

Motorola Solutions Customer Agreement

This Motorola Solutions Customer Agreement (the “**MCA**”) is entered into between Motorola Solutions, Inc., with offices at 500 W. Monroe Street, Suite 4400, Chicago, IL 60661 (“**Motorola**”) and the entity set forth in the signature block below (“**Customer**”), a Missouri municipal corporation and charter city. Motorola and Customer will each be referred to herein as a “**Party**” and collectively as the “**Parties**”. This Agreement (as defined below) is effective as of the date of the last signature (the “**Effective Date**”).

Section 1. Agreement.

1.1. Scope; Agreement Documents. This MCA governs Customer’s purchase of Products and Services, including certain construction items as outlined in Exhibit A (as each are defined below) from Motorola. Additional terms and conditions applicable to specific Products and Services are set forth in one or more Motorola prepared or agreed upon addenda attached to this MCA (each an “**Addendum**”, and collectively the “**Addenda**”). This MCA, the Exhibits, Addenda, and Motorola-provided Proposal collectively form the Parties’ “**Agreement**”.

1.2. Attachments. The Exhibits listed below will be attached hereto and incorporated into and made a part of this Agreement:

Exhibit A Motorola Proposal

Exhibit B Software License Addendum

Exhibit C Maintenance, Support and Lifecycle Management Addendum

Exhibit D Hyperlink Addenda

1.3. Order of Precedence. In interpreting this Agreement and resolving any ambiguities: 1) the main body of this Agreement takes precedence over the exhibits (unless otherwise specified in an exhibit), and any inconsistency between Exhibits A through D will be resolved in their listed order, and 2) Each Addendum will control with respect to conflicting terms in the Agreement, but only as applicable to the Products and Services described in such Addendum.

Section 2. Definitions.

“**Authorized Users**” means Customer’s employees, full-time contractors engaged for the purpose of supporting the Products and Services that are not competitors of Motorola, and the entities (if any) specified in a Proposal or otherwise approved by Motorola in writing (email from an authorized Motorola signatory accepted), which may include affiliates or other Customer agencies.

“**Change Order**” means a written amendment to this Agreement after the effective date that alters the work, the contract sum, the contract time, or other change mutually decided between the Parties.

“**Communications System**” is a solution that includes at least one radio Product, whether devices, software, or infrastructure, and requires Integration Services to deploy such radio Product at a Customer Site or onto any Customer-Provided Equipment or Equipment provided to Customer.

“Contract Price” means the price for the Communications System and implementation Services, excluding applicable sales or similar taxes and freight charges. Further, unless otherwise stated in the pricing pages of the Proposal, recurring fees for maintenance, SUA, or Subscription Software are included in the Contract Price.

“Confidential Information” means any and all non-public information provided by one Party to the other that is disclosed under this Agreement in oral, written, graphic, machine recognizable, or sample form, being clearly designated, labeled or marked as confidential or its equivalent or that a reasonable business person would consider non-public and confidential by its nature. With respect to Motorola, Confidential Information will also include Products and Services, and Documentation, as well as any other information relating to the Products and Services.

“Customer Contact Data” has the meaning given to it in the DPA.

“Customer Data” has the meaning given to it in the DPA.

“Customer-Provided Equipment” means components, including equipment and software, not provided by Motorola which may be required for use of the Products and Services.

“Data Processing Addendum” or **“DPA”** means the Motorola Data Processing Addendum applicable to processing of Customer Data for US customers, as updated, supplemented, or superseded from time to time. The DPA is incorporated into and made a part of this Agreement as Exhibit D for all purposes pertaining to the contents of the DPA. Where terms or provisions in the Agreement conflict with terms or provisions of the DPA, the terms or provisions of the DPA will control with respect to the contents of the DPA.

“Documentation” means the documentation for the Equipment, software Products, or data, that is delivered with the Products and Services that specifies technical and performance features, capabilities, users, or operation, including training manuals, and other deliverables, such as reports, specifications, designs, plans, drawings, analytics, or other information.

“Equipment” means hardware provided by Motorola.

“Equipment Lease-Purchase Agreement” means the agreement by which Customer finances all or a portion of the Contract Price.

“Feedback” means comments or information, in oral or written form, given to Motorola by Customer or Authorized Users, including their end users, in connection with or relating to the Products or Services;

“Fees” means charges applicable to the Products and Services.

“Integration Services” means the design, deployment, and integration Services provided by Motorola in order to design, install, set up, configure, and/or integrate the applicable Products as agreed upon by the Parties.

“Licensed Software” means licensed software which is either preinstalled on Equipment or installed on Customer-Provided Equipment and licensed to Customer by Motorola for a perpetual or other defined license term.

“Maintenance and Support Services” means the break/fix maintenance, technical support, or other Services (such as software integration Services) described in the applicable statement of work.

“Motorola Data” means data owned or licensed by Motorola and made available to Customer in connection with the Products and Services;

“Motorola Materials” means proprietary software, tools, data, and other materials, including designs, utilities, models, methodologies, systems, and specifications, which Motorola has developed or licensed from third parties (including any corrections, bug fixes, enhancements, updates, modifications, adaptations, translations, de-compilations, disassemblies, or derivative works of the foregoing, whether made by Motorola or another party). Products and Services, Motorola Data, Third-Party Data, and Documentation, are considered Motorola Materials

“Non-Motorola Materials” means collectively, Customer or third-party software, services, hardware, content, and data that is not provided by Motorola.

“Proposal” means solution descriptions, pricing, equipment lists, statements of work (“SOW”), schedules, technical specifications, quotes, and other documents setting forth the Products and Services to be purchased by Customer and provided by Motorola. The Proposal may also include an ATP, Acceptance Test Plan, depending on the Products and Services purchased by Customer.

“Products” or **“Product”** is how the Equipment, Licensed Software, and Subscription Software being purchased by the Customer will collectively be referred to in this Agreement (collectively as “Products”, or individually as a “Product”).

“Professional Services” are Services provided by Motorola to Customer under this Agreement the nature and scope of which are more fully described in the Proposal and Section 2.2.5 of this Agreement.

“Prohibited Jurisdiction” means any jurisdiction in which the provision of such Products and Services is prohibited under applicable laws or regulations.

“Process” or **“Processing”** have the meaning given to them in the DPA

“Services” means services related to purchased Products as described in the Proposal.

“Service Completion Date” means the date of Motorola’s completion of the Services described in a Proposal.

“Service Use Data” has the meaning given to it in the DPA.

“Site” or **“Sites”** means the location where the Integration Services or Maintenance and Support Services will take place.

“Software System” means a solution that includes at least one software Product and requires Integration Services to deploy such software Product at a Customer Site or onto any Customer-Provided Equipment or Equipment provided to Customer.

“SUA” or **“SUA II”** means Motorola’s Software Upgrade Agreement program.

“Subscription Software” means licensed cloud-based software-as-a-service products and other software which is either preinstalled on Equipment or installed on Customer-Provided Equipment, but licensed to Customer by Motorola on a subscription basis.

“Third-Party Data” has the meaning given to it in the DPA.

“Term” means the term of this MCA which will commence on the Effective Date and continue until six (6) months after the later of (a) the termination, expiration, or discontinuance of services under the last Proposal in effect, or (b) the expiration of all applicable warranty periods, unless the MCA is earlier terminated as set forth herein.

Section 3. Products and Services.

3.1. Products. Motorola will (a) sell Equipment, (b) Licensed Software, and (c) Subscription Software to Customer, to the extent each is set forth in this Agreement. At any time during the Term (as defined below), Motorola may substitute any Products at no cost to Customer, if the substitute is substantially similar to the Products set forth in this Agreement.

3.2. Services.

3.2.1. Motorola will provide Services, to the extent set forth in this Agreement.

3.2.2. Integration Services; Maintenance and Support Services. Motorola will provide (a) Integration Services at the applicable Sites, agreed upon by the Parties or (b) Maintenance and Support Services, each as further described in the applicable statement of work. Maintenance, Support Services and Integration Services will each be considered “Services”, as defined above.

3.2.3. Service Proposals. The Fees for Services will be set forth in Motorola’s Quote or Proposal. A Customer point of contact will be set forth in the applicable statement of work for the Services. For purposes of clarity, each statement of work will be incorporated into, and form an integral part of, this Agreement.

3.2.4. Service Completion. Services described in a Proposal will be deemed complete upon the Service Completion Date, or as Services are renewed or terminated.

3.2.5. Professional Services

3.2.5.1. Assessment of Systems & Operations. If Customer is purchasing Professional Services to evaluate or assess networks, systems or operations, Customer acknowledges and agrees that the equipment provided by or used by Motorola to facilitate performance of the Services may impact or disrupt information systems. Except as specifically set forth in the Agreement, Motorola disclaims responsibility for costs in connection with any such disruptions of and/or damage to Customer’s or a third party’s information systems, equipment, voice transmissions, and data, including, but not limited to, denial or access to a legitimate system user, automatic shut-down of information systems caused by intrusion detection software or hardware, or failure of the information system resulting from the provision or delivery of the Service. Motorola agrees to cooperate with Customer to schedule any such potential damage or disruption around Customer’s voice or information technology traffic and use patterns so as to reduce the risk of disruption during working hours.

3.2.5.2. Network Security. If Customer is purchasing network security assessment of network monitoring Professional Services, Customer acknowledges and agrees that Motorola

does not guarantee or warrant that it will discover all of Customer's system vulnerabilities or inefficiencies. Customer agrees not to represent to third parties that Motorola has provided such guarantee. Motorola disclaims any and all responsibility for any and all loss or costs of any kind associated with vulnerabilities or security events, whether or not they are discovered by Motorola.

3.2.5.3. Application Development. If Customer purchases software application development as part of the Professional Services, the deliverables will be licensed as described in Section 2.5 - Documentation.

3.2.6. Transport Connectivity Services. Certain Communications Systems may include one or more transport connectivity services as specified in the Proposal. In addition to the terms of this MCA, transport connectivity services shall also be governed by the terms of Motorola's standard Transport Connectivity Addendum, a copy of which is attached to and incorporated herein as Exhibit D.

3.3. Non-Preclusion. If, in connection with the Products and Services provided under this Agreement, Motorola performs assessments of its own, or related, products or makes recommendations, including a recommendation to purchase other products or services, nothing in this Agreement precludes such efforts nor precludes Motorola from participating in a future competitive bidding process or otherwise offering or selling the recommended products or other services to Customer. Customer represents that this paragraph does not violate its procurement standards or other laws, regulations, or policies.

3.4. Customer Obligations. Customer represents that information Customer provides to Motorola in connection with receipt of Products and Services are accurate and complete in all material respects. If any assumptions in the Proposals or information provided by Customer prove to be incorrect, or if Customer fails to perform any of its obligations under this Agreement, Motorola's ability to perform its obligations may be impacted and changes to the Agreement, including the scope, Fees, and performance schedule may be required.

3.5. Documentation. Products and Services may be delivered with Documentation. Documentation is and will be owned by Motorola, unless otherwise expressly agreed in an Addendum or Proposal that certain Documentation will be owned by Customer. Motorola hereby grants Customer a limited, royalty-free, worldwide, non-exclusive license to use the Documentation solely for its internal business purposes in connection with the Products and Services.

3.6. Motorola Tools and Equipment. As part of delivering the Products and Services, Motorola may provide certain tools, equipment, models, and other materials of its own. Such tools and equipment will remain the sole property of Motorola unless they are to be purchased by Customer as Products and are explicitly listed on the Proposal. The tools and equipment may be held by Customer for Motorola's use without charge and may be removed from Customer's premises by Motorola at any time without restriction. Customer will safeguard all tools and equipment while in Customer's custody or control, and be liable for any loss or damage. Upon the expiration or earlier termination of this Agreement, Customer, at its expense, will return to Motorola all tools and equipment in its possession or control.

3.7. Authorized Users. Customer will ensure its employees and Authorized Users comply with the terms of this Agreement and will be liable for all acts and omissions of its employees and Authorized Users. Customer is responsible for the secure management of Authorized Users' names, passwords and login credentials for access to Products and Services.

3.8. Export Control. Customer, its employees, and any other Authorized Users will not access or use the Products and Services in any Prohibited Jurisdiction), and Customer will not provide access to the Products and Services to any government, entity, or individual located in a Prohibited Jurisdiction. Customer represents and warrants that (a) it and its Authorized Users are not named on any U.S. government list of persons prohibited from receiving U.S. exports, or transacting with any U.S. person; (b) it and its Authorized Users are not a national of, or a company registered in, any Prohibited Jurisdiction; (c) Customer will not permit its Authorized Users to access or use the Products or Services in violation of any U.S. or other applicable export embargoes, prohibitions or restrictions; and (d) Customer and its Authorized Users will comply with all applicable laws regarding the transmission of technical data exported from the U.S. and the country in which Customer, its employees, and the Authorized Users are located.

3.9. To obtain any additional Services, Customer will issue a purchase order referring to this Agreement and the separate proposal document. Omission of reference to this Agreement in Customer's purchase order will not affect the applicability of this Agreement. Motorola's proposal may include a cover page entitled "Service Agreement" or "Installation Agreement", as applicable, and other attachments. These cover pages and other attachments are incorporated into this Agreement by this reference.

3.10. Change Orders. Unless a different change control process is agreed upon in writing by the Parties, a Party may request changes to an Addendum or a Proposal by submitting a Change Order to the other Party. If a requested change in a Change Order causes an increase or decrease in the Products or Services, the Parties by means of the Change Order will make appropriate adjustments to the Fees, project schedule, or other matters. Change Orders are effective and binding on the Parties only upon execution of the Change Order by an authorized representative of both Parties.

Section 4. Term and Termination.

4.1. Term. The applicable Addendum or Proposal will set forth the Term for the Products and Services governed thereby.

4.1.1. Subscription Terms. The duration of Customer's subscription commences upon delivery of the first Subscription Software (and recurring Services, if applicable) ordered under this Agreement and will continue for a twelve (12) month period or such longer period identified in a Proposal (the "**Initial Subscription Period**") and will automatically renew for additional twelve (12) month periods (each, a "**Renewal Subscription Year**"), unless either Party notifies the other of its intent not to renew at least thirty (30) days before the conclusion of the then-current Subscription Term. (The Initial Subscription Period and each Renewal Subscription Year will each be referred to herein as a "**Subscription Term**".) Motorola may increase Fees prior to any Renewal Subscription Year. In such case, Motorola will notify Customer of such proposed increase no later than thirty (30) days prior to commencement of such Renewal Subscription Year.

Unless otherwise specified in writing, additional Subscription Software or recurring Services purchased under this Agreement will (a) commence upon delivery of such Subscription Software or recurring Service, and continue until the conclusion of Customer's then-current Subscription Term (a "**Partial Subscription Year**"), and (b) automatically renew for Renewal Subscription Years thereafter, unless either Party notifies the other of its intent not to renew at least thirty (30) days before the conclusion of the then-current Subscription Term. Unless otherwise specified in writing, the Subscription Terms for all Subscription Software and recurring Services hereunder will be synchronized.

4.2. Termination. Either Party may terminate the Agreement or the applicable Addendum or Proposal if the other Party breaches a material obligation under the Agreement and does not cure such breach within thirty (30) days after receipt of notice of the breach or fails to produce a cure plan within such period of time. Each Addendum and Proposal may be separately terminable as set forth therein.

4.3. Termination for Non-Appropriation. In the event any identified funding is not appropriated or becomes unavailable, the Customer reserves the right to terminate this Agreement for non-appropriation upon thirty (30) days' advance written notice to Motorola. In the event of such termination, Motorola shall be entitled to compensation for all conforming goods delivered and for all services performed prior to the effective date of termination date.

4.4. Suspension of Services. Motorola may promptly terminate or suspend any Products or Services under a Proposal if Motorola determines: (a) the related Product license has expired or has terminated for any reason; (b) the applicable Product is being used on a hardware platform, operating system, or version not approved by Motorola; or (c) Customer fails to make any payments when due.

4.5. Wind Down of Subscription Software. In addition to the termination rights in this Agreement, Motorola may terminate any Subscription Term, in whole or in part, in the event Motorola plans to cease offering the applicable Subscription Software or Service to customers.

4.6. Effect of Termination or Expiration. Upon termination for any reason or expiration of this Agreement, an Addendum, or a Proposal, Customer and the Authorized Users will return or destroy (at Motorola's option) all Motorola Materials and Motorola's Confidential Information in their possession or control, as allowed under Missouri Law, and, as applicable, provide proof of such destruction, except that Equipment purchased by Customer should not be returned. If Customer has any outstanding payment obligations under this Agreement, Motorola may accelerate and declare all such obligations of Customer immediately due and payable by Customer. Notwithstanding the reason for termination or expiration, Customer agrees to pay Motorola for Products and Services already delivered. Customer and Motorola has a duty to mitigate any damages under this Agreement, including in the event of default by Motorola and Customer's termination of this Agreement.

4.7. Equipment as a Service. In the event that Customer purchases any Equipment at a price below the published list price for such Equipment in connection with Customer entering into a fixed- or minimum required-term agreement for Subscription Software, and Customer or Motorola terminates the Agreement prior to the expiration of such fixed- or minimum required-term, then Motorola will have the right to invoice Customer for, and Customer will pay, the amount of the discount to the published list price for the Equipment or such other amount set forth in writing. This Section will not limit any other remedies Motorola may have with respect to an early termination.

Section 5. Payment, Invoicing, Delivery and Risk of Loss

5.1. Customer affirms they have signatory authority to execute this contract. The Contract Price which is stated in the proposal and excluding taxes, is fully committed and identified, including all subsequent years of contracted services, if applicable. The Customer will pay all invoices as received from Motorola subject to the terms of this Agreement and any changes in scope will be subject to the change order process as described in this Agreement.

Motorola acknowledges the Customer may require the issuance(s) of a purchase order or notice to proceed as part of the Customer's procurement process. However, Customer agrees that the issuance or non-issuance of a purchase order or notice to proceed does not preclude the Customer from its contractual obligations as defined in this Agreement.

5.2. Fees. Fees and charges applicable to the Products and Services will be as set forth in the applicable Addendum or Proposal. Changes in the scope of Services described in a Proposal that require an adjustment to the Fees will be set forth in the applicable pricing schedule. Unless otherwise specified in the applicable Proposal, the Fees for any Services exclude expenses associated with unusual and costly Site access requirements (e.g., if Site access requires a helicopter or other equipment), and Customer will reimburse Motorola, as long as the Parties agree to the costs in writing prior to the work commencing, for these or other expenses incurred by Motorola in connection with the Services. The annual subscription Fee for Subscription Software and associated recurring Services may include certain one-time Fees, such as start-up fees, license fees, or other fees set forth in a Proposal. Motorola may suspend the Subscription Software and any recurring Services if Customer fails to make any payments within thirty (30) days of invoice due date when due.

5.3. Taxes. The Fees do not include any excise, sales, lease, use, property, or other taxes, assessments, duties, or regulatory charges or contribution requirements (collectively, "**Taxes**"), all of which will be paid by Customer, except as exempt by law, unless otherwise specified in a Proposal. If Customer loses its tax exempt status and Motorola is required to pay any Taxes for good or services provided to the City during the Term of this Agreement Customer will reimburse Motorola for such Taxes (including any interest and penalties) within thirty (30) days after Customer's receipt of an invoice therefore. Customer will be solely responsible for reporting the Products for personal property tax purposes, and Motorola will be solely responsible for reporting taxes on its income and net worth.

5.4. Invoicing. Motorola will invoice Customer as described in this Agreement and Customer will pay all invoices within thirty (30) days of the invoice date or as otherwise specified in writing. In the event Customer finances the purchase of the Motorola Products and Services contemplated herein via Motorola Solutions Credit Corporation ("MSCC"), invoices for such purchase will be paid via the disbursement of the financing proceeds pursuant to the Equipment Lease - Purchase Agreement executed between the parties and the payment schedule enclosed therein shall control payment of the related invoices. Late payments will be subject to interest charges at the maximum rate permitted by Missouri law, commencing upon the due date. Motorola may invoice electronically via email, and Customer agrees to receive invoices via email at the email address set forth in a Proposal. Customer acknowledges and agrees that a purchase order or other notice to proceed is not required for payment for Products or Services.

5.5. Payment. Customer will pay invoices for the Products and Services provided under this Agreement in accordance with the invoice payment terms set forth in Section 5.4. Generally, invoices are issued after shipment of Equipment or upon Motorola's delivery of Licensed Software, or upon System Completion Date of a Software System, as applicable, but if a specific invoicing or payment schedule is set forth in the Agreement, such schedule will determine the invoicing cadence.

Motorola will have the right to suspend future deliveries of Products and Services if Customer fails to make any payments when due.

5.6. INVOICING AND SHIPPING ADDRESSES. Invoices will be sent to the Customer at the following address:

Name: Jarrod Winship

Address: 220 S.E. Green Street, Lee's Summit, MO 64063

Phone: 816-969-1115

E-INVOICE. To receive invoices via email:

Customer Account Number: _____

Customer Accounts Payable Email: AP@cityofls.net

Customer CC (optional) Email: Jarrod.Winship@cityofls.net

The address which is the ultimate destination where the Equipment will be delivered to

Customer is: Lee's Summit Police Department

Address: 10 NE Tudor Rd. Lee's Summit, MO 64086

The Equipment will be shipped to the Customer at the following address (insert if this information is known):

Name: Lee's Summit Police Department
Address: 10 NE Tudor Road, Lee's Summit, MO 64086
Phone: 816-969-1115

Customer may change this information by giving written notice to Motorola.

5.7. Delivery, Title and Risk of Loss. Motorola will provide to Customer the Products (and, if applicable, related Services) set forth in a Proposal, in accordance with the terms of the Agreement. Motorola will, using commercially reasonable practices, pack the ordered Equipment and ship such Equipment to the Customer address set forth in **Section 5.6** or otherwise provided by Customer in writing, using a carrier selected by Motorola.

Notwithstanding the foregoing and unless otherwise stated in an Equipment Lease - Purchase Agreement, delivery of Equipment (and any incorporated Licensed Software) will occur, and title and risk of loss for the Equipment will pass to Customer, upon acceptance at each site location. . Notwithstanding the above, title and risk of loss for all subscriber radios and related subscriber radio accessories, if purchased, will pass upon delivery to a Customer designated location. Customer will pay all shipping costs, taxes, and other charges applicable to the shipment and import or export of the Products and Services, as applicable, and Customer will be responsible for reporting the Products for personal property tax purposes.

Delivery of Licensed Software for installation on Equipment or Customer-Provided Equipment will occur upon the earlier of (a) electronic delivery of the Licensed Software by Motorola, and (b) the date Motorola otherwise makes the Licensed Software available for download by Customer. If agreed upon in a Proposal, Motorola will also provide Services related to such Products. Title to Licensed Software and/or Subscription Software will not pass to Customer at any time.

5.8. Delays. Any shipping dates set forth in a Proposal are approximate, and while Motorola will make reasonable efforts to ship Products by any such estimated shipping date, Motorola will not be liable for any delay or related damages to Customer.

5.9. Future Regulatory Requirements. The Parties acknowledge and agree that certain Services (i.e. cyber) are an evolving technological area and therefore, laws and regulations regarding Services may change. Changes to existing Services required to achieve regulatory compliance may be available for an additional fee. Any required changes may also impact the price for Services.

Section 6. Sites; Customer-Provided Equipment; Non-Motorola Materials.

6.1. Access to Sites. Customer and Motorola (as applicable) will be responsible for providing all necessary permits, licenses, and other approvals necessary for the installation and use of the Products and the performance of the Services at each applicable Site as outlined in Exhibit A Motorola Proposal, including for Motorola to perform its obligations hereunder, and for facilitating Motorola's access to the Sites. No waivers of liability will be imposed on Motorola or its subcontractors by Customer or others at Customer facilities or other Sites, but if and to the extent any such waivers are imposed, the Parties agree such waivers are void.

6.2. Site Conditions. Customer and Motorola will ensure that (a) all Sites are safe and secure, (b) Site conditions meet all applicable industry and legal standards (including standards promulgated by OSHA or other governmental or regulatory bodies), (c) to the extent applicable, Sites have adequate physical space, air conditioning, and other environmental conditions, electrical power outlets, distribution, equipment, connections, and telephone or other communication lines (including modem access and interfacing networking capabilities), and (d) Sites are suitable for the installation, use, and maintenance of the Products and Services. This Agreement is predicated upon normal soil conditions as defined by the version of E.I.A. standard RS-222 in effect on the Effective Date.

6.3. Site Issues. Upon its request, which will not be unreasonably denied, Motorola will have the right to inspect the Sites and advise Customer of any deficiencies or non-conformities with the requirements of this **Section 6 – Sites; Customer-Provided Equipment; Non-Motorola Materials**. If Motorola or Customer identifies any deficiencies or non-conformities, Customer will promptly remediate such issues or the Parties will select a replacement Site. If a Party determines that a Site identified in a Proposal is not acceptable or desired, the Parties will cooperate to investigate the conditions and select a replacement Site or otherwise adjust the installation plans and specifications as necessary. A change in Site or adjustment to the installation plans and specifications may cause a change in the Fees or performance schedule under the applicable Proposal.

6.4. Customer-Provided Equipment. Customer will be responsible, at its sole cost and expense, for providing and maintaining the Customer-Provided Equipment in good working order. Customer represents and warrants that it has all rights in Customer-Provided Equipment to permit Motorola to access and use the applicable Customer-Provided Equipment to provide the Products and Services under this Agreement, and such access and use will not violate any laws or infringe any third-party rights (including intellectual property rights). Customer (and not Motorola) will be fully liable for Customer-Provided Equipment, and Customer will immediately notify Motorola of any Customer-Provided Equipment damage, loss, change, or theft that may impact Motorola's ability to provide the Products and Services under this Agreement, and Customer acknowledges

that any such events may cause a change in the Fees or performance schedule under the applicable Proposal.

6.5. Non-Motorola Materials. In certain instances, Customer may be permitted to access, use, or integrate Non-Motorola Materials with or through the Products and Services. If Customer accesses, uses, or integrates any Non-Motorola Materials with the Products or Services, Customer will first obtain all necessary rights and licenses to permit Customer's and its Authorized Users' use of the Non-Motorola Materials in connection with the Products and Services. Customer will also obtain the necessary rights for Motorola to use such Non-Motorola Materials in connection with providing the Products and Services, including the right for Motorola to access, store, and process such Non-Motorola Materials (e.g., in connection with Subscription Software), and to otherwise enable interoperation with the Products and Services. Customer represents and warrants that it will obtain the foregoing rights and licenses prior to accessing, using, or integrating the applicable Non-Motorola Materials with the Products and Services, and that Customer and its Authorized Users will comply with any terms and conditions applicable to such Non-Motorola Materials. If any Non-Motorola Materials requires access to Customer Data (as defined below), Customer hereby authorizes Motorola to allow the provider of such Non-Motorola Materials to access Customer Data, in connection with the interoperation of such Non-Motorola Materials with the Products and Services.

6.6. Customer acknowledges and agrees that Motorola is not responsible for, and makes no representations or warranties with respect to, the Non-Motorola Materials (including any disclosure, modification, or deletion of Customer Data resulting from use of Non-Motorola Materials or failure to properly interoperate with the Products and Services). If Customer receives notice that any Non-Motorola Materials must be removed, modified, or disabled within the Products or Services, Customer will promptly do so. Motorola will have the right to disable or remove Non-Motorola Materials if Motorola believes a violation of law, third-party rights, or Motorola's policies is likely to occur, or if such Non-Motorola Materials poses or may pose a security or other risk or adverse impact to the Products or Services, Motorola, Motorola's systems, or any third party (including other Motorola customers).

6.7. Motorola may provide certain Non-Motorola Materials as an authorized sales representative of a third party as set out in a Proposal. As an authorized sales representative, the third party's terms and conditions, as set forth in the Proposal, will apply to any such sales. Any orders for such Non-Motorola Materials will be filled by the third party. Nothing in this Section will limit the exclusions set forth in **Section 8.2 – Intellectual Property Infringement**.

6.8. End User Licenses. Notwithstanding any provision to the contrary in the Agreement, certain Non-Motorola Materials software are governed by a separate license, EULA, or other agreement, including terms governing third-party equipment or software, such as open source software, included in the Products and Services. Customer will comply, and ensure its Authorized Users comply, with any such additional terms applicable to third-party equipment or software. Third party software flow-down terms applicable to Motorola products are attached and incorporated herein as Exhibit D.

6.9. Prohibited Use. Customer will not integrate or use, or permit a third party or an Authorized User to integrate or use, any Non-Motorola Materials with or in connection with a Software System or other software Product provided by Motorola under this Agreement, without the express written permission of Motorola.

6.10. API Support. Motorola will use commercially reasonable efforts to maintain its Application Programming Interface ("API") offered solely in connection with any Software

System. APIs will evolve and mature over time, requiring changes and updates. Motorola will use reasonable efforts to continue supporting any version of an API for 6 months after such version is introduced, but if Motorola determines, in its sole discretion, to discontinue support of an API for any reason, Motorola will provide reasonable advance notification to Customer. If an API presents a security risk, Motorola may discontinue an API without prior notice.

6.11. Support of Downloaded Clients. If Customer purchases any software Product that requires a client installed locally on any Customer-Provided Equipment or Equipment in possession of Customer, Customer will be responsible for downloading and installing the current version of such client, as it may be updated from time to time. Motorola will use reasonable efforts to continue supporting any version of a client for forty-five (45) days following its release, but Motorola may update the current version of its client at any time, including for bug fixes, product improvements, and feature updates, and Motorola makes no representations or warranties that any software Product will support prior versions of a client.

Section 7. Representations and Warranties.

7.1. Mutual Representations and Warranties. Each Party represents and warrants to the other Party that (a) it has the right to enter into the Agreement and perform its obligations hereunder, and (b) the Agreement will be binding on such Party.

7.2. Communications System Warranty. Motorola represents and warrants that, on the date of System Acceptance, (a) the Communications System will perform in accordance with the descriptions in the applicable Proposal in all material respects, and (b) if Customer has purchased any Equipment or Motorola Licensed Software (but, for clarity, excluding Subscription Software) as part of such Communications System, the warranty period applicable to such Equipment and Motorola Licensed Software will continue for a period of one (1) year commencing upon System Acceptance (the "Warranty Period").

7.3. During the Warranty Period, in addition to warranty services, Motorola will provide Maintenance and Support Services for the Equipment and support for the Motorola Licensed Software pursuant to the applicable maintenance and support Proposal. Support for the Motorola Licensed Software will be in accordance with Motorola's established Software Support Policy ("SwSP"). The SwSP is attached to and incorporated herein as Exhibit D. If Customer wishes to purchase (a) additional Maintenance and Support Services during the Warranty Period; or (b) continue or expand maintenance, software support, installation, and/or Motorola's Lifecycle Management Services ("LMS") after the Warranty Period, Motorola will provide the description of and pricing for such services in a separate proposal document and such terms will be agreed upon in a Proposal. Unless otherwise agreed by the Parties in writing, the terms and conditions in this Agreement applicable to maintenance, support, installation, and/or LMS, will be included in the Maintenance and Support Addendum, LMS Addendum, the applicable Proposals, and the proposal (if applicable). These collective terms will govern the provision of such Services.

7.4. On-Premises Software System Warranty. Motorola represents and warrants that, on the System Completion Date, or on the applicable Product Completion Date for a specific Product within such on-premises Software System, if earlier, (a) such Software System or Product will perform in accordance with the descriptions in the applicable Proposals in all material respects, and (b) if Customer has purchased any Equipment or Motorola Licensed Software (but, for clarity, excluding Subscription Software) as part of such on-premises Software System, the warranty period applicable to such Equipment and Motorola Licensed Software will continue for a period of one (1) year commencing upon the System Completion Date for the Software System that includes such Products, or on the applicable Product Completion Date, if earlier.

7.4.1. On-premises Software Systems as a service and cloud hosted Software Systems are provided as a service and accordingly do not qualify for the On-premises Software System Warranty. System completion, however, for each of these solutions is determined in accordance with **Section 12.2 Software System Completion** below.

7.5. Motorola Warranties - Services. Subject to the disclaimers and exclusions below, Motorola represents and warrants that (a) Services will be provided in a good and workmanlike manner and will conform in all material respects to the descriptions in the applicable Proposal; and (b) for a period of ninety (90) days commencing upon the Service Completion Date for one-time Services, the Services will be free of material defects in materials and workmanship. Other than as set forth in subsection (a) above, recurring Services are not warranted but rather will be subject to the requirements of the applicable Addendum or Proposal.

7.6. Motorola Warranties - Equipment. Subject to the disclaimers and exclusions set forth below, (a) for a period of one (1) year commencing upon the delivery of Motorola-manufactured Equipment under **Section 5.7 – Delivery, Title and Risk of Loss**, Motorola represents and warrants that such Motorola-manufactured Equipment, under normal use, will be free from material defects in materials and workmanship; and (b) The warranties applicable to Motorola-manufactured Equipment set forth in herein shall be applicable to all radio Equipment purchased hereunder whether or not such Equipment was manufactured by Motorola.

7.7. Motorola Licensed Software Warranty. Unless otherwise stated in the License Agreement, for a period of ninety (90) days commencing upon the delivery of Motorola-owned Licensed Software, Motorola represents and warrants that such Licensed Software, when used in accordance with the Documentation and the Agreement, will be free from reproducible defects that prevent operation of features critical to the primary functionality or successful operation of the Motorola-developed Licensed Software (as determined by Motorola)

7.7.1. As Customer's sole and exclusive remedy for any breach of the Motorola Licensed Software Warranty, Motorola will use commercially reasonable efforts to remedy the material defect in the applicable Licensed Software; provided, however, that if Motorola does not remedy such material defect within a reasonable time, then at Motorola's sole option, Motorola will either replace the defective Licensed Software with functionally-equivalent software, provide substitute software to Customer, or terminate the applicable software license and refund any paid license fees to Customer on a pro-rata basis.

7.7.2. For clarity, the Motorola Licensed Software Warranty applies only to the most current version of the Licensed Software issued by Motorola, and issuance of updated versions of any Licensed Software does not result in a renewal or extension of the Motorola Licensed Software Warranty beyond the ninety (90) day warranty period.

7.8. ADDITIONAL WARRANTY EXCLUSIONS. NOTWITHSTANDING ANY PROVISION OF THE AGREEMENT TO THE CONTRARY, MOTOROLA WILL HAVE NO LIABILITY FOR (A) DEFECTS IN OR DAMAGE TO PRODUCTS RESULTING FROM USE OTHER THAN IN THE NORMAL AUTHORIZED MANNER, OR FROM ACCIDENT, LIQUIDS, OR NEGLIGENCE; (B) TESTING, MAINTENANCE, REPAIR, INSTALLATION, OR MODIFICATION BY PARTIES OTHER THAN MOTOROLA; (C) CUSTOMER'S OR ANY AUTHORIZED USER'S FAILURE TO COMPLY WITH INDUSTRY AND OSHA OR OTHER LEGAL STANDARDS; (D) DAMAGE TO RADIO ANTENNAS, UNLESS CAUSED BY DEFECTS IN MATERIAL OR WORKMANSHIP; (E)

EQUIPMENT WITH NO SERIAL NUMBER; (F) BATTERIES OR CONSUMABLES; (G) FREIGHT COSTS FOR SHIPMENT TO REPAIR DEPOTS; (H) COSMETIC DAMAGE THAT DOES NOT AFFECT OPERATION; (I) NORMAL WEAR AND TEAR; (J) ISSUES OR OBSOLESCENCE OF LICENSED SOFTWARE DUE TO CHANGES IN CUSTOMER OR AUTHORIZED USER REQUIREMENTS, EQUIPMENT, OR SYSTEMS; (K) TRACKING AND LOCATION-BASED SERVICES; OR (L) BETA SERVICES.

7.9. Warranty Claims; Remedies. To assert a warranty claim, Customer must notify Motorola in writing of the claim prior to the expiration of any warranty period set forth in this Agreement. Unless a different remedy is otherwise expressly set forth herein, upon receipt of such claim, Motorola will investigate the claim and use commercially reasonable efforts to repair or replace any confirmed materially non-conforming Product or re-perform any non-conforming Service, at its option. Such remedies are Customer's sole and exclusive remedies for Motorola's breach of a warranty. Motorola's warranties are extended by Motorola to Customer only, and are not assignable or transferable.

7.10. Pass-Through Warranties. Notwithstanding any provision of this Agreement to the contrary, Motorola will have no liability for third-party software or hardware provided by Motorola; provided, however, that to the extent offered by third-party providers of software or hardware and to the extent permitted by law, Motorola will pass through express warranties provided by such third parties.

7.11. WARRANTY DISCLAIMER. EXCEPT FOR THE EXPRESS AND PASS THROUGH WARRANTIES IN THIS AGREEMENT, PRODUCTS AND SERVICES PURCHASED HEREUNDER ARE PROVIDED "AS IS" AND WITH ALL FAULTS. WARRANTIES SET FORTH IN THE AGREEMENT ARE THE COMPLETE WARRANTIES FOR THE PRODUCTS AND SERVICES AND MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE, AND QUALITY. MOTOROLA DOES NOT REPRESENT OR WARRANT THAT USE OF THE PRODUCTS AND SERVICES WILL BE UNINTERRUPTED, ERROR-FREE, OR FREE OF SECURITY VULNERABILITIES, OR THAT THEY WILL MEET CUSTOMER'S PARTICULAR REQUIREMENTS.

Section 8. Indemnification.

8.1. General Indemnity. Motorola will defend, indemnify, and hold Customer harmless from and against any and all damages, losses, liabilities, and expenses (including reasonable fees and expenses of attorneys) arising from any actual third-party claim, demand, action, or proceeding ("Claim") for personal injury, death, or direct damage to tangible property to the extent caused by Motorola's negligence, gross negligence or willful misconduct while performing its duties under this Agreement, except to the extent the claim arises from Customer's negligence or willful misconduct. Motorola's duties under this **Section 8.1 – General Indemnity** are conditioned upon: (a) Customer promptly notifying Motorola in writing of the Claim; (b) Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise to the extent allowed by applicable law; and (c) Customer cooperating with Motorola and, if requested by Motorola, providing reasonable assistance in the defense of the Claim.

8.2. Intellectual Property Infringement. Motorola will defend Customer against any third-party claim alleging that a Motorola-developed or manufactured Product or Service (the "Infringing

Product”) directly infringes a United States patent or copyright (“Infringement Claim”), and Motorola will pay all damages finally awarded against Customer, including attorney fees and the cost of defense, by a court of competent jurisdiction for an Infringement Claim, or agreed to in writing by Motorola in settlement of an Infringement Claim. Motorola’s duties under this **Section 8.2 – Intellectual Property Infringement** are conditioned upon: (a) Customer promptly notifying Motorola in writing of the Infringement Claim; (b) Motorola having sole control of the defense of the suit and all negotiations for its settlement or compromise; and (c) Customer cooperating with Motorola and, if requested by Motorola, providing reasonable assistance in the defense of the Infringement Claim.

8.2.1. If an Infringement Claim occurs, or in Motorola’s opinion is likely to occur, Motorola may at its option and expense: (a) procure for Customer the right to continue using the Infringing Product; (b) replace or modify the Infringing Product so that it becomes non-infringing; or (c) grant Customer (i) a prorated refund of any amounts pre-paid for the Infringing Product (if the Infringing Product is a software Product, i.e., Licensed Software or Subscription Software) or (ii) a credit for the Infringing Product, less a reasonable charge for depreciation (if the Infringing Product is Equipment, including Equipment with embedded software).

8.2.2. In addition to the other damages disclaimed under this Agreement, Motorola will have no duty to defend or indemnify Customer for any Infringement Claim that arises from or is based upon: (a) Customer Data, Customer-Provided Equipment, Non-Motorola Materials, or third-party equipment, hardware, software, data, or other third-party materials; (b) the combination of the Product or Service with any products or materials not provided by Motorola; (c) a Product or Service designed, modified, or manufactured in accordance with Customer’s designs, specifications, guidelines or instructions; (d) a modification of the Product or Service by a party other than Motorola; (e) use of the Product or Service in a manner for which the Product or Service was not designed or that is inconsistent with the terms of this Agreement; or (f) the failure by Customer to use or install an update to the Product or Service that is intended to correct the claimed infringement. In no event will Motorola’s liability resulting from an Infringement Claim extend in any way to any payments due on a royalty basis, other than a reasonable royalty based upon revenue derived by Motorola from Customer from sales or license of the Infringing Product.

8.2.3. This **Section 8.2 – Intellectual Property Infringement** provides Customer’s sole and exclusive remedies and Motorola’s entire liability in the event of an Infringement Claim.

8.3. Customer Indemnity. To the extent allowed by Missouri law and the Missouri Constitution, Customer will defend, indemnify, and hold Motorola and its subcontractors, subsidiaries and other affiliates harmless from and against any and all damages, losses, liabilities, and expenses (including reasonable fees and expenses of attorneys) arising from any actual third-party claim, demand, action, or proceeding arising from or related to (a) Customer-Provided Equipment, Customer Data, or Non-Motorola Materials, including any claim, demand, action, or proceeding alleging that any such equipment, data, or materials (or the integration or use thereof with the Products and Services) infringes or misappropriates a third-party intellectual property or other right, violates applicable law, or breaches the Agreement; (b) Customer-Provided Equipment’s failure to meet the minimum requirements set forth in the applicable Documentation or match the applicable specifications provided to Motorola by Customer in connection with the Products or Services; (c) Customer’s (or its service providers, agents, employees, or Authorized User’s) negligence or willful misconduct; and (d) Customer’s or its Authorized User’s breach of this Agreement. This indemnity will not apply to the extent any such claim is caused by Motorola’s use of Customer-Provided Equipment, Customer Data, or Non-Motorola Materials in violation of the Agreement. Motorola will give Customer prompt, written notice of any claim subject to the

foregoing indemnity. Motorola will, at its own expense, cooperate with Customer in its defense or settlement of the claim. In no event shall the language of this Section constitute or be construed as a waiver or limitation of the Customer's rights or defenses with regard to sovereign immunity, governmental immunity, or other official immunities and protections as provided by the federal and state constitutions or by law.

Section 9. Limitation of Liability.

9.1. EXCEPT FOR PERSONAL INJURY OR DEATH, THE TOTAL AGGREGATE LIABILITY OF MOTOROLA AND CUSTOMER, ITS AFFILIATES, AND ITS AND THEIR RESPECTIVE OFFICERS, DIRECTORS, EMPLOYEES, SUBCONTRACTORS, AGENTS, SUCCESSORS, AND ASSIGNS (COLLECTIVELY, THE "MOTOROLA PARTIES"), WHETHER BASED ON A CLAIM IN CONTRACT OR IN TORT, LAW OR EQUITY, RELATING TO OR ARISING OUT OF THE AGREEMENT WILL NOT EXCEED THE FEES, OR PORTION OF FEES, RELATED TO THE PRODUCT OR INTEGRATION SERVICE UNDER WHICH THE CLAIM AROSE. WITH RESPECT TO ANY SUBSCRIPTION SOFTWARE OR ANY RECURRING SERVICES, THE MOTOROLA PARTIES' TOTAL AGGREGATE LIABILITY FOR ALL CLAIMS RELATED TO SUBSCRIPTION SOFTWARE OR RECURRING SERVICES WILL NOT EXCEED THE TOTAL FEES PAID FOR THE APPLICABLE SUBSCRIPTION SOFTWARE OR RECURRING SERVICE DURING THE CONSECUTIVE TWELVE (12) MONTH PERIOD IMMEDIATELY PRECEDING THE EVENT FROM WHICH THE FIRST CLAIM AROSE. EXCEPT FOR PERSONAL INJURY OR DEATH, THE MOTOROLA PARTIES WILL NOT BE LIABLE IN CONNECTION WITH THIS AGREEMENT (WHETHER UNDER MOTOROLA'S INDEMNITY OBLIGATIONS, A CAUSE OF ACTION FOR BREACH OF CONTRACT, UNDER TORT THEORY, OR OTHERWISE) FOR ANY INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, PUNITIVE, OR CONSEQUENTIAL DAMAGES OR DAMAGES FOR LOST PROFITS OR REVENUES, EVEN IF MOTOROLA HAS BEEN ADVISED BY CUSTOMER OR ANY THIRD PARTY OF THE POSSIBILITY OF SUCH DAMAGES OR LOSSES AND WHETHER OR NOT SUCH DAMAGES OR LOSSES ARE FORESEEABLE.

9.2. EXCLUSIONS FROM LIABILITY. NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, MOTOROLA WILL HAVE NO LIABILITY FOR DAMAGES ARISING OUT OF (A) CUSTOMER DATA, INCLUDING ITS TRANSMISSION TO MOTOROLA, OR ANY OTHER DATA AVAILABLE THROUGH THE PRODUCTS OR SERVICES; (B) CUSTOMER-PROVIDED EQUIPMENT OR SITES; NON-MOTOROLA MATERIALS; THIRD-PARTY EQUIPMENT, HARDWARE, SOFTWARE, DATA, OR CONTENT; OR UNKNOWN OR UNAUTHORIZED COMBINATION OF PRODUCTS AND SERVICES ; (C) LOSS OF DATA, HACKING, RANSOMWARE, THIRD-PARTY ATTACKS OR DEMANDS; (D) MODIFICATION OF PRODUCTS OR SERVICES NOT AUTHORIZED BY MOTOROLA; (E) RECOMMENDATIONS PROVIDED IN CONNECTION WITH THE PRODUCTS AND SERVICES PROVIDED UNDER THIS AGREEMENT; (F) DATA RECOVERY SERVICES OR DATABASE MODIFICATIONS; OR (G) CUSTOMER'S OR ANY AUTHORIZED USER'S BREACH OF THIS AGREEMENT OR MISUSE OF THE PRODUCTS AND SERVICES.

MOTOROLA AND THE CUSTOMER AGREE TO COLLABORATE IN GOOD FAITH TO INVESTIGATE AND ADDRESS DAMAGES ARISING FROM LOSS OF DATA, HACKING, RANSOMWARE, THIRD-PARTY ATTACKS OR DEMANDS. IN THE EVENT OF AN INCIDENT BOTH PARTIES WILL PROMPTLY WORK TOGETHER TO DETERMINE THE ROOT CAUSE,

ASSESS THE CONTRIBUTING FACTORS, AND IMPLEMENT REASONABLE MEASURES TO MITIGATE AND RECTIFY THE ISSUE. MOTOROLA'S EXCLUSION OF LIABILITY SHALL NOT APPLY IN CASE OF WILLFUL MISCONDUCT OR GROSS NEGLIGENCE IN DELIVERING THE PRODUCTS OR SERVICES AND CUSTOMER WILL REMAIN RESPONSIBLE FOR ITS OWN SECURITY PRACTICES AND COMPLIANCE WITH AGREED PROTOCOLS.

IN ADDITION TO THE FOREGOING EXCLUSIONS FROM DAMAGES, AND NOTWITHSTANDING ANY PROVISION OF THE AGREEMENT TO THE CONTRARY, MOTOROLA WILL HAVE NO LIABILITY FOR (A) INTERRUPTION OR FAILURE OF CONNECTIVITY, VULNERABILITIES, OR SECURITY EVENTS; (B) DISRUPTION OF OR DAMAGE TO CUSTOMER'S OR THIRD PARTIES' SYSTEMS, EQUIPMENT, OR DATA, INCLUDING DENIAL OF ACCESS TO USERS, OR SHUTDOWN OF SYSTEMS CAUSED BY INTRUSION DETECTION SOFTWARE OR HARDWARE; (C) AVAILABILITY OR ACCURACY OF ANY DATA AVAILABLE THROUGH THE SUBSCRIPTION SOFTWARE OR SERVICES, OR INTERPRETATION, USE, OR MISUSE THEREOF; (D) TRACKING AND LOCATION-BASED SERVICES; OR (E) BETA SERVICES.

9.3 Statute of Limitations. Customer may not bring any claims against a Motorola Party in connection with this Agreement or the Products and Services more than one (1) year after the date of accrual of the cause of action or when Customer becomes aware of the cause of action, whichever is longer in time.

Section 10. Confidentiality.

10.1. Confidential Information. In order to be considered Confidential Information, information that is disclosed orally must be identified as confidential at the time of disclosure and confirmed by disclosing party ("Discloser") by submitting a written document to receiving party ("Recipient") within thirty (30) days after such disclosure. The written document must contain a summary of the Confidential Information disclosed with enough specificity for identification purpose and must be labeled or marked as confidential or its equivalent.

10.2. Obligations of Confidentiality. During the Term and for a period of three (3) years from the expiration or termination of this Agreement, Recipient will (a) not disclose Confidential Information to any third party, except as expressly permitted in this **Section 10 - Confidentiality**; (b) restrict disclosure of Confidential Information to only those employees, agents or consultants who must access the Confidential Information for the purpose of providing Services and who are bound by confidentiality terms substantially similar to those in this Agreement and licenses; (c) not copy, reproduce, reverse engineer, decompile or disassemble any Confidential Information; (d) use the same degree of care as for its own information of like importance, but no less than reasonable care to safeguard against disclosure; (e) promptly notify Discloser upon discovery of any unauthorized use or disclosure of the Confidential Information and take reasonable steps to regain possession of the Confidential Information and prevent further unauthorized actions or other breach of this Section; and (f) only use the Confidential Information as needed to fulfill its obligations and secure its rights under this Agreement.

10.3. Exceptions. Recipient may disclose Confidential Information to the extent required by law, or a judicial or legislative order or proceeding. Recipient is not obligated to maintain as confidential any information that Recipient can demonstrate by documentation (a) is publicly known or available prior to without breach of this Agreement; (b) is lawfully obtained; or (c) is

independently known or developed by Recipient without the use of, or reference to, any of Discloser's Confidential Information or any breach of this Agreement.

10.4. Ownership of Confidential Information. All Confidential Information is and will remain the property of Discloser, and will not be copied or reproduced without written permission. Within ten (10) days of receipt of Discloser's written request, Recipient will return or destroy all Confidential Information to Discloser, as allowed by law, or certify in writing that all such Confidential Information has been destroyed. However, Recipient may retain (a) one (1) archival copy for use only in case of a dispute concerning this Agreement, and (b) Confidential Information that has been automatically stored in accordance with Recipient's standard backup or recordkeeping procedures. Recipient will remain subject to the obligations of this Agreement with respect to any Confidential Information retained subject to clauses (a) or (b). No license, express or implied, in the Confidential Information is granted to the Recipient other than to use it in the manner, and to the extent authorized by this Agreement. Discloser represents and warrants that it is authorized to disclose any Confidential Information it discloses pursuant to this Agreement.

Section 11. Proprietary Rights; Data; Feedback.

11.1. Motorola Materials. Customer acknowledges that Motorola may use or provide Customer with access to "Motorola Materials". Except when Motorola has expressly transferred title or other interest to Customer by way of an Addendum, the Motorola Materials are the property of Motorola or its licensors, and Motorola or its licensors retain all right, title and interest in and to the Motorola Materials (including, all rights in patents, copyrights, trademarks, trade names, trade secrets, know-how, other intellectual property and proprietary rights, and all associated goodwill and moral rights).

This Agreement does not grant to Customer any shared development rights in or to any Motorola Materials or other intellectual property, and Customer agrees to execute any documents and take any other actions reasonably requested by Motorola to effectuate the foregoing. Motorola and its licensors reserve all rights not expressly granted to Customer, and no rights, other than those expressly granted herein, are granted to Customer by implication, estoppel or otherwise. Customer will not modify, disassemble, reverse engineer, derive source code or create derivative works from, merge with other software, distribute, sublicense, sell, or export the Products and Services or other Motorola Materials, or permit any third party to do so.

11.2. Ownership of Customer Data. Customer retains all right, title and interest, including intellectual property rights, if any, in and to Customer Data. Motorola acquires no rights to Customer Data except those rights granted under this Agreement including the right to Process and use the Customer Data as set forth in the DPA.

11.3. Data Retention and Deletion. Except as expressly provided otherwise under the DPA, Motorola will delete all Customer Data following termination or expiration of this MCA or the applicable Addendum or Proposal, with such deletion to occur no later than ninety (90) days following the applicable date of termination or expiration, unless otherwise required to comply with applicable law. Any requests for the exportation or download of Customer Data must be made by Customer to Motorola in writing before expiration or termination, subject to **Section 15.9 – Notices**. Motorola will have no obligation to retain such Customer Data beyond expiration or termination unless the Customer has purchased extended storage from Motorola through a mutually executed Proposal.

11.4. Service Use Data. Customer understands and agrees that Motorola may collect and use Service Use Data for its own purposes, and may disclose Service Use Data to third parties. It is Customer's responsibility to notify Authorized Users of Motorola's collection and use of Service Use Data and to obtain any required consents, provide all necessary notices, and meet any other applicable legal requirements with respect to such collection and use, and Customer represents and warrants to Motorola that it has complied and will continue to comply with this Section.

11.5. Third-Party Data and Motorola Data. Customer will not, and will use reasonable efforts to ensure its Authorized Users will not: (a) use the Motorola Data or Third-Party Data for any purpose other than Customer's internal business purposes; (b) disclose the data to third parties; (c) "white label" such data or otherwise misrepresent its source or ownership, or resell, distribute, sublicense, or commercially exploit the data in any manner; (d) use such data in violation of applicable laws; (e) remove, obscure, alter, or falsify any marks or proprietary rights notices indicating the source, origin, or ownership of the data; or (f) modify such data or combine it with Customer Data or other data or use the data to build databases. Additional restrictions may be set forth in the applicable Addendum.

11.5.1. Any rights granted to Customer or Authorized Users with respect to Motorola Data or Third-Party Data will immediately terminate upon termination or expiration of the applicable Addendum, Proposal, or this MCA. Further, Motorola or the applicable Third-Party Data provider may suspend, change, or terminate Customer's or any Authorized User's access to Motorola Data or Third-Party Data if Motorola or such Third-Party Data provider believes Customer's or the Authorized User's use of the data violates the Agreement, applicable law or Motorola's agreement with the applicable Third-Party Data provider.

11.5.2. Upon termination of Customer's rights to use any Motorola Data or Third-Party Data, Customer and all Authorized Users will immediately discontinue use of such data, delete all copies of such data, and certify such deletion to Motorola. Notwithstanding any provision of the Agreement to the contrary, Motorola will have no liability for Third-Party Data or Motorola Data available through the Products and Services. Motorola and its Third-Party Data providers reserve all rights in and to Motorola Data and Third-Party Data not expressly granted in an Addendum or Proposal.

11.6. Feedback. Any Feedback provided by Customer is entirely voluntary, and will not create any confidentiality obligation for Motorola, even if designated as confidential by Customer. Motorola may use, reproduce, license, and otherwise distribute and exploit the Feedback without any obligation or payment to Customer or Authorized Users and Customer represents and warrants that it has obtained all necessary rights and consents to grant Motorola the foregoing rights.

11.7. Improvements; Products and Services. The Parties agree that, notwithstanding any provision of this Agreement to the contrary, all fixes, modifications and improvements to the Services or Products conceived of or made by or on behalf of Motorola that are based either in whole or in part on the Feedback, Customer Data, or Service Use Data (or otherwise) are the exclusive property of Motorola and all right, title and interest in and to such fixes, modifications or improvements will vest solely in Motorola. Customer agrees to execute any written documents necessary to assign any intellectual property or other rights it may have in such fixes, modifications or improvements to Motorola.

Section 12. Acceptance

12.1. Communications System Acceptance.

12.1.1. Any Communications System described in the Proposal hereunder (including the Products, Integration Services, and all other components thereof) will be deemed completed upon successful completion of the acceptance procedures ("Acceptance Tests") set forth in the Acceptance Test Plan ("System Acceptance"). Motorola will notify Customer at least ten (10) days before the Communications System testing commences. Upon System Acceptance, the Parties will memorialize this event by promptly executing a certificate documenting such System Acceptance. If the Acceptance Test Plan includes separate tests for individual sub-Systems or phases of the Communications System, acceptance of the individual sub-System or phase will occur upon the successful completion of the Acceptance Tests for the sub-Communications System or phase, and the Parties will promptly execute an acceptance certificate for the sub-Communications System or phase. If Customer believes the Communications System has failed the completed Acceptance Tests, Customer will provide to Motorola a written notice that includes the specific details of the failure. If Customer does not provide to Motorola a failure notice within thirty (30) days after completion of the Acceptance Tests, System Acceptance will be deemed to have occurred as of the completion of the Acceptance Tests. Minor omissions or variances in the Communications System that do not materially impair the operation of the Communications System as a whole will not postpone System Acceptance or sub-Communications System acceptance, but will be corrected according to a mutually agreed punch list schedule. This Section applies to Products purchased as part of a Communications System notwithstanding any conflicting delivery provisions within this Agreement and this Section will control over such other delivery provisions to the extent of a conflict.

12.1.2. Beneficial Use. Customer acknowledges that Motorola's ability to perform its implementation and testing responsibilities may be impeded if Customer begins using the Communications System before System Acceptance.

12.1.3. Customer shall not commence using the system before System Acceptance without Motorola's prior written authorization, which will not be unreasonably withheld. Motorola is not responsible for Communications System performance deficiencies that occur prior to System Acceptance or written authorized use. Upon the date Customer begins using the Communications System, Customer assumes responsibility for the use and operation of the Communications System.

12.2 Software System Completion. Any Software System described in the Proposal (including the Products, Integration Services, and all other components thereof) will be deemed completed upon Customer's (or the applicable Authorized User's) Beneficial Use of each Product that is included in the Software System (unless alternative acceptance procedures are set forth in the Proposal) (the "System Completion Date"). Customer will not unreasonably delay Beneficial Use of any Product within a Software System, and in any event, the Parties agree that Beneficial Use of a Product will be deemed to have occurred thirty (30) days after functional demonstration. For clarity, if a Software System is comprised of more than one Product, Motorola may notify Customer that all Integration Services for a particular Product within the Software System have been completed, and Customer may have Beneficial Use of such Product prior to having Beneficial Use of other Products in the Software System, or of the Software System as a whole. In such case, the Integration Services applicable to such Product will be deemed complete upon Customer's Beneficial Use of the Product ("Product Completion Date"), which may occur before the System Completion Date. As used in this Section, "Beneficial Use" means use by Customer or at least one (1) Authorized User of the material features and functionalities of a Product within a Software System, in material conformance with Product descriptions in the Proposal. This Section applies to Products purchased as part of a Software System notwithstanding any

conflicting delivery provisions within this Agreement, and will control over such other delivery provisions to the extent of a conflict.

Section 13. Force Majeure; Delays Caused by Customer.

13.1. Force Majeure. Except for Customer's payment obligations hereunder, neither Party will be responsible for nonperformance or delayed performance due to events outside of its reasonable control. If performance will be significantly delayed, the affected Party will provide notice to the other Party, and the Parties will agree (in writing) upon a reasonable extension to any applicable performance schedule.

13.2. Delays Caused by Customer. Motorola's performance of the Products and Services will be excused for delays caused by Customer or its Authorized Users or subcontractors, or by failure of any assumptions set forth in this Agreement (including in any Addendum or Proposal). In the event of a delay under this **Section 13.2 – Delays Caused by Customer**, (a) Customer will continue to pay the Fees as required hereunder, (b) the Parties will agree (in writing) upon a reasonable extension to any applicable performance schedule, and (c) Customer will compensate Motorola for its out-of-pocket costs incurred due to the delay (including those incurred by Motorola's affiliates, vendors, and subcontractors).

Section 14. Disputes. The Parties will use the following procedure to resolve any disputes relating to or arising out of this Agreement (each, a "Dispute"):

14.1. Governing Law. All matters relating to or arising out of the Agreement are governed by the laws of the State of Illinois, unless Customer is the United States Government (or an agency thereof) or a state government or state agency or local municipality within the United States, in which case all matters relating to or arising out of the Agreement will be governed by the laws of the State in which the Products and Services are provided. The terms of the U.N. Convention on Contracts for the International Sale of Goods and the Uniform Computer Information Transactions Act will not apply.

14.2. Negotiation; Mediation. The Parties will attempt to timely resolve the Dispute promptly through good faith negotiations. Either Party may initiate dispute resolution procedures by sending a notice of Dispute ("Notice of Dispute") to the other Party. The Parties will choose an independent mediator within thirty (30) days of such Notice of Mediation. Neither Party may unreasonably withhold consent to the selection of a mediator, but if the Parties are unable to agree upon a mediator, either Party may request that the American Arbitration Association nominate a mediator. Each Party will bear its own costs of mediation, but the Parties will share the cost of the mediator equally. Unless otherwise agreed in writing, all in person meetings under this **Section 14.2 – Negotiation; Mediation** will take place in Lee's Summit, Missouri, and all communication relating to the Dispute resolution will be maintained in strict confidence by the Parties. Notwithstanding the foregoing, any Dispute arising from or relating to Motorola's intellectual property rights must be decided by a court of competent jurisdiction, in accordance with **Section 14.3 – Litigation, Venue, Jurisdiction** below.

14.3. Litigation, Venue, Jurisdiction. If the Dispute has not been resolved by mediation within sixty (60) days from the Notice of Mediation, either Party may submit the Dispute exclusively to a court in Cook County, Illinois, or in the case the Customer is the United States, a state agency, or local municipality, then the appropriate court in the State in which the Products and Services are provided. Each Party expressly consents to the exclusive jurisdiction of such courts for resolution of any Dispute and to enforce the outcome of any mediation.

Section 15. General.

15.1. Compliance with Laws. Each Party will comply with applicable laws in connection with the performance of its obligations under this Agreement, including that Customer will ensure its and its Authorized Users' use of the Products and Services complies with law (including privacy laws), and Customer will obtain any FCC and other licenses or authorizations (including licenses or authorizations required by foreign regulatory bodies) required for its and its Authorized Users' use of the Products and Services. Motorola may, at its discretion, cease providing or otherwise modify Products and Services (or any terms related thereto in an Addendum or Proposal), in order to comply with any changes in applicable law.

15.2. Audit; Monitoring. Motorola will have the right to monitor and audit use of the Products, including an audit of total user licenses credentialed by Customer for any Subscription Software, which may also include access by Motorola to Customer Data and Service Use Data. Customer will provide notice of such monitoring to its Authorized Users and obtain any required consents, including individual end users, and will cooperate with Motorola in any monitoring or audit. Customer will maintain during the Term, and for two (2) years thereafter, accurate records relating to any software licenses granted under this Agreement to verify compliance with this Agreement. Motorola or a third party ("Auditor") may inspect Customer's and, as applicable, Authorized Users' premises, books, and records. Motorola will pay expenses and costs of the Auditor, unless Customer is found to be in violation of the terms of the Agreement, in which case Customer will be responsible for such expenses and costs. In the event Motorola determines that Customer's usage of the Subscription Software during the applicable Subscription Term exceeded the total number of licenses purchased by Customer, Motorola may invoice Customer for the additional licenses used by Customer, pro-rated for each additional license from the date such license was activated, and Customer will pay such invoice in accordance with the payment terms in the Agreement.

15.3. Assignment and Subcontracting. Neither Party may assign or otherwise transfer this Agreement without the prior written approval of the other Party. Motorola may assign or otherwise transfer this Agreement or any of its rights or obligations under this Agreement without consent (a) for financing purposes, (b) in connection with a merger, acquisition or sale of all or substantially all of its assets, (c) as part of a corporate reorganization, or (d) to a subsidiary corporation. Subject to the foregoing, this Agreement will be binding upon the Parties and their respective successors and assigns. Motorola may subcontract any of the work, but subcontracting will not relieve Motorola of its duties under this Agreement.

15.4. Waiver. A delay or omission by either Party to exercise any right under this Agreement will not be construed to be a waiver of such right. A waiver by either Party of any of the obligations to be performed by the other, or any breach thereof, will not be construed to be a waiver of any succeeding breach or of any other obligation. All waivers must be in writing and signed by the Party waiving its rights.

15.5. Severability. If any provision of the Agreement is found by a court of competent jurisdiction to be invalid, illegal, or otherwise unenforceable, such provision will be deemed to be modified to reflect as nearly as possible the original intentions of the Parties in accordance with applicable law. The remaining provisions of this Agreement will not be affected, and each such provision will be valid and enforceable to the full extent permitted by applicable law.

15.6. Independent Contractors. Each Party will perform its duties under this Agreement as an independent contractor. The Parties and their personnel will not be considered to be employees or agents of the other Party. Nothing in this Agreement will be interpreted as granting either Party

the right or authority to make commitments of any kind for the other. This Agreement will not constitute, create, or be interpreted as a joint venture, partnership, or formal business organization of any kind.

15.7. Third-Party Beneficiaries. The Agreement is entered into solely between, and may be enforced only by, the Parties. Each Party intends that the Agreement will not benefit, or create any right or cause of action in or on behalf of, any entity other than the Parties. Notwithstanding the foregoing, a licensor or supplier of third-party software included in the software Products will be a direct and intended third-party beneficiary of this Agreement.

15.8. Interpretation. The section headings in this Agreement are included only for convenience. The words “including” and “include” will be deemed to be followed by the phrase “without limitation”. This Agreement will be fairly interpreted in accordance with its terms and conditions and not for or against either Party.

15.9. Notices. Notices required under this Agreement to be given by one Party to the other must be in writing and either personally delivered or sent to the address provided by the other Party by certified mail, return receipt requested and postage prepaid (or by a recognized courier service, such as FedEx, UPS, or DHL), and will be effective upon receipt.

15.10. Cumulative Remedies. Except as specifically stated in this Agreement, all remedies provided for in this Agreement will be cumulative and in addition to, and not in lieu of, any other remedies available to either Party at law, in equity, by contract, or otherwise. Except as specifically stated in this Agreement, the election by a Party of any remedy provided for in this Agreement or otherwise available to such Party will not preclude such Party from pursuing any other remedies available to such Party at law, in equity, by contract, or otherwise.

15.11. Survival. The following provisions will survive the expiration or termination of this Agreement for any reason: Section 3.4 – Customer Obligations; Section 4.6 – Effect of Termination or Expiration; Section 5 – Payment and Invoicing; Section 7.11 – Warranty Disclaimer; Section 8 – Indemnification; Section 9 – Limitation of Liability; Section 10 – Confidentiality; Section 11 – Proprietary Rights; Data; Feedback; Section 13 – Force Majeure; Delays Caused by Customer; Section 14 – Disputes; and Section 15 – General.

15.12. Entire Agreement. This Agreement, including all Exhibits, Addenda, and Proposals, constitutes the entire agreement of the Parties regarding the subject matter hereto, and supersedes all previous agreements, proposals, and understandings, whether written or oral, relating to this subject matter. This Agreement may be executed in multiple counterparts, and will have the same legal force and effect as if the Parties had executed it as a single document. The Parties may sign in writing or by electronic signature. An electronic signature, facsimile copy, or computer image of a signature, will be treated, and will have the same effect as an original signature, and will have the same effect, as an original signed copy of this document. This Agreement may be amended or modified only by a written instrument signed by authorized representatives of both Parties. The preprinted terms and conditions found on any Customer purchase order, acknowledgment, or other form will not be considered an amendment or modification or part of this Agreement, even if a representative of each Party signs such document.

15.13. Work Authorization/E-verify. Pursuant Section 285.530, RSMo., if this Agreement exceeds five thousand dollars (\$5,000.00), Motorola warrants and affirms to the Customer that (i) Motorola is enrolled and participates in a federal work authorization program with respect to the employees working in connection with the contracted services and (ii) Motorola does not knowingly employ

any person who is an unauthorized alien in connection with the contracted services. Motorola shall swear to and sign an affidavit declaring such affirmation, and provide the Customer with supporting documentation of its enrollment and participation in a federal work authorization program with respect to the employees working in connection with this Agreement. The required documentation must be from the federal work authorization program provider (e.g. the electronic signature page from the E-Verify program's Memorandum of Understanding); a letter from Motorola reciting compliance is not sufficient.

15.14. If this Agreement has a total potential value of \$100,000 or more and Motorola has 10 or more employees, the following applies. Pursuant to Section 34.600, RSMo and to the fullest extent permitted by law, Motorola certifies that it is not engaged in a boycott of Israel as of the Effective Date of this Agreement, and agrees for the duration of this Agreement to not engage in a boycott of Israel as defined in Section 34.600, RSMo

15.15. Insurance. Motorola shall maintain "occurrence" form Commercial General Liability insurance with limits of \$4,000,000 for each occurrence, \$4,000,000 Products and Completed Operations Annual Aggregate and a \$4,000,000 General Aggregate Limit, business automobile liability insurance with limits of \$4,000,000 each occurrence bodily injury and property damage, combined single limits, extended to include all owned, non-owned and hired vehicles that perform services for this Agreement. In addition, Motorola shall maintain a statutory workers' compensation program applicable in the State of Missouri and at the statutory limits set forth under state and federal laws. Motorola shall furnish to Customer certificates of insurance on an annual basis during the term of this Agreement. The Commercial General Liability, Automobile Liability and Workers Compensation policies of insurance shall be endorsed to provide a thirty (30) days prior written notice of cancellation to Customer. The Commercial General Liability, Automobile Liability and Workers Compensation policies shall contain a waiver of rights of recovery (subrogation) against Customer, its agents, representatives, officials, officers and employees for any claims arising out of the work or services of Motorola and Customer shall be included as an additional insured on the Commercial General Liability and Automobile policies. Motorola shall maintain Cyber Liability and Professional Liability insurance with limits of \$4,000,000 per claim, \$4,000,000 annual aggregate. Coverage shall be sufficiently broad to respond to the duties and obligations as is undertaken by Motorola in this Agreement and shall include, negligent errors and omissions arising out of the services performed by themselves, or anyone employed by Motorola, or anyone for whose negligent acts, mistakes, errors and omissions Motorola is legally liable, claims involving infringement of intellectual property (excluding patents and trade secrets), including infringement of copyright, trademark, trade dress, invasion of privacy violations, information theft, damage to or destruction of electronic information, release of private information, alteration of electronic information, extortion and network security. The policy shall provide coverage for breach response costs as well as regulatory fines and penalties as well as credit monitoring expenses.

15.16. Prevailing Wages. Wages. Pursuant to § 290.230.5, RSMo. if this Agreement, or a project of which this Agreement is a part, exceeds seventy-five thousand dollars (\$75,000.00) and involves construction of public works, Motorola shall pay all its workers the applicable prevailing hourly rate of wages for work of a similar character in Lee's Summit. If there is a dispute whether this Agreement is subject to prevailing wages as required by §§ 290.210, et. seq., RSMo. the Customer's determination shall control.

15.17. Performance and Payment Bonds. If any services to be performed under this Agreement, is in excess of \$50,000.00 and involves a public works project, Motorola shall submit a satisfactory Performance and Maintenance Bond and Payment Bond, each of which with a good and sufficient surety authorized to do business in the State of Missouri. The bonds shall be in the full amount of the compensation and set forth in this Agreement for the services which require said bonds. The Payment Bond shall comply with all requirements of Section 107.170, RSMo. Such bonds shall be submitted within ten (10) days after receipt of the written notification of award from the Customer. Bonds shall also hold a current Certificate of Authority as an acceptable surety under 31 CFR Part 223 (and be listed on the current U.S. Department of the Treasury Circular 570 and have at least A Best's rating and a FPR9 or better financial performance rating per the current A.M. Best Company ratings). The bonds shall be automatically increased in amount and extended in time without formal and separate amendments to cover full and faithful performance of the Agreement in the event of Change Orders regardless of the amount of time or money involved. It shall be Motorola's responsibility to notify their surety of any changes affecting the general scope of the work or change in the compensation. If at any time during the continuance of the Agreement that the surety on any bond becomes unacceptable to Customer, Customer shall have the right to require additional and sufficient sureties which Motorola shall furnish to the satisfaction of City within ten (10) days after notice to do so.

15.18. Safety Plan. Motorola shall provide the services in accordance with a safety plan that is compliant with Occupational Safety and Health Administration ("OSHA"), American National Standards Institute and National Institute for Occupational Safety and Health standards. If, in the Motorola's sole determination, the services to be provided do not require a safety plan, Motorola shall notify the Customer, in writing, describing the reasons a safety plan is unnecessary. The Customer reserves the right to request a safety plan following such notification.

15.19. Performance Warranty. Motorola warrants that the services rendered will conform to the requirements of this Agreement and with the care and skill ordinarily used by members of the same profession practicing under similar circumstances at the same time and in the same locality.

15.20. Time of Essence. Time is of the essence in this Agreement. Unless otherwise specifically provided, any consent to delay in Motorola's performance of its obligation is applicable only to the particular transaction to which it relates, and is not applicable to any other obligation or transaction.

15.21. Provisions Required by Law. Each and every provision of law and any clause required by law to be in the Agreement will be read and enforced as though it were included herein and, if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either Party, the Agreement will promptly be physically amended to make such insertion or correction.

15.22. Laws and Regulations. Motorola shall comply with all federal, state, and local laws, regulations, and ordinances applicable to its performance under this Agreement. Motorola shall include similar requirements of all subcontractors in Agreements entered for performance of Motorola's obligations under this Agreement. Motorola shall keep fully informed and shall at all times during the performance of its duties under this Agreement ensure that it and any person for

whom Motorola is responsible abides by, and remains in compliance with, all rules, regulations, ordinances, statutes or laws affecting the services, including, but not limited to, the following: (1) existing and future City and County ordinances and regulations; (2) existing and future State and Federal laws and regulations; and (C) existing and future Occupational Safety and Health Administration standards.

15.23. Conflict of Interest. No salaried officer or employee of the Customer and no member of the Customer's City Council shall have a financial interest, direct or indirect, in this Agreement, and any violation of this provision renders the Agreement void. The Parties shall comply with all federal conflict of interest statutes and regulations, and all applicable provisions of §§ 105.450, et. seq. RSMo. Motorola covenants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services to be performed under this Agreement. Motorola further covenants that in the performance of this Agreement no person having such interest shall be employed.

15.24. Debarment. Motorola certifies that neither it nor its principals are presently debarred or suspended by any Federal Department or agency, including listing in the U.S. General Services Administration's List of Parties Excluded from Federal Procurement or Non-Procurement programs; or if the amount of this response is equal to or in excess of \$100,000, that neither it nor its principals nor its subcontractors receiving sub-awards equal to or in excess of \$100,000 is presently disbarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any Federal Department, agency or provision of law. If the Motorola is unable to certify any of the statements in this certification, Motorola must attach an explanation to its response.

The Parties hereby enter into this MCA as of the Effective Date.

Motorola Solutions, Inc.

**City of Lee's Summit, Missouri, a
Missouri municipal corporation and
charter city**

By: _____

By: _____

Name: _____

Name: Mark Dunning

Title: _____

Title: City Manager

Date: _____

Date: _____

Approved as to form

By: _____

Name: Beth Murano

Title: Chief Counsel of Public Safety

Date: _____

Exhibit A

Proposal to City of Lee's Summit, Missouri; titled "Joint Operations Center Migration Plan"; issued by Motorola Solutions, Inc.



MOTOROLA SOLUTIONS

Proposal

City of Lee's Summit, Missouri

Joint Operations Center Migration Plan

Alternative Firm Proposal

January 8, 2025

The design, technical, and price information furnished with this proposal is proprietary information of Motorola Solutions, Inc. (Motorola). Such information is submitted with the restriction that it is to be used only for the evaluation of the proposal, and is not to be disclosed publicly or in any manner to anyone other than those required to evaluate the proposal, without the express written permission of Motorola.

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PS-000184746

Motorola Solutions, Inc.
500 W. Monroe Street, Suite 4400
Chicago, IL 60661

January 8, 2025

Chief Travis Forbes
Chief of Police, Lee's Summit Police Department
10 NE Tudor
Lee's Summit, MO 64086

RE: Alternative Joint Operations Center Migration Plan

Dear Chief Forbes,

Motorola Solutions, Inc. (Motorola Solutions) appreciates the opportunity to provide the City of Lee's Summit (Lee's Summit) with quality communications equipment and services. Motorola Solutions' project team has taken great care to propose this Microwave Plan and System Expansion solution to address your needs for the Joint Operations Center.

Motorola Solutions' proposal is conditional upon Lee's Summit's acceptance of the terms and conditions included in this proposal, or a negotiated version thereof. Pricing for this proposal will remain valid until January 31, 2025.

We look forward to our continued support of your public safety communications system. If you have any questions concerning our proposal, please do not hesitate to contact your Sr. Account Manager, Ryan Zidar, via email at ryan.zidar@motorolasolutions.com or by mobile at (773) 497-1399.

Our goal is to provide Lee's Summit with the best products and services available in the communications industry. We thank you for the opportunity to present our proposed solution, and we hope to strengthen our relationship by implementing this project.

Sincerely,
Motorola Solutions, Inc.



Frank Galvin
Vice President-Central US and Canada

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Section 1

System Description

1.1 Proposed System Overview

In response to Lee's Summit's plan for a Joint Operations Center facility (JOC), Motorola Solutions proposes to move the existing KCP&L Geo-Prime and Simulcast Subsite to the Joint Operations Center. The proposal includes a new tower and shelter at the JOC facility, with the FAA approving up to, but not exceeding, 164' of height. The proposed tower is a Monopole tower and the total pole height is 160' AGL. The proposed refurbished shelter has 12'x16' dimensions. Refurbished shelters are designed to meet industry and local codes, ensure efficient equipment installation, maximize interior space and reduce installation time.

The Lee's Summit Police Department (LSPD) is currently a 10 position PSAP & the Lee's Summit Fire Department (LSFD) is currently a 6 Position PSAP. This proposal includes moving the existing operator positions, backup control stations, and backroom equipment at LSPD and LSFD to the JOC facility. The existing Eventide IP logging recorder and AIS equipment from LSPD dispatch will be moved to the JOC. An Eventide logging solution upgrade is included in this proposal as an option.

With the existing microwave network approaching "end-of-life" by the manufacturer, Motorola Solutions proposes a full network replacement with long-term carrier grade equipment to support the new configuration with the future Joint Operations Center. The proposed network design is a microwave ring comprised of the four sites in the Simulcast Cell (JOC, Scherer, Woods Chapel, Ranson) with spurs to the KCMO and Independence systems. Please see below for a summary of new equipment in the scope of this proposal:

Dispatch Equipment

- LSPD: 10 Existing Dispatch Consoles and Backup Consolettes to be moved to the JOC.
- LSFD: 6 Existing Dispatch Consoles and Backup Consolettes to be moved to the JOC.

Prime and RF Equipment

- Existing KCP&L Geo-Prime equipment to be moved to the JOC.
- Existing KCP&L G-Series Subsite equipment to be moved to the JOC.
- Antenna/Line for the new JOC site and the antenna replacement at Scherer.
- 160' tower with mounts and light system
- 12x16 refurbished shelter

IP Microwave and MPLS Network Equipment

- A ring-protected 11 GHz & 6 GHz IP microwave backhaul system providing 163 Mbps at a fixed modulation of 128 QAM while meeting the Motorola availability target of 99.999%
- MPLS routers will be re-used and re-configured to provide Layer 3 routing and fast reroute across the new microwave system.

1.2 Microwave Network

1.2.1 Overview

The City of Lee's Summit operates on legacy Cambium PTP microwave links. For this solution, Motorola Solutions proposes to replace the legacy network with long-term carrier grade equipment from Infinity/Nokia. This design includes the future Joint Operations Center and supports the new configuration. With the addition of JOC, the existing Police and Fire PSAPs and the KCP&L site will be removed from the microwave ring.

The proposed microwave design comprises of SIX microwave paths, designed using the Nokia Wavence (MPT-HLC) all indoor transceiver in the 6 GHz and 11 GHz frequency band. All radios will use a fixed modulation of 128 QAM to provide 163 Mbps of data capacity while meeting the Motorola availability target of 99.999% for any path designed with ring protection (4 Paths), and 99.9999% for any path designed as a spur (2 paths). The four paths that are part of the ring topology are designed using non-standby microwave radios. The remaining two paths designed as a spur will use the monitored hot-standby microwave radios, providing hardware redundancy. DC Plant and Battery Plants are included at 68th and Booth and Independence-Woods Chapel to provide 18 hours of backup time and a battery recharging period of 24 hours. DC Plant and Battery Plants are optional at all other sites. The Nokia 7705 Service Aggregation Router (SAR-8) will provide microwave awareness (MWA) for the Wavence microwave transceivers, as well as provide MPLS fast re-route for sub 50ms ring switching. Nokia 7705 Service Aggregation Routers (SAR-8) are existing and will continue to be utilized at the Lee's Summit sites. Monitoring of the Microwave solution in Unified Event Manager is included in this proposal.

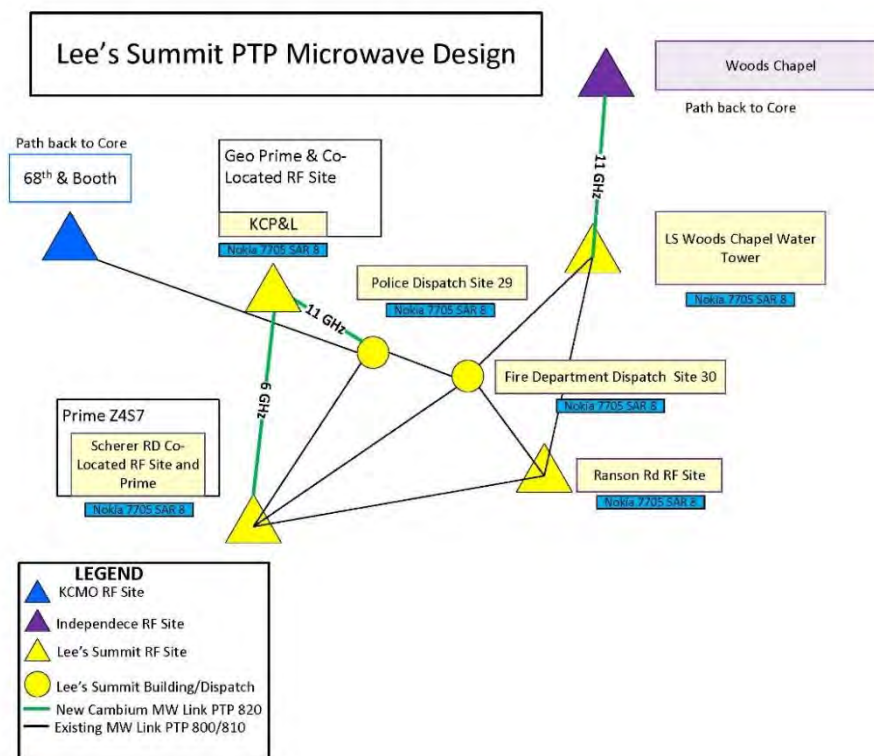


Figure 1-1: Existing Backhaul Design

1.2.2 Proposed Backhaul Design

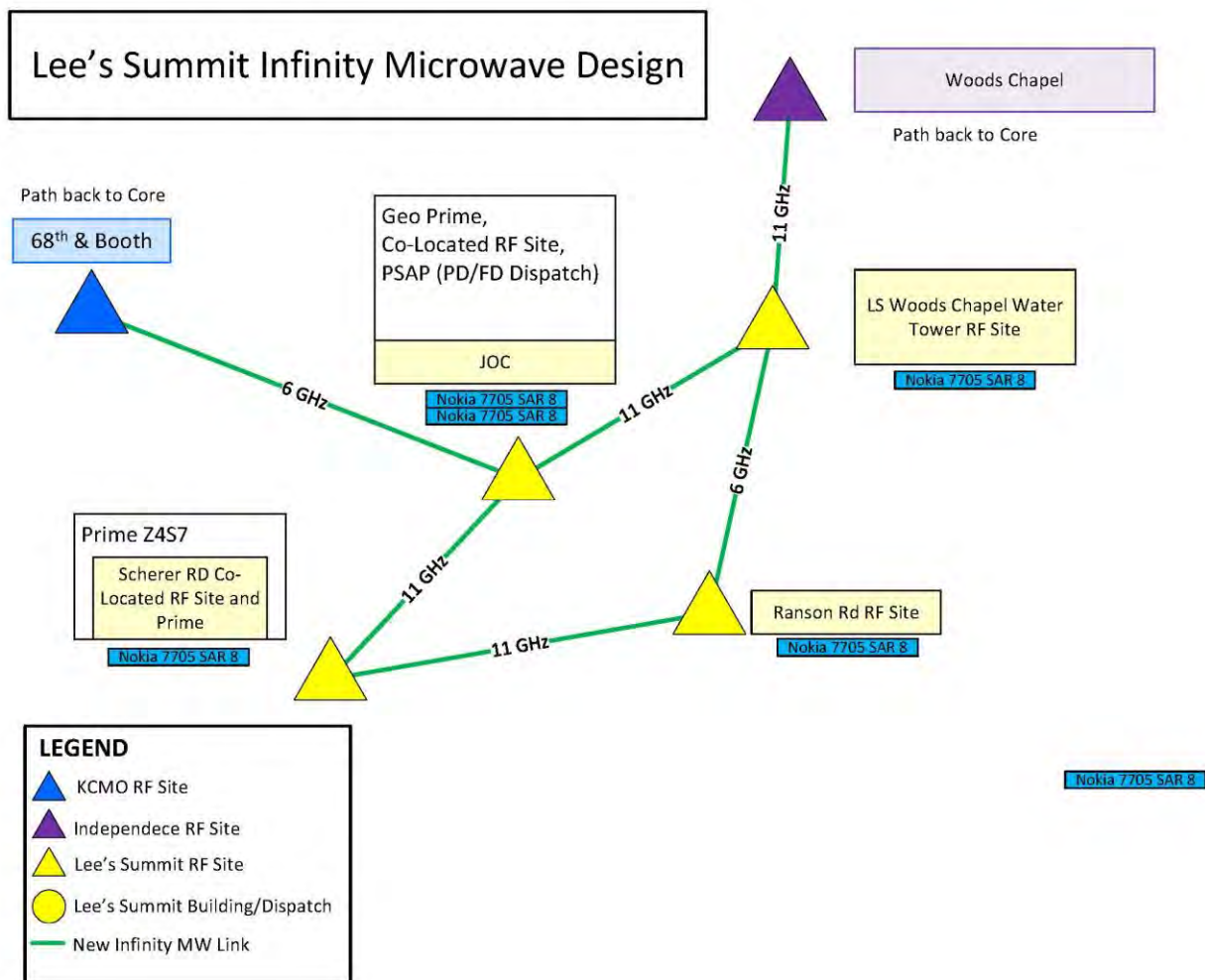
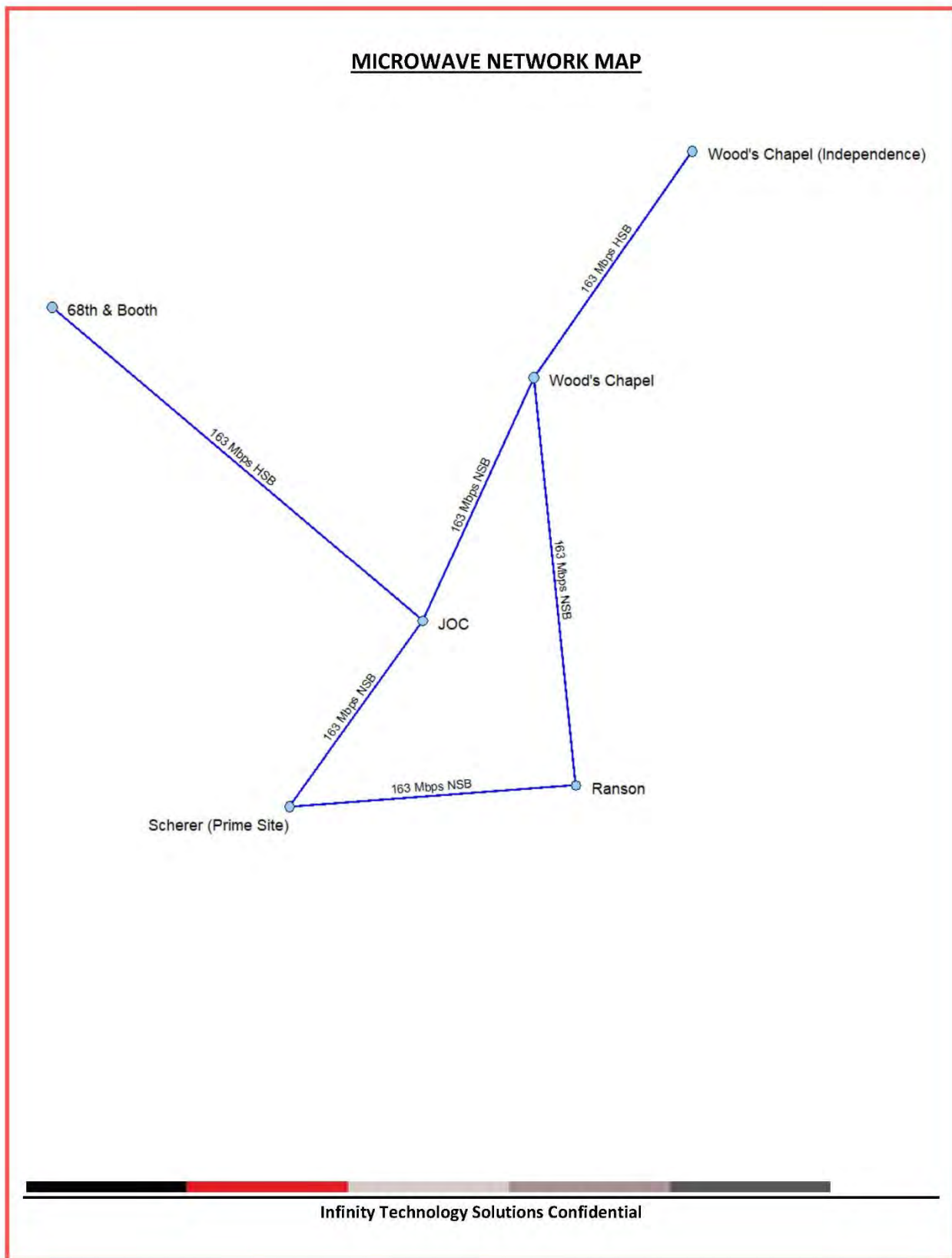
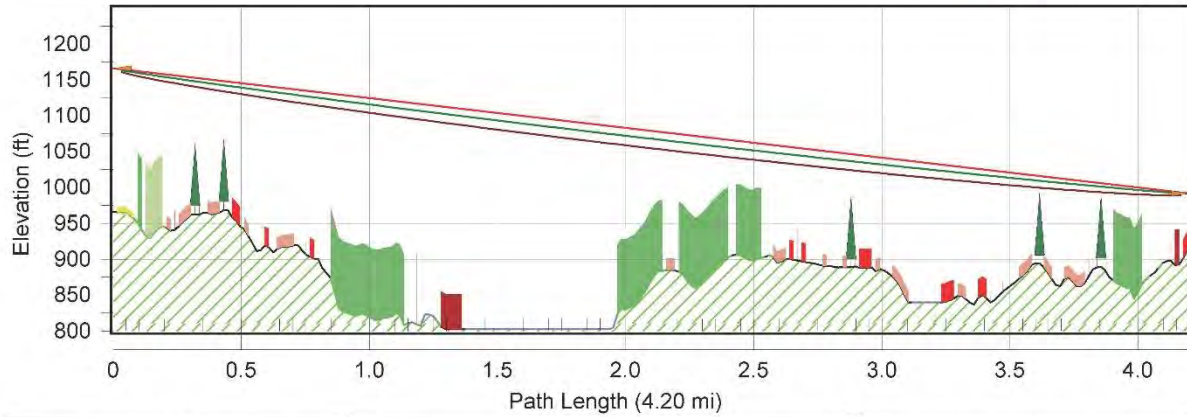


Figure 1-2: Proposed Backhaul Design

1.2.3 Path Report

Please see the Microwave Path Design Summary, Profiles, and Calculations on the following pages.





Wood's Chapel	
Latitude	38 59 06.36 N
Longitude	094 21 03.66 W
Azimuth	34.99°
Elevation	966 ft ASL
Antenna CL	200.0 ft AGL

Frequency (MHz) = 11200.0
Main 1 K = 1.330 %F1 = 100.00
Main 2 K = 0.670 %F1 = 30.00

Wood's Chapel (Independence)	
Latitude	39 02 05.60 N
Longitude	094 18 22.80 W
Azimuth	215.01°
Elevation	917 ft ASL
Antenna CL	75.0 ft AGL



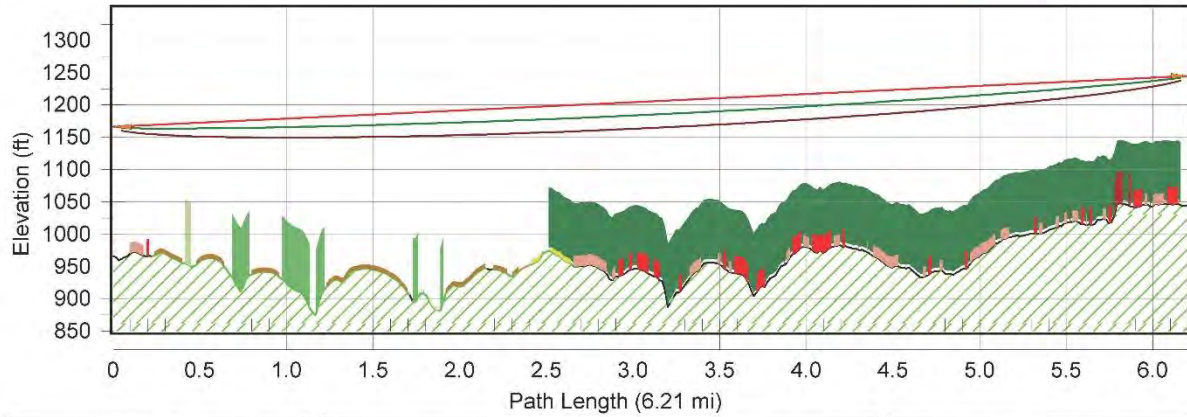
Transmission details (Wood's Chapel-Wood's Chapel (Independence).pl6)

	Wood's Chapel	Wood's Chapel (Independence)
Latitude	38 59 06.36 N	39 02 05.60 N
Longitude	094 21 03.66 W	094 18 22.80 W
True Azimuth (°)	34.99	215.01
Vertical Angle (°)	-0.47	0.43
Elevation (ft)	965.93	916.70
Tower height (ft)	200.00	180.00
Tower Type	Water tank	Self Supporting
Antenna Model	SHPX4-11W (TR)	SHPX4-11W (TR)
Antenna Filename	shpx4-11w	shpx4-11w
Antenna Gain (dBi)	41.00	41.00
Antenna Height (ft)	200.00	75.00
TX Line Model	EW90	EW90
TX Line Unit Loss (dB/100 ft)	3.06	3.06
TX Line Length (ft)	230.00	105.00
TX Line Loss (dB)	7.05	3.22
Connector Loss (dB)	0.50	0.50
TX Switch Loss (dB)	0.15	0.15
TX Filter Loss (dB)	2.10	2.10
RX Filter Loss (dB)	2.20	2.20
Frequency (MHz)	11200.00	
Polarization	Vertical	
Path Length (mi)	4.199	
Free Space Loss (dB)	130.05	
Atmospheric Absorption Loss (dB)	0.18	
Diffraction loss (dB)	0.00	
Net Path Loss (dB)	63.94	63.94
Configuration	HSB (1:10) Diplexer Main	HSB (1:10) Diplexer Main
Radio Model	WVCE11-L1-128F30S-163	WVCE11-L1-128F30S-163
Radio Filename	wvce11_l_128f30s_163	wvce11_l_128f30s_163
TX Power (dBm)	30.50	30.50
TX Power at ACU Antenna Port (dBm)	28.25	28.25
TX Power at Top of Rack (dBm)	28.25	28.25
Emission Designator	30M0D7W	30M0D7W
EIRP (dBm)	61.70	65.53



	Wood's Chapel	Wood's Chapel (Independence)
RX Threshold Criteria	1E-6 BER	1E-6 BER
RX Threshold Level (dBm)	-74.00	-74.00
RX Threshold at RX Input Port (dBm)	-74.00	-74.00
RX Signal at Top of Rack (dBm)	-31.24	-31.24
RX Signal at ACU Antenna Port (dBm)	-31.24	-31.24
RX Signal at RX Input Port (dBm)	-33.44	-33.44
Receive Signal (dBm)	-33.44	-33.44
Thermal Fade Margin (dB)	40.56	40.56
Dispersive Fade Margin (dB)	57.00	57.00
Dispersive fade occurrence factor	1.00	
Effective Fade Margin (dB)	40.56	40.56
Climatic factor	1.00	
Terrain roughness (ft)	42.70	
C factor	1.23	
Average annual temperature (°F)	54.36	
Fade occurrence factor (Po)	2.545E-03	
Worst month multipath availability (%)	99.99998	99.99998
Worst month multipath unavailability (sec)	0.60	0.60
Annual multipath availability (%)	99.99999	99.99999
Annual multipath unavailability (sec)	1.94	1.94
Annual 2 way multipath availability (%)	99.99999	
Annual 2 way multipath unavailability (sec)	3.89	
Polarization	Vertical	
Rain Region	Kansas City, Missouri	
Critical Rain Rate (mm/hr)	255.18	
Flat Fade Margin - rain (dB)	40.56	
Rain Attenuation (dB)	40.56	
Annual rain availability (%)	99.99994	
Annual rain unavailability (min)	0.32	
Annual rain + multipath availability (%)	99.99993	
Annual rain + multipath unavailability (min)	0.39	

Multipath fading method - Vigants - Barnett
Rain fading method - Crane



Wood's Chapel	
Latitude	38 59 06.36 N
Longitude	094 21 03.66 W
Azimuth	174.12°
Elevation	966 ft ASL
Antenna CL	200.0 ft AGL

Frequency (MHz) = 6100.0	
Main 1 K	= 1.330 %F1 = 100.00
Main 2 K	= 0.670 %F1 = 30.00

Ranson	
Latitude	38 53 44.11 N
Longitude	094 20 21.22 W
Azimuth	354.13°
Elevation	1045 ft ASL
Antenna CL	200.0 ft AGL



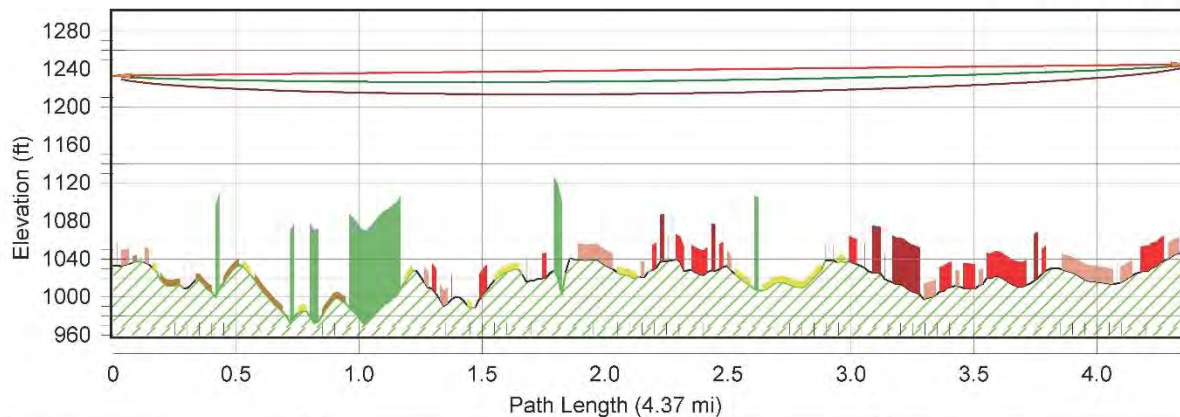
Transmission details (Wood's Chapel-Ranson.pl6)

	Wood's Chapel	Ranson
Latitude	38 59 06.36 N	38 53 44.11 N
Longitude	094 21 03.66 W	094 20 21.22 W
True Azimuth (°)	174.12	354.13
Vertical Angle (°)	0.10	-0.17
Elevation (ft)	965.93	1044.97
Tower height (ft)	200.00	200.00
Tower Type	Water tank	Water tank
Antenna Model	HX6-6W (TR)	HX6-6W (TR)
Antenna Filename	hx6-6w	hx6-6w
Antenna Gain (dBi)	39.10	39.10
Antenna Height (ft)	200.00	200.00
TX Line Model	EW63	EW63
TX Line Unit Loss (dB/100 ft)	1.45	1.45
TX Line Length (ft)	230.00	230.00
TX Line Loss (dB)	3.34	3.34
Connector Loss (dB)	0.50	0.50
TX Filter Loss (dB)	1.30	1.30
RX Filter Loss (dB)	1.60	1.60
Frequency (MHz)	6100.00	
Polarization	Vertical	
Path Length (mi)	6.208	
Free Space Loss (dB)	128.17	
Atmospheric Absorption Loss (dB)	0.12	
Diffraction loss (dB)	0.00	
Net Path Loss (dB)	60.66	60.66
Configuration	NSB Diplexer Main	NSB Diplexer Main
Radio Model	WVCE61-L1-128F30S-163	WVCE61-L1-128F30S-163
Radio Filename	wvce61_l_128f30s_163	wvce61_l_128f30s_163
TX Power (dBm)	32.50	32.50
TX Power at ACU Antenna Port (dBm)	31.20	31.20
TX Power at Top of Rack (dBm)	31.20	31.20
Emission Designator	30M0D7W	30M0D7W
EIRP (dBm)	66.46	66.46
RX Threshold Criteria	1E-6 BER	1E-6 BER



	Wood's Chapel	Ranson
RX Threshold Level (dBm)	-74.50	-74.50
RX Threshold at RX Input Port (dBm)	-74.50	-74.50
RX Signal at Top of Rack (dBm)	-26.56	-26.56
RX Signal at ACU Antenna Port (dBm)	-26.56	-26.56
RX Signal at RX Input Port (dBm)	-28.16	-28.16
Receive Signal (dBm)	-28.16	-28.16
Thermal Fade Margin (dB)	46.34	46.34
Dispersive Fade Margin (dB)	57.00	57.00
Dispersive fade occurrence factor	1.00	
Effective Fade Margin (dB)	46.34	46.34
Climatic factor	1.00	
Terrain roughness (ft)	29.04	
C factor	2.03	
Average annual temperature (°F)	54.48	
Fade occurrence factor (Po)	7.394E-03	
Worst month multipath availability (%)	99.99998	99.99998
Worst month multipath unavailability (sec)	0.50	0.50
Annual multipath availability (%)	99.99999	99.99999
Annual multipath unavailability (sec)	1.64	1.64
Annual 2 way multipath availability (%)	99.99999	
Annual 2 way multipath unavailability (sec)	3.29	
Polarization	Vertical	
Rain Region	Kansas City, Missouri	
Critical Rain Rate (mm/hr)	927.37	
Flat Fade Margin - rain (dB)	46.34	
Rain Attenuation (dB)	46.34	
Annual rain availability (%)	100.00000	
Annual rain unavailability (min)	0.00	
Annual rain + multipath availability (%)	99.99999	
Annual rain + multipath unavailability (min)	0.06	

Multipath fading method - Vigants - Barnett
Rain fading method - Crane



Scherer (Prime Site)	
Latitude	38 53 27.27 N
Longitude	094 25 12.50 W
Azimuth	85.74°
Elevation	1033 ft ASL
Antenna CL	200.0 ft AGL

Frequency (MHz) = 11200.0
Main 1 K = 1.330 %F1 = 100.00
Main 2 K = 0.670 %F1 = 30.00

Ranson	
Latitude	38 53 44.11 N
Longitude	094 20 21.22 W
Azimuth	265.79°
Elevation	1045 ft ASL
Antenna CL	200.0 ft AGL



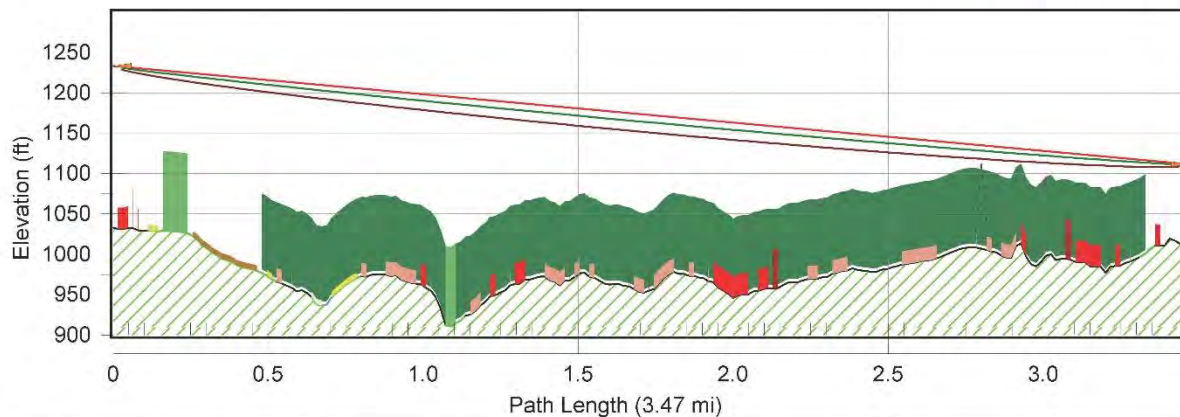
Transmission details (Scherer (Prime Site)-Ranson.pl6)

	Scherer (Prime Site)	Ranson
Latitude	38 53 27.27 N	38 53 44.11 N
Longitude	094 25 12.50 W	094 20 21.22 W
True Azimuth (°)	85.74	265.79
Vertical Angle (°)	0.01	-0.05
Elevation (ft)	1033.11	1044.97
Tower height (ft)	200.00	200.00
Tower Type	Water tank	Water tank
Antenna Model	HX6-11W (TR)	SHPX4-11W (TR)
Antenna Filename	hx6-11w	shpx4-11w
Antenna Gain (dBi)	43.60	41.00
Antenna Height (ft)	200.00	200.00
TX Line Model	EW90	EW90
TX Line Unit Loss (dB/100 ft)	3.06	3.06
TX Line Length (ft)	230.00	230.00
TX Line Loss (dB)	7.05	7.05
Connector Loss (dB)	0.50	0.50
TX Filter Loss (dB)	1.40	1.40
RX Filter Loss (dB)	1.70	1.70
Frequency (MHz)	11200.00	
Polarization	Vertical	
Path Length (mi)	4.374	
Free Space Loss (dB)	130.40	
Atmospheric Absorption Loss (dB)	0.19	
Diffraction loss (dB)	0.00	
Net Path Loss (dB)	64.18	64.18
Configuration	NSB Diplexer Main	NSB Diplexer Main
Radio Model	WVCE11-L1-128F30S-163	WVCE11-L1-128F30S-163
Radio Filename	wvce11_l_128f30s_163	wvce11_l_128f30s_163
TX Power (dBm)	30.50	30.50
TX Power at ACU Antenna Port (dBm)	29.10	29.10
TX Power at Top of Rack (dBm)	29.10	29.10
Emission Designator	30M0D7W	30M0D7W
EIRP (dBm)	65.15	62.55
RX Threshold Criteria	1E-6 BER	1E-6 BER



	Scherer (Prime Site)	Ranson
RX Threshold Level (dBm)	-74.00	-74.00
RX Threshold at RX Input Port (dBm)	-74.00	-74.00
RX Signal at Top of Rack (dBm)	-31.98	-31.98
RX Signal at ACU Antenna Port (dBm)	-31.98	-31.98
RX Signal at RX Input Port (dBm)	-33.68	-33.68
Receive Signal (dBm)	-33.68	-33.68
Thermal Fade Margin (dB)	40.32	40.32
Dispersive Fade Margin (dB)	57.00	57.00
Dispersive fade occurrence factor	1.00	
Effective Fade Margin (dB)	40.32	40.32
Climatic factor	1.00	
Terrain roughness (ft)	20.00	
C factor	3.29	
Average annual temperature (°F)	54.55	
Fade occurrence factor (Po)	7.711E-03	
Worst month multipath availability (%)	99.99993	99.99993
Worst month multipath unavailability (sec)	1.90	1.90
Annual multipath availability (%)	99.99998	99.99998
Annual multipath unavailability (sec)	6.23	6.23
Annual 2 way multipath availability (%)	99.99996	
Annual 2 way multipath unavailability (sec)	12.46	
Polarization	Vertical	
Rain Region	Kansas City, Missouri	
Critical Rain Rate (mm/hr)	247.03	
Flat Fade Margin - rain (dB)	40.32	
Rain Attenuation (dB)	40.32	
Annual rain availability (%)	99.99993	
Annual rain unavailability (min)	0.37	
Annual rain + multipath availability (%)	99.99989	
Annual rain + multipath unavailability (min)	0.57	

Multipath fading method - Vigants - Barnett
Rain fading method - Crane



Scherer (Prime Site)	
Latitude	38 53 27.27 N
Longitude	094 25 12.50 W
Azimuth	35.86°
Elevation	1033 ft ASL
Antenna CL	200.0 ft AGL

Frequency (MHz) = 11200.0	
Main 1 K	= 1.330 %F1 = 100.00
Main 2 K	= 0.670 %F1 = 30.00

JOC	
Latitude	38 55 53.99 N
Longitude	094 22 56.69 W
Azimuth	215.89°
Elevation	1006 ft ASL
Antenna CL	105.0 ft AGL



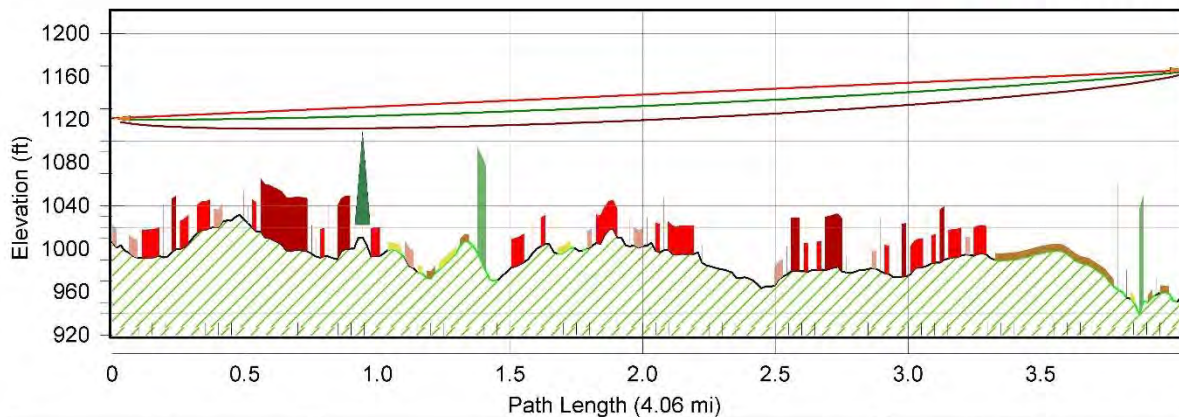
Transmission details (Scherer (Prime Site)-JOC.pl6)

	Scherer (Prime Site)	JOC
Latitude	38 53 27.27 N	38 55 53.99 N
Longitude	094 25 12.50 W	094 22 56.69 W
True Azimuth (°)	35.86	215.89
Vertical Angle (°)	-0.40	0.36
Elevation (ft)	1033.11	1006.30
Tower height (ft)	200.00	160.00
Tower Type	Water tank	Monopole
Antenna Model	SHPX4-11W (TR)	SHPX3-11W (TR)
Antenna Filename	shpx4-11w	shpx3-11w
Antenna Gain (dBi)	41.00	38.70
Antenna Height (ft)	200.00	105.00
TX Line Model	EW90	EW90
TX Line Unit Loss (dB/100 ft)	3.06	3.06
TX Line Length (ft)	230.00	135.00
TX Line Loss (dB)	7.05	4.14
Connector Loss (dB)	0.50	0.50
TX Filter Loss (dB)	1.40	1.40
RX Filter Loss (dB)	1.70	1.70
Frequency (MHz)	11200.00	
Polarization	Vertical	
Path Length (mi)	3.470	
Free Space Loss (dB)	128.39	
Atmospheric Absorption Loss (dB)	0.15	
Diffraction loss (dB)	0.00	
Net Path Loss (dB)	64.12	64.12
Configuration	NSB Diplexer Main	NSB Diplexer Main
Radio Model	WVCE11-L1-128F30S-163	WVCE11-L1-128F30S-163
Radio Filename	wvce11_l_128f30s_163	wvce11_l_128f30s_163
TX Power (dBm)	30.50	30.50
TX Power at ACU Antenna Port (dBm)	29.10	29.10
TX Power at Top of Rack (dBm)	29.10	29.10
Emission Designator	30M0D7W	30M0D7W
EIRP (dBm)	62.55	63.16
RX Threshold Criteria	1E-6 BER	1E-6 BER



	Scherer (Prime Site)	JOC
RX Threshold Level (dBm)	-74.00	-74.00
RX Threshold at RX Input Port (dBm)	-74.00	-74.00
RX Signal at Top of Rack (dBm)	-31.92	-31.92
RX Signal at ACU Antenna Port (dBm)	-31.92	-31.92
RX Signal at RX Input Port (dBm)	-33.62	-33.62
Receive Signal (dBm)	-33.62	-33.62
Thermal Fade Margin (dB)	40.38	40.38
Dispersive Fade Margin (dB)	57.00	57.00
Dispersive fade occurrence factor	1.00	
Effective Fade Margin (dB)	40.38	40.38
Climatic factor	1.00	
Terrain roughness (ft)	20.05	
C factor	3.28	
Average annual temperature (°F)	54.51	
Fade occurrence factor (Po)	3.836E-03	
Worst month multipath availability (%)	99.99996	99.99996
Worst month multipath unavailability (sec)	0.93	0.93
Annual multipath availability (%)	99.99999	99.99999
Annual multipath unavailability (sec)	3.04	3.04
Annual 2 way multipath availability (%)	99.99998	
Annual 2 way multipath unavailability (sec)	6.09	
Polarization	Vertical	
Rain Region	Kansas City, Missouri	
Critical Rain Rate (mm/hr)	288.00	
Flat Fade Margin - rain (dB)	40.38	
Rain Attenuation (dB)	40.38	
Annual rain availability (%)	99.99996	
Annual rain unavailability (min)	0.20	
Annual rain + multipath availability (%)	99.99994	
Annual rain + multipath unavailability (min)	0.30	

Multipath fading method - Vigants - Barnett
Rain fading method - Crane



JOC	
Latitude	38 55 53.99 N
Longitude	094 22 56.69 W
Azimuth	24.63°
Elevation	1006 ft ASL
Antenna CL	115.0 ft AGL

Frequency (MHz) = 11200.0
Main 1 K = 1.330 %F1 = 100.00
Main 2 K = 0.670 %F1 = 30.00

Wood's Chapel	
Latitude	38 59 06.36 N
Longitude	094 21 03.66 W
Azimuth	204.65°
Elevation	966 ft ASL
Antenna CL	200.0 ft AGL



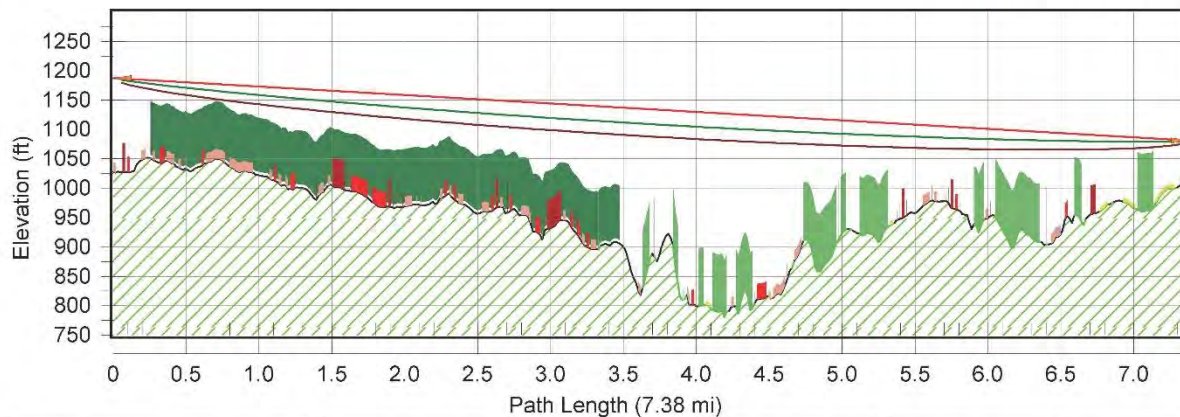
Transmission details (JOC-Wood's Chapel.pl6)

	JOC	Wood's Chapel
Latitude	38 55 53.99 N	38 59 06.36 N
Longitude	094 22 56.69 W	094 21 03.66 W
True Azimuth (°)	24.63	204.65
Vertical Angle (°)	0.10	-0.14
Elevation (ft)	1006.30	965.93
Tower height (ft)	160.00	200.00
Tower Type	Monopole	Water tank
Antenna Model	SHPX4-11W (TR)	SHPX4-11W (TR)
Antenna Filename	shpx4-11w	shpx4-11w
Antenna Gain (dBi)	41.00	41.00
Antenna Height (ft)	115.00	200.00
TX Line Model	EW90	EW90
TX Line Unit Loss (dB/100 ft)	3.06	3.06
TX Line Length (ft)	145.00	230.00
TX Line Loss (dB)	4.44	7.05
Connector Loss (dB)	0.50	0.50
TX Filter Loss (dB)	1.40	1.40
RX Filter Loss (dB)	1.70	1.70
Frequency (MHz)	11200.00	
Polarization	Vertical	
Path Length (mi)	4.056	
Free Space Loss (dB)	129.75	
Atmospheric Absorption Loss (dB)	0.17	
Diffraction loss (dB)	0.00	
Net Path Loss (dB)	63.51	63.51
Configuration	NSB Diplexer Main	NSB Diplexer Main
Radio Model	WVCE11-L1-128F30S-163	WVCE11-L1-128F30S-163
Radio Filename	wvce11_l_128f30s_163	wvce11_l_128f30s_163
TX Power (dBm)	30.50	30.50
TX Power at ACU Antenna Port (dBm)	29.10	29.10
TX Power at Top of Rack (dBm)	29.10	29.10
Emission Designator	30M0D7W	30M0D7W
EIRP (dBm)	65.16	62.55
RX Threshold Criteria	1E-6 BER	1E-6 BER



	JOC	Wood's Chapel
RX Threshold Level (dBm)	-74.00	-74.00
RX Threshold at RX Input Port (dBm)	-74.00	-74.00
RX Signal at Top of Rack (dBm)	-31.31	-31.31
RX Signal at ACU Antenna Port (dBm)	-31.31	-31.31
RX Signal at RX Input Port (dBm)	-33.01	-33.01
Receive Signal (dBm)	-33.01	-33.01
Thermal Fade Margin (dB)	40.99	40.99
Dispersive Fade Margin (dB)	57.00	57.00
Dispersive fade occurrence factor	1.00	
Effective Fade Margin (dB)	40.99	40.99
Climatic factor	1.00	
Terrain roughness (ft)	20.00	
C factor	3.29	
Average annual temperature (°F)	54.44	
Fade occurrence factor (Po)	6.147E-03	
Worst month multipath availability (%)	99.99995	99.99995
Worst month multipath unavailability (sec)	1.30	1.30
Annual multipath availability (%)	99.99999	99.99999
Annual multipath unavailability (sec)	4.24	4.24
Annual 2 way multipath availability (%)	99.99997	
Annual 2 way multipath unavailability (sec)	8.49	
Polarization	Vertical	
Rain Region	Kansas City, Missouri	
Critical Rain Rate (mm/hr)	264.11	
Flat Fade Margin - rain (dB)	40.99	
Rain Attenuation (dB)	40.99	
Annual rain availability (%)	99.99995	
Annual rain unavailability (min)	0.28	
Annual rain + multipath availability (%)	99.99992	
Annual rain + multipath unavailability (min)	0.42	

Multipath fading method - Vigants - Barnett
Rain fading method - Crane



68th & Booth	
Latitude	39 00 02.00 N
Longitude	094 29 14.00 W
Azimuth	130.06°
Elevation	1028 ft ASL
Antenna CL	160.0 ft AGL

Frequency (MHz) = 6100.0	
Main 1 K	= 1.330 %F1 = 100.00
Main 2 K	= 0.670 %F1 = 30.00

JOC	
Latitude	38 55 53.99 N
Longitude	094 22 56.69 W
Azimuth	310.13°
Elevation	1006 ft ASL
Antenna CL	75.0 ft AGL



Transmission details (68th & Booth-JOC.pl6)

	68th & Booth	JOC
Latitude	39 00 02.00 N	38 55 53.99 N
Longitude	094 29 14.00 W	094 22 56.69 W
True Azimuth (°)	130.06	310.13
Vertical Angle (°)	-0.20	0.12
Elevation (ft)	1027.56	1006.30
Tower height (ft)	200.00	160.00
Tower Type	Self Supporting	Monopole
Antenna Model	HX6-6W (TR)	HX6-6W (TR)
Antenna Filename	hx6-6w	hx6-6w
Antenna Gain (dBi)	39.10	39.10
Antenna Height (ft)	160.00	75.00
TX Line Model	EW63	EW63
TX Line Unit Loss (dB/100 ft)	1.45	1.45
TX Line Length (ft)	190.00	105.00
TX Line Loss (dB)	2.76	1.52
Connector Loss (dB)	0.50	0.50
TX Switch Loss (dB)	0.15	0.15
TX Filter Loss (dB)	1.80	1.80
RX Filter Loss (dB)	2.10	2.10
Frequency (MHz)	6100.00	
Polarization	Vertical	
Path Length (mi)	7.379	
Free Space Loss (dB)	129.67	
Atmospheric Absorption Loss (dB)	0.15	
Diffraction loss (dB)	0.00	
Net Path Loss (dB)	60.94	60.94
Configuration	HSB (1:10) Diplexer Main	HSB (1:10) Diplexer Main
Radio Model	WVCE61-L1-128F30S-163	WVCE61-L1-128F30S-163
Radio Filename	wvce61_l_128f30s_163	wvce61_l_128f30s_163
TX Power (dBm)	32.50	32.50
TX Power at ACU Antenna Port (dBm)	30.55	30.55
TX Power at Top of Rack (dBm)	30.55	30.55
Emission Designator	30M0D7W	30M0D7W
EIRP (dBm)	66.39	67.63



	68th & Booth	JOC
RX Threshold Criteria	1E-6 BER	1E-6 BER
RX Threshold Level (dBm)	-74.50	-74.50
RX Threshold at RX Input Port (dBm)	-74.50	-74.50
RX Signal at Top of Rack (dBm)	-26.34	-26.34
RX Signal at ACU Antenna Port (dBm)	-26.34	-26.34
RX Signal at RX Input Port (dBm)	-28.44	-28.44
Receive Signal (dBm)	-28.44	-28.44
Thermal Fade Margin (dB)	46.06	46.06
Dispersive Fade Margin (dB)	57.00	57.00
Dispersive fade occurrence factor	1.00	
Effective Fade Margin (dB)	46.06	46.06
Climatic factor	1.00	
Terrain roughness (ft)	63.98	
C factor	0.73	
Average annual temperature (°F)	54.40	
Fade occurrence factor (Po)	4.447E-03	
Worst month multipath availability (%)	99.99999	99.99999
Worst month multipath unavailability (sec)	0.34	0.34
Annual multipath availability (%)	100.00000	100.00000
Annual multipath unavailability (sec)	1.13	1.13
Annual 2 way multipath availability (%)	99.99999	
Annual 2 way multipath unavailability (sec)	2.25	
Polarization	Vertical	
Rain Region	Kansas City, Missouri	
Critical Rain Rate (mm/hr)	899.20	
Flat Fade Margin - rain (dB)	46.06	
Rain Attenuation (dB)	46.06	
Annual rain availability (%)	100.00000	
Annual rain unavailability (min)	0.00	
Annual rain + multipath availability (%)	99.99999	
Annual rain + multipath unavailability (min)	0.04	

Multipath fading method - Vigants - Barnett
Rain fading method - Crane

1.2.4 Path Summary

The Path Report shows the required dish height at each site for the microwave path availability. The following assumptions were used in the path design:

- Ground elevations are from the National Elevation Dataset (NED) with a 1/3 arc-sec resolution in the Continental US (~10 m resolution).
- Land cover are from the National Land Cover Dataset 2019.
- Tree heights used in the design are based on a database of previously measured trees in the area. Tree, building, and other potential obstructions heights are cross-referenced as best as possible in Google Earth when street view and 3D building views are available.
- A tree height growth factor of 20 feet.
- Profiles use the Vigants-Barnett multi-path algorithm, Vigants space diversity algorithm, and the 2003 Crane model with city rates for rain attenuation.
- The path was designed for an average propagation area (Climatic factor = 1.0).
- The clearance criteria for all main antenna centerlines are the higher of:
 - 100% 1st Fresnel zone over $K=4/3$
 - 30% 1st Fresnel zone over $K=2/3$
- The microwave radio type used for path design is the Nokia MPT-HLC indoor transceiver.
- All transmit antennas meet FCC Part 101 Category A standards.
- All ring paths are designed to meet an annual availability objective is 99.999% (2-way multipath + Rain) at 10^{-6} BER.
- All paths are designed to meet an annual rain availability objective is 99.9999% (2-way multipath + Rain) at 10^{-6} BER.
- Paths were designed for a minimum effective fade margin (flat fade margin) of 40 dB.
-
- Based on desktop study the following risks have been identified. Path and site surveys will be required for a final determination of paths viability.
- JOC to Wood's Chapel crosses runway 29 of Lee's Summit Municipal Airport. The path crosses the middle of the runway. Planes are expected to be wheels on the ground. No interference is anticipated.

1.3 The water tanks appear to have several antennas located in the nest. A site survey will be required to determine if there is adequate space to achieve the required azimuth. Eventide Logging Upgrade (Optional)

Motorola Solutions is proposing a new Eventide NexLog DX-Series base system for Lee's Summit's Joint Operations Center. This upgrade will utilize existing logging interface equipment and will be within the Lee's Summit Radio Network Infrastructure (RNI) at the JOC. The new logger will replace the existing Eventide Logger and reside on the Customer Network (CEN). This upgrade will ensure that the Lee's Summit will be able to record high quality audio and efficiently find that audio whenever it is needed.

1.3.1 Logging Recorder Solution

The proposed logging recorder solution is the Eventide NexLog 740. The solution includes IP logging configured to record Project 25 trunked IP audio for Lee's Summit (MARRS, Zone 4).

1.3.1.1 Solution Overview

The Eventide NexLog 740 logging recorder (see Figure 1-3) can reliably capture, store, protect, reproduce, and help manage important interactions and critical data. NexLog logging systems have been designed to securely document and retrieve incidents, comply with regulations, and improve facility operations. Eventide NexLog communications logging systems offer outstanding flexibility and ease of use, with a choice of advanced capability remote software or convenient touch screen front panel operation. Call records are stored in a state-of-the-art SQL relational database, and NexLog logging systems feature an embedded Linux operating system for maximum reliability and compatibility with existing Windows infrastructure.



Figure 1-3: NexLog 740

The below list is a summary of some of the features available with the NexLog 740 Logging Recorder:

System Description



- The NexLog 740 DX-Series recording solution is a 3U rack-mountable system.
- Core i5 CPU, 16GB DDR4 RAM
- Call records are stored in a state-of-the-art SQL relational database.
- Integrated Linux operating system.
- Integrated 7" Color LCD Touch Screen Display.
- Audio controls & amplified speaker on front panel.
- Web-based configuration manager.
- Internal RAID Storage with Hot Swap (4TB).
- Dual Hot-Swap Power Supplies (120/240 VAC)
- Dual Port 100/1000 PCIe Network Card

1.3.1.2 Logging Interface with Proposed P25 Radio System

The logger will utilize the existing Archiving Interface Server (AIS) and VPM module in the Lee's Summit RNI, which provides an interface between the radio system and the logging recorder. This enables call audio on the radio system to be recorded together with the Project 25 call data associated with the calls.

Section 2

Solution Description – ASTRO MDR

2.1 Solution Overview

Motorola Solutions, Inc. (Motorola Solutions) is pleased to present the proposed cybersecurity services for the City of Lee's Summit, Missouri (hereinafter referred to as "Customer"). This proposal is conditional upon the host system, MARRS (hereinafter referred to as "Host"), subscribing to ASTRO Managed Detection and Response (MDR).

Identifying and mitigating cyber threats requires a reliable solution that supplies the right data to cybersecurity experts. With MDR, Motorola Solutions will provide access to our ActiveEyeSM Security Platform, along with 24x7 support from specialized security technologists, who will monitor your mission critical network against threat and intrusion.

The following ASTRO[®] 25 Managed Detection and Response features and services are included in our proposal:

- **ActiveEyeSM Managed Detection and Response Elements**
 - ActiveEye Security Management Platform
- **Service Modules**
 - Log Collection / Analytics
- **Security Operations Center Monitoring and Support**

2.1.1 Site Information

The following site information is included in the scope of our proposal:

Table 2-1:. Site Information

Site / Location	Quantity
Dispatch Consoles	16
AIS	1

Services Included

The ActiveEye service modules included in our proposal are listed below.

Table 2-2: Service Modules

Service Module	Features Included	Network Environment
Log Collection / Analytics	Online Storage Period: 30 Day Storage Extended Log Storage Length: 12 Months	Consoles

2.2 Service Description

Managed Detection and Response is performed by Motorola Solutions' Security Operations Center (SOC) using the ActiveEyeSM security platform. The SOC's cybersecurity analysts monitor for alerts 24x7x365. If a threat is detected, analysts will investigate and initiate an appropriate Customer engagement. Customer engagements may include but are not limited to: requesting additional information from the Customer, continuing to monitor the event for further development, or informing the Customer to enact the Customer's documented Incident Response plan.

SOC analysts rely on monitoring elements to detect signs of a potential threat impacting the Customer's ASTRO 25 network and applicable Customer Enterprise Network (CEN) systems. These elements are described below.

The Managed Detection and Response service includes the deployment and optimization of these elements into the Customer's network.

2.2.1 Managed Detection and Response Elements

This section and its subsections describe Managed Detection and Response elements, and their applicability for specific infrastructure.

2.2.1.1 ActiveEye Security Platform

Motorola Solutions' ActiveEyeSM security platform collects and analyzes security event streams from ActiveEye Remote Security Sensors (AERSS) in the Host's ASTRO 25 network and applicable CEN systems, using security orchestration and advanced analytics to identify the most important security events from applicable systems.

The platform automates manual investigation tasks, verifies activity with external threat intelligence sources, and learns what events will require rapid response action.

If the Host provides it, the Customer will receive access to the ActiveEye platform as part of this service. ActiveEye will serve as a single interface to display system security information. Using ActiveEye, the Customer will be able to configure alerts and notifications, review security data, and perform security investigations.

Applies to included console infrastructure.

2.2.1.2 ActiveEye Managed Security Portal

The ActiveEye Managed Security Portal will synchronize security efforts between the Host, Customer and Motorola Solutions. From this central point, the Customer will be able to view threat insights, event investigations, security reports, threat advisories, and status of any security cases.

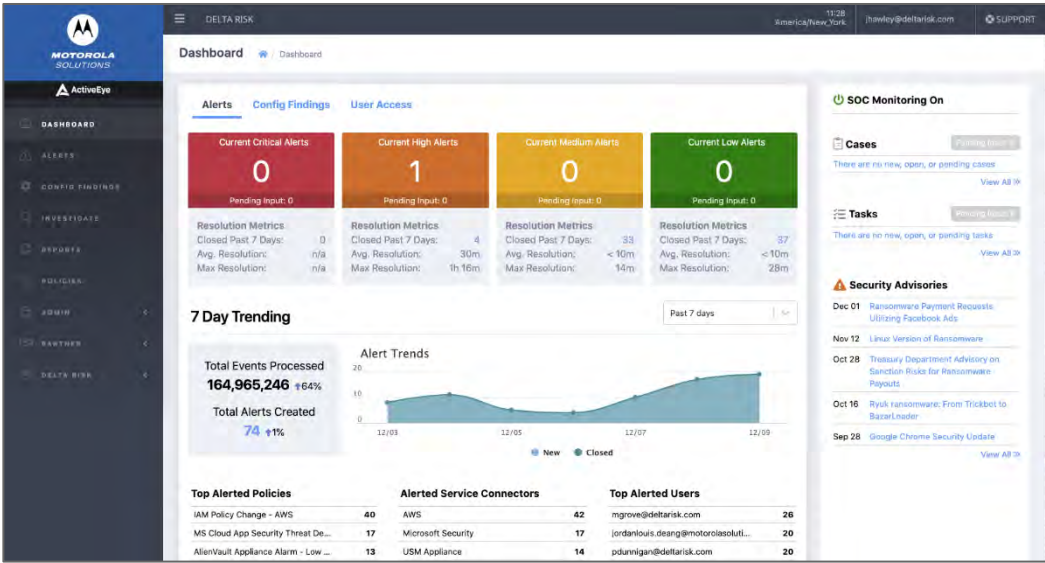


Figure 2-1: ActiveEye Interface

Dashboard

Key information in the ActiveEye Portal is summarized on the dashboard. This dashboard provides details about open alerts, an overview of alert categories, alert processing, key performance indicators (KPI), open security cases, and recent threat advisories. Also, users can access more in-depth information like security cases, alert details, alert trends, reports, and group communications.

Security Cases

When the Customer and Motorola Solutions identify a threat, the SOC will create a security case. Through the ActiveEye Portal, the Customer can view details of current or past cases, create new cases, or respond to ongoing cases.

Alert Details and Trends

Alerts can be evidence of a past, active, or developing threat. ActiveEye records relevant data for each alert, enabling users to quickly view its triggers, systems it impacts, and any actions taken to address the alert. ActiveEye Portal also provides tools for reviewing groups of alerts based on key attributes or time periods. Attribute filters enable users to toggle which alert groups ActiveEye Portal shows, helping to spot trends or threat activity. Users can also compare alert logs for specific time periods to determine if specific trends are associated with a threat or are false positives.

Investigations and Reporting

ActiveEye Portal includes robust *ad hoc* reporting capabilities, which will provide important, additional information about active and historical threats. Users can share information outside of ActiveEye Portal by downloading reports in .csv or .json format.

In addition to *ad hoc* reporting, ActiveEye Portal can provide a daily email summary and monthly report. Daily email summaries can include alert counts, security cases opened or closed, saved queries that have new data, and detailed endpoint security statistics. If needed, ActiveEye Portal can send one or more summary emails with different content for different groups. Monthly reports are available as a PDF download.

Security Advisories

Security Advisories are messages initiated from the SOC that share information on active threats with the Customer's security teams. These advisories guide security teams on how to best take action against a threat and tell them where they can find further information.

Information Sharing

The ActiveEye Portal includes several functions for sharing information. Automatic security alerts notify pre-defined contacts of incidents, based on incident priority. Other information sharing functions include:

- **SOC Bulletins** - Instructions from the Customer, or the SOC, that SOC analysts reference when creating security cases. These can communicate short-term situations where a security case may not be needed, such as during testing or maintenance windows.
- **Customer Notebook** - The SOC will use the Customer Notebook to document the Customer's environment and any specific network implementation details that will help the SOC investigate security cases.
- **Contact Procedures** - Escalation procedures and instructions on who to contact if an incident occurs. Contact procedures include instructions and procedures for specific security incident levels. The SOC and the Customer will jointly manage contact procedures.

User Access

The ActiveEye Portal provides the ability to add, update, and remove user access. Every ActiveEye user can save queries, customize reports, and set up daily email summaries. Users may be given administrative access, allowing them to perform administrative tasks, such as setting up new service connectors, resetting passwords, and setting up multi-factor authentication for other users.

2.2.2 Service Modules

ActiveEye delivers service capability by integrating one or more service modules. These modules provide ActiveEye analytics more information to correlate and a clearer vision of events on the Customer's network. In addition, modules enable security teams and analysts to more easily access and compare data from these disparate systems. The following subsections describe each ActiveEye service module in detail.

2.2.2.1 Log Collection / Analytics

The AERSS deployed in the Host's system collects logs and other security information from applicable servers, workstations, switches, routers, Network Detection, and firewalls. This information is forwarded to the ActiveEye platform, which uses advanced analytics to identify signs of security incidents. If it identifies signs of a security incident, ActiveEye notifies the SOC for further analysis.

Collected events will be stored in the ActiveEye Security Management Platform to enable historical searching or threat hunting as needed. Some high volume, repetitive logs may be aggregated as noted in the documentation. The default storage time period is one year, but no longer than 90 days, following expiration or termination of the Agreement. A longer time period can be provided if subscribed.

2.2.3 Security Operations Center Services

Motorola Solutions delivers SOC Monitoring using one or more SOC facilities. The SOC includes any centralized hardware and software used to deliver this Service and its service modules. The SOC and its centralized hardware and software are housed within an SSAE-18 compliant data center.

Motorola Solutions' SOC is staffed with security experts who will use ActiveEye Security Management Platform to monitor elements integrated by service modules. In addition, SOC staff will take advantage of their extensive experience to investigate, and triage detected threats, and to recommend responses to the Customer.

Section 3

Solution Description – Professional Services

Motorola Solutions, Inc. (Motorola) is pleased to present the proposed cybersecurity services for the City of Lee's Summit, Missouri (Customer).

The following cybersecurity services are included in our proposal:

- **Cyber Assurance Program (CAP)**
 - Ransomware Tabletop Exercise
 - IR Plan Development
 - NIST CyberSecurity Framework (CSF) Program Risk Assessment
 - Vulnerability Scanning
 - External Penetration Test
- **Risk Assessment**
 - Risk Assessment Standard
 - Cybersecurity Risk Assessment
 - Firewall Review
 - Physical Security Assessment

3.1 Site Information

The following site information is included in the scope of our proposal:

Table 3-1: Customer Site Information

Quantity	Site / Location	Network Environment	Service Type
1 Year	Organization Level	ASTRO	<ul style="list-style-type: none"> • Cyber Assurance Program (CAP) <ul style="list-style-type: none"> ○ Ransomware Tabletop Exercise ○ IR Plan Development ○ NIST Cyber Security Framework (CSF) Program Risk Assessment ○ Vulnerability Scanning ○ External Penetration Test • Risk Assessment <ul style="list-style-type: none"> ○ Risk Assessment Standard <ul style="list-style-type: none"> – Cybersecurity Risk Assessment – Firewall Review – Physical Security Assessment

Backhaul environments are not included in the scope of our proposal. RF Sites and Dispatch locations must be within 70 miles of the primary assessment location. The Risk Assessment scope will be one system core, as well as a backup site/location that is within 50 miles of the primary site.

Table 3-2: Services by Year

Year	Service	Description
1	Cyber Assurance Program	<ul style="list-style-type: none"> ▪ Ransomware Tabletop Exercise ▪ IR Plan Development ▪ Vulnerability Scanning ▪ External Penetration Test
1	Risk Assessment Standard	<ul style="list-style-type: none"> ▪ Cybersecurity Risk Assessment ▪ Firewall Review ▪ Physical Security Assessment

3.2 Service Description

3.2.1 Cyber Assurance Program

CAP is the best way to ensure that comprehensive measures and a robust approach is taken to secure your public safety critical infrastructure by leveraging proven frameworks, expert advice and cybersecurity best practices.

Motorola offers customers one (1) year support packages that include combinations of the following services, varying in each year, to establish a continuous approach to maintaining your cybersecurity posture and readiness for cybersecurity incidents.

- Ransomware Tabletop Exercise
- IR Plan Development
- Vulnerability Scanning
- External Penetration Test

3.2.2 Risk Assessment

3.2.2.1 Cybersecurity Risk Assessment

The Cybersecurity Risk Assessment is a professional service to evaluate an existing information security program against best practices, as well as common frameworks. The Cybersecurity Risk Assessment will support the investigation of already established policies, standards, procedures, practices and technologies implemented by the Customer and align these practices with the chosen framework. The outcome of the assessment will allow Motorola to provide the Customer with an understanding of its state of compliance, provide insight into gaps that have been identified in the security program with respect to cyber best practices and benchmarks and provide remediation recommendations for the organization to improve upon.

Objectives

Customer is seeking assistance to evaluate if their security program meets prudent security guidelines, and is in compliance with common cyber requirements. This security review will provide Customer with visibility into how your existing IT Security standards stand up against best practices to:

- Identify cyber threats and gaps
- Determine areas of mis-alignment with common cyber frameworks such as CJIS, NIST CSF or ISO 27001
- Define and prioritize the risk associated with the gaps
- Offer specific advice on how to remediate the gaps

3.2.2.2 Firewall Review

Review firewall configuration files in order to determine whether there are any misconfigurations or security weaknesses that would allow traffic from external sources to bypass security restrictions and enter the network, as well as whether traffic is allowed to leave the network undetected.

Checks performed include authentication services and settings, time synchronization, message logging, network interfaces, etc.

3.2.2.3 Physical Security Assessment

Locating gaps in facility security and determining what risks are associated with them requires specialized training that can be expensive to maintain on staff. Motorola can provide an evaluation by a facility security expert, giving the benefit of expert assessment without the costs of recruiting and retaining personnel. Motorola's expert assesses the efficacy of security controls and procedures, and provides a report outlining potential security risks and ways to mitigate them.

Section 4

Implementation Statement of Work

4.1 Responsibility Matrix

Motorola Solutions will install and configure the proposed equipment. The following table describes the tasks involved with installation and configuration.

Tasks	Motorola Solutions	Customer
PROJECT INITIATION		
Contract Finalization and Team Creation		
Execute contract and distribute contract documents.	X	X
Assign a Project Manager as a single point of contact.	X	X
Assign resources.	X	X
Provide applicable technician resumes, as required.	X	
Schedule project kickoff meeting.	X	X
Deliverable: Signed contract, defined project team, and scheduled project kickoff meeting.		
Project Administration		
Ensure that project team members attend all meetings relevant to their role on the project.	X	X
Record and distribute project status meeting minutes.	X	
Maintain responsibility for third-party services contracted by Motorola Solutions.	X	
Complete assigned project tasks according to the project schedule.	X	X
Submit project milestone completion documents.	X	
Upon completion of tasks, approve project milestone completion documents.		X
Conduct all project work Monday thru Friday, 8 a.m. to 5:00 p.m. local time with the exception of Motorola Solutions' and the Customer's holidays.	X	
Deliverable: Completed and approved project milestones throughout the project.		

Tasks	Motorola Solutions	Customer
Project Kickoff		
Introduce team, review roles, and decision authority.	X	X
Present project scope and objectives.	X	
Review SOW responsibilities and project schedule.	X	X
Schedule Design Review.	X	X
Deliverable: Completed project kickoff and scheduled Design Review.		
Design Review		
Review the Customer's operational requirements.	X	X
Present the system design and operational requirements for the solution.	X	
Provide announced End of Life (EOL) notifications for proposed equipment. An NDA will apply,	X	
Identify 3 rd party equipment that is outside of the Motorola Solutions contract that will need to be reconfigured and reoptimized, as needed.	X	
Identify existing radio and non-radio interfaces.	X	
Present installation plan.	X	
Present preliminary cutover plan and methods to document final cutover process.	X	
Present configuration and details of sites required by system design.	X	
Identify non-standard configurations, customer-modified infrastructure, and specific 3 rd party infrastructure that are not included in this proposal.	X	
Identify support and entry facilities for the cables between proposed equipment locations.	X	
Identify utility service and AC breaker requirements to support the new equipment and ancillary equipment.	X	
Identify space, grounding, and power requirements.	X	X
Validate that Customer sites can accommodate proposed equipment.	X	X
Provide approvals required to add equipment to proposed existing sites.		X
Review safety, security, and site access procedures.	X	
Finalize site acquisition and development plan.	X	
Present equipment layout plans and system design drawings.	X	
Provide heat load and power requirements for new equipment.	X	
Modification of 800 MHz FCC Licenses, as required.	X	

Tasks	Motorola Solutions	Customer
Identify antenna mounting requirements and antenna types.	X	X
Evaluate and incorporate the results of any site and microwave path surveys into the system design.	X	
Calculate microwave path availability using industry accepted models for predicting outages and countermeasure improvements associated with normal atmospheric multi-path fading, up-fading, rain fading, and obstruction fading, etc.	X	
Provide a microwave path design report that includes the proposed microwave system solution. The report includes a topology map, design criteria, path RF and network performance calculations. The microwave radio models, antenna models, and transmission line models are included in the path design report.	X	
Develop and provide rack elevation drawings, for Infinity provided equipment. This may include but not limited to the inter-rack mounting locations for power distribution units (PDUs), DC power and batteries, microwave radios, DS1 patch panels, routers, switches, etc.	X	
For applications that include the Nokia Microwave Service Switches (MSS); work with the Lee Summit to define parameters including but not limited to management IP addresses, OSPF areas, VLANs, ethernet port configuration, and TDM circuit parameters.	X	
Develop and provide microwave acceptance test plans as required.	X	
Develop and provide a microwave design document that may include a combination of the following items: <ul style="list-style-type: none"> ▪ Site and path survey reports ▪ Final microwave topology map, path design, and calculations ▪ FCC PCN datasheets and licenses ▪ Bill of materials ▪ Rack drawings ▪ Installation photos ▪ Testing results Backups of microwave equipment configuration files	X	
Identify new and existing Field Replacement Units (FRUs) to establish a baseline for future service.	X	X
Provide information on existing radio system interfaces.	X	X
Provide information on existing non-radio system interfaces.		X
Assume liability and responsibility for providing all information necessary for complete installation.	X	X
Identify issues outside of Motorola Solutions' control.	X	
Assume responsibility for issues outside of Motorola Solutions' control.		X
Review and update design documents, including System Description, Statement of Work, Project Schedule, and Acceptance Test Plan, based on Design Review agreements.	X	

Tasks	Motorola Solutions	Customer
Provide minimum acceptable performance specifications for customer provided hardware, software, LAN, WAN and internet connectivity.	X	
Execute Change Order in accordance with all material changes to the Contract resulting from the Design Review.	X	
Deliverable: Finalized design documentation based upon "frozen" design, along with any relevant Change Order documentation.		
MICROWAVE FIELD DESIGN		
Microwave Site Surveys		
Arrange for surveyor access inside of the proposed sites.	X	X
Determine and document locations for new equipment rack at each site.	X	
Measure and document any transmission lines routes required from the proposed equipment rack location to the entry panel port of the building/shelter at the site. For indoor microwave radio applications, the transmission line is elliptical waveguide. For outdoor radio applications this may be one or a combination of ethernet cable, optical fiber cable, or coaxial cable.	X	
Complete a basic floor plan drawing.	X	
Document the AC breaker types available at each site.	X	
Provide general survey observations, comments, and site photos/videos.	X	
Prepare a site survey report and submit the report to the customer.	X	
Deliverable: Microwave Site Survey Report		
Microwave Path Surveys: Formal microwave path surveys are required to determine or verify site coordinates, ground elevation, on-path obstructions (location and height), tower information, and other parameters required to engineer the final design of a radio link. The current and anticipated future path performance impact of on-path and off-path obstructions, such as tree growth evaluated and incorporated into the path design where applicable.		
Provide information to the surveyors to locate the proposed microwave sites.	X	X
Arrange for the path surveyor to access to the proposed microwave sites	X	X
Verify and document site elevations above sea level to an accuracy of within 5-feet and provide a terrain elevation contour map.	X	
Verify and document site longitude and latitude coordinates within 1-second by using Differential Global Positioning Satellites (GPS).	X	
Document the existing tower description and information, including photos of any applicable ASR signs.	X	
Provide general survey observations, comments, and site photos/videos.	X	

Tasks	Motorola Solutions	Customer
Generate tower mapping document as observed from the ground. Tower map does not include exact tower mounted equipment centerlines or equipment model numbers.	X	
Deliverable: Microwave Path Survey Report		
Microwave Frequency Planning and Licensing Frequency planning and licensing services include frequency selection, prior coordination notices, identifying potential interference cases, and preparation of any application FCC documents and application.		
Utilizing the final approved microwave path design, identify and select frequencies for each path. This is completed by utilizing FCC databases and completing a thorough interference analysis of available frequencies. Interference studies are conducted utilizing industry accepted methods, based on FCC databases at the time of the FCC coordination process.	X	
Complete and submit a Prior Coordination Notice (PCN).	X	
Complete and submit the FCC 601 license application.	X	
Notify the FCC of a completion of construction of each path.	X	
Provide the licensee's FCC Registration Number (FRN) and password.		X
For any non-government licensees that are not exempt, pay any applicable FCC licensing fees.		X
Deliverable: Microwave FCC Licensing		
SITE PREPARATION AND DEVELOPMENT		
Site Access		
Provide site owners/managers with written notice to provide entry to sites identified in the project design documentation.		X
Maintain access roads in order to provide clear and stable entry to sites for heavy-duty construction vehicles, cement trucks and cranes. Ensure that sufficient space is available at the site for these vehicles to maneuver under their own power, without assistance from other equipment.		X
Obtain site licensing and permitting, including site lease/ownership, zoning, permits, regulatory approvals, easements, power, and telco connections, unless expressly provided by Motorola Solutions in the Civil SOW appendix to this SOW.		X
Deliverable: Access, permitting, and licensing necessary to install system equipment at each site, other than those expressly provided by Motorola Solutions in the Civil SOW.		
Site Planning		
Provide necessary buildings, equipment shelters, and towers for installation of system equipment other than those expressly provided by Motorola Solutions in our Civil SOW.		X

Tasks	Motorola Solutions	Customer
Maintain existing access road in order to provide clear and stable entry to the site for heavy-duty construction vehicles, cement trucks and cranes. Sufficient space must be available at the site for these vehicles to maneuver under their own power, without assistance from other equipment.		X
Ensure that required rack space is available for installation of the new equipment, as identified by the customer and Motorola Solutions in the Detailed Design Review.		X
Ensure that required space is available on the tower or antenna mounting structure, as identified by the customer and Motorola Solutions in the Detailed Design Review.		X
Provide the R56 requirements for space, power, grounding, HVAC, and connectivity requirements at each site.	X	
Provide adequate electrical power in proper phase and voltage at sites, as identified by Motorola Solutions in the Detailed Design Review.		X
Provide backup power, as required. 200A circuit needed at a minimum.		X
Provide power to the top of each proposed rack at new sites.	X	
Provide power to the top of each proposed rack at existing sites, as identified by Motorola Solutions in the Detailed Design Review.		X
Provide appropriately sized breakers in the AC panel at sites to support the needs of the proposed system, as identified by Motorola Solutions in the Detailed Design Review.		X
Provide support and entry facilities for the cables (cable ladder/chaseway, entry ports, etc.) between the proposed equipment locations, as identified by Motorola Solutions in the Detailed Design Review.		X
Provide as-built structural and foundation drawings of the structures and site locations, along with geotechnical reports, in order to facilitate a structural analysis.		X
Perform structural analysis of towers, rooftops, or other structures to confirm that they are capable of supporting proposed and future antenna loads.	X	
Modify towers or other structures, or relocate sites in the system, to ensure that they are capable of supporting proposed and future antenna loads.		X
Conduct site walks to collect pertinent information (e.g. location of telco, power, structures, etc.)	X	
Conduct one three-point ground resistance test of each site.	X	
Prepare a lease exhibit and sketch of each site showing the proposed lease space and planned development at that site.	X	
Prepare site construction drawings showing the layout of new and existing equipment.	X	
Review and approve site construction drawings.		X

Tasks	Motorola Solutions	Customer
Obtain the permits needed to complete site development, including electrical, building, and construction permits.	X	
As applicable (based on local jurisdictional authority), the Customer will be responsible for any installation or up-grades of the electrical system in order to comply with NFPA 70, Article 708. This will be identified by Motorola Solutions in the Detailed Design Review.		X
Pay for application fees, taxes, and recurring payments for lease/ownership of property.		X
Deliverable: Information and permitting requirements completed at each site.		
General Facility Improvements		
General Facility improvements, unless expressly defined by the Civil SOW		X
Deliverable: Sites meet physical requirements for equipment installation.		
SYSTEM INSTALLATION		
Equipment Order and Manufacturing		
Create equipment order and reconcile to contract.	X	
Manufacture Motorola Solutions-provided equipment necessary for the system based on equipment order.	X	
Procure non-Motorola Solutions equipment necessary for the system.	X	
Deliverable: Equipment procured and ready for shipment.		
Equipment Shipment and Storage		
Provide a secure location for solution equipment for dispatch equipment	X	
Provide a secure location for solution equipment for microwave equipment at Customer owned facility. Motorola Solutions' project management team will work closely with Lee's Summit to align shipment date timing for the microwave equipment with the final implementation schedule.		X
Assume title and risk of microwave equipment while in Customer storage		X
Pack and ship solution equipment to the identified, or site locations.	X	
Receive solution equipment.	X	X
Inventory solution equipment.	X	
Deliverable: Solution equipment received and ready for installation		
General Installation		
Deliver solution equipment to installation location.	X	

Tasks	Motorola Solutions	Customer
Coordinate receipt of and inventory solution equipment with designated contact.	X	
Install all proposed fixed equipment as outlined in the System Description based upon the agreed-upon floor plans, connecting audio, control, and radio transmission cables to connect equipment to the power panels or receptacles, and audio/control line connection points. Installation performed in accordance with R56 standards and state/local codes.	X	
Provide system interconnections that are not specifically outlined in the system design, including dedicated phone circuits, microwave links, or other types of connectivity, as identified by Motorola Solutions in the Detailed Design Review.		X
Install and terminate all network cables between site routers and network demarcation points, including microwave, leased lines, and Ethernet. Unless noted otherwise in the proposal, network cable lengths are assumed to be 25 feet or less, and to be run within the same equipment room. Also, up to 2 network cables are assumed per site.	X	
Provide, Install and terminate all cabling between punchblocks and customer provided I/O or alarm interfaces, as identified by the customer and Motorola Solutions in the Detailed Design Review.		X
Connect installed equipment to the provided ground system within 15 feet.	X	
Label Motorola-supplied equipment, racks, and cables.	X	
Perform preliminary audit of installed equipment to ensure compliance with requirements and R56 standards.	X	
Note any required changes to the installation for inclusion in the "as-built" system documentation.	X	
Remove, transport, and dispose of old equipment.	X	
Deliverable: Equipment installed.		
ASTRO 25 Core and Remote Site Installation and Configuration		
Install fixed equipment contained in the equipment list and system description.	X	
Provide backhaul connectivity and associated equipment for all sites to meet latency, jitter and capacity requirements.	X	
Deliverable: ASTRO 25 core and remote site equipment installation completed.		
Console Installation and Configuration		
Provide console furniture and make room for console installation.		X
Identify circuits for connection to console and a demarcation point located near the console interface, as identified by the customer and Motorola Solutions in the Detailed Design Review.		X
Connect console to circuit demarcation points.	X	

Tasks	Motorola Solutions	Customer
Install peripheral console equipment in accordance with R56 standards and state/local codes.	X	
Relocate and upgrade existing Eventide logging recorders	X	
Deliverable: Console equipment installation completed.		
Control Station Relocation, Installation, and Configuration		
Removal control station equipment from existing dispatch locations.	X	
Provide the locations of control stations and desk sets at each site.	X	X
Survey mounting locations and develop control station installation plan.	X	
Provide adequate space, grounding, and power for the control station installation, as identified by Motorola Solutions in the Detailed Design Review.		X
Properly ground the cabling, which will be run to the outdoor antenna location using the least obtrusive method.	X	
Provide an elevated antenna mounting location, and adequate feed-line routing and support.		X
Provide and install standard antenna mounts.	X	
Install line (not greater than 100 feet in length) and antenna system (connectors, coax grounding kit, antenna, and surge protection).	X	
Install RF local control stations identified in the equipment list.	X	
Deliverable: Control station equipment installation completed.		
Deskset Installation and Configuration		
Remove desksets and control cables from existing locations	X	
Survey deskset locations and develop installation plan.	X	
Provide adequate space, grounding, and power for the desksets, RGU's and related equipment, as identified by Motorola Solutions in the Detailed Design Review.		X
Provide network and network connectivity for existing and new desksets.	X	
Provide and install network cabling between solution components. The network demarcation point is the proposed hardware itself.	X	
Install existing desksets and associated equipment.	X	
Connect the deskset solution to the control stations as designed.	X	
Perform deskset and RGU programming.	X	
Deliverable: Control station and deskset equipment installation and configuration completed.		

Tasks	Motorola Solutions	Customer
Deliverable: Fleetmap plan completed and approved by Customer.		
SYSTEM OPTIMIZATION AND TESTING		
R56 Site Audit		
Perform pre and post R56 site-installation quality-audits, verifying proper physical installation and operational configurations.	X	
Create site evaluation report to verify site meets or exceeds requirements, as defined in Motorola Solutions' R56 Standards and Guidelines for Communication Sites.	X	
Deliverable: R56 Standards and Guidelines for Communication Sites audits completed successfully.		
Solution Optimization		
Verify that all equipment is operating properly and that all electrical and signal levels are set accurately.	X	
Verify that all audio and data levels are at factory settings.	X	
Verify communication interfaces between devices for proper operation.	X	
Ensure that functionality meets manufacturers' specifications and complies with the final configuration established during design review or system staging.	X	
Reconfigure and reoptimize 3rd party equipment that is not part of the Motorola Solutions scope of work.		X
Deliverable: Completion of System Optimization.		
Functional Acceptance Testing		
Verify the operational functionality and features of the solution supplied by Motorola Solutions, as contracted.	X	
Witness the functional testing.		X
Document all issues that arise during the acceptance tests.	X	
If any major task for the system as contractually described fails during the Customer acceptance testing or beneficial use, repeat that particular task after Motorola Solutions determines that corrective action has been taken.	X	
Resolve any minor task failures before Final System Acceptance.	X	
Document the results of the acceptance tests and present for review.	X	
Review and approve final acceptance test results.		X
Deliverable: Completion of functional testing and approval by Customer.		
Cutover		
Finalize Cutover Plan.	X	X

Tasks	Motorola Solutions	Customer
Conduct a cutover meeting with relevant personnel to address both how to mitigate technical and communication problem impacts to the users during cutover and during the general operation of the system.	X	
Notify the personnel affected by the cutover of the date and time planned for the cutover.		X
Provide ongoing communication with users regarding the project and schedule.	X	X
Cut over users and ensure that user radios are operating on the system.	X	X
Resolve punch list items, documented during the Acceptance Testing phase, in order to meet all the criteria for final system acceptance.	X	
Assist Motorola Solutions with resolution of identified punch list items by providing support, such as access to the sites, equipment and system, and approval of the resolved punch list items.		X
Deliverable: Migration to new system completed, and punch list items resolved.		
Transition to Warranty		
Review the items necessary for transitioning the project to warranty support and service.	X	
Motorola Solutions to provide services during year 1 warranty which align with the proposed services.	X	
Provide a Customer Support Plan detailing the warranty support associated with the contract equipment.	X	
Identify non-standard configurations, customer-modified infrastructure, and unsupported third party infrastructure during transition.	X	
Provide Remote Technical Support responsibilities matrix.	X	
Participate in the Transition Service/Project Transition Certificate (PTC) process.		X
Deliverable: Service information delivered and approved by Customer		
Finalize Documentation and System Acceptance		
Provide manufacturer's installation material, part list and other related material to Customer upon project completion.	X	

Tasks	Motorola Solutions	Customer
Provide an electronic as-built system manual on CD or other Customer preferred electronic media. The documentation will include the following: <ul style="list-style-type: none"> ▪ Site Block Diagrams. ▪ Site Floor Plans. ▪ Site Equipment Rack Configurations. ▪ Antenna Network Drawings for RF Sites (where applicable). ▪ ATP Test Checklists. ▪ Functional Acceptance Test Plan Test Sheets and Results. ▪ Equipment Inventory List. ▪ Console Programming Template (where applicable). ▪ Maintenance Manuals (where applicable). ▪ Technical Service Manuals (where applicable). ▪ Drawings will be delivered in Adobe PDF format. 	X	
Ensure proper handoff of Software (Binder or Hard Drive) to Customer, and identify where the Software will be for future service.	X	
Receive and approve documentation.		X
Execute Final Project Acceptance.	X	X
Deliverable: All required documents are provided and approved. Final Project Acceptance.		

4.2 Civil Work

4.2.1 Site Development at Lee's Summit JOC Site

New 160' Mono Pole and refurbished shelter will be installed by Motorola outside the existing fence near the space identified on the original site walk. The customer will be responsible to provide backup power as express by Tusa consulting on the walks and has not been included in Motorola's proposal.

- Engineering services for site drawings and regulatory approvals – Included.
- Site acquisition services – Not included.
- Zoning Services – Included
- New fenced compound/expansion size – 40-foot x 40-foot.
- Clearing type – Light.
- Road length requiring improvement – 40 feet.
- New power run – 90 feet, Electrical service type – Underground, 200-amp - 120/240-volt, single-phase.
- Refurbished shelter size – 12-foot x 16-foot.
- New tower to be used for antennas – 160-foot monopole tower.
- New tower foundation type and size – based on Tower Vendor preliminary foundation design.

Motorola Responsibilities:

Site Zoning

- Coordinate zoning and permitting of the new tower site such that it is in full compliance with applicable jurisdictional requirements.

Site Engineering

- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Perform a site and topographic survey for the property on which the communication site is located or will be located.
- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Prepare zoning drawings that can be used to describe the proposed site installation in sufficient detail.
- Prepare record drawings of the site showing the as-built information.
- Perform construction staking around the site to establish reference points for proposed construction.
- Perform NEPA Threshold Screening, including limited literature and records search and brief reporting, as necessary to identify sensitive natural and cultural features referenced in 47 CFR Chapter 1, subsection 1.1307 that may potentially be impacted by the proposed construction activity. This does not include the additional field investigations to document site conditions if it is determined that the proposed communication facility "may have a significant environmental impact" and thus require additional documentation, submittals, or work. Regional Environmental Review (RER) report submittals if required by FEMA have not been included. Perform Cultural Resource study as needed to identify sensitive historical and archaeological monuments that might be impacted by proposed construction activity.
- Conduct up to 40-foot deep soil boring test at tower location and prepare geotechnical report of soil conditions at the location of monopole tower foundation.
- Conduct construction inspection of foundation steel prior to pour, materials testing of concrete and field density tests of backfill to ensure quality construction.
- Check tower erection for plumbness, linearity and alignment after installation.
- Prepare, submit and track application for local permit fees (electrical, building etc.), prepare FAA filings and procure information necessary for filing.

Site Preparation

- Obtain the permits such as electrical, building, and construction permits, and coordinate any inspections with local authorities that may be needed to complete site development work.
- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.
- Perform light clearing of brush, grubbing and disposal of vegetation and shrub growth in the site compound area and a 20-foot path around it (6400 square feet).
- Perform clear light brush, grub roots and dispose vegetation and shrub growth in a 15-foot wide access road to the site (not to exceed 40 feet in length).

- Grade the site compound and 10-foot path around it to provide a level, solid, undisturbed surface for installation of site components (not to exceed 3600 square feet).
- Supply and install gravel surfacing to a depth of 6 inches, including herbicide treatment and geotextile fabric installation within the fenced in site compound area, and a 3-foot path around it (not to exceed 2116 square feet).
- Provide a 15-foot wide access road (not to exceed 40 feet in length), including surface grading and graveling
- Provide silt fence around the compound to control soil erosion (not to exceed 160 linear feet).
- Supply and install 8-foot high similar to existing fencing with a ten-foot wide gate around the shelter compound (not to exceed 160 linear feet).
- Perform site touch up (fertilize, seed and straw) disturbed areas not covered with gravel after completion of construction work. Landscaping, decorative fencing or any other aesthetic improvement that may be required by local jurisdictions has not been included and will be handled through a negotiated contract change notice.
- Supply and install 1 prefabricated concrete shelter 12-foot x 16-foot.
- Supply and install 1 120/240-volt, 200-amp, single-phase meter pedestal and hook-up for electrical service by the local utility.
- Provide all trenching, conduit, and cabling necessary for underground hook-up of power to the shelter from nearby utility termination located within 90 cable feet of the shelter.
- Supply and install a perimeter grounding system around the compound, shelter and tower. The ground system is to tie to the fence and all new metal structures within the compound to meet current Motorola's R56 standards.
- Conduct 1 three-point ground resistance test of the site. Should any improvements to grounding system be necessary after ground testing, the cost of such improvements shall be the responsibility of Lee's Summit.
- Supply and install 1 freestanding 24-inch-wide cable/ice bridge from the tower to the shelter (up to 20 linear feet).

Tower Work

- Construct drilled pier type tower foundations including excavation, rebar and concrete (not to exceed 26 cubic yards).
- Erect new 160-foot monopole tower.
- Supply and install grounding for the tower-base for monopole or guyed towers.

Antenna and Transmission Line Installation

- Install 2 antenna(s) for the RF system.
- Install 2 4-foot microwave dishes.
- Install 1 6-foot microwave dishes.
- Install 7/8-inch transmission line up to antenna locations.
- Install EW63 waveguide up to microwave dish location.
- Install EW90 waveguide up to microwave dish location.
- Perform sweep tests on transmission lines.

- Perform alignment of each of 3 microwave paths to ensure that the microwave dishes are optimally positioned.
- Supply and install 1 ground buss bar at the bottom of the antenna support structure for grounding RF cables before they make horizontal transition.

Customer Responsibilities: At the JOC

- Provide personnel to observe construction progress and testing of site equipment according to the schedule provided by Motorola.
- As required, provide property deed or lease agreement, and boundary survey, along with existing as-built drawings of the site and site components to Motorola for conducting site engineering.
- Provide property deed or lease agreement, and boundary survey, along with existing as-built drawings of the site and site components to Motorola for conducting site engineering.
- Provide a right of entry letter from the site owner for Motorola to conduct field investigations.
- Provide additional temporary space for staging of the construction equipment during the construction of new site facilities (tower, shelter, etc.).

Assumptions:

- Pricing has been based on National codes such as IBC or BOCA.
- Hazardous materials are not present at the work location. Testing and removal of hazardous materials, found during site investigations, construction or equipment installation will be the responsibility of the customer.
- A maximum of 30 days will be required for obtaining approved building permits from time of submission.
- If extremely harsh or difficult weather conditions delay the site work for more than a week, Motorola will seek excusable delays rather than risk job site safety.
- In absence of geotechnical reports, foundations and subsurface conditions for tower design are based on Normal Soil per Rev-F soil parameters, as defined by EIA-222-H. Also, rock coring, piling, extensive dewatering of foundations, permanent casings or hazardous material removal has not been included.
- For zoning approvals, a maximum of 60 days will be required from time of submittal.
- The new tower location will pass the FAA hazard study, zoning, FCC and environmental permitting.
- The restoration of the site surroundings by fertilizing, seeding and strawing the disturbed areas will be adequate.
- Tower and foundation sizing is based on the tower loading requirements as a result of the RF Antenna System design and the Microwave Antenna System design (i.e. - dish sizes and locations obtained from paper path studies). If after physical path studies, the dish sizes and locations change, then Motorola will then review the impact to tower structure and foundations and revise applicable costs.
- If as a result of NEPA studies, any jurisdictional authority should determine that a proposed communications facility "may have a significant environmental impact", the environmental impact studies or field testing and evaluation related to such determination have not been included.

- A waiver to zoning requirements like setbacks, tower height limitations, etc. can be obtained.
- The soil resistivity at the site is sufficient to achieve resistance of ten (10) ohms or less. Communications site grounding will be designed and installed per Motorola's Standards and Guidelines for Communications Sites (R56).
- Foundations for the compound, shelter, generator and fuel tank are based "normal soil" conditions as defined by TIA/EIA 222-H. Footings deeper than 30 inches, raised piers, rock coring, dewatering, hazardous material removal or wetland mitigation have not been included.
- AM tuning of towers has not been included in this proposal.
- The available Transformer near the identified tower/ Shelter location can provide power to the site compound.

4.3 Civil Work

4.3.1 Site Development at Scherer Prime WT Site

Site construction includes drawings, permitting, Limited NEPA, Foundation, Geo-tech & Foundation Mapping, Structural Analysis, Project Management Remove 3 MW dishes & install 2- MW dishes, run lines, test & path align. Any deviation from using existing mounts & azimuths will require a Change Order for engineering & materials.

Site Scope Summary

- Engineering services for site drawings and regulatory approvals – Included.
- Site acquisition services – Not included.
- Zoning Services – Included
- Existing tower to be used for antennas – 200 ' Water Tank.

Motorola Responsibilities:

Site Engineering

- Prepare site construction drawings, showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Prepare record drawings of the site showing the as-built information.
- NEPA compliance/FCC checklist to determine if the site location affects Wilderness Area, Wildlife Preserve, Endangered Species, Historical Site, Indian Religious Site, Flood Plain, Wetlands, High Intensity White Lights in residential neighborhoods or excessive RF radiation exposure and prepare Cultural resource report.
 - If the Limited NEPA is not needed at this Water Tank site, Lee's Summit will receive a \$1,500 technology credit towards the purchase of additional Motorola Solutions manufactured equipment. Technology Credit expires upon the completion of the Warranty Period.

- Provide a structural engineering analysis for antenna support structure, if necessary, to support the proposed the proposed equipment loads.
- Design multi antenna support platform to support proposed antennas and dishes.
- Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing.

Site Preparation

- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.
- Supply and install 2 6-foot side arm(s) for antenna mounts.
- Install 2 antennas for the RF system.
- Install 1 4-foot microwave dish.
- Install 1 6-foot microwave dish.
- Supply 1 4-foot dish mount.
- Supply 1 6-foot dish mount.
- Install 1-1/4-inch transmission line up to antenna location.
- Install EW90 waveguide up to microwave dish locations.
- Perform sweep tests on transmission lines.
- Perform alignment of each of 2 microwave paths to ensure that the microwave dishes are optimally positioned.

Customer Responsibilities: For the Water Tank sites

- Provide a right of entry letter from the site owner for Motorola to conduct field investigations.

Assumptions: At the water tank sites

- All utility installations shall be coordinated and paid for by the site owner and located at jointly agreed to location within or around the new communications shelter or equipment room.
- Pricing has been based on National codes such IBC or BOCA. Local codes or jurisdictional requirements have not been considered in this proposal.
- Hazardous materials are not present at the work location. Testing and removal of hazardous materials, found during site investigations, construction or equipment installation will be the responsibility of the customer.
- A maximum of 30 days will be required for obtaining approved building permits from time of submission.
- If extremely harsh or difficult weather conditions delay the site work for more than a week, Motorola will seek excusable delays rather than risk job site safety.
- Existing antenna support structures are structurally capable of supporting the new antenna, cables and ancillary equipment proposed and will not need to be removed or rebuilt at the existing site. The tower or supporting structure meets all applicable EIA/TIA-222 structural, foundation, ice, wind and twist and sway requirements. Motorola has not included any cost for structural or foundation upgrades to the antenna support structure.
- Existing cable support facilities from the antenna to the cable entry port can be used for supporting the new antenna cables

- Extensive documentation (balloon tests, photo simulations, expert testimony etc.) to support zoning effort for existing structures is not required.
- Alarming at existing sites will be limited to new component installations and will have to be discussed and agreed to on a site-by-site basis.
- The site will have adequate room for installation of proposed equipment, based on applicable codes and Motorola's R56 standards, as identified by the customer and Motorola Solutions in the Detailed Design Review.
- The existing utility service and backup power facilities (UPS, generators) have sufficient extra capacity to support the proposed new equipment load.
- A clear obstruction-free access exists from the antenna location to the equipment room.
- The Customer does not desire upgrade of the existing site to meet Motorola's R56 standards.
- The floor can support the proposed new loading. Physical or structural improvements to the existing room will not be required.
- Microwave install will be performed link by link using the existing mounts. Elliptical Wave guide does not lend itself to be place in flexible conduit as it may become damaged. If required multiple sections maybe required and addition time and engineering may require some experimentation and use of additional materials and effort. This will need to be worked out during implementation.
- Existing Microwave mounts conformed to the previous installation and will be reused. Watertank dishes will be mounted on the existing mounts with available brackets to support dual tiebacks, if applicable.

4.4 Civil Work

4.4.1 Site Development at Ranson WT Site

Site Construction includes drawings, permitting, Limited NEPA, Foundation, Geo-tech & Foundation Mapping, Structural Analysis, Project Management Remove & install 2- MW dishes, run lines, test & path align. Removal of 1 MW dish, line and ancillary equipment. Any deviation from using existing azimuth and existing mounts will require a change order.

Site Scope Summary

- Engineering services for site drawings and regulatory approvals – Included.
- Zoning Services – Not included.
- Existing tower to be used for antennas – 200 ' Water Tank.

Motorola Responsibilities:

Site Engineering

- Prepare site construction drawings, showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).

- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Prepare record drawings of the site showing the as-built information.
- NEPA compliance/FCC checklist to determine if the site location affects Wilderness Area, Wildlife Preserve, Endangered Species, Historical Site, Indian Religious Site, Flood Plain, Wetlands, High Intensity White Lights in residential neighborhoods or excessive RF radiation exposure and prepare Cultural resource report.
 - If the Limited NEPA is not needed at this Water Tank site, Lee's Summit will receive a \$1,500 technology credit towards the purchase of additional Motorola Solutions manufactured equipment. Technology Credit expires upon the completion of the Warranty Period.
- Provide a structural engineering analysis for antenna support structure, if necessary, to support the proposed the proposed equipment loads.
- Design multi antenna support platform to support proposed antennas and dishes.
- Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing.

Site Preparation

- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs
- Install 1 6-foot microwave dish.
- Supply 1 6-foot dish mount.
- Install 1 4-foot microwave dish.
- Supply 1 4-foot dish mount.
- Install EW90 waveguide up to microwave dish locations.
- Perform sweep tests on transmission lines.
- Perform alignment of each of 2 microwave paths to ensure that the microwave dishes are optimally positioned.

4.5 Civil Work

4.5.1 Site Development at Woods Chapel WT Site

- Engineering services for site drawings and regulatory approvals – Included.
- Site acquisition services – Not included.
- Zoning Services – Not included.
- Existing tower to be used for antennas – 200 ' Water Tank.

Motorola Responsibilities:

Site Engineering

- Prepare site construction drawings, showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Prepare record drawings of the site showing the as-built information.
- NEPA compliance/FCC checklist to determine if the site location affects Wilderness Area, Wildlife Preserve, Endangered Species, Historical Site, Indian Religious Site, Flood Plain, Wetlands, High Intensity White Lights in residential neighborhoods or excessive RF radiation exposure and prepare Cultural resource report.
 - If the Limited NEPA is not needed at this Water Tank site, Lee's Summit will receive a \$1,500 technology credit towards the purchase of additional Motorola Solutions manufactured equipment. Technology Credit expires upon the completion of the Warranty Period.
- Provide a structural engineering analysis for antenna support structure, if necessary, to support the proposed the proposed equipment loads.
- Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing.

Site Preparation

- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.

Antenna and Transmission Line Installation

- Install 2 4-foot microwave dishes.
- Install 1 6-foot microwave dish.
- Supply 1 6-foot dish mount.
- Supply 2 4-foot dish mounts.
- Install EW90 waveguide up to microwave dish locations.
- Perform sweep tests on transmission lines.
- Perform alignment of each of 3 microwave paths to ensure that the microwave dishes are optimally positioned.

4.6 Civil Work

4.6.1 Site Development at Woods Chapel Independence System Site

Construction includes A&E to include, drawings, permitting, tower mapping, structural analysis, project management. Limited NEPA, install 1 MW Dish @ 75' run line, test, path align, remove 1 dish, line & ancillary hardware.

- Engineering services for site drawings and regulatory approvals – Included.
- Site acquisition services – Not included.
- Existing tower to be used for antennas – 180 ' Self supported Tower.

Motorola Responsibilities:

Site Engineering

- Prepare site construction drawings, showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Prepare record drawings of the site showing the as-built information.
- Perform a boundary and topographic survey for the property on which the communication site is located or will be located.
- NEPA compliance/FCC checklist to determine if the site location affects Wilderness Area, Wildlife Preserve, Endangered Species, Historical Site, Indian Religious Site, Flood Plain, Wetlands, High Intensity White Lights in residential neighborhoods or excessive RF radiation exposure and prepare Cultural resource report. Perform four point soil resistivity testing at the time of site visit.
- Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing.

Site Preparation

- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.

Antenna and Transmission Line Installation

- Install 1 4-foot microwave dishes.
- Supply 1 4-foot dish mounts.
- Install EW90 waveguide up to microwave dish location.
- Perform sweep tests on transmission lines.
- Perform alignment of each of 1 microwave paths to ensure that the microwave dishes are optimally positioned.

4.6.2 Site Development at 68 and Booth Site

Site construction includes, drawings, tower mapping & structural analysis, permitting, install 1 new MW dish, run lines, test & path align, remove 1 dish, line and ancillary equipment.

Site Scope Summary

- Engineering services for site drawings and regulatory approvals – Included.
- Site acquisition services – Not included.
- Zoning Services – Not included.
- Existing tower to be used for antennas – 200 ' Self supported Tower.

Motorola Responsibilities:

Site Engineering

- Prepare site construction drawings, showing the layout of various new and existing site components.
- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Prepare record drawings of the site showing the as-built information.
- Perform a boundary and topographic survey for the property on which the communication site is located or will be located.
- NEPA compliance/FCC checklist to determine if the site location affects Wilderness Area, Wildlife Preserve, Endangered Species, Historical Site, Indian Religious Site, Flood Plain, Wetlands, High Intensity White Lights in residential neighborhoods or excessive RF radiation exposure and prepare Cultural resource report. Perform four point soil resistivity testing at the time of site visit.
- Provide a structural engineering analysis for antenna support structure, if necessary, to support the proposed antenna system. If the tower structure fails the analysis, the cost of any site relocation or modifications to the tower required to support the antenna system will be the responsibility of Lees Summit.
- Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing.

Site Preparation

- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.

Antenna and Transmission Line Installation

- Install 1 6-foot microwave dishes.
- Supply 1 dish mounts for 6-foot microwave dishes.
- Install EW63 waveguide up to microwave dish location.
- Perform sweep tests on transmission lines.

- Perform alignment of each of 1 microwave paths to ensure that the microwave dishes are optimally positioned.

4.7 Civil Work

4.7.1 Site Development at KCPL/Evergy

Remove Shelter & Haul off up to 50 miles, remove shelter, generator & propane tank pads 2' below grade, remove and dispose of antennas, MW Dishes, Lines, ice bridge, fence & concrete

Site Scope Summary

- Engineering services for site drawings and regulatory approvals – Included.
- Site acquisition services – Not included.
- Zoning Services – Not included.
- Existing tower to be used for antennas – 220 ' self supported Tower.

Motorola Responsibilities:

Site Engineering

- Conduct site walks to collect pertinent information from the sites (e.g., location of Telco, power, existing facilities, etc.).
- Prepare a lease exhibit and sketch of the site to communicate to the property owner the proposed lease space and planned development at the particular site location.
- Perform a boundary and topographic survey for the property on which the communication site is located or will be located.
- NEPA compliance/FCC checklist to determine if the site location affects Wilderness Area, Wildlife Preserve, Endangered Species, Historical Site, Indian Religious Site, Flood Plain, Wetlands, High Intensity White Lights in residential neighborhoods or excessive RF radiation exposure and prepare Cultural resource report. Perform four point soil resistivity testing at the time of site visit.
- Provide a structural engineering analysis for antenna support structure, if necessary, to support the proposed antenna system. If the tower structure fails the analysis, the cost of any site relocation or modifications to the tower required to support the antenna system will be the responsibility of Lees Summit.
- Preparation, submission and tracking of application for local permit fees (zoning, electrical, building etc.) and procurement of information necessary for filing.

Site Preparation

- Provide one-time mobilization costs for the construction crews. Any remobilization due to interruptions/delays that are out of Motorola's control will result in additional costs.

Motorola pricing conditions

- Material Pricing, Towers, Shelters –

- Due to material price fluctuations in raw materials such as steel, copper, finished wood and concrete, Motorola reserves the right to review all material pricing prior to placing any order on new towers, shelters to verify price validity. This also includes the same materials associated with the civil work required on each site.
- Transportation from Supplier to Site the freight rates are estimated.
- A fuel surcharge may be applied to the quoted freight rate on all shipments based on the cost of diesel at the time of shipment.

4.8 Eventide Audio Logging - Statement of Work (Optional)

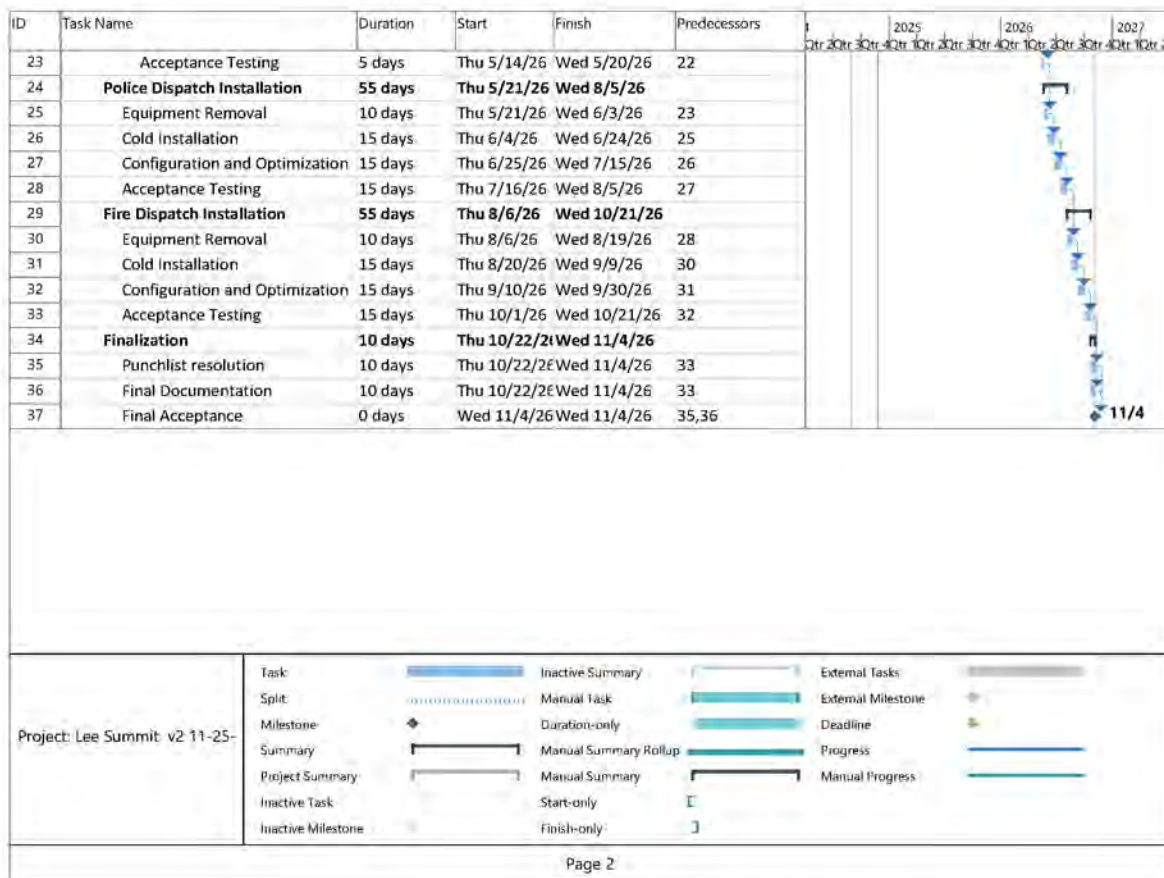
4.8.1 Professional Integration Services

To ensure a smooth installation and deployment, our proposed solution for Lee's Summit, MO includes the following services:

- Motorola "Remote" Project Management for the entire project lifecycle.
- Motorola and Eventide Engineering support for system design, installation, optimization, and acceptance testing.
- System installation, programming, and integration of all Motorola supplied equipment.
- End User Training.
- Includes 1st year warranty support services
 - Eventide IP Logging support includes local On-Site Support, Remote Alarm Monitoring, Remote Diagnostics, Annual Preventative Maintenance, and Software Hardware Upgrades (every 2 years).

This solution will be upgraded, optimized, and tested by our dedicated Project Implementation Team.

4.9 Project Schedule



4.10 Assumptions

Motorola Solutions has made several assumptions in preparing this proposal, which are noted below. Motorola will need to seek alternate solutions in the case of invalid assumptions.

- A Performance Bond is not required.
- Union Labor is not required.
- All existing sites or equipment locations will have adequate electrical power in the proper phase and voltage, and site grounding to support the requirements of the system described.
 - Electrician services are not included.
- Prevailing Wages provided for civil labor only and are assumed to not be required for other labor.
- All existing sites or equipment locations will have sufficient space available for the system described as required/specified by R56.
- All existing towers will have adequate space and size to support the antenna network requirements of the system described.

- Any tower stress analysis or tower upgrade requirements are the responsibility of the Customer.
 - Tower stress analysis or tower upgrades will be identified by Motorola Solutions.
- Any site/location upgrades or modifications are the responsibility of the Customer.
- Approved local, State, or Federal permits as may be required for the installation and operation of the proposed equipment are the responsibility of the Customer.
- Any required system interconnections not specifically outlined here will be provided by the Customer. This may include dedicated phone circuits, microwave links, or other types of connectivity.
- All recurring and non-recurring utility costs will be borne by the Customer or site owner.
- Site will have adequate electrical service. Utility transformer, transformer upgrades, line, or pole extensions have not been included.
- Training is included in this proposal.
- Motorola Solution's proposal is conditioned upon the ability of Motorola Solutions to complete the project at the prices set forth herein. Due to significant market volatility and material price fluctuations in raw materials such as steel, copper, finished wood, and concrete, Motorola Solutions reserves the right to review all material and multiyear services pricing prior to placing any order for materials or equipment required for new towers or shelters and related civil work at each site and at the start of any maintenance services in order to verify price validity. In the event of a cost increase in material, equipment, labor, or energy occurring during performance of the project through no fault of Motorola Solutions, including customer delays, the contract price, time of completion and/or contract requirements shall be equitably adjusted by Change Order in accordance with the procedures of the contract documents.
 - Any increases will be mutually agreed upon between Motorola Solutions and the Customer.
- Motorola Solutions is not responsible for interference caused by equipment not provided by Motorola Solutions in this contract. Should the Customer's system experience interference, Motorola Solutions can be contracted to investigate the source and recommend solutions to mitigate the issue.
 - All interference identified by Lee's Summit will be investigated by Motorola Solutions to determine if it is coming from equipment provided in this contract. Investigation will include the finding's results. Motorola Solutions can be contracted to investigate the source of interference from equipment outside of the contract to mitigate this issue.
- Motorola Solutions is not responsible for excessive outages or degraded performance due to abnormal fading conditions that include, but are not limited to:
 - Formation of extreme radio refractivity gradients associated with:
 - Exceptionally large temperature inversions
 - Abnormal temperature/humidity layers
 - Fog formation
 - Atmospheric ducting
 - Reflections from unidentifiable off path terrain features or physical structures
 - Rain fading due to rainfall rates that are more than the published rates or charts used to predict rain induced outages

- If Motorola Solutions suspects abnormal propagation conditions are causing degraded system performance, Motorola Solutions will reasonably assist the Customer in verifying the conditions leading to the degraded system performance. After the problem has been identified, Motorola Solutions will support the Customer in identifying possible solutions to the problem.
- Implementation of any corrective action required to remedy this type of problem shall be the sole responsibility of the Customer. Motorola Solutions can provide any required corrective actions for the Customer as part of an additional scope not covered in this statement of work contract.
- If any receiver interference is detected after the microwave system has been accepted, the Lee Summit is responsible for any correction actions. Motorola Solutions can provide any required corrective actions for Lee Summit as part of an additional scope not covered in this statement of work contract.
- Existing VESTA workstations will be moved to the JOC and current geographic mapping capabilities will be available.
- Grounding of cable drops to each Dispatch position are not included and are the responsibility of the customer.

Section 5

Coverage Design

No coverage testing is included in the scope of this project. For the Coverage Design, Motorola Solutions has reviewed the predictive, information-only coverage maps with the Lee's Summit Consultant, TUSA, to determine that the new coverage is acceptable. Additionally, a KMZ file of the coverage was provided to the Consultant for additional review. If additional coverage testing is requested it will need to be added to the scope.

Table 5-1: Optimized Radio System Coverage

Service Area	Device	Digital
Lee's Summit Portable on Street Outbound Coverage	Mobile	98%
Lee's Summit Portable on Street Inbound Coverage	Mobile	98%

Table 5-2: Motorola Design Coverage Parameters

Site Name	Function	Lat	Long	Tx Ant Height (top of ant)	Rx Ant Height (top of ant)
JOC	Geo-Prime Subsite Dispatch	38°55'53.99"N	94°22'56.69"W	160'	160'
Scherer	Prime Subsite	38°53'27.27"N	94°25'12.5"W	200'	200'
Woods Chapel	Subsite	38°59'6.36"N	94°21'3.66"W	170'	170'
Ranson	Subsite	38°53'43.7"N	94°20'23.7"W	185'	185'

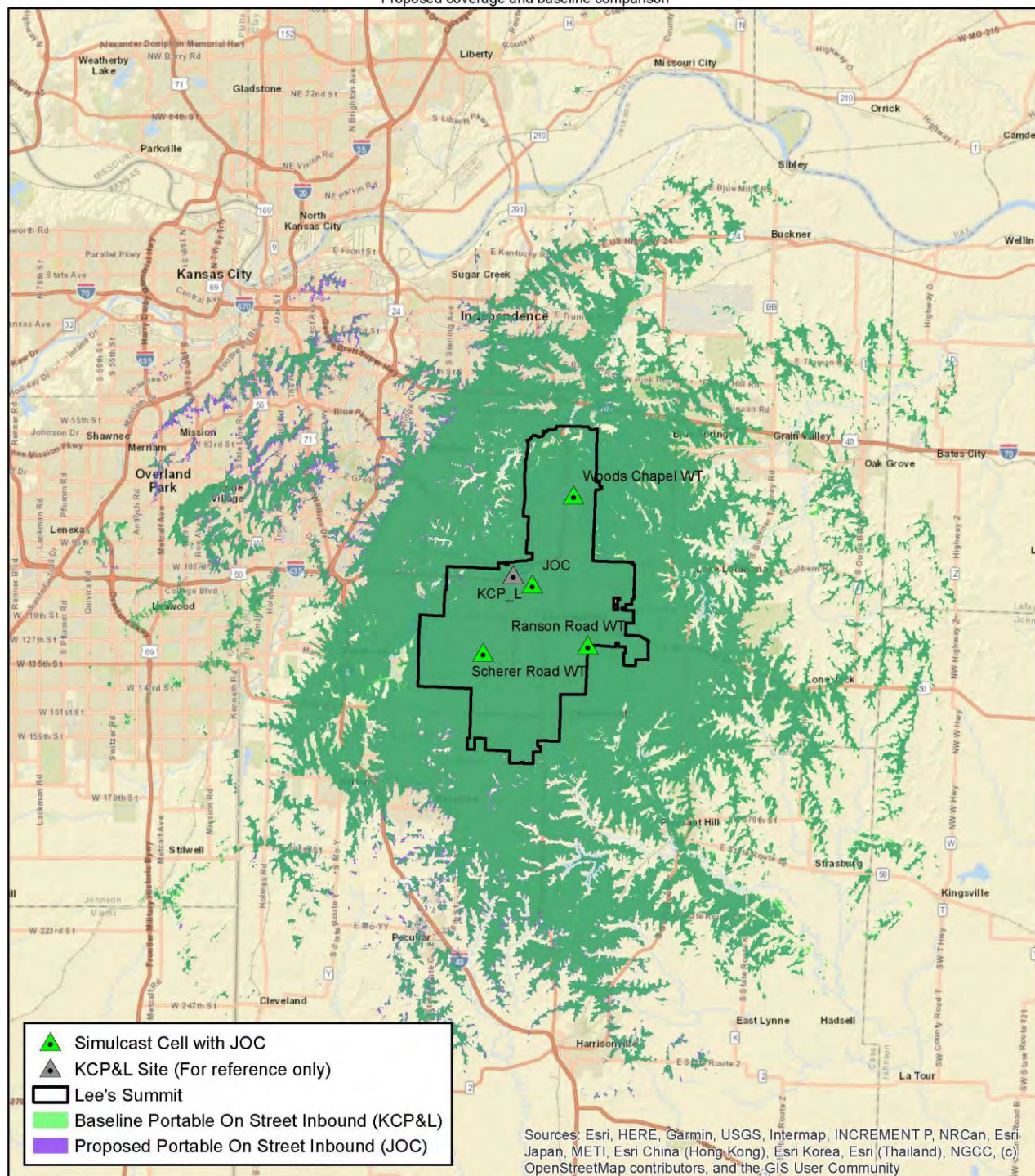
The coverage maps on the following pages show the change in coverage, and are all provided for reference only:



Lee's Summit, MO

For Information Only.

4-Site ASTRO P25 800 MHz TDMA Single-Cell Simulcast System
Shaded Area Represents 97% Covered Area Reliability at DAQ 3.4
Proposed coverage and baseline comparison



0 2 4 6 Miles
1 in = 5 miles

Nov 11, 2024
Hydra Stratus 3.1.10

Portable Configuration:
APX 6000, 3 W, 1/4 wave antenna
Tx/Rx at hip using swivel case with RSM

This map is intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

Lees Summit
LeesSummit_PropSol_Oct-30-2017_AsBuilt - Copy
Designs 32 and 33
BUH376, BUH376-ZB15G3

Map 1

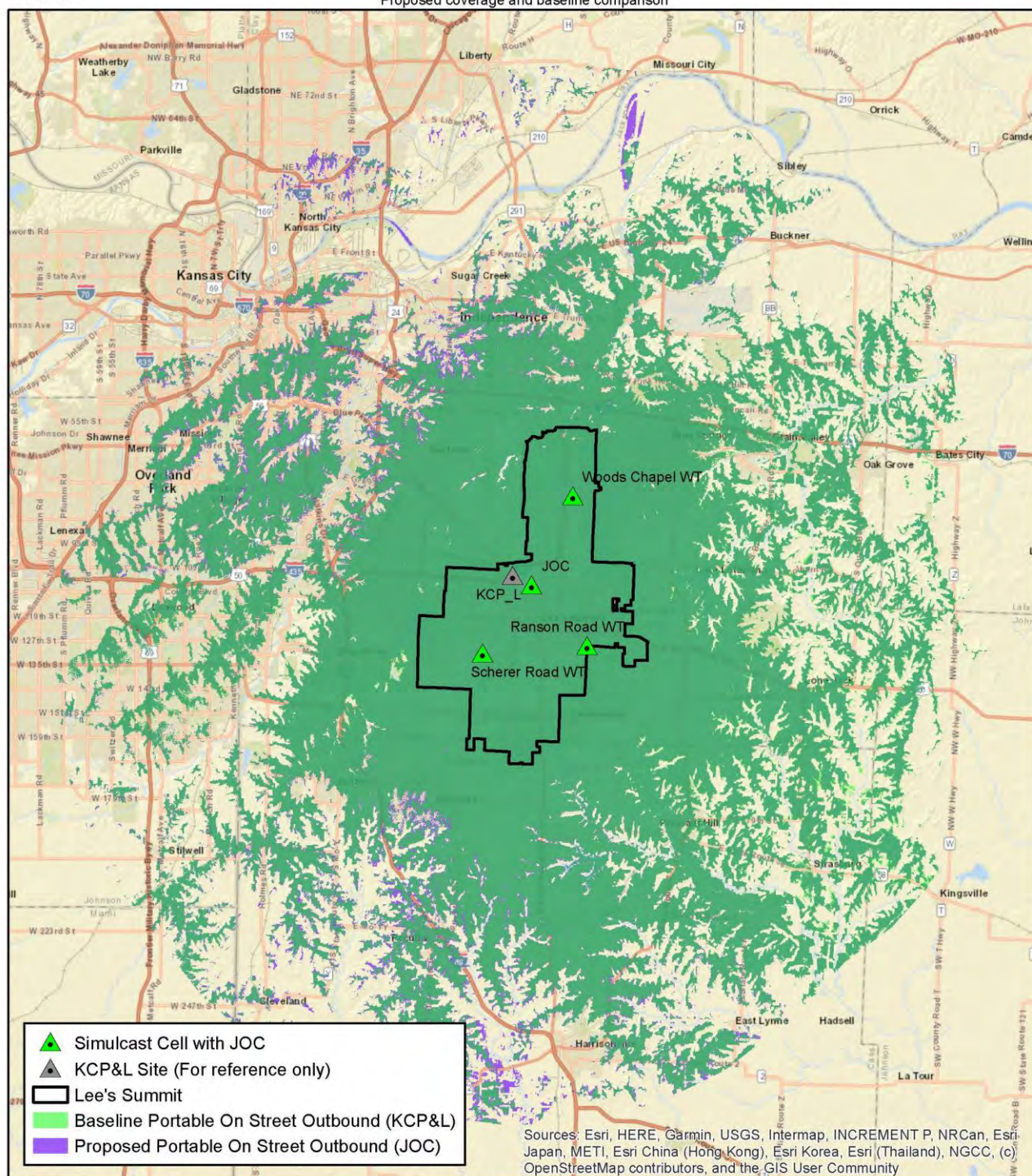




Lee's Summit, MO

For Information Only.

4-Site ASTRO P25 800 MHz TDMA Single-Cell Simulcast System
Shaded Area Represents 97% Covered Area Reliability at DAQ 3.4
Proposed coverage and baseline comparison



Portable Configuration:

APX 6000, 3 W, 1/4 wave antenna
Tx/Rx at hip using swivel case with RSM

Lees Summit
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Designs 32 and 33
BUH376, BUH376-ZB15G3

Nov 11, 2024
Hydra Stratus 3.1.10

This map is intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

Map 2

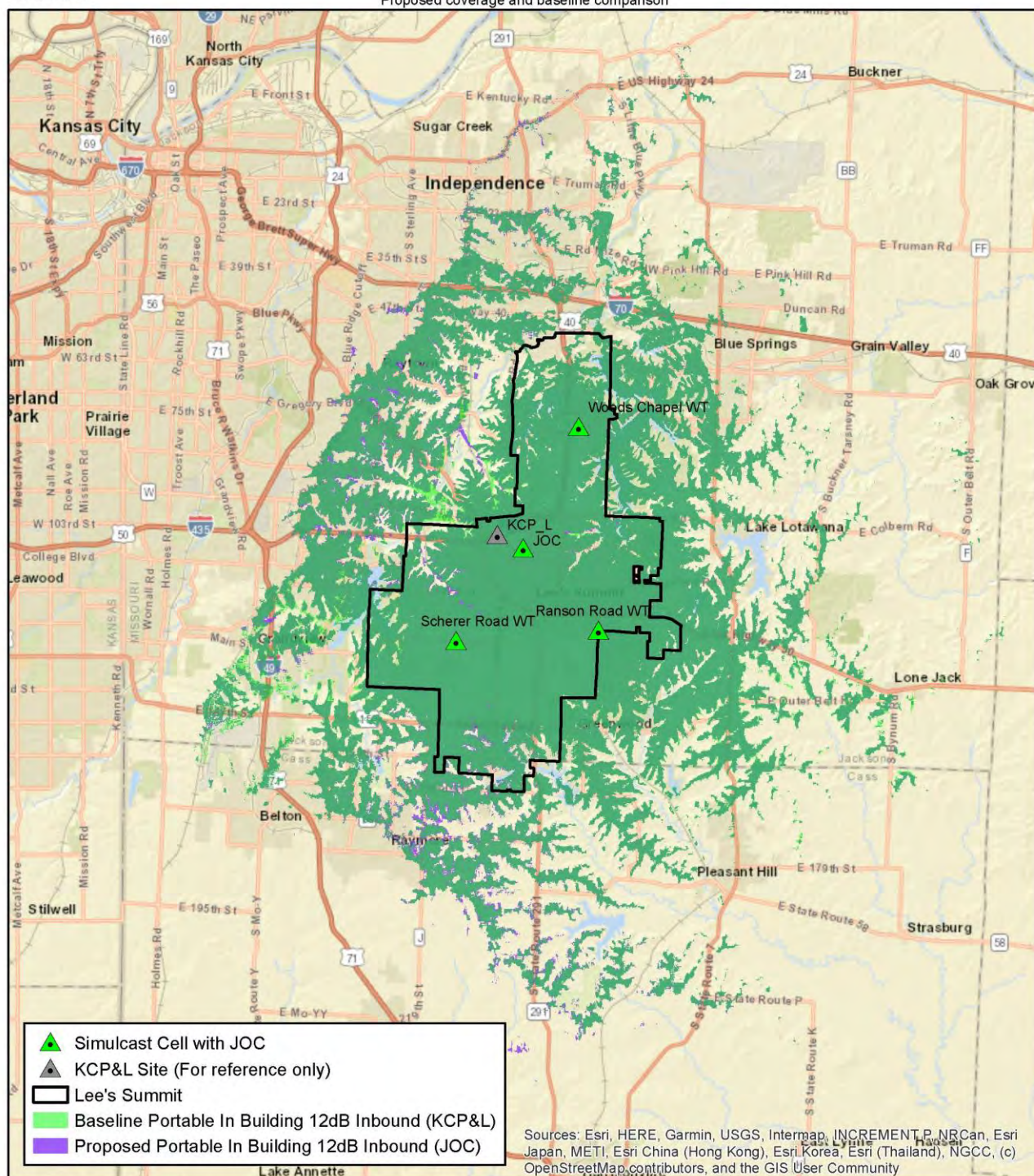




Lee's Summit, MO

For Information Only.

4-Site ASTRO P25 800 MHz TDMA Single-Cell Simulcast System
Shaded Area Represents 97% Covered Area Reliability at DAQ 3.4
Proposed coverage and baseline comparison



0 1.5 3 4.5 Miles
1 in = 4 miles

Portable Configuration:
APX 6000, 3 W, 1/4 wave antenna
Tx/Rx at hip using swivel case with RSM

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Designs 32 and 33
BUH376, BUH376-ZB15G3

Nov 11, 2024
Hydra Stratus 3.1.10

This map is intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

Map 3

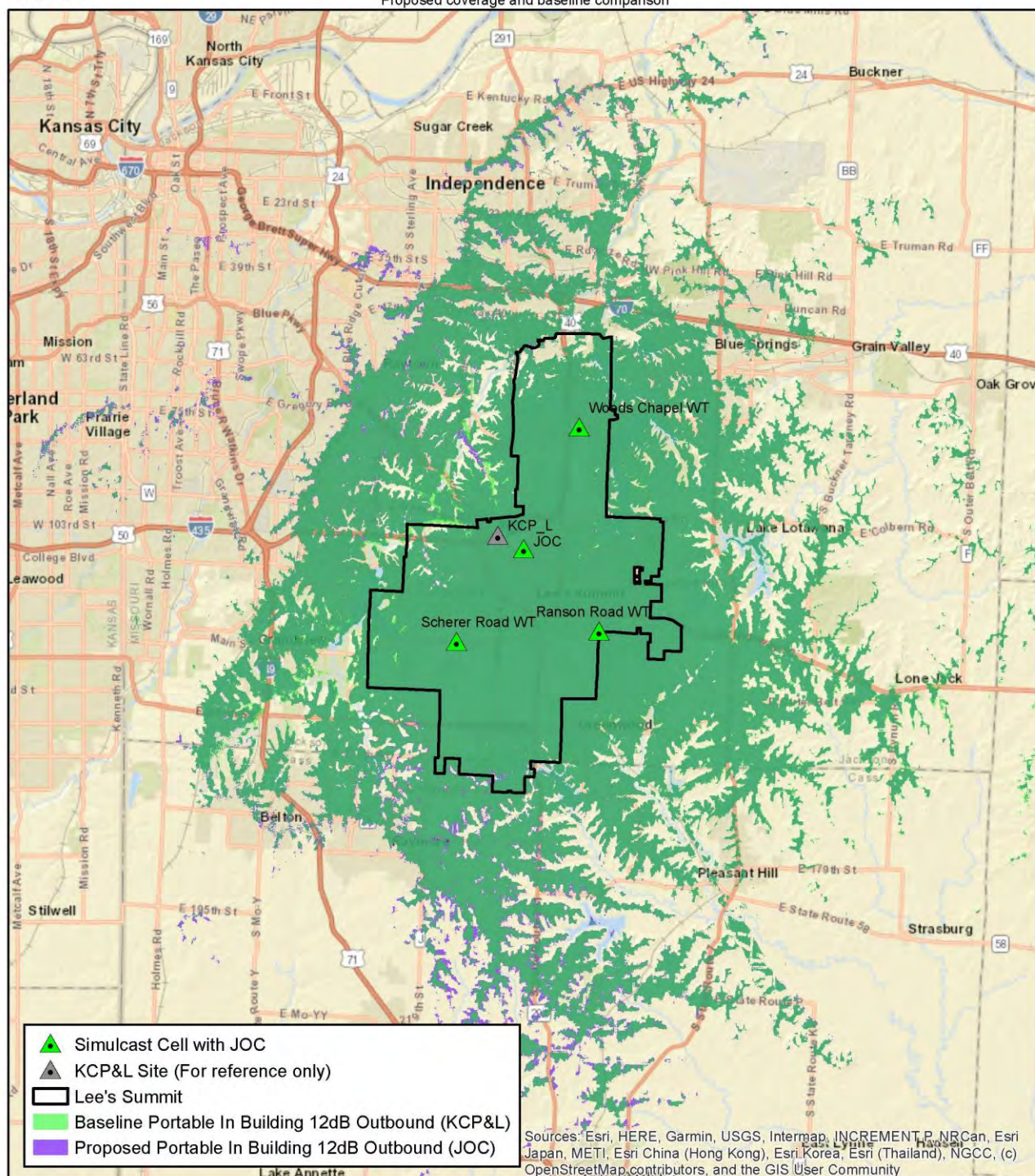




Lee's Summit, MO

For Information Only.

4-Site ASTRO P25 800 MHz TDMA Single-Cell Simulcast System
Shaded Area Represents 97% Covered Area Reliability at DAQ 3.4
Proposed coverage and baseline comparison



Nov 11, 2024
Hydra Stratus 3.1.10

Portable Configuration:
APX 6000, 3 W, 1/4 wave antenna
Tx/Rx at hip using swivel case with RSM
This map is intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

Lees Summit
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Designs 32 and 33
BJH376, BJH376-ZB15G3

Map 4

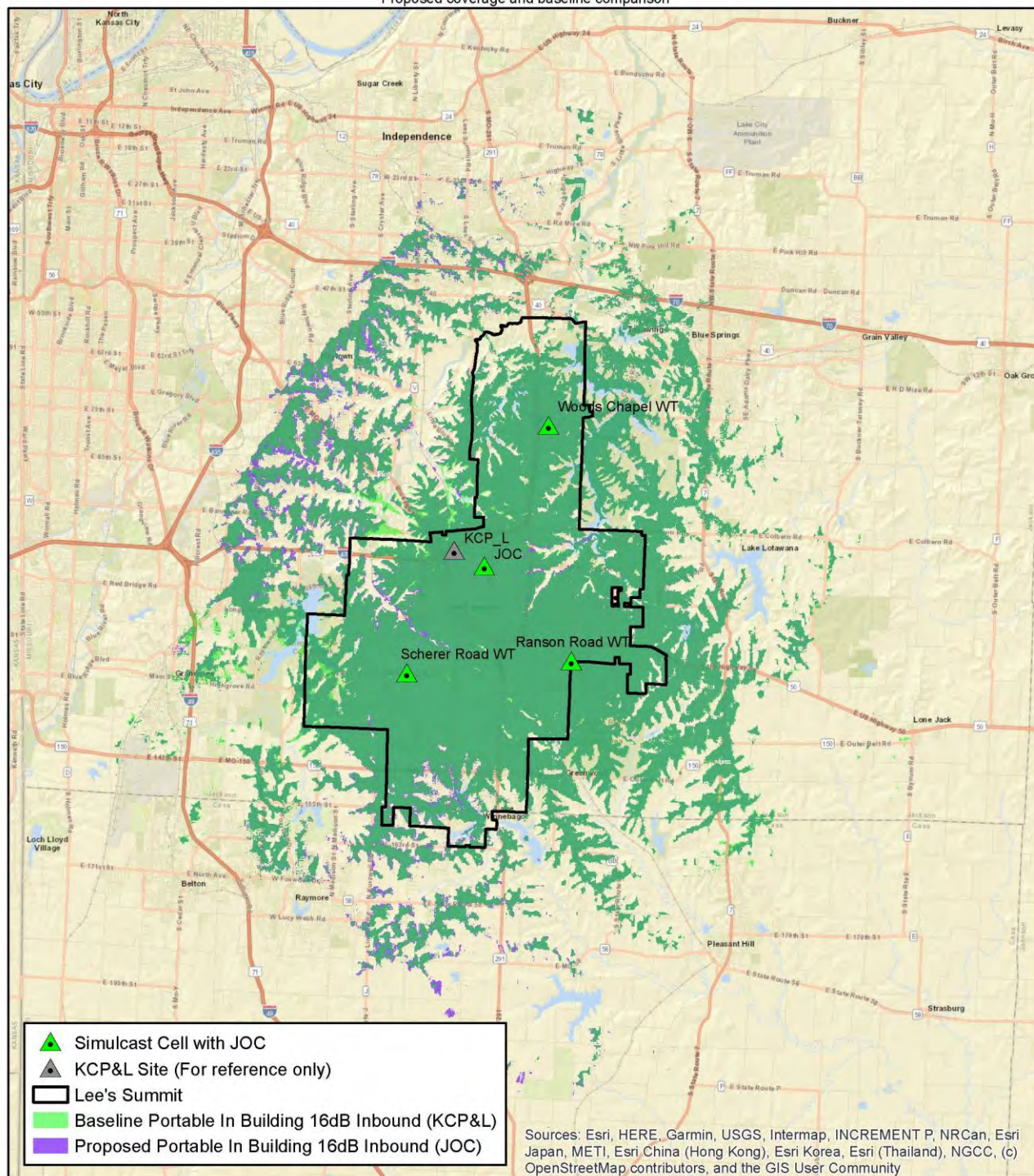




Lee's Summit, MO

For Information Only.

4-Site ASTRO P25 800 MHz TDMA Single-Cell Simulcast System
Shaded Area Represents 97% Covered Area Reliability at DAQ 3.4
Proposed coverage and baseline comparison



0 1 2 3 Miles
1 in = 3 miles

Nov 11, 2024
Hydra Stratus 3.1.10

Portable Configuration:
APX 6000, 3 W, 1/4 wave antenna
Tx/Rx at hip using swivel case with RSM

This map is intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

Lees Summit
LeesSummit_PropSol_Oct-30-2017_AsBuilt - Copy
Designs 32 and 33
BUH376, BUH376-ZB15G3

Map 5

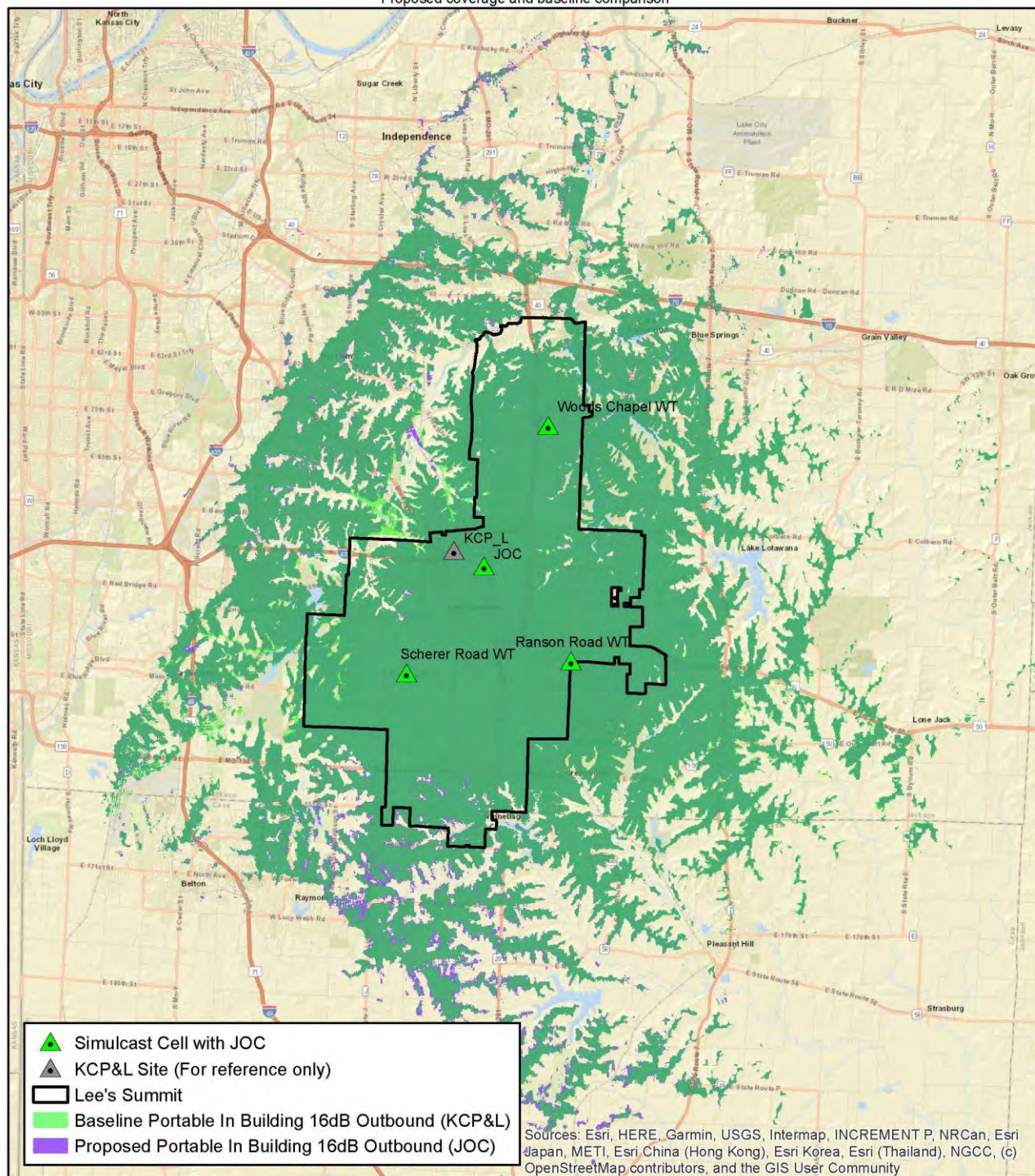




Lee's Summit, MO

For Information Only.

4-Site ASTRO P25 800 MHz TDMA Single-Cell Simulcast System
Shaded Area Represents 97% Covered Area Reliability at DAQ 3.4
Proposed coverage and baseline comparison



0 1 2 3 Miles
1 in = 3 miles

Portable Configuration:
APX 6000, 3 W, 1/4 wave antenna
Tx/Rx at hip using swivel case with RSM

Lees Summit
LeesSummit_PropSol_Oct-30-2017_AsBuilt - Copy
Designs 32 and 33
BUH376, BUH376-ZB15G3

Nov 11, 2024
Hydra Stratus 3.1.10

This map is intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

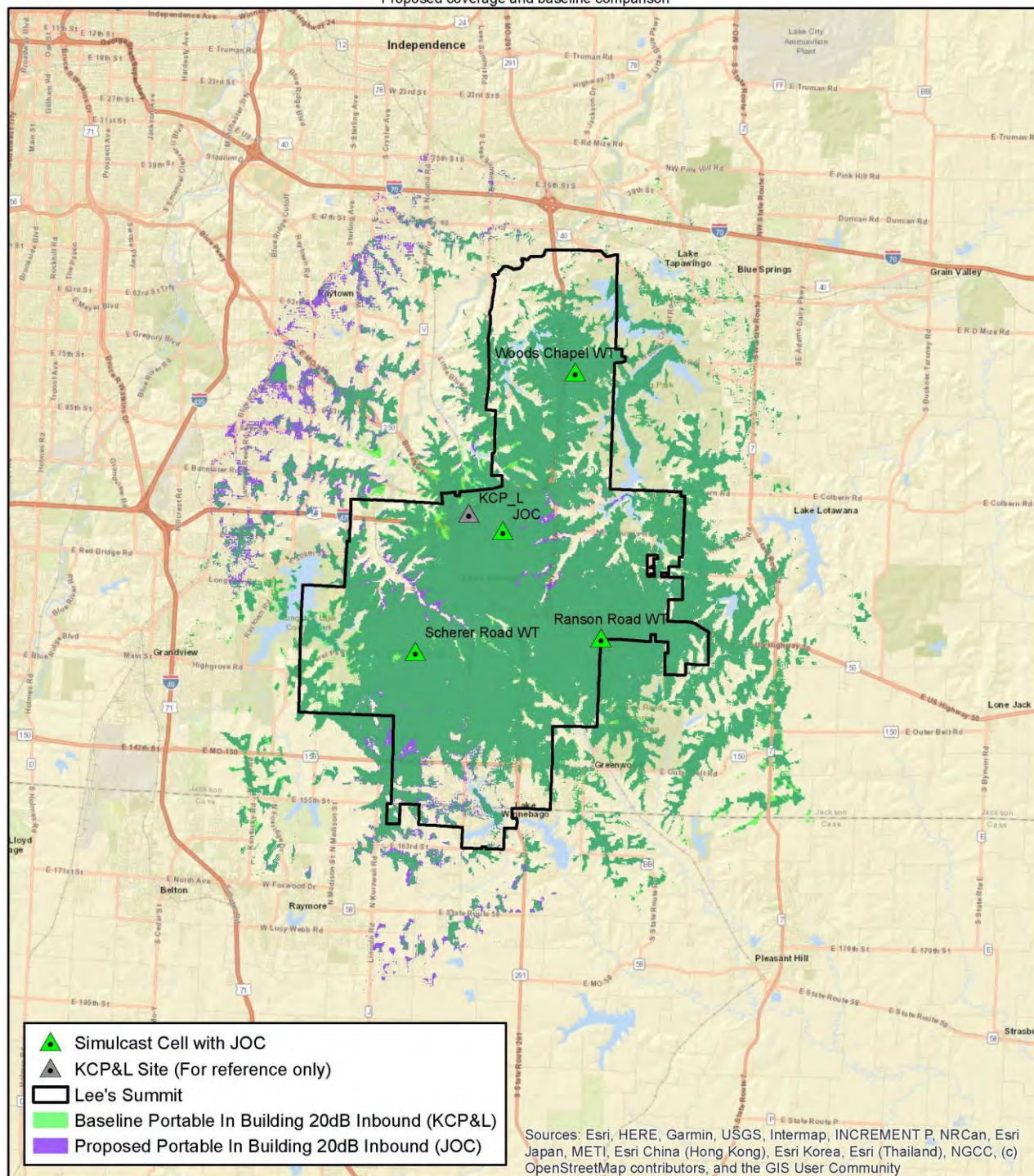
Map 6



Lee's Summit, MO

For Information Only.

4-Site ASTRO P25 800 MHz TDMA Single-Cell Simulcast System
Shaded Area Represents 97% Covered Area Reliability at DAQ 3.4
Proposed coverage and baseline comparison



0 1 2 3 Miles
1 in = 3 miles

Portable Configuration:
APX 6000, 3 W, 1/4 wave antenna
Tx/Rx at hip using swivel case with RSM

Lees Summit
LeesSummit_PropSol_Oct-30-2017_AsBuilt - Copy
Designs 32 and 33
BUH376, BUH376-ZB15G3

Nov 11, 2024
Hydra Stratus 3.1.10

This map is intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

Map 7

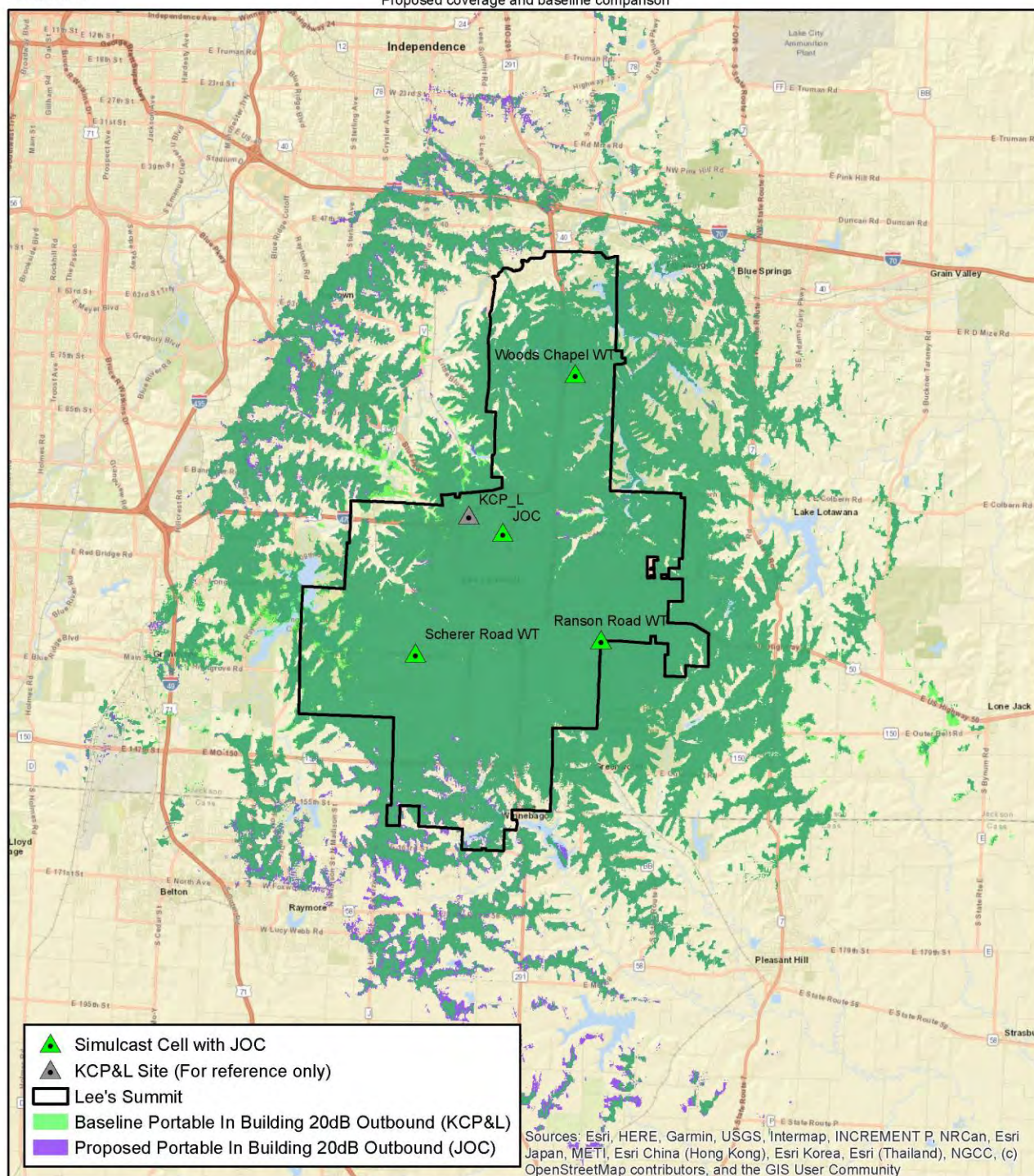




Lee's Summit, MO

For Information Only.

4-Site ASTRO P25 800 MHz TDMA Single-Cell Simulcast System
Shaded Area Represents 97% Covered Area Reliability at DAQ 3.4
Proposed coverage and baseline comparison



0 1 2 3 Miles
1 in = 3 miles

Nov 11, 2024
Hydra Stratus 3.1.10

Portable Configuration:
APX 6000, 3 W, 1/4 wave antenna
Tx/Rx at hip using swivel case with RSM

This map is intended solely for the equipment configuration stated above.
Coverage can vary significantly if different configurations are used.

Lees Summit
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Designs 32 and 33
BUH376, BUH376-ZB15G3

Map 8



Section 6

Lifecycle and Maintenance Services

ASTRO® 25 Essential Plus Statement of Work

6.1 Overview

Motorola Solutions' ASTRO® 25 Essential Plus Services (Essential Plus Services) provide an integrated and comprehensive sustainment program for fixed end network infrastructure equipment located at the network core, RF sites, and dispatch sites. Essential Services do not include maintenance for mobile devices, portable devices, or network backhaul equipment.

Essential Services consist of the following elements:

- Remote Technical Support
- Network Hardware Repair
- Security Update Service
- On-site Infrastructure Response
- Annual Preventative Maintenance
- Network Event Monitoring
- Remote Security Update Services

Each of these elements is summarized below and expanded upon in Section 6.3: Essential Plus Services Detailed Description. In the event of a conflict between the descriptions below and an individual subsection of Section 6.3: Essential Plus Services Detailed Description, the individual subsection prevails.

This Statement of Work (SOW), including all of its subsections and attachments is an integral part of the applicable agreement ("Agreement") between Motorola Solutions, Inc. ("Motorola Solutions") and the customer ("Customer").

In order to receive the services as defined within this SOW, the Customer is required to keep the system within a standard support period as described in Motorola Solutions' Software Support Policy (SwSP).

Remote Technical Support

Motorola Solutions will provide telephone consultation with specialists skilled at diagnosing and swiftly resolving infrastructure operational technical issues that require a high level of ASTRO 25 network experience and troubleshooting capabilities.

Network Hardware Repair

Motorola Solutions will repair Motorola Solutions-manufactured infrastructure equipment and select third-party manufactured infrastructure equipment supplied by Motorola Solutions. Motorola Solutions coordinates the equipment repair logistics process.

Security Update Service

Motorola Solutions will pre-test third-party security updates to verify they are compatible with the ASTRO 25 network. Once tested, Motorola Solutions posts the updates to a secured extranet website, along with any recommended configuration changes, warnings, or workarounds.

On-site Infrastructure Response

When needed to resolve equipment malfunctions, Motorola Solutions will dispatch qualified local technicians to the Customer's location to diagnose and restore the communications network. Technicians will perform diagnostics on impacted hardware and replace defective components. The service technician's response time will be based on pre-defined incident priority levels.

Annual Preventive Maintenance

Qualified field service technicians will perform regularly scheduled operational testing and alignment of infrastructure and network components to verify those components comply with the original manufacturer's specifications.

Network Event Monitoring

Real-time, continuous ASTRO 25 radio communications network monitoring and event management. Using sophisticated tools for remote monitoring and event characterization, Motorola will assess events, determine the appropriate response, and initiate that response. Possible responses include remotely addressing the issue, escalation to product technical support groups, and dispatch of designated field technical resources.

Remote Security Update Service

Motorola will pre-test third-party security updates to verify they are compatible with the ASTRO 25 network, and remotely push the updates to the Customer's network.

6.2 Motorola Solutions Service Delivery Ecosystem

Essential Plus Services are delivered through a tailored combination of local field service personnel, centralized teams equipped with a sophisticated service delivery platform, product repair depots, and Customer Hub. These service entities will collaborate to swiftly analyze issues, accurately diagnose root causes, and promptly resolve issues to restore the Customer's network to normal operations.

6.2.1 Centralized Managed Support Operations

The cornerstone of Motorola Solutions' support process is the Centralized Managed Support Operations (CMSO) organization, which includes the Service Desk and technical support teams. The CMSO is staffed 24/7/365 by experienced personnel, including service desk specialists, security analysts, and operations managers.

The Service Desk provides a single point of contact for all service related items, including communications between the Customer, Motorola Solutions, and third-party subcontractors. The Service Desk processes service requests, service incidents, change requests, and dispatching, and communicates with stakeholders in accordance with pre-defined response times.

All incoming transactions through the Service Desk are recorded, tracked, and updated through the Motorola Solutions Customer Relationship Management (CRM) system. The Service Desk also documents Customer inquiries, requests, concerns, and related tickets.

The CMSO coordinates with the field service organization that will serve the Customer locally.

6.2.2 Field Service

Motorola Solutions authorized and qualified field service technicians perform on-site infrastructure response, field repair, and preventive maintenance tasks. These technicians are integrated with the Service Desk and with technical support teams and product engineering as required to resolve repair and maintenance requests.

6.2.3 Customer Support Manager

A Motorola Solutions Customer Support Manager (CSM) will be the Customer's key point of contact for defining and administering services. The CSM's initial responsibility is to create the Customer Support Plan (CSP) in collaboration with the Customer.

The CSP functions as an operating document that personalizes the services described in this document. The CSP contains Customer-specific information, such as site names, site access directions, key contact persons, incident handling instructions, and escalation paths for special issues. The CSP also defines the division of responsibilities between the Customer and Motorola Solutions so response protocols are pre-defined and well understood when the need arises.

The CSP governs how the services will be performed and will be automatically integrated into this Statement of Work by this reference. The CSM and Customer will review and amend the CSP on a mutually agreed cadence so the CSP remains current and effective in governing the Essential Services.

6.2.4 Repair Depot

The Motorola Solutions Repair Depot provides the Customer with a central repair location, eliminating the need to send network equipment to multiple vendor locations for repair. All products sent to the Depot are tracked throughout the repair process, from inbound shipment to return, through a case management system that enables Customer representatives to see repair status.

6.2.5 Customer Hub

Supplementing the CSM and the Service Desk as the Customer points of contact, Customer Hub is a web-based platform that provides network maintenance and operations information. The portal is accessed from a desktop, laptop, tablet, or smartphone web browser. The information available includes:

- **Remote Technical Support:** Manage incidents and view self-service reports. Observe incident details by incident priority level, and track the progress of issue resolution.

- **Network Hardware Repair:** Track return material authorizations (RMA) shipped to Motorola Solutions' repair depot and eliminate the need to call for status updates. In certain countries, customers will also have the ability to create new RMA requests online.
- **Security Update Service:** View available security updates. Access available security update downloads.
- **On-site Infrastructure Response:** Manage incidents and view self-service reports. Observe incident details by incident priority level, and track the progress of issue resolution.
- **Annual Preventive Maintenance:** View incident status and details of each annual change request for preventive maintenance, including completed checklist information for the incident.
- **Orders and Contract Information:** View available information regarding orders, service contracts, and service coverage details.
- **Network Event Monitoring :** Manage incidents and view self-service reports. Observe incident details by incident priority level, and track the progress of issue resolution.

The data presented in Customer Hub is provided to support the services described in the following sections, which define the terms of any service delivery commitments associated with this data.

6.2.6 Connectivity Specifications

A monitored access link is provided with sufficient bandwidth to support the optional Network Event Monitoring and Remote Security Update Services, if included as part of the Essential Plus offering.

6.3 Essential Plus Services Detailed Description

Due to the interdependence between deliverables within the detailed sections, any changes to or any cancellation of any individual section may require a scope review and price revision.

6.3.1 Remote Technical Support

Motorola Solutions' Remote Technical Support service provides telephone consultation for technical issues that require a high level of ASTRO 25 network knowledge and troubleshooting capabilities. Remote Technical Support is delivered through the Motorola Solutions CMSO organization by a staff of technical support specialists skilled in diagnosis and swift resolution of infrastructure performance and operational issues.

Motorola Solutions applies leading industry standards in recording, monitoring, escalating, and reporting for technical support calls from its contracted customers to provide the support needed to maintain mission-critical systems.

6.3.1.1 Description of Service

The CMSO organization's primary goal is Customer Issue Resolution (CIR), providing incident restoration and service request fulfillment for Motorola Solutions' currently supported infrastructure. This team of highly skilled, knowledgeable, and experienced specialists is an integral part of the support and technical issue resolution process. The CMSO supports the Customer remotely using a variety of tools, including fault diagnostics tools, simulation networks, and fault database search engines.

Calls requiring incidents or service requests will be logged in Motorola Solutions' CRM system, and Motorola Solutions will track the progress of each incident from initial capture to resolution. This helps ensure that technical issues are prioritized, updated, tracked, and escalated as necessary, until resolution. Motorola Solutions will advise and inform Customer of incident resolution progress and tasks that require further investigation and assistance from the Customer's technical resources.

The CMSO Operations Center classifies and responds to each technical support request in accordance with Section 6.4: Priority Level Definitions and Response Times.

This service requires the Customer to provide a suitably trained technical resource that delivers maintenance and support to the Customer's system, and who is familiar with the operation of that system. Motorola Solutions provides technical consultants to support the local resource in the timely closure of infrastructure, performance, and operational issues.

6.3.1.2 Scope

The CMSO Service Desk is available via telephone 24/7/365 to receive and log requests for technical support. Remote Technical Support service is provided in accordance with Section 6.4: Priority Level Definitions and Response Times.

6.3.1.3 Inclusions

Remote Technical Support service will be delivered for Motorola Solutions-provided infrastructure, including integrated third-party products.

6.3.1.4 Motorola Solutions Responsibilities

- Maintain availability of the Motorola Solutions CMSO Service Desk via telephone (800-MSI-HELP) 24/7/365 to receive, log, and classify Customer requests for support.
- Respond to incidents and technical service requests in accordance with Section 6.4: Priority Level Definitions and Response Times.
- Provide caller a plan of action outlining additional requirements, activities, or information required to achieve restoral/fulfillment.
- Maintain communication with the Customer in the field as needed until resolution of the incident.
- Coordinate technical resolutions with agreed upon third-party vendors, as needed.
- Escalate support issues to additional Motorola Solutions technical resources, as applicable.
- Determine, in its sole discretion, when an incident requires more than the Remote Technical Support services described in this SOW and notify the Customer of an alternative course of action.

6.3.1.5 Limitations and Exclusions

The following activities are outside the scope of the Remote Technical Support service:

- Customer training.
- Remote Technical Support for network transport equipment or third-party products not sold by Motorola Solutions.
- Any maintenance and/or remediation required as a result of a virus or unwanted cyber intrusion.

6.3.1.6 Customer Responsibilities

- Prior to contract start date, provide Motorola Solutions with pre-defined information necessary to complete CSP.
- Submit timely changes in any information supplied in the CSP to the CSM.
- Contact the CMSO Service Desk to engage the Remote Technical Support service when needed, providing the necessary information for proper entitlement services. This information includes, but is not limited to, the name of contact, name of Customer, system ID number, site(s) in question, and a brief description of the problem that contains pertinent information for initial issue classification.
- Maintain suitably trained technical resources familiar with the operation of the Customer's system to provide field maintenance and technical maintenance services for the system.
- Supply suitably skilled and trained on-site presence when requested.
 - When an instance requires personnel onsite, a CSMO ticket will be created and assigned to a local technician. Please refer to 6.3.4 Onsite Infrastructure Response.
- Validate issue resolution in a timely manner prior to close of the incident.
- Acknowledge that incidents will be addressed in accordance with Section 6.4: Priority Level Definitions and Response Times.
- Cooperate with Motorola Solutions, and perform all acts that are reasonable or necessary to enable Motorola Solutions to provide Remote Technical Support.
- In the event that Motorola Solutions agrees in writing to provide supplemental Remote Technical Support to third-party elements provided by the Customer, the Customer agrees to obtain all third-party consents or licenses required to enable Motorola Solutions to provide the service.

6.3.2 Network Hardware Repair

Motorola Solutions will provide hardware repair for Motorola Solutions and select third-party infrastructure equipment supplied by Motorola Solutions. A Motorola Solutions authorized repair depot manages and performs the repair of Motorola Solutions supplied equipment, and coordinates equipment repair logistics.

6.3.2.1 Description of Service

Infrastructure components are repaired at Motorola Solutions-authorized Infrastructure Depot Operations (IDO). At Motorola Solutions' discretion, select third-party infrastructure may be sent to the original equipment manufacturer or third-party vendor for repair.

Network Hardware Repair is also known as Infrastructure Repair.

6.3.2.2 Scope

Repair authorizations are obtained by contacting the CMSO organization Service Desk, which is available 24/7/365. Repair authorizations can also be obtained by contacting the CSM.

6.3.2.3 Inclusions

This service is available on Motorola Solutions-provided infrastructure components, including integrated third-party products. Motorola Solutions will make a commercially reasonable effort to repair Motorola Solutions manufactured infrastructure products after product cancellation. The post-cancellation support period of the product will be noted in the product's end-of-life (EOL) notification. Announced EOL notifications for new equipment can be provided during the Detailed Design Review. Customer and Tusa consulting will need to sign a Non-Disclosure Agreement (NDA).

6.3.2.4 Motorola Solutions Responsibilities

- Provide the Customer access to the CMSO Service Desk, operational 24/7, to request repair service.
- Provide repair return authorization numbers when requested by the Customer.
- Receive malfunctioning infrastructure components from the Customer and document its arrival, repair, and return.
- Conduct the following services for Motorola Solutions infrastructure:
 - Perform an operational check on infrastructure components to determine the nature of the problem.
 - Replace malfunctioning components.
 - Verify that Motorola Solutions infrastructure components are returned to applicable Motorola Solutions factory specifications.
 - Perform a box unit test on serviced infrastructure components.
 - Perform a system test on select infrastructure components.
- Conduct the following services for select third-party infrastructure:
 - When applicable, perform pre-diagnostic and repair services to confirm infrastructure component malfunctions and prevent sending infrastructure components with No Trouble Found (NTF) to third-party vendor for repair.
 - When applicable, ship malfunctioning infrastructure components to the original equipment manufacturer or third-party vendor for repair service.
 - Track infrastructure components sent to the original equipment manufacturer or third-party vendor for service.
 - When applicable, perform a post-test after repair by original equipment manufacturer or third-party vendor to confirm malfunctioning infrastructure components have been repaired and function properly in a Motorola Solutions system configuration.
- Reprogram repaired infrastructure components to original operating parameters based on software and firmware provided by the Customer, as required in Section 6.3.2.6: Customer Responsibilities. If the Customer's software version and configuration are not provided, shipping will be delayed. If the repair depot determines that infrastructure components are malfunctioning due to a software defect, the repair depot reserves the right to reload these components with a different but equivalent software version.
- Properly package repaired infrastructure components.

- Ship repaired infrastructure components to Customer-specified address during normal operating hours of Monday through Friday from 7:00 a.m. to 7:00 p.m. Central Standard Time (CST), excluding holidays. Infrastructure component will be sent using two-day air shipping unless the Customer requests otherwise. Motorola Solutions will pay for shipping unless the Customer requests shipments outside of the above mentioned standard business hours or carrier programs, such as next flight out (NFO). In such cases, the Customer will be responsible for paying shipping and handling charges.
- Identify where Network Hardware versions and configurations for software, applications, and firmware are stored on the system and advise the customer so they are aware of this.

6.3.2.5 Limitations and Exclusions

Motorola Solutions may return infrastructure equipment that is no longer supported by Motorola Solutions, the original equipment manufacturer, or a third-party vendor without repairing or replacing it. The following items are excluded from this service:

- All Motorola Solutions infrastructure components over the post-cancellation support period.
- All third-party infrastructure components over the post-cancellation support period.
- All broadband infrastructure components over the post-cancellation support period.
- Physically damaged infrastructure components.
- Third-party equipment not shipped by Motorola Solutions.
- Consumable items including, but not limited to, batteries, connectors, cables, toner or ink cartridges, tower lighting, laptop computers, monitors, keyboards, and mouse.
- Video retrieval from digital in-car video equipment.
- RF infrastructure and backhaul components, including but not limited to, antennas, transmission lines, antenna dehydrators, microwave, line boosters, amplifiers (such as tower top amplifiers and bi-directional amplifiers), logging recorders, data talker wireless transmitters, short haul modems, combiners, multicouplers, duplexers, shelters, shelter HVAC, generators, UPSs, dropship non-standard items and test equipment.
- Racks, furniture, and cabinets.
- Non-standard configurations, customer-modified infrastructure, and certain third party infrastructure. Identification of these items should be captured by Motorola Solutions during Transition to Service.
- Firmware or software upgrades.

6.3.2.6 Customer Responsibilities

- Contact or instruct servicer to contact the Motorola Solutions CMSO organization, and request a return authorization number prior to shipping malfunctioning infrastructure components.
- Provide model description, model number, serial number, type of system, software and firmware version, symptom of problem, and address of site location for spare infrastructure components.
- Indicate if Motorola Solutions or third-party infrastructure components being sent in for service were subjected to physical damage or lightning damage.
- Follow Motorola Solutions instructions regarding including or removing firmware and software applications on infrastructure components being sent in for service.

- In the event that the Customer requires repair of equipment that is not contracted under this service at the time of request, the Customer acknowledges that charges may apply to cover shipping, labor, and parts. Motorola Solutions and the Customer will collaborate to agree on payment vehicle that most efficiently facilitates the work, commensurate with the level of urgency that is needed to complete the repair.
- Properly package and ship the malfunctioning component, at the Customer's expense. The Customer is responsible for properly packaging the malfunctioning infrastructure component to ensure it is not damaged in-transit and arrives in repairable condition.
 - Clearly print the return authorization number on the outside of the packaging.
- Maintain versions and configurations for software, applications, and firmware to be installed on repaired equipment. Motorola Solutions to advise the Customer on where versions and configurations can be found on the system.
- Provide Motorola Solutions with proper software and firmware information to reprogram equipment after repair, unless current software has caused this malfunction. Motorola Solutions to advise the Customer on software and firmware information and shall assist the Customer as needed.
- Cooperate with Motorola Solutions and perform reasonable or necessary acts to enable Motorola Solutions to provide hardware repair services to the Customer.
- At the Customer's cost, obtain all third-party consents or licenses required to enable Motorola Solutions to provide the service.

6.3.2.7 Repair Process

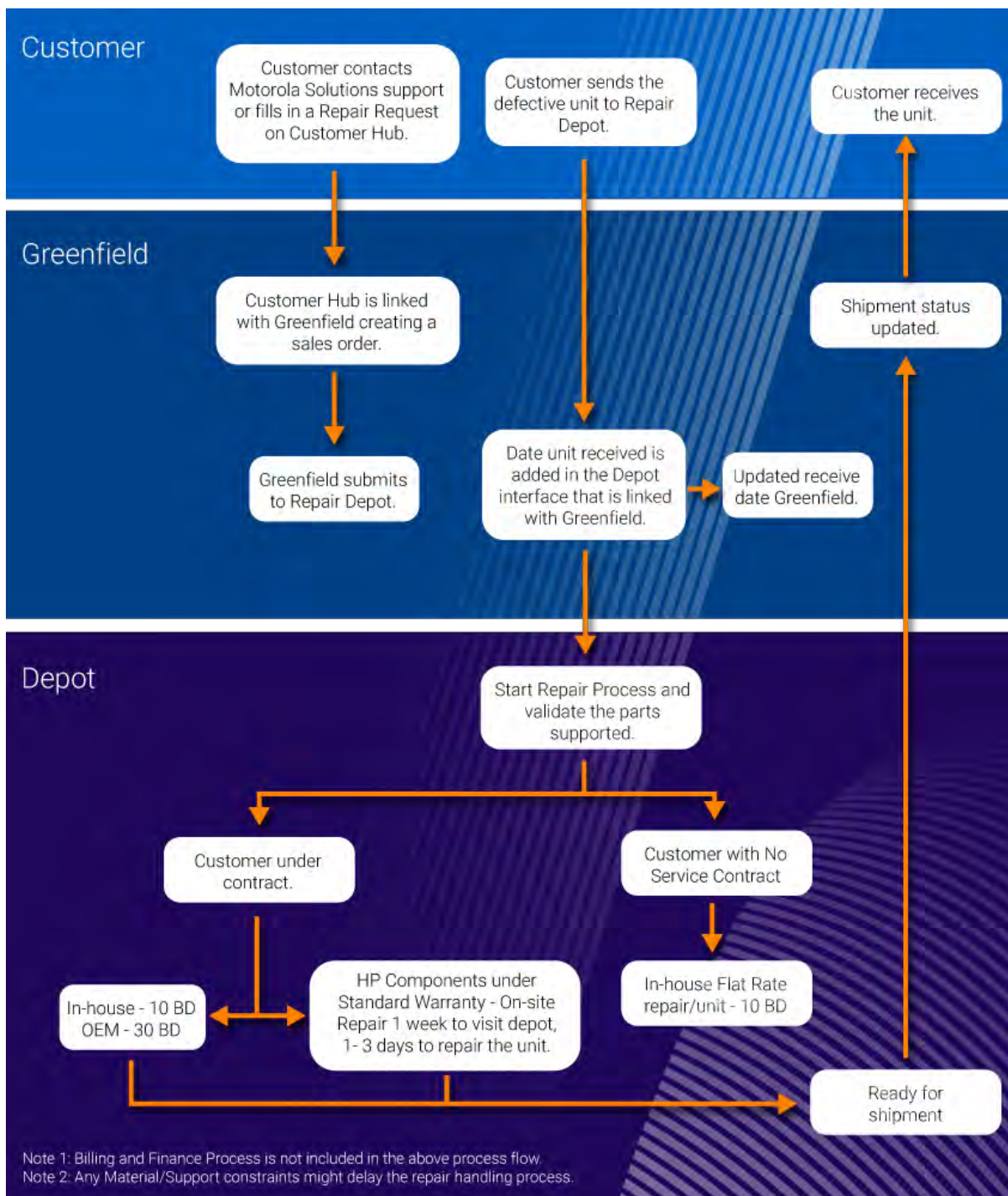


Figure 6-1: Repair Decision Process

6.3.3 Security Update Service

Motorola Solutions' ASTRO 25 Security Update Service (SUS) provides pretested security updates, minimizing cyber risk and software conflicts. These security updates contain operating system security patches and antivirus definitions that have been validated for compatibility with ASTRO 25 systems. Security update delivery is determined by the options included as part of this service. Section 6.3.3.3: Inclusions indicates if options are included as part of this service.

6.3.3.1 Description of Service

Motorola Solutions uses a dedicated information assurance lab to test and validate security updates. Motorola Solutions deploys and tests security updates in the lab to check for and prevent potential service degradation.

Motorola Solutions releases tested, compatible security updates for download and installation. Once security updates are verified by the SUS team, Motorola Solutions uploads them to a secure website and sends a release notification email to the Customer contact to inform them that the security update release is available. If there are any recommended configuration changes, warnings, or workarounds, the SUS team will provide documentation with the security updates on the secure website.

With the base service, the Customer will be responsible for downloading security updates, installing them on applicable components, and rebooting updated components. Additional options are available for Motorola Solutions to deploy security updates, reboot servers and workstations, or both.

6.3.3.1.1 Onsite Delivery

If Onsite Delivery is included with SUS, Motorola Solutions provides trained technician(s) to install security updates at the Customer's location. The technician downloads and installs available security updates and coordinates any subsequent server and workstation reboots.

6.3.3.2 Scope

SUS includes pretested security updates for the software listed in Table 6-2: Update Cadence. This table also describes the release cadence for security updates.

Table 6-2: Update Cadence

Software	Update Release Cadence
Antivirus Definition Files	Weekly
Microsoft Windows	Monthly
Microsoft Windows SQL Server	Quarterly
Microsoft Windows third party (i.e. Adobe Reader)	Monthly
Red Hat Linux (RHEL)	Quarterly
VMWare ESXi Hypervisor	Quarterly
PostgreSQL (From ASTRO 25 7.14 and newer major releases)	Quarterly
McAfee Patch(es)	Quarterly
Dot Hill DAS Firmware	Quarterly

HP SPP Firmware	Quarterly
QNAP Firmware	Quarterly

6.3.3.3 Inclusions

Supported ASTRO 25 core types and security update delivery methods are included in Table 6-3: SUS Package. This table indicates if Motorola Solutions will provide any SUS optional services to the Customer. SUS supports the current Motorola Solutions ASTRO 25 system release and aligns with the established [Software Support Policy \(SwSP\)](#).

Motorola Solutions reserves the right to determine, which releases are supported as business conditions dictate. Additional charges may apply in the event of supporting older releases. Contact Motorola Solutions' assigned CSM for the latest supported releases.

Table 6-3: SUS Package

Service	ASTRO 25 Core Type	Included
Security Update Service Customer Self-installed	L Core M Core Simplified Core	X
Security Update Service with Reboot Support	L Core M Core Simplified Core	
Security Update Service with On-site Delivery	L Core M Core Simplified Core	

Responsibilities for downloading and installing security updates and rebooting applicable hardware are detailed in Section 6.3.3.7: Installation and Reboot Responsibilities.

6.3.3.4 Motorola Solutions Responsibilities

- On the release schedule in Section 6.3.3.2: Scope, review relevant and appropriate security patches released by Original Equipment Manufacturer (OEM) vendors.
- Release tested and verified security patches to Motorola Solutions' secure website.
- Publish documentation for installation, recommended configuration changes, any identified issue(s), and remediation instructions for each security update release.
- Include printable labels the Customer may use if downloading security updates to a disk.
- Send notifications by email when security updates are available to download from the secure website.

6.3.3.5 Limitations and Exclusions

- Systems with non-standard configurations that have not been certified by Motorola Solutions' Systems Integration and Test (SIT) team are specifically excluded from this service, unless otherwise agreed in writing by Motorola Solutions.

- Interim or unplanned releases outside the supported release cadence.
- Service does not include pretested intrusion detection system (IDS) signature updates for IDS solutions. However, select vendor IDS signature updates are made available via the secure website. The available vendors may change pursuant to Motorola Solutions' business decisions. The Customer is responsible for complying with all IDS licensing requirements and fees, if any.
- This service does not include releases for Motorola Solutions products that are not ASTRO 25 L, M, and Simplified Core radio network infrastructure equipment. The following are examples of excluded products: WAVE PTX, Critical Connect, and VESTA solutions.
- K Core ASTRO 25 systems are excluded.
- Motorola Solutions product updates are not included in these services.
- Shared network infrastructure firmware, such as transport and firewall firmware, are not included in these services.
- Motorola Solutions does not represent that it will identify, fully recognize, discover, or resolve all security events or threats, system vulnerabilities, malicious codes or data, backdoors, or other system threats or incompatibilities as part of the service, or that the agreed upon cadence/time of delivery will be sufficient to identify, mitigate or prevent any cyber incident.

6.3.3.6 Customer Responsibilities

- Provide Motorola Solutions with predefined information necessary to complete a CSP prior to the Agreement start date.
- Provide timely updates on changes of information supplied in the CSP to Motorola Solutions' assigned CSM.
- Update Motorola Solutions with any changes in contact information, specifically for authorized users of Motorola Solutions' secure website.
- Provide means for accessing Motorola Solutions' secure website to collect the pretested files.
- Download and apply only to the Customer's system as applicable, based on the Customer Agreement and the scope of the purchased service. Distribution to any other system or user other than the system/user contemplated by the Customer Agreement is not permitted.
- Implement Motorola Technical Notices (MTN) to keep the system current and patchable.
- Adhere closely to the Motorola Solutions CMSO troubleshooting guidelines provided upon system acquisition. Failure to follow CMSO guidelines may cause the Customer and Motorola Solutions unnecessary or overly burdensome remediation efforts. In such cases, Motorola Solutions reserves the right to charge an additional fee for the remediation effort.
- Upgrade system to a supported system release when needed to continue service. Contact Motorola Solutions' assigned CSM for the latest supported releases.
- Comply with the terms of applicable license agreements between the Customer and non-Motorola Solutions software copyright owners.

6.3.3.7 Installation and Reboot Responsibilities

Installation and Reboot responsibilities are determined by the specific SUS package being purchased. Table 6-4: Installation and Reboot Responsibilities Matrix contains the breakdown of responsibilities. Section 6.3.3.3: Inclusions indicates which services are included.

Microsoft Windows servers and workstations often need to be rebooted before security updates take full effect and mitigate vulnerabilities.

Table 6-4: Installation and Reboot Responsibilities Matrix

SUS Package	Motorola Solutions Responsibilities	Customer Responsibilities
Security Update Service Customer Self-installed		<ul style="list-style-type: none"> ▪ Deploy pretested files to the Customer's system as instructed in the "Read Me" text provided on Motorola Solutions' secure website. ▪ When a security update requires a reboot, reboot servers and workstations after security updates are installed.
Security Update Service with On-site Delivery	<ul style="list-style-type: none"> ▪ Dispatch a technician to deploy pretested files to the Customer's system. ▪ When a security update requires a reboot, reboot servers and workstations after security updates are installed. 	<ul style="list-style-type: none"> ▪ Acknowledge Motorola Solutions will reboot servers and workstations, and agree to timing.
Security Update Service with Reboot Support	<ul style="list-style-type: none"> ▪ When a security update requires a reboot, dispatch a technician to reboot servers and workstations after security updates are installed. 	<ul style="list-style-type: none"> ▪ Deploy pretested files to the Customer's system as instructed in the "Read Me" text provided on Motorola Solutions' secure website.

6.3.3.8 Disclaimer

This service tests OEM security updates. Delivering security updates for specific software depends on OEM support for that software. If an OEM removes support (e.g. end-of-life) from deployed software, Motorola Solutions may work with the OEM to reduce the impact, but may remove support for the affected software from this service without notice.

OEMs determine security update schedules, supportability, or release availability without consultation from Motorola Solutions. Motorola Solutions will obtain and test security updates when they are made available, and incorporate those security updates into the next appropriate release.

All security updates are important. This service is intended to balance the security and compatibility of tested updates with agreed upon time/cadence of delivery. Customer assumes the risk of this inherent tradeoff.

Motorola Solutions disclaims any warranty with respect to pretested database security updates, hypervisor patches, operating system software patches, intrusion detection sensor signature files, or other third-party files, express or implied. Further, Motorola Solutions disclaims any warranty concerning non-Motorola Solutions software and does not guarantee Customers' systems will be error-free or immune to security breaches as a result of these services.

6.3.4 Onsite Infrastructure Response

Motorola Solutions' Onsite Infrastructure Response service provides incident management and escalation for on-site technical service requests. The service is delivered by Motorola Solutions' CMSO organization in cooperation with a local service provider.

Onsite Infrastructure Response may also be referred to as Onsite Support.

6.3.4.1 Description of Service

The Motorola Solutions CMSO Service Desk will receive the Customer's request for on-site service.

The CMSO Dispatch Operations team is responsible for opening incidents, dispatching on-site resources, monitoring issue resolution, and escalating as needed to ensure strict compliance to committed response times.

The dispatched field service technician will travel to the Customer's location to restore the system in accordance with Section 6.4: Priority Level Definitions and Response Times.

Motorola Solutions will manage incidents as described in this SOW. The CMSO Service Desk will maintain contact with the field service technician until incident closure.

6.3.4.2 Scope

On-site Infrastructure Response is available in accordance with Section 6.4: Priority Level Definitions and Response Times. Customer's Response Time Classification is designated in the Customer Support Plan.

6.3.4.3 Geographical Availability

On-site Infrastructure Response is available worldwide where Motorola Solutions servicers are present. Response times are based on the Customer's local time zone and site location.

6.3.4.4 Inclusions

Onsite Infrastructure Response is provided for Motorola Solutions-provided infrastructure.

6.3.4.5 Motorola Solutions Responsibilities

- Receive service requests.
- Create an incident when service requests are received. Gather information to characterize the issue, determine a plan of action, and assign and track the incident to resolution.
- Dispatch a field service technician, as required by Motorola Solutions' standard procedures, and provide necessary incident information.
- Provide the required personnel access to relevant Customer information, as needed.
- Motorola Solutions field service technician will perform the following on-site:
 - Run diagnostics on the infrastructure component.
 - Replace defective infrastructure components, as supplied by the Customer.

- Provide materials, tools, documentation, physical planning manuals, diagnostic and test equipment, and any other material required to perform the maintenance service.
- If a third-party vendor is needed to restore the system, the vendor can be accompanied onto the Customer's premises.
- If required by the Customer's repair verification in the CSP, verify with the Customer that restoration is complete or system is functional. If verification by the Customer cannot be completed within 20 minutes of restoration, the incident will be closed and the field service technician will be released.
- Escalate the incident to the appropriate party upon expiration of a response time.
- Close the incident upon receiving notification from the Customer or Motorola Solutions field service technician, indicating the incident is resolved.
- Notify the Customer of incident status, as defined in the CSP and Service Configuration Portal (SCP):
 - Open and closed.
 - Open, assigned to the Motorola Solutions field service technician, arrival of the field service technician on-site, delayed, or closed.
- Provide incident activity reports to the Customer, if requested.

6.3.4.6 Limitations and Exclusions

The following items are excluded from this service:

- All Motorola Solutions infrastructure components beyond the post-cancellation support period.
- All third-party infrastructure components beyond the post-cancellation support period.
- All broadband infrastructure components beyond the post-cancellation support period.
- Physically damaged infrastructure components.
- Third-party equipment not shipped by Motorola Solutions.
- Consumable items including, but not limited to, batteries, connectors, cables, toner or ink cartridges, tower lighting, laptop computers, monitors, keyboards, and mouse.
- Video retrieval from digital in-car video equipment.
- RF infrastructure and backhaul components, including but not limited to, antennas, transmission lines, antenna dehydrators, microwave, line boosters, amplifiers (such as tower top amplifiers and bi-directional amplifiers), logging recorders, data talker wireless transmitters, short haul modems, combiners, multicouplers, duplexers, shelters, shelter HVAC, generators, UPSs, and test equipment.
- Racks, furniture, and cabinets.
- Tower and tower mounted equipment.
- Non-standard configurations, customer-modified infrastructure, and certain third party infrastructure.
- Firmware or software upgrades.

6.3.4.7 Customer Responsibilities

- Contact Motorola Solutions, as necessary, to request service.

- Prior to start date, provide Motorola Solutions with the following pre-defined Customer information and preferences necessary to complete CSP:
 - Incident notification preferences and procedure.
 - Repair verification preference and procedure.
 - Database and escalation procedure forms.
- Submit timely changes in any information supplied in the CSP to the CSM.
- Provide the following information when initiating a service request:
 - Assigned system ID number.
 - Problem description and site location.
 - Other pertinent information requested by Motorola Solutions to open an incident.
- Provide field service technician with access to equipment.
- Supply infrastructure spare or FRU, as applicable, in order for Motorola Solutions to restore the system.
- Maintain and store software needed to restore the system in an easily accessible location.
- Maintain and store proper system backups in an easily accessible location.
- If required by repair verification preference provided by the Customer, verify with the CMSO Service Desk and dispatch that restoration is complete or system is functional.
- Cooperate with Motorola Solutions and perform reasonable or necessary acts to enable Motorola Solutions to provide these services.
- In the event that Motorola Solutions agrees in writing to provide supplemental On-site Infrastructure Response to Customer-provided third-party elements, the Customer agrees to obtain and provide applicable third-party consents or licenses to enable Motorola Solutions to provide the service.

6.3.4.8 Priority Level Definitions and Response Times

This section describes the criteria Motorola Solutions used to prioritize incidents and service requests, and lists the response times for those priority levels.

Table 6-5: Standard Level Definitions and Response Times

Incident Priority	Incident Definition	On-site Response Time
Critical P1	<p>Core: Core server or core link failure. No redundant server or link available.</p> <p>Sites/Subsites: Primary site down. Two RF sites or more than 10% of RF sites down, whichever is greater.</p> <p>Consoles: More than 40% of a site's console positions down.</p> <p>Conventional Channels: Conventional Channel Gateways (CCGW) down without redundant gateways available.</p> <p>Security Features: Security is non-functional or degraded.</p>	<p>Response provided 24/7 until service restoration.</p> <p>Field service technician arrival on-site within 4 hours of receiving dispatch notification.</p>

Incident Priority	Incident Definition	On-site Response Time
High P2	<p>Core: Core server or link failures. Redundant server or link available.</p> <p>Consoles: Between 20% and 40% of a site's console positions down.</p> <p>Sites/Subsites: One RF site or up to 10% of RF sites down, whichever is greater.</p> <p>Conventional Channels: Up to 50% of CCGWs down. Redundant gateways available.</p> <p>Network Elements: Site router, site switch, or GPS server down. No redundant networking element available.</p>	<p>Response provided 24/7 until service restoration.</p> <p>Field service technician arrival on-site within 4 hours of receiving dispatch notification.</p>
Medium P3	<p>Consoles: Up to 20% of a site's console positions down.</p> <p>Conventional Channels: Single channel down. Redundant gateway available.</p> <p>Network Elements: Site router/switch or GPS server down. Redundant networking element available.</p>	<p>Response provided during normal business hours until service restoration.</p> <p>Field service technician arrival on-site within 8 hours of receiving dispatch notification.</p>
Low P4	<p>Service Requests: Minor events and warnings in the system. Preventative and planned maintenance activities (scheduled work).</p>	Not applicable.

Table 6-6: Premier Priority Level Definitions and Response Times

Incident Priority	Incident Definition	On-site Response Time
Critical P1	<p>Core: Core server or core link failure. No redundant server or link available.</p> <p>Sites/Subsites: Primary site down. Two RF sites or more than 10% of RF sites down, whichever is greater.</p> <p>Consoles: More than 40% of a site's console positions down.</p> <p>Conventional Channels: Conventional Channel Gateways (CCGW) down without redundant gateways available.</p> <p>Security Features: Security is non-functional or degraded.</p>	<p>Response provided 24/7 until service restoration.</p> <p>Field service technician arrival on-site within 2 hours of receiving dispatch notification.</p>
High P2	<p>Core: Core server or link failures. Redundant server or link available.</p> <p>Consoles: Between 20% and 40% of a site's console positions down.</p> <p>Sites/Subsites: One RF site or up to 10% of RF sites down, whichever is greater.</p> <p>Conventional Channels: Up to 50% of CCGWs down. Redundant gateways available.</p> <p>Network Elements: Site router, site switch, or GPS server down. No redundant networking element available.</p>	<p>Response provided 24/7 until service restoration.</p> <p>Field service technician arrival on-site within 2 hours of receiving dispatch notification.</p>

Incident Priority	Incident Definition	On-site Response Time
Medium P3	Consoles: Up to 20% of a site's console positions down. Conventional Channels: Single channel down. Redundant gateway available. Network Elements: Site router/switch or GPS server down. Redundant networking element available.	Response provided during normal business hours until service restoration. Field service technician arrival on-site within 8 hours of receiving dispatch notification.
Low P4	Service Requests: Minor events and warnings in the system. Preventative and planned maintenance activities (scheduled work).	Not applicable.

Table 6-7: Limited Priority Level Definitions and Response Times

Incident Priority	Incident Definition	On-site Response Time
Critical P1	Core: Core server or core link failure. No redundant server or link available. Sites/Subsites: Primary site down. Two RF sites or more than 10% of RF sites down, whichever is greater. Consoles: More than 40% of a site's console positions down. Conventional Channels: Conventional Channel Gateways (CCGW) down without redundant gateways available. Security Features: Security is non-functional or degraded.	Response provided during normal business hours until service restoration. Field service technician arrival on-site within 4 hours of receiving dispatch notification.
High P2	Core: Core server or link failures. Redundant server or link available. Consoles: Between 20% and 40% of a site's console positions down. Sites/Subsites: One RF site or up to 10% of RF sites down, whichever is greater. Conventional Channels: Up to 50% of CCGWs down. Redundant gateways available. Network Elements: Site router, site switch, or GPS server down. No redundant networking element available.	Response provided during normal business hours until service restoration. Field service technician arrival on-site within 4 hours of receiving dispatch notification.
Medium P3	Consoles: Up to 20% of a site's console positions down. Conventional Channels: Single channel down. Redundant gateway available. Network Elements: Site router/switch or GPS server down. Redundant networking element available.	Response provided during normal business hours until service restoration. Field service technician arrival on-site within 8 hours of receiving dispatch notification.
Low P4	Service Requests: Minor events and warnings in the system. Preventative and planned maintenance activities (scheduled work).	Not applicable.

6.3.5 Annual Preventative Maintenance

Motorola Solutions personnel will perform a series of maintenance tasks to keep network equipment functioning correctly.

6.3.5.1 Description of Service

Annual Preventative Maintenance provides annual operational tests on the Customer's infrastructure equipment to monitor its conformance to specifications.

6.3.5.2 Scope

Annual Preventive Maintenance will be performed during standard business hours, unless otherwise agreed to in writing. After the service starts, if the system or Customer requirements dictate that the service must occur outside of standard business hours, an additional quotation will be provided. The Customer is responsible for any charges associated with unusual access requirements or expenses.

6.3.5.3 Inclusions

Annual Preventive Maintenance service will be delivered for Motorola Solutions-provided infrastructure, including integrated third-party products, per the level of service marked in Table 6-8: Preventive Maintenance Level.

Table 6-8: Preventive Maintenance Level

Service Level	Included
Level 1 Preventive Maintenance	X
Level 2 Preventive Maintenance	

6.3.5.4 Motorola Solutions Responsibilities

- Notify the Customer of any planned system downtime needed to perform this service.
- Maintain communication with the Customer as needed until completion of the Annual Preventive Maintenance.
- Determine, in its sole discretion, when an incident requires more than the Annual Preventive Maintenance services described in this SOW, and notify the Customer of an alternative course of action.
- Provide the Customer with a report in Customer Hub, or as otherwise agreed in the CSP, comparing system performance with expected parameters, along with any recommended actions. Time allotment for report completion is to be mutually agreed.
- Provide trained and qualified personnel with proper security clearance required to complete Annual Preventive Maintenance services.
- Field service technician will perform the following on-site:
 - Perform the tasks defined in Section 6.3.5.7: Preventative Maintenance Tasks.
 - Perform the procedures defined in Section 6.3.5.8: Site Performance Evaluation Procedures for each site type on the system.

- Provide diagnostic and test equipment necessary to perform the Preventive Maintenance service.
- As applicable, use the Method of Procedure (MOP) defined for each task.

6.3.5.5 Limitations and Exclusions

The following activities are outside the scope of the Annual Preventive Maintenance service:

- Preventive maintenance for third-party equipment not sold by Motorola Solutions as part of the original system.
- Network transport link performance verification.
- Verification or assessment of Information Assurance.
- Any maintenance and/or remediation required as a result of a virus or unwanted cyber intrusion.
- Tower climbs, tower mapping analysis, or tower structure analysis.

6.3.5.6 Customer Responsibilities

- Provide preferred schedule for Annual Preventative Maintenance to Motorola Solutions. Work with your CSM to add into the Customer Service Plan.
- Authorize and acknowledge any scheduled system downtime.
- Maintain periodic backup of databases, software applications, and firmware. Motorola Solutions to advise the Customer on where these can be found on the system.
- Establish and maintain a suitable environment (heat, light, and power) for the equipment location as described in equipment specifications, and provide Motorola Solutions full, free, and safe access to the equipment so that Motorola Solutions may provide services. All sites shall be accessible by standard service vehicles.
- Submit timely changes in any information supplied in the CSP to the CSM.
- Provide site escorts, if required, in a timely manner.
- Provide Motorola Solutions with requirements necessary for access to secure facilities.
- In the event that Motorola Solutions agrees in writing to provide supplemental Annual Preventive Maintenance to third-party elements provided by Customer, the Customer agrees to obtain any third-party consents or licenses required to enable Motorola Solutions field service technician to access the sites to provide the service.

6.3.5.7 Preventative Maintenance Tasks

The Preventive Maintenance service includes the tasks listed in this section. Tasks will be performed based on the level of service noted in Section 6.3.5.3: Inclusions.

PRIME SITE CHECKLIST – LEVEL 1	
Software	
Verify System software physical media	Perform audit of software media on site. Verify that versions, KC numbers, and types match what is deployed to Customer server.

PRIME SITE CHECKLIST – LEVEL 1	
Switches	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on switch type. Capture available diagnostic logs.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.
Routers	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on router type. Capture available diagnostic logs.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.
Miscellaneous Equipment	
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Capture Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Site Frequency Standard Check (Timing Reference Unit)	Check LEDs for proper operation.
Site Controllers	
Capture Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Equipment Alarms	Check LED and/or other status indicators for fault conditions.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.
Site Controller Redundancy (Trunking)	Roll site controllers with no dropped audio.
Comparators	
Equipment Alarms	Verify no warning/alarm indicators.
Capture Diagnostics	Perform recommended diagnostic tests based on server type. Capture available diagnostic logs.
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.

DISPATCH SITE CHECKLIST – LEVEL 1	
General	
Inspect all Cables	Inspect all cables and connections to external interfaces are secure.

DISPATCH SITE CHECKLIST – LEVEL 1	
Mouse and Keyboard	Verify operation of mouse and keyboard.
Configuration File	Verify each operator position has access to required configuration files.
Console Operator Position Time	Verify console operator position time is consistent across all operator positions.
Screensaver	Verify screensaver set as Customer prefers.
Screen Performance	Verify screen operational and is not suffering from dead pixels or image burn-in that prevent user operation.
Touchscreen	Verify touchscreen operation, if present.
Cabling/Lights/Fans	Visual inspection of all equipment cabling, lights, and fans
Filters/Fans/Dust	Clean all equipment filters and fans and remove dust.
Monitor and Hard Drive	Confirm monitor and hard drive do not "sleep".
DVD/CD	Verify and clean DVD or CD drive.
Time Synchronization	Verify console time is synchronized with NTP server
Anti-Virus	Verify anti-virus is enabled and that definition files have been updated within two weeks of current date.
Headset Unplugged Testing	
Speakers	Test all speakers for audio quality, volume, static, drop-outs, and excess hiss when turned up.
Channel Audio in Speaker	Verify selected channel audio in select speaker only.
Footswitch Pedals	Verify both footswitch pedals operational.
Radio On-Air Light	Verify radio on-air light comes on with TX (if applicable).
Headset Plugged In Testing	
Radio TX and RX	Verify radio TX/RX from both headset jacks. Verify levels OK. Check volume controls for noise, static, or drop-outs.
Speaker Mute	Verify speaker mutes when muted.
Telephone Operation	Verify telephone operational through both headset jacks. Check volume controls for noise, static, or drop-outs.
Audio Switches	Verify audio switches to speaker when phone off-hook if interfaced to phones.
Radio Takeover in Headset	Verify radio-takeover in headset mic when phone is off-hook, with mic switching to radio and muting phone during push-to-talk.
Other Tests	
Phone Status Light	Verify phone status light comes on when phone is off-hook (if applicable).
Desk Microphone Operation	Confirm desk mic operation (if applicable).

DISPATCH SITE CHECKLIST – LEVEL 1	
Radio Instant Recall Recorder (IRR) Operation	Verify radio IRR operational on Motorola Solutions dispatch (if applicable).
Telephone IRR Operation	Verify telephone IRR operational on Motorola Solutions dispatch, if on radio computer.
Recording	Verify operator position being recorded on long term logging recorder, if included in service agreement
Computer Performance Testing	
Computer Reboot	Reboot operator position computer.
Computer Operational	Confirm client computer is fully operational (if applicable).
Audio Testing	
Conventional Resources	Confirm all conventional resources are functional, with adequate audio levels and quality.
Secure Mode	Confirm any secure talkgroups are operational in secure mode.
Trunked Resources	Confirm all trunked resources on screen are functioning by placing a call in both directions, at the Customer's discretion, and at a single operator position
Backup Resources	Confirm backup resources are operational.
Logging Equipment Testing	
Recording - AIS Test	Verify audio logging of trunked calls.
Recording	With Customer assistance, test operator position logging on recorder.
System Alarms	Review alarm system on all logging equipment for errors.
Capture Diagnostics	Perform recommended diagnostic tests based on equipment, and capture available diagnostic logs.
Verify System software Physical media	Perform audit of software media on site. Verify that versions, KC numbers, and types match what is deployed to Customer server.
Playback Station (Motorola Solutions Provided)	
Capture Diagnostics	Perform recommended diagnostic tests based on equipment, and capture available diagnostic logs.
Recall Audio	Verify that radio and telephone audio can be recalled.

RF SITE CHECKLIST – LEVEL 1	
RF PM Checklist	
Equipment Alarms	Verify no warning or alarm indicators.
Clean Fans and Equipment	Use an antistatic vacuum to clean cooling pathways.

RF SITE CHECKLIST – LEVEL 1	
Site Frequency Standard Check	Check LEDs for proper operation, PCA screens indicating potential faults for proper operation
Basic Voice Call Check	Voice test each voice path, radio to radio.
Trunking Control Channel Redundancy	Roll control channel, test, and roll back if the site has GTR stations. This test is not applicable for D series stations
Trunking Site Controller Redundancy, ASTRO® 25 Site Repeater only	Roll site controllers with no dropped audio if the site has GTR stations. This test is not applicable for D series stations
PM Optimization Workbook (See Section 6.3.5.8: Site Performance Evaluation Procedures for GTR tests)	Complete Base Station Evaluation tests - Frequency Error, Modulation Fidelity, Forward at Set Power, Reverse at Set Power, and Gen Level Desense no TX. Update station logs.

MOSCAD CHECKLIST – LEVEL1	
MOSCAD Server	
Equipment Alarms	Verify no warning or alarm indicators.
Check Alarm/Event History	Review MOSCAD alarm and events to find if there are chronic issues.
Windows Event Logs	Review Windows event logs. Save and clear if full.
Password Verification	Log in to site devices to verify passwords. Document changes if any found.
MOSCAD Client	
Equipment Alarms	Verify no warning or alarm indicators.
Check Alarm / Event History	Review MOSCAD alarm and events to find if there are chronic issues.
Windows Event Logs	Review Windows event logs. Save and clear if full.
Password Verification	Site devices to verify passwords. Document changes if any found.
Verify System software Physical media	Perform audit of software media on site. Verify that versions, KC numbers, and types match what is deployed to Customer server.

MOSCAD CHECKLIST – LEVEL1	
MOSCAD RTUs	
Equipment Alarms	Verify no warning or alarm indicators.
Verify Connectivity	Verify connectivity
Password Verification	Site devices to verify passwords. Document changes if any found.
Check Alarm/Event History	Review MOSCAD alarms and events to find if there are chronic issues.
Verify System software Physical media	Perform audit of software media on site. Verify that versions, KC numbers, and types match what is deployed to Customer server.

FACILITIES CHECKLIST – LEVEL 1	
Visual Inspection Exterior	
Antenna Site Registration Sign	Verify that the Antenna Site Registration sign is posted.
Warning Sign - Tower	Verify that a warning sign is posted on the tower.
Warning Sign - Gate	Verify that a warning sign is posted at the compound gate entrance.
10 Rule Sign	Verify that a 10 rules sign is posted on the inside of the shelter door.
Outdoor Lighting	Verify operation of outdoor lighting and photocell.
Exterior of Building	Check exterior of building for damage and disrepair.
Fences / Gates	Check fences and gates for damage and disrepair.
Landscape / Access Road	Check landscape and access road for accessibility.
Visual Inspection Interior	
Electrical Surge Protectors	Check electrical surge protectors for alarms.
Emergency Lighting	Verify emergency lighting operation.
Indoor Lighting	Verify indoor lighting.
Equipment Inspection	Visually inspect that all hardware, including equipment, cables, panels, batteries, and racks, is in acceptable physical condition for normal operation.
Regulatory Compliance (License, ERP, Frequency, Deviation)	Check for site and station FCC licensing indicating regulatory compliance.

FACILITIES CHECKLIST – LEVEL 1	
Clean Fans and Equipment	Use antistatic vacuum to clean cooling pathways.
UPS	
Visual inspection (condition, cabling)	Check for damage, corrosion, physical connections, dirt and dust, and error indications.
Generator	
Visual Inspection	Check panel housing for cracks, rust, and weathering. Check physical connections for corrosion, dirt and dust, or other abnormal conditions.
Fuel	Verify fuel levels in backup generators, document date of last fuel delivered from fuel service provider.
Oil	Check the oil dipstick for proper level. Note condition of oil.
Verify operation (no switchover)	Verify generator running and check ease or difficulty of start. Is generator "throttling" or running smooth? Any loud unusual noise? Document any concerns or abnormal conditions.
Motorized Dampers	Check operation
HVAC	
Air Filter	Check air filter and recommend replacement if required.
Coils	Check coils for dirt and straightness.
Outdoor Unit	Check that outdoor unit is unobstructed.
Wiring	Check wiring for insect and rodent damage.
Cooling / Heating	Check each HVAC unit for cooling/heating.
Motorized Dampers	Check operation.

TOWER CHECKLIST – LEVEL 1	
Structure Condition	
Rust	Check structure for rust.
Cross Members	Check for damaged or missing cross members.
Safety Climb	Check safety climb for damage.
Ladder	Verify that ladder system is secured to tower.
Welds	Check for cracks or damaged welds.
Outdoor lighting/photocell	Test outdoor lighting and photocell.
Drainage Holes	Check that drainage holes are clear of debris.
Paint	Check paint condition.

TOWER CHECKLIST – LEVEL 1	
Tower Lighting	
Lights/Markers	Verify all lights and markers are operational.
Day/Night Mode	Verify day and night mode operation.
Power Cabling	Verify that power cables are secured to tower.
Antennas and Lines	
Antennas	Visually inspect antennas for physical damage from ground using binoculars.
Transmission Lines	Verify that all transmission lines are secure on the tower.
Grounding	
Structure Grounds	Inspect grounding for damage or corrosion
Guy Wires	
Tower Guys	Visually inspect guy wires for fraying, loss of tension, or loss of connection.
Guy Wire Hardware	Check hardware for rust.
Concrete Condition	
Tower Base	Check for chips or cracks.

6.3.5.8 Site Performance Evaluation Procedures

The Preventive Maintenance service includes the site performance evaluation procedures listed in this section.

ASTRO 25 SITE PERFORMANCE
Antennas
Transmit Antenna Data
Receive Antenna System Data
Tower Top Amplifier Data
FDMA Mode
Base Radio Transmitter Tests
Base Radio Receiver Tests
Base Radio Transmit RFDS Tests
Receive RFDS Tests with TTA (if applicable)
Receive RFDS Tests without TTA (if applicable)
TDMA Mode
Base Radio TDMA Transmitter Tests
Base Radio TDMA Receiver Tests
TDMA Transmit RFDS Tests

ASTRO 25 SITE PERFORMANCE

TDMA Receive RFDS Tests with 432 Diversity TTA

TDMA Receive RFDS Tests with 2 Independent TTA's (if applicable)

TDMA Receive RFDS Tests without TTA (if applicable)

6.4 Priority Level Definitions and Response Times

Table 6-9: Priority Level Definitions and Response Times describes the criteria Motorola Solutions CMSO uses to prioritize incidents and service requests, and lists the response times for those priority levels.

Table 6-9: Priority Level Definitions and Response Times

Incident Priority	Incident Definition	Initial Response Time
Critical P1	<p>Core: Core server or core link failure. No redundant server or link available.</p> <p>Sites/Subsites: Primary site down. Two RF sites or more than 10% of RF sites down, whichever is greater.</p> <p>Consoles: More than 40% of a site's console positions down.</p> <p>Conventional Channels: Conventional Channel Gateways (CCGW) down without redundant gateways available.</p> <p>Security Features: Security is non-functional or degraded.</p>	<p>Response provided 24/7 until service restoration.</p> <p>Technical resource will acknowledge incident and respond within 1 hour of CMSO logging incident.</p>
High P2	<p>Core: Core server or link failures. Redundant server or link available.</p> <p>Consoles: Between 20% and 40% of a site's console positions down.</p> <p>Sites/Subsites: One RF site or up to 10% of RF sites down, whichever is greater.</p> <p>Conventional Channels: Up to 50% of CCGWs down. Redundant gateways available.</p> <p>Network Elements: Site router, site switch, or GPS server down. No redundant networking element available.</p>	<p>Response provided 24/7 until service restoration.</p> <p>Technical resource will acknowledge incident and respond within 4 hours of CMSO logging incident.</p>
Medium P3	<p>Consoles: Up to 20% of a site's console positions down.</p> <p>Conventional Channels: Single channel down. Redundant gateway available.</p> <p>Network Elements: Site router/switch or GPS server down. Redundant networking element available.</p>	<p>Response provided during normal business hours until service restoration.</p> <p>Technical resource will acknowledge incident and respond within 1 Business Day of CMSO logging incident.</p>
Low P4	<p>Service Requests: Minor events and warnings in the system. Preventative and planned maintenance activities (scheduled work).</p>	<p>Response provided during normal business hours.</p> <p>Motorola Solutions will acknowledge and respond within 1 Business Day.</p>

6.4.1 Network Event Monitoring

Network Event Monitoring provides continuous real-time fault monitoring for radio communications networks. Motorola uses a defined set of tools to remotely monitor the Customer's ASTRO 25 radio network and characterize network events. When an actionable event takes place, it becomes an incident. CMSO technologists acknowledge and assess these incidents, and initiate a defined response.

With Network Event Monitoring, Motorola uses a Managed Services Suite of Tools (MSST) to detect events 24/7 as they occur, analyze them, and escalate them to the Network Operation Center (NOC). Incidents will be generated automatically based on the criteria shown in Table 6-10: Alarm Threshold Rule Options for All Event Types.

Table 6-10: Alarm Threshold Rule Options for All Event Types

Standard Threshold	Optional Threshold
An incident will be triggered if an event fulfills one of the two following criteria: <ul style="list-style-type: none">▪ Event occurs 5 times in 30 minutes.▪ Event causes 10 minutes of continuous downtime for a monitored component.	An incident will be triggered if an event fulfills one of the two following criteria: <ul style="list-style-type: none">▪ Event occurs 7 times in 30 minutes.▪ Event causes 15 minutes of continuous downtime for a monitored component.

The CMSO NOC agent assigns a priority level to an incident, then initiates a response in accordance with the Customer Handling Procedure (CHP). Depending on the incident, Motorola's response may include continued monitoring for further incident development, remote remediation by technical support, dispatching a field service technician, or other actions Motorola determines necessary.

To prevent duplicate incidents from being generated by the same root cause, Motorola employs an auto triage process that groups related incidents. The auto triage process therefore automatically assigns grouped incidents to a field service technician, enabling the resolution of these incidents together if the root alarm has been addressed.

Motorola uses a set of standard templates to record key information on service process, defined actions, and points of contact for the Customer's service. In the event of an incident, Motorola and the Customer can reference these templates. When information is updated, it will be organized in four categories:

- **Open** – Motorola's points of contact for dispatch permissions, entitlement information, and knowledge management.
- **Vendor** – Escalation and contact information.
- **Resolution** – Incident closure information.
- **Site Arrival** – Site arrival and exit process information.

The Customer will be able to access information on Network Event Monitoring activities via Customer Hub, including incident management reports. Any specific remediation and action notes from Motorola's CMSO or field service technicians will be available for the Customer to review as well.

Service Configuration Portal-Lite (SCP-Lite), which can be accessed through Customer Hub, provides a read-only view of the Customer's current service configuration, including site parameters, notification preferences and dispatch information. If the Customer or Motorola makes changes to the network, the

updated information will be incorporated into SCP-Lite allowing the Customer a view of the ASTRO® 25 radio network's state.

6.4.2 Scope

Network Event Monitoring is available 24/7. Incidents generated by the monitoring service will be handled in accordance with Section 6.4: Priority Level Definitions and Response Times.

Network Event Monitoring is a globally provided service unless limited by data export control or other applicable local and regional regulations. Timeframes are based on the Customer's local time zone.

6.4.3 Inclusions

Network Event Monitoring is available for the devices listed in Section 6.4.9: Monitored Elements.

6.4.4 Motorola Responsibilities

- Provide a dedicated network connection necessary for monitoring the Customer's communication network. Allow Motorola continuous remote access to enable the monitoring service.
- Provide continuous utility service to any Motorola equipment installed or used at the Customer's premises to support delivery of the service. The Customer agrees to take reasonable due care to secure the Motorola equipment from theft or damage while on the Customer's premises.
- Create an incident, as necessary. Gather information to perform the following:
 - Characterize the issue.
 - Determine a plan of action.
 - Assign and track the incident to resolution.
- Prior to contract start date, provide Motorola with pre-defined information necessary to complete a CSP, including:
 - Incident notification preferences and procedure.
 - Repair verification preference and procedure.
 - Database and escalation procedure forms.
- Submit timely changes in any information supplied to Motorola and included in the CSP to the CSM.
- Notify the CMSO when the Customer performs any activity that impacts the system. Activity that impacts the system may include, but is not limited to: installing software or hardware upgrades, performing upgrades to the network, renaming elements or devices within the network, and taking down part of the system to perform maintenance.
- Send system configuration change requests to Motorola's CSM.
- Allow Motorola's field service technician, if designated in the CSP, access to equipment, including any connectivity or monitoring equipment, if remote service is not possible.
- Allow Motorola's field service technician, if designated in the CSP, access to remove Motorola-owned monitoring equipment upon cancellation of service.

- Provide Motorola with all Customer-managed passwords required to access the Customer's system upon request, when opening a request for service support, or when needed to enable response to a technical issue.
- Pay additional support charges above the contracted service agreements that may apply if it is determined that system faults were caused by the Customer making changes to critical system parameters without written agreement from Motorola.
- In the event that Motorola agrees in writing to provide supplemental monitoring for third-party elements provided by the Customer, the Customer agrees to obtain third party consents or licenses required to enable Motorola to provide the monitoring service.
- Cooperate with Motorola and perform reasonable or necessary acts to enable Motorola to provide these services.
- Contact Motorola to coordinate transition of monitoring when the responsibility for monitoring needs to be transferred to or from Motorola, as specified in pre-defined information provided in the Customer's CSP. An example of a transfer scenario is transferring monitoring from Motorola for network monitoring after normal business hours.
 - Upon contact, the Customer must provide Motorola with customer name, site ID, status on any open incidents, priority level of any open incidents, brief descriptions of any ongoing incident, and action plan for resolving those incidents.
- Acknowledge that incidents will be handled in accordance with Section 6.4: Priority Level Definitions and Response Times.
- Connectivity Matrix describes available connectivity options.
- If determined necessary by Motorola, provide Motorola-owned equipment at the Customer's premises for monitoring network elements. The type of equipment and location of deployment is listed in Section 6.4.8: Motorola Owned and Supplied Equipment.
- Verify connectivity and event monitoring prior to system acceptance or start date.
- Monitor system continuously during hours designated in the CSP, and in accordance with Section 6.4: Priority Level Definitions and Response Times.
- Remotely access the Customer's system to perform remote diagnosis as permitted by the Customer.
- Provide the Customer with a link to access system configuration info, site info, system notifications, and system notes.
- Cooperate with the Customer to coordinate the transition of monitoring responsibilities between Motorola and the Customer.
- Maintain communication as needed with the Customer in the field until incident resolution.
- Provide available information on incident resolution to the Customer.

6.4.5 Limitations and Exclusions

The following activities are outside the scope of the Network Monitoring service:

- Motorola will not monitor any elements outside of the Customer's ASTRO 25 network, or monitor infrastructure provided by a third party, unless specifically stated. Monitored elements must be within the ASTRO 25 radio network and capable of sending alerts to the Unified Event Manager (UEM).

- Additional support charges above contracted service agreement fees may apply if Motorola determines that system faults were caused by the Customer making changes to critical system parameters without written agreement from Motorola.
- Monitoring of network transport, such as WAN ports, WAN cloud, and redundant paths, unless provided by supplemental service outside this standard scope.
- Emergency on-site visits required to resolve technical issues that cannot be resolved by working remotely with the Customer's technical resource.
 - When an instance requires personnel onsite, a CSMO ticket will be created and assigned to a local technician. Please refer to 6.3.4 Onsite Infrastructure Response.
- Elements deployed outside of ASTRO RNI (e.g., ASTRO CEN sites) are excluded from the service.
- System installations, upgrades, and expansions.
- Customer training.
- Hardware repair and/or replacement.
- Network security services.
- Information Assurance.

6.4.6 Customer Responsibilities

- Allow Motorola continuous remote access to enable the monitoring service.
- Provide continuous utility service to any Motorola equipment installed or used at the Customer's premises to support delivery of the service. The Customer agrees to take reasonable due care to secure the Motorola equipment from theft or damage while on the Customer's premises.
- Create an incident, as necessary. Gather information to perform the following:
 - Characterize the issue.
 - Determine a plan of action.
 - Assign and track the incident to resolution.
- Prior to contract start date, provide Motorola with pre-defined information necessary to complete a CSP, including:
 - Incident notification preferences and procedure.
 - Repair verification preference and procedure.
 - Database and escalation procedure forms.
- Submit timely changes in any information supplied to Motorola and included in the CSP to the CSM.
- Notify the CSMO when the Customer performs any activity that impacts the system. Activity that impacts the system may include, but is not limited to: installing software or hardware upgrades, performing upgrades to the network, renaming elements or devices within the network, and taking down part of the system to perform maintenance.
- Send system configuration change requests to Motorola's CSM.
- Allow Motorola's field service technician, if designated in the CSP, access to equipment, including any connectivity or monitoring equipment, if remote service is not possible.

- Allow Motorola's field service technician, if designated in the CSP, access to remove Motorola-owned monitoring equipment upon cancellation of service.
- Provide Motorola with all Customer-managed passwords required to access the Customer's system upon request, when opening a request for service support, or when needed to enable response to a technical issue.
- Pay additional support charges above the contracted service agreements that may apply if it is determined that system faults were caused by the Customer making changes to critical system parameters without written agreement from Motorola.
- In the event that Motorola agrees in writing to provide supplemental monitoring for third-party elements provided by the Customer, the Customer agrees to obtain third party consents or licenses required to enable Motorola to provide the monitoring service.
- Cooperate with Motorola and perform reasonable or necessary acts to enable Motorola to provide these services.
- Contact Motorola to coordinate transition of monitoring when the responsibility for monitoring needs to be transferred to or from Motorola, as specified in pre-defined information provided in the Customer's CSP. An example of a transfer scenario is transferring monitoring from Motorola for network monitoring after normal business hours.
 - Upon contact, the Customer must provide Motorola with customer name, site ID, status on any open incidents, priority level of any open incidents, brief descriptions of any ongoing incident, and action plan for resolving those incidents.
- Acknowledge that incidents will be handled in accordance Section 6.4: Priority Level Definitions and Response Times.

6.4.7 Connectivity Matrix

ASTRO connectivity should be established prior service start date.

Table 6-11: Available Connectivity

System Type	Available Connectivity	Set up and Maintenance
ASTRO 25	ASTRO Connectivity Service	Motorola

6.4.8 Motorola Owned and Supplied Equipment

This table identifies equipment that Motorola will supply to support the network monitoring service for the duration of the service.

Table 6-12: Motorola Owned and Supplied Equipment

Equipment Type	Location Installed
Firewall/Router	Primary Site
Service Delivery Management Server (DSR only)	Primary Site for each Zone

6.4.9 Monitored Elements

This table identifies the elements that can be monitored by the service. The specific quantities of each element to be monitored on the Customer's system will be inventoried in the CHP.

Table 6-13: Monitored Elements

Monitored Elements		
Active Directory	Enrichment Testing	Probe
Agent	Environmental	Core Switch
AIS	ESX	Radio Interface
AMB	Exit Router	RDM
Application Server	RNI Firewall	RFDS
APX Cloud Application	Core Server	RGU
ATR	Gateway	RNG
AUC	Gateway Router	Site Router
Backup Server	Gateway Unit	RTU
Base Radio	GIS Server	SCOM Server
Call Processor	HSS	Short Data Router
Camera	Install Server	Statistical Server
CBSD	Site Switch	Storage Networking
CCGW	Licensing Service	Consoles
Load Balancer	Load Balancer	TRAK
Client Station	Logging Recorder	Terminal Server
CommandCentral AXS dispatch console	Logging Replay Station	Time Keeper
Controller	UNC	Training App
Conventional	UEM	Training Database
Core Router	MOSCAD Server	Trap Forwarder
Data Processing	Network Address	UCS
Database Server	Network Device	Licensing Server
Data Warehouse Server	NTP	Virtual Machine
Device Configuration Server	AIS	VMS
DNS	Application Server	VPM
Domain Controller	Packet Data Gateway	WSGU
D series Site Controller	Physical Host Environmental	ZDS
eNodeB	Physical Host Power and Network	Zone Controller
Active directory	Power Distribution Unit	Syslog

Monitored Elements		
Repeaters	Power Monitor	Proxy

6.5 Remote Security Update Service

Motorola Solutions, Inc.'s (Motorola) ASTRO 25 Remote Security Update Service (RSUS) provides pretested security updates, minimizing cyber risk and software conflicts. These security updates contain operating system security patches and antivirus definitions that have been validated for compatibility with ASTRO 25 systems. Motorola will remotely deliver tested security updates to the Customer using a network connection. Reboot responsibility is determined by which options are included as part of this service.

The ASTRO 25 Monthly Security Update Service (SUS) is a prerequisite for RSUS. Please see the Statement of Works for ASTRO 25 SUS Statement of Work.

6.5.1 Description of Service

Motorola remotely installs pretested security updates on the applicable ASTRO 25 system components.

Note that some ASTRO 25 system components may be covered by the self-installed SUS service and not RSUS (RSUS Exceptions).

If the Customer is unable to apply updates to RSUS exceptions, Motorola can provide Onsite SUS, whereby the Motorola field service team attend Customer premises to install the updates.

Motorola remotely installs pretested security updates on the applicable ASTRO 25 system components. Motorola tests security updates for compatibility with ASTRO 25 in a dedicated information assurance lab.

Motorola will install compatible ASTRO 25 security updates using a remote connection. After installing tested security updates remotely, Motorola provides the Customer with a report outlining the updates made to the Customer's system. This report will inform the Customer of security update network transfers and installation statuses.

6.5.1.1 Application of Prerequisite Motorola Technical Notices (MTN)

In some instances, MTNs must be applied to enable Motorola to remotely deploy the latest security updates. MTN installation is not part of RSUS. In the event that Motorola is prevented from deploying security updates due to incomplete implementation of prerequisite MTNs, Motorola will raise a service incident and notify the Customer. Once necessary MTNs are applied to the Customer's system, Motorola will continue to remotely deploy security updates.

6.5.1.2 Updates to System Components in the Customer Enterprise Network

Connections to other networks, herein referred to as Customer Enterprise Network (CEN), are delineated by firewalls. All security updates deployed by RSUS are specific to the equipment included in the ASTRO 25 radio network. The only exceptions are those identified as RSUS exceptions in Appendix 1.

The Customer may request a quote, via the CSM, for Motorola to remotely install updates to eligible systems that are in the Customer's CEN.

The Customer must make the appropriate configuration changes to their firewall giving logical access and a network path to allow Motorola to remotely install the requisite patches.

6.5.1.3 Microsoft Windows Reboot Following Security Update Installation

It is a critical requirement for Microsoft Windows systems to be rebooted following the installation of security updates. In the case of RSUS, this is the responsibility of the Customer.

Failure of the Customer to fulfill reboot responsibilities as described in Table 6-16: Reboot Responsibilities Matrix exposes systems to security threats. Until reboot, the system is not updated.

It will also delay execution of future RSUS updates, with a risk of failed RSUS scheduling and unnecessary Customer impact.

If Customers require further support from Motorola Solutions to reboot following Microsoft Windows update deployment and installation, please contact your CSM who can discuss options for Reboot Support.

6.5.2 Scope

RSUS includes pretested security updates for the software listed in Table 6-14: Update Cadence. This table also describes the release cadence for security updates.

Table 6-14: Update Cadence

Software	Update Release Cadence
Antivirus Definition Files	Weekly
Microsoft Windows	Monthly
Microsoft SQL Server	Quarterly
Red Hat Linux (RHEL)	Quarterly
VMWare ESXi Hypervisor	Quarterly
Trellix (McAfee) Patch(es)	Quarterly
Dot Hill DAS Firmware	Quarterly
HP SPP Firmware	Quarterly

Motorola installs security updates during normal business hours. Normal business hours are defined as 8 a.m. to 5 p.m. Central Standard Time Monday through Friday, excluding public holidays.

The Customer may submit a formal request that Motorola personnel work outside of these hours. The Customer will need to pay additional costs for work to be completed outside of normal business hours.

Motorola will provide an Impact Timeline (ITL) to the Customer to show installation tasks scheduled, including preparation work and the transfer of security updates to local storage or memory. Core Server reboots or zone controller rollover will be initiated at the times shared in the ITL.

It is a critical requirement that Microsoft Windows systems are rebooted following the installation of security updates. In the case of RSUS, this is the responsibility of the Customer.

Intrusive security updates require Customer coordination, may require hardware reboots and zone controller rolling (switching from one zone controller to the other) to fully implement. Systems with redundant zone controllers (M3) have low downtime (minutes) as the zone controllers are rolled but systems with single zone controllers will be down for longer periods. While rolling the zone controllers, the system will operate in "site trunking" mode. The Customer will need to be aware of these operational impacts, and coordinate events with users.

6.5.3 Tenanted Customers Access to Antivirus Updates

Where a Customer is a Tenant Customer (for example, a Public Safety Access Point / Dispatch Center) on a Core system owned and operated by another organization, any Tenant customer systems such as dispatch consoles need to be able to access the core Central Security Management Server (CSMS). The RSUS team will need permission from the Core system owners to allow connectivity from the Core system to any RSUS entitled Tenant Customers.

6.5.4 Inclusions

Supported ASTRO 25 core types and security update delivery methods are included in Table 6-15: RSUS Options. This table indicates if Motorola will provide any RSUS optional services to the Customer. RSUS supports the current Motorola ASTRO® 25 system release and aligns with the established [Software Support Policy \(SwSP\)](#).

Motorola reserves the right to determine which releases are supported as business conditions dictate. Additional charges may apply in the event of supporting releases that are no longer within the Standard Support Period (as defined by the SWSP). Contact Motorola's assigned CSM for the latest supported releases.

Table 6-15: RSUS Options

Service	ASTRO 25 Core Type	Included
Remote Security Update Service	L Core M Core Simplified Core	X
Remote Security Update Service with Reboot Support	L Core M Core Simplified Core	

Responsibilities for rebooting applicable hardware are detailed in 6-117 6.5.8: Reboot Responsibilities.

6.5.5 Motorola Responsibilities

- Remotely deploy patches listed in Section 6.5.2: Scope on the Customer's system. Patches will be installed on the cadence described in that section.
 - As outlined in Section 6.5.2: Scope, coordinate and communicate with the Customer when installing updates that will require server reboots, workstation reboots, or both.
- Install non-intrusive updates, like antivirus definitions, as released without coordination.

- In the event that no security updates are released by the Original Equipment Manufacturers (OEM), the Final RSUS Patch Report can be reviewed by the Customer to identify where no new security updates were required.
- Coordinate RSUS activities with any other Motorola system maintenance or other engineering activities with the Customer to minimize downtime, inefficiency and operational impact.

6.5.6 Limitations and Exclusions

- Systems with non-standard configurations that have not been certified by Motorola's Systems Integration and Test (SIT) team are specifically excluded from this service, unless otherwise agreed in writing by Motorola.
- Interim or unplanned releases outside the supported release cadence.
- Service does not include pretested intrusion detection system (IDS) signature updates for IDS solutions.
- This service does not include releases for Motorola products that are not ASTRO 25 L, M and Simplified Core radio network infrastructure equipment. The following are examples of excluded products: WAVE PTX, Critical Connect and VESTA solutions.
- K Core ASTRO 25 systems are excluded.
- Motorola product updates are not included in these services.
- Shared network infrastructure firmware, such as transport and firewall firmware are not included in these services.
- This service excludes the delivery of MTNs to the customer system.
- Motorola does not represent that it will identify, fully recognize, discover, or resolve all security events or threats, system vulnerabilities, malicious codes or data, backdoors, or other system threats or incompatibilities as part of the service, or that the agreed upon cadence/time of delivery will be sufficient to identify, mitigate or prevent any cyber incident.
- Motorola shall provide Customers with a list of MTNs that are prerequisite for execution of the RSUS service.

6.5.7 Customer Responsibilities

- This service requires connectivity from Motorola to the Customer's ASTRO 25 system. If required, procure internet connectivity before the service commences, and maintain it for the duration of the service contract.
- Refrain from making uncertified changes to the ASTRO 25 system. Consult with Motorola before making changes to the ASTRO 25 system.
- Be aware of the operational impacts of RSUS update installation, and coordinate the update process with users.
- Prerequisite Motorola Technical Notices (MTN) must be applied to enable Motorola to remotely deploy the latest security updates. The list of MTNs that must be applied are available on the SUS secure customer portal.

6.5.8 Reboot Responsibilities

Microsoft Windows servers and workstations often need to be rebooted before security updates take full effect and mitigate vulnerabilities. Reboot responsibilities are determined by the specific RSUS package being purchased. Table 6-16: Reboot Responsibilities Matrix contains the breakdown of responsibilities. Section 6.5.4: Inclusions indicates which services are included.

If a Customer chooses not to reboot after an update, whether for operational reasons or convenience, they are accepting the associated risks, which include:

- Greater exposure to cyber security threats and vulnerabilities.
- Impact to implementation of subsequent RSUS Microsoft Windows updates at the agreed delivery cadence, until the devices are rebooted and at the correct RSUS release.

If Customers require further support from Motorola to reboot following Microsoft Windows update deployment and installation, please contact your CSM who can discuss options for Reboot Support.

Table 6-16: Reboot Responsibilities Matrix

Remote SUS Package	Motorola Responsibilities	Customer Responsibilities
Remote Security Update Service	<ul style="list-style-type: none"> ▪ Provide a report to the Customer's main contact listing the servers or workstations which must be rebooted to ensure installed security updates become effective. 	<ul style="list-style-type: none"> ▪ When a security update requires a reboot, reboot servers and workstations after security updates are installed. ▪ When remote deployment is in progress, it may be necessary for multiple reboots to be coordinated with Motorola Solutions.
Remote Security Update Service with Reboot Support	<ul style="list-style-type: none"> ▪ When a security update requires a reboot, dispatch a technician to reboot servers and workstations after security updates are installed. 	

6.5.9 Disclaimer

This service tests OEM security updates. Delivering security updates for specific software depends on OEM support for that software. If an OEM removes support (e.g., end-of-life) from deployed software, Motorola may work with the OEM to reduce the impact, but may remove support for the affected software from this service without notice.

OEMs determine security update schedules, supportability, or release availability without consultation from Motorola. Motorola will obtain and test security updates when they are made available, and incorporate those security updates into the next appropriate release.

All security updates are important. This service is intended to balance the security and compatibility of tested updates with agreed upon time/cadence of delivery. Customer assumes the risk of this inherent tradeoff.

Motorola disclaims any warranty with respect to pretested database security updates, hypervisor patches, operating system software patches, intrusion detection sensor signature files, or other third-party files, express or implied. Further, Motorola disclaims any warranty concerning non-Motorola software and does not guarantee Customers' systems will be error-free or immune to security breaches as a result of these services.

ASTRO® System Upgrade Agreement Statement of Work

6.6 SUA Overview

Utilizing the ASTRO® System Upgrade Agreement (SUA) service, Lee Summit (Customer) is able to take advantage of new functionality and security features while extending the operational life of the system.

Motorola Solutions, Inc. (Motorola) continues to make advancements in on-premises and cloud technologies to bring value to our customers. Cloud technologies enable the delivery of additional functionality through frequent updates ensuring the latest in ASTRO® is available at all times.

This Statement of Work (SOW), including all of its subsections and attachments, is an integral part of the applicable agreement (Agreement) between Motorola and the Customer.

The Customer is required to keep the system within a standard support period as described in Motorola's [Software Support Policy \(SwSP\)](#).

6.7 Scope

As system releases become available, Motorola agrees to provide the Customer with the software, hardware, and implementation services required to execute up to one system infrastructure upgrade (System Upgrade) in each eligible System Upgrade window over the term of this agreement. The term of the agreement is listed in Table 6-17: SUA Term. The eligible System Upgrade windows and their duration are illustrated in Table 6-18: Eligible System Upgrade Window.

With the addition of the cloud services, Motorola will provide continuous updates to the cloud core to enable the delivery of additional functionality. Cloud updates will be more frequent than the ASTRO® System Upgrades and will occur outside the defined eligible System Upgrade windows in Table 6-18: Eligible System Upgrade Window. Motorola may, at its sole discretion, automatically apply the cloud updates as they become available.

If needed to perform the System Upgrade, Motorola will provide updated and/or replacement hardware for covered infrastructure components. System Upgrades, when executed, will provide an equivalent level of functionality as that originally purchased and deployed by the Customer. At Motorola's option, new system releases may introduce new features or enhancements that Motorola may offer separately for purchase.

Table 6-17: SUA Term

Duration	6 Year(s) – Warranty +5 Maintenance
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Table 6-18: Eligible System Upgrade Window

First Eligible Upgrade Window	Second Eligible Upgrade Window	Third Eligible Upgrade Window
Duration: 2 years	Duration: 2 years	Duration: 2 years
10/1/2026-9/30/2028	10/1/2028-9/30/30	10/1/2030-9/30/2032

The methodology for executing each System Upgrade is described in [Section 6.9](#). ASTRO® SUA pricing is based on the system configuration outlined in [Appendix B: System Pricing Configuration](#). This configuration is to be reviewed annually from the contract effective date. Any change in system configuration may require an ASTRO® SUA price adjustment.

The price quoted for ASTRO® SUA requires the Customer to choose a certified system upgrade path in [Appendix A: ASTRO® System Release Upgrade Paths](#). Should the Customer elect an upgrade path other than one listed in [Appendix A: ASTRO® System Release Upgrade Paths](#), the Customer agrees that additional fees may be incurred to complete the implementation of the system upgrade. In this case, Motorola will provide a price quotation for any additional materials and services necessary.

6.8 Inclusions

Refer to [Table C-6: SUA Coverage Table](#) for more detailed information on the SUA inclusions referenced in this section.

6.8.1 System Upgrades

System Upgrade coverage includes the products outlined in [Appendix B: System Pricing Configuration](#) and does not cover all products. The ASTRO® SUA applies only to System Upgrades within the ASTRO® platform and entitles the Customer to eligible past software versions for downgrading product software to a compatible release version. Past versions from within the Standard Support Period will be available.

6.8.2 Subscriber Radio Software

The ASTRO® SUA makes available the subscriber radio software releases that are shipping from the factory during the coverage period. Please refer to [Section 6.9.5](#) for further clarification on coverage.

6.9 Limitations and Exclusions

The parties acknowledge and agree that the ASTRO® SUA does not cover the products and services detailed in Section 6.9. Third Party Maintenance and Lifecycle not covered under ASTRO® SUA are in Sections 6.12 and 6.13.

Excluded Products and Services	Examples (Not Limited To)
Purchased directly from a third party	NICE, Genesis, Verint
Residing outside of the ASTRO® network	CAD, E911, Avtec Consoles
Not certified on ASTRO® systems	Laptops, PCs, Eventide loggers
Backhaul Network	MPLS, Microwave, Multiplexers
Two-way Subscriber Radios	APX, MCD 5000, Programming, Installation
Consumed in normal operation	Monitors, microphones, keyboards, speakers
RFDS and Transmission Mediums	Antennas, Transmission Line, Combiners, Multicouplers
Customer-provided cloud connectivity	LTE, Internet

Excluded Products and Services	Examples (Not Limited To)
Maintenance Services of any kind	Infrastructure Repair, Tech Support, Dispatch
Security Services	Security Update Service (SUS), Remote SUS

6.9.1 Platform Migrations

Platform Migrations are the replacement of a product with the next generation of that product that is not within the same product family. This can be defined as a new technology that is based on a new hardware configuration and/or a new underlying software. Any upgrades to hardware versions and/or replacement hardware required to support new features or those not specifically required to maintain existing functionality are not included. Unless otherwise stated in this document, Platform Migrations such as, but not limited to, stations, comparators, site controllers, consoles, backhaul, and network changes are not included.

6.9.2 Non-Standard Configurations

Systems that have non-standard configurations that have not been certified by Motorola Systems Integration Testing are specifically excluded from the ASTRO® SUA unless otherwise included in this SOW. Customer acknowledges that if the system has a Special Product Feature it may be overwritten by the software upgrade. Restoration of that feature is not included in the coverage of this SOW.

6.9.3 System Expansions and New Features

Any upgrades to hardware versions, replacement hardware, and/or implementation services that are not directly required to support the certified System Upgrade are not included unless otherwise agreed to in writing by Motorola. This exclusion applies to, but is not limited to, system expansions and new features.

6.9.4 Cloud Technology

Support for Customer-provided connectivity to the cloud platform is not covered under this agreement.

Future cloud, IT, and security related adoption is an evolving technological area and laws, regulations, and standards relating to ASTRO® SUA may change. Any changes to ASTRO® SUA required to achieve future regulatory or Customer specific compliance requirements are not included.

6.9.5 Subscriber Radio Software

Applying software updates to subscriber radios is the Customer's responsibility and is not included in SUA coverage. Subscriber radios must be at a software release compatible with the Customer's ASTRO® system configuration. Motorola will make reasonable efforts to notify the Customer if there is an incompatibility.

6.9.6 Lifecycle

Motorola Solutions Inc. offers the SUA and Astro services packages for current ASTRO platforms equipment that is currently under the Motorola Lifecycle plan. Motorola publishes lifecycle dates for end-of-sale, end-of support and best effort for tech support, security patches and hardware. If a

platform change date is less than the contract date, the customer will be entitled to best commercial effort support, however, all services may not be available past this date.

6.10 General Statement of Work for System Upgrades

6.10.1 Upgrade Planning and Preparation

All items listed in this section are to be completed at least 6 months prior to a scheduled upgrade.

6.10.1.1 Motorola Responsibilities

- Obtain and review infrastructure system audit data as needed.
- Identify the backlog accumulation of security patches and antivirus upgrades needed to implement a system release. If applicable, provide a quote for the necessary labor, security patches, and antivirus upgrades.
- If applicable, identify additional system hardware needed to implement a system release.
- Identify Customer provided hardware that is not covered under this agreement, or where the Customer will be responsible for implementing the system release upgrade software.
- Identify the equipment requirements and the installation plan.
- Advise the Customer of probable impact to system users during the cloud update and the actual field upgrade implementation.
- If applicable, advise the Customer on the network connection specifications necessary to perform the System Upgrade.
- Where necessary to maintain existing functionality and capabilities, deploy and configure any additional telecommunications equipment necessary for connectivity to the cloud based technologies.
- Assign program management support required to perform the certified System Upgrade. Prepare an overall System Upgrade schedule identifying key tasks and personnel resources required from Motorola and Customer for each task and phase of the System Upgrade. Conduct a review of this schedule and obtain mutual agreement of the same.
- Assign installation and engineering labor required to perform the certified System Upgrade.
- Provide access to cloud training videos, frequently asked questions, and help guide.
- Deliver release impact and change management training to the primary zone core owners, outlining the changes to their system as a result of the upgrade path elected. This training needs to be completed at least 12 weeks prior to the scheduled System Upgrade. This training will not be provided separately for user agencies who reside on a zone core owned by another entity. Unless specifically stated in this document, Motorola will provide this training only once per system.

6.10.1.2 Customer Responsibilities

- Contact Motorola to schedule a System Upgrade and provide necessary information requested by Motorola to execute the System Upgrade. Review System Upgrade schedule and reach mutual agreement of the same.

- System Upgrades for Lee's Summit to be driven by and coordinated with the MARRS ASTRO System
- Identify hardware not purchased through Motorola that will require the system release upgrade software.
- Purchase the security patches, antivirus upgrades and the labor necessary to address any security upgrades backlog accumulation identified in [Section 6.9.1.1 Motorola Responsibilities](#), if applicable. Unless otherwise agreed in writing between Motorola and Customer, the installation and implementation of accumulated backlog security patches and network updates is the responsibility of the Customer.
- If applicable, provide network connectivity at the zone core site(s) for Motorola to use to download and pre-position the software that is to be installed at the zone core site(s) and pushed to remote sites from there. Motorola will provide the network connection specifications, as listed in [Section 6.9.1.1 Motorola Responsibilities](#). Network connectivity must be provided at least 12 weeks prior to the scheduled System Upgrade. In the event access to a network connection is unavailable, the Customer may be billed additional costs to execute the System Upgrade.
- Assist in site walks of the system during the system audit when necessary.
- Provide a list of any FRUs and/or spare hardware to be included in the System Upgrade when applicable. Upon reasonable request by Motorola, Customer will provide a complete serial and model number list of the equipment. The inventory count of Customer FRUs and/or spare hardware to be included as of the start of the SUA is included in [Appendix B: System Pricing Configuration](#).
- Acknowledge that new and optional system release features or system expansions, and their required implementation labor, are not within the scope of the SUA. The Customer may purchase these under a separate agreement.
- Maintain an internet connection between the on premise radio solution and the cloud platform, unless provided by Motorola under separate Agreement.
- Identify any Customer specific standard or requirements that may be implicated by the planned upgrade(s), including heightened cloud, IT, or information security related standards or requirements, such as those that may apply to U.S. Federal Customer or other government Customer standards. Motorola makes no representations as to the compliance of ASTRO® SUA with any Customer specific standards, requirements, specifications, or terms, except to the extent expressly specified.
- Participate in release impact training at least 12 weeks prior to the scheduled System Upgrade. This applies only to primary zone core owners. It is the zone core owner's responsibility to contact and include any user agencies that need to be trained, or to act as a training agency for those users not included.

6.10.2 System Readiness Checkpoint

All items listed in this section are to be completed at least 30 days prior to a scheduled upgrade.

6.10.2.1 Motorola Responsibilities

- Perform appropriate system backups and make them available to the customer according to the Customer Service Plan.

- Work with the Customer to validate that all system maintenance is current.
- Work with the Customer to validate that all available security patches and antivirus upgrades have been upgraded on the Customer's system.
 - Motorola reserves the right to charge the Customer for the security patches, antivirus updates and the labor necessary to address any security updates backlog accumulation, in the event that these are not completed by the Customer at the System Readiness Checkpoint.

6.10.2.2 Customer Responsibilities

- Validate that system maintenance is current, in conjunction with the Customer Service Manager according to the Customer Service Plan.
- Validate that all available security patches and antivirus upgrades to the Customer's system have been completed or contract Motorola to complete in time for the System Readiness Checkpoint.

6.10.3 System Upgrade

6.10.3.1 Motorola Responsibilities

- Perform System Upgrade for the system elements outlined in this SOW.

6.10.3.2 Customer Responsibilities

- Inform system users of software upgrade plans and scheduled system downtime.
- Cooperate with Motorola and perform all acts that are reasonable or necessary to enable Motorola to provide software upgrade services.

6.10.4 Upgrade Completion

6.10.4.1 Motorola Responsibilities

- Validate all certified System Upgrade deliverables are complete as contractually required.
- Confirm with Customer that the cloud is available for beneficial use.

6.10.4.2 Customer Responsibilities

- Cooperate with Motorola in efforts to complete any post upgrade punch list items as needed.

6.11 Special Provisions

The migration of capabilities from ASTRO® on-premises Core infrastructure to the cloud is included in the deliverable of the SUA agreement. Technologies based on cloud architecture will be a part of the Motorola roadmap and may be subject to additional cloud terms and conditions.

The SUA does not extend to Customer-provided software and hardware. Motorola makes no warrants or commitments about adapting our standard system releases to accommodate Customer implemented equipment. If during the course of a System Upgrade, it is determined that Customer provided software and/or hardware does not function properly, Motorola will notify the Customer of the limitations. The Customer is responsible for any costs and liabilities associated with making the Customer-provided software and/or hardware work with the standard Motorola system release. This includes, but is not limited to, Motorola's costs for the deployment of resources to implement the upgrade once the limitations have been resolved by the Customer.

Any Motorola software, including any system releases, is licensed to Customer solely in accordance with the applicable Motorola Software License Agreement. Any non-Motorola Software is licensed to Customer in accordance with the standard license, terms, and restrictions of the copyright owner unless the copyright owner has granted to Motorola the right to sublicense the Non-Motorola Software pursuant to the Software License Agreement, in which case it applies and the copyright owner will have all of Licensor's rights and protections under the Software License Agreement. Motorola makes no representations or warranties of any kind regarding non-Motorola Software. Non-Motorola Software may include Open Source Software.

ASTRO® SUA coverage and the parties' responsibilities described in this SOW will automatically terminate if Motorola no longer supports the ASTRO® 7.x software version in the Customer's system or discontinues the ASTRO® SUA program. In either case, Motorola will refund to Customer any prepaid fees for ASTRO® SUA applicable to the terminated period.

If the Customer cancels a scheduled upgrade within less than 12 weeks of the scheduled on site date, Motorola reserves the right to charge the Customer a cancellation fee equivalent to the cost of the pre-planning efforts completed by the Motorola Upgrade Operations Team.

The ASTRO® SUA annualized price is based on the fulfillment of the system release upgrade in each eligible System Upgrade window. If the Customer terminates, except if Motorola is the defaulting party, the Customer will be required to pay for the balance of payments owed in that eligible System Upgrade window if a system release upgrade has been taken prior to the point of termination.

Appendix A: ASTRO® System Release Upgrade Paths

The upgrade paths for standard ASTRO® system releases are listed in Table A-3: Certified Standard ASTRO® System Release Upgrade Paths.

Table A-6-19: Certified Standard ASTRO® System Release Upgrade Paths

ASTRO® System Release	Certified Upgrade Paths
Pre-7.17.X	Upgrade to current shipping release
A7.17.X	A2020.1
A7.18	A2021.1
A2019.2	A2021.1
A2020.1	A2022.1
A2021.1	A2022.1

The upgrade paths for high security ASTRO® system releases for federal deployments are described in Table A-4: Certified High Security ASTRO® System Release Upgrade Paths.

Table A-6-20: Certified High Security ASTRO® System Release Upgrade Paths

ASTRO® High Security System Release	Certified Upgrade Paths
A7.17.X	A2020.HS
A2020.HS	A2022.HS

The release taxonomy for the ASTRO® 7.x platform is expressed in the form “ASTRO® 7.x release 20YY.Z”. In this taxonomy, YY represents the year of the release, and Z represents the release count for that release year.

A20XX.HS enhances the ASTRO® System release with support for Public Key Infrastructure (PKI) Common Access Card / Personal Identity Verification (CAC/PIV) and with Cyber Security Baseline Assurance.

Starting with the 2024 releases, Motorola is moving from the ASTRO 7.x release names to ASTRO Next. For the purposes of the SUA program, releases using the naming convention of AN (ASTRO Next) or A (ASTRO) will be considered the same.

- The most current system release upgrade paths can be found in the most recent Lifecycle Services bulletin.
- The information contained herein outlines Motorola’s presently anticipated general technology direction and is provided for information purposes only. The information in the roadmap is not a commitment to deliver a product, product feature, or software functionality. Motorola reserves the right to make changes to the content and timing of any product, product feature, or software release.

Appendix B: System Pricing Configuration

This configuration is to be reviewed annually from the contract effective date. Any change in system configuration may require an ASTRO® SUA price adjustment. Third party solutions, like Microwave and Audio Logging, are not present in this section. Please refer to Section 6.12 and 6.13.

Table B-6-21: System Configuration at Time of Contract

System Configuration	
Core Configuration	
Cloud-based Core	0
On-premises Main Site	0
On-premises Backup Site	0
System Level Features	
Standalone Servers (Critical Connect / Smart Connect)	0
MOSCAD NFM RTU (typically 1 per site location)	0
Network Management Clients	0
IMW Servers	0
Telephone Interconnect	0
Security Configuration	
AERSS Sensors	1
Firewalls	1
KMF Servers	0
KMF Clients	0
RF Site Configuration	
Virtual Prime Sites	0
IP Simulcast Prime Sites (include co-located/redundant)	2
RF Sites (include Simulcast sub-sites)	4
GTR 8000 Base Stations	32
DBR 8000 Base Stations	0
Dispatch Site Configuration	
Dispatch Site Locations	1
MCC 7500 Dispatch Consoles	16
AIS	1
CCGWs	8
Aux I/O	2
AXS Console Dispatch Site Locations	0
AXS Console PDH (CommandCentral Hub)	0

System Configuration	
AXS Servers	0
Third Party Elements	
NICE Logging recorders (IP, Telephony, or Analog) Purchased through Motorola	0
MACH Alert FSA Purchased through Motorola	0
Genesis Applications Purchased through Motorola	0

Appendix C: SUA Coverage Table

This appendix includes a breakdown of coverage under the SUA. System Upgrade coverage includes software and hardware coverage for equipment originally provided by Motorola. A "board-level replacement" is defined as any Field Replaceable Unit (FRU). Third party solutions, like Microwave and Audio Logging, are not present in this section. Please refer to Section 6.12 and 6.13.

Table C-6: SUA Coverage Table

ASTRO® Certified Solution	System Upgrade		
	Software	Hardware Full Product	Hardware Board-Level
Equipment Provided by Motorola			
Servers	✓	✓	
Workstations	✓	✓	
Firewalls	✓	✓	
Routers	✓	✓	
LAN Switches	✓	✓	
CirrusNode	✓	✓	
MCC 7500 Voice Processing Module	✓		✓
MCC 7500E Dispatch AIM	✓	✓	
MCC 7500E Dispatch (CommandCentral Hub)	✓	✓	
AXS PDH Client (CommandCentral Hub)	✓	✓	
SDM 3000 Aux I/O	✓	✓	
MC Edge Aux I/O	✓	✓	
GTR 8000 Base Stations	✓		✓
GCP 8000 Site Controllers	✓		✓
DSC 8000 Site Controllers	✓	✓	
GCM 8000 Comparators	✓		✓
Motorola logging interface equipment	✓	✓	
PBX switches for telephone interconnect	✓	✓	
SDM 3000 RTU	✓		✓
Conventional Channel Gateway (CCGW)	✓	✓	
NICE IP logging solutions (if software, hardware and lifecycle purchased from Motorola)	✓	✓	
MACH Alert FSA (if software, hardware and lifecycle purchased from Motorola)	✓	✓	

ASTRO® Certified Solution	System Upgrade		
Genesis Applications (if software, hardware and lifecycle purchased from Motorola)	✓	✓	

Third Party - Statement of Work

6.12 Microwave Maintenance

6.12.1 Technical Support – Phone Support Gold

Customer Technical Assistance Center (CTAC) remote support is included during warranty and post-warranty maintenance period. Motorola Solutions will use reasonable commercial efforts to provide effective telephone assistance, which results in timely answers to technical questions involving applications, operations and maintenance of the microwave equipment. This involves defining, isolating and reproducing system problems. All calls to Nokia CTAC are logged and tracked. Technical Support Gold services apply to both Nokia 7705 SAR and Wavence products.

Technical Support Gold includes:

- Remote access to engineers for product-related questions, troubleshooting assistance, diagnostic procedures, and Patch and Maintenance Releases to restore service and resolve issues for Maintained Products.

6.12.2 Return for Exchange – Nokia 7705 SAR

Board return and exchanges services are included during the warranty and maintenance period under Technical Support Gold Services as part of this proposal for Nokia 7705 SAR products only. These services include:

- Facilitates the exchange of End-Customer-owned FRUs.
- The End-Customer returns the defective FRU, and Nokia, through Motorola Solutions, exchanges it with a functional FRU from their inventory.

6.12.3 Return for Repair – Wavence

Board return and repair services are included during the warranty and maintenance period under Technical Support Gold Services as part of this proposal for Nokia Wavence products only. These services include:

- Provides repair or replacement of End-Customer-owned Supported FRUs at Nokia's discretion.
- The End-Customer returns the defective FRU, and Nokia, through Motorola Solutions, repairs or replaces it with a functional FRU.

6.12.4 Software Subscription Plan

In addition to hardware and technical support, Software Subscription Plan (SPP/SRS) is included with this proposal. Under a maintenance contract, SSP covers software upgrades to keep the end-user within N-2 of the newest release (excluding labor services for installation).

- Motorola Solutions will provide all Feature Releases for network/node elements, management systems, and other network-related applications at its discretion.

6.13 Eventide Logging Maintenance and Lifecycle (Optional)

6.13.1 Maintenance Agreement Coverage Summary

General Maintenance Agreement for Eventide Logging Solution includes the following:

- Full Hardware/Software Replacement
- Remote & on-site Support
- Software upgrades
- Remote Alarm Monitoring
- Remote diagnostics
- Annual Preventative Maintenance Cleanings

All Hardware and Licenses are covered. Continual training Included. Minimum 4-hour response times in the event of a major system failure guaranteed.

The Motorola Solutions biennial AIS Version Upgrades are included within the Quoted Eventide Maintenance Options.

Section 7

Statement of Work – ASTRO MDR

7.1 Overview

In accordance with the terms and conditions of the Agreement, this Statement of Work (SOW), including all of its subsections and attachments, defines the principal activities and responsibilities of all parties for the delivery of Motorola Solutions, Inc. (Motorola Solutions) Cybersecurity services as presented in this proposal to the City of Lee's Summit, Missouri (hereinafter referred to as "Customer").

In order to receive the services as defined within this SOW, the Customer is required to keep the system within a standard support period as described in Motorola Solutions' [Software Support Policy \(SwSP\)](#).

7.2 Description of Service

7.2.1 Deployment Timeline and Milestones

To initiate the ASTRO 25 Managed Detection and Response service to function, Motorola Solutions and the Customer must perform deployment tasks. Service deployment is broken into the following phases, each with specific deliverables.

Phase 1: Information Exchange

After contract execution, Motorola Solutions will schedule a service kick-off meeting with Customer and provide information-gathering documents. The kick-off meeting may be conducted either remotely or in-person, at the earliest, mutually available opportunity. Customer is to identify and ensure participation of key team members in kickoff and project initiation activities.

Phase 2: Infrastructure Readiness

Motorola Solutions will provide detailed requirements regarding Customer infrastructure preparation actions after kick-off meeting. It is the Customer's responsibility to accomplish all agreed upon infrastructure preparations.

Phase 3: System Buildout and Deployment

Motorola Solutions will build and provision tools in accordance with the requirements of this proposal and consistent with information gathered in earlier phases. Motorola Solutions will also provide detailed requirements regarding Customer deployment actions. The Customer must deploy tools, as applicable, in their environment, in accordance with provided requirements.

Phase 4: Monitoring Turn Up

Motorola Solutions will verify all in-scope assets are properly forwarding logs or events. Motorola Solutions will notify Customer of any exceptions. Motorola Solutions will begin monitoring any properly connected in-scope sources after the initial tuning period.

Phase 5: Tuning and Customer Training

Motorola Solutions will conduct initial tuning of the events and alarms in the service and ActiveEye training.

7.2.2 General Responsibilities

7.2.2.1 Motorola Solutions Responsibilities

- Provide software and licenses to the Customer necessary to remotely monitor the ASTRO 25 network and applicable CEN environments.
- Verify connectivity and monitoring is active prior to start of service.
- Coordinate with the Customer to maintain Motorola Solutions service authentication credentials.
- Maintain trained and accredited technicians.
- Monitor the Customer's ASTRO 25 network and applicable CEN systems 24/7/365 for malicious or unusual activity.
- Respond to security incidents in the Customer's system in accordance with Section 7.3.6: Priority Level Definitions and Notification Times. This may include, but is not limited to, requesting additional information from the Customer, continuing to monitor the event for further development or informing the Customer to enact the Customer's documented Incident Response plan.
- Ensure that all monitored devices within the network are properly configured for Syslog, forwarding events to the centralized event log server.
- Assist the Customer with identifying devices that support logging within the ASTRO 25 network and applicable CEN systems have been configured to forward Syslog events to the AERSS.
- Provide the Customer with access to the ActiveEye Security Management platform, so the Customer can access security event and incident details.

7.2.2.2 Customer Responsibilities

- The ASTRO 25 Managed Detection and Response service requires a connection from the Customer's ASTRO 25 network and applicable CEN systems to the Internet. Establish connectivity with sufficient bandwidth before service commences. Internet service bandwidth requirements are as follows:
 - Bandwidth throughput of 10Mbps per zone.
 - High availability Internet Connection (99.99% (4-9s) or higher).
 - Packet loss < 0.5%.
 - Jitter <10 ms.
 - Delay < 120 ms.
 - RJ45 Port Speed - Auto Negotiate
- Maintain an active Security Update Service (SUS) subscription, ensuring patches and antivirus definitions are applied according to the release cadence of the service.
- For regional adders to another system, the hosted core (regional system) must subscribe to and maintain either an ActiveEye Pulse or ASTRO 25 Managed Detection and Response service.

- Allow Motorola Solutions continuous remote access to monitor the ASTRO 25 network and applicable CEN systems. This includes keeping the connection active, providing passwords, and working with Motorola Solutions to understand and maintain proper administration privileges.
- Provide continuous utility service(s) to any Motorola Solutions equipment installed or utilized at the Customer's premises to support service delivery.
- Provide Motorola Solutions with contact information necessary to complete the Customer Support Plan (CSP). Notify the assigned Customer Support Manager (CSM) in advance of any contact information changes.
- Notify Motorola Solutions if any new components are added to or removed from the environment as it may be necessary to update or incorporate in Managed Detection and Response. Changes to monitored components may result in changes to the pricing of the Managed Detection and Response service.
- As necessary, upgrade the ASTRO 25 system, on-site systems, and third party software or tools to supported releases.
- Allow Motorola Solutions' dispatched field service technicians physical access to monitoring hardware when required.
- Cooperate with Motorola Solutions and perform all acts that are required to enable Motorola Solutions to provide the services described in this SOW.
- Configure and maintain networking infrastructure physical and logical configuration to mirror (typically via a port(s) on a switch) network traffic to the ActiveEye sensor for applicable CEN systems.
- Responding to Cybersecurity Incident Cases created by the Motorola Solutions Security Operations Center.

7.2.3 Service Modules

The following subsections describe the delivery of the service modules selected.

7.2.3.1 Log Analytics

Motorola Solutions Responsibilities

- Consult with and advise the Customer on performing necessary system configurations to direct log sources to the appropriate Remote Security Sensor.
- Configure Customer's networking infrastructure to allow AERSS to Communicate with ActiveEye as defined.
- The SOC will consult with the Customer to identify appropriate log sources for the level of threat detection desired in each environment.

Applies to included console infrastructure.

7.3 Security Operations Center Monitoring and Support

7.3.1 Scope

Motorola Solutions will start monitoring the ASTRO 25 Managed Detection and Response service in accordance with Motorola Solutions processes and procedures after deployment, as described in Section 7.2.1: Deployment Timeline and Milestones.

The SOC receives system-generated alerts 24x7, and provides the Customer with a toll-free telephone number and email address for support requests, available 24x7. Support requests are stored in a ticketing system for accountability and reporting. The SOC will respond to detected events in accordance with Section 7.3.6: Priority Level Definitions and Notification Times.

7.3.2 Ongoing Security Operations Center Service Responsibilities

Motorola Solutions Responsibilities

If a probable security incident is detected, provide phone and email support to:

- Engage the Customer's defined Incident Response Process.
- Gather relevant information and attempt to determine the extent of compromise using existing monitoring capabilities in place as part of the ASTRO 25 MDR service.
- Analysis and support to help the Customer determine if the Customer's corrective actions are effective.
- Continuous monitoring, in parallel with analysis, to support incident response.

Customer Responsibilities

- Provide Motorola Solutions with accurate and up-to-date information, including the name, email, landline telephone numbers, and mobile telephone numbers for all designated, authorized Customer escalation Points of Contact (PoC).
- Provide a timely response to SOC security incident tickets or investigation questions.
- Notify Motorola Solutions at least 24 hours in advance of any scheduled maintenance, network administration activity, or system administration activity that would affect Motorola Solutions' ability to perform the Managed SOC Service, as described in this SOW.

7.3.3 Technical Support

ActiveEye Security Management Technical Support provides the Customer with a toll-free telephone number and email address for ActiveEye Security Management support requests, available Monday through Friday from 8am to 7pm CST.

Motorola Solutions Responsibilities

- Notify Customer of any scheduled maintenance or planned outages.
- Provide technical support, security control, and service improvements related to ActiveEye.

Customer Responsibilities

- Provide sufficient information to allow Motorola Solutions technical support agents to diagnose and resolve the issue.

Limitations and Exclusions

Technical support is limited to the implementation and use of the ActiveEye Security Management platform and does not include use or implementation of third-party components.

7.3.4 Incident Response

An Indicator of Compromise (IoC) is an observable event that Motorola Solutions Security Analysts have determined will jeopardize the confidentiality, integrity, or availability of the system. Examples of IoC include ransomware or malicious use of PowerShell.

When an IoC is observed by the Security Analyst, Motorola Solutions and Customer will be responsible for the tasks defined in the following subsections.

Motorola Solutions Responsibilities

- Upon the identification of an IoC, notify the Customer's documented contact and initiate the escalation plan.
- Take documented, Customer approved actions in an attempt to contain an IoC to the extent enabled via Motorola Solutions managed technology. Communicate to the Customer any additional potential containment actions and incident response resources that can be taken across the Customer's managed IT infrastructure.
- Perform investigation using the ActiveEye Managed Detection and Response integrated and enabled data sources in an initial attempt to determine the extent of an IoC.
- Document and share IoC and artifacts discovered during investigation. Motorola Solutions services exclude performing on-site data collection or official forensic capture activities on physical devices.

Customer Responsibilities

- Maintain one named PoC to coordinate regular team discussions and organize data collection and capture across the Customer and Motorola Solutions teams.
- If determined to be required by Customer, contract an Incident Response service provider to perform procedures beyond the scope of this Agreement such as forensic data capture, additional malware removal, system recovery, ransomware payment negotiation, law enforcement engagement, insurance provider communications, identify patient zero, etc.

7.3.5 Event Response and Notification

Motorola Solutions will analyze events created and/or aggregated by the Service, assess their type, and notify the Customer in accordance with the following table.

Table 7-1: Event Handling

Event Type	Details	Notification Requirement
False Positive or Benign	Any event(s) determined by Motorola Solutions to not likely have a negative security impact on the organization.	None
Event of Interest (EOI)	Any event(s) determined by Motorola Solutions to likely have a negative security impact on the organization.	Escalate to Customer in accordance with routine notification procedure. Escalate in accordance with urgent notification procedure when required by agreed-upon thresholds and SOC analysis. Notification procedures are included in Table 7-2: Notification Procedures.

Notification

Motorola Solutions will establish notification procedures with the Customer, generally categorized in accordance with the following table.

Table 7-2: Notification Procedures

Notification Procedure	Details
Routine Notification Procedure	The means, addresses, format, and desired content (within the capabilities of the installed technology) for Events of Interest. These can be formatted for automated processing, e.g., by ticketing systems.
Urgent Notification Procedure	Additional, optional means and addresses for notifications of Events of Interest that require urgent notification. These usually include telephone notifications.

Motorola Solutions will notify the Customer according to the escalation and contact procedures defined by the Customer and Motorola Solutions during the implementation process.

Tuning

Motorola Solutions will assess certain events to be environmental noise, potentially addressable configuration issues in the environment, or false positives. Motorola Solutions may recommend these be addressed by the Customer to preserve system and network resources.

Motorola Solutions will provide the Customer with the ability to temporarily suppress alerts reaching ActiveEye, enabling a co-managed approach to tuning and suppressing events or alarms. The SOC may permanently suppress particular alerts and alarms if not necessary for actionable threat detection.

Tuning Period Exception

The tuning period is considered to be the first 30 days after each service module has been confirmed deployed and configured and starts receiving data. During the tuning period, Motorola Solutions may make recommendations to the Customer to adjust the configurations of their installed software so Services can be effectively delivered. Service Availability will not be applicable during the tuning period and responses or notifications may not be delivered. However, Motorola Solutions will provide responses and notifications during this period.

Motorola Solutions may continue to recommend necessary tuning changes after this period, with no impact on Service Availability.

7.3.6 Priority Level Definitions and Notification Times

Motorola Solutions will analyze events created and/or aggregated by the ASTRO® 25 Managed Detection and Response services, assess their type, and notify the Customer in accordance with the following table.

Table 7-3: Priority Level Definitions and Notification Times

Incident Priority	Incident Definition	Notification Time
Critical P1	Security incidents that have caused or are suspected to have caused significant and/or widespread damage to the functionality of Customer's ASTRO 25 system or information stored within it. Effort to recover from the incident may be significant. Examples: <ul style="list-style-type: none"> ▪ Malware that is not quarantined by anti-virus. ▪ Evidence that a monitored component has communicated with suspected malicious actors. 	Response provided 24 hours, 7 days a week, including US Holidays.
High P2	Security incidents that have localized impact but are viewed as having the potential to become more serious if not quickly addressed. Effort to recover from the incident may be moderate to significant. Examples: <ul style="list-style-type: none"> ▪ Malware that is quarantined by antivirus. ▪ Multiple behaviors observed in the system that are consistent with known attacker techniques. 	Response provided 24 hours, 7 days a week, including US Holidays.
Medium P3	Security incidents that potentially indicate an attacker is performing reconnaissance or initial attempts at accessing the system. Effort to recover from the incident may be low to moderate. Examples: <ul style="list-style-type: none"> ▪ Suspected unauthorized attempts to log into user accounts. ▪ Suspected unauthorized changes to system configurations, such as firewalls or user accounts. ▪ Observed failures of security components. ▪ Informational events. ▪ User account creation or deletion. ▪ Privilege change for existing accounts. 	Response provided Monday through Friday 8 a.m. to 5 p.m. local time, excluding US Holidays.
Low P4	These are typically service requests from Customer.	Response provided Monday through Friday 8 a.m. to 5 p.m. local time, excluding US Holidays.

Section 8

Statement of Work – Professional Services

In accordance with the terms and conditions of the Agreement, this Statement of Work (SOW), including all of its subsections and attachments, defines the principal activities and responsibilities of all parties for the delivery of Motorola Solutions, Inc. (Motorola) Cybersecurity services as presented in this proposal to the City of Lee's Summit, Missouri (Customer).

8.1 Cyber Assurance Program

CAP is the best way to ensure that comprehensive measures and a robust approach is taken to secure your public safety critical infrastructure by leveraging proven frameworks, expert advice and cybersecurity best practices.

8.1.1 Cyber Assurance Program (One to Six Years)

Motorola offers customers one (1) year to (6) years support packages that include combinations of the following services, varying in each year, to establish a continuous approach to maintaining your cybersecurity posture and readiness for cybersecurity incidents.

- Ransomware Tabletop Exercise
- IR Plan Development
- Vulnerability Scanning
- External Penetration Test

8.1.2 Ransomware Tabletop Exercise

The MDR Ransomware Tabletop Exercise provides scenario(s), which are presented in timed release of information, to specific participants in a discussion format to determine the Customer's ability to perform response and recovery decision-making related to a cybersecurity event. During the Cybersecurity Incident Response Tabletop Exercise, the participants will respond according to what they would "normally" do given the scenario and subsequent events. As the scenario unfolds the MDR team as well as the Customer will discuss the response needed to determine courses of action. Communication and hand-offs can be discussed and pre-coordinated between the MDR team and the local incident response team making for optimal synchronization should a real-life event ever occur.

The format of the Cybersecurity Incident Response Tabletop Exercise is strictly discussion-based and limited to participants in the venue – no actions are taken on live systems. A facilitator will guide the discussion and prompt participants' additional actions or comments via thought-provoking questions designed to achieve the exercise objectives.

8.1.2.1 Methodology

Motorola leverages lessons learned from years of experience using planning and execution practices based on the Homeland Security Exercise and Evaluation Program (HSEEP), a national standard for

exercises, and our own objectives-based contingency planning and risk assessment methodology. Our proposed process includes the following key activities:

Identifying Exercise Objectives

Motorola will review Customer's participating stakeholders and gather background data on the information security and cybersecurity skill level of the staff, the current security capabilities of the organization, identify key threat scenarios, and response and coordination processes that may/may not be established. Motorola may conduct interviews or review documentation as part of this activity. Motorola will work with the Customer and exercise participants to draft, coordinate, and approve the scenario(s) and exercise objectives.

Developing and Design of the Exercise

Motorola will design the scenario(s) based on the information gathered from the interviews with the participating cooperatives and coordinate it with the Customer's exercise stakeholders. A collaborative process between the stakeholders to identify key concerns and response actions will then be used as a foundation for the exercise.

8.1.2.2 Exercise Scope

Motorola will facilitate a tabletop exercise over the agreed upon time involving stakeholders identified with the Customer. Motorola personnel will act as facilitator, controller and scribe for the exercise, ensuring the exercise meets established objectives and documents key observations of participants.

Motorola will:

- Develop two (2) incident scenarios to use as the basis for facilitation with assembled Customer staff and leadership. The Customer's assigned project leader, at a minimum, will present scenario products for approval.
- Facilitate the cybersecurity tabletop exercises. Motorola will coordinate the exercise timeline, define the scope of the exercise and its key objectives and conduct and steer the Cybersecurity Incident Response Tabletop Exercise.
- Motorola facilitator will document observations and recommendations based on gaps in the plan or procedures identified during discussions.

8.1.2.3 Service Deliverables

Motorola will provide Customer with the following for the Cybersecurity Incident Response Tabletop Exercise:

- Tabletop Exercise Facilitation.
- Final Presentation in PDF format which will include after action review notes.

8.1.3 Incident Response Plan Review and Development

Your ability to handle cybersecurity incidents is reliant on establishing a well-defined, organized and highly documented process for your organization that leverages your MDR team.

An Incident Response (IR) Plan is a set of written instructions for detecting, responding to and limiting the effects of an information security breach/event. The IR Plan Review and Development effort will

support the Customer in defining, developing, implementing and testing the procedures required to follow when a security event occurs based on the most common and recent threats in the Customer's industry.

By identifying the various stakeholders, including the MDR team, documenting their roles throughout an Incident Management and Response process, the Customer will be able to Prepare, Detect, Analyze, Contain, Eradicate, Recover and move forward with Post-Incident Activity which is necessary before and after a security incident.

8.1.3.1 Methodology

Motorola will use industry best practices to help develop and enhance the Customer's Incident Response Plan. The IR Plan will support the customer with the following phases of a cybersecurity incident as outlined by NIST 800-61r2:

Preparation

The Preparation phase documents, outlines, and explains Customer's Incident Response team's roles and responsibilities, including establishing the underlying security policy which will guide the development of the Customer's Incident Response Plan.

Detection and Analysis

The Detection and Analysis phase of the Incident Response Plan involves monitoring, detecting, alerting, and reporting on security events. This includes identifying known, unknown, and suspect threats—those that appear malicious in nature, but not enough data is available at the time of discovery to decide either way. Criteria will also be established for the categorization of incidents as well as an escalation matrix for incidents to be reported.

Containment, Eradication, and Recovery

The Containment, Eradication and Recovery phase is used to help with triaging, containing, and neutralizing the security threats by isolating, shutting down, or otherwise "disconnecting" infected systems from your network to prevent the spread of the cyber-attack.

Additionally, incident response operations will include eliminating the threats which led to the security incident and bring affected production systems back online carefully, to prevent additional attacks.

Lessons Learned

The purpose of the Lessons Learned phase is to complete documentation that could not be prepared during the response process and investigate the incident further to identify its full scope, how it was contained and eradicated, what was done to recover the attacked systems, areas where the response team was effective, and areas that require improvement.

8.1.3.2 Scope of Activity

The scope of this engagement is:

- Ensure MDR considerations and factors are written into the customers IR Plan.
- Determine the current state of the existing Customer IR plans and procedures and review internal Customer objectives for the plan with the Customer's Incident Response lead.

- Assist the Customer's Incident Response lead in developing and coordinating across Customer's business units (Cyber) Security Incident Severity Classification guidance to address Customer business operations and response priorities.
- Recommend a workflow that establishes key steps and considerations for a response along with highlighting key decision points for escalation and response team expansion.
- Determine and coordinate linkages to other Incident Response-related plans and procedures, such as corporate communications plan(s) and higher-level business continuity plans and procedures.
- Develop a glossary of industry standard or best practice Incident Response terms for use in instructing and educating the Customer staff.

8.1.3.3 Service Deliverables

Motorola will work with the Customer to prepare an IR Plan. If the customer already has an IR Plan, their plan shall be enhanced or recommendations made for improvement where necessary. If the customer does not have a plan, Motorola will work on developing a plan for the customer's use. The document will include the following details:

Electronic Documents

- Customer Incident Response Plan
 - Preparation
 - Detection and Analysis
 - Containment, Eradication, and Recovery
 - Post-Incident Activity
- The Incident Response Plan may document the following items:
 - Purpose of the Plan
 - Scope and Exceptions
 - Inputs and Starting Events
 - MDR considerations and contacts
 - Outputs and Completion of Events (Evidence) Procedures
 - Authorities
 - Definitions
 - Links to Related Policies
 - Links to Related Procedures
 - Relevant Regulations
 - Enforcement
 - Revision and Review History
 - IT and Data Security Incident Severity Classification
 - Security Incident Response Team Roster and Contact Information
 - Additional External Contacts (Law Enforcement, Key Security Vendors, Stakeholders)

Draft Review Conference Call or Presentation

A formal conference call debriefing based on the draft plan before marking the plan "final."

The Customer will be able to have interim question-and-answer conversations with Motorola regarding the IR Plan.

8.1.4 Vulnerability Scanning

Internal and external vulnerability scanning services are described in the subsections below.

8.1.4.1 Methodology

Motorola's Vulnerability Assessment Methodology uses a signature-based test-and-evaluate process that leverages input from industry vulnerability databases including but not limited to the Common Vulnerabilities and Exposures (CVE) database, Microsoft vulnerabilities, and Bugtraq. Motorola personnel perform Vulnerability Scanning analysis with the use of fully licensed and automated vulnerability scanning systems and where appropriate apply manual validation techniques by experienced security analysis, who will perform follow up discussions to gain additional information about the operational environment and potential risks due to discovered vulnerabilities.

The data gathered is then aggregated and placed in the Vulnerability Assessment Detail Analyzer for further review with Customer.

8.1.4.2 Scope of Activity

Internal

- An independent third-party scan of the internal IP range of up to 200 active internal IPs. IP addresses will be reconfirmed with Customer prior to the beginning of the effort.
- Any Critical findings are informally communicated within 24 hours of discovery.

External

- An independent third-party scan of external IP range of up to 20 active external IPs. IP addresses will be reconfirmed with Customer prior to the beginning of the effort.
- Any Critical findings are informally communicated within 24 hours of discovery.

8.1.4.3 Deliverables

The following service deliverables will be provided by Motorola:

Table 8-1: Vulnerability Scan Deliverables

Deliverable	Description
Electronic Reports	<p>After the assessment is complete, Motorola will provide Customer with a formal report that contains:</p> <ul style="list-style-type: none"> ▪ Executive Summary: This is a concise summary of the findings and associated recommendations targeted to a non-technical, executive audience. ▪ Operational Findings Matrix and Action Plan: A findings matrix summarizing items that Motorola determines to pose a risk to the Customer along with risk ratings and remediation recommendations. ▪ Technical overview of critical and high-level findings from the assessment.
Draft Review Conference Call or Presentation	<p>A formal conference call debriefing based on the draft report before marking the report as final.</p> <ul style="list-style-type: none"> ▪ Customer participants will be able to have interim question-and-answer conversations with the testers regarding their findings as well.

8.1.5 External Penetration Test

Penetration Testing services are described in the subsections below.

8.1.5.1 Methodology

Penetration Testing follows a three-step methodology of:

- Reconnaissance
- Enumeration
- Fingerprinting, Exploit Selection (and where appropriate Exploitation / Compromise)

Step One: Reconnaissance

This phase uses public sources of information such as Google searching, public web sites, Wiki and Blog communities, domain naming and registration information, and other information to determine as much information about potential targets as possible. This information is then integrated with any information provided by the Customer to build as complete a picture as possible about the target systems and network.

Step Two: Enumeration

During the enumeration phase, the tester actively tries to confirm or expand the information he has regarding the system. This can involve additional tools that actively attempt to map networks, systems, and configuration settings.

Step Three: Fingerprinting, Exploit Selection (and Compromise)

Once active and passive information gathering is complete, testers begin to narrow in on potential attack paths. During the fingerprinting phase, testers gather additional detailed information about a specific target. This can include an operating system or software versions, allowed encryption methods, and other specific information that leads to identifying a weakness or vulnerability and selecting the appropriate exploit technique to leverage that vulnerability. During testing, it may be sufficient to identify vulnerabilities and use a limited exploit to confirm their existence. However, whether for proof or

confirmation, many times exploits will be leveraged to gain access and show system weaknesses. Motorola follows a “Do No Harm” approach to testing and will not conduct tests or exploits that would purposely take down a system or cause other operational harm to a system or data.

8.1.5.2 External Penetration Testing

External penetration testing applies these techniques to Internet-facing systems where “external” refers to tests performed from outside the organization’s infrastructure. These tests target the following types of systems and services (where applicable, subject to the type of system/solution under test):

- Firewalls
- External Routers
- Web Servers – typically at the operating system and web server levels. Dynamic web applications are penetration tested by a comprehensive web application penetration testing approach outside the scope of a standard external penetration test unless requested.
- Domain Name Service Servers (DNS)
- Remote Access (VPNs, SSL VPNs, etc.)
- Secure encrypted connections (site-to-site or B2B VPNs)
- Email Systems
- File Transfer Servers

Scope of Activity

- Reconnaissance, Enumeration, Exploitation & Remediation Recommendations
- Up to 50 live IP addresses tested

8.1.5.3 Service Deliverables

The following service deliverables will be provided by Motorola:

Table 8-2: Service Deliverables

Deliverable	Description
Electronic Reports	<p>After the assessment is complete, Motorola will provide Customer with a formal report that contains:</p> <p>Executive Summary: This is a concise summary of the findings and associated recommendations targeted to a non-technical, executive audience.</p> <p>Operational Findings Matrix and Action Plan: A findings matrix summarizing items that Motorola determines to pose a risk to the Customer along with risk ratings and remediation recommendations.</p> <p>Technical overview of critical and high level findings from the assessment.</p>
Draft Review Conference Call or Presentation	A formal conference call debriefing based on the draft report before marking the report as final.

Deliverable	Description
	Customer participants will be able to have interim question-and-answer conversations with the testers regarding their findings as well.

8.2 Risk Assessment

The following Risk Assessment services are described in the subsections below.

- Cybersecurity Risk Assessment
 - Security Program Review
- Firewall Review
- Physical Security Assessment

8.2.1 Cybersecurity Risk Assessment

The project consists of the following tasks:

- Introduction Call, Planning and Setup
- Assessment Initiation: Discovery, Key Risks, Control and Program Assessment
- Draft NIST CSF Security Program Risk Assessment and DHS CPG scorecard creation
- Draft Report Review and Final Report Delivery

Step One: Introduction Call, Planning and Setup

Motorola will collaborate with the Customer's Primary Point of Contact (POC) to define the timing, confirm scope and speak through any related details related to interview scheduling with key stakeholders, relevant security program documents, coordination of project status meeting and milestone schedule, travel and/or escalation protocol required for the kick-off of the project.

Assessment Initiation: Discovery, Key Risks, Control Assessment

Once Motorola completes the Introduction Call, Planning and Setup phase and upon the arrival of the agreed upon assessment date(s), Motorola will conduct the Cybersecurity Risk Assessment based on the following methodology and tasks:

Step Two: Discovery

Motorola will conduct a series of remote and/or onsite interviews to understand the elements by which the Customer's cybersecurity efforts will be measured against, along with identifying the Customer's in-scope framework categories and subcategories. Through the interviews with key Customer staff, Motorola will determine the Customer's cybersecurity compliance as they relate to safeguarding or disseminating data and maintaining the availability of systems against the best practices and industry leading frameworks. Motorola will evaluate compliance with the following security disciplines:

- Asset Management
- Governance
- Remote Access
- Risk Management

- Supply Chain Management
- Identity Management and Access Control
- Awareness and Training
- Data Security and Encryption
- Maintenance
- Protective Technology
- Detection and Security Monitoring
- Incident Response, Analysis and Recovery
- Remote Access
- Business Continuity and Disaster Recovery

Key Risks

NIST's Special Publication 800 Series provides guidance for supervision and administration of an enterprise Information Security Management System. Motorola methodology includes a systematic orientation to the threat environment facing Customer's industry as well as Customer's specific business and operating environment. Motorola will determine key risk areas based on vulnerabilities, likely threats, potential impacts as identified through document reviews, interviews and industry best practices.

Control Assessment

Upon identifying the key risks for the Customer with respect to compliance and best practices, Motorola will perform a control analysis to determine the current profile of cybersecurity maturity with NIST, ISO and other industry framework requirements and create a list of Information Security Management System program and policy gaps. Motorola will then determine the target profile based on the desired level of risk mitigation and risk appetite and outline the needed investments and rebalancing efforts to meet the target profile required to satisfy compliance with regulatory requirements and cyber industry leading practices.

Step Three: Draft NIST CSF Security Program Risk Assessment Report Creation

Motorola will document the results of the Risk Assessment findings, gaps and recommendations in a written Portable Document Format (PDF) formatted report and make reasonable efforts to prioritize issues via the most pressing threats, risk areas and gaps.

Upon the completion of the Draft Report, Motorola will perform the following tasks with the Customer:

- Provide the Customer with the Draft Report for their review and analysis. During this time, Motorola will also coordinate a Draft Report Review session with the relevant stakeholders over the phone and/or internet conferencing methods.
- Review the report and findings with the Customer and discuss recommendations for mitigating the relevant risks with the Customer
- Upon completion of the Draft Report Review, Motorola will make final modifications to the report that are brought up by the Customer and deliver the Final Report back to the Customer POC to complete the project.

8.2.1.1 Scope of Activity

Motorola understands the scope of this engagement to be:

Activity or Focus	Description
Cybersecurity Risk Assessment	<p>Up to fifteen (15) interviews of Customer staff knowledgeable in information security, technology management.</p> <p>All Information protection and security documentation such as:</p> <ul style="list-style-type: none"> ▪ Policies, Procedures, Guidelines, Baselines and / or Standards ▪ Previous audits, assessments and / or regulatory reviews <p>Environment(s) in scope: See Section 3.1 for site listing.</p>

8.2.2 Firewall Review

Motorola will review the Customer's firewall configuration files to provide the following services:

- Determine whether there are any misconfigurations or security weaknesses that would allow traffic from external sources to bypass security restrictions and enter the network, as well as whether traffic is allowed to leave the network undetected.
- Perform industry best practice validations such as authentication services and settings, time synchronization, message logging, network interfaces, etc.
- Provide a report that includes an analysis of the findings, best practice comparison and recommendations, as well as recommendations of configuration changes for any weaknesses or misconfigurations.

The configuration file can be reviewed offline so no disruption to normal network activities would occur.

8.2.3 Physical Security Assessment

The assessment will evaluate Customer's physical safeguards. Motorola's expert will travel to Customer's location to assess the efficacy of security controls and procedures.

8.2.3.1 Requirements and Objectives

The following scope is included within this service offering:

- Physical Security:
 - Site Security Architecture Assessment
 - Perimeter Access Controls Assessment
- Sensitive Information Handling:
 - Internal sensitive information handling assessment

8.2.3.2 Service Deliverables

After performing the assessment, the expert will provide a report outlining potential security risks and recommending changes to mitigate them.

8.2.4 Service Deliverables

The following service deliverables will be provided by Motorola:

Table 8-3: Service Deliverables

Deliverable	Description
Electronic Reports	<p>After the assessment is complete, Motorola will provide Customer with a formal report that contains:</p> <p>Executive Summary: This is a concise summary of the findings and associated recommendations targeted to a non-technical, executive audience.</p> <p>Technical Summary:</p> <ul style="list-style-type: none"> Identify several strong security practices currently in place supporting Customer's security program. Provide areas for improvement based on determined security risks currently facing Customer and its information security program with respect to the CSF requirements. Identify potential gaps between the in-scope Customer's operating environment and the NIST CSF requirements. Provide a DHS Cross-Sector Cybersecurity Performance Goal scorecard that displays where organizations are lacking in conformance to the CPGs. Provide a control rating using the scoring methodology based on observations generated in interviews, and policies and documentation received and reviewed. Provide additional recommendations and remediation guidance for each control in NIST CSF categories and subcategories which will assist Customer management in reaching compliance.
Draft Review Conference Call or Presentation	<p>A formal conference call debriefing based on the draft report before marking the report as final.</p> <p>Customer participants will be able to have interim question-and-answer conversations with the testers regarding their findings as well.</p>

8.3 Coordination & Assumptions

Coordination & Engagement Planning Call

Motorola recognizes the value and necessity of effective communication and ongoing collaboration with our customers throughout the life of an engagement. To ensure engagements get started off on the right track, Motorola has found it beneficial to begin with a structured engagement planning meeting, typically by conference call. During the planning call, Motorola will facilitate a discussion of the following topics along with other engagement-specific items:

- Introduce key engagement participants.
- Establish communication protocols.
- Review scope of services and expected timelines for the delivery of services.

- Review communication, notification, and issue-escalation expectations and procedures.
- Determine the frequency of method of project status meetings (i.e., in-person, conference call, online meeting, etc.).
- Discuss other Customer requests and rules of engagement.
- Discuss the involvement of the Customer's staff in the project for knowledge transfer and security.
- Review the deliverables required at completion of the project, the designated recipient, and the manner in which Motorola will forward those deliverables.

Roles, Responsibilities, & Assumptions

Motorola used the following assumptions during development of this SOW. Any changes to these assumptions may affect the price and schedule commitments.

- Customer will assign a knowledgeable single point of contact for all issues that require escalation/resolution.
- Customer will provide Motorola access to the Customer's place of business, technical information, and facilities necessary to execute this engagement.
- Customer will ensure that appropriate personnel are available to meet with Motorola, as necessary, and provide timely response to all requests for information, revisions, and resources.
- The Motorola professional working day is eight and a half hours, including reasonable time for meals. Motorola understands that occasions arise during engagements that require a longer or shorter working day. Motorola will perform the work between 8:30am and 5:00pm (Customer's local time). After-hours and weekend must be explicitly identified in the Statement of Work or be otherwise specifically agreed to in writing by the parties. Motorola will request approval from Customer for any dates and times in which work will be performed.
- Motorola will always attempt to be flexible to meet Customer needs and will not extend engagements to our detriment when such delays result from the Customer's inability to reasonably meet stated prerequisites agreed to prior to an engagement, nor when delays result from Customer personnel not being reasonably available to provide required support.

8.4 Responsibilities

Motorola Responsibilities

- **Project Lead.** Motorola will assign a project lead to oversee the engagement, interface with Customer's project management team and provide project status as needed during the assessment.
- **Experienced and Senior Security Professional.** Motorola will provide one Cybersecurity subject matter expert who will:
 - Conduct a kick-off meeting with Customer to identify the scope of the assessment.
 - Conduct the elements of the in-scope activities with the assistance of Customer's technical point of contact.
 - Conduct an off-site analysis of the data collected and generate the final report.
- **Deliverables.** Motorola will provide the following deliverables as an output of the in-scope activity:

- **Cybersecurity assessment report** - The report outlines the findings of the cybersecurity assessment and provides an overview of the cybersecurity risk posture.
- **Single Report** – Motorola will provide one (1) comprehensive cybersecurity risk assessment report for assessments included in the statement of work for this proposal.

Customer Responsibilities

- **Confirmation of Scope.** Customer will receive and must acknowledge in writing the Cybersecurity Professional Service Statement of Work provided by Motorola prior to initiating the service.
- **Kickoff Support.** Customer will participate in the kickoff meeting, which identifies the scope of the assessment.
- **Contacts.** Customer will appoint at least one (1) primary contact, including a project manager, and one (1) technical point of contact that are trained and knowledgeable of the project objectives to assist Motorola's project lead and Motorola's security engineer and answer any technical or business process questions. Customer's partners, consultants or any third parties involved in the project shall likewise provide access to their resources and shall not restrict access by Motorola to Customer resources.
- **Reasonable Access to Resources.** Customer will provide reasonable access to necessary resources as requested by the project manager, including access to the applicable facilities, network equipment and systems. Where access directly by the Motorola security engineer is not permissible, Customer must provide the necessary technical expertise to acquire the necessary data or information for Motorola.
- **Reasonable Access to Information.** Customer will provide Motorola with reasonable access to any information necessary to facilitate the project. Such requests may include site plans, facility layout, network topography or other documentation. Where access directly by the Motorola engineer is not permissible, customer must provide the necessary technical expertise to acquire the necessary data or information for Motorola.
- **Site Conditions.** Customer will ensure that all work sites it provides will be safe, secure, and in compliance with all applicable industry and OSHA standards.
- **Customer Review.** Customer will review project documentation as it is received to provide feedback for appropriate and timely discussions and changes.
- **On-Site Services.** Customer and Motorola will agree on the dates and times associated with Motorola's on-site activities. Customer will provide the necessary access and resources, as described above, throughout those periods.
- **Access to Workspace, Telephone and Internet.** Customer will provide access to workspace, telephone and Internet connectivity to Motorola during the project. This access will be used solely for purposes of project execution.
- **Physical Access on-Site.** Customer will provide any escort, badges, security personnel, labor resources or other necessary assistance to enable Motorola's access to required work areas on site. Customer is responsible for all costs associated with availability and use of these resources.
- **Third-Party Equipment, Software and Services.** Unless specifically provided by Motorola's service delivery team described herein, Customer is responsible for all third-party services, equipment and software associated with this service.

- **Project Changes.** Customer will communicate schedule changes for tasks or phase events to the Motorola project lead. Customer understands such changes may lead to additional costs for which Customer will be responsible.

Section 9

Limitations & Clarifications – ASTRO MDR

Motorola's ASTRO MDR service does not include services to perform physical containment and/or remediation of confirmed security incidents, remote or onsite. The Customer may choose to purchase additional Incident Response professional services to assist in the creation of and/or execution of a Customer's Incident Response Plan.

Motorola Solutions' scope of services does not include responsibilities relating to recovery of data available through the products or services, or remediation or responsibilities relating to the loss of data, ransomware, or hacking.

9.1.1 Service Limitations

Cybersecurity services are inherently limited and will not guarantee that the Customer's system will be error-free or immune to security breaches as a result of any or all of the services described in this SOW. Motorola Solutions does not warrant or guarantee that this service will identify all cybersecurity incidents that occur in the Customer's system. Services and deliverables are limited by, among other things, the evolving and often malicious nature of cyber threats, conduct/attacks, as well as the complexity/disparity and evolving nature of Customer computer system environments, including supply chains, integrated software, services, and devices. To the extent we do offer recommendations in connection with the services, unless otherwise stated in the statement of work, our recommendations are necessarily subjective, may or may not be correct, and may be based on our assumptions relating to the relative risks, priorities, costs and benefits that we assume apply to you.

Motorola does not represent that it will identify, fully recognize, discover or resolve all security events or threats, system vulnerabilities, malicious codes, files or malware, indicators of compromise or internal threats or concerns.

NOTWITHSTANDING ANY PROVISION OF THE AGREEMENT TO THE CONTRARY, MOTOROLA WILL HAVE NO LIABILITY FOR (A) INTERRUPTION OR FAILURE OF CONNECTIVITY, VULNERABILITIES, OR SECURITY EVENTS; (B) DISRUPTION OF OR DAMAGE TO CUSTOMER'S OR THIRD PARTIES' SYSTEMS, EQUIPMENT, OR DATA, INCLUDING DENIAL OF ACCESS TO USERS, OR SHUTDOWN OF SYSTEMS CAUSED BY INTRUSION DETECTION SOFTWARE OR HARDWARE; (C) AVAILABILITY OR ACCURACY OF ANY DATA AVAILABLE THROUGH THE SERVICES, OR INTERPRETATION, USE, OR MISUSE THEREOF; (D) TRACKING AND LOCATION-BASED SERVICES; OR (E) BETA SERVICES.

9.1.2 Processing of Customer Data in the United States and/or other Locations

Customer understands and agrees that data obtained, accessed, or utilized in the performance of the services may be transmitted to, accessed, monitored, and/or otherwise processed by Motorola Solutions in the United States (US) and/or other Motorola Solutions operations globally. Customer

consents to and authorizes all such processing and agrees to provide, obtain, or post any necessary approvals, consents, or notices that may be necessary to comply with applicable law.

9.1.3 Customer and Third-Party Information

Customer understands and agrees that Motorola Solutions may obtain, use and/or create and use anonymized, aggregated and/or generalized Customer data, such as data relating to actual and potential security threats and vulnerabilities, for its lawful business purposes, including improving its services and sharing and leveraging such information for the benefit of Customer, other customers, and other interested parties. For purposes of this engagement, so long as not specifically identifying the Customer, Customer data shall not include, and Motorola Solutions shall be free to use, share and leverage security threat intelligence and mitigation data generally, including without limitation, third party threat vectors and IP addresses, file hash information, domain names, malware signatures and information, information obtained from third party sources, indicators of compromise, and tactics, techniques, and procedures used, learned, or developed in the course of providing services.

9.1.4 Third-Party Software and Service Providers, including Resale

Motorola Solutions may use, engage, license, resell, interface with or otherwise utilize the products or services of third-party processors or sub-processors and other third-party software, hardware, or services providers (such as, for example, third-party endpoint detection and response providers). Such processors and sub-processors may engage additional sub-processors to process personal data and other Customer Data. Customer understands and agrees that the use of such third-party products and services, including as it relates to any processing or sub-processing of data, is subject to each respective third-party's own terms, licenses, EULAs, privacy statements, data processing agreements and/or other applicable terms. Such third-party providers and terms are available publicly, through performance, or upon request.

Motorola Solutions disclaims any and all responsibility for any and all loss or costs of any kind associated with security events. Motorola Solutions disclaims any responsibility for customer use or implementation of any recommendations provided in connection with the services. Implementation of recommendations does not ensure or guarantee the security of the systems and operations evaluated.

Section 10

Pricing Summary

10.1 System Infrastructure Summary

Description	Total Equipment	Total Services	Total Price - Equipment and Services
Cost Summary - Remote Sites:			
Remote Site 1 Equipment and Services - Scherer	\$107,647	\$365,602	\$473,249
Remote Site 2 Equipment and Services - Joint Operations Center (JOC)	\$450,666	\$871,502	\$1,322,168
Remote Site 3 Equipment and Services - Ranson	\$92,671	\$268,453	\$361,124
Remote Site 4 Equipment and Services - Woods Chapel	\$149,303	\$295,561	\$444,863
Remote Site 5 Equipment and Services - 68th and Booth	\$87,088	\$155,013	\$242,101
Remote Site 6 Equipment and Services - Independence (Woods Chapel)	\$74,361	\$156,447	\$230,807
Remote Site 7 Services - Everygy		\$185,755	\$185,755
Cost Summary - Dispatch (Police and Fire)			
Dispatch Services - Police Dispatch		\$310,474	\$310,474
Dispatch Services - Fire Dispatch		\$495,601	\$495,601
Cost Summary - Other System Items:			
Recommended Spares for Infrastructure Equipment	\$26,615		\$26,615
Training		\$0	\$0
Total Infrastructure Cost (before adjustments)	\$988,351	\$3,104,408	\$4,092,759
Lee's Summit Contract Incentives:			
All Infrastructure Items as Proposed with Purchase of 6-Year Maintenance and Lifecycle			-\$200,000
One Time Additional Discount for Contract Execution by January 31st, 2025 with Purchase of system items as proposed			-\$200,000
Total Infrastructure Cost (after adjustments)			\$3,692,759
Lifecycle and Maintenance Summary			
Warranty plus Year 1 Infrastructure Lifecycle and Maintenance			\$402,952
Year 2 Infrastructure Lifecycle and Maintenance			\$438,656

Description	Total Equipment	Total Services	Total Price - Equipment and Services
Year 3 Infrastructure Lifecycle and Maintenance			\$487,301
Year 4 Infrastructure Lifecycle and Maintenance			\$468,213
Year 5 Infrastructure Lifecycle and Maintenance			\$523,634
Year 6 Infrastructure Lifecycle and Maintenance			\$512,205
Total Lifecycle and Maintenance			\$2,832,961
Cybersecurity Summary			
Install and Activation Services, Cyber Assurance Plan, Risk Assessment and Year 1 ASTRO25 Managed Detection and Response			\$111,598
Year 2 ASTRO25 Managed Detection and Response			\$21,216
Year 3 ASTRO25 Managed Detection and Response			\$22,065
Year 4 ASTRO25 Managed Detection and Response			\$22,947
Year 5 ASTRO25 Managed Detection and Response			\$24,095
Year 6 ASTRO25 Managed Detection and Response			\$25,299
Total Cybersecurity Services			\$227,220
Total Price All-In			\$6,752,940

10.2 Dispatch – JOC

Equipment Description	Number Req'd	List Unit Cost	Total List	Unit Cost	Extended Cost
Police Dispatch					
Project Management	<u>LOT</u>				\$93,537
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$45,058
Equipment Installation, Transport, Logging Recorder Relocation	<u>LOT</u>				\$135,771
Cable Runs and Drops	<u>LOT</u>				\$36,108
Fire Dispatch					
Project Management	<u>LOT</u>				\$93,537
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$45,058
Equipment Installation, Transport, Logging Recorder Relocation	<u>LOT</u>				\$135,771
Cable Runs and Drops	<u>LOT</u>				\$36,108
Eventide Logging Upgrade - Fire Dispatch	<u>LOT</u>				\$185,128
Subtotal Equipment					\$0
Subtotal Labor					\$806,075
Total Equipment/Labor					\$806,075

10.3 Prime/RF1 – Scherer

Equipment Description	Number Req'd	List Unit Cost	Total List	Unit Cost	Extended Cost
Receive Antenna System	<u>1</u>	\$9,619	\$9,619	\$8,657	\$8,657
Transmitter Antenna System	<u>1</u>	\$7,714	\$7,714	\$6,943	\$6,943
Microwave	<u>1</u>	\$102,275	\$102,275	\$92,047	\$92,047
Tower	<u>0</u>				
Shelter	<u>0</u>				
Site Civil Modifications; includes A&E; Site Preparation; Tower Installs/Work; Shelter Installs; MW Dish installs	<u>LOT</u>				\$227,690
Prevailing Wages - Civil Labor only	<u>LOT</u>				\$34,154
Project Management	<u>LOT</u>				\$34,759
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$12,728
Microwave Services & Site Services: Path and Site Surveys, Engineering, FCC Coordination, Project Management	<u>LOT</u>				\$56,272
FNE Installation, Warehousing, Transport	<u>LOT</u>				
Subtotal Equipment					\$107,647
Subtotal Labor					\$365,602
Total Equipment/Labor					\$473,249

10.4 Geo-Prime/RF2 – Joint Operations Center

Equipment Description	Number Req'd	List Unit Cost	Total List	Unit Cost	Extended Cost
Receive Antenna System	<u>1</u>	\$9,619	\$9,619	\$8,657	\$8,657
Transmitter Antenna System	<u>1</u>	\$7,714	\$7,714	\$6,943	\$6,943
Microwave	<u>1</u>	\$190,647	\$190,647	\$171,582	\$171,582
Tower	<u>1</u>	\$152,147	\$152,147	\$136,933	\$136,933
Shelter	<u>1</u>	\$128,987	\$128,987	\$126,552	\$126,552
Site Civil Modifications; includes A&E; Site Preparation; Tower Installs/Work; Shelter Installs; MW Dish installs	<u>LOT</u>				\$614,390
Prevailing Wages - Civil Labor only	<u>LOT</u>				\$92,159
Project Management	<u>LOT</u>				\$35,132
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$13,101
Microwave Services & Site Services: Path and Site Surveys, Engineering, FCC Coordination, Project Management	<u>LOT</u>				\$56,272
FNE Installation, Warehousing, Transport	<u>LOT</u>				\$60,448
Subtotal Equipment					\$450,666
Subtotal Labor					\$871,502
Total Equipment/Labor					\$1,322,168

10.5 RF3 – Ranson

Equipment Description	Number Req'd	List Unit Cost	Total List	Unit Cost	Extended Cost
Receive Antenna System	<u>0</u>				
Transmitter Antenna System	<u>0</u>				
Microwave	<u>1</u>	\$102,968	\$102,968	\$92,671	\$92,671
Tower	<u>0</u>				
Shelter	<u>0</u>				
Site Civil Modifications; includes A&E; Site Preparation; Tower Installs/Work; Shelter Installs; MW Dish installs	<u>LOT</u>				\$174,150
Prevailing Wages - Civil Labor only	<u>LOT</u>				\$26,123
Project Management	<u>LOT</u>				\$10,685
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$1,223
Microwave Services & Site Services: Path and Site Surveys, Engineering, FCC Coordination, Project Management	<u>LOT</u>				\$56,272
FNE Installation, Warehousing, Transport	<u>LOT</u>				
Subtotal Equipment					\$92,671
Subtotal Labor					\$268,453
Total Equipment/Labor					\$361,124

10.6 RF4 – Woods Chapel

Equipment Description	Number Req'd	List Unit Cost	Total List	Unit Cost	Extended Cost
Receive Antenna System	<u>0</u>				
Transmitter Antenna System	<u>0</u>				
Microwave	<u>1</u>	\$165,892	\$165,892	\$149,303	\$149,303
Tower	<u>0</u>				
Shelter	<u>0</u>				
Site Civil Modifications; includes A&E; Site Preparation; Tower Installs/Work; Shelter Installs; MW Dish installs	<u>LOT</u>				\$197,722
Prevailing Wages - Civil Labor only	<u>LOT</u>				\$29,658
Project Management	<u>LOT</u>				\$10,685
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$1,223
Microwave Services & Site Services: Path and Site Surveys, Engineering, FCC Coordination, Project Management	<u>LOT</u>				\$56,272
FNE Installation, Warehousing, Transport	<u>LOT</u>				
Subtotal Equipment					\$149,303
Subtotal Labor					\$295,561
Total Equipment/Labor					\$444,863

10.7 RF5 – 68th and Booth

Equipment Description	Number Req'd	List Unit Cost	Total List	Unit Cost	Extended Cost
Receive Antenna System	<u>0</u>				
Transmitter Antenna System	<u>0</u>				
Microwave	<u>1</u>	\$83,551	\$83,551	\$75,195	\$75,195
Microwave Battery System	<u>1</u>	\$13,214	\$13,214	\$11,893	\$11,893
Tower	<u>0</u>				
Shelter	<u>0</u>				
Site Civil Modifications; includes A&E; Site Preparation; Tower Installs/Work; Shelter Installs; MW Dish installs	<u>LOT</u>				\$73,954
Prevailing Wages - Civil Labor only	<u>LOT</u>				\$11,093
Project Management	<u>LOT</u>				\$10,685
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$1,223
Microwave Services & Site Services: Path and Site Surveys, Engineering, FCC Coordination, Project Management	<u>LOT</u>				\$56,272
Microwave Battery Install Services	<u>LOT</u>				\$1,786
FNE Installation, Warehousing, Transport	<u>LOT</u>				
Subtotal Equipment					\$87,088
Subtotal Labor					\$155,013
Total Equipment/Labor					\$242,101

10.8 RF6 – Independence (Woods Chapel)

Equipment Description	Number Req'd	List Unit Cost	Total List	Unit Cost	Extended Cost
Receive Antenna System	<u>0</u>				
Transmitter Antenna System	<u>0</u>				
Microwave	<u>1</u>	\$69,409	\$69,409	\$62,468	\$62,468
Microwave Battery System	<u>1</u>	\$13,214	\$13,214	\$11,893	\$11,893
Tower	<u>0</u>				
Shelter	<u>0</u>				
Site Civil Modifications; includes A&E; Site Preparation; Tower Installs/Work; Shelter Installs; MW Dish installs	<u>LOT</u>				\$75,200
Prevailing Wages - Civil Labor only	<u>LOT</u>				\$11,280
Project Management	<u>LOT</u>				\$10,685
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$1,223
Microwave Services & Site Services: Path and Site Surveys, Engineering, FCC Coordination, Project Management	<u>LOT</u>				\$56,272
Microwave Battery Install Services	<u>LOT</u>				\$1,786
FNE Installation, Warehousing, Transport	<u>LOT</u>				
Subtotal Equipment					\$74,361
Subtotal Labor					\$156,447
Total Equipment/Labor					\$230,807

10.9 RF7 – Evergy

Equipment Description	Number Req'd	List Unit Cost	Total List	Unit Cost	Extended Cost
Receive Antenna System	<u>0</u>				
Transmitter Antenna System	<u>0</u>				
Microwave	<u>0</u>				
Microwave Battery System	<u>0</u>				
Tower	<u>0</u>				
Shelter	<u>0</u>				
Site Civil Modifications; includes A&E; Site Preparation; Tower Installs/Work; Decommissioning	<u>LOT</u>				\$151,171
Prevailing Wages - Civil Labor only	<u>LOT</u>				\$22,676
Project Management	<u>LOT</u>				\$10,685
System Engineering and Technologist, Documentation, FCC License Coordination, and Engineering Studies	<u>LOT</u>				\$1,223
Microwave Services & Site Services: Path and Site Surveys, Engineering, FCC Coordination, Project Management	<u>LOT</u>				
FNE Installation, Warehousing, Transport	<u>LOT</u>				
Subtotal Equipment					\$0
Subtotal Labor					\$185,755
Total Equipment/Labor					\$185,755

10.10 System Spares Package

Equipment Description	Number Req'd	Total List	Extended Cost
Microwave Spares	<u>LOT</u>	\$29,572	\$26,615
Subtotal Equipment			\$26,615
Subtotal Labor			
Total Equipment/Labor			\$26,615

10.11 Lifecycle and Maintenance

Lifecycle and Maintenance Services	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	TOTAL (YRS 1 - 6)
Essential Plus Package (Including RSUS)	\$244,889	\$254,692	\$264,881	\$275,477	\$286,504	\$297,960	\$1,624,403
System Update Service (SUA II)	\$102,792	\$105,156	\$107,615	\$110,172	\$112,831	\$115,596	\$654,162
Third Party Maintenance and Lifecycle - CompassCom	\$22,578	\$15,338	\$24,421	\$16,590	\$26,413	\$17,944	\$123,284
Third Party Maintenance - Tower Inspection	\$22,215	\$23,797	\$25,491	\$27,306	\$29,250	\$31,333	\$159,392
Third Party Maintenance - Microwave	\$10,478	\$16,142	\$17,995	\$16,107	\$16,914	\$23,903	\$101,539
Third Party Maintenance and SUA - Eventide	Included	\$23,531	\$46,898	\$22,561	\$51,722	\$25,470	\$170,181
Yearly Total	\$402,952	\$438,656	\$487,301	\$468,213	\$523,634	\$512,205	\$2,832,961

10.12 Cybersecurity Services

CYBERSECURITY SERVICES	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	TOTAL (YRS 2 - 6)
ASTRO Managed Detection and Response (MDR) Subscription	\$25,598	\$21,216	\$22,065	\$22,947	\$24,095	\$25,299	\$141,220
Installation and Activation Services	\$3,600						\$3,600
Cyber Assurance Program (CAP)	\$60,000						\$60,000
Risk Assessment	\$22,400						\$22,400
Yearly Total	\$111,598	\$21,216	\$22,065	\$22,947	\$24,095	\$25,299	\$227,220
Note: Travel and Expenses are not included.							

10.13 Payment Terms

Except for a payment that is due on the Effective Date, Customer will make payments to Motorola within thirty (30) days after the date of each invoice. Customer will make payments when due in the form of a check, cashier's check, or wire transfer drawn on a U.S. financial institution. If Customer has purchased additional Professional or Subscription services, payment will be in accordance with the applicable addenda. Payment for the System purchase will be in accordance with the following milestones.

System Purchase (excluding Mobile Video and Subscribers & Accessories, if applicable)

1. 10% of the Contract Price due upon contract execution;
2. 35% of the Contract Price due upon delivery of and inventory by Lee's Summit designee of network infrastructure components to Lee's Summit designated location(s). (Inventory to be completed in a reasonable timeframe)
3. 25% of the Contract Price due upon installation completion;
4. 10% of the Contract Price due upon satisfactory completion of audio quality and signal coverage testing;
5. 5% of the Contract Price due upon satisfactory completion of all training
6. 15% of the Contract Price due upon Final Acceptance.

If Subscribers & Accessories are purchased, 100% of the Subscriber & Accessories Contract Price will be invoiced upon shipment (as shipped).

Motorola shall make partial shipments of equipment and will request payment upon shipment of such equipment. In addition, Motorola shall invoice for installations completed on a site-by-site basis or when professional services are completed, when applicable. The value of the equipment shipped/services performed will be determined by the value shipped/services performed as a percentage of the total milestone value. Unless otherwise specified, contract discounts are based upon all items proposed and overall system package. For invoicing purposes only, discounts will be applied proportionately to the FNE and Subscriber equipment values to total contract price. Overdue invoices will bear simple interest at the maximum allowable rate by state law.

For Lifecycle Support Plan and Subscription Based Services:

Motorola will invoice Customer annually in advance of each year of the plan.

Section 11

Contractual Documentation

The Contractual Documentation shall be the Motorola Solutions Customer Agreement to which this proposal is attached to as its Exhibit A.

Section 12

Specification Sheets

The Specification Sheets are included on the following pages.



PROPERLY PROTECT FIXED EQUIPMENT FROM THE ELEMENTS

MOTOROLA BUILDING ENCLOSURES

One of the critical factors for providing reliable communications during normal and emergency situations is to adequately secure and protect your equipment from the environment. Motorola's equipment enclosures enhance system performance by minimizing equipment malfunction downtime due to environmental changes such as a lightning strike during a storm.

To provide organizations with an enclosure that meets your unique equipment requirements, Motorola has developed two choices in building designs: Motorola Standard Buildings (MSB) and Motorola Alternative Buildings (MAB).

Cost effective designs – Motorola building enclosures are designed to meet most industry and local codes, ensure efficient equipment installation, maximize interior space and reduce installation time. In addition, the MAB enclosure provides a low cost base solution with the ability to add the upgrades you choose.

Scalable packages to meet your needs – Begin with a basic MAB model and modify it with specific upgrades to tailor the building for your unique requirements or choose the more complete MSB enclosure. The designs have already been drafted and pre-approved to meet state building codes, reducing the approval and certification process.



SOLUTION DATA SHEET

MOTOROLA BUILDING ENCLOSURES

Predesigned and equipment ready –

Our building systems have been pre-designed to meet the most current edition of Motorola's R56 Standards and Guidelines for Communication Sites, including cabling facilities, back-up power sources, grounding, and complete electrical systems and surge suppression. Your fixed radio equipment can be installed at the building manufacturing plant or on site.



Building electrical entry points have appropriate surge protection to protect the equipment from outside surges and spikes.

Specific electrical configurations for wireless equipment –

The power requirements are based on the load calculations for each specific building type and system configuration. Individual load distribution centers allow for proper allocation of electrical power and easy identification of the breakers. Separate receptacles with dedicated circuits are installed for convenient powering of the equipment.



For convenient powering of the equipment, individual receptacles with dedicated power circuits are installed in a raceway system above the equipment racks.

Backup power for emergency operations –

Uninterruptible Power Supply (UPS) is designed to prevent critical equipment downtime. The UPS instantly powers the equipment load in case of power failure until a stable power source is available. Different UPS sizes are recommended depending on the building size and power requirements. Building configuration has been sized with an outdoor standby generator with an automatic transfer switch in case of utility power failure.



Motorola Alternative Building 10x12 foot with an optional outdoor generator based on the selected equipment load configuration.

Single point grounding – The enclosures are built with Motorola's specifications for single point grounding, which requires all internal equipment grounds to terminate on a single ground bar and for all cable penetrations into the shelter to also ground to the same bar.

Multiple manufacturing locations reduce shipping costs – Multiple strategically located facilities manufacture MSB and MAB enclosures, which can reduce freight cost and speed delivery, as well as provide you with prompt warranty support.

BUILDING SPECIFICATIONS

Motorola offers a comprehensive portfolio of building enclosures that addresses the needs of today's communication environment. Whether you need a building to be constructed on site or fully assembled, Motorola has the right combination of expertise, options and resources to protect and house your fixed network equipment.



Motorola Alternative Building (MAB) – is a lightweight fiberglass aggregate panel shelter, fully scalable and tailored to your specific requirements.

MOTOROLA ALTERNATE BUILDING (MAB) AVAILABILITY

BUILDING SIZE (W X L)	GENERATOR	RACK CAPACITY
10 x 12 ft	External Generator Optional	4
10 x 16 ft	External Generator Optional	6
12 x 16 ft	External Generator Optional	8



Motorola Standard Building (MSB) – shelter sets the industry standard as an all inclusive concrete shelter that provides maximum protection for your equipment.

MOTOROLA STANDARD BUILDING (MSB) AVAILABILITY

BUILDING SIZE (W X L)	GENERATOR	RACK CAPACITY
12 x 10 ft	External Generator Included	4
12 x 16 ft	External Generator Included	8
12 x 24 ft	External Generator Included	12
12 x 32 ft	External Generator Included	16
12 x 36 ft	External Generator Included	20
24 x 32 ft	External Generator Included	32

SOLUTION DATA SHEET
MOTOROLA BUILDING ENCLOSURES

FEATURES

	MOTOROLA ALTERNATIVE BUILDING (MAB)	MOTOROLA STANDARD BUILDING (MSB)
Floor and Loadings	200psf wood with i-beam skid perimeter Optional concrete upgrade	300psf concrete design
Roof and Loading	100psf galvaneal steel with membrane	150psf solid concrete
Seismic Design	Group 1 – Category D of International Building Code (IBC) Seismic Design optional upgrade	Group 1 – Category D of International Building Code (IBC) Seismic Design optional upgrade
Walls and Loadings	120 MPH wind loading; galvaneal steel with exposed aggregate fiberglass panels exterior	150 MPH wind loading; 4 in solid concrete with exposed aggregate exterior; level 4 bullet resistant; 2 hour fire rated
Grounding	Meets or exceeds R-56	Meets or exceeds R-56
Electrical Service	Integrated load center includes TVSS, power panel	Utility power panel, TVSS, enclosed circuit breakers as safety disconnect all separate components
Surge Protection	Type 1 Transient Voltage Surge Suppressor Type 2 surge suppression optional upgrade	Type 1A and Type 2 surge protection Primary surge protection for control wiring/generator Type 3 surge suppression optional upgrade
Exterior Outlets	One 20A GFI duplex outlet	Two 20 A GFI duplex outlets
HVAC	Fresh air, thermostat controlled exhaust fan system Optional single or dual HVAC upgrade	Redundant (2 units) system HVAC economizer optional upgrade
Emergency Lighting	One twin bulb with battery EXIT sign located over doorway	One twin bulb with battery EXIT sign located over doorway
Alarms	No standard alarms Optional Upgrades available	Standard: Smoke, Power Fail, High/Low temp, intrusion, tower lights, HVAC, TVSS, Generator, Automatic transfer switch, UPS alarms, and external ground bar anti-theft relay
Safety Equipment	Eye wash and first aid kit Optional upgrade for fire extinguishers	Eye wash and first aid kit and 2 fire extinguishers per room
Floor Insulation	R-11	R-4
Wall Insulation	R-11	R-11
Ceiling Insulation	R-19	R-19
Generator	Optional Upgrade available	Standard Indoor generator room optional upgrade
UPS	Optional Upgrade available	Standard
Cable Tray Size	18 in Wide	24 in Wide
Warranty	2 year structural 2 year interior (HVAC, generator, TVSS, UPS) Optional Structural Warranty Upgrade	10 year structural 2 year interior (HVAC, generator, TVSS, UPS)

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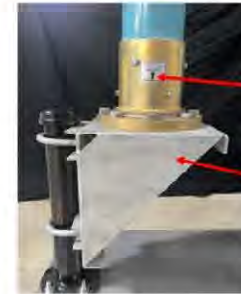
800 MHz Band Antenna - Magnum B-pattern Low-PIM/Hi-PIP 14.2 dBd Gain

Model – DS8M14PDBU-Series Antennas

Specifications	
Design Type	True Corporate Feed "B-pattern"/Offset
Frequency Range	806-869 MHz
Passive Intermod – 3 rd -order PIM	-150 dBc
Bandwidth	63 MHz
Gain	16.3 dBi / 14.2 dBd
Configuration	Single antenna
Beam Tilt (electrical downtilt)	(x) = - (0.75 degrees)
Horizontal Beamwidth (H-Plane), typ.	14.0°
Vertical Beamwidth (E-Plane), typ.	3.5°
Impedance	50 Oms
Null fill pattern features	Included
VSWR / Return Loss	<1.5:1 / 14 dB (min.)
Average Power Rating	600 W
Peak Instantaneous Power	25 kW
Polarization	Vertical
Lightning Protection	Direct Ground
Connector	DS8M14PDBU(x)D 7/16 DIN (F) DS8M14PDBU(x)M 4.3-10 (F)
Equivalent Flat-Plate Area	6.4 sq. ft.
Lateral Wind load Thrust @ 100mph	268 lbf.
Rated Wind Speed	155 mph (without ice)
Total Length, antenna only Add for Mounting Kit: 1.3 ft.	19 feet
Radome O.D.	6.0 inches
Base O.D.	6.5 inches
Mounting design	Metal flange base see detail. (8 x 3/4" bolts)
Radome color	Horizon Blue
Weight, antenna only (approx.) With DSH-MAG1HD mount, included	95 lbs. 149 lbs.
Shipping Weight (approx.)	Consult factory
Mounting kit, included	P/N DSH-MAG1HD H.D. pipe mount kit for 4" vertical members
Invertibility	Antennas are not invertible. For invertible beam tilt options contact dbSpectra at tech@dbSpectra.com
Ordering Information DS8M14PDBU(x)D – 7/16 DIN Connector DS8M14PDBU(x)M – 4.3-10 Connector	<ol style="list-style-type: none"> 1. Replace (x) in the model number with Beam Tilt options. 2. "–" in the beam-tilt options represents 0.75° down-tilt.

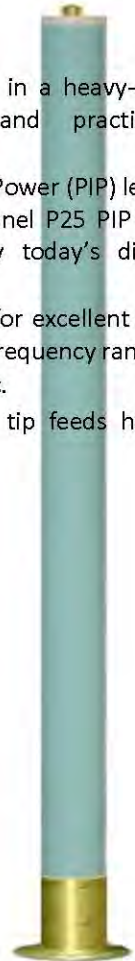
Features and Benefits

- "B-pattern"/Offset horizontal coverage in a heavy-duty package maximizes performance and practically eliminates tip deflection.
- Tested to stringent Peak Instantaneous Power (PIP) levels of 25 KW using dbSpectra's multi-channel P25 PIP test bed. High PIP level is demanded by today's digital systems.
- True Corporate Feed Array – provides for excellent gain and pattern consistency across a wider frequency range.
- PIM Rated Design – better than -150 dBc.
- Excellent Lightning Protection – brass tip feeds heavy internal conductor DC ground.



Maximum Gain
Direction Indicator
for Directional
Pattern Magnums

Mounting Kit
(Included)

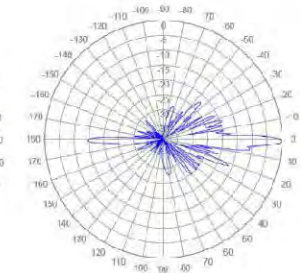
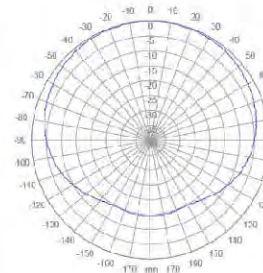


Radiation Pattern

Plots 5 dB/Div

Horizontal (H-Plane)

Vertical (E-Plane, -0.75°)



800 MHz Band Antenna - Magnum H-pattern Low-PIM/Hi-PIP 13.5 dBd Gain Model – DS8M14PH2U-Series Antennas

Specifications	
Design Type	True Corporate Feed "H-pattern" model
Frequency Range	806-869 MHz
Passive Intermod – 3 rd -order PIM	-150 dBc
Bandwidth	63 MHz
Gain	15.6 dBi / 13.5 dBd
Configuration	Single antenna
Beam Tilt (electrical downtilt)	(x) = - (0.75 degrees)
Horizontal Beamwidth (H-Plane), typ.	75° Bi-directional
Vertical Beamwidth (E-Plane), typ.	3.5°
Impedance	50 Ohms
Null fill pattern features	Included
VSWR / Return Loss	<1.5:1 / 14 dB (min.)
Average Power Rating	600 W
Peak Instantaneous Power	25 kW
Polarization	Vertical
Lightning Protection	Direct Ground
Connector DS8M14PH2U(x)D DS8M14PH2U(x)M	7/16 DIN (F) 4.3-10 (F)
Equivalent Flat-Plate Area	7.0 sq. ft.
Lateral Wind load Thrust @ 100mph	295 lbf.
Rated Wind Speed	155 mph (without ice)
Total Length, antenna only Add for Mounting Kit: 1.3 ft.	19 feet
Radome O.D.	6.0 inches
Mast O.D.	6.5 inches
Mounting design	Metal flange base see detail. (8 x ¾" bolts)
Radome color	Horizon Blue
Weight, antenna only (approx.) With DSH-MAG1HD mount, included	85 lbs. 139 lbs.
Shipping Weight (approx.)	Consult factory
Mounting kit, included	P/N DSH-MAG1HD H.D. pipe mount kit for 4" vertical members
Invertibility	Antennas are not invertible. For invertible beam tilt options contact dbSpectra at tech@dbSpectra.com
Ordering Information DS8M14PH2U(x)D – 7/16 DIN Connector DS8M14PH2U(x)M – 4.3-10 Connector	<ol style="list-style-type: none"> 1. Replace (x) in the model number with Beam Tilt options. 2. "-" in the beam-tilt options represents 0.75° down-tilt.

Features and Benefits

- "H-pattern" Bi-directional coverage in a heavy-duty package maximizes performance and practically eliminates tip deflection.
- Tested to stringent Peak Instantaneous Power (PIP) levels of 25 KW using dbSpectra's multi-channel P25 PIP test bed. High PIP level is demanded by today's digital systems.
- True Corporate Feed Array – provides for excellent gain and pattern consistency across a wider frequency range.
- PIM Rated Design – better than -150 dBc.
- Excellent Lightning Protection – brass tip feeds heavy internal conductor DC ground.

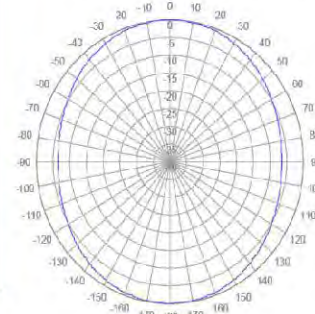


Maximum Gain
Direction Indicator
for Directional
Pattern Magnums

Mounting Kit
(Included)

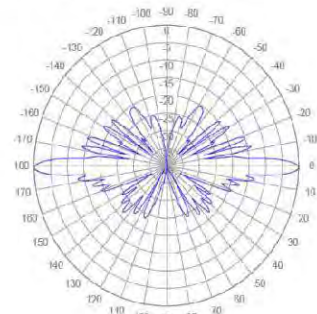
Radiation Pattern

Horizontal (H-Plane)



Plots 5 dB/Div

Vertical (E-Plane, -0.75°)



Data Sheet

Features

- 700/800 MHz band
- USA manufacture and applications support
- Single Part Number kits for ordering complete systems
- Low noise figure across standard operating gain levels
- Tower Top Unit:
 - Lightweight: < 8 lbs.
 - Amplifier redundancy
 - Non-diversity or diversity variants
 - N Type or 4.3-10 Connector options
 - High rejection pre-selector filter prior to TTA to eliminate TX intermodulation blocking issues
- Control and Multicoupler Unit:
 - Intuitive graphic user interface
 - -48 VDC Isolated Power Supply with optional AC mains (sold separately)
 - Field upgrade options to grow existing systems from 8 to 16 channels and 16 to 48 channels



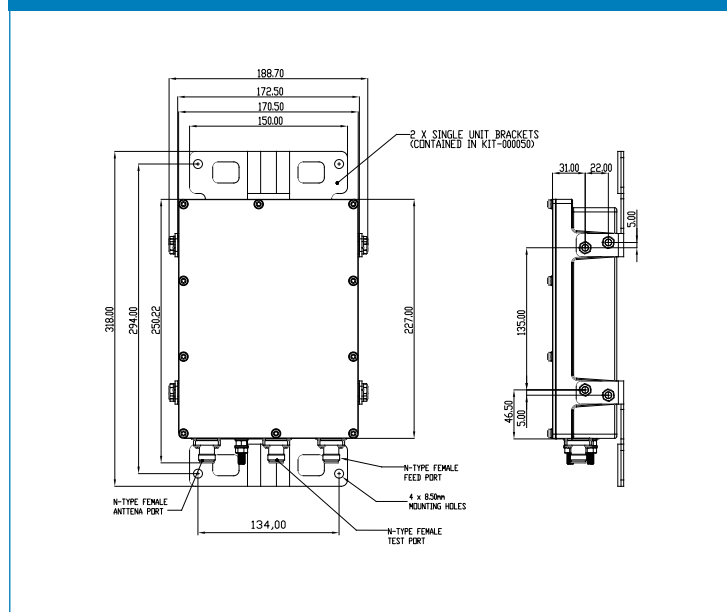
Tower Top Amplifier System Specification	8-32 Channels	48 Channels
System Gain [dB] Min. / (Typical)	23.0 / (23.7)	19.0 / (19.7)
System Noise Figure [dB] Max. / (Typical)	≤ 2.8 / (2.5)	
Frequency Band(s) [MHz]	700/800	
System Passband [MHz]	794 - 824	
System Gain Flatness [dB] Max. / (Typ.)	≤ 1.5 / (0.5)	
System IIP3 3rd Order Intercept Point [dBm] / (Typ.)	>13.4/(13.9) @ 15dB gain setting	>13.4/(13.9) @ 10dB gain setting
Adjustable Attenuation Range [dB]	≥ 15 to 0	
Adjustable Attenuation Step Size [dB]	≤ 0.5	
Redundant Power Supply	Optional – see table for ordering options	
Testport Function	Included	
Testport Flatness [dB]	< 2.0	
Preselector	Included	
System TX Band Rejection [dB]	≥ 110	
Internal Termination Test Mode	Included	
Antenna Test Mode	Included	
Bypass (Failure) Mode	Included	
Bypass Mode System Loss [dB]	< 22	
Internal Storage of Test Data	Included	
Auto RX Overall Gain Setup	Included	
High Level Carrier Monitor	Included	

Data Sheet

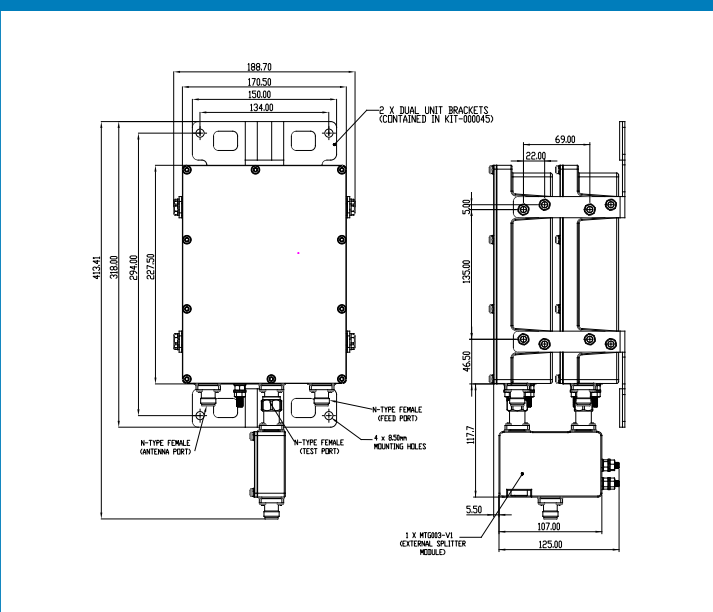
Tower Top Unit Specification

TTA Gain [dB] Min. / (Typ.)	27.0 / (27.5)
TTA Noise Figure [dB] Max. / (Typ.)	2.8 / (2.5)
TTA IIP3 [dBm] Min. / (Typ.)	17.0 / (18.0)
Type of Amplifier	Quadrature Coupled - Redundant [two (2) independent quadrature amplifiers]
Amplifier Switching	Automatic upon failure detection
Type of Amplifier/Test Mode Switching	Solid State RF Switch
Return Loss on All RF Ports [dB]	> 14
Power Requirements	Control unit: -48 VDC, 0.21A typ. (10W) DC Power supplied from Control Unit to TTA via Feed cable
Operating Temp. Range (Full Specs) [°C]	-30 to +60
Operating Temp. Range (Degraded Specs) [°C]	-40 to +70
Lightning Protection	20kA IEC 61000-4-5 8/20 uS multiple strike and 3 kA 10/350 uS slow pulse waveform
Grounding Studs	2 ¼", M6, studs for 2 hole lugs with ¾" center to center spacing
Test Port Coupling (Test in to Antenna in) [dB]	30 ± 2
Test Port Balance (Dual Branch) [dB]	< ±0.25
Branch to Branch Isolation (Dual Branch) [dB]	< -60
Connector Type (All Ports)	N or 4.3-10 female – see table for ordering options
Enclosure	IP 67
Size Maximum (H x W x D) [in]	9 x 6.8 x 2.4 excluding brackets (single branch unit)
Weight Maximum [lbs]	8 (Single branch unit)
TTA Unit Test Record	Stored electronically in unit

Single Tower Top Unit Outline Drawing



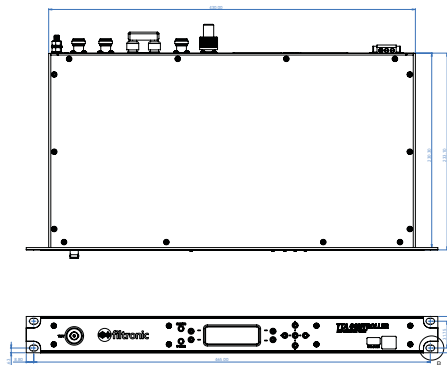
Dual Tower Top Unit Outline Drawing



Data Sheet

Control & Multicoupler Unit (CMU) Specification	8-32 Channels		48 Channels	
CMU Gain [dB] Min. / (Typ.)	Control Unit = -5.0 / (-4.8)	Multicoupler Unit = 1.0 / (1.0)	Control Unit = -5.0 / (-4.8)	Distribution Unit = -3.5 / (-3.5)
CMU Noise Figure [dB] Max. / (Typ.)	Control Unit = 5.0 / (4.8)	Multicoupler Unit = 2.5 / (2.2)	Control Unit = 5.0 / (4.8)	Distribution Unit = 5 / (4.5)
CMU IIP3 [dB] Min. / (Typ.)	Control Unit = > 60 / (>60.0)	Multicoupler Unit = 29.9 / (30.2)	Control Unit = >60 / (>60)	Distribution Unit = 29.9 / (30.2)
Type of Amplifier	Quadrature Amplifier			
RF Port Return Loss [dB]	≥ 14			
Adjustable Attenuator Type	Electronic			
TTA Connectors Type (Rear Facing)	N-Female			
Number of Rx Output Ports	8,16, 32 or 48 dependent on model (see table for ordering options)			
Rx Output Connectors Type (Rear Facing)	BNC-Female			
Rx to Rx Port Isolation [dB]	≥ 20			
External Filter Ports - Type	Included - BNC			
Testport Input Connector Type (Front Facing)	BNC-Female			
ESD Protection	IEC61000-4-2 Level 3			
Grounding Studs	2 ¼", M6 studs for 2 hole lugs with 3/4" center to center spacing			
Status Indicators	Included			
Alarm Contacts	Form-C Contacts			
Ethernet Port	Included allows SNMP (Configuration and control from internal web page)			
Power Requirements	100 - 240 VAC 50/60 Hz OR -48 VDC – See table for ordering options			
Operating Temperature Range (Full Specs) [°C]	0 to +50			
Enclosure	Standard EIA 19" Rack Mount			
Size Maximum (H x W x D) [in]	1.75 (1 RU) x 19 x 9.25 (single branch unit 8 or 16 output unit) 2 x 1.75 (1 RU) x 19 x 9.25 (Dual branch unit 8 or 16 output unit) 2 x 1.75 (1 RU) x 19 x 9.25 (Single branch unit 32 output unit) 4 x 1.75 (1 RU) x 19 x 9.25 (Dual branch unit 32 output unit)		3 x 1.75 (1 RU) x 19 x 9.25 (Single Branch Unit 48 way output) 6 x 1.75 (1 RU) x 19 x 9.25 (Dual Branch Unit 48 way output)	
Control and Multicoupler Unit Test Record	Stored electronically in unit			

Single Control and Multicoupler Unit Outline



Ordering Guide



	Non-Diversity [Single Branch] TTA System Part Numbers			
	N-Type Connectors on TTA		4.3-10 Connectors on TTA	
	Control & Multicoupler Unit Dual -48VDC Input	Control & Multicoupler Unit Single -48VDC Input	Control & Multicoupler Unit Dual -48VDC Input	Control & Multicoupler Unit Single -48VDC Input
8 Output	SGG025-P (2)	SGG026-P (1)	SGG033-P (2)	SGG034-P (1)
16 Output	SGG045-P (2)	SGG046-P (1)	SGG053-P (2)	SGG054-P (1)
32 Output	SGG065-P (4)	SGG066-P (2)	SGG073-P (4)	SGG074-P (2)
48 Output	SGG077-P (6)	SGG078-P (3)	SGG081-P (6)	SGG082-P (3)

AC/DC power supplies (PSU-000001-P) are sold separately. If required, please order (n) quantity as indicated in the table above.



	Diversity [Dual Branch] TTA System Part Numbers			
	N-Type Connectors on TTA		4.3-10 Connectors on TTA	
	Control & Multicoupler Unit Dual -48VDC Input	Control & Multicoupler Unit Single -48VDC Input	Control & Multicoupler Unit Dual -48VDC Input	Control & Multicoupler Unit Single -48VDC Input
8 Output	SGG027-P (4)	SGG028-P (2)	SGG035-P (4)	SGG036-P (2)
16 Output	SGG047-P (4)	SGG048-P (2)	SGG055-P (4)	SGG056-P (2)
32 Output	SGG067-P (8)	SGG068-P (4)	SGG075-P (8)	SGG076-P (4)
48 Output	SGG079-P (12)	SGG080-P (6)	SGG083-P (12)	SGG084-P (6)

AC/DC power supplies (PSU-000001-P) are sold separately. If required, please order (n) quantity as indicated in the table above.

Accessory Ordering Guide

Description	Part Number
POWER SUPPLY ADAPTER, 110V AC TO -48V DC, SINGLE OUTPUT	PSU-000001-P
SHELF, 1U, HOLDS UP TO (4) DSPSU000001P POWER SUPPLY ADAPTERS	MGG002-V1-P
EXPANSION KIT, 16 WAY TO 32 WAY, PASSIVE, EXTERNAL	MTG004-P
EXPANSION KIT, 8 WAY TO 16 WAY, PASSIVE, INTERNAL, FOR SEG002-F*-V8	MTG005-P
EXPANSION KIT, 32 WAY TO 48 WAY, PASSIVE, EXTERNAL, FOR SEG003-F*-V16	MTG006-P
TERMINATOR, 50 OHM, BNC	CON-000460-P
SURGE PROTECTOR, LIGHTNING, N-F TO N-F, DC PASS THRU	MVG002-V1-P
EXTERNAL PRE-SELECTOR BANDPASS FILTER 700/800MHZ **	Only use when addt'l filtering is req'd
	**PASS BANDWIDTH = 3 MHZ
	PPC028-V3-P
	**PASS BANDWIDTH = 6 MHZ
	PPC028-V6-P
	**PASS BANDWIDTH = 10 MHZ
	PPC028-V10-P
	**PASS BANDWIDTH = 15 MHZ
	PPC028-V15-P
	**PASS BANDWIDTH = 18 MHZ
	PPC028-V18-P

Replacement Parts

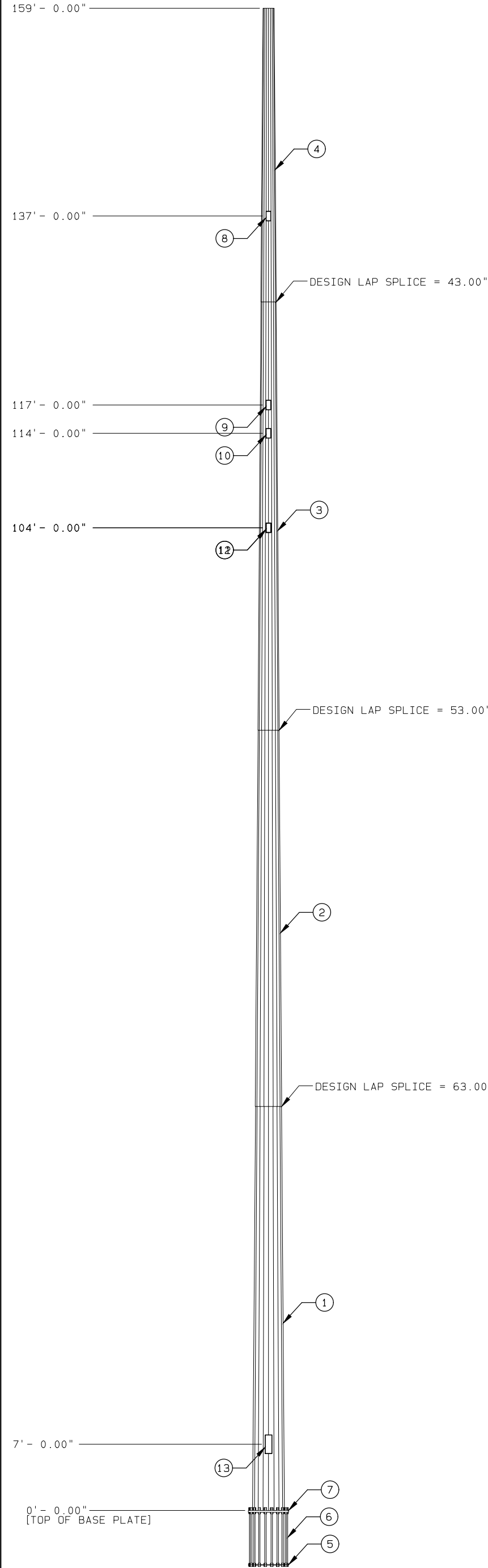
Description	Part Number
TOWER TOP AMPLIFIER, 700/800MHZ REDUNDANT AMP, N-CONNECTORS	SAC001-V1-P
TOWER TOP AMPLIFIER, 700/800MHZ REDUNDANT AMP, 4.3-10 CONNECTORS	SAC001-V2-P
TTA CONTROL & DISTRIBUTION UNIT, 8 WAY, W/O REDUNDANT PS, 1U, 19"	SEG002-F1-V8-P
TTA CONTROL & DISTRIBUTION UNIT, 8 WAY, W REDUNDANT PS, 1U, 19"	SEG002-F2-V8-P
TTA CONTROL & DISTRIBUTION UNIT, 16 WAY, W/O REDUNDANT PS, 1U, 19"	SEG002-F1-V16-P
TTA CONTROL & DISTRIBUTION UNIT, 16 WAY, W REDUNDANT PS, 1U, 19"	SEG002-F2-V16-P
TTA CONTROL & DISTRIBUTION UNIT, 16 WAY, W/O REDUNDANT PS, 1U, 19", 48 WAY	SEG003-F1-V16-P
TTA CONTROL & DISTRIBUTION UNIT, 16 WAY, W REDUNDANT PS, 1U, 19", 48 WAY	SEG003-F2-V16-P
MOUNTING KIT, TTA, SINGLE UNIT	KIT-000044-P
MOUNTING KIT, TTA, DUAL, N-TYPE CONNCTR, W/TEST PORT POWER SPLITTER	KIT-000045-V1-P
MOUNTING KIT, TTA, DUAL, 4.3-10 CONNCTR, W/TEST PORT POWER SPLITTER	KIT-000045-V2-P

Contact Us

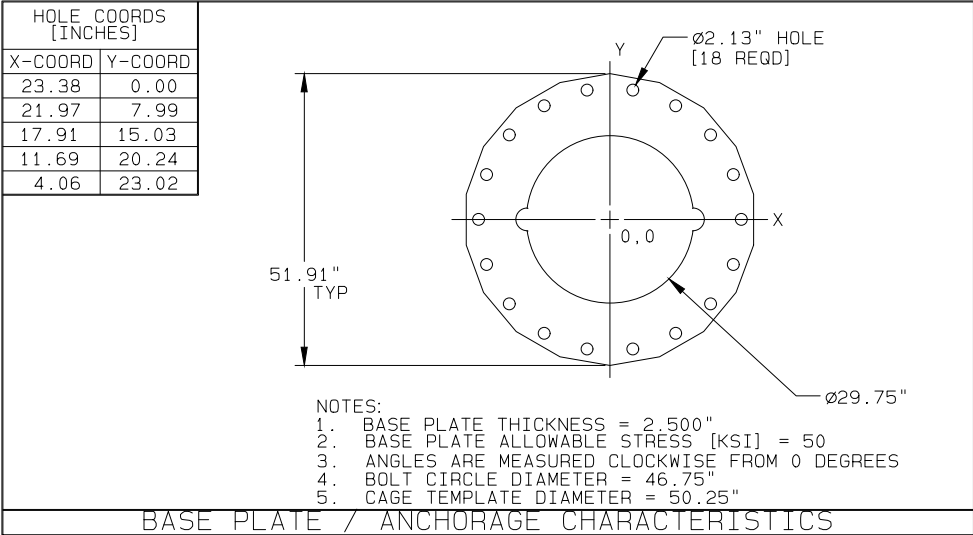
Filtronic, 700 Marvel Road, Salisbury, MD 21801, USA
Tel: +1 410 202 8811 Email: sales@filtronic.com

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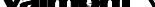




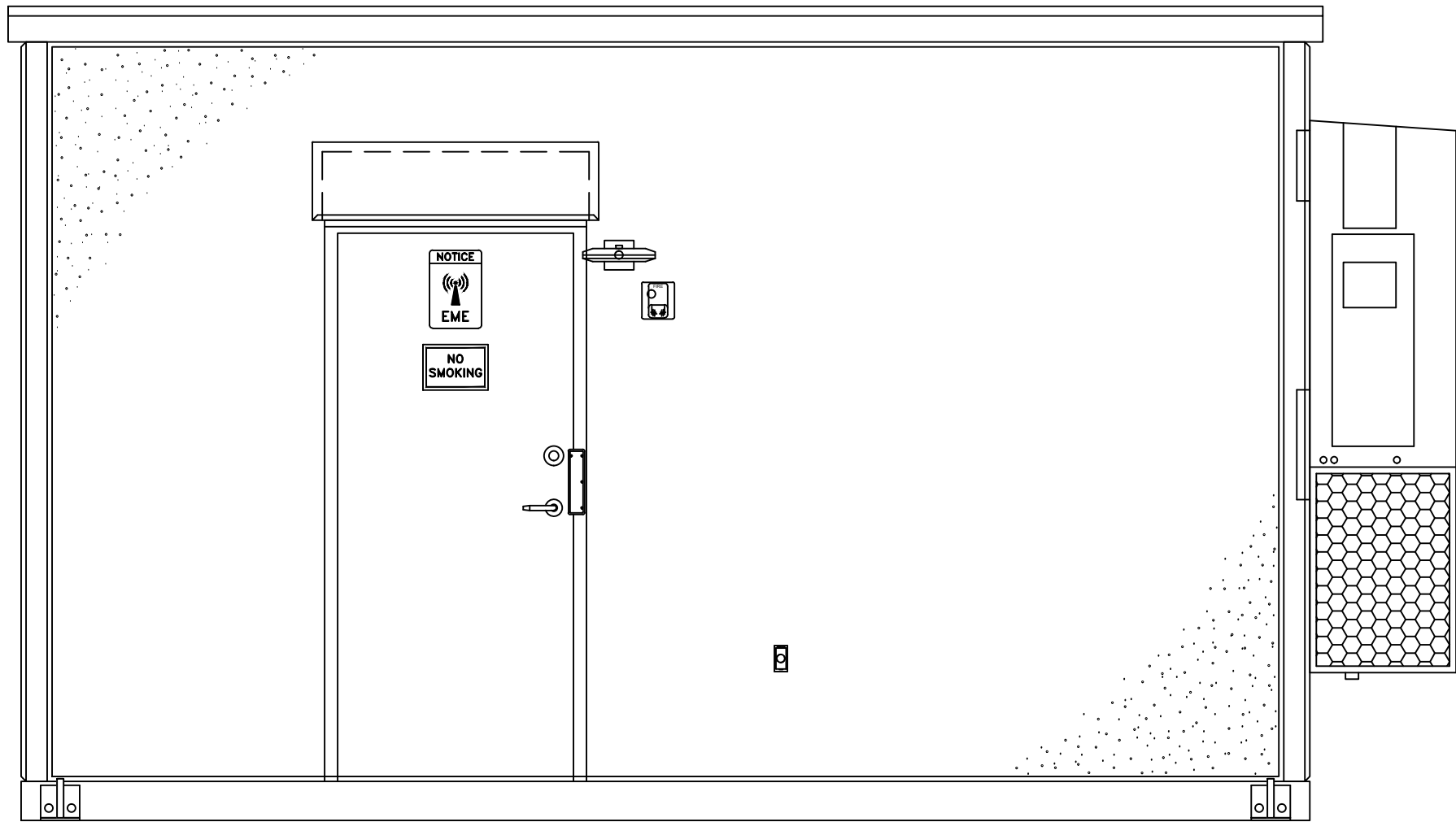
ITEM ID	NO. REQD	FEATURES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
1	1	SECTION A VALMONT S-22 0.375" THK (A572 GR65)	6,946	6,946
2	1	SECTION B VALMONT S-22 0.313" THK (A572 GR65)	4,366	4,366
3	1	SECTION C VALMONT S-22 0.250" THK (A572 GR65)	2,957	2,957
4	1	SECTION D VALMONT S-22 0.188" THK (A572 GR65)	1,034	1,034
5	1	BOTTOM CAGE PLATE	134	134
6	18	1.75" ANCHOR BOLT, LENGTH=6.00' A615 GR75	69	1,229
7	1	BASE PLATE VALMONT S-56 2.500" THK (A572 GR50)	924	924
	1	TOP CAGE PLATE (REMOVE BEFORE SETTING POLE)	134	134
	1	SAFETY CLIMBING CABLE (LENGTH = 149.00')	110	110
	3	GROUNDING LUG	2	6
		GALVANIZING	354	354
	201	STEP AND CLIP (VALMONT STANDARD)	1	201
8	3	HAND HOLE STD (6" x 12")	11	33
9	3	HAND HOLE STD (6" x 12")	11	33
10	1	HAND HOLE STD (6" x 12")	11	11
11	1	HAND HOLE STD (6" x 12") @ 90°	11	11
12	1	HAND HOLE STD (6" x 12")	11	11
13	3	HAND HOLE HVY (9" x 24") @ 0°, 120°, 240°	52	156
	1	POLE CAP	12	12



- NOTES:
- FACTORED REACTIONS FOR FOUNDATION DESIGN
MOMENT = 16,561 IN-KIPS
SHEAR = 14,617 #
VERTICAL = 23,080 #
 - GALVANIZED PER ASTM A-123.
 - DESIGN CRITERIA: TIA-222-G ADDENDUM 2
 - THIS STRUCTURE HAS BEEN DESIGNED FOR THE FOLLOWING LOADING:
EXPOSURE CATEGORY = C
TOPOGRAPHY CATEGORY = 1
STRUCTURE CLASSIFICATION = 3
EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS SS = 0.16
EARTHQUAKE SPECTRAL RESPONSE ACCELERATION AT ONE SECOND S1 = 0.09
EARTHQUAKE SITE CLASS = D
WIND LOAD CASES ARE BASED ON 3 SECOND GUST AND 100 YEAR WIND RETURN PERIOD
A. CASE 1: WIND = 84 MPH WIND SPEED
B. CASE 2: WIND = 40 MPH ICE AND WIND SPEED
DESIGN ICE THICKNESS = 1.00 IN
C. CASE 3: WIND = 60 MPH WIND SPEED
D. CASE 4: SEISMIC
E. EQUIPMENT
- | DESCRIPTION | ABP MTG HT. (FT) | ABP CENTROID HT. (FT) | WITHOUT ICE EPA (FT**2) | ICE WT (LBS) | WITH ICE EPA (FT**2) | WT (LBS) |
|--------------------------------|------------------|-----------------------|-------------------------|--------------|----------------------|----------|
| 1-1/2" X 4' LIGHTNING RODS | 159.00 | 161.00 | 0.20 | 14 | 1.72 | 69 |
| 3-ATC-GC7V120 WHIP ANTENNA | 139.00 | 147.50 | 12.24 | 126 | 34.66 | 1230 |
| 3-SP1 HS6-K MOUNTS | 139.00 | 139.00 | 15.59 | 879 | 48.77 | 1724 |
| 3-ATC-GC7V120 WHIP ANTENNA | 119.00 | 127.50 | 12.24 | 126 | 34.46 | 1207 |
| 3-SP1 HS6-K MOUNTS | 119.00 | 119.00 | 15.59 | 879 | 48.26 | 1710 |
| 1-3' HP DISH MICROWAVE DISH (W | 114.00 | 114.00 | 11.52 | 172 | 16.57 | 528 |
| 1-3' HP DISH MICROWAVE DISH (W | 104.00 | 104.00 | 11.52 | 172 | 16.53 | 524 |
| 1-6' HIGH PERFORMANCE MICROWAV | 104.00 | 104.00 | 38.27 | 372 | 46.06 | 1280 |
- POLE DESIGNED TO ULTIMATE WIND SPEED OF 116 MPH PER ASCE 7-16
 - FEEDLINES ARE PLACED INTERIOR TO THE POLE SHAFT (UNLESS NOTED OTHERWISE)
 - TOTAL POLE HEIGHT IS 160 FT AGL
 - ELEVATIONS ARE MEASURED FROM TOP OF BASE PLATE (APPROX. 1 FT AGL)
 - 18 SIDED SHAFT
 - SHIELDING FACTOR OF KA=0.8 APPLIED
 - DESIGNED NOT TO EXCEED STRUCTURAL CAPACITY OF 50%.
 - ALTHOUGH RARE, VIBRATIONS SEVERE ENOUGH TO CAUSE DAMAGE CAN OCCASIONALLY OCCUR IN STRUCTURES OF ALL TYPES. BECAUSE THEY ARE INFLUENCED BY MANY INTERACTING VARIABLES, VIBRATIONS ARE GENERALLY UNPREDICTABLE. THE USER'S MAINTENANCE PROGRAM SHOULD INCLUDE OBSERVATION FOR EXCESSIVE VIBRATION AND EXAMINATION FOR ANY STRUCTURAL DAMAGE OR BOLT LOOSENING. THE VALMONT WARRANTY SPECIFICALLY EXCLUDES FATIGUE FAILURE OR SIMILAR PHENOMENA RESULTING FROM INDUCED VIBRATION, HARMONIC OSCILLATION OR RESONANCE ASSOCIATED WITH MOVEMENT OF AIR CURRENTS AROUND THE PRODUCT.
 - PRELIMINARY - NOT FOR CONSTRUCTION

SECTION INFORMATION														
ITEM ID	LENGTH	BASE OD	TOP OD	THK	MATL	ORDER		PROJECT	FILE ID	SCALE	DATE	ENGR		
1	48' - 0.00"	40.50"	32.05"	0.375"	A572 65 KSI			G630909	630909-02G	NONE	10/08/24	CS72		
2	44' - 3.00"	33.60"	25.80"	0.313"	A572 65 KSI									
3	48' -11.00"	27.08"	18.47"	0.250"	A572 65 KSI									
4	31' - 1.00"	19.47"	14.00"	0.188"	A572 65 KSI									
						DESCRIPTION								
						MOTOROLA 159.0' POLE, SITE: LEES SUMMIT, MO								

MSB MASTER 11'-8" X 16'-6" SHELTER



TO BE BUILT AT THE: THERMOBOND
ELKHART PLANT
58140 COUNTY ROAD 3
ELKHART, IN 46517
PHONE: (574) 295-1214

SPECIAL CONDITIONS / LIMITATIONS

- THIS STRUCTURE IS NOT DESIGNED FOR INSTALLATION IN A FLOOD HAZARD AREA.
- THIS STRUCTURE IS NOT DESIGNED FOR HUMAN OCCUPANCY EXCEPT FOR SHORT TIME PERIODS FOR EQUIPMENT MAINTENANCE.
- THERMOBOND WILL NOT BE RESPONSIBLE FOR INSTALLATION OF ANY SPRINKLER SYSTEM, WHICH MAY BE REQUIRED BY LOCAL BUILDING OFFICIAL.
- THERMOBOND WILL NOT BE RESPONSIBLE FOR ANY ANTENNA INSTALLATION ASSOCIATED WITH THIS BUILDING.
- THIS BUILDING SHALL NOT BE LOCATED AT A SITE THAT EXCEEDS THE LISTED DESIGN LOADS.
- IF BATTERIES WITH AN ELECTROLYTE CAPACITY OF MORE THAN 50 GAL. ARE TO BE INSTALLED IN THIS BUILDING, ONE OF THE FOLLOWING MUST BE INSTALLED BY OTHERS ON SITE:
 - AN EXHAUST FAN WITH A HYDROGEN LIMIT SWITCH THAT LIMITS THE HYDROGEN TO 1% OF THE TOTAL VOLUME OF THE ROOM.
 - CONTINUOUS VENTILATION SHALL BE PROVIDED AT A RATE NOT LESS THAN 1 CU.FT. PER MINUTE PER SQ.FT. OF FLOOR AREA OF THE ROOM.

DESIGN LOADS

OCCUPANCY TYPE (RISK CAT.): IV
FLOOR LIVE LOAD: 300 psf
ROOF LIVE LOAD: 150 psf

$$Pf = (0.7) * (Ce) * (I) * (Ct) * (Pg)$$

EXPOSURE FACTOR $C_e = 1.0$
IMPORTANCE FACTOR $I_s = 1.20$
THERMAL FACTOR $C_t = 1.0$
GROUND SNOW LOAD $P_g = 60$

WIND DESIGN

WIND SPEED: 150 MPH 3 SECOND GUST
EXPOSURE: D
 $a = 3ft$
 $Gzpi = \pm 0.18$ (PER ASCE 7)

SHIPPING WEIGHT: 49,000 LBS
BUILDING FOOT PRINT: 193 SQ. FT.

DRAWING INDEX

SHEET	DESCRIPTION	REV 1	REV 2	REV 3	REV 4	REV 5	REV 6
C1	COVER						
C2	MATERIALS LIST						
A1	FLOOR PLAN						
A2	ELEVATIONS						
A3	SUGGESTED FOUNDATIONS						
E1	ELECTRICAL SCHEMATIC						
E1.1	ELECTRICAL PANELS						
E1.2	ALARM DIAGRAM						
E2	GROUNDING LAYOUT						
E2.1	GROUNDING DETAILS						
E3	WIRE MOLD						
S4	CROSS SECTION						
T2	INSTALL DETAILS						

REVISIONS

REV	DESCRIPTION	BY	DATE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			

TYPE STATE HERE

OCCUPANT LOAD: 1
CONSTRUCTION TYPE: VB
USE GROUP: S2
CODES:
2006 INTERNATIONAL BUILDING CODE
2006 INTERNATIONAL MECHANICAL CODE
2008 NATIONAL ELECTRICAL CODE
2006 INTERNATIONAL ENERGY CONSERVATION CODE

STAMPS AND SEALS

CUSTOMER APPROVAL

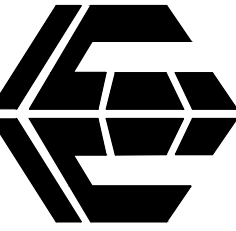
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☐ APPROVED EXCEPT AS NOTED
☐ REVISE AS NOTED AND RESUBMIT
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209 N. Court P.O. Box 445
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605-356-2090
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MOTOROLA MSB
11'-8" X 16'-6" SHELTER

COVER

PROJECT NAME:

Master Drawing

SERIAL NUMBER:

XXXX-X

MODEL #:

TBBXXX

SCALE ~ 24X36:

NONE

SHEET:

C1

DRAWN:

XXXX

REVISED:

XXXX

DRAWN BY:

XXXX

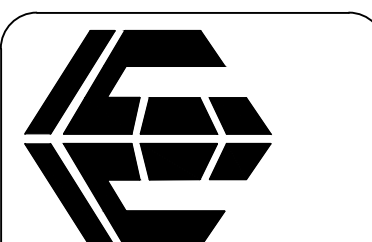
MATERIALS LIST						
ITEM	QTY	UM	DESCRIPTION	MANUFACTURER	MFR PART NUMBER	TBB PART NUMBER NOTE
1	1	EA	3070 FRAME - LHR	MESKER	F SERIES	099-0911 4
1	1	EA	3070 DOOR - STANDARD PREP	MESKER	NP SERIES	099-0894 4
1	1	EA	PAINT 3/0 X 7/0 DOOR/FRAME TELECOM BROWN	GLOBAL	16A	099-0905 7
1	1	EA	MAGNETIC WEATHER STRIPPING (3070)	PEMCO	2815CM	099-0830 7
1	1	EA	36" THRESHOLD	HAGER	4155	099-0896 7
1	1	EA	36" THRESHOLD STOP	HAGER	4815	099-0897 7
1	1	EA	36" NEOPRENE STYLE DOOR SWEEP	DESIGN HARDWARE	SW-R	099-1373 7
1	1	EA	40" DRIP CAP	HAGER	8105	099-0899 7
1	1	EA	NRP-SS HINGES, SET OF 3	HAGER	ECBB1100NRP	099-0895 7
1	1	EA	ANTI-PICK PLATE	DON-JO	ULP-111-630	099-1199 7
1	1	EA	CONSTRUCTION CORE w/KEY MT-1	CENTRAL IN HARDWARE	1C-7DI-STD-626	099-003 7
1	1	EA	DEADBOLT, INTERCHANGEABLE CORE	HAGER	3115 2 3/4"	099-0901 7
1	1	EA	PASSAGE LEVER SET, UNKEYED	HAGER	3410 2 3/4"	099-0900 7
1	1	EA	HYDRAULIC DOOR CLOSER	HAGER	5100	099-0205 7
1	1	EA	HOLD OPEN ARM	HAGER	5961	099-0936 7
1	1	EA	3070 DOOR CANOPY		B4T	199-0347 2,4
2	1	EA	41,500 BTU HVAC W/5KW HEAT	BARD	W42A1-AO5XPXXXJ	899-0095 8
3	1	EA	41,500 BTU HVAC W/5KW HEAT	BARD	W42L1-AO5XPXXXJ	899-0096 8
4	2	EA	SUPPLY GRILL	BARD	SG-5	899-0007 8
5	2	EA	RETURN GRILL	BARD	RG-5	899-0008 8
6	1	EA	LEADLAG	BARD	MC4001A	100-0084 8,12
7	1	EA	HUMIDISTAT	BARD	H600A	100-0115 8,12
8	1	EA	CKT BKR ENCLOSURE, 200A	SQUARE D	Q22200N5	300-0014 8,12
9	1	EA	CKT BKR, 2/200A	SQUARE D	QBL2200	200-0131 8
10	1	EA	200A LOAD CENTER, 1q/3W	SQUARE D	QO140M200	200-0152 8,12
11	1	EA	LOAD CENTER COVER	SQUARE D	QOC40US	200-0164 8
12	1	EA	GROUND BAR	SQUARE D	FK27GTA	200-0706 8
13	1	EA	CKT BKR, 2/125A	SQUARE D	QO2125	200-0070 8
14	2	EA	CKT BKR, 2/60A	SQUARE D	QO260	200-0066 8
15	2	EA	CKT BKR, 2/50A	SQUARE D	QO250	200-0065 8
16	1	EA	CKT BKR, 2/15A	SQUARE D	QO215	200-0023 8
17	2	EA	CKT BKR, 1/30A	SQUARE D	QO130	200-0054 8
18	2	EA	CKT BKR, 1/15A	SQUARE D	QO115	200-0051 8
19	74	EA	CKT BKR, 1/20A	SQUARE D	QO120	200-0052 8
20	2	EA	200A LOAD CENTER, 1q/3W	SQUARE D	QO140M200	200-0152 8,12
21	2	EA	LOAD CENTER COVER	SQUARE D	QOC40US	200-0164 8
22	4	EA	GROUND BAR	SQUARE D	FK18GTA	700-0022 8
23	4	EA	GROUND BAR ISOLATOR KIT	SQUARE D	FKG7AB	200-0197 8
24	1	EA	CKT BKR ENCLOSURE, 100A	SQUARE D	QO2100BNS	200-0196 8,12
25	1	EA	SURGE ARRESTOR, TYPE 2 - MOV, 120/240, 1q/3W	TRANSECTOR	DSAPEXIMAX808MM	100-0088 8,12
26	1	EA	SURGE ARRESTOR, TYPE 1 - SAD/1MOV, 120/240, 1q/3W	TRANSECTOR	DSAPEXIMAX808	100-0087 8,12
27	4	EA	SURGE PROTECTION, 120V MODULE	TRANSECTOR	12R-ICPI20V	100-0181 8
28	5	EA	SURGE PROTECTION, 54V MODULE	TRANSECTOR	FSP 4003 MC	100-0183 8
29	2	EA	SURGE PROTECTION, 12V MODULE	TRANSECTOR	12R-ICPI2VDC	100-0200 8
30	1	EA	ENCLOSURE, 3R, 6 X 6 X 4	B-LINE	664RTSC NK	300-0055 7
31	4	EA	ENCLOSURE, N1, 6 X 6 X 4	B-LINE	664SC NK	300-0216 7
32	2	EA	ENCLOSURE, N1, 12 X 12 X 6	B-LINE	12126SC NK	300-0210 7
33	6	EA	DUPLEX RECEPTACLE	LEVITON	BR20-1	800-114 7,12
34	2	EA	WEATHERPROOF GFCI RECEPTACLE	PASS # SEYMOUR	2095TRWR1	800-0034 8
35	3	EA	SINGLE POLE SWITCH	LEVITON	CS120-2I	800-0058 7
36	4	EA	48" 32W 2-BULB FLUORESCENT	COOPER LIGHTING	APW-GPW232	500-129 7
37	1	EA	EMERGENCY/EXIT LIGHT WITH BATTERY BACK-UP	LITHONIA	LHQ1 S W 3 R	500-0177 7
38	1	EA	LED EXTERIOR LIGHT W/PHOTOCELL	LITHONIA	OLN14	500-0040 2,7
39	1	EA	ENTRY PORT, 4 X 3	MICROFLECT	B1334	199-0085 8
40	1	EA	GROUND BAR KIT	HARGER	EPK121MT	200-0116 8
41	1	EA	BAIT WIRE SYSTEM	HARGER	MOTOGBALARMKT	001-2257 8
42	3	EA	66 BLOCK W/AMPHENOL CONNECTOR	SIEMON	566M2-5W	050-0022 7,12
43	3	EA	AMPHENOL CABLE	ORTRONICS	OR-804025PC050-1GY	752-0080 7
44	150	EA	BRIDGE CLIP	SIEMON	SA1-SS-100	050-0004 7
45	1	EA	DOOR ALARM	SENTROL	1047T	100-0231 7,12
46	1	EA	240V POWER FAIL RELAY W/BASE	DAYTON	GRAINGER# 3XT40/5X852	100-0034 # 100-0001 7,12
47	1	EA	PHOTOELECTRIC DETECTOR WITH RELAY	BRK	7010/RM14	100-0185 # 100-0184 7
48	30	FT	24" CABLE LADDER W/HARDWARE	CENTRAL STEEL FABRICATORS	10024	754-2121 7,13
49	10	FT	6" CABLE LADDER W/HARDWARE	CENTRAL STEEL FABRICATORS	10006	754-2114 7,13
50	1	EA	TELCO BOARD, 3' X 4' X 3/4", GRAY	THERMOBOND		499-001Y 7
51	1	EA	10LB CO2 FIRE EXTINGUISHER	KIDDE	PRO10CDM	399-0051 2,7
52	1	EA	20LB DRY CHEM FIRE EXTINGUISHER	KIDDE	PRO20TCM	399-0067 2,7
53	1	EA	METAL WALL POCKET	SAFCO	21D199	001-2048 7
54	1	EA	EYE WASH	HONEYWELL	GRAINGER# 3ARD6	399-0255 7
55	1	EA	FIRST AID KIT	NORTH	GRAINGER# 4EY92	399-0254 7
56	1	EA	NO SMOKING SIGN	BRADY	GRAINGER# 4TG76	399-0108 7
57	1	EA	ELECTRO EMISSION SIGN	RICHARD TELL ASSOCIATES	TESSCO# 203T9	399-0109 7
58	1	EA	WASTE BASKET	TOUGH GUY	GRAINGER# 4PGN2	399-0199 1,7
59	1	EA	DUST PAN	TOUGH GUY	GRAINGER# 1VAJ7	399-0054 1,7
60	1	EA	BROOM	TOUGH GUY	GRAINGER# 1VAC2	101-0301 1,7
61	1	EA	UTILITY HOLDER	BATTALION	GRAINGER# 4JG66	101-0528 7
62	1	EA	4" WIREMAY, 2FT	B-LINE	4424 G NK	300-0038 7
63	2	EA	4" WIREMAY END CAP	B-LINE	44 E NK	300-0028 7
64	0.1	EA	10FT WIREMOLD	WIREMOLD	ALA4800B-10	001-2327 8
65	2	EA	8FT WIREMOLD	WIREMOLD	ALA4800B-8	001-2327 8
66	6	EA	WIREMOLD END CAP	WIREMOLD	ALA4810B	001-2340 8
67	16	EA	WIREMOLD BLANK COVER	WIREMOLD	ALA-BL	001-2329 8
68	16	EA	WIREMOLD 4 HOLE COVER	WIREMOLD	ALA-BL (SEE E3)	001-2329 8
69	2	EA	WIREMOLD 2 HOLE COVER	WIREMOLD	ALA-BL (SEE E3)	001-2329 8
70	68	EA	WIREMOLD RECEPTACLE	PASS # SEYMOUR	5358	800-0105 7,12
71	1	EA	50 KW GENERATOR, LP	GENERAC	LPV500D	025-0283 8
72	1	EA	200A ATS, 1q/3W, 240V WITH RRP	GENERAC	GTS SERIES	025-0277 # 025-0296 8,12
73	1	EA	20 KVA UPS	LIEBERT	ASADONCYHNN	8
74	1	EA	UPS BYPASS SWITCH	LIEBERT	NMB4N81/202816G1	350-0068 8,12
75						
76						
77						
78						
79						
80						

MATERIALS LIST						
ITEM	QTY	UM	DESCRIPTION	MANUFACTURER	MFR PART NUMBER	TBB PART NUMBER NOTE
81						2,7
82						2,7
83						7
84						7
85						7
86						7
87						7
88						
89						1,7
90						1,7
91						1,7
92						7
93						
94						
95						
96						
97						
98						
99						
100						
101						
102						
103						
104						
105						
106						
107	3	EA	GROUND STRAP BARS			1
108	3	EA	GROUND STRAP COVERS			650-0048 1
109	50	EA	RIVETS			1
110	4	EA	LIFTING LUGS			001-2059 1
111	4	EA	TIE DOWN PLATES			001-104-Telcom 1
112	8	EA	TIE DOWN BOLTS			001-2169 1
113	8	EA	BLACK PLASTIC BASE PLUGS			001-2351 1
114	10	EA	FLOOR TILES			399-0280 1
115	1	EA	TUBE OF BRILLIANT WHITE CAULK			399-0197 1
116	4	EA	TUBES OF BEIGE DYMOMIC CAULK			199-0226 1
117	1	EA	PINT CAN OF TELECOM BROWN PAINT			599-1942 # 001-2220 1
118	1	EA	PINT CAN OF ELASTOMERIC COARSE PAINT			599-1942 # 001-1046 1
119	25	EA	1/8" SHIMS FOR SHELTER SET			001-2206 1
120	25	EA	1/4" SHIMS FOR SHELTER SET			001-2207 1

FIRE SUPPRESSION SYSTEM						
ITEM	QTY	UM	DESCRIPTION	MANUFACTURER	MFR PART NUMBER	TBB PART NUMBER NOTE
121	1	EA	FIRE CONTROL PANEL WITH BATTERIES	FIKE	SHIP PRO	100-0293 8,12
122	1	EA	RELAY MODULE PANEL	FIKE	CRM4	100-0268 8
123	1	EA	MAINTENANCE DISCONNECT SWITCH, 4 POLE	GEMCON	GEM-MAINT	100-0303 7
124	1	EA	BELL, 24VDC	GENTEX	GB6	100-0296 7
125	1	EA	HORN/STROBE, 24VDC	COOPER WHEELOCK	MT-24MCH-AR	100-0297 7
126	1	EA	EXTERIOR STROBE, 24VDC, WITH BOX	COOPER WHEELOCK	RS5NP-2475W-FR	100-0298 7
127	2	EA	DETECTOR BASE PLATE	FIKE	67 1034	100-0295 7
128	2	EA	PHOTOELECTRIC DETECTOR	FIKE	63 1024	100-0294 7
129	1	EA	MANUAL RELEASE	FIKE	10 1638	100-0288 7
130	1	EA	ABORT STATION	FIKE	10 1639	100-0289 7
131	1	EA	INTERIOR WARNING SIGN	BFPE		100-0340 7
132	1	EA	EXTERIOR WARNING SIGN	BFPE		7
133	1	EA	CYLINDER 60LBS, 52LBS FILL, WITH STRAP	FIKE		100-0342 7
134	1	EA	IVO KIT (IVO, IVO5, # 1RM MODULE)			100-0300 7
135	1	EA	DISCHARGE PRESSURE SWITCH - SPDT			100-0304 7
136	1	EA	180" DISCHARGE NOZZLE (BRASS), 1-1/2"			100-0301 7
137	20	FT	PIPE, 150#			
138	2	EA	ELBOW, 90°, 1 1/2", 300#			
139	1	EA	UNION, 1 1/2", 300#			
140	2	EA	NIPPLE, 1 1/2" X CLOSE, 150#			
141						
142						
143						
144						
145						
146						
147						
148						
149						
150						

MATERIAL LIST NOTES:	
1.	SHIP LOOSE
2.	PRE-INSTALL REMOVE FOR SHIPMENT
3.	FABRICATED ITEM
4.	PAINT - TELECOM BROWN
5.	PAINT - TELECOM GRAY
6.	PAINT - COLOR DESIGNATED
7.	OR EQUIVALENT
8.	NO SUBSTITUTIONS ALLOWED
9.	NO PART NUMBER SPECIFIED
10.	MAY BE DELIVERED AT SITE
11.	PROVIDED BY OTHERS
12.	LABEL
13.	QUANTITY ESTIMATED

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MOTOROLA MSB

11'-8" X 16'-6" SHELTER

MATERIALS LIST

PROJECT NAME:

Master Drawing

SERIAL NUMBER:

XXXX-X

MODEL #:

TBBXXXX

SCALE ~ 24X36:

NONE

SHEET:

C2

DRAWN:

XXXX

REVISED:

XXXX

DRAWN BY:

XXXX

STAMPS AND SEALS

CUSTOMER APPROVAL

☐ APPROVED

☐ APPROVED EXCEPT AS NOTED

☐ REVISE AS NOTED AND RESUBMIT

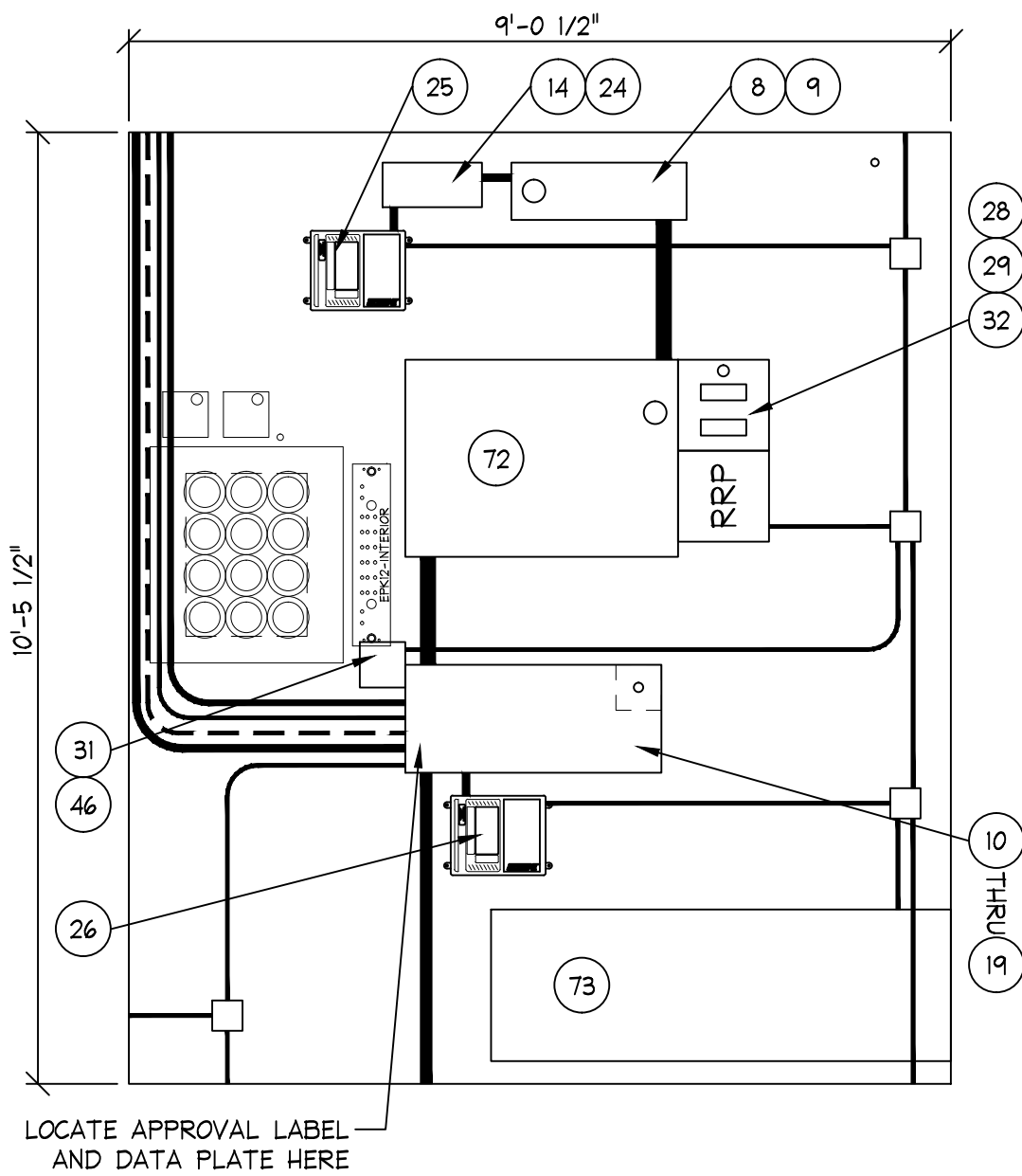
☐ SEE LETTER OF TRANSMITTAL

APPROVED BY _____

DATE _____

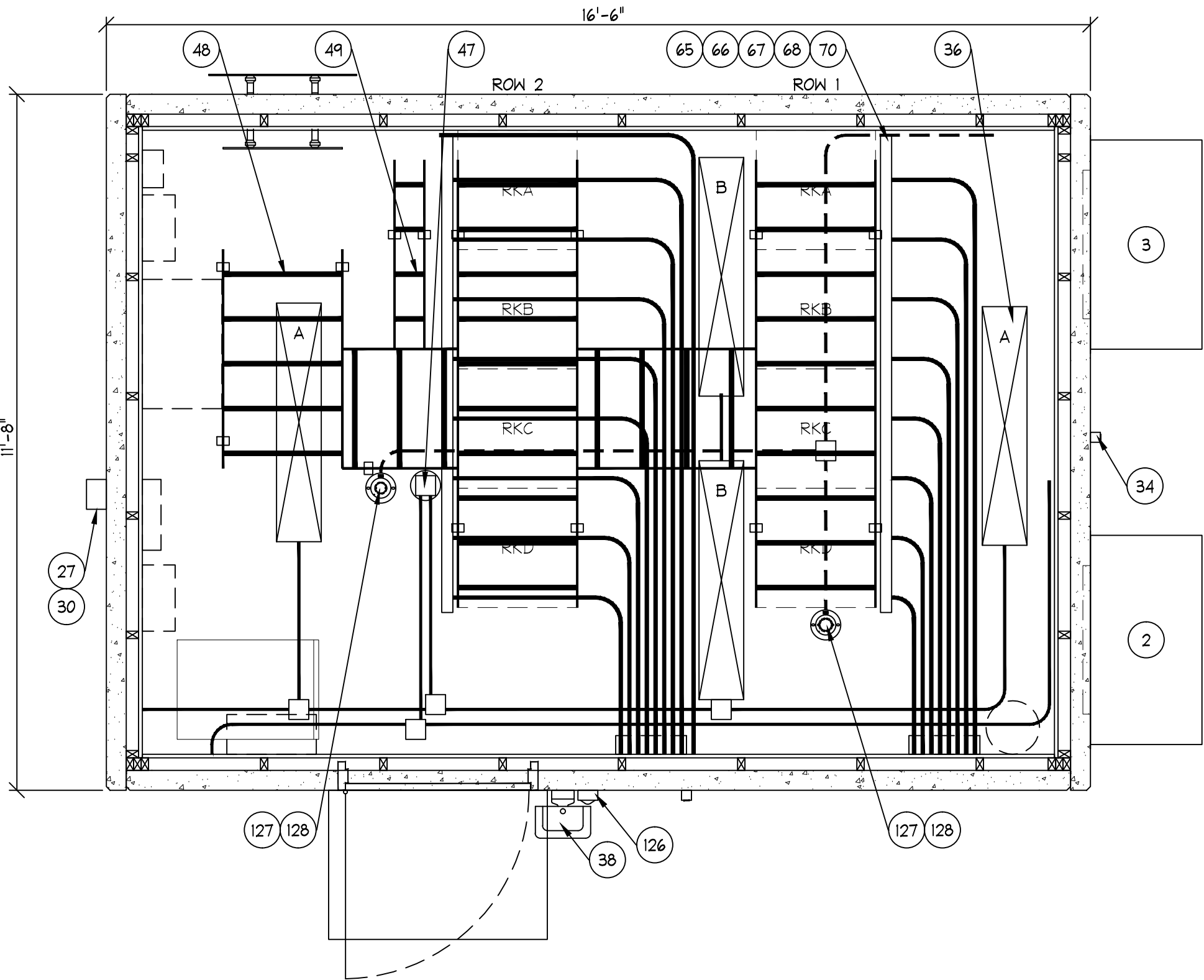
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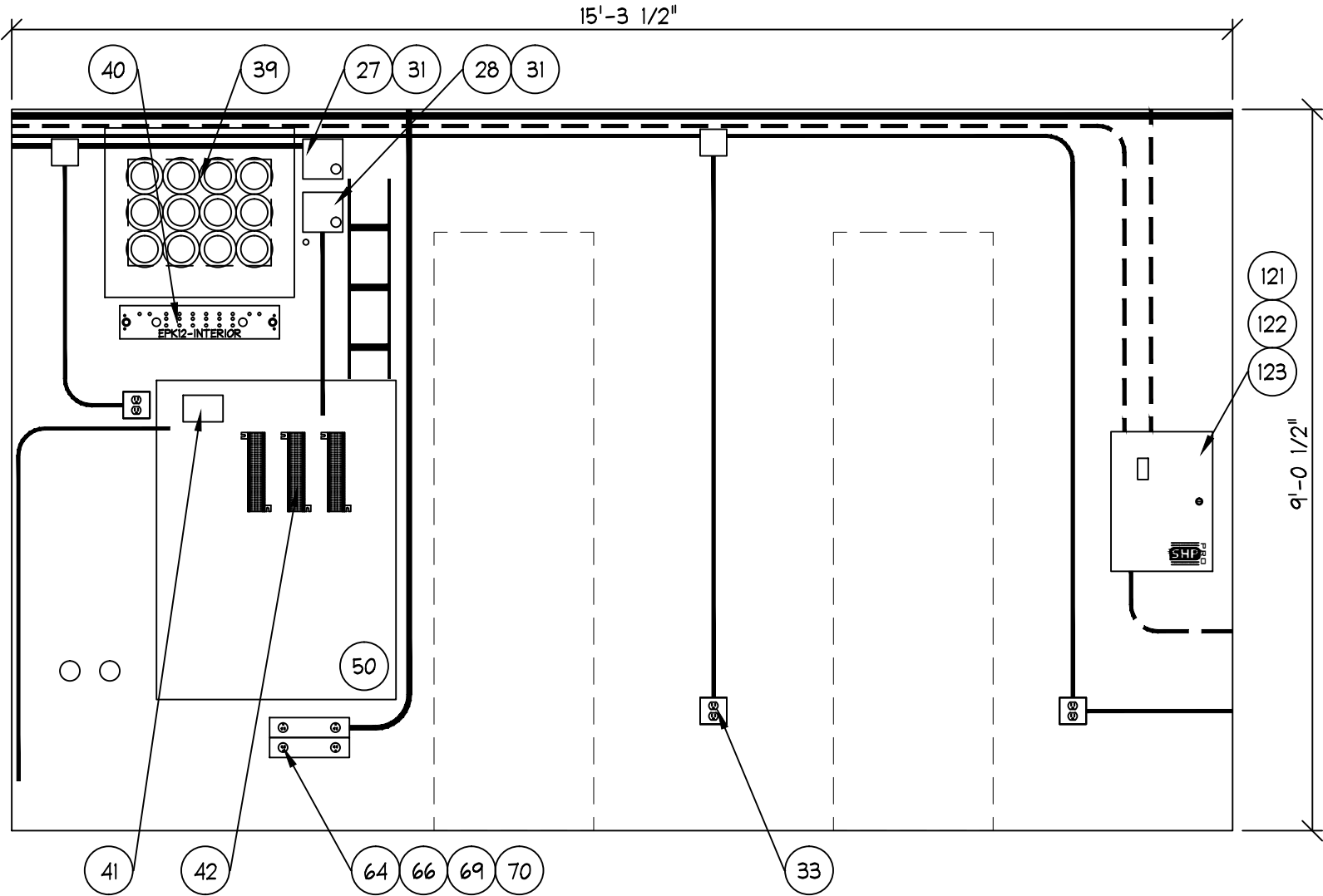


WALL D

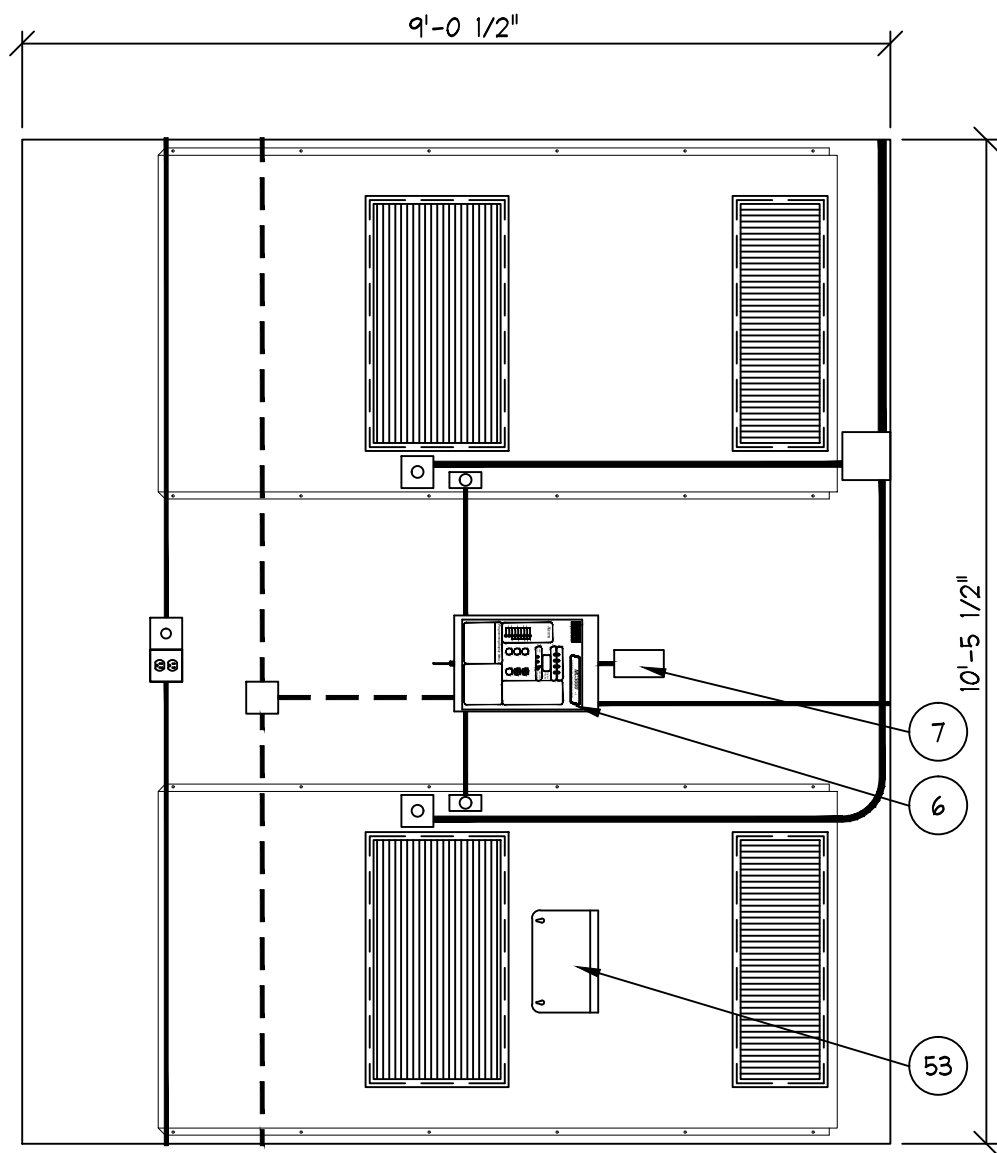
OPTIONAL PORT LOCATION



WALL A

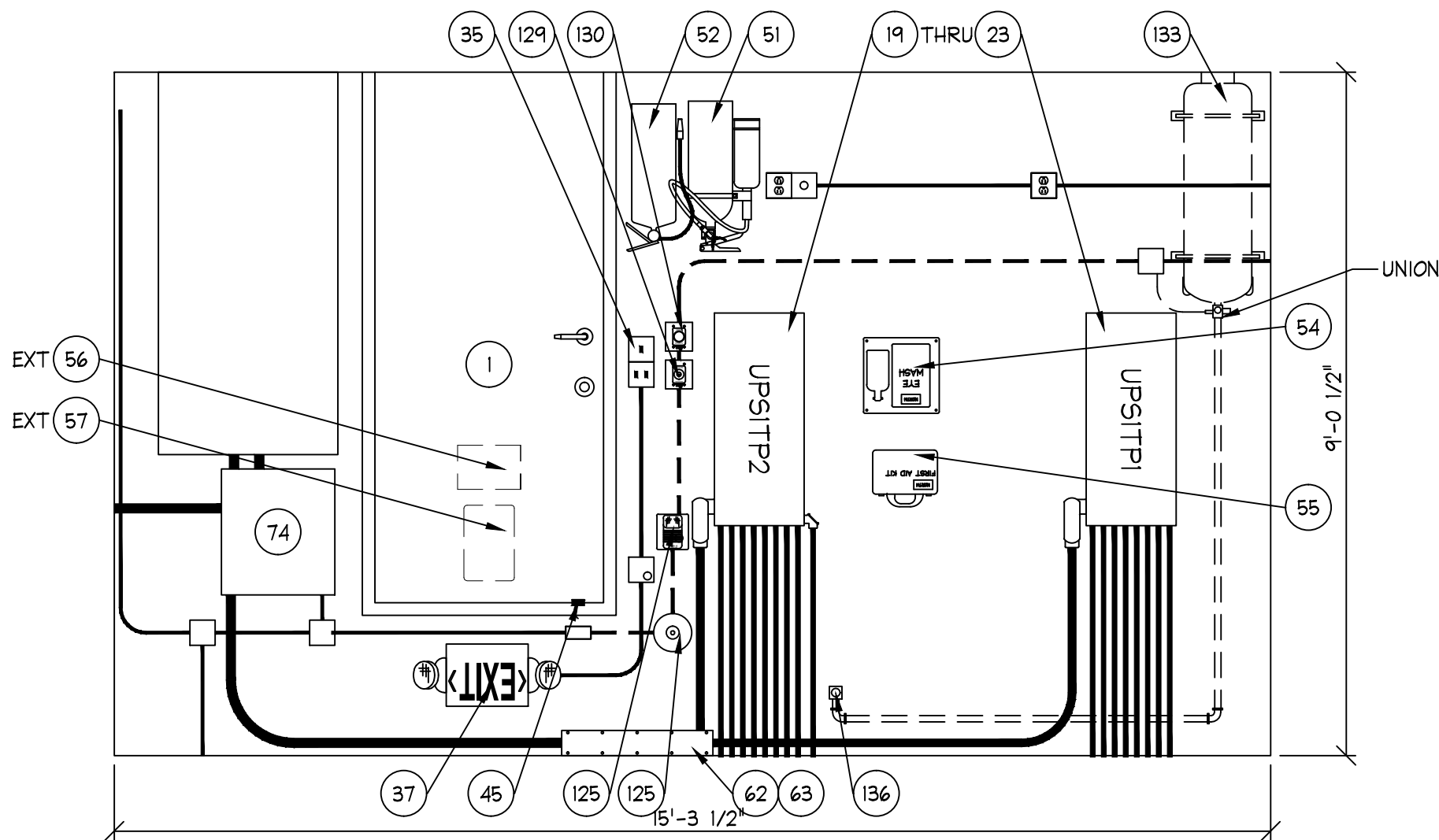


WALL C



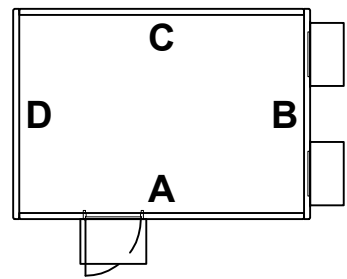
WALL B

- COMMERCIAL POWER:**
- 120/240VAC, 200AMP SINGLE PHASE SERVICE.
- CONDUIT RUNS:**
1. ALL CONDUIT RUNS ARE TO BE 1/2" EMT UNLESS STATED OTHERWISE.
 2. ALL CONDUIT RUNS TERMINATING AT SERVICE ENTRANCE EQUIPMENT SHALL CONTAIN BONDED BUSHINGS.
 3. WIREWAYS CARRYING 3 OR MORE CURRENT CARRYING CONDUCTORS SHALL BE DERATED PER TABLE 310-15(B)(3)(a) OF APPLICABLE EDITION OF THE NEC.
 4. CONDUIT FILL IS BASED ON CHAPTER 9, APPENDIX C OF THE NEC.
- CABLE LADDER:**
1. CABLE LADDER IS TO BE 8'-0" A.F.F. AND INSTALLED IN ACCORDANCE WITH ARTICLE 392 OF THE NEC LEVEL TO WITHIN 1/8" IN 10' OR SIMILAR.
- GROUNDING:**
1. ALL GROUNDING EXCEPT FOR CABLE LADDER TO CONFORM TO ARTICLE 250 OF THE NEC.
 2. CABLE LADDER GROUNDING TO CONFORM TO ARTICLE 392.60 OF THE NEC.
- GENERAL NOTES:**
1. LABEL FACE OF ALL ELECTRICAL EQUIPMENT WITH PHENOLIC LABELS, BLACK, WITH WHITE LETTERS, EXTERNAL BYPASS, TI, SDI, & LAI. EXCEPTION SHALL BE ALL UPS EQUIPMENT SHALL HAVE PHENOLIC LABELS RED WITH WHITE LETTERS, EX: UPSITPI, UPSI, WIREMOLD RECEPTACLES.
 2. CONNECT ALARMS TO UPS WITH A DB25 PIN CONNECTOR.
 3. CONNECT CIRCUITS PPI-22 & PPI-24 TO THE EXTERIOR SURGE PROTECTOR AND LABEL.
 4. COIL AND TAG 50' OF ALARM WIRE FOR GENERATOR ALARMS.
 5. CONNECT GENERATOR ALARMS TO THE DSWP03 SURGE PROTECTION MODULES.
 6. COIL AND TAG 12' OF #10 WIRE FOR CIRCUITS, PPI-2 & 4.
 7. COIL 12" OF ALARM WIRE FOR TOWER LIGHT ALARM, TBI-25 & 26.
 8. COIL 50' OF #18 AWG FOR GENERATOR CONTROL WIRE.



FLOOR PLAN

SCALE: 1/2"=1'-0"



STAMPS AND SEALS

CUSTOMER APPROVAL

☐ APPROVED
☐ APPROVED EXCEPT AS NOTED
☐ REVISE AS NOTED AND RESUBMIT
☐ SEE LETTER OF TRANSMITTAL

APPROVED BY _____
DATE _____

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ALL CONDUIT IS APPROXIMATE AND MAY NOT REFLECT ACTUAL RUNS.

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209 N. Court P.O. Box 445
Elk Point, SD 57025
605-356-2090

**MOTOROLA MSB
11'-8" X 16'-6" SHELTER**

FLOOR PLAN

PROJECT NAME: **Master Drawing**

SERIAL NUMBER: **XXXX-X**

MODEL #: TBBXXX
SCALE ~ 24X36:
SHEET: 1/2" = 1'-0"

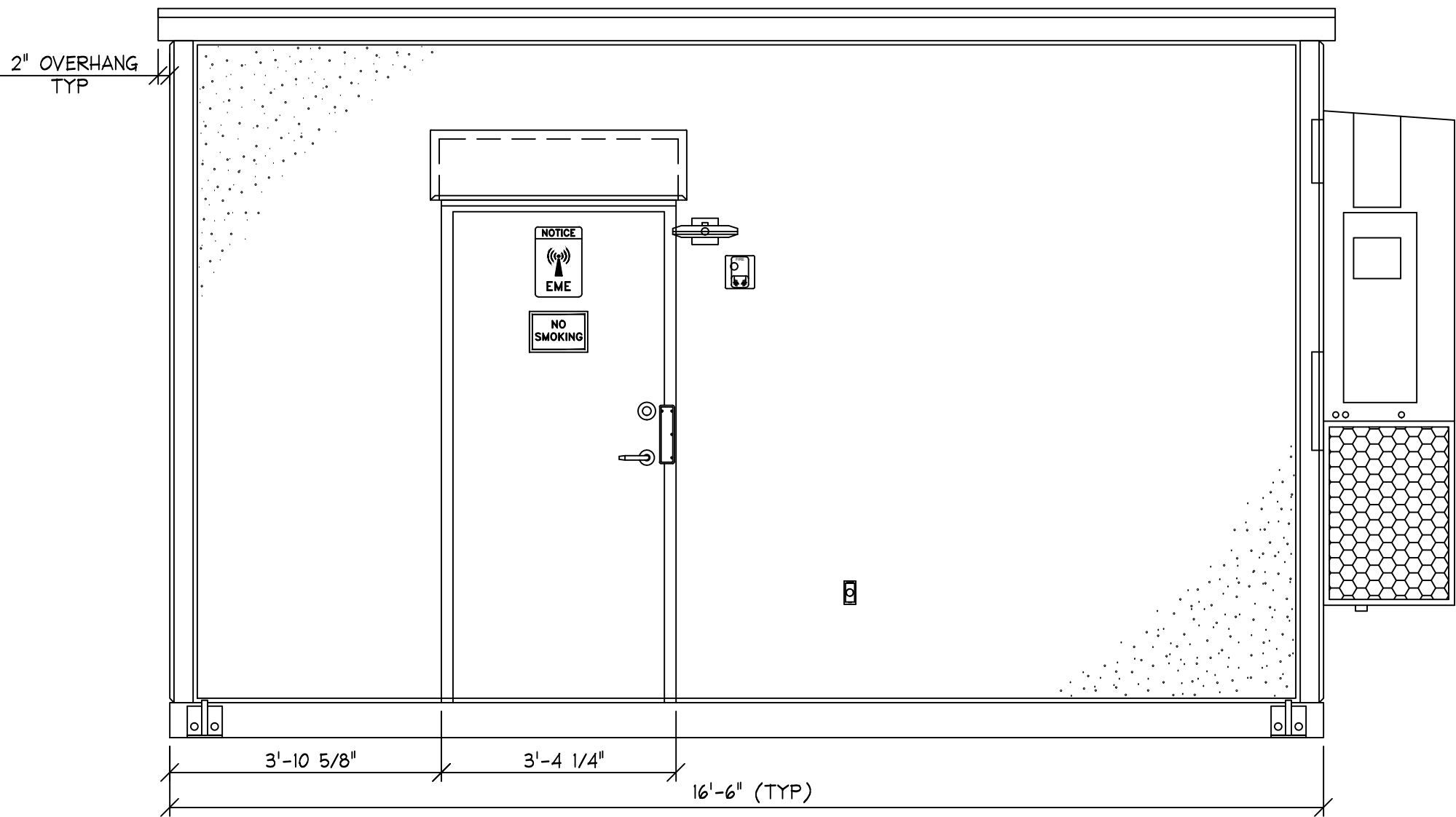
DRAWN BY: XXXX
REVISED: XXXX
DRAWN BY: XXXX

A1

EXTERIOR FINISH SCHEDULE			
ITEM	SURFACE	FINISH	PAINT COLOR
ROOF	TROWELED SMOOTH	SEALED, ELASTOMERIC COARSE PAINT	TELECOM BROWN
WALLS	EXPOSED WASHED AGGREGATE	OKITE STAIN (2 COATS)	-
DOORS	STEEL, RATED	PAINT	TELECOM BROWN
JOINTS	AS FINISHED	SEALED PER DETAILS SHEET	TELECOM BROWN

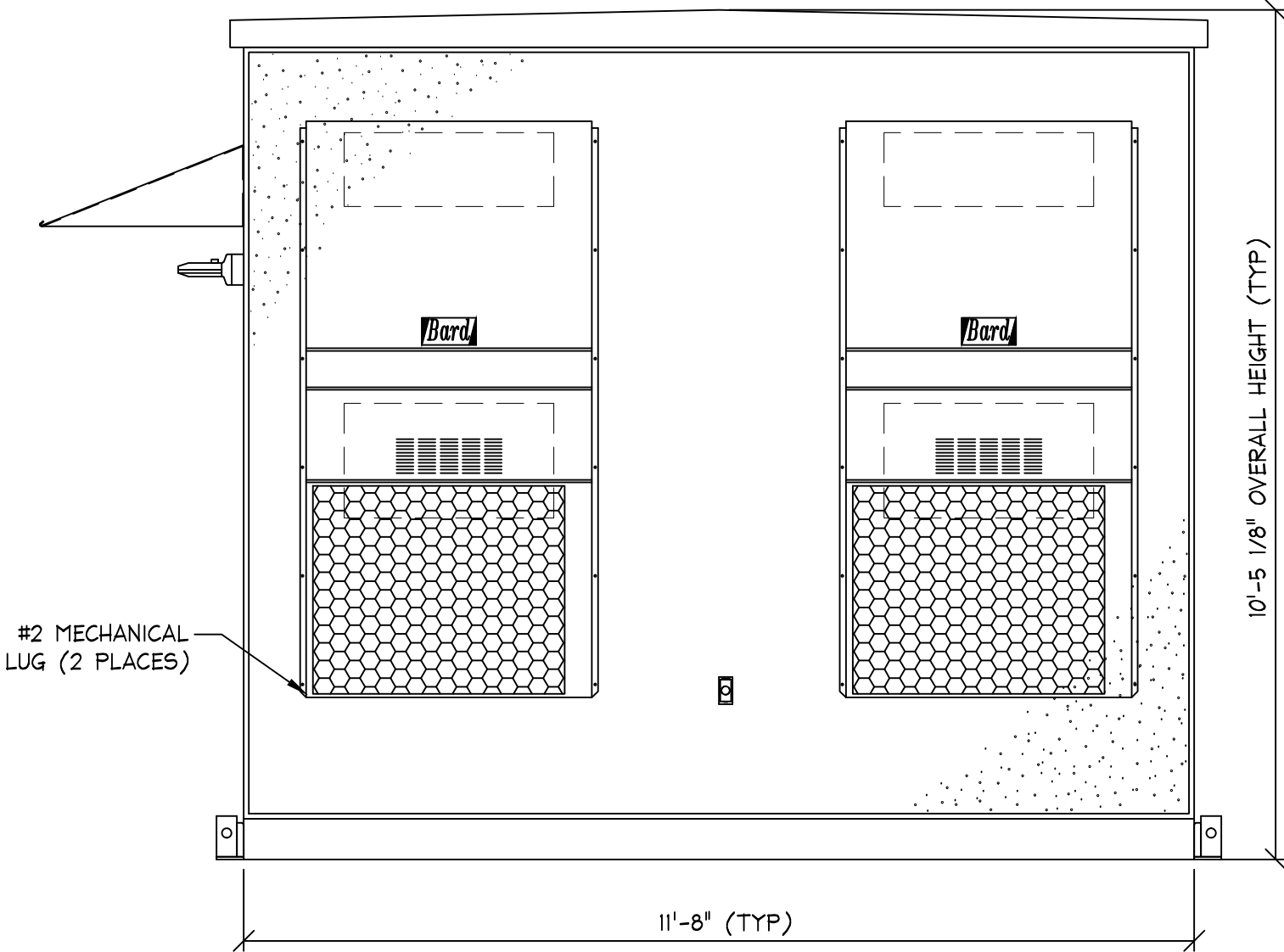
ELEVATION NOTES:

- SEE MATERIALS LIST FOR SHIPPED LOOSE ITEMS.
- SEE MATERIALS LIST FOR DOOR HARDWARE.



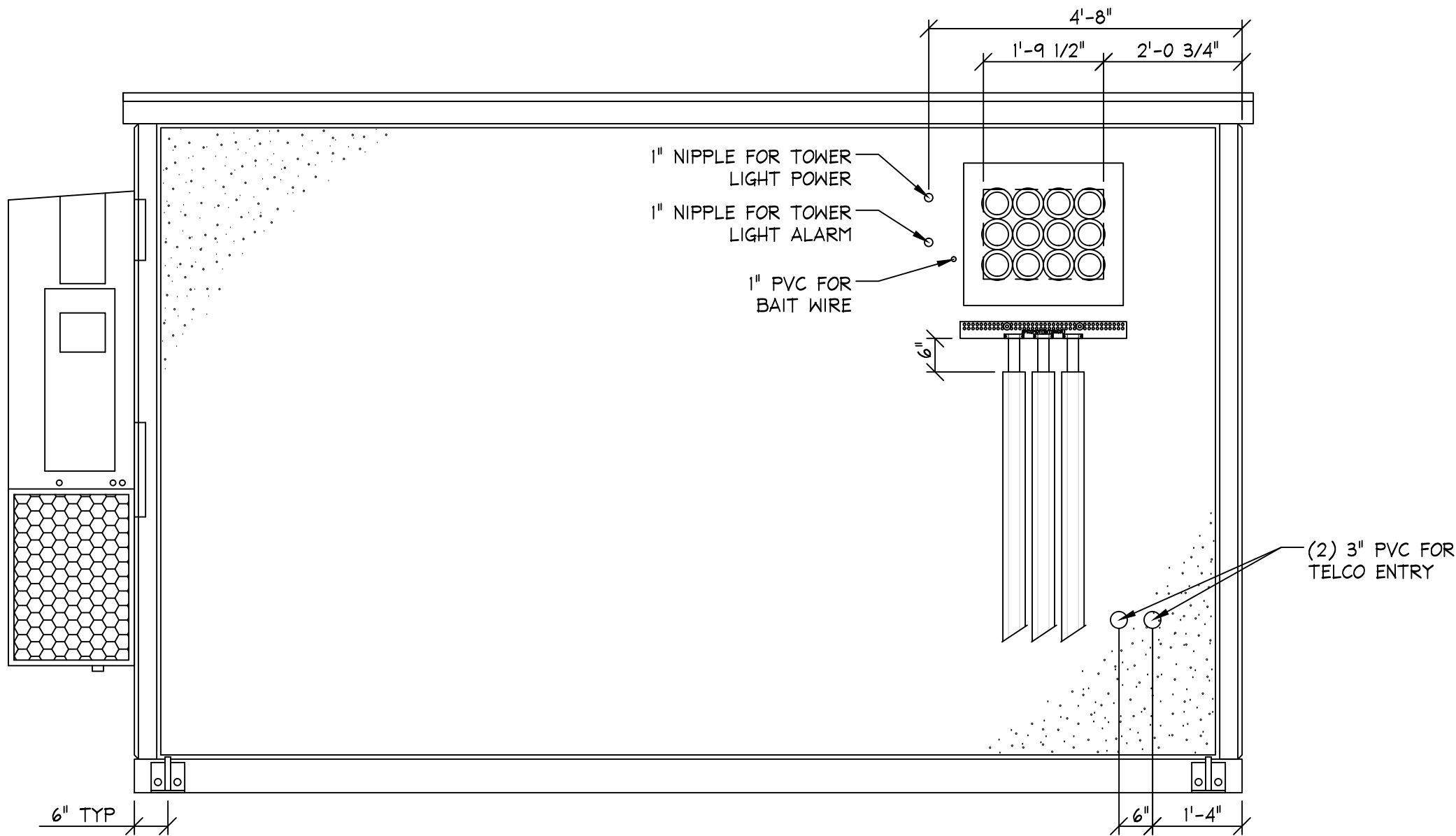
FRONT ELEVATION (WALL A)

SCALE: NONE



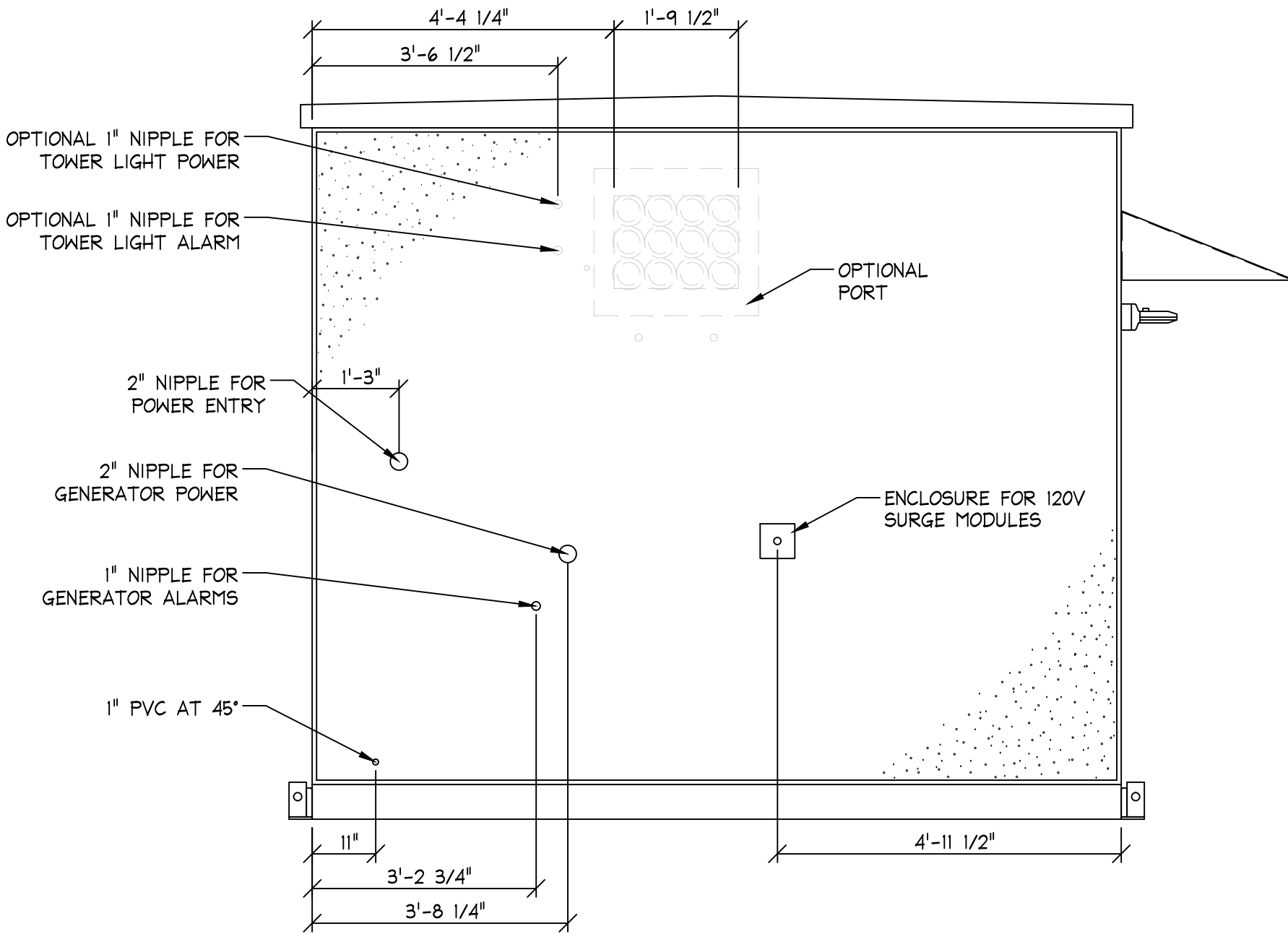
RIGHT ELEVATION (WALL B)

SCALE: NONE



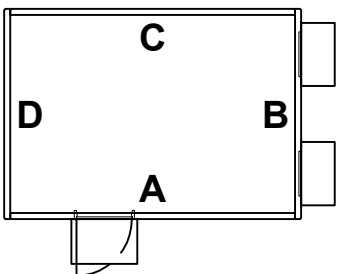
REAR ELEVATION (WALL C)

SCALE: NONE

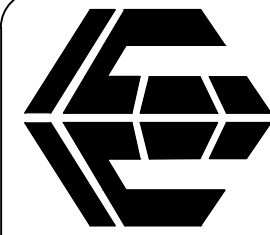


LEFT ELEVATION (WALL D)

SCALE: NONE



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**MOTOROLA MSB
11'-8" X 16'-6" SHELTER**

ELEVATIONS

PROJECT NAME: **Master Drawing**
SERIAL NUMBER: **XXXX-X**

MODEL #: **TBBXXX**
SCALE: **1/2" = 1'-0"**
SHEET: **A2**

STAMPS AND SEALS

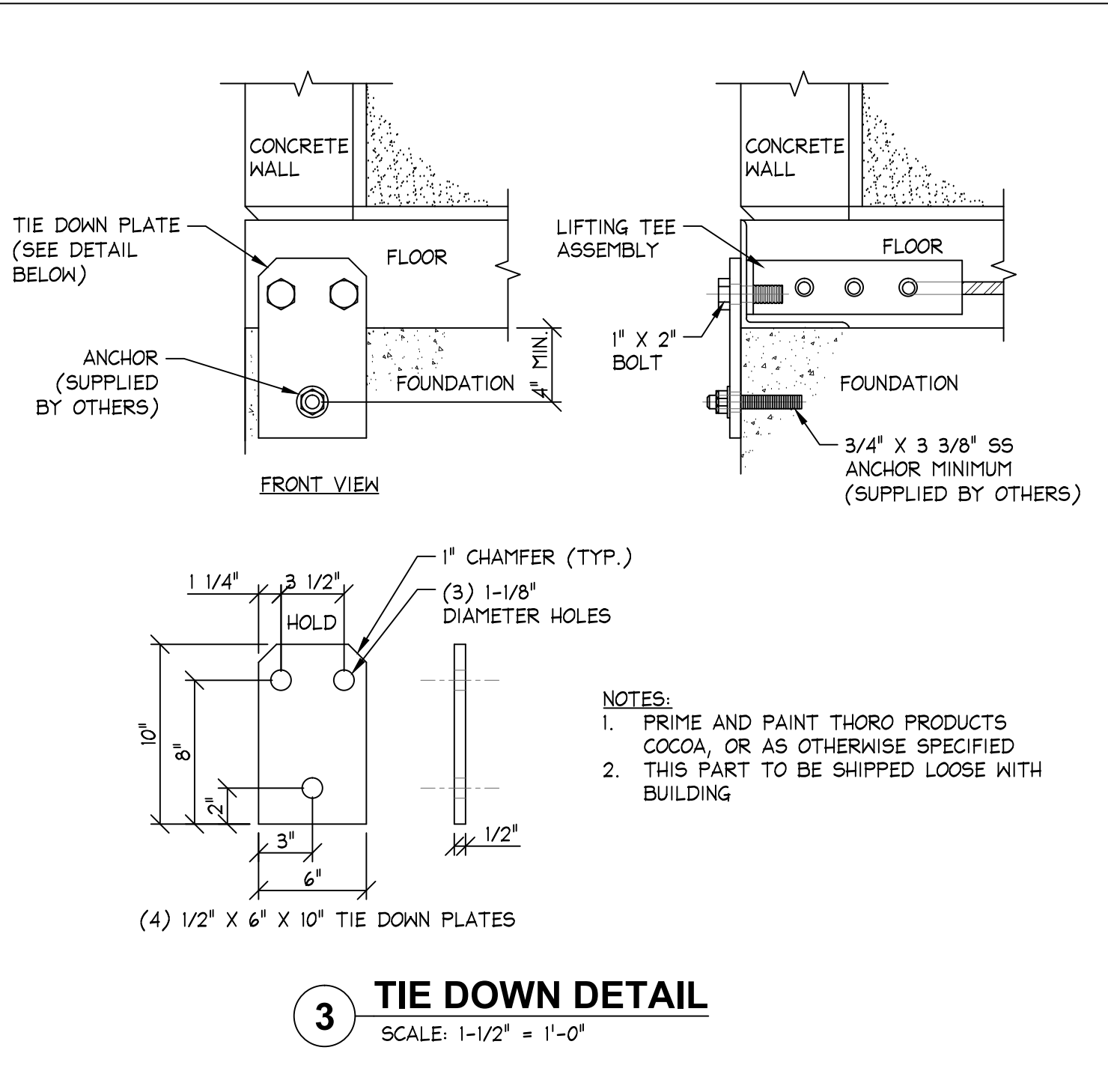
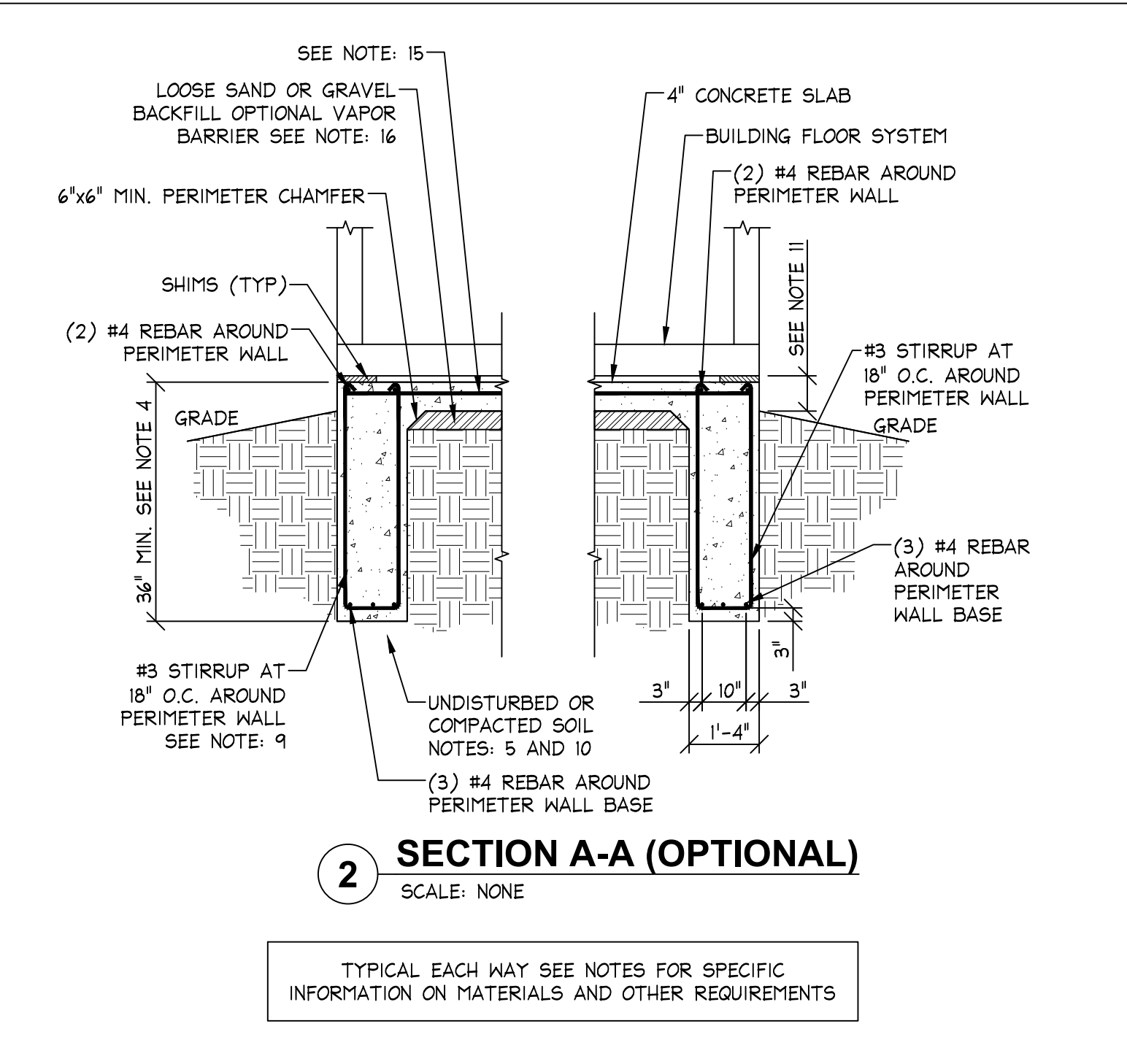
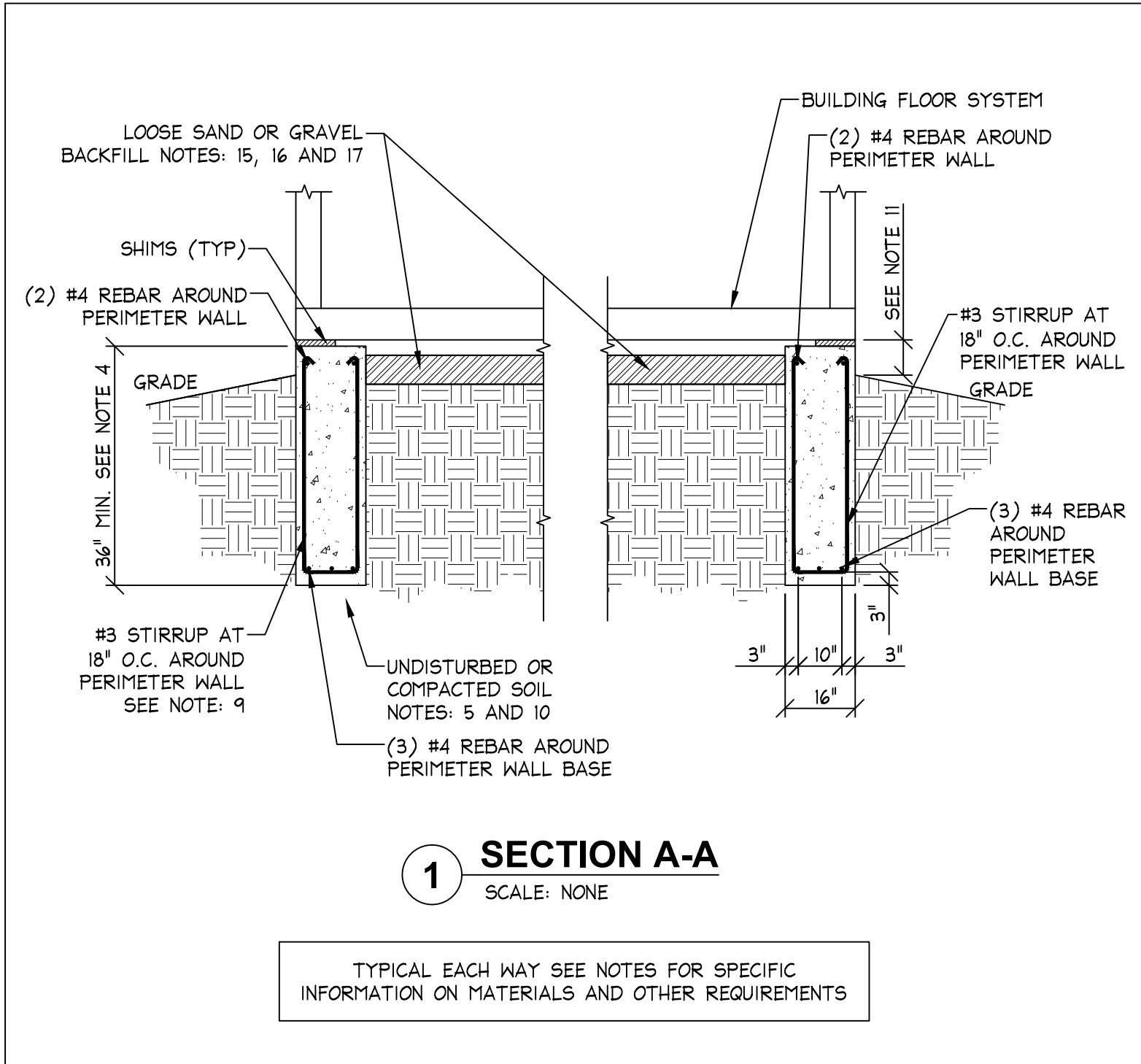
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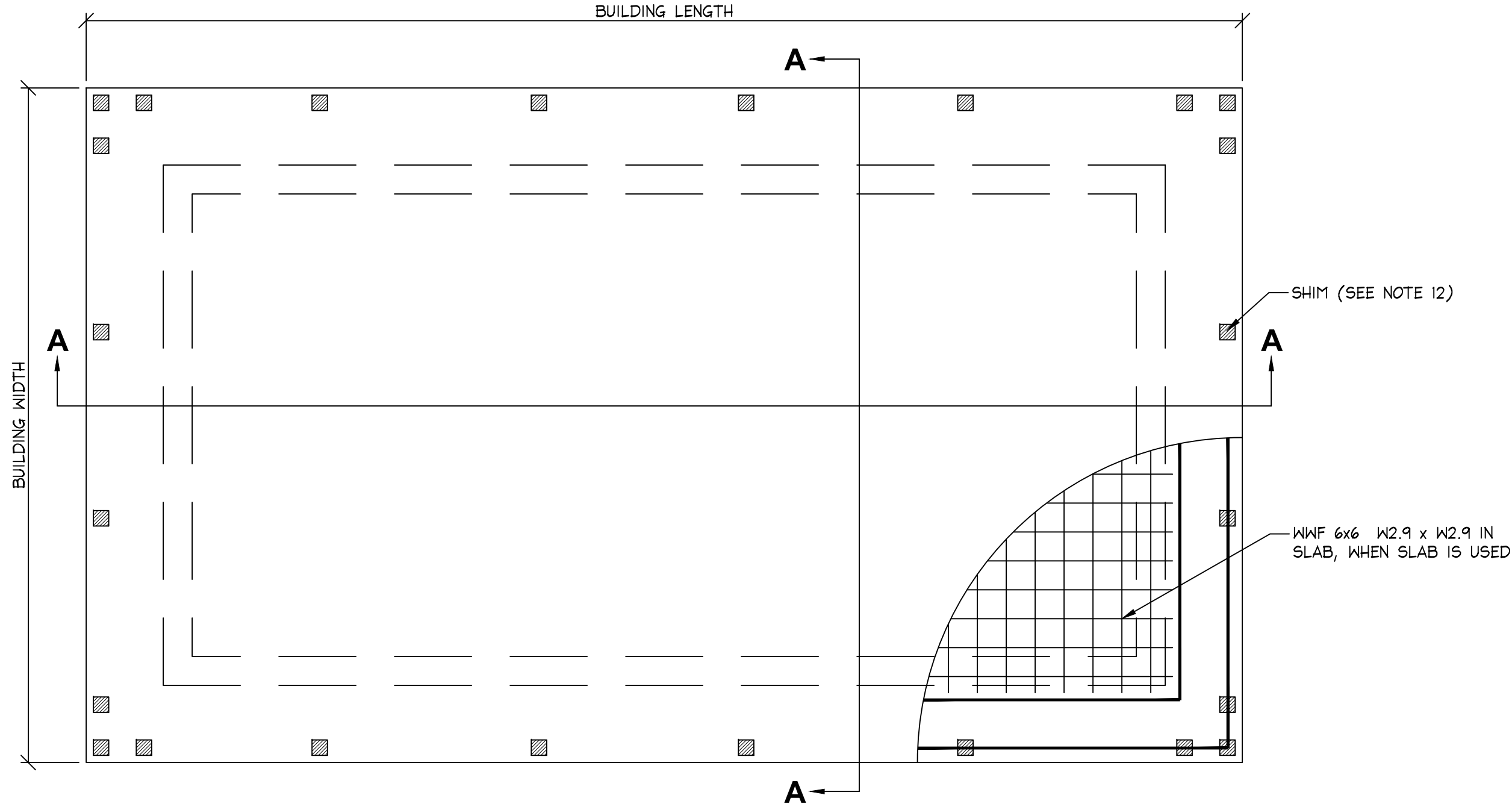


THIS DRAWING IS NOT FOR CONSTRUCTION SEE NOTE: 13

- FOUNDATION NOTES:**
- ALL FOUNDATION WORK BY OTHERS AND SUBJECT TO LOCAL INSPECTION AND APPROVAL.
 - FOUNDATION SURFACE SHALL BE LEVEL TO WITHIN +/- 1/8" PER 10' LINEAL FEET IN ANY DIRECTION.
 - FOUNDATION SHALL BE SQUARE TO WITHIN +/- 1/4".
 - BASE FOUNDATION WALL FOOTING MUST BE ESTABLISHED A MIN. OF 6" BELOW FROST LINE AND ON UNDISTURBED SOIL.
 - SOIL BEARING CAPACITY SHALL NOT BE LESS THAN 3000 PSF.
 - CONCRETE COMPRESSIVE STRENGTH SHALL NOT BE LESS THAN 3000 PSI, @ 28 DAYS.
 - REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, LATEST REVISION.
 - CONCRETE MIX DESIGN, BATCHING AND CONSTRUCTION PRACTICES SHALL CONFORM TO ACI 318, ACI 305R, ACI 306R LATEST REVISIONS.
 - DETAILING, FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL COMPLY WITH ACI 315, ACI 318, LATEST REVISIONS.
 - COMPACTION REQUIREMENTS TO BE DETERMINED BY ENGINEERING ANALYSIS OF SITE SPECIFIC DATA.
 - TIE DOWN PLATES, IF USED, MUST BE ENTIRELY ABOVE GRADE.
 - SHELTER MUST BE SHIMMED AT LOW SPOTS OF FOUNDATION, BUILDING TO HAVE FULL BEARING ON FOUNDATION.
 - THIS INFORMATION IS PROVIDED FOR REFERENCE ONLY. FINAL DESIGN BASED ON SITE SPECIFIC DATA IS THE RESPONSIBILITY OF THE SITE CONTRACTOR.
 - PROVIDE PROPER DRAINAGE AWAY FROM FOUNDATION AT GRADE.
 - SLAB REINFORCEMENT TO BE LOCATED IN UPPER THIRD OF SLAB.
 - VAPOR BARRIER 12 MIL TO 20 MIL.
 - BACKFILL DEPTH REQUIREMENTS TO BE DETERMINED BY ENGINEERING ANALYSIS OF SITE SPECIFIC DATA (4" MIN.).

- FOUNDATION LOADS:**
- DEAD LOAD: 1485 PLF
 - LIVE LOAD: 2700 PLF

THIS DRAWING IS NOT FOR CONSTRUCTION
SEE NOTE: 13



STAMPS AND SEALS			
CUSTOMER APPROVAL			
<input type="checkbox"/> APPROVED <input type="checkbox"/> APPROVED EXCEPT AS NOTED <input type="checkbox"/> REVISE AS NOTED AND RESUBMIT <input type="checkbox"/> SEE LETTER OF TRANSMITTAL			
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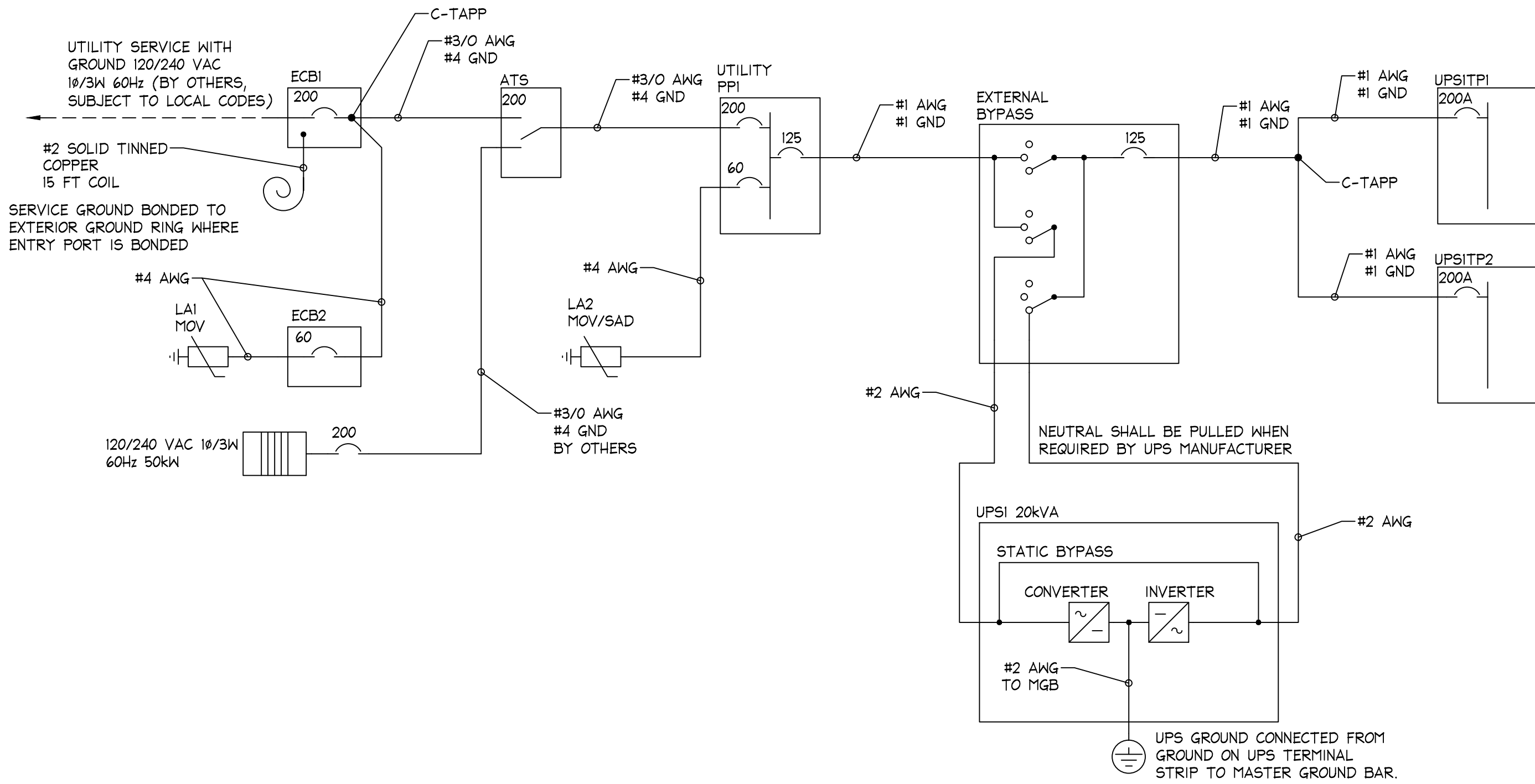
**MOTOROLA MSB
11'-8" X 16'-6" SHELTER**

SUGGESTED FOUNDATIONS

PROJECT NAME: **Master Drawing**

SERIAL NUMBER: **XXXXX-X**

MODEL #:	TBBXXXX	DRAWN:	XXXX
SCALE:	~ 24X36:	REVISED:	XXXX
SHEET:	NONE	DRAWN BY:	XXXX
			A3



ONE-LINE WIRING DIAGRAM
SCALE: NONE

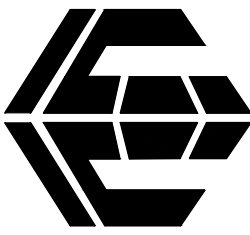
ONE-LINE DIAGRAM NOTES:

1. ALL GROUNDING TO CONFORM TO ARTICLE 250 OF THE NEC
2. WIREWAYS CARRYING 3 OR MORE CURRENT CARRYING CONDUCTORS SHALL BE DERATED PER TABLE 310-15(B)(3)(a) OF THE APPLICABLE EDITION OF THE NEC
3. CONDUIT FILL IS BASED ON CHAPTER 9, APPENDIX C OF THE NEC
4. INCLUDE THE NEUTRAL TO GROUND BOND SCREW TO BE DONE ON SITE BY OTHERS.

SCHEMATIC LEGEND

	LUGGED LOAD CENTER		ON SITE BY OTHERS
	LOAD CENTER WITH BREAKER		ELECTRICAL EQUIPMENT
	TRANSFER SWITCH		
	GENERATOR		
	SURGE ARRESTER		
	PIG TAIL GROUND		
	3 POSITION SWITCH		
	CIRCUIT BREAKER		
	FUSE		
	INVERTER		
	CONVERTER		
	GROUND		
	CONNECTION		

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**MOTOROLA MSB
11'-8" X 16'-6" SHELTER**

ELECTRICAL SCHEMATICS

PROJECT NAME:

Master Drawing

SERIAL NUMBER:

XXXX-X

MODEL #:

TBBXXXX

SCALE ~ 24/36:

NONE

SHEET:

E1

DRAWN:

XXXX

REVISED:

XXXX

DRAWN BY:

XXXX

STAMPS AND SEALS

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PP1 200A, 120/240VAC, 1ϕ/3W, 60Hz, M.BKR																								
LOAD	VOLT AMPS		WIRE		BREAKER		BREAKER WIRE		VOLT AMPS		LOAD													
	A	B			P	TRIP			A	B														
UPSI FEED	8400				1	2	125	1			2	30	1	10	250									TOWER LIGHT
		8400						3			4	30	1	10		250								TOWER LIGHT
HVAC #1	3300				5	2	50	5			6													
		3300			7			7			8	50	2	6	3300		3300							HVAC #2
FIRE SUPPRESSION	120				9	1	20	9			10	20	1	12	180									BAIT WIRE
SURGE ARRESTOR		60			11	2	60	11			12													BLANK
LIGHTS INT & EXT		630			13	1	20	13			14	15	1											SPARE
					15			15			16													BLANK
POWER FAIL	120				17	2	15	17			18	20	1	12	900									RECEPTACLES
		120			19			19			20	20	1	12		360								RECEPTACLE GFCI
SMOKE DETECTOR	120				21	1	15	21			22	20	1	12	120									BLOCK HEATER ***
BLANK					23			23			24	20	1	12		120								BATT. CHARGER ***
BLANK					25			25			26													BLANK
BLANK					27			27			28													BLANK
BLANK					29			29			30													BLANK
BLANK					31			31			32													BLANK
BLANK					33			33			34													BLANK
BLANK					35			35			36													BLANK
BLANK					37			37			38													BLANK
BLANK					39			39			40													BLANK
VA PER PHASE	12120	12510														4750	4030							VA PER PHASE
																141	138							TOTAL VA PER PHASE
																	33.4							AMPS PER PHASE
																	141							TOTAL KVA
																								MAX AMPS PER PHASE
* CALCULATED AT 125% FOR CONTINUOUS LOAD																								
** CONNECTION BY OTHERS																								
*** GROUND FAULT PROTECTION BY OTHERS AS REQUIRED																								
CKT #9 WILL BECOME A SPARE WHEN NO FIRE SUPPRESSION OPTION IS TAKEN																								

UPS1TP1 200A, 120/240VAC, 1ϕ/3W, 60Hz, M.BKR																								
LOAD	VOLT AMPS		WIRE		BREAKER		BREAKER WIRE		VOLT AMPS		LOAD													
	A	B			P	TRIP			A	B														
ROW 1 RECEPT #1	180				12	1	20	1			2	20	1	12	180									ROW 1 RECEPT #2
ROW 1 RECEPT #3					12	1	20	3			4	20	1	12		180								ROW 1 RECEPT #4
ROW 1 RECEPT #5	180				12	1	20	5			6	20	1	12	180									ROW 1 RECEPT #6
ROW 1 RECEPT #7					12	1	20	7			8	20	1	12		180								ROW 1 RECEPT #8
ROW 1 RECEPT #9	180				12	1	20	9			10	20	1	12	180									ROW 1 RECEPT #10
ROW 1 RECEPT #11					12	1	20	11			12	20	1	12		180								ROW 1 RECEPT #12
ROW 1 RECEPT #13	180				12	1	20	13			14	20	1	12	180									ROW 1 RECEPT #14
ROW 1 RECEPT #15					12	1	20	15			16	20	1	12		180								ROW 1 RECEPT #16
ROW 1 RECEPT #17	180				12	1	20	17			18	20	1	12	180									ROW 1 RECEPT #18
ROW 1 RECEPT #19					12	1	20	19			20	20	1	12		180								ROW 1 RECEPT #20
ROW 1 RECEPT #21	180				12	1	20	21			22	20	1	12	180									ROW 1 RECEPT #22
ROW 1 RECEPT #23					12	1	20	23			24	20	1	12		180								ROW 1 RECEPT #24
ROW 1 RECEPT #25	180				12	1	20	25			26	20	1	12	180									ROW 1 RECEPT #26
ROW 1 RECEPT #27					12	1	20	27			28	20	1	12		180								ROW 1 RECEPT #28
ROW 1 RECEPT #29	180				12	1	20	29			30	20	1	12	180									ROW 1 RECEPT #30
ROW 1 RECEPT #31					12	1	20	31			32	20	1	12		180								ROW 1 RECEPT #32
BLANK								33			34													BLANK
BLANK								35			36													BLANK
BLANK								37			38													BLANK
BLANK								39			40													BLANK
VA PER PHASE	1440	1440														1440	1440							VA PER PHASE
																2880	2880							TOTAL VA PER PHASE
																24	24							AMPS PER PHASE
																	5.8							TOTAL KVA
																	24							MAX AMPS PER PHASE

UPS1TP2 200A, 120/240VAC, 1ϕ/3W, 60Hz, M.BKR																								
LOAD	VOLT AMPS		WIRE		BREAKER		BREAKER WIRE		VOLT AMPS		LOAD													
	A	B			P	TRIP			A	B														
ROW 2 RECEPT #1	180				12	1	20	1			2	20	1	12	180									ROW 2 RECEPT #2
ROW 2 RECEPT #3					12	1	20	3			4	20	1	12		180								ROW 2 RECEPT #4
ROW 2 RECEPT #5	180				12	1	20	5			6	20	1	12	180									ROW 2 RECEPT #6
ROW 2 RECEPT #7					12	1	20	7			8	20	1	12		180								ROW 2 RECEPT #8
ROW 2 RECEPT #9	180				12	1	20	9			10	20	1	12	180									ROW 2 RECEPT #10
ROW 2 RECEPT #11					12	1	20	11			12	20	1	12		180								ROW 2 RECEPT #12
ROW 2 RECEPT #13	180				12	1	20	13			14	20	1	12	180									ROW 2 RECEPT #14
ROW 2 RECEPT #15					12	1	20	15			16	20	1	12		180								ROW 2 RECEPT #16
ROW 2 RECEPT #17	180				12	1	20	17			18	20	1	12	180									ROW 2 RECEPT #18
ROW 2 RECEPT #19					12	1	20	19			20	20	1	12		180								ROW 2 RECEPT #20
ROW 2 RECEPT #21	180				12	1	20	21			22	20	1	12	180									ROW 2 RECEPT #22
ROW 2 RECEPT #23					12	1	20	23			24	20	1	12		180								ROW 2 RECEPT #24
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ROW 2 RECEPT #27					12	1	20	27			28	20	1	12		180								ROW 2 RECEPT #28
ROW 2 RECEPT #29	180				12	1	20	29			30	20	1	12	180									ROW 2 RECEPT #30
ROW 2 RECEPT #31					12	1	20	31			32	20	1	12		180								ROW 2 RECEPT #32
BLANK								33			34													BLANK
BLANK								35			36													BLANK
BLANK								37			38													BLANK
TELCO RECEPT #1	180				12	1	20	37			38	20	1	12	180									TELCO RECEPT

1. ALL ALARMS TO BE NORMALLY CLOSED.
2. UNSHIELDED SINGLE TWISTED PAIR WIRE IS STANDARD.



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ALARM DIAGRAM

XXX-X-XXX

SHEET:	XXXX
E12	DRAWN BY:
	XXXX

BRIDGE CLIP (TYP):



CONNECTOR
AT BLOCK



CONNECTOR
AT BLOCK

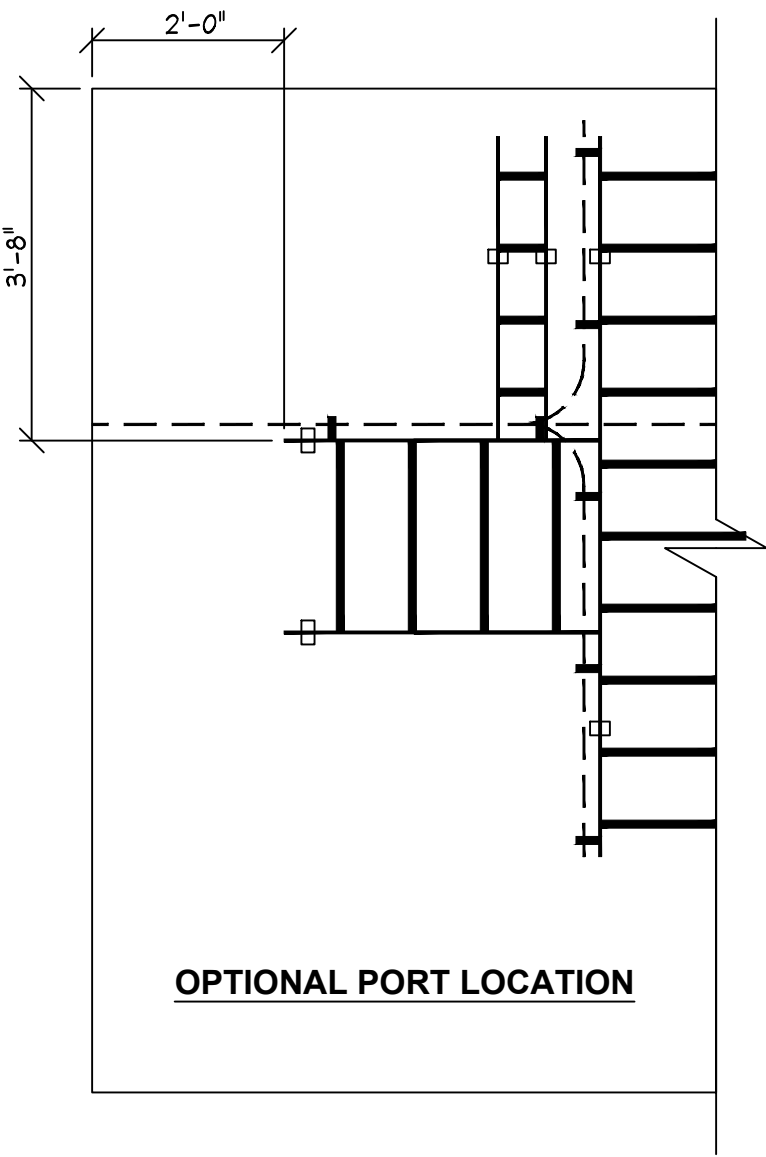


SCALE: NONE

CUSTOMER APPROVAL

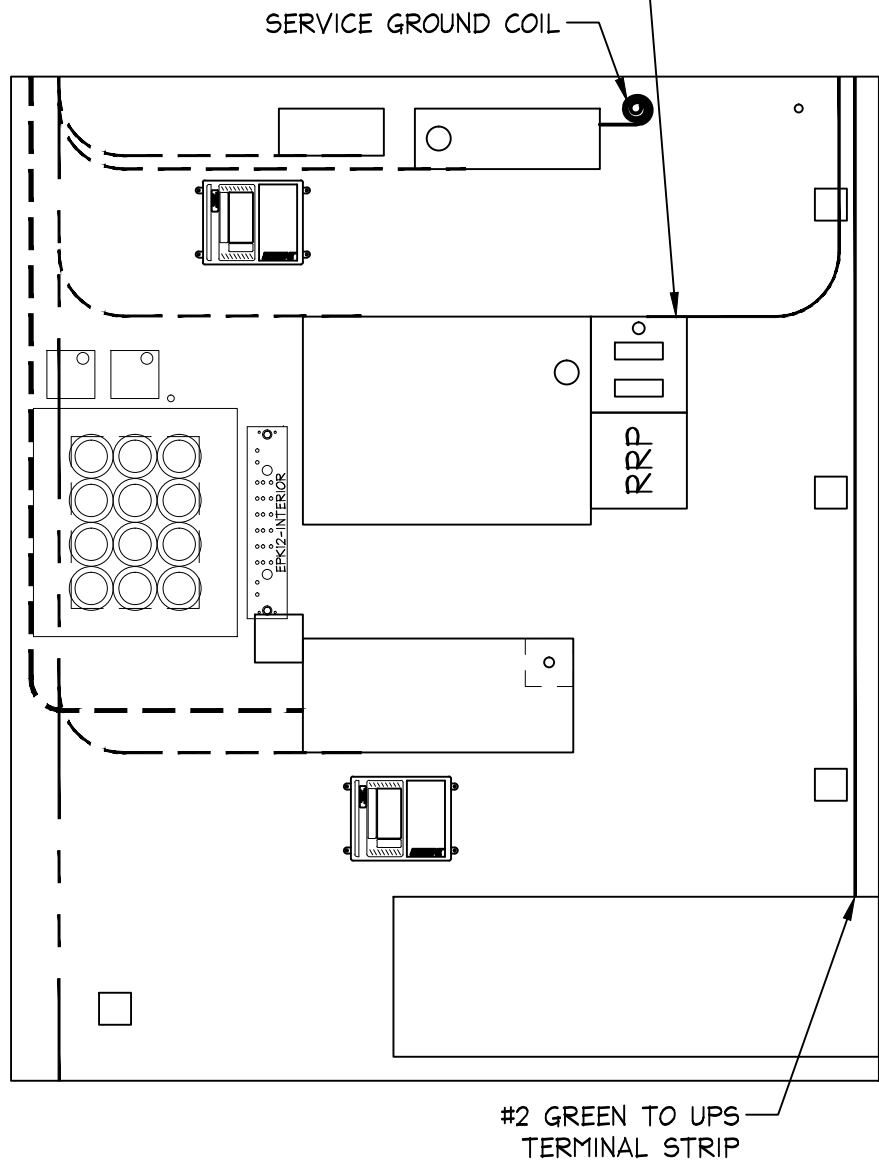
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SHEET: **E1-2**

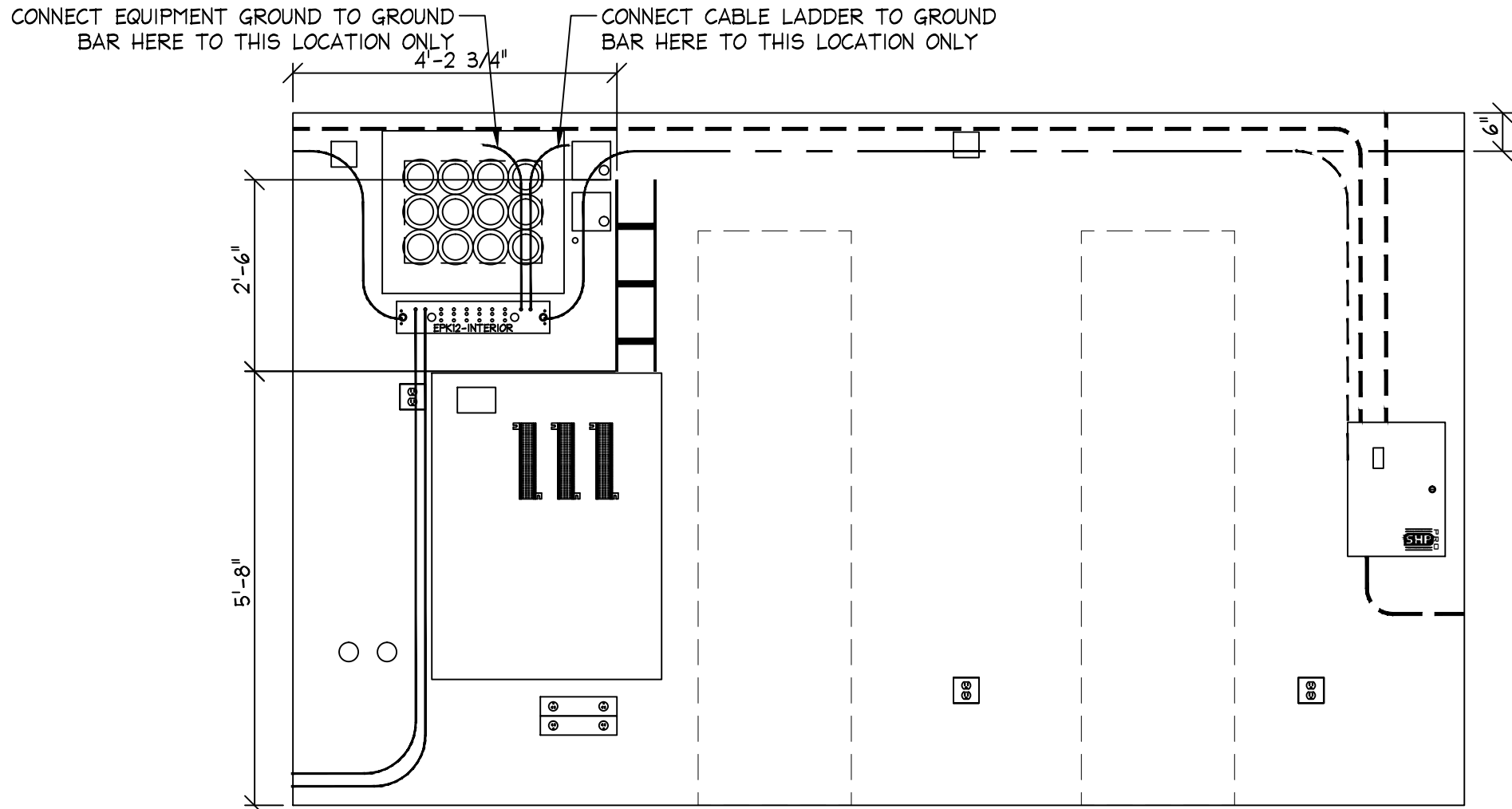


OPTIONAL PORT LOCATION

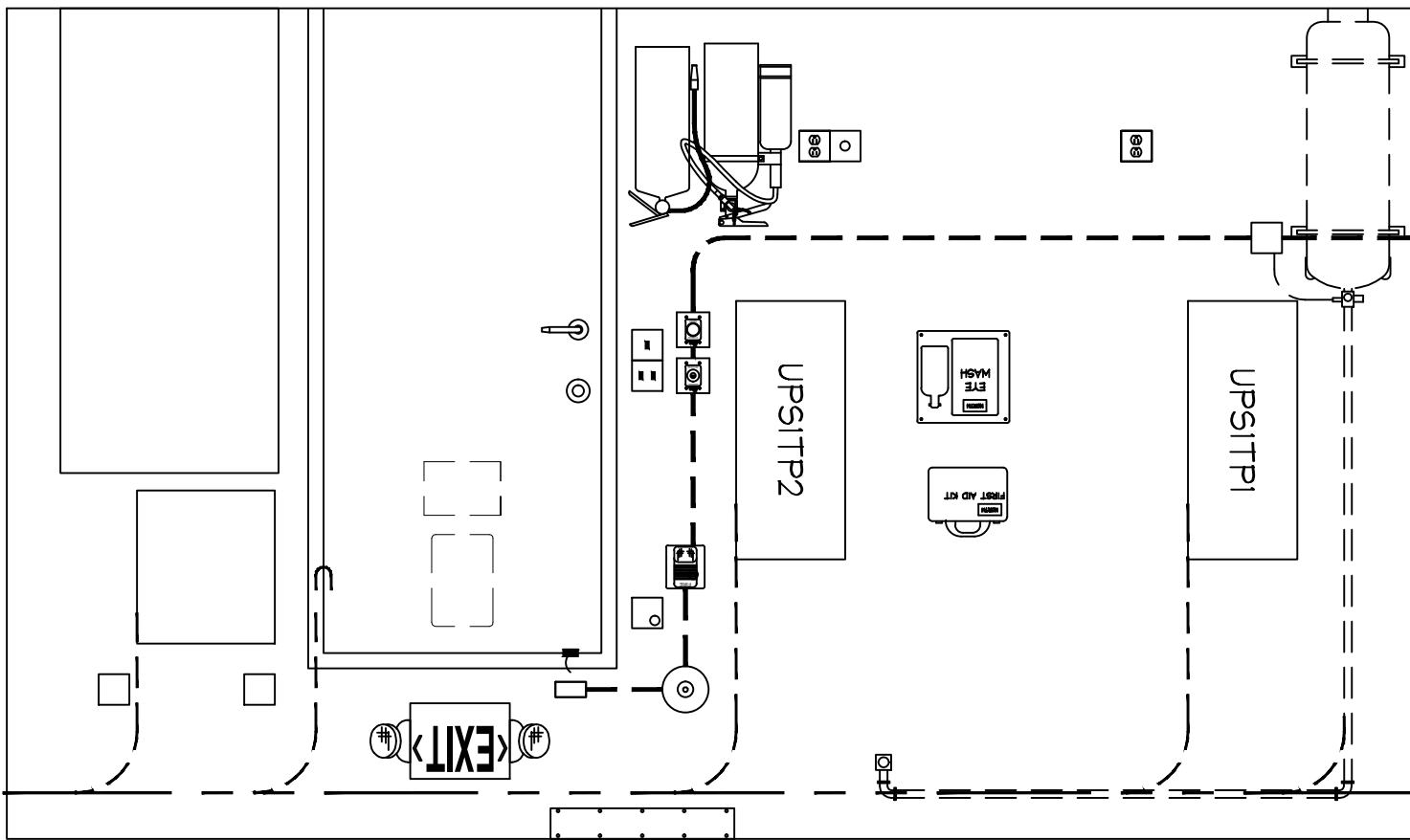
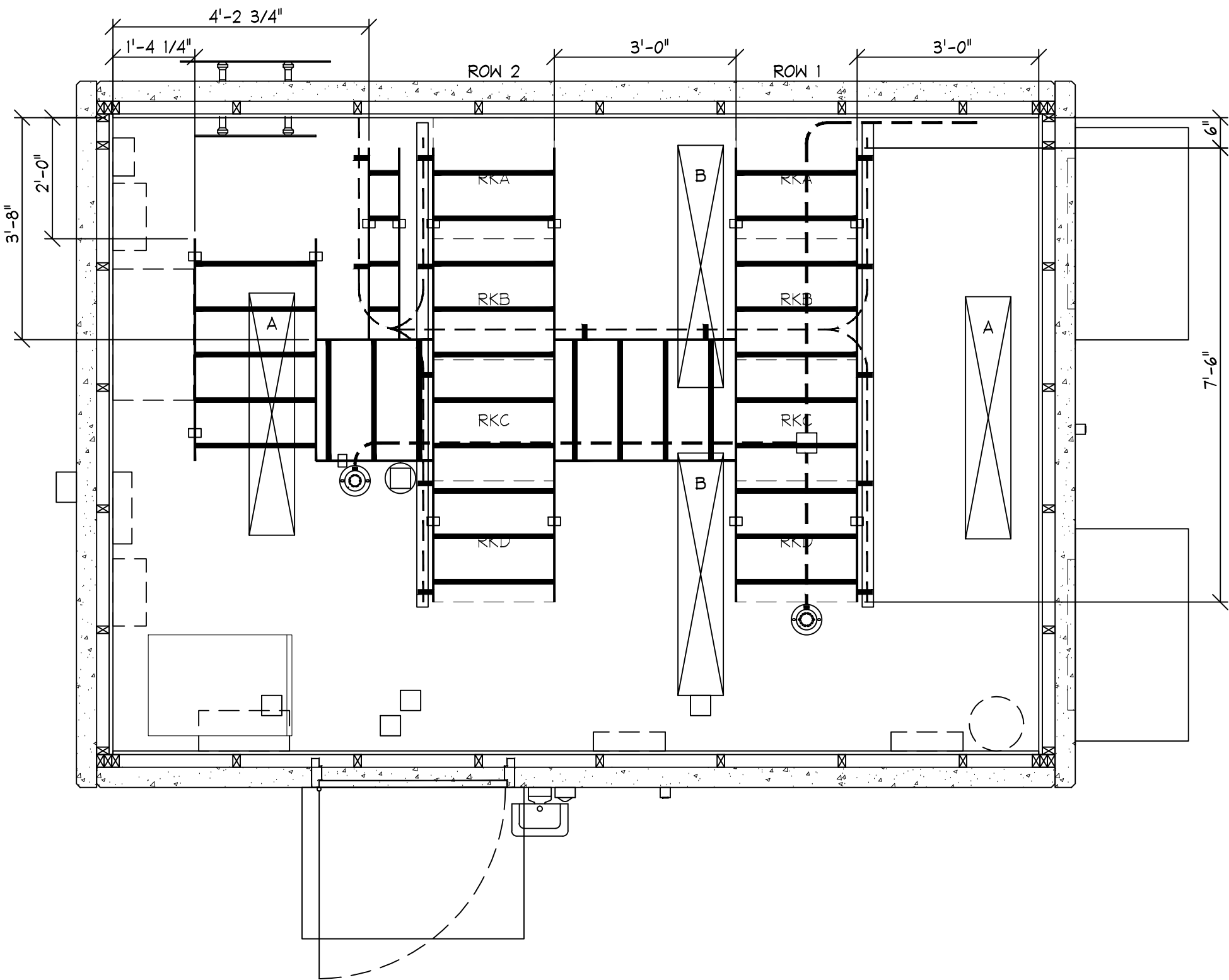
INSTALL GBK14 TO SIDE OF ENCLOSURE WITH #10 BOLTS AND NUTS. (REMOVE PAINT AND USE NO-OK) GROUND EACH DSHF403 TO GBK14. CONNECT #2 TO THE ENCLOSURE WITH 2-HOLE LUG (PLACE #2 AS CLOSE AS POSSIBLE TO THE #10 BOLTS) AND RUN AS SHOWN TO THE MGB AND CONNECT WITH A 2-HOLE LUG.



WALL D



WALL C

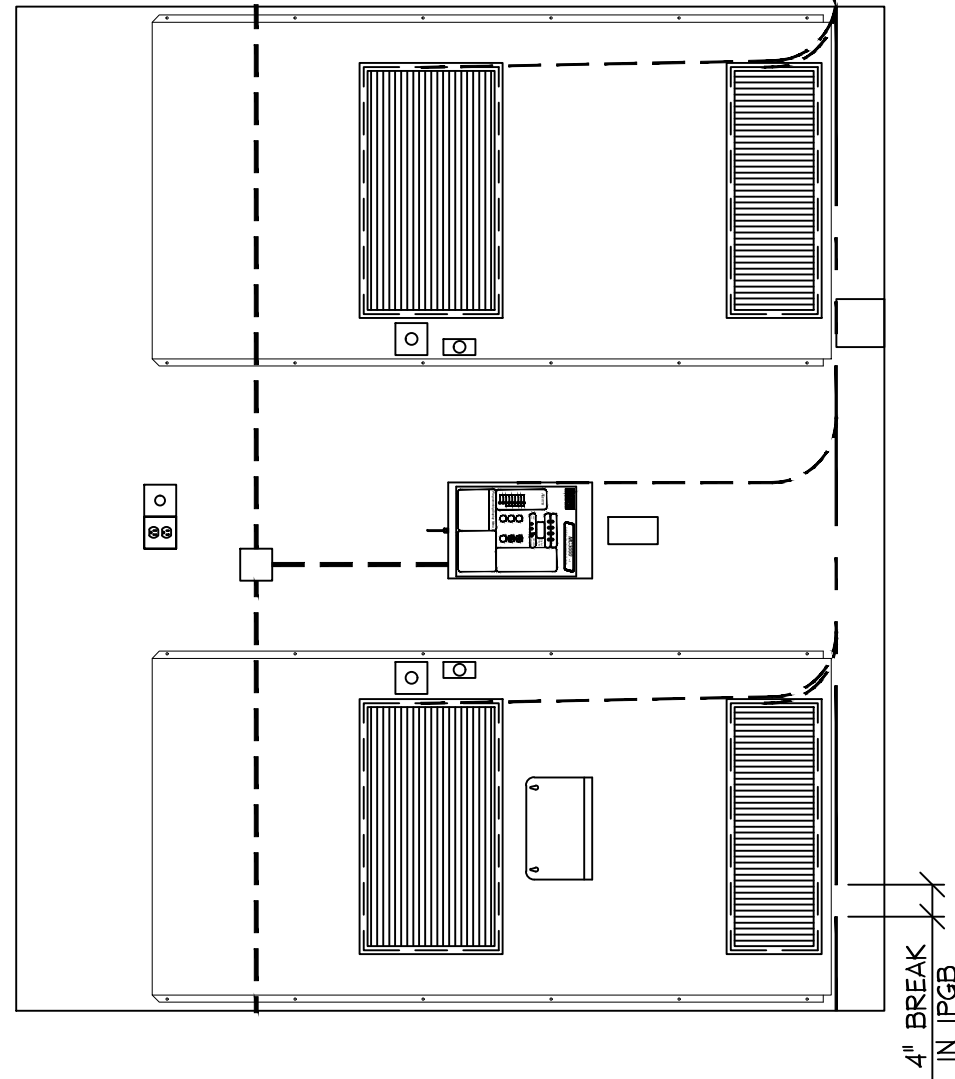


WALL A

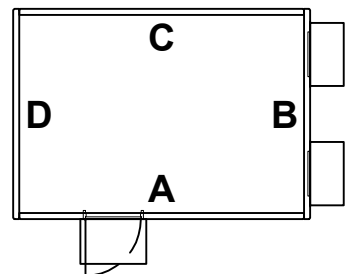
GROUNDING LAYOUT

SCALE: 1/2"=1'-0"

#2 BARE STRANDED COPPER IPGB ON 4" PANDUIT STANDOFFS EVERY 18" (PRT: #PP2S-S10-C), CONNECTED TO MASTER GROUND BAR. ALL CONNECTIONS SHALL BE MADE WITH BURNDY COMPRESSION FITTINGS AND ALL BENDS SHALL BE 8" MIN. RADIUS.



WALL B



CABLE LADDER:

- CABLE LADDER IS TO BE 8'-0" A.F.F. AND INSTALLED IN ACCORDANCE WITH ARTICLE 392 OF THE NEC LEVEL TO WITHIN 1/8" IN 10' OR SIMILAR.

GROUNDING:

- ALL GROUNDING EXCEPT FOR CABLE LADDER TO CONFORM TO ARTICLE 250 OF THE NEC.
- CABLE LADDER GROUNDING TO CONFORM TO ARTICLE 392.60 OF THE NEC.

STAMPS AND SEALS

CUSTOMER APPROVAL

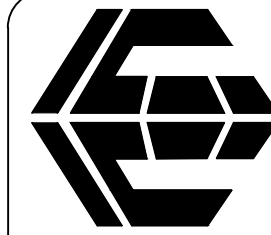
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- ☐ APPROVED EXCEPT AS NOTED
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MOTOROLA MSB
11'-8" X 16'-6" SHELTER

GROUNDING LAYOUT

PROJECT NAME:

Master Drawing

SERIAL NUMBER:

XXXX-X

MODEL #:

TBBXXXX

SCALE ~ 24X36:

1/2" = 1'-0"

SHEET:

E2

DRAWN:

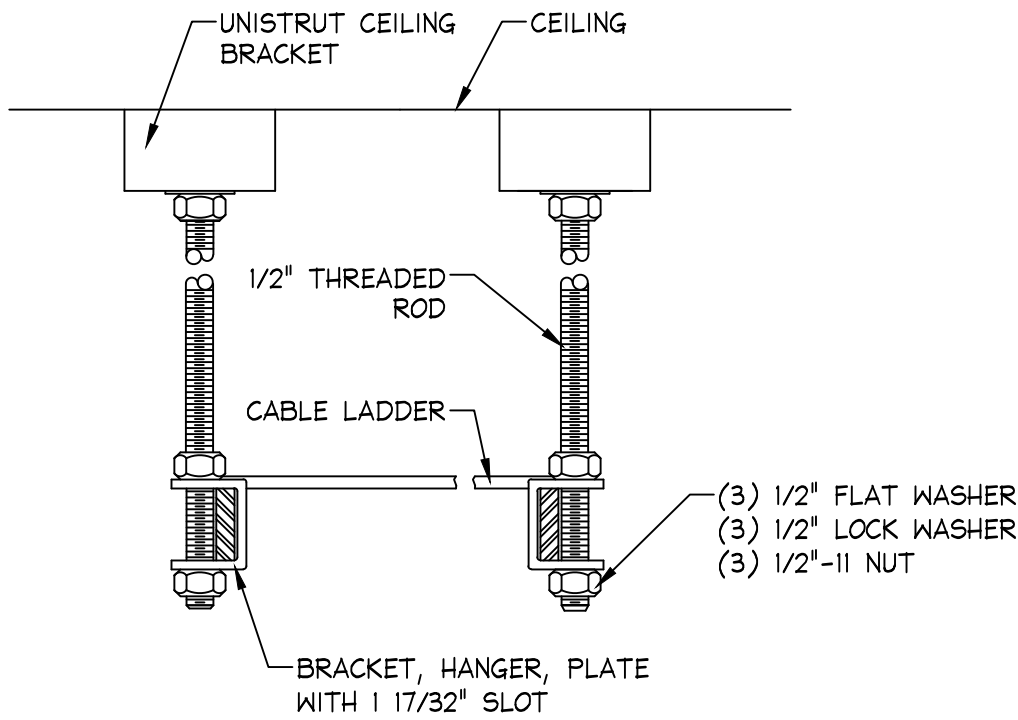
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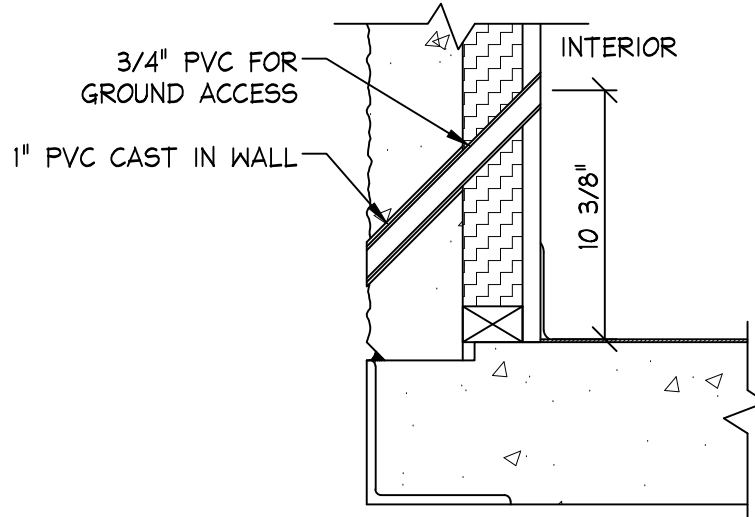
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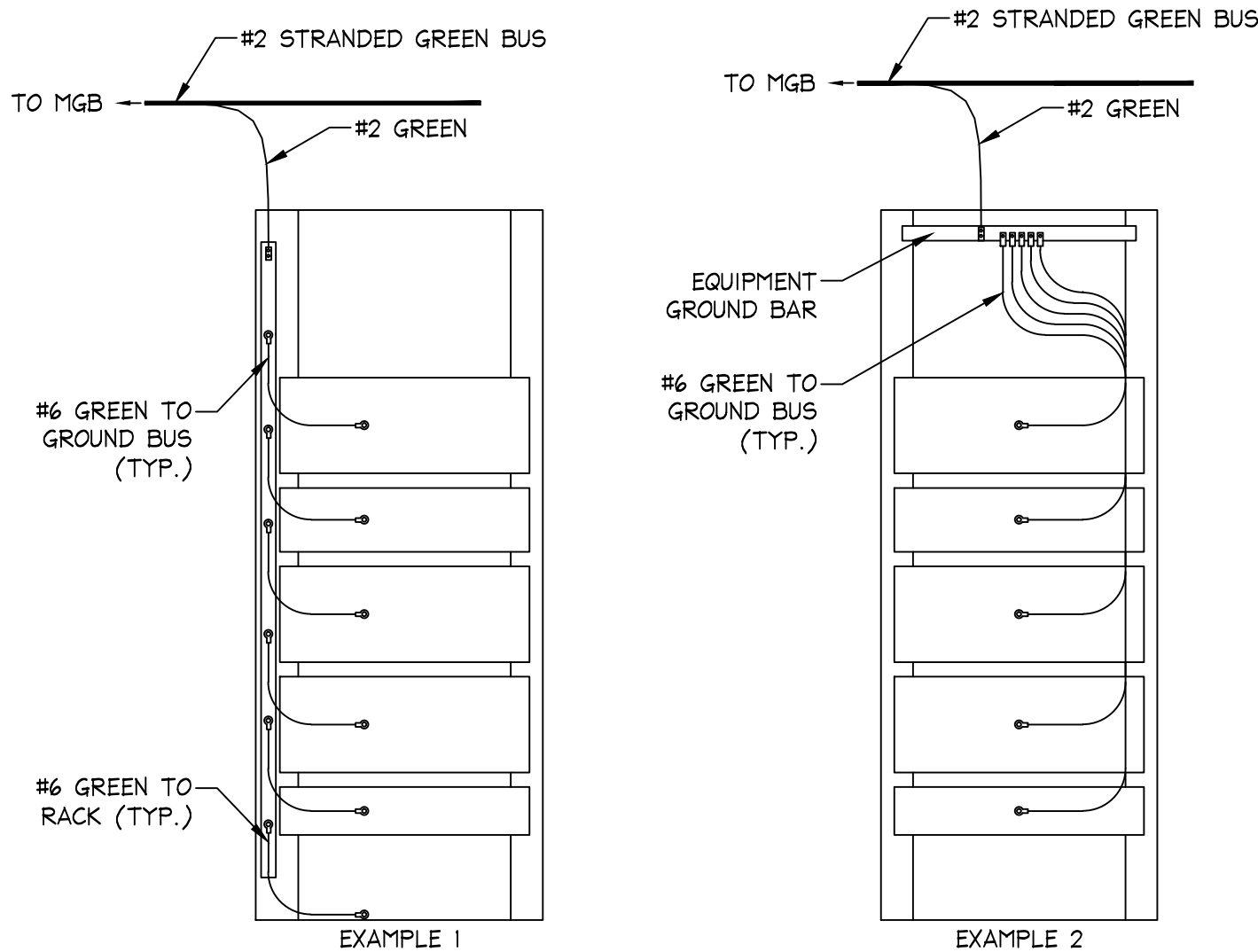
XXXX



LADDER INSTALLATION DETAIL
SCALE: NONE

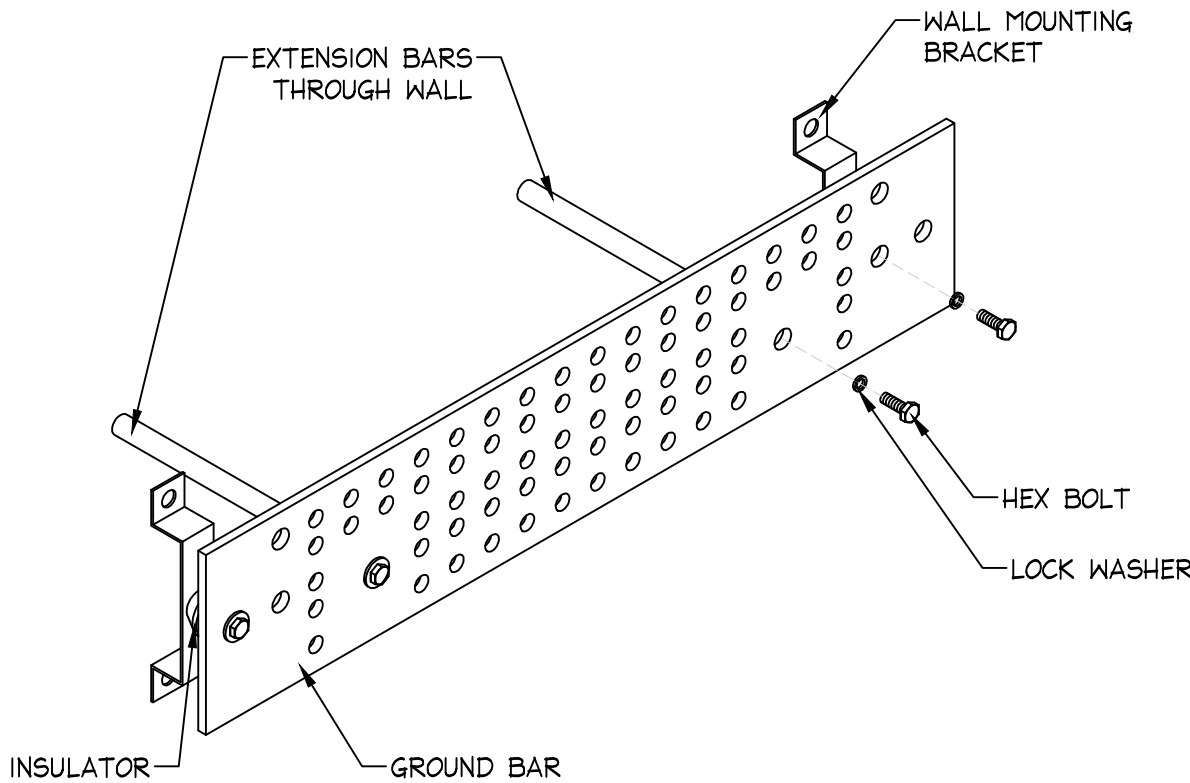


45° PVC NIPPLE DETAIL
SCALE: NONE

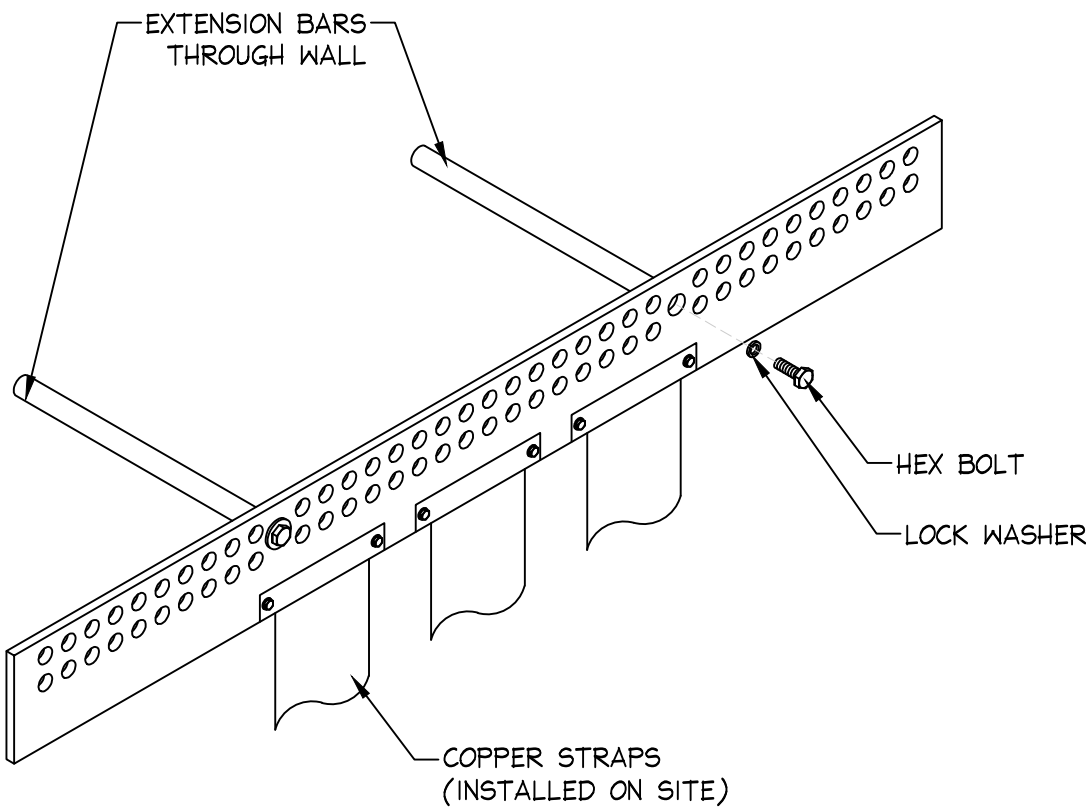


EQUIPMENT GROUNDING ELEVATION EXAMPLE
REFER TO ONLY WHEN EQUIPMENT IS INSTALLED. VIEWED FROM REAR OF EQUIPMENT
SCALE: NONE

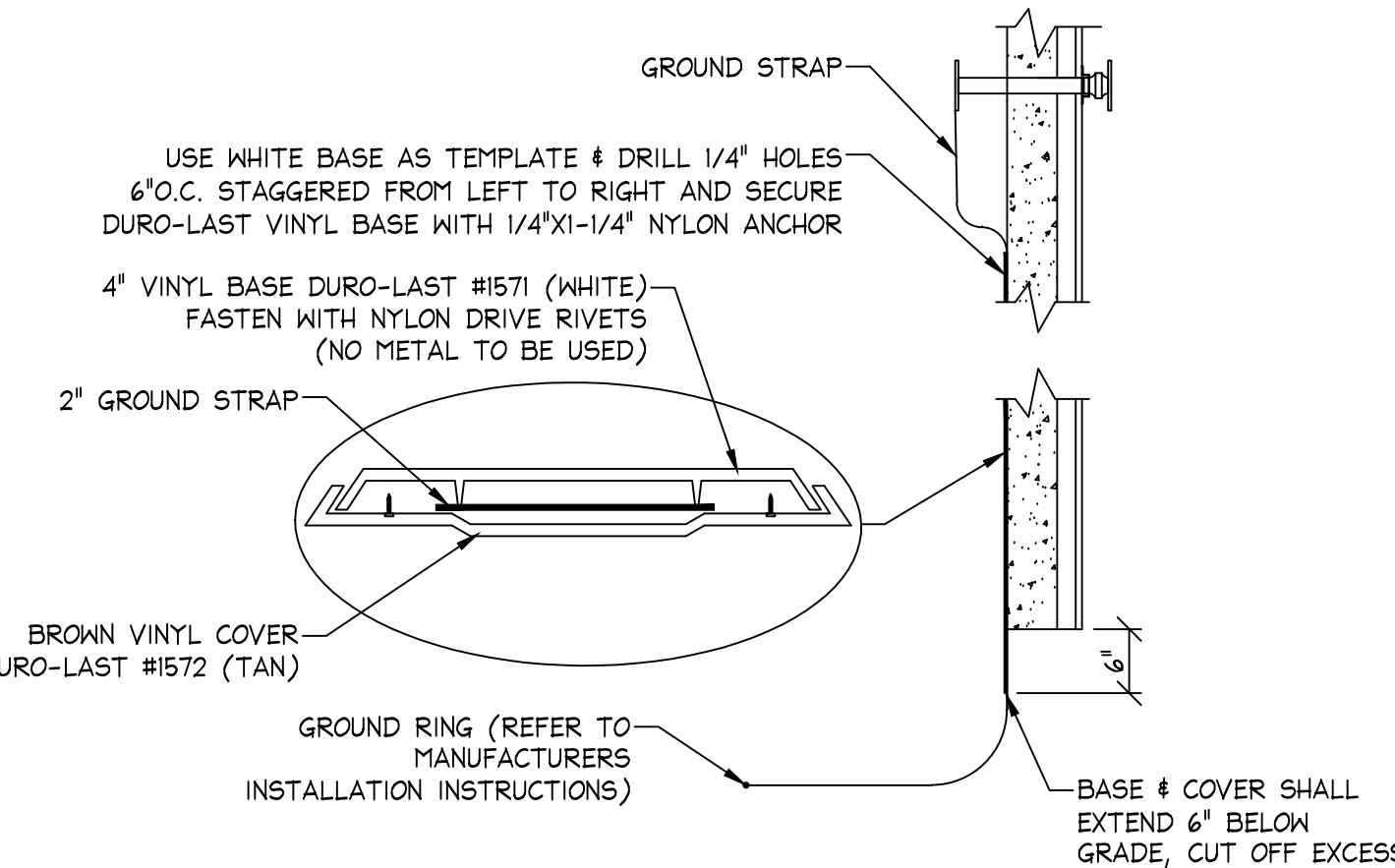
- GROUNDING NOTES:**
1. USE NO-OX AT ALL GROUND TERMINATIONS.
 2. IN PLACES WHERE THE GROUND BUS WIRE IS LESS THAN 2" FROM METALLIC OBJECTS AND NOT BONDED, NEATLY TAPE THE SECTION WITH GREEN TAPE. WHERE NECESSARY, REMOVE THE TIE WRAPS (AND RE-INSTALL AFTER TAPING) AND TAPE C-TAPS FIRST AND THEN TAPE PAST THEM IN A CONTINUOUS WRAP.
 3. PLACE HEAT SHRINK TUBING ON GROUND BAR PIGTAILS THAT CROSS WALL MOUNTED CONDUIT.
 4. ALL DOORS TO BE GROUNDED TO THEIR FRAMES WITH WELDING WIRE. USE #2 GAUGE WELDING WIRE AND STANDARD BURNDY TWO-HOLE LUGS. PLACE A 2" BAND OF GREEN TAPE AT EACH END OF THE JUMPER.
 5. INTERIOR PERIMETER GROUND BUS (IPGB): #2 BARE STRANDED COPPER AROUND INSIDE PERIMETER OF BUILDING WITH EACH END LUGGED TO THE GROUND BAR.
 6. BONDING JUMPERS: #6 GREEN STRANDED INSULATED WIRE FROM METALLIC EQUIPMENT TO IPGB AND ACROSS LADDER RACK SPLICES/CROSSES/TEES.
 7. EQUIPMENT GROUND BUS: #2 GREEN RAN OUTSIDE EACH RUN OF CABLE LADDER WITH NEWTON CLIPS (#2106C).



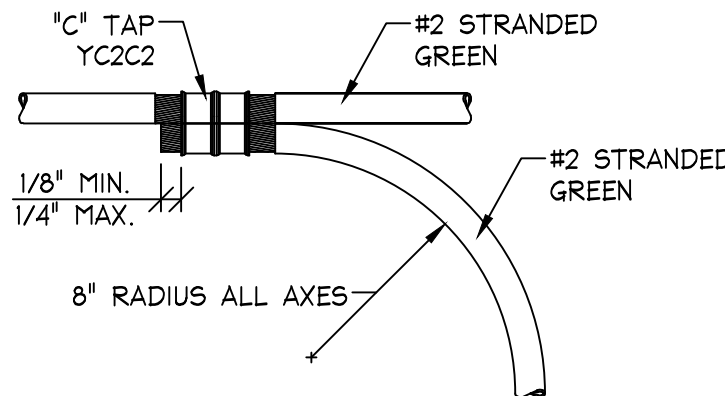
INTERIOR GROUND BAR DETAIL
SCALE: NONE



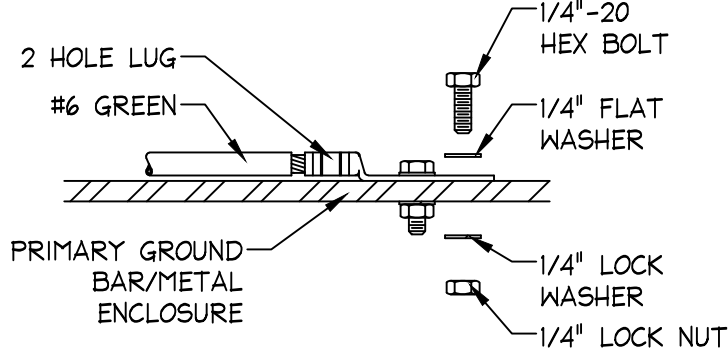
EXTERIOR GROUND BAR DETAIL
SCALE: NONE



GROUND BAR/STRAP/COVER DETAIL
SCALE: NONE

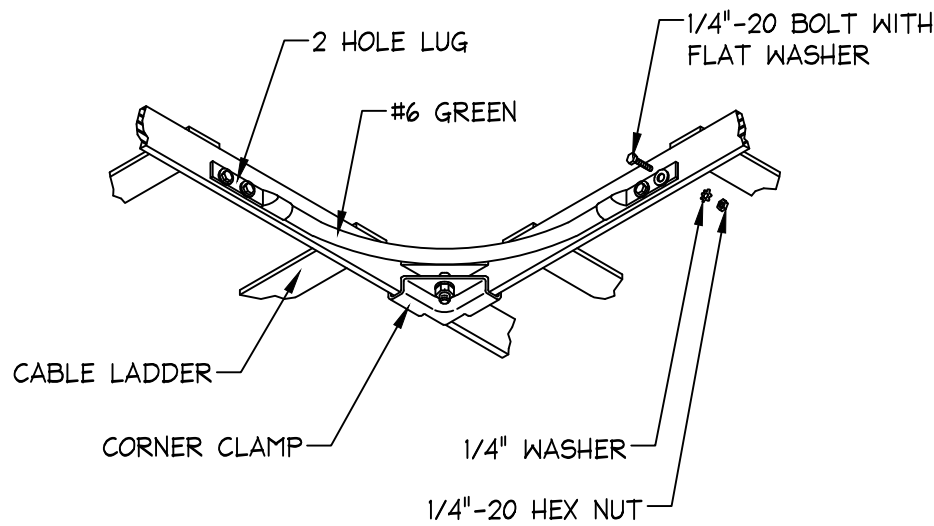


EQUIPMENT GROUND TAP
SCALE: NONE



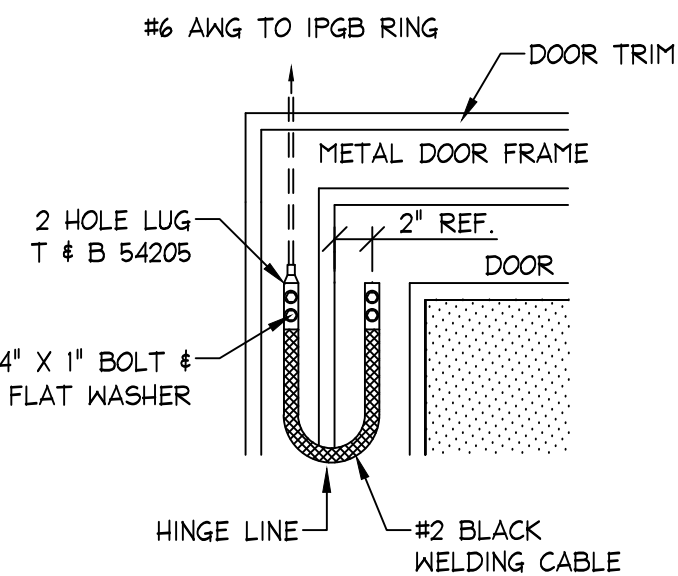
1. SELECT BOLT LENGTH TO PROVIDE A MINIMUM OF TWO EXPOSED THREADS.
2. BURNISH MOUNTING SURFACE TO REMOVE PAINT IN THE AREA OF LUG CONTACT.
3. APPLY ANTI-OXIDANT COMPOUND TO MATING SURFACE OF LUG AND WIPE CLEAN EXCESS COMPOUND.
4. ONLY ONE LUG PER SET OF BOLTS.

GROUNDING CONNECTION
SCALE: NONE

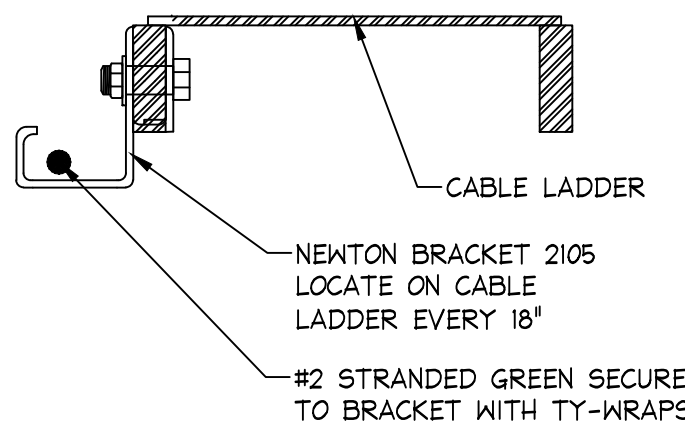


ACROSS EVERY LADDER TO LADDER CONNECTION

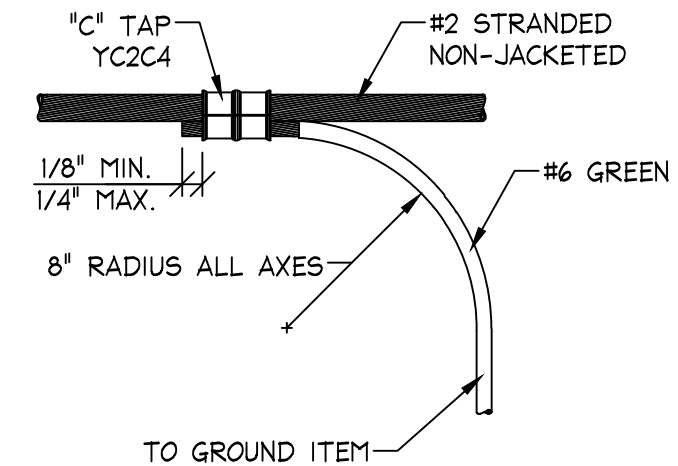
CABLE LADDER BOND DETAIL
SCALE: NONE



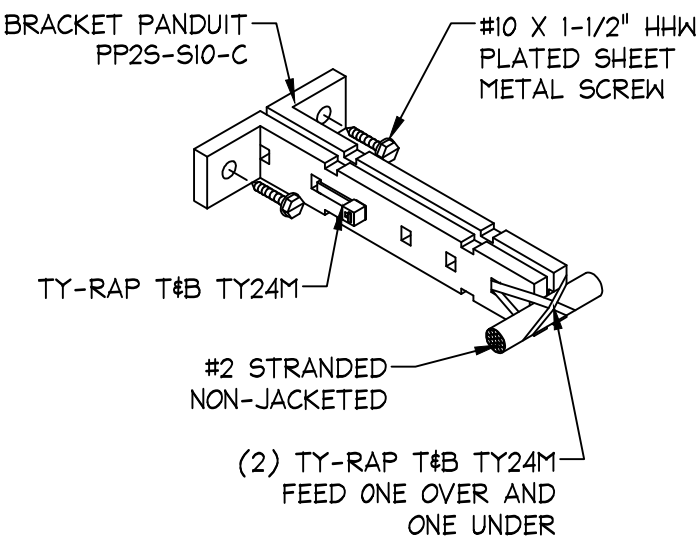
DOOR BONDING DETAIL
SCALE: NONE



NEWTON BRACKET GROUND
SCALE: NONE



IPGB RING GROUND TAP
SCALE: NONE



IPGB GROUND INSTALLATION
SCALE: NONE

STAMPS AND SEALS

CUSTOMER APPROVAL

☐ APPROVED
☐ APPROVED EXCEPT AS NOTED
☐ REVISE AS NOTED AND RESUBMIT
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574-295-1214
www.thermobond.com

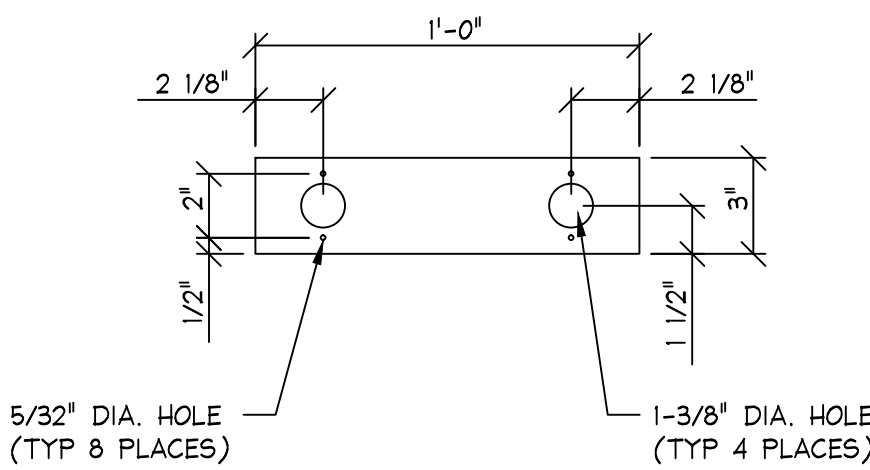
**MOTOROLA MSB
11'-8" X 16'-6" SHELTER**

GROUNDING DETAILS

PROJECT NAME: **Master Drawing**
SERIAL NUMBER: **XXXX-X**

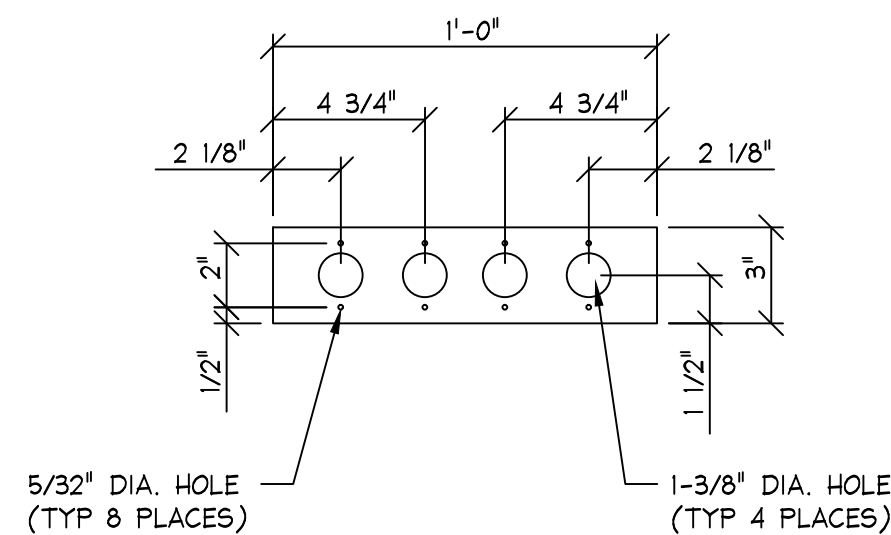
MODEL #: **TBBXXX**
SCALE: **~ 24/36**
SHEET: **E2.1**

DRAWN BY: **XXXX**
REVISED: **XXXX**
NONE



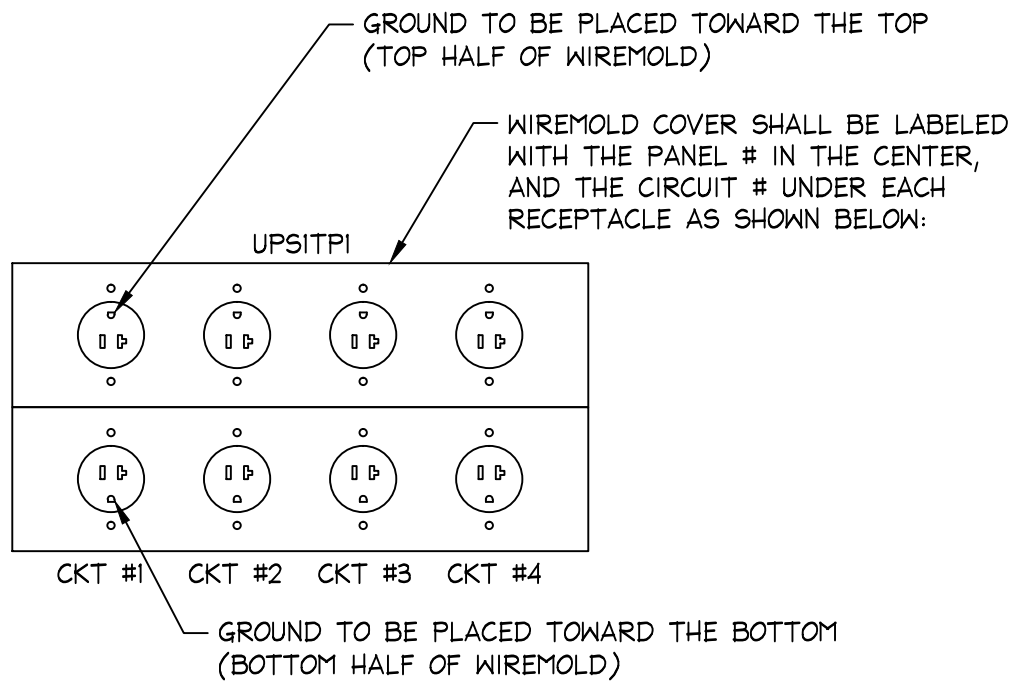
1 WIREMOLD SIMPLEX COVER
SCALE: NONE

2 EACH REQUIRED

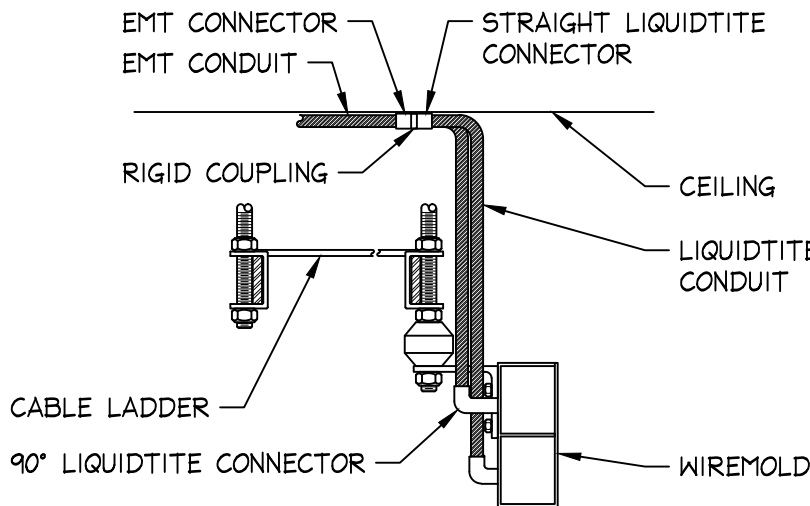


2 WIREMOLD SIMPLEX COVER
SCALE: NONE

16 EACH REQUIRED

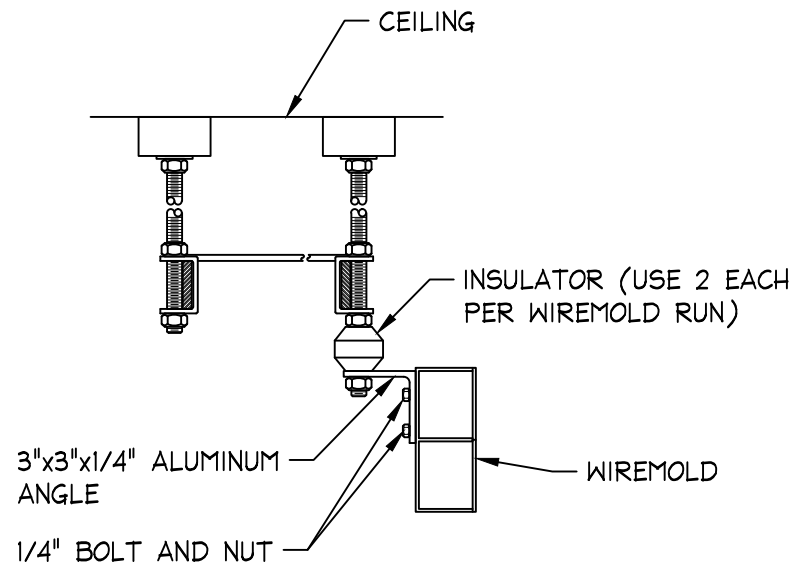


3 SIMPLEX RECEPTACLE ORIENTATION
SCALE: NONE



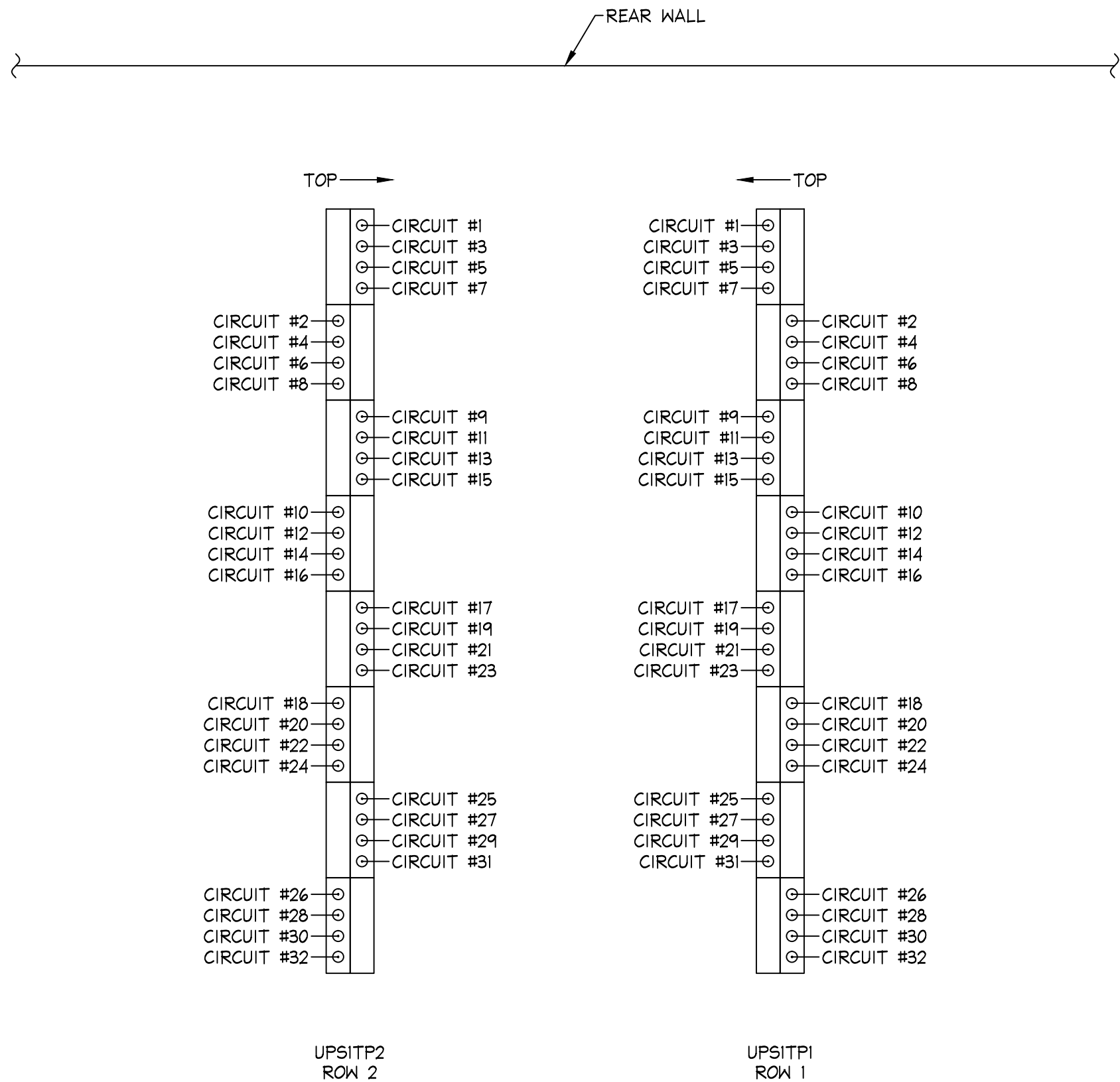
4 WIREMOLD CONNECTION
SCALE: NONE

(DO NOT RUN CONDUITS THROUGH CABLE LADDER)
(CONDUIT SHALL LINE-UP WITH BLANK COVER PLATE)



5 WIREMOLD INSTALLATION DETAIL
SCALE: NONE

INSULATORS SHALL BE PLACED AS
CLOSE TO CABLE LADDER AS POSSIBLE



WIREMOLD CIRCUIT LOCATION
SCALE: NONE

RECEPTACLES ARE TO BE PLACED ON REAR SIDE OF EQUIPMENT.
ODD CIRCUIT NUMBERS TO BE ON TOP HALF OF WIREMOLD.

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MOTOROLA MSB
11'-8" X 16'-6" SHELTER

WIREMOLD

PROJECT NAME: Master Drawing
SERIAL NUMBER: XXXXX-X

MODEL #: TBBXXX
SCALE: ~ 24/36
SHEET: NONE
DRAWN BY: E3
XXXX
XXXX
XXXX

STAMPS AND SEALS

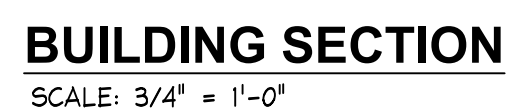
CUSTOMER APPROVAL

☐ APPROVED
☐ APPROVED EXCEPT AS NOTED
☐ REVISE AS NOTED AND RESUBMIT
☐ SEE LETTER OF TRANSMITTAL

APPROVED BY _____
DATE _____

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6 WELDED CONNECTION DETAILS

NOTE: ALL PAGES MUST BE SIGNED

**MOTOROLA MSB
11'-8" X 16'-6" SHELTER**

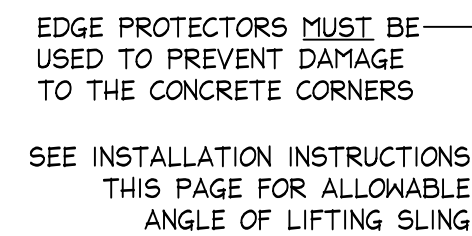
CROSS SECTION

Master Drawing

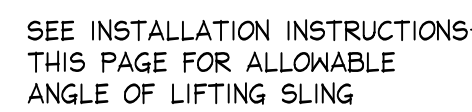
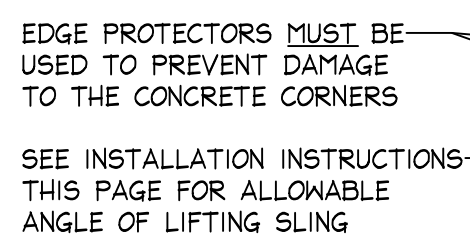
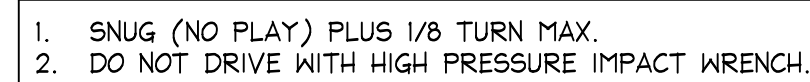
SERIAL NUMBER:

XXX-X-XXX

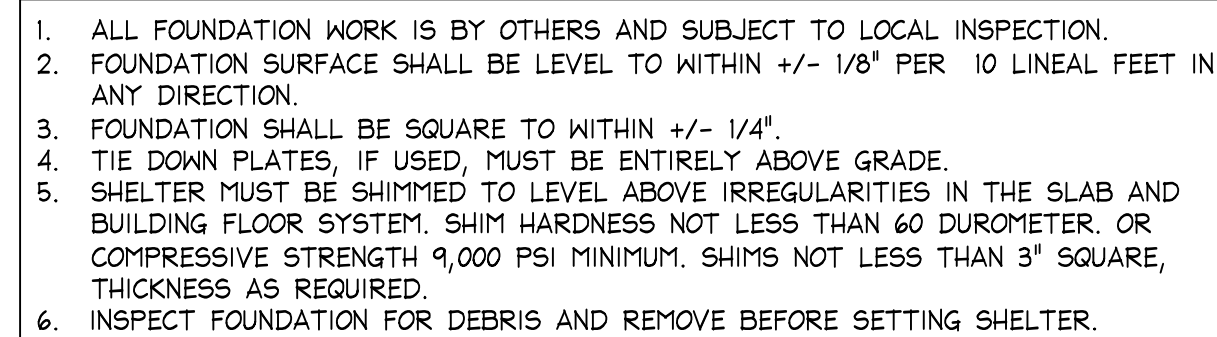
SHEET 11: C4



1 4 POINT LIFT OPTIONS
SCALE: NONE

SEE TABLE

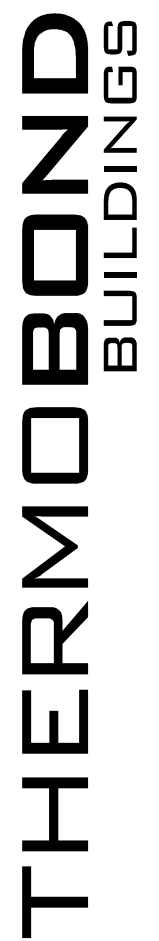
3 END INSTALLATION AND SLING LIMITS



4 SHELTER SHIMMING

SCALE: NONE

1. SHELTER MUST BE LIFTED ONLY AT POINTS PROVIDED, USING APPROPRIATE SPREADER BARS AND SLINGS, AND WITHIN THE LIMITS SHOWN ON THIS DRAWING.
2. UNLESS OTHERWISE APPROVED OR INDICATED, LIFT ONLY THE SHELTER SELF-WEIGHT. DO NOT LIFT THE SHELTER WITH ADDITIONAL EQUIPMENT INSIDE.
3. INSPECT EACH LIFT DEVICE FOR CRACKS, WARPING OR OTHER DEFECTS BEFORE INSTALLING ON SHELTER. DO NOT USE A LIFTING DEVICE THAT HAS ANY CRACKS, QUESTIONABLE WELDS, IRREGULAR OR ELONGATED HOLES, OR IS BENT OUT OF SHAPE.
4. INSPECT BOLTS BEFORE INSTALLATION. DO NOT USE ANY BOLTS THAT HAVE DAMAGED THREADS, ARE BENT, APPEAR ELONGATED OR ARE MALFORMED IN ANY WAY.
5. DO NOT ROUTE SLING NEAR HVAC SYSTEMS.
6. REMOVE OR PROTECT DOOR HARDWARE AND OTHER PROTRUSIONS FROM DAMAGE.
7. RIGGER IS TO PROVIDE LIFTING EQUIPMENT ABOVE THE THERMOBOND EXTERIOR LIFTING DEVICE. THE RIGGER IS RESPONSIBLE FOR ENSURING THAT THE SAFETY REQUIREMENTS LISTED HEREIN ARE MET.
8. RIGGING SHALL CONFORM TO APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
9. IF SHELTER IS DELIVERED WITH TEMPORARY SHIPPING WALLS OR ANY OTHER TEMPORARY STRUCTURE INSTALLED FOR TRANSPORT, DO NOT REMOVE BEFORE SHELTER PLACEMENT.
10. DO NOT USE SINGLE HOLE POSITIONS FOR LIFTING.
11. DO NOT SET THE SHELTER ON AN UNEVEN OR UNSTABLE SURFACE.



209 N. Court P.O. Box 445
Elk Point, SD 57025

www.thermobond.com

**MOTOROLA MSB
11'-8" X 16'-6" SHELTER**

INSTALL DETAILS

PROJECT NAME:

Master Drawing

SERIAL NUMBER:

XXXX-X

MODEL #:	DRAWN:
----------	--------

TBBXXXX	XXXX
---------	------

[illegible]

SHEET:	NONE	DRAWN BY:	
--------	------	-----------	--

12

STAMPS AND SEALS

CUSTOMER APPROVAL

- ☐ APPROVED
☐ APPROVED EXCEPT AS NOTED
☐ REVISE AS NOTED AND RESUBMIT
☐ SEE LETTER OF TRANSMITTAL

APPROVED BY _____
DATE _____

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NOTE: ALL PAGES MUST BE SIGNED

Exhibit B

Software License Addendum

This Software License Addendum (this “**SLA**”) is subject to, and governed by, the terms of the Motorola Solutions Customer Agreement (“**MCA**”) to which it is attached. Capitalized terms used in this SLA, but not defined herein, will have the meanings set forth in the MCA.

Section 1. Addendum. This SLA governs Customer’s use of Licensed Software (and, if set forth in a Proposal, related Services) and Subscription Software from Motorola, as applicable, and is an integral part of the Parties’ Agreement.

Section 2. Licensed Software License and Restrictions.

2.1. Licensed Software License. Subject to Customer’s and its Authorized Users’ compliance with the Agreement (including payment terms), Motorola hereby grants Customer and its Authorized Users a limited, non-transferable, non-sublicensable, and non-exclusive license to use the Licensed Software identified in a Proposal, in object code form only, and the associated Documentation, solely in connection with the Equipment provided by Motorola or authorized Customer-Provided Equipment (as applicable, the “**Designated Products**”) and solely for Customer’s internal business purposes. Unless otherwise stated in an Addendum or the Proposal, the foregoing license grant will be limited to the number of licenses set forth in the applicable Proposal and will continue for the life of the applicable Designated Product. Except as otherwise permitted in an applicable Addendum or Proposal, Customer may install, access, and use Licensed Software only in Customer’s owned or controlled facilities, including any authorized mobile sites; provided, however, that Authorized Users using authorized mobile or handheld devices may also log into and access the Licensed Software remotely from any location.

2.2. Subscription License Model. If the Parties mutually agree that any Licensed Software purchased under this Agreement will be replaced with or upgraded to Subscription Software, then upon such time which the Parties execute the applicable Change Order or Proposal, the licenses granted under this Section 2 Licensed Software License and Restrictions will automatically terminate, and such Subscription Software will be governed by the terms of Section 3 Subscription Software License and Restrictions.

2.3. Customer Restrictions. Customers and Authorized Users will comply with the applicable Documentation in connection with their use of the Products. Customer will not and will not allow others, including the Authorized Users, to: (a) make the Licensed Software available for use by unauthorized third parties, including via a commercial rental or sharing arrangement; (b) reverse engineer, disassemble, or reprogram the Licensed Software or any portion thereof to a human-readable form; (c) modify, create derivative works of, or merge the Licensed Software with other software or equipment; (d) copy, reproduce, distribute, lend, lease, or transfer the Licensed Software or Documentation for or to any third party without the prior express written permission of Motorola; (e) take any action that would cause the Licensed Software or Documentation to be placed in the public domain; (f) use the Licensed Software to compete with Motorola; or (g) remove, alter, or obscure, any copyright or other notice.

2.4. Copies. Customer may make one (1) copy of the Licensed Software solely for archival, back-up, or disaster recovery purposes during the term of the applicable Licensed Software license. Customer may make as many copies of the Documentation reasonably required for the internal use of the Licensed Software during such Licensed Software’s license term. Unless otherwise authorized by Motorola in writing, Customer will not, and will not enable or allow any third party to: (a) install a licensed copy of the Licensed Software on more than one (1) unit of a Designated Product; or (b) copy onto or transfer Licensed Software installed in a unit of a Designated Product onto another device. Customer may temporarily transfer Licensed Software

installed on a Designated Product to another device if the Designated Product is inoperable or malfunctioning, if Customer provides written notice to Motorola of the temporary transfer and identifies the device on which the Licensed is transferred. Temporary transfer of the Licensed Software to another device must be discontinued when the original Designated Product is returned to operation and the Licensed Software must be removed from the other device. Customer must provide prompt written notice to Motorola at the time the temporary transfer is discontinued.

2.5. Resale of Equipment. Equipment contains embedded Licensed Software. If Customer desires to sell its used Equipment to a third party, Customer must first receive prior written authorization from Motorola, which will not be unreasonably denied, and obtain written acceptance of the applicable Licensed Software license terms, including the obligation to pay relevant license fees, from such third party.

Section 3. Subscription Software License and Restrictions.

3.1. Subscription Software License. Subject to Customer's and its Authorized Users' compliance with the Agreement, including payment terms, Motorola hereby grants Customer and its Authorized Users a limited, non-transferable, non-sublicensable, and non-exclusive license to use the Subscription Software identified in a Proposal, and the associated Documentation, solely for Customer's internal business purposes. The foregoing license grant will be limited to use in the territory and to the number of licenses set forth in a Proposal (if applicable), and will continue for the applicable Subscription Term. Customer may access, and use the Subscription Software only in Customer's owned or controlled facilities, including any authorized mobile sites; provided, however, that Authorized Users using authorized mobile or handheld devices may also log into and access the Subscription Software remotely from any location. No custom development work will be performed under this Addendum.

3.2. Customer Restrictions. Customers and Authorized Users will comply with the applicable Documentation and the copyright laws of the United States and all other relevant jurisdictions (including the copyright laws where Customer uses the Subscription Software) in connection with their use of the Subscription Software. Customer will not, and will not allow others including the Authorized Users, to make the Subscription Software available for use by unauthorized third parties, including via a commercial rental or sharing arrangement; reverse engineer, disassemble, or reprogram software used to provide the Subscription Software or any portion thereof to a human-readable form; modify, create derivative works of, or merge the Subscription Software or software used to provide the Subscription Software with other software; copy, reproduce, distribute, lend, or lease the Subscription Software or Documentation for or to any third party; take any action that would cause the Subscription Software, software used to provide the Subscription Software, or Documentation to be placed in the public domain; use the Subscription Software to compete with Motorola; remove, alter, or obscure, any copyright or other notice; share user credentials (including among Authorized Users); use the Subscription Software to store or transmit malicious code; or attempt to gain unauthorized access to the Subscription Software or its related systems or networks.

3.3. User Credentials. If applicable, Motorola will provide Customer with administrative user credentials for the Subscription Software, and Customer will ensure such administrative user credentials are accessed and used only by Customer's employees with training on their proper use. Customer will protect, and will cause its Authorized Users to protect, the confidentiality and security of all user credentials, including any administrative user credentials, and maintain user credential validity, including by updating passwords. Customer will be liable for any use of the Subscription Software through such user credential (including through any administrative user credentials), including any changes made to the Subscription Software or issues or user impact arising therefrom. To the extent Motorola provides Services to Customer in order to help resolve issues resulting from changes made to the Subscription Software through user credentials,

including through any administrative user credentials, or issues otherwise created by Authorized Users, such Services will be billed to Customer on a time and materials basis, and Customer will pay all invoices in accordance with the payment terms of the MCA.

Section 4. Software Systems - Applicable Terms and Conditions

4.1. On-Premise Software System. If Customer purchases an “on-premises Software System,” where Licensed Software is installed at Customer Sites or on Customer-Provided Equipment, then, unless otherwise specified in writing that any software is being purchased as Subscription Software, the Licensed Software is subject to Section 2 of the SLA.

4.1.1. CAD and Records Products. The terms set forth in this Section 4.1.1. apply in the event Customer purchases any Computer Aided Dispatch (“CAD”) or Records Products under the Agreement.

4.1.1.1. Support Required. Customer acknowledges and agrees that the licenses granted by Motorola under this SLA to CAD and Records Products for on-premises Software Systems are conditioned upon Customer purchasing Maintenance and Support Services for such Products during the term of the applicable license. If at any time during the term of any such license, Customer fails to purchase associated Maintenance and Support Services (or pay the fees for such Services), Motorola will have the right to terminate or suspend the software licenses for CAD and Record Products.

4.1.1.2. CJIS Security Policy. Motorola agrees to support Customer’s obligation to comply with the Federal Bureau of Investigation Criminal Justice Information Services (“CJIS”) Security Policy and will comply with the terms of the CJIS Security Addendum for the term of the Addendum or Proposal for the applicable Product. Customer hereby consents to Motorola screened personnel serving as the “escort” within the meaning of CJIS Security Policy for unscreened Motorola personnel that require access to unencrypted Criminal Justice Information for purposes of Product support and development.

4.2. On-Premise Software System as a Service. If Customer purchases an “on-premises Software System as a service,” where software Products are installed at Customer Sites or on Customer-Provided Equipment, and generally licensed on a subscription basis (i.e., as Subscription Software), then such Subscription Software is subject to Section 3 of the SLA. The firmware preinstalled on Equipment included with an on-premises Software System as a service purchase, and any Microsoft operating system Licensed Software are subject to Section 2 of the SLA.

4.2.1. Transition to Subscription License Model. If the Parties mutually agree that any on-premises Subscription Software purchased under this SLA as part of an “on-premises Software System as a service” solution will be replaced with or upgraded to Subscription Software hosted in a data center, then upon such time the Parties execute the applicable agreement, (a) the licenses granted to such on-premises Subscription Software under this SLA will automatically terminate, (b) Customer and its Authorized Users will cease use of the applicable on-premises copies of Subscription Software, and (c) the replacement hosted Subscription Software provided hereunder will be governed by the terms of **Section 4.3 Cloud Hosted Software System**.

4.2.2. Transition Fee. Motorola will not charge additional Fees for Services related to the transition to hosted Subscription Software, as described in **Section 4.2.1 – Transition to Subscription License Model**. Notwithstanding the foregoing, subscription Fees may be greater than Fees paid by Customer for on-premises Subscription Software.

4.2.3. Software Decommissioning. Upon (a) transition of the on-premises Software System as a service to Subscription Software hosted in a data center or (b) any termination of the Subscription

Software license for the on-premises Software System as a service, Motorola will have the right to enter Customer Sites and decommission the applicable on-premises Subscription Software that is installed at Customer's Site or on Customer-Provided Equipment. For clarity, Customer will retain the right to use Licensed Software that is firmware incorporated into Equipment purchased by Customer from Motorola and any Microsoft operating system Licensed Software.

4.3. Cloud Hosted Software System. If Customer purchases a "cloud hosted Software System," where the applicable software is hosted in a data center and provided to Customer as a service (i.e., as hosted Subscription Software), then such Subscription Software is subject to Section 3 of the SLA.

4.4. Additional Cloud Terms. The terms set forth in this **Section 4.4 – Additional Cloud Terms** apply in the event Customer purchases any cloud-hosted software Products.

4.4.1. Data Storage. Motorola will determine, in its sole discretion, the location of the stored content for cloud hosted software Products. All data, replications, and backups will be stored at a location in the United States for Customers in the United States.

4.4.2. Data Retrieval. Cloud hosted software Products will leverage different types of storage to optimize software, as determined in Motorola's sole discretion. For multimedia data, such as videos, pictures, audio files, Motorola will, in its sole discretion, determine the type of storage medium used to store the content. The type of storage and medium selected by Motorola will determine the data retrieval speed. Access to content in archival storage may take up to twenty-four (24) hours to be viewable.

4.4.3. Maintenance. Scheduled maintenance of cloud-hosted software Products will be performed periodically. Motorola will make commercially reasonable efforts to notify customers one (1) week in advance of any such maintenance. Unscheduled and emergency maintenance may be required from time to time. Motorola will make commercially reasonable efforts to notify customers of any unscheduled or emergency maintenance twenty-four (24) hours in advance.

Section 5. Term.

5.1. Term. The term of this SLA (the "**SLA Term**") will commence upon the Effective Date of the MCA.

5.2. Termination - Licensed Software License. Notwithstanding the termination provisions of the MCA, Motorola may terminate this SLA (and any Agreements hereunder) immediately upon notice to Customer if Customer breaches **Section 2 – Licensed Software License and Restrictions** of this SLA, or any other provision related to Licensed Software license scope or restrictions set forth in a Proposal, EULA, or other applicable Addendum. Upon termination or expiration of the SLA Term, all Motorola obligations under this SLA (including with respect to Equipment and Licensed Software delivered hereunder) will terminate. If Customer desires to purchase additional Services in connection with such Equipment or Licensed Software, Customer may enter into a separate Addendum with Motorola, governing such Services.

5.3. Termination - Subscription Software License. Notwithstanding the termination provisions of the MCA, Motorola may terminate this SLA, or suspend delivery of Subscription Software or Services, immediately upon notice to Customer if (a) Customer breaches **Section 3 – Subscription Software License and Restrictions** of this SLA, or any other provision related to Subscription Software license scope or restrictions set forth therein, or (b) it determines that Customer's use of the Subscription Software poses, or may pose, a security or other risk or adverse impact to any Subscription Software, Motorola, Motorola's systems, or any third party (including other Motorola customers).

5.4. Customer acknowledges that Motorola made a considerable investment of resources in the development, marketing, and distribution of the Licensed Software, Subscription Software, and Documentation, and that Customer's breach of the SLA will result in irreparable harm to Motorola for which monetary damages would be inadequate. If Customer breaches this SLA, in addition to termination, Motorola will be entitled to all available remedies at law or in equity (including immediate injunctive relief).

5.5. Applicable End User Terms. Additional license terms apply to third-party software included in certain software Products which are attached and incorporated herein as Exhibit E and available online at www.motorolasolutions.com/legal-flow-downs. Customer will comply, and ensure its Authorized Users comply, with all such additional license terms.

Section 6. Copyright Notices. The existence of a copyright notice on any Licensed Software will not be construed as an admission or presumption of publication of the Licensed Software or public disclosure of any trade secrets associated with the Licensed Software.

Section 7. Survival. The following provisions will survive the expiration or termination of this SLA for any reason: Section 2 – Licensed Software License and Restrictions; Section 3 -- Subscription Software License and Restrictions; Section 4 -- Software Systems -- Applicable Terms and Conditions; Section 5 – Term; Section 7 – Survival.

Exhibit C

MAINTENANCE, SUPPORT AND LIFECYCLE MANAGEMENT ADDENDUM

This Maintenance, Support and Lifecycle Management Addendum (this “**MSLMA**”) is subject to, and governed by, the terms of the Motorola Solutions Customer Agreement (“MCA”) to which it is attached. Capitalized terms used in this MSLMA, but not defined herein, will have the meanings set forth in the MCA.

Section 1. Addendum. This MSLMA governs Customer’s purchase of Maintenance, Support and Lifecycle Management (as defined below) services (and, if set forth in an Proposal related Services) from Motorola and will form part of the Parties’ Agreement. This MSMLA will control with respect to conflicting terms in the MCA or any other applicable Addendum, but only as applicable to the Maintenance, Support and Lifecycle Management services purchased under this MSMLA and not with respect to other Products and Services.

Section 2. Scope

Motorola will provide break/fix maintenance, technical support, or other Services (such as software integration Services) (“Maintenance and Support Services”) and/or upgrade services (“Lifecycle Management”) as further described in the applicable Proposal.

Section 3. Terms and conditions

3.1 Maintenance and Support services

3.1.1 Purchase Order Acceptance. Purchase orders for additional, continued, or expanded maintenance and software support, during the Warranty Period or after the Warranty Period, become binding only when accepted in writing by Motorola.

3.1.2 Start Date. The “Start Date” for Maintenance and Support Services will be indicated in the applicable Proposal.

3.1.3 Auto Renewal. Unless the applicable Proposal specifically states a termination date or one Party notifies the other in writing of its intention to discontinue the Maintenance and Support Services, this Agreement will renew for an additional one (1) year term on every anniversary of the Start Date. At the anniversary date, Motorola may adjust the price of the Services to reflect the renewal rate.

3.1.4 Termination. Written notice of intent to terminate must be provided thirty (30) days or more prior to the anniversary date. If Motorola provides Services after the termination or expiration of this MSLMA, the terms and conditions in effect at the time of termination or expiration will apply to those Services and Customer agrees to pay for those services on a time and materials basis at Motorola’s then effective hourly rates. This provision survives the expiration or termination of the Agreement and applies notwithstanding any contrary provision.

3.1.5 Equipment Definition. For maintenance and support services, Equipment will be defined to mean the hardware specified in the applicable Proposal.

3.1.6 Additional Hardware. If Customer purchases additional hardware from Motorola that

becomes part of the Communications System, the additional hardware may be added to this MSLMA and will be billed at the applicable rates after the warranty period for that additional equipment expires. Such hardware will be included in the definition of Equipment.

3.1.7 Maintenance. Equipment will be maintained at levels set forth in the manufacturer's product manuals and routine procedures that are prescribed by Motorola will be followed. Motorola parts or parts of equal quality will be used for Equipment maintenance.

3.1.8 Equipment Condition. All Equipment must be in good working order on the Start Date or when additional equipment is added to the MSLMA. Upon reasonable request by Motorola, Customer will provide a complete serial and model number list of the Equipment. Customer must promptly notify Motorola in writing when any Equipment is lost, damaged, stolen or taken out of service. Customer's obligation to pay maintenance and support fees for this Equipment will terminate at the end of the month in which Motorola receives the written notice. If Equipment cannot, in Motorola's reasonable opinion, be properly or economically maintained for any reason, Motorola may modify the scope of Services related to that Equipment; remove that Equipment from the Agreement; or increase the price to maintain that Equipment.

3.1.9 Equipment Failure. Customer must promptly notify Motorola of any Equipment failure. Motorola will respond to Customer's notification in a manner consistent with the level of Service purchased as indicated in this MSLMA and applicable Proposal.

3.1.10 Intrinsically Safe. Customer must specifically identify any Equipment that is labeled intrinsically safe for use in hazardous environments.

3.1.11 Excluded Services.

a) Service excludes the repair or replacement of Equipment that has become defective or damaged from use in other than the normal, customary, intended, and authorized manner; use not in compliance with applicable industry standards; excessive wear and tear; or accident, liquids, power surges, neglect, acts of God or other force majeure events.

b) Unless specifically included in this MSLMA or the applicable Proposal, Service excludes items that are consumed in the normal operation of the Equipment, such as batteries or magnetic tapes.; upgrading or reprogramming Equipment; accessories, belt clips, battery chargers, custom or special products, modified units, or software; and repair or maintenance of any transmission line, antenna, microwave equipment, tower or tower lighting, duplexer, combiner, or multicoupler. Motorola has no obligations for any transmission medium, such as telephone lines, computer networks, the internet or the worldwide web, or for Equipment malfunction caused by the transmission medium.

3.1.12 Time And Place. Service will be provided at the location specified in this MSLMA and/or the applicable Proposal. When Motorola performs maintenance, support, or installation at Customer's location, Customer will provide Motorola, at no charge, a non-hazardous work environment with adequate shelter, heat, light, and power and with full and free access to the Equipment. Waivers of liability from Motorola or its subcontractors will not be imposed as a site access requirement. Customer will provide all information pertaining to the hardware and software elements of any system with which the Equipment is interfacing so that Motorola may perform its Services. Unless otherwise stated in this MSLMA or applicable Proposal, the hours of Service will be 8:30 a.m. to 4:30 p.m., local time, excluding weekends and holidays. Unless otherwise stated in this MSLMA or applicable Proposal, the price for the Services exclude any

charges or expenses associated with helicopter or other unusual access requirements; if these charges or expenses are reasonably incurred by Motorola in rendering the Services, Customer agrees to reimburse Motorola for those charges and expenses.

3.1.13 Customer Contact. Customer will provide Motorola with designated points of contact (list of names and phone numbers) that will be available twenty-four (24) hours per day, seven (7) days per week, and an escalation procedure to enable Customer's personnel to maintain contact, as needed, with Motorola.

3.1.14 Warranty. Motorola warrants that its Maintenance and Support Services under this section will be free of defects in materials and workmanship for a period of ninety (90) days from the date the performance of the Services are completed. In the event of a breach of this warranty, Customer's sole remedy is to require Motorola to re-perform the non-conforming Service or to refund, on a pro-rata basis, the fees paid for the non-conforming Service. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

3.2 Lifecycle Management Services

3.2.1 The License terms included in the MCA and its SLA Addendum apply to any Motorola Licensed Software provided as part of the Lifecycle Management transactions.

3.2.2 The term and price of this MSLMA is stated in the Proposal. Because the Lifecycle Management is a subscription service as more fully described in the applicable Proposal, payment from Customer is due in advance and will not be in accordance with any Payment Milestone Schedule.

3.2.3 The Communications System upgrade will be scheduled during the subscription period and will be performed when Motorola's upgrade operation resources are available. Motorola may substitute any of the promised Equipment or Licensed Software so long as the substitute is equivalent or superior to the initially promised Equipment or Licensed Software.

3.2.4 Acceptance of a Lifecycle Management transaction occurs when the Equipment (if any) and Licensed Software are delivered, in accordance with the MCA, and the Lifecycle Management services are fully performed.

3.2.5 The Warranty Period for any Equipment or Licensed Software provided under a Lifecycle Management transaction will commence upon shipment and is for a period of ninety (90) days. The ninety (90) day warranty for Lifecycle Management services is set forth in the applicable Proposal.

3.2.6 In addition to the description of the Lifecycle Management services and exclusions provided in the applicable Proposal, the following apply:

- a) Upon reasonable request by Motorola, Customer will provide a complete serial and model number list of the Equipment.
- b) Lifecycle Management services exclude the repair or replacement of Equipment that has become defective or damaged from use in other than the normal, customary, intended, and

authorized manner; use not in compliance with applicable industry standards; excessive wear and tear; or accident, liquids, power surges, neglect, acts of God or other force majeure events.

c) Unless specifically included in this MSLMA or the applicable Proposal, Lifecycle Management services exclude items that are consumed in the normal operation of the Equipment; accessories; and repair or maintenance of any transmission line, antenna, microwave equipment, tower or tower lighting, duplexer, combiner, or multicoupler. Motorola has no obligations for any transmission medium, such as telephone lines, computer networks, the internet, or for Equipment malfunction caused by the transmission medium.

d) Customer will provide Motorola with designated points of contact (list of names and phone numbers) that will be available during the performance of the Lifecycle Management services.

3.2.7 The Lifecycle Management annualized price is based on the fulfillment of the two year cycle. If Customer terminates this service during a two year cycle, except for Motorola's default, then Customer will be required to pay for the balance of payments owed for the two year cycle if a major system release has been implemented before the point of termination.

3.2.8 If Customer terminates this Maintenance and Support or Lifecycle Management service and contractual commitment before the end of the term, for any reason other than Motorola's default, then the Customer will pay to Motorola a termination fee equal to the discount applied to the last three years of service payments related to the term commitment. This provision survives the expiration or termination of the Agreement and applies notwithstanding any contrary provision.

Section 4. Payment

4.1 Unless alternative payment terms are stated in this MSLMA, Motorola will invoice Customer in advance for each payment period. All other charges will be billed monthly and the Customer must pay each invoice in U.S. dollars within thirty (30) days of the invoice date. Customer will reimburse Motorola for all property taxes, sales and use taxes, excise taxes, and other taxes or assessments that are levied as a result of Services rendered under this Agreement (except income, profit, and franchise taxes of Motorola) by any governmental entity.

4.2 INFLATION ADJUSTMENT. For multi-year agreements, at the end of the Agreement's first year and each year thereafter, a CPI percentage change calculation shall be performed using the U.S. Department of Labor, Consumer Price Index, "All Items," Unadjusted Urban Areas (CPI-U). Should the annual inflation rate increase greater than 3% during the previous year, Motorola shall have the right to increase all future maintenance prices by the CPI increase amount exceeding 3%. The adjustment calculation will be based upon the CPI for the most recent twelve (12) month increment beginning from the most current month available posted by the U.S. Department of Labor (<http://www.bls.gov>) immediately preceding the new maintenance year. For purposes of illustration, if in Year 5 the CPI reported an increase of 8%, Motorola may increase the Year 6 price by 5% (8%-3% base).

Exhibit D HYPERLINK ADDENDA

Motorola Solutions Data Processing Addendum - U.S.

This Data Processing Addendum, including its Schedules and Annexes ("DPA"), forms part of the Motorola Solutions Customer Agreement or other underlying agreement governing the relationship of the parties ("Agreement") to reflect the parties' agreement with regard to the Processing of Customer Data, which may include Personal Data. In the event of a conflict between this DPA, the Agreement or any Schedule, Annex or other addenda to the Agreement, including a prior DPA, this DPA will prevail.

1. Definitions.

To the extent the Agreement provides definitions for the terms defined in this Section 1, the definitions of this Section 1 will apply to this DPA and the definitions of the Agreement will apply to the Agreement.

"Controller" means the natural or legal person, public authority, agency or other body which, alone or jointly with others, determines the purposes and means of the processing of personal data. Regulatory frameworks may differ in their respective naming conventions and therefore may refer to a Controller as a Business or otherwise.

"Customer Data" means data including images, text, videos, and audio, that are provided to Motorola by, through, or on behalf of Customer and its Authorized Users or their end users, through the use of the Products and Services. Customer Data does not include Customer Contact Data, Service Use Data, other than that portion comprised of Personal Information, or Third Party Data.

"Customer Contact Data" means data Motorola collects from Customer for contact purposes, including, without limitation, contract fulfillment, marketing, advertising, licensing, and sales activities.

"Data" means collectively Motorola Data and Customer Data, including any Personal Data included therein.

"Data Protection Laws and Policies" means all applicable corporate, state and local, federal and international laws, standards, guidelines, policies, regulations and procedures applicable to Supplier or Motorola pertaining to data security, confidentiality, privacy, and breach notification, as amended

"Data Subjects" means the identified or identifiable person to whom Personal Data relates.

"Metadata" means data that describes other data.

"Motorola Data" means data owned by Motorola and made available to Customer in connection with the Products and Services.

"Personal Data" or **"Personal Information"** means any information relating to an identified or identifiable natural person transmitted to Motorola by, through, or on behalf of Customer and its Authorized Users or their end users as part of Customer Data. An identifiable natural person is one who can be identified, directly or indirectly, in particular by reference to an identifier such as a name, an identification number, location data, an online identifier or to one or more factors

specific to the physical, physiological, genetic, mental, economic, cultural or social identity of that natural person.

“Process” or “Processing” means any operation or set of operations which is performed on Customer Data, which may include Personal Data or on sets of Personal Data, whether or not by automated means, such as collection, recording, copying, analyzing, caching, organization, structuring, storage, adaptation, or alteration, retrieval, consultation, use, disclosure by transmission, dissemination or otherwise making available, alignment or combination, restriction, erasure or destruction.

“Processor” means a natural or legal person, public authority, agency or other body which processes personal data on behalf of the Controller. Processors act on behalf of the relevant Controller and under their authority. In doing so, they serve the Controller's interests rather than their own. Regulatory frameworks may differ in their respective naming conventions and therefore may refer to a Processor as a “Service Provider” or otherwise.

“Security Incident” means a confirmed or reasonably suspected accidental or unlawful destruction, loss, alteration or disclosure of, or access to Customer Data, which may include Personal Data, while processed by Motorola.

“Service Use Data” means data generated about the use of the Products and Services through Customer's use or Motorola's support of the Products and Services, which may include Metadata, Personal Data, product performance and error information, activity logs, and date and time of use.

“Sub-processor” means other Processors engaged by Motorola to Process Customer Data which may include Personal Data.

“Third Party Data” means information obtained by Motorola from publicly available sources or its third party content providers and made available to Customer through the Products or Services.

“Users” means Customer's employees, contractors, agents, customers and end-users who are authorized to use the Services to access or receive Data. Motorola or customer (as determined by Motorola) will be responsible for all User identification and password change management.

2. Processing of Customer Data

2.1. Roles of the Parties. The Parties agree that with regard to the Processing of Personal Data hereunder, Customer is the Controller and Motorola is the Processor who may engage Sub-processors pursuant to the requirements of **Section 6** entitled “Sub-processors” below.

2.2. Motorola's Processing of Customer Data. Motorola and Customer agree that Motorola may only use and Process Customer Data, including the Personal Information embedded in

Service Use Data, in accordance with applicable law and Customer's documented instructions for the following purposes: (i) to perform Services and provide Products under the Agreement;

(ii) analyze Customer Data to operate, maintain, manage, and improve Motorola products and services; and (iii) create new products and services. Customer agrees that its Agreement (including this DPA), along with the Product and Service Documentation and Customer's use and configuration of features in the Products and Services, are Customer's complete and final documented instructions to Motorola for the processing of Customer Data. Any additional or alternate instructions will be agreed to according to the process for amending Customer's Agreement. Customer represents and warrants to Motorola that Customer's instructions, including appointment of Motorola as a Processor or Sub-processor, have been authorized by the relevant controller. Customer Data may be processed by Motorola at any of its global locations and/or disclosed to Sub-processors. It is Customer's responsibility to notify Authorized Users of Motorola's collection and use of Customer Data, and to obtain any required consents, provide all necessary notices, and meet any other applicable legal requirements with respect to such collection and use. Customer represents and warrants to Motorola that it has complied with the terms of this provision.

2.2.1. Additional Products and Services. In the event, Customer purchases additional Products and Services that integrate with the previously purchased Products and Services, Customer Data may be processed at additional locations around the world and by Sub-processors utilized in connection with the additional Products and Services. Identification of Sub-processors utilized by Motorola Solutions can be in Annex III attached hereto.

2.3. Details of Processing. The subject-matter of Processing of Personal Data by Motorola hereunder, the duration of the Processing, the categories of Data Subjects and types of Personal Data are set forth on **Annex I** to this DPA.

2.4. Disclosure of Processed Data. Motorola will not disclose to or share any Customer Data with any third party except to Motorola's Sub-processors, suppliers and channel partners as necessary to provide the products and services unless permitted under this Agreement, authorized by Customer or required by law. In the event a government or supervisory authority demands access to Customer Data, to the extent allowable by law, Motorola will provide Customer with notice of receipt of the demand to provide sufficient time for Customer to seek appropriate relief in the relevant jurisdiction. In all circumstances, Motorola retains the right to comply with applicable law. Motorola will ensure that its personnel are subject to a duty of confidentiality, and will contractually obligate its Sub-processors to a duty of confidentiality, with respect to the handling of Customer Data and any Personal Data contained in Service Use Data.

2.5. Customer's Obligations. Customer is solely responsible for its compliance with all Data Protection Laws and establishing and maintaining its own policies and procedures to ensure such compliance. Customer will not use the products and services in a manner that would violate applicable Data Protection Laws. Customer will have sole responsibility for (i) the lawfulness of any transfer of Personal Data to Motorola, (ii) the accuracy, quality, and legality of

Personal Data provided to Motorola; (iii) the means by which Customer acquired Personal Data, and (iv) the provision of any required notices to, and obtaining any necessary acknowledgements, authorizations or consents from Data Subjects. Customer takes full responsibility to keep the amount of Personal Data provided to Motorola to the minimum necessary for Motorola to perform in accordance with the Agreement.

2.6. Customer Indemnity. To the extent permitted by applicable law, Customer will defend, indemnify, and hold Motorola and its subcontractors, Sub-processors, subsidiaries and other affiliates harmless from and against any and all damages, losses, liabilities, and expenses (including reasonable fees and expenses of attorneys) arising from any actual or threatened third-party claim, demand, action, or proceeding arising from or related to Customer's failure to comply with its obligations under this DPA and/or applicable Data Protection Laws. Motorola will give Customer prompt, written notice of any claim subject to the foregoing indemnity. Motorola will, at its own expense, cooperate with Customer in its defense or settlement of the claim.

3. Service Use Data. Except to the extent that it is Personal Information, Customer understands and agrees that Motorola may collect and use Service Use Data for its own purposes, provided that such purposes are compliant with applicable Data Protection Laws. Service Use Data may be processed by Motorola at any of its global locations and/or disclosed to Sub-processors.

4. Third-Party Data and Motorola Data. Motorola Data and Third Party Data may be available to Customer through the products and services. Customer and its Authorized Users may use the Motorola Data and Third Party Data as permitted by Motorola and the applicable third-party data provider, as described in the Agreement or applicable addendum. Unless expressly permitted in the Agreement or applicable addendum, Customer will not, and will ensure its Authorized Users will not: (a) use the Motorola Data or Third-Party Data for any purpose other than Customer's internal business purposes or disclose the data to third parties; (b) "white label" such data or otherwise misrepresent its source or ownership, or resell, distribute, sublicense, or commercially exploit the data in any manner; (c) use such data in violation of applicable laws; (d) use such data for activities or purposes where reliance upon the data could lead to death, injury, or property damage; (e) remove, obscure, alter, or falsify any marks or proprietary rights notices indicating the source, origin, or ownership of the data; or (f) modify such data or combine it with Customer Data or other data or use the data to build databases. Additional restrictions may be set forth in the Agreement. Any rights granted to Customer or Authorized Users with respect to Motorola Data or Third-Party Data will immediately terminate upon termination or expiration of the applicable addendum, order or the Agreement. Further, Motorola or the applicable Third Party Data provider may suspend, change, or terminate Customer's or any Authorized User's access to Motorola Data or Third-Party Data if Motorola or such Third Party Data provider believes Customer's or the Authorized User's use of the data violates the Agreement, applicable law or by Motorola's agreement with the applicable Third Party Data provider. Upon termination of Customer's rights to use of any Motorola Data or Third-Party Data, Customer and all Authorized Users will immediately discontinue use of such data, delete all copies of such data, and certify such deletion to Motorola. Notwithstanding any provision of the Agreement to the contrary, Motorola has no liability for Third-Party Data or Motorola Data available through the Products and Services. Motorola and its Third Party Data

providers reserve all rights in and to Motorola Data and Third-Party Data not expressly granted in the Agreement or applicable order..

5. Motorola as a Controller or Joint Controller. In all instances where Motorola acts as a Controller it will comply with the applicable provisions of the Motorola Privacy Statement at [Motorola Privacy Statement](#) as each may be updated from time to time. Motorola holds all Customer Contact Data as a Controller and will Process such Customer Contact Data in accordance with the Motorola Privacy Statement. In instances where Motorola is acting as a Joint Controller with Customer, the Parties will enter into a separate addendum to the Agreement to allocate the respective roles as joint controllers.

6. Sub-processors.

6.1. Use of Sub-processors. Customer agrees that Motorola may engage Sub-processors who in turn may engage Sub-processors to Process Personal Data in accordance with the DPA. A current list of Sub-processors is set forth in **Annex III**, if **Annex III** has been completed. When engaging Sub-processors, Motorola will enter into agreements with the Sub-processors to bind them to obligations which are substantially similar or more stringent than those set out in this DPA.

6.2. Changes to Sub-processing. The Customer hereby consents to Motorola engaging Sub-processors to process Customer Data provided that: (i) Motorola will use its reasonable endeavors to provide at least 10 days' prior notice of the addition or removal of any Sub-processor, which may be given by posting details of such addition or removal at [Motorola Sub-Processors](#); (ii) Motorola imposes data protection terms on any Sub-processor it appoints that protect the Customer Data to the same standard provided for by this DPA; and (iii) Motorola remains fully liable for any breach of this clause that is caused by an act, error or omission of its Sub-processor(s). MSI Sub-Processors The Customer may object to Motorola's appointment or replacement of a Sub-processor prior to its appointment or replacement, provided such objection is based on reasonable grounds relating to data protection. In such event, Motorola will either appoint or replace the Sub-processor or, if in Motorola's discretion this is not feasible, the Customer may terminate this Agreement and receive a pro-rata refund of any prepaid service or support fees as full satisfaction of any claim arising out of such termination.

6.3. Data Subject Requests. Motorola will, to the extent legally permitted, promptly notify Customer if it receives a request from a Data Subject, including without limitation requests for access to, correction, amendment, transport or deletion of such Data Subject's Personal Data and, to the extent applicable, Motorola will provide Customer with commercially reasonable cooperation and assistance in relation to any complaint, notice, or communication from a Data Subject. Customer will respond to and resolve promptly all requests from Data Subjects which Motorola provides to Customer. Customer will be responsible for any reasonable costs arising from Motorola's provision of such assistance under this Section.

7. Data Transfers

Motorola agrees that it will not make transfers of Personal Data under this Agreement from one jurisdiction to another unless such transfers are performed in compliance with this DPA and applicable Data Protection Laws. Motorola agrees to enter into appropriate agreements with its

affiliates and Sub-processors, which will permit Motorola to transfer Personal Data to its affiliates and Sub-processors. Motorola also agrees to assist the Customer in entering into agreements with its affiliates and Sub-processors if required by applicable Data Protection Laws for necessary transfers.

8. Security. Motorola will implement appropriate technical and organizational measures to ensure a level of security appropriate to the risks posed by the Processing of Customer Data which may include Personal Data. The appropriate technical and organizational measures implemented by Motorola are set forth in **Annex II**.

9. Security Incident Notification. If Motorola becomes aware of a Security Incident, then Motorola will (i) notify Customer of the Security Incident without undue delay, (ii) investigate the Security Incident and apprise Customer of the details of the Security Incident and (iii) take commercially reasonable steps to stop any ongoing loss of Customer Data including Personal Data due to the Security Incident if in the control of Motorola. Notification of a Security Incident will not be construed as an acknowledgement or admission by Motorola of any fault or liability in connection with the Security Incident. Motorola will make reasonable efforts to assist Customer in fulfilling Customer's obligations under Data Protection Laws to notify the relevant supervisory authority and Data Subjects about such incident. Notwithstanding the foregoing, If Motorola becomes aware of a Security Incident that involves Customer Data which is Personal Data, Motorola shall provide notice to Customer, law enforcement, applicable regulators and affected individuals if required under applicable laws and regulations.

10. Data Retention and Deletion. Except for anonymized Customer Data, as described above, or as otherwise provided under the Agreement, Motorola deletes all Customer Data ninety (90) days following termination or expiration of the Agreement or the applicable Addendum or Ordering Document unless otherwise required to comply with applicable law. Notwithstanding the foregoing, Motorola will retain the Customer Data for at least thirty (30) days following such termination or expiration to accommodate a request by Customer for the Customer Data. If, within such thirty (30) day period, Customer requests (in writing), Motorola will make Customer Data available to Customer for export or download for a period of thirty (30) days. Motorola has no obligation to retain such Customer Data beyond such thirty (30) day period. Subject to Section 12.3 regarding CJIS Data, Motorola may delete any Service Use Data upon termination or expiration of the Agreement or the applicable Addendum or Ordering Document.

11. Audit Rights

11.1 Periodic Audit. Motorola will allow Customer to perform an audit of reasonable scope and duration of Motorola operations relevant to the Products and Services purchased under the Agreement, at Customer's sole expense, for verification of compliance with the technical and organizational measures set forth in **Annex II** if (i) Motorola notifies Customer of a Security Incident that results in actual compromise to the Products and/or Services purchased; or (ii) if Customer reasonably believes Motorola is not in compliance with its security commitments under this DPA, or (iii) if such audit is legally required by the Data Protection Laws. Any audit will be conducted in accordance with the procedures set forth in **Section 11.3** of this DPA and

may not be conducted more than one time per year. Unless mandated by law or court order, no audits are allowed within a data center for security and compliance reasons. Motorola will, in no circumstances, provide Customer with the ability to audit any portion of its software, products, and services which would be reasonably expected to compromise the confidentiality of any third party's information or Personal Data.

11.2 Satisfaction of Audit Request. Upon receipt of a written request to audit, and subject to Customer's agreement, Motorola may satisfy such audit request by providing Customer with a confidential copy of Motorola's most recent applicable third party security review performed by a nationally recognized independent third party auditor, such as a SOC2 Type II report or ISO 27001 and 27701 certification, in order that Customer may reasonably verify Motorola's compliance with industry standard information security and privacy frameworks..

11.3 Audit Process. Customer will provide at least sixty days (60) days prior written notice to Motorola of a request to conduct the audit described in **Section 11.1**. All audits will be conducted during normal business hours, at applicable locations or remotely, as designated by Motorola. Audit locations, if not remote will generally be those location(s) where Customer Data is accessed, or Processed, excluding data centers. The audit will not unreasonably interfere with Motorola's day to day operations. An audit will be conducted at Customer's sole cost and expense and subject to the terms of the confidentiality obligations set forth in the Agreement. Before the commencement of any such audit, Motorola and Customer will mutually agree upon the time, and duration of the audit. Motorola will provide reasonable cooperation with the audit, including providing the appointed auditor a right to review, but not copy, Motorola security information or materials provided such auditor has executed an appropriate non-disclosure agreement. Motorola's policy is to share methodology and executive summary information, not raw data or private information. Customer will, at no charge, provide to Motorola a full copy of all findings of the audit.

12. Regulation Specific Terms

12.1. HIPAA Business Associate. If Customer is a "covered entity" or a "business associate" and includes "protected health information" in Customer Data as those terms are defined in 45 CFR § 160.103, execution of the Agreement includes execution of the Motorola HIPAA Business Associate Agreement Addendum ("BAA"). Customer may opt out of the BAA by sending the following information to Motorola in a written notice under the terms of the Customer's Agreement: "Customer and Motorola agree that no Business Associate Agreement is required. Motorola is not a Business Associate of Customer's, and Customer agrees that it will not share or provide access to Protected Health Information to Motorola or Motorola's sub-processors."

12.2. FERPA. If Customer is an educational agency or institution to which regulations under the Family Educational Rights and Privacy Act, 20 U.S.C. § 1232g (FERPA), apply, Motorola acknowledges that for the purposes of the DPA, Motorola is a "school official" with "legitimate educational interests" in the Customer Data, as those terms have been defined under FERPA and its implementing regulations, and Motorola agrees to abide by the limitations and requirements imposed by 34 CFR 99.33(a) on school officials. Customer understands that Motorola may possess limited or no contact information for Customer's students and students' parents. Consequently, Customer will be responsible for obtaining any parental consent for any end user's use of the Online Service that may be required by applicable law and to convey

notification on behalf of Motorola to students (or, with respect to a student under 18 years of age and not in attendance at a post-secondary institution, to the student's parent) of any judicial order or lawfully-issued subpoena requiring the disclosure of Customer Data in Motorola's possession as may be required under applicable law.

12.3. CJIS. Motorola agrees to support the Customer's obligation to comply with the Federal Bureau of Investigation Criminal Justice Information Services (CJIS) Security Policy and will comply with the terms of the CJIS Security Addendum for the Term of this Agreement. Customer hereby consents to allow Motorola "screened" personnel as defined by the CJIS Security Policy to serve as an authorized "escort" within the meaning of CJIS Security Policy for escorting unscreened Motorola personnel that require access to unencrypted Criminal Justice Information for purposes of Tier 3 support (e.g. troubleshooting or development resources). In the event Customer requires access to Service Use Data for its compliance with the CJIS Security Policy, Motorola will make such access available following Customer's request. Notwithstanding the foregoing, in the event the Agreement or applicable ordering document terminates, Motorola will carry out deletion of Customer Data in compliance with Section 10 herein and may likewise delete Service Use Data within the time frame specified therein. To the extent Customer objects to deletion of its Customer Data or Service Use Data and seeks retention for a longer period, it will provide written notice to Motorola prior to expiration of the 90 day period for data retention to arrange return of the Customer Data and retention of the Service Use Data for a specified longer period of time.

12.4 CCPA / CPRA. If Motorola is Processing Personal Data within the scope of the California Consumer Protection Act ("CCPA") and/or the California Privacy Rights Act ("CPRA") (collectively referred to as the "California Privacy Acts"), Customer acknowledges that Motorola is a "Service Provider" within the meaning of California Privacy Acts. Motorola will process Customer Data and Personal Data on behalf of Customer and, not retain, use, or disclose that data for any purpose other than for the purposes set out in this DPA and as permitted under the California Privacy Acts, including under any "sale" exemption. In no event will Motorola sell any such data, nor will M. If a California Privacy Act applies, Personal Data will also include any data identified with the California Privacy Act or Act's definition of personal data. Motorola shall provide Customer with notice should it determine that it can no longer meet its obligations under the California Privacy Acts, and the parties agree that, if appropriate and reasonable, Customer may take steps necessary to stop and remediate unauthorized use of the impacted Personal Data.

12.5 Data Protection Laws. Motorola will comply with its obligations under the applicable legislation, and shall make available to Customer all information in its possession necessary to demonstrate compliance with obligations in accordance with such legislation.

12.6 Motorola Contact. If Customer believes that Motorola is not adhering to its privacy or security obligations hereunder, Customer will contact the Motorola Data Protection Officer at Motorola Solutions, Inc., 500 W. Monroe, Chicago, IL USA 90661-3618 or at privacy1@motorolasolutions.com.

ANNEX I

DESCRIPTION OF TRANSFER

Categories of data subjects whose personal data is transferred

Data subjects include the data exporter's representatives and end-users including employees, contractors, collaborators, and customers of the data exporter. Data subjects may also include individuals attempting to communicate or transfer personal information to users of the services provided by data importer. Motorola acknowledges that, depending on Customer's use of the Online Service, Customer may elect to include personal data from any of the following types of data subjects in the Customer Data:

- Employees, contractors, and temporary workers (current, former, prospective) of data exporter;
- Dependents of the above;
- Data exporter's collaborators/contact persons (natural persons) or employees, contractors or temporary workers of legal entity collaborators/contact persons (current, prospective, former);
- Users (e.g., customers, clients, patients, visitors, etc.) and other data subjects that are users of data exporter's services;
- Partners, stakeholders or individuals who actively collaborate, communicate or otherwise interact with employees of the data exporter and/or use communication tools such as apps and websites provided by the data exporter;
- Stakeholders or individuals who passively interact with data exporter (e.g., because they are the subject of an investigation, research or mentioned in documents or correspondence from or to the data exporter);
- Minors; or
- Professionals with professional privilege (e.g., doctors, lawyers, notaries, religious workers, etc.).

Categories of personal data transferred

Customer's use of the Products and Services, Customer may elect to include personal data from any of the following categories in the Customer Data:

- Basic personal data (for example place of birth, street name, and house number (address), Agreemental code, city of residence, country of residence, mobile phone number, first name, last name, initials, email address, gender, date of birth), including basic personal data about family members and children;
- Authentication data (for example user name, password or PIN code, security question, audit trail);
- Contact information (for example addresses, email, phone numbers, social media identifiers; emergency contact details);
- Unique identification numbers and signatures (for example Social Security number, bank account number, passport and ID card number, driver's license number and vehicle registration data, IP addresses, employee number, student number, patient number, signature, unique identifier in tracking cookies or similar technology);
- Pseudonymous identifiers;
- Financial and insurance information (for example insurance number, bank account name and number, credit card name and number, invoice number, income, type of assurance, payment behavior, creditworthiness);
- Commercial Information (for example history of purchases, special offers, subscription information, payment history);
- Biometric Information (for example DNA, fingerprints and iris scans);
- Location data (for example, Cell ID, geo-location network data, location by start call/end of the call. Location data derived from use of wifi access points);
- Photos, video, and audio;
- Internet activity (for example browsing history, search history, reading, television viewing, radio listening activities);
- Device identification (for example IMEI-number, SIM card number, MAC address);
- Profiling (for example based on observed criminal or anti-social behavior or pseudonymous profiles based on visited URLs, click streams, browsing logs, IP-addresses, domains, apps installed, or profiles based on marketing preferences);

- HR and recruitment data (for example declaration of employment status, recruitment information (such as curriculum vitae, employment history, education history details), job and position data, including worked hours, assessments and salary, work permit details, availability, terms of employment, tax details, payment details, insurance details and location, and organizations);
- Education data (for example education history, current education, grades and results, highest degree achieved, learning disability);
- Citizenship and residency information (for example citizenship, naturalization status, marital status, nationality, immigration status, passport data, details of residency or work permit);
- Information processed for the performance of a task carried out in the public interest or in the exercise of an official authority;
- Special categories of data (for example racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership, genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health, data concerning a natural person's sex life or sexual orientation, or data relating to criminal convictions or offenses); or
- Any other personal data identified under applicable law or regulation.

Sensitive data transferred

To the extent that a solution sold under an Agreement requires the processing of sensitive personal information, it will be restricted to the minimum processing necessary for the solution functionality and be subject to technical security measures appropriate to the nature of the information.

The frequency of the transfer Data may be transferred on a continuous basis during the term of the Agreement or other agreement to which this DPA applies.

Nature of the processing

The nature, scope and purpose of processing personal data is to carry out performance of Motorola's obligations with respect to provision of the Products and Services purchased under the Agreement and applicable ordering documents. The data importer utilizes a global network of data centers and management/support facilities, and processing may take place in any jurisdiction where data importer or its Sub-processors utilize such facilities.

Purpose(s) of the data transfer and further processing

The nature, scope and purpose of processing personal data is to carry out performance of Motorola's obligations with respect to provision of the Products and Services purchased under the Agreement and applicable ordering documents. The data importer utilizes a global network of data centers and management/support facilities, and processing may take place in any jurisdiction where data importer or its Sub-processors utilize such facilities

The period for which the personal data will be retained Data retention is governed by Section 10 of this Data Processing Addendum

For transfers to (sub-) processors, also specify subject matter, nature and duration of the processing

Transfers to Sub-processors will only be for carrying out the performance of Motorola's obligations with respect to provision of the Products and Services purchased under the Agreement and applicable ordering documents. The data importer utilizes a global network of data centers and management/support facilities, and processing may take place in any jurisdiction where data importer or its Sub-processors utilize such facilities. In accordance with the DPA, the data exporter agrees the data importer may hire other companies to provide limited services on data importer's behalf, such as providing customer support. Any such Sub-processors will be permitted to obtain Customer Data only to deliver the services the data importer has retained them to provide, and they are prohibited from using Customer Data for any other purpose.

ANNEX II

TECHNICAL AND ORGANIZATIONAL MEASURES INCLUDING TECHNICAL AND ORGANIZATIONAL MEASURES TO ENSURE THE SECURITY OF THE DATA

Measures of pseudonymisation and encryption of personal data

Where technically feasible and when not impacting services provided: Motorola Solutions minimizes the data it collects to information it believes is necessary to communicate, provide, and support products and services and information necessary to comply with legal obligations. Motorola Solutions encrypts data in transit and at rest. Motorola Solutions pseudonymizes and limits administrative accounts that have access to reverse pseudonymisation.

Measures for ensuring ongoing confidentiality, integrity, availability and resilience of processing systems and services

In order to ensure ongoing confidentiality, integrity, availability and resilience of processing systems and services, Motorola Solutions Information Protection policy mandates the institutionalization of information protection throughout solution development and operational lifecycles. Motorola Solutions maintains dedicated security teams for its internal information security and its products and services. Its security practices and policies are integral to its business and mandatory for all Motorola Solutions employees and contractors. The Motorola Chief Information Security Officer maintains responsibility and executive oversight for such policies, including formal governance, revision management, personnel education and compliance. Motorola Solutions generally aligns its information security practices to the NIST Cybersecurity Framework as well as ISO 27001.

Measures for ensuring the ability to restore the availability and access to personal data in a timely manner in the event of a physical or technical incident

Motorola's availability and backup strategy is designed to ensure replication and fail-over protections in the event of a physical or technical incident. Personal Data is backed up and maintained using at least industry standard methods

Security Incident Procedures. Motorola maintains a global incident response plan to address any physical or technical incident in an expeditious manner. Motorola maintains a record of security breaches with a description of the breach, the time period, the consequences of the breach, the name of the reporter, and to whom the breach was reported, and the procedure for recovering data. For each security breach that is a Security Incident, notification will be made in accordance with the Security Incident Notification section of this DPA.

Business Continuity and Disaster Preparedness. Motorola maintains business continuity and disaster preparedness plans for critical functions and systems within Motorola's control that support the products and services purchased under the Agreement in order to avoid services disruptions and minimize recovery risks.

Processes for regularly testing, assessing and evaluating the effectiveness of technical and organizational measures in order to ensure the security of the processing

Motorola periodically evaluates its processes and systems to ensure continued compliance with obligations imposed by law, regulation or contract with respect to the confidentiality, integrity, availability, and security of Customer Data, including Personal Information. Motorola documents the results of these evaluations and any remediation activities taken in response to such evaluations. Motorola periodically has third party assessments performed against applicable industry standards, such as ISO 27001, 27017, 27018 and 27701.

Measures for user identification and authorisation

Identification and Authentication. Motorola uses industry standard practices to identify and authenticate users who attempt to access Motorola information systems. Where authentication mechanisms are based on passwords, Motorola requires that the passwords are at least twelve characters long and are changed regularly. Motorola uses industry standard password protection practices, including practices designed to maintain the confidentiality and integrity of passwords when they are assigned, distributed, and during storage.

Access Policy and Administration. Motorola maintains a record of security privileges of individuals having access to Customer Data, including Personal Information. Motorola maintains appropriate processes for requesting, approving and administering accounts and access privileges in connection with the Processing of Customer Data. Only authorized personnel may grant, alter or cancel authorized access to data and resources. Where an individual has access to systems containing Customer Data, the individuals are assigned separate, unique identifiers. Motorola deactivates authentication credentials on a periodic basis.

Measures for the protection of data during transmission

Data is generally encrypted during transmission within the Motorola managed environments. Encryption in transit is also generally required of any Sub-processors. Further, protection of data in transit is achieved through the access controls, physical and environmental security, and personnel security described throughout this Annex II.

Measures for the protection of data during storage

Data is generally encrypted during storage within the Motorola managed environments. Encryption in storage is also generally required of any Sub-processors. Further, protection of data in storage is also achieved through the access controls, physical and environmental security, and personnel security described throughout this Annex II.

Measures for ensuring physical security of locations at which personal data are processed

Motorola maintains appropriate physical and environment security controls to prevent unauthorized access to Customer Data, including Personal Information. This includes appropriate physical entry controls to Motorola facilities such as card-controlled entry points, and a staffed reception desk to protect against unauthorized entry. Access to controlled areas within a facility will be limited by job role and subject to authorized approval. Use of an access badge to enter a controlled area will be logged and such logs will be retained in accordance with Motorola policy. Motorola revokes personnel access to Motorola facilities and controlled areas upon separation of employment in accordance with Motorola policies. Motorola policies impose industry standard workstation, device and media controls designed to further protect Customer Data, including personal information.

Measures for ensuring personnel security

Access to Customer Data. Motorola maintains processes for authorizing and supervising its employees, and contractors with respect to monitoring access to Customer Data. Motorola requires its employees, contractors and agents who have, or may be expected to have, access to Customer Data to treat that data as Motorola Solutions Confidential Restricted information.

Security and Privacy Awareness. Motorola ensures that its employees and contractors remain aware of industry standard security and privacy practices, and their responsibilities for protecting Customer Data, which may include Personal Data. This includes, but is not limited to, protection against malicious software, password protection, and management, and use of workstations and computer system accounts. Motorola requires periodic information security training, privacy training, and business ethics training for all employees and contract resources.

Sanction Policy. Motorola maintains a sanction policy to address violations of Motorola's internal security requirements as well as those imposed by law, regulation, or contract.

Background Checks. Motorola follows its standard mandatory employment verification requirements for all new hires. In accordance with Motorola internal policy, these requirements will be periodically reviewed and include criminal background checks, proof of identity validation and any additional checks as deemed necessary by Motorola.

Measures for ensuring events logging

Motorola Solutions logs, or enables Customers to log, access and use of products or services that Process Customer Data. Logging of defined system activities, with appropriate event details, is required by Motorola Solutions policy. Such policy also requires integrated audit record review via a Security Information Event Management system and requirements for appropriate audit trail log management.

Measures for certification/assurance of processes and products

Motorola performs internal security evaluations such as Secure Application Reviews and Secure Design Review as well as Production Readiness Reviews prior to product or service release. Where appropriate, privacy assessments are performed for Motorola's products and services. A risk register is created as a result of internal evaluations with assignments tasked to appropriate personnel. Security audits are performed annually with additional audits as needed. Additional privacy assessments, including updated data maps, may occur when material changes are made to the products or services. Further, Motorola Solution has achieved AICPA SOC2 Type 2 reporting and ISO/IEC 27001:2013 certification for the scope as set forth in its applicable certificate found at the [Motorola Solutions Trust Center](#).

Measures for ensuring data minimisation

Motorola Solutions policies require processing of all personal information in accordance with applicable law, including when that law requires data minimisation. Further, Motorola Solutions conducts privacy assessments of its products and services and evaluates if those products and services support the principles of processing, such as data minimization.

Measures for ensuring data quality

Motorola Solutions policies require processing of all personal information in accordance with applicable law, including when that law requires ensuring the quality and accuracy of data. Further, Motorola Solutions conducts privacy assessments of its products and services and evaluates if those products and services support the principles of processing, such as ensuring data quality.

Measures for ensuring limited data retention

Motorola Solutions maintains a data retention policy that provides a retention schedule outlining storage periods for Personal Data. The schedule is based on business needs and provides sufficient information to identify all records and to implement disposal decisions in line with the schedule. The policy is periodically reviewed and updated.

Measures for ensuring accountability

To ensure compliance with the principle of accountability, Motorola Solutions maintains a Privacy Program which generally aligns its activities to industry standard frameworks including the Nymity Privacy Management and Accountability Framework, NIST Privacy Framework and ISO 27701. The Privacy Program is audited annually by Motorola Solutions Audit Services.

Measures for allowing data portability and ensuring erasure

When subject to a data subject request to move, copy or transfer their personal data, Motorola Solutions will provide personal data to the Controller in a structured, commonly used and machine readable format. Where possible and if the Controller requests it, Motorola Solutions can directly transmit the personal information to another organization.

For transfers to Sub-processors

If, in the course of providing products and services under the Agreement, Motorola Solutions transfers Customer Data containing Personal Data to Sub-processors, such Sub-processors will be subjected to a security assessment and bound by obligations substantially similar, but at least as stringent, as those included in this DPA.

ANNEX III

SUB-PROCESSORS

Motorola Solutions Sub-processors are identified at the [Motorola Solutions Sub-processor Site](#)

SOFTWARE POLICY

This document defines specific support availability and timelines for Motorola Solutions ASTRO® 25 and Dimetra systems.

Support Periods : The standard support period begins when a system software release is first made available to the market. From that date, the standard support period for the software release is four years, referred to as Year 1 to Year 4 or Y1 to Y4. The extended support period is from year 5 to year 7 or Y5 to Y7. Depending on the support option, the End of Support (EoS) period is from either year 5 or year 8 and into the future. These support periods are not affected by the purchase date, shipment date or acceptance date of a system for a given software release.

1) Standard support period: Motorola Solutions will support the given software release in the following manner:

- **Support Service Availability**
 - Period: Y1 through Y4 from initial market availability of the software release
 - All Support Services available
- **Software Defect Repair / Patching**
 - Period: Y1 through Y2
 - Qualified Severity 1 and Severity 2 incidents that result in product defect fixes will be made available to the customer. Some defects may require an upgrade to a more current release to resolve.
 - Period: Y3 through Y4
 - Qualified Severity 1 incidents that result in product defect fixes will be made available to the customer. Some defects may require an upgrade to a more current release to resolve.
- **Security Services**
 - Period: Y1 through Y4
 - All Security Services available (Security Monitoring and Security Update Service)
- **System Expansion**
 - Period: Y1 through Y4
 - Full system expansion available including subscribers, sites, consoles, base stations and radio system Customer Enterprise Network (CEN) additions.

2) Extended Support Period: Applies to software releases that have reached the end of Standard Support. Motorola Solutions continues to provide support on such products as specified below. Extended Support includes:

- **Support Service Availability**
 - Period: Y5 through Y7
 - All Support Services available through pricing of these services will be escalated.
- **Software Defect Repair / Patching**
 - Period: Y5 through Y7
 - Defect Repair: Not available
- **Security Services**
 - Period: Y5 through Y7
 - Security Services - Not available
- **System Expansion**
 - Period: Y5 through Y7
 - Infrastructure expansions are not available. System Expansion is limited to

subscribers only. Some features on the subscribers may not function due to Infrastructure expansions no longer being available.

3) End of Support Period: Applies to software releases that have reached the end of Extended Support. Support for older software versions will no longer be available. End of Support includes:

- Support Service Availability and Pricing
 - Period: Y8 and later
 - Support Services - Not Available
- Software Patching
 - Period: Y5 and later
 - Defect Repair - Not Available
 - Security Services - Not Available
- System Expansion
 - Period: Y5 and later
 - Infrastructure expansions are not available. System Expansion is limited to subscribers only. Some features on the subscribers may not function due to Infrastructure expansions no longer being available.