

Department of the Interior
Bureau of Land Management



COMMUNICATIONS SITE PLAN LOW MOUNTAIN ARIZONA STRIP FIELD OFFICE

Prepared by the United States Bureau of Land Management
Arizona Strip Field Office
State of Arizona

Approved by: _____
Field Manager

_____ Date

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I. INTRODUCTION

A. Terms and Definitions

The terms used in this communications site management plan conform to the definitions listed in the April 22, 2005, Federal Register notice “Rights-of-Way, Principles, and Procedures: Rights-of-Way Under the Federal Land Policy and Management Act and the Mineral Leasing Act” and clarifications provided in Bureau of Land Management (BLM) Handbook 2860-1 and the Title 32 Code of Federal Regulations (CFR) 2800. In the event of a conflict, between the plan and these sources, the Federal Register notice and the BLM Handbook will govern.

The words “lease” and “lessee” as used in this plan refer to the relationship between the BLM and the communications use leaseholder, the lessee. The words “customer” and “tenant” refer to the relationship between the lessee and the occupants in the lessee’s facilities.

LEASE – A right-of-way (ROW) authorization issued to a communication Facility Owner or Facility Manager, allowing for the use of Public Lands to construct and or operate a communications facility and unless specifically prohibited, to sublease to occupants in that facility.

LEASEHOLDER OR LESSEE – Facility Owner/Facility Manager

CUSTOMER – Entities that pay a Facility Owner, facility manager or tenant for communications services and are not re-selling or broadcasting communications services to others

TENANT – A communications user who rents space in a communications facility and operates communication equipment for the purpose of re-selling, or broadcasting communications services to others for profit.

COMMUNICATIONS SITE – An area of BLM-managed public land designated through the land and resource management planning process as being used or as suitable for communications 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 a local prominent landmark, such as Low Mountain Communications Site.

FACILITY MANAGER – The holder of a BLM communications use authorization who leases space for other communication users. A facility manager does not directly provide communications services to third parties.

FACILITY OWNER – Individuals, commercial entities, organizations, or agencies that, own a communications facility on Federal land; own and operate their own communications equipment; and hold a communications use authorization.

NON-BROADCAST – This category includes Commercial Mobile Radio Service (CMRS), Facility Managers, Cellular Telephone, Private Mobile Radio Service (PMRS), Microwave, Local Exchange Network, and Passive Reflector.

BROADCAST – This category includes Television Broadcast, AM and FM Radio Broadcast, Cable Television, Broadcast Translator, Low Power Television, and Low Power FM Radio.

RIGHT-OF-WAY – The public lands authorized to be used or occupied pursuant to a ROW grant.

RIGHT-OF-WAY GRANT – An instrument issued pursuant to Title V of the Federal Land Policy and Management Act of October 21, 1976 (U.S.C. 1701 *et seq.*) or issued on or before October 21, 1976, pursuant to then existing statutory authority, authorizing the use of a ROW over, upon, under or through public lands for construction, operation, maintenance and termination of a project.

HOLDER – Any applicant who has received a ROW grant or temporary use permit.

B. Purpose

This plan will be used by BLM officials, administering communications uses at Low Mountain, existing lessees, holders, and applicants desiring a lease, grant, or an amendment to an existing lease or grant. The plan will be kept updated by amending pages or sections of the plan rather than issuing a revised edition of the plan. When a revision is necessary, a letter from the Arizona Strip Field Office enclosing a copy of revised pages or sections will amend the plan. The amendments will be consecutively numbered.

Overall management direction for the administration of communications sites is outlined in the CFR and the BLM Handbook and applicable BLM Instructional Memoranda. Specific direction for site management planning on designated communications sites is contained in BLM Handbook 2860-1. Primary regulations and policy pertaining to issuance of ROW authorizations by the BLM are found in Title 43, CFR, 2801- 2803 and BLM Handbook 2860-1.

This site was not identified in the Arizona Strip District Resource Management Plan (RMP), which was approved January 1992. The site will be identified in the revised RMP for low-power, non-broadcast uses. The senior use is two-way radio and point-to-point microwave. Other current uses include cellular.

No communications site plan has ever been prepared for this site. This Site Plan has technical standards for better management of the Low Mountain Communications Site. This plan governs development and management of Low Mountain and will be modified in the future as needs and conditions warrant. Any future such uses must be designed, installed, operated, and maintained to be compatible and not interfere with the senior uses. This site-specific plan is administrative in nature and is Categorically Excluded from further review under the National Environmental Policy Act (NEPA) (516.DM2, Appendix 1,1.7). Any additional development of the site will be addressed in a site-specific NEPA document.

C. Site Description

The site is located on a mesa south of St. George, Utah and adjacent to the Paiute Wilderness Area in the Black Rock Mountains overlooking the Virgin River corridor. The area is managed by the Arizona Strip Field Office and the site is specifically located in portions of Section 36, T. 41 N., R. 14 W., Gila and Salt River Meridian at approximately 36° 54' 38" North Latitude and 113° 45' 40.5" West Longitude. The elevation at the Low Mountain Communications Site is approximately 5,412 feet above mean sea level. A site map is provided as Appendix A.

D. Area Served

This site serves does not serve a Ranally Metro Area, RMA. The population zone served is between 25,000 and 49,999 (Zone 8). These zones may be adjusted in the future as population change. This information will be used for fee determination.

E. Access

Access to Low Mountain is from Interstate 15 south of St. George to the Black Rock Road exit 27 and then south on the graded haul road to the gypsum mine. From the gypsum mine, the road narrows and proceeds south and then west to the top of the ridge for approximately 3.6 miles to the site. Except for portions of State land, then entire road is on BLM lands.

F. Site History and Development

The first communications facility ROW on Low Mountain was issued to Arizona Public Service for two-way radio repeater facilities. This ROW was issued in 1974. The site supports highway maintenance and law enforcement primarily along the I-15 corridor from the Stateline port of entry down the Virgin River corridor. In 1999, Western Wireless was authorized a lease for a cellular facility at this location.

Space appears to be available in the existing buildings and towers to serve this area for the current demand. Lack of commercial power is the most limiting factor for expansion of this site. It is located adjacent to a designated wilderness area, however, additional facilities could be developed east of the existing structures. The wilderness lies entirely below the rim of the mesa to the north and west. Any modifications to existing facilities or proposals for new facilities must be approved by the Arizona Strip Field Office according to the process described in this document.

G. Goals and Objectives of Site Management Plan

1. Manage the Low Mountain Site as a low power, two-way radio, point-to-point microwave, and cellular communications site. All uses must be designed, operated and maintained so as not to materially or electronically interfere with the senior uses.
2. Manage communication equipment on the Low Mountain Site to maintain the RF hazard to be within the Public Standard as defined by the FCC.
3. Systematically develop the site to maximize the number of compatible uses while ensuring safety and protection of resources. Development of new towers or buildings within each of the authorized owner's facilities will be authorized only after their respective tower or building space area is filled to near capacity.
4. Present a program for future growth, development and operation within the site.
5. Help fulfill the public need for adequate communications sites.
6. Protect the interests of leaseholders and site users by preserving a safe and electronically "clean" environment.
7. Encourage the efficient development and use of space and facilities within the designated site, subject to the BLM's goal to provide the best possible public service at reasonable cost.
8. Achieve visual quality objectives by requiring design standards that are unobtrusive and utilizing earth tone colors and non-reflective surface material and stringent site maintenance requirements.
9. Describe the BLM's policy for authorizing road use and maintenance.

10. Develop new facilities only after the appropriate site-specific NEPA analysis and coordination with current leaseholders and users. This future development must also be consistent with the revised Arizona Strip Field Office RMP when approved.
11. Amend this Communications Site Plan as necessary to be consistent with the revised Arizona Strip Field Office RMP when it is approved.

II. AUTHORITY AND DIRECTION

A. Authority

The BLM authority to authorize communications uses on Public Land (administered by the BLM) is granted by the Federal Land Policy and Management Act of 1976, 90 Stat. 2776 (43 U.S. C. 1761-1771) and is reflected in 43 CFR 2801- 2803 and Washington Office Information Bulletin 98-23.

The BLM authority for communications site management planning is contained in BLM Handbook 2801-1, Plan of Development. Direction on, and policy for communication use authorizations is contained in BLM Manual 2860.

Authority for the issuance of authorizations and/or licenses for the transmission and reception of electronic radiation for communication purposes is granted by Congress and administered by the Federal Communications Commission (FCC) and/or the National Telecommunication and Information Administration – Interagency Radio Advisory Committee (NTIA/IRAC).

B. Relationship to Communications Site Lease

This site plan will be incorporated into all leases, grants, and reservations issued (now and/or in the future) for this communications site and must be used in conjunction with the granting authorization. **PROVISIONS OF THE SITE PLAN ARE ENFORCED THROUGH THE GRANTING AUTHORIZATION.** Each lessee or holder is expected to include the requirements of the authorization and the site plan into any documents, which describe the business relationship between the lessee or holder and their tenants and customers. The lessee or holder is responsible for enforcing those provisions.

III. GENERAL RESPONSIBILITIES

A. The BLM retains the responsibility for:

Issuing and amending authorizing instruments to Facility Owners and Facility Managers, only for the areas actually occupied by the authorized improvements. Granting occupancy and use of Public Lands rests exclusively with the BLM, 43 CFR 2801- 2803. The issuance of a FCC license (authorization), or frequency assignment, does not authorize occupancy of Public Lands.

1. Approving any new/modified facility(ies) at the site.

2. Approving amendments or assignments to leases and grants to qualified buyers of facilities on the site.

B. Facility Owners and Facility Managers (or their designated representatives) are responsible for:

1. Complying with their authorization and all sections of this Site Management Plan.
2. Ensuring that all new facilities, expansions, or improvements are consistent with the Arizona Strip Field Office Planning Documents; any environmental document(s)/decisions for the site; and, this Site Plan.
3. Ensuring facilities/equipment not complying with Federal/State/local laws/regulations/ ordinances will be removed or modified within one year of the approval of this plan. Any modification needs pre-approval by the BLM.
4. Keeping all facilities within the established limits of their authorized area.
5. Providing the BLM, with the name, address and phone number for a local contact person. The Facility Owner and Facility Manager and the contact person may be the same individual. The contact person will be available for emergencies and will have the authority to make decisions about construction issues, facility maintenance and all equipment within the facility.
6. Adhering to the Facility Owner/Manager Lease/ROW as follows:
 - a. Facility Owners and Facility Managers with Communications Use Leases are authorized to rent building/tower space to tenants and/or customers without prior written approval from the BLM.
 - b. Tenants and/or customers may not construct their own equipment shelter (building, shelter or cabinet) or antenna support structure (tower or mast). The Facility Owner must own all communication shelters and towers under their lease or grant. [If that is not possible, a separate SF-299 application, cost-recovery deposit, analysis, and authorization are required. This will also result in the use being a tenant/customer of the original lease/holder in addition to being a separate facility for billing purposes.]
 - c. Tenants and/or customers using a facility covered by a Facility Lease/ROW will not have separate BLM Leases/ROWs to authorize the use except in situations where regulations or policy require them.
 - d. Facility Owners and Facility Managers are responsible for complying with the terms and conditions of the Facility Lease/ROW. Facility Owner/Managers are also responsible for ensuring that their tenants and customers are in compliance with the terms and conditions of the Lease/ROW, and applicable FCC or NTIA/IRAC license terms and conditions.
 - e. The Facility Owner and Facility Manager may not place any unreasonable restrictions nor any restriction restraining competition or trade practices on tenants and/or customers, or potential tenants and/or customers.
7. Ensuring that all communications equipment is properly installed, operated, and maintained.
8. Ensuring that all communication equipment meets ANSI, FCC and BLM regulations, guidelines and standards concerning radiation limitations by:
 - a. Monitoring radiation levels at their facility and;
 - b. Immediately correcting any radiation levels that are, or could be a hazard to human health. (FCC 47CFR sections 1.1307(b), 1.1310 and 2.1093) and FCC OET Bulletin 54, August 1999.

9. Providing a certified copy of their use and the category of use along with the current phone numbers and addresses of all tenants and customers as of September 30th each year. This report is due by October 15th.
10. Keeping the premises around their buildings free of trash and debris.
11. Placing the BLM Lease/ROW numbers on the door of their communications building. The holder's name, address, and phone number are optional on the door of their communications site building.
12. Correcting interference problems.

C. FCC and NTIA/IRAC are responsible for:

Frequency Management. The FCC and NTIA/IRAC are not normally responsible for the resolution of conflicts when the licensees or agencies are operating within the limits of the authorizations.

IV. AUTHORIZED USES AND USERS WITHIN A FACILITY
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A. Exclusive Use of a Facility By a Single User

Both currently have no tenants or customers. Unless unexpected demand occurs, these facilities will be allowed to remain as single users facilities at the Low Mountain Site.

B. Use by Multiple Users

Use of new facilities and improvements by more than one user will be required except where the Facility Owner is a government agency. Site applicants will take the lead in this area and design their proposals to accommodate multiple uses of facilities and improvements. This includes multiple uses of buildings, towers, back-up generators, grounding systems, fuel containers, access ways and parking areas.

Due to the availability of building and tower space at the site, new facilities, or major modifications to existing facilities will generally not be approved until the empty space is utilized 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 prove to the BLM authorized officer that:

1. Space is not available;
2. The use is incompatible with the existing facilities;
3. Additional space is needed by the Facility Owner/Manager;
4. Additional users would violate system security needs; or,
5. Potential interference is not resolvable.

V. FEES

The BLM will charge Facility Owners and Facility Managers annual fees based on the Fee Schedule for Communications Uses on Public Lands as adjusted annually. These fees will be fair market value for the use of Public Lands. This site serves does not serve a Ranally Metro Area, RMA. The population zone served is between 25,000 and 49,999 (Zone 8) which will be used for these calculations unless something else is specifically agreed to in writing by the authorizing officer or until populations change.

Fees that Facility Owners and Facility Managers may charge their tenants and “customers” are to be:

Reasonable (consistent with, and not in excess of, other fees for similar facilities) and commensurate with the uses and occupancy of the facilities and services provided to tenants and “customers”.

VI. General Operation and Maintenance Direction

A. Unique Resource Considerations at this Communication Site

The site is located adjacent to the Paiute Wilderness Area. The wilderness boundary follows the topographic break of the mesa to the north and west of the site. There are no other special or unique resource considerations at this communications site at this time. If any are identified in the future through the NEPA and or RMP process the appropriate coordination standards will be amended to this plan.

The site is within secondary release habitat of the California Condor. At this time no special management or mitigation stipulations are required. If found to become necessary, anti perching and other measures to discourage condors from using these facilities and from potentially being harmed by loose wires and cables shall be added to this plan.

B. Wiring and Grounding

1. All equipment is to be installed within existing buildings and on equipment racks that are grounded and shielded. Grounding is to be installed in accordance with accepted standards.
2. All electrical wiring and grounding must meet the “National Electrical Code” and applicable estate codes. All permanent wiring shall be installed in metallic conduit. Surge protection shall be installed on all power distribution panels.
3. Lightning protection “down” conductors installed upon communications towers shall be treated as “Transmission lines.” Therefore, they shall have an insulating jacket. Periodic bonding of the down conductor to the tower (Galvanized) steel shall be made with proper bonding connectors that are tin plated or made of brass.
4. Each building is to have its own separate grounding system for all users in that structure. Wherever practical, interconnection of individual grids and/or the simultaneous placement of a large sized copper ground wire with any new grounding systems that are buried on the site will be required.

5. Site or facility grounding must be constructed of copper, with #2 AWG or larger wire or 2" or larger solid copper strap, connected to an adequate site/facility ground electrode system. The site/facility ground electrode system shall be bonded to the power service entrance grounding electrode conductor. Guy wires should also be grounded using manufacturers approved methods to preclude bi-metallic junction and corrosion. All equipment on the site (buildings, towers, power units, transmitters, receivers, antennas, combiners, telephone systems, power cabinets, HVAC units, etc) must be connected to the site/facility ground by direct connection. Electrical system ground wiring is required for electrical ground fault protection and circuit breaker coordination. High power operations should use copper strap bonding in accordance with manufacturers specifications. The grounding systems shall comply with applicable laws, codes and in accordance with standard engineering practice. Below ground connections must use either an exothermic welding process (i.e. Cadweld, Thermoweld, etc.), copper wedge pressure devices (i.e. Ampact, Wrench-lock, etc.), or brazed copper connections in conjunction with a mechanical UL listed connector (to be used as a physical strength enhancement component). Brazing by itself is not an acceptable method of bonding below earth grade (buried).

C. Communications Equipment

Equipment Ownership

All equipment shall be labeled with:

1. The owner's name;
2. Transmitter frequency(ies);
3. A valid FCC, or IRAF, authorization;
4. Transmitting power output(s); and
5. A current 24-hour phone contact number.

Transmitting Equipment

All transmitters will have protective devices (shields, filters, isolation components), designed into or externally installed, to prevent interference to other users. All transmitters shall be FCC type accepted or meet type acceptance criteria.

Re-radiation of intercepted signals from any unprotected transmitter and its associated antenna system will be prevented by the use of appropriate filters (wide band and narrow band broadcast transmitters).

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

Direct radiation of out-of-bound emissions, (i.e. transmitter wide band noise, spurious emissions, harmonics, etc.) shall be reduced to a noninterference level by using bandpass, lowpass, and/or harmonic filtering. Band-reject filtering may be required in certain applications.

Re-radiation of signals from a transmitter and its associated antenna system shall be prevented by installing appropriate devices (i.e. ferrite isolators), with minimum return loss of 25 db.

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

Receiving Equipment

All receivers shall comply with all applicable parts of the FCC rules, including Parts 2 and 15.

All receivers shall have sufficient “front end” pre-selection to prevent receiver spurious response. The use of bandpass, band-reject cavity or crystal filters may be required to prevent receiver-produced intermodulation or adjacent-channel interference is recommended at the input of all receiving devices.

Where duplexing is used, use of a notch type device should be avoided. In situations where a notch type device is used, a bandpass filter must be used with the transmitter.

Tower

1. Generally only one tower is authorized for each Facility Owner. Facility Owners and Facility Managers may obtain permission to construct a second tower only after submitting evidence that demonstrates that their existing tower is completely filled and full use has been made of combining systems.
2. All towers will be left unpainted, if they are dull, galvanized steel. If paint is required, the BLM will approve only non-reflective colors from the Munsell Soil Color Chart, Standard Environmental Colors.
3. Maximum tower height (including antennas) for this site is 120 feet.
4. 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>).
5. Anti-climb devices, removable steps, or other means to discourage unauthorized climbing, are highly recommended to reduce or avoid liability claims.

Antennas

1. The maximum antenna height (including tower) will be 120 feet.
2. Microwave (dish) antennas (other than ground mounted satellite dishes) will be limited to a maximum of ten (10) feet in diameter. The smallest diameter dishes are preferred if technically feasible.
3. All antennas must meet all OSHA safety standards. If an antenna exceeds FCC public or occupations standards (see FCC OET Bulletin 57), it will be remedied within 24 hours after measures are taken or isolated (e.g., fencing, signing, relocation, lowering power levels are all possible remedies). Ground measurements of RFR levels will be taken before mitigation measures are implemented.

4. Color(s) for dish antennas, or covers, must be pre-approved by the BLM. White dish antennas and/or covers will not be approved. Existing white dishes and covers must be repainted or replaced with dishes of approved color, as repairs or replacement become necessary.
5. Antennas will be treated for low to non-reflectance.

Interference

The responsibility for correcting interference problems is a matter for resolution between the Lease/ROW holder of the facility(ies), the user causing the interference, and the affected party(ies). First users on a site have seniority with respect to the resolution of interference complaints. Senior holders 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 BLM authorization.

New users on a site must correct, at their expense, interference problems that they create. They may be required to furnish an intermodulation study or other interference-related data and agree to accept financial responsibility for elimination or prevention of any interference caused by the facility before their application can be evaluated. They must cease operation of 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.

All users shall cooperate with the Association and the Bureau in identification and correction of any interference. The BLM does not have authority for correcting interference problems, but can act as a mediator to help all affected parties. Interference problems must be coordinated with the FCC or NTIA/IRAC whichever is appropriate.

Interference with law enforcement and/or emergency communications must be corrected immediately. The operation of equipment covered by this Site Plan shall not interfere with United States Government radio or electronic operations already in existence on public land within two (2) miles of the site to which this authorization refers. The user causing this interference, shall, at its own expense, take all action necessary to prevent or eliminate such interferences. If it does not eliminate such interference within ten (10) days after receipt of notice from the BLM to do so, this use will be terminated.

If electromagnetic noise becomes an issue, noise thresholds will be established and this Site Plan will be amended accordingly.

D. Cables and Transmission Line (Wave Guides)

All new cabling will be jacketed and shielded and shall either be flexible or semi-rigid type. Existing substandard cables will be upgraded as repairs or replacement become necessary.

Cables will be properly installed and will be strapped and fastened down. Use of ports at building entrance points will be kept to a minimum by use of combiners.

When attaching cables onto a tower, conduits should be used and cable runs should be equally divided among all tower legs.

All transmission lines (wave guides) are to be supported in accordance with manufacturer's specifications.

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

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

E. Radiation

All communications uses must meet ANSI, FCC and BLM regulations guidelines and standards concerning radiation limitations.

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

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

Security fences with RFR notice signs are required around areas that exceed public use levels. Raising higher power transmitting antenna on the tower or adding a taller tower may be necessary to eliminate RFR hazards. Reducing power may also be required if other alternatives are not feasible. All fencing location and design or new tower construction must be pre-approved by the BLM.

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

Lowering power levels for on-tower access during maintenance will be coordinated between affected users.

Any identified RFR radiation problems that are, or could be, a human health hazard must be corrected within 24 hours after measurement tests have been completed or be removed from the site by the site user(s). If the proposed corrective action involves any new ground disturbance, it must be pre-approved by the BLM.

F. Utilities-Availability of and Requirements for:

Commercial Electrical Power

No commercial power is provided to the site. Due to the remote nature of the site all power is provide via a combination of solar, wind turbine, and propane generators.

Telephone Service

There is no commercial telephone provided to the site.

If additional service is ever deemed necessary, site users will pay for the cost of:

1. The necessary resource surveys and reports for service connections; and
2. The cost of constructing service connections.

For visual reasons, overhead utility poles may not be authorized.

Fuel Tanks

All Facility Owners are responsible for providing fuel storage (propane and diesel) and emergency power for their tenants. No tenants will be authorized to have separate fuel tanks and/or generators. Each Facility Owner will preferably consolidate fuel storage into a tank large enough in size to accommodate all tenants. At a minimum, tanks will be grouped together in a consolidated area adjacent to their facilities. All fuel, storage tanks (e.g. LPG, propane and diesel) must meet current fire department, Federal, State and County safety and hazardous materials requirements. Propane is the preferred fuel for future generators

1. All tanks will be:
 - a. Signed in red letters, “SMOKING OR OPEN FLAME PROHIBITED WITHIN 20 FEET”;
 - b. In conformance with National Fire Protection Association (NFPA) requirements; and,
 - c. Painted an approved color, or screened by an enclosure to blend in with the natural environment. If an enclosure is used, it must be pre-approved and painted an approved color from the Munsell Soil Color Chart, Standard Environmental Colors.
2. Diesel tanks will also be:
 - a. Enclosed in BLM and fire department approved secondary containment vaults that are painted a BLM approved color from the Munsell Soil Color Chart, Standard Environmental Colors.
 - b. Constructed with underground fuel lines. Fuel line must be constructed of black, treated pipe and fittings, and must be posted.

G. Sanitary Facilities

1. Plans for any new sanitary facilities must be pre-approved by the BLM. If it is determined by the BLM that the users need such facilities, they will be provided by the Lease/ROW holder in a manner and location satisfactory to the BLM and within the requirements of the County Health Department.

H. Security and Law Enforcement

The County Sheriff’s Department is the key law enforcement agency for the area. They are responsible for most civil and criminal matters. The BLM will be responsible for enforcing matters related to uses of BLM lands (e.g. resource protection issues).

Gating and controlled access is the key to site security. Patrolling and policing for security purposes is the holder’s responsibility.

Gate and key access must be approved in advance by the BLM and must be adequate for BLM and County Fire Department access needs.

I. Site Maintenance

The objective of maintenance activities is to present a clean, neat, and orderly appearance at the site and have all of the authorized improvements safe for workers and the public. All users will keep up the overall appearance of the site.

Miscellaneous debris remaining after any construction and/or equipment installation, removal or modification, is not only a hazard, but can cause interference or intermodulation problems. In particular, all loose wire or metal objects are to be removed from the site.

The users of the Site will remove all graffiti within 10 working days of finding it. If graffiti is on natural features (e.g. rocks), the graffiti will be removed in a method approved by the BLM authorized officer.

Holders will not be permitted to leave or dispose of trash, garbage or cut brush on BLM lands. No outside trash or litter containers will be provided. Site users (i.e. holders) will remove litter from the site as it is produced.

Policing of litter in common areas (i.e. areas between buildings and developed sites) is the shared responsibility of those holders bordering these areas.

During construction and/or maintenance, paintbrushes will not be cleaned off on the rocks around the site and excess materials (e.g. cement) will be removed from BLM land.

Peeling paint on buildings and/or towers will be re-painted within thirty (30) days of discovery by the Facility Owner or within 10 days of notification of the holder by the BLM.

J. Inspections

Enforcement authority is vested in the BLM as the Communications Site Administrator for Low Mountain via 43 CFR 2800.

The BLM may conduct an annual inspection of each primary user's facility. This inspection will verify:

- a. Compliance with technical standards.
- b. Structural integrity.
- c. As-built plan accuracy.
- d. Electromagnetic compatibility.
- e. General site health, safety, and cleanliness.

The BLM shall provide written notice of the scheduled inspection date at least 30 days in advance. Each primary user shall arrange to have personnel available at the site at the time of the inspection.

Any non-compliance found shall be forwarded to the BLM and a written copy of the report shall be forwarded to the violating party or organization within 30 working days following the inspection. The report shall include:

- a. A description of the violation.
- b. Corrective action required.
- c. Name, address, and organization of the responsible party.
- d. Time allowed for completion of corrective measures.

- e. Anticipation action in the event of noncompliance with remedial instructions.
- f. Method, manner and time allowed for appeal.

Copies of the violation reports and user responses shall be forwarded to the Technical Standards Committee Chair-person for incorporation into the annual report.

K. Fire Prevention and Hazard Reduction Requirements

Facility Owners and managers will be required to maintain to mineral soil, a minimum of (10) feet clearance around their buildings and a minimum of then (10) feet clearance around any propane tanks or as specifically directed by the authorized officer to protect tortoise habitat. Identified threatened, endangered, or sensitive plant species must remain within the minimum clearance areas.

Smoking is prohibited in flammable vegetation areas.

Roof structure shall be kept reasonably clear of leaves, twigs, and other 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 40 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 BLM office and/or County Sheriff.

The BLM authorized officer 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.

L. Access Maintenance and Restrictions

Roads

Primary access is a graded road from Interstate 15 to within 2 miles of the site. The first portion of the road to the gypsum mine is maintained by the mine to a haul standard. Between the mine and the junction 2 miles south of the site is on BLM Road 1009. This road receives maintenance as funds are available. The final 9,420 feet of road is included in the ROWs to the Arizona Department of Public Safety and Western Wireless.

Users who damage or disturb the access road, or any associated structures, such as ditches, culverts, roadside vegetation, signs and/or underground utilities or facilities, will be required to repair the road or associated structures, to conditions equal to or superior to those prior to any damage or disturbance. This work must be done according to applicable BLM road maintenance standards and may require the appropriate NEPA analysis.

Interior Site Driveways/ Parking Areas

Roads within the communications site will be maintained by the site users. Interior roads will be planned and approved during establishment of new facilities. Interior roads will be maintained in a manner to allow only one entrance to the site. Off-road vehicle use in and around the site is discouraged.

Road Closures

Roads on public land are subject to periodic closures to entry during periods of extreme fire danger, inclement weather, or wet conditions. Authorized site users may use the site during these general closures, if advance approval is obtained from the BLM.

VII. CONDITIONS FOR CONSTRUCTION, MODIFICATIONS OR EXPANSION

A. New Facility Owner Responsibilities

In addition to the responsibilities listed in Section III, New Facility Owners and Facility Managers are responsible for:

1. Submitting a complete application to the Arizona Strip Field Office prior to any new construction or modifications to existing improvements (ATTN: "Realty Specialist"). The application must include:
 - a. The appropriate cost recovery and application fees.
 - b. A copy of the approved Site Plan Base Map showing all of the proposed (new) facilities including structures, towers, and auxiliary equipment;
 - c. Completed drawings/plans prepared by a registered engineer and approved by the BLM;
 - d. Identification of any microwave beam paths, a plot of their azimuth(s), and their proposed elevation(s) on the tower;
 - e. Documentation that shows that proposed facilities will not be obstructing, or interfering with, any existing fixed point to point antennas, omni directional broadcast antennas, or microwave beam paths in the directions of primary population targets. Proposed beam path needs must be shown on Site Plan Base Map; and,
 - f. Any needed recommendations, changes or modifications to their original proposal, based on any required resource surveys and/or reports.
2. Demonstrating that their proposals will not cause undue interference with any existing uses before the BLM can approve new facilities. In addition, it is the applicant's responsibility to show that any new facilities will make the most efficient use of the limited amount of space at the site.
3. Showing their proposals will provide for future users without additional construction.
4. Providing engineering and geotechnical investigations for development of specific foundation designs and grading plans.

5. Providing an Erosion Control Plan prior to construction activities. At a minimum, the Erosion Control Plan must include: sediment control, stipulations that cut/fill slopes will be graded and contoured to prevent erosion and/or excessive runoff, and recommendations for temporary erosion control measures, (e.g. netting, silt fences, swales, and/or sediment collection areas).
6. Coordinating with other Federal (e.g., FCC and FAA), State, and County agencies and obtain all required approvals and/or permits.
7. Providing 30-day notice to all Facility Owners/Managers at the site, as well as the BLM, of all new frequencies proposed for the site. A completed BLM technical data sheet or equivalent must 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.
8. Insuring that all written approvals have been obtained from the BLM prior to construction. In addition:
 - a. Directional broadcast antennas (e.g. translators) will only be protected within the arch between their licensed 3 dB points.
 - b. New and/or modified facilities will not obstruct existing fixed point-to-point antennas or omni-directional broadcast antennas in directions of primary population targets.

B. Construction Methods and Resource Protection

Plans submitted by an applicant for any new construction or modifications shall specify provisions for soil rehabilitation measures including, but not limited to, soil replacement and stabilization and for proper handling of runoff from buildings, parking area, access roads, and undeveloped common areas.

The following methods and resource protection measures will be required to minimize impacts during construction:

1. Avoid and protect sensitive resource areas, as identified by the BLM.
2. Compliance with the Erosion Control Plan.
3. During construction and/or maintenance, paintbrushes will not be cleaned off on rocks around site and no marks of any kind (including survey) marks will be permitted on rocks.
4. Minimize ground disturbance and vegetation removal as much as possible during construction activities. All ground-disturbing activities require BLM pre-approval.
5. Any extensive cut and fill slopes will be re-vegetated with native vegetation species pre-approved by BLM as soon as possible after construction. If necessary, reseedling will be required until vegetation is successfully established as determined by the BLM.
6. No grading material will be cast off during construction/reconstruction activities. Excess soil can be used for fill material on road and/or building/tower pads.
7. Temporary, on-site storage of construction materials will require pre-approval by the BLM.
8. Construction materials and supplies, except for hazardous materials (see number 10. below) may be left unattended at the construction site at the end of each workday, but at the owner's risk.

9. Hazardous materials, including, but not limited to all fuels, oils, and lubricants are not to be left unattended at the site at any time. During construction, these materials are to be removed from the site at the end of each workday, or temporarily stored inside a locked and signed building until the following workday.
10. All surplus construction materials and/or waste debris must be removed from the site no later than thirty (30) days after construction has been completed.
11. Any earth moving or heavy equipment (e.g. dozers, graders, cranes, backhoes, etc.) leaving the designated roadway and/or approved parking area(s) to perform authorized activities at the site, will be power washed prior to being brought onto public lands to prevent the introduction and spread of noxious weeds into the area.

C. Construction Inspection

1. All new construction, reconstruction, or major modification shall conform to the established technical standards and accepted engineering practices (i.e., the Uniform Building Code).
2. Any construction inspections required by other applicable agencies are the responsibility of the lessee/holder. Copies of completed inspections are to be provided to the BLM authorized officer, either as they occur or as part of the final as-built plan. Inspection information shall become a permanent part of the proponent's Lease/ROW case file.
3. The Lessee/Holder agrees that corrective work detailed in BLM, or other agency required compliance inspections, would be completed by the scheduled completion date. If the Lessee/Holder disagrees or has questions about specific items, the Lessee/Holder must contact the BLM in order that the disagreement or item may be resolved.
4. A final set of as-built plans will be submitted to the BLM authorized officer within 90 days of acceptance of structure (if contracted) or of completion date.

D. New or Remodeled/Expanded Buildings

1. Any new buildings must be designed to accommodate multiple users along with fitting into the physical environment as defined in a site-specific environmental analysis developed at the time of the proposal.
2. Buildings are required to be one-story, flat roofed. The roof must be metal or covered with metal to be fire resistant. 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 facilities (i.e. buildings)

- a. Floors – Concrete slab with drainage.
- b. Walls – Concrete block, metal or pre-fabricated concrete.
- c. Roof – Metal, or concrete, if painted to eliminate shiny surfaces, or other fireproof material as approved by the BLM. Proposals for wooden roofs will not be approved.
- d. Partitions – If it is felt partitions are necessary in buildings, ensure they are constructed with fire resistant material (e.g., concrete block, reinforced concrete, or properly grounded fencing).
- e. Color – Proposed color for use on all exterior building surfaces must be pre-approved by the BLM. The goal of the color selection for the facilities is to make the building as inconspicuous as possible and make buildings located on the skyline look inconspicuous 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, BLM approved colors will be used on equipment buildings; the standardized color for Low Mountain is Slate Gray, Munsell Soil Color No. 5Y 6/1 or Shale Green, Munsell Soil Color No. 5Y 4/2.

5. 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 (e.g., 3-5 minutes); and
- c. Have a shielded beam that is pointed at the building door.

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

E. New or Remodeled/Expanded Towers

- 1. All new construction, reconstruction, and modifications to towers will be pre-approved by the BLM prior to implementation.
- 2. It is the applicant/holder’s responsibility to assure that a new, or modified, structure will not unduly interfere electronically or physically with any existing equipment at the site. Towers must be spaced, so as to prevent ground level radiation and/or interference problems. This must be clearly demonstrated in writing to the BLM prior to issuance of a Lease/ROW or amendment.
- 3. All new towers will 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 will be designed using maximum wind, snow, and/or tower loading anticipated for the site.

VIII. SITE ASSOCIATION/ADVISORY GROUP

A Site Users’ Association is probably not needed at this time at this site. If demand and additional facilities are approved in the future, a Users Association may be desirable.

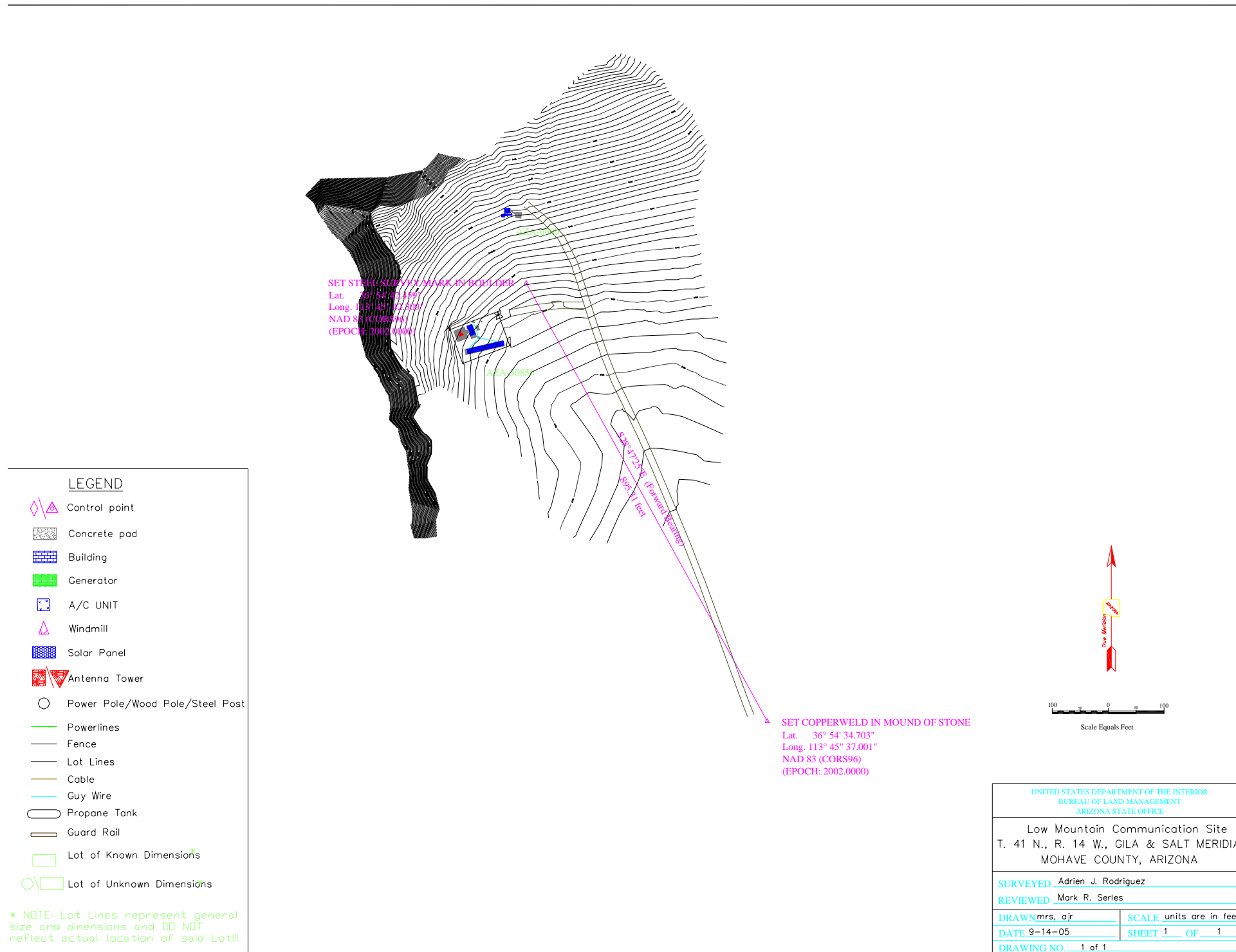
The goal of the Site User's Association will be to maximize the effective use of the site. The objective of a sanctioned association will be to represent all site users as a group when dealing with the BLM, Arizona Strip Field Office on matters relating to the Site administration. The association will be able to work in cooperation with the BLM (BLM) to identify problems or opportunities and make recommendations to the BLM for any changes in management strategies at the site. The association could also provide input to the BLM 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 BLM, the BLM could use the input for administration of the site. The BLM would be a member of such a group and would help jointly develop the charter (i.e., the ground rules).

IX. APPENDICIES

- A. Site Map**
- B. Authorized Facilities**
- C. Site Photographs**
- D. Inspection Checklist**

APPENDIX A

SITE MAP



APPENDIX B

LESEE FACILITY TABLE

(See associated User's Table on this Website)

	Auth #	Use	Building	Tower	Access/Parking	Other
Facility # 1 AZ Department of Public Safety	AZA- 6609	PMRS	8'x 10' block	60' lattice	Access road and parking 50'x 9,420' RW	Solar panels, Wind turbine, Batteries
Facility #2 Western Wireless	AZA- 30856	CEL	10'x 20' metal	120' lattice	Access and parking	60'x 8' solar panel array 50' guyed tower wind turbine 1000 gal propane 20kw generator

APPENDIX C
SITE PHOTOGRAPHS



Facility 1
AZ Dept of Public Safety

Facility 2
Western Wireless



APPENDIX D

INSPECTION CHECKLIST

“Low 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: _____

Bureau of Land Management 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 BLM in St George. If you should have any questions, please call the BLM office.