

# Statement of Work

## Design/Planning Phase:

Overview:

- AMS.NET will review the existing configurations and overall network layout/architecture with City of San Leandro
- Review business objectives and goals
- Discuss desired features and industry best practices based on City of San Leandro's business objectives and purchased equipment.
- AMS.NET will conduct a technical workshop with City of San Leandro's designated technical team members.
- Plan installation and integration of new equipment procedures, site rollout order, and schedule.

Deliverables:

- A technical workshop that addresses goals and objects will be held to help guide the planning and deployment of the network solution. It will also serve as input for the acceptance testing that will occur during the deployment phase.
- A written deployment plan including procedures and schedules.
- A mutually agreed upon "freeze-date" where no further changes to existing equipment will be made and no changes to new equipment configuration will be made.

AMS.NET Responsibilities:

- AMS.NET will conduct a technical workshop with City of San Leandro key personnel and other stakeholders as appropriate.
- Review existing network configurations to assist in further design/planning.
- AMS.NET will summarize/outline key points and provide to City of San Leandro a technical outline for approval.
- Propose installation procedures, schedules and advise on required outage windows
- Discuss impact on end-users and propose fallback plans.

City of San Leandro Responsibilities:

- City of San Leandro will arrange to have key technical personnel and any other stakeholders available for the technical workshop.
- Designate specific team members as primary and secondary technical contacts to interface with AMS.NET engineers.
- City of San Leandro to provide remote access into network and existing equipment as needed by AMS.NET engineers for the purpose of evaluating existing configs and designing necessary configuration changes for integration of new equipment.



- Answer any additional questions regarding existing layout or configuration. Provide access to any 3rd-party vendor technical resources if needed.
- City of San Leandro approval of technical plan is required.
- Approve Install procedures, schedules and outage windows
- Alert end-users of work being done and potential service interruption

#### Exclusions:

• Redesigning of existing network architecture (including L3 routing, VLAN design, subnetting design, etc.) and addition of new/advanced features is not included.

## **Prep/Configuration Phase:**

#### Overview:

- Creation of configuration templates and network layout diagram based on design review process.
- City of San Leandro approval of configurations and proposed integration to existing network.
- AMS.NET in-house burn-in, upgrade, prepping and documentation of new equipment for delivery and installation at City of San Leandro's site.

## Deliverables:

- Configuration templates for new equipment
- IP addressing (management) for new equipment
- Basic layout diagram of new equipment (will include existing equipment only where it connects/uplinks to new)
- Proposed configuration changes to existing equipment only where necessary to connect/integrate with new equipment
- Physical/Environmental/Power requirements list

#### AMS.NET Responsibilities:

- Develop configuration templates
- Specify management IP addressing for new equipment
- Diagram basic network layout illustrating connectivity and integration to existing equipment
- Specify needed configuration changes for existing equipment
- Receive equipment and stage at AMS.NET facilities
- Burn-in, upgrade (as needed), and configure equipment. Label and tag equipment to City of San Leandro specifications.
- Deploy templates on new equipment and configure specific settings for each device
- Validate equipment for basic functionality
- Fully document equipment (Serial number, hostname, IP Address, Customer Asset tag number, etc)



• Provide physical/environmental/power requirements for all new equipment.

City of San Leandro Responsibilities:

- Provide passwords/secret keys/SNMP strings and other info that is not readily available from existing config files.
- Approve of all configuration templates and proposed configuration changes as well as all proposed inter-connectivity between new and existing equipment.
- Provide asset tags and other labels as needed.
- Approve proposed firmware versions
- Provide hostname/labeling requirements
- Address physical/environmental/power requirements for all new equipment

#### Exclusions:

- VLAN/Subnetting/Network architectural changes other than is necessary to inter-connect new equipment to existing equipment.
- Any new/advanced features not specifically outlined in an official bid specification.
- Address physical/environmental/power requirements for all new equipment

### **Deployment Phase:**

Overview:

- Equipment will be installed as per design
- Interconnectivity to existing network equipment
- Tested per User Acceptance Testing
- Next business day cut coverage provided

#### Deliverables:

- Full Documentation of all new equipment (Serial numbers, asset tag number, IP Address hostname,
- As-built configuration files for all new equipment and all existing equipment that has been modified by AMS.NET
- Completed installation and connectivity of all new equipment per original design requirements
- Completed and signed User Acceptance Test

#### AMS.NET Responsibilities:

- Deliver pre-configured equipment to site(s)
- Install equipment in customer provided racks/cabinets
- Route cables in customer provided cable management
- Removal of old equipment being replaced



- Maintain port layout/configuration and cable mapping to ensure restoration of full functionality
- Perform the User Acceptance Test with customer
- Remedy any items that do not pass the UAT

City of San Leandro Responsibilities:

- Provide delivery location and check-in procedures
- Provide rack space to house new equipment
- Ensure no changes are made to existing equipment that could affect integration with new equipment
- Provide a reachability checklist to verify connectivity (will be incorporated into UAT testing)
- Provide needed access to site on cut day
- Sign off on User Acceptance Test once completed

#### Exclusions:

• Changes required as a result of post-freeze date configuration on existing equipment

#### Support Phase:

Overview:

- Warranty of installation workmanship
- Knowledge transfer to key technical personnel of newly installed equipment

#### Deliverables:

- One technical knowledge transfer workshop for key technical personnel
- 30-day warranty of all workmanship commencing on the day following the installation/cutover.

#### AMS.NET Responsibilities:

- Schedule the Knowledge Transfer Workshop with City of San Leandro's key technical personnel
- Respond to issues reported that are a result of the current installation work.
- AMS.NET will respond to issues and fix them in a timely manner.
- AMS.NET will troubleshoot issues until there is a clear determination that they are/aren't a result of new installation work. If they are, AMS.NET will continue to work on them to full resolution.

City of San Leandro Responsibilities:

 Work with AMS.NET to schedule a mutually agreeable time for the Knowledge Transfer Workshop



• Report issues that may be related to new install.

Exclusions:

• Issues deemed unrelated to install will not be covered under warranty. AMS.NET will troubleshoot issues until there is a clear determination that they are/aren't as a result of new installation work.

#### Other terms and exclusions:

- **Physical Cabling-** In the event any issues are identified with the existing physical cabling plant, the City of San Leandro will be responsible for rectifying all issues before project completion.
- **Feature Compatibility-** Existing features no longer supported by the manufacturer will not be implemented in the new configuration. AMS.NET will document all unsupported features prior to configuration.
- **Legacy Equipment-** Reconfiguration of existing equipment except where it is deemed necessary to integrate with new equipment.
- Advanced Features- Multicast, VxLAN, custom QoS, or IPv6 configurations, Overlay Transport Virtualization (OTV) - Fiber Channel over Ethernet (FCoE) - Layer 2 Multi-Pathing (L2MP) -TRILL- Multiple (greater than one) data center- Data center interconnect- Multi-tenancy Firewall and load balancing design and/or integration



## **Bill of Materials**

AMS Quote #	Description	Products	Labor	Est. Taxes	Total
Q- 00091905	Phase 2 - Multi-Dept Cisco Network Upgrade Rev 04	\$497,918.50	\$122,160.00	\$39,135.64	\$659,214.14
Q- 00091872	Ineligible E- Rate - Meraki Infrastructure Labor	\$0.00	\$11,750.00	\$0.00	\$11,750.00
Q- 00085321	Phase 2 - City Hall to PD - Singlemode Fiber Cabling	\$3,277.18	\$10,456.00	\$352.35	\$14,085.53
Q- 00085322	Phase 2 - City Hall to South Bldg Singlemode Fiber Cabling	\$4,463.28	\$10,456.00	\$479.85	\$15,399.13
Q- 00091494	Phase 2 - Server Rm Singlemode Fiber Cabling	\$2,248.89	\$6,032.00	\$241.77	\$8,522.66
Q- 00091907	Phase 2 - PD - Telcom Rm. Network Patching	\$2,497.98	\$6,032.00	\$268.56	\$8,798.54
Q- 00091546	Phase 2 - City Hall - Telcom Rm. Patching and Power	\$11,289.23	\$9,400.00	\$423.48	\$21,112.71
Q- 00085329	Phase 2 - Senior Center Rack removal patch panel Organization & Patching Cabling	\$3,122.56	\$7,640.00	\$335.70	\$11,098.26
	Totals	\$524,817.62	\$183,926.00	\$41,237.35	\$749,980.97