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TYPE I ENGINE APPARATUS PLACEMENT (1.1)

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- NFPA 1002 Standard on Fire Apparatus Driver/Operator Professional Qualifications
- IFSTA Driver/Operator Handbook, 2nd Edition

TASK SKILL DESCRIPTION AND DETAIL

This training chapter is intended to create consistency for apparatus placement of Type 1 Fire Engines. It is NOT intended to replace education, training and experience in the operation of Type I Engines.

Type I Engine Apparatus Placement:

Every incident that LFRA responds to is unique. The type of incident as well as the strategy and tactics involved will determine the placement of the apparatus on scene. The Engineer should know where to place thus leaving the Company Officer time to take care of the initial on scene reports. The Company Officer must communicate specific needs to the Engineer relative to apparatus placement. Once the apparatus is in place and in use, it becomes difficult to be moved.

Residential Fire Placement

- Size up the incident and surroundings to determine proper apparatus placement
 - Fire location
 - Aerial Apparatus placement (*Think about areas of opportunity for the aerial*)
 - Access for additional apparatus
 - Water Supply- Forward Lay, Reverse, Split or Handjack (within 100' of the Engine).
 - Exposures
 - Potential collapse zone (1 ½ times the height of the involved structure).



- Place apparatus as close as possible to the side of the street allowing access for later arriving apparatus (keep the street open)
- On approach to the Emergency Scene, try and give the Company Officer a 3 sided view of the structure involved as the apparatus is placed.
- Try and position the apparatus in a way that provides for the easiest hoseline deployment based on the hosebed configuration i.e. rear deploying or cross lay attack lines. If the apparatus is rear deploying, point the rear of the apparatus towards the direction of the stretch if possible. If it is a cross lay hosebed, try and center the apparatus up with the anticipated direction of the hose stretch.





- ***It is imperative that the aerial apparatus be given position that allows for the greatest opportunity for rescues, vent, master streams etc.... and to locate the engine in a way that considers these factors. The aerial apparatus are restricted to the lengths of their ladder devices for operations (TWR 6 has a 105' ladder and LAD 6 has a 105' ladder), whereas the Engines have multiple extended lengths of hose to compensate for a farther stretch if needed. For residential structure fires the optimal position for the aerial is the front of the structure (refer to aerial apparatus placement) unless there is an obstruction such as a power pole or tree, then the Engine should place in front of or near the obstruction to open up another optimal position for the aerial apparatus. Building setbacks should also be considered when evaluating needs for the aerial apparatus.***



- If the area for placement is very tight on larger residential structures use the inside/ outside rule (<5 stories, engine parks inside, >5 stories, aerial parks inside). This may not always apply due to building setbacks. *(Aerial Operators should avoid placing stabilizers on sidewalks if possible due to the potential of cracking sidewalks and creating instability within the aerial apparatus)*



Residential Placement Considerations Examples:

- Always consider “**opportunity placement**” of the Aerial Apparatus when positioning Type I Apparatus.



There is opportunity at this residence for Aerial Placement along the entire Alpha side, the Type I can pull past to leave room.



There is open opportunity at this residence for Aerial Placement on the A/B corner, the Type I should place in front of the tree at the A/D corner.



There is limited opportunity at this residence for Aerial Placement on the Alpha side, the Type I should consider placement to best engage in fire attack as the aerial will most likely be limited to ground ladders.



There is limited opportunity at this residence for Aerial Placement on the A/D corner, the Type I should consider placement at the A/B corner or past the residence to the bravo side to leave room for the aerial apparatus.



In this example, setbacks of the structure should be considered for aerial opportunity placement. Leaving the driveway completely open, placing to the left or right of the driveway entrance and deploying perhaps the yellow or alley lines, will give the aerial apparatus the opportunity to perhaps back into the driveway for placement.

Commercial Fire Placement

- First arriving Engine with “nothing showing” should place for access to allow for investigation.
 - Best access for investigation is generally the front side or entrance of the building and also allows quick access to the fire alarm panel.
 - If a fire and location is determined, the first due engine can be moved or the second due engine can be placed in the best position for fire attack or FDC connection.

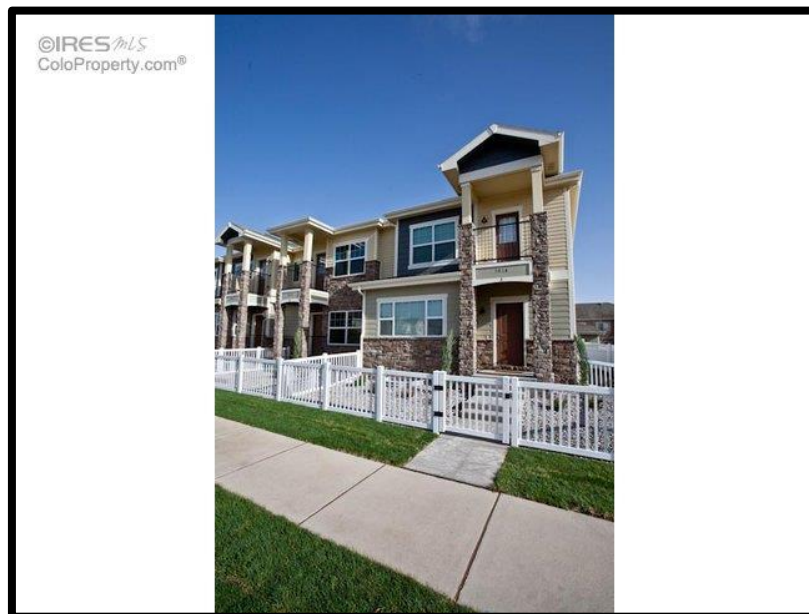


- First arriving Engine with smoke and or fire showing should place in the best location for fire attack but placement consideration of the below must be made upon arrival.
 - Fire location
 - Aerial placement
 - FDC location
 - Water Supply
 - Access for later arriving units
 - Potential collapse zone (1 ½ times the height of the involved structure).
 - Assignment
 - Leave corners of buildings open

Commercial Placement Considerations Examples:



Based on fire location, consider egress for victims escape and place Type I apparatus in a way that allows for aerial apparatus to assist with victim rescue i.e., windows, balconies or stairways as well as ventilation. It is also important to consider vehicles that are parked.



As with single family residential structures, when placing Type I Apparatus keep in mind that setbacks can limit Aerial opportunity and placement should be based on assisting with compensating for the setback and longer stretches should be considered.



Consider different access points to the commercial structure, i.e. different driveways, roads etc. that surround the structure. The Type (I) may want to consider placement on a perimeter street for not only water supply access but to also leave open areas of opportunity for the aerial apparatus based on fire location and protection of the most savable property.

Motor Vehicle Accidents

- Position for safety of personnel exiting the apparatus.
 - The apparatus should be positioned on an angle so that exiting personnel are protected from traffic.
 - At least one lane next to the Incident lane should be closed. Additional or all traffic lanes made need to be closed if the extra lane does not provide a safe barrier.
 - The apparatus should be placed between the flow of traffic and personnel working on the Incident at an angle to act as a barrier and the front wheels should be turned away from the vehicles involved and personnel operating on scene, this helps insure that if the apparatus is struck from the rear it will not be driven into the Incident.





- Engine DO's should place apparatus in a manner that leaves room for support vehicles to be close to the scene if extrication is needed.
- Direct ambulances where to park for protection, ease of access to the patient as well as ease of exiting the scene for patient transport based on traffic congestion.
- 2nd Due Engines should be placed for possible suppression efforts in the case of an extrication or 150-200' behind the 1st arriving units to create an additional barrier of protection to the scene.

Medicals

- If arriving on scene before the ambulance, position the apparatus so that the ambulance has priority for ease of patient loading. This can include giving the ambulance the front of the Incident location, closest known location to the patient or driveway access.
- If the medical is in a location where the ambulance and personnel need to be protected from traffic, position the apparatus as a barrier similar to an MVA so that it protects the ambulance, personnel and patient while loading for transport.
- Place the apparatus in a manner that allows the rig to respond in the event of another emergency.

TASK SKILL INSTRUCTIONAL REQUIREMENTS AND IMPLEMENTATION

- Minimum of gloves and helmets when instructing and participating in training.

REFERENCE INFORMATION

- IFSTA Pumping Apparatus Driver/Operator Handbook 2nd Edition