect the operation of all other switches in the stack.
5.1.2.3 Stand-alone stackable switches: Switches that are not stacked can be configured with a single field replaceable or hot swappable P/S. However, Vendor should include 1 additional P/S as an on-premise repair
stock if it is a different P/S than is already configured by the N+1 spare P/S configured for Stacked switches above.

5.1.2.4 Servers, and another other critical switches or appliance: 1+1 P/S, or otherwise as recommended by Vendor as long as there will be no single point of failure due to a single power supply failure.

5.1.2.5 If a switch needs to be updated, rebooted or bounced, will it continue to provide PoE+ through the reboot or have some mechanism to return PoE+ ASAP without having to wait for the switch to go through it’s full boot up sequence

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.1.3 Will the software, feature and functionality licensing be perpetual, or will it expire annually, upon warranty expiration, upon software assurance maintenance expiration, or otherwise? Hartnell would prefer a licensing strategy that minimizes upkeep and TCO but maximizes compliance to our requirements. Please explain below.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.1.4 Software Defined Networking (SDN) – Please describe below any solution available from the Solution for Software Defined Networking, OpenFlow, or proprietary technology that provides similar profile and policy-based configuration of devices and ports. All quoted equipment should support SDN in the future with no hardware upgrade required. Vendor should specify whether SDN is licensed/provided by the software level that they have quoted on the switches. If additional software is required to support SDN, it should be described and priced at list and discounted pricing levels below. Please describe any unique functionality of your SDN solution, and its specific fit for the needs of Hartnell and other Higher Ed Colleges/Universities.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.2 CORE SWITCH REQUIREMENTS - OPTIONAL

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
<th>Port Density</th>
<th>Uplinks</th>
<th>Stacking Cables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Redundant Chassis Core</td>
<td>144 x 1GigE PoE+</td>
<td>16 x 10G (SFP+)</td>
<td>Should act as one unit</td>
</tr>
<tr>
<td>2</td>
<td>Total</td>
<td>288 Ports</td>
<td>32 x 10G (SFP+)</td>
<td>2 – Cabinet Connectors</td>
</tr>
</tbody>
</table>

5.2.1 The core network HPE 5412zl2 cabinets are not planned (nor budgeted) to be part of the replacement, however if pricing on a complete system replacement makes financial sense, the College is interested in exploring this as an option. Please explain whether you have priced out a replacement of the Core Switches, whether you recommend upgrading the core switches at this time, and what advantage there will be to the College to replace these Core switches now, at the same time as the other switches that you are proposing. Vendors are responsible for researching the capabilities of the 5412zl2 switches and ensuring that the performance of any proposed replacement switches will meet or exceed this functionality, including redundancy, port counts, and backplane speed. The table above provides counts and specifications that the Vendor should quote on Schedule A. Please specify which equipment you are proposing including manufacturer, make, model, # of ports, power supply provided, optional modules quoted, backplane aggregate throughput (whether it is blocking or not), and stacking cable or cross-connect throughput for each switch model quoted.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.3 AGGREGATION, DISTRIBUTION, TOP OF RACK SWITCHES

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
<th>Port Density</th>
<th>Uplinks</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 Slot Chassis</td>
<td>48 x 1GigE PoE+</td>
<td>4 x 10G (SFP+)</td>
<td>L2 Aggregation Main Campus</td>
</tr>
<tr>
<td></td>
<td></td>
<td>24 x Mini-GBIC SFP</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The following switches are relatively new and not approaching capacity. Price these switches separately where indicated on Schedule A as optional upgrades that are included in the base price you are proposing. These switches may be removed from the BOM later in the evaluation process.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
<th>Port Density</th>
<th>Uplinks</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6 Slot Chassis</td>
<td>24 x Mini-GBIC SFP</td>
<td>4 x 10G (SFP+)</td>
<td>L2 Aggregation</td>
</tr>
<tr>
<td>1</td>
<td>12 Slot Chassis or Stackables</td>
<td>288 x 1GigE PoE+</td>
<td>2 x 1G-F (SFP+)</td>
<td>Access Chassis or Stackables</td>
</tr>
<tr>
<td>1</td>
<td>12 Slot Chassis</td>
<td>72 x 1GigE PoE+</td>
<td>4 x 10G (SFP+)</td>
<td>L2 Aggregation</td>
</tr>
<tr>
<td>1</td>
<td>12 Slot Chassis</td>
<td>96 x 1GigE PoE+</td>
<td>4 x 10G (SFP+)</td>
<td>L2 Aggregation</td>
</tr>
<tr>
<td>4</td>
<td>Total</td>
<td>456 x 1GigE PoE+</td>
<td>2 x 1G-F</td>
<td>OPTIONAL AGGREGATION SWITCHES</td>
</tr>
<tr>
<td></td>
<td></td>
<td>48 x Mini-GBIC SFP</td>
<td>12 x 10G</td>
<td></td>
</tr>
</tbody>
</table>

The following switch acts as the Top of Rack/Aggregation switch in the Data Center in the Library. It is relatively new and does not need to be replaced. However, we may consider replacing it for consistency with the rest of the network. Price this switch separately where indicated on Schedule A as an option.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
<th>Port Density</th>
<th>Uplinks</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12 Slot Chassis</td>
<td>96 x 1GigE PoE+</td>
<td>4 x 10G (SFP+)</td>
<td>OPTIONAL DATA CENTER TOP OF RACK</td>
</tr>
<tr>
<td></td>
<td></td>
<td>72 x 1GigE</td>
<td>24 x SFP</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 x 10GE Access</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.3.1 The tables above provide counts and specifications that the Vendor should quote on Schedule A. Please specify which equipment you are proposing including manufacturer, make, model, # of ports, power supply provided, optional modules quoted, backplane aggregate throughput (whether it is blocking or not), and stacking cable or cross-connect throughput for each switch model quoted.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply
5.3.2 The wired switches must have the following characteristics:
   5.3.2.1 All switches should be quoted with SFP+ capable network modules for uplink ports. Switches with 1G-F uplinks should use Optics that are compatible with SFP+.
   5.3.2.2 Minimum 40G backbone speed between blades on Chassis switches.
   5.3.2.3 For stackable switches - ability to stack similar series switches through a dedicated backplane connection that does not steal ports from the stacked switches. Minimum throughput of 40 Gbps bidirectionally through the stacking cable.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.3.3 Customer prefers Enterprise class Chassis Switches for high density Distribution and Aggregation layers, due to longer expected development/support lifecycle, and higher backplane throughput speeds. However, we will consider stackable switches if the Vendor can assure us of the same longevity, while also saving Customer money, and providing adequate backplane speeds across the stacking cables.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.4 ACCESS LAYER SWITCH REQUIREMENTS

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
<th>Port Density</th>
<th>Uplinks</th>
<th>Stacking Cables</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>24 Port Stackable Access</td>
<td>24 Port 1GigE PoE+</td>
<td>1 x 1G-F (SFP)</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>48 Port Stackable Access</td>
<td>48 Port 1GigE PoE+</td>
<td>2 x 1G-F (SFP)</td>
<td>0</td>
</tr>
<tr>
<td>24</td>
<td>48 Port Stackable Access</td>
<td>48 Port 1GigE PoE+</td>
<td>1 x 1G-F (SFP)</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>48 Port Stack Top/Bottom</td>
<td>48 Port 1GigE PoE+</td>
<td>1 x 1G-F (SFP)</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>48 Port Stack Top/Bottom</td>
<td>48 Port 1GigE PoE+</td>
<td>1 x 10G (SFP+)</td>
<td>10</td>
</tr>
<tr>
<td>17</td>
<td>48 Port Stack Members</td>
<td>48 Port 1GigE PoE+</td>
<td>-</td>
<td>17</td>
</tr>
<tr>
<td>64</td>
<td>Total</td>
<td>2808 Ports</td>
<td>37 x 1G-F 10 x 10G</td>
<td>29 Cables for 6 Stacks</td>
</tr>
</tbody>
</table>

5.4.1 The wired switches must have the following characteristics:
   5.4.1.1 Switches noted above with 1G-F uplinks can be quoted with SFP or SFP+ network modules at the discretion of the Vendor. Switches noted as 10G must be configured with SFP+. Switches with no uplinks, do not need to be provisioned with uplink network modules.
   5.4.1.2 However, all proposed switches should be capable of supporting at least 2 x 10g uplink ports per switch by adding the appropriate SFP+ network modules, Optics, and software in the future.
   5.4.1.3 1G Ethernet access ports;
   5.4.1.4 Ability to stack similar series switches through a dedicated backplane connection that does not steal ports from the stacked switches. Minimum throughput of 40 Gbps bidirectionally through the stacking cable.
   5.4.1.5 See notes above for Power Supply requirements, including the need to price 1 spare power supply for onsite replacement stock.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.4.2 IT has a preference to implement Stackable Switches that allow for backplane interconnection as it will minimize the amount of cable management that will need to be adjusted. Port counts provided on the spreadsheet are for live data connections and power supplies/processors will need to be engineered accordingly. Note that moving from Stackable Switches to Chassis Switches would require significant re-cabling of the data racks including moving cable management, patch panels, and the current Power Injectors.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply
5.5 Fiber Optic Transceiver Re-Use – Optional

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>J9150A HPE X132 10G SFP+ LC SR Transceiver</td>
</tr>
<tr>
<td>8</td>
<td>J9151A HPE X132 10G SFP+ LC LR</td>
</tr>
<tr>
<td>1</td>
<td>J9152A HPE X132 10G SFP+ LC LRM</td>
</tr>
<tr>
<td>3</td>
<td>J9144A HPE X131 10G X2 SC LRM</td>
</tr>
<tr>
<td>10</td>
<td>J8437A HPE X131 10G X2 SC LR</td>
</tr>
<tr>
<td>12</td>
<td>J9285B HPE X242 10G SFP+ SFP+ Direct Attach Cable</td>
</tr>
<tr>
<td>1</td>
<td>J4860C HPE 1G LH-LC Mini-GBIC</td>
</tr>
<tr>
<td>48</td>
<td>J4858B HPE 1G SFP SX-LC</td>
</tr>
<tr>
<td>39</td>
<td>J4858C HPE 1G SFP SX-LC</td>
</tr>
<tr>
<td>13</td>
<td>J4859A HPE 1G SFP LX</td>
</tr>
<tr>
<td>17</td>
<td>J4859B HPE 1G LX-LC</td>
</tr>
<tr>
<td>12</td>
<td>J4859C HPE 1G LX-LC</td>
</tr>
<tr>
<td>3</td>
<td>J4860C HPE X121 1G SFP LC LH</td>
</tr>
</tbody>
</table>

Totals:
- 0 Multimode 10G
- 22 Singlemode 10G
- 4 SingleMode over Multimode 10G
- 87 Multimode 1G
- 46 Singlemode 1G

5.5.1 Hartnell currently has the above Fiber Optic Transceivers in their network and is willing to allow vendors that support these same transceivers to migrate them to the proposed solution. Please state below whether you can re-use this hardware and how you would organize the deployment to allow for migration of the SFP from the old switches to the new switches.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.5.2 Note that the counts above do not exactly match the required configuration for the RFP due to upgrades in uplink bandwidth as well as denser stacks. Vendors will be required to include enough transceivers to meet the aggregate requirement of the proposed switches defined above.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.6 LAN General Requirements

5.6.1 If your solution uses any commercially available software for the Operating System, database, system administration, API, or other, please explain how the software is patched when the manufacturer of that software issues bug and security patches (Microsoft, Linux and VMware as examples). Will Customer be able to install these patches as soon as they are released, or must they wait for the Manufacturer to validate and support the patch? What SLA will the Manufacturer commit to validating and releasing compliance with “High Risk” security patches?

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.6.2 Can all the switches quoted support 10G uplinks? If not, note below which ones will not support 10G uplinks, and whether they may support 10G through a software/hardware upgrade? How much more than the switch you quoted would be the switch version that would support 10G when we need it in the future?

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply
5.6.3 Describe below any capabilities to support 802.3bz Multi-Gigabit (2.5G, 5G over CatSe or better cabling) Access Layer ports in the product line that is being quoted as the proposed solution, or in a different product line from the same Manufacturer. Will the same Multi-Gigabit slots support 10G over Cat6 or better cabling? If the switches being proposed will support Multi-Gigabit, note below whether different blades or software is required and provide list pricing for these.

Response: [ ] Comply, Included [ ] Partial Comply, Included [ ] Optional Cost, Not Included [ ] DO NOT Comply

5.6.4 Do any of the switches in the proposed product line support 10G Access Layer ports; or 40G or 100G uplinks? Briefly describe which switch models and provide list pricing below.

Response: [ ] Comply, Included [ ] Partial Comply, Included [ ] Optional Cost, Not Included [ ] DO NOT Comply

5.6.5 Customer prefers to implement a new software release after it has been generally available (G.A.) for at least 3 months. The software can then be considered stable and there should have been an x.1 type software release to resolve any software bugs. Please make note if you are recommending the installation of any software that does not meet these criteria, and your justification for doing so. When is the next release due?

Response: [ ] Comply, Included [ ] Partial Comply, Included [ ] Optional Cost, Not Included [ ] DO NOT Comply

5.6.6 Customer will provide any required battery back-up. Will the proposed system require any non-standard plugs or voltage (DC, 220v, twist-lock), if so please specify?

Response: [ ] Comply, Included [ ] Partial Comply, Included [ ] Optional Cost, Not Included [ ] DO NOT Comply

5.6.7 When a switch needs to be replaced due to hardware failure, the system should allow configurations to be automatically copied to the replacement switch;

Response: [ ] Comply, Included [ ] Partial Comply, Included [ ] Optional Cost, Not Included [ ] DO NOT Comply

5.6.8 Briefly summarize any additional licenses available to unlock additional feature sets on the proposed LAN equipment, including the functionality provided and sample pricing at list price.

Response: [ ] Comply, Included [ ] Partial Comply, Included [ ] Optional Cost, Not Included [ ] DO NOT Comply

5.6.9 Does your solution provide for dynamic segmentation of devices plugged into the wired network by encapsulating their traffic on connection and tunneling to a central location for application level policy enforcement, in other words instantiating an encapsulated tunnel for traffic between a device on a switch port and a wireless controller, to provide security and segmentation for devices?

Response: [ ] Comply, Included [ ] Partial Comply, Included [ ] Optional Cost, Not Included [ ] DO NOT Comply

5.7 **WIRELESS NETWORK REQUIREMENTS**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>321</td>
<td>Indoor ceiling mounted Wireless Access Points</td>
</tr>
<tr>
<td>50</td>
<td>Wall Mounted Wireless Access Points</td>
</tr>
<tr>
<td>24</td>
<td>Outdoor Mounted Antennas – combination of wall and pole mounted</td>
</tr>
<tr>
<td>5</td>
<td>Outdoor ‘Portable’ pole mounted Antennas (per below)</td>
</tr>
<tr>
<td>400</td>
<td>Mounting brackets and installation hardware as needed for the above</td>
</tr>
</tbody>
</table>
5.7.1 The Wireless Access Points (WAP or AP) should have the following characteristics:

5.7.1.1 Wi-Fi access points must support the following protocols and be certified by the Wi-Fi Alliance 802.11 a/b/g/n/ac;
5.7.1.2 The wireless LAN solution should incorporate a centralized architecture with thin Access Points and centralized controllers, and integrated network management
5.7.1.3 2 x 1gb uplink to wired network;
5.7.1.4 Full support of 802.11ac, Wave 2;
5.7.1.5 Beamforming and Multiple-Input and Multiple-Output (MiMo);
5.7.1.6 Support for WPA2 security protocol;
5.7.1.7 Support for multiple radios per band;
5.7.1.8 Authentication, Authorization and Accounting (AAA) support;
5.7.1.9 User based roles and policies enforced on the network;
5.7.1.10 OS agnostic;
5.7.1.11 Access Points should support at least 10 SSIDs simultaneously;
5.7.1.12 Allow for connection of at least 50 users simultaneously;

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.2 Describe the specifications and functionality of the Wireless Access Points that you have chosen to quote, including the number of antennas and radios provided by your WAP. What is the maximum concurrent data rate for the WAP across 2.4Ghz and 5Ghz bands. Describe why the WAP that you are proposing will meet the requirements of Hartnell and is the best fit for the needs of College. Note any differences between different antenna/radio configurations available in the same product line. Also note any specific unique abilities of your WAP/antennas/radios for our needs. Lastly, please address your capabilities related to the following:

5.7.2.1 MiMo
5.7.2.2 Beamforming
5.7.2.3 Omni-Directional antennas
5.7.2.4 Internal vs. External antennas
5.7.2.5 Hartnell will require that about 50 of the WAP will be wall mounted, and this might cause issues in coverage with Omni-directional internal antennas. How is that addressed by your solution? Is it possible to add an external antenna for just these WAP while standardizing on the same WAP otherwise? If your solution will require additional external antenna to get the best coverage for wall mounted application, please include the price on Schedule A.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.3 WLAN Controllers:

5.7.3.1 The Solution should provide for Dual Redundant Active/Active Controllers that will manage the WAP, and apply routing and security to all WLAN traffic.
5.7.3.2 If the Controllers are Active/Passive the WAPs should fail 'open' to allow for continuous data connectivity while the secondary Controller comes up – and WAPs should connect without interruption of data connectivity.
5.7.3.3 How are the Controllers synchronized for failover? Do they use VRRP or some other technology?
5.7.3.4 How is WAP traffic load balanced and failed over between the Controllers? Hardware Load Balancers, DNS, etc.? If a user roams from an AP that is connected to one Controller to an AP that is connected to a different controller, how will their session be continued, and will the user be affected (especially if they are streaming a phone call or video)?
5.7.3.5 Are the controllers physical appliances, web based applications, or virtual servers?

5.7.3.6 If they are virtual servers that need to be deployed in Hartnell’s VMware farm, please provide specifications for the vServers, vCPU, VRAM, storage, IOPS hard drive requirements, USB or dongle access, vNICs and physical dedicated NICs, CPI affinity, vMotion, DRS, etc.?

5.7.3.7 Please describe the controllers that you are proposing including capacities (number of controllers, number of WAPs, number of devices, cached devices), capabilities and critical specifications.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.4 Hartnell intends to deploy at least the following profiles. Please describe how your solution will support these profiles and the differential rights that might be assigned to each role.

5.7.4.1 Faculty – 5 devices each registered for 1-year, unrestricted speed, faculty network access

5.7.4.2 Students – 3 devices each registered for 1 semester, 5Mbps cap, restricted network access

5.7.4.3 Guests – 1 device each registered for 1 day, 1Mbps cap, internet access only, lower QoS

5.7.4.4 Administrative/IT – Radius/SSO, unrestricted speed, elevated network access, elevated QoS (critical data plane, below voice and video)

5.7.4.5 All devices should flush at the end of the time period above and require a new AAA registration.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.5 The Wireless LAN solution should allow Hartnell to assign differential rights to various devices automatically, based on their profile as provided by Single Sign On (SSO), 802.1x Radius authentication, Capture Portal, MAC authentication, etc.

5.7.5.1 Bandwidth utilization restriction and caps,

5.7.5.2 Restrict certain types of data exchange,

5.7.5.3 Which networks and VLANs the device can communicate with,

5.7.5.4 Internet only access,

5.7.5.5 Bonjour gateway services to allow Airplay, Printing, iTunes, etc.

5.7.5.6 Multicast DNS (mDNS), Chromecast, DIAL

5.7.5.7 Access to printers, selected servers, selected business applications

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.6 Does the proposed solution include Access Points that support multifunction services including client data access, Wireless Intrusion Prevention System (WIPS), intrusion detection, rogue AP/device identification, location tracking, Auto RF, and RF monitoring, while simultaneously serving clients, and with no physical touch and no additional cost required?

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.7 Mesh wireless and Repeater Antennas:

5.7.7.1 Will Access Points automatically transition to repeaters in the event of a loss of network connectivity?

5.7.7.2 Can the Wireless Access Points being proposed be configured for Mesh or Repeater mode where they get power through 110v AC adapter, and data connectivity wirelessly from other AP?

5.7.7.3 Hartnell has a requirement for 'Portable' WAP that they can set up temporarily for large gatherings of students and additional coverage connections/density is required.

5.7.7.4 Mesh may be useful to stand-up temporary additional coverage for outdoor gatherings, as well as a failback if wired connectivity to the LAN switch goes down. Please describe any functionality available.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply
5.7.8 Describe and provide a screen shot of the WLAN Captive Portal ‘Landing Page’ that can be presented to users and devices – especially devices that do not authenticate through SSO or Radius.

5.7.8.1 How many different Landing Pages can be defined, and how can they be assigned by location/area or profile?

5.7.8.2 Can the Landing Page be customized or ‘white labelled’ with Hartnell information and logos?

5.7.8.3 Will the system provide optimized landing pages per OS, including for Android and iOS devices, and right size skins to auto adjust to smaller screen size type?

5.7.8.4 Will the solution allow for ‘sponsored visits’ that capture and validate against an authenticated sponsor, with Sponsor workflow that contacts the sponsor for approval of the guest account?

5.7.8.5 Can the Landing Page use public certificates so that browsers will not throw an error which would prevent connection?

5.7.8.6 Guest access should not require additional appliances or licenses.

5.7.8.7 Ability to send automated SMS or email credentials to the Guest User.

5.7.8.8 Auto-login for self-registration workflow – no need for the guest to retrieve account credentials from email or SMS for initial login.

5.7.8.9 Support URL persistence so users originally requested webpage can be displayed post login.

5.7.8.10 While not currently being considered, will the solution support social networking logins as an alternative identity store for guest users joining the network?

Response: ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.7.9 Firewall - The wireless LAN solution should provide a firewall:

5.7.9.1 Able to take action including allowing the traffic, denying the traffic, routing traffic, destination or source NAT the traffic, modify the QOS level of the traffic, and blacklist the client for policy matches.

5.7.9.2 Does the wireless LAN solution provide security enforcement for wireless users using a role based, stateful firewall that can be directly integrated with the roles defined within existing authentication servers?

5.7.9.3 Does the wireless system support a stateful application-layer firewall that can identify, classify, and prioritize applications using layer 7 intelligence? Applications should be able to be traffic shaped as well to ensure that recreational applications (like BitTorrent, Pandora, Spotify, etc.) do not consume all of the available bandwidth.

5.7.9.4 Does the wireless system support the ability to fingerprint client device types (i.e. iPad, Android, iPhone, Windows, etc.) and apply security settings to those devices, without the need for additional appliances or licenses? For example: iPads on the Student SSID may have access to only the web and are rate limited to 512 kbps, and no peer to peer traffic is allowed.

5.7.9.5 Does the wireless LAN solution include centralized encryption and decryption on the controller to prevent wired eavesdropping on wireless user data and malicious attacks on access points? Does the solution allow certain devices connected to WAPs to communicate directly to specified VLANs and Ports without having to tunnel all traffic through the controller?

Response: ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.7.10 Roaming - The wireless LAN solution should have the ability to facilitate “Roaming” of mobile devices as they move from Access Point to Access Point. This helps to solve issues with “Sticky Wi-Fi” connections at devices.

5.7.10.1 Intelligently and dynamically load balance devices across Access Points without receiving a new Association request from the device.

5.7.10.2 As ‘Roaming’ users move through a building, and start to lose connection to their attached WAP, will the WLAN automatically and proactively move the device to a WAP in the area they are moving to, and that they would have a strong signal strength with.

5.7.10.3 802.1r – allows not having to re-authenticate to 802.1x Radius server every time it roams from one AP to another.

5.7.10.4 Will the quoted Solution support Opportunistic Key Caching (OKC) and Pairwise Master Key (PMK) caching?
5.7.10.5 Moving a device from one WAP to another WAP should be transparent to the user and session-based connections such as phone calls and video streams should not be interrupted.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.11 Hartnell has a specific requirement for their VRI – Virtual Real-Time Interpreter program. There are certain students that are hard of hearing that have been issued tablet devices. There is a live interpreter that is watching/listening to the teacher and then doing sign language translation for the student in real-time. In the past they found that the video displayed latency and pixilation when sharing the same AP with other students. There was a decision to dedicate an AP or a radio just for these students with their own SSID. This effectively created a separate infrastructure just for them and must be modified each semester for the classrooms that these students will utilize.

5.7.11.1 How can your solution ensure adequate bandwidth and latency on video streams to/from these tablet devices for the VRI program without having to dedicate an entire AP for them? If a shared AP will be used with dedicated SSID or radio, how will the system handle QoS prioritization of the traffic on the uplink from the WAP to the Controller and then to/from the internet?

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.12 Hartnell has a specific requirement around wireless log-ins. When students are brought in for a test, they are told all at once to open the computers or iPad. This creates 30+ registration attempts at the same time asking for IP addresses from a single WAP. Additionally, there are classes such as the Nursing program where they give an iPad to everyone when they walk in and they all try to register at the same time. In the past, there have been delays in all computers registering at the same time. How can your solution solve this issue?

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.13 Do the quoted Wireless Access Points support the following technologies, either inherently as proposed, or through a future software upgrade? If so, please describe below. If not, if there is another WAP available from the Manufacturer that supports these technologies, please provide a brief description of that WAP below, along with list pricing.

5.7.13.1 802.11e QoS over Wi-Fi – with the ability to prioritize traffic on the WAP and the Controller, and shape traffic on the uplink from the WAP through the LAN to the Controller. Describe your solutions ability to support this functionality, and how it is configured.

5.7.13.2 802.1ax (Wi-Fi 6) – Do the WAPS contain circuits/silicon/hardware that will support 802.1ax once the standard is finalized? If not, will there be any way to field upgrade the proposed WAP to support 802.1ax?

5.7.13.3 802.3bz MultiGigabit (such as 2.5G or 5G, over standard Cat 5e or better cabling) to allow higher speed single cable connections to WAP

5.7.13.4 802.3bt which supports 60w Power over Ethernet, and is sometime called 4PPoE, PoE++, or UPoE

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.7.14 Does the proposed solution support location based services such as:

5.7.14.1 Location-based applications that will provide directions between buildings/classrooms and other location services, based on the WLAN’s ability to track a user’s location and provide ‘way finding’ directions?

5.7.14.2 Does the proposed solution support location-based emergency location services so that staff or emergency services personnel can find a person exactly if they make a 911 call from their cell phone?

5.7.14.3 Does the solution provide any type application where students can opt in to see where their friends are, and share their location to their friends?

5.7.14.4 Could the solution be used to be able to see if someone is moving around in a particular room, and which rooms are occupied?

5.7.14.5 Bluetooth Low Energy Beacons and Receivers?
5.7.14.6 Location Analytic information to track visitor frequency, duration of stay, and number of daily visitors?
5.7.14.7 Describe how each of the technologies work in your solution and the benefits that accrue from them. Note whether any of these applications are included in your base proposal pricing. Any applications that you would like to propose as an option should be priced in the “Identified Options” section of Schedule A.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.7.15 The wireless LAN solution should allow for bandwidth or packet rate limiting connected devices based on the profile of the user. Will your solution allow for Guests to burst to higher than the imposed limit during times of low congestion?

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.7.16 The wireless LAN solution should provide automatic call recognition and automatic quality of service correction of voice protocols such as SIP, SCCP, Spectralink Voice Protocol and VoWLAN protocols, as well as Wi-Fi calling identification for major carriers such as T-Mobile, AT&T, and Verizon.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.7.17 Do the proposed Wireless Access Points provide the following features to allow for troubleshooting?
5.7.17.1 The ability to identify themselves by flashing their LED status light on command.
5.7.17.2 Access Points should have a local landing page for client troubleshooting, which should include device information for both the AP and Client, as well as signal strength and nearby interference sources.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.7.18 How do the Wireless Access Points identify interference sources on the 2.4 and 5 GHz spectrum, provide real-time spectrum analysis on those spectrums, as well as identify any interfering access points across all channels in those spectrums. Does it require a dedicated radio on certain AP, or designating certain antennae or AP for this functionality?

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.8 AUTHENTICATION, AUTHORIZATION AND ACCOUNTING (AAA)

5.8.1 Describe the AAA appliance or application proposed by your solution. It is hardware based or a virtual appliance? Is it co-resident with the WAN Controllers or the Network Management software? Does it support the following?
5.8.1.1 User based roles/policies enforced on network, integrated with existing X.500 directory.
5.8.1.2 Full AAA server – RADIUS and TACACS+
5.8.1.3 Identity based policies to secure network access
5.8.1.4 Device Profiling
5.8.1.5 Built-in guest management and device/user onboarding
5.8.1.6 Web based management interface with Dashboard
5.8.1.7 Reporting and analysis with custom data filters
5.8.1.8 Data repository for user, device, transaction information
5.8.1.9 Rich policies using identity, device, health, or conditional elements
5.8.1.10 Deployment and implementation tools

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

5.8.2 Describe any AAA or Network Access Control (NAC) functionality provided by your solution.
5.8.2.1 Does the AAA platform provide AAA, NAC, BYOD and guest access by incorporating identity, health, physical and device information, and additional elements into one set of policies?
5.8.2.2 Does the AAA solution provide APIs to extend the system to support different authentication protocols, high density stores, Health evaluation engines and port vulnerability scanning engines?
5.8.2.3 How will the AAA solution gather information about devices connected to the network?
5.8.2.4 In addition to authenticating the user, will the solution gather granular information about the endpoint device, and perform health checks on Windows/Linux/Mac platforms?
5.8.2.5 Does the AAA solution support multiple methods for device identification and profiling such as: Integrated network-based device profiler utilizing collection via SNMP, DHCP, HTTP, AD, ActiveSync and Endpoint audit via NESSUS or NMAP scanning?
5.8.2.6 Does the WLAN solution support dynamic role updates of users based on CoA (Change of Authority) messages?

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.8.3 Certificates and Authentication:
5.8.3.1 Does the AAA solution support complex PKI deployment where TLS authentication requires validating client certificate from multiple Certificate Authority (CA) trust chains?
5.8.3.2 Does the AAA support server certificate being signed by external/Public CA whilst validating internal PKI signed client certificates?
5.8.3.3 Do the WAPs have Trusted Platform Modules (TPM). It would be preferred that APs not hold “hard configured” internal network information or certificates for authentication to the centralized switches unless this information is stored in a trusted platform module (TPM) integrated into the AP.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.8.4 Does the Solution proposed provide the following Authorization features?
5.8.4.1 Automated onboarding of devices to enable secure access via self-serve portal allowing for the configuration of 802.1x supplicants, device enrolment and provisioning.
5.8.4.2 Policy model should support incorporation of several contextual elements including identity, endpoint health, device, authentication method & types, and conditions such as location, time, day, etc.
5.8.4.3 VLAN steering via RADIUS IETF attributes and VSAs, VLAN steering and port bouncing via SNMP
5.8.4.4 Access control lists – both statically defined filter-ID based enforcement, as well as dynamically downloaded ACLs.
5.8.4.5 Roles or any other vendor-specific RADIUS attribute supported by the network device
5.8.4.6 Support Port bounce (change of authorization) on access points
5.8.4.7 SAML integration and registration

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.9 NETWORK MANAGEMENT

5.9.1 Hartnell prefers a Solution that will allow for management of the Wired and Wireless Networks through the same administration portal, and applications. Describe how the platform provides for system administration of each of the component parts. Provide a screen shot of the key System Administration screens. Is the system administration platform premise or cloud based? Is it a desktop client, a web client, or otherwise? Will the solution offer a "single-pane-of-glass" management platform for managing Access Points, Switches, Security Appliances and Mobile Device Management?

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply
5.9.2 How is the system administration platform made redundant or reliable? Will wired and wireless devices continue to operate autonomously in the event of a disconnect from the system administration portal? Can switches and wireless devices be programmed directly if the system administration portal is down?

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.9.3 System Administration Platform

5.9.3.1 Does the system administration platform provide for multiple levels of administrators with different privilege levels by group?

5.9.3.2 The management application should allow for multiple sites, and multiple levels of administrative roles, including "read-only", "monitor-only" and Guest Ambassador (for creating guest Wireless Access);

5.9.3.3 How do administrators log onto the system? The management application should support Single Sign On (SSO), AD Authentication, Radius authentication, and two factor authentications;

5.9.3.4 Are there any restrictions or any licensing required per administrator?

5.9.3.5 All system changes should be logged and tracked by user and values changed.

5.9.3.6 Does the platform provide a single dashboard page that shows overall system performance any alarms or outages that need to be addressed?

5.9.3.7 How is the work of Help Desk and System Administrators automated or made easier through your solution?

5.9.3.8 Does the system have the ability to create “known good” configurations as a template?

5.9.3.9 How are new wired switches and wireless APs added to the system? Will the administration platform scan the network, or must new switches and APs need to be programmed to connect to the Admin portal before they are deployed to the field?

5.9.3.10 When configuration changes are applied to the network, the administration platform must validate that the were applied successfully, and alert if they are not.

5.9.3.11 The Administration Platform must allow for archiving of configurations to allow a switch to be easily reverted to a previous configuration.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.9.4 Please describe security, encryption, and hacking/penetration features of the system administration portal. How is the platform system administration portal secured against hacking? If the system administration portal is web based, Data Centers hosting the solution should have at least a 99.99% uptime SLA and be secured against penetration and hacking.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

5.9.5 The Management and Administration Solution should provide reports and graphical dashboards that show:

5.9.5.1 Bandwidth Utilization in the network or on certain equipment

5.9.5.2 High bandwidth users

5.9.5.3 Bandwidth utilization by data type

5.9.5.4 In depth Layer 7 analytics with respect to client traffic

5.9.5.5 The last time that a port, IP, user, or wireless device was on the network

5.9.5.6 Bandwidth utilization by wired or wireless port, by IP, by user, or by wireless device

5.9.5.7 Applications and protocols in use by port, IP, user, or wireless device

5.9.5.8 The operations solution should provide historical information, including bandwidth, CPU utilization, memory and errors, for up to one year to surface any errors that could be masked by day-to-day or seasonal variations.

5.9.5.9 The operations solution should retain key client association session information (MAC and IP addresses, signal strength, location/roaming data, start and stop time, session length, bandwidth utilization, etc.) for at least 3 months to enable IT to perform intelligent network and capacity planning, diagnose problems, manage compliance requirements, etc.

5.9.5.10 The wireless system should support the ability to send summary reports to certain administrators on a daily, weekly and monthly basis. These summary reports should show information like top users, top applications,
bandwidth consumed per day, etc. These summary reports should be able to be sent on a per entity basis or aggregated for multiple entities using a tagging mechanism. For example, one administrator may want to see summary report information for all buildings in aggregate every week.

5.9.5.11 Switches should include network wide search capabilities, in which a specific device, a group of devices, type of device, or type of port configuration can be located and configured;

Response: ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.9.6 For faster problem resolutions and to enable troubleshooting and root cause analysis:

5.9.6.1 The operation solution should provide easy-to-use, real-time monitoring views of every device, including access points, switches and controllers, under management.

5.9.6.2 For every access point and switch, the operations solution should provide accurate information on number and username of connected clients; bandwidth utilization in and out; device make, model, software version, serial number; frame and PHY statistics and errors when supported by the device; IP address, MAC address, active alerts, event logs, etc.

5.9.6.3 The solution should alert administrators if the status of hardware changes,

5.9.6.4 The system should alert on specified error conditions, including high processor load, temperature, fan or power supply failure, down ports, hardware failure, memory usage, etc.

5.9.6.5 The operations solution should monitor components of the wired network infrastructure that have a direct impact on the performance of the wireless network

5.9.6.6 The solution should provide port-by-port collection of traffic, errors, discards, etc.

5.9.6.7 The system should allow for packet captures to be generated via the management console for directly connected clients

5.9.6.8 Switches should include network wide search capabilities, in which a specific device, a group of devices, type of device, or type of port configuration can be located and configured;

5.9.6.9 Switch Ports should have the ability to run cable tests and packet captures via the management console;

5.9.6.10 Switch Ports should track uptime history for troubleshooting purposes;

5.9.6.11 To facilitate service desk troubleshooting, will user monitoring screens provide 24-hour playback of a user’s roaming patterns within the facility

5.9.6.12 Deep application visibility into the applications that are used on the network, including hostname visibility to view the individual URLs of all the applications

5.9.6.13 Will the system discover existing and new Access Points in the network by actively polling the network through SNMP, HTTP scanning, CDP etc.? If a new Access Point is found can it be placed in a monitor-only mode until and administrator can review it?

5.9.6.14 The Management and Administration Solution should show the configuration for all devices that were programmed and attached to the system – even if that device fails and is no longer attached to the network.

5.9.6.15 The current Wi-Fi systems do not allow the examination of configuration for WAP that are not online, and this causes significant issues in trying to figure out where the WAP was located.

Response: ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.9.7 In addition to routers and switches, will the operations solution monitor key components of the network infrastructure, DNS servers, DHCP servers, etc. and determine client connectivity and user experience

5.9.7.1 Will the Management and Administration portal allow for monitoring and administration of other network devices such as firewalls, routers, load balancers, servers, etc.

5.9.7.2 Will the Management solution monitor and/or administer equipment from other 3rd party Manufacturers other than the maker of the solution?

5.9.7.3 Is the ability to monitor and manager devices that are not being supplied in this proposal an additional cost, or is it included in the base price of the solution? If it is extra cost please describe the pricing and capabilities below.

Response: ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply
5.9.8  Heat Maps - The solution should provide up-to-date RF heat maps that show accurate information and the overall signal quality delivered to locations on a map.

5.9.8.1  The wireless system should support creating dynamic RF ‘Heat Maps’ showing signal strength, Signal-to-Noise, Signal-to-Interference, coverage, dead spots, rogue APs, other WLAN networks, rogue SSIDs, etc.

5.9.8.2  Will your solution allow uploading of floorplans, and if so which formats does it support?

5.9.8.3  Will it integrate with Google Maps?

5.9.8.4  The solution should have the ability to use all authorized access points under management to perform wireless RF scans to detect unauthorized rogue access points within range.

5.9.8.5  The solution should have the ability to ignore neighbor access points that are not managed but are not rogues, such as a legitimate wireless LAN established by a neighboring organization within RF range.

5.9.8.6  The solutions should be able to display on Quality of Service for voice.

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.9.9  Rogue AP and Wi-Fi interference mitigation

5.9.9.1  Does the solution provide mechanisms for remediating and/or containing rogue devices it has detected?

5.9.9.2  The platform should be able to determine and show the location of rogue access points or devices on a map.

5.9.9.3  Can the system be configured to prevent clients from connecting to rogue APs or unauthorized APs.

5.9.9.4  Does the Solution use tarpitting, de-auth, RF, or other methods for mitigating rogue APs?

5.9.9.5  Will the solution identify regions of WiFi interference to allow for IT investigation?

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.9.10  The Solution Maintenance platform should:

5.9.10.1  Solution should allow for 1-click mass upgrades for switches/WAP/devices simultaneously, regardless of model;

5.9.10.2  The solution should manage and sync firmware versions across all devices;

5.9.10.3  Switches should allow for mass port changes on multiple switches simultaneously from a GUI, without the use of CLI or 3rd party management applications;

5.9.10.4  Support the ability to easily replicate and clone configurations across multiple different sites using a single click. Ideally, a config could be changed once and then replicated across multiple sites

5.9.10.5  Will the solution notify Network Administrators when a new feature or firmware version is available?

5.9.10.6  Will the solution provide a way to open cases with support and monitor their status directly from the management console?

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.10  MOBILE DEVICE MANAGEMENT - OPTIONAL

5.10.1  Hartnell is interested in the proposed solution’s ability to support Mobile Device Management.  Hartnell currently owns, maintains, and administers hundreds of iPads and Chromebooks for student use, mobile phones provided to employees, and applications deployed on BYOD devices.  Please discuss your solution’s ability to provide an of the following functionality.  Note, that vendors that cannot provide MDM will not be excluded, and a decision on whether to purchase MDM will be made separately to the main LAN/WLAN decision.  Provide generic pricing where indicated on Schedule A and let Hartnell know if additional information is required in order to provide pricing for this section.

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.10.2  The proposed solution should support the following capabilities:

5.10.2.1  Asset Monitoring
5.10.2.2 Location Tracking
5.10.2.3 Geo Fence
5.10.2.4 Software and Application Management
5.10.2.5 Content Management
5.10.2.6 Device Restrictions
5.10.2.7 Live Troubleshooting and Diagnostics
5.10.2.8 Networking Configuration Settings
5.10.2.9 Device Erase or Selective Wipe
5.10.2.10 Enterprise Wipe and Profile Removal
5.10.2.11 Active Directory Enrollment Integration
5.10.2.12 Dynamic Security Profiling
5.10.2.13 Android Samsung Knox
5.10.2.14 Open-in Containerization
5.10.2.15 Customer Certificate Authority Upload
5.10.2.16 Network Group Policy Integration
5.10.2.17 24/7 Support

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

5.10.3 Related to the LAN/WLAN network are the following functionalities (or others) provided?
5.10.3.1 Will the wireless system have the ability to identify information from probe requests of mobile devices and have a way to export the probe request information using an XML?
5.10.3.2 Will Access Points natively integrate with a Mobile Device Management application for automatic onboarding and provisioning?
5.10.3.3 Will the AAA solution support Restful API capability to interact with leading MDM vendors within the base license?

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply
6 IMPLEMENTATION AND INSTALLATION REQUIREMENTS

The entire “Implementation Requirements” section reflects Mandatory requirements of Hartnell. Vendors should ensure that their proposal will meet the required Scope of Work in this section, as well as other Mandatory requirements throughout the RFP. Please provide line item pricing for each portion of the Implementation and Installation portion of the RFP response. Below are the implementation requirements for this project:

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

6.1 PHASED DEPLOYMENT/MIGRATION

6.1.1 Best Practice Configuration – An initial discussion (upon contract award) will be held between the Vendor and Customer to review all IT/IS infrastructure systems (including all hardware versions, software revisions, and routing/switching programming), and important applications and data flows on the LAN/WAN. Upon completion of this initial discovery, Vendor will provide recommendations for upgrades and remediation as needed, as well as Best Practice documentation and recommendations for deployment of the new Network.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

6.1.2 Vendor is expected to work in concert with Customer, outside Vendors and other specialists to deliver a LAN/WAN configuration that is 100% operational. Vendor will be responsible for providing consultation, best practice recommendations, and switch and router configuration scripts for the models and software revision levels that the Vendor has proposed; in order to support network connectivity to the specifications required by the Manufacturer. Typically, Vendor will provide sample configurations, and once approved by Customer, Hartnell will customize and deploy into every switch and router in the network. Customer will implement Vendor provided configurations on any pre-existing hardware that the vendor is not certified on.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

6.1.3 Hartnell intends to deploy the solution to locations over a period of 1-2 months per a mutually-agreed schedule in the Project Plan. This deployment plan considers resource constraints within Hartnell. Vendor should state their compliance with this requirement below as well as any recommendations for deployment with a multi-site, phased deployment, including any recommendations for Hartnell to consider based on Vendor’s experience, unique Solution characteristics, and best practices.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

6.1.4 Vendor must include professional services to review current WAP placements based on floor plans, and provide high level recommendations building by building for coverage and density.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

6.1.5 Vendor should provide optional pricing to provide a ‘Heat Map’ survey of all Hartnell buildings and campuses with Vendor provide mobile equipment that will allow the Vendor and Hartnell to jointly determine the optimal locations for deployment of Wireless Access Points, as well as any pre-existing conditions such as dead-spots or areas of interference. Please let us know if additional information is required to provide pricing, and Customer will accept an informed estimate based on estimated number of days or hours to complete.

Response: □ Comply, Included □ Partial Comply, Included □ Optional Cost, Not Included □ DO NOT Comply

6.2 PHYSICAL DEPLOYMENT AND IMPLEMENTATION RESPONSIBILITIES
6.2.1 In order to minimize the labor and professional services costs of the implementation, Hartnell intends to complete most of the programming of the ports on the switches, as well as manual labor for deployment of switches and Access Points themselves. Hartnell will:

6.2.1.1 Arrange to move cabling to facilitate moving WAP from walls to ceilings where needed.
6.2.1.2 Provide cabling and hang APs where none currently exist (Hartnell is going from 1 WAP per 2 classrooms in some buildings to 1:1)
6.2.1.3 Remove old WAP and hang new WAPs
6.2.1.4 Inventory current switch configurations and program the new switch ports
6.2.1.5 Receive, unbox, assemble/prepare the switches and components, rack and stack the new switches
6.2.1.6 Moving patch cables from the old switches to the new switches

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

6.2.2 In case Hartnell has resource constraints in deploying the new network, Vendor should provide an estimate of its cost to provide professional services for the following as an option on Schedule A:

6.2.2.1 Install new APs where none currently exist (Hartnell to provide required infrastructure and cabling)
6.2.2.2 Remove old WAP and hang new WAPs
6.2.2.3 Rack and stack the new switches
6.2.2.4 Moving patch cables from the old switches to the new switches
6.2.2.5 Inventory current switch configurations and program the new switch ports – price this optional element separately

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

6.3 NETWORK SWITCHES:

6.3.1 Have all equipment shipped to Hartnell and Vendor will perform a complete inventory based on the Bill of Materials.
6.3.2 Vendor will assist Hartnell in performing software upgrades:
   6.3.2.1 Versions will be coordinated by Hartnell and Vendor at time of task
6.3.3 The Vendor and Hartnell will work in concert to test equipment:
   6.3.3.1 Burn in all equipment for a minimum of 3 days
   6.3.3.2 Test interoperability to the maximum extent possible
   6.3.3.3 Test programming and functionality to the maximum extent possible
6.3.4 Vendor will provide on-site Engineer support as needed during cutover (weekend daytime hours)

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

6.4 WIRELESS LAN (Wi-Fi)

6.4.1 Have all equipment shipped to Hartnell, and Vendor will perform a complete inventory based on the Bill of Materials.
6.4.2 The Vendor will assist Hartnell in the physical preparation of Controllers, System Administration and AAA portals, and other provided servers:
   6.4.2.1 Install software as required onto Vendor supplied servers, or Hartnell provider VM server hosts
   6.4.2.2 Attach rack mounting brackets for physical hardware
   6.4.2.3 Affix printed label with hostname and management IP address to the rack mounting bracket at the front right side of the controllers
6.4.3 Vendor will work with Hartnell to test physical connectivity to the network, and WLAN controllers, of a sample number of WAPs
6.4.4 Vendor will assist Hartnell in performing software upgrades, Versions will be coordinated by Hartnell and Vendor at time of task
6.4.5 Vendor will assist Hartnell in:
6.4.5.1 Set up as WLAN Controllers for active/load-balancing high-availability pair
6.4.5.2 IP addresses provided by Hartnell at time of task
6.4.5.3 Configure CAPWAP (RFC 5415 Control and Provisioning of Wireless Access Points) or similar and provide DHCP settings requirements to Hartnell
6.4.5.4 Configure application visibility
6.4.5.2 IP addresses provided by Hartnell at time of task
6.4.5.3 Configure CAPWAP (RFC 5415 Control and Provisioning of Wireless Access Points) or similar and provide DHCP settings requirements to Hartnell
6.4.5.4 Configure application visibility
6.4.6 The Vendor will assist Hartnell to configure up to 10 wireless networks (SSIDs) SSIDs for:
6.4.6.1 New advanced corporate data 802.1x Radius and/or certificate-based authentication, Hartnell will provide Microsoft Windows Server AD services
6.4.6.2 Basic corporate data WPA2 Enterprise
6.4.6.3 New hidden IT/IS administrative network 802.1x based
6.4.6.4 New basic VoIP WPA Personal (voice QoS)
6.4.6.5 New WPA2 Personal as a backup for specific SSID
6.4.6.6 Faculty 802.1x and/or captive portal
6.4.6.7 Student captive portal
6.4.6.8 New public/guest network with captive T&C web portal
6.4.6 Vendor will assist Hartnell in testing equipment
6.4.7.1 Burn in all equipment for a minimum of 3 days
6.4.7.2 Test interoperability to the maximum extent possible
6.4.7.3 Test programming and functionality to the maximum extent possible
6.4.7 Vendor will provide on-site Engineer support as needed during go-live (normal business hours)
6.4.8 Prepare the system to run a heat map of WLAN coverage, including uploading Customer provided Floor Plans, and then provide recommendations for Best Practice configuration modifications or WAP movements based on the results of the Heat Map.
Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

6.5 SIT AND UAT SOLUTION TESTING
6.5.1 SIT and UAT – 1 to 2 weeks prior to UAT testing, Vendor will complete Unit Testing (UT) of individual solution components, as well as System Integration Testing (SIT) between various parts of the Vendor provided solution and the Customer provided network. SIT should follow Vendor/Manufacturer/Service Provider best practices, but be at least as comprehensive as the UAT test plan to ensure that UAT testing will be successful. Vendor will test all installed equipment to manufacturer and vendor supplied test plans and correct all defects prior to UAT.
6.5.2 UAT – Vendor will supply a recommended test plan, which Communications Strategies and Customer will edit into a final User Acceptance Test (UAT) plan that confirms the operation and resilience of all applications to the requirements specified in the RFP.
6.5.3 Vendor shall have a lead technician and adequate support staff onsite and available for UAT system testing at least 1-2 weeks prior to going live with the Solution.
Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply

6.6 IMPLEMENTATION
6.6.1 Please indicate your intended compliance with each of the following once you are awarded the contract. The plans and charts do not need to be created at this time.
6.6.2 Responsibility - The selected Vendor is expected to work in conjunction with Customer to complete the installation, provisioning and deployment of the replacement WAN & LAN infrastructure. Vendor may designate their affiliates (including sub-contractors, Service Provider, and Manufacturer), but Vendor remains responsible.
6.6.3 Single Point of Contact – Successful Vendor will provide a single point of contact for all installation work. The Successful Vendor shall appoint a Project Manager for the duration of the project. The Project Manager will be subject to Hartnell approval.
6.6.4 **Programming Information** – The successful Vendor should provide optional pricing to complete turnkey switch configuration discovery and programming for the new LAN/WLAN infrastructure.

6.6.5 **Installation** – The Vendor should provide optional pricing where indicated on Schedule A to assist the Customer employees in racking the new network gear and assist the Customer in migrating the existing network equipment to the new LAN/WLAN hardware.

6.6.6 **Software Version** - Vendor will implement the most recent and stable version of all supplied software. If the manufacturer releases a software update to fix flaws, bugs, or security during the installation timeframe the Vendor will update Hartnell’s system at the earliest reasonable opportunity during a scheduled maintenance window. This maintenance window will be scheduled after hours for service impacting upgrades to an operational and partially deployed system at no extra cost to Hartnell.

6.6.7 **Project Plan** - A master project schedule must be created, along with a work responsibility matrix, identifying the tasks the Vendor will perform and the tasks Hartnell is expected to perform to successfully implement the new system.

6.6.8 **Security** – Hartnell requires that security compliance protocols be followed at all times. This may require some or all of the following:

- 6.6.8.1 Vendor employees being escorted to certain work areas on Hartnell premises;
- 6.6.8.2 Examination and certification of installed systems, programs, applications and platforms (possibly in a PoC or Sandbox environment) for compliance with Hartnell security requirements and protocols;
- 6.6.8.3 Individual background checks of Vendor/Manufacturer/SP employees working on solution installation;
- 6.6.8.4 Other factors deemed necessary by Hartnell CISO and management.

**Response:**
- ☐ Comply, Included
- ☐ Partial Comply, Included
- ☐ Optional Cost, Not Included
- ☐ DO NOT Comply

6.7 **TRAINING**

6.7.1 The Vendor will provide Train the Trainer training and documentation for any significantly different functionality, or user experience that will exist in the new system.

6.7.2 Vendor will provide Knowledge Transfer to Hartnell designated staff of any new significant administrative processes required to manage the new systems. Note that this does not amount to full administrative training but may take 1-2 days.

6.7.3 Hartnell desires to have Manufacturer learning credits included to allow for 2 persons to each attend a 1 week (or otherwise as recommended by Vendor/Manufacturer) formal training class that will provide training to Manage, Administer, and Maintain the proposed Solution.

**Response:**
- ☐ Comply, Included
- ☐ Partial Comply, Included
- ☐ Optional Cost, Not Included
- ☐ DO NOT Comply

6.8 **CUTOVER COVERAGE**

6.8.1 It is expected that equipment will be pre-staged labelled and organized in such a manner as to minimize any outages or service disruptions. Service disruptions that affect a very small and limited area (such as WAP deployments once the WLAN is fully configured) can be done during business hours. Otherwise, major disruptions will be conducted after business hours on weekdays. Hartnell will also try to take advantage of weekdays where students are not in class such as Spring Break or Christmas.

6.8.2 For major cutovers, it is expected that the lead engineer will physically attend onsite, and project manager will personally coordinate remediation onsite, until all reasonable punch-list items are resolved.

6.8.3 For minor cutovers where Hartnell is lead on the deployment, Vendor shall provide arrange to have Lead Engineer on-call remotely to provide programming and troubleshooting assistance.

6.8.4 After reasonable punch list items are resolved, additional issues will be moved to an exception list and will be tracked by Vendor with an action plan, responsible person, and deadline for completion. Vendor will provide daily updates on the remaining exception list items.

**Response:**
- ☐ Comply, Included
- ☐ Partial Comply, Included
- ☐ Optional Cost, Not Included
- ☐ DO NOT Comply
6.9  **SYSTEM ACCEPTANCE**

6.9.1  System acceptance will be defined as follows:

6.9.1.1  All equipment delivered and installed. All core Solution applications and functionality deployed. Certain advanced features and applications may be deployed later upon Hartnell preference at the end of the project, in which case they should be installed and tested before System Acceptance.

6.9.1.2  All Knowledge Transfer and training completed.

6.9.1.3  All installation issues resolved to Hartnell satisfaction.

6.9.1.4  Documentation representing the system “As Built” is delivered and reviewed with Hartnell. System Administrator and Help Desk training provided that will allow Hartnell to manage the Solution.

6.9.1.5  Hartnell may agree to system acceptance with a mutually acceptable exception list.

**Response:**  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

6.9.2  Hartnell expects that they will move from installation support to warranty/maintenance support only upon execution of a Delivery and Acceptance agreement. Please define if Vendor has a different requirement for the beginning of the warranty/maintenance period.

**Response:**  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply
7  WARRANTY, MAINTENANCE AND SUPPORT

7.1  WARRANTY, MAINTENANCE AND SUPPORT

7.1.1  As noted earlier, the Proposed solution should include the following Warranties, Maintenance, and or Support:

7.1.1.1  Lifetime hardware replacement warranty with Next Business Day Advanced Hardware Replacement.
7.1.1.2  If Manufacturer cannot replace hardware with the same model by Next Business Day, they will provide the next better or newer hardware that meets the same minimum specifications.
7.1.1.3  Shipping of replacement part to Customer site should be no charge. Shipping of the defective part back to Manufacturer would be at the Manufacturer’s or Vendor’s expense.
7.1.1.4  Software should ideally include lifetime support and updates for bug fixes and security patches. However, the quoted Solution must have at least 5 years Software Support included in the Proposed price.
7.1.1.5  The proposed solution should be quoted with break-out pricing on Schedule A (if priced separately) for ongoing licensing costs in the Annual Recurring Cost Column.
7.1.1.6  The proposed solution should be quoted with break-out pricing on Schedule A (in the maintenance section) for 5 years of Software Support and Updates that will allow Customer to install the most recent software level and enact features that are available at the same software level.
7.1.1.7  Support should be available 24x7 by telephone to allow Customer to call with issues or open tickets.
7.1.1.8  Installation labor and Professional Services should be Warranted against defects and errors for 1 year.
7.1.1.9  Maintenance and support may be provided remotely if that is possible. However, if Vendor or Manufacturer determines that they need to come onsite to enact a repair there should be no additional cost to Customer for the onsite visit.
7.1.1.10  All maintenance during the warranty and maintenance agreements shall be performed by Manufacturer certified personnel that are full time employees of a Manufacturer Certified Vendor.
7.1.1.11  Any services provided from Cloud Services or Manufacturer/Vendor Data Centers should be covered by SLAs to guarantee 99.99% uptime availability during Hartnell’s normal working hours.
7.1.1.12  Any Cloud outages that may affect Customer’s network must be communicated to the Customer proactively with at least 1 weeks’ notice, other than urgent emergency patches. Customer should always have a right to refuse a newer version of software code if they feel that the risk or business disruption is not warranted.
7.1.1.13  Please describe below what the Manufacturer’s standard warranty covers, and how it and any supplemental warranties you are proposing will meet the requirements above. Note any area where you are not meeting the requirements above, or where you are surpassing those requirements. Provide a copy of the Warranty/Maintenance terms and contract as an attachment to the RFP, but summarize briefly below.

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

7.2  WARRANTY QUESTIONS

7.2.1  Describe any portals or reports where Hartnell can view past and current service calls, and moves/adds/changes with detailed resolution notes.

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

7.2.2  How does your company provide future software releases as part of the Solution or the maintenance package? After installation will the system need to reboot, or can these upgrades take place in an online environment? Briefly describe the process for installing a software update and reverting to a previous software load if required. Specify for each major component proposed.

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply
8  CONTRACT TERMS AND CONDITIONS

8.1  ORDER OF PRECEDENCE

If there is a discrepancy in terms and conditions between any documents that will form part of the final awarded contract, the following order will prevail:

1) Vendor provided Master Service Agreement or Professional Services Agreement
2) RFP, Response to RFP, Addenda, and RFP Schedules
3) Vendor Contract
4) Vendor Scope of Work
5) Written correspondence between the Vendor and Hartnell

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

8.2  GENERAL CONDITIONS

The following conditions are typical. If you must take exception with any of the conditions below, please copy a blue “Response” line to the appropriate spot, fully explain your objection, and suggest an alternative.

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply

8.2.1  Not An Offer to Contract

This RFP is not an offer by Hartnell to enter into a contract under these or any other terms. Acceptance of a proposal neither commits Hartnell to award a contract to any Vendor, even if all requirements stated in this RFP are satisfied; nor limits Hartnell’s right to negotiate in its best interest. Hartnell reserves the right to reject all proposals and not make a decision, or to contract for only a portion of the project. Hartnell shall have the right to modify the terms of this RFP without notice, and to make its selection decision on any basis, in its sole discretion. All costs for proposal preparation are the responsibility of the Vendor. All RFP responses become the property of Hartnell upon submission.

8.2.2  Addenda

Written Addenda (including emails) issued by Hartnell, interpreting, modifying, or adding to this RFP shall be incorporated into the RFP response. Any oral communication concerning this RFP is not binding on Hartnell and shall in no way modify this RFP.

8.2.3  Valid Period of Offer

The pricing, terms, and conditions stated in the RFP Response must remain valid for 3 months from the due date of the response in order to finalize a decision and enter into contract. Thereafter, pricing should remain fixed for the term of the contract.

8.2.4  Inclusive Pricing

It is expected that there will be no additional charges other than those specified on Schedule A. The Vendor is solely responsible for all Time and Materials, airfare, hotel, living expenses, mileage charges, shipping, duties, tariffs and Value Added Tax. These costs should be included in the quoted “turn-key” pricing. Any error in configuration or omission of required equipment is the responsibility of the Vendor to provide at no additional charge in order to provide a functioning Solution that meets the scope of the RFP.

Vendor’s proposal should identify all services and equipment to be provided by Hartnell, required to implement the Vendor’s proposal. No materials (including servers or Windows OS), labor or facilities will be furnished by Hartnell, unless specifically requested in the RFP response.

8.2.5  “Optional” Pricing

Hartnell wants to avoid any misunderstanding where it is assumed that a feature is included in the base pricing and turns out to be an optional, extra cost feature. As such, any question answered “Comply” will be considered included at no additional cost. Any service that is referred to in the body of this response and exhibits (does not pertain to attachments and brochures)
will be considered included in the basic offer, and pricing, unless Vendor specifically refers to the service as Optional and provides optional breakout pricing on Schedule A.

8.2.6 Scope of Work

This RFP, your response to the RFP, Appendices, Schedules, Addenda and written modifications to the RFP requirements will be incorporated into the final contract as indicative of the overall scope of work under which you are awarded the contract (and as a material inducement for Customer to enter into contract), further defining the contractual responsibilities of the Vendor.

Vendor’s final Scope of Work will not be able to capture every action item, deliverable or responsibility of each party. If an action item is not listed in the SoW but is reasonably required in order to meet the requirements and specifications of the RFP, it will be assumed to be included at no extra charge and the responsibility of the Vendor if it relates to the hardware, software or services being provided by the Vendor. If an action item is not listed and is solely related to the inner workings of Hartnell’s LAN/WAN, IT network, or business processes, it will be assumed to be delivered by Hartnell (but with Vendor support and consultation).

8.2.7 Complete Response

Failure to answer all questions in this RFP may be considered non-responsive. Hartnell may, at its sole discretion, waive minor inconsistencies in a response.

8.2.8 Joint Response

If two or more firms are involved in a joint venture or association in order to provide a response, the proposal must clearly delineate the respective areas of authority and responsibility of each party. All parties must submit a Vendor RFP Authorization section. All parties signing the agreement must be individually liable for providing the services even when the areas of responsibility under the terms of the joint venture or association are limited. This often applies when the Vendor contracts with the Manufacturer for professional services in the installation of the system.

8.2.9 Sub-Contract of Work

Vendor must disclose if they intend to sub-contract any portion of the work required under this RFP response. Sub-contractors must be chosen prior to submitting a bid and their abilities will be assessed as well as those of the Vendor. Hartnell will contract directly with Vendor and Vendor will be completely responsible for the completion of all facets of this RFP (even if sub-contracted to others by the Vendor).

If Vendor sub-contracts work without prior disclosure or changes the designated sub-contractor, this will be considered a breach of contract and Hartnell may, at its sole discretion, terminate the contract. Vendor will be paid only for actual work completed to that point and Hartnell will pay no penalties for cancelling the contract. Please note below if any work will be sub-contracted, which work, to whom, and the percentage of the total proposal being sub-contracted.

8.2.10 Assignment

Vendor may not assign their responsibilities under this contract to any other party without the written consent of Hartnell. Vendor contract may not be assumed by another company through a merger or acquisition without Hartnell’s written consent, which will not be unduly withheld. This is intended to prevent Hartnell from being obligated to work with a Vendor that they would not have chosen to work with, through an evaluation of the assigned company’s own merits.

8.2.11 Right of Refusal

Hartnell retains full right of refusal over Vendor staff or resources for any, or no, reason. Upon notification of a reasonable request to change staff, Vendor will identify alternate candidates with similar or equal qualifications for Hartnell to interview. Upon selection of alternate resource, Vendor will endeavor to schedule the new resources to the project with minimal delay.

8.2.12 Insurance, Liability, and Indemnification

The successful Vendor is liable and responsible for any damage to the premises (e.g., floor, walls, etc.) caused by Vendor personnel or equipment during installation and is responsible for the removal of all project-related debris.

The Vendor shall, at Vendor’s expense, procure and maintain satisfactory comprehensive general liability insurance to adequately protect the Vendor’s personnel and Hartnell against damages for bodily injury, including death, and property damage, which may arise from operations under this contract, whether such operations are by the Vendor or by the Vendor’s subcontractor, or anyone directly or indirectly employed by the Vendor. Hartnell requires $1,000,000 comprehensive general
liability coverage, a policy of comprehensive vehicle liability insurance with minimum limits of $1,000,000, and worker’s compensation in compliance with California law.

In addition, the Vendor must agree to defend, indemnify, and hold harmless Hartnell, its officials, and every officer, employee and agent of Hartnell (collectively “Hartnell”) from any claim, liability or financial loss, injuries to property or persons arising out of any acts or omissions of Vendor, its officials, officers, employees or agents in connection with the performance of this Agreement, except for such claim, liability or financial loss or damage arising from the gross negligence, sole negligence, or willful misconduct of Hartnell, as determined by final arbitration or court decision or by the agreement of the parties. Vendor shall defend Hartnell, with counsel of Hartnell’s acceptance, at Vendor’s own cost, expense, and risk, and shall pay and satisfy any judgment, award, or decree that may be rendered against Hartnell. Vendor shall reimburse Hartnell for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Vendor’s obligation to indemnify shall not be restricted to insurance proceeds, if any, received by Vendor or Hartnell.

8.2.13 Permits
The Vendor shall obtain and pay for any permits and licenses required for the performance of the work, post all notices required by law, and comply with all laws, ordinances and regulations bearing on the conduct of the work, as specified herein. On any work which requires an inspection certificate issued by local authorities, National Board of Fire Underwriters, or any other governing body, such inspection certificate(s) shall be obtained by and paid for by the Vendor. The chosen Vendor shall procure all required certificates of acceptance or of completions issued by the state, municipal or other authorities and must deliver these to Hartnell.

8.2.14 Seismic Requirements
All systems, equipment, and materials proposed must be designed and installed to meet Universal Building Code (UBC) requirements for seismic protection. Vendor must certify that all work performed as a part of any contract resulting from this RFP will conform to the codes and other seismic protection requirements and regulations for the locality being installed into.

8.2.15 Single Point of Contact
The Vendor will act as a single point of contact for all installation/warranty/maintenance issues related to all equipment provided under this contract. Vendor will not refer Hartnell to the manufacturer of the equipment for resolution of any service issues. Vendor will coordinate response between the suppliers of all hardware/software that the Vendor has provided under this contract, so that Hartnell is not affected by any “finger pointing.” Vendor will provide best effort in resolving issues unrelated to the equipment they provided but integrating with the equipment they have provided (for example Unified Messaging integration with a Vendor supplied Voicemail platform).

8.2.16 On Time Performance
The successful Vendor will be required to commence work within fifteen (15) calendar days of execution of contract, to prosecute the work with faithfulness and energy, and to complete the work according to the schedule set out in this RFP. The parties hereto agree that it will be impractical and extremely difficult to fix the actual damage from a breach of the obligation to complete the work within the specified period, and therefore, agree that two hundred fifty dollars ($250) per day shall be presumed to be the amount of damages sustained for any such delay.

It shall be understood by all Vendors that time is of the essence in the prompt manufacture, shipping, delivery, and installation offered by the Vendor; and Hartnell reserves the right, and may at its sole election, cancel any award or purchase order arising hereunder for untimely delivery (more than 1 month after date shown in final Vendor project plan).

If the contractor shall be delayed in the work by the acts or negligence of Hartnell, or by changes ordered in the work, or by strikes, lockouts, fire, unusual delay in transportation, unavoidable casualties or any Force Majeure causes beyond the control of the Contractor, or by delay authorized by Hartnell, or by any cause which Hartnell shall decide justifies the delay - the time of completion may be extended for such reasonable time as Vendor and Hartnell mutually decide.

8.2.17 Failure to Perform
Unless otherwise specified, if an item is not provided or installed as specified in the contract or if the Vendor provides an item which does not conform to the specifications, Hartnell may, at its option, annul and set aside the contract, either in whole or in part, and may enter into a new contract in accordance with law for furnishing and installing such item. Any reasonable additional cost or expense incurred by Hartnell in making of such contract or any additional cost of purchasing or installing an item by reason of the failure of the Vendor as described in this paragraph shall be paid by the Vendor.
8.2.18 General Guarantee

Neither “sign-off” of operational readiness by Hartnell or its representatives nor partial or full payment by Hartnell to the Vendor shall relieve Vendor of liability in respect to any express or implied warranties, or responsibility for faulty materials, workmanship, or code violations in labor or material supplied by the Vendor.

8.2.19 Intellectual Property Rights

Inasmuch as this RFP document represents the core business offering of Communication Strategies, Com-Strat LLC retains ownership of the RFP document template. This document may not be used in whole, or in part, outside of this particular RFP engagement with Hartnell, nor disclosed or given to any other party for their use. Hartnell and the Vendor are granted unrestricted rights to use this document in procuring and responding to this RFP.

8.2.20 Terms and Conditions Acceptance

Please note below your acceptance and intended compliance with the Terms and Conditions above.

Response:  ☐ Comply, Included  ☐ Partial Comply, Included  ☐ Optional Cost, Not Included  ☐ DO NOT Comply
9 ATTACHMENTS

Vendors are instructed to follow the detailed instructions in the RFP. This section/checklist summarizes the documents required in the Vendor response. Please name the document files according the Number and Title below so that they we can find the appropriate document in numeric order.

9.1 REQUIRED RESPONSE DOCUMENTS

The following documents will be provided in soft copy to all proposers. Vendors should provide their responses inline and return their response documents.

9.1.1 Request for Proposal – This RFP Document for Vendor to include inline Vendor Responses (Microsoft Word)
9.1.2 Schedule A – RFP Pricing Worksheet (Microsoft Excel)
9.1.3 Schedule B – RFP Counts and Capacities Site Summary (Microsoft Excel)
9.1.4 Copies of all issued Addendum to the RFP with Vendor compliance noted
9.1.5 Vendor Master Service Agreement

9.2 REQUIRED RESPONSE ATTACHMENTS

All proposers must include the following required documents with their response:

9.2.1 Itemized Equipment List or Bill of Material with pricing
9.2.2 Signed “Vendor RFP Authorization”
9.2.8 Vendor-provided Solution Diagrams (Visio and/or PDF)
9.2.9 Manufacturer’s letter committing to hardware and software support for 5 years
9.2.10 Manufacturer’s Guarantee of price support in absence of VAR Letter
9.2.11 Gartner Magic Quadrant or similar report showing the solution being quoted

9.3 REQUIRED DOCUMENT SAMPLES

A sample of the following documents must be provided by the Vendor in their response. They do not need to be customized for Hartnell at this time:

9.3.1 Any and all contract document(s) which Vendor requires Hartnell to sign
9.3.2 Manufacturer Software License Agreement
9.3.3 Warranty and/or Maintenance Agreements and Service Level Agreements
9.3.4 Sample Vendor Scope of Work
9.3.5 Sample Installation Project Plan
9.3.6 Sample Acceptance Test Plan

Indicate your compliance of providing all required documents.

Response: ☐ Comply, Included ☐ Partial Comply, Included ☐ Optional Cost, Not Included ☐ DO NOT Comply