CHAPTER 6—URBAN INTERFACE

CONTENTS

SAFETY FIRST—NO EXCEPTIONS

WILDLAND /URBAN INTERFACE "WATCH OUT" SITUATIONS

"REFERENCE FIRELINE HANDBOOK CHAPTER 1, PAGE 9"

STRUCTURE TRIAGE GUIDELINES

Firefighter safety is the primary consideration when evaluating whether a structure can be protected. There are three categories of structures:

- Those that are not threatened.
- Those that are threatened and have the potential of being saved.
- Those that are not able to be saved and too dangerous to protect.

Factors to consider during structure triage:

- FIREFIGHTER SAFETY
- Safety Zone Availability (is there time to prepare a safety zone?)
- Proximity of the fuels and predicted flame length to structure (no defensible space).
- Position on slope relative to fire spread.
- Fire behavior and intensity (the greater the intensity, the wider the defensible space needed).

- Flammability of roof and siding (wood roof and siding, vinyl siding**,** along with inadequate defensible space may make structure impossible to protect).

- Timing and available resources (not having time to position resources or lack of resources to protect structure).

An attempt to save a structure may be unsuccessful or too dangerous if:

- There is no safety zone and refuge available.

- There is no place to park engine safely.

- Fire is making a sustained run and there is little or no clearance.

- Fire behavior is extreme: spot fires are numerous and out pacing control.

- Water supply will not last as long as the threat.

- Fire's intensity dictates you leave the area NOW.

- Roof is more that ¼ involved.

- Fire inside structure, windows broken, and windy conditions.

- You cannot safely remain at the structure and your escape route could become not longer safe to use.

<u>If a structure becomes well involved, leave it and move on to one that can be saved</u>**<u>.</u>**

STRUCTURE ASSESSMENT CHECKLIST

Address/Property Name

- Numerical street address, ranch name, etc.
- Number of residents on site

Road Access

- Road surface (paved, gravel, unimproved, dirt)
- Adequate width, vegetation clearance and safety zones along road
- Undercarriage problems (4x4 access only)
- Turnouts and turnarounds
- Bridges (load limits)
- Stream crossings (approach angle, crossing depth and surface)
- Terrain (road slope, location on slope-near chimneys, saddles, canyon bottom)
- Grade (greater than 15%)

Structure/Building

- Single residence or multi complex, out building (barn, storage)
- Does building have unknown or hazardous materials?
- Exterior walls (stucco or other non-combustible, wood frame, vinyl, wood shake)
- Large unprotected windows facing heat source
- Proximity of any aboveground fuel tanks (LPG, propane, etc.)
- Roof material (wood shake, asphalt**,** non-combustible)
- Eaves (covered with little overhang, exposed with large overhang)
- Other features (wood deck, wood patio cover and furniture, wood fencing)

Clearances/Exposures/Defensible Space

- Structure location (narrow ridge, canyon, mid-slope, chimney)
- Adequate clearance around structure-minimum of 100' (steeper the slope the more clearance required)
- Surrounding fuels (larger, denser the fuels, the more clearance required)

- Flammable fuels (trees, ladder fuel, shrubs) adjacent to structure (is there time for removing these fuels?)
- Other combustibles near structure (wood piles, furniture, fuel tanks)
- Is there adequate clearance around fuel tank?
- Power lines or transformers (DO NOT park under lines)

Hazardous Materials

- Chemicals (Look for DOT/NFPA/UN symbols)
- Pesticides and herbicides
- Petroleum products
- Paint products

Water Sources

- Hydrant/standpipe (When connecting with hydrant, be aware of flow rate and gpm output, size and venting capability of engine or water tender may not be able to handle hydrants with high flow and gpm rates.)
- Storage tank
- Swimming pool
- Hot tub

- Fish pond
- Irrigation ditch

Evacuation

- Is safe evacuation possible? (Identify safe refuge for those who cannot be evacuated.)
- Coordinate with on-scene law enforcement and emergency services personnel.

Estimated Resources for Protection

- Number(s) and type(s) of engines, water tenders, crews, dozers (General Guidelines: one engine per structure, one additional engine for every four structures to be used as "back-up" and for patrol. For structures that are close together (50' or less), one engine may be adequate to protect two structures.
- Type and number of aircraft available.

STRUCTURE PROTECTION GUIDELINES

DO NOT enter a structure unless you are trained, equipped, and authorized. If safe, a structure can be used as refuge. Firefighter safety and survival is the number one priority. Supervisors must keep in close communication with those you supervise and adjoining forces in the area.

Equipment Placement

- Identify escape routes and safety zones and make them known to all crew members.
- ALWAYS STAY MOBILE and wear all of your PPE.
- Back equipment in for quick escape.
- Mark entrance to long driveways to show that protection is in place (*very important* when structure can not be seen from road).
    - Multiple ribbons at end of drive on street
    - Ribbon/flagging across drive entrance
    - Sign
    - Other pre-determined signal
- Park in a cleared area (watch for overhead hazards).
- Protect your equipment (park behind structure, placing structure between equipment and fire front; be aware of spot fires occurring behind you).
- Watch for hazards (drop-offs, pot holes, above-ground fuel storage, chemicals, septic tanks).

- Keep egress route clear:

  - park extra equipment on street
  - keep hose off driveway

- Have an engine/crew protection line charged and readily available.

- DO NOT make long hose lays.

- Try to keep sight contact with all crewmembers.

Water Use Guidelines

- Keep at least 100 gallons of water reserve in your tank.

- Top off tank at every opportunity; use garden hose.

- Draft from swimming pool, hot tub, and fishpond.

- STAY MOBILE. Do not hook up to hydrant except to refill tank. (Hydrant may not always work if system is electric powered and power is lost in area.)

- CONSERVE WATER, avoid wetting down an area.

- Apply water only if it controls fire spread or significantly reduces heating of structure being protected.

- Keep fire out of the heavier fuels.
- Extinguish fire at its lowest intensity, not when it is flaring up.
- Knock down fire in the lighter fuels.
- Have enough water to last duration of main heat wave and to protect crew.

Class A Foam Use Guidelines

- Direct Attack - apply to base of flame.
- Indirect Attack - lay out wet line and burn out.
- Apply to structure (roof and siding) 10-15 minutes before fire arrives.

Preparing Structure

- Determine if residents are home (legal responsibility for evacuation lies with law enforcement). If residents remain on-scene, advise them to use structure if it's safe to do so as refuge when fire arrives.
- For roof access, place owner's ladder at a corner of structure on side with least fire threat and away from power drop.
- Clean roof of leaves, needles, and any other combustible materials.
- Cover vents and air conditioning unit on roof.

- Remove and scatter away from structure:
  - over-hanging limbs.
  - ground/ladder fuels to prevent fire from moving into the crowns.
  - wooden fences and wood piles near structure.
- Clear area around above-ground fuel tank, shutting off tank.
- Place combustible outside furniture inside structure.
- Close windows and doors, including garage, leaving unlocked. AS A LAST RESORT, YOU MAY NEED TO USE STRUCTURE AS REFUGE.
- Have garden hose(s) charged and place strategically around structure for immediate use.