

CLAY FIRE



Construction and Development Guide

**A Service of the Clay Fire Territory
272-2144**

Clay Fire Territory **Construction / Development Checklist**

This checklist represents critical areas of concern to the plan review process and is intended to assist architects and developers for a code compliant construction process. This is a partial list only and should not be construed to be all inclusive for the Fire, Building, Mechanical, Electrical or any additional Local code(s).

The items addressed are referenced in the following codes and standards; the 2000 International Fire Code, 2000 Building Code, the 2003 Indiana Fire Prevention Code, the most current National Fire Codes / Standards as published by the National Fire Protection Association, and any applicable local codes and ordinances in force within St. Joseph County, Indiana.

Every effort is made for a thorough plan review process. However, it is possible that something may be overlooked. Problems may not be noted until a routine site visit, a pre-final site inspection, or the final Certificate of Occupancy inspection. At any time prior to or during construction, the Community Service Division / Fire Marshal may be reached by phone at **574- 272-2144** during the hours of **7:30am. to 5:00 pm.** Monday thru Friday. Site visits or conferences may be scheduled for hours other than regular office hours.

Once your building is under construction, periodic site visits will be conducted by a representative of the Clay Fire Territory. Since pre-incident planning is part of our standard operating guidelines, once the point of construction provides for a roof, a site visit will be scheduled for our fire personnel for the purpose of building and construction familiarization.

Project Information

Site Location: _____
Type of Occupancy _____
Developer _____
Architect _____
General Contractor _____

Fire Safety During Construction and Demolition: (IFC Chap. 14)

- Smoking shall be prohibited except in approved areas
- No burning of construction materials
- Clearance to combustibles from temporary heating devices shall be maintained in accordance with the labeled equipment.
- The construction site shall be protected by appropriate fencing to deter unauthorized entry.
- Exit signs shall be attached at proper locations for identification and access by workers.
- Buildings four or more stories in height shall be provided with not less than one standpipe for use during construction when the progress of construction is not more than 40 feet in height above the lowest level of fire department access.
- An approved fire extinguisher shall be provided at each stairway on all floor levels and in every storage and construction shed during construction.
- An audible device for evacuation notification and evacuation plan shall be located in a conspicuous location for building occupants.
- Water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible materials arrive on site.

Address Requirement: (IBC 501.2)

- Approved numbers or addresses shall be provided for new buildings in such a position as to be clearly legible and visible from the street or roadway fronting the property. Letters or numbers shall be no less than 3" in height and a stroke of .5" of a contrasting color to the background itself.

- A structure with more than one occupancy requires each units rear accesses to be numbered / identified.
- The owner or representative shall provide the Fire Department with emergency phone numbers to be used while construction is in progress.

Fire Hydrants: (IFC 508.1)

- The on-site water supply shall be accessible to the fire department and be located within 150' of the structure being protected by an automatic fire-extinguishing system.
- Fire hydrants must be serviceable (wet), and accessible during all phases of combustible construction.
- Fire hydrants shall face the proper direction. The steamer connection shall face the drive surface and all caps shall be in place.
- Proper grading and elevation around hydrant(s) must be provided at time of final inspection.
- Vegetation and landscaping shall be placed in a manner as not to obstruct or impede a fire hydrant from view or use.

Fire Apparatus Access: (IFC 503)

- Fire apparatus access roads shall have an unobstructed width of not less than 20 feet and a vertical clearance of not less than 13 feet 6 inches.
- Fire apparatus access roads shall be designed and maintained to support the imposed loads of the agencies largest apparatus and be surfaced as to provide all-weather driving capabilities.
- Fire apparatus access / turnarounds and cul-de-sac shall be per Appendix A of this document.
- Design of turnarounds must be approved by Clay Fire Territory to meet the needs of largest apparatus.

Key Boxes: (IFC 506)

- The Clay Fire Territory requires all new commercial construction (as of 1995) and commercial renovation to install the Knox Box access system. More than one key box may be requested. Contact the Community Service Division for determination of installation location. *** An order form is provided with this guide book***
- All keys to be contained in Knox Box shall be clearly labeled

Fire Extinguishers: (IFC 906)

- Extinguisher locations shall be approved by the Fire Marshal.
- Extinguisher requirements may change according to occupancy / hazard classification.
- A minimum 2A-10BC rated (approximately 5 lb.) required where applicable. (see above)
- All fire extinguishers are required to have a current inspection tag in place.
- Fire extinguisher cabinets shall be installed with the top of the cabinet no higher than 54" from a finished floor.
- A minimum 2A-10BC rated (approximately 5 lb.) required where applicable. (see above)

Fire Protection Equipment:

- All fire protection systems shall meet the applicable N.F.P.A. standard(s).
- Fire alarm systems shall be the addressable type unless the total devices to be installed number less than 10. In which case, a zoned system will be allowed. Clay Fire Territory shall be contacted to approve fire alarm control panel (FACP) location. Remote annunciator panels may be requested.

- Fire department connection shall be located no more than one hundred fifty (150) feet from the hydrant.
- Fire sprinkler system controls and water flow switch are required to be monitored by an approved monitoring company.
- A U.L. approved exterior electric or hydraulic warning device (bell) shall be installed on the outside of the structure proximate to the fire department connection of a building protected by a fire sprinkler system.
- If the distance between standpipes is greater than 200', an additional standpipe shall be located in the center of the building beginning at the second floor level and extending to the highest level of the structure to be occupied.

Signs and Labeling:

- All fire sprinkler valves, shutoffs, drains, etc, shall be labeled in accordance with NFPA 13 guidelines.
- All fire sprinkler systems shall have shut down, drain, and re-charge directions posted in fire sprinkler control room.
- All fire alarm systems shall have a device location list at the fire alarm control panel. If a zoned system, a zone map must be included.
- Occupancy card issued by Clay Fire Territory to be posted in all assembly occupancies.
- Fire Lane to be identified by sign no less than 12" across and 18" high, as in accordance with the "sign code".
- When requested, all exterior doors shall be numbered, with the graphics appearing on both the interior and exterior.

System Tests:

Note: *Notify the Community Service Division at (574) 272-2144 a minimum of twenty-four (24) hours prior to conducting any system / device test.*

- Fire Detection System
- Smoke detection System
- Fire Sprinkler and Standpipe system (200 psi hydrostatic test)
- Underground piping for fire protection system use. (flush & hydrostatic
- Commercial kitchen fire extinguishing hood system

Note: *A copy of the required forms / documentation pertinent to each test shall be provided to the Clay Fire Territory as soon after the conclusion of the test as possible.*

Appendix A

SIGNAGE

Emergency communications for Area of Rescue Assistance.

Call box to be located at current ADA heights.

Text for instructions to be location specific.

To be located in each stairwell on each level

Area Of Rescue Assistance

To evacuate the building, follow this stairway to the lowest level safe to exit. If this area is unsafe to occupy, use the EXIT stairway located at the opposite end of the building.

For Emergency Assistance Only:

1. Push And Hold The RED Button.
2. Listen For The Operator.
3. Advise Them What The Emergency Is.
4. Tell Them You Are In The East Stairway On The 2nd Floor.
5. Follow The operator's instructions.







*Reflective EXIT to
be located on
stairwell side of
each door at
1 st. floor level*

*Area of Rescue Assistance
sign located in hallway on
each floor at each stairway
to identify location.*



STAIR 2
NO ROOF ACCESS

1

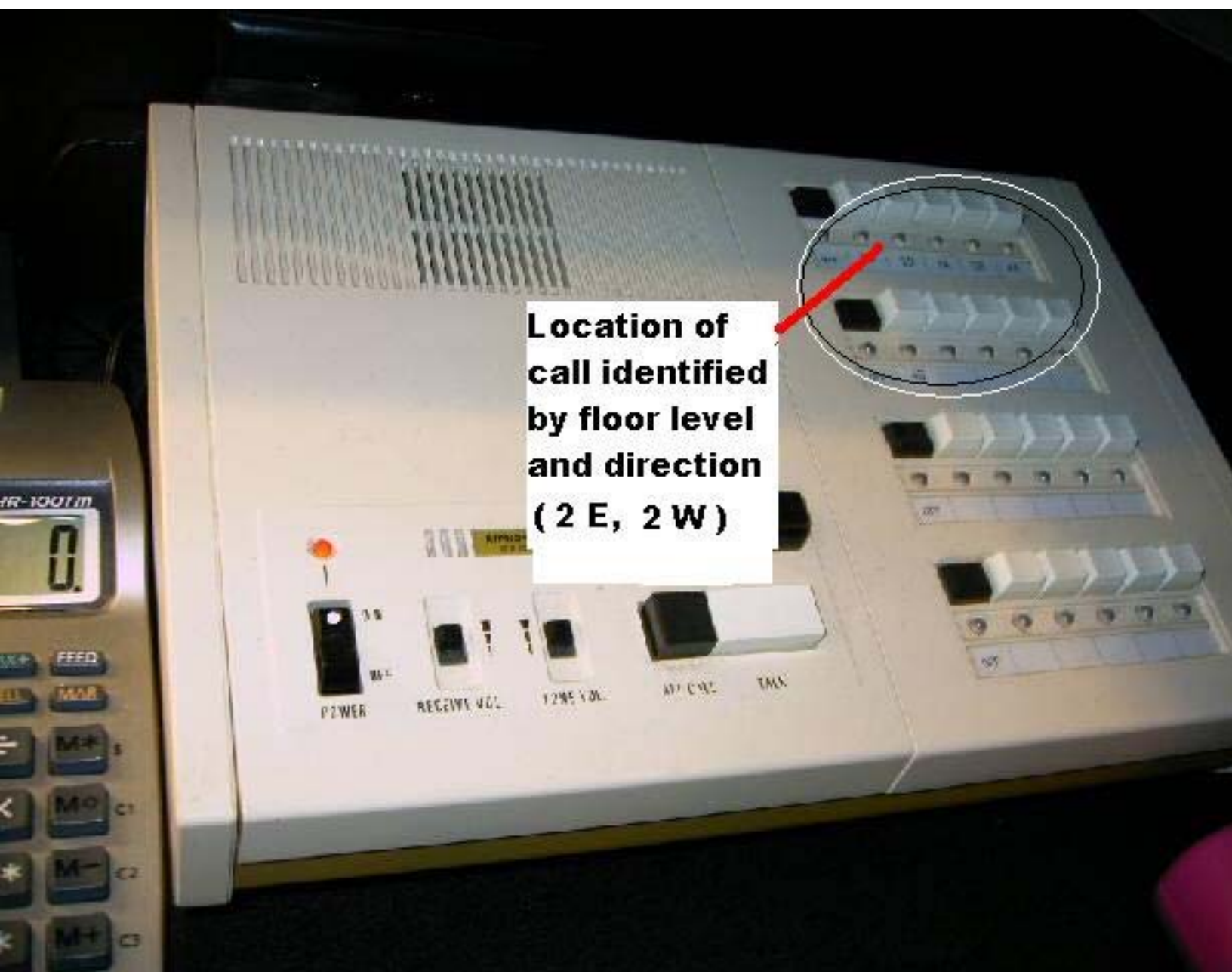
1ST
FLOOR

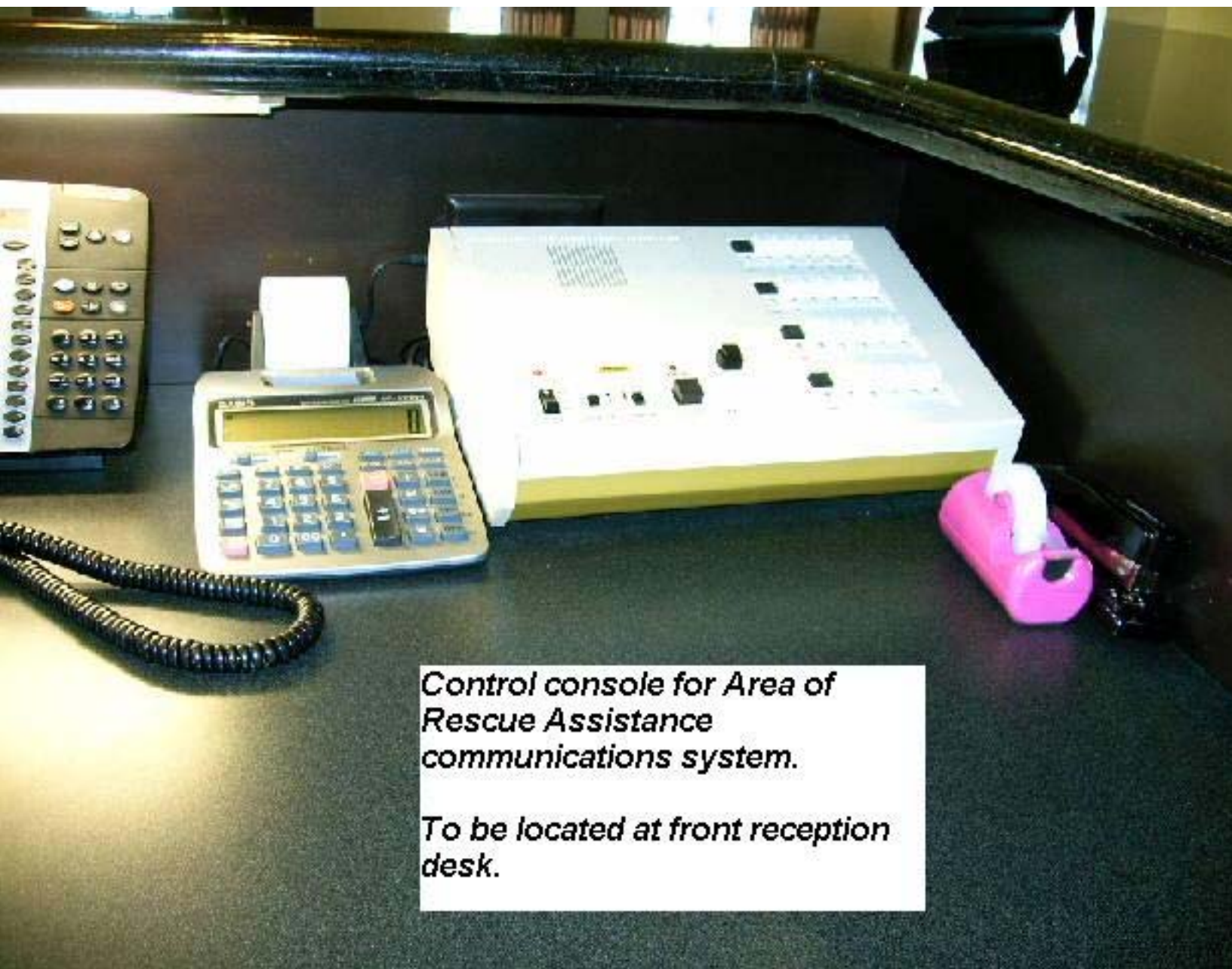
1-2-3-4

1 THRU 4
FIRE DOOR-KEEP CLOSED

To be located on stairway side at each floor level.

Designating roof access or no roof access at this level.





*Control console for Area of
Rescue Assistance
communications system.*

*To be located at front reception
desk.*

Area of Rescue Assistance

To evacuate the building, follow this stairway to the lowest level safe to exit. If this area is unsafe to occupy, use the EXIT stairway located at the opposite end of the building.

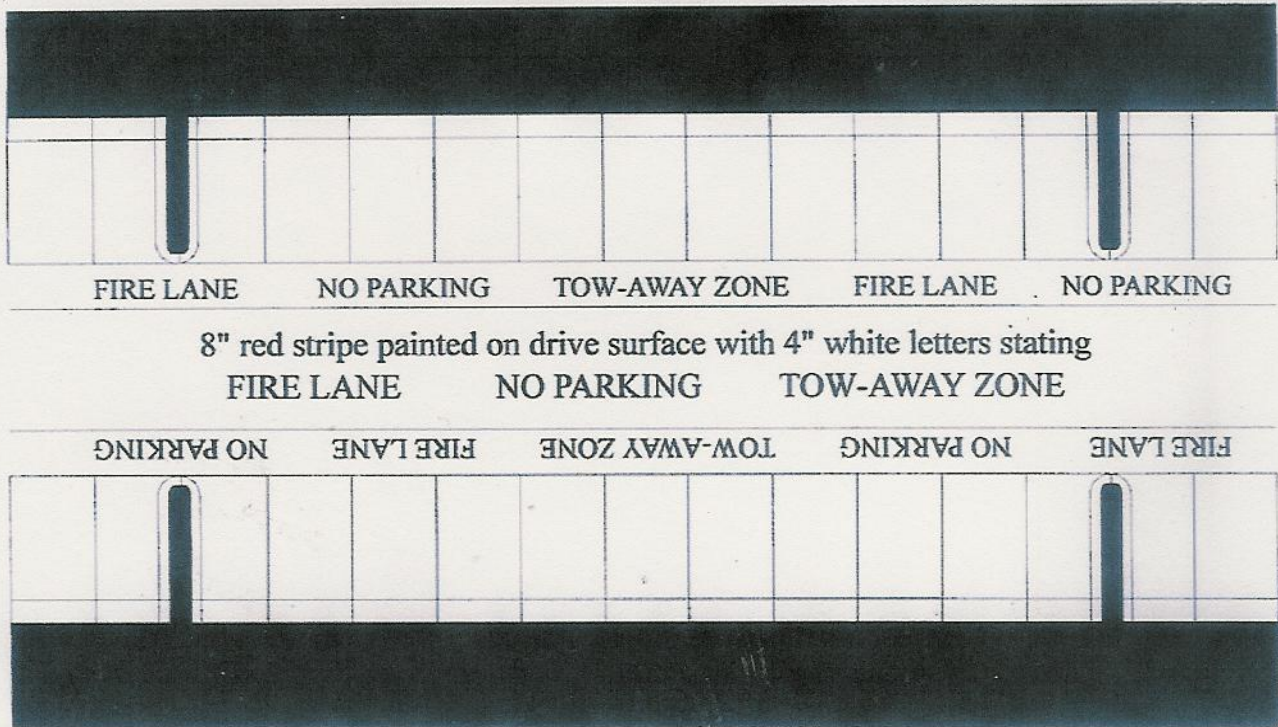
For Emergency Assistance Only;

1. Push And Release The RED Button.
2. Listen For Operator.
3. Advise Them What The Emergency Is.
4. Tell Them You Are In The East Stairway On The 2nd Floor.
5. Follow The operator's Instructions.

Signage to be located above Area of Rescue Assistance comm. unit on stairwell landing.



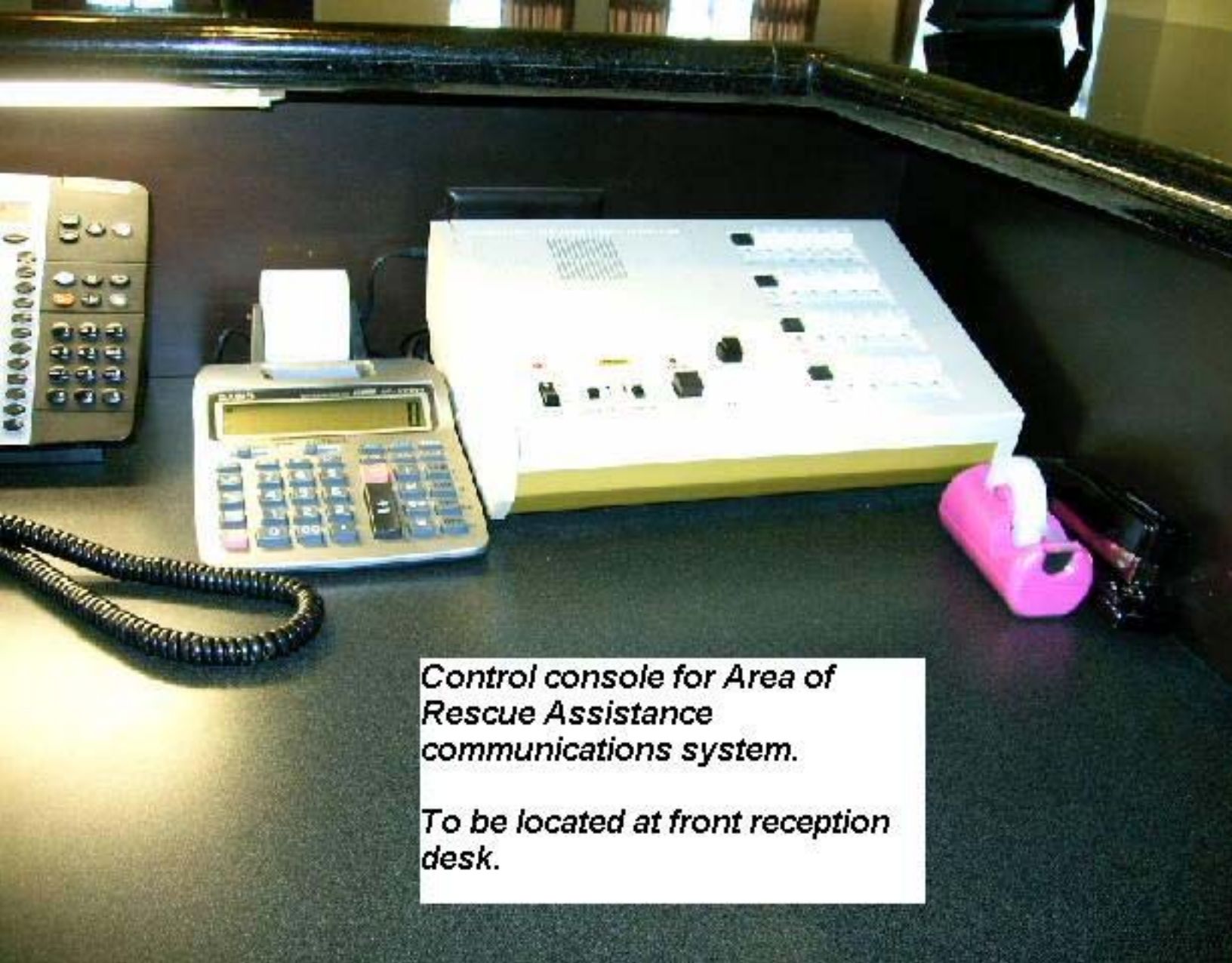
FIRE LANE MARKINGS



Appendix B

Area of Rescue Assistance Devices Location and Signage





*Control console for Area of
Rescue Assistance
communications system.*

*To be located at front reception
desk.*

Area of Rescue Assistance

To evacuate the building, follow this stairway to the lowest level safe to exit. If this area is unsafe to occupy, use the EXIT stairway located at the opposite end of the building.

For Emergency Assistance Only;

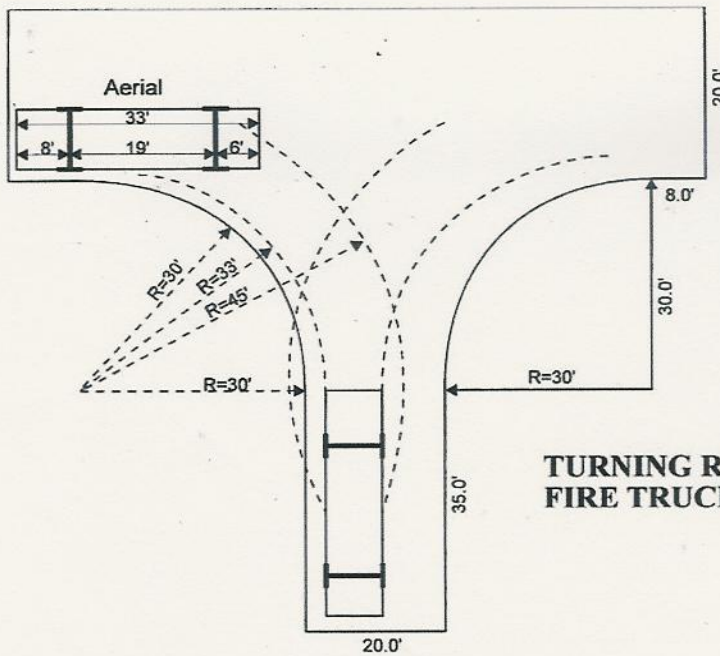
1. Push And Release The RED Button.
2. Listen For Operator.
3. Advise Them What The Emergency Is.
4. Tell Them You Are In The East Stairway On The 2nd Floor.
5. Follow The operator's Instructions.

Signage to be located above Area of Rescue Assistance comm. unit on stairwell landing.

Appendix C

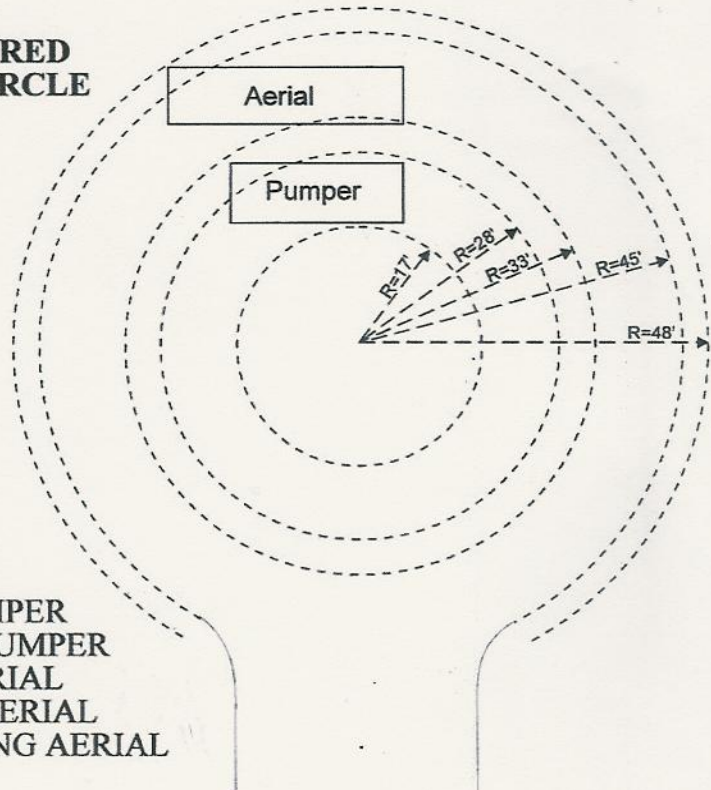
Maneuvering Specifications for Fire Apparatus

TURNING RADIUS SPECIFICATIONS



**TURNING RADIUS REQUIRED FOR
FIRE TRUCKS IN A TEE TURNAROUND**

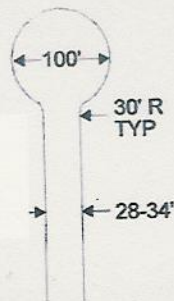
**TURNING RADIUS REQUIRED
FOR FIRE TRUCKS IN A CIRCLE
TURNAROUND**



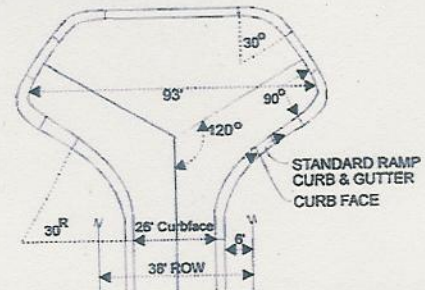
- R-17': INSIDE WHEEL PUMPER
- R=28': OUTSIDE WHEEL PUMPER
- R=33': INSIDE WHEEL AERIAL
- R=45': OUTSIDE WHEEL AERIAL
- R=48': OUTSIDE OVERHANG AERIAL



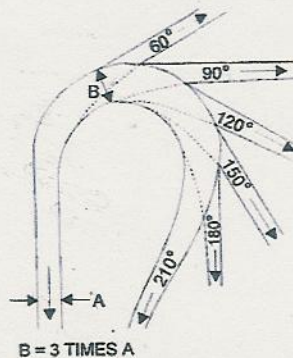
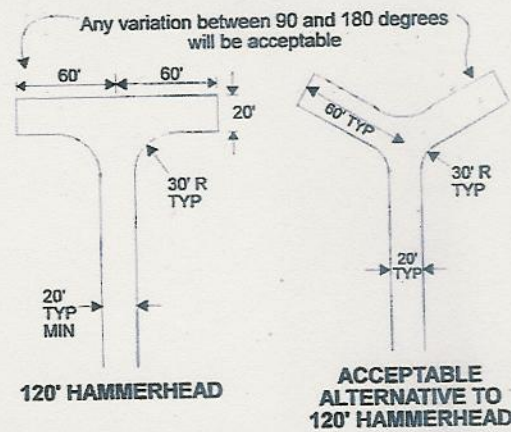
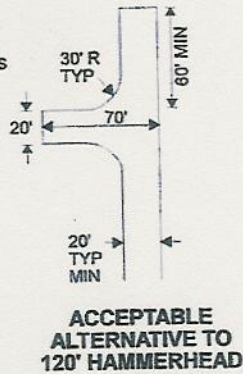
APPROVED ACCESS ROADWAY TURNAROUNDS



Cul-de-sac not to exceed 600 feet



Alternate access roadways considerations for private driveways (one to two homes maximum) and special approved applications.



SEMITRAILER WHEELTRACKS
48' RADIUS

Misc.



MINIMUM CLEARANCE
AROUND A FIRE HYDRANT

Appendix C

Fire Hydrant Bollard Specifications

FIRE HYDRANT BOLLARD DETAIL

