

# Affidavit of Publication

STATE OF NEVADA,  
County of Washoe—SS.

Mary Hefling

being duly sworn, deposes and says that he is the

Record Clerk

of The SPARKS TRIBUNE, a weekly newspaper,  
published in Sparks, Washoe County, Nevada; that  
he has charge of and knows the advertising ap-  
pearing in said newspaper, and the

Notice of County Ordinance

Bill No. 727

Ordinance No. 554

of which a copy is hereunto attached, was first  
published in said newspaper in its issue dated

November 24, 19 82

and was published in each of the following issues

thereafter: December 1, 1982

the date of the last publication being in the issue

of December 1, 19 82

*Mary Hefling*

Subscribed and sworn to before me this, the

1st day of December, 19 82

*Loretta Dickerson*

Notary Public in and for the County of Washoe,  
State of Nevada.

My Commission expires: October 25, 1984

NOTICE OF  
COUNTY ORDINANCE  
NOTICE IS HEREBY  
GIVEN that Bill No. 727,  
Ordinance No. 554, entitled, "An  
Ordinance amending the Washoe  
County Code by adopting, with  
minor changes, the 1981 edition  
of the National Electrical Code"  
was adopted on November 16,  
1982, by Commissioners Farr,  
Ferrari, Brown, and Williams  
with Commissioner Underwood  
being absent.  
Typewritten copies of the  
Ordinance are available for  
inspection by all interested  
persons at the Office of the  
County Clerk.  
Judi Bailey,  
Washoe County Clerk  
Publish November 24;  
December 1, 1982



LORETTA DICKERSON  
Notary Public - State of Nevada  
Washoe County  
My Appointment Expires Oct. 25, 1984

SUMMARY: Amends the Washoe County Code by adopting the 1981 Edition of the National Electric Code.

BILL NO. 727

ORDINANCE NO. 554

AN ORDINANCE AMENDING THE WASHOE COUNTY CODE BY ADOPTING, WITH MINOR CHANGES, THE 1981 EDITION OF THE NATIONAL ELECTRICAL CODE.

THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF WASHOE DO ORDAIN:

SECTION 1. Section 100.330 of the Washoe County Code is hereby amended to read as follows:

100.330 "National Electrical Code" defined. As used in sections 100.330 to 100.XXX, inclusive, "National Electrical Code" means the 1981 Edition of the National Electrical Code adopted by the National Fire Protection Association.

SECTION 2. Section 100.340 of the Washoe County Code is hereby amended to read as follows:

100.340 Article 90 of the National Electrical Code amended by adding Section 90-9: Enforcing authority. Article 90 of the National Electrical Code is amended by adding thereto a new section designated as Section 90-9, which shall immediately follow Section 90-8 and shall read as follows:

90-9. Enforcing Authority.

(a) Enforcement of the National Electrical Code, as amended, is the responsibility of the Building and Safety Division of the Department of Public Works. The enforcing authority is the County Building Inspector and his assistants.

(b) Upon notice to the owner or occupant of a building, the County Building Inspector may require the correction of any defects in existing wiring which he finds are dangerous or likely to cause fire or injury.

(c) Upon notice to the owner or occupant of a building and to the public utility providing service to the building, the County Building Inspector may require the disconnection of electrical service to the building if the use has been abandoned or connection has been made to the source of electrical energy without approval of the Building and Safety Division of the Department of Public Works.

SECTION 3. Section 100.345 of the Washoe County Code is hereby amended to read as follows:

100.345 Article 90 of the National Electrical Code amended by adding Section 90-10: Persons eligible to receive permits. Article 90 of the National Electrical Code is amended by adding thereto a new section designated as Section 90-10, which shall immediately follow Section 90-9 and shall read as follows:

90-10. Persons Eligible to Receive Permits.

(a) Except as otherwise provided in this Section, it is unlawful for any person to do, cause or permit to be done any electrical work without first obtaining a permit from the Building and Safety Division of the Department of Public Works. Any person who commences any electrical work for which a permit is required by this Code without first having obtained such permit, shall subsequently pay double the permit fee established in Section 90-12.

(b) Any permit required by this Code may be issued to any person complying with the provisions of Chapter 624 of NRS relating to contractors. Contractors desiring a permit shall possess a current Washoe County business license.

(c) In cases where an emergency exists or where an urgent necessity is shown, work may begin prior to the issuance of a permit. The Building and Safety Division of the Department of Public Works shall be notified immediately upon the commencement of the work or as soon thereafter as possible, and application for a permit shall be made within 24 hours thereafter, exclusive of weekends and holidays.

(d) Permits are not required for the following electrical work:

(1) The replacement of lamps, fuses and similar devices.

(2) The connection of portable appliances to suitable permanently installed receptacles.

(3) The installation of temporary wiring for testing electrical equipment.

SECTION 4. Section 100.350 of the Washoe County Code is hereby amended to read as follows:

100.350 Article 90 of the National Electrical Code amended by adding Section 90-11: Application for permit. Article 90 of the National Electrical Code is amended by adding thereto a new section designated as Section 90-11, which shall immediately follow Section 90-10 and shall read as follows:

90-11. Application for Permit.

(a) Application for a permit shall be made to the Building and Safety Division of the Department of Public Works by the person who will perform the work. Application forms shall be supplied by the Building and Safety Division.

(b) The application shall be accompanied by such

plans, specifications and other information as may be necessary to determine whether the proposed installation will conform to the requirements of this Code. If all of the provisions of this Code have been complied with, a permit authorizing installation shall be issued.

(c) A permit may be issued for the installation described in the application only and no deviation therefrom shall be made without the written approval of the Building and Safety Division. A permit expires at the end of 18 months. In the event work authorized by the permit cannot be completed within 18 months after the date of issuance, the applicant may apply for a renewal of the original permit upon payment of a fee equal to one half of the original permit fee if:

(1) The application for renewal permit is submitted to the Building and Safety Division prior to the expiration of the original permit.

(2) No changes have been or will be made in the original plans and specifications for the project.

(d) An applicant who has been notified to correct defective work shall do so within 10 days after the date of notification. If the defective work has not been corrected within the 10 day period, no new permit may be issued.

SECTION 5. Section 100.355 of the Washoe County Code is hereby amended to read as follows:

100.355 Article 90 of the National Electrical Code amended by adding Section 90-12: Service fees for permits for new construction. Article 90 of the National Electrical Code is amended by adding thereto a new section designated as Section 90-12, which shall immediately follow Section 90-11 and shall read as follows:

90-12. Service Fees for Permits for New Construction.

(a) Residential (Single or Multifamily). The service fees listed below for new residential construction include all electrical installations when the hereinafter described formula is applied to the square footage of the area.

(1) Two cents per square foot and \$5 for issuance of a permit, plus the additional fee imposed by subsection (d).

(2) One cent per square foot for any garage, whether detached or attached on the same service, plus the additional fee imposed by subsection (d).

(b) Commercial, Industrial, Assembly Building; Including All Alterations.

(1) One cent per square foot, plus the additional fee imposed by subsection (d).

(2) The minimum service fee for issuance of a

permit is \$5.00, plus the additional fee imposed by subsection (d).

(c) Incidental Fee Schedule. The minimum service fee for issuing any electrical permit is \$5.00, plus the additional fee imposed by subsection (d).

Installation of new service, subservice or distribution panel on a residence, 100 ampere minimum. . .	\$2.50
Installation of new service, subservice or distribution panel on a commercial structure . . . . .	3.00
(1) <u>Cooking appliances:</u>	
For each electrical range (standard). . . . .	.50
For cooking units with oven (domestic). . . . .	.50
For each additional oven (domestic) . . . . .	.50
For each electrical range (commercial). . . . .	.50
For ovens (commercial) not over 1,500 W . . . . .	1.50
For ovens (commercial) over 1,500 W . . . . .	3.00
For each fry-kettle, toaster, waffle iron, coffee maker or cooking device under 3,000 W . . . . .	1.00
For each fry-kettle, toaster, waffle iron, coffee maker or cooking device 3,000 W or over . . . . .	1.50
(2) <u>Fixtures:</u>	
Fixtures, each. . . . .	.20
(3) <u>Generators:</u>	
Not more than 5 kW . . . . .	3.00
Over 5 kW and not over 15 kW. . . . .	5.00
Over 15 kW. . . . .	10.00

NOTE: There is no charge for generator installation when it is installed in connection with any motor generator set. For the inspection of any motor generator set installed, the fee charged shall be based upon the size and horsepower output of the motor.

(4) <u>Heaters, other heating appliances and hair dryers:</u>	
For each air heater not over 1,650 W. . . . .	.50
For each air heater over 1,650 W . . . . .	1.00
For each water heater . . . . .	1.00
For each hair dryer . . . . .	.50
For infra-red drying units not over 15,000 W. . . . .	1.50
For infra-red drying units over 15,000 W. . . . .	3.00
For kilns . . . . .	1.00
(5) <u>Home appliances:</u>	
Clothes dryer . . . . .	.50
Dishwasher . . . . .	.50
Furnace . . . . .	.50
Garbage disposal . . . . .	.50
Kitchen fan . . . . .	.50

(6) <u>Miscellaneous:</u>	
For each moving picture machine, including sound equipment used in connection therewith. . . .	\$2.50
For each ceiling fan. . . . .	1.00
For other permanently connected fans with a motor of not more than 1/2 hp. . . . .	1.00
For each X-ray machine. . . . .	2.50
For each sterilizer . . . . .	1.00
For each dental unit. . . . .	1.00
For each barber pole. . . . .	1.00
For each capacitor over 5 kVA capacity. . . . .	1.00
For each welder of the transformer type . . . . .	1.50
For each self-contained vegetable and meat case . . . . .	1.00
For each deep-freeze box. . . . .	1.00
For each beverage and ice cream cabinet . . . . .	1.00
For each drinking fountain. . . . .	.50
For each unitized type kitchen. . . . .	2.50
(7) <u>Motors:</u>	
Not over 1 hp . . . . .	.50
Over 1 hp and not over 3 hp . . . . .	1.50
Over 3 hp and not over 8 hp . . . . .	2.00
Over 8 hp and not over 15 hp. . . . .	2.50
Over 15 hp and not over 50 hp . . . . .	3.00
Over 50 hp and not over 100 hp. . . . .	5.00
Over 100 hp and not over 500 hp . . . . .	10.00
Over 500 hp . . . . .	15.00
Extra outlet for portable motors over 2 hp each . . . . .	1.00
(8) <u>Transformers:</u>	
Not over 1/2 kW . . . . .	.50
Over 1/2 kW and not over 1 kW . . . . .	1.00
Over 1 kW and not over 5 kW . . . . .	1.50
Over 5 kW and not over 10 kW . . . . .	2.00
Over 10 kW and not over 15 kW . . . . .	2.50
Over 15 kW and not over 25 kW . . . . .	3.00
Over 25 kW and not over 50 kW . . . . .	4.00
Over 50 kW and not over 100 kW. . . . .	5.00
Over 100 kW and not over 500 kW . . . . .	7.50
Over 500 kW . . . . .	10.00
(9) <u>Signs and high potential gas tube lighting:</u> . . . . .	
	10.00

NOTE: For electrical work requiring a permit but for which no fee is herein provided, an inspection fee at the rate of \$16 per hour per man and 10¢ per mile on a round-trip basis, plus the additional fee imposed by subsection (d), will be charged.

(d) Additional Service Fees.

(1) An additional service fee in the amount of 9.9 percent of the basic service fee must be paid upon issuance of any permit or upon any inspection required by this Code.

(2) If first approved in the manner required by NRS 354.5989, an additional annual service fee in the amount of 9.9 percent of the basic service fee must be paid in 1982 and cumulatively each year thereafter upon issuance of any permit or upon an inspection required by this Code.

SECTION 6. Section 100.360 of the Washoe County Code is hereby amended to read as follows:

100.360 Article 90 of the National Electrical Code amended by adding Section 90-13: Inspections. Article 90 of the National Electrical Code is amended by adding thereto a new section designated as Section 90-13, which shall immediately follow Section 90-12 and shall read as follows:

90-13. Inspections.

(a) All electrical work shall be inspected by the Building and Safety Division of the Department of Public Works to insure compliance with the requirements of the National Electrical Code.

(b) The person doing the work authorized by this permit shall notify the Building and Safety Division that such work is ready for inspection. Such notice shall be given at least 24 hours before the inspection is desired and, in the case of rough-in wiring inspection, the inspection should be coordinated with the building's frame and rough-in plumbing inspection.

(c) No part of any wiring installation shall be hidden from view by placement of any other parts of the building prior to inspection and approval by the Building and Safety Division. The County Building Inspector may require removal of any obstruction which prevents proper electrical inspection.

SECTION 7. Section 100.365 of the Washoe County Code is hereby amended to read as follows:

100.365 Article 90 of the National Electrical Code amended by adding Section 90-14: Connection to installation. Article 90 of the National Electrical Code is amended by adding thereto a new section designated as Section 90-14, which shall immediately follow Section 90-13 and shall read as follows:

90-14. Connection to Installation. It is unlawful for any person to make any connection from a source of electrical energy or to supply electrical service to any electric wiring, equipment, device or appliance:

(a) For an installation requiring a permit, unless such person has obtained satisfactory evidence from the Building and Safety Division of the Department of Public Works that such electric wiring, equipment, device or appliance complies with all applicable laws

and ordinances.

(b) Which has been disconnected or ordered to be disconnected by the Building and Safety Division of the Department of Public Works, or the use of which has been ordered discontinued by the Building and Safety Division, until a certificate of approval from the Building and Safety Division is issued authorizing the reconnection and use of such wiring, equipment, device or appliance. The Building and Safety Division shall notify the serving utility of every order to discontinue use.

SECTION 8. Section 100.370 of the Washoe County Code is hereby amended to read as follows:

100.370 Article 90 of the National Electrical Code amended by adding Section 90-15: Nonliability of County. Article 90 of the National Electrical Code is amended by adding thereto a new section designated as Section 90-15, which shall immediately follow Section 90-14 and shall read as follows:

90-15. Nonliability of County. This Code does not relieve from responsibility any person owning, operating, controlling or installing any electrical wiring, device or material for damages to persons or property caused by any defect therein, nor may liability attach to Washoe County by virtue of issuance of a certificate of inspection by the Building and Safety Division of the Department of Public Works.

SECTION 9. Section 100.375 of the Washoe County Code is hereby amended to read as follows:

100.375 Article 90 of the National Electrical Code amended by adding Section 90-16: Board of appeals. Article 90 of the National Electrical Code is amended by adding thereto a new section designated as Section 90-16, which shall immediately follow Section 90-15 and shall read as follows:

90-16. Board of Appeals.

(a) Any person aggrieved by a decision of the Building and Safety Division of the Department of Public Works may appeal to the Board of Appeals created pursuant to the provisions of Section 204 of the Uniform Building Code within 20 days after the mailing or delivery of written notice of decision to the aggrieved person.

(b) Appeal may be made by filing a written notice of appeal with the Building and Safety Division, accompanied by a \$27.48 filing fee. All such fees shall be deposited to the credit of the County general fund.

(c) The County Building Inspector shall convene the Board of Appeals within 30 days after the filing of the notice of appeal.



SECTION 10. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 110-14 amended:  
Electrical connections. Section 110-14 of the National  
Electrical Code is hereby amended to read as follows:

110-14. Electrical Connections. Because of the different characteristics of copper and aluminum, devices such as pressure terminal or pressure splicing connectors and soldering lugs must be suitable for the material of the conductor and shall be properly installed and used. Conductors of dissimilar metals shall not be intermixed in a terminal or splicing connector where physical contact occurs between dissimilar conductors (such as copper and aluminum, copper and copper-clad aluminum, or aluminum and copper-clad aluminum), unless the device is suitable for the purpose and conditions of use. Materials such as solder, fluxes, inhibitors, and compounds, where employed, must be suitable for the use and of a type which will not adversely affect the conductors, installation, or equipment.

(a) Terminals. Connection of conductors to terminal parts shall insure a thoroughly good connection without damaging the conductors and shall be made by means of pressure connectors (including set-screw type), solder lugs, or splices to flexible leads.

Exception: Connection by means of wire binding screws or studs and nuts having upturned lugs or equivalent shall be permitted for No. 10 or smaller conductors.

Terminals for more than one conductor and terminals used to connect aluminum shall be so identified.

(b) Splices. Conductors shall be spliced or joined with splicing devices suitable for the use or by brazing, welding, or soldering with a fusible metal or alloy. Soldered splices shall first be so spliced or joined as to be mechanically and electrically secure without solder and then soldered. All splices and joints and the free ends of conductors shall be covered with an insulation equivalent to that of the conductors or with an insulating device suitable for the purpose.

(c) Connection of conductors to terminals shall be made so as to insure a strong, clean connection and shall be made by installation of an approved connector without any installation-related damage to the conductor. Aluminum conductors shall terminate in a swedge-type connection, used with an oxidation inhibitor, and shall not terminate directly under a screw or bolt or any device using a screw or bolt to apply pressure to the conductor.

(d) When splicing the grounding electrode conductor, two approved splice bolt connectors shall be used. Six inches is the minimum overlap of the splice.

SECTION 11. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 110-22 amended: Identification of service disconnections. Section 110-22 of the National Electrical Code is hereby amended to read as follows:

110-22. Identification of Service Disconnections. Each method of service disconnection required by this Code for motors and appliances and each service, feeder or branch circuit shall be legibly marked at the point of its origin so as to indicate its purpose, unless located and arranged so that the purpose is evident or obvious. In addition, each method of service disconnection shall be legibly marked as to the characteristics of the service and such marking shall be of sufficient durability to withstand weather and normal wear and tear. All shunt trip switches on the outside of a building, used to disconnect electric power, shall have a twelve inch triangle painted over the switch with red fluorescent paint. The shunt trip switch shall be located a minimum of seven feet above finish grade.

SECTION 12. Section 100.380 of the Washoe County Code is hereby amended to read as follows:

100.380 National Electrical Code Section 210-8 amended: Ground-fault circuit protection. Section 210-8 of the National Electrical Code is hereby amended to read as follows:

210-8. Ground-fault Circuit Protection.

(a) Dwelling units.

(1) All 120-volt, single-phase, 15-and 20-ampere receptacles installed in bathrooms and garages of dwelling units shall have ground-fault circuit interrupter protection for personnel.

(2) All 120-volt, single-phase 15-and 20-ampere receptacles installed outdoors where there is direct grade level access to the dwelling unit and to the receptacles shall have ground-fault circuit interrupter protection for personnel.

Bathroom: A bathroom is an area including a basin with one or more of the following: A toilet, a tub, or a shower.

Such ground-fault circuit interrupter protection may be provided for other circuits, locations and occupan-

cies, and where used, will provide additional protection against line-to-ground shock hazard.

(b) Construction Sites. All 120 volt single-phase, 15- and 20-ampere receptacle outlets which are not part of the permanent wiring of a building or structure shall have ground-fault circuit interrupters. Receptacles on a portable or vehicle mounted generator rated up to and including 5 kilowatts, where the circuit conductors are insulated from the generator frame as provided in Section 250-6 of the National Electrical Code, need not have ground-fault circuit interrupters.

SECTION 13. Section 100.385 of the Washoe County Code is hereby amended to read as follows:

100.385 National Electrical Code Section 230-2 amended: Number of services. Section 230-2 of the National Electrical Code is hereby amended to read as follows:

230-2. Number of Services.

(a) A building or other structure served shall be supplied by only one service.

Where more than one service is permitted by any of the following exceptions, a permanent plaque or directory shall be installed at each service drop or lateral or at each service-equipment location denoting all other services on or in that building or structure and the area served by each.

Exception No. 1: For fire pumps where a separate service is required.

Exception No. 2: For emergency, legally required standby, or optional standby systems where a separate service is required.

Exception No. 3: Multiple-Occupancy Buildings.

a. By special permission, in multiple-occupancy buildings where there is no available space for service equipment accessible to all the occupants.

b. Buildings of multiple occupancy shall be permitted to have two or more separate sets of service-entrance conductors which are tapped from one service drop or lateral.

Exception No. 4: Capacity Requirements. Two or more services shall be permitted:

a. Where the capacity requirements are in excess of 3000 amperes at a supply voltage of 600 volts or less; or

b. Where the load requirements of a single-phase installation are greater than the serving agency normally supplies through one service; or

c. By special permission.

Exception No. 5: Buildings of Large Area. By special permission, for a single building or other structure sufficiently large to make two or more ser-

vices necessary.

Exception No. 6: For different characteristics, such as for different voltages, frequencies, or phases, or for different uses, such as for different rate schedules.

Exception No. 7: For the purpose of Section 230-45 only, underground sets of conductors, size 1/0 or larger, running to the same location and connected together at their supply end but not connected together at their load end shall be considered to be one service.

(b) Service Entrance Equipment Poles. The minimum requirements for all service equipment poles are:

(1) Construction grade, rather than laminated, solid timber poles having a minimum cross-section of six inches by six inches or a circular pole having a minimum top circumference of 16 inches shall be used and shall be placed 16 feet above grade. Poles shall be installed to a minimum depth of 4 feet into the ground and backfilled with concrete or compacted earth.

(2) Service poles shall be pressure treated with an approved wood preservative or shall be wood naturally resistant to decay. Service poles may also be constructed solely of metal.

SECTION 14. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 230-23 amended: Size and rating. Section 230-23 of the National Electrical Code is hereby amended to read as follows:

230-23. Size and Rating. All occupancies as defined in the Uniform Building Code shall be serviced by a minimum of three stranded conductors of at least 100 ampere capacity, subject to the following exceptions:

(a) Service of less than 100 amperes capacity for accessory buildings or temporary use if approved by the Building and Safety Division of the Department of Public Works.

(b) Multiple family dwellings of four or more units may have a service of 60 amperes per unit, subject to the same approval.

(c) For installations to supply only limited loads of a single branch circuit such as small polyphase power, controlled water heaters and the like. However, even under this exception, conductors may not be smaller than Number 12 gauge hard drawn copper or its equivalent. Conductors shall have sufficient capacity to carry the load. They shall have adequate mechanical strength and shall not be smaller than Number 8 gauge

copper, Number 6 gauge aluminum or copper-clad aluminum, unless otherwise provided by this Code. The grounded conductor shall not be less than the minimum size required by Section 250-23(b). All service installations shall conform with requirements of the local utility providing service.

SECTION 15. Section 100.395 of the Washoe County Code is hereby amended to read as follows:

100.395 National Electrical Code Section 230-72 amended: Grouping of disconnects. Section 230-72 of the National Electrical Code is hereby amended to read as follows:

230-72. Grouping of Disconnects.

(a) General. The two to six disconnects for each service as permitted in Section 230-71 shall be grouped. Each disconnect shall be marked to indicate the load served.

Exception No. 1: Services as permitted in Section 230-2.

Exception No. 2: One of the two to six service disconnecting means permitted in Section 230-71, when used only for a water pump also intended to provide fire protection, shall be permitted to be located remotely from the other disconnecting means.

(b) Additional Service Disconnecting Means. The one or more additional service disconnecting means for fire pumps or for emergency, legally required standby, or optional standby services permitted by Section 230-2 shall be installed at a location sufficiently remote from the one to six service disconnecting means for normal service to minimize the possibility of simultaneous interruption of supply.

(c) Location. The method of service disconnection shall be installed on the exterior of the building or structure at a readily accessible location nearest the entry point for the service entrance conductors. If the method of service disconnection and meter are located in a cabinet for aesthetic or architectural reasons, there shall be a sign attached to the cabinet door which reads "Main Disconnect Location".

(d) Access to Occupants. In a multiple-occupancy building, each occupant shall have access to his disconnecting means.

SECTION 16. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 250-81 amended: Grounding electrode system. Section 250-81 of the National Electrical Code is hereby amended to read as follows:

250-81. Grounding Electrode System.

(a) If available on the premises of each building or structure served, each concrete-encased electrode or ground ring, as defined below, shall be bonded together to form the grounding electrode system. The size of the bonding jumper shall be as required in Section 250-94 and it shall be connected in the manner specified in Section 250-115. The grounding electrode conductor may run to any convenient grounding electrode available within the grounding electrode system. The grounding electrode conductor shall be sized for the largest grounding electrode conductor required.

(b) A concrete-encased electrode, within the meaning of this section, is an electrode encased in a minimum of two inches of concrete, located within or near the bottom of a concrete foundation or footing, which foundation or footing is in direct contact with the ground and lies two feet below finish grade and consisting of a minimum of 20 feet of one or more steel reinforcing bars of not less than one half inch diameter, or alternatively consisting of a minimum of 20 feet of bare copper conductor at a minimum size of Number 4 gauge at the point where such wire leaves the foundation wall. The wire shall be protected by a conduit pipe if it may be subject to potential physical damage.

(c) A ground ring, within the meaning of this section, is a ring consisting of at least 20 feet of bare copper conductor not smaller than Number 2 gauge, which encircles the building or structure in direct contact with the earth at a minimum depth of two and a half feet below the surface and is connected to a grounding rod driven a minimum depth below the surface of eight feet.

SECTION 17. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 250-83 amended: Made and other electrodes. Section 250-83 of the National Electrical Code is hereby amended to read as follows:

250-83. Made and Other Electrodes. No electrode listed in this section may be installed without prior approval from the Building and Safety Division of the Department of Public Works, except as otherwise provided by this section.

Where service entrance equipment is located on a pole installed in compliance with Section 230-24, the following grounding methods are solely applicable:

(a) Rod and pipe electrodes, not less than eight feet in length, consisting of the following material installed in the following manner:

(1) Electrodes of rods of steel or iron shall be

a minimum diameter of 5/8ths of one inch and shall have the outer surface galvanized or metal-coated for corrosion protection.

(2) Electrode rods of non-ferrous material or their equivalent shall be listed and shall be of a minimum diameter of 1/2 of one inch.

(3) Electrodes consisting of not less than twenty feet of bare copper conductor not smaller than Number 4 gauge installed per Section 250-81 or coiled within two inches from the bottom of a concrete pier which has a minimum size of two square feet by two feet deep.

(4) Where driven rods are used, they shall be driven to a depth of at least eight feet below the surface at a point 18 inches away from the service pole. Conduit used to protect the ground electrode conductor shall be physically connected to the electrode with an approved clamp.

SECTION 18. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 336-3 amended: Permitted and nonpermitted uses. Section 336-3 of the National Electrical Code is hereby amended to read as follows:

336-3. Permitted and Nonpermitted Uses. Type NM and NMC cables may be used in single family or multi-family dwellings of a height not exceeding three floors above grade including accessory buildings in conjunction with residential use. For purposes of this section, the first floor of a building or structure is that floor which is designed for human habitation and which has 50 percent or more of its perimeter level even with or above the grade level of the exterior wall.

SECTION 19. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 350-2 amended: Use of flexible metal conduit. Section 350-2 of the National Electrical Code is hereby amended to read as follows:

350-2. Use of Flexible Metal Conduit. Flexible metal conduit may not be used:

(a) In wet locations, unless conductors are of the lead covered type or are of another type approved for the specific conditions present.

(b) In hoistway spaces, except as provided in Section 620-21.

(c) In storage-battery rooms.

(d) In any hazardous or classified location, except

as provided in Section 501-4.

(e) Where rubber covered conductors are exposed to oil, gasoline or other materials which cause rubber to deteriorate.

(f) Underground or embedded in any poured concrete or aggregate.

(g) In lengths over six feet.

SECTION 20. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 350-5 amended: Grounding. Section 350-5 of the National Electrical Code is hereby amended to read as follows:

350-5. Grounding. Flexible metal conduit may not be used as a grounding means. Equipment grounding conductors shall be sized according to Table 250-95.

SECTION 21. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 410-4 amended: Fixture locations. Section 410-4 of the National Electrical Code is hereby amended to read as follows:

410-4. Fixture Locations.

(a) Wet and Damp Locations. Fixtures installed in wet or damp locations shall be so constructed or installed that water cannot enter or accumulate in wireways, lampholders, or other electrical parts. All fixtures installed in wet locations shall be marked, "Suitable for Wet Locations." All fixtures installed in damp locations shall be marked, "Suitable for Damp Locations."

Installations underground or in concrete slabs or masonry in direct contact with the earth, and locations subject to saturation with water or other liquids, such as locations exposed to weather and unprotected, vehicle washing areas, and like locations, shall be considered to be wet locations with respect to the above requirement.

Interior locations protected from weather but subject to moderate degrees of moisture, such as some basements, some barns, some cold-storage warehouses and the like, the partially protected locations under canopies, marquees, roofed open porches, and the like, shall be considered to be damp locations with respect to the above requirement.

(b) Corrosive Locations. Fixtures installed in corrosive locations shall be of a type approved for such locations.



(c) In Ducts or Hoods. Fixtures shall be permitted to be installed in cooking hoods of nonresidential occupancies where all of the following conditions are met:

(1) The fixture shall be identified for use within commercial cooking hoods and installed so that the temperature limits of the materials used are not exceeded.

(2) The fixture shall be so constructed that all exhaust vapors, grease, oil or cooking vapors are excluded from the lamp and wiring compartment. Diffusers shall be resistant to thermal shock.

(3) Parts of the fixture exposed within the hood shall be noncorrosive or protected against corrosion and the surface shall be smooth to prevent the collection of deposits and facilitate cleaning.

(4) Wireways supplying the fixture shall not be exposed within the cooking hood.

(d) Pendants. Hanging fixtures and pendants where located directly above any part of the bathtub shall be so installed that the fixture is not less than 8 feet above the top of the bathtub.

(e) Permanent lighting fixtures installed in all occupancies and defined in the Uniform Building Code may not be located in any location deemed hazardous by a Building Inspector.

SECTION 22. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Sections 324-1 to 324-14, inclusive, are hereby repealed: Concealed knob and tube wiring. Sections 324-1 to 324-14, inclusive, of the National Electrical Code (Concealed Knob and Tube Wiring) are hereby repealed.

SECTION 23. Chapter 100 of the Washoe County Code is hereby amended by adding thereto a new section which shall read as follows:

100.XXX National Electrical Code Section 550-23 amended: Mobile home service. Section 550-23 of the National Electrical Code is hereby amended to read as follows:

550-23. Mobile Home Service.

(a) Rating. Mobile home service equipment shall be rated at not less than 100 amperes, and provision shall be made for connecting a mobile home feeder assembly by a permanent wiring method. Power outlets used as mobile home service equipment shall also be permitted to contain receptacles rated up to 50 amperes with appropriate overcurrent protection. Fifty-ampere receptacles shall conform to the configuration shown in Figure 550-3(f).

(b) Additional Outside Electrical Equipment. Mobile home service equipment shall also contain a means for connecting a mobile home accessory building or structure or additional electrical equipment located outside a mobile home by a fixed wiring method.

(c) Additional Receptacles. Additional receptacles shall be permitted for connection of electrical equipment located outside the mobile home, and all such 120-volt, single-phase, 15-and 20-ampere receptacles shall be protected by approved ground-fault circuit protection for personnel.

(d) Grounded. Each mobile home service equipment shall be grounded in accordance with Article 250 for service equipment.

Proposed on the 10 day of August, 1982.  
Proposed by Commissioners Brown.  
Passed on the 16th day of November, 1982.

Vote:

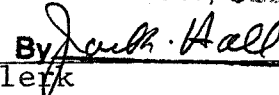
Ayes: Commissioners: Farr, Ferrari, Brown & Williams

Nays: Commissioners: None

Absent: Commissioners: Underwood

  
\_\_\_\_\_  
Chairman of the Board

ATTEST: JUDI BAILEY, CLERK

By  Chief Deputy  
County Clerk

This ordinance shall be in force and effect from and after the 1st day of December, 1982.