Issue:
In accordance with Chapter 41, Section 703.D of the Phoenix City Code, electric fences are permitted in zoning districts A-1 & A-2 only.

The National Electrical Code (NEC) does not have specific requirements for electric security fences. How will electric fences be reviewed, permitted and inspected?

Interpretation:
A fence permit is required for the installation of an electric fence. The plans for this permit must demonstrate compliance with:

- Section 703.D of the Phoenix City Code for height and location of electric security fences; separation between electric fences and physical barriers, gates, warning signage; and any other requirements on the load side of the electric fence energizer.

- International Standard IEC 60335-2-76 Edition 2.1 2006-04 – Particular requirements for electric fence energizers for fence installation including the electric fence energizer.

- Electric fence energizers shall be pulsed output type. Continuous output type systems are not acceptable. Electric fence energizers shall be listed and labeled as complying with the above IEC standard and shall be installed in accordance with any instructions included in the listing or labeling per NEC Section 110.3(B). Unlisted energizers shall be field evaluated by an approved Field Evaluation Body.

- Any new electrical premises wiring (as defined in NEC Article 100) supplying the fence energizer must comply with the NEC.

Once a permit is issued, the following inspections are required:

- An independent inspection by a qualified special inspector to verify that the fence was installed in accordance with the approved plan, including a listed energizer and fence installation compliant with IEC 60335-2-76.

- A city inspection for any new premises wiring. The city inspector will also verify fence location and completion of special inspection.