



CLARK COUNTY FIRE DEPARTMENT
Fire Prevention Bureau
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Permit Type: 105.7.16
Control Number: A.0
Effective Date: 11/15/11

TITLE: EMERGENCY RESPONDER RADIO COVERAGE SYSTEM

SCOPE: Clark County Fire Department requirements for the submittal and design of an emergency responder radio coverage system.

For new work in existing buildings, see the "New Work in Existing Buildings" guideline.

PURPOSE: To standardize plan/permit requirements of the Fire Department in accordance with the Clark County Fire Code. Permits are valid through the duration of construction. Work must commence within 180 days, and remain active with no period of inactivity exceeding 180 days, or the permit becomes invalid.

DEFINITIONS:

Assessor's Parcel Number (APN): A unique number assigned to each property by the Clark County Assessor's office.

Emergency Responder Radio Coverage System: A two-way radio communication system installed to assure the effective operation of radio communications systems for fire, emergency medical services or law enforcement agencies within a building or structure. A system used by firefighters, police, and other emergency services personnel.

Southern Nevada Area Communications Council (SNACC): The SNACC oversees, manages, and maintains the fire and EMS radio system utilized by multiple jurisdictions in southern Nevada.

ANNUAL RENEWABLE PERMIT PROCEDURE:

After issuance of your initial permit(s), your permit(s) will be valid for one year. Approximately 30-60 days prior to the expiration of your permit, a renewal notice will be mailed to you with instructions for the annual permit renewal.

If you do not receive this notice, it is your responsibility to submit the renewal application. Please refer to the website for additional information.

PERMIT FEES:

Permit fees shall be assessed in accordance with the Permit Fee Schedule as adopted in the Clark County Fire Code. For applications that are expedited, additional fees shall apply.

SPECIFICATIONS AND SUBMITTAL REQUIREMENTS:

An application must be completed for each submittal. A minimum of three sets of plans and three sets of specifications shall be submitted with the permit application. The plans shall be drawn to an indicated scale (1/8" scale and 1/4" scale are preferred). Plans shall show compliance in accordance with Chapter 5 and Appendix J of the Clark County Fire Code, and NFPA 72 as adopted and amended by the Clark County Fire Code. All submittals must be legible and readable or the plan shall be rejected for cause.

Plans shall address the following:

1. Indicate the project name, address, and APN (Assessor's Parcel Number). Note that each separate building/tenant space having a unique address requires a separate permit.
2. Contractor name, address, phone number, license numbers, license classification, and license limit.
3. Wet signature of licensee (contractor's Master or Qualified Employee).
4. The minimum qualifications of the system designer and lead installation personnel shall include a valid FCC-issued General Radio Operators License and certification of in-building system training issued by a nationally recognized organization or school or a certification issued by a manufacturer of the equipment being installed.
5. Construction documents for emergency responder radio coverage systems shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of the fire code and relevant laws, ordinances, rules and regulations as determined by the fire code official.
6. Cabling shall be in metal conduit, be metal-clad, or be otherwise enclosed in metal sheathing.
7. Floor plan drawn to an indicated scale on sheets of a uniform size showing:
 - a) Room use identification labels.
 - b) Emergency responder radio coverage system equipment locations.
 - c) Power panel connections.

- d) Raceway routing layout.
 - e) Conduit and conductor types and sizes.
 - f) Compliance with survivability criteria.
 - g) Locations of building access to the equipment.
 - h) A roof plan showing the location of antenna(s) including a line of site plan to agency transmitting and receiving antenna(s).
 - i) Locations of in-building antennae
 - j) Schematic drawings of the electrical system, backup power, antenna system and other associated equipment.
 - k) Rack and equipment cabinet plans showing arrangement and configuration of emergency responder radio coverage system equipment.
 - l) System riser diagram(s).
8. Monitoring of the following conditions shall be performed by the fire alarm system to annunciate the status of the emergency responder radio coverage system.
- a) Normal AC power.
 - b) Active component trouble.
 - c) Loss of normal AC power.
 - d) Battery system trouble.
 - e) Low battery capacity, at 70% of required capacity.
9. The emergency responder radio coverage system shall be equipped with a secondary source of power that is capable of operating the system for a period of at least 12 hours. The secondary source of power shall be either a battery system or an emergency generator. If utilizing batteries, battery calculations shall be supplied with submittal.
10. The owner shall provide to the fire department a minimum of two radios, and no less than one radio for every one million square feet of building area. Note that radios shall be approved by the fire department.
11. All systems utilizing repeaters shall be FCC licensed under the agency's and the SNACC system.
12. A narrative shall indicate the performance of the system, including the requirements for coverage, and the frequencies supported.
13. Manufacturer specification sheets shall be provided for all equipment, including but not limited to rooftop antennae, bi-directional amplifiers, repeaters, secondary power supply systems, filters, cabling, and in-building antennae. Note that systems and components shall be listed and approved for the purpose for which they are installed.
14. Any additional information determined necessary by the fire code official.

PERMIT REVISIONS AND RESUBMITTALS:

Revisions to approved plans are required to be submitted and approved. Revisions will be assessed additional plan review fees. A copy of the previously approved plan shall accompany the revised submittal to facilitate the review. Clearly indicate all changes to the revised plans by clouding the change with a delta number to signify the date of plan change. When several changes have been made, a detailed list of changes is required.

Re-submittals to address a Letter of Correction will require a full submittal. These plans require a copy of the red lined plan from the previous submittal to facilitate the review. Clearly indicate all changes by clouding the change with the delta number to signify the date of plan change.

PLANS CHECK STATUS INSTRUCTIONS:

The status of the review can be checked by logging on to:

www.clarkcountynv.gov/depts/fire

INSPECTIONS THAT MAY BE REQUIRED AND SCHEDULING INSTRUCTIONS:

If approved, an inspection will need to be scheduled. To schedule an inspection, go to www.clarkcountynv.gov/depts/fire . A fire inspector will review your site in accordance with the approved plans and this guideline.

The Clark County Fire Department's Fire Prevention Bureau (FPB) may witness and accept inspection, testing and maintenance of fire and life safety systems conducted by approved individuals as required by and within the scope and authority of the Clark County Fire Code.

This Guideline does not take the place of the Fire Code and does not take precedence over any Fire Code requirement or position taken by the Fire Chief. When a conflict exists between the requirements of this Guideline and the Fire Code or the opinion of the Fire Chief, the Fire Code or opinion of the Fire Chief prevails.

Technical Assistance, when required by the Fire Chief, will require a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.

Acceptance of Alternative Materials and Methods requires a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.