

Telecommunications License Agreement
LICENSOR: County of Riverside
LICENSEE: U.S. Department of Agriculture, Forest Service
Office of the Chief Information Officer, Lands, Minerals, and Realty Management
Red Mountain Communication Site, Riverside County
License Agreement Number 0512COMM0001

TABLE OF CONTENTS

1.	Recitals	3
2.	Term	4
3.	Automatic Extensions	4
4.	INTENTIONALLY DELETED	4
5.	INTENTIONALLY DELETED	4
6.	INTENTIONALLY DELETED	4
7.	INTENTIONALLY DELETED	4
8.	INTENTIONALLY DELETED	4
9.	Use	4
10.	Access to Premises	4
11.	Safety and Cleanliness of the Premises	4
12.	Maintenance of the Premises	5
13.	Inspection and Monitoring of the Premises	5
14.	Change in Federally Owned Communications Equipment	5
15.	Re-Allocation of Space	5
16.	Installation of Federally Owned Communications Equipment	5
17.	Disposition of LICENSEES Equipment	5
18.	Tower Analysis	6
19.	Electrical and Heat Load Analysis	6
20.	Contract Support	6
21.	Utilities	6
22.	National Telecommunications and Information Administration Licenses	7
23.	LICENSEE'S Operations	7
24.	Interference	7
25.	Employees and Agents of LICENSEE	8
26.	Permits and Licenses	8
27.	INTENTIONALLY DELETED	8
28.	COUNTY'S Representative	8
29.	Termination by COUNTY	9
30.	Termination by LICENSEE	9
31.	INTENTIONALLY DELETED	9
32.	Free From Liens	9
33.	Insurance and Liability	9
34.	INTENTIONALLY DELETED	9
35.	Non-Transferability	9
36.	Hazardous Materials	9
37.	Waiver of Performance	10
38.	Severability	10
39.	Venue	10
40.	Notices	10
41.	Entire Agreement	11
42.	Interpretation of Agreement	11
43.	Future Users Obligation	11
44.	INTENTIONALLY DELETED	11
45.	INTENTIONALLY DELETED	11
46.	Mode of Execution	11
47.	Members of or Delegates to Congress and Resident Commissioners	11

LIST OF APPENDICES

Appendix A – County's Forest Service Lease and Associated Communications Site Management Plan

Appendix B – Description and Map of Premises

Appendix C – County's Communications Site Engineering Analysis

Appendix D – Communications Equipment Technical Data

Appendix E – County Points of Contact for Premises

Appendix F – Premises Access Procedures

Appendix G – County Site Installation Standards

These and any other appendices to this Agreement are hereby incorporated into this Agreement.

PREAMBLE

This Telecommunications License Agreement, hereinafter referred to as the "Agreement," by and between COUNTY OF RIVERSIDE, a political subdivision of the State of California, the Licensor, on behalf of the Riverside County Sheriff's Department, hereinafter referred to as "COUNTY" and UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE, an executive department of the United States, hereinafter referred to as "LICENSEE." It is hereby agreed as follows:

1. Recitals.

- (a) COUNTY operates a communications tower, communications building, and related facilities (hereinafter the "Premises") at the Red Mountain Communication Site on National Forest System lands in the San Bernadino National Forest under a Communications Use Lease dated June 14, 2010, issued by LICENSEE to COUNTY, hereinafter "Communications Use Lease," which is governed by a communications site management plan, which are collectively attached as Appendix "A", attached hereto and incorporated herein by this reference. COUNTY'S authority to license the Premises to LICENSEE is subject to all the terms of the Communications Use Lease. If there is any inconsistency between the terms of the Communications Use Lease and the terms of this Agreement, the terms of the Communications Use Lease shall govern. If the Communications Use Lease terminates or is revoked, this agreement shall terminate. COUNTY shall notify LICENSEE as soon as practicable of termination or revocation of the Communications Use Lease.
- (b) LICENSEE desires to install communications equipment in and on the Premises which are more fully depicted on Appendix "B", attached hereto and incorporated herein by this reference.
- (c) COUNTY warrants that it has the authority to execute this Agreement, to allow the LICENSEE to use and occupy the Premises, and to provide unrestricted legal access to the Premises for purposes of the LICENSEE's exercise of its rights and privileges under this Agreement.
- (d) The Premises are part of the Riverside County Public Safety Enterprise Communications (PSEC) system, which operates the communication network for first responders in Riverside County.
- (e) The COUNTY and PSEC have agreed that no rent will be charged to LICENSEE under this Agreement.
- (f) It is in the public interest and the best interest of the COUNTY that a license be granted to LICENSEE for use of the Premises on the terms and conditions herein and that this Agreement will not substantially conflict or interfere with the use of the Premises by COUNTY or other co-located users.
- (g) LICENSEE's use of the Premises must not result in the installation or operation of equipment that in any way hinders, obstructs, or interferes with operations or communications of the COUNTY or any existing licensee at the Premises.

2. Term.

The initial term of this Agreement shall be for a period of five (5) years, commencing once the agreement is fully executed _____ ("Commencement Date"), and expiring at midnight on _____.

3. Automatic Extensions.

The initial term shall be followed by three (3) five (5)-year automatic extensions, unless either party provides written notice of termination ninety (90) days prior to expiration of any of its five-year terms. Any further extensions shall only be granted with the approval of the Riverside County Board of Supervisors.

4. INTENTIONALLY DELETED.

5. INTENTIONALLY DELETED.

6. INTENTIONALLY DELETED.

7. INTENTIONALLY DELETED.

8. INTENTIONALLY DELETED.

9. Use.

(a) COUNTY hereby grants to LICENSEE use of the Premises, for the purposes of installation, operation, maintenance, and removal of federally owned communications equipment, as described in Appendix "C", the Riverside County Communications Site Engineering Analysis, and Appendix "D", the Communications Equipment Technical Data (Forest Service Form 2700-10), attached hereto and incorporated herein by reference, and for such other uses or purposes necessarily related thereto, including any applicable easements for utilities and access to the Premises.

(b) LICENSEE shall, at LICENSEE's sole expense, comply with the requirements of all local, state, and federal statutes, regulations, rules, ordinances, and orders now in force or which may be hereafter in force, pertaining to its permitted use of the Premises.

10. Access to Premises.

COUNTY will maintain control over the Premises, and LICENSEE shall exercise rights and privileges of access and use as listed Section 9(a) above as detailed in Appendix "F", the Premises Access Procedures, attached and incorporated herein by reference.

11. Safety and Cleanliness of the Premises.

LICENSEE shall maintain a clean and safe working environment in and on the Premises. COUNTY reserves the right to remove or expel from the Premises any personnel, including contractors, observed working in an unsafe manner.

12. Maintenance of the Premises.

COUNTY shall maintain the Premises, including any obstruction lights, tower lights, tower lighting alarm system, monitoring of lighting, inspections, weed control, and other measures needed to maintain the safety and utility of the communications facilities, in accordance with applicable local, state, and federal law, including Federal Communications Commission and Federal Aviation Administration requirements.

13. Inspection and Monitoring of the Premises.

COUNTY shall have the right to enter the Premises at any time for the purpose of inspecting, auditing, monitoring, and evaluating the obligations of this Agreement and for the purpose of doing any and all things which it is obligated or has a right to do under this Agreement.

14. Change in Federally Owned Communications Equipment.

LICENSEE shall not cause or permit any change of the federally owned communications equipment installed in and on the Premises by LICENSEE, including power outputs or changes in the use of the frequencies described in Appendix "C" and "D" herein attached, except upon making a written request to COUNTY for each such change and the obtaining of COUNTY's prior written consent, said consent not to be unreasonable withheld or delayed. Any changes to the federally owned communications equipment approved by COUNTY shall be documented in an amendment to Appendix "C" and "D" of this Agreement, as applicable.

15. Re-Allocation of Space.

COUNTY will have the right at any time upon giving notice thereof to re-assign or re-allocate the amount or location of space for the federally owned communications equipment in and on the Premises so long as the re-assignment or re-allocation does not interfere with LICENSEE's use under this Agreement. In the event that a space re-allocation is made, LICENSEE shall within ninety (90) days of receipt of notice thereof, relocate its equipment in conformity with said re-allocation at the expense of the COUNTY.

16. Installation of Federally Owned Communications Equipment.

- (a) Starting on the Commencement Date, LICENSEE has the right to install, operate, maintain, and remove federally owned communications equipment in and on the Premises, including but not limited to, radio frequency transmitting and receiving equipment, batteries, radio frequency transmitting and receiving antennae and supporting structures and improvements, as detailed in Appendix "C" and "D".
- (b) LICENSEE shall comply with applicable federal, state, and local signage requirements; subject to the availability of appropriated funds for this purpose.
- (c) Prior to any subsequent changes to the construction of the Premises to accommodate LICENSEE's federally owned communications equipment, LICENSEE shall present plans or construction drawings as applicable to COUNTY and COUNTY's supervisor of the Premises for review and approval. COUNTY shall have forty-five (45) business days to provide comments in writing to LICENSEE. If no response has been received by LICENSEE within 45 days, any plans or constructions drawings will be deemed acceptable by COUNTY.

17. Disposition of LICENSEE's Equipment.

- (a) During the term of this Agreement, all federally owned communications equipment placed in and on the Premises by LICENSEE shall remain the property of LICENSEE and shall be removed by LICENSEE, at its sole expense, within ninety (90) days after expiration or termination of this Agreement.

- (b) Should LICENSEE fail to remove the federally owned communications equipment within ninety (90) days after expiration or termination of this Agreement, COUNTY may do so at LICENSEE's sole expense, subject to the availability of appropriated funds for this purpose.
- (c) LICENSEE may, however, with written consent of the COUNTY, abandon in place any or all of the federally owned communications equipment, whereupon, ownership of that federally owned communications equipment shall transfer to the COUNTY.

18. Tower Analysis.

- (a) If federally owned communications equipment is to be added to an existing tower, or if a structure other than a tower will be used to support a communication system within the Premises, the COUNTY will perform the tower/structural analysis. All cost associated with the analysis will be the responsibility of the LICENSEE, subject to the availability of appropriated funds for this purpose. COUNTY shall have the right to terminate this Agreement immediately upon learning of Licensee's inability to appropriate funds for the purpose of paying the costs of the tower/structural analysis noted herein.
- (b) If it is determined that the addition of the federally owned communications equipment would result in a tower or structure being overloaded, LICENSEE shall be responsible for work necessary to bring the tower/structure into compliance prior to installation of the federally owned communications equipment. LICENSEE shall have the right to terminate this Agreement if structural analysis reveals the costs to bring the tower/structure into compliance to be excessive.

19. Electrical and Heat Load Analysis.

- (a) Prior to the installation of federally owned communications equipment in and on the Premises, COUNTY will conduct an electrical and heat load analysis to determine whether any electrical upgrades are required to maintain optimal performance for the Premises. All cost associated with these analyses will be the responsibility of the COUNTY.
- (b) If the COUNTY and LICENSEE agree an upgrade is necessary to the electrical system(s) associated with the Premises to accommodate the federally owned communications equipment, LICENSEE is responsible for all upgrades and costs associated with the upgrade to meet the commercial power, emergency power and heat load requirements, subject to the availability of appropriated funds for this purpose.

20. Contract Support.

COUNTY has the right to review and deny LICENSEE's choice for contract support for equipment located on the radio tower provided, however, that such review will be conducted promptly and in a commercially reasonable manner. LICENSEE will provide and maintain updated contact information including names, business phone numbers, after hours contact phone numbers and cell phone numbers for all staff members providing maintenance/repair support.

21. Utilities.

COUNTY shall provide, and pay for, all electrical utilities, including stand-by emergency and commercial electrical power services, for the entire Premises, with the exception of any electrical system upgrade costs that may be deemed necessary as related to LICENSEE's installation of federally owned communications equipment, as provided in clause 19(b).

22. National Telecommunications and Information Administration (NTIA) Licenses.

LICENSEE shall provide all applicable NTIA licenses for the federally owned communications equipment to the COUNTY as incorporated into Appendix "D". LICENSEE shall ensure that all NTIA licenses are kept current along with all contact information.

23. LICENSEE's Operations.

LICENSEE's installation, operation, maintenance, and removal of the federally owned communications equipment shall be performed in accordance with industry standards and shall conform to applicable fire, safety and construction standards.

LICENSEE's installation, operation, maintenance, and removal of the federally owned communications equipment shall also be performed in accordance with the Red Mountain Communications Site Management Plan, attached hereto as part of Appendix "A" and incorporated by reference, as well as Riverside County's Site Installation Standards, attached hereto as Appendix "G", and incorporated herein by reference.

Prior to installation of any federally owned communications equipment, the LICENSEE certifies herein that all personnel gaining access to the Premises have received RFR safety awareness training and tower climbers have been qualified. If requested by COUNTY, LICENSEE shall provide copies of safety certifications to COUNTY.

24. Interference.

(a) LICENSEE's federally owned communications equipment shall not disturb or interfere with the communications equipment and uses which exist on the Premises, and LICENSEE in the operation of the federally owned communications equipment shall comply with all non-interference rules of the Federal Communications Commission (FCC). LICENSEE agrees to make no changes to its operating equipment frequencies, without prior written approval of COUNTY, which approval shall not be unreasonably withheld, delayed or conditioned. It shall not be unreasonable for such approval by COUNTY to be withheld, delayed or conditioned if such changes will result in interference with the communications equipment and uses which exist on COUNTY's Premises on the date of the changes. LICENSEE agrees to maintain all federally owned communications equipment to operate within the manufacturers and FCC specifications.

(b) COUNTY shall conduct intermodulation studies prior to LICENSEE activating the federally owned communications equipment. LICENSEE shall be responsible for eliminating any potential intermodulation problems.

(c) In the event LICENSEE's installation or operation, in any way hinders, obstructs, or interferes with the radio or electronic equipment of the COUNTY, or any permitted occupant in or on the Premises, LICENSEE shall, at its sole expense, immediately cease the interfering installation or operation. In the event of LICENSEE's inability or refusal to cease such interference within seventy-two (72) hours, COUNTY may at its option, terminate this Agreement.

(d) Any interference and compatibility testing required hereunder for radio interference with other equipment at the COUNTY's facility, by such equipment installed, or by changes to said equipment, shall be made at the sole cost of LICENSEE by the COUNTY, subject to the availability of appropriated funds for this purpose. If the test is satisfactory to the COUNTY representative, a certification of such test signed by both the LICENSEE and the COUNTY

representative will be forwarded to the COUNTY at locations indicated in "Notices" paragraph hereof. All costs incurred by the COUNTY to conduct compatibility testing will be reimbursed to the COUNTY by LICENSEE, subject to the availability of appropriated funds for this purpose.

(e) COUNTY shall require compliance with provisions substantially the same as in this "Interference" section by all future licensees, or other parties granted or given rights to install or operate communications or other radio frequency transmitting equipment on the Premises.

(f) COUNTY will perform pre-installation engineering studies to predict potential interference from the federally owned communications equipment. The results may be distributed by COUNTY to existing occupants at COUNTY's discretion. COUNTY shall require its existing occupants of the Premises to cooperate with LICENSEE in performing these engineering studies. This shall include providing COUNTY all data necessary to perform the engineering study, including the occupants' transmitting frequencies, receiving frequencies, antenna pattern data and antenna model, antenna azimuth, transmit power level, transmitter and receiver technical specifications, and any radio frequency filtering devices being used.

(g) COUNTY will conduct a pre-operational test to determine whether any actual interference will be caused by the operation of the federally owned communications equipment. COUNTY shall notify all existing occupants of its intent to conduct the test and shall determine a date for the test jointly with existing occupants of the Premises. LICENSEE and the participating occupants shall jointly agree on the duration, procedures and success criteria of the test, except that the test duration shall not be longer than twenty-four (24) consecutive hours.

(h) If LICENSEE or the federally owned communications equipment causes interference to other FCC licensees, LICENSEE shall take all steps necessary to correct or eliminate such interference. LICENSEE agrees to cure a case of interference within seventy-two (72) hours upon notification. Notice will include verifiable evidence of interference, provided to LICENSEE by COUNTY or by any supervisor of the Premises of COUNTY. COUNTY may require that LICENSEE temporarily cease operation of the federally owned communications equipment, provided that it is determined conclusively that the interference is caused by the improper operation or malfunction of LICENSEE's equipment, until such interference be cured or eliminated.

25. Employees and Agents of LICENSEE.

It is understood and agreed that all persons hired or engaged by LICENSEE shall be considered employees or agents of LICENSEE and not of COUNTY.

26. Permits and Licenses.

LICENSEE shall secure, at its expense, all necessary permits and licenses for operation of the federally owned communications equipment. COUNTY will cooperate with LICENSEE at no expense to COUNTY, in LICENSEE'S effort to obtain any other necessary permits and licenses for operation of the federally owned communications equipment.

27. INTENTIONALLY DELETED.

28. COUNTY's Representative.

COUNTY hereby appoints the Director of Facilities Management as its authorized representative to administer this Agreement.

29. Termination by COUNTY.

- (a) COUNTY may terminate this Agreement without cause upon ninety (90) days prior written notice to LICENSEE.
- (b) COUNTY shall have the right to immediately terminate this Agreement:
 - i. In the event of abandonment of the Premises by LICENSEE.
 - ii. In the event LICENSEE is in noncompliance with the terms of this Agreement and fails to correct the noncompliance within ninety (90) days of receipt of written notice from COUNTY.

30. Termination by LICENSEE.

- (a) LICENSEE shall have the right to terminate this Agreement in the event COUNTY is in noncompliance with the terms of this Agreement, provided, that COUNTY has not corrected the noncompliance within sixty (60) days of receipt of prior written notice thereof by LICENSEE, and provided that in the event the noncompliance is not corrected, LICENSEE may elect to terminate this Agreement in its entirety, and such election shall be given by an additional ninety (90) days written notice to COUNTY.
- (b) LICENSEE shall have the right to terminate this Agreement without penalty if structural analysis reveals the costs to bring the tower/structure into compliance to be excessive.
- (c) LICENSEE shall have the option to terminate this Agreement at any time by giving COUNTY a minimum of ninety (90) days prior written notice.

31. INTENTIONALLY DELETED.**32. Free From Liens.**

LICENSEE shall pay, when due, all sums of money that may become due for any labor, services, material, supplies, or equipment, alleged to have been furnished or to be furnished to LICENSEE, in, upon, or about the Premises.

33. Insurance and Liability .

The United States is self-insured. All claims against the United States for injuries or damages incurred as a result of the licensee's exercise of its rights under this agreement shall be determined in accordance with the Federal Tort Claims Act, 28 U.S.C. 1346(b), 2401(b), and 2671-2680, as amended, and are subject to the availability of federal appropriations.

34. INTENTIONALLY DELETED.**35. Non-Transferability.**

LICENSEE may not transfer in any manner any of its rights or obligations under this Agreement to any person or entity without the advance written consent of COUNTY.

36. Hazardous Materials.

- (a) As used herein, the term "hazardous materials" means (a) any hazardous waste as defined by the Resource Conservation and Recovery Act of 1976, as amended from time to time, and

regulations promulgated thereunder; (b) any hazardous substance as defined by the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65), as amended from time to time, and regulations promulgated thereunder; (c) any oil, petroleum products and their by-products; and (d) any substance that poses a risk to human health or the environment. Any substance which is exempt from regulation under the definitions or exemptions in any of the statutes, regulations or ordinances referenced herein is also excluded from the provisions of this agreement.

- (b) Except for types of batteries enumerated in Appendix "C" and "D", coolants used for cooling systems, and reasonable amounts of cleaning supplies or materials customarily used in or on the Premises, LICENSEE shall not cause or allow any hazardous materials to be brought upon, kept, or used in or on the Premises by LICENSEE, its agents, employees, contractors or invitees, without the prior written consent of COUNTY, which shall not be unreasonably withheld provided LICENSEE demonstrates that such hazardous materials are necessary for LICENSEE's use of the Premises.
- (c) Upon termination of this agreement and at the written request of COUNTY, LICENSEE, at its sole expense and to the extent appropriated funds are available, shall remove in the manner required by law any hazardous materials stored and used in or on the Premises with COUNTY's prior written consent.

37. Waiver of Performance.

No waiver by COUNTY or LICENSEE at any time of any of the terms and conditions of this Agreement shall be deemed a waiver at any time thereafter of the same or any other terms or conditions contained herein.

38. Severability.

The invalidity of any provision in this Agreement as determined by a federal court of competent jurisdiction shall in no way affect the validity of any other provision hereof.

39. Venue.

Any action at law or in equity brought by either of the parties hereto for the purpose of enforcing a right or rights provided for by this Agreement shall be tried in a federal court of competent jurisdiction.

40. Notices.

All notices and other communications pertaining to this agreement shall be in writing and shall be sent by email or mail, except for notice termination by either party, which shall be sent by certified mail, return receipt requested.. Notices sent via mail shall be deemed delivered on the date of delivery or rejection by the person to receive the notice if received Monday through Friday, or on the following business day if received on Saturday, Sunday, or a Federal holiday.

All notices shall be sent to the following addresses:

LICENSEE:

United States of America
Department of Agriculture
San Bernadino National
Forest Supervisor's Office
Attn: Land Mobile Radio Staff
602 S. Tippecanoe Ave
San Bernardino, CA 92408

LICENSOR:

County of Riverside
Facilities Management
Real Estate Division
3450 14th Street, Suite 201
Riverside, California 92501
FM-Leasing@rivco.org

LMR Realty General Email:

sm.fs.lmr_realty@usda.gov

Region 5 LMR Radio Manager:

Ken Prado, kenneth.prado@usda.gov

41. Entire Agreement.

This Agreement is intended by the parties as a final expression of their understanding with respect to the subject matter hereof and as a complete and exclusive statement of the terms and conditions thereof and supersedes any and all prior and contemporaneous agreements, licenses and understandings, oral or written, in connection therewith. This Agreement may be changed or modified only upon the written consent of the parties hereto.

42. Interpretation of Agreement.

The parties hereto negotiated this Agreement at arm's length and with the advice of their respective attorneys, and no provisions contained herein shall be construed against COUNTY solely because it prepared this Agreement in its executed form.

43. Future User's Obligation.

In the event COUNTY permits other parties to use space at the Premises who are not presently occupying such space and such future parties' equipment causes interference with LICENSEE's equipment, COUNTY shall require such future parties to eliminate such interference at the earliest possible time

44. INTENTIONALLY DELETED.**45. INTENTIONALLY DELETED.****46. Mode of Execution.**

This Agreement may be executed in any number of counterparts, each of which will be an original, but all of which together will constitute one instrument.

47. Members of or Delegates to Congress and Resident Commissioners.

No member of or delegate to Congress or resident commissioner shall benefit from this Agreement either directly or indirectly, except to the extent the authorized use and occupancy provide a general benefit to a corporation.

IN WITNESS WHEREOF, this Agreement has been executed by the parties hereto as of the date written below.

COUNTY as LICENSOR:

COUNTY OF RIVERSIDE, a political
subdivision of the State of California

By: 
V. MANUEL PEREZ
Chair, Board of Supervisors

LICENSEE:

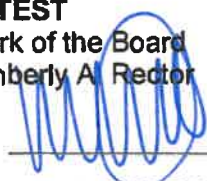
USDA, U.S. FOREST SERVICE
SAN BERNADINO NATIONAL FOREST

By: _____
Danelle Harrison,
Forest Supervisor

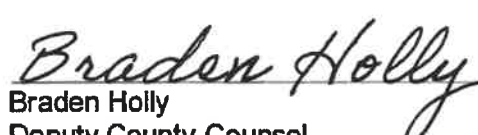
RIVERSIDE COUNTY PUBLIC SAFETY
ENTERPRISE COMMUNICATIONS
STEERING COMMITTEE

By: 
Chris Wagner
Committee Chair

ATTEST
Clerk of the Board
Kimberly A. Rector

By: 
DEPUTY

APPROVED AS TO FORM:
County Counsel

By: 
Braden Holly
Deputy County Counsel

APPENDIX A
COUNTY'S FOREST SERVICE LEASE AND
ASSOCIATED COMMUNICATIONS SITE MANAGEMENT PLAN

|

COUNTY'S FOREST SERVICE LEASE & ASSOCIATED COMMUNICATIONS SITE MANAGEMENT PLAN

Auth ID: SJD818102
Contact ID: COUNTY OF RIVERSIDE PSEC
Expiration Date: 12/31/2040
Use Code: 818

FS-2700-10b (05/2008)
OMB No. 0596-0082

**U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
COMMUNICATIONS USE LEASE
AUTHORITY:
FEDERAL LAND POLICY AND MGMT ACT, AS AMENDED October 21, 1976**

COUNTY of RIVERSIDE, 3403 10TH STREET SUITE 500 RIVERSIDE, CA UNITED STATES 92501.

THIS LEASE, dated this 14th day of JUNE, 2010 by and between the UNITED STATES OF AMERICA, acting through the Forest Service, Department of Agriculture (hereinafter called the "United States" or "Forest Service"), as authorized by the Act of October 21, 1976, (90 Stat. 2743; 43 U.S.C. 1761, et seq.), and COUNTY OF RIVERSIDE, its agents, successors, and assigns (hereinafter called the "Lessee").

The United States and the Lessee are jointly referred to herein as the "Parties". As used herein, the "Authorized Officer" refers to the Forest Service official having the delegated authority to execute and administer this lease. Generally, unless otherwise indicated, such authority may be exercised by the Forest Supervisor or District Ranger of the San Bernardino National Forest wherein the following described lands are located.

The United States, for and in consideration of the terms and conditions contained herein and the payment to the United States of a rental in advance by the Lessee, does hereby grant to the Lessee a lease for the following described communications facility in the County of Riverside, State of California, Section 23 of Township 6 South and Range 1 East, on the Blackburn Canyon, California USGS topographic quadrangle, at approximately Latitude 33° 37' 48.4" North, Longitude 116° 50' 52.6" West, (hereinafter called the "property"). The Lessee accepts this lease and possession of the property, subject to any valid existing rights, and agrees not to use the property, or any part thereof, except as a site for only the construction, operation, maintenance, and termination of a microwave repeater communications facility. The area is identified as the Red Mountain Communication Site. Authorized structures under this lease include:

- One equipment building, 12 feet x 36 feet in size, placed on concrete foundations.
- One 80 foot self-supporting, three-legged, lattice style tower constructed of appropriate colored, LRV 42 or less, galvanized steel, with approximately 30' x 30' footprint.
- One designated temporary staging area for parking and laydown use during initial construction measuring 100' x 100'.
- Fencing: 9' high chain link fencing surrounding the 65' x 65' compound and a 12' wide drive through gate.
- Underground electrical cable.
- Standby generators: One standby generator will be located inside the 12 x 36 shelter
- One 2,000 gallon propane tank(s), white in color

The location of the property is shown generally on the vicinity map attached and made part hereof as **Exhibit A**.

Site Plans provided by Riverside County dated SEPTEMBER 10, 2009 for Red Mountain, sheets A-1 – A-5, are attached and made part hereof as, **Exhibit B**.

A communication site management plan will become part of this lease once approved and will be identified as

Auth ID: SJD818102
Expiration Date: 12/31/2040
Use Code: 818

Riverside County Red Mountain Comm Site Lease

1111111111 307

Exhibit C.

The, previously listed, dated and initialed exhibit(s), attached hereto, are incorporated into and made a part of this instrument as fully and effectively as if they were set forth herein in their entirety.

The parties agree that this lease is made subject to the following terms and conditions.

I. TENURE, RENEWAL AND TRANSFERABILITY

A. This lease shall terminate at one minute after midnight on 12/31/2040. Termination at the end of the lease term shall occur by operation of law and shall not require any addition notice or documentation by the Authorized Officer. This lease is not renewable; but the Lessee has the right to request a new lease pursuant to Paragraph "C" below.

B. The Lessee shall undertake and pursue with due diligence construction and operation that is authorized by this lease. To the extent specified in the appended Exhibits, construction is expected to commence on July 2010 and be completed by October 2010 unless the parties agree in writing, in advance, to an extension of the commencement and /or end date.

C. If the Lessee desires a new lease upon termination of this lease, the Lessee shall notify the Authorized Officer accordingly, in writing. The notice must be received by the Authorized Officer at least one year prior to the end of the lease term. The Authorized Officer will determine if the use should continue and, if it is to continue, if a new lease should be issued to the Lessee and under what conditions. The Authorized Officer shall require payment of any amounts owed the United States under any Forest Service authorization before issuance of another authorization.

D. This lease is assignable with prior written approval of the Authorized Officer, except when rent has been exempted or waived in whole or part. Renting of space does not constitute an assignment under this clause.

II. RENTAL

A. The Lessee must pay in advance an annual rental determined by the Authorized Officer in accordance with law, regulation, and policy. The annual rental will be adjusted by the Authorized Officer to reflect changes in fair market value, annual adjustments using the Consumer Price Index - Urban (CPI-U), changes in tenant occupancy, or phase-in rental, if applicable.

B. Rentals are due at the close of business on January 1 of each year for which a payment is due. Payments in the form of a check, draft, or money order are payable to USDA, Forest Service. If the due date for the rental or rental calculation statement falls on a non-work day, the charges shall not apply until the close of business on the next workday. This lease terminates if rent is not received by the Forest Service within 90 calendar days of the due date.

C. Pursuant to 31 U.S.C. 3717, et seq., interest shall be charged on any rental amount not paid within 30 days from the date the rental or rental calculation financial statement specified in this authorization becomes due. The rate of interest assessed shall be the higher of the rate of the current value of funds to the U.S. Treasury (i.e., Treasury tax and loan account rate), as prescribed and published by the Secretary of the Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletins annually or quarterly or at the Prompt Payment Act rate. Interest on the principal shall accrue from the date the rental or rental calculation financial statement is due. In addition, an administrative penalty at a percentage rate prescribed by law or regulation will be assessed for failure to pay any portion of the debt that is more than 90 days past due. This paragraph shall survive the termination or revocation of this lease, regardless of cause.

Auth ID: SJD818102
Expiration Date: 12/31/2040
Use Code: 818

Riverside County Red Mountain Comm Site Lease

D. Disputed rentals are due and payable by the due date. No appeal of rentals will be considered by the Forest Service without full payment of the disputed amount.

III. RESPONSIBILITIES OF THE LESSEE

A. The Lessee is authorized to rent space and provide other services to customers and/or tenants and shall charge each customer/tenant a reasonable rental without discrimination for the use and occupancy of the facilities and services provided. The Lessee shall impose no unreasonable restrictions nor any restriction restraining competition or trade practices. **By October 15 of each year, the Lessee shall provide the Authorized Officer a certified statement listing all tenants and customers, by category of use in the facility on September 30th of that year.**

B. All development, operation and maintenance of the authorized facility, improvements, and equipment located on the property shall be in accordance with stipulations in the communications site plan approved by the Authorized Officer. If required by the Authorized Officer, all plans for development, layout, construction, or alteration of improvements on the property, as well as revisions of such plans, must be prepared by a licensed engineer, architect, and/or landscape architect. Such plans must be approved in writing by the Authorized Officer before commencement of any work. After completion, as-built plans, maps, surveys, or other similar information will be provided to the Authorized Officer and appended to the communications site plan.

C. The Lessee will comply with applicable Federal, State, county, and municipal laws, regulations and standards for public health and safety, environmental protection, siting, construction, operation, and maintenance in exercising the rights granted by this lease. The obligations of the Lessee under this lease are not contingent upon any duty of the Authorized Officer, or other agent of the United States, to inspect the premises. A failure by the United States, or other governmental officials, to inspect is not a defense to noncompliance with any of the terms or conditions of this lease. Lessee waives all defenses of laches or estoppel against the United States. The Lessee shall at all times keep the title of the United States to the property free and clear of all liens and encumbrances.

D. Use of communications equipment is contingent upon the possession of a valid Federal Communication Commission (FCC) or Director of Telecommunications Management/Interdepartmental Radio Advisory Committee (DTM/IRAC) authorization, and the operation of the equipment is in strict compliance with applicable requirements of FCC or IRAC. A copy of each applicable license or authorization shall at all times be maintained by the Lessee for each transmitter being operated. The Lessee shall provide the Authorized Officer, when requested, with current copies of all licenses for equipment in or on facilities covered by this lease.

E. The Lessee shall ensure that equipment within his or her facility (including tenant and customer equipment) operates in a manner which will not cause harmful interference with the operation of existing equipment on or adjacent to the communications site. If the Authorized Officer or authorized official of the Federal Communication Commission (FCC) determines that the Lessee's use interferes with existing equipment, the Lessee will promptly take the necessary steps to eliminate or reduce the harmful interference to the satisfaction of the Authorized Officer or FCC official.

F. When requested by the Authorized Officer, the Lessee will furnish technical information concerning the equipment located on the property.

IV. LIABILITIES

A. The Lessee assumes all risk of loss to the authorized improvements.

B. The Lessee shall comply with all applicable Federal, State, and local laws, regulations, and standards, including but not limited to, the Federal Water Pollution Control Act, 33 U.S.C. 1251 et seq., the Resource Conservation and Recovery Act, 42 U.S.C. 6901 et seq., the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9601 et seq., and other relevant environmental laws, as well as public health and safety laws and other laws relating to the siting, construction, operation and maintenance of any facility, improvement, or

equipment on the property.

C. The Lessee shall indemnify, defend, and hold the United States harmless for any violations incurred under any such laws and regulations or for judgments, claims, or demands assessed against the United States in connection with the Lessee's use or occupancy of the property. The Lessee's indemnification of the United States shall include any loss of personal injury, loss of life or damage to property in connection with the occupancy or use of the property during the term of this lease. Indemnification shall include, but is not limited to, the value of resources damaged or destroyed; the costs of restoration, cleanup, or other mitigation; fire suppression or other types of abatement costs; third party claims and judgments; and all administrative, interest, and other legal costs. This paragraph shall survive the termination or revocation of this lease, regardless of cause.

D. The Forest Service has no duty, either before or during the lease term, to inspect the property or to warn of hazards and, if the Forest Service inspects the property, it shall incur no additional duty nor any liability for hazards not identified or discovered through such inspections. This paragraph shall survive the termination or revocation of this lease, regardless of cause.

E. The Lessee has an affirmative duty to protect from damage the land, property, and interests of the United States.

F. In the event of any breach of the lease by the Lessee, the Authorized Officer may, on reasonable notice, cure the breach for the account at the expense of the Lessee. If the Forest Service at any time pays any sum of money or does any act which will require payment of money, or incurs any expense, including reasonable attorney's fees, in instituting, prosecuting, and/or defending any action or proceeding to enforce the United States rights hereunder, the sum or sums so paid by the United States, with all interests, costs and damages shall, at the election of the Forest Service, be deemed to be additional rental hereunder and shall be due from the Lessee to the Forest Service on the first day of the month following such election.

V. OTHER PROVISIONS

A. Nondiscrimination. The Lessee shall at all times operate the described property and its appurtenant areas and its buildings and facilities, whether or not on the property, in full compliance with Title VI of the Civil Rights Act of 1964 and all requirements imposed by or pursuant to the regulations issued thereunder by the Department of Agriculture and in effect on the date this lease is granted to the end that no person in the United States shall, on the grounds of race, sex, color, religion or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any of the programs or activities provided thereon.

B. Revocation, Termination and Suspension.

1. General. For purposes of this lease, termination, revocation, and suspension refer to the cessation of uses and privileges under the lease.

"Revocation" refers to an action by the Authorized Officer to end the lease because of noncompliance with any of the prescribed terms, abandonment, or for reasons in the public interest. Revocations are appealable.

"Termination" refers to the cessation of the lease under its own terms without the necessity for any decision or action by the Authorized Officer. Termination occurs automatically when, by the terms of the lease, a fixed or agreed upon condition, event, or time occurs. For example, the lease terminates at expiration. Terminations are not appealable.

"Suspension" refers to a revocation which is temporary and the privileges may be restored upon the occurrence of prescribed actions or conditions. Suspensions are appealable.

2. This lease may be suspended or revoked upon breach of any of the conditions herein or upon nonuse. Nonuse refers to a failure to operate the facilities on the property for a period of one (1) year.

3. Except in emergencies, the Authorized Officer shall give the Lessee written notice of the grounds for revocation or suspension and a reasonable time, not to exceed 90 days, to complete the corrective action. After 90 days, the Forest Service is entitled to such remedies as provided herein.

4. This lease may be revoked at the discretion of the Forest Service when in the public interest. When revoked in the public interest, the Lessee shall be compensated subject to the availability of appropriated funds. Compensation shall be based upon the initial cost of improvements located on the lease, less depreciation as allocated over the life of the improvements as declared by the Lessee's Federal tax amortization schedules.

5. Any discretionary decisions or determinations by the Authorized Officer on revocation or suspension are subject to the appeal regulations at 36 CFR 251, Subpart C, or revisions thereto.

6. In the event the Authorized Officer decides not to issue a new lease, or the Lessee does not desire a new lease, the Authorized Officer and the Lessee shall, within six months prior to the termination date of this lease, agree upon a mitigation plan to restore and stabilize the site.

7. Upon termination or revocation of the authorization, delinquent fees and other charges associated with the authorization will be subject to all rights and remedies afforded the United States pursuant to 31 U.S.C. 3711 et seq. Delinquencies may be subject to any or all of the following conditions:

a. Administrative offset of payments due the holder from the Forest Service.

b. Delinquencies in excess of 60 days shall be referred to United States Department of Treasury for appropriate collection action as provided by 31 U.S.C. 3711 (g), (1).

c. The Secretary of the Treasury may offset an amount due the debtor for any delinquency as provided by 31 U.S.C. 3720, et seq.).

In the event this lease is revoked for noncompliance, the Lessee shall remove all structures and improvements within 90 days, except those owned by the United States, and shall restore the site as nearly as reasonably possible to its original condition unless this requirement is otherwise waived in writing by the Authorized Officer.

If the Lessee fails to remove all structures or improvements within the prescribed period, they shall become the property of the United States and may be sold, destroyed, or otherwise disposed of without any liability to the United States.

C. Members of Congress. No member of or Delegate to Congress or Resident Commissioner shall benefit from this lease whether directly or indirectly, except when the lease provides a general benefit to a corporation.

D. Reservations. This lease is granted subject to the following reservations by the United States:

1. The right to all natural resource products now or hereafter located on the property unless stated otherwise, and the right to utilize or dispose of such resources insofar as the rights of the Lessee are not unreasonably affected.
2. The right to modify the communications site plan as deemed necessary.
3. The right to enter upon the lease and inspect all facilities to assure compliance with the conditions of this lease.
4. The right of the United States to require common use of the property, and the right to authorize use of the property for compatible uses, including the subsurface and air space.

In the event of any conflict between any of the preceding printed clauses or any provisions thereof and any of the following clauses or any provision thereof, the preceding clauses shall control.

ACCEPTED this 14 day of June, I _____, the undersigned have read, understand and accept the terms and conditions of this lease.

County of Riverside

ATTEST:

KECIA HARPER-IHEM, Clerk

By _____

DEPUTY

Marion Ashley
Marion Ashley, Chairman
Board of Supervisors

IN WITNESS WHEREOF, the Forest Service, by its Authorized Officer, has executed this lease on the day and year first written above.

UNITED STATES OF AMERICA

Department of Agriculture

Forest Service

Jeanne Wade Evans
JEANNE WADE EVANS

Forest Supervisor

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond, to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

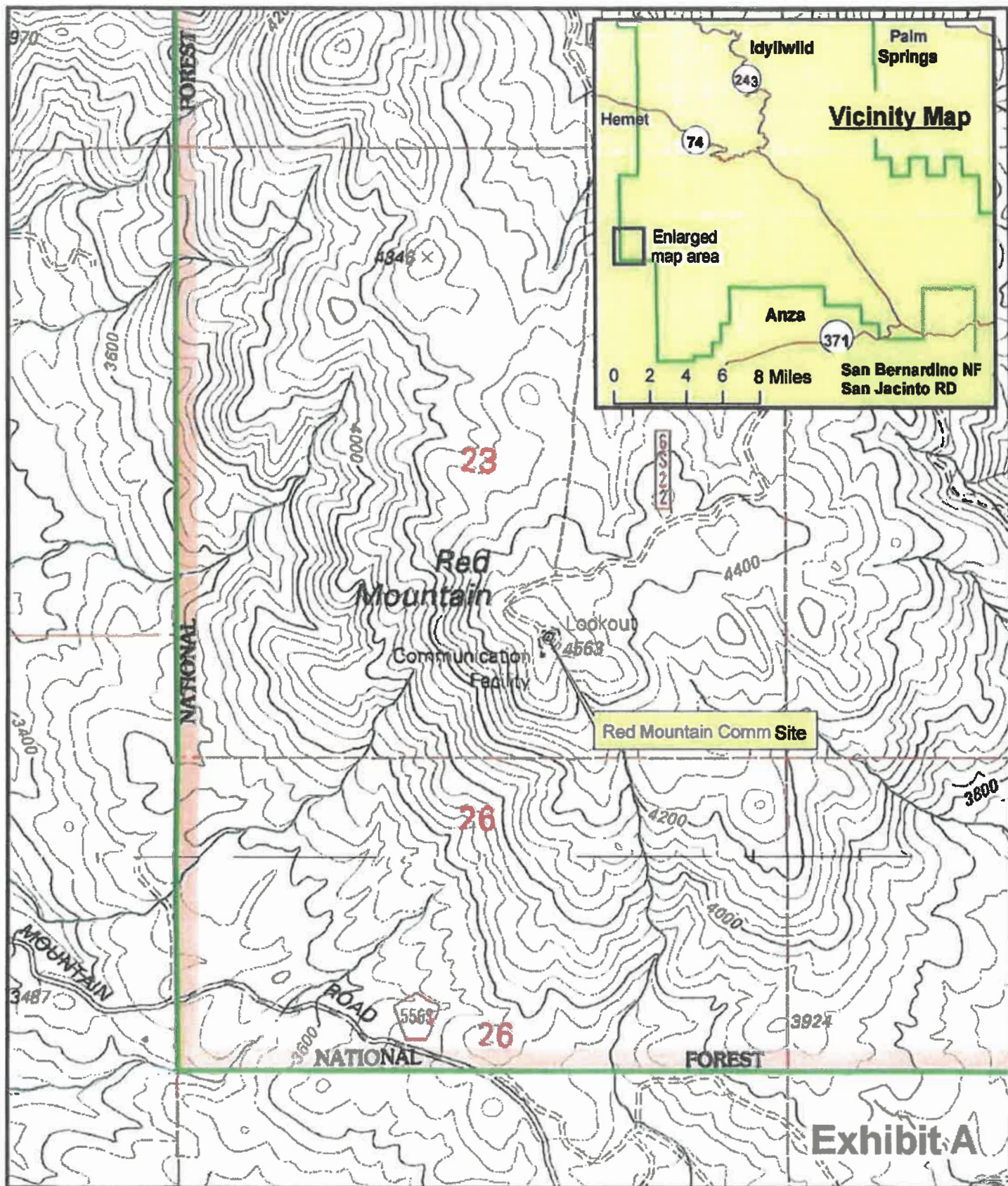
Auth ID: SJD818102

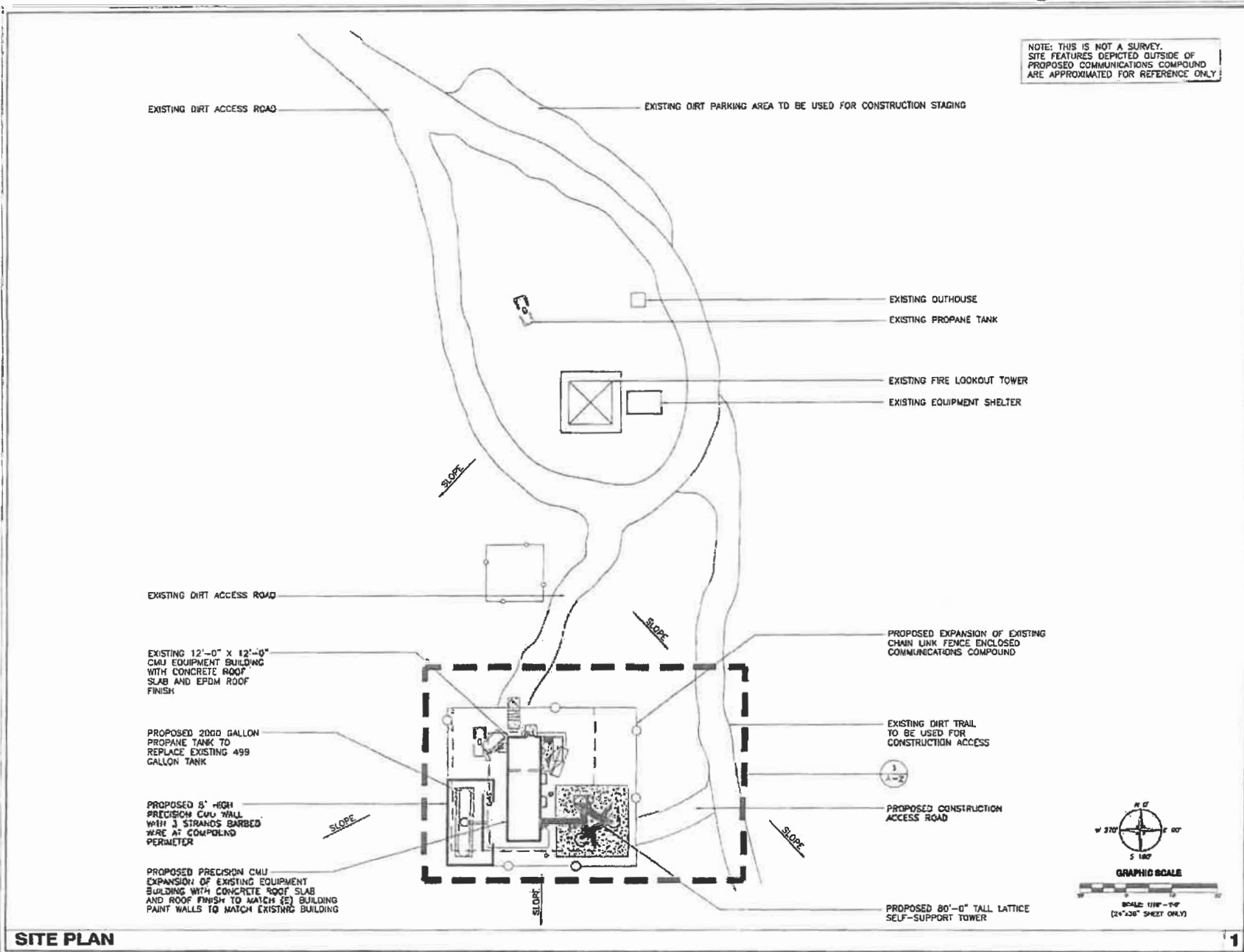
Expiration Date: 12/31/2040

Use Code: 818

Riverside County Red Mountain Comm Site Lease

FORM APPROVED COUNTY COUNSEL
BY: Thalia M. Gunter DATE: 5-12-10
SY: THIA M. GUNTER





MOTOROLA INC.
6450 SERRAVALLO DR
SAN DIEGO, CA 92121



1855 CHICAGO AVE.
RIVERSIDE, CA 92507

PLANS PREPARED BY
**DELTA GROUPS
ENGINEERING, INC.**
CONSULTING ENGINEERS
2362 MCGARY AVE
IRVINE, CA 92614
TEL: 949-452-0333
FAX: 949-417-2593

PROJECT INFORMATION

**COUNTY OF
RIVERSIDE**

RED MOUNTAIN

NO.	DATE	DESCRIPTION	BY
1	8/13/09	PRELIMINARY	IT
2	8/19/09	PRELIMINARY	TT
3	8/25/09	PRELIMINARY	TT
4	9/10/09	PRELIMINARY	WD

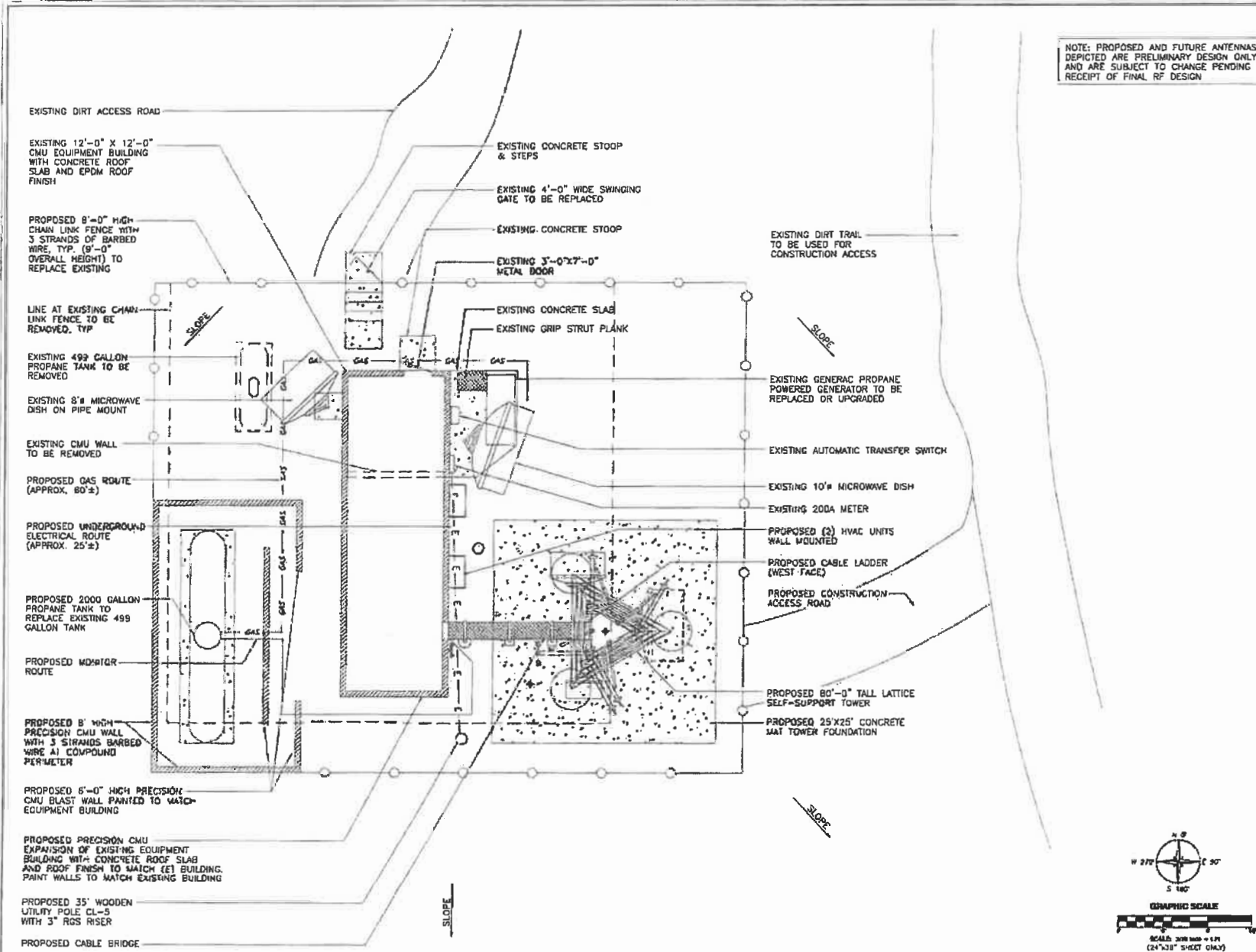
SEAL

SHEET TITLE

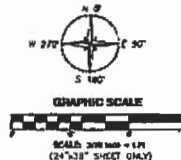
SITE PLAN

SHEET NUMBER

A-1



ENLARGED SITE PLAN



MOTOROLA INC
6430 SEQUENCE DR
SAN DIEGO, CA 92121



1855 CHICAGO AVE.
RIVERSIDE, CA 92507

PLANS PREPARED BY
**DELTA GROUPS
ENGINEERING, INC.**
CONSULTING ENGINEERS
2367 MCGAW AVE.
IRVINE, CA 92614
TEL. 949-622-0333
FAX. 949-417-2553

PROJECT INFORMATION

**COUNTY OF
RIVERSIDE**

RED MOUNTAIN

NO.	DATE	DESCRIPTION	BY
1	8/13/09	PRELIMINARY	TT
2	8/19/09	PRELIMINARY	TT
3	8/25/09	PRELIMINARY	TT
4	9/10/09	PRELIMINARY	WD

SEAL

SHEET TITLE

**ENLARGED
SITE PLAN**

SHEET NUMBER

A-2



MOTOROLA INC.
4450 SEQUENCE DR
SAN DIEGO, CA 92121



1855 CHICAGO AVE,
RIVERSIDE, CA 92507

PLANS PREPARED BY

 **DELTA GROUPS**
ENGINEERING, INC.
CONSULTING ENGINEERS

2382 MCGAW AVE.
IRVINE, CA 92614
TEL. 949-672-0333
FAX: 949-417-7883

PROJECT INFORMATION —

**COUNTY OF
RIVERSIDE**

RED MOUNTAIN

NO	DATE	DESCRIPTION	BY
1	8/13/09	PRELIMINARY	TT
2	8/19/09	PRELIMINARY	TT
3	8/25/09	PRELIMINARY	TT
4	9/10/09	PRELIMINARY	WO

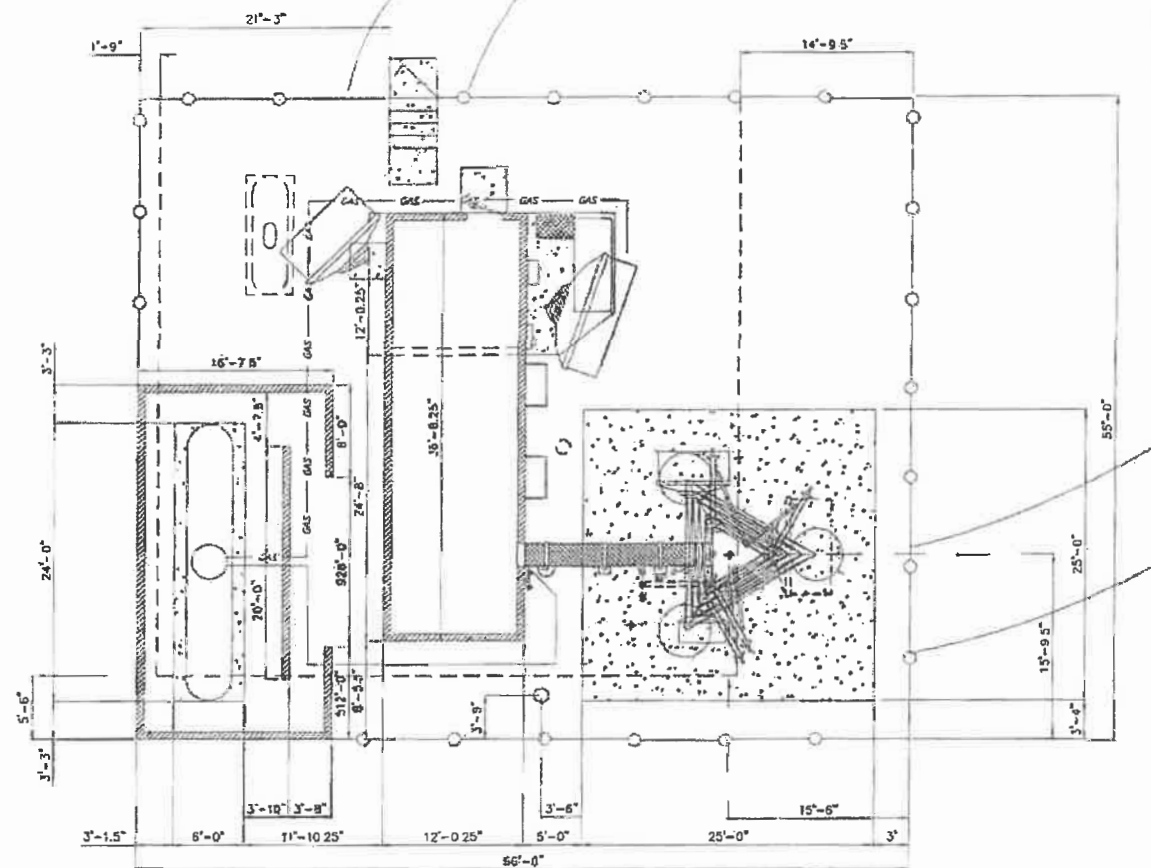
SEN

SWEET WILC

DIMENSIONED SITE PLAN

5444: 42062

A-3

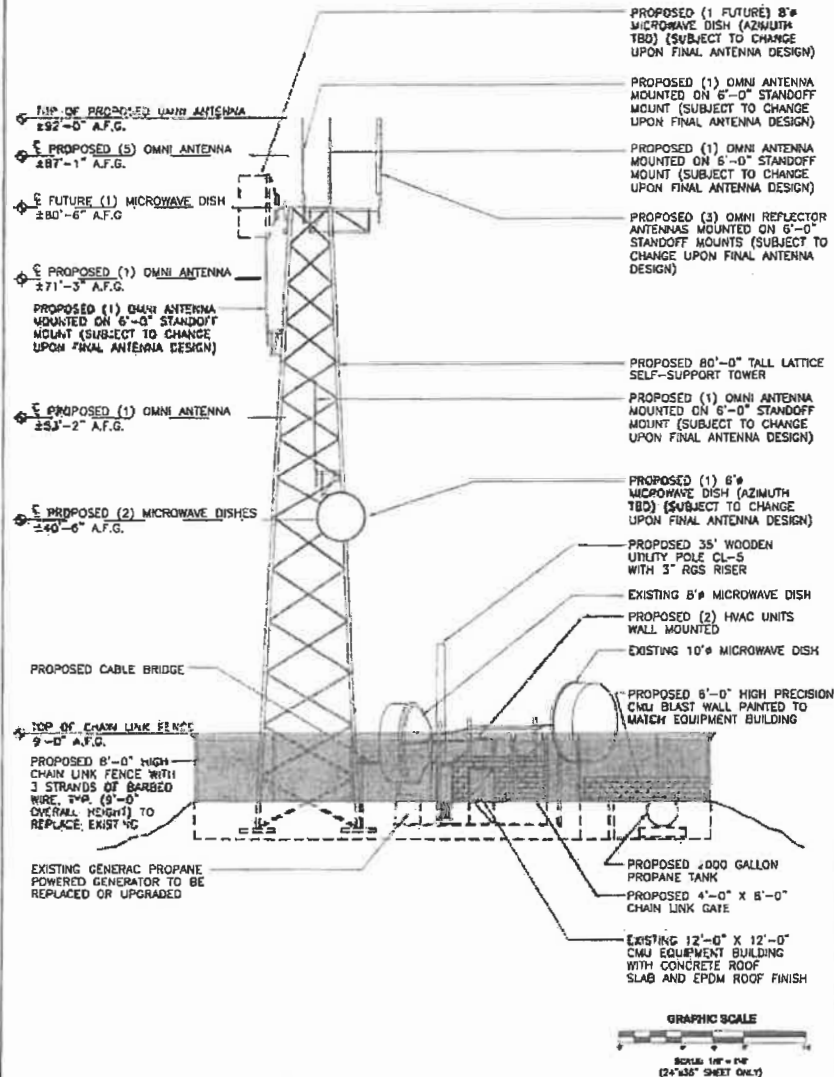


DIMENSIONED SITE PLAN

11

NOTES:

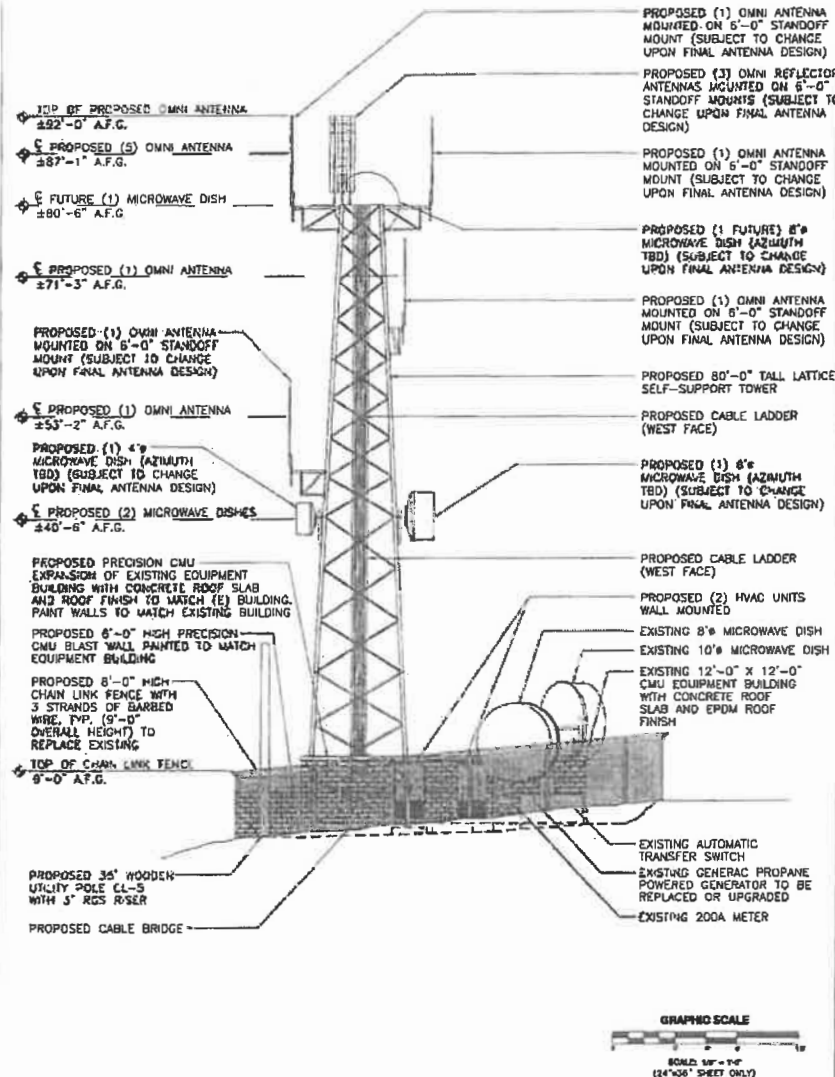
1. ATTACH ANTENNAS AND MOUNTS PER MANUFACTURER'S SPECIFICATIONS
2. TOWER HEIGHT SUBJECT TO CHANGE PENDING FINAL RF DESIGN.



NORTH ELEVATION

NOTES:

1. ATTACH ANTENNAS AND MOUNTS PER MANUFACTURER'S SPECIFICATIONS
2. TOWER HEIGHT SUBJECT TO CHANGE PENDING FINAL RF DESIGN.



2 EAST ELEVATION

MOTOROLA INC
6450 SEQUOIA DR
SAN DIEGO, CA 92121



1955 CHICAGO AVE
RIVERSIDE, CA 92507

PLANS PREPARED BY
DELTA GROUPS
ENGINEERING, INC.
CONSULTING ENGINEERS
2362 MCGAW AVE
IRVINE, CA 92614
TEL 949-622-0333
FAX 949-417-2663

PROJECT INFORMATION

COUNTY OF RIVERSIDE

RED MOUNTAIN

NO.	DATE	DESCRIPTION	BY
1	8/13/09	PRELIMINARY	TT
2	8/18/09	PRELIMINARY	TT
3	8/25/09	PRELIMINARY	TT
4	8/10/09	PRELIMINARY	WD

SEAL

SHEET TITLE

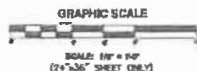
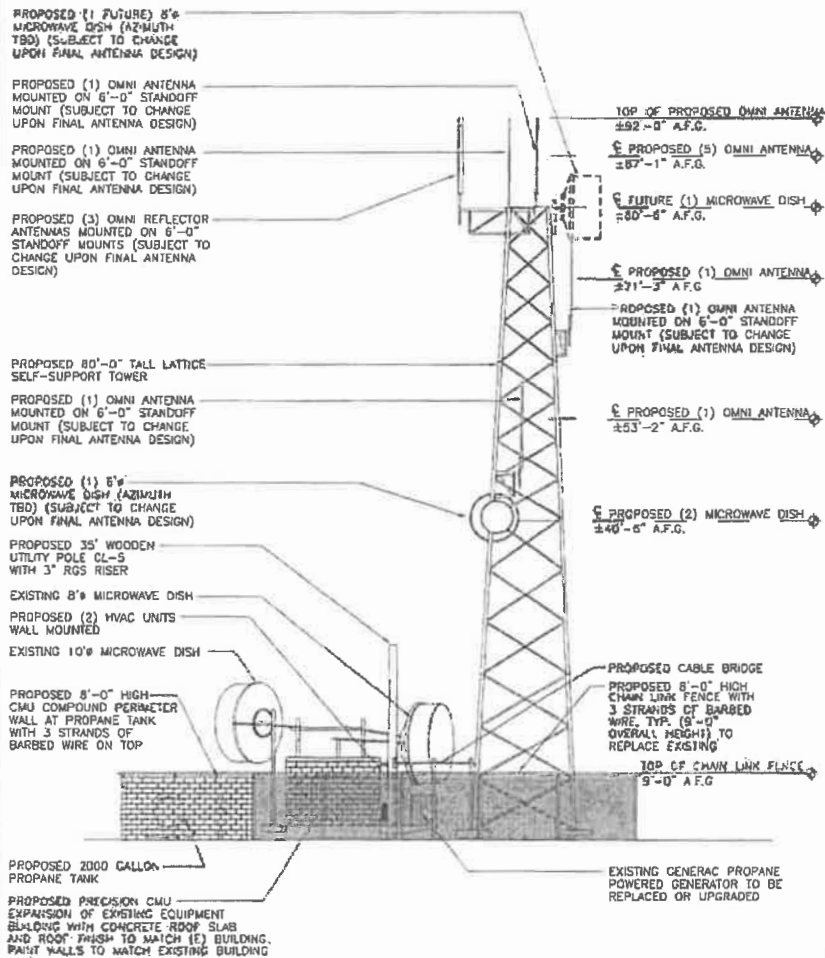
NORTH & EAST ELEVATIONS

SHEET NUMBER

A-4

NOTES:

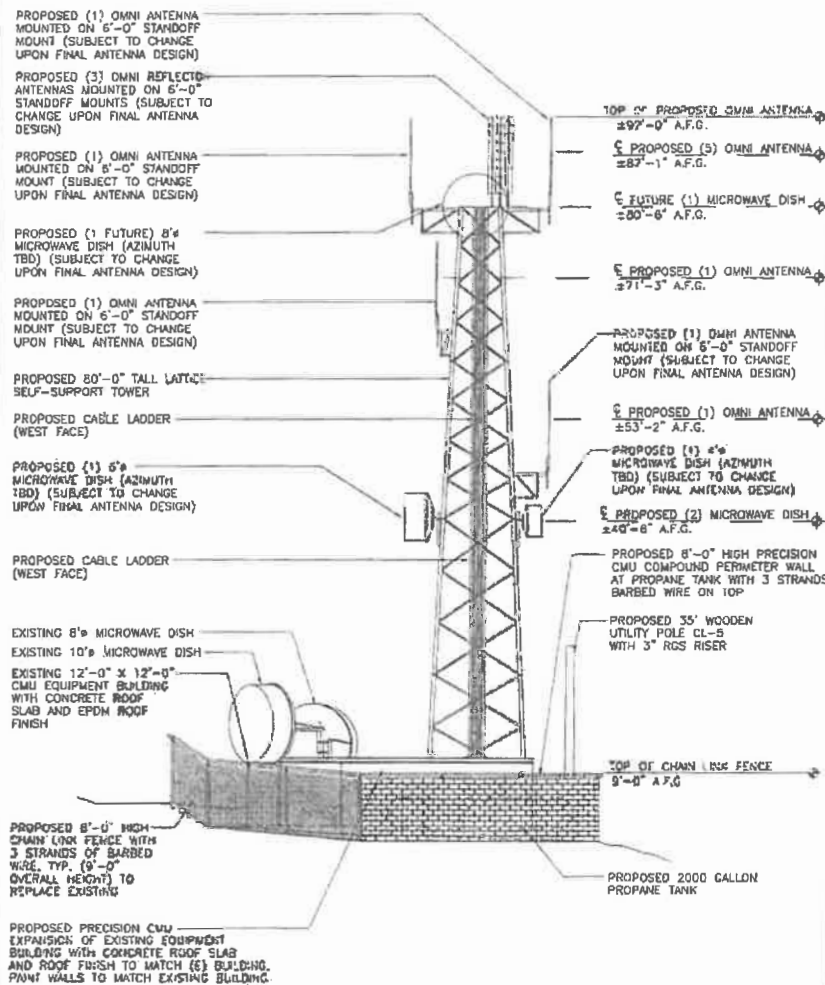
1. ATTACH ANTENNAS AND MOUNTS PER MANUFACTURER'S SPECIFICATIONS
2. TOWER HEIGHT SUBJECT TO CHANGE PENDING FINAL RF DESIGN



SOUTH ELEVATION

NOTES:

1. ATTACH ANTENNAS AND MOUNTS PER MANUFACTURER'S SPECIFICATIONS
2. TOWER HEIGHT SUBJECT TO CHANGE PENDING FINAL RF DESIGN



WEST ELEVATION

MOTOROLA INC
8450 SEQUENCE DR
SAN DIEGO, CA 92121

PS/EC
INVESTMENT DESIGN CONSULTANTS

1056 CHICAGO AVE.
RIVERSIDE, CA 92507

PLANS PREPARED BY
DELTA GROUPS ENGINEERING, INC.
CONSULTING ENGINEERS

2382 MCGAW AVE.
RYAN, CA 92614
TEL: 949-822-0333
FAX: 949-417-2683

PROJECT INFORMATION
COUNTY OF RIVERSIDE

RED MOUNTAIN

NO.	DATE	DESCRIPTION	BY
1	8/13/09	PRELIMINARY	TT
2	8/19/09	PRELIMINARY	TT
3	8/25/09	PRELIMINARY	TT
4	8/10/09	PRELIMINARY	WD

SEAL

SHEET TITLE

SOUTH & WEST ELEVATIONS

SHEET NUMBER

A-5

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN



**RED MOUNTAIN COMMUNICATIONS SITE
MANAGEMENT PLAN**

**SAN BERNARDINO NATIONAL FOREST
SAN JACINTO RANGER DISTRICT
IDYLLWILD, CALIFORNIA**

Submitted By: /s/ *Laurie Rosenthal* 4/12/10
District Ranger Date

Approved By: /s/ *Tom Gillett* for Jeanne Wade Evans 4/26/10
Forest Supervisor Date

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Table of Contents

I. DEFINITIONS	3
II. NARRATIVE	4
A. Site Description.....	4
B. Existing Site Development.....	4
C. Objectives.....	5
III. AUTHORITY AND JURISDICTION	6
A. Authority	6
B. Jurisdiction	6
IV. RIGHTS AND RESPONSIBILITIES	7
A. The Forest Service.....	7
B. Facility Owners and Facility Managers	7
C. Tenants and Customers	8
V. USE OF THE SITE	8
A. Multiple-Use Facilities.....	8
VI. RENTAL FEES	9
VII. CONDITIONS FOR NEW CONSTRUCTION AND MODIFICATION OR EXPANSION OF A FACILITY	9
A. New Construction, Modification, and Expansion Responsibilities	9
B. Construction Methods and Resource Protection	11
C. Construction Inspection	12
D. New or Remodeled or Expanded Buildings.....	12
E. New or Remodeled/Expanded Towers.....	13
VIII. GENERAL OPERATION AND MAINTENANCE	14
A. Special Environmental and/or Biological Considerations	14
B. Wiring and Grounding	14
C. Communications Equipment.....	15
D. Cables and Transmission Lines.....	17
E. Radiation	17
F. Utilities.....	18
G. Sanitary Facilities.....	19
H. Security and Law Enforcement.....	19
I. Site Maintenance.....	19
J. Inspections	20
K. Fire Prevention and Hazard Reduction Requirements	20
L. Access	21
IX. SITE ASSOCIATION AND ADVISORY GROUP	22
X. APPENDICIES	23
APPENDIX A – Location Map.....	23
Site map.....	24
APPENDIX B – Authorized Facilities.....	26
APPENDIX C – Facility Photographs	27
APPENDIX D – Inspection Checklist	30

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

I. DEFINITIONS

Authorized Officer. The Forest Service employee with the delegated authority to issue and manage communications uses. The authorized officer is usually the District Ranger or Forest Supervisor of the unit on which the communications site is located.

Co-location. Installation of telecommunications equipment in or on an existing communications facility or other structure.

Communications Site. An area of National Forest System (NFS) lands designated as an electronic site through the Forest Land and Resource Management planning process for telecommunications uses. A communications site may be limited to a single communications facility, but most often encompasses more than one. Each site is identified by name, usually denoting a local prominent landmark, such as Bald Mountain Communications Site.

Customer. An individual, business, organization, or agency that is paying a facility owner or tenant for communications services and is not re-selling communications services to others. Private ("other communications use" category) and internal (private mobile radio service and non-commercial microwave categories) communications uses leasing space in a building and not re-selling communications services to others are considered customers for rental calculation purposes.

Facility. A building, tower, or other physical improvement (buildings and towers do not have to be combined to be considered a facility) that is built or installed to house and support authorized communications equipment.

Facility Manager. The holder of a Forest Service communications use authorization who (1) owns a communications facility on NFS lands, (2) rents space in or on their facility to other communication users, but (3) does not own or operate their own communications equipment and they do not directly provide communications services to third parties. Persons or entities that manage or administer a communications facility on NFS lands for a facility owner or a facility manager are not facility managers for purposes of this communications site plan.

Facility Owner. The holder of a Forest Service communications use authorization who (1) owns a communications facility on NFS lands, (2) may or may not be renting space or equipment to other communications users in or on their facility, and (3) owns and operates their own communications equipment in their facility.

Multiple-Use Facility. A communications site facility that has multiple communications uses operated directly by the facility owner or has customers or tenants in or on that facility.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Ranally Metro Area. Geographic areas in the United States identified by Rand McNally in its Commercial Atlas and Marketing Guide that define population centers of 50,000 or more. There are approximately 450 Ranally Metro Areas (RMAs) in the United States.

Senior Use. A communications use that predates another communications use. The most senior use or uses form the basis for the communications site designation.

Single-Use Facility. A communications site facility that contains only the single communications use of the facility owner and no tenants or customers in or on the facility.

Tenant. A communications user who rents space in a communications facility and operates communications equipment for the purpose of re-selling communications services to others for profit. Tenants may hold separate authorizations, without sub-tenancy rights, at the full schedule rent based on the category of use.

II. NARRATIVE

A. Site Description

Red Mountain Communication Site is located on San Jacinto Ranger District, San Bernardino National Forest, riverside, State of California in Section 23, T.6S., R1E., San Bernardino Meridian at approximately Latitude 33° 37' 48.4" North, Longitude 116° 50' 52.6" West. The elevation at Red mountain communications site is approximately 4545 feet above mea sea level (msl). The area for development is approximately 5 acres in size. Red Mountain Communication Site is road accessible.

The site does serve the Hemet Ranally Metro Area (RMA) Zone 6. The population for this zone is updated annually by the Forest Service, Washington Office, Director of lands, and is used to determine the annual rental fee to the Forest Service.

The most senior sue at the site is the Forest Service two-way radio and the site is designated as low power non-broadcast. This designation was established in a San Bernardino National Forest land and resource management plan revised in April 2006 within prescriptions which allow electronic sites. The maximum power output for the Communication Site is based on the maximum output allowed for two-way radio under the Federal Communications Commission's rules at title 47, Code of Federal regulation, Part 90.

B. Existing Site Development

The Red Mountain Communication Site is located approximately 12 miles south of the city of Hemet, California. Red mountain was first developed when the US Forest Service established a lookout tower for fire detection in southwest Riverside County. The Forest Service maintains two-way radio repeaters which were originally placed on the lookout. In

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

the early 1970's, GTE installed communication facilities for commercial use at this site. Additionally, in 1993, the County of Riverside acquired permission to place a small prefab equipment shelter adjacent to the lookout and utilize the lookout for antennae placement.

The purpose of this facility is for public safety two-way radio operation. Due to increasing demand for public safety communications equipment, the County of Riverside studied and proposed expanding the size of the facilities on Red Mountain. The plans were approved in 2008 and the facilities constructed in 2010. The antennae and repeaters on the lookout and prefab equipment shelter were relocated to these new facilities.

Scripts College has a small equipment shelter and antenna at this site.

See Appendix B for a current list of currently authorized facilities.

C. Objectives

The primary objectives of the Sample Communications Site Management Plan are to:

1. Document site management policy, procedures and standards, which are not already specified in the standard communication site lease.
2. Manage for low power communications uses only. The maximum power output expressed as ERP is based on the maximum output allowed for two-way radio under the Federal Communications Commission's rules at Title 47, Code of Federal Regulations, Part 90. As of the 2003 regulation, that is 500 watts ERP. Each use must operate at or below the power level authorized by their respective FCC license as long as it does not exceed the site limitation.
3. No continuously transmitting uses are authorized at this site, excluding microwave and controller channels used in support of mobile radio equipment.
4. All uses must be designed, operated and maintained so as not to physically or electronically interfere with the senior uses. If new uses deteriorate the receiving/transmitting operation of existing uses, the new uses may be required to institute at their expense; additional studies, equipment upgrades, frequency isolation, or physically separate themselves from the existing uses.
5. Present a program for operation within the site.
6. Help fulfill the public need for adequate communication sites.
7. Protect the interests of leaseholders and site users by preserving a safe and an electronically "clean" environment.
8. Encourage the efficient development and use of space and facilities within the designated site, subject to the USFS goal to provide the best possible public service at reasonable cost.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

9. Authorize new Tenant and/or Customer uses that can physically and electronically be accommodated within existing buildings and/or towers.
10. Maintain visual resource objectives by requiring design standards that are unobtrusive and by utilizing earth tone colors and non-reflective surface material consistent with the standards in the Land and Resource Management Plan.
11. Amend this Communications Site Plan as necessary to be consistent with future Forest Land and Resource Management Plans. The Forest Service will provide authorization holders with proposed amendments to this plan and will allow a reasonable period of time for the holders to review and comment on the proposed changes.

III. AUTHORITY AND JURISDICTION

A. Authority

Forest Service authority to authorize and manage communications uses on National Forest System lands derives from the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761-1771); Title 36, Code of Federal Regulations, part 251, subpart B (36 CFR 251, subpart B); Forest Service Manual (FSM) 2700; and Forest Service Handbook (FSH) 2709.11, chapter 90.

B. Jurisdiction

The Forest Service has jurisdiction over the use and occupancy of National Forest System (NFS) lands for communications purposes under the National Forest Management Act (NFMA) of 1976 (16 U.S.C. 1600 et seq.); the Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1701 et seq.), and Title 36, Code of Federal Regulations, part 251, Subpart B (36 CFR part 251, subpart B).

The Federal Communications Commission (FCC) has jurisdiction over the use of non-Federal channels of radio and television transmission under licenses granted by the FCC. The National Telecommunications and Information Administration (NTIA) has jurisdiction over the use of Federal channels of radio transmission under authorizations granted by the NTIA.

The issuance of an FCC license or NTIA authorization does not authorize the use and occupancy of NFS lands. A Forest Service special use authorization is required for the use and occupancy of NFS lands for communications purposes.

The Forest Service has jurisdiction over resolution of conflicts associated with the use and occupancy of NFS lands, such as those involving location and re-radiation. The FCC and NTIA are not responsible for resolving occupancy conflicts associated with the use and occupancy of NFS lands or the resolution of other conflicts when entities are operating within the limits of their FCC license or NTIA authorization. However, the FCC or the

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

NTIA may be useful in assisting in the resolution of interference problems or other frequency conflicts.

IV. RIGHTS AND RESPONSIBILITIES**A. The Forest Service**

The Forest Service retains the responsibility for issuing and amending authorizing instruments to Facility Owners and Facility Managers for the authorized improvements. The issuance of a FCC license (authorization), or frequency assignment, does not authorize occupancy of National Forest system lands. Granting occupancy and use of National Forest system lands rest exclusively with the Forest Service. This includes:

1. Amend or modify this site plan as deemed appropriate.
2. Approve new facilities including those constructed within a lease holder's authorized area.
3. Approve assignment of a communications site lease.

B. Facility Owners and Facility Managers Are Responsible for:

1. Complying with the terms and conditions of their communications site authorization and this site plan.
2. Ensuring that all new facilities, expansions, or improvements are consistent with the San Bernardino National Forests Land and Resource Management Plan, environmental documentation and decisions affecting the use of this site, and the provisions of this site plan.
3. May rent building and tower space to tenants and customers without prior written approval from the Forest Service as long as that tenant or customer use is an approved communications use as designated in this site plan and does not interfere with other existing uses at the site.
4. May not place any unreasonable restrictions on potential or existing tenants and customers.
5. Ensuring that facilities and equipment not complying with Federal, State, and local laws, regulations, and ordinances will be removed or modified within one year of approval of this site plan. Modifications require the pre-approval of the authorized officer.
6. Keeping all facilities within the established limits of their authorized area. The Facility owner or manager may not, for itself or for any customer or tenant, authorize construction of any equipment shelter or tower, or manipulation of

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

the site or vegetation in any way, without specific authorization from the Forest Service (See sec. VII).

7. Providing the authorized officer the name, address, and telephone number of a local contact. The facility owner or the facility manager and the local contact person may be the same individual. The local contact shall be available for emergencies and shall have the authority to make decisions about construction issues, facility maintenance, and all equipment within the facility.
8. Ensuring that all communications facilities and equipment are installed, operated, and maintained according to the most recent Motorola R-56 Standards and Guidelines for Communication Sites. Repairs and modifications to existing facilities/equipment must also meet Motorola R-56 Standards. These standards may be waived by the Forest Service authorized officer when recommended by a site user association or similar technical committee upon request of a facility owner/manager when equivalent measures would achieve similar results.
9. Providing the authorized officer by October 15th of each year, a certified statement listing their type or types of communications uses they provide and the business names of all occupants and their type of communication use in the facility on September 30th of that year.
10. Treat and control noxious weeds on and adjacent to their permitted area, access, and parking areas. Treatment requirements and standards must be according to applicable regulations. Standards and application procedures may be obtained from the Forest Office.

C. Tenants and Customers:

May co-locate in an existing facility when their communications use is an approved use in the site plan. Co-location in a non-Federal communications facility does not require a Forest Service authorization. Tenants and customers who co-locate in a Federal facility shall first be issued a special use permit from the authorized officer before locating in that Federal facility.

V. USE OF THE SITE**A. Multiple-Use Facilities**

Co-location, when practical, shall be required. Site applicants shall take the lead in this area and shall design their proposals to accommodate multiple uses of facilities and improvements. This includes the multiple-use of buildings, towers, solar generating systems, back-up generators, grounding systems, fuel containers, access ways, and parking areas.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Due to the limited development space at the site, new facilities, or major modifications to existing facilities, shall be designed to accommodate additional users even if other users are, or could be, competitors.

Facility owners and facility managers are not required to lease facility space to others if they can demonstrate to the authorized officer that:

1. Space is not available;
2. The use is incompatible with the existing communications uses at the site. For example, the proposed use is not compatible with other uses as provided for in FSH 2709.11, section 97, exhibit 05;
3. Additional space is needed by the facility owner or the facility manager; or
4. Additional users would compromise security of the facility or communications systems located in that facility.

VI. RENTAL FEES

Unless specified differently in the communications site lease, the Forest Service shall charge facility owners and facility managers of non-Federal facilities and tenants and customers in Federal facilities an annual rental fee based on the fee schedule for communications uses on National Forest System lands contained in FSH 2709.11, section 95. The rental rates shall be adjusted annually using the Consumer Price Index-Urban (CPI-U), and the population figures are adjusted annually based on the most recent Rand McNally Commercial Atlas and Marking Guide (for RMAs) and Rand McNally Road Atlas for non-RMA communities.

Rental fees that facility owners and facility managers may charge their tenants and customers shall be:

1. Reasonable and commensurate with the use and occupancy of the facilities and services provide to tenants and customers; and
2. Consistent with other fees charged for similar facilities.

VII. CONDITIONS FOR NEW CONSTRUCTION AND MODIFICATION OR EXPANSION OF A FACILITY

A. New Construction, Modification, and Expansion Responsibilities

Construction space at the site is limited and new uses may not be authorized. If new facilities are proposed or if existing facilities need modification, the following guidelines shall apply.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

In addition to the responsibilities listed in Section IV, proponents, facility owners, and facility managers seeking to construct a new facility or modify or expand an existing facility are responsible for:

1. Submitting a complete application to the authorized officer prior to any new construction, modification, or expansion of a facility. The application shall include:
 - a. A copy of the approved site plan base map showing all of the proposed new, modified, or expanded facilities, including structures, towers, and auxiliary equipment;
 - b. Completed drawings or plans prepared by a professional engineer or architect;
 - c. Identification of any proposed microwave beam paths, a plot of their azimuth, and their proposed elevation on the tower; and
 - d. Documentation showing that the proposed facilities will not obstruct or interfere with any existing uses, including fixed point-to-point antennas, omni-directional broadcast antennas, or microwave beam paths.
2. Demonstrating that the new facility will make the most efficient use of the limited amount of space at the site and will provide for future uses without additional construction.
3. Providing engineering and geotechnical investigations for development of specific foundation designs and grading plans.
4. Providing an erosion control plan prior to construction. At a minimum, the erosion control plan shall include sediment control, stipulations that cut and fill slopes will be graded and contoured to prevent erosion and excessive runoff, and recommendations for temporary erosion control measures, such as netting, silt fences, swales, sediment collection areas, and so forth.
5. Coordinating with other Federal and local governments and securing all pertinent permits and approvals from those agencies.
6. Providing 30-days notice to all facility owners and facility managers at the site, as well as the Forest Service, of all new frequencies, either for themselves or their tenants and customers, proposed for the site. A completed FS-2700-10 shall be sent with the 30-day notice to allow for comment of potential interference. This would be for new frequencies for themselves and their tenants or customers.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN**B. Construction Methods and Resource Protection**

Plans submitted by a proponent, facility owner, or a facility manager for construction, modification, or expansion of a facility shall provide for soil rehabilitation measures, including soil replacement and stabilization and proper handling of runoff from buildings, parking areas, access roads, and undeveloped common areas. The authorized officer must approve all cutting or trimming of vegetation.

During construction, modification, or expansion of facilities, facility owners and facility managers shall:

1. Identify, avoid, and protect sensitive resource areas identified by the Forest Service.
2. Comply with the erosion control plan.
3. Notify the Forest Service authorized officer prior to commencing any approved ground-disturbing activities.
4. During construction and/or maintenance, paintbrushes will not be cleaned off on rocks. No marks of any kind, including survey marks, will be permitted on rocks.
5. Minimize, to the greatest extent possible, ground disturbance and vegetation removal.
6. Re-vegetate extensive cut and fill slopes with native vegetation as soon as possible after construction. All re-vegetation must have prior written approval of the authorized officer.
7. Not cast off grading material. Excess soil can be used as fill material for roads, buildings and towers.
8. Obtain prior written approval of the authorized officer for temporary, on-site storage of construction materials.
9. Not leave hazardous materials, including fuels, oils, and lubricants unattended at the site at any time. Hazardous materials shall be removed from the site at the end of each workday or temporarily stored inside a locked and posted building until the following workday. Construction materials and supplies other than hazardous materials may be left unattended at the construction site at the end of each workday at the owner's risk.
10. Remove surplus construction materials and waste debris from the site no later than 30 days after construction has been completed.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

11. To prevent the spread of noxious weeds into the area, power wash off any earth-moving or heavy equipment, such as dozers, graders, cranes, backhoes, and so forth before it is brought onto National Forest System lands.

C. Construction Inspection

1. All new construction, modification, and expansion of facilities shall conform to established technical standards and accepted engineering practices, such as the Uniform Building Code.
2. Any construction inspections required by other agencies are the responsibility of the holder. Copies of completed inspections shall be provided to the Authorized Officer, either as they occur or as part of the final as-built plan. Inspection information shall become a permanent part of the holder's special-use file.
3. Corrective work required as a result of Forest Service or other agency inspections shall be completed by the date specified in the inspection report to the satisfaction of the inspecting official.
4. A final set of as-built plans shall be submitted to the Authorized Officer within 90 days of acceptance of a structure (if the construction was contracted) or of its completion date (if the construction was not contracted).

D. New or Remodeled or Expanded Buildings

1. Any new buildings shall be designed to accommodate multiple users and shall be consistent with a site-specific environmental analysis conducted at the time of the proposal.
2. Buildings shall be one-story and have a low profile sloped roof. The roof shall be non-reflective metal or other non-reflective fire resistant material approved by the Forest Service. Roofs can be equipped with antenna support structures, such as poles and railings that can extend up to 25 feet above ground level.
3. Facility owners and facility managers are encouraged to construct the interior of their buildings in a modular fashion, so that they can:
 - a. Sublease sections to others;
 - b. Provide tenants and customers with internal separation and security;
 - c. Reduce physical interference; and
 - d. Increase management effectiveness.
4. The following materials are approved for construction of new buildings:

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

- a. Floors: Concrete slab with drainage or as part of a non-flammable pre-fabricated structure.
- b. Walls: Concrete block, metal, or pre-fabricated concrete.
- c. Roofs: Concrete, metal (if painted to eliminate shiny surfaces), or other fireproof material approved by the Forest Service. Proposals for wooden roofs will not be approved.
- d. Partitions: Fire resistant material, such as reinforced concrete or properly grounded expanded metal.
- e. Color: Color used on all exterior building surfaces must have prior written approval of the authorized officer. The goal of color selection is to make buildings as inconspicuous as possible when viewed from a distance. The intent is to reduce or eliminate glare from reflective and/or illuminated surfaces such as windowpanes, sheeting and reflective paints. Non-reflective, Forest Service approved dark gray to green colors shall be used on equipment buildings.

Building entry lights must:

- a. Only light the immediate area in the vicinity of the door;
- b. Be motion-activated and have a limited time duration of 3 to 5 minutes; and
- c. Have a shielded beam that is pointed at the building door.

Requests for all-night (dusk-to-dawn) lighting or entry lighting that would be visible from outside the site will not be approved.

E. New or Remodeled/Expanded Towers

- 1. All construction, modification, and expansion of towers shall have the prior written approval of the authorized officer.
- 2. It is the applicant and holder's responsibility to ensure that new, modified, or expanded towers will not unduly interfere electronically or physically with any existing equipment at the site. Towers shall be spaced so as to prevent ground level radiation and interference problems. Compliance with these requirements shall be demonstrated in writing to the authorized officer prior to issuance of a lease, permit, or amendment.
- 3. All new towers shall comply with current structural and safety specifications and design standards, including safety-climbing devices. Towers should be as narrow and "open" as safety and structural integrity allow. New towers should

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

be designed using maximum wind, snow, and tower loading anticipated for the site.

4. All new towers (including antennas) shall not exceed 120 feet. All new towers shall be self-supporting unless specifically authorized.
5. To avoid possible impacts to birds or bats, follow the most current version of the U.S. Fish & Wildlife Service's Interim Guidelines on the Siting, Construction, Operation and Decommissioning of Communication Towers (available at <http://migratorybirds.fws.gov/issues/towers/comtow.html>).
6. All towers shall be left unpainted if they are made of dull, galvanized steel. Paint is required only if the tower has a shiny or reflective surface. Non-reflective, Forest Service approved dark gray to green colors will be approved unless the FAA requires red and white tower striping.
7. No lights, beacons, or strobes shall be allowed on new towers unless specifically required by the FCC/FAA.

VIII. GENERAL OPERATION AND MAINTENANCE**A. Special Environmental and/or Biological Considerations**

This area is suitable habitat for Federally-listed Quino Checkerspot butterfly, therefore certain construction activities will occur outside the flight season for the Quino Checkerspot butterfly, specifically: vegetation clearing, grading or leveling of the site. The flight season at that elevation can range annually from March 1 – June 1, but does not officially begin each year until US Fish and Wildlife Service announces that the species is active. If ground disturbing activities are required during this period they may occur with coordination of a Forest Service wildlife biologist.

B. Wiring and Grounding

1. All equipment shall be installed in metal cabinets or open frame equipment racks that are grounded and shielded. Grounding is to be installed in accordance with manufacturer's recommendations and accepted industry standards.
2. All electrical wiring and grounding shall meet the National Electrical Code and applicable State codes. All permanent wiring shall be installed in metallic conduit. Surge protection shall be installed on all power distribution panels.
3. Every effort shall be made to protect the equipment from lightning damage. Lightning protectors should be used on all coaxial cable connections to

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

equipment enclosures. Gas gap and MOV protectors should be used on all control, audio, and power lines.

4. Each building shall have its own separate grounding system for all users in that structure. Wherever practical, interconnection of individual grids and/or the simultaneous placement of large sized copper ground wire with any new grounding systems that are buried on the site shall be encouraged.
5. Grounding shall be installed in accordance with accepted practices and standards, such as Motorola specification R-56 and the NEC. Grounding using bentonitic clays is currently the only approved method for chemical grounding. Other types of chemical grounding shall require completion of NEPA documentation by the applicant prior to consideration for approval by the authorized officer.

C. Communications Equipment**1. Equipment Ownership**

All equipment shall be labeled with:

- a. The owner's name;
- b. Applicable transmitter frequencies;
- c. The applicable FCC license or NTIA authorization;
- d. Transmitting power outputs; and
- e. A current 24-hour telephone contact number.

2. Transmitting Equipment

All transmitters shall have protective devices built into them or externally installed to prevent interference with other uses. All transmitters shall meet FCC licensing requirements.

The re-radiation of intercepted signals from any unprotected transmitter and its associated antenna system shall be prevented by the use of appropriate filters, typically bandpass filters, circulators, and/or harmonic filters.

The direct radiation of out-of-band emissions (noise or spurious harmonics) shall be reduced to a level such that it may not be identified as a source of interference as defined in FCC Regulations (47 CFR 90.209(e)). If site noise (electromagnetic noise) becomes an issue, noise threshold limits shall be established, and amended into the Site Plan.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

All transmitters not in immediate use and not specifically designated as standby equipment shall be removed. Loads connected to circulators shall be capable of dissipating the total power output of the transmitter.

3. Receiving Equipment

A bandpass device, such as a cavity or crystal filter, is recommended at the input of all receiving devices. Cavity filters or other protective devices may be used at receiver inputs to reduce interference.

Where duplexing is used, a notch-type device should be avoided. In situations where a notch-type device is used, a bandpass filter shall be used on both the receiver and transmitter.

4. Antennas

- a. Microwave (dish) antennas and other than ground-mounted satellite dishes shall not exceed 10 feet in diameter / or minimum diameter necessary to meet needs..
- b. All antennas shall meet all OSHA safety standards. If an antenna is operating in excess of FCC public or occupations standards, steps will be taken, such as fencing, posting of signs, relocation, lowering power levels, within 24 hours to bring it into compliance. Ground measurements of RFR levels will be taken before mitigation measures are implemented.
- c. Colors for dish antennas or covers shall be pre-approved by the authorized officer. White dish antennas and covers will not be approved. Existing white dishes and covers shall be repainted or replaced as repairs or replacement become necessary.
- d. Antennas shall be treated to reduce or eliminate reflected glare.
- e. Low-powered transmit and receive antennas may be located low on the tower or on the ground.

5. Interference

The responsibility for correcting interference problems lies with the holder of the communications site authorization for the facility, the user causing the interference, and the affected parties. Generally, the first users at a site have seniority with respect to resolution of interference complaints. Senior users have an obligation to maintain their equipment to industry standards, to operate their systems in accordance with the terms of both the FCC license and NTIA/IRAC frequency authorization, and to comply with the Forest Service communications site authorization. New users at a site shall correct, at their expense, interference problems that they create. They shall cease operation of

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

the suspect equipment until the problem is corrected. If interference problems cannot be resolved or corrected within a reasonable time, the new use that is causing the interference may be terminated and the equipment removed.

If a Site Users Association is formed, all users shall cooperate with the Forest Service in the identification and correction of any interference. The Forest Service does not have any responsibility for correcting interference problems, but can act as a mediator to help all affected parties. Interference problems should be coordinated with the FCC or NTIA, as appropriate.

Interference with law enforcement and emergency communications shall be corrected immediately. Operation of equipment covered by this site plan shall not interfere with Federal Government radio or electronic operations already in existence on National Forest System lands within two miles of the Sample Communications Site. The user causing this interference shall at their own expense take all actions necessary to prevent or eliminate the interference. If they do not eliminate the interference within ten days after receipt of notice from the Forest Service to do so, their use will be terminated.

If electromagnetic noise becomes an issue, noise thresholds shall be established and incorporated as an amendment to this site plan. The cost of such analysis is the responsibility of the lease holders.

D. Cables and Transmission Lines

All new cabling shall be jacketed and shielded and shall either be flexible or semi-rigid. Existing substandard cables shall be upgraded as repairs or replacement become necessary. Cables shall be properly installed, strapped, and fastened down. Cable runs should be consistent with applicable engineering standards when attaching cables onto a tower.

All transmission lines (wave guides) shall be supported in accordance with manufacturer's specifications. Unjacketed transmission lines or unjacketed cables of any type are prohibited. No transmission lines shall be left unterminated.

Double-shielded braided or solid-shielded cable shall be used. No RG-8 cable is permitted. No connector-type adapters shall be used on transmission lines. Only correct connectors that will mate to connected devices may be used.

Conduits shall be shared when they service common areas and shall be buried where possible.

E. Radiation

All communications uses shall meet ANSI, FCC, and Forest Service regulations, policy, guidelines, and standards concerning radiation limitations.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Monitoring radiation levels at the site is the responsibility of all site users and shall occur at intervals to comply with FCC regulations and guidelines. A copy of the monitoring report shall be provided to the Forest Service within 30 days of its completion.

Onsite RFR measurements shall be taken using appropriate equipment that can adequately measure levels both on the tower and on the ground before mitigation measures related to RFR are implemented.

Security fences with RFR notice signs are required around areas that exceed public use levels. All fencing location and design shall be pre-approved by the Forest Service.

Warning signs shall be in English and Spanish and comply with ANSI C95.2 color, symbol, and content conventions. Contact information, including name and telephone number will also be included on warning signs.

Any identified RFR problems that are, or could be, a human health hazard shall be corrected within 24 hours after measurement tests have been completed, or the equipment involved shall be removed from the site by the site user. Any ground disturbance associated with correction of RFR problems or removal of equipment causing the problem must have prior written approval of the authorized officer.

F. Utilities

Site users shall pay for the cost to install and maintain utilities, including any resource surveys and reports needed for environmental compliance. For visual reasons, new overhead utility poles are not authorized.

1. Commercial Electrical Power

Commercial power is provided by Anza Electric Corporation (AEC). Riverside County operates backup power propane generators. Installation of powerlines will be authorized by permit or permit amendment to AEC. Powerlines placed underground, wherever possible, at least 24 " deep, and will be posted. All wiring shall conform to the National Electrical Safety Code. Every effort should be made to protect equipment from lightning damage.

2. Telephone Service

Commercial telephone lines do not service this site.

3. Fuel Storage

Fuel storage facilities on this site must be designed, installed and maintained according to applicable federal, State and local laws and ordinances.

If additional service is ever deemed necessary, a separate authorization will be issued to the owner of the service following the appropriate NEPA analysis and decision.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

The applicant must pay the cost of necessary resource surveys, and reports and construction costs including appropriate mitigation. For visual reason, overhead utility lines may not be authorized.

G. Sanitary Facilities

No sanitation facilities exist at this site. If needed, any new sanitary facilities shall be pre-approved by the Forest Service. If it is determined by the authorized officer that the user needs such facilities, they will be provided by the applicant/holder in a manner and location satisfactory to the authorized officer and requirements of the local health department.

H. Security and Law Enforcement

The California Highway Patrol and Riverside County Sheriff's Department are the principal law enforcement agencies for the area in which the Red Mountain Communications Site is located. Generally, the Highway Patrol and County Sheriff's are responsible for civil and criminal law enforcement. Generally, the Forest Service is responsible for enforcing Federal laws applicable to NFS lands, such as resource protection. Patrol and policing for security purposes is the holder's responsibility.

Several of the facilities at Red Mountain Communication Site are fenced. If additional fencing is ever deemed necessary for security purposes at other facilities on the site, it must meet the following criteria:

1. All fences must meet health and safety requirements.
2. All fence locations and design require Forest Service pre-approval.
3. The standard fencing type will be chain-link (i.e. cyclone).
4. The standard fence height will be eight (8) feet.
5. Fencing will be designed, maintained, and of a type to minimize interference issues.
6. Fences will be signed with RFR notices if RFR is above public levels.

Buildings shall be posted with a 24-hour contact phone number(s) on the main door(s) into the building where appropriate.

I. Site Maintenance

The objectives of site maintenance are to present a clean, neat, and orderly appearance at the site and to have all the authorized improvements at the site be safe for workers and the public. All users are responsible for maintaining the overall appearance of the site.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Miscellaneous debris remaining after any construction or installation, removal or modification of equipment is not only a hazard but can cause interference or intermodulation problems. All loose debris must be removed from the site within 30 days after completing construction, reconstruction, or other activities. In particular, all loose wire or metal objects shall be removed from the site. The users of the site shall remove graffiti within ten working days of finding it. If graffiti is on natural features, such as rocks and trees, site users will remove graffiti using a method approved by the authorized officer.

Holders may not leave or dispose of trash, garbage, or cut brush on NFS lands. No outside trash or litter containers are allowed. Site users shall remove all trash and litter from the site as it is produced. Policing of litter in common areas, such as the areas between buildings and developed sites, is the shared responsibility of those holders bordering these areas.

Peeling paint on buildings and towers shall be re-painted within thirty days of discovery or as soon as possible as allowed by weather conditions.

J. Inspections

Unless waived in writing by the authorized officer, the holder shall have conducted annually a certified inspection of the facilities and equipment covered by the authorization. The inspection shall include a technical review that should ensure that all authorized equipment is operating in accordance with requirement of this site plan, the applicable FCC license or NTIA authorization, ANSI standards, and the manufacturer's specifications. In addition, the inspection should ensure that the authorized equipment is secure, free of rust, properly grounded, and otherwise properly operated and maintained. A copy of the inspection report, certified by a telecommunication specialist, shall be provided to the authorized officer within 30 days of completion of the inspection. The Forest Service may also conduct periodic reviews to monitor for authorization compliance.

K. Fire Prevention and Hazard Reduction Requirements

Facility owners and facility managers will be required to control vegetation within the fenced or immediate area around their facilities. Extent of vegetation removal will be agreed to by the authorizing official. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Facility owners and facility managers will be required to control vegetation within the fenced or immediate area around their facilities. Extent of vegetation removal will be agreed to by the authorizing official. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Smoking is prohibited in flammable vegetation areas.

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Roof structures shall be kept reasonably clear of debris at all times.

No explosives will be stored at this site. Flammable materials shall be stored in conformance with the requirements of local fire regulations. Flammables will be placed in closed containers and stored away from sources of ignition and combustible materials. If flammables are stored within a building, the building will be locked, properly signed and well ventilated.

Approved spark arresters will be required and maintained on all internal combustion engines.

At least one (1) U.L. rated 20 lb. A:B:C dry chemical fire extinguisher is required inside each building. Prior to each June, fire extinguisher(s) shall be inspected by holders and refilled, if necessary.

Any fire will be immediately reported to "911", the nearest Forest Service office and/or Riverside County Sheriff's Office.

Forest Service Officers will make periodic fire prevention inspections. They will call to the holder's attention any lack of compliance with the above regulations, plus any other existing hazards. Compliance with these inspections is required within the time limits specified in the inspection report.

All fire protection standards must be accomplished by the beginning of fire season unless otherwise agreed to, and then maintained throughout the fire season.

For new construction, the Forest Service will provide the Holder with a separate Construction Fire Plan which will be prepared at that time as applicable.

State and local laws/regulations must be followed for the diesel tank installation.

L. Access

1. Road

Holders who damage the access road, or any of its associated improvements, such as ditches, culverts, roadside vegetation, signs, and underground utilities and facilities, shall be required to repair the road to conditions equal to or superior to those prior to any damage or disturbance.

Access to Red Mountain Communications site is from State Highway 371 about 3 ½ miles west of Anza to Carey Road, a County Road. The road goes north and west and becomes Tripp Flats Road. Just prior to the Tripp Flats station, take Forest Road 6S22 towards Red Mountain. The Access road to the lookout and Red Mountain Communications Site has a gate at the road junction approximately ½ mile from the site. The County of Riverside maintains the

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

road commensurate with use. The Red Mountain Communication Site is located approximately 12 air miles southwest of the town of Idyllwild and driving time is approximately 1 hour.

2. Internal Roads and Parking Areas

Internal roads and parking areas within the communications site are the responsibility of the site users. Interior roads and parking areas shall be planned and approved by the authorized officer in conjunction with establishment of new facilities. Interior roads shall be maintained so as to allow only one entrance to the site. The intent is to discourage off-road vehicle use in and around the site.

3. Road Closures

Forest Service roads are subject to periodic closures to entry during periods of extreme fire danger, inclement weather, or wetness. Site users may access the site during these closures if they have prior, written approval from the authorized officer.

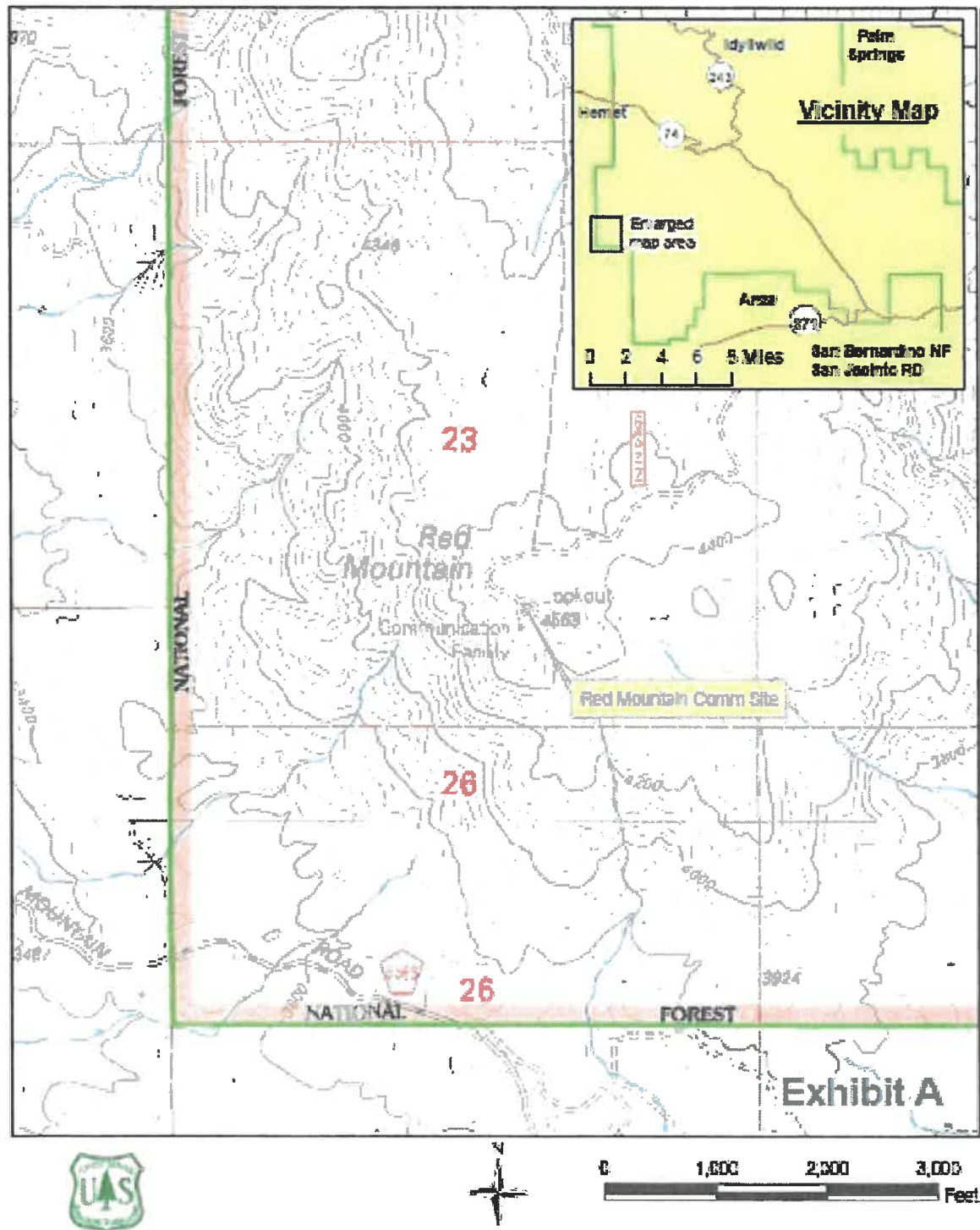
IX. SITE ASSOCIATION AND ADVISORY GROUP

A Site Users' Association is recommended at this site. If formed in the future, all lease and permit holders would be encouraged to join the association. The goal of the association would be to maximize the effective use of the site, coordinate access and maintenance. The objective of a sanctioned association would also be to represent all site users as a group when dealing with the San Jacinto Ranger District Office on matters relating to the site administration. The association would be able to work in cooperation with the Forest Service to identify problems or opportunities and make recommendations to the Forest Service for any changes in management strategies at the site. The association could also provide input to the Forest Service regarding the future addition of equipment and facilities at the site. While the advice and recommendations of the association would not be binding on the Forest Service, the Forest Service could use the input for administration of the site. The Forest Service would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

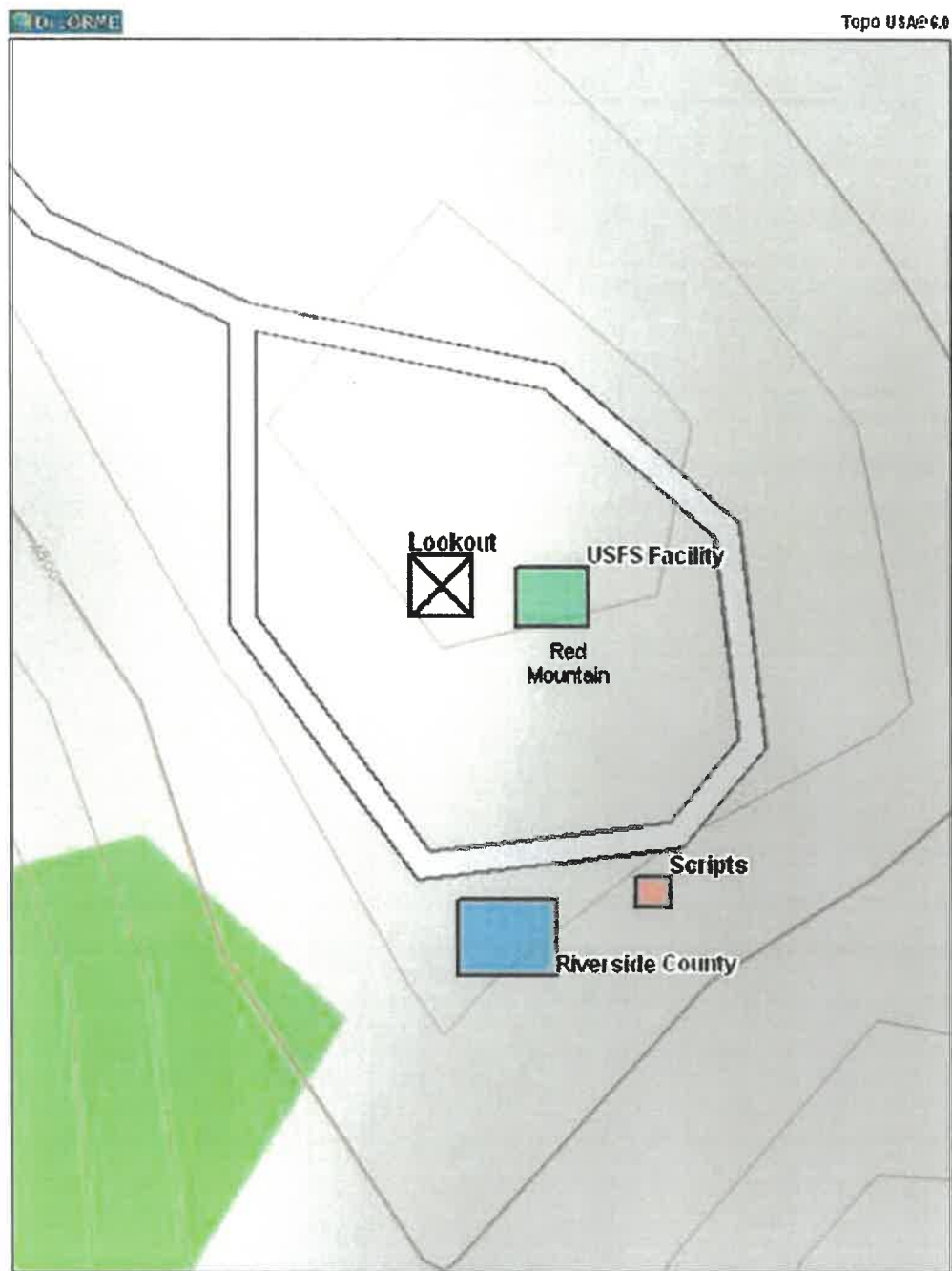
X. APPENDICIES

APPENDIX A – Location Map



RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Site maps

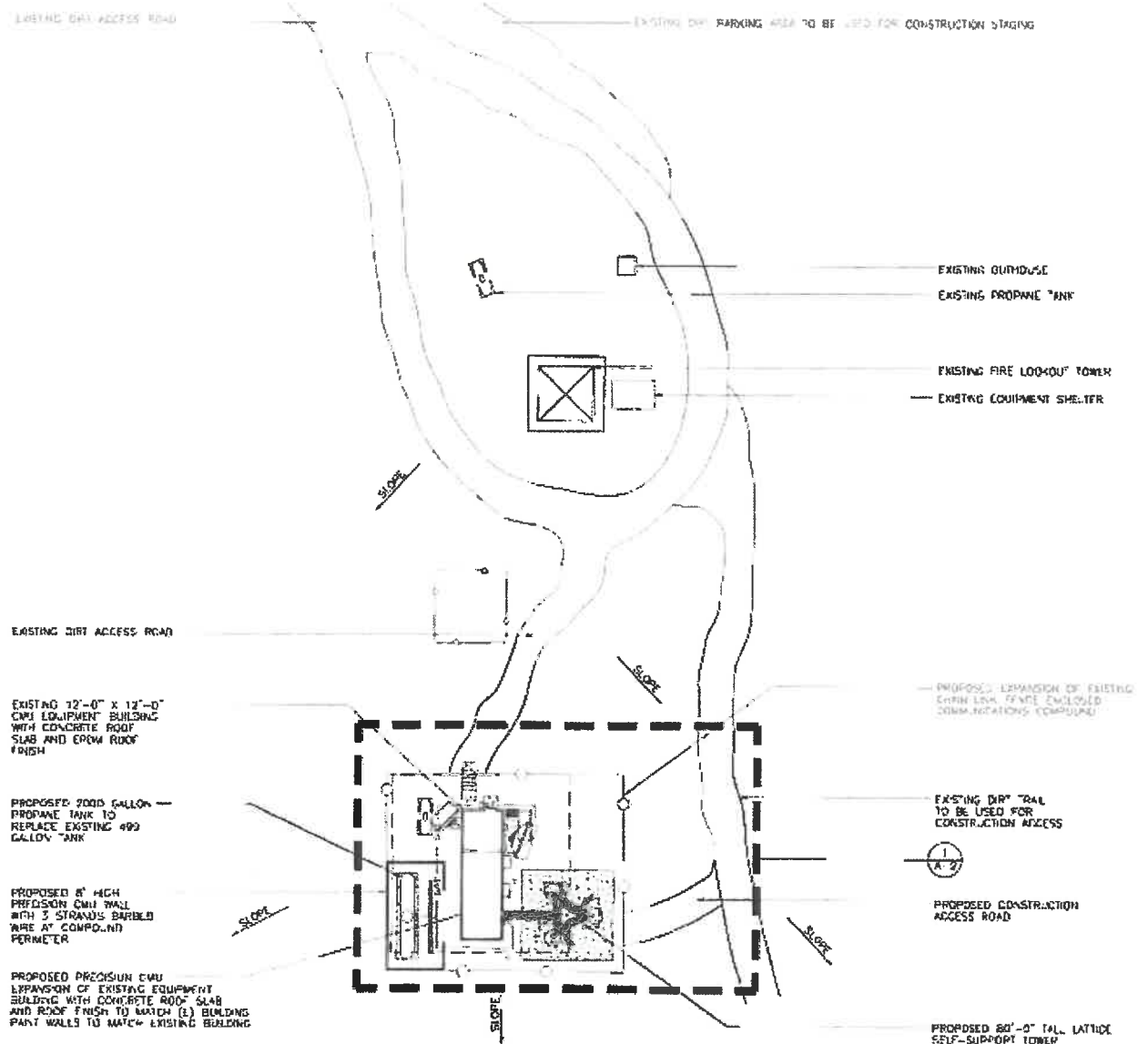


Data use subject to license.
© 2006 DeLorme. Topo USA® 6.0.
www.delorme.com

MN (12.5° E)

0 50 100 ft
Data Zoom 17-0

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN



RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

APPENDIX B – Authorized Facilities

Facility	Auth #	Use	Building	Tower	Other
#1 Forest Service	-----	PMRS	On county of riverside tower	On county of riverside tower	Lookout tower
		Air Quality monitoring	On county of riverside tower	On county of riverside tower	Camera Ozone sampler Metrologic station
#2 Scripts		other	3'x3' metal cabinet	20' mast	
#3 County of Riverside	SJD818102	PMRS	12x 36 block on concrete foundation	Steel, self supporting 80 foot, 3 legged lattice	Propane Tank, Generator, chain link fence

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

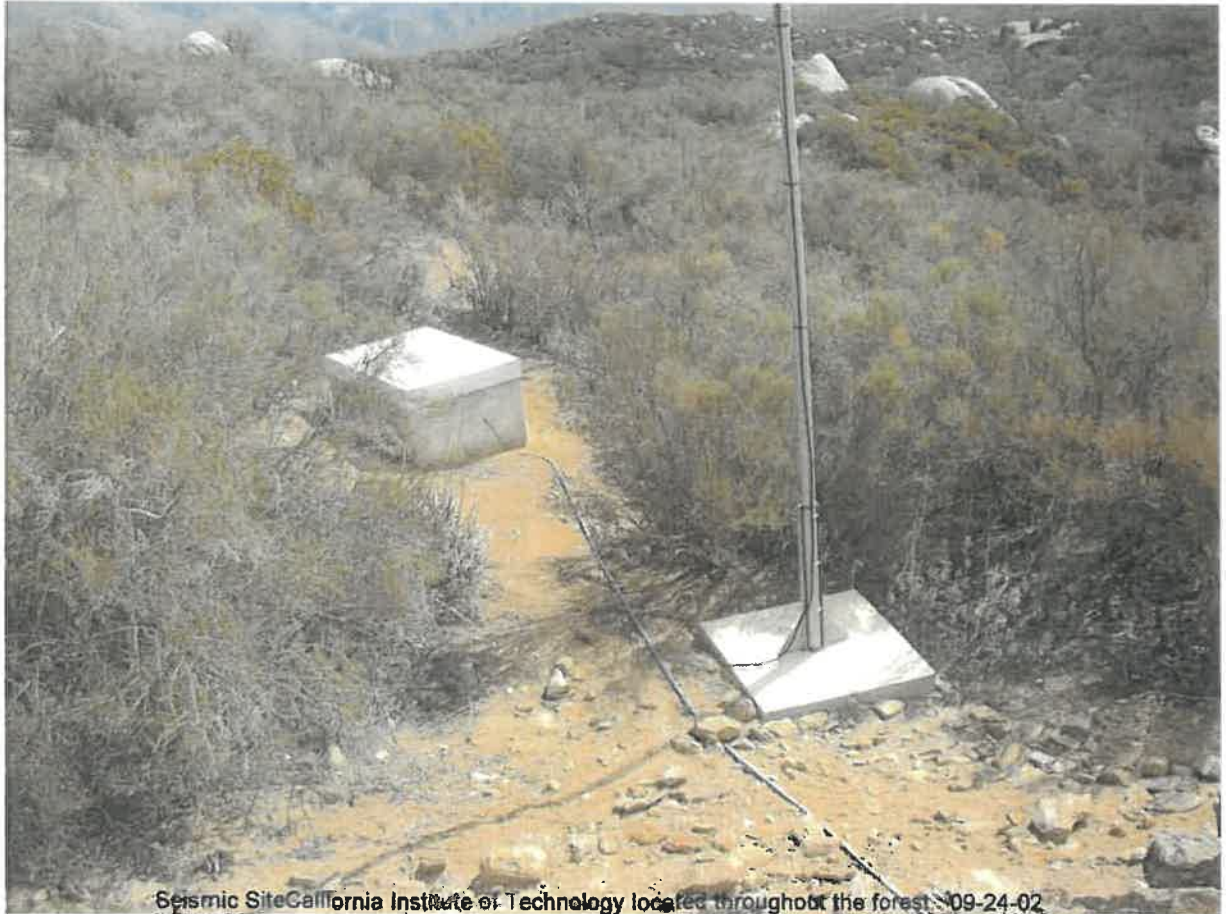
APPENDIX C – Facility Photographs

Facility 1 - FS Lookout



RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Facility 2 – Scripts



Seismic Site California Institute of Technology located throughout the forest. 09-24-02

RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

Facility 3 - Riverside County PSEC

Site under re-construction – February, 2011



Site near completion of re-construction - July, 2011



RED MOUNTAIN COMMUNICATION SITE MANAGEMENT PLAN

APPENDIX D – Inspection Checklist

“Red Mountain Annual Technical Inspection”

Date Inspected: _____ Time Inspection: _____

Permit Holder: _____ Authorization # _____

Site Technician : _____ Phone # _____

Number of Transmitters _____ License Posted _____

Please mark the following Items as Acceptable (A) or Unacceptable (U).

Electrical Wiring ----- (A) (U) Grounding ----- (A) (U)

Equipment Installation ----- (A) (U) Housekeeping ----- (A) (U)

Building Repair ----- (A) (U) Tower Repair ----- (A) (U)

Please mark the following Items as Yes (Y) or NO (N) or (NA)

Isolators ----- (Y) (N) (NA) Circulators ----- (Y) (N) (NA)

Cavities ----- (Y) (N) (NA) Terminators ----- (Y) (N) (NA)

Filters ----- (Y) (N) (NA) Lightning Protection ----- (Y) (N) (NA)

Comments:

Recommended Corrective Action:

Required Corrective Action To Be Taken:

Committee Representatives:

Forest Service Representatives:

Please make the required corrective action within the next 120 days.

Please make a written report of corrective action taken and submit to the FS.. If you should have any questions, please call the Forest Service office.

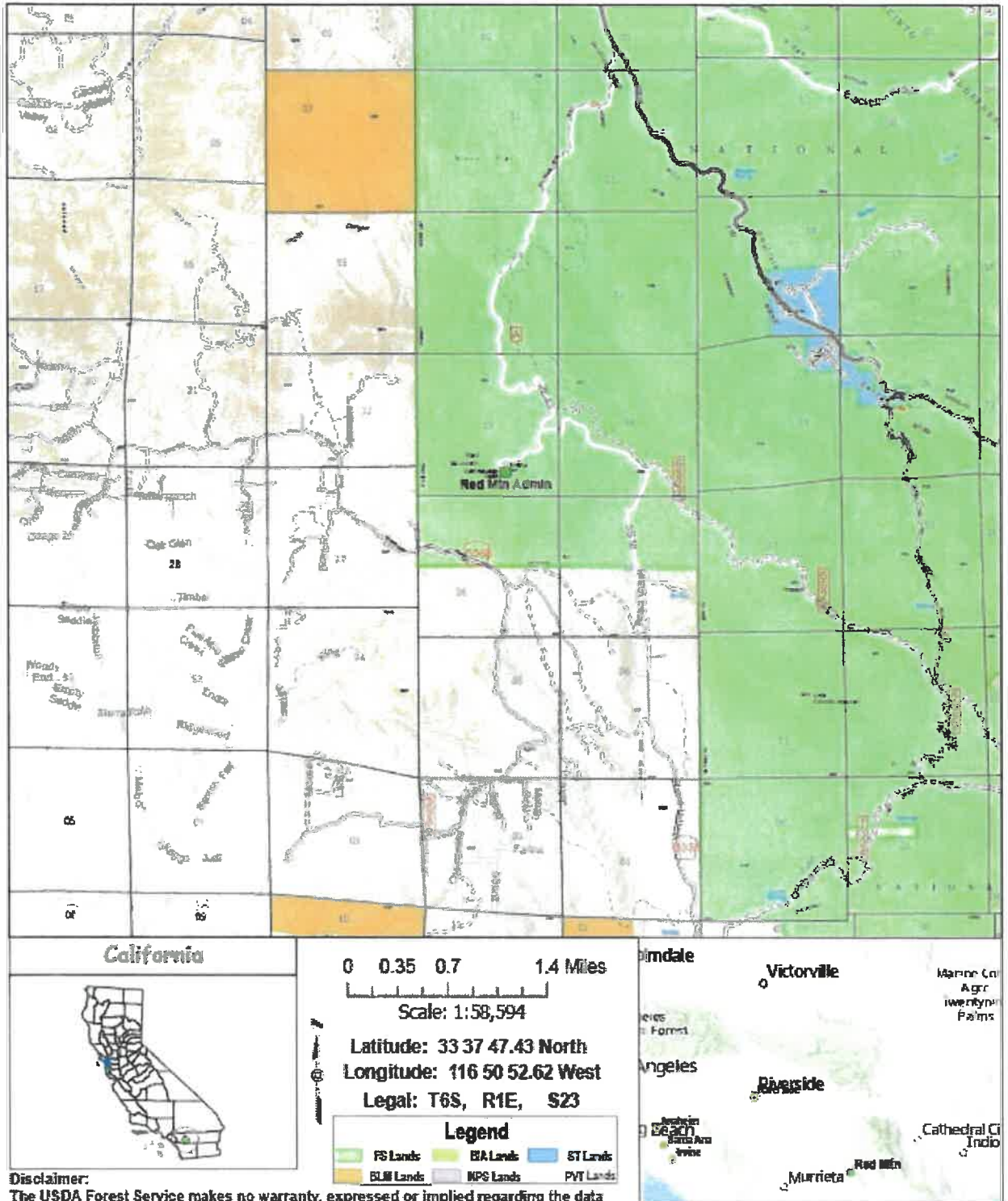


Site Common Name: **Red Mtn Communications Site**

Site Name: **RED MOUNTAIN**

(NOTE: The Site Name is used for RFAs, etc.)

Forest Name: **San Bernardino National Forest**



APPENDIX C
COUNTY'S COMMUNICATIONS SITE ENGINEERING ANALYSIS

Riverside County Communication Site Engineering Analysis

Site Name	Red Mountain Lookout/Communication Site	Application Type	New ☒ Modification ☐	Date	October 10, 202
County Site Manager	Chuck Rushing 951-840-8680	Latitude	33 degree 37 minutes 47.48 seconds N		
		Longitude	116 degrees 50 minutes 52.66 seconds w		
Site Description	The Site consists of the communications facilities located in the City of Idllwild, COUNTY of Riverside , CA. The access road is owned and controlled by United States of America (USDA, U.S. Forest Service)				
Legal Description (if available)	Red Mountain Communications Site - Section 23, T.6S., R1E., San Bernardino Meridian at approximately Latitude 33° 37' 48.4" North, Longitude 116° 50' 52.6" West				

CUSTOMER SITE INFORMATION

Customer Name/Org	USDA, U.S. Forest Service				
Customer Site Name	Red Mountain Communications Site (San Bernardino National Forest	Customer Site Num			

Summary of Work to be completed on Site:

The U.S. Forest Service would like to install three Codan MT4E Radio Repeaters, three Duplexers, one Power Module, one Battery Tray, three 12 VDC Batteries, and two Standard 19" x 7' Chatworth Aluminum Communication Racks in the Riverside County Red Mountain Radio Shelter. The installation would also consist of three Radiowave ANTF150-2 (Blue Bat) Antennas and LDF4-50 Helix Coax Cable on the Riverside County Red Mountain Tower.

PROJECT CONTACT INFORMATION

Primary Contact	Katy Polluconi (Contract/Administration) & Patrick Kepler (Technical)					Only POC for Deliverables	[
Company/Organization	USDA/U.S. Forest Service, Land Mobile Radio Program Staff						
Address, City, State, Zip	602 S. Tippecanoe Avenue, San Bernardino NF, CA 92408						
Office Phone	909-382-2600	Email	katy.polluconi@usda.gov	patrick.kepler@usda.gov	Cell	541-903-0552	

CUSTOMER ADDITIONAL CONTACT INFORMATION

	Firm or Contact Name	Email	Phone
RF Engineer	Doug King	douglas.king@usda.gov	509-684-7121
Construction PM			
Other			

DELIVERABLES TO BE SENT TO

Agreement Draft/Final	Katy Polluconi, Realty Specialist	katy.polluconi@usda.gov	541-903-0552
Company / Organization	WO/USDA Forest Service CIO-Land Mobile Radio		
Address	San Bernardino National Forest Supervisor's Office, Land Mobile Radio Staff, 602 S. Tippecanoe Avenue, San Bernardino NF, CA 92408		
Legal Entity Name	USDA, U.S. Forest Service, San Bernardino National Forest		
Signatory Full Name/Title	Danelle Harrison, Forest Supervisor	danelle.harrison@usda.gov	909-382-2604
Address, City, State, Zip	same as above		
Attn: Full Name	Land Mobile Radio Staff	Copy via email: sm.fs.lmr_realty@usda.gov	

NOTE: Based on customer requirements, the following analyses may be required, for which the customer will be responsible for all costs:

Radio Frequency Radiation Study (required by FCC Regulation)	
Tower Analysis	Electrical Analysis
BTU Analysis	Intermodulation Studies

NOT FOR EXECUTION

Riverside County Communication Site Engineering Analysis

GROUND SPACE REQUIREMENTS				
Dimensions	Length (ft)	Width (ft)	Height (ft)	Or Sq. Ft
Primary Contiguous Lease Area	10'	8'	7.5'	80 Sq. Ft
Minimum space required if requested area not available	8'	8'	7.5'	64 Sq. Ft
Inside Shelter ☒	Floor DIMS Needed			
Custom Shelter ☐	Dimensions			
Pad for Shelter ☐	Dimensions			
Stoop ☐	Dimensions			
Outdoor Cabinets ☐	Dimensions			
Pad for Cabinets ☐	Dimensions			

RACK SPACE REQUIREMENTS	
(application will not be considered complete without Equipment Information)	
Equipment Manufacturer(s)	Equipment Measurements
Three Codan: MT4E Repeaters	3U x 3 (9U)
Three Sinclair Q2220E: Duplexers	4U x 3 (12U)
One NewMar Integrated Power Module: IPS-12-40	2U x 1 (2U)
One Newmar Heavy Duty Battery Tray: NEW405-4360-0	4U x 1 (4U), plus battery height
Three Outback NorthStar 12 VDC Batteries AGM NSB155FT	11in x 4.9in x 22in, 4U x 1 (4U)

BACKUP POWER REQUIREMENTS			
GENERATOR NOT REQUIRED ☒	RivCo Shared Generator ☐	Shared Generator Peak Usage Requested (kw)	
Customer Generator Location	Inside Custom Shelter ☐	Inside ☐ or Outside ☐	Primary Lease Space
Manufacturer		Make/Model	
Fuel Type		Capacity (kw)	
Add'l lease area required for backup power	Dimensions		
Pad for Generator ☐	Dimensions		
Fuel Tank ☐ Tank Size (gal)	Dimensions		
Pad for Fuel Tank ☐	Dimensions		

Notes:
 XU=rack space, all rack spaces requires 1U between equipment. Based on standard 19" 2-Total equipment rack. Total Rack Space need 40U

FOR COUNTY SITE MANAGER USE
Setback Requirements:

SECONDARY GROUND LEASE AREA REQUIREMENTS			
(i.e. for additional dish, antenna, etc., beyond area describe above)			
Will supplementary ground space be needed to accommodate additional equipment?	☐ Yes ☒ No		
If yes, please identify the dimensions for the additional area	N/A		
Minimum space required if requested area not available	N/A		
Additional equipment – please describe, if other than generator described above	N/A		
Additional equipment description	N/A		
Ground space notes (if additional area needed beyond that indicated above, please note here):			
N/A			

POWER/TELCO REQUIREMENTS				
Power provided by	Utility Company Direct ☒	County Provided ☐	Avg Monthly Power Consumption	KWH un
Telco/Interconnect Requirements	POTS ☐	T1 ☐	Microwave ☐	Fiber Optic ☐

NOT FOR EXECUTION

Riverside County Communication Site Engineering Analysis

TRANSMITTER SPECIFICATIONS (& RECEIVER)

If Transmit antenna are requested below 30', Applicant will be required to pay for a RF Field Study.

Transmitter/Receiver Type	FN/FM Analog	AN/FM Analog	LE/FM Mix-Mode			
Qty of Transmitters/Receivers	1/1	1/1	1/1			
Manufacturer	Codan/Zetron	Codan/Zetron	Codan/Zetron			
Type & Model	MT4Z	MT4Z	MT4Z			
Type of Technology	VHF-Repeater	VHF-Repeater	VHF-Repeater			
Tx Power Output	30-Watts	30-Watts	30-Watts			
ERP (watts)	<60-Watts ERP	<60-Watts ERP	<60-Watts ERP			
Electric Service Req'd (amps/volts)	11 A/120 VAC	11 A/120 VAC	11 A/120 VAC			

ANTENNA EQUIPMENT SPECIFICATION

Equipment Type	FN-Repeater Ant.	AN-Repeater Ant.	LE-Repeater Ant.			
Installation Status	Pending FS Inst.	Pending FS Inst.	Pending FS Inst.			
RAD Center AGL (ft)	60'	50'	40'			
Equip Mount ht (ft)	55'	45'	35'			
Equip Mount Type	Standoff/Clampset	Standoff/Clampset	Standoff/Clampset	(Clamp Sets for	.5" 3' Dia. Mast)	
Equip Manufacturer	Telewave	Telewave	Telewave			
Equip Model #	ANT150F2	ANT150F2	ANT150F2			
Equip Dimensions (HxWxD) (ft or in)	in. 60 x 2.75	in. 60 x 2.75	in. 60 x 2.75			
Equip Weight (per item, in lbs)	12 lb	12 lb	12 lb			
Equip Quantity	1	1	1			
Azimuths/Direction of Radiation	Omni	Omni	Omni			
Qty in each azimuth/sector	1	1	1			
TX Frequency	171.4750 MHz	172.2250 MHz	172.5125 MHz			
RX Frequency	168.1500 MHz	164.1375 MHz	164.3625 MHz			
Is equip using unlicensed frequencies?	No	No	No			
Antenna Gain	2.5 dBd	2.5 dBd	2.5 dBd			
Total # of lines for equipment in column	1	1	1			
Line Qty in each azimuth / sector	1	1	1			
Line Type	LDF4-50	LDF4-50	LDF4-50			
Line Diameter / Size	1/2"	1/2"	1/2"			
Removing Equipment (if applicable)						

Additional Installation Notes:

Total equipment power 11A/120VAC-8A/12VDC X 3 60/20/20 DC
amperage@12VDC Duty Cycle (TX/RX/STNBY).
Antenna weight 12 lb each (with clampset), Lateral thrust at 100 MPH 50 lb.
Bending moment at top clamp 67 ft. lb (100 MPH, 40 PSF flat plate equiv.)
Antenna Dimensions (L x base diam.) in. 60 x 2.75

NOT FOR EXECUTION

APPENDIX D
COMMUNICATIONS EQUIPMENT TECHNICAL DATA

COMMUNICATIONS EQUIPMENT TECHNICAL DATA

USDA Forest Service

FS-2700-10 (09/2020)

OMB No. 0596-0082

USDA Forest Service
Technical Data
Sheet
(Ref. FSM 2700)

INSTRUCTIONS: Applicant completes system items 1 to 16, and submit this form, license(s), along with an application to place communication equipment on National Forest System land. This form is authorized by Federal Land Policy and Management Act of 1976, P. L. 94-579 to evaluate the requested use and no authorization may be issued unless this form is completed.

1. Applicants's Name: WO/CIO/R5/PSW-2/San Bernardino NF
Street Address: 602 S Tippecanoe Ave,
City State & Zip Ccde: San Bernardino, CA 92408
Telephone Number: (909) 382-2600
2. Location Applied For:
Site Name: Red Mountain Forest: San Bernardino District: **San Jacinto NM**
3. Technical Data:

a. License number and call sign	A 172110
b. Date license issued	4/17/23
c. FCC/NTIA eligibility	NTIA
d. Class of service (FCC/NTIA symbol)	FXR FBR FAR ML MA MLP
e. Type of emission (FCC/NTIA symbol)	11K00F3E, 8K10F1E
f. Transmit output power (watts)	30W
g. Transmit output (Effective Radiated Power)	47W
h. CTCSS control tone (Hz)	103.5
i. Receive frequency crystal	
j. Receiver IF frequency 1	
frequency 2	
k. Receive frequency	M164.1375
l. Transmit frequency crystal	M172.2250
Multi 1	
Multi 2	
Multi 3	
Multi 4	
Output	

4. Control Method:

Wireline ☐	Radio Link ☐	Local ☐
Repeater ☒	Microwave ☐	Other ☐
5. Control Frequency
6. Antenna Type:

Omnidirectional ☒	Directional ☐	Polarization ☐	Gain 2 dB
Height to top of antenna from ground level ft.;		Dish Diameter ft.	
Beam path with deg.;		Azimuth deg.;	
Name of place beam goes to:		Tilt +/- deg.;	
Beam path length ft.			
7. Tower Type: Pole – Guyed ☐ Self-Supporting ☐ Height ft.
Metal – Guyed ☐ Self-Supporting ☐ Height ft.
8. Ground elevation above sea level at the base of the tower 45825 ft.
9. Tower: Latitude: **33.374743** Longitude: **116.505266**
10. Chief Engineer or Service company:

COMMUNICATIONS EQUIPMENT TECHNICAL DATA

Street Address:

City

State

Zip Code

Phone Number

Emergency Number

11. Will station have commercial power?

Yes ☒

No ☐

12. Will station have standby power plant?

Yes ☐

No ☐

13. Will station have commercial telephone?

Yes ☐

No ☐

Area Code and Phone # _____

14. Attached (check appropriate block(s)) :

☒
☐
☐

Current FCC License/NTIA Radio Frequency Authorization

FCC License Application

FCC Construction Permit with Land Owner (FS) sign-off

15. Additional Information:

Admin Net

NOTICE: Title 18, U.S.C. Section 1001, makes it a crime for any person to knowingly and willfully make any false, fictitious, or fraudulent statements or representations to matters under the jurisdiction of the United States Government.

16. Applicant's Signature: PATRICK KEPLER Title: LMR Date: _____

Digitally signed by PATRICK KEPLER
Date: 2023.10.17 12:49:00 -0700

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond, to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. Response to this collection of information is mandatory. The authority to collect the information is the Organic Administration Act, 16 U.S.C. 551. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

FOREST SERVICE
COMMUNICATIONS EQUIPMENT TECHNICAL DATA

USDA is an equal opportunity provider, employer, and lender.

The Privacy Act of 1974, 5 U.S.C. 552a, and the Freedom of Information Act, 5 U.S.C. 552, govern the confidentiality to be provided for information received by the Forest Service.

COMMUNICATIONS EQUIPMENT TECHNICAL DATA

USDA Forest Service

FS-2700-10 (09/2020)

OMB No. 0596-0082

USDA Forest Service
Technical Data
Sheet
(Ref. FSM 2700)

INSTRUCTIONS: Applicant completes system items 1 to 16, and submit this form, license(s), along with an application to place communication equipment on National Forest System land. This form is authorized by Federal Land Policy and Management Act of 1976, P. L. 94-579 to evaluate the requested use and no authorization may be issued unless this form is completed.

1. Applicants's Name: WO/CIO/R5/PSW-2/San Bernardino NF
Street Address: 602 S Tippecanoe Ave,
City State & Zip Ccde: San Bernardino, CA 92408
Telephone Number: (909) 382-2600
2. Location Applied For:
Site Name: Red Mountain Forest: San Bernardino District: San Jacinto NM
3. Technical Data:

a. License number and call sign	A 172109
b. Date license issued	4/17/23
c. FCC/NTIA eligibility	NTIA
d. Class of service (FCC/NTIA symbol)	FXR FBR FAR ML MA MLP
e. Type of emission (FCC/NTIA symbol)	11K00F3E, 8K10F1E
f. Transmit output power (watts)	30W
g. Transmit output (Effective Radiated Power)	47W
h. CTCSS control tone (Hz)	103.5
i. Receive frequency crystal	
j. Receiver IF frequency 1	
frequency 2	
k. Receive frequency	M168.1500
l. Transmit frequency crystal	M171.4750
Multi 1	
Multi 2	
Multi 3	
Multi 4	
Output	

4. Control Method:

Wireline	☐	Radio Link	☐	Local	☐
Repeater	☒	Microwave	☐	Other	☐
5. Control Frequency
6. Antenna Type:

Omnidirectional	☒	Directional	☐	Polarization	☐	Gain 2	dB
Height to top of antenna from ground level		ft.;	Dish Diameter		ft.		
Beam path with		deg.;	Azimuth		deg.;	Tilt	
Name of place beam goes to:		Beam path length		ft.			
7. Tower Type: Pole – Guyed ☐ Self-Supporting ☐ Height ft.
Metal – Guyed ☐ Self-Supporting ☐ Height ft.
8. Ground elevation above sea level at the base of the tower 45825 ft.
9. Tower: Latitude: 33.374743 Longitude: 116.505266
10. Chief Engineer or Service company:

COMMUNICATIONS EQUIPMENT TECHNICAL DATA

Street Address:

City

State

Zip Code

Phone Number

Emergency Number

11. Will station have commercial power?

Yes

☒

No

☐

12. Will station have standby power plant?

Yes

☐

No

☐

13. Will station have commercial telephone?

Yes

☐

No

☐

Area Code and Phone #

14. Attached (check appropriate block(s)) :

☒
☐
☐

Current FCC License/NTIA Radio Frequency Authorization

FCC License Application

FCC Construction Permit with Land Owner (FS) sign-off

15. Additional Information:

Forest Net

NOTICE: Title 18, U.S.C. Section 1001, makes it a crime for any person to knowingly and willfully make any false, fictitious, or fraudulent statements or representations to matters under the jurisdiction of the United States Government.

16. Applicant's Signature: PATRICK KEPLER Title: LMR S Date: _____

Digitally signed by PATRICK KEPLER
Date: 2023.10.17 12:38:54 -0700

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond, to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. Response to this collection of information is mandatory. The authority to collect the information is the Organic Administration Act, 16 U.S.C. 551. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotope, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

~~CONFIDENTIAL~~
COMMUNICATIONS EQUIPMENT TECHNICAL DATA

USDA is an equal opportunity provider, employer, and lender.

The Privacy Act of 1974, 5 U.S.C. 552a, and the Freedom of Information Act, 5 U.S.C. 552, govern the confidentiality to be provided for information received by the Forest Service.

COMMUNICATIONS EQUIPMENT TECHNICAL DATA

USDA Forest Service

FS-2700-10 (09/2020)

OMB No. 0596-0082

USDA Forest Service
Technical Data
Sheet
(Ref. FSM 2700)

INSTRUCTIONS: Applicant completes system items 1 to 16, and submit this form, license(s), along with an application to place communication equipment on National Forest System land. This form is authorized by Federal Land Policy and Management Act of 1976, P. L. 94-579 to evaluate the requested use and no authorization may be issued unless this form is completed.

1. Applicants's Name: WO/CIO/R5/PSW-2/San Bernardino NF
Street Address: 602 S Tippecanoe Ave,
City State & Zip Ccde: San Bernardino, CA 92408
Telephone Number: (909) 382-2600
2. Location Applied For:
Site Name: Red Mountain Forest: San Bernardino District: **San Jacinto NM**
3. Technical Data:

a. License number and call sign	A 235028
b. Date license issued	4/17/23
c. FCC/NTIA eligibility	NTIA
d. Class of service (FCC/NTIA symbol)	FXR FBR FAR ML MA MLP
e. Type of emission (FCC/NTIA symbol)	11K00F3E, 8K10F1E
f. Transmit output power (watts)	30W
g. Transmit output (Effective Radiated Power)	47W
h. CTCSS control tone (Hz)	103.5
i. Receive frequency crystal	
j. Receiver IF frequency 1 frequency 2	
k. Receive frequency	M164.3625
l. Transmit frequency crystal	M172.5125
Multi 1	
Multi 2	
Multi 3	
Multi 4	
Output	

4. Control Method:

Wireline ☐	Radio Link ☐	Local ☐
Repeater ☒	Microwave ☐	Other ☐

5. Control Frequency

6. Antenna Type:

Omnidirectional ☒	Directional ☐	Polarization ☐	Gain 2	dB
Height to top of antenna from ground level ft.;		Dish Diameter	ft.	
Beam path with	deg.;	Azimuth	deg.;	Tilt
Name of place beam goes to:		Beam path length	ft.	

7. Tower Type: Pole – Guyed ☐ Self-Supporting ☐ Height ft.
Metal – Guyed ☐ Self-Supporting ☐ Height ft.

8. Ground elevation above sea level at the base of the tower 45825 ft.

9. Tower: Latitude: **33.374743** Longitude: **116.505266**

10. Chief Engineer or Service company:

~~CONFIDENTIAL~~
COMMUNICATIONS EQUIPMENT TECHNICAL DATA

Street Address:

City

State

Zip Code

Phone Number

Emergency Number

11. Will station have commercial power?

Yes ☐

No ☐

12. Will station have standby power plant?

Yes ☐

No ☐

13. Will station have commercial telephone?

Yes ☐

No ☐

Area Code and Phone # _____

14. Attached (check appropriate block(s)) :

☒
☐
☐

Current FCC License/NTIA Radio Frequency Authorization

FCC License Application

FCC Construction Permit with Land Owner (FS) sign-off

15. Additional Information:

LE Net

NOTICE: Title 18, U.S.C. Section 1001, makes it a crime for any person to knowingly and willfully make any false, fictitious, or fraudulent statements or representations to matters under the jurisdiction of the United States Government.

16. Applicant's Signature: PATRICK KEPLER Title: LMR S Date: _____

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond, to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. Response to this collection of information is mandatory. The authority to collect the information is the Organic Administration Act, 16 U.S.C. 551. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, gender identity (including gender expression), sexual orientation, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the responsible agency or USDA's TARGET Center at (202) 720-2600 (voice and TTY) or contact USDA through the Federal Relay Service at (800) 877-8339. Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at How to File a Program Discrimination Complaint and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: program.intake@usda.gov.

~~CONFIDENTIAL~~
COMMUNICATIONS EQUIPMENT TECHNICAL DATA

USDA is an equal opportunity provider, employer, and lender.

The Privacy Act of 1974, 5 U.S.C. 552a, and the Freedom of Information Act, 5 U.S.C. 552, govern the confidentiality to be provided for information received by the Forest Service.

10/10/2023

***** UNCLASSIFIED *****
 COMMUNICATIONS EQUIPMENT TECHNICAL DATA
 SPECIAL HANDLING

Radio Frequency Authorization

This Authorization is granted pursuant to Chapter 1 Part 1.1 Section 6.i of the NTIA Manual by authority of the US Department of Agriculture.

This Authorization must be updated by: April 17, 2028. For continued use of this equipment, YOU MUST SUBMIT a request to your Frequency Manager by January 18, 2028.

Serial Number	FOI	MSD	BUR	NET	RVD	AUS	EXD
A 172109	X		F5	10008	230417	J1860465	

FRQ	BIN	TME	SPD	STC	Bandwidth	Emission	Power
171.475 MHz	1			FXR	11.00 kHz	F3E	30 Watt(s)
				FBR	11.00 kHz	F3E	30 Watt(s)
				FAR	11.00 kHz	F3E	30 Watt(s)
				ML	11.00 kHz	F3E	50 Watt(s)
				MA	11.00 kHz	F3E	10 Watt(s)
				MLP	11.00 kHz	F3E	5 Watt(s)
				FXR	8.10 kHz	F1E	30 Watt(s)
				FBR	8.10 kHz	F1E	30 Watt(s)
				FAR	8.10 kHz	F1E	30 Watt(s)
				ML	8.10 kHz	F1E	50 Watt(s)
				MA	8.10 kHz	F1E	10 Watt(s)
				MLP	8.10 kHz	F1E	5 Watt(s)

XAL, XSC	XRC	XLA, XLG	XCL	XAP	XAZ
RED MOUNTAIN, CA	SNBRNRDN	333747N1165053W			ND

XAD

05GCOLLINEAR 01393H0015T

RAL, RSC	RRC	RLA, RLG	ACL	RAP	RAZ
PINE COVE, CA	I,NTIA-U	334503N1164437W			ND
SAN BERNARDINO, CA	I,NTIA-U	340524N1171539W			ND
RED MOUNTAIN, CA	I,NTIA-U	333747N1165053W			

RAD

02GCOAXDIPOLE01879H0008T

05GCOLLINEAR 00324H0015T

Remarks

*PRD,M168.1500,A 172039

*RAD,0080

*NRM,01000,SAN BERNARDINO - FOREST NET

*EQS,LMS

*POC,ROBERT KOLENIC,2085762858,230324

*NTS,M014,0050,AGL

*MFI,NATURAL RESOURCES

*IFI,FIRE

*AGN,CTCSS H103.5

*AGN,ELEVATIONS FROM 1 SECOND DATA

*AGN,RAL 02 FICC SUPERVISOR OFFICE

*PRD,M168.1500,A 172040

Restrictions (NTS, *NTS, SUP)

M014,0050,AGL - DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD (*NTS).

SPECIAL HANDLING

10/10/2023

***** UNCLASSIFIED *****
COMMUNICATIONS EQUIPMENT TECHNICAL DATA
SPECIAL HANDLING

Restrictions (NTS, *NTS, SUP)

Supplementary Details - USED FOR CONSERVATION, LAW ENFORCEMENT, AND SAFETY OF LIFE OR PROPERTY.

SPECIAL HANDLING INSTRUCTIONS

Exempt from release outside US Government IAW 5 U.S.C. Paragraph 552.

SPECIAL HANDLING

10/10/2023

***** UNCLASSIFIED *****

SPECIAL HANDLING

Radio Frequency Authorization

This Authorization is granted pursuant to Chapter 1 Part 1.1 Section 6.i of the NTIA Manual by authority of the US Department of Agriculture.

This Authorization must be updated by: April 17, 2028. For continued use of this equipment, YOU MUST SUBMIT a request to your Frequency Manager by January 18, 2028.

Serial Number	FOI	MSD	BUR	NET	RVD	AUS	EXD
A 172110	X		F5	10008	230417	J1860467	

FRQ	BIN	TME	SPD	STC	Bandwidth	Emission	Power
172.225 MHz		1		FXR	11.00 kHz	F3E	30 Watt(s)
				FBR	11.00 kHz	F3E	30 Watt(s)
				FAR	11.00 kHz	F3E	30 Watt(s)
				ML	11.00 kHz	F3E	50 Watt(s)
				MA	11.00 kHz	F3E	10 Watt(s)
				MLP	11.00 kHz	F3E	5 Watt(s)
				FXR	8.10 kHz	F1E	30 Watt(s)
				FBR	8.10 kHz	F1E	30 Watt(s)
				FAR	8.10 kHz	F1E	30 Watt(s)
				ML	8.10 kHz	F1E	50 Watt(s)
				MA	8.10 kHz	F1E	10 Watt(s)
				MLP	8.10 kHz	F1E	5 Watt(s)

XAL, XSC	XRC	XLA, XLG	XCL	XAP	XAZ
RED MOUNTAIN, CA	SNBRNRDN	333747N1165053W			ND

XAD

05GCOLLINEAR 01393H0015T

RAL, RSC	RRC	RLA, RLG	ACL	RAP	RAZ
PINE COVE, CA	I,NTIA-U	334503N1164437W			ND
SAN BERNARDINO, CA	I,NTIA-U	340524N1171539W			ND
RED MOUNTAIN, CA	I,NTIA-U	333747N1165053W			

RAD

02GCOAXDIPOLE01879H0008T

05GCOLLINEAR 00324H0015T

Remarks

*PRD,M164.1375,A 175009

*RAD,0080

*NRM,01000,SAN BERNARDINO - ADMIN NET

*EQS,LMS

*POC,ROBERT KOLENIC,2085762858,230328

*NTS,M014,0050,AGL

*MFI,NATURAL RESOURCES

*AGN,CTCSS H103.5

*AGN,ELEVATIONS FROM 1 SECOND DATA

*AGN,RAL 02 SAN BERNARDINO FICC SO

*PRD,M164.1375,A 175014

Restrictions (NTS, *NTS, SUP)

M014,0050,AGL - DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD (*NTS).

Supplementary Details - USED FOR CONSERVATION, LAW ENFORCEMENT, AND SAFETY OF LIFE OR

SPECIAL HANDLING

10/10/2023

~~~~~ UNCLASSIFIED ~~~~~  
**COMMUNICATIONS EQUIPMENT TECHNICAL DATA**  
SPECIAL HANDLING

**Restrictions (NTS, \*NTS, SUP)**

PROPERTY.

**SPECIAL HANDLING INSTRUCTIONS**

Exempt from release outside US Government IAW 5 U.S.C. Paragraph 552.

SPECIAL HANDLING

10/10/2023

\*\*\*\*\* UNCLASSIFIED \*\*\*\*\*  
**COMMUNICATIONS EQUIPMENT TECHNICAL DATA**  
 SPECIAL HANDLING

## Radio Frequency Authorization

This Authorization is granted pursuant to Chapter 1 Part 1.1 Section 6.i of the NTIA Manual by authority of the US Department of Agriculture.

**This Authorization must be updated by: April 17, 2028. For continued use of this equipment, YOU MUST SUBMIT a request to your Frequency Manager by January 18, 2028.**

| Serial Number | FOI | MSD | BUR | NET   | RVD    | AUS      | EXD |
|---------------|-----|-----|-----|-------|--------|----------|-----|
| A 235028      | X   |     | F5  | 10008 | 230417 | J1860468 |     |

| FRQ          | BIN | TME | SPD | STC | Bandwidth | Emission | Power      |
|--------------|-----|-----|-----|-----|-----------|----------|------------|
| 172.5125 MHz | 1   |     |     | FXR | 11.00 kHz | F3E      | 30 Watt(s) |
|              |     |     |     | FBR | 11.00 kHz | F3E      | 30 Watt(s) |
|              |     |     |     | FAR | 11.00 kHz | F3E      | 30 Watt(s) |
|              |     |     |     | ML  | 11.00 kHz | F3E      | 50 Watt(s) |
|              |     |     |     | MA  | 11.00 kHz | F3E      | 10 Watt(s) |
|              |     |     |     | MLP | 11.00 kHz | F3E      | 5 Watt(s)  |
|              |     |     |     | FXR | 8.10 kHz  | F1E      | 30 Watt(s) |
|              |     |     |     | FBR | 8.10 kHz  | F1E      | 30 Watt(s) |
|              |     |     |     | FAR | 8.10 kHz  | F1E      | 30 Watt(s) |
|              |     |     |     | ML  | 8.10 kHz  | F1E      | 50 Watt(s) |
|              |     |     |     | MA  | 8.10 kHz  | F1E      | 10 Watt(s) |
|              |     |     |     | MLP | 8.10 kHz  | F1E      | 5 Watt(s)  |

| XAL, XSC         | XRC      | XLA, XLG        | XCL | XAP | XAZ |
|------------------|----------|-----------------|-----|-----|-----|
| RED MOUNTAIN, CA | SNBRNRDN | 333747N1165053W |     |     | ND  |

**XAD**  
 05GCOLLINEAR 01393H0015T

| RAL, RSC           | RRC      | RLA, RLG        | ACL | RAP | RAZ |
|--------------------|----------|-----------------|-----|-----|-----|
| SAN BERNARDINO, CA | I,NTIA-U | 340524N1171539W |     |     | ND  |
| RED MOUNTAIN, CA   | I,NTIA-U | 333747N1165053W |     |     |     |

**RAD**  
 05GCOLLINEAR 00324H0015T

**Remarks**  
 \*PRD,M164.3625,A 135092  
 \*RAD,0080  
 \*NRM,01000,SAN BERNARDINO - ADMIN NET  
 \*EQS,LMS  
 \*POC,ROBERT KOLENIC,2085762858,230328  
 \*NTS,M014,0050,AGL  
 \*MFI,NATURAL RESOURCES  
 \*AGN,CTCSS H103.5  
 \*AGN,ELEVATIONS FROM 1 SECOND DATA  
 \*AGN,RAL 01 SAN BERNARDINO FICC SO

### Restrictions (NTS, \*NTS, SUP)

M014,0050,AGL - DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD (\*NTS).

Supplementary Details - USED FOR CONSERVATION, LAW ENFORCEMENT, AND SAFETY OF LIFE OR PROPERTY.

SPECIAL HANDLING

10/10/2023

\*\*\*\*\* UNCLASSIFIED \*\*\*\*\*  
**COMMUNICATIONS EQUIPMENT TECHNICAL DATA**  
SPECIAL HANDLING

**SPECIAL HANDLING INSTRUCTIONS**

Exempt from release outside US Government IAW 5 U.S.C. Paragraph 552.

SPECIAL HANDLING

**APPENDIX E  
COUNTY POINTS OF CONTACT FOR PREMISES**

**Leasing Agent – Administrative Contact**

Justin Celis, Real Property Agent  
3450 14<sup>th</sup> Street, Suite 200  
Riverside, CA 92507  
[Jucelis@rivco.org](mailto:Jucelis@rivco.org)  
(951) 955-4214 Direct  
(951) 955-3345 Main Office  
(951) 955-4850 24/7 Emergency Line

**Public Safety Enterprise Communications**

Trish Byrd  
Radio Communications Tech Manager  
7195 Alessandro Blvd  
Riverside CA 92506  
951-955-1086  
[pbyrd@riversidesheriff.org](mailto:pbyrd@riversidesheriff.org)

**APPENDIX F  
PREMISES ACCESS PROCEDURES**

**Contact Names and Numbers:** PSEC Facilities Supervisor or PSEC on Call

**Primary Contact Number:** 24/7/365 (951) 955-3580

**Business Hours:** Monday – Thursday 7:00 AM – 4:30 PM; Friday 7:00 AM – 3:30 PM

**Closed the Following Holidays:** New Year's Day, Martin Luther King Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Juneteenth, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving, day after Thanksgiving, Christmas Day.

- When Christmas or New Year's Day falls on a Tuesday, the County will be closed the day before the holiday.
- When Christmas or New Year's Day falls on a Thursday, the County will be closed the day after the holiday

**COORDINATING SITE ACCESS**

- All staff arriving on Premises are required to check in with PSEC at the number above and provide nature of the work and estimated duration.
- All staff arriving on Premises are to contact the PSEC Facilities Supervisor at the number above to schedule an escort at least 5 working days prior for scheduled work.
- All staff departing Premises are required to check out with PSEC at the number above.
- Prior to the commencement of any work on Premises, LICENSEE shall:
  - Ensure all individuals working on the Premises have provided a photo of their government issued ID to the PSEC Facilities Supervisor for a cursory background check.
  - If work is anything other than general maintenance, it must be scheduled with PSEC.
- PSEC will maintain control over Premises access.
- PSEC will escort any individual who has not gone thru the Sheriff Office cursory background check process with ingress and egress rights to Premises.
- PSEC reserves the right to deny access without an escort.
- The Premises are alarmed and monitored by PSEC staff.

APPENDIX G  
COUNTY SITE INSTALLATION STANDARDS

## Table of contents

|                                                                                    |    |
|------------------------------------------------------------------------------------|----|
| Overview .....                                                                     | 21 |
| General Requirements .....                                                         | 21 |
| Safety .....                                                                       | 21 |
| Cabinet and Equipment Rack Installation Standards.....                             | 22 |
| Equipment Installation within Racks or Cabinets .....                              | 22 |
| Cabling Requirements for Equipment in Racks and Cabinets.....                      | 23 |
| Communication Cabling Requirements for Plenums and Other Air-Handling Spaces ..... | 25 |
| Antenna-Installation Installation and Removal of Antennas and Cables .....         | 25 |
| RF Transmission Line and Preamplifier Grounding .....                              | 27 |
| Microwave Dish Installation .....                                                  | 28 |
| Documentation .....                                                                | 29 |
| Surge Protection Devices (SPDS) .....                                              | 29 |
| RF Surge Protection Devices.....                                                   | 29 |
| AC/UPS Power Specifications .....                                                  | 29 |
| Grounding Installation check list.....                                             | 29 |
| Grounding Routing.....                                                             | 30 |
| Tenant Communication .....                                                         | 30 |
| Check in - check out procedure .....                                               | 30 |
| Ingress Procedures.....                                                            | 30 |
| Ingress Procedures – Scheduled Maintenance, Regular Business Hours .....           | 31 |
| Ingress Procedures – Scheduled Maintenance, After-Hours .....                      | 31 |
| Ingress Procedures – Scheduled System Outage, Regular Business Hours.....          | 31 |
| Ingress Procedures – Scheduled System Outage, After-Hours .....                    | 31 |
| Ingress Procedures – Unscheduled System Outage, Regular Business Hours.....        | 31 |
| Ingress Procedures – Unscheduled System Outage, After-Hours .....                  | 31 |
| Site Logbook .....                                                                 | 31 |
| Copy of valid FCC license(s) and COR Technical Data Form posted for location.....  | 31 |

## 1. Overview

The County of Riverside ("County") has adopted the Motorola R-56 set standards and requirements for the installation of communications equipment, infrastructure and the way a communications site is managed, controlled, and operated. All tenants located in a communications site shall follow all requirements set forth in this document and the Motorola R-56 standard. All requirements are essential to protect personnel, minimize component failure, and optimize performance.



## 2. General Requirements

These general requirements have been put in place to improve personal safety and to prevent equipment damage. They establish minimum requirements for grounding, safety, equipment installation, conduct, maintenance, and all other requirements necessary for a successful installation. These procedures relate to safe operations that will be followed during installation and maintenance of communications equipment and antenna systems. The County site procedures and standards shall prevail over contractor accepted practices and standards, unless otherwise agreed to in writing, and safety standards are maintained or exceeded. Contractors must follow the standards and requirements for all sites accessed. The conduct of contractors will be controlled and coordinated by the Riverside County Communications Site Manager ("Site Manager"). All contractors, whether County of Riverside controlled or contracted directly with the outside vendor, must follow specific procedures and coordinate all installations and approvals with the Site Manager.

## 3. Safety

All County employees, contractors, and other personnel working at a communications site shall be familiar with the information contained in this document. The County, as a site owner/primary tenant, is responsible for compliance to Federal Communications Commission (FCC) regulation.

- All County employees, tenants, contractors, and other personnel shall be required to use an appropriate EME monitoring device when working in the vicinity of fixed transmission sources of RF energy.
- All County employees, tenants, contractors, and other personnel shall be required to provide certification that all field technicians have received RFR safety awareness training.
- All County employees, tenants, contractors, and other personnel shall be required to provide certification that field technicians have personal protection equipment (PPE) in the form of RF personal monitors.
- All tower work shall be performed with personnel trained in this practice and who possess the proper equipment and certifications.
- Fall protection measures shall be observed and implemented on all towers and structures, where climbing is required.
- All applicable regulations regarding tower climbing shall be observed.
- Subcontractors shall be required to submit their written Safety Program to the Site Manager and obtain approval prior to commencing any work.
- All tower climbing shall be in accordance with the Fall Protection Program.



- OSHA or other applicable Occupational Safety and Health standards/regulations shall be observed and followed in all phases of tower construction and maintenance. Proper documentation must be on file with County.
- All tower climbing crews shall provide copies of tower climbing and safety certification to the county prior to climbing the tower.
- In case of a fire at the communication site, the fire department shall be notified as soon as a fire is discovered. Notification shall not be delayed in order to assess the results of firefighting effort using on-site fire extinguisher.

#### 4. Cabinet and Equipment Rack Installation Standards

The County communication facilities are designed to utilize both open and closed rack mounting for equipment installations. Floor spacing and electrical outlet spacing in cable trays follow this pattern, which is designed to maximize the amount of equipment within the available floor space. All approved racks, cabinets, electrical ("If Available") and cable tray for the specified communications site will be provided and installed by the County of Riverside per County standards unless otherwise specified or on a case by case basis. If tenant provides their own rack or cabinet it shall be installed per County standards, which include but are not limited to:

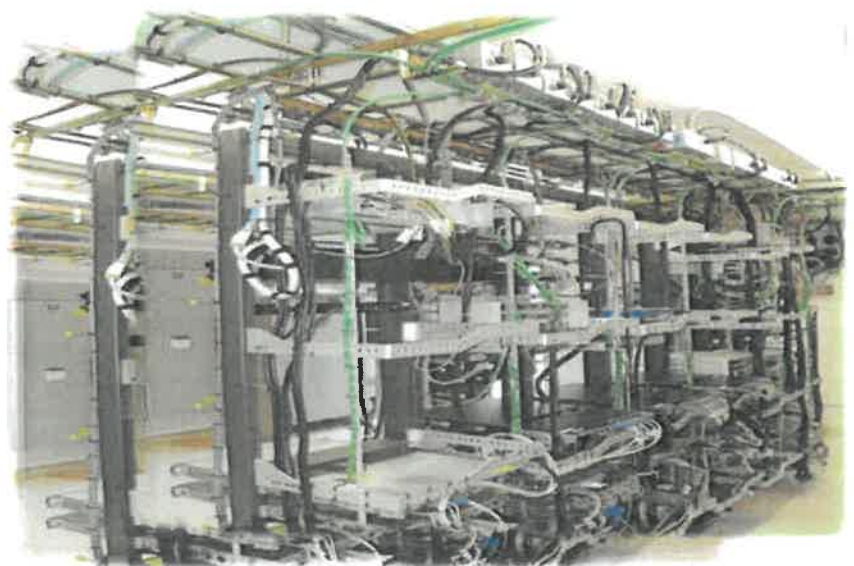
- Bonding to the MGB- (Master Ground Bar)
- Bonding to SSGB- (Sub System Ground Bus Bar)
- Bonding to RGB - (Rack Ground Bar)
- Bonding to ground bus conductor
- Bonding to communication bonding backbone conductors and grounding equalizer conductors.
- Approved welded rack or cabinet, based on the equipment specifications.
- Insulation pad/Isolated Grommets.
- Hilti Anchor-Specified for seismic (Zone 4) Part#HSL-3-B, M12
- A 36-inch side aisle shall be maintained around electrical panel boards (NFPA 70-2005, Article 110.26).
- A 36 to 48-inch front, side, and (where applicable) rear aisles are required for servicing interior mounted air conditioners (NFPA 70-2005, Article 110.26, ASHRAE).
- A 36-inch aisle shall be maintained in front of all telephone switching equipment and/or demarcation cabling. A 36-inch aisle shall be maintained in situations where there is telephone switching equipment and/or demarcation cabling on both sides of the aisle (NFPA 70-2005, Article 110.72).
- A 36-inch minimum workspace shall be maintained on all non-egress or aisle ways without equipment described in this section.
- A 36-inch aisle shall be maintained between at least one end of an equipment row and building wall or other obstruction; longer aisles may require additional access breaks. Larger aisles and additional access breaks in a row may be required as the row becomes longer, such that a fire in the aisle does not prevent egress.

#### 5. Equipment Installation within Racks or Cabinets

Prior to the installation of equipment in a communication site, the County shall perform a BTU and electrical load analysis making sure there is sufficient power and AC for the entire facility. If electrical or AC needs to be upgraded to support any additional equipment, the tenant will be responsible for all associated costs, tenant must provide the county all load, electrical and BTU requirements for each piece of equipment prior of installation.

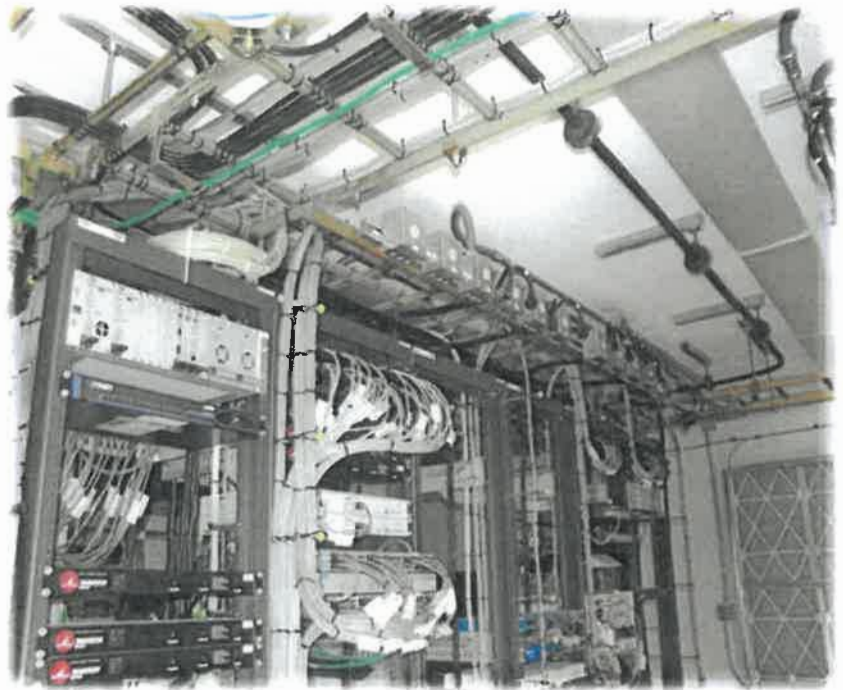
- All cabling within racks and cabinets shall conform to the requirements of NFPA 70-2005, Article 300, Article 800, Article 810, Article 820, and Article 830.
- (See ANSI/TIA/EIA-568(c) and 569(c) and NECA/BICSI 568-2001 for additional information.)

Every transmitter on site shall be equipped with a dual-stage isolator with second harmonic filter or bandpass cavity on the isolator output. Strong IM can be generated from the transmitter power amplifier(PA). The dual-stage isolator greatly reduces the amount of external frequency energy entering a transmitter PA and consequently, the level of IM generated. Jacketed heliax transmission lines and type N connectors shall be used instead of RG-8 cable and UHF connectors. Where two



or more transmit frequencies are combined to one antenna, connectors shall be 7/16 inch DIN connectors. Every receiver should have a band pass cavity to prevent strong transmitter signals from swamping the receiver, all transmitters onsite should have sufficient transmitter noise filtering to reduce harmful on-channel noise to all receivers on site. This is best achieved through a bandpass cavity(s) that reduces the on channel transmitter noise below the interference level. All receivers should have bandpass cavities to prevent receivers from being desensitized by nearby strong transmit frequency carriers.

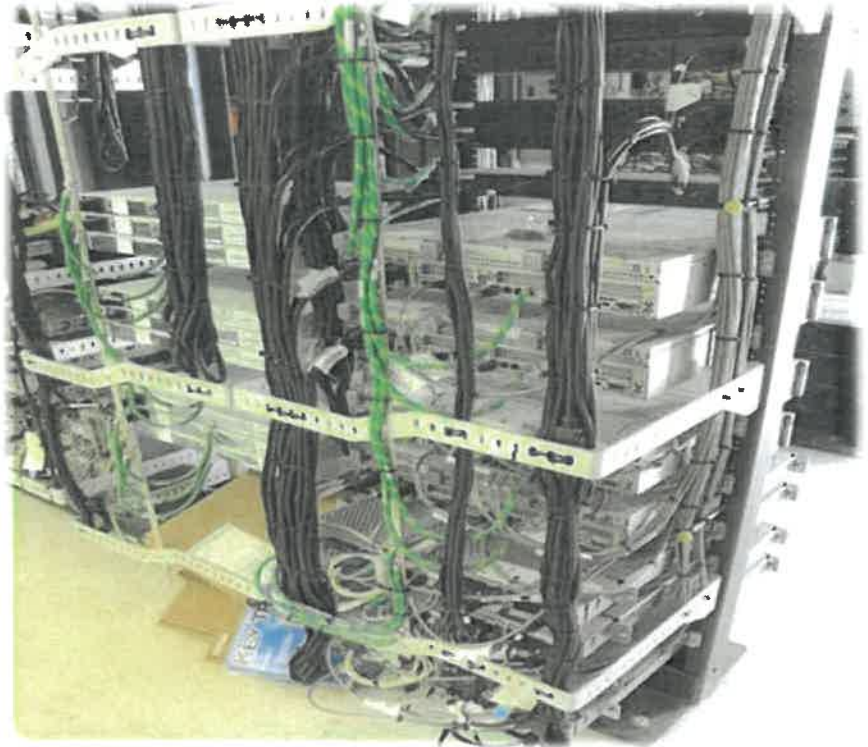
- Some radios, when manufactured, are designed to have the antenna connectors and control cables exit to the side. Side-mounted connectors require additional and odd spacing and disrupt designated floor plans. Mounting of this type of equipment, without modification, shall not be permitted in primary site radio facilities. It may however, be permitted with a single-station installation in County facilities other than specified locations and/or County radio facilities. Installation of this type of equipment shall require coordination for facilities under the jurisdiction of other agencies.
- Floor space assignments shall be made by Site Manager for locations under county control. Installations of equipment shall be well planned in order to provide a minimum of interference or downtime to system users. All installations or modifications that require the disabling of an operational system shall be coordinated with the proper jurisdiction. All equipment installations shall comply with all local building and electrical codes.
- 25-54 MHz - Transmitters in this range shall have an isolator with a minimum of 20dB reverse isolation followed by a low pass filter and a bandpass cavity setup, which provides a minimum of 20dB of attenuation at 1 MHz from the transmit frequency.
- 66-88 MHz - Transmitters in this range shall have an isolator with a minimum of 25dB reverse isolation followed by a low pass filter and bandpass cavity setup, which provides a minimum of 20dB of attenuation at 1 MHz from the transmit frequency.
- 130-225 MHz - Transmitters in this range shall have a set of isolators with a minimum of 50dB reverse isolation followed by a low pass filter and a bandpass cavity setup, which provides a minimum of 25dB of attenuation at 1 MHz from the transmit frequency.
- 276-284 MHz - Transmitters in this range shall have a set of isolators with a minimum of 50dB reverse isolation followed by a low pass filter and a bandpass cavity setup, which provides a minimum of 25dB of attenuation at 1 MHz from the transmit frequency.
- 400-512 MHz - Transmitters in this range shall have a set of isolators with a minimum of 50dB reverse isolation followed by a low pass filter and a bandpass cavity setup, which provides a minimum of 15dB of attenuation at 1 MHz from the transmit frequency.
- 764-960 MHz - Transmitters in this range shall have a set of isolators with a minimum of 50dB reverse isolation followed by a low pass filter and a bandpass cavity setup, which provides a minimum of 15dB of attenuation at 1 MHz from the transmit frequency.



## **6. Cabling Requirements for Equipment in Racks and Cabinets**

To help prevent damage or accidental disconnection, cables and conductors **shall** be secured at intervals of no more than 914 mm (3 ft.). Attachment **shall** be accomplished in a manner that does not restrict access to the equipment in the rack or cabinet.

- Insulated standoffs are recommended for use in racks or cabinets. The standoffs should be of sufficient length to maintain the proper cable separation.
- Nonmetallic cable ties shall be used to secure cables and conductors. Attachment shall be tight enough to secure cables without crushing or deforming them.
- Nonmetallic cable ties must be cut with flush cut side cuts directly adjacent to the locking tab to prevent sharp protrusions.
- When tenants install their own cabinet or rack all grounding conductors within racks or cabinets shall be routed toward the RGB, MGB, SSGB, or ground bus conductor. Connections to the RGB or ground bus conductor shall always be made with the equipment grounding or tap conductors being routed toward the MGB, SSGB, or RGB.
- Whenever possible, cable groups of different types should maintain 50.8 mm (2 in.) separation when passing through the cabinet housing. When the 50.8 mm (2 in.) separation cannot be maintained at the through the cabinet housing penetration, separation shall be maintained before and after the penetration point. Cables are to be run neatly. Cable management over relay racks and equipment cabinets is accomplished by utilizing cable tray systems. Cable trays provide proper support of cables between cabinets, relay racks and bays of equipment and help maintain adequate separation between the cable groups. The orderly separation and support of cable also simplifies maintenance. All cables installed in cable trays shall installed in a neatly secure fashion with all listed requirements met.
- Cables in racks or cabinets shall be sized to length, and shall be installed and routed neatly and in a workmanlike manner.
- AC power cords longer than necessary may be looped down and back up a rack or cabinet. Excess lengths of AC power cord shall not be coiled on top of racks or cabinets.
- Grounding conductors of all sizes shall maintain a minimum bending radius of 203 mm (8 in.). The angle of any bend shall be not less than 90 degrees.
- The bending radius of CAT-5e cables shall be not less than 10 times the outside diameter of the cable. Follow the cable manufacturer's recommendations and see ANSI/TIA/EIA-568(c) and CSAT529-1995 for additional information.
- All other cables shall not have sharp bends which will damage or degrade the performance of the cable. The cable manufacturer's specifications shall be followed.
- Cabling in racks or cabinets shall be grouped according to function. Groups are defined as:
  - AC power cords
  - DC power cables



- Ground conductors
- RF transmission cabling
- Data, control, signal and timing reference cabling and telephone cabling
- Cable groups within racks and cabinets shall be separated by 50.8 mm (2 in.) from other cable groups. See ANSI/TIA/EIA-568(c) and -569(c); and NFPA 70-2005, Articles 800.133, 810.18, 820.133 and 830.133 for additional information.
- When practical, cable groups at or in close proximity to equipment chassis should be separated by 50.8 mm (2 in.) or cross at a 90-degree angle.

## **7. Communication Cabling Requirements for Plenums and Other Air-Handling Spaces**

- Non-plenum rated power cabling shall not be installed within plenums. Failure to use plenum-rated cables in these areas can result in generation of toxic fumes in the event of a fire. Wiring systems may be installed in ducts specifically constructed to transport environmental air only when such wiring consists exclusively of the following:
  - Type MI (mineral insulated) cable.
  - Type MC (metal-clad) cable employing a smooth or corrugated impervious metal sheath without an overall nonmetallic covering.
  - Type CMP (communications plenum cable), electrical metallic tubing, flexible metal tubing, intermediate metal conduit, or rigid metal conduit. Flexible metal conduit and liquid-tight flexible metal conduit shall only be permitted in lengths not exceeding 1.22 m (4 ft.), to connect physically adjustable equipment and devices permitted to be in the ducts.
  - See NFPA 70-2005, Article 300.22(B) for additional information
- Wiring installed in other spaces used for environmental air, such as the area above a suspended ceiling or as otherwise defined in NFPA 70-2005, Article 300.22(C), shall be installed in accordance with NFPA 70-2005, Article 300.22(C). Such wiring methods include using Type MI (mineral insulated) cable, Type MC (metal-clad) cable without an overall nonmetallic covering, and Type AC (armored cable) cable. See NFPA 70-2005, Article 300.22(C) for additional information.

## **8. Antenna-Installation Installation and Removal of Antennas and Cables**

An interference analysis shall be performed to determine interference that may exist at the location. The EME study will be the responsibility of the party requesting the new equipment installation. The EME study will be made available to the County site administrator for approval before site work is to proceed.

All antennas shall have a jumper constructed of Andrew LDF4-50A (not to exceed 50 inches). and Andrew LDF5-50A is recommended as the primary feed line. A "drip loop" shall be formed as the jumper or feed line is installed. The manufacturer-recommended bending radius specifications shall not be exceeded. Coaxial feed line connectors shall not fall within, or be obscured by, any antenna support pipe or conduit run when making antenna feed line installations inside of support pipes or conduit runs. Antenna feed line runs to be installed in conduit or pipes will require special consideration and the approval of the Site Manager.



All antenna feed line runs shall be secured to the existing Unistrut brackets with HOT-DIP GALVANIZED Unistrut clamps and STAINLESS STEEL hardware.

All antenna feed line runs to be installed on towers shall follow the appropriate antenna feed line ladder support. This is dependent upon which side of the tower the antenna is to be mounted. Accordingly, inside and outside positions on the cable ladder shall be evenly utilized when making antenna feed line installations. All antenna feed line runs shall be secured to the antenna feed line ladder and ice bridge.

- Transmission lines shall not be installed in a way that will impede climbing or safety devices.
- Transmission lines shall not be mounted to climbing ladder rungs or climbing pegs.
- Transmission line installation should be planned with consideration for future expansion.
- Excess transmission line shall not be stored (coiled or looped) on the tower.
- Any unused or abandoned transmission line will be removed from tower.
- All transmission line connectors, splices, terminations, and jumpers shall be weatherproofed.



On towers where antenna feed line support systems have not been provided, antenna feed line runs may be secured by the utilization of stainless angle adapter clamps such as (Andrew part number 31768A) and the appropriate Andrew hanger kit number for size of cable) attached to the tower face cross angles. At other locations where galvanized pipe or electrical conduit has been utilized for mounting antennas, the vertical antenna feed line runs may be secured by the utilization of stainless steel wrap lock or stainless steel ties. When installing antenna feed line runs, no feed line shall be attached to or supported by any other individual antenna feed line run already installed. Attachment intervals shall follow that of the manufacturer recommendation as provided in the Andrew reference catalog.

The utilization of messenger cable for antenna feed line support shall be considered on an "as-needed" basis.

Antenna feed line entryways are provided for each individual equipment row. All antenna feed line runs entering or exiting these buildings shall utilize the appropriate entryway for the equipment row being utilized. Each entryway port shall be fully utilized prior to the use of another entryway. Microflex entryway boots shall be used for the appropriate remote sites.

All antenna feed line runs inside buildings (where cable trays are provided) may be secured by utilization of black nylon cable ties. Where cable trays are not provided, the use of jiffy clips, one-hole pipe straps, rigid conduit straps, Unistrut and Unistrut clamps or black nylon cable ties shall be permitted to secure antenna feed line runs. Utilization of ELECTRO-GALVANIZED or PLATED material inside of buildings is permitted.

When Andrew LDF5-50A antenna feed line is used for the primary run, it shall terminate (when cable trays are provided) approximately twelve inches prior to being centered over a radio rack or radio cabinet. A jumper cable utilizing Andrew LDF4-50A shall be constructed to connect the antenna feed line to a base station, duplexer, transmitter combiner or receiver combiner, etc. In some cases RG-214, RG-142, RG-400 or Andrew FSJ4-50B may be permitted



A coax protector is to be utilized for the installation, it shall be installed in the cable tray between the 7/8" run of antenna feed line and the jumper cable going to the equipment. The coax protector shall be connected to the ground bus at this point. A SPD shall be used for single station installations and an IS-PT50HN-MA or similar shall be used for installations with combiners.

All antenna feed line runs shall have cable identification tags and shall denote antenna location on tower. An antenna location chart and antenna feed line run chart shall be provided by the Riverside County Communications Site Manager for each County-controlled site.

The antenna feed line point of connection to a vertical antenna (Stationmaster type) shall be sealed with electrical tape. A minimum of three wraps shall be utilized. All other types of antennas, with exposed connectors, shall be sealed with Andrew Type 34283 Connector Burial Kit. This shall consist of one wrap of electrical tape, one wrap of Type 34283 Connector Burial Kit and three additional wraps of electrical tape. All wraps shall be properly cut and sealed.

The point of connection of the jumper Andrew LDF4-50A and LDF5-50A (on the antenna end) shall be sealed. This shall consist of one wrap of electrical tape, one wrap of Andrew Type 34283 Connector Burial Kit and three additional wraps of electrical tape. All wraps shall be properly cut and sealed. All transmission lines shall be labeled per county guidelines. County guidelines will be provided by the Site Manager prior of installation.

## **9. RF Transmission Line and Preamplifier Grounding**

All antenna feed line runs shall be grounded and shall comply with all applicable codes in use by the authority having jurisdiction. Grounding systems shall be installed in a neat and workmanlike manner (NFPA 70-2005, Article 110.12 and NFPA 780-2004, section 1.4). This will require the installation of a grounding kit similar to Andrew Type 204989-2 Strap Kit (for Andrew LDF5-50A) or appropriate kit number for the antenna feed line being used. All transmission lines shall be installed and bonded to the tower using ground kits as follows:

- Each transmission line run shall have entry port boots (inside and/or outside), lightning protectors and associated mounting brackets, and any additional jumpering required by the site specific RF configuration. Some manufacturers provide transmission line kits, which include the main line connectors, top and bottom jumpers, line grounding kits (typically three per line), hoist grips, and weatherproofing materials.
- Coaxial cable transmission lines shall be bonded and grounded in accordance with the installation practices listed below. To minimize the formation of condensation and ice on transmission lines, a drip loop should be created at the point where the direction of the transmission lines changes from vertical to horizontal. To lessen the likelihood of moisture on the cables getting into the shelter, the cables should be installed with a slight upward incline as they approach the shelter.
- Transmission line ground kits shall be installed per manufacturer specifications.
- Transmission line ground kits shall be sealed from the weather to prevent water and corrosion damage to the transmission line (ANSI T1.313-2003, section 10.5).
- When a tower bus bar is not available the transmission line ground kits shall be attached to an effectively grounded vertical member of the tower, using tower manufacturer-approved methods (typically a type of mechanical clamp).
- Transmission line ground kits shall be attached to a tower bus bar if available.
- Transmission line ground kit grounding conductors shall be installed without drip loops, parallel to the transmission line, and pointed down towards the ground to provide a direct discharge path for lightning (ANSI T1.313-2003, section 10.5.1).
- Transmission line ground kits shall be installed at the first point of contact, near the antenna (ANSI T1.334-2002, section 6.6; ANSI T1.313-2003, section 10.5.1; and MIL-HDBK-419A).
- Transmission line ground kits shall be installed at the bottom of the tower near the vertical to horizontal transition point (ANSI T1.313-2003, section 10.5.1; ANSI T1.334-2002, section 6.6; and MIL-HDBK-419A). The ground kits shall be bonded to the tower or tower ground bus bar (TGB) if installed.
- If the tower is greater than 61 m (200 ft.) in height, an additional ground kit shall be installed at the tower midpoint (ANSI T1.334-2002, section 6.6 and MIL-HDBK-419A). Additional ground kits shall be installed as necessary to reduce the distance between ground kits to 61 m (200 ft.) or less.

- In high lightning prone geographical areas, additional ground kits should be installed at spacing between 15.2 to 22.9 m (50 to 75 ft.) (ANSI T1.313, section 10.5.1 and ANSI T1.334-2002, section 6.6). This is especially important on towers taller than 45.7 m (150 ft.).

All antennas and transmission lines supported by wooden poles, or installed on the side of a structure will be handled and designed on a case by case basis and approved by the Site Manager.

The use of Andrew FSJ4-50B SUPERFLEXIBLE cable shall be permitted only in those cases where the bending radius required cannot be achieved when using Andrew LDF4-50A. The use of Andrew FSJ1-50 or Andrew LDF2-50 shall not be permitted. Any variation from the above shall require the approval of the Site Manager for County-controlled facilities. Coordination and approval shall be required with other controlling agencies.

## 10. Microwave Dish Installation

All microwave dish mounts shall be HOT-DIPPED GALVANIZED after fabrication. Each microwave dish leg mount shall be constructed and mounted so as to be plumb. All microwave dishes, after mounting, shall have a stabilizer arm attached and shall be properly anchored so as to prohibit the microwave dish from moving during high winds. Mounting of microwave dishes between tower legs shall be considered on an "as-needed" basis.

Elliptical waveguide shall be utilized for all microwave installations from 6 GHz through 18 GHz. When RF transmitters are installed they must be maintained per manufacture guidelines and must be in compliance. This includes ensuring all shields are maintained properly and installed correctly, this includes but not limited to:



- Not allowing transmit antennas inside equipment rooms or near the ground level of sites.
- Ensuring all microwave dishes are directed away from facilities.
- Proper use and installation of transmission lines and connectors. When waveguide carrying high power is used, verification of fitting integrity must be performed to ensure there is no RF leakage.
- Each transmission line run shall have entry port boots (inside and/or outside), lightning protectors and associated mounting brackets, and any additional jumpering required by the site specific RF configuration. Some manufacturers provide transmission line kits, which include the main line connectors, top and bottom jumpers, line grounding kits (typically three per line), hoist grips, and weatherproofing materials.
- Strain relief devices shall be used a minimum of every 60.8 m (200 ft.) during transmission line installation and shall remain in place to support the cable after installation. A support cable should be used between the grips to prevent damage to the transmission line caused by lifting from only one point.
- Coaxial cable transmission lines shall be bonded and grounded in accordance with antenna installation grounding installation.
- To minimize the formation of condensation and ice on transmission lines, a drip loop should be created at the point where the direction of the transmission lines changes from vertical to horizontal. To lessen the likelihood of moisture on the cables getting into the shelter, the cables should be installed with a slight upward incline as they approach the shelter.

All microwave waveguide shall be grounded by following the same procedure as that of antenna feed line grounding. The required grounding kit shall be obtained from the Andrew reference catalog for the type of waveguide being utilized. Special consideration shall be given to microwave waveguide installations and shall require contacting the Site Manager. All transmission lines shall be labeled per county guidelines. County guidelines will be provided from the Site Manager prior of installation.

When equipment/users vacate a communications building, the antenna(s), transmission line(s) along with all hardware and appurtenances are to be removed from the tower and inside the comm. building.

#### 11. Documentation

All systems, when installed shall provide the following prior to acceptance:

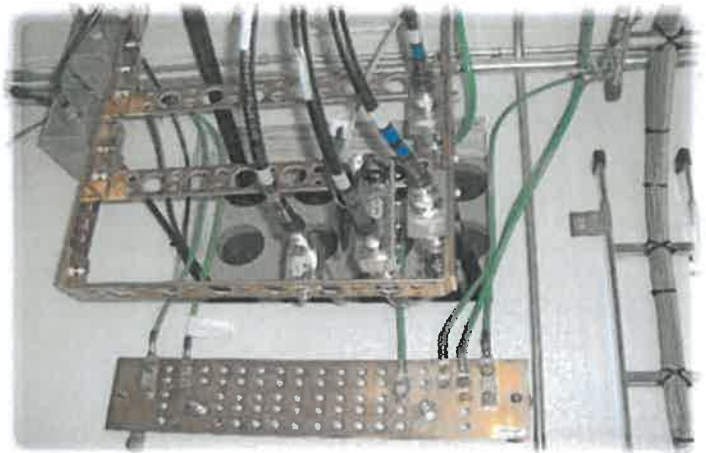
- Transmitter frequency by antenna mount
- Power out of transmitter
- FCC License

Coordination with the Site Manager shall be required when multiplex channels are to be installed in the County Microwave System.

#### 12. Surge Protection Devices (SPDS)

All surge protection devices and outside telecommunication cable metallic shields including, but not limited to, items listed below **shall** be effectively bonded back to the internal grounding (earthing) system with a 16 mm<sup>2</sup> csa (#6 AWG) or coarser equipment grounding conductor by using the following requirements and connection methods described within this document:

- Individual RF Surge Protection Devices
- Primary Surge Protection Devices
- Secondary Surge Protection Devices
- Telecommunication Cable Metallic Shields
- GPS Cable Metallic Shields



#### 13. RF Surge Protection Devices

RF transmission SPDs **shall** be bonded to the MGB within 610 mm (24 in.) of entry into the equipment shelter, equipment room or equipment area. A separate equipment grounding (earthing) conductor **shall** be used to bond each of these devices to the MGB or to a SSGB. RF transmission line SPDs may also be bonded directly to a SSGB, MGB, or the copper integrated entry panel with the proper securing hardware.

#### 14. AC/UPS Power Specifications

All tenant provided UPS's shall be rack mounted and approved by the Site Manager.

#### 15. Grounding Installation check list

- All grounding conductors shall be installed and routed so that personal safety is not compromised and that all equipment is serviceable. The following requirements shall apply:
- Length: conductors shall be no longer than required to achieve their purpose and shall be installed and routed in a professional and workmanlike manner.
- Support: conductors shall be secured or attached to surfaces as required to ensure they do not become damaged or disconnected. Conductors shall be secured in a manner that permits associated equipment to be easily serviced. Conductors shall be secured at no greater than 3 foot intervals.

- Protection: conductors installed in areas where they may be subjected to damage shall be sleeved in electrical non-metallic tubing, or other conduit, that is securely attached to the surface over which it is routed.
- In locations where metallic tubing or conduit is required for adequate protection, the conductor(s) routed through the metallic tubing or conduit must be effectively bonded to each end of the conduit using suitable listed means and devices.
- When ground conductor tap joints are used, they shall be properly insulated as to prevent the bare conductor or connection device from making incidental contact with metallic surfaces.

## **16. Grounding Routing**

- At points where conductors are routed through holes within metallic surfaces, the surfaces shall be suitably protected with grommets or other material to minimize damage to the conductor or insulation.
- Conductors shall be routed toward the MGB. Connections to bus conductors shall always be made with the tap conductors routed toward the MGB.
- At points where conductors must pass through a hole in a metallic surface and the hole is slightly larger than the conductor, the conductor shall be bonded to the metallic surface through which it passes. If the hole or opening is much larger than the conductor and is intended to accommodate several conductors, the conductor is not required to be bonded.
- Ground bus conductors may be routed within cable trays, on the outside of cable trays where suitable support is provided, or along equipment platforms.
- Equipment grounding conductors shall be installed along the rack rail.
- Ground bus conductors shall be routed using the shortest possible routes.
- Bending radius: Ground bus conductors of all sizes shall maintain a minimum bending radius of 8 inches. The angle of any bend shall not be less than 90 degrees.

## **17. Tenant Communication**

If there are situations in which one tenant needs to communicate with another tenant regarding equipment at the site, all communication will go through the Riverside County Site Manager. Unless directed by the Site Manager, or a life and death emergency, tenants **shall not** contact other tenants regarding the site, equipment, interference, etc.

## **18. Check in - check out procedure**

- Central call in number for site personnel
- Installers/techs to provide work authorization number provided by county prior to work performed.

## **19. Ingress Procedures**

To access the Tower, contact the Riverside County Communications Site manager at 951-955-3580 pursuant to the advanced notice requirements prescribed below. Prior to the commencement of any Work on the Tower Facility, Licensee shall have all individuals working on the site cleared through the Riverside Sheriff's Office background process. The Licensee shall contact the Site Manager to schedule an escort. The Licensee shall be escorted at all times when on site.

This number is to be used during regular business hours and after hours. Our regular business hours are:  
 Mon-Thurs 7:00 AM – 4:30 PM  
 Fri 7:00 AM – 3:30 PM

Closed the Following Holidays: New Year's Day, Martin Luther King Day, Lincoln's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving, day after Thanksgiving, Christmas Day. When Christmas or New Year's Day falls on a Tuesday, the County will be closed the day before the holiday. When Christmas or New Year's Day falls on a Thursday, the County will be closed the day after the holiday.

**Ingress Procedures – Scheduled Maintenance, Regular Business Hours**

Contact the Riverside County Communications Site manager three (3) business days prior to the scheduled work to be performed. Notify the Site Manager of the estimated duration and nature of the scheduled work, the number of personnel to be on site, and the number of vehicles expected to be used.

**Ingress Procedures – Scheduled Maintenance, After-Hours**

Contact the Riverside County Communications Site manager three (3) business days prior to the maintenance work to notify them of the estimated time and nature of the scheduled work, the number of personnel to be on site, and the number of vehicles expected to be used.

**Ingress Procedures – Scheduled System Outage, Regular Business Hours**

Contact the Riverside County Communications Site manager five (5) business days prior to the outage. Notify them of the nature of the outage, the estimated time repair personnel will be on site, and the estimated number of staff and vehicles that will be required.

**Ingress Procedures – Scheduled System Outage, After-Hours**

Contact the Riverside County Communications Site manager five (5) business days prior to the outage. Notify them of the nature of the outage, the number of personnel and vehicles required to make the necessary repairs, and the estimated time and duration of the site visit.

**Ingress Procedures – Unscheduled System Outage, Regular Business Hours**

Contact the Riverside County Communications Site manager as soon as you are aware of the outage. Notify them of the nature of the outage, the estimated time repair personnel will be on site, and the estimated number of staff and vehicles that will be required.

**Ingress Procedures – Unscheduled System Outage, After-Hours**

Contact the Riverside County Communications Site manager as soon as you are aware of the outage. Notify them of the nature of the outage, the estimated time repair personnel will be on site, and the estimated number of staff and vehicles that will be required.

## **20. Site Logbook**

All site work is to be recorded in the Site Logbook.

- All personnel entering a communications site are to record, in the Site Log Book, the date of their entry, a brief description of the work performed and the names of the personnel performing the work.
- Contact/User information listed in Site Log Book.
- A section of the Site Log Book will be set aside to record all pertinent contact information for the current site users. This information will include Name, Telephone and Email of the responsible person or department to contact in case of questions or emergency. It is the responsibility of each site user to keep the information current. If the information should change, the County site administrator is to be notified.

## **21. Copy of valid FCC license(s) and COR Technical Data Form posted for location**

A copy of the current FCC license must be posted in the Communications Site for the equipment installed.

- The equipment installation must meet with the license terms.
- A copy of the license must be provided to the County site administrator before the transmitting equipment will be allowed to be placed in service.

A copy of the Riverside County Application and Technical Data Form as approved by Riverside County Facilities Management must be posted in the site.