AMENDMENT NO. 2 TO THE AGREEMENT
BETWEEN THE COUNTY OF SAN MATEO AND AVIAT U.S., INC.

THIS AMENDMENT TO THE AGREEMENT, entered into this _____day of _____ 20___, by and between the COUNTY OF SAN MATEO, hereinafter called "County," and AVIAT U.S., INC., hereinafter called "Contractor";

W I T N E S S E T H:

WHEREAS, pursuant to Government Code, Section 31000, County may contract with independent contractors for the furnishing of such services to or for County or any Department thereof;

WHEREAS, on September 13, 2022, the parties entered into an agreement to provide services to engineer and implement the Microwave System Upgrade Project for the term of September 13, 2022, through September 12, 2025, in an amount not to exceed $6,451,432; and

WHEREAS, on May 25, 2023, the parties executed the first Amendment to update the milestones and corresponding payment scheduled outlined in the agreement; and

WHEREAS, both parties wish to further amend the agreement to include the following required additional services: to replace the microwave dehydrators, include additional waveguide equipment and services, add the Skylawn Radio Communications Site to the San Mateo Police Department (SMPD) microwave link, supply and install spur site replacement batteries and rectifiers at various radio sites, and to increase the agreement amount by $753,584.51 for a total not to exceed amount of $7,205,016.51.

NOW, THEREFORE, IT IS HEREBY AGREED BY THE PARTIES HERETO AS FOLLOWS:

1. Section 3, Payments of the agreement is amended to read as follows:

   In consideration of the services provided by Contractor in accordance with all terms, conditions, and specifications set forth in this Agreement and in Revised Exhibit A (Rev. 09/12/23), County shall make payment to Contractor based on the rates and in the manner specified in Revised Exhibit B (Rev. 09/12/23). County reserves the right to withhold payment if County determines that the quantity or quality of the work performed is unacceptable and written notification has been communicated to Contractor. In no event shall County's total fiscal obligation under this Agreement exceed **SEVEN MILLION TWO HUNDRED FIVE THOUSAND SIXTEEN DOLLARS AND FIFTY-ONE CENTS ($7,205,016.51)**. In the event that the County makes any advance payments, Contractor agrees to refund any amounts in excess of the amount owed by the County at the time of contract termination or expiration. Contractor is not entitled to payment for work not performed as required by this agreement.

2. Original Exhibit A is hereby replaced in its entirety with Revised Exhibit A (Rev. 09/12/23) a copy of which is attached hereto and incorporated into the agreement by this reference.

3. Revised Exhibit B (Rev. 04/28/23) is hereby replaced in its entirety with Revised Exhibit B (Rev. 09/12/23) a copy of which is attached hereto and incorporated into the agreement by this reference.

4. Original Exhibit D is hereby replaced in its entirety with Revised Exhibit D (Rev. 09/12/23) a copy of which is attached hereto and incorporated into the agreement by this reference.

5. **All other terms and conditions of the agreement between the County and Contractor dated September 13, 2022, as previously amended, shall remain in full force and effect.**

In witness of and in agreement with this Agreement's terms, the parties, by their duly authorized representatives, affix their respective signatures:

FOR CONTRACTOR: AVIAT U.S., INC.

Contractor Signature	9 /29 /2023 Date	David Gray, Sr. VP and CFO Contractor Name (please print)

COUNTY OF SAN MATEO

By:

Resolution No.

President, Board of Supervisors, San Mateo County

Date:

ATTEST:

By:

Clerk of Said Board

Revised Exhibit A (Rev. 09/12/23)

SERVICES

In consideration of the payments set forth in Revised Exhibit B (Rev. 09/12/23), Contractor shall provide the following services for the County of San Mateo:

Description of Services to be provided by Contractor

1. Engagement Overview

1.1 **Project Purpose**

Contractor shall be retained for the purpose of providing services required to plan, delivery of microwave and associated products from Contractor and its partners, as well as the professional services required to engineer and implement the microwave system design upgrade, replacing the former Harris microwave system.

1.2 **Project Scope**

Contractor shall provide the following services:

- Project Management
- Transmission Engineering
- Configuration Engineering/Drafting
- Factory Integration and Testing
- Radio Installation and Testing
- Radio Decommission
- RAD DACS 4100 Factory Integration, Field Installation, and Testing
- Frequency Assurance Solutions (FAS) Software for 6 gHz Hops for 10 years
- Network Engineering
- Project Engineering
- MPLS Network Services
- Antenna and Line Installation
- Network Integration
- Antenna System Decommission

Project Summary

- Number of Hops: 36 + 2
  Number of Sites: 36 + 2
- Number of Parallel RF Channels: 0
  Number of Sites: 0
- Radio Equipment Family(ies): IRU600v4 & ODU600
  Frequency Band(s): 6.11 & 18gHz
- Link Capacity(ies): QAM to 4096 mb/s
  Projection Type(s): NP Ring and HSD Spurs
- Traffic Type(s): Ethernet and T1
  Projection Locations (States): CA

1.3 **Supporting Documents**

Contractor shall provide the following documents in support of this project for County's review and acceptance as part of the project completion. Once County

has accepted each supporting document, County shall sign and return each document to Contractor prior to final project completion.

	Document	**Master Document**	**Requires County's Acceptance/Sign-off**
Planning	Project Schedule	Project Schedule	Yes
	Statement of Work	This document	Yes
	Statement of Work Sign-off	This document	Yes
Design	DC Power calculations	Design Freeze Package	Yes
	Design Freeze Package	Design Freeze Package	Yes
	Equipment List	Equipment List	Yes
	Frequency Datasheets	Path Survey Report	Yes
	Floor Plan	Installation Specifications	Yes
	IP Plan	Design Freeze Package	Yes
	NMS Plan	Design Freeze Package	Yes
	Path Calculations and Path Profiles	Path Survey Report	Yes
	Path Survey Report	Path Survey Report	Yes
	Rack Profiles and Wiring Diagrams	Installation Specifications	Yes
	Site Survey Report	Site Survey Report	Yes
	Synchronization Plan	Design Freeze Package	Yes
	System Layout	Design Freeze Package	No
	Traffic Plan	Design Freeze Package	Yes
Implementation	Antenna Installation Checklist	Installation Specifications	Yes
	Antenna Mounting Design	Installation Specifications	Yes
	Antenna System Audit Form	Installation Specifications	Yes
	As Built Record Sets	As Build Records	Yes
	Change Order Form	This document	Yes
	Equipment Installation Checklist	Installation Specifications	Yes
	Field Acceptance Test Plan	Installation Specifications	Yes

	Installation Specifications	Installation Specifications	Yes
	Injury and Illness Prevention	Installation Specifications	Aviat
	Project Completion Sign-off	This document	Yes
	Punch List Completion Report	Installation Specifications	Yes
	Site Installation Completion Report	Installation Specifications	Yes
	Traffic Cutover Plan	Installation Specifications	Yes
	RF Cutover Plan	Installation Specifications	Yes

1.4 **System Summary**

Contractor shall provide the following services as indicated in Exhibit C- Aviat U.S., Inc. Microwave System Summary.

- Warranties: Three 3 years of hardware and equipment warranty
- Training: Onsite training for Eclipse Radios, MPLS routers, Management System, and RAD 4 100 DACs.
- Refer to ***Exhibit C-Aviat U.S., Inc. Microwave System Summary*** for further details

1.5 **MPLS Design Scope for Projects with this Feature**

Contractor shall provide a detailed IP/MPLS plan covering the following:

- Layer 1 connectivity: list of ports, types, speed/duplex
- Layer 2 parameters: VLANs, Link aggregation schemes
- Layer 3 parameters: IP addresses, mask, topology, IGP protocol, area design, routing and BFD parameters
- MPLS signaling protocols, parameters and protection schemes
- MPLS services: list of all VPNS and their configuration parameters (VRFs, route targets, PWs, etc.)
- QoS schemes: classification rules, priority mapping, scheduling and shaping schemes
- Security plan: user accounts, authentication and encryption schemes
- Management plan: ports, IP addresses and routing

County shall provide the application-level requirements for the IP/MPLS backhaul network including:

- List of applications: public safety, video cameras, VOIP, security, etc.
- Performance targets for each application: throughput, latency, jitter, convergence time, and QoS
- List of County/Customer Edge (CE) routers and devices per site
- Number and type of device connections per site
- Required connectivity schemes between CE routers and devices: VPWS, VPLS, or L3VPN
- Required IP address range

1.6 **Period of Performance**

The project Period of Performance is estimated at twenty (20) months after of issuance of a Purchase Order/Receipt of Order (ARO)

1.7 **Field Crew Mobilization**

Contractor has included six (6) mobilization for Contractor's Network Integrators for the duration of the field implementation phase. For any additional mobilizations shall be billed on a time-and expenses basis which is subject to the written approval by the County.

1.8 **On-site Meetings**

Contractor to provide at least four (4) on-site meetings for the Project Manager (PM) and Project Engineer (PE) for this project. In the event, County requests more on-site meeting both parties will mutually agree on the date and time. All other meetings shall be conducted through conference calls through out the duration of this project.

1.9 **Towers and Antenna Structures**

Contractor assumes all towers are climbable, and antennas can be installed without the need for cranes or lifts; if after the site survey it is determined that crane or lift is required, Contractor shall inform County with this requirement and provide a change order subject to the County's written approval and acceptance.

1.10 **Construction, Site, and Civil Drawings**

Contractor shall provide the standard drawing package for the microwave equipment listed in Exhibit A, Section 12. County is responsible for all other drawings required for this project.

1.11 **Cutover Outages**

Contractor estimates minimum outages on all ring hops, assuming ring protection is implemented; four (4) to eight (8) hours on all spur hops.

1.12 **Structural Analysis**

County shall be responsible for all structural analysis for all towers and antenna infrastructures.

1.13 **Performance Period**

Contractor shall conduct a 30-day performance period at the completion of the end-to-end testing. Contractor to shall add Ethernet test sets at various locations of the network to monitor for 30 days. Contractor to monitor the system performance through NMS.

1.14 **Battery Storage and Charging for projects that include batteries**

Storage Location

If the battery is not to be installed at the time of receipt, it is recommended that it be stored indoors in a cool [77°F (25°C) or less], clean, dry location. Do not stack pallets or cell terminal damage may occur.

The storage interval from the date of battery shipment to the date of installation and initial charge should not exceed six (6) months. If extended storage is necessary, the battery should be charged at regular intervals until installation can be completed and float charging can be initiated. When in extended storage, it is advised to mark the battery pallets with the date of shipment and the date of every charge. If the battery is stored at 77°F (25°C) or below, the battery should be given a freshening charge within 6 months

of the date of shipment and receive a freshening charge at 6-month intervals thereafter. Storage at elevated temperatures will result in accelerated rates of self-discharge. For every 18°F (10°C) temperature increase above 77°F (25°C), the time interval for the initial freshening charge and subsequent freshening charges should be halved. Thus, if a battery is stored at 95°F (35°C), the maximum storage interval between charges would be 3 months (reference ***Appendix B).*** Storage beyond these periods without proper charge can result in excessive sulphation of plates and positive grid corrosion which is detrimental to battery performance and life. Failure to charge accordingly may void the battery's warranty. Initial and freshening charge data should be saved and included with the battery historical records.

2. Planning and Design Services and Responsibilities

2.1 Project Management

Contractor shall provide a dedicated Project Manager (PM) to manage this project.

Project Management Responsibilities

Planning	
Develop project schedule for Contractor's engineers	Contractor
Develop project schedule for County's supporting vendors	County
Establish an action register	Contractor
Establish a communications plan	Contractor and County
Establish a change management plan	Contractor and County
Establish a risk management strategy	Contractor
Provide quality standards and procedures document	Contractor
Establish a resource management plan for Contractor resources	Contractor
Develop a responsibility matrix, detailing principle team members by function	Contractor
Provide details of County's principle team members by function	County
Provide details of County's single point of contact for Contractor	County
Execution	
Act as primary point of contact for County	Contractor
Finalize project terms and scope with County	Contractor
Chair meetings to assign tasks, evaluate progress and address issues	Contractor
Coordinate Contractor Networks' day-to-day activities through to project signoff	Contractor
Coordinate County's supporting vendors' day-to-day activities	County
Monitor progress against the agreed-upon project milestones	Contractor

Report on progress as agreed to in the communications plan	Contractor
Manage project risk through risk identification, quantification and mitigation	Contractor
Ensure the terms and conditions of the contract are complied with	Contractor
Closeout	
Manage project closeout activities	Contractor
Sign-off on closeout activities and final deliverables	County

Project Management Deliverables

Contractor shall provide the following deliverables:

- Project schedule
- Risk Management Strategy
- Change management plan
- Action register
- Communication plan
- Progress reports (as required)
- Refer to ***Appendix A*** for further details regarding PM's role

2.2 **Microwave Network Design**

Contractor shall provide copies of equipment datasheets/user manuals.

Microwave Network Design Responsibilities

Planning	
Microwave system requirements	County
Existing traffic, IP and NMS plans	County
Anticipated channel plan requirements	County
Preliminary system design during or after initial proposal	Contractor
Preliminary path calculations for selected Contractor Networks radios	Contractor
Design	
Final equipment list	Contractor
Final path calculations and path profiles	Contractor
Site specific diagram (RP's and wiring diagrams)	Contractor
DS0 traffic plans	County
DS1/DS3/OC3 traffic plans	County
IP traffic plans	Contractor
NMS plan	Contractor
Synchronization plan	Contractor
DC power calculations	Contractor
Traffic cut-over plan and method of procedure	Contractor
Field acceptance test plan	Contractor
Sign-off	
County sign-off on final network design (design freeze)	County

Microwave Network Design Deliverables

Contractor shall provide the following deliverables:

- Equipment list
- Design freeze package
- Refer to ***Appendix B*** for further details regarding Microwave Network Design

2.3 **Microwave Path Design**

- Path reliability: 99.999%
- BER: 10^6
- County exempt from FCC license fee

Microwave Path Design Services

Contractor shall provide the following services:

- RF interference paper study

Microwave Path Design Responsibilities

Planning	
Documents relating to tower or structural analysis and drawings	County
Documents relating to previous path surveys and frequency coordination	County
Historical path performance details on a per link basis	County
Path clearance objective for each path	County
Federal registration number (FRN) and username and password	County
Design	
Path surveys to confirm path reliability objectives	Contractor
Site elevation and coordinates	County
Existing antenna mounting structure description and information (tower type)	Contractor
Existing building description and information	Contractor
Site plan (drawing with major landmarks for location purposes)	County
Final path calculations and path profiles for each hop	Contractor
Identify locations of possible sources of spectral reflection	Contractor
Information concerning possible obstructions or obstacles	Contractor
Recommend antenna size, type, and mounting height	Contractor
Radio frequency coordination	Contractor
Tower permit application	County
Prepare and submit FCC license application (where applicable – Form 601)	Contractor
Prepare and submit environmental impact data	County
Provide required environmental approvals or permits	County
File FCC construction completion notice	Contractor
Sign-off	
Approve recommended antenna size, type and mounting height	County
County sign--off on final path design	County

Microwave Path Design Deliverables

Contractor shall provide the following deliverables:

- Microwave path survey report
- Frequency data sheets
- Refer to ***Appendix C*** for further details regarding Microwave Path Design

2.4 Project Engineering

Project Engineering Services

Contractor shall provide the following services:

- Floor plan for installation scope
- Traffic cutover plan
- RF cutover plan
- Field acceptance test plan
- Installation specifications
- Manage field installation

Project Engineering Responsibilities

Planning	
Documents relating to tower or structural analysis and drawings	County
Site access policies and procedures	County
Site access as required	County
Building/shelter/enclosure access as required	County
Design	
Site surveys	Contractor
Existing tower description and information (tower type)	Contractor
Existing building description and information	Contractor
Site plan (drawing with major landmarks for location purposes)	County
Environmental data (if required)	County
Flooring, ceiling, racking data, and requirements to mount new hardware	County
All power, existing and future, with breaker assignments	County
Recommendation for placement of new equipment	Contractor and County
Identify and define antenna mounting hardware	Contractor
Identify any grounding issues and recommend improvements	Contractor
Identify demarcation types and location between new and existing equipment	County
Existing waveguide dehydrator information and their associated cabling	Contractor
All structural information regarding power generator	County
Recommendation for any site or shelter upgrades	County
Recommendation for tower upgrades	County
Execution	
Coordinate day-to-day field install activities through to project signoff	Contractor

Monitor field installation progress against the agreed-upon project milestones	Contractor
Report on field installation progress as agreed to in the communications plan	Contractor
Ensure proper site readiness prior to the install start date	County
Coordinate change orders until project completion	Contractor
Coordinate system acceptance and project completion	Contractor
Coordinate finalization of project closeout drawings and documents	Contractor
Review quality checklists and photos for defects	Contractor

Project Engineering Deliverables

Contractor shall provide the following deliverables:

- Microwave site survey report
- Traffic cutover plan
- RF cutover plan
- Field acceptance test plan
- Installation specifications
- Project closeout package
- Refer to ***Appendix D*** for further details regarding Project Engineering

3. Installation, Integration and Testing

3.1 Installation Services

Contractor shall provide the following installation services:

- Antenna system installation
- Transmission line installation
- Indoor equipment and rack installation
- Antenna alignment

County shall provide the following installation services:

- Tower installation
- Shelter installation
- AC power equipment
- Ground installation

Not included: DC power equipment

3.2 Integration Services

Contractor shall provide the following integration services:

- Microwave equipment integration
- Dehydrator integration
- NMS integration

3.3 Testing Services

Contractor shall provide the following testing services:

- Station test
- Hop test
- System test
- Traffic cutover

- RF cutover

3.4 Installation, Integration and Testing Responsibilities

General project responsibilities	
Obtain all necessary environmental and public agency approvals/documentation	County
Obtain all necessary construction permits and documentation	County
Access to sites in accordance with the project schedule	County
Normal road access for all project related vehicles	County
Transport of Contractor supplied equipment to County warehouse	Contractor
Transport of Contractor supplied equipment to sites	Contractor
Transport of Contractor personnel to and from sites	Contractor
Safety and first aid material and supplies to Contractor personnel	Contractor
Site & civil services	
Leasing, zoning, permits and inspections	County
Soil analysis or provide report	County
Foundation design for tower/shelter	County
Site construction (demolition, grading, erosion control, drainage, etc.)	County
Civil documentation for existing shelters and towers	County
Structural design package required to support proposed antenna system	County
Structural analysis report for the existing and new antenna system	County
Site layout drawings, plot plans or applicable architectural blueprints	County
Locate and mark all site boundaries and features	County
Secure storage for all equipment including radios, antennas and racks for three (3) months	Contractor
Standard equipment packaging	Contractor
Unpack Contractor equipment and remove packing material from site	Contractor
Verify packing list to specifications	Contractor
Installation services	
Tower installation:	
Antenna system support structures: towers, monopoles and tripods	County
Ground resistivity measurements and report of newly installed ground system	County
Install tower foundation	County
Tower painting	County
Provide and install tower lights	County
Provide and install safety climb and safety climb ladder	County
Provide and install lightning rod	County
Provide and install platform	County
Provide and install footing hardware and penetrations for structure on rooftops	County
Adequate earth ground in accordance with EIA/TIE standard 222G	County

Connect tower ground to site ground, in accordance with EIA/TIA standard 222G	County
Provide and install standard tower leg pipe mounts.	Contractor
Provide and paint antennas to match structure or specific color	Not Included
Provide and paint lines to match structure or specific color	Not Included
Provide and install tower or rooftop pole mounts	County
Provide and install any required steel support members for side braces	Contractor
Provide and install specialized antenna mounts	Not Included
Provide and install standard face mounts	Not Included
All RF/microwave antenna mounting brackets	Contractor
Antenna feeder window/bridge and cable tray supports	County
Antennas and radomes at specified centerlines	Contractor
Ice shields at specified locations	Not Included
Cranes, man lifts, snowmobiles, ATV's, or special hoisting equipment	TBD after Surveys
Transmission Line Installation	
Waveguide ladders	County
Waveguide bridges	County
Rooftop sleepers for transmission lines and ground plates	County
Provide and install cable trays	County
Provide and install transmission lines	Contractor
Provide and install hanger kits and ground kits	Contractor
Penetrate building walls or roof and install waveguide ports and entry plates	County
Provide and install waveguide or coax boots at entry plates	Contractor
Provide and install lightning protector at entry points	Contractor
Provide and install conduit	County
Terminate and label waveguide or coax runs	Contractor
Shelter Installation	
Provide shelters, cabinets or enclosures	County
Provide and install shelter foundation	County
Shelter installation	County
Replace GPS receiver, cable and antenna at CoB2 Site	Contractor
Indoor Equipment and Rack Installation	
Provide and install cable ladders or trays	County
Provide and install new racks in specified locations	Contractor
Provide and install bracing supports	Contractor
Provide and install pressurization equipment	Contractor
AC/DC Power Equipment and/or Ground Installation	
Perform electrical (underground conduits, trenching, AC power source, etc.)	County
Provide and install ground ring	County
Provide and install generator and fuel tank	County

Provide and install AC circuit breakers to support Contractor's equipment	County
Provide and install AC feeds from AC distribution to charger or UPS equipment	County
Provide and install DC circuit breakers to support Contractor's equipment	Contractor
Provide and install charger racks	Not Included
Provide and install battery into charger rack or on floor as required	Not Included
Field Integration Services	
Integrate Contractor supplied microwave equipment	Contractor
Integrate rack ground to ground distribution in shelter	Contractor
Integrate DC wiring to specified distribution panels	Contractor
Integrate payload wiring to designated demarcation	Contractor
Integrate Ethernet wiring to designated demarcation	Contractor
Integrate alarm contacts to designated demarcation	Contractor
Integrate battery wiring to designated chargers	Not Included
Connect radio antenna ports to waveguide flex sections	Contractor
Set dehydrator pressure to 4psi	Contractor
Install and integrate NMS software into County's radio network	Contractor
Customize NMS alarm designations	Contractor
Testing Services	
Review and approve Contractor's field acceptance test plan	County
Station Test	
Perform grounding inspection	County
Perform equipment inspection	County
Perform DC power system test	Not Included
○ Measure charger floating/equalization voltages	Not Included
○ Measure voltages on each battery cell	Not Included
○ Verify charger/battery switching	Not Included
○ Verify 2% voltage drop to racks	Not Included
Dehydrator airflow and alarm tests	Contractor
Hop Test	
Perform antenna system test	Contractor
○ Perform a sweep test of antenna system over the bandwidth of the antenna.	Contractor
○ Perform a waveguide tap test	Contractor
○ Perform a 4-hour pressure test of the waveguide and antenna system	Contractor
Perform IRU inventory	Contractor
Perform transmit power output test	Contractor
Perform receive signal level test	Contractor
Perform receiver threshold (fade margin) test	Contractor
Perform Interference fade margin test	Contractor
Verify XPIC operation and feedhorn alignment	Not Applicable

Perform transmitter/receiver switching test	Contractor
Perform Layer 2 link aggregation test	Contractor
Perform adaptive modulation test	Contractor
Perform RFC2544 Ethernet testing: throughput, latency, and frame loss	Contractor
Perform Y.1564 Ethernet service activation testing	Not Included
Perform AUX alarm/data card test	Contractor
Perform channel bank test	County
Verify VF continuity/level at 1KHz	County
Verify operation of E/M signaling	County
Perform RAD DACS 4100 Factory integration, and field installation and test	Contractor
Perform IP phone test	Not Included
Perform order wire test	Not Included
Perform 1-hour BER test on the primary and standby radios (systems with TDM interfaces)	Contractor
Perform 12-hour BER test on primary radio and 4-hour BER test on standby radio (on Ethernet only systems) using Portal and the internal G.826 data capture routine.	Contractor
System Test	
Perform ring wrapping test	Contractor
Perform IP phone test	Not Included
Perform order wire test	Not Included
Perform network continuity test	Contractor
Perform ProVision element manager test	Contractor
Perform 12-hour BER test on primary radio and 4-hour BER test on standby radio (using DS1 loopback on TDM systems)	Contractor
Perform a network level Ethernet Ring Protection (ERP) to verify protection switching.	Contractor
Perform a network level MPLS traffic routing test to verify proper routing	Contractor
Traffic/RF Cutover	
Provide technical personnel familiar with existing equipment and cutover plan	County
Schedule cutover of all complete traffic immediately following installation	Contractor
Transfer circuit wiring	Contractor
Verify integrity of circuits being cutover	Contractor and County
Perform RF cutover	Contractor
Perform traffic cutover	Contractor
Thirty-day (30-day) system burn-in starts	Not Included
Final Site Acceptance Procedure	
Notify all parties involved of site completion	Contractor
Perform site installation inspection	County
Complete indoor quality checklist	Contractor
Complete tower quality checklist	Contractor

Submit final punch list of all deficiencies to be corrected by Contractor	County
Identify all critical punch list items	County
Review, agree and sign off on final punch list	Contractor and County
Sign off on Contractor's site installation checklist form	County
Final system acceptance procedure	
Sign off on Contractor's field acceptance test results	County
Resolution of County vendor issues affecting completion or project	County
Sign off on Contractor's installation completion report	County
Sign off on project acceptance based on acceptance criteria of project	County
Issue final invoice for services upon acceptance of the system	Contractor
Provide as-built drawings for Contractor provided equipment	Contractor

Installation, Integration, and Testing Deliverables

Contractor shall provide the following deliverables:

- Site installation completion report
- Quality checklists
- System installation completion report
- Field acceptance test report (completed)
- Punch list completion report
- As-built record sets
- Refer to ***Appendix F*** for further details regarding Installation, Integration, and Testing Services

4. Equipment Decommission

4.1 Equipment Decommission Services

Contractor shall provide decommission services for the following:

- Antenna system
- Transmission line
- Pipe mount
- Radio rack
- Dispose decommissioned equipment
- Not Included:
  - DC charger rack
  - Battery

5. Subcontractor

Contractor shall be utilizing Velex as their subcontractor to provide antenna installation and testing services.

6. Appendix A: Project Management

Responsibilities

Contractor shall assign a representative to be the primary point of contact for this project ("Project Manager") for the duration of the project. The Project Manager (PM) shall work with County to facilitate effective resource management,

escalations, approval processes, scheduling, communication, and reporting with Contractor's engineers and other designated vendors as needed. The PM is responsible for maintaining control of the project and assuring compliance with the project and County's specifications. Contractor shall not be responsible for the resolution of County's vendor issues affecting the completion of the project.

Contractor shall conduct face-to-face communication and on-site meetings with the County, some activities that do not require face-to-face contact shall be performed at the Contractor's office. It is the responsibility of the Contractor to communicate to the County when these activities that do not require face-to-face contact shall occur.

Project Schedule

The project schedule for Contractor's engineers and sub-contractors, and for County's supporting vendors shall be developed (or updated if a schedule is included with this proposal) and maintained in Microsoft Project and shall identify project deliverables, key milestones, resource assignments, and track project progress against each milestone. County and Contractor shall review and mutually agree to the project milestones and deliverable dates prior to the execution of any services on the project. A copy of the project schedule will be available upon request in .pdf or .mpp format.

It shall be the responsibility of County to track and deliver against all County internal (including County's sub-contractors) milestones. The overall project plan generated by Contractor's PM shall show major deliverable milestones, but not internal milestones of the County.

Communication Plan

Establishment of a communications plan shall be done in accordance with the principles of project management established by the Project Management Institute (PMI®) unless otherwise agreed to. The plan shall involve representatives from Contractor and County and any other entities as mutually agreed between the parties for project kickoff meetings, periodic progress meetings, or problem escalations as needed. The plan shall include the location and frequency of any such meetings, the format for formal communication and meeting minutes, attendee or distribution lists with contact details, methods of communication, and escalation and management level lists.

County shall make appropriate staff available for regular consultation and meetings with Contractor's PM.

Change Management Plan

Establishment of a change management plan shall be done in accordance with the principles of project management established by the Project Management Institute (PMI®). Each party shall work closely with the other to manage any scope changes through the term of the project and understand their impact on the project performance from a cost, quality, and schedule perspective. Any such change may be subject to a change order fee and shall be communicated to County prior to the implementation of the change. Any change order approvals

shall be submitted in writing.

Quality Standards and Procedures
Quality standards and procedures documents will be provided by County of San Mateo.

Resource Management Plan
Establishment of a resource management plan shall be done in accordance with the principles of project management established by the Project Management Institute (PMI®), identifying principal team members by function, including backup resources (if required).

Closeout Activities
During the project closeout, contractor shall manage all project closeout activities and County shall review all project closeout documents and final deliverables.

County Responsibilities
County of San Mateo shall:

- Provide details of County's principal team members by function during the project kickoff meeting.
- Provide details of County's single point of contact during the project kickoff meeting.
- Provide all other relevant documentation or resources to assist in gathering information.
- Provide access to sites, shelters, buildings, enclosures, facilities or any other areas as required.
- Provide updates as necessary of any site readiness issues to be resolved prior to start of work. This includes, and is not limited to, permitting, leasing, zoning, insurance, etc.
- Provide security clearances and/or escorts as required for field survey and installation activities.
- Provide access to pertinent databases, planning requirements, including strategic plans, expansion scenarios, growth projections, introduction of new services and wireless technology.

7. Appendix B: Network Engineering

Microwave System and Network Design
Contractor shall provide a Network Engineer who oversees the network and provides the overall technical direction of the system design. The Network Engineer shall work with the County to ensure system integrity, verify that all sub-systems and Contractor furnished OEM equipment is compatible, and that the desired performance of the system is realized.

The network design portion of the project consists of three phases:

1. Preliminary design
2. Final design
3. Design freeze

Preliminary Design Phase

During the preliminary design phase, the Network Engineer shall gather data to establish the design criteria and any special County requirements that need to be incorporated into the final design. The Network Engineer shall review and translate the system configuration into specific hardware requirements. Equipment selection shall be based on the requirements, input and requests from County, functionality of the equipment, and recommendations from the Network Engineer. Contractor shall provide County with a summary of the preliminary system design prior to commencing field surveys. All preliminary designs are subject to change. Changes can include, but are not limited to changes based on:

1. Survey results
2. Vendor shortages or long lead times
3. County requests
4. Engineering recommendations

Design Finalization Phase

After receipt of purchase order and the project kickoff meeting, Contractor and County shall enter into the design finalization phase. During this phase, the Network Engineer shall incorporate any required changes stemming from the path and/or site surveys into the design and confirm the final design details. Changes can include but not limited to:

1. Antennas (types, sizes, models, quantities, and mounts)
2. Waveguide (types and lengths), waveguide accessories and dehydrators
3. Power systems, cabling, and other materials that could not be finalized prior to conducting the field surveys

During this phase, County may also request changes to the system design if the changes fall within the original scope and hours of the project. Any changes outside of the original scope or agreed schedule are subject to review and acceptance by Contractor to determine the impact and cost on the overall project.

Contractor shall provide a formal submission detailing the final system design and equipment list and highlight changes needed to the preliminary design. County shall review the data and schedule a meeting, if necessary, to discuss any concerns. If no concerns are noted, it is County's responsibility to approve the final design in writing (email is acceptable) before the design is frozen and equipment is placed on order (unless otherwise agreed to in Exhibit A-Services or with the Project Manager). Any delay in the approval of the final design could result in a delay in material delivery to the field. This might require a review by County and Contractor of the project schedule and deadlines.

Design Freeze Phase

As part of the Design Finalization Phase, a date shall be set for the design freeze at which the final design and all changes must be approved and accepted by both parties. Following the design freeze, the Bill of Materials and documentation shall be submitted to Contractor's factory and the system shall be scheduled for

manufacturing. The Network Engineer shall concurrently review all design documents and finalize any traffic plans, NMS plans, synchronization plans, traffic cutover requirements, as well as any special factory and field acceptance testing requirements for the project. During the Design Freeze Phase, the design is frozen and no further changes to the system design shall be accepted without a formal approved change order and reevaluation of the project and delivery schedules. Refer to the project schedule for details on the planned start and finish dates for each of these phases.

Deliverables
For a full list of Contractor's microwave design deliverables, refer to section Microwave Network Design and Deliverables.

1. The equipment list refers to the final bill of material ("BOM")
2. The design freeze package refers to the final path calculations, path profiles, rack profile and system drawings, traffic plans, IP plans, NMS plans, synchronization plans, and/or DC power calculations

8. Appendix C: Transmission Engineering

Microwave Path Design
Contractor shall provide a Transmission Engineer who oversees transmission and ensures the delivery of the best possible network solution by providing the technical direction for the over-the-path RF performance of Contractor's system implementation. All microwave paths designs are preliminary, pending final path surveys and frequency coordination. This includes:

1. Antenna selections, antenna centerlines, and antenna mounts
2. Total transmission line lengths
3. Path calculations and profiles
4. The size, type, quantity and configuration of each component

Equipment proposals are simply a reflection of these preliminary designs and subject to change. It is further understood that any changes to existing or proposed antenna centerlines could justify the need for tower stress analysis or, if modification is impractical, construction of a new tower. Any such requirements shall be the responsibility of County unless otherwise stated in the Agreement.

In the event that County elects not to use Contractor to perform path surveys, the performance of the microwave system shall not be guaranteed by Contractor and it shall be up to County to resolve any path reliability or obstruction issues. Refer to the ***Warranty of Path Engineering Services*** section below for further detail.

In the event that County selects Contractor to perform path surveys, a formal submission detailing the results of the path survey and highlight changes needed to the preliminary design will be submitted to County. County shall review the path survey data and schedule a meeting, if necessary, to discuss any concerns or alternate means of providing path continuity/system reliability. County shall communicate any feedback to Contractor before the final system design approval. Once County accepts and approves the path survey data, Contractor shall proceed with frequency coordination (if applicable).

Microwave Path Survey, Frequency Planning and Licensing

Contractor shall provide the following microwave path survey services:

1. Identify geographical location of sites and antenna, waveguide length and tower requirements
2. Verify path clearance objectives for each of the paths from existing or new tower locations
3. Document obstruction, critical points, and reflection points in each of the paths
4. Verify tower coordinates and site elevations.
5. Establish coordinates and height requirements for new towers, as needed for governmental agency registration and licenses filed by County
6. Confirm antenna centerlines and waveguide length requirements. Catalog antennas on the existing structures noting any space limitations in the survey report. Contractor's engineer shall review the tower for new antenna design space limitations specific to this project only but shall not perform a complete tower audit
7. Perform frequency coordination based on available FCC records to reduce the potential for interference between internal or external radio sources on a given system or network.
8. Contractor, upon receipt of County's written authorization, shall prepare the FCC License Application Form 601 with the appropriate technical data. Information such as site location, radio type, and frequency shall be listed. Contractor shall complete and submit the Construction Complete Form 601 online via FCC Universal Licensing System ("ULS").
9. File Antenna Structure Registration ("ASR") form for towers over 200 feet.

The results of the survey shall be utilized by Contractor for preparation of final performance calculations, frequency coordination, government licensing, and tower registration requirements. In the event where Contractor shall not be performing the path survey, County shall provide all the documents needed for Contractor to complete the frequency coordination, licensing, and final system design. Contractor shall not be held accountable for validating the accuracy of the information provided by County and assumes no responsibility in any inaccuracies of any part of the path engineering based on the information provided by County or any contact affiliated with County. Any corrective action required as a result of this shall be billed to County a billable change order.

Survey Procedures

Preliminary path profiles are drawn based on the supplied site coordinates and contour information extracted from the best available topographic mapping. A field site survey is conducted to verify site coordinates and elevations based on North American Datum 1983 ("NAD83") and gather information related to the proposed radio equipment and antenna locations, site access, and site development constraints. A field path survey is then conducted to verify path profile elevations, measure all natural and manmade potential obstructions and assess the reflective potential of all natural and manmade surfaces. Antenna

centerline heights were calculated for the proposed frequency band by applying suitable clearance criteria based on the propagation characteristics of the geographic area. The path survey report is considered to be a representation of the information gathered in the field and as such, reflects a snapshot in time at the time of the survey. It is not intended to show the final as-built configuration if any of the parameters were changed or updated after the survey report has been released.

Path calculation sheets are then generated for each hop, based upon the recommended centerline heights. Antenna sizes and the choice of propagation protection diversity are chosen to meet the required fade margin and the desired path propagation reliability. Propagation outage and reliability calculations are based on the Vigants model (ref. “Space Diversity Engineering”, BSTJ, 1/75).

Design Criteria

Path clearance criteria must be established for each path on the basis of total system performance objectives, economic considerations, and careful analysis of local atmospheric conditions derived from published climatological data, where available, and reported microwave transmission experience pertinent to the area. Antenna heights much greater than actually needed cause an unwarranted increase in system cost, and on paths with significant ground reflections, this can increase the exposure to multipath and ground reflection signal fading. It is desirable to locate the antennas high enough so that even under severe super-standard atmospheric refractive conditions (surface ducting) there is adequate clearance such that signal entrapment does not significantly degrade the fade margin of the path or generate excessive multipath fade activity. The choice of clearance criteria for a microwave path is a balance between cost and performance.

The path clearance criterion as applied to a given geographic area is a function of the degree and direction of atmospheric beam bending and can conveniently be defined by the equivalent earth radius K factor:

$$K = \frac{Effective\ Earth's\ Radius}{Actual\ Earth's\ Radius}$$

The median propagation value of K = 4/3 allows the normal microwave horizon to be slightly extended when compared to the optical horizon; however, under certain meteorological conditions (for example, during nighttime super-refractivity usually associated with temperature inversions) the value of K increases to 2 or greater for periods of several minutes to several hours. This increases the path clearance and results in the heavy multipath fade activity seen on some reflective paths and antenna decoupling power fading on others.

Clearance Criteria

The criteria used to design a radio path in regions where the C-factor is equal to or less than 1:
Main to Main:

- 100% first Fresnel zone radius over K=4/3, or
- 60% first Fresnel zone radius over K=1, whichever is greater

Main to Diversity:

- 60% first Fresnel zone radius over K=4/3 (Not Applicable)

The criteria used to design a radio path in regions where the C-factor is greater than 1:

Main to Main:

- 100% first Fresnel zone radius over K=4/3, or
- 30% first Fresnel zone radius over K=2/3, whichever is greater

Main to Diversity:

- 60% first Fresnel zone radius over K=4/3 (Not Applicable)

Microwave Path Performance Calculations and Warranties

The microwave path design models most frequently employed within the industry (e.g., Vigants, and ITU-R P-530) provide a reasonably accurate (and therefore usually guaranteed) estimate of the cumulative time a path will be out of service due to random atmospheric multipath fading under normal atmospheric conditions. **These models do not (and cannot) accommodate abnormal, unusual, anomalous, or otherwise unpredictable conditions of weather or atmospheric refractivity.**

Microwave Frequency Engineering/inter-system Interference Analysis

Contractor shall partner with Comsearch, a CommScope company, to provide cost-effective frequency planning and FCC licensing services for radio communications systems (if required). The planning software used, considers specific operating parameters of both the proposed microwave system and the environment microwave systems (license and proposed) to properly consider the interference potential of the new path or system. Parameters and data elements incorporated into the modeling include, but are not limited to:

- Antenna type, antenna height, elevation, antenna radiation pattern
- Receiver filter performance
- Terrain
- Radio modulation
- Path orientation
- Receiver threshold

These elements are required to accurately predict specific interfering levels into and from the existing microwave systems. The accuracy of the calculations is ensured by real-time maintenance of the Comsearch point-to-point microwave, earth station, radio equipment, antenna, interference objective, and contact database.

Microwave Frequency Selection

The interference analysis performed on the microwave system identifies available frequencies considering existing and proposed systems found in the Comsearch database. When applicable, an analysis of the systems in the adjacent bands can be done to ensure the microwave system does not receive unwanted threshold degradation. In bands shared with satellite systems, an analysis of potential

interference with earth stations and with the geo-stationary satellite orbit can also be done. Additionally, co-located or nearby transmitters already licensed in the required frequency band can be identified in order to reduce the possibility of "bucking" an existing high/low frequency plan that could increase the possibility of receiver overload or reflective interference from a nearby system.

Microwave Frequency Coordination and FCC Licensing

The majority of microwave bands subject to FCC Rule Part 101 require prior coordination with existing licensees. Contractor shall partner with Comsearch to perform the frequency coordination and FCC licensing on behalf of the County (if required). The procedure will include notification of the technical parameters of the proposed system to all existing and proposed licensees in the area and frequency band of operation. Frequency coordination will also be performed with Canadian and Mexican authorities in border areas when necessary. By FCC rule, recipients are given 30 days to respond, or in some cases an expedited response can be requested.

Upon completion of the prior coordination process, documentation required to satisfy FCC Rule Part 101.103 (d) can be prepared on behalf of the County. This will include any necessary exhibits, including supplemental showings required upon submittal of the requested license application. The FCC filing process includes:

- Filing of the FCC Form 601 microwave application upon written approval from County and providing an electronic copy of the application to County via email.
- Tracking the status of the application until the license is granted by the FCC. Amendments will be handled expeditiously on behalf of County for any questions or concerns from the FCC.
- Email notifications to the licensee when the license is granted by the FCC.
- Filing of the required completion of construction notification with the FCC upon written approval from the licensee and notification of the filing via email.

Special Considerations

On all microwave radio paths traversing urban areas there exists the possibility of multiple on- and off-path structural reflections which generate long-delayed echoes, as well as terrain scatter RF intra- and inter-system interference. Long delayed, low-level echoes have no effect on digital radio performance; however, the terrain scatter mechanism cannot be accurately predicted nor precisely measured without an extensive and expensive field trial. Consequently, this mechanism is specifically excluded from all current industry-wide path survey and frequency coordination performance guarantees.

The structure supporting the microwave antenna can take many forms. The antenna is most often mounted on a tower but can be mounted on a variety of structures such as roof tripods, penthouse walls, wooden telephone poles, or metal monopoles. It is recommended that County conduct a structural analysis of the support structure to determine if the structure will support the additional

loading imposed by the antenna and its mount. The structure must also meet the twist and sway requirements per EIA/ANSI 222G.

Site Access

Access to work sites shall be made available by County for a minimum of 10 hours per day, 5 days per week or per the agreed schedule in the project plan. All roads leading to work sites shall not require more than a 4-wheel drive vehicle unless stated otherwise and agreed to by both County and Contractor. Any delays or additional cost caused by poor road conditions or site access issues not discussed prior to the start of the surveys shall be billed to County as a billable change order and could have a negative impact on the project completion schedule.

FCC Rules for Filing Accuracy

CFR 47, Part 1.929 specifies that filing accuracy for site coordinates shall be (+/-) 1" latitude and longitude, and for ground elevation (+/-) 1 meter (3.28 ft.). Part 1.929(k) (covering modification of FCC licenses) specifies that any change in site coordinates >5" latitude or longitude shall require prior authorization and re-coordination. Therefore, wherever Contractor's survey results deviate more than (+/-) 5" latitude or longitude, or more than +3.28 ft. site elevation, frequency re-coordination will be recommended.

Terms and Conditions

When Contractor performs reliability calculations or path studies (path profiles from mapping or digitized data only) based solely on information supplied by or on behalf of the County, these calculations and studies are provided solely for budgetary purposes and shall not be construed as or be used for an installable design.

When conducting a path survey, Contractor shall verify site coordinates and ground elevations, and record trees and man-made fixed obstructions on the path. This information shall be recorded on the profile for that particular path. Contractor shall assign an appropriate growth factor to tree heights.

When Contractor performs frequency planning based, in part or its totality, on data provided by the County at the time of the study, Contractor shall not be responsible for any interference case that might arise due to errors or omissions in such data. As the usage of microwave bands increase and there is more sharing with satellite services, it may be necessary to perform frequency interference studies and additional path surveys (to determine blockage) to alleviate the possibility of interference from satellite earth stations.

Warranty of Path Engineering Services

Contractor warrants that the installed radio communication path shall conform to County's multipath performance reliability objectives when Contractor has performed the path survey, recommended the path design, and implemented such recommendations. This warranty is for a period of fifteen (15) months from the date of the survey or one (1) year from the date of installation of the microwave path, whichever expires first. All Contractor's field activities and path propagation

analysis shall utilize current hardware, software, engineering practices and judgment with the goal of meeting normal Path Loss, as defined in TIA/EIA Standard RS-252-A.

Contractor is not responsible for paths that it does not survey, nor for changes in path design beyond those specifically allowed in the path survey report or in writing after the field survey is completed, including but not limited to:

- Any change in path design
- Any movement in site locations
- Any building or other structure built on-path after date of survey
- Any disturbance of the terrain which may cause blockage or reflection
- Any additional frequency interference source
- Any change of available antenna mounting space on tower

Any one of these changes listed will nullify the warranty, and County shall in such case bear the total cost of determining that such change was the cause.

Contractor shall not be responsible for degraded path performance when such degradation is due to such anomalous propagation conditions as:

- Long-term loss of fade margin due to antenna decoupling misalignment caused by widely varying k-factor changes
- Long-term loss of fade margin due to atmospheric boundary layering ("ABL") causing wave front defocusing (beam spreading), signal entrapment (blackout fading), ducting, and other such occurrence
- Excessive rain outage rates beyond the published crane and/or chart data used in the calculation
- Degradation resulting from certain types of multipath interference attributed to unidentifiable off-path terrain features or structures
- Any other technological or atmospheric condition not foreseeable through the exercise of prudent engineering knowledge and judgment.

Additionally, Contractor shall not be responsible for degraded path performance when:

- Non-Contractor's radio equipment is installed on a surveyed path
- Contractor's radio equipment is not installed by Contractor
- Existing antenna and waveguide system are used without test and inspection performed by Contractor.

Contractor designs the microwave path based upon engineering practices and standards common to the industry. When path loss or reliability objectives are not achieved, County's sole remedy, and Contractors' exclusive liability in connection with path engineering, shall be that Contractor shall provide incremental labor and material to optimize the antenna system to meet the requirements created during initial installation.

Where anomalous propagation is suspected in an installed microwave path, Contractor shall work with the County to obtain reasonable evidence that such condition exists. The total retroactive costs for such study shall be the

responsibility of the County, and Contractor shall provide in-office engineering support at County's expense. The cost of relocating towers, antennas, passive reflectors, or other measures required to remedy this type of problem shall solely be the responsibility of the County.

Warranty Limitations

THE LIMITED WARRANTY CONTAINED IN THIS EXHIBIT A CONSTITUTES CONTRACTORS' SOLE AND EXCLUSIVE LIABILITY HEREUNDER AND COUNTY'S SOLE AND EXCLUSIVE REMEDY FOR DEFECTIVE OR NON-CONFORMING EQUIPMENT, SERVICES, AND SOFTWARE MEDIA OR LICENSED PROGRAMS. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES (EXCEPT AS TO TITLE), WHETHER ORAL, WRITTEN, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, ANY IMPLIED WARRANTY OR CONDITION OF FITNESS FOR A PARTICULAR PURPOSE, OR ANY WARRANTY OR CONDITION ARISING OUT OF COURSE OF DEALING, COURSE OF PERFORMANCE, OR CUSTOM OR USAGE OF TRADE. COUNTY AGREES THAT NO CIRCUMSTANCE CAUSING COUNTY'S EXCLUSIVE AND LIMITED REMEDIES TO FAIL IN THEIR ESSENTIAL PURPOSE SHALL INCREASE OR EXTEND ANY CONTRACTOR WARRANTY. THE TOTAL LIABILITY OF CONTRACTOR AND ITS LICENSORS UNDER THIS WARRANTY SHALL IN ANY EVENT BE SUBJECT TO THE LIMITATIONS IN THIS EXHIBIT A.

ANY WARRANTY CLAIM NOT SENT TO CONTRACTOR IN WRITING DURING THE APPLICABLE WARRANTY PERIOD IS WAIVED BY COUNTY. REPLACEMENT EQUIPMENT, SERVICES, SOFTWARE MEDIA AND LICENSED CONTRACTOR PROGRAMS ARE WARRANTED ONLY FOR THE BALANCE OF THE UNEXPIRED PORTION OF THE ORIGINAL WARRANTY PERIOD, IF ANY.

COUNTY IS EXPRESSLY NOTIFIED THAT UNDER NO CIRCUMSTANCES SHALL CONTRACTOR BE LIABLE FOR (A) ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OF ANY PARTY, INCLUDING THIRD PARTIES, EVEN IF SUCH DAMAGES ARE FORESEEABLE, OR (B) LOSS OF REVENUE, LOSS OF PROFITS, LOSS OF BUSINESS, LOSS OF USE, LOST SAVINGS, OR LOST OR CORRUPTED DATA, OR (C) LOSSES RESULTING FROM SYSTEM SHUTDOWN, FAILURE TO ACCURATELY TRANSFER, READ OR TRANSMIT INFORMATION, FAILURE TO UPDATE OR PROVIDE CORRECT INFORMATION, SYSTEM INCOMPATIBILITY OR PROVIDING INCORRECT COMPATIBILITY INFORMATION OR BREACHES IN SYSTEM SECURITY EVEN IF CONTRACTOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THIS LIMITATION SHALL APPLY TO ANY CLAIM OR CAUSE OF ACTION WHETHER IN CONTRACT OR TORT (INCLUDING NEGLIGENCE, STRICT LIABILITY OR BREACH OF WARRANTY).

IN NO EVENT SHALL CONTRACTORS' TOTAL LIABILITY TO COUNTY OR ANY PARTY CLAIMING THROUGH COUNTY EXCEED THE LESSER OF ONE

HUNDRED THOUSAND UNITED STATES DOLLARS ($100,000.00 USD) OR THE ACTUAL SALES PRICE PAID BY COUNTY FOR ANY EQUIPMENT, SOFTWARE OR SERVICES SUPPLIED UNDER THIS SOW.

THIS SECTION SHALL SURVIVE THE TERM OR EXPIRATION OF THE AGREEMENT. COUNTY AGREES TO INDEMNIFY, DEFEND, AND HOLD HARMLESS CONTRACTOR AGAINST ALL LOSS OR LIABILITY FROM CLAIMS BY COUNTY OR A THIRD PARTY ARISING OUT OF OR RELATING TO COUNTY'S INSTALLATION, OPERATION, OR MISUSE OF THE EQUIPMENT OR LICENSED PROGRAMS, WHETHER ON ACCOUNT OF NEGLIGENCE OR OTHERWISE.

9. Appendix D: Project Engineering

Microwave Site Design
The Contractor's representative overseeing implementation ("Project Engineer") shall perform field site surveys to verify that telecommunications equipment can be installed, powered, and commissioned effectively at each site, antennas, waveguide and accessories can be connected to radios (towers, shelters and buildings), and County traffic, alarms and dehydrator lines are fully engineered.

Microwave Site Survey
The microwave site survey is intended to gather data and identify the gap(s) between the site's present state and the site readiness for equipment installation, document any visible issue with the existing infrastructure and equipment that would pose a quality or safety issue during installation, gather environmental data and requirements for telecommunication equipment to function properly (including but not limited to HVAC, temperature, humidity, the general state of the facility as well as seismic evaluation and compliance if required), record flooring, ceiling, racking data and requirements to mount new equipment including floor plans, relay rack profiles, aisle numbering plans, and ceiling hangers, ladders, and anchor materials required to meet quality and safety standards.

The survey is also intended to record AC, DC, grounding (as is and to be), and breaker assignments and ensure power and grounding standards are met, identify demarcation types and location between new and existing equipment as well as the type of termination and the details required to terminate to the County provided equipment, identify existing radio equipment (fixed and mobile) as well as their operating frequencies, record existing waveguide, dehydrator component and their associated cabling, identify all required or existing tower structures, mounting structures, antenna mounting types, waveguide ladder systems, entryway into telecom shelters, and energy sources.

The results of the survey shall be published and released in a site survey report and shall be utilized by Contractor for preparation of final power calculations, waveguide requirements, field OEM requirements, installation specifications, field test plans, and traffic cutover plans. In the event where Contractor shall not be performing the site survey, County shall provide all the documents needed to Contractor to complete the site engineering and final system design. Contractor

shall not be responsible for validating the accuracy of the information provided by County and assumes no responsibility in any inaccuracies of any part of the site engineering and microwave site design when such design is based on the information provided by County, or any contact affiliated with County. Any corrective action required as a result of this shall be billed to County as a billable change order.

Microwave Site Access

Access to work sites shall be made available by County for a minimum of 10 hours per day, 5 days per week or per the agreed schedule in the project plan. All roads leading to work sites shall not require more than a 4-wheel drive vehicle unless stated otherwise in this Agreement and agreed to by both County and Contractor. Any delays or additional cost caused by poor road conditions or site access issues not discussed prior to the start of the surveys shall be billed to County as a billable change order and may have a negative impact on the project completion schedule.

Field Installation Management

Contractor shall manage the day-to-day activities of the field installation with support from County to ensure the project remains on schedule as per the agreed project schedule.

10. Appendix E: Installation, Integration and Testing

The installation, integration, and testing services include design-supported methodologies, product expertise, and field-proven processes to help ensure a quality installation and testing of critical system paths and hardware so that the network performs according to its design. Contractor shall designate a primary point of contact to answer any County questions, provide guidance, and address issues specific to this service.

This Agreement is based on the Contractor's standard installation schedule of 10-hour days, six (6) days per week. Contractor shall adjust these services for work week schedules outside of Contractors' standard. Installation work performed during maintenance windows is not included in this Agreement unless specifically identified. All work will be done in accordance with Contractors' best practices guide.

Scope

Delivery of this service shall utilize the design documentation developed as part of the planning and design phase. Field crews shall utilize this documentation to:

- Install antenna systems
- Install transmission lines
- Install indoor microwave equipment, racks and components
- Perform antenna alignment
- Perform system integration
- Perform system testing

System implementation is predicated upon completion of civil construction and complete site readiness. Antenna, waveguide and equipment installation

activities shall be performed at the same time on a per-site basis. As part of the delivery of this service, Contractor may choose to integrate equipment at the manufacturer's location to minimize onsite installation time and provide a common point for quality assurance inspections. If staging areas are utilized as part of the project, equipment and materials shall be delivered from these facilities to site by the installation crews. It is recommended that County provide maintenance technicians during any service affecting work.

The successful completion of all installation, integration, and testing services are based on uninterrupted, contiguous-site installation and testing. Additional mobilizations are not included in the pricing and project schedule. If installation is delayed due to inclement weather, inaccessible sites(s), incomplete site preparation, or construction, the following charges may apply and will be billed to County as a billable change order:

- Standby time for antenna installation teams shall be charged at a rate of $1,220 per person per day.
- Standby time for radio teams shall be charged at a rate of $1,225 per person per day.
- If re-mobilization of the installation crew is necessary, then a two-week advance notice is required.
- Re-mobilization shall be billed on a time-and-expenses basis.
- Service costing assumes use of 4-wheel drive vehicles for all project related vehicles. Additional requirements such as ATVs may require additional service costs.
- If the field crew(s) is required to work out of contiguous sequence due to conditions beyond the control of Contractor, a charge equal to one day for each crew person shall be assessed to the County for each occurrence.

Site Access

Access to work sites shall be made available by County for a minimum of 8 hours per day, 5 days per week or per the agreed schedule in the project plan. All roads leading to work sites shall not require more than a 4-wheel drive vehicle unless stated otherwise is this Agreement and agreed to by both County and Contractor. Any delays or additional cost caused by poor road conditions or site access issues not discussed prior to the start of the installation, integration or testing services will be billed to County as a billable change order and could have a negative impact on the project completion schedule.

Site Services

All work permits, public agency approvals, leasing agreements, zoning permits or inspections required at each site, soil analysis, foundation design, civil documentation for existing shelters or towers, architectural blueprints, plot plans, structural analysis for new or existing antenna systems, location of all site boundaries and features (including locating and marking tower location, true North, property boundaries, paved areas, landscaping, fences and any other underground/overhead obstruction which could interfere with construction and access), and/or other related documentation for this project shall be obtained, conducted, completed and made available to all parties involved prior to the start

of any installation, integration or testing services. All other construction and installation work shall be conducted in accordance with local city, county, state, and government laws and regulations.

All equipment including radios, antennas and racks shall be stored by County in a secure location at the site or at a designated location. County shall be responsible for the loss of any equipment, tools, or personal belongings from any secured location provided or monitored by County.

Installation

County shall verify that each site is ready for installation and commissioning activities, including County supplied equipment installation and power up prior to the start of any such services and shall be responsible for any delay caused or cost incurred due to sites not being ready, as stated in the project scope of this Agreement.

An inspection shall be performed with County after completing the physical installation. Workmanship deficiencies shall be noted on a punch list for immediate correction. This inspection is not intended to verify operation of the new system or suitability of components, but rather to inventory and document that all equipment and materials from the schedule of values are installed to acceptable workmanship quality standards. Site drawings shall be reviewed and red-lined to reflect the installed condition.

Testing

Test crews shall begin work immediately after installation is complete. Testing, based on a standard set of Contractor test cases, shall be performed on all provided equipment to confirm configuration, operation and manufacturer's specifications. Test data shall be recorded on field test sheets, by technical field personnel who shall also be responsible for documenting test results and any changes made to the design documentation.

The test crews shall be trained on the equipment and utilize test equipment to perform all tests. Test equipment shall have valid calibration certifications, which can be verified prior to commencing any tests. It is recommended that County take the opportunity to have their maintenance technicians witness or participate in field commissioning testing to gain on-the-job training and experience on the new system components.

Commissioning tests shall consist of a set of standard Contractor test cases and include turn-up and performance verification tests and circuit tests to verify end-to-end continuity and equipment operation as well as any other tests documented in the field acceptance test plan. The field acceptance test plan shall be approved and agreed to by Contractor and County prior to test execution. Test results shall be recorded on field test data sheets and submitted to County. Refer to the field acceptance test document for details on the test to be performed.

System tests shall be performed on a logical section/loop of the system. The system tests shall be designed to demonstrate performance and functionality of system features as-well as end-to-end operation of individual circuits/services.

System test results shall establish benchmark system performance and operation prior to cut-over and acceptance. The test data sheets prepared during commissioning and system testing shall become the base line document for maintenance and performance evaluation of the system over an extended period of time. County shall be required to review the commissioning and acceptance testing and results and red-lined drawings and provide approval of the data and authorization to proceed with cut-over activities.

Traffic Cut-over

Cut-over activities are anticipated to occur as DC, antenna and radio sub-systems are implemented. The Commissioning and system-level test activities verify that the new system is ready to accept traffic. Preparation, planning, logistics, and technical support are the critical elements in transferring existing services to a new system. County infrastructure is utilized for control of mission critical infrastructure; therefore, processes must also be put in place to minimize interruptions as well as to restore the original service in the event of unforeseen situations.

Safety

The health and safety of all individuals, whether in the field, plant or office, takes precedence over all other concerns. Management's goal is to prevent accidents and to reduce personal injury and occupational illness and comply with all safety and health standards. A code of safe conduct is important to the efficiency of operations. To the greatest degree possible, County shall provide physical safeguards required for personal safety and health in keeping with the highest standards. Contractor requires a written report from County for all accidents and incidents, no matter how small.

Safety and first aid material and supplies shall be provided to all Contractor construction and installation personnel or made available at each site for the duration of this project. All safety and first aid material shall be stocked at acceptable levels and shall have not exceeded the expiration dates where applicable. County shall be responsible for providing Contractor with the location and phone numbers of all local emergency agencies.

11. Appendix F: Assumptions and Exclusions

The following assumptions shall govern the delivery of the project management service:

- This Agreement is based on County completing all items set forth in this Agreement as being County's responsibility to ensure site readiness.
- Any inaccuracies in FCC data may drive additional services costs during field implementation. In addition, any other troubleshooting tasks related to frequency interference issues that are not directly attributable to Contractor are subject to additional service fees at rates define in this Agreement.
- All equipment interconnections or termination points, unless specified otherwise, are estimated to be fifty (50) feet. This project does not include any cabling between buildings, rooms, or floors, unless specifically identified in this Agreement.
- County provided construction drawings shall have sufficient details for

Contractor engineering to order antenna mounting or any other related material required. Any re-engineering to provide correct mounts or material required by Contractor may increase cost to County.

- Contractor shall not be responsible for managing County project responsibilities and deliverables.
- Contractor shall not be responsible for the condition of existing equipment, or the deficiencies of non-Contractor provided labor. Only the labor addressed in this Agreement shall be provided by Contractor.
- On-site technicians shall decline any County request for work outside the scope of work defined and agreed upon in this Agreement unless it is addressed in a change order.
- Contractor proprietary documentation used by service delivery teams to perform this service is not available to County.
- Contractor shall not provide proprietary information on methods, procedures, or tools to perform the services in this Agreement.
- Contractor shall not perform any and services that are not specifically described within this Agreement as being provided by Contractor.
- Contractor shall not be responsible for the resolution of other vendor issues affecting the completion of the cutover. Contractor can provide guidance and support to County in resolving interoperability issues, where applicable.
- Contractor shall not repair equipment not in the engineering drawings. Equipment requiring repair that is not included in the engineering drawings but is still under warranty must follow Contractor's repair and return procedures.
- Additions or changes to ironwork, cable racks, or fiber ducts are not included and can be quoted separately after site visit information is collected.
- Contractor shall comply with all applicable County Safety and security policies and procedures.
- Contractor shall not charge the following expenses to this engagement namely: airfare, lodging, mileage, meals, photocopies, tolls and parking, and travel time.
- When applicable, Contractor shall apply and secure the required security clearances from the County and Contractor's resources shall comply with the County's minimum background check requirements.
- When applicable and if requested by the County, Contractor to provide all applicable licenses and license numbers, certificates relevant to the assigned project, name of holders of those licenses and certificates, and names of the agencies issuing the licenses and certificates.
- 48VDC Power Systems shall be available at all sites.
- Contractor to provide DC Power Consumption Calculations for microwave radios, routers, and other DC Powered equipment (if any) provided by Contractor.
- Any upgrades to the existing power system or hardware for a new power system is not included in this engagement.
- AC power drop wiring within three (3) feet of DC power plants is excluded, unless specifically indicated in the Agreement.

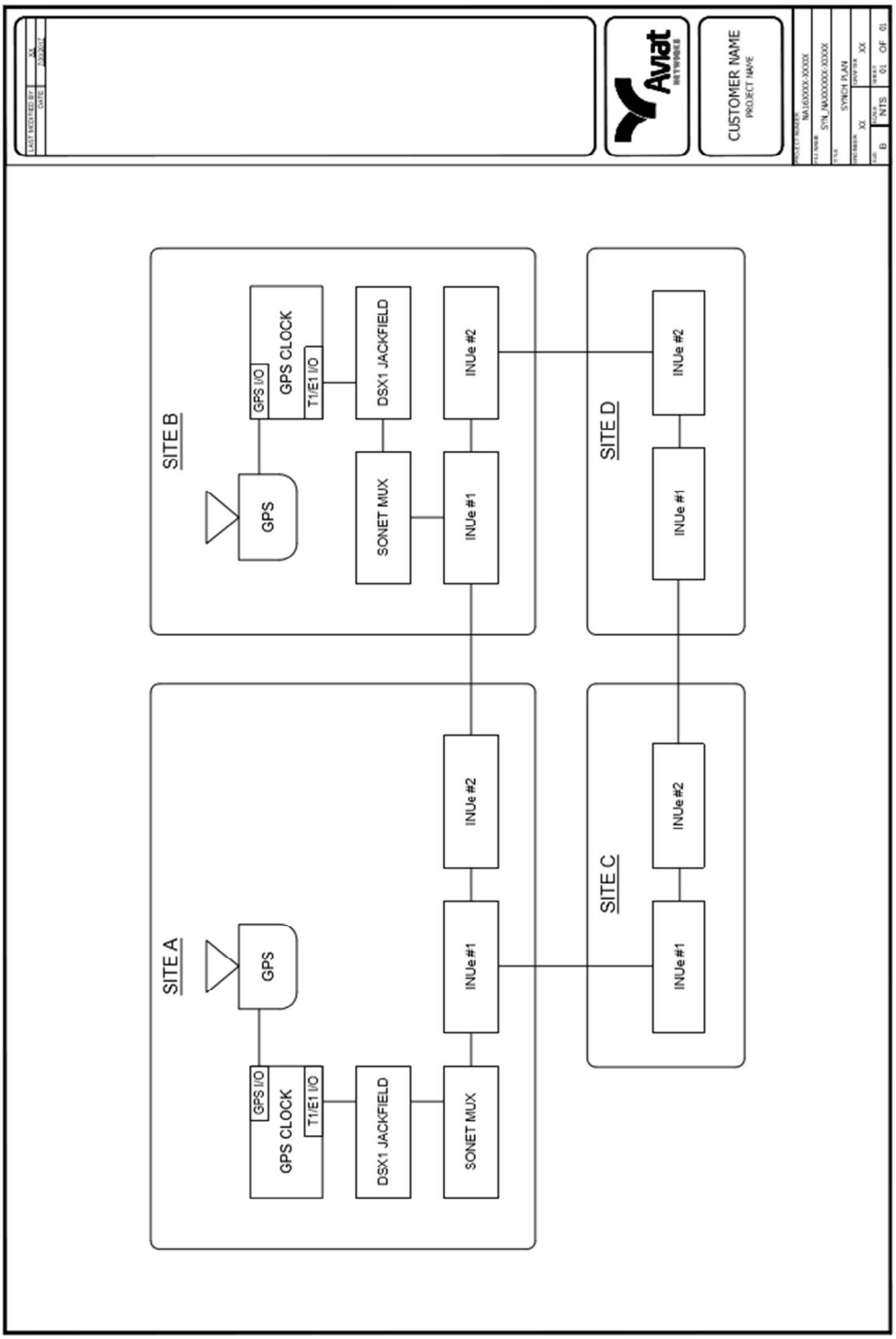
12. Appendix G: Field Change Order Procedure

Any change to the proposed system configuration, the number of sites, type of equipment, type of services or project responsibilities, or any other change to this Agreement shall be considered as a change in scope and will be subject to the following process:

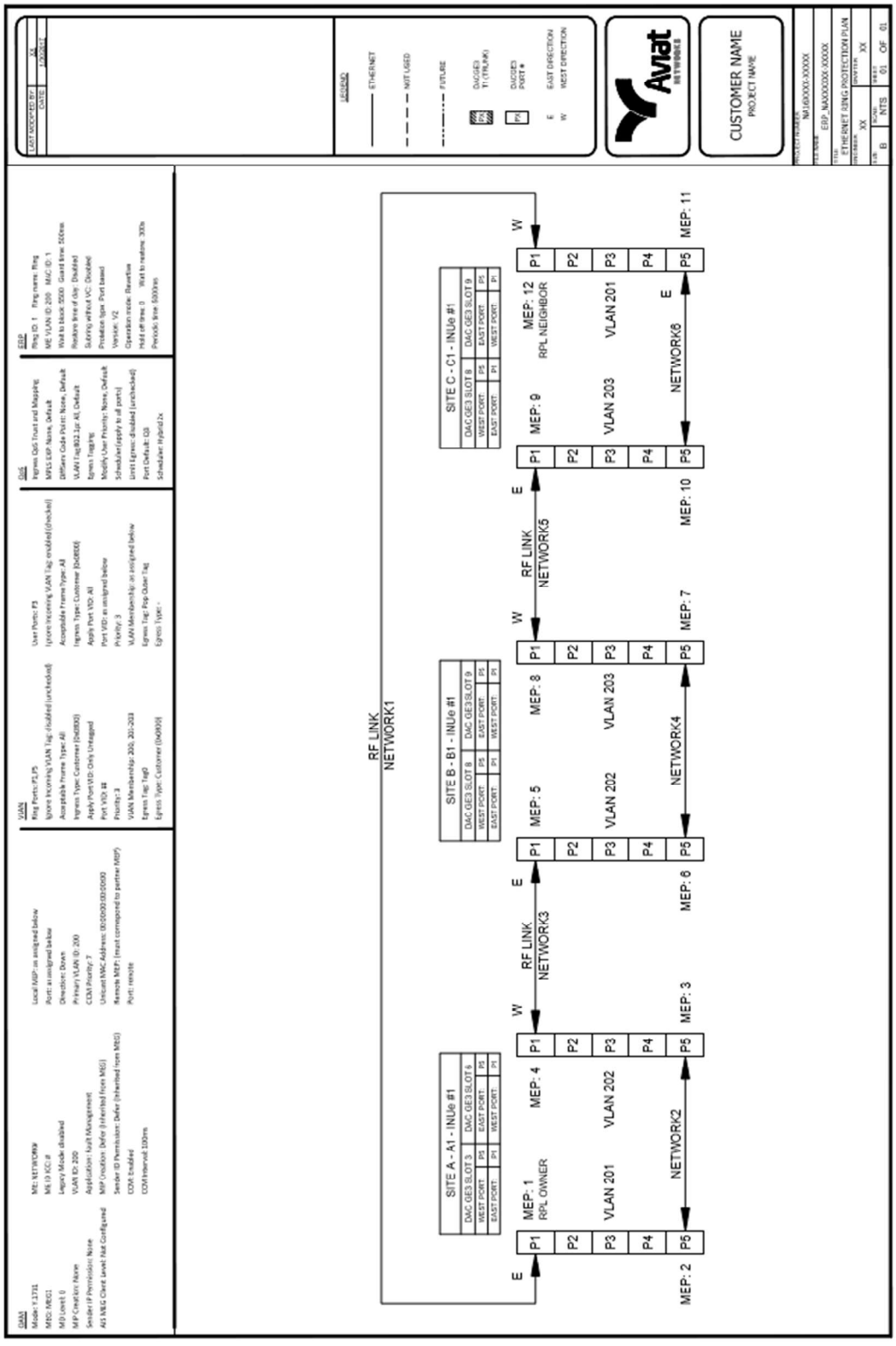
- The County or Contractor identifies a change of project scope of work.
- Contractor Project Manager or Network Engineer shall submit a proposed field change order authorization or an amendment to this Agreement containing documentation of the proposed additional activity and an additional cost.
- An authorized County representative shall review and approve the field change order authorization. A fully executed amendment to this Agreement is required prior to changes to the scope of work being implemented.

13. Contractor's Standard Drawings

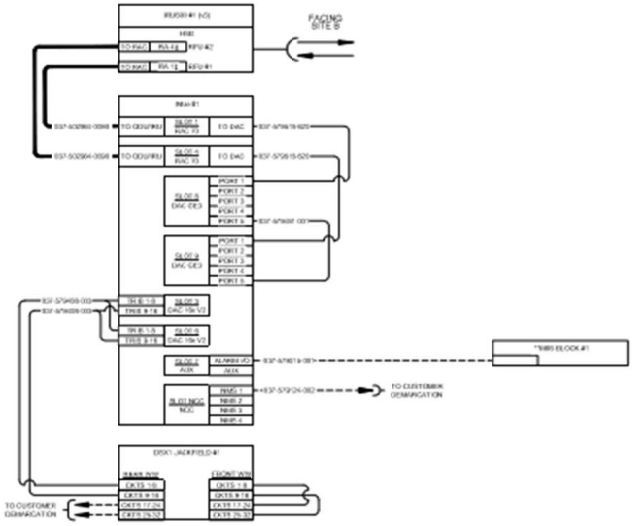
Synch Plan



Ethernet Ring Protection Plan (ERP)



SIGNAL BLOCK DIAGRAM
A1



LAST MODIFIED BY:	XX
DATE:	XX/XX/XXXX

NOTES:

- CABLE CONNECTION
- CUSTOMER/FIELD CONNECTION
- EXISTING CONNECTION
- COAX CABLE
- FIBER CABLE
- EXISTING EQUIPMENT
- FUTURE EQUIPMENT
- ' EQUIP. FOR SHIPPING PURPOSES ONLY
- '' EQUIP. TO BE DROP SHIPPED
- ''' CUSTOMER FURNISHED EQUIPMENT

UNLESS OTHERWISE SPECIFIED, ALL STRAPPING ON AND OR BETWEEN, TERMINAL BLOCKS IS TO BE ON THE CUSTOMER SIDE OF THE BLOCK(S).

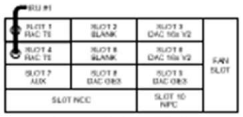
	PORTAL RPU

Aviat NETWORKS

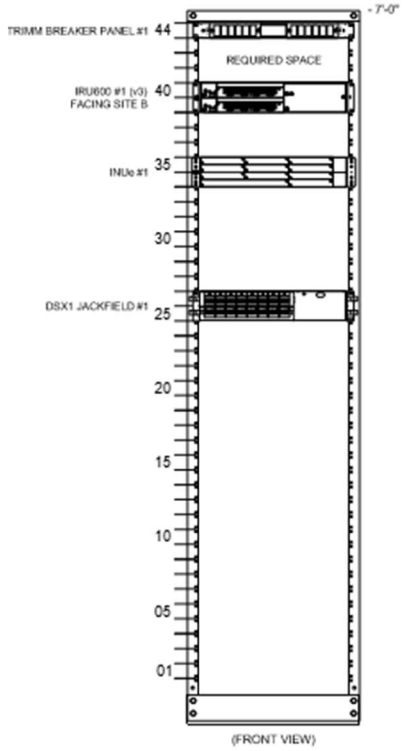
CUSTOMER NAME
PROJECT NAME

PROJECT NUMBER:	NAXXXXXX-XXXXX
FILE NAME:	SSD_A_SITE A
TITLE:	SIGNAL BLOCK DIAGRAM
DESIGNER: XX	DRAWN: XX
SIZE: B	SCALE: NTS
SHEET: 03 OF 03	

RACK PROFILE



INUe #1 CARD SLOTTING



**M66 BLOCK #1

RACKFACE ELEVATION - RACK A1
CHATSWORTH 7'-0" x 19" ALUMINUM RACK

LAST MODIFIED BY:	XX
DATE:	XX/XX/XXXX

NOTES:

- CABLE CONNECTION
- CUSTOMER/FIELD CONNECTION
- EXISTING CONNECTION
- COAX CABLE
- FIBER CABLE
- EXISTING EQUIPMENT
- FUTURE EQUIPMENT
- * EQUIP. FOR SHIPPING PURPOSES ONLY
- ** EQUIP. TO BE DROP SHIPPED
- *** CUSTOMER FURNISHED EQUIPMENT

UNLESS OTHERWISE SPECIFIED, ALL STRAPPING ON, AND OR BETWEEN, TERMINAL BLOCKS IS TO BE ON THE CUSTOMER SIDE OF THE BLOCK(S).

PORTAL RPU

Aviat NETWORKS

CUSTOMER NAME
PROJECT NAME

PROJECT NUMBER:	NA0XXXXX-XXXXX	
FILE NAME:	SSD_A_SITE A	
TITLE:	RACK PROFILE	
DRAWN BY:	XX	CHK'D BY: XX
SIZE: B	SCALE: NTS	SHEET: 01 OF 03

Sample Power Calculations

Sample Power Calculations

Eclipse Packet Node Power Consumption Calculation
Proposal #: NA130208-50689
Date: November 20, 2014
Network Engineer: M. Del Fierro

Site Name: Princeton

		Manual Entry
RFU / Module Type	**Consumption**	**Qty**
IRU600 1+1 High Power	124 W	1
RAC 60E	12 W	2
DAC GE V3	13 W	1
DAC 16X	2.5 W	2
NPC	8 W	1
INU or INUe	13 W	1
TOTAL		**187.00 W**

Total AMPS @ 48Vdc: **3.90 A**

Additional Equipment Load

Description	**Consumption**	**Qty**
TOTAL		**0.00 W**

Additional AMPS @ 48Vdc: **0.00 A**

Station Load (Amps)	**3.90 A**
Recharge Time (Hours)	24
Battery Reserve (Hours)	8
Ampere-Hour Multiplier	8.0
Termperature Correction Factor	1

Min. Battery Plant Size (AMP-HRS) **31**
Min. Charger System Size (AMP Rating) **5**

WATTS to BTU/HR **794**
(incl. charger and equipment)

NOTE: Dehydrators operate with AC power

Hours Reserve====>	**2**	**4**	**6**	**8**	**12**	**24**	
Amp-Hour multiplier====>	**2.8**	**4.7**	**6.4**	**8.0**	**10.9**	**19.3**	
Temperature F(Deg)====>	**0**	**10**	**20**	**40**	**60**	**70**	**77**
Correction Factor=====>	**2.0**	**1.85**	**1.59**	**1.3**	**1.11**	**1.04**	**1.0**

Battery Size (Min) = Station Load X Amp-Hour Multiplier X Correction Factor
Charger Size (Min) = (1.15 X Battery Size / Recharge Time) + Station Load

Sample IP Plan

	EQUIPMENT		ACCESS & CONFIGURATION													Additional Radio			DATES				STATUS		
SITE NAME	Site Address	Vendor	Component	Telnet	SSH	HTTP	EMS/NMS	Craft Interface	Terminal Server	Device Ethernet IP Address	Device Ethernet Subnet Mask	UserID (Admin)	Password (Admin)	Enable Secret (Admin)	Access Notes/URL	System Name (Hostname / FQDN)	Read SNMP Comm. String	Write SNMP Comm. String	Peer Site Name Radio A (For End Radio Site)	Peer Site Name Radio B (For End Radio Site)	Display Name (Provision Name)	Device Matrix Date	Provision Insertion	Launch Date	Element Update Date	Element Status	Current SW Revision	Device in Provision
Princeton		Aviat	Eclipse	NA	NA	Yes	Yes	Yes	NA	10.0.0.1	255.255.255.240 (/28)	default	default	default			terminal	terminal	Turquoise			11/20/2014						N/A
Turquoise		Aviat	Eclipse	NA	NA	NA	Yes	Yes	NA	10.0.0.17	255.255.255.240 (/28)	default	default	default			terminal	terminal	Princeton	Tennessee Pass		11/20/2014						N/A
Turquoise		Asentria	SiteBoss 5550-E	NA	NA	Yes	Yes	NA	NA	10.0.0.18	255.255.255.240 (/28)	default	default	default			public	private				11/20/2014						N/A
Tennessee Pass		Aviat	Eclipse	NA	NA	NA	Yes	Yes	NA	10.0.0.33	255.255.255.240 (/28)	default	default	default			terminal	terminal	Turquoise			11/20/2014						N/A
Tennessee Pass		Asentria	SiteBoss 5550-E	NA	NA	Yes	Yes	NA	NA	10.0.0.34	255.255.255.240 (/28)	default	default	default			public	private				11/20/2014						N/A

14. Additional Services

After a comprehensive field and site survey was conducted, it was determined additional services were needed. The microwave sites will need to operate with both the old and new systems during the system cutovers, additional waveguides are needed to minimize emergency communications downtime during system cutover. The following additional services were submitted to the County that addresses the hardware and services required as per the final design agreed upon by the County and Contractor. As part of this engagement, Contractor provided a more comprehensive design that incorporates data from field surveys. The final design was prepared and reviewed by the County. Adjustments were made to optimize the design and meet the County's requirements. The additional services reflect the services required to buildout the network per the County's direction and requirements.

Contractor to provide the following services that are hereby added to this agreement.

- To replace the microwave dehydrators, and to include additional waveguide equipment and services
- To supply and install spur site replacement batteries and rectifiers at the various radio sites
- To add Skylawn Radio Communication Site to San Mateo Police Department (SMPD) Link
- To supply and install changes in hardware/equipment. Refer to ***Revised Exhibit D (Rev. 09/12/23) - Aviat U.S., Inc. List of Descriptions of Equipment and Services*** for further details
- To supply and install additional hardware for parallel operations on spurs using expansion port on new radio paths for: North Peak to Pigeon Point and Foster City to Brisbane

Skylawn Radio Communications Site to SMPD Link

- Radio Integration
- Vendor integration
- Documentation and drafting
- Network system engineering
- Project/Site engineering
- Path survey
- Program management including site survey
- Field installation to include wiring and testing
- Pickup, decommission, and recycling
- Warehousing
- Manlift for accessing monopole at Skylawn site
- Crane to get wall mounts to EPA rooftop
- Manlift for accessing tower at Daly City site
- Manlift for Sweeny Ridge site
- Provide new conduit for tower to Shelter at Sweeny Ridge
- Additional installation services for parallel operation on Pescadero to North Peak path

- Additional installation service for 2300 ft of extra waveguide

Any additional services and change orders, requested, and approved by the County, not included in this Agreement, shall be quoted on as needed basis. Any additional services and change orders will be submitted by the Contractor and must be pre-approved by the Chief Information Officer (CIO), or CIO's designee in writing, prior to commencing work. A fully executed amendment to this Agreement is required prior to any additional services and change orders.

The methods and techniques used to provide the services indicated herein to the County are within the Contractor's discretion, but subject to the County Information Services Department's technology policies, guidelines, and requirements. The amount of time, specific hours, and location of the performance of Contractor's services are left to the Contractor's discretion provided that the Contractor coordinates with County Information Services Department as needed.

Revised Exhibit B (Rev. 09/12/23)

PAYMENTS, RATES, AND INVOICING

In consideration of the services provided by Contractor described in Revised Exhibit A (Rev. 09/12/23) and subject to the terms of the Agreement, County shall pay Contractor based on the following fee schedule and terms:

Milestone Description	Amount
Milestone 1: Path and Site Surveys and 20% of Radio Equipment	$633,734.28
Milestone 2: Design Freeze and 25% of Radio Equipment	$638,407.43
Milestone 3: Product Training	$42,375.00
Milestone 4: Completion of Shipment of all Equipment, Confirmation of Receipt of all Equipment, and Successful Factory Testing of all Equipment	$3,635,334.65
Milestone 5: Installation of Radios on the Ring	$798,024.90
Milestone 6: Installation of Spur Radio Links	$988,505.05
Milestone 7: System Acceptance	$468,635.20
GRAND TOTAL	**$7,205,016.51**

BREAKDOWN OF MILESTONES (Rev. 09/12/23)				SYSTEM		SYSTEM		SYSTEM		633,734.28	638,407.43	63,039.00	3,165,494.65	798,024.90	795,250.95	357,480.80	6,451,432.00
Partial Release Completed	EQUIPMENT LIST	PRODUCT CODE	UNIT	QTY	PRICE	QTY	PRICE	QTY	PRICE	633,734.28	638,407.43	42,375.00	3,635,334.65	798,024.90	988,505.05	468,635.20	7,205,016.51
ITEM	DESCRIPTION	PART NUMBER	PRICE	Revised Design		Contract		Delta (Revised - Contract)		Milestone 1: Path and Site Surveys + 20% Radio Equipment	Milestone 2: Design Freeze + 25% Radio Equipment	Milestone 3: Aviat Product Training:	Milestone 4: Successful Factory Testing & Shipment of Equipment:	Milestone 5: Installation of all Radios on the Ring	Milestone 6: Installation of Spur Radio Links	Milestone 7: Upon system acceptance:	Balance
1.0020	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 5.8 U6 GHz, Filter-non ACCP	EV206-AMT-AM0-410000	12,654.00	4	50,616.00	4	50,616.00	0	-	10,123.20	12,654.00	-	27,838.80	-	-	-	-
1.0030	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP U6 GHz, Filter-non ACCP	EV206-AEU-AE0-410000	17,848.00	2	35,696.00	2	35,696.00	0	-	7,139.20	8,924.00	-	19,632.80	-	-	-	-
1.0040	IRU600v4 RFSEC ASSY NP, IF TR EHP 11 GHz, Filter-non ACCP	EV202-AEB-000-410000	10,016.00	3	30,048.00	3	30,048.00	0	-	6,009.60	7,512.00	-	16,526.40	-	-	-	-
1.0050	IRU600v4 RFSEC ASSY NP, IF TR EHP 11 GHz, Filter-non ACCP, 80 MHz	EV202-AEB-000-418000	10,405.00	1	10,405.00	1	10,405.00	0	-	2,081.00	2,601.25	-	5,722.75	-	-	-	-
1.0060	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV207-AMC-AM0-410000	13,221.00	2	26,442.00	4	52,884.00	-2	(26,442.00)	10,576.80	13,221.00	-	2,644.20	-	-	-	-
1.0070	IRU600v4 RFSEC ASSY 1+0 REPEATER, IF TR EHP 11 GHz, Filter-non ACCP	EV205-AEB-AEB-410100	18,985.00	2	37,970.00	2	37,970.00	0	-	7,594.00	9,492.50	-	20,883.50	-	-	-	-
1.0080	IRU600v4 RFSEC ASSY 1+0 REPEATER, IF TR EHP 11 GHz, Filter-non ACCP, 80 MHz	EV205-AEB-AEB-418180	19,763.00	2	39,526.00	2	39,526.00	0	-	7,905.20	9,881.50	-	21,739.30	-	-	-	-
1.0090	IRU600v4 RFSEC ASSY 1+0 REPEATER, IF TR EHP 11 GHz, Filter-non ACCP, 80/40 MHz	EV205-AEB-AEB-418100	19,374.00	3	58,122.00	3	58,122.00	0	-	11,624.40	14,530.50	-	31,967.10	-	-	-	-
1.0100	MSHB radios 11 GHz			0	-	0	-	0	-	-	-	-		-	-	-	-
1.0110	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV206-AMC-AM0-410000	12,654.00	21	265,734.00	21	265,734.00	0	-	53,146.80	66,433.50	-	146,153.70	-	-	-	-
1.0111	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV206-AMC-AM0-410000	44,599.00	0	-	0	-	0	-	-	-	-	-	-	-	-	-
1.0120	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP 11 GHz, Filter-non ACCP	EV206-AEB-AE0-410000	17,848.00	6	107,088.00	4	71,392.00	2	35,696.00	14,278.40	17,848.00	-	74,961.60	-	-	-	-
1.0130	Waveguide extension Kits 6 GHz			0	-	0	-	0	-	-	-	-		-	-	-	-
1.0140	WG EXT KIT IRU600 V3 6GHZ SH1-PO1, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-AA101	355.00	3	1,065.00	4	1,420.00	-1	(355.00)	284.00	355.00	-	426.00	-	-	-	-
1.0150	WG EXT KIT IRU600 V3 6GHZ SH2-PO2, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-BB201	1,021.00	2	2,042.00	1	1,021.00	1	1,021.00	204.20	255.25	-	1,582.55	-	-	-	-
1.0160	WG EXT KIT IRU600 V3 6GHZ SH3-PO3, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-CC301	1,379.00	1	1,379.00	1	1,379.00	0	-	275.80	344.75	-	758.45	-	-	-	-
1.0170	WG EXT KIT IRU600 V3 6GHZ SH4-PO4, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-DD401	1,443.00	0	-	0	-	0	-	-	-	-	-	-	-	-	-
1.0180	Waveguide extension Kits 11 GHz		-	0	-	0	-	0	-	-	-	-		-	-	-	-
1.0190	WG EXT KIT IRU600 V3 11GHZ SH1-PO1, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-AA121	312.00	23	7,176.00	22	6,864.00	1	312.00	1,372.80	1,716.00	-	4,087.20	-	-	-	-
1.0200	WG EXT KIT IRU600 V3 11GHZ SH1-PO1, 2+0/FD, RPTR (RPTR)	179-530135-AA122	312.00	7	2,184.00	8	2,496.00	-1	(312.00)	499.20	624.00	-	1,060.80	-	-	-	-
1.0210	WG EXT KIT IRU600 V3 11GHZ SH2-PO2, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-BB221	1,066.00	8	8,528.00	7	7,462.00	1	1,066.00	1,492.40	1,865.50	-	5,170.10	-	-	-	-
1.0220	WG EXT KIT IRU600 V3 11GHZ SH3-PO3, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-CC321	1,371.00	4	5,484.00	6	8,226.00	-2	(2,742.00)	1,645.20	2,056.50	-	1,782.30	-	-	-	-
1.0230	WG EXT KIT IRU600 V3 11GHZ SH4-PO4, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-DD421	1,393.00	3	4,179.00	3	4,179.00	0	-	835.80	1,044.75	-	2,298.45	-	-	-	-
1.0240	WG EXT KIT IRU600 V3 11GHZ SH2-PO2, 1+0/MHSB 2 ANT, MHSB/SD	179-530135-BB223	1,770.00	1	1,770.00	1	1,770.00	0	-	354.00	442.50	-	973.50	-	-	-	-
1.0250	WG EXT KIT IRU600 V3 11GHZ SH1-PO1, 1+0/MHSB 2 ANT, MHSB/SD	179-530135-AA123	734.00	2	1,468.00	1	734.00	1	734.00	146.80	183.50	-	1,137.70	-	-	-	-
1.0260	Waveguide extension bracket		-	0	-		-	0	-	-	-	-		-	-	-	-
1.0270	EXT BRKT KIT IRU600 2 SHELF (179-530089-001_REV002)	179-530089-001	197.00	5	985.00	1	197.00	4	788.00	39.40	49.25	-	896.35	-	-	-	-
1.0280	EXT BRKT KIT IRU600 3 SHELF (179-530089-002_REV002)	179-530089-002	394.00	3	1,182.00	4	1,576.00	-1	(394.00)	315.20	394.00	-	472.80	-	-	-	-
1.0290	EXT BRKT KIT IRU600 4 SHELF (179-530089-003_REV002)	179-530089-003	591.00	3	1,773.00	5	2,955.00	-2	(1,182.00)	591.00	738.75	-	443.25	-	-	-	-
1.0300				0	-	0	-	0	-	-	-	-		-	-	-	-
1.0310	11 GHz outdoor radio , ODU 600v2		-	0	-	0	-	0	-	-	-	-		-	-	-	-
1.0320	ODU 600v2, 11 GHz	M-ECH-11	2,987.00	6	17,922.00	6	17,922.00	0	-	3,584.40	4,480.50	-	9,857.10	-	-	-	-
1.0330	Coupler Assy ODU 600v2 , 10/11 GHz Unequal 6 dB, V and H Pole (840D611H1B)	086-523300-116	248.00	3	744.00	3	744.00	0	-	148.80	186.00	-	409.20	-	-	-	-
1.0340	AOD RADIO ODU600v2 10/11 GHz Waveguide Transition Kit, WR 90 waveguide, UDR 100 flange	179-530500-011	79.00	1	79.00	3	237.00	-2	(158.00)	47.40	59.25	-	(27.65)	-	-	-	-
1.0350	Remote Mount Bracket Assembly ODU600v2	179-530502-001	58.00	1	58.00	3	174.00	-2	(116.00)	34.80	43.50	-	(20.30)	-	-	-	-
1.0360	FLEXIBLE WAVEGUIDE, 10 - 11.7 GHZ, 900 MM, PDR100 FLANGES	086-119100-900	92.00	1	92.00	3	276.00	-2	(184.00)	55.20	69.00	-	(32.20)	-	-	-	-
1.0370				0	-	0	-	0	-	-	-	-		-	-	-	-
1.0380	18 GHz outdoor radio , ODU 600v2		-	0	-	0	-	0	-	-	-	-		-	-	-	-
1.0390	ODU 600v2, 18 GHz	M-ECH-18	2,987.00	32	95,584.00	32	95,584.00	0	-	19,116.80	23,896.00	-	52,571.20	-	-	-	-
1.0400	Coupler Assy ODU 600v2 , 18 GHz Unequal 6 dB, V and H Pole (840D618H1B)	086-523300-186	264.00	16	4,224.00	16	4,224.00	0	-	844.80	1,056.00	-	2,323.20	-	-	-	-
1.0410	WTM 4100/4200 ODU600v2 18/23 GHz Waveguide Transition Kit, WR 42 waveguide, UBR220 flange	179-530500-018	81.00	16	1,296.00	16	1,296.00	0	-	259.20	324.00	-	712.80	-	-	-	-
1.0420	WRAPPER, WTM4000 & ODU600v2 RACK MOUNT	012-910239-001	328.00	15	4,920.00	13	4,264.00	2	656.00	852.80	1,066.00	-	3,001.20	-	-	-	-
1.0430	WG EXY KIT ODU600 WRAPPER #1	179-530166-131	1,004.00	10	10,040.00	11	11,044.00	-1	(1,004.00)	2,208.80	2,761.00	-	5,070.20	-	-	-	-

1.0440	WG EXT KIT ODU600 WRAPPER #2	179-530166-211	1,256.00	0	-	3	3,768.00	-3	(3,768.00)	753.60	942.00	-	(1,695.60)	-	-	-	-
1.0450	WG EXT KIT ODU600 WRAPPER #3	179-530166-311	1,915.00	0	-	2	3,830.00	-2	(3,830.00)	766.00	957.50	-	(1,723.50)	-	-	-	-
1.0460	NP to MHSB		-	0	-	0	-	0	-	-	-	-		-	-	-	-
1.0470	IRU600v4 ACU MHSB RX UNEQUAL SPLIT 5.8-U6 GHz, Filter-non ACCP	ET206-T-0-410000	1,453.00	4	5,812.00	4	5,812.00	0	-	1,162.40	1,453.00	-	3,196.60	-	-	-	-
1.0480	RFU, EHP, IRU600v4 IF TR, U6 GHz, 6400-7125 MHz	ERE-AU6-401	7,467.00	4	29,868.00	4	29,868.00	0	-	5,973.60	7,467.00	-	16,427.40	-	-	-	-
1.0490	Mis 6, 11 and 18 Ghz kits						-	0		-	-	-		-	-	-	-
1.0500	WG EXT KIT ODU600 WAPPER #2	179-530166-231	1,256.00	3	3,768.00		-	3	3,768.00	-	-	-	3,768.00	-	-	-	-
1.0505	EXT BRKT KIT one bracket for each ODU wrapper	179-530089-001	-	15	-		-	15	-	-	-	-	-	-	-	-	-
1.0510	WG EXT KIT ODU600 WAPPER #3	179-530166-331	1,915.00	2	3,830.00		-	2	3,830.00	-	-	-	3,830.00	-	-	-	-
1.0520	WG EXT KIT IRU600 V3 11GHZ SH3-PO3, 1+0/MHSB 2 ANT, MHSB/SD	179-530135-CC323	2,594.00	1	2,594.00		-	1	2,594.00	-	-	-	2,594.00	-	-	-	-
1.0530	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR EHP 11 GHz, Filter-non ACCP	EV207-AEB-AE0-410000	19,473.00	2	38,946.00		-	2	38,946.00	-	-	-	38,946.00	-	-	-	-
1.0540	ADAPTER, N-MALE TO N-MALE	018-501627-001	5.00	34	170.00		-	34	170.00	-	-	-	170.00	-	-	-	-
2.0000	Eclipse Indoor Unit and Data Cards		-	0	-	0	-	0	-	-	-	-		-	-	-	-
2.0010	INUe		-	0	-	0	-	0	-	-	-	-		-	-	-	-
2.0020	ECLIPSE, INTELLIGENT NODE UNIT 2RU, INC IDCE, FAN, NCCV3, HIGH OUTPUT	EXX-000-205	1,039.00	60	62,340.00	60	62,340.00	0	-	12,468.00	15,585.00	-	34,287.00	-	-	-	-
2.0030	NODE PROTECTION CARD, HIGH OUTPUT	EXS-002	230.00	60	13,800.00	60	13,800.00	0	-	2,760.00	3,450.00	-	7,590.00	-	-	-	-
2.0040	KIT BRACKET 2RU	179-530064-001	10.00	60	600.00	60	600.00	0	-	120.00	150.00	-	330.00	-	-	-	-
2.0050	Rac Card		-	0	-	0		0		-	-	-		-	-	-	-
2.0060	RAC 70v2, QPSK-4096QAM, NO XPIC, ACM	EXR-700-002	648.00	138	89,424.00	130	84,240.00	8	5,184.00	16,848.00	21,060.00	-	51,516.00	-	-	-	-
2.0070	Aux Card and Cables		-	0	-	0	-	0	-	-	-	-		-	-	-	-
2.0080	AUX, ALARM I/O CARD	EXA-001	203.00	37	7,511.00	37	7,511.00	0	-	1,502.20	1,877.75	-	4,131.05	-	-	-	-
2.0090	ALARM I/O HD15 10M WIREWRAP	037-579315-001	56.00	37	2,072.00	37	2,072.00	0	-	414.40	518.00	-	1,139.60	-	-	-	-
2.0100	M66 Punch-Down Block Kit	179-530132-001	59.00	37	2,183.00	37	2,183.00	0	-	436.60	545.75	-	1,200.65	-	-	-	-
2.0110	Ethernet Card and Cables		-	0	-	0	-	0	-	-	-	-		-	-	-	-
2.0120	DAC GE3 GIGABIT ETHERNET SWITCH CARD	EXD-181-002	731.00	111	81,141.00	108	78,948.00	3	2,193.00	15,789.60	19,737.00	-	45,614.40	-	-	-	-
2.0130	CABLE PROT / BRIDGEING GE3, DIRECT FIT, 500mm	037-579461-500	55.00	48	2,640.00	47	2,585.00	1	55.00	517.00	646.25	-	1,476.75	-	-	-	-
2.0140	GIG ETH SFP, OPT MMF 850nm LC 1000BASE-SX, <550M (LM28-C3S-TC-N) (optional)	079-422662-001	51.00	0	-	0	-	0		-	-	-	-	-	-	-	-
2.0150	XCVR ELECTRICAL GIGE SFP W/LOS 3V3 COM(2 per card)	083-845434-001	86.00	129	11,094.00	126	10,836.00	3	258.00	2,167.20	2,709.00	-	6,217.80	-	-	-	-
2.0160	SFP OPT GIGE 1310nm SMF LC 10KM 0 to 70C	079-422656-001	58.00	4	232.00		-	4	232.00	-	-	-	232.00	-	-	-	-
2.0170	NETWORK CONVERGENCE MODULE (NCM)	EXD-400-002	974.00	26	25,324.00	16	15,584.00	10	9,740.00	3,116.80	3,896.00	-	18,311.20	-	-	-	-
2.0180	NCM LOOP SWITCH License to support up to 50E1/63T1 TDM circuits	EZF-14	4,870.00	13	63,310.00	16	77,920.00	-3	(14,610.00)	15,584.00	19,480.00	-	28,246.00	-	-	-	-
2.0190	Non Protected DS1 Card and Cables		-	0	-	0	-	0	-	-	-	-		-	-	-	-
2.0200	ECLIPSE, DAC 16XE1/DS1 V3, PROTECTABLE	EXD-161-002	256.00	107	27,392.00	41	10,496.00	66	16,896.00	2,099.20	2,624.00	-	22,668.80	-	-	-	-
2.0210	HDR-E50 TO 24AWG FREE END 3M	037-579418-003	97.00	0	-	56	5,432.00	-56	(5,432.00)	-	-	-	-	-	-	-	-
2.0210	2x HDR-E50 TO Y JOIN TO 24AWG FREE END 3.5M	037-579408-003	237.00	116	27,492.00		-	116	27,492.00	1,086.40	1,358.00	-	25,047.60	-	-	-	-
2.0220	Non DS3 Mux Card to interconnect loop INUe to Spur INUe on rings sites			0	-	0	-	0	-	-	-	-		-	-	-	-
2.0230	DAC 3XE3/DS3M, MUXED TO E1/DS1 BUS	EXD-331-001	373.00	0	-	20	7,460.00	-20	(7,460.00)	1,492.00	1,865.00	-	(3,357.00)	-	-	-	-
2.0240	CABLE, TRIB, E3/DS3, UNBALANCED SLIM-LINE BNC TO SLIM-LINE BNC, 5 METERS	037-579249-001	35.00	0	-	40	1,400.00	-40	(1,400.00)	280.00	350.00	-	(630.00)	-	-	-	-
2.0250	Non protected DS3-3 Mux Card to interconnect loop INUe		-	0	-	0	-	0	-	-	-	-		-	-	-	-
2.0260	DAC 155oMv3, 1XSTM1/OC3 MUXED TO 63E1/84DS1, OPTICAL (NO SFP)	EXD-155-001	1,000.00	24	24,000.00	24	24,000.00	0	-	4,800.00	6,000.00	-	13,200.00	-	-	-	-
2.0261	SFP OPT STM-1/OC3 1310nm SMF LC 15km 0 to 70C	079-422657-001	-	24	-		-	24	-	-	-	-	-	-	-	-	-
2.0270	SIMPLEX 3M SM LC TO LC (037-579131-001_REV004)	037-579131-001	11.00	26	286.00	48	528.00	-22	(242.00)	105.60	132.00	-	48.40	-	-	-	-
2.0280	SIMPLEX 10M SM LC TO LC (HTX1001LCLC000010_REV S1)	037-579133-001	13.00	8	104.00		-	8	104.00	-	-	-	104.00	-	-	-	-
2.0290	XCVR OPT MULTIMODE SFP 3V3, 850 nm, 125 Mbps Fast Ethernet (LM28-A3S-TC-N)	079-422661-001	95.00	0	-		-	0	-	-	-	-	-	-	-	-	-
2.0300	CABLE, OPTICAL JMPR, LC-SC, SM-DUP, 9/125UM, 10M/32.8FT (203-3700-010/3MI)	LOC-203-3700-010/3MI	22.00	8	176.00		-	8	176.00	-	-	-	176.00	-	-	-	-
2.0310	Software and Licenses		-	0	-		-	0	-	-	-	-		-	-	-	-
2.0320	IRU 600 high power license			0	-		-	0	-	-	-	-		-	-	-	-
2.0330	IRU600 600 High power option 1 x RFU	EZF-61	974.00	0	-		-	0	-	-	-	-	-	-	-	-	-
2.0340	IRU600 600 Nodal High power option 2 x RFU	EZF-62	1,948.00	3	5,844.00	6	11,688.00	-3	(5,844.00)	2,337.60	2,922.00	-	584.40	-	-	-	-
2.0350	IRU600 600 Nodal High power option 4 x RFU	EZF-64	3,896.00	0	-		-	0	-	-	-	-	-	-	-	-	-
2.0360	ODU 600 high power license		-	0	-		-	0	-	-	-	-		-	-	-	-
2.0370	ODU 600 Nodal High power option 2 x ODU	EZF-52	974.00	10	9,740.00	10	9,740.00	0	-	1,948.00	2,435.00	-	5,357.00	-	-	-	-
2.0380	ODU 600 Nodal High power option 4 x ODU	EZF-54	1,948.00	3	5,844.00	3	5,844.00	0	-	1,168.80	1,461.00	-	3,214.20	-	-	-	-
2.0400	Capacity License			0	-		-	0	-	-	-	-		-	-	-	-
2.0410	50 Mbps Node radio capacity License	EZE-08001	98.00	29	2,842.00	29	2,842.00	0	-	568.40	710.50	-	1,563.10	-	-	-	-
2.0420	NODE SW LICENSE, 100 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08002	406.00	11	4,466.00	11	4,466.00	0	-	893.20	1,116.50	-	2,456.30	-	-	-	-
2.0430	NODE SW LICENSE, 300 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08005	2,435.00	17	41,395.00	18	43,830.00	-1	(2,435.00)	8,766.00	10,957.50	-	21,671.50	-	-	-	-
2.0440	NODE SW LICENSE, 400 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08006	3,247.00	3	9,741.00	2	6,494.00	1	3,247.00	1,298.80	1,623.50	-	6,818.70	-	-	-	-
2.0450	NODE SW LICENSE, 800 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08007	3,896.00	0	-		-	0	-	-	-	-	-	-	-	-	-
2.0460	SECURE MANGEMENT, INU, inc SNMPV3 NODAL	EZF-03	973.00	60	58,380.00	60	58,380.00	0	-	11,676.00	14,595.00	-	32,109.00	-	-	-	-
2.0470	LICENCE UPGRADE EZE-08001 TO EZA-08002 50 Mbps TO 100 Mbps	EZA-08002-LU1	-	1	-		-	1	-	-	-	-	-	-	-	-	-
2.0480	CBL, IF, SMA (M) to SMA (M), RAC-60 to IRU-600 RFU, 150CM	037-502964-0150	32.00	18	576.00		-	18	576.00	-	-	-	576.00	-	-	-	-
2.0490	CBL, IF, SMA (M) to SMA (M), RAC-60 to IRU-600 RFU, 300CM	037-502964-0300	41.00	18	738.00		-	18	738.00	-	-	-	738.00	-	-	-	-
2.0500	CBL, IF, SMA (M) to SMA (M), RAC-60 to IRU-600 RFU, 1000CM	037-502964-1000	76.00	6	456.00		-	6	456.00	-	-	-	456.00	-	-	-	-

2.0510	UPGRADE IRU 600 Nodal High power option 2 x RFU	EZG-62	1,948.00	1	1,948.00		-	1	1,948.00	-	-	-	1,948.00	-	-	-	-
2.0511	LICENCE UPGRADE EZA-08005 TO EZA-08006 300 Mbps TO 400 Mbps	EZA-08006-LU5	858.00	1	858.00		-	1	858.00	-	-	-	858.00	-	-	-	-
3.0000	Provision & PV Plus			0	-		-	0	-	-	-	-		-	-	-	-
3.0010	Hardware			0	-		-	0	-	-	-	-		-	-	-	-
3.0020	ProVision Plus Windows Server, Diamond Level, Rack Mounted	614-100161-005	9,762.00	1	9,762.00	1	9,762.00	0	-	-	-	-	9,762.00	-	-	-	-
3.0030	ProVision Plus Windows Server, Diamond Level, Rack Mounted	614-100161-005	9,762.00	1	9,762.00	1	9,762.00	0	-	-	-	-	9,762.00	-	-	-	-
3.0040	1U KMM, TOUCHPAD/KEYBOARD/18.5" LED, INCL READYRAILS, 1U KVM MNT KIT (331-9439)	LOC-331-9439	1,718.00	0	-	2	3,436.00	-2	(3,436.00)	-	-	-	-	-	-	-	-
3.0050	Software			0	-		-	0	-	-	-	-		-	-	-	-
3.0060	PROVISION SOLUTION PACK - 100 NODES	614-225012-002	12,987.00	1	12,987.00	1	12,987.00	0	-	-	-	-	12,987.00	-	-	-	-
3.0070	STANDBY SERVER - PV SOLUTION PACK - 100 NODES	614-625012-001	1,624.00	1	1,624.00	2	3,248.00	-1	(1,624.00)	-	-	-	1,624.00	-	-	-	-
3.0080	ProVision Plus EM Integration for ProVision Module Perpetual Technology License	276-111001-001	16,233.00	1	16,233.00	1	16,233.00	0	-	-	-	-	16,233.00	-	-	-	-
3.0090	ProVision Plus High Availability Module Technology License	276-902001-001	22,727.00	1	22,727.00	1	22,727.00	0	-	-	-	-	22,727.00	-	-	-	-
3.0100	ProVision Plus EM & CE & IP/MPLS Fault & Performance & Provisioning Technology License Bundle	276-801005-001	50,322.00	1	50,322.00	1	50,322.00	0	-	-	-	-	50,322.00	-	-	-	-
3.0110	ProVision Plus EM & CE & IP/MPLS Fault & Performance & Provisioning CTR 8740 Device License Bundle	276-802005-002	998.00	36	35,928.00	32	31,936.00	4	3,992.00	-	-	-	35,928.00	-	-	-	-
3.0120	PROVISION GDS PACKAGE, RAD MEGAPLEX 4100 V1.1	614-700470-001	1,624.00	0	-	1	1,624.00	-1	(1,624.00)	-	-	-	-	-	-	-	-
3.0130	PROVISION CUSTOMIZED DEVELOPMENT - 1 CLOK	614-550200-001	8,295.00	0	-	1	8,295.00	-1	(8,295.00)	-	-	-	-	-	-	-	-
3.0140	PROVISION GDS PACKAGE, Microsemi TimeProvider 4100 V1.0	614-700461-001	2,288.00	1	2,288.00		-	1	2,288.00	-	-	-	2,288.00	-	-	-	-
3.0150	KVM CONSOLE, CONSISTS OF KEYBOARD, 19" LCD MONITOR, 8-PORT SWITCH, IP REMOTE ACCESS, 4-POST RACK MOUNT (OPTIONAL MOUNTING BRACKET 614-100137-002 TO MOUNT ON 2-POST RACK), 19", 1 RU, 120-240 VAC INPUT, 50/60 HZ, C13 TO 5-15P POWER CORD (B020-U08-19-IP)	614-100137-001	2,043.00	2	4,086.00		-	2	4,086.00	-	-	-	4,086.00	-	-	-	-
3.0160	MOUNTING BRACKET, 2-POST RACK MOUNT BRACKET FOR 614-100137-001 KVM CONSOLE (B019-000)	614-100137-002	129.00	2	258.00		-	2	258.00	-	-	-	258.00	-	-	-	-
3.0170	PROVISION GDS PACKAGE, LOOP AM-3440-A /-C /-E MULTIPLEXERS, V1.1	614-700091-001	1,716.00	1	1,716.00		-	1	1,716.00	-	-	-	1,716.00	-	-	-	-
3.0180	PROVISION GDS PACKAGE, LOOP TELECOM V4150 MULTIPLEXER, V1.2	614-700092-001	2,288.00	1	2,288.00		-	1	2,288.00	-	-	-	2,288.00	-	-	-	-
3.0190	PROVISION GDS PACKAGE, ELTEK SMARTPACK, FLATPACK POWER SYSTEMS, V1.9	614-700070-001	2,288.00	1	2,288.00		-	1	2,288.00	-	-	-	2,288.00	-	-	-	-
4.0000	MPLS router		-	0	-		-	0	-	-	-	-		-	-	-	-
4.0010	CTR 8740		-	0	-		-	0	-	-	-	-		-	-	-	-
4.0020	CTR 8740 microwave router, MPLS, CE, L1LA and PTP-TC capable. Includes 3x 10G SFP+ cage, 8x 1G SFP cage, 4x 1G RJ45, fan assembly, SD card and BASE software	CTE-740-001	2,536.00	0	-	32	81,152.00	-32	(81,152.00)	-	-	-	-	-	-	-	-
4.0030	SFP OPT GIGE 1310nm SMF LC 10KM 0 to 70C	079-422656-001	58.00	36	2,088.00	32	1,856.00	4	232.00	-	-	-	2,088.00	-	-	-	-
4.0040	GIG ETH SFP, ELEC RJ45 1000BASE-T, CTR ONLY (with RX_LOS) (LX1801CNL-AAN)	083-845537-001	87.00	288	25,056.00	228	19,836.00	60	5,220.00	-	-	-	25,056.00	-	-	-	-
4.0050	CTR 8700 Series R3 MPLS Software License	CZL-67350	1,827.00	36	65,772.00	32	58,464.00	4	7,308.00	-	-	-	65,772.00	-	-	-	-
4.0060	CTR 8700 SECURE MANAGEMENT NODAL LICENSE (ONE LICENSE PER CHASSIS)	CZF-67060	585.00	36	21,060.00	32	18,720.00	4	2,340.00	-	-	-	21,060.00	-	-	-	-
4.0070	CTR 8700 HIGH AVAILABILITY SWITCH / ROUTER WITH RADIO PROTECTION (ONE LICENSE PER CHASSIS)	CZF-67125	710.00	36	25,560.00	32	22,720.00	4	2,840.00	-	-	-	25,560.00	-	-	-	-
4.0080	Cable, QSFP-DD to QSFP-DD, Diversity cable, 1.0M (C45593-A571-D10)	037-579807-001	322.00	18	5,796.00	24	7,728.00	-6	(1,932.00)	-	-	-	5,796.00	-	-	-	-
4.0090	DIRECT ATTACH STACKING CABLE, TWIN-AX, SFP+ TO SFP+, 10GBPS, 500mm	037-579820-005	72.00	26	1,872.00	24	1,728.00	2	144.00	-	-	-	1,872.00	-	-	-	-
4.0100	CTR 8740 microwave router, SR-MPLS, High Availability capable. Includes 3x 10G SFP+ cage, 8x 1G SFP cage, 4x 1G RJ45, fan assembly, SD card and BASE software	CTE-740-002	2,536.00	36	91,296.00		-	36	91,296.00	-	-	-	91,296.00	-	-	-	-
5.0000	Rack and Installation materials		-	0	-		-	0	-	-	-	-		-	-	-	-
5.0010	RACK ASSY CRATED, 7' CHATSWORTH ALUMINUM, 1 BREAKER PNL W/10 BLANK COVERS AND NO BREAKERS	179-530307-0113	1,596.00	41	65,436.00	42	67,032.00	-1	(1,596.00)	-	-	-	65,436.00	-	-	-	-
5.0020	Zone 4 Earthquake Kit, 19" Rack (AV179-530123-001WA)	179-530123-001	421.00	43	18,103.00	42	17,682.00	1	421.00	-	-	-	18,103.00	-	-	-	-
5.0030	CUSTOM WAVEGUIDE KIT COMPLEXITY 1	WGKIT-1000	418.00	0	-	5	2,090.00	-5	(2,090.00)	-	-	-	-	-	-	-	-
5.0040	Installation Kit, Aluminum Rack, Concrete Floor (Included in services)	179-530119-001	561.00	1	561.00		-	1	561.00	-	-	-	561.00	-	-	-	-
5.0050	COMMON BREAKERS & BLANKING PLUGS PER RACK PER DRAWING	COMMON-BREAKERS-RACK	86.00	43	3,698.00	42	3,612.00	1	86.00	-	-	-	3,698.00	-	-	-	-
5.0060	SIPQ-CABLES (100 $ per rack)	SIPQ-CABLES	70.00	43	3,010.00	42	2,940.00	1	70.00	-	-	-	3,010.00	-	-	-	-
5.0070	GROUND BAR,KIT,RACK,R56 COMPLIANT,72 INCHES L X 5/8 INCHES WIDE X 1/4 INCHES DEPTH (TRGBVKIT145872AWA)	LOC-TRGBVKIT14587ZW	496.00	43	21,328.00	42	20,832.00	1	496.00	-	-	-	21,328.00	-	-	-	-
5.0080	CHANNEL MOUNTING, FORWARD, U-SHAPE, 4 INCHES LONG (FORWARD) X 5/8 INCHES WIDE X 1.75 INCHES HIGH (1 RU) (020-018475-005_REV001)	020-018475-005	23.00	129	2,967.00	126	2,898.00	3	69.00	-	-	-	2,967.00	-	-	-	-
5.0090	RACK ASSY CRATED, 7' CHATSWORTH ALUMINUM, 2 BREAKER PNL W/10 BLANK COVERS AND NO BREAKERS	179-530307-0123	2,134.00	2	4,268.00		-	2	4,268.00	-	-	-	4,268.00	-	-	-	-
6.0000	DS1 Jackfield for T1 Demarcation		-	0	-		-	0	-	-	-	-		-	-	-	-
6.0010	JACKFIELD, LOADED 64 DSX-1 CIRCUITS (TERMINATIONS), TOTAL REAR WIREWRAP, 1-32A AND 1-32B. FLUSH MOUNT, 2", 3", 4" RECESS. 19" OR 23" WIDTH, 3 RU, 8" DEPTH, -48VDC, COLOR PUTTY (DI-D2GU1)	CNI-SA-2115-2001	1,584.00	0	-	1	1,584.00	-1	(1,584.00)	-	-	-	-	-	-	-	-
6.0020			-	0	-		-	0	-	-	-	-		-	-	-	-

6.0030	DS1 JACKFIELD, FIXED, NO INTERNAL CROSS-CONNECT, LOADED 28 CIRCUITS, 1 RU, 19" OR 23"W, 9"D, FRONT RJ48X INCLUDES AUTOMATIC LOOP BACK FUNCTION, REAR WIREWRAP, NO POWER INPUT (097-0128-0006 T1 DEMARCATION CUSTOMER INTERFACE PANEL EQUIVALENT) (DSX-28P-RJ48)	NSM-DSX-28P-RJ48	1,159.00	51	59,109.00	40	46,360.00	11	12,749.00	-	-	-	59,109.00	-	-	-	-
6.0040	4100 Microsemi GPS Clock			0	-		-	0	-	-	-	-		-	-	-	-
6.0050	CLOCK, PRECISE TIMING GATEWAY CLOCK, TP4100 BASE UNIT WITH RUBIDIUM (090-14000-003)	SYM-090-14000-003	13,823.00	0	-	1	13,823.00	-1	(13,823.00)	-	-	-	-	-	-	-	-
6.0060	ANTENNA AND CABLE KIT, FOR PRECISE TIMING GATEWAY CLOCK TP4100, CABLE 200FT, LIGHTNING ARRESTOR KIT AND ANTENNA	SYM-990-15202-225	1,409.00	1	1,409.00	1	1,409.00	0	-	-	-	-	1,409.00	-	-	-	-
6.0070	NTP Reflector LicenseNSM-920-14000-001	NSM-920-14000-001	-	2	-		-	2	-	-	-	-	-	-	-	-	-
6.0080	CLOCK, PRECISE TIMING GATEWAY CLOCK, TP4100 BASE UNIT WITH RUBIDIUM and E1/T1 module (090-14001-003)	LSNetwork(SYM-090-14001-003)	13,823.00	2	27,646.00		-	2	27,646.00	-	-	-	27,646.00	-	-	-	-
6.0090	ETHERNET SFP MOD SNGL-MODE OPTL (121-20621-10-2)	SYM-121-20621-10-2	294.00	2	588.00		-	2	588.00	-	-	-	588.00	-	-	-	-
6.0100	SFP 100/1000 electrical	LSNetwork(SYM-121-20621-12-2	294.00	2	588.00		-	2	588.00	-	-	-	588.00	-	-	-	-
6.0110	HARDWARE		490.00	0	-		-	0	-	-	-	-		-	-	-	-
6.0120	Includes Protected Controller and Power supply. Non Protected T1 cards to support 64 T1's.	LSNetwork(TBD)	30,345.00	0	-	1	30,345.00	-1	(30,345.00)	-	-	-	-	-	-	-	-
6.0130				0	-		-	0	-	-	-	-		-	-	-	-
6.0140	LOOPS DACS V4150- Protected			0	-		-	0	-	-	-	-		-	-	-	-
6.0150	DACS Main Chassis 6U high, w/o power, CPU	LSNETWORK(V4150-CHA)	1,876.00	1	1,876.00		-	1	1,876.00	-	-	-	1,876.00	-	-	-	-
6.0160	Controller (dual) with SNMP	LSNETWORK(V4150-CCA)	5,230.00	3	15,690.00		-	3	15,690.00	-	-	-	15,690.00	-	-	-	-
6.0170	Connector Board (required)	LSNETWORK(V4150-CBA)	525.00	2	1,050.00		-	2	1,050.00	-	-	-	1,050.00	-	-	-	-
6.0180	Fan Board	LSNETWORK(V4150-FANA)	1,012.00	2	2,024.00		-	2	2,024.00	-	-	-	2,024.00	-	-	-	-
6.0190	Single 48VDC Power	LSNETWORK(V4150-SD48)	425.00	3	1,275.00		-	3	1,275.00	-	-	-	1,275.00	-	-	-	-
6.0200	63 T1 interface card	LSNETWORK(V4150-63TE)	4,291.00	5	21,455.00		-	5	21,455.00	-	-	-	21,455.00	-	-	-	-
6.0210	16 Port Y-Box for card protection, 16 in 32 out ,RJ48C Connectors	LSNETWORK(ACC-Y-2SCSI-16RJ-G)	362.00	6	2,172.00		-	6	2,172.00	-	-	-	2,172.00	-	-	-	-
6.0220	SCSI Cable, Y box to 32TE Card	LSNETWORK(Loop-ACC-CAB-)	202.00	12	2,424.00		-	12	2,424.00	-	-	-	2,424.00	-	-	-	-
6.0230	Mapping/Documentation GUI Software, per controller	NSM-MAP41	1,287.00	2	2,574.00		-	2	2,574.00	-	-	-	2,574.00	-	-	-	-
6.0240	Extension of warranty to 3 Years	NSM-WARRANTY3	2,028.00	1	2,028.00		-	1	2,028.00	-	-	-	2,028.00	-	-	-	-
6.0250				0	-		-	0	-	-	-	-		-	-	-	-
6.0260	LOOPS DACS 3340 Protected		-	0	-		-	0	-	-	-	-		-	-	-	-
6.0270	Main Chassis 3U high, w/o power, CPU	LSNETWORK(AM3440-CHPCa-G)	1,602.00	1	1,602.00		-	1	1,602.00	-	-	-	1,602.00	-	-	-	-
6.0280	Controller (2 for redundant) with SNMP	LSNETWORK(AM3440-CCPB-2GEA)	3,240.00	3	9,720.00		-	3	9,720.00	-	-	-	9,720.00	-	-	-	-
6.0290	CLKa Mini Slot plug-in card, Clock in x2, clock out x1 Alarm in x1, Alarm out x2	LSNETWORK(AM3440-CLKa)	1,012.00	2	2,024.00		-	2	2,024.00	-	-	-	2,024.00	-	-	-	-
6.0300	Single 48VDC Power (2 for redundant)	LSNETWORK(AM3440-SDPB)	812.00	3	2,436.00		-	3	2,436.00	-	-	-	2,436.00	-	-	-	-
6.0310	Analog Bridge card (2 for redundant)	LSNETWORK(AM3440-ABRA)	1,502.00	5	7,510.00		-	5	7,510.00	-	-	-	7,510.00	-	-	-	-
6.0320	Quad T1 Card (2 for redundant)	LSNETWORK(AM3440-4T1)	1,163.00	5	5,815.00		-	5	5,815.00	-	-	-	5,815.00	-	-	-	-
6.0330	16 Port protection Y Box	LSNETWORK(VV-T-G)	450.00	1	450.00		-	1	450.00	-	-	-	450.00	-	-	-	-
6.0340	Mapping/Documentation GUI Interface	NSM-MAP34	358.00	1	358.00		-	1	358.00	-	-	-	358.00	-	-	-	-
6.0350	Extend Warranty to 3years	NSM-WARRANTY3	1,110.00	1	1,110.00		-	1	1,110.00	-	-	-	1,110.00	-	-	-	-
6.0360				0	-		-	0	-	-	-	-		-	-	-	-
6.0370	Training, 10 students, per student, includes study material. Includes travel expenses, two days	NSM-TRAINING-10-E	1,001.00	10	10,010.00		-	10	10,010.00	-	-	-	10,010.00	-	-	-	-
6.0380	Preconfiguration for both V4150 and AM3440 after documentation provided by customer	NSM-PRECONFIGURATION	4,290.00	1	4,290.00		-	1	4,290.00	-	-	-	4,290.00	-	-	-	-
6.1000	1 RU Chassis			0	-		-	0	-	-	-	-		-	-	-	-
6.1001				0	-		-	0	-	-	-	-		-	-	-	-
6.1002	EMPTY CHASSIS, FLATPACK S INTREPID POWER SYSTEM, NO CONTROLLER, -48VDC, REAR ACCESS, 80 AMP MAX, LVBD & SHUNT, 1 RU, 19", MID/FLUSH MOUNT, 3 EMPTY RECTIFIER POSITIONS, 2 LOAD BREAKER (NOT INCLUDED) POSITIONS, 2 BATTERY BRKR (NOT INCL) POS (FPSJ60I-ANL-VC)	ELT-FPSJ60I-ANL-VC	937.00	28	26,236.00		-	28	26,236.00	-	-	-	26,236.00	-	-	-	-
6.1003	SMARTPACK S CONTROLLER, FOR FLATPACK S INTREPID, -48 VDC, 100 AMP SYSTEM, 1 RU, SNMP, 6 PROGRAMMABLE DIGITAL OR ANALOG SIGNALS INPUTS, 6 PROGRAMMABLE RELAY OUTPUTS	ELT-SPS-FPS100-A01-VV	730.00	29	21,170.00		-	29	21,170.00	-	-	-	21,170.00	-	-	-	-
6.1004	RECTIFIER, FOR FLATPACK S INTREPID, 1 RU, 100-250 VAC INPUT, 48 VDC OUTPUT, 1800 WATTS, 37.5 AMP @ 220 VAC INPUT, 20 AMP @ 110 VAC INPUT (241122.125.VC)	ELT-241122.125	626.00	85	53,210.00		-	85	53,210.00	-	-	-	53,210.00	-	-	-	-
-	6.1005 FLATPACK S BLANK PANEL FOR EMPTY SLOT	ELT-331E00116500	25.00	0	-		-	0	-	-	-	-	-	-	-	-	-
6.1006	CIRCUIT BREAKER, 60 AMP PLUG-IN BULLET, MIDTRIP (CBB060M)	ELT-CBB060M	32.00	58	1,856.00		-	58	1,856.00	-	-	-	1,856.00	-	-	-	-
6.1007	LINE CORD WITH AMP MATE-N-LOCK CONNECTOR AT ONE END AND UNTERMINATED AT THE OTHER END, 12AWG CABLE, 20' LONG	LSNetwork(ELT-LA2012-UU)	119.00	30	3,570.00		-	30	3,570.00	-	-	-	3,570.00	-	-	-	-

6.1008	DUAL HEADED LINE CORD WITH QTY 2 AMP MATE-N-LOCK CONNECTORS AT ONE END AND UNTERMINATED AT THE OTHER END. 10AWG CABLE, 20' LONG	ELT-LC2010-UU	139.00	30	4,170.00		-	30	4,170.00	-	-	-	4,170.00	-	-	-	-
6.1009	PULLER, FOR BULLET BREAKER	ELT-BBPULR-01	49.00	30	1,470.00		-	30	1,470.00	-	-	-	1,470.00	-	-	-	-
6.1010	PLUG, NEMA LOCKING L5-20P (3021003372)	LSNetwork(ELT-3021003372)	117.00	28	3,276.00		-	28	3,276.00	-	-	-	3,276.00	-	-	-	-
6.1011	PLUG, NEMA LOCKING L5-30P (3021001664)	ELT-3021001664	117.00	28	3,276.00		-	28	3,276.00	-	-	-	3,276.00	-	-	-	-
6.1012	CIRCUIT BREAKER, 100 AMP PLUG-IN BULLET, ELECTRO-MECHANICAL (CBB100E)	ELT-CBB100E	40.00	60	2,400.00		-	60	2,400.00	-	-	-	2,400.00	-	-	-	-
6.1013	BATTERY TRAY, KIT, FOR 19" RACK, HEAVY DUTY (217035)	ELT-217035	364.00	56	20,384.00		-	56	20,384.00	-	-	-	20,384.00	-	-	-	-
6.1014	BATTERY CABLE KIT, 100A, INCLUDES ALARM CABLE 20 FEET, #4 BLACK WIRE AND LUGS, FOR 4 BATTERY BREAKERS (CONNECT BATTERIES IN FRONT ONLY) (259576)	ELT-259576	277.00	30	8,310.00		-	30	8,310.00	-	-	-	8,310.00	-	-	-	-
6.1015	BATTERY STRING INTERCONNECT CABLE, 4 AWG, 3', 1/4" SINGLE	LSNetwork(SOL-BCI-4-3-14)	49.00	30	1,470.00		-	30	1,470.00	-	-	-	1,470.00	-	-	-	-
6.1016	BATTERY, SET OF 4 X 12V190F BATTERY CELLS, 48V, 190 AH, 8 RU HEIGHT, 4.9" WIDTH/CELL, 22.1" DEPTH/CELL, INCLUDES ALL INTERCONNECT STRAPS, HARDWARE AND INSTALL MANUAL, FRONT ACCESS, NO TRAY (A12V190F)	ENE-A12V190F	3,025.00	0	-		-	0	-	-	-	-	-	-	-	-	-
6.1017	48V, (4)SBS190F, 190Ah front terminal battery	LOC-SBS190F	3,025.00	28	84,700.00		-	28	84,700.00	-	-	-	84,700.00	-	-	-	-
6.1018	WILMORE DC-DC CONVERTER, 48V TO 12V, 30 AMPS	LSNetwork(1502-48-13-30-M3)	2,233.00	7	15,631.00		-	7	15,631.00	-	-	-	15,631.00	-	-	-	-
6.1019	CIRCUIT BREAKER, 20 AMP PLUG-IN BULLET, MID-TRIP	ELT-CBB020M	40.00	32	1,280.00		-	32	1,280.00	-	-	-	1,280.00	-	-	-	-
6.1020	DISTRIBUTION PANEL, QTY 9+9 LOAD BREAKER POSITIONS, REAR ACCESS (USING CBB BREAKERS ONLY) - INPUT VOLTAGE: +/-48, 24, 12 VDC - TWO SEPARATE INPUT A AND B BUSS, 300A PER BUS, 3/8"-16 STUDS ON 1" CENTER (A JUMPER IS PROVIDED FOR CONVERTING TWO INPUTS TO SINGLE INPUT) - OUTPUT: 9 LOAD BREAKER POSITIONS ON BUS A; 9 LOAD BREAKER POSITIONS ON BUS B LANDING: 1/4"-20 STUDS ON 5/8" CENTER - DIMENSION:19"/23" MID MOUNT, 15" DEEP, 2RU HIGH - ALARM CONTACT A SIDE / B SIDE - WEIGHT: 20 LBS	LSNetwork(DD600R-09A-A-S)	1,760.00	6	10,560.00		-	6	10,560.00	-	-	-	10,560.00	-	-	-	-
6.1021				0	-		-	0	-	-	-	-		-	-	-	-
6.1021	VENDOR INTEGRATION	SVCS-IN-SIPQ-VI	604.00	28	16,912.00		-	28	16,912.00	-	-	-	16,912.00	-	-	-	-
6.1022	PROGRAM MANAGEMENT	SVCS-IN-PM-PM	7,717.00	1	7,717.00		-	1	7,717.00	-	-	-		-	-	7,717.00	-
6.1023	NETWORK/SYSTEM ENGINEERING	SVCS-PN-EN-SE	5,485.00	1	5,485.00		-	1	5,485.00	-	-	-		-	-	5,485.00	-
6.1024	PROJECT/SITE ENGINEERING	SVCS-IN-SS-PE	7,759.00	1	7,759.00		-	1	7,759.00	-	-	-		-	-	7,759.00	-
6.1025	FIELD INSTALLATION, including wiring and testing	SVCS-IN-IC-FI	24,474.00	1	24,474.00		-	1	24,474.00	-	-	-		-	-	24,474.00	-
6.1026	Pickup, decommission and recycling	SVCS-IN-IC-FI	66,924.00	1	66,924.00		-	1	66,924.00	-	-	-		-	-	66,924.00	-
6.1027				0	-		-	0	-	-	-	-		-	-	-	-
6.1028	Freight	FREIGHT	42,848.00	1	42,848.00		-	1	42,848.00	-	-	-	42,848.00	-	-	-	-
7.0000	Antenna ,Waveguides and Dehydrators		-	0	-		-	0	-	-	-	-		-	-	-	-
7.0010	ANTENNA, L6/U6 GHZ, 1.8 M (6FT), SENTINEL, UHP, SUPER HIGH XPD, REMOTE MOUNT, DISH (STD: WHITE RAL9016), 5.925-7.125, RADOME (STD: GRAY), CPR137G, DUAL POL., CLASS IV/FCC101A, SINGLE PIECE REFLECTOR, 200 KMPH, 200 KMPH (USX6-6W-6WH)	AND-USX6-6W-6WH	4,545.00	6	27,270.00	6	27,270.00	0	-	-	-	-	27,270.00	-	-	-	-
7.0020	HIGH WIND UPDATE KIT FOR HX6 AND USX6 ANTENNAS TAKES SURVIVAL WINDSPEED UP TO 250KM/H (155MPH) (HIGHWIND-6-KIT)	AND-HIGHWIND-6-KIT	653.00	6	3,918.00	6	3,918.00	0	-	-	-	-	3,918.00	-	-	-	-
7.0030	TERMINATION LOAD,WAVEGUIDE,06 GHZ,BLOCK (LOAD),MATING FLANGE,PDR70/CPR137,DUAL POLARIZED,WR137,RAM TYPE (112614-70)	AND-112614-70	253.00	6	1,518.00	6	1,518.00	0	-	-	-	-	1,518.00	-	-	-	-
7.0040	11GHz		-	0	-		-	0	-	-	-	-		-	-	-	-
7.0050	ANT,10.125-11.70GHZ,1M/3FT,SHP,DUAL POL,CPR90G,WHT POLY RAD,ETSI CL3, FCC 101A (SHP3-11W-6WH/A)	AND-SHP3-11W-6WH	1,327.00	34	45,118.00	41	54,407.00	-7	(9,289.00)	-	-	-	45,118.00	-	-	-	-
7.0060	ANTENNA, 10/11 GHz, 1.2M (4ft), SENTINEL, HP, REMOTE MOUNT, DISH (STD: WHITE), 10.125 - 11.700 GHz, RADOME (STD: GRAY), DUAL POL., Class III+/FCC101A, SINGLE PIECE REFLECTOR, 250 KMPH, 200 KMPH (SHPX4-11W-6WH)	AND-SHPX4-11W-6WH	2,611.00	20	52,220.00	13	33,943.00	7	18,277.00	-	-	-	52,220.00	-	-	-	-
7.0070	TERMINATION LOAD,WAVEGUIDE,10/11 GHZ,BLOCK (LOAD),MATING FLANGE,PDR100/CPR90G,DUAL POLARIZED,RAM TYPE (112614-100)	AND-112614-100	245.00	20	4,900.00	13	3,185.00	7	1,715.00	-	-	-	4,900.00	-	-	-	-
7.0080	ANTENNA, 10/11 GHZ, 1.0 M (3FT), SENTINEL, HP (GT1-RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: GRAY), 10.125 - 11.700 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III+/FCC101A, SINGLE PIECE REFLECTOR, 250 KMPH, 200 KMPH (SHP3-11W-GT1)	AND-SHP3-11W-GT1	1,327.00	2	2,654.00		-	2	2,654.00	-	-	-	2,654.00	-	-	-	-
7.0090	ANTENNA, 18 GHZ, 0.6 M (2FT), SENTINEL, HP (SHPX), REMOTE MOUNT, PARABOLIC (STD: WHITE), 17.700–19.700 GHZ, RADOME (STD: WHITE), UBR220, DUAL POL., CLASS IV/FCC101A, SINGLE PIECE REFLECTOR, 250 KMPH, 180 KMPH (SHPX2-18-3WH/B)	AND-SHPX2-18-3WH	496.00	15	7,440.00	16	7,936.00	-1	(496.00)	-	-	-	7,440.00	-	-	-	-

7.0100	ANTENNA, 18 GHZ, 0.6 M (2FT), SENTINEL, HP (GT1-RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 17.700 - 19.700 GHZ, RADOME (STD: WHITE), SINGLE POL., CLASS IV/FCC101A, SINGLE PIECE REFLECTOR, 250 KMPH, 180 KMPH (SHP2-18-GT1)	AND-SHP2-18-GT1	496.00	1	496.00		-	1	496.00	-	-	-	496.00	-	-	-	-
7.0110	ELLIPTICAL WAVEGUIDE STANDARD, 5.925-7.125 GHZ, BLACK PE JACKET, PER FOOT (EW63-F)	AND-EW63-F	8.00	668	5,344.00	389	3,112.00	279	2,232.00	-	-	-	5,344.00	-	-	-	-
7.0120	EW63INSTALL-KIT (ONE KIT PER WAVEGUIDE RUN) (EW63INSTALL-KIT)	AND-EW63INSTALL-KIT	1,063.00	6	6,378.00	6	6,378.00	0	-	-	-	-	6,378.00	-	-	-	-
7.0130	HARDWARE-KIT (ONE KIT PER 100FT) (HARDWARE-KIT)	179-530526-001	515.00	8	4,120.00	6	3,090.00	2	1,030.00	-	-	-	4,120.00	-	-	-	-
7.0140	EW63 X2 HOLES CUSHION (Bag of 5 Kits) (SREW632-K)	018-510063-002	62.00	43	2,666.00	25	1,550.00	18	1,116.00	-	-	-	2,666.00	-	-	-	-
7.0150	WAVEGUIDE BOOT FOR EW63, 4 IN (WGB4-63)	AND-WGB4-63	68.00	6	408.00	6	408.00	0	-	-	-	-	408.00	-	-	-	-
7.0160	WAVEGUIDE CUSHION HANGER, KITS, EW63, 1 HOLE (BAG OF 5 KITS)	018-510063-001	64.00	0	-		-	0	-	-	-	-	-	-	-	-	-
7.0170	ELLIPTICAL WAVEGUIDE STANDARD, 10.2-11.7 GHZ, BLACK PE JACKET, PER FOOT (EW90-F)	AND-EW90-F	7.00	6035	42,245.00	4368	30,576.00	1667	11,669.00	-	-	-	42,245.00	-	-	-	-
7.0180	EW90INSTALL-KIT (ONE KIT PER WAVEGUIDE RUN) (EW90INSTALL-KIT)	AND-EW90INSTALL-KIT	1,055.00	54	56,970.00	50	52,750.00	4	4,220.00	-	-	-	56,970.00	-	-	-	-
7.0190	HARDWARE-KIT (ONE KIT PER 100FT) (HARDWARE-KIT)	179-530526-001	515.00	59	30,385.00	50	25,750.00	9	4,635.00	-	-	-	30,385.00	-	-	-	-
7.0200	WAVEGUIDE CUSHION HANGER, KITS, EW90, 3-HOLE (BAG OF 5 KITS) (SREW903-K)	018-510090-003	60.00	321	19,260.00	319	19,140.00	2	120.00	-	-	-	19,260.00	-	-	-	-
7.0210	WAVEGUIDE BOOT FOR EWP90, 4 IN (WGB4-90)	AND-WGB4-90	68.00	50	3,400.00	47	3,196.00	3	204.00	-	-	-	3,400.00	-	-	-	-
7.0220	WAVEGUIDE CUSHION HANGER, KITS, EW90, 1 HOLE (BAG OF 5 KITS)	018-510090-001	63.00	0	-		-	0	-	-	-	-	-	-	-	-	-
7.0230	Waveguide18 GHz		-	0	-		-	0	-	-	-	-		-	-	-	-
7.0240	Elliptical Waveguide Standard, 17.3-19.7 Gaz, Black Pe Jacket, Per Foot (EW180-F).	AND-EW180-F	9.00	1340	12,060.00	980	8,820.00	360	3,240.00	-	-	-	12,060.00	-	-	-	-
7.0250	FIXED-TUNED CONNECTOR FOR EW180, PBR220 (1180SCM) 2 per run	AND-1180SCM	405.00	30	12,150.00	32	12,960.00	-2	(810.00)	-	-	-	12,150.00	-	-	-	-
7.0260	ECLIPSE FLEXIBLE WAVEGUIDE, 17.70-26.50 GHZ, 900MM, PBR220 FLANGES (250220-900-KKS-A)	086-189220-900	444.00	15	6,660.00	16	7,104.00	-1	(444.00)	-	-	-	6,660.00	-	-	-	-
7.0270	HARDWARE-KIT (ONE KIT PER 100FT) (HARDWARE-KIT)	179-530526-001	515.00	15	7,725.00	16	8,240.00	-1	(515.00)	-	-	-	7,725.00	-	-	-	-
7.0280	PRESSURE WINDOW WR42, 17.7-26.5, UG596A/U (1 per run)	AND-55000A-42	133.00	0	-	16	2,128.00	-16	(2,128.00)	-	-	-	-	-	-	-	-
7.0290	WG Cushion, Ew180, Ewp180, We190, We191 X 1 Hole Cus (Bag of 5 Kits) (SREW180-K) (Bag of 5 .1 bag per 15 ft)	VLT-SREW180-K	66.00	91	6,006.00	70	4,620.00	21	1,386.00	-	-	-	6,006.00	-	-	-	-
7.0300	Waveguide Boot for Ew220, 4 in (WGB4-220) (1 per run)	AND-WGB4-220	90.00	15	1,350.00	16	1,440.00	-1	(90.00)	-	-	-	1,350.00	-	-	-	-
7.0310	GROUNDING KIT, UNIV, 1/2-1 5/8IN, CORRUG COAX CBL, ELLIPT WG 63-180, WR51-WR137, WG19-WG14, R180-R70 (UG12158-15B4-T)	AND-UG12158-15B4-T	46.00	0	-	43	1,978.00	-43	(1,978.00)	-	-	-	-	-	-	-	-
7.0320	HOISTING GRIP, LACE-UP HOISTING GRIP FOR 5/8 INCH COAXIAL CABLE AND ELLIPTICAL WAVEGUIDE 85, 90, 127, 132 AND PWRT-608 (29958)(1 per run)	AND-29958	45.00	0	-	17	765.00	-17	(765.00)	-	-	-	-	-	-	-	-
7.0330	PRESSURE WINDOW (112587)Pressure Window for WR42, 17.7–26.5 GHz, mates to PBR220	AND-112587	117.00	15	1,755.00		-	15	1,755.00	-	-	-	1,755.00	-	-	-	-
7.0340	DEHYDRATOR			0	-		-	0	-	-	-	-		-	-	-	-
7.0350	AUTOMATIC DEHYDRATOR, W/LP ALRM; 0.2 SCFM,120V 60HZ,320W,380VA,MODEL APD20-D (APD20-D-35XH0R00S0)	RFS-APD20-D	1,940.00	0	-	34	65,960.00	-34	(65,960.00)	-	-	-	-	-	-	-	-
7.0360	WALL SHELF FOR RFS DEHYDRATORS APD-D SERIES (SHELF-APD-D)	RFS-SHELF-APD-D	120.00	0	-	34	4,080.00	-34	(4,080.00)	-	-	-	-	-	-	-	-
7.0370	DISTRIBUTION MANIFOLD,4-PORT,0-15.0 PSIG,25 FEET OF TUBING PER PORT,WALL MOUNTABLE (6600D-4)	AND-6600D-4	435.00	0	-	28	12,180.00	-28	(12,180.00)	-	-	-	-	-	-	-	-
7.0380	DISTRIBUTION MANIFOLD,6-PORT,0-15.0 PSIG,25 FEET OF TUBING PER PORT,WALL MOUNTABLE (6600D-6)	AND-6600D-6	607.00	0	-	9	5,463.00	-9	(5,463.00)	-	-	-	-	-	-	-	-
7.0390	IF Cable Kit		-	0	-		-	0	-	-	-	-		-	-	-	-
7.0400	CABLE, ODU, 9913, WITH CONN/GROUND KIT, 50M CNT400 CCAL TYPE (STXC400-GKWT-50)	037-579311-050	166.00	0	-	6	996.00	-6	(996.00)	-	-	-	-	-	-	-	-
7.0410	THREAD ROD SUPPORT 12IN (305MM) LONG, KIT OF 5 (31771-4)	AND-31771-4	28.00	0	-	6	168.00	-6	(168.00)	-	-	-	-	-	-	-	-
7.0420	WAVEGUIDE CUSHION HANGER, KITS, LMR-400 3/8" FLEX, 4 HOLES (BAG OF 5 KITS) (SRLR44-K)	VLT-SRLR44-K	66.00	0	-	30	1,980.00	-30	(1,980.00)	-	-	-	-	-	-	-	-
7.0430	HARDWARE, SNGL STACK, SS, FOR MINI CLICK -ON HANGERS (10/PK) (252027-10KT-P)	AND-252027-10KT-P	36.00	0	-	30	1,080.00	-30	(1,080.00)	-	-	-	-	-	-	-	-
7.0440	KIT, LIGHTNING ARRESTOR, UNIVERSAL, 50 OHM, MALE TO FEMALE (62009)	179-530062-002	52.00	6	312.00	6	312.00	0	-	-	-	-	312.00	-	-	-	-
7.0450	TYPE N MALE CRIMP CONNECTORS (400BPNM-C-CR)	840-600202-001	10.00	0	-	24	240.00	-24	(240.00)	-	-	-	-	-	-	-	-
7.0460	WEATHERPROOFING KIT (HF-TAPEKIT)	011-390001-001	4.00	6	24.00	6	24.00	0	-	-	-	-	24.00	-	-	-	-
7.0470	GROUNDING KIT, UNIVERSAL, 1/4" TO 5/8" CABLES (GK-SUNV)	179-530509-001	12.00	26	312.00	18	216.00	8	96.00	-	-	-	312.00	-	-	-	-
7.0480	CABLE, IDU/ODU, NO CONN, 50M, .4IN	840-600311-050	132.00	0	-		-	0	-	-	-	-	-	-	-	-	-
7.0490	CABLE, IDU/ODU, NO CONN, 75M, .4IN	840-600311-075	198.00	2	396.00		-	2	396.00	-	-	-	396.00	-	-	-	-
7.0500	CABLE, IDU/ODU, NO CONNECTORS, 0.4" COPPER BRAIDED FLEXIBLE FOAM DIELECTRIC 50 OHM COAXIAL CABLE, 100 METERS (328 FEET) (MIS840-600311-100)	840-600311-100	264.00	1	264.00		-	1	264.00	-	-	-	264.00	-	-	-	-
7.0510	CABLE, IDU/ODU, NO CONNECTORS, 0.4" COPPER BRAIDED FLEXIBLE FOAM DIELECTRIC 50 OHM COAXIAL CABLE, 125 METERS (410 FEET) (MIS840-600311-125)	840-600311-125	330.00	1	330.00		-	1	330.00	-	-	-	330.00	-	-	-	-
7.0520	CONNECTOR KIT N TYPE M&F 400 TYPE CABLE	179-530057-001	25.00	28	700.00		-	28	700.00	-	-	-	700.00	-	-	-	-
7.0530	COAX CUSHION HANGER, KITS, LMR-400 3/8" FLEX, 2-HOLE (BAG OF 5 KITS)	018-510140-002	60.00	29	1,740.00		-	29	1,740.00	-	-	-	1,740.00	-	-	-	-
7.0540	Entry Boot Kit, 3/8" Coaxial Cable, 4", 4 holes (BA384)	179-530160-004	24.00	4	96.00		-	4	96.00	-	-	-	96.00	-	-	-	-

7.0550	HOISTING GRIP, LACE-UP HOISTING GRIP FOR 5/8 INCH COAXIAL CABLE AND ELLIPTICAL WAVEGUIDE 85, 90, 127, 132 AND PWRT-608 (29958)(1 per run)	AND-29958	45.00	8	360.00		-	8	360.00	-	-	-	360.00	-	-	-	-
7.0560	New Pipe Mounts			0	-		-	0	-	-	-	-		-	-	-	-
7.0570	KIT, UNIV PIPE MOUNT, 4 1/2" X 96", SUPPORTS UP TO 8" ANGLE LEGS (PM-SC4-96)	AND-PM-SC4-96	812.00	0	-		-	0	-	-	-	-	-	-	-	-	-
7.0580	MICROWAVE SADDLE MT SUPPORT ANGLE, 6FT (MD-SSA6)	AND-MD-SSA6	599.00	0	-		-	0	-	-	-	-	-	-	-	-	-
7.0590	DEHYDRATOR			0	-		-	0	-	-	-	-		-	-	-	-
7.0600	DEHYDRATOR, AUTOMATIC, LAB4.50, 10-60 KPA, 300 L/H, 100-240VAC 50/60 HZ AND 48-60VDC INPUT, NO ETHERNET, 6 AIR OUTLETS 3/8", INCLUDES PWR CABLE 3M, 30M TUBING, 1 STRAIGHT + 1 X 90 DEGREE FITTING, NEEDLE VALVE. MOUNTING: WALL, FLOOR AND RACK (C16600.502)	CIB-C16600.502	2,561.00	36	92,196.00		-	36	92,196.00	-	-	-	92,196.00	-	-	-	-
7.0610	MANIFOLD, 1 PORT INLET, 4 PORTS OUTLET AND SHUT OFF VALVES, 3/8" PUSH-ON FITTING (K15019-005)	CIB-K15019-005	212.00	36	7,632.00		-	36	7,632.00	-	-	-	7,632.00	-	-	-	-
7.0620	MANIFOLD, 1 PORT INLET, 6 PORTS OUTLET AND SHUT OFF VALVES, 3/8" PUSH-ON FITTING (K15019-006)	CIB-K15019-006	261.00	3	783.00		-	3	783.00	-	-	-	783.00	-	-	-	-
7.0630	STRUT, INBOARD SIDE KIT FOR 3 FT, 4 FT AND 6 FT COMMSCOPE MICROWAVE ANTENNAS (VSTRUT-P3KIT)	086-000011-002	194.00	5	970.00		-	5	970.00	-	-	-	970.00	-	-	-	-
7.0640	Hardware to run Spur in paralle			0	-		-	0	-	-	-	-		-	-	-	-
7.0650	11 GHz			0	-		-	0	-	-	-	-		-	-	-	-
7.0660	WAVEGUIDE TO COAX TRANSITION, WR90, CPR90G TO N-FEMALE, 8.2--12.4 GHZ, GRAY	086-002038-001	156.00	8	1,248.00		-	8	1,248.00	-	-	-	1,248.00	-	-	-	-
7.0670	LOW DEN FOAM COAX CABLE, 3/8 IN COR COPPER; BLACK PE JCKT (LDF2-50)	AND-LDF2-50	1.00	80	80.00		-	80	80.00	-	-	-	80.00	-	-	-	-
7.0680	WG ASSY CPR90-G/TAP-UG39CLR	018-501615-769	63.00	4	252.00		-	4	252.00	-	-	-	252.00	-	-	-	-
7.0690	6GHz						-	0	-	-	-	-		-	-	-	-
7.0700	WAVEGUIDE TO COAX TRANSITION, CPR137G TO N-FEMALE, 5.85-8.20 GHZ, NO PLATING, PAINTED LIGHT GREY, FIXING KIT INCLUDED (CA14CN-N-G-FK)	086-002031-001	187.00	4	748.00		-	4	748.00	-	-	-	748.00	-	-	-	-
7.0710	LOW DEN FOAM COAX CABLE, 3/8 IN COR COPPER; BLACK PE JCKT (LDF2-50)	AND-LDF2-50	1.00	40	40.00		-	40	40.00	-	-	-	40.00	-	-	-	-
7.0720	WG SPACER CPR137G/TAP-CMR137/CLR	014-504181-647	130.00	2	260.00		-	2	260.00	-	-	-	260.00	-	-	-	-
8.0000	Warranty -3 years after shipment including 1 year before and 2 years after system acceptance*			0	-		-	0	-	-	-	-		-	-	-	-
8.0010	WARRANTY PLUS IW , NA&C, 12 MONTHS, IRU-600	SNA-BWXXA1001238	-	88	-	88	-	0	-	-	-	-		-	-	-	-
8.0020	WARRANTY PLUS IW - NA&C, 24 MONTHS, IRU-600, year 1-2 after acceptance	SNA-BWXXA1002438	210.00	88	18,480.00	88	18,480.00	0	-	-	-	-		-		18,480.00	-
8.0030	WARRANTY PLUS IW, NA&C, 12 MONTHS, ODU-600	SNA-BWXXA1001243	-	38	-	38	-	0	-	-	-	-		-		-	-
8.0040	WARRANTY PLUS IW, NA&C, 24 MONTHS, ODU-600, year 1-2 after acceptance	SNA-BWXXA1002443	210.00	38	7,980.00	38	7,980.00	0	-	-	-	-		-		7,980.00	-
8.0050	WARRANTY PLUS IW- WORLD WIDE ,12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BWXXA1001253	-	32	-	32	-	0	-	-	-	-		-		-	-
8.0060	WARRANTY PLUS IW- WORLD WIDE ,24 MONTHS, CTR 87XX w/Base or CE IMAGE, year 1-2 after acceptance	SWW-BWXXA1002453	149.00	36	5,364.00	32	4,768.00	4	596.00	-	-	-		-		5,364.00	-
8.0070	SOFTWARE SUPPORT PLUS - WORLD WIDE,12 MONTHS, CTR 87XX-MPLS ADVANCED	SWW-SPLUA4001252	-	32	-	32	-	0	-	-	-	-		-		-	-
8.0080	SOFTWARE SUPPORT PLUS - WORLD WIDE,24 MONTHS, CTR 87XX-MPLS ADVANCED, year 1-2 after acceptance	SWW-SPLUA4002452	349.00	36	12,564.00	32	11,168.00	4	1,396.00	-	-	-		-		12,564.00	-
8.0090	PROVISION SUPPORT, 12 MONTHS 21-100 NODES, 24 X 7	SWW-PV24G2XX1299	-	1	-	1	-	0	-	-	-	-		-		-	-
8.0100	PROVISION SUPPORT, 24 MONTHS, 21-100 NODES, 24 X 7, year 1-2 after acceptance	SWW-PV24G2XX2499	10,452.00	1	10,452.00	1	10,452.00	0	-	-	-	-		-		10,452.00	-
8.0110	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM INTEGRATION FOR PROVISION MODULE TECHNOLOGY LICENSE	SWW-P24T3XXX1299	-	1	-	1	-	0	-	-	-	-		-		-	-
8.0120	PROVISION PLUS SUPPORT 24 X 7, 24 MONTHS - PROVISION PLUS EM INTEGRATION FOR PROVISION MODULE TECHNOLOGY LICENSE	SWW-P24T3XXX2499	3,422.00	1	3,422.00	1	3,422.00	0	-	-	-	-		-		3,422.00	-
8.0130	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS HIGH AVAILABILITY MODULE PERPETUAL TECHNOLOGY LICENSE	SWW-P24T10XX1299	-	1	-	1	-	0	-	-	-	-		-			-
8.0140	PROVISION PLUS SUPPORT 24 X 7, 24 MONTHS - PROVISION PLUS HIGH AVAILABILITY MODULE PERPETUAL TECHNOLOGY LICENSE	SWW-P24T10XX2499	20,530.00	1	20,530.00	1	20,530.00	0	-	-	-	-		-		20,530.00	-
8.0150	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING TECHNOLOGY LICENSE BUNDLE	SWW-P24T12671299	-	1	-	1	-	0	-	-	-	-		-			-
8.0160	PROVISION PLUS SUPPORT 24 X 7, 24 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING TECHNOLOGY LICENSE BUNDLE	SWW-P24T12672499	5,133.00	1	5,133.00	1	5,133.00	0	-	-	-	-		-		5,133.00	-
8.0170	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING CTR 8740 DEVICE LICENSE BUNDLE	SWW-P24T12671253	-	32	-	32	-	0	-	-	-	-		-			-
8.0180	PROVISION PLUS SUPPORT 24 X 7, 24 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING CTR 8740 DEVICE LICENSE BUNDLE	SWW-P24T12672453	99.00	32	3,168.00	32	3,168.00	0	-	-	-	-		-		3,168.00	-
8.0190	WARRANTY, THREE-YEAR PLATFORM MAINTENANCE (999-62007-03)	SYM-999-62007-03	2,561.00	1	2,561.00	1	2,561.00	0	-	-	-	-	2,561.00	-			-

8.0200	WARRANTY, TWO-YEAR HARDWARE EXTENDED WARRANTY (COVERS 2 YEARS AFTER THE FIRST YEAR STANDARD WARRANTY - TOTAL 36 MONTHS COVERAGE) (999-62002-02)	SYM-999-62002-02	826.00	1	826.00	1	826.00	0	-	-	-	-	826.00	-		-	-
8.0210	WARRANTY For RAD			0	-		-	0	-	-	-	-		-	-	-	-
8.0220	RadCare Maintenance-Basic Service-5YR Promo-Warranty Coverage: All RAD equipment purchases include one year of Basic Service plus includes: l 5 years* of hardware warranty. 24*7 Priority support, call handling and software upgrades: RAD¡¦s standard hardware warranty Software updates for covered product(s) Technical assistance on general inquiries	LSNetwork(TBD)	18,497.00	0	-	1	18,497.00	-1	(18,497.00)	-	-	-	-	-	-	-	-
9.0000	Services*			0	-		-	0	-	-	-	-		-	-	-	-
9.0010	RADIO INTEGRATION	SVCS-IN-SIPQ-RI	95,524.00	1	95,524.00	1	95,524.00	0	-	-	-	-	95,524.00	-	-	-	-
9.0020	RADIO INTEGRATION - Routers	SVCS-IN-SIPQ-RI	23,061.00	1	23,061.00	1	23,061.00	0	-	-	-	-	23,061.00	-	-	-	-
9.0030	VENDOR INTEGRATION	SVCS-IN-SIPQ-VI	26,868.00	1	26,868.00	1	26,868.00	0	-	-	-	-	26,868.00	-	-	-	-
9.0040	RAD configuration services	LSNetwork(TBD)	6,191.00	0	-	1	6,191.00	-1	(6,191.00)	-	-	-	-	-	-	-	-
9.0050	CUSTOMER ACCEPTANCE TESTING	SVCS-IN-SIPQ-AT	6,419.00	1	6,419.00	1	6,419.00	0	-	-	-	-	6,419.00	-	-	-	-
9.0060	CONFIG ENG / DOCUMENTATION / DRAFTING	SVCS-IN-SS-CEDFT	42,628.00	1	42,628.00	1	42,628.00	0	-	-	42,628.00	-	-	-	-	-	-
9.0070	NETWORK/SYSTEM ENGINEERING	SVCS-PN-EN-SE	88,768.00	1	88,768.00	1	88,768.00	0	-	-	88,768.00	-	-	-	-	-	-
9.0080	NETWORK/SYSTEM ENGINEERING - Routers	SVCS-PN-EN-SE	18,384.00	1	18,384.00	1	18,384.00	0	-	-	18,384.00	-	-	-	-	-	-
9.0090	FREQUENCY COORDINATION AND FCC LICENSE	SVCS-PN-EN-XE	58,592.00	1	58,592.00	1	58,592.00	0	-	58,592.00	-	-	-	-	-	-	-
9.0100	PATH SURVEY	SVCS-PN-EN-XE	123,309.00	1	123,309.00	1	123,309.00	0	-	123,309.00	-	-	-	-	-	-	-
9.0110	PROGRAM MANAGEMENT	SVCS-IN-PM-PM	154,017.00	1	154,017.00	1	154,017.00	0	-	7,700.85	46,205.10	-	30,803.40	15,401.70	53,905.95	-	-
9.0120	PROJECT MANAGEMENT including site survey	SVCS-IN-SS-PE	172,364.00	1	172,364.00	1	172,364.00	0	-	146,509.40	25,854.60	-	-	-	-	-	-
9.0130	FIELD INSTALLATION; Antenna System	SVCS-IN-IC-FI	772,935.00	1	772,935.00	1	772,935.00	0	-	-	-	-		463,761.00	309,174.00	-	-
9.0140	FIELD INSTALLATION; Radio installation, testing and cut over	SVCS-IN-IC-FI	291,185.00	1	291,185.00	1	291,185.00	0	-	-	-	-		174,711.00	116,474.00	-	-
9.0150	FIELD INSTALLATION; final testing and 30 days burn in	SVCS-IN-IC-FI	172,513.00	1	172,513.00	1	172,513.00	0	-	-	-	-		103,507.80	69,005.20	-	-
9.0160	FIELD INSTALLATION; Radio Testing and cut over - Routers	SVCS-IN-IC-FI	23,060.00	1	23,060.00	1	23,060.00	0	-	-	-	-		13,836.00	9,224.00	-	-
9.0170	FIELD INSTALLATION; Equipment Removal	SVCS-IN-IC-FI	44,679.00	1	44,679.00	1	44,679.00	0	-	-	-	-		26,807.40	17,871.60	-	-
9.0180	Warehousing	SVCS-IN-IC-AS	18,016.00	1	18,016.00	1	18,016.00	0	-	-	-	-	18,016.00	-	-	-	-
9.0190	Skylawn - San Matep PD			0	-		-	0	-	-	-	-		-	-	-	-
9.0200	Services* (Factory integration and Field installation will be done at the same time as part of main system. The service pricing		-	0	-		-	0	-	-	-	-		-	-	-	-
9.0210	RADIO INTEGRATION	SVCS-IN-SIPQ-RI	3,018.00	1	3,018.00		-	1	3,018.00	-	-	-	3,018.00	-	-	-	-
9.0220	RADIO INTEGRATION - Routers	SVCS-IN-SIPQ-RI	970.00	1	970.00		-	1	970.00	-	-	-	970.00	-	-	-	-
9.0230	VENDOR INTEGRATION	SVCS-IN-SIPQ-VI	642.00	1	642.00		-	1	642.00	-	-	-	642.00	-	-	-	-
9.0240	CONFIG ENG / DOCUMENTATION / DRAFTING	SVCS-IN-SS-CEDFT	1,132.00	1	1,132.00		-	1	1,132.00	-	-	-	1,132.00	-	-	-	-
9.0250	NETWORK/SYSTEM ENGINEERING	SVCS-PN-EN-SE	2,342.00	1	2,342.00		-	1	2,342.00	-	-	-		-	2,342.00	-	-
9.0260	NETWORK/SYSTEM ENGINEERING - Routers	SVCS-PN-EN-SE	1,280.00	1	1,280.00		-	1	1,280.00	-	-	-		-	1,280.00	-	-
9.0270	FREQUENCY COORDINATION AND FCC LICENSE	SVCS-PN-EN-XE	1,572.00	1	1,572.00		-	1	1,572.00	-	-	-		-	1,572.00	-	-
9.0280	PATH SURVEY	SVCS-PN-EN-XE	3,033.00	1	3,033.00		-	1	3,033.00	-	-	-		-	3,033.00	-	-
9.0290	PROGRAM MANAGEMENT	SVCS-IN-PM-PM	4,126.00	1	4,126.00		-	1	4,126.00	-	-	-		-	4,126.00	-	-
9.0300	PROJECT MANAGEMENT including site survey	SVCS-IN-SS-PE	4,616.00	1	4,616.00		-	1	4,616.00	-	-	-		-	4,616.00	-	-
9.0310	FIELD INSTALLATION; Antenna System	SVCS-IN-IC-FI	18,763.00	1	18,763.00		-	1	18,763.00	-	-	-		-	18,763.00	-	-
9.0320	FIELD INSTALLATION; Radio installation, testing and cut over	SVCS-IN-IC-FI	6,983.00	1	6,983.00		-	1	6,983.00	-	-	-		-	6,983.00	-	-
9.0330	FIELD INSTALLATION; final testing and 30 days burn in	SVCS-IN-IC-FI	4,986.00	1	4,986.00		-	1	4,986.00	-	-	-		-	4,986.00	-	-
9.0340	FIELD INSTALLATION; Radio Testing and cut over - Routers	SVCS-IN-IC-FI	1,178.00	1	1,178.00		-	1	1,178.00	-	-	-		-	1,178.00	-	-
9.0350	FIELD INSTALLATION; Equipment Removal	SVCS-IN-IC-FI	3,140.00	1	3,140.00		-	1	3,140.00	-	-	-		-	3,140.00	-	-
9.0360	Warehousing	SVCS-IN-IC-AS	483.00	1	483.00		-	1	483.00	-	-	-		-	483.00	-	-
9.0370	FREIGHT *	FREIGHT	4,239.00	1	4,239.00		-	1	4,239.00	-	-	-	4,239.00	-	-	-	-
9.0380	One time management discount	EQ DISCOUNT	(1,507.00)	1	(1,507.00)		-	1	(1,507.00)	-	-	-	(1,507.00)	-	-	-	-
9.0390	Service Changes			0			-	0	-	-	-	-		-	-	-	-
9.0400	Manlift for accessing Monopole Skylawn	SVCS-IN-IC-FI	11,587.00	1	11,587.00		-	1	11,587.00	-	-	-		-	11,587.00	-	-
9.0410	Crane to get Wall mounts to the rooftop at EPA	SVCS-IN-IC-FI	9,652.50	1	9,652.50		-	1	9,652.50	-	-	-		-	9,652.50	-	-
9.0420	Manlift for accessing Daly City	SVCS-IN-IC-FI	5,720.00	1	5,720.00		-	1	5,720.00	-	-	-		-	5,720.00	-	-
9.0430	Manlift for Sweeny	SVCS-IN-IC-FI	4,119.00	1	4,119.00		-	1	4,119.00	-	-	-		-	4,119.00	-	-
9.0440	New Conduit needed from tower to Shelter at Sweeny Ridge	SVCS-IN-IC-FI	19,305.00	1	19,305.00		-	1	19,305.00	-	-	-		-	19,305.00	-	-
9.0450	Additional installation services for parallel operation on Pescadero to North Peak path	SVCS-IN-IC-FI	6,175.00	1	6,175.00		-	1	6,175.00	-	-	-		-	6,175.00	-	-
9.0460	Additional Installation service for 2069 ft of extra waveguide	SVCS-IN-IC-FI	40,512.00	1	40,512.00		-	1	40,512.00	-	-	-		-	40,512.00	-	-
10.0000	Training*			0	-		-	0	-	-	-	-		-	-	-	-
10.0010	ECLIPSE/PV: INSTALLATION, OPERATION AND MAINTENANCE - ILT- BUNDLE, 5 DAYS, CUSTOMER LOCATION-WITH EQUIPMENT-ONLY FOR US- 10 STUDENTS MAX	TRN-GP-ECLPV-D	22,117.00	1	22,117.00	1	22,117.00	0	-	-	-	22,117.00		-	-	-	-
10.0020	CTR8740 L2/PV+: Installation, Operation and Maintenance - ILT-Bundle, 5 DAYS, Customer Location-with Equipment- only for US- 10 Students Max	TRN-GP-CTR87PVP-D	20,258.00	1	20,258.00	1	20,258.00	0	-	-	-	20,258.00		-	-	-	-
10.0030	Onsite training on all RAD equipment using equipment provided by RAD, Up to 10 students	LSNetwork(TBD)	20,664.00	0	-	1	20,664.00	-1	(20,664.00)	-	-	-	-	-	-	-	-
11.0000	SYSTEM DISCOUNTS			0	-	0	-	0	-	-	-	-		-	-	-	-
11.1000	One time management discount (Legacy Customer Discount)	EQ DISCOUNT	(626,429.00)	1	(626,429.00)	1	(626,429.00)	0	-	-	-	-	(626,429.00)	-	-	-	-
11.2000	23-2022	EQ DISCOUNT	(62,969.00)	1	(62,969.00)	1	(62,969.00)	0	-	-	-	-	(62,969.00)	-	-	-	-
11.2010	FREIGHT *	FREIGHT	72,135.00	1	72,135.00	1	72,135.00	0	-	-	-	-	72,135.00	-	-	-	-
11.3000	ADDITIONAL SINGLE DISCOUNT FOR EQUIPMENT	EQ DISCOUNT		1	(8,236.00)			1	(8,236.00)	-	-	-	(8,236.00)	-	-	-	-
12.0000	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		-	0	-	0	-	0	-	-	-	-		-	-	-	-
12.1000	Tax, 9.875%		229,062.00	1	229,062.00	1	179,498.00	1	49,564.00	-	-	-	229,062.00	-	-	-	-
13.0000	Additional TDM, Loop switch cards for hardware redundancy		-	0	-	0	-	0	-	-	-	-		-	-	-	-
13.0010	Additional NCM for hardware redundancy		-	0	-	0	-		-	-	-	-		-	-	-	-

13.0020	NETWORK CONVERGENCE MODULE (NCM)	EXD-400-002	974.00	0	-	16	15,584.00	-16	(15,584.00)	-	-	-	-	-	-	-	-
13.0030	Additional DS1 Card and Cables for hardware redundancy			0	-	0	-	0	-	-	-	-		-	-	-	-
13.0040	ECLIPSE, DAC 16XE1/DS1 V3, PROTECTABLE	EXD-161-002	256.00	0	-	43	11,008.00	-43	(11,008.00)	-	-	-	-	-	-	-	-
13.0050	2x HDR-E50 TO Y JOIN TO 24AWG FREE END 3.5M	037-579408-003	237.00	0	-	58	13,746.00	-58	(13,746.00)	-	-	-	-	-	-	-	-
13.0060	Additional DS3 Mux Card to interconnect loop INUe to Spur INUe on rings sites			0	-	0	-	0	-	-	-	-		-	-	-	-
13.0070	DAC 3XE3/DS3M, MUXED TO E1/DS1 BUS	EXD-331-001	373.00	0	-	20	7,460.00	-20	(7,460.00)	-	-	-	-	-	-	-	-
13.0080	CABLE, TRIB, E3/DS3, UNBALANCED SLIM-LINE BNC TO SLIM-LINE BNC, 5 METERS	037-579249-001	35.00	0	-	40	1,400.00	-40	(1,400.00)	-	-	-	-	-	-	-	-
13.0090	Additional T1 cards for RAD 4100 DACs for hardware redundancy						-	0	-	-	-	-		-	-	-	-
13.0100	RAD 4100 DAC t1 cards	LSNetwork(TBD)	10,656.00	0	-	1	10,656.00	-1	(10,656.00)	-	-	-	-	-	-	-	-
13.0110	FREIGHT *	FREIGHT	669.00	1	669.00	1	669.00	0	-	-	-	-	669.00	-	-	-	-
13.0120	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		-	0	-	1	5,911.00	-1	(5,911.00)	-	-	-		-	-	-	-
14.0000	Feature license to support SyncE on Eclipse radios									-	-	-		-	-	-	-
14.0010	SYNCHRONOUS ETHERNET NODAL LICENSE for DAC GE3	EZF-09	324.00	60	19,440.00	60	19,440.00	0	-	-	-	-	19,440.00	-	-	-	-
14.0020	Other feature licenses			0	-	0	-	0	-	-	-	-		-	-	-	-
14.0030	ADAPTIVE MODULATION NODAL RAC60/6X/60E/6XE/70	EZF-02	1,218.00	60	73,080.00	60	73,080.00	0	-	-	-	-	73,080.00	-	-	-	-
14.0040	PAYLOAD ENCRYPTION NODAL RAC70/7X/60/6X/60E/6XE	EZF-04	812.00	60	48,720.00	60	48,720.00	0	-	-	-	-	48,720.00	-	-	-	-
14.0050	RADIUS CLIENT, NODAL CENTRALIZED USER ACCT MGMT	EZF-06	365.00	60	21,900.00	60	21,900.00	0	-	-	-	-	21,900.00	-	-	-	-
14.0060	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		16,142.00	1	16,110.00	1	16,110.00	0	-	-	-	-	16,110.00	-	-	-	-
15.0000	Feature license to support 1588v2 PTP on MPLS router									-	-	-		-	-	-	-
15.0010	CTR 8700 1588v2 PTP TRANSPARENT CLOCK (ONE LICENSE PER CHASSIS)	CZF-67100	483.00	34	16,422.00	32	16,422.00	2	966.00	-	-	-	16,422.00	-	-	-	-
15.0020	CTR 8700 SECURE AUTHENTICATION CLIENT, CENTRALIZED USR ACCT WITH TACACS+ (ONE LICENSE PER CHASSIS)	CZF-67050	216.00	34	7,344.00	32	7,344.00	2	432.00	-	-	-	7,344.00	-	-	-	-
15.0030	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		2,347.00	1	2,347.00	1	2,209.00			-	-	-	2,347.00	-	-	-	-
15.0040	CTR 8700 1588v2 PTP TRANSPARENT CLOCK (ONE LICENSE PER CHASSIS) - UPGRADE	CZG-67100	-	2	-		-	2	-	-	-	-	-	-	-	-	-
15.0050	CTR 8700 SECURE AUTHENTICATION CLIENT, CENTRALIZED USR ACCT WITH TACACS+ (ONE LICENSE PER CHASSIS) - UPGRADE	CZG-67050	-	2	-		-	2	-	-	-	-	-	-	-	-	-
16.0000	Recommended Spares			0	-	0	-	0	-	-	-	-		-	-	-	-
16.0010	Indoor Unit									-	-	-		-	-	-	-
16.0020	ECLIPSE, INTELLIGENT NODE UNIT 2RU, INC IDCE, FAN, NCCV3, HIGH OUTPUT	EXX-000-205	1,039.00	2	2,078.00	2	2,078.00	0	-	-	-	-	2,078.00	-	-	-	-
16.0030	NODE PROTECTION CARD, HIGH OUTPUT	EXS-002	230.00	2	460.00	2	460.00	0	-	-	-	-	460.00	-	-	-	-
16.0040	RAC 70v2, QPSK-4096QAM, NO XPIC, ACM	EXR-700-002	648.00	6	3,888.00	6	3,888.00	0	-	-	-	-	3,888.00	-	-	-	-
16.0050	AUX, ALARM I/O CARD	EXA-001	203.00	2	406.00	2	406.00	0	-	-	-	-	406.00	-	-	-	-
16.0060	DAC GE3 GIGABIT ETHERNET SWITCH CARD	EXD-181-002	731.00	6	4,386.00	6	4,386.00	0	-	-	-	-	4,386.00	-	-	-	-
16.0070	NETWORK CONVERGENCE MODULE (NCM)	EXD-400-002	974.00	4	3,896.00	4	3,896.00	0	-	-	-	-	3,896.00	-	-	-	-
16.0080	ECLIPSE, DAC 16XE1/DS1 V3, PROTECTABLE	EXD-161-002	256.00	6	1,536.00	6	1,536.00	0	-	-	-	-	1,536.00	-	-	-	-
16.0090	DAC 155oMv3, 1XSTM1/OC3 MUXED TO 63E1/84DS1, OPTICAL (NO SFP)	EXD-155-001	1,000.00	0		2	2,000.00	-2	(2,000.00)	-	-	-	-	-	-	-	-
16.0100	NODE SW LICENSE, 800 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08007	3,896.00	2	7,792.00	2	7,792.00	0	-	-	-	-	7,792.00	-	-	-	-
16.0110	Feature License							0	-	-	-	-		-	-	-	-
16.0120	SYNCHRONOUS ETHERNET NODAL LICENSE for DAC GE3	EZF-09	129.00	2	258.00	2	258.00	0	-	-	-	-	258.00	-	-	-	-
16.0130	SECURE MANGEMENT, INU, inc SNMPV3 NODAL	EZF-03	389.00	2	778.00	2	778.00	0	-	-	-	-	778.00	-	-	-	-
16.0140	Radio spares			0	-	0	-	0	-	-	-	-		-	-	-	-
16.0150	RFU, MP, IRU600v4 IF TR, 10.5-11 GHz, 10500-11700 MHz	ERM-ACC-401	4,870.00	2	9,740.00	2	9,740.00	0	-	-	-	-	9,740.00	-	-	-	-
16.0160	RFU, MP, IRU600v4 IF TR, 5.8-L6-U6 GHz, 5725-7125 MHz	ERM-ATT-401	4,870.00	2	9,740.00	2	9,740.00	0	-	-	-	-	9,740.00	-	-	-	-
16.0170	ODU 600v2, 18 GHZ, PLANNING PART NUMBER	M-ECH-18	2,987.00	8	23,896.00	8	23,896.00	0	-	-	-	-	23,896.00	-	-	-	-
16.0180	ODU 600v2, 11 GHZ, PLANNING PART NUMBER	M-ECH-11	2,987.00	4	11,948.00	4	11,948.00	0	-	-	-	-	11,948.00	-	-	-	-
16.0190	RFU, EHP, IRU600v4 IF TR, 11 GHz, 10700-11700 MHz	ERE-ABB-401	7,467.00	2	14,934.00	2	14,934.00	0	-	-	-	-	14,934.00	-	-	-	-
16.0200	RFU, EHP, IRU600v4 IF TR, U6 GHz, 6400-7125 MHz (one spare already provided)	ERE-AU6-401	7,467.00	1	7,467.00	1	7,467.00	0	-	-	-	-	7,467.00	-	-	-	-
16.0210	MPLS ROUTER, spares-8740			0	-	0	-	0	-	-	-	-		-	-	-	-
16.0220	Includes 3x 10G SFP+ cage, 8x 1G SFP cage, 4x 1G RJ45, fan assembly, SD card and BASE software	CTE-740-001	2,536.00	0	-	3	7,608.00	0	-	-	-	-	-	-	-	-	-
16.0230	SFP+ OPT TRANSCEIVER, 10Gbit-LR/LW, 1310nm, 10km, SM, DUPLEX, LC, I TEMP (LX4002IDR-AAN)	079-422678-001	166.00	3	498.00	3	498.00	0	-	-	-	-	498.00	-	-	-	-
16.0240	SFP OPT GIGE 1310nm SMF LC 10KM 0 to 70C	079-422656-001	86.00	3	258.00	3	258.00	0	-	-	-	-	258.00	-	-	-	-
16.0250	GIG ETH SFP, ELEC RJ45 1000BASE-T, CTR ONLY (with RX_LOS) (LX1801CNL-AAN)	083-845537-001	87.00	24	2,088.00	24	2,088.00	0	-	-	-	-	2,088.00	-	-	-	-
16.0260	CTR 8700 Series R3 MPLS Software License	CZL-67350	1,827.00	3	5,481.00	3	5,481.00	0	-	-	-	-	5,481.00	-	-	-	-
16.0270	CTR 8700 1588v2 PTP TRANSPARENT CLOCK (ONE LICENSE PER CHASSIS)	CZF-67100	483.00	3	1,449.00	3	1,449.00	0	-	-	-	-	1,449.00	-	-	-	-
16.0280	CTR 8700 SECURE MANAGEMENT NODAL LICENSE (ONE LICENSE PER CHASSIS)	CZF-67060	585.00	3	1,755.00	3	1,755.00	0	-	-	-	-	1,755.00	-	-	-	-
16.0290	CTR 8700 HIGH AVAILABILITY SWITCH / ROUTER WITH RADIO PROTECTION (ONE LICENSE PER CHASSIS)	CZF-67125	710.00	3	2,130.00	3	2,130.00	0	-	-	-	-	2,130.00	-	-	-	-
16.0300	Cable, QSFP-DD to QSFP-DD, Diversity cable, 1.0M (C45593-A571-D10)	037-579807-001	322.00	3	966.00	3	966.00	0	-	-	-	-	966.00	-	-	-	-
16.0310	DIRECT ATTACH STACKING CABLE, TWIN-AX, SFP+ TO SFP+, 10GBPS, 500mm	037-579820-005	72.00	3	216.00	3	216.00	0	-	-	-	-	216.00	-	-	-	-

16.0320	4100 Microsemi GPS Clock- SPARE			0	-	0	-	0	-	-	-	-		-	-	-	-
16.0330	CLOCK, PRECISE TIMING GATEWAY CLOCK, TP4100 BASE UNIT WITH RUBIDIUM	SYM-090-14000-003	13,823.00	0	-	1	13,823.00	-1	(13,823.00)	-	-	-	-	-	-	-	-
16.0340	ANTENNA AND CABLE KIT, FOR PRECISE TIMING GATEWAY CLOCK TP4100, CABLE 200FT, LIGHTNING ARRESTOR KIT AND ANTENNA	SYM-990-15202-225	1,409.00	0	-	0	-	0	-	-	-	-	-	-	-	-	-
16.0350	Warranties for 4100 Microsemi GPS Clock			0	-	0	-	0	-	-	-	-		-	-	-	-
16.0360	WARRANTY, THREE-YEAR PLATFORM MAINTENANCE (999-62007-03)	SYM-999-62007-03	2,561.00	1	2,561.00	1	2,561.00	0	-	-	-	-	2,561.00	-	-	-	-
16.0370	WARRANTY, TWO-YEAR HARDWARE EXTENDED WARRANTY (COVERS 2 YEARS AFTER THE FIRST YEAR STANDARD WARRANTY - TOTAL 36 MONTHS COVERAGE) (999-62002-02)	SYM-999-62002-02	826.00	1	826.00	1	826.00	0	-	-	-	-	826.00	-	-	-	-
16.0380	NTP Reflector License (included in base price)	NSM-920-14000-001	-	0	-		-	0	-	-	-	-	-	-	-	-	-
16.0390	HARDWARE			0	-		-	0	-	-	-	-		-	-	-	-
16.0400	Spares quantity=1 of each. Controller, Power supply and T1 card.	LSNetwork(TBD)	9,843.00	0	-	1	9,843.00	-1	(9,843.00)	-	-	-	-	-	-	-	-
16.0410	DEHYDRATOR,			0	-		-	0	-	-	-	-		-	-	-	-
16.0420	AUTOMATIC DEHYDRATOR, W/LP ALRM; 0.2 SCFM,120V 60HZ,320W,380VA,MODEL APD20-D (APD20-D-35XH0R00S0) (Spare)	RFS-APD20-D	1,940.00	0	-	1	1,940.00	-1	(1,940.00)	-	-	-	-	-	-	-	-
16.0430	FREIGHT *	FREIGHT	1,465.00	1	1,465.00	1	1,465.00	0	-	-	-	-	1,465.00	-	-	-	-
16.1320	CTR 8740 microwave router, SR-MPLS, High Availability capable. Includes 3x 10G SFP+ cage, 8x 1G SFP cage, 4x 1G RJ45, fan assembly, SD card and BASE software	CTE-740-002	2,536.00	3	7,608.00		-	3	7,608.00	-	-	-	7,608.00	-	-	-	-
16.1330	CTR 8700 SECURE AUTHENTICATION CLIENT, CENTRALIZED USR ACCT WITH TACACS+ (ONE LICENSE PER CHASSIS)	CZF-67050	216.00	3	648.00		-	3	648.00	-	-	-	648.00	-	-	-	-
17.0000	New Antenna Mounts		-	0	-	0	-	0	-	-	-	-		-	-	-	-
17.0010	KIT, UNIV PIPE MOUNT, 4 1/2" X 63" (PM-SC4-63)	AND-PM-SC4-63	723.00	0	-	61	44,103.00	-61	(44,103.00)	-	-	-	-	-	-	-	-
17.0020	KIT, UNIV PIPE MOUNT, 4 1/2" X 96", SUPPORTS UP TO 8" ANGLE LEGS (PM-SC4-96)	AND-PM-SC4-96	1,209.00	0	-	14	16,926.00	-14	(16,926.00)	-	-	-	-	-	-	-	-
17.0030	MICROWAVE SADDLE MT SUPPORT ANGLE, 6FT (MD-SSA6)	AND-MD-SSA6	599.00	0	-	14	8,386.00	-14	(8,386.00)	-	-	-	-	-	-	-	-
17.0040	Installation new pipe mount*	SVCS-IN-IC-FI	47,622.00	1	47,622.00	1	47,622.00	0	-	-	-	-	-	-	47,622.00	-	-
17.0040	FREIGHT *	FREIGHT	8,533.00	1	8,533.00	1	8,533.00	0	-	-	-	-	8,533.00	-	-	-	-
17.0050	Antenna Mount Hardware including Freight	SVCS-IN-IC-FI	65,756.00	1	65,756.00			1	65,756.00	-	-	-		-	65,756.00	-	-
18.0000	Additional material and service required for parallel existing hops during cut over			0	-	0	-	0	-	-	-	-		-	-	-	-
18.0010	Cut Over Materials	SVCS-IN-IC-FI	21,750.00	1	21,750.00	1	21,750.00			-	-	-		-	21,750.00	-	-
18.0020	Additional labor required parallel option*	SVCS-IN-IC-FI	42,822.00	1	42,822.00	1	42,822.00			-	-	-	21,411.00	-	21,411.00	-	-
18.0030	FREIGHT *	FREIGHT	269.00	1	269.00	1	269.00			-	-	-	269.00	-	-	-	-
19.0000	Frequency Assurance Services: Software for 7 Hops of 6 GHz links, 10 Years Support									-	-	-		-	-	-	-
19.0010	FAS Software & Support (for (6 ; Links: 6GHz[New]:5GHz links) (10 Years; Links: 6GHz[New]:5)	FAS-CAPEX	6,064.00	5	30,320.00	5	30,320.00			-	-	-	30,320.00	-	-	-	-
19.0020	1. La Honda to Town Hedge 2. Town Hedge to Pescadero 3. North Peak to Half Moon Bay 4. North Peak to Pigeon Point 5.. North Peak to Pescadero									-	-	-		-	-	-	-
19.0030	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		2,994.00	1	2,994.00	1	2,994.00			-	-	-	2,994.00	-	-	-	-
20.0000	LMR integration with the microwave upgrade project*			0	-	0	-	0	-	-	-	-		-	-	-	-
20.0010	LMR integration with the microwave upgrade project*	SVCS-IN-IC-AS	521,449.00	1	521,449.00	1	521,449.00			13,036.23	13,036.23	-	495,376.55	-	-	-	-
21.0000	Network Health Services									-	-	-		-	-	-	-
21.0010	Network Health monitoring and report per link for 10 years (including Software Upgrades and Technical Support	SWW-HSHAS7X61299	199.00	380	75,620.00	380	75,620.00			-	-	-		-	15,124.00	60,496.00	-
21.0020	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		7,467.00	1	7,467.00	1	7,467.00			-	-	-	7,467.00	-	-	-	-
22.0000	Three (3) additional years warranty after acceptance (total of 5 years after acceptance)			0	-	0	-	0	-	-	-	-		-	-	-	-
22.0010	WARRANTY PLUS NW - NA&C, 12 MONTHS, IRU-600	SNA-BNWXA1001238	236.00	88	20,768.00	88	20,768.00			-	-	-		-	4,153.60	16,614.40	-
22.0020	WARRANTY PLUS NW - NA&C, 12 MONTHS, IRU-600	SNA-BNWXA1001238	236.00	88	20,768.00	88	20,768.00			-	-	-		-	4,153.60	16,614.40	-
22.0030	WARRANTY PLUS NW - NA&C, 12 MONTHS, IRU-600	SNA-BNWXA1001238	236.00	88	20,768.00	88	20,768.00			-	-	-		-	4,153.60	16,614.40	-
22.0040	WARRANTY PLUS NW - NA&C, 12 MONTHS, ODU-600	SNA-BNWXA1001243	244.00	38	9,272.00	38	9,272.00			-	-	-		-	1,854.40	7,417.60	-
22.0050	WARRANTY PLUS NW - NA&C, 12 MONTHS, ODU-600	SNA-BNWXA1001243	244.00	38	9,272.00	38	9,272.00			-	-	-		-	1,854.40	7,417.60	-
22.0060	WARRANTY PLUS NW - NA&C, 12 MONTHS, ODU-600	SNA-BNWXA1001243	244.00	38	9,272.00	38	9,272.00			-	-	-		-	1,854.40	7,417.60	-
22.0070	WARRANTY PLUS NW- WW, 12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BNWXA1001253	193.00	52	10,036.00	52	10,036.00			-	-	-		-	2,007.20	8,028.80	-
22.0080	WARRANTY PLUS NW- WW, 12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BNWXA1001253	193.00	52	10,036.00	52	10,036.00			-	-	-		-	2,007.20	8,028.80	-
22.0090	WARRANTY PLUS NW- WW, 12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BNWXA1001253	193.00	52	10,036.00	52	10,036.00			-	-	-		-	2,007.20	8,028.80	-
22.0100	WARRANTY PLUS NW- WW, 12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BNWXA1001253	193.00	32	6,176.00	32	6,176.00			-	-	-		-	1,235.20	4,940.80	-
22.0110	WARRANTY PLUS NW- WW, 12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BNWXA1001253	193.00	32	6,176.00	32	6,176.00			-	-	-		-	1,235.20	4,940.80	-
22.0120	WARRANTY PLUS NW- WW, 12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BNWXA1001253	193.00	32	6,176.00	32	6,176.00			-	-	-		-	1,235.20	4,940.80	-

22.0130	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM INTEGRATION FOR PROVISION MODULE TECHNOLOGY LICENSE	SWW-P24T3XXX1299	1,540.00	1	1,540.00	1	1,540.00			-	-	-		-	308.00	1,232.00	-
22.0140	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM INTEGRATION FOR PROVISION MODULE TECHNOLOGY LICENSE	SWW-P24T3XXX1299	1,540.00	1	1,540.00	1	1,540.00			-	-	-		-	308.00	1,232.00	-
22.0150	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM INTEGRATION FOR PROVISION MODULE TECHNOLOGY LICENSE	SWW-P24T3XXX1299	1,540.00	1	1,540.00	1	1,540.00			-	-	-		-	308.00	1,232.00	-
22.0160	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS HIGH AVAILABILITY MODULE PERPETUAL TECHNOLOGY LICENSE	SWW-P24T10XX1299	9,239.00	1	9,239.00	1	9,239.00			-	-	-		-	1,847.80	7,391.20	-
22.0170	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS HIGH AVAILABILITY MODULE PERPETUAL TECHNOLOGY LICENSE	SWW-P24T10XX1299	9,239.00	1	9,239.00	1	9,239.00			-	-	-		-	1,847.80	7,391.20	-
22.0180	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS HIGH AVAILABILITY MODULE PERPETUAL TECHNOLOGY LICENSE	SWW-P24T10XX1299	9,239.00	1	9,239.00	1	9,239.00			-	-	-		-	1,847.80	7,391.20	-
22.0190	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING TECHNOLOGY LICENSE BUNDLE	SWW-P24T12671299	2,309.00	1	2,309.00	1	2,309.00			-	-	-		-	461.80	1,847.20	-
22.0200	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING TECHNOLOGY LICENSE BUNDLE	SWW-P24T12671299	2,309.00	1	2,309.00	1	2,309.00			-	-	-		-	461.80	1,847.20	-
22.0210	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING TECHNOLOGY LICENSE BUNDLE	SWW-P24T12671299	2,309.00	1	2,309.00	1	2,309.00			-	-	-		-	461.80	1,847.20	-
22.0220	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING CTR 8740 DEVICE LICENSE BUNDLE	SWW-P24T12671253	44.00	52	2,288.00	52	2,288.00			-	-	-		-	457.60	1,830.40	-
22.0230	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING CTR 8740 DEVICE LICENSE BUNDLE	SWW-P24T12671253	44.00	52	2,288.00	52	2,288.00			-	-	-		-	457.60	1,830.40	-
22.0240	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING CTR 8740 DEVICE LICENSE BUNDLE	SWW-P24T12671253	44.00	52	2,288.00	52	2,288.00			-	-	-		-	457.60	1,830.40	-
22.0250	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING CTR 8740 DEVICE LICENSE BUNDLE	SWW-P24T12671253	44.00	32	1,408.00	32	1,408.00			-	-	-		-	281.60	1,126.40	-
22.0260	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING CTR 8740 DEVICE LICENSE BUNDLE	SWW-P24T12671253	44.00	32	1,408.00	32	1,408.00			-	-	-		-	281.60	1,126.40	-
22.0270	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT & PERFORMANCE & PROVISIONING CTR 8740 DEVICE LICENSE BUNDLE	SWW-P24T12671253	44.00	32	1,408.00	32	1,408.00			-	-	-		-	281.60	1,126.40	-
22.0280	Five (5) year warranty for OEM equipment (Hardware only) after acceptance*	SWW-OMEW000012MC	45,855.00	1	45,855.00	1	45,855.00			-	-	-		-	9,171.00	36,684.00	-
23.0000										-	-	-		-	-	-	-
24.0000	CTR 8740 MPLS Routers on the spurs		-	0	-	0	-	0	-	-	-	-		-	-	-	-
24.0010	CTR 8740		-	0	-	0	-	0	-	-	-	-		-	-	-	-
24.0020	CTR 8740 with Std Sync option, Fan Assembly, Blank cover plates, Install kit, DC power	CTE-740-001	2,536.00	52	131,872.00	52	131,872.00			-	-	-	131,872.00	-	-	-	-
24.0020	CTR 8740 microwave router, SR-MPLS, High Availability capable. Includes 3x 10G SFP+ cage, 8x 1G SFP cage, 4x 1G RJ45, fan assembly, SD card and BASE software	CTE-740-002	2,536.00					52	131,872.00	-	-	-	-	-	-	-	-
24.0030	SFP+ OPT 10Gbit 1310nm SMF LC 10km LR/LW -40 to 85C (LX4002IDR-AAN)	079-422678-001	166.00	0	-	0	-	0	-	-	-	-	-	-	-	-	-
24.0040	SFP OPT GIGE 1310nm SMF LC 10KM 0 to 70C	079-422656-001	58.00	52	3,016.00	52	3,016.00			-	-	-	3,016.00	-	-	-	-
24.0050	GIG ETH SFP, ELEC RJ45 1000BASE-T, CTR ONLY (with RX_LOS) (LX1801CNL-AAN)	083-845537-001	87.00	416	36,192.00	416	36,192.00			-	-	-	36,192.00	-	-	-	-
24.0060	CTR 8700 Series R3 MPLS Software License	CZL-67350	1,827.00	52	95,004.00	52	95,004.00			-	-	-	95,004.00	-	-	-	-
24.0070	CTR 8700 1588v2 PTP TRANSPARENT CLOCK (ONE LICENSE PER CHASSIS)	CZF-67100	483.00	52	25,116.00	52	25,116.00			-	-	-	25,116.00	-	-	-	-
24.0080	CTR 8700 SECURE AUTHENTICATION CLIENT, CENTRALIZED USR ACCT WITH TACACS+ (ONE LICENSE PER CHASSIS)	CZF-67050	216.00	52	11,232.00	52	11,232.00			-	-	-	11,232.00	-	-	-	-
24.0090	CTR 8700 SECURE MANAGEMENT NODAL LICENSE (ONE LICENSE PER CHASSIS)	CZF-67060	585.00	52	30,420.00	52	30,420.00			-	-	-	30,420.00	-	-	-	-
24.0100	CTR 8700 HIGH AVAILABILITY SWITCH / ROUTER WITH RADIO PROTECTION (ONE LICENSE PER CHASSIS)	CZF-67125	710.00	52	36,920.00	52	36,920.00			-	-	-	36,920.00	-	-	-	-
24.0110	Cable, QSFP-DD to QSFP-DD, Diversity cable, 1.0M (C45593-A571-D10)	037-579807-001	322.00	26	8,372.00	26	8,372.00			-	-	-	8,372.00	-	-	-	-
24.0120	DIRECT ATTACH STACKING CABLE, TWIN-AX, SFP+ TO SFP+, 10GBPS, 500mm	037-579820-005	72.00	26	1,872.00	26	1,872.00			-	-	-	1,872.00	-	-	-	-
24.0130	PV + License to monitor routers on the spur		-	0	-	0	-			-	-	-		-	-	-	-
24.0140	ProVision Plus EM & CE & IP/MPLS Fault & Performance & Provisioning CTR 8740 Device License Bundle	276-802005-002	998.00	52	51,896.00	52	51,896.00			-	-	-	51,896.00	-	-	-	-
24.0150	Warranties		-	0	-	0	-			-	-	-		-	-	-	-
24.0160	WARRANTY PLUS IW- WORLD WIDE ,12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BWXXA1001253	-	52	-	52	-			-	-	-		-	-	-	-

24.0170	WARRANTY PLUS IW- WORLD WIDE ,24 MONTHS, CTR 87XX w/Base or CE IMAGE, year 1-2 after acceptance	SWW-BWXXA1002453	149.00	52	7,748.00	52	7,748.00			-	-	-		-	1,549.60	6,198.40	-
24.0180	SOFTWARE SUPPORT PLUS - WORLD WIDE,12 MONTHS, CTR 87XX-MPLS ADVANCED	SWW-SPLUA4001252	-	52	-	52	-			-	-	-		-	-	-	-
24.0190	SOFTWARE SUPPORT PLUS - WORLD WIDE,24 MONTHS, CTR 87XX-MPLS ADVANCED, year 1-2 after acceptance	SWW-SPLUA4002452	349.00	52	18,148.00	52	18,148.00			-	-	-		-	3,629.60	14,518.40	-
24.0200	Services for Routers *		-	0	-	0	-	0	-	-	-	-		-	-	-	-
24.0210	VENDOR INTEGRATION	SVCS-IN-SIPQ-VI	2,296.00	1	2,296.00	1	2,296.00			-	-	-	2,296.00	-	-	-	-
24.0220	ROUTER FACTORY INTEGRATION	SVCS-IN-SIPQ-RI	34,481.00	1	34,481.00	1	34,481.00			-	-	-	34,481.00	-	-	-	-
24.0230	NETWORK/SYSTEM ENGINEERING FOR ADDED ROUTERS	SVCS-PN-EN-SE	47,798.00	1	47,798.00	1	47,798.00			-	47,798.00	-		-	-	-	-
24.0240	ROUTER FIELD TESTING	SVCS-IN-IC-FI	39,443.00	1	39,443.00	1	39,443.00			-	-	-		-	39,443.00	-	-
24.0250	Freight*	FREIGHT	2,600.00	1	2,600.00	1	2,600.00			-	-	-	2,600.00	-	-	-	-
Tax	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		12,807.00	1	12,807.00	1	15,469.00	0	(2,662.00)	-	-	-	12,807.00	-	-	-	-
Tax	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		2,148.00	1	2,148.00	1	2,148.00			-	-	-	2,148.00	-	-	-	-
Tax	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		45,209.00	1	45,209.00	1	45,209.00			-	-	-	45,209.00	-	-	-	-
Tax	Applicable tax, 9.875%, Excluding items marked with * which are not subject to tax		6,493.00	1	6,493.00	1	6,855.00	0	(362.00)	-	-	-	6,493.00	-	-	-	-

Total Not to Exceed Amount for this Agreement is $7,205,016.51.

INVOICING

Contractor shall request approval/confirmation via email to the County's designated Project Manager (PM) by submitting a Milestone Completion Certificate indicating completed services/milestones indicated in this Agreement. Once approval/confirmation has been secured, Contractor shall send an invoice together with the Approved Milestone Completion Certificate.

Each invoice submitted must include the following information, at a minimum:

- Invoice Number and Date
- Agreement Number and/or Purchase Order Number
- Detailed statement of actual services
- Breakdown of labor, materials, and taxes (when applicable)
- Total amount of invoice

Invoices must be sent to ISD-Vendor-Invoices@smcgov.org. Processing time may be delayed if invoices are not submitted electronically and without written approval/confirmation (Approved Milestone Completion Certificate) from designated County PM.

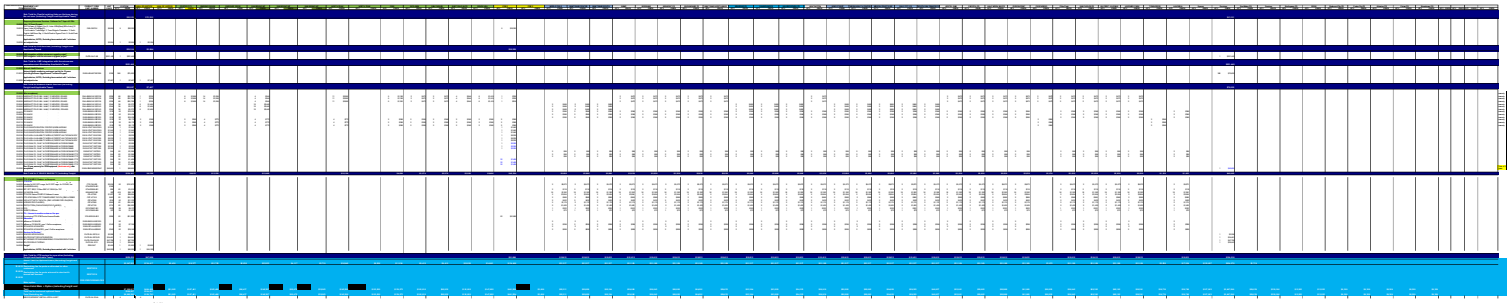
The County shall submit payment within net thirty (30) days of receipt of invoice, for services rendered conditioned upon the approval of services performed during the billing cycle.

Revised Exhibit D (Rev. 09/12/23)

AVIATUS, INC. LIST OF DESCRIPTIONS OF EQUIPMENT AND SERVICES

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT PRICE	SYSTEM QTY	SYSTEM PRICE
[illegible]	WAVEGUIDE CUSHION HANGER, KITS, EW[illegible], 1 HOLE (BAG OF [illegible] KITS)	[illegible]	[illegible]		
	Waveguide 11 GHz				
[illegible]	ELLIPTICAL WAVEGUIDE STANDARD, [illegible] GHZ, BLACK PE JACKET, PER FOOT	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	DEHYDRATOR				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Services: Power system				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10.0000	Training				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Sub-Total including items (Excluding Freight and Applicable Taxes)				[illegible]
11.0000	SYSTEM DISCOUNTS				
[illegible]	One time management discount [illegible]	EQ-DISCOUNT	[illegible]	1	[illegible]
[illegible]	One time management discount [illegible]	EQ-DISCOUNT	[illegible]	1	[illegible]
[illegible]	ADDITIONAL SINGLE DISCOUNT FOR EQUIPMENT	EQ-DISCOUNT	[illegible]	1	[illegible]
[illegible]	FREIGHT *	FREIGHT	[illegible]	1	[illegible]
	Total (Including One Time Management Discount and Freight and using Applicable Taxes)				[illegible]
12.0000	Applicable tax, [illegible], Excluding items marked with * which are not subject to tax				
[illegible]	Tax, [illegible]		[illegible]	1	[illegible]
	Grand Total including One Time Management Discount, Freight and Tax				[illegible]
	OPTIONAL ITEMS ADDED INTO MAIN BID				
13.0000	[illegible]				
[illegible]	NETWORK CONVERGENCE MODULE (NCM)	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Sub-Total for hardware redundancy (including Freight and Applicable Taxes)				[illegible]
14.0000	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Sub-Total for Feature license to support [illegible] (including Freight and Applicable Taxes)				[illegible]
15.0000	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	Sub-Total for Feature license to support [illegible] (including Freight and Applicable Taxes)				[illegible]
16.0000	Recommended Spares				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible]



Revised Exhibit D (Rev. 09/12/23)

AVIAT U.S., INC. LIST OF DESCRIPTIONS OF EQUIPMENT AND SERVICES

Aviat U.S., Inc. Summary List of Descriptions of Equipment and Services		Updated Design
Item	Description	Price
Section 1	**Eclipse IRU600 and ODU600**	**$920,809.00**
	-IRU600 6/11 GHz along with WG extension kit	
	-ODU 600 6/11/18 GHz	
Section 2	**INUe, DAC and licenses**	**$583,949.00**
	-Eclipse INUe with all DS1 cards, Loop protection cards	
	-Capacity license and all other feature licenses	
Section 3	**PV and PV+**	**$172,269.00**
	PV hardware and Software	
	PV+	
	GDS package for clock and DACS	
Section 4	**CTR Routers**	**$238,500.00**
Section 5	**Rack and mis equipment**	**$119,371.00**
Section 6	**DSX-1 JK, clocking and RAC DACS**	**$437,054.00**
Section 7	**Antenna system, WG, IF cables and accessories**	**$473,159.00**
Section 8	**Warranty, 3 years**	**$93,618.00**
	Router	
	PV+	
Section 9	**services**	**$2,462,508.00**
	SIPQ	
	services	
	SIPQ	
	NDE	
	NI	
Section 10	**Training**	**$52,385.00**
	Router Training	
	Total Before Discount	**$5,553,622.00**
	One Time Management Discount	**-$626,429.00**
	One Time Management Discount (order before 9/23/2022)	**-$62,969.00**
	ADDITIONAL SINGLE DISCOUNT FOR EQUIPMENT	**-$8,236.00**
	Freight	**$72,135.00**
	Tax 9.875%	**$229,062.00**
	Grand total including discount and tax	**$5,157,185.00**
Summary for Option items adding into Main Proposal		
Section 13	Additional TDM, Loop switch cards for hardware redundancy	**$669.00**
Section 14	Feature licenses to support SynE	**$179,250.00**
Section 15	Feature license to support 1588v2 PTP	**$26,113.00**
Section 16	Spares	**$143,959.00**
Section 17	New Antenna Mount materials and labor	**$128,404.00**
Section 18	Additional material and service required for parallel hops for cut over	**$66,989.00**
Section 19	10 years FAS for 6 GHz hops	**$33,314.00**
Section 20	LMR integration with the microwave upgrade project	**$521,449.00**
Section 21	Network Health Services	**$83,087.00**
Section 22	Additional 3 years warranty	**$234,963.00**
Section 24	Adding CTR 8740 MPLS Routers on the spurs	**$629,635.00**
	Freight	**included in each section above**
		included in each section above
	Tax 9.875%	
	Total For Options Excluding Tax and Freight	**$2,047,832.00**
Grand total Main + Option (including freight and Tax)		**$7,205,016.51**

Aviat U.S., Inc.
200 Parker Drive, Suite C100A
Austin, TX 78728

Company **County of San Mateo, CA**
Attn
Contact

County of San Mateo Contract Menu Pricing for Equipment. Pricing is valid from September 13, 2022 to September 12, 2025.

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT LIST PRICE PRICE	Discount Pct	 Amt	Unit Price
1.000	**Outdoor RF Section, ODU600v2**					
						
1.001	PLANNING MODEL ODU 600v2, Lower 06 GHz	M-ECH-06-LOW	$10,392	65.00	$6,755	$3,637
1.002	PLANNING MODEL ODU 600v2, Upper 06 GHz	M-ECH-06-HIGH	$10,392	65.00	$6,755	$3,637
1.003	ODU 600v2, 11 GHZ, PLANNING PART NUMBER	M-ECH-11	$10,392	65.00	$6,755	$3,637
1.004	ODU 600v2, 18 GHZ, PLANNING PART NUMBER	M-ECH-18	$10,392	65.00	$6,755	$3,637
1.005	ODU 600v2, 23 GHZ, PLANNING PART NUMBER	M-ECH-23	$10,392	65.00	$6,755	$3,637
1.006	Remote Mount Bracket Assembly ODU600v2	179-530502-001	$201	28.00	$56	$145
1.007	ODU600v2 INDOOR VERTICAL RACK MOUNT	086-523260-002	$456	28.00	$128	$328
1.008	ECLIPSE FLEX WG, 5.925 - 7.125 GHZ, 900MM, PDR70-CPR137 (S137CHS3-A)	086-068137-900	$357	28.00	$100	$257
1.009	HANGER, DUAL MOUNT HANGER KIT, FOR FLEXIBLE WAVEGUIDE, SIZE WG14 / WR137 / R70, POLE	018-510100-001	$27	28.00	$8	$19
1.010	ECLIPSE FLEXIBLE WAVEGUIDE, 10.15-11.7 GHZ, 900MM, PDR100-CPR90G	086-118090-900	$305	28.00	$85	$220
1.011	FLEX TWIST HANGER KIT FOR WR90, WG16 AND R100, 11 GHZ (244106A-100)	018-510102-002	$139	28.00	$39	$100
1.012	ECLIPSE FLEXIBLE WAVEGUIDE, 17.70-26.50 GHZ, 900MM, PBR220-UG595	086-188596-900	$814	28.00	$228	$586
1.013	FLEX-TWIST HANGER KIT FOR WR42, WG20 AND R220, 18-26 GHZ (244106A-220)	018-510105-002	$88	28.00	$25	$63
1.014	Coupler Assy ODU 600v2 , 6 GHz Equal 3 dB, V and H Pole (840D606H1A)	086-523300-063	$822	28.00	$230	$592
1.015	Coupler Assy ODU 600v2 , 6 GHz Unequal 6 dB, V and H Pole (840D606H1B)	086-523300-066	$921	28.00	$258	$663
1.016	Coupler Assy ODU 600v2 , 10/11 GHz Equal 3 dB, V and H Pole (840D611H1A)	086-523300-113	$863	28.00	$242	$621
1.017	Coupler Assy ODU 600v2 , 10/11 GHz Unequal 6 dB, V and H Pole (840D611H1B)	086-523300-116	$863	28.00	$242	$621
1.018	Coupler Assy ODU 600v2 , 18 GHz Equal 3 dB, V and H Pole (840D618H1A)	086-523300-183	$921	28.00	$258	$663
1.019	Coupler Assy ODU 600v2 , 18 GHz Unequal 6 dB, V and H Pole (840D618H1B)	086-523300-186	$921	28.00	$258	$663
1.020	Coupler Assy ODU 600v2 , 23 GHz Equal 3 dB, V and H Pole (840D623H1A)	086-523300-233	$978	28.00	$274	$704
1.021	Coupler Assy ODU 600v2 , 23 GHz Unequal 6 dB, V and H Pole (840D623H1B)	086-523300-236	$921	28.00	$258	$663
1.022	Coupler Assy XPIC 600V2 6 GHz OMT Assembly (860D606H01)	086-523302-006	$975	28.00	$273	$702
1.023	Coupler Assy XPIC 600V2 10/11 GHz OMT Assembly (860D611H01)	086-523302-011	$993	28.00	$278	$715
1.024	Coupler Assy XPIC 600V2 18 GHz OMT Assembly (860D618H01)	086-523302-018	$903	28.00	$253	$650
1.025	Coupler Assy XPIC 600V2 23 GHz OMT Assembly (860D623H01)	086-523302-023	$801	28.00	$224	$577
1.026	WTM 4100/4200 ODU600v2 6 GHz Waveguide Transition Kit, WR 137 waveguide, UDR 70 flange	179-530500-006	$267	28.00	$75	$192
1.027	WTM 4100/4200 ODU600v2 10/11 GHz Waveguide Transition Kit, WR 90 waveguide, UDR 100 flange	179-530500-011	$265	28.00	$74	$191
1.028	WTM 4100/4200 ODU600v2 18/23 GHz Waveguide Transition Kit, WR 42 waveguide, UBR220 flange	179-530500-018	$267	28.00	$75	$192
1.029	KIT, LIGHTNING ARRESTOR, UNIVERSAL, 50 OHM, MALE TO FEMALE	179-530062-002	$77	28.00	$22	$55
1.030	ODU/IDU Level 2 Terminal Assy & RF Link Test Service	VAS-ODUIDU-002	$150			$150
1.100	**Indoor RF Section, IRU600v4**					
						
1.101	IRU600v4 RFSEC ASSY NP, IF TR SP-HP L6 GHz, Filter-non ACCP, 60 MHz	EV202-AML-000-416000	$25,811	65.00	$16,777	$9,034
1.102	IRU600v4 RFSEC ASSY NP, IF TR SP-HP 5.8-U6 GHz, Filter-non ACCP	EV202-AMT-000-410000	$25,811	65.00	$16,777	$9,034
1.103	IRU600v4 RFSEC ASSY NP, IF TR EHP L6 GHz, Filter-non ACCP	EV202-AEL-000-410000	$34,848	65.00	$22,651	$12,197
1.104	IRU600v4 RFSEC ASSY NP, IF TR EHP L6 GHz, Filter-non ACCP, 60 MHz	EV202-AEL-000-416000	$34,848	65.00	$22,651	$12,197
1.105	IRU600v4 RFSEC ASSY NP, IF TR EHP U6 GHz, Filter-non ACCP	EV202-AEU-000-410000	$34,848	65.00	$22,651	$12,197
1.106	IRU600v4 RFSEC ASSY NP, IF TR SP-HP 11 GHz, Filter-non ACCP, 80 MHz (EV202-AMC-000-418000)	EV202-AMB-000-418000	$27,167	65.00	$17,659	$9,508
1.107	IRU600v4 RFSEC ASSY NP, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV202-AMC-000-410000	$25,811	65.00	$16,777	$9,034
1.108	IRU600v4 RFSEC ASSY NP, IF TR EHP 11 GHz, Filter-non ACCP	EV202-AEB-000-410000	$34,848	65.00	$22,651	$12,197
1.109	IRU600v4 RFSEC ASSY NP, IF TR EHP 11 GHz, Filter-non ACCP, 80 MHz	EV202-AEB-000-418000	$36,204	65.00	$23,533	$12,671
1.110	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 5.8-U6 GHz, Filter-non ACCP	EV206-AMT-AM0-410000	$44,026	65.00	$28,617	$15,409
1.111	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP L6 GHz, Filter-non ACCP, 60 MHz	EV206-AML-AM0-416000	$44,026	65.00	$28,617	$15,409
1.112	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP L6 GHz, Filter-non ACCP	EV206-AEL-AE0-410000	$62,100	65.00	$40,365	$21,735
1.113	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP L6 GHz, Filter-non ACCP, 60 MHz	EV206-AEL-AE0-416000	$62,100	65.00	$40,365	$21,735
1.114	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP U6 GHz, Filter-non ACCP	EV206-AEU-AE0-410000	$62,100	65.00	$40,365	$21,735
1.115	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV206-AMC-AM0-410000	$44,026	65.00	$28,617	$15,409
1.116	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP, 80 MHz (EV206-AMC-AM0-418000)	EV206-AMB-AM0-418000	$45,382	65.00	$29,498	$15,884
1.117	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP 11 GHz, Filter-non ACCP	EV206-AEB-AE0-410000	$62,100	65.00	$40,365	$21,735
1.118	IRU600v4 RFSEC ASSY MHSB RX UNEQUAL SPLIT, IF TR EHP 11 GHz, Filter-non ACCP, 80 MHz	EV206-AEB-AE0-418000	$63,455	65.00	$41,246	$22,209
1.119	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR SP-HP 5.8-U6 GHz, Filter-non ACCP	EV207-AMT-AM0-410000	$46,003	65.00	$29,902	$16,101
1.120	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR SP-HP L6 GHz, Filter-non ACCP, 60 MHz	EV207-AML-AM0-416000	$46,003	65.00	$29,902	$16,101
1.121	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR EHP L6 GHz, Filter-non ACCP	EV207-AEL-AE0-410000	$64,077	65.00	$41,650	$22,427
1.122	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR EHP L6 GHz, Filter-non ACCP, 60 MHz	EV207-AEL-AE0-416000	$64,077	65.00	$41,650	$22,427
1.123	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR EHP U6 GHz, Filter-non ACCP	EV207-AEU-AE0-410000	$64,077	65.00	$41,650	$22,427
1.124	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV207-AMC-AM0-410000	$46,003	65.00	$29,902	$16,101

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT LIST PRICE PRICE	Discount Pct	 Amt	Unit Price
1.125	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP, 80 MHz (EV207-AMC-AM0-418000)	EV207-AMB-AM0-418000	$47,359	65.00	$30,783	$16,576
1.126	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR EHP 11 GHz, Filter-non ACCP	EV207-AEB-AE0-410000	$64,077	65.00	$41,650	$22,427
1.127	IRU600v4 RFSEC ASSY MHSB/SD TX SWITCH, IF TR EHP 11 GHz, Filter-non ACCP, 80 MHz	EV207-AEB-AE0-418000	$65,432	65.00	$42,531	$22,901
1.128	IRU600v4 RFSEC ASSY SD SPLIT TX, IF TR EHP L6 GHz, Filter-non ACCP	EV208-AEL-AEL-410000	$66,392	65.00	$43,155	$23,237
1.129	IRU600v4 RFSEC ASSY SD SPLIT TX, IF TR EHP L6 GHz, Filter-non ACCP, 60 MHz	EV208-AEL-AEL-416000	$66,392	65.00	$43,155	$23,237
1.130	IRU600v4 RFSEC ASSY SD SPLIT TX, IF TR EHP U6 GHz, Filter-non ACCP	EV208-AEU-AEU-410000	$66,392	65.00	$43,155	$23,237
1.131	IRU600v4 RFSEC ASSY SD SPLIT TX, IF TR SP-HP L6 GHz, Filter-non ACCP, 60 MHz	EV208-AML-AML-416000	$48,319	65.00	$31,407	$16,912
1.132	IRU600v4 RFSEC ASSY SD SPLIT TX, IF TR SP-HP 5.8-U6 GHz, Filter-non ACCP	EV208-AMT-AMT-410000	$48,319	65.00	$31,407	$16,912
1.133	IRU600v4 RFSEC ASSY SD SPLIT TX, IF TR SP-HP 11 GHz, Filter-non ACCP, 80 MHz	EV208-AMB-AMB-418000	$48,997	65.00	$31,848	$17,149
1.134	IRU600v4 RFSEC ASSY SD SPLIT TX, IF TR SP-HP 10.5-11 GHz, Filter-non ACCP	EV208-AMC-AMC-410000	$48,319	65.00	$31,407	$16,912
1.135	WG EXT KIT IRU600 V3 6GHZ SH1-PO1, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-AA101	$531	28.00	$149	$382
1.136	WG EXT KIT IRU600 V3 6GHZ SH1-PO1, 1+0/MHSB 2 ANT, MHSB/SD	179-530135-AA103	$2,412	28.00	$675	$1,737
1.137	WG EXT KIT IRU600 V3 11GHZ SH1-PO1, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-AA121	$525	28.00	$147	$378
1.138	WG EXT KIT IRU600 V3 11GHZ SH1-PO1, 1+0/MHSB 2 ANT, MHSB/SD	179-530135-AA123	$1,066	28.00	$298	$768
1.139	WG EXT KIT IRU600 V3 6GHZ SH2-PO2, 1+0/MHSB 1ANT, RPTR(MAIN)	179-530135-BB201	$1,738	28.00	$487	$1,251
1.140	WG EXT KIT IRU600 V3 6GHZ SH2-PO2, 1+0/MHSB 2 ANT, MHSB/SD (179-530135-BB203)	179-530135-BB203	$2,802	28.00	$785	$2,017
1.141	WG EXT KIT IRU600 V3 11GHZ SH2-PO2, 1+0/MHSB 1ANT, RPTR(MAIN) (179-530135-BB221)	179-530135-BB221	$1,590	28.00	$445	$1,145
1.142	WG EXT KIT IRU600 V3 11GHZ SH2-PO2, 1+0/MHSB 2 ANT, MHSB/SD (179-530135-BB223)	179-530135-BB223	$2,758	28.00	$772	$1,986
1.143	WG EXT KIT IRU600 V3 6GHZ SH3-PO3, 1+0/MHSB 1ANT, RPTR(MAIN) (179-530135-CC301)	179-530135-CC301	$2,293	28.00	$642	$1,651
1.144	WG EXT KIT IRU600 V3 6GHZ SH3-PO3, 1+0/MHSB 2 ANT, MHSB/SD (179-530135-CC303)	179-530135-CC303	$3,913	28.00	$1,096	$2,817
1.145	WG EXT KIT IRU600 V3 11GHZ SH3-PO3, 1+0/MHSB 1ANT, RPTR(MAIN) (179-530135-CC321)	179-530135-CC321	$2,045	28.00	$573	$1,472
1.146	WG EXT KIT IRU600 V3 11GHZ SH3-PO3, 1+0/MHSB 2 ANT, MHSB/SD (179-530135-CC323)	179-530135-CC323	$3,821	28.00	$1,070	$2,751
1.147	WG EXT KIT IRU600 V3 6GHZ SH4-PO4, 1+0/MHSB 1ANT, RPTR(MAIN) (179-530135-DD401)	179-530135-DD401	$2,273	28.00	$636	$1,637
1.148	WG EXT KIT IRU600 V3 6GHZ SH4-PO4, 1+0/MHSB 2 ANT, MHSB/SD (179-530135-DD403)	179-530135-DD403	$4,472	28.00	$1,252	$3,220
1.149	WG EXT KIT IRU600 V3 11GHZ SH4-PO4, 1+0/MHSB 1ANT, RPTR(MAIN) (179-530135-DD421)	179-530135-DD421	$2,077	28.00	$582	$1,495
1.150	WG EXT KIT IRU600 V3 11GHZ SH4-PO4, 1+0/MHSB 2 ANT, MHSB/SD (179-530135-DD423)	179-530135-DD423	$5,027	28.00	$1,408	$3,619
1.151	EXT BRKT KIT IRU600 2 SHELF (179-530089-001 REV002)	179-530089-001	$294	28.00	$82	$212
1.152	EXT BRKT KIT IRU600 3 SHELF (179-530089-002 REV002)	179-530089-002	$587	28.00	$164	$423
1.153	EXT BRKT KIT IRU600 4 SHELF (179-530089-003 REV002)	179-530089-003	$881	28.00	$247	$634
2.000	**Eclipse INUe**					
						
2.001	ECLIPSE, INTELLIGENT NODE UNIT 2RU, INC IDCE, FAN, NCCV3, HIGH OUTPUT	EXX-000-205	$3,463	65.00	$2,251	$1,212
2.002	KIT BRACKET 2RU	179-530064-001	$37	30.00	$11	$26
2.003	Network Equipment Building Systems, 2RU	179-530053-002	$326	30.00	$98	$228
2.004	NODE PROTECTION CARD, HIGH OUTPUT	EXS-002	$802	65.00	$521	$281
2.005	RAC 70v2, QPSK-4096QAM, NO XPIC, ACM	EXR-700-002	$2,254	65.00	$1,465	$789
2.006	RAC 7Xv2, QPSK-4096QAM, XPIC, ACM	EXR-770-002	$3,784	65.00	$2,460	$1,324
2.007	DAC GE3 GIGABIT ETHERNET SWITCH CARD	EXD-181-002	$2,542	65.00	$1,652	$890
2.008	ECLIPSE, DAC 16XE1/DS1 V3, PROTECTABLE (EXD-161-002)	EXD-161-002	$892	65.00	$580	$312
2.009	AUX, ALARM I/O CARD	EXA-001	$706	65.00	$459	$247
2.010	NODE SW LICENSE,50 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08001	$339	65.00	$220	$119
2.011	NODE SW LICENSE, 100 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08002	$1,412	65.00	$918	$494
2.012	NODE SW LICENSE, 150 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08003	$3,389	65.00	$2,203	$1,186
2.013	NODE SW LICENSE, 200 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08004	$5,648	65.00	$3,671	$1,977
2.014	NODE SW LICENSE, 300 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08005	$8,472	65.00	$5,507	$2,965
2.015	NODE SW LICENSE, 400 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08006	$11,296	65.00	$7,342	$3,954
2.016	NODE SW LICENSE, 800 Mbps TOTAL RADIO PAYLOAD CAPACITY	EZE-08007	$13,555	65.00	$8,811	$4,744
2.017	LAYER 1 LINK AGGREGATION NODAL ON DAC GE / DAC GE3	EZF-01	$508	25.00	$127	$381
2.018	ADAPTIVE MODULATION NODAL RAC60/6X/60E/6XE	EZF-02	$1,694	25.00	$424	$1,270
2.019	SECURE MANGEMENT, INU, inc SNMPV3 NODAL	EZF-03	$3,111	25.00	$778	$2,333
2.020	PAYLOAD ENCRYPTION NODAL RAC60/6X/60E/6XE	EZF-04	$2,074	25.00	$519	$1,555
2.021	RADIUS CLIENT, NODAL CENTRALIZED USER ACCT MGMT	EZF-06	$778	25.00	$195	$583
2.022	ODU 600 Nodal High power option 1 x ODU	EZF-51	$1,694	65.00	$1,101	$593
2.023	ODU 600 Nodal High power option 2 x ODU	EZF-52	$3,389	65.00	$2,203	$1,186
2.024	ODU 600 Nodal High power option 3 x ODU	EZF-53	$5,083	65.00	$3,304	$1,779
2.025	ODU 600 Nodal High power option 4 x ODU	EZF-54	$6,778	65.00	$4,406	$2,372
2.026	IRU600 600 High power option 1 x RFU	EZF-61	$3,389	65.00	$2,203	$1,186
2.027	IRU600 600 Nodal High power option 2 x RFU	EZF-62	$6,778	65.00	$4,406	$2,372
2.028	IRU600 600 Nodal High power option 3 x RFU	EZF-63	$10,166	65.00	$6,608	$3,558
2.029	IRU600 600 Nodal High power option 4 x RFU	EZF-64	$13,555	65.00	$8,811	$4,744
3.000	**CTR 8740**					
						
3.001	CTR 8740 with Std Sync option, Fan Assembly, Blank cover plates, Install kit, DC power, incl SD card, Software and Base License	CTE-740-001	$7,563	65.00	$4,916	$2,647
	Optional Redundant Power Supply			65.00		
3.002	CTR 8500 Series Redundant Power Supply Module, 48VDC	CTS-100-001	$819	65.00	$532	$287
	Each chassis has three SFP+ ports					
3.003	SFP+ OPT TRANSCEIVER, 10Gbit , 850nm, 300m, MM, I TEMP (LX4001IDR-AAN)	079-422677-001	$136	30.00	$41	$95
3.004	SFP+ OPT TRANSCEIVER, 10Gbit-LR/LW, 1310nm, 10km, SM, DUPLEX, LC, I TEMP (LX4002IDR-AAN)	079-422678-001	$250	30.00	$75	$175
3.005	SFP+ OPT TRANSCEIVER, 10Gbit-LR/LW, 1310nm, 1.4km, SM, DUPLEX, LC, I TEMP (SPP-10E-LR-IDFR)	079-422679-001	$193	30.00	$58	$135
	Each chassis has eight SFP ports					
3.006	GIG ETH SFP, OPT MMF 850nm LC 1000BASE-SX, <550M (LM28-C3S-TC-N)	079-422662-001	$72	30.00	$22	$50
3.007	GIG ETH SFP, OPT SMF 1310nm LC 1000BASE-LX, <10 KM (SP-GB-LX-CNFM)	079-422656-001	$86	30.00	$26	$60
3.008	GIG ETH SFP, OPT SMF 1550nm LC 1000BASE-ZX, <70KM (LS48-C3U-TC-N)	079-422665-001	$599	30.00	$180	$419
3.009	GIG ETH SFP, ELEC RJ45 1000BASE-T, CTR ONLY (with RX LOS) (LX1801CNL-AAN)	083-845537-001	$129	30.00	$39	$90
	Choose one of the following software licenses					
3.010	CTR 8700 Series R3 BASE Software License	CZL-67300	$908	60.00	$545	$363
3.011	CTR 8700 Series R3 CARRIER ETHERNET Software License	CZL-67310	$1,815	60.00	$1,089	$726

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT LIST PRICE PRICE	Discount Pct	 Amt	Unit Price
3.012	CTR 8700 Series R3 MPLS Software License	CZL-67350	$5,446	60.00	$3,268	$2,178
	Optional feature licenses					
3.013	CTR 8700 L1 LINK AGGREGATION (ONE LICENSE PER CHASSIS)	CZF-67040	$875	60.00	$525	$350
3.014	CTR 8700 1588v2 PTP TRANSPARENT CLOCK (ONE LICENSE PER CHASSIS)	CZF-67100	$1,440	60.00	$864	$576
3.015	CTR 8700 HIGH AVAILABILITY SWITCH / ROUTER WITH RADIO PROTECTION (ONE LICENSE PER CHASSIS)	CZF-67125	$2,118	60.00	$1,271	$847
	Optional Security Licenses					
3.016	CTR 8700 SECURE AUTHENTICATION CLIENT, CENTRALIZED USR ACCT WITH TACACS+ (ONE LICENSE PER CHASSIS)	CZF-67050	$778	60.00	$467	$311
3.017	CTR 8700 SECURE MANAGEMENT NODAL LICENSE (ONE LICENSE PER CHASSIS)	CZF-67060	$2,001	60.00	$1,201	$800
3.018	LEVEL A CTR8740 CHASSIS ASSEMBLY/SW LOAD	VAS-CTR8740-00A	$52	60.00	$31	$21
3.100	**CTR 8740 Spares**					
3.101	Spare CTR 8740 - No SD Card - Std Sync option, Fan Assembly, Blank cover plates, Install kit, DC power	CTE-S740-001	$7,450	60.00	$4,470	$2,980
3.102	CTR 8500 Series Redundant Power Supply Module, 48VDC	CTS-100-001	$819	60.00	$491	$328
3.103	SFP+ OPT TRANSCEIVER, 10Gbit , 850nm, 300m, MM, I TEMP (LX4001IDR-AAN)	079-422677-001	$136	28.00	$38	$98
3.104	SFP+ OPT TRANSCEIVER, 10Gbit-LR/LW, 1310nm, 10km, SM, DUPLEX, LC, I TEMP (LX4002IDR-AAN)	079-422678-001	$250	28.00	$70	$180
3.105	SFP+ OPT TRANSCEIVER, 10Gbit-LR/LW, 1310nm, 1.4km, SM, DUPLEX, LC, I TEMP (SPP-10E-LR-IDFR)	079-422679-001	$193	28.00	$54	$139
3.106	GIG ETH SFP, OPT MMF 850nm LC 1000BASE-SX, <550M (LM28-C3S-TC-N)	079-422662-001	$72	28.00	$20	$52
3.107	GIG ETH SFP, OPT SMF 1310nm LC 1000BASE-LX, <10 KM (SP-GB-LX-CNFM)	079-422656-001	$86	28.00	$24	$62
3.108	GIG ETH SFP, OPT SMF 1550nm LC 1000BASE-ZX, <70KM (LS48-C3U-TC-N)	079-422665-001	$599	28.00	$168	$431
3.109	GIG ETH SFP, ELEC RJ45 1000BASE-T, CTR ONLY (with RX LOS) (LX1801CNL-AAN)	083-845537-001	$129	28.00	$36	$93
3.200	**CTR 8740 Warranty**					
3.201	WARRANTY PLUS IW- WORLD WIDE ,24 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BWXXA1002453	$234	25.00	$59	$175
3.202	WARRANTY PLUS NW- WW, 12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BNWXA1001253	$317	25.00	$79	$238
4.000	**Racks , DSX-1 jackfield and Eclipse Accessories**					
4.001	RACK ASSY CRATED, 7' CHATSWORTH ALUMINUM, 1 BREAKER PNL W/10 BLANK COVERS AND NO BREAKERS	179-530107-0113	$2,809	28.00	$787	$2,022
4.002	RACK ASSY, NO RACK, NO CRATE, 1 BREAKER PNL W/10 BLANK COVERS AND NO BREAKERS	179-530107-9910	$1,098	28.00	$307	$791
4.003	Installation Kit, Aluminum Rack, Concrete Floor (AV179-530119-001WA)	179-530119-001	$1,110	28.00	$311	$799
4.004	GROUND BAR,KIT,RACK,R56 COMPLIANT,72 INCHES L X 5/8 INCHES WIDE X 1/4 INCHES DEPTH (TRGBVKIT145872AWA)	LOC-TRGBVKIT145872W	$1,016	28.00	$284	$732
4.005	CHANNEL MOUNTING,FORWARD,U-SHAPE,1 RU,4 INCHES LONG X 5/8 INCHES WIDE X 1.75 INCHES DEPTH (020-018475-005 REV001)	020-018475-005	$36	28.00	$10	$26
4.006	COMMON BREAKERS & BLANKING PLUGS PER RACK PER DRAWING	COMMON-BREAKERS-RACK	$133	28.00	$37	$96
4.007	2x HDR-E50 TO Y JOIN TO 24AWG FREE END 3.5M	037-579408-003	$353	28.00	$99	$254
4.008	CABLE, ALARM I/O, 24AWG, HD15 TO WIREWRAP, 15M	037-579470-015	$191	28.00	$53	$138
4.009	AUX HD26, 2M, SYNC, WIREWRAP (037-579115-001V)	037-579115-001	$79	28.00	$22	$57
4.010	CABLE, ETHERNET, CAT 5E, SHIELDED, 24 AWG, INDOOR/OUTDOOR, BOTH ENDS RJ45 (M) CONNECTORS, 2M (6.56'), BLACK (037-579124-002V REVA)	037-579124-002	$9	28.00	$3	$6
4.011	CABLE, ETHERNET, CAT 5E, SHIELDED, 24 AWG, INDOOR/OUTDOOR, BOTH ENDS RJ45 (M) CONNECTORS, 5M (16.4'), BLACK (037-579125-002V REVA)	037-579125-002	$17	28.00	$5	$12
4.012	CABLE PROT / BRIDGEING GE3, DIRECT FIT, 1M (VAHS-30-0342 REV X2)	037-579461-001	$141	28.00	$39	$102
4.013	GIG ETH SFP, OPT MMF 850nm LC 1000BASE-SX, <550M (LM28-C3S-TC-N)	079-422662-001	$72	28.00	$20	$52
4.014	GIG ETH SFP, OPT SMF 1310nm LC 1000BASE-LX, <10 KM (LS38-C3S-TC-N)	079-422656-001	$86	28.00	$24	$62
4.015	SPLITTER SM LC-LC TO LC 2M	037-579143-001	$62	28.00	$17	$45
4.016	JACKFIELD, LOADED 64 DSX-1 CIRCUITS, TOTAL REAR WIREWRAP (REAR CROSSCONNECT 1-64, REAR WIREWRAP), 19" OR 23"W, 3 RU, 10"D, -48VDC, RED LED (SA-2115-2001)	CNI-SA-2115-2001	$2,575	28.00	$721	$1,854
4.017	DS1 JACKFIELD, FIXED, NO INTERNAL CROSS-CONNECT, LOADED 28 CIRCUITS, 1 RU, 19" OR 23"W, 9"D, FRONT RJ48X INCLUDES AUTOMATIC LOOP BACK FUNCTION, REAR WIREWRAP, NO POWER INPUT (097-0128-0006 T1 DEMARCATION CUSTOMER INTERFACE PANEL EQUIVALENT) (DSX-28P-RJ48)	NSM-DSX-28P-RJ48	$1,883	28.00	$527	$1,356
5.000	**Spares**					
	ODUv2					
5.001	PLANNING MODEL ODU 600v2, Lower 06 GHz	M-ECH-06-LOW	$10,392	65.00	$6,755	$3,637
5.002	ODU 600v2, 11 GHZ, PLANNING PART NUMBER	M-ECH-11	$10,392	65.00	$6,755	$3,637
5.003	ODU 600v2, 18 GHZ, PLANNING PART NUMBER	M-ECH-18	$10,392	65.00	$6,755	$3,637
5.004	ODU 600v2, 23 GHZ, PLANNING PART NUMBER	M-ECH-23	$10,392	65.00	$6,755	$3,637
5.005	**IRUv4**			65.00		
5.006	RFU, MP, IRU600v4 IF TR, 5.8-L6-U6 GHz, 5725-7125 MHz	ERM-ATT-401	$16,944	65.00	$11,014	$5,930
5.007	RFU, EHP, IRU600v4 IF TR, L6 GHz, 5925-6425 MHz	ERE-AL6-401	$25,981	65.00	$16,888	$9,093
5.008	RFU, EHP, IRU600v4 IF TR, U6 GHz, 6400-7125 MHz (ERE-AU6-400)	ERE-AU6-401	$25,981	65.00	$16,888	$9,093
5.009	RFU, MP, IRU600v4 IF TR, 10.5-11 GHz, 10500-11700 MHz	ERM-ACC-401	$16,944	65.00	$11,014	$5,930
5.010	RFU, EHP, IRU600v4 IF TR, 11 GHz, 10700-11700 MHz (ERE-ABB-400)	ERE-ABB-401	$25,981	65.00	$16,888	$9,093
	INUe					
5.011	NODE PROTECTION CARD, HIGH OUTPUT	EXS-002	$802	65.00	$521	$281
5.012	RAC 70, QPSK-4096QAM, NO XPIC, ACM	EXR-700-002	$2,254	65.00	$1,465	$789
5.013	RAC 7X, QPSK-4096QAM, XPIC, ACM (EXR-700-001)	EXR-770-002	$3,784	65.00	$2,460	$1,324
5.014	DAC GE3 GIGABIT ETHERNET SWITCH CARD	EXD-181-002	$2,542	65.00	$1,652	$890
5.015	ECLIPSE, DAC 16XE1/DS1 V3, PROTECTABLE	EXD-161-002	$892	65.00	$580	$312
5.016	AUX, ALARM I/O CARD	EXA-001	$706	65.00	$459	$247
	CTR 8740					
5.017	CTR 8740 with Std Sync option, Fan Assembly, Blank cover plates, Install kit, DC power, incl SD card, Software and Base License	CTE-740-001	$7,563	60.00	$4,538	$3,025
5.018	SFP+ OPT 10Gbit 1310nm SMF LC 10km LR/LW -40 to 85C (LX4002IDR-AAN)	079-422678-001	$250	28.00	$70	$180
5.019	SFP OPT GIGE 1310nm SMF LC 10KM 0 to 70C	079-422656-001	$86	28.00	$24	$62
5.020	SFP Elec GIGE RJ45 100m CTR ONLY (with RX LOS) 0 to 70C	083-845537-001	$129	28.00	$36	$93
5.021	CTR 8700 Series R3 MPLS Software License	CZL-67350	$5,446	60.00	$3,268	$2,178
5.022	CTR 8700 1588v2 PTP TRANSPARENT CLOCK (ONE LICENSE PER CHASSIS)	CZF-67100	$1,440	60.00	$864	$576
5.023	CTR 8700 SECURE MANAGEMENT NODAL LICENSE (ONE LICENSE PER CHASSIS)	CZF-67060	$2,001	60.00	$1,201	$800
5.024	CTR 8700 HIGH AVAILABILITY SWITCH / ROUTER WITH RADIO PROTECTION (ONE LICENSE PER CHASSIS)	CZF-67125	$2,118	60.00	$1,271	$847
5.025	Cable, QSFP-DD to QSFP-DD, Diversity cable, 1.0M (C45593-A571-D10)	037-579807-001	$501	28.00	$140	$361
5.026	DIRECT ATTACH STACKING CABLE, TWIN-AX, SFP+ TO SFP+, 10GBPS, 500mm	037-579820-005	$113	28.00	$32	$81
	Misc					
5.027	KIT, LIGHTNING ARRESTOR, UNIVERSAL, 50 OHM, MALE TO FEMALE	179-530062-002	$77	28.00	$22	$55

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT LIST PRICE PRICE	Discount Pct	 Amt	Unit Price
6.000	**WTM 4000 Radios, License, Cables**					
	 					
6.001	WTM 4100, L6 GHz (Planning Model only)	M-W41-L6	$14,110	63.00	$8,889	$5,221
6.002	WTM 4100, U6 GHz (Planning Model only)	M-W41-U6	$14,110	63.00	$8,889	$5,221
6.003	WTM 4100, 07 GHz (Planning Model only)	M-W41-07	$14,110	63.00	$8,889	$5,221
6.004	WTM 4100, 08 GHz (Planning Model only)	M-W41-08	$14,110	63.00	$8,889	$5,221
6.005	WTM 4100, 10 GHz (Planning Model only)	M-W41-10	$14,110	63.00	$8,889	$5,221
6.006	WTM 4100, 11 GHz (Planning Model only)	M-W41-11	$14,110	63.00	$8,889	$5,221
6.007	WTM 4100, 13 GHz (Planning Model only)	M-W41-13	$14,110	63.00	$8,889	$5,221
6.008	WTM 4100, 15 GHz (Planning Model only)	M-W41-15	$14,110	63.00	$8,889	$5,221
6.009	WTM 4100, 18 GHz (Planning Model only)	M-W41-18	$14,110	63.00	$8,889	$5,221
6.010	WTM 4100, 23 GHz (Planning Model only)	M-W41-23	$14,110	63.00	$8,889	$5,221
6.011	WTM 4200, L6 GHz (Planning Model only)	M-W42-L6	$24,413	63.00	$15,380	$9,033
6.012	WTM 4200, U6 GHz (Planning Model only)	M-W42-U6	$24,413	63.00	$15,380	$9,033
6.013	WTM 4200, 07 GHz (Planning Model only)	M-W42-07	$24,413	63.00	$15,380	$9,033
6.014	WTM 4200, 08 GHz (Planning Model only)	M-W42-08	$24,413	63.00	$15,380	$9,033
6.015	WTM 4200, 10 GHz (Planning Model only)	M-W42-10	$24,413	63.00	$15,380	$9,033
6.016	WTM 4200, 11 GHz (Planning Model only)	M-W42-11	$24,413	63.00	$15,380	$9,033
6.017	WTM 4200, 13 GHz (Planning Model only)	M-W42-13	$24,413	63.00	$15,380	$9,033
6.018	WTM 4200, 15 GHz (Planning Model only)	M-W42-15	$24,413	63.00	$15,380	$9,033
6.019	WTM 4200, 18 GHz (Planning Model only)	M-W42-18	$24,413	63.00	$15,380	$9,033
6.020	WTM 4200, 23 GHz (Planning Model only)	M-W42-23	$24,413	63.00	$15,380	$9,033
6.021	Remote Mount Bracket Assembly, WTM4100, WTM4200, WTM4500	179-530505-001	$892	30.00	$268	$624
6.022	WTM 4100/4200 ODU600v2 6 GHz Waveguide Transition Kit, WR 137 waveguide, UDR 70 flange	179-530500-006	$267	30.00	$80	$187
6.023	WTM 4100/4200 ODU600v2 7/8 GHz Waveguide Transition Kit, WR 112 waveguide, UDR 84 flange	179-530500-007	$304	30.00	$91	$213
6.024	WTM 4100/4200 ODU600v2 10/11 GHz Waveguide Transition Kit, WR 90 waveguide, UDR 100 flange	179-530500-011	$265	30.00	$80	$185
6.025	WTM4000 Base License, inc CLI & GUI, IPv4 or IPv6, VLANs, 10Mbps	WZL-BASE	$560	63.00	$353	$207
6.026	WTM4000 CE1 License, inc QoS, QinQ, Routed NMS, Traffic scheduling, Spanning Tree	WZL-CE1	$1,713	63.00	$1,079	$634
6.027	WTM4000 CE1 License, inc ERPS, HQoS, Ethernet EOAM 802.3ah 802.3ag	WZL-CE2	$2,867	63.00	$1,806	$1,061
6.028	WTM 4000 Radio Throughput License 50 Mbps	WZF-40050	$765	63.00	$482	$283
6.029	WTM 4000 Radio Throughput License 100 Mbps	WZF-40100	$1,446	63.00	$911	$535
6.030	WTM 4000 Radio Throughput License 500 Mbps	WZF-40500	$5,599	63.00	$3,527	$2,072
6.031	WTM 4000 Radio Throughput License 1000 Mbps	WZF-41000	$9,639	63.00	$6,073	$3,566
6.032	WTM 4000 Radio Throughput License 2500 Mbps	WZF-42500	$12,078	63.00	$7,609	$4,469
6.033	WTM 4000 Multi-Layer Header Compression (MLHC) License	WZF-MLHC	$1,066	63.00	$672	$394
6.034	WTM 4000 Adaptive Modulation License up to 1024 QAM	WZF-AM1	$1,008	63.00	$635	$373
6.035	WTM 4000 Adaptive Modulation License up to 4096 QAM	WZF-AM2	$1,344	63.00	$847	$497
6.036	WTM4200 2nd RFM Enable License	WZF-42SECRFM	$3,919	63.00	$2,469	$1,450
6.037	WTM4100 Adaptive Dual Carrier (A2C) Enable License	WZF-41A2C	$3,919	63.00	$2,469	$1,450
6.038	POE INJECTOR, 112W 100 to 240VAC, POWER CORD NOT INCLUDED, USE WITH ALL WTM 4000 (MIT-51G-56PNN)	045-310105-001	$730	30.00	$219	$511
6.039	POE INJECTOR, 112W 40 to 72VDC, POWER CORD NOT INCLUDED, USE WITH ALL WTM 4000 (MIT-65G-4856)	045-310107-001	$831	30.00	$249	$582
6.040	OUTDOOR IP66 POE INJECTOR, 112W 100 to 240VAC, INC SURGE ARRESTORS, POWER CORD NOT INCLUDED, USE WITH ALL WTM 4000 (MIT-51G-56PNN-IP66-T105G)	045-310108-001	$525	30.00	$158	$367
6.041	OUTDOOR IP66 POE INJECTOR, 112W 40 to 72VDC, INC SURGE ARRESTORS, POWER CORD NOT INCLUDED, USE WITH ALL WTM 4000 (MIT-65G-4856-IP66-T105G)	045-310109-001	$547	30.00	$164	$383
6.042	Power Cord, IEC 60320-C13 to NORTH AMERICA PLUG, 2-2.5m (6.5-8') (17250 10 B1)	2940-04-00-01	$34	30.00	$10	$24
6.043	WiFi Dongle, USB-powered (07W8938)	009-320006-001	$202	30.00	$61	$141
6.044	CABLE, PWR 2 CORE BLUE/GREY, 2x16AWG, 10M UNTERM (FRHT1300292-10)	037-579712-010	$78	30.00	$23	$55
6.045	CABLE, PWR 2 CORE BLUE/GREY, 2x16AWG, 50M UNTERM (FRHT1300292-50)	037-579712-050	$389	30.00	$117	$272
6.046	CABLE, PWR 2 CORE BLUE/GREY, 2x16AWG, 100M UNTERM (FRHT1300292-100)	037-579712-100	$778	30.00	$233	$545
6.047	CABLE, PWR 2 CORE BLUE/GREY, 2x16AWG, 500M REEL (FRHT1300292-500)	037-579712-500	$3,889	30.00	$1,167	$2,722
6.048	CONN, TERMINAL BLOCK, RECEPTACLE, 6 PIN, DUAL ROW, 3.5MM PITCH, CABLE MOUNT (1790302)	034-392398-001	$17	30.00	$5	$12
6.049	CABLE KIT, ETHERNET, CAT 5E, SHIELDED, 24 AWG, INDOOR/OUTDOOR, INCLUDES 2x RJ45 (M)	037-579711-050	$148	30.00	$44	$104
6.050	CABLE KIT, ETHERNET, CAT 5E, SHIELDED, 24 AWG, INDOOR/OUTDOOR, INCLUDES 2x RJ45 (M)	037-579711-100	$295	30.00	$89	$206
6.051	CABLE, CAT 5E, 24AWG, 500M UNTERM REEL (HGTD-CAT5E)	037-579711-500	$785	30.00	$236	$549
6.052	CONN PG SHLD RJ-45 8P8C (TA5708FS)	039-020096-721	$1	30.00		$1
6.053	CRIMP TOOL, RJ45 EDGE ODU CABLE (TA5808A)	008-311001-001	$50	30.00	$15	$35
6.054	CABLE TIE, 450 MM (17.7") LENGTH, 4.8 MM WIDTH, NYLON, BLACK, (KIT, 50 PIECES) (40417)	006-371750-000	$9	30.00	$3	$6
6.055	CABLE, FIBRE OPTICS, OUTDOOR, SMF, 2xLC to 2xLC, 10M (037-579710-010 R004)	037-579723-010	$89	30.00	$27	$62
6.056	CABLE, FIBRE OPTICS, OUTDOOR, SMF, 2xLC to 2xLC, 50M (037-579710-050 R004)	037-579723-050	$281	30.00	$84	$197
6.057	CABLE, FIBRE OPTICS, OUTDOOR, SMF, 2xLC to 2xLC, 100M (037-579710-100 R004)	037-579723-100	$481	30.00	$144	$337
6.058	CABLE, FIBRE OPTICS, OUTDOOR, SMF, 2xLC to 2xLC, 300M (037-579710-300 R004)	037-579723-300	$1,272	30.00	$382	$890
6.059	CABLE, FIBRE OPTICS, OUTDOOR, SMF, 2xLC to 2xLC, 500M (037-579710-500 R004)	037-579723-500	$2,065	30.00	$620	$1,445
6.060	WTM 4000 POE CABLE, CAT 6, 22AWG, 50M PRE-TERMINATED WITH RJ-45, GLAND PRE-FITTED (C45593-A567-A050)	037-579724-050	$351	30.00	$105	$246
6.061	WTM 4000 POE CABLE, CAT 6, 22AWG, 75M PRE-TERMINATED WITH RJ-45, GLAND PRE-FITTED (C45593-A567-A075)	037-579724-075	$504	30.00	$151	$353
6.062	WTM 4000 POE CABLE, CAT 6, 22AWG, 100M PRE-TERMINATED WITH RJ-45, GLAND PRE-FITTED (C45593-A567-A100)	037-579724-100	$475	30.00	$143	$332
6.063	GIG ETH SFP, OPT SMF 1310nm LC 1000BASE-LX, <10 KM (LS38-C3S-TC-N)	079-422656-001	$86	30.00	$26	$60
6.064	GIG ETH SFP, OPT SMF 1550nm LC 1000BASE-ZX, <70KM (LS48-C3U-TC-N)	079-422665-001	$599	30.00	$180	$419
6.065	SFP+ OPT TRANSCEIVER, DUAL RATE 1G-10G ETHERNET, 1310nm, 10KM SM (FTLX1471D3BCV)	079-422668-001	$709	30.00	$213	$496
7.000	**ProVision EMS - Software, ProVision PLUS**					
7.001	ProVision Solution Pack - 10 Nodes	614-225008-002	$5,648	50.00	$2,824	$2,824
7.002	PROVISION SOLUTION PACK - 50 NODES	614-225061-002	$23,722	50.00	$11,861	$11,861
7.003	PROVISION SOLUTION PACK - 100 NODES	614-225012-002	$45,184	50.00	$22,592	$22,592
7.004	PROVISION SOLUTION PACK - 250 NODES	614-225063-002	$67,776	50.00	$33,888	$33,888
7.005	PROVISION SOLUTION PACK - 500 NODES	614-225014-002	$90,368	50.00	$45,184	$45,184
7.006	STANDBY SERVER - PV SOLUTION PACK - 100 NODES	614-625012-001	$5,648	50.00	$2,824	$2,824
7.007	STANDBY SERVER - PV SOLUTION PACK - 500 NODES	614-625014-001	$16,944	50.00	$8,472	$8,472
7.008	ProVision Plus EM Fault & Performance Module Technology License	276-101001-001	$33,888	50.00	$16,944	$16,944
7.009	ProVision Plus EM Fault & Performance Module WTM 4000 Device License (10 pack)	276-101002-001	$3,954	50.00	$1,977	$1,977
7.010	ProVision Plus EM Fault & Performance Module WTM 4000 Device License	276-101022-001	$395	50.00	$198	$197

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT LIST PRICE PRICE	Discount Pct	 Amt	Unit Price
7.011	ProVision Plus EM Fault & Performance Module CTR 8740 Device License	276-101022-002	$514	50.00	$257	$257
7.012	ProVision Plus EM Provisioning Module Technology License	276-102001-001	$33,888	50.00	$16,944	$16,944
7.013	ProVision Plus EM Provisioning Module WTM 4000 Device License	276-102022-001	$395	50.00	$198	$197
7.014	ProVision Plus EM Provisioning Module CTR 8740 Device License	276-102022-002	$791	50.00	$396	$395
7.015	ProVision Plus EM Integration for ProVision Module Technology License	276-111001-001	$56,480	50.00	$28,240	$28,240
7.016	ProVision Plus IP/MPLS Fault & Performance Module Technology License	276-201001-001	$45,184	50.00	$22,592	$22,592
7.017	ProVision Plus IP/MPLS Fault & Performance Module CTR 8540 Device License (10 pack)	276-201002-001	$9,037	50.00	$4,519	$4,518
7.018	ProVision Plus IP/MPLS Fault & Performance Module CTR 8740 Device License	276-201022-002	$904	50.00	$452	$452
7.019	ProVision Plus IP/MPLS Fault & Performance Module CTR 8540 Device License	276-201022-003	$904	50.00	$452	$452
7.020	ProVision Plus Carrier Ethernet Fault & Performance Module Technology License	276-301001-001	$16,944	50.00	$8,472	$8,472
7.021	ProVision Plus Carrier Ethernet Fault & Performance Module WTM 4000 Device License (10 pack)	276-301002-001	$1,694	50.00	$847	$847
7.022	ProVision Plus Carrier Ethernet Fault & Performance Module WTM 4000 Device License	276-301022-001	$169	50.00	$85	$84
7.023	ProVision Plus Carrier Ethernet Fault & Performance Module CTR 8740 Device License	276-301022-002	$220	50.00	$110	$110
7.024	ProVision Plus EM & CE Fault & Performance Technology License Bundle	276-801001-001	$33,888	50.00	$16,944	$16,944
7.025	ProVision Plus EM & CE Fault & Performance Technology License Upgrade Bundle	276-801001-002	$90,368	50.00	$45,184	$45,184
7.026	ProVision Plus EM & CE & IP/MPLS Fault & Performance Technology License Bundle	276-801002-001	$79,072	50.00	$39,536	$39,536
7.027	ProVision Plus EM & CE Fault & Performance + EM Provisioning Technology License Bundle	276-801003-001	$67,776	50.00	$33,888	$33,888
7.028	ProVision Plus EM & CE Fault & Performance WTM 4000 Device License Bundle	276-802001-001	$407	50.00	$204	$203
7.029	ProVision Plus EM & CE Fault & Performance CTR 8740 Device License Bundle	276-802001-002	$537	50.00	$269	$268
7.030	ProVision Plus EM & CE Fault & Performance + EM Provisioning WTM 4000 Device License Bundle	276-802003-001	$802	50.00	$401	$401
7.031	ProVision Plus EM & CE Fault & Performance + EM Provisioning CTR 8740 Device License Bundle	276-802003-002	$1,327	50.00	$664	$663
7.032	ProVision Plus NBI Module Technology License	276-901001-001	$338,881	50.00	$169,441	$169,440
7.033	ProVision Plus High Availability Module Technology License	276-902001-001	$338,881	50.00	$169,441	$169,440
7.034	ProVision Plus NBI Lite Module Technology License	276-903001-001	$33,888	50.00	$16,944	$16,944
8.000	**ProVision EMS - Hardware**					
8.001	ProVision Windows Server, up to 1,000 SLV, Entry Level, Tower	614-100140-001	$5,196	30.00	$1,559	$3,637
8.002	ProVision Windows Server, up to 3,000 SLV, Mid Level, Tower	614-100141-001	$6,326	30.00	$1,898	$4,428
8.003	PROVISION WINDOWS SERVER, UP TO 9,000 SLV, HIGH LEVEL, TOWER	614-100142-001	$10,844	30.00	$3,253	$7,591
8.004	ProVision Windows Server, up to 1,000 SLV, Entry Level, Rack Mounted	614-100145-001	$6,326	30.00	$1,898	$4,428
8.005	ProVision Windows Server, up to 3,000 SLV, Mid Level, Rack Mounted	614-100150-002	$10,703	30.00	$3,211	$7,492
8.006	ProVision Windows Server, up to 9,000 SLV, High Level, Rack Mounted	614-100155-001	$10,392	30.00	$3,118	$7,274
8.007	ProVision Plus Windows Server, High Level, Rack Mounted	614-100161-001	$14,557	30.00	$4,367	$10,190
8.008	ProVision Windows Client Laptop up to 6,000 SLV, High Level	614-100165-001	$3,389	30.00	$1,017	$2,372
8.009	ProVision Windows Client Laptop up to 3,500 SLV, Entry Level	614-100170-001	$2,146	30.00	$644	$1,502
8.010	19" LCD MONITOR OPTION	614-100135-001	$1,581	30.00	$474	$1,107
8.011	24" MONITOR OPTION	614-100136-001	$700	30.00	$210	$490
8.012	KVM CONSOLE, CONSISTS OF KEYBOARD, 19" LCD MONITOR, 8-PORT SWITCH, IP REMOTE ACCESS, 4-POST RACK MOUNT (OPTIONAL MOUNTING BRACKET 614-100137-002 TO MOUNT ON 2-POST RACK), 19", 1 RU, 120-240 VAC INPUT, 50/60 HZ, C13 TO 5-15P POWER CORD (B020-U08-19-IP)	614-100137-001	$6,018	30.00	$1,805	$4,213
8.013	MOUNTING BRACKET, 2-POST RACK MOUNT BRACKET FOR 614-100137-001 KVM CONSOLE (B019-000)	614-100137-002	$182	30.00	$55	$127
9.000	**RAS service**					
	FAS (CAPEX)					
9.001	FAS Software & Support, per link (5 Years)	FAS-CAPEX	$6,750	25.00	$1,688	$5,062
9.002	FAS Software & Support, per link (10 Years)	FAS-CAPEX	$8,085	25.00	$2,021	$6,064
	ULS Professional Services					
9.003	ULS - Site Audits, Interference Analysis, PCN Updates & FCC License Modification, per link single channel (Public Safety)	ULS-PS	$4,133	25.00	$1,033	$3,100
9.004	ULS - Site Audits, Interference Analysis, PCN Updates & FCC License Modification, per link single channel (Other)	ULS-OT	$5,333	25.00	$1,333	$4,000
9.005	ULS Services - Number of hops with more than 1 RF channel	ULS-ADDCH	$1,540	25.00	$385	$1,155
	FAS (Annual / OPEX)					
9.006	FAS Software & Support, per link (1 Year)	FAS-OPEX	$1,250	25.00	$313	$937
9.007	FAS Software & Support, per link (1 Year)	FAS-OPEX	$1,250	25.00	$313	$937
10.000	**Direct Mount Antennas**					
10.001	ANTENNA, L6/U6 GHZ, 1.8 M (6FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101B1/B2. SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP6-6W-GT1A)	AND-VHLP6-6W-GT1	$4,160	28.00	$1,165	$2,995
10.002	ANTENNA, L6/U6 GHZ, 1.8 M (6FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101B1/B2, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP6-6W-GT2)	AND-VHLP6-6W-GT2	$4,142	28.00	$1,160	$2,982
10.003	ANTENNA, L6/U6 GHZ, 1.2 M (4FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101B2. SINGLE PIECE REFLECTOR. 250 KMPH. 200 KMPH (VHLP4-6W-GT1A)	AND-VHLP4-6W-GT1	$2,137	28.00	$598	$1,539
10.004	ANTENNA, L6/U6 GHZ, 1.2 M (4FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101B2, SINGLE PIECE REFLECTOR. 250 KMPH. 200 KMPH (VHLP4-6W-GT2)	AND-VHLP4-6W-GT2	$2,119	28.00	$593	$1,526
10.005	ANTENNA, L6/U6 GHZ, 1.0 M (3FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101B2. SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP3-6W-GT1A)	AND-VHLP3-6W-GT1	$1,628	28.00	$456	$1,172
10.006	ANTENNA, L6/U6 GHZ, 1.0 M (3FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101B2, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP3-6W-GT2)	AND-VHLP3-6W-GT2	$1,610	28.00	$451	$1,159
10.007	ANTENNA, 10/11 GHZ , 1.2 M (4FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 10.125-11.7 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101A. SINGLE PIECE REFLECTOR. 250 KMPH. 200 KMPH (VHLP4-11W-GT1A)	AND-VHLP4-11W-GT1	$1,957	28.00	$548	$1,409
10.008	ANTENNA, 10/11 GHZ , 1.2 M (4FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 10.125-11.7 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 200 KMPH (VHLP4-11W-GT2)	AND-VHLP4-11W-GT2	$1,939	28.00	$543	$1,396
10.009	ANTENNA, 10/11 GHZ, 1.0 M (3FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 10.125-11.7 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101A/B. SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP3-11W-GT1A)	AND-VHLP3-11W-GT1	$1,497	28.00	$419	$1,078
10.010	ANTENNA, 10/11 GHZ, 1.0 M (3FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 10.125-11.7 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101A/B, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP3-11W-GT2)	AND-VHLP3-11W-GT2	$1,479	28.00	$414	$1,065
10.011	ANTENNA, 10/11 GHZ , 0.6 M (2FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 10.125-11.7 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101B. SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP2-11W-GT1A)	AND-VHLP2-11W-GT1	$646	28.00	$181	$465

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT LIST PRICE PRICE	Discount Pct	 Amt	Unit Price
10.012	ANTENNA, 10/11 GHZ , 0.6 M (2FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 10.125-11.7 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101B, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP2-11W-GT2)	AND-VHLP2-11W-GT2	$614	28.00	$172	$442
10.013	ANTENNA, 18 GHZ, 1.0 M (3FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 17.7-19.7 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP3-18-GT1A)	AND-VHLP3-18-GT1	$1,497	28.00	$419	$1,078
10.014	ANTENNA, 18 GHZ, 1.0 M (3FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 17.7-19.7 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP3-18-GT2)	AND-VHLP3-18-GT2	$1,479	28.00	$414	$1,065
10.015	ANTENNA, 18 GHZ, 0.6 M (2FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 17.7-19.7 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP2-18-GT1A)	AND-VHLP2-18-GT1	$600	28.00	$168	$432
10.016	ANTENNA, 18 GHZ, 0.6 M (2FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 17.7-19.7 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP2-18-GT2)	AND-VHLP2-18-GT2	$584	28.00	$164	$420
10.017	ANTENNA, 18 GHZ, 0.3 M (1FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 17.7-19.7 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101B2, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP1-18-GT1A)	AND-VHLP1-18-GT1	$507	28.00	$142	$365
10.018	ANTENNA, 18 GHZ, 0.3 M (1FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 17.7-19.7 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101B2, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP1-18-GT2)	AND-VHLP1-18-GT2	$491	28.00	$137	$354
10.019	ANTENNA, 23 GHZ, 1.0 M (3FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 21.2-23.6 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP3-23-GT1A)	AND-VHLP3-23-GT1	$1,497	28.00	$419	$1,078
10.020	ANTENNA, 23 GHZ, 1.0 M (3FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 21.2-23.6 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP3-23-GT2)	AND-VHLP3-23-GT2	$1,479	28.00	$414	$1,065
10.021	ANTENNA, 23 GHZ, 0.6 M (2FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 21.2-23.6 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP2-23-GT1A)	AND-VHLP2-23-GT1	$600	28.00	$168	$432
10.022	ANTENNA, 23 GHZ, 0.6 M (2FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 21.2-23.6 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP2-23-GT2)	AND-VHLP2-23-GT2	$569	28.00	$159	$410
10.023	ANTENNA, 23 GHZ, 0.3 M (1FT), VALULINE, HPLP (GT1- RECTANGULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 21.2-23.6 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP1-23-GT1A)	AND-VHLP1-23-GT1	$507	28.00	$142	$365
10.024	ANTENNA, 23 GHZ, 0.3 M (1FT), VALULINE, HPLP (GT2- CIRCULAR INTERFACE), DIRECT MOUNT, DISH (STD: WHITE), 21.2-23.6 GHZ, RADOME (STD: GRAY), DUAL POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP1-23-GT2)	AND-VHLP1-23-GT2	$491	28.00	$137	$354
11.000	**Remote Mount Antennas**					
11.001	ANTENNA, L6 GHZ, 3.7 M (12FT), TRUNKLINE, HP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 5.925-6.425 GHZ, RADOME (STD: WHITE), CPR137G SINGLE POL., CLASS II/FCC101A, TWO PIECE REFLECTOR. 200 KMPH. 190 KMPH (DA12-59AC)	RFS-DA12-59XC	$20,442	28.00	$5,724	$14,718
11.002	ANTENNA, L6/U6 GHZ, 3.7 M (12FT), VALULINE, HP, HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 5.925-7.125, RADOME (STD: GRAY), CPR137G, DUAL POL., CLASS III/FCC101A, TWO PIECE REFLECTOR. 200 KMPH. 180 KMPH (HX12-6W-6GR)	AND-HX12-6W-6GR	$18,167	28.00	$5,087	$13,080
11.003	ANTENNA, L6/U6 GHZ, 3.7 M (12FT), SENTINEL, UHP, SUPER HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 5.925-7.125, RADOME (STD: GRAY), CPR137G, DUAL POL., CLASS 4/FCC101A, TWO PIECE REFLECTOR. 200 KMPH. 180 KMPH (USX12-6W-6GR)	AND-USX12-6W-6GR	$17,719	28.00	$4,961	$12,758
11.004	ANTENNA, L6/U6 GHZ, 3.0 M (10FT), VALULINE, HP, HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 5.925-7.125, RADOME (STD: GRAY), CPR137G, DUAL POL., CLASS III/FCC101A, TWO PIECE REFLECTOR. 200 KMPH. 180 KMPH (HX10-6W-6GR)	AND-HX10-6W-6GR	$12,951	28.00	$3,626	$9,325
11.005	ANTENNA, L6 GHZ, 3.0 M (10FT), TRUNKLINE, HP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 5.925-6.425 GHZ, RADOME (STD: WHITE), CPR137G SINGLE POL., CLASS II/FCC101A, SINGLE PIECE REFLECTOR. 200 KMPH. 190 KMPH (DA10-59AC)	RFS-DA10-59XC	$13,423	28.00	$3,758	$9,665
11.006	ANTENNA, L6/U6 GHZ, 3.0 M (10FT), SENTINEL, UHP, SUPER HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 5.925-7.125, RADOME (STD: GRAY), CPR137G, DUAL POL., CLASS 3/FCC101A, TWO PIECE REFLECTOR. 200 KMPH. 180 KMPH (USX10-6W-6GR)	AND-USX10-6W-6GR	$13,692	28.00	$3,834	$9,858
11.007	ANTENNA, L6/U6 GHZ, 2.4M (8FT), VALULINE, HP, HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 5.925-7.125, RADOME (STD: GRAY), CPR137G, DUAL POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 200 KMPH. 180 KMPH (HX8-6W-6GR)	AND-HX8-6W-6GR	$8,054	28.00	$2,255	$5,799
11.008	ANTENNA, L6 GHZ, 2.4 M (8FT), TRUNKLINE, HP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 5.925-6.425 GHZ, RADOME (STD: WHITE), CPR137G SINGLE POL., CLASS II/FCC101A, SINGLE PIECE REFLECTOR. 200 KMPH. 190 KMPH	RFS-DA8-59XC	$10,866	28.00	$3,042	$7,824
11.009	ANTENNA, L6/U6 GHZ, 2.4M (8FT), SENTINEL, UHP, SUPER HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 5.925-7.125, RADOME (STD: GRAY), CPR137G, DUAL POL., CLASS IV/FCC101A, SINGLE PIECE REFLECTOR. 200 KMPH. 180 KMPH (USX8-6W-6GR)	AND-USX8-6W-6GR	$9,343	28.00	$2,616	$6,727
11.010	ANTENNA, L6/U6 GHZ, 1.8 M (6FT), SENTINEL, UHP, SUPER HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 5.925-7.125, RADOME (STD: GRAY), CPR137G, DUAL POL., CLASS IV/FCC101A, SINGLE PIECE REFLECTOR. 200 KMPH. 180 KMPH (USX6-6W-6GR)	AND-USX6-6W-6GR	$6,887	28.00	$1,928	$4,959
11.011	ANTENNA, L6/U6 GHZ, 1.8 M (6FT), COMPACTLINE, UHP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: WHITE), CPR137G SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 200 KMPH. 200 KMPH	RFS-SB6-W60XC	$5,740	28.00	$1,607	$4,133
11.012	ANTENNA, L6/U6 GHZ, 1.8 M (6FT), VALULINE, HPLP, REMOTE MOUNT, DISH (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY) WITHOUT FLASH, CPR137G SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH/180 KMPH	AND-VHLP6-6W-6WH	$3,968	28.00	$1,111	$2,857
11.013	ANTENNA, L6/U6 GHZ, 1.2 M (4FT), VALULINE, HPLP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY), CPR137G, SINGLE POL., CLASS III/FCC101B2, SINGLE PIECE REFLECTOR. 200 KMPH. 250 KMPH	AND-VHLP4-6W-6WH/C	$2,798	28.00	$783	$2,015
11.014	ANTENNA, L6/U6 GHZ, 1.2 M (4FT), COMPACTLINE, UHP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: WHITE), CPR137G SINGLE POL., CLASS III/FCC101B2, SINGLE PIECE REFLECTOR. 200 KMPH. 200 KMPH (SB4-W60DC)	RFS-SB4-W60XC	$2,082	28.00	$583	$1,499
11.015	ANTENNA, L6/U6 GHZ, 1.2 M (4FT), SENTINEL, HP, REMOTE MOUNT, DISH (STD: WHITE), 5.925 - 7.125 GHZ, RADOME (STD: WHITE), CPR137G, DUAL POL., CLASS III, FCC PART 101B2, SINGLE PIECE REFLECTOR. 200 KMPH OPERATIONAL. 250 KMPH SURVIVAL (SHPX4-6W-6WH)	AND-SHPX4-6W-6WH	$4,104	28.00	$1,149	$2,955
11.016	ANTENNA, L6/U6 GHZ, 1.0 M (3FT), VALULINE, HPLP, REMOTE MOUNT, DISH (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: GRAY), CPR137G, SINGLE POL., CLASS III/FCC101B2, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH	AND-VHLP3-6W-6WH	$2,053	28.00	$575	$1,478
11.017	ANTENNA, L6/U6 GHZ, 0.9 M (3FT), COMPACTLINEEASY, UHP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 5.925-7.125 GHZ, RADOME (STD: WHITE), CPR137G SINGLE POL., CLASS III/FCC101B2, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (SC3-W60AC)	RFS-SC3-W60XC	$1,597	28.00	$447	$1,150

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT LIST PRICE PRICE	Discount Pct	 Amt	Unit Price
11.018	ANTENNA, L6/U6 GHz, 1.0 M (3FT), SENTINEL, HP, REMOTE MOUNT, DISH (STD: WHITE), 5.925-7.125 GHz, RADOME (STD: GRAY), PDR70, DUAL POLE, SINGLE PIECE REFLECTOR, CLASS III/FCC PART 101B2. 250 KMPH. 200 KMPH (SHPX3-6W-4WH/A)	AND-SHPX3-6W-4WH	$1,858	28.00	$520	$1,338
11.019	ANTENNA, 10/11 GHZ, 1.8 M (6FT), VALULINE, HPLP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 10.0-11.7 GHZ, RADOME (STD: GRAY), SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR, 250 KMPH. 180 KMPH	AND-VHLP6-11W-6WH	$5,768	28.00	$1,615	$4,153
11.020	ANTENNA, 10/11 GHZ, 1.8 M (6FT), VALULINE, HP, HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 10.0-11.7, RADOME (STD: GRAY), CPR090G, DUAL POL., CLASS III/FCC105A/107A, SINGLE PIECE REFLECTOR. 200 KMPH. 180 KMPH (HX6-11W-6GR)	AND-HX6-11W-6GR	$5,154	28.00	$1,443	$3,711
11.021	ANTENNA, 10/11 GHZ, 1.8 M (6FT), SENTINEL, UHP, SUPER HIGH XPD, REMOTE MOUNT, DISH (STD: GRAY), 10.0-11.7, RADOME (STD: GRAY), CPR090G, DUAL POL., CLASS IV/FCC105A/107A, SINGLE PIECE REFLECTOR. 200 KMPH. 180 KMPH (USX6-11W-6GR)	AND-USX6-11W-6GR	$6,887	28.00	$1,928	$4,959
11.022	ANTENNA, 10/11 GHZ, 1.8 M (6FT), COMPACTLINE, UHP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 10.000-11.700 GHZ, RADOME (STD: WHITE), CPR90G SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 200 KMPH. 200 KMPH	RFS-SB6-W100XC	$5,235	28.00	$1,466	$3,769
11.023	ANTENNA, 10/11 GHZ, 1.2 M (4FT), COMPACTLINE, UHP, HIGH GAIN, REMOTE MOUNT, PARABOLIC (STD: WHITE), 10.000-11.700 GHZ, RADOME (STD: WHITE), CPR90G SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 200 KMPH. 200 KMPH (SB4-W100DC-HG)	RFS-SB4-W100XC-HG	$2,082	28.00	$583	$1,499
11.024	ANTENNA, 10/11 GHZ, 1.2 M (4FT), VALULINE, HPLP REMOTE MOUNT, DISH (STD: WHITE), 10.125-11.700 GHZ, RADOME (STD:GRAY), CPR90G SINGLE POLARIZED, CLASS III/FCC101A/B, SINGLE PIECE REFLECTOR. 250 KMPH (SURVIVAL). 200 KMPH (OPERATIONAL)	AND-VHLP4-11W-6WH	$2,049	28.00	$574	$1,475
11.025	ANTENNA, 10/11 GHz, 1.2M (4ft), SENTINEL, HP, REMOTE MOUNT, DISH (STD: WHITE), 10.125 - 11.700 GHz, RADOME (STD: GRAY), DUAL POL., Class III+/FCC101A, SINGLE PIECE REFLECTOR, 250 KMPH, 200 KMPH (SHPX4-11W-6WH)	AND-SHPX4-11W-6WH	$4,017	28.00	$1,125	$2,892
11.026	ANTENNA, 10/11 GHZ, 1.0 M (3FT), VALULINE, HPLP, REMOTE MOUNT, DISH (STD: WHITE), 10.125-11.7 GHZ, RADOME (STD: GRAY), CPR90G, SINGLE POL., CLASS III/FCC101A/B, SINGLE PIECE REFLECTOR, 250 KMPH. 180 KMPH	AND-VHLP3-11W-6WH	$1,620	28.00	$454	$1,166
11.027	ANTENNA, 10/11 GHz, 1.0M (3ft), SENTINEL, HP, REMOTE MOUNT, DISH (STD: WHITE), 10.125 - 11.700 GHz, RADOME (STD: GRAY), DUAL POL., Class III+/FCC101A, SINGLE PIECE REFLECTOR, 250 KMPH, 200 KMPH (SHPX3-11W-6WH/A)	AND-SHPX3-11W-6WH	$2,124	28.00	$595	$1,529
11.028	ANTENNA,10/11 GHZ,0.9 M (3FT),COMPACTLINEEASY, UHP,REMOTE MOUNT,PARABOLIC (STD: WHITE),10.000-11.700 GHZ,RADOME (STD: WHITE),CPR90G,SINGLE POLARIZED,CLASS III/FCC101A.180 KMPH.SINGLE PIECE REFLECTOR	RFS-SC3-W100AC	$1,406	28.00	$394	$1,012
11.029	ANTENNA, 10/11 GHZ, 0.6 M (2FT), COMPACTLINEEASY, UHP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 10.000-11.700 GHZ, RADOME (STD: WHITE), CPR90G SINGLE POL., CLASS III/FCC101A/B, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH	RFS-SC2-W100XC	$1,060	28.00	$297	$763
11.030	ANTENNA, 10/11 GHZ, 0.6 M (2FT), VALULINE, HPLP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 10.125-11.7 GHZ, RADOME (STD: GRAY), CPR90G, SINGLE POL., CLASS III/FCC101A/B, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH	AND-VHLP2-11W-6WH	$568	28.00	$159	$409
11.031	ANTENNA, 18 GHZ, 0.9 M (3FT), COMPACTLINEEASY, UHP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 17.700-19.700 GHZ, RADOME (STD: WHITE), PBR220, SINGLE POLARIZED, CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 160 KMPH (SC3-190BB)	RFS-SC3-190XB	$1,287	28.00	$360	$927
11.032	ANTENNA,18 GHZ,0.6 M (2FT),COMPACTLINEEASY, UHP,REMOTE MOUNT,PARABOLIC (STD: WHITE),17.700-19.700 GHZ,RADOME (STD: WHITE),PBR220,SINGLE POLARIZED,CLASS III/FCC101A,180 KMPH.SINGLE PIECE REFLECTOR	RFS-SC2-190BB	$859	28.00	$241	$618
11.033	ANTENNA, 18 GHZ, 0.6 M (2FT), VALULINE, HPLP, REMOTE MOUNT, PARABOLIC (STD: WHITE), 17.7-19.7 GHZ, RADOME (STD: GRAY), UG-595, SINGLE POL., CLASS III/FCC101A, SINGLE PIECE REFLECTOR. 250 KMPH. 180 KMPH (VHLP2-18-1WH/C)	AND-VHLP2-18-1WH	$691	28.00	$193	$498
12.000	**IF Cables & Accessories**					
12.001	CABLE, ODU, 9913, WITH CONN/GROUND KIT, 50M CNT400 CCAL TYPE (STXC400-GKWT-50)	037-579311-050	$248	28.00	$69	$179
12.002	CABLE, ODU, 9913, WITH CONN/GROUND KIT, 75M CNT400 CCAL TYPE (STXC400-GKWT-75)	037-579311-075	$597	28.00	$167	$430
12.003	CABLE, ODU, 9913, WITH CONN/GROUND KIT, 150M CNT400 CCAL TYPE (STXC400-GKWT-150)	037-579311-150	$830	28.00	$232	$598
12.004	CONNECTOR KIT N TYPE M&F 400 TYPE CABLE (N0121A1-002-NT3G-50)	179-530057-001	$34	28.00	$10	$24
12.005	LIGHTNING ARRESTOR KIT, UNIVERSAL, 50 OHM, TYPE N, MALE TO FEMALE (108-1118B-A-KIT)	179-530062-002	$77	28.00	$22	$55
12.006	WEATHERPROOFING KIT (HF-TAPEKIT)	011-390001-001	$4	28.00	$1	$3
12.007	HOISTING GRIP, FOR 3/8 INCH COAXIAL CABLE (L2SGRIP)	AND-L2SGRIP	$42	28.00	$12	$30
12.008	ADAPTER, ANGLE, SS, FOR MINI CLICK-ON HANGAERS (10/PK) (294572)	179-530160-005	$69	28.00	$19	$50
12.009	MINIATURE CLICK-ON HANGER FOR 9-12 MM (BHD-38)	179-530160-007	$19	28.00	$5	$14
12.010	HARDWARE, SNGL STACK, SS, FOR MINI CLICK -ON HANGERS (10/PK) (252027-10KT-P)	AND-252027-10KT-P	$53	28.00	$15	$38
12.011	HARDWARE KIT FOR 1/2 IN OR 7/8 IN DOUBLE CLICK ON HANGERS, INCL 3/8 IN BOLTS AND	179-530160-006	$40	28.00	$11	$29
12.012	TRIPLE STACK H/W KIT FOR MINI CLICK-ON HANGERS, INCL M8 BOLTS & H/W (252029-10KT-P)	AND-252029-10KT-P	$59	28.00	$17	$42
12.013	THREAD ROD SUPPORT 12IN (305MM) LONG, KIT OF 5 (31771-4)	AND-31771-4	$42	28.00	$12	$30
12.014	CABLE BOOT ASSY FOR 3/8 IN COR COAX CBL, 6 HOLES (SEC-638)	AND-SEC-638	$92	28.00	$26	$66
12.015	ENTRANCE PANEL, FEED-THRU ENTRY PANEL, 4-PORT, 1X4, PORT SIZE 4", ENTRY CAP INCLUDED, ALUMINUM (204673-4)	220-000044-001	$83	28.00	$23	$60
13.000	**Waveguide & Accessories**					
13.001	HARDWARE-KIT (ONE KIT PER 100FT)	179-530526-001	$769	28.00	$215	$554
13.002	ELLIPTICAL WAVEGUIDE STANDARD, 5.925-7.125 GHZ, BLACK PE JACKET, PER FOOT (EW63-F)	AND-EW63-F	$12	28.00	$3	$9
13.003	EW63INSTALL-KIT (ONE KIT PER WAVEGUIDE RUN) (EW63INSTALL-KIT)	AND-EW63INSTALL-KIT	$1,586	28.00	$444	$1,142
13.004	WAVEGUIDE CUSHION HANGER, KITS, EW63, 2-HOLE (BAG OF 5 KITS)	018-510063-002	$93	28.00	$26	$67
13.005	ENTRY BOOT, KIT, FOR EW63, 4", 2-HOLE (BAEW632)	VLT-BAEW632	$63	28.00	$18	$45
13.006	ELLIPTICAL WAVEGUIDE STANDARD, 10.2-11.7 GHZ, BLACK PE JACKET, PER FOOT (EW90-F)	AND-EW90-F	$11	28.00	$3	$8
13.007	EW90INSTALL-KIT (ONE KIT PER WAVEGUIDE RUN) (EW90INSTALL-KIT)	AND-EW90INSTALL-KIT	$1,574	28.00	$441	$1,133
13.008	WAVEGUIDE CUSHION HANGER, KITS, EW90, 3-HOLE (BAG OF 5 KITS)	018-510090-003	$89	28.00	$25	$64
13.009	ENTRY BOOT, KIT, FOR EW90 AND EWP90, 4", 3-HOLE (BAEW903)	VLT-BAEW903	$63	28.00	$18	$45
13.010	ENTRANCE PANEL, 2 PORT, 1 X 2 IN (204673-2A)	AND-204673-2A	$121	28.00	$34	$87
13.011	ENTRANCE PANEL, 3 PORT, 1X3 IN (204673-3)	AND-204673-3	$160	28.00	$45	$115
14.000	**Dehydrators**					
14.001	DEHYDRATOR, AUTOMATIC, LAB4.50, 10-60 KPA, 300 L/H, 120 VAC 50/60 HZ INPUT, 6 AIR OUTLETS 3/8", ETHERNET. INCLUDES SIX HOSE FITTING ADAPTER STRAIGHT + SIX 90 DEGREE ELBOW + 40M HOSE. MOUNTING: WALL, FLOOR AND RACK. 19"W. 5.2"H (3RU). 13.2"D (C15130.602)	CIB-C15130.602	$6,071	28.00	$1,700	$4,371
14.002	MANIFOLD, 1 PORT INLET, 4 PORTS OUTLET AND SHUT OFF VALVES, 3/8" PUSH-ON FITTING (K15019-005)	CIB-K15019-005	$414	28.00	$116	$298
15.000	**Factory services**					
15.001	ODU/INU Level 2 Terminal Assy & RF Link Test Service	VAS-ODUINU-002	$181	10.00	$18	$163
15.002	IRU600 Level 3, Standard Integration Service	VAS-IRU000-003	$778	10.00	$78	$700
15.003	IRU600 Level 3, Advanced Custom Configuration	VAS-IRU000-AC3	$337	10.00	$34	$303
15.004	IRU600 Level 3, Extended Long Count BER	VAS-IRU000-LC3	$156	10.00	$16	$140

ITEM	EQUIPMENT LIST DESCRIPTION	PRODUCT CODE PART NUMBER	UNIT LIST PRICE PRICE	Discount Pct	 Amt	Unit Price
15.005	ODU Level 3, Standard Integration Service	VAS-ODU000-003	$518	10.00	$52	$466
15.006	ODU Level 3, Advanced Custom Configuration	VAS-ODU000-AC3	$337	10.00	$34	$303
15.007	ODU Level 3, Extended Long Count BER	VAS-ODU000-LC3	$156	10.00	$16	$140
15.008	WTM PRELOAD SERVICE	VAS-WTM4000-00A	$52	10.00	$5	$47
16.000	**Warranty**					
16.001	WARRANTY PLUS IW - WORLD WIDE, 24 MONTHS, ODU 600	SWW-BWXXA1002443	$365	20.00	$73	$292
16.002	WARRANTY PLUS IW - NA&C, 24 MONTHS, IRU-600	SNA-BWXXA1002438	$311	20.00	$62	$249
16.003	WARRANTY PLUS IW- WORLD WIDE ,12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BWXXA1001253	$117	20.00	$23	$94
16.004	WARRANTY PLUS IW, WORLD WIDE, 24 MONTHS, WTM-4000	SWW-BWXXA1002440	$311	20.00	$62	$249
16.005	WARRANTY PLUS NW - WORLD WIDE, 12 MONTHS, ODU600	SWW-BNWXA1001243	$546	20.00	$109	$437
16.006	WARRANTY PLUS NW - NA&C, 12 MONTHS, IRU-600	SNA-BNWXA1001238	$389	20.00	$78	$311
16.007	WARRANTY PLUS NW- WW, 12 MONTHS, CTR 87XX w/Base or CE IMAGE	SWW-BNWXA1001253	$317	20.00	$63	$254
16.008	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM INTEGRATION FOR PROVISION	SWW-P24T3XXX1299	$6,325	20.00	$1,265	$5,060
16.009	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS HIGH AVAILABILITY MODULE	SWW-P24T10XX1299	$37,951	20.00	$7,590	$30,361
16.010	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT &	SWW-P24T12671299	$9,488	20.00	$1,898	$7,590
16.011	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT &	SWW-P24T12671253	$182	20.00	$36	$146
16.012	PROVISION PLUS SUPPORT 24 X 7, 12 MONTHS - PROVISION PLUS EM & CE, FAULT &	SWW-P24T12671253	$182	20.00	$36	$146

County of San Mateo Contract Menu Pricing for Services. Pricing is valid from September 13, 2022 to September 15, 2025.

Item Number		UOM	San Mateo County PRICE	Notes
1	Project manager - Aviat office	Hour	$219	
2	Project engineer - Aviat office	Hour	$203	
3	Transmission engineer - Aviat office	Hour	$176	
4	Network Design engineer - Aviat office	Hour	$225	
5	Configuration engineer - Aviat office	Hour	$140	
6	Drafter - Aviat office	Hour	$111	
7	Field Network Integrator	Hour	$150	Prevailing Wages
8	Field Project Manager	Hour	$132	
9	Tower technician	Hour	$169	Prevailing Wages
10	Project manager - Aviat office	Day	$1,747	8-hour day
11	Project engineer - Aviat office	Day	$1,624	8-hour day
12	Transmission engineer - Aviat office	Day	$1,405	8-hour day
13	Network Design engineer - Aviat office	Day	$1,799	8-hour day
14	Configuration engineer - Aviat office	Day	$1,115	8-hour day
15	Drafter - Aviat office	Day	$887	8-hour day
16	Field Network Integrator daily rate	Day	$1,491	10-hour day, Prevailing wages
17	Field Project Manager daily rate	Day	$1,316	10-hour day
18	Tower technician daily rate	Day	$1,686	10-hour day, Prevailing wages
19	Site Survey	Site	$1,927	Does not include travel
20	Path Survey	Path	$3,395	Does not include travel
21	Path Surveyor Mob/Demob, per person, per occurrence	Each	$4,169	
22	Site Surveyor Mob/Demob, per person, per occurrence	Each	$4,001	
23	Field Network Integrator Mob/demob, per person, per occurrence	Each	$4,001	
24	Tower technician Mob/demob, per person, per occurrence	Each	$3,182	
25	Field living expenses, per person	Day	$538	
26	Frequency Coordination (Frequency Bands-6, 10, 11, 18 and 23 GHz) Standard 30-day PCN			
26.01	*First Frequency Pair (Per Hop)*	Hop	$2,075	
26.02	*Additional Frequency pairs coordinated at the same time (Per hop)*	Hop	$1,416	
27	Frequency Coordination (Frequency Bands-6, 10, 11, 18 and 23 GHz) Expedited 14-day PCN			
27.01	*First Frequency Pair (Per Hop)*	Hop	$2,792	
27.02	*Additional Frequency pairs coordinated at the same time (Per hop)*	Hop	$1,599	
28	Renewal Notices-Required to protect coordinated paths when license filings haven't been submitted.			
28.01	*For first path*	Hop	$485	
28.02	*For each additional path at the same time*	Hop	$121	
29	FCC License Preparation			
29.01	*Per site location*	Site	$1,093	
30	FCC License Submittal Fee			
30.01	*New License-per site location*	Site	$802	
30.02	*Modification to License-per site location*	Site	$478	
31	Factory Services (Per Man Day)			
31.01	*Factory Acceptance Test*	Man-day	$1,697	8 hour day
31.02	*System Integration Product Quality (SIPQ)*	Man-day	$1,697	8 hour day
32	Radio installation and test (IRU600/Eclipse - All indoor radio)- 1+0 Config, 1 antenna	Hop	$10,828	Prevailing Wages
33	Radio installation and test (IRU600/Eclipse - All indoor radio)- 2+0 Config, 1 antenna	Hop	$12,995	Prevailing Wages
34	Radio installation and test (Eclipse - RF-ODU outdoor radio)- 1+0 Config, 1 antenna	Hop	$8,663	Prevailing Wages
35	Radio installation and test (Eclipse - RF-ODU outdoor radio)- 2+0 Config, 1 antenna	Hop	$10,828	Prevailing Wages
36	End to end Network integration and field acceptance testing	Hop	$2,166	Prevailing Wages
37	ODU installation on tower, within 3 ft. of antenna	Each	$1,154	Prevailing Wages
38	Provision server installation and test	Per server	$6,498	Installed during radio mobilization
39	Provision server installation and test	Per server	$10,948	Installed in a separate mobilization
40	Alarm and control tests to NMS system	Site	$1,084	Prevailing Wages
41	Traffic cutover	Hop	$4,332	Prevailing Wages
42	Tower rigging	Per Tower	$1,593	Prevailing Wages
43	Tower crew Mob/Demob, travel expenses and per diem (4-man crew)	Site	$4,087	Prevailing Wages
44	Main Antenna install 1-2' - up to 100' CL w/Alignment	Per Antenna	$4,570	Prevailing Wages
45	Main Antenna install 3-4' - up to 100' CL w/Alignment	Per Antenna	$5,632	Prevailing Wages
46	Main Antenna install 6-8' - up to 100' CL w/Alignment	Per Antenna	$8,829	Prevailing Wages
47	Main Antenna install 10-12' - up to 100' CL w/Alignment	Per Antenna	$14,958	Prevailing Wages
48	Main Antenna install 1-2' - 101 to 200' CL w/Alignment	Per Antenna	$5,090	Prevailing Wages
49	Main Antenna install 3-4' - 101 to 200' CL w/Alignment	Per Antenna	$6,087	Prevailing Wages
50	Main Antenna install 6-8' - 101 to 200' CL w/Alignment	Per Antenna	$9,868	Prevailing Wages
51	Main Antenna install 10-12' - 101 to 200' CL w/Alignment	Per Antenna	$14,958	Prevailing Wages
52	Diversity antenna install 1-2' - 101 to 200' CL w/Alignment	Per Antenna	$3,843	Prevailing Wages
53	Diversity antenna install 3-4' - 101 to 200' CL w/Alignment	Per Antenna	$5,048	Prevailing Wages
54	Diversity antenna install 6-8' - 101 to 200' CL w/Alignment	Per Antenna	$7,583	Prevailing Wages
55	Diversity antenna install 10-12' - 101 to 200' CL w/Alignment	Per Antenna	$13,400	Prevailing Wages
56	Diversity antenna install 1-2' - 101 to 200' CL w/Alignment	Per Antenna	$4,363	Prevailing Wages
57	Diversity antenna install 3-4' - 101 to 200' CL w/Alignment	Per Antenna	$5,567	Prevailing Wages
58	Diversity antenna install 6-8' - 101 to 200' CL w/Alignment	Per Antenna	$8,102	Prevailing Wages
59	Diversity antenna install 10-12' - 101 to 200' CL w/Alignment	Per Antenna	$13,919	Prevailing Wages
60	Antenna stiff arm tie-back material and installation	Per stiff arm	$1,905	Prevailing Wages
61	Main Waveguide (EW52 or EW63) Includes Connector attachment & Grounding	Per Foot	$35	100 feet minimum charge
62	Main Waveguide (EW90) labor only Includes Connector attachment & Grounding	Per Foot	$33	100 feet minimum charge

Item Number		San Mateo County UOM	PRICE	Notes
63	Main Waveguide (EW132/EW180/EW220) Install, Connector attachment & Grounding	Per Foot	$28	100 feet minimum charge
64	Diversity Waveguide (EW52 or EW63) Install, Connector attachment & Grounding	Per Foot	$28	100 feet minimum charge
65	Diversity Waveguide (EW90) Install, Connector attachment & Grounding	Per Foot	$23	100 feet minimum charge
66	Diversity Waveguide (EW132/EW180/EW220) Install, Connector attachment & Grounding	Per Foot	$21	100 feet minimum charge
67	Main Coax (LMR 400) labor only Includes Connector attachment & Grounding	Per Foot	$12	100 feet minimum charge
68	Diversity or hot standby Coax (LMR 400) Install	Per Foot	$10	100 feet minimum charge
69	Sweep Test (VSWR)	Per line	$1,039	Prevailing Wages
70	Install Ice Shield Kit, for 1-2 feet antenna	Per Ice shield	$3,347	Prevailing Wages
71	Install Ice Shield Kit, for 3-4 feet antenna	Per Ice shield	$3,970	Prevailing Wages
72	Install Ice Shield Kit, for 6 feet antenna	Per Ice shield	$4,905	Prevailing Wages
73	Install Ice Shield Kit, for 8 feet antenna	Per Ice shield	$5,944	Prevailing Wages
74	Install Ice Shield Kit, for 10 feet antenna	Per Ice shield	$7,271	Prevailing Wages
75	Install Ice Shield Kit, for 12 feet antenna	Per Ice shield	$9,349	Prevailing Wages
76	Install dehydrator and 6-port manifold - Rack Mounted	Per Unit	$831	Prevailing Wages
77	Install dehydrator and 6-port manifold - Wall Mounted (Includes backboard)	Per Unit	$1,454	Prevailing Wages
78	Install DC power system - Redundant 25 amp charger & 105 Amp-Hr. battery (No AC work)	Per Unit	$2,771	Prevailing Wages
79	Install DC power system - Redundant 50/75 amp charger & 210 Amp-Hr. battery (No AC work)	Per Unit	$3,463	Prevailing Wages
80	Install DC power system - Redundant 150 amp charger & 320 Amp-Hr. battery (No AC work)	Per Unit	$4,386	Prevailing Wages
81	Installation close out package	Site	$924	Prevailing Wages
82	De-Installation			Prevailing Wages
82.01	*Removal of Equipment rack(up to 8 feet high)*	Per rack	$1,032	Prevailing Wages
82.02	*Removal of DC power system - Redundant 25 amp charger & 105 Amp-Hr. battery*	Per Unit	$1,377	Prevailing Wages
82.03	*Removal of DC power system - Redundant 50/75 amp charger & 210 Amp-Hr. battery*	Per Unit	$1,652	Prevailing Wages
82.04	*Removal of DC power system - Redundant 150 amp charger & 320 Amp-Hr. battery*	Per Unit	$1,917	Prevailing Wages
82.05	*Removal of antenna and transport to customer warehouse, 1-2' up to 100' CL*	Per Antenna	$1,154	Prevailing Wages
82.06	*Removal of antenna and transport to customer warehouse, 1-2' 101 to 200' CL*	Per Antenna	$1,501	Prevailing Wages
82.07	*Removal of antenna and transport to customer warehouse, 3-4' up to 100' CL*	Per Antenna	$1,154	Prevailing Wages
82.08	*Removal of antenna and transport to customer warehouse, 3-4' 101 to 200' CL*	Per Antenna	$1,501	Prevailing Wages
82.09	*Removal of antenna and transport to customer warehouse, 6-8' up to 100' CL*	Per Antenna	$1,501	Prevailing Wages
82.10	Removal of antenna and transport to customer warehouse, 6-8' 101 to 200' CL	Per Antenna	$1,847	Prevailing Wages
82.11	*Removal of antenna and transport to customer warehouse, 10-12' up to 100' CL*	Per Antenna	$2,309	Prevailing Wages
82.12	*Removal of antenna and transport to customer warehouse, 10-12' 101 to 200' CL*	Per Antenna	$3,002	Prevailing Wages
82.13	*Removal of Pipe mount*	Per mount	$1,154	Prevailing Wages

Notes and Assumption

1	De-installation/removal assumes original deployment for installation on the same trip and equipment delivered to the customer warehouse within 50 miles of the site. If a special trip to remove items is needed additional mobilization fees will apply.
2	Pricing is for installation, test and de-installation only, material is excluded, unless otherwise specifically noted on individual lines