

**Strathclyde Fire Brigade**

**Incident**

**Petershill Court**

**17<sup>th</sup> November 2004**

**HSE Enforcement Action**

**Briefing Note**

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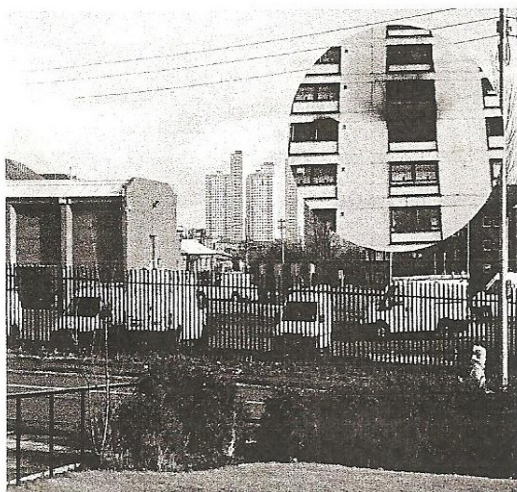
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## 1. Introduction

On 17<sup>th</sup> November 2003, at approximately 12:17 hrs, two pumping appliances were mobilised from Springburn Fire Station to a report of a fire at 30 Petershill Court, Glasgow. These are high rise premises of “slab block” construction and consist of twenty-four floors.

Whilst en-route it was clearly visible to the attending crews that a fire had fully developed in one of the upper floors, however, no confirmation was given as to the exact location of the fire. Figure one below provides the view of 30 Petershill Court, which can be seen from Springburn Fire Station.



**Figure 1** – View from Springburn Fire Station as seen by crews attending 30 Petershill Court on 17<sup>th</sup> November 2003.

Springburn is a densely populated area of Glasgow and comprises of a mixture of residential, commercial and industrial risks. The station mobilises to approximately three thousand emergency calls each year, of which approximately five hundred are to the sixty-two residential high rise buildings within this station area.

Strathclyde Fire Brigade has followed an operational procedure [last reviewed February 1998] whereby a bridgehead is formed on the floor immediately below the fire floor. From this position firefighting crews are then deployed to the fire floor. This procedure has served the Brigade well, with no major safety failures reported since its introduction.

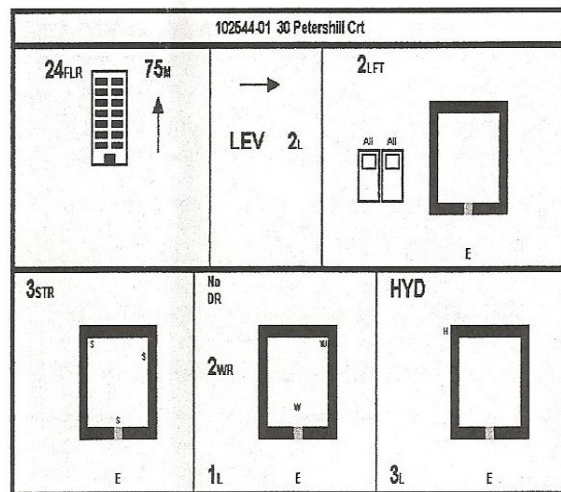
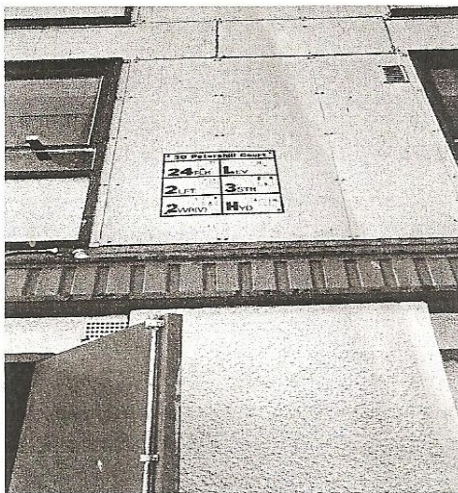
## 2. The Incident

Springburn's appliances were mobilised and were in attendance at 12:23hrs. Whilst en-route a detour was required due to road closures, however, this did not affect the Brigade's response to the incident. On arrival both lifts were commandeered and the Station Officer together with a breathing apparatus entry control officer (BAECO) and two wearers, made their way to what the Station Officer believed was the floor below the fire [21<sup>st</sup> floor]. The BA wearers, acting on their own initiative, donned their facemasks in the lift. This is not Brigade policy but was carried out in order to effect a speedier deployment, as they were informed that the fire was persons reported. The lift arrived at the 21<sup>st</sup> floor, the doors opened and the crews were immediately faced with dense smoke and intense heat. Despite attempts to close the lift doors and retire to a safer floor below the fire, the irrespirable atmosphere quickly overcame the Station Officer and BAECO.

Meanwhile two other BA wearers had travelled to the same floor in the opposite lift. They too arrived at the floor of the fire, donned in BA, but unlike the initial crew, were able to close the lift doors. They travelled down to the floor below and then made their way back up to the fire floor (using the staircase) and rescued their colleagues.

Paramedics treated the Station Officer at the scene for the effects of respiratory arrest. The Station Officer, BAECO and two members of The Scottish Ambulance Service were taken to hospital suffering from smoke inhalation.

The following images provide a pictorial guide to the working environment and conditions experienced by the personnel in attendance.



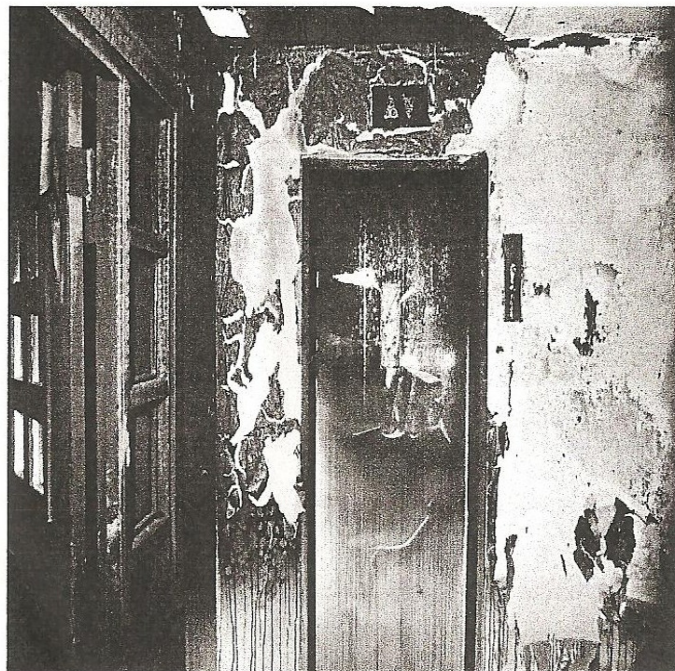
Figures 2 & 3 demonstrates the guidance plate available at 30 Petershill Court. This information is available on all residential high rise premises in Strathclyde and provides the OIC with valuable operational intelligence regarding construction, water supplies and access.

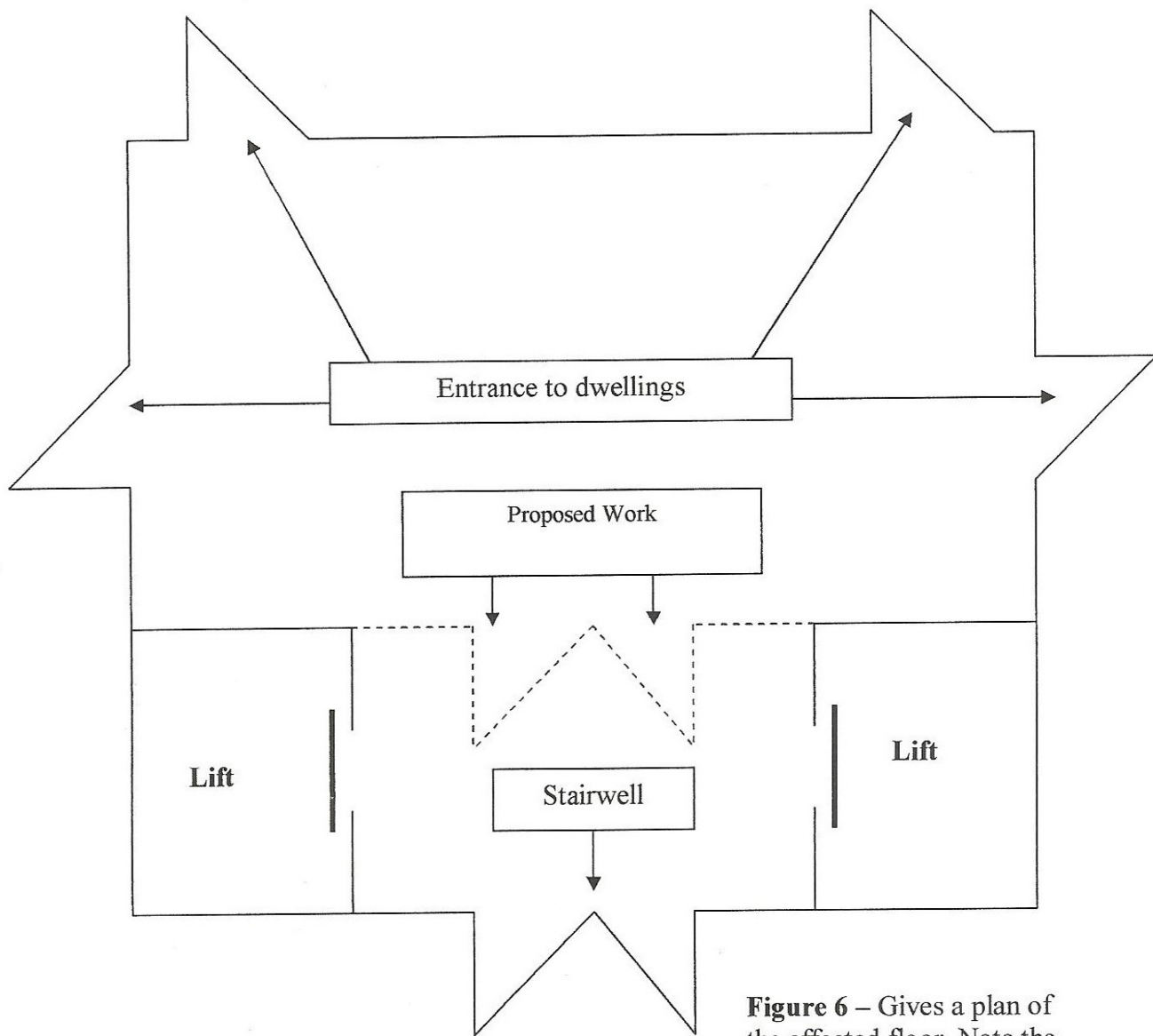


**Figure 4** presents a view of the fire scene and indicates the degree of involvement.

**Figure 5** indicates the level of damage to the 21<sup>st</sup> floor lift doors. Note that the lifts open directly into the lobby and are not separated from the four dwellings on this level.

The door visible in the left of this picture opens directly onto the stairway. This serves all floors and has no separation. This led to smoke logging down to the 7<sup>th</sup> floor.





**Figure 6** – Gives a plan of the affected floor. Note the Brigade’s proposal (annotated in red) to have the lifts separated from the dwellings, thus creating a protected lobby.

#### **4. Operational Procedure**

The revised operational procedure referred to in section 3 above is summarised as follows;

##### **FIRST APPLIANCE ATTENDING**

- Incident Commander must consult the Guidance Plate on arrival and secure control of all lifts by operating firefighter switch
- Locate riser inlet box and hydrant and provide water supplies from hydrant to riser via appliance pump
- Establish a suitable BA entry control point location at ground level
- Provide 2 BA wearers (Firefighting & Rescue) with high rise carrier unit
- Provide 1 BA wearer (nominated lift operator) and driver who will undertake BAECO duties at ground floor level
- After assessing all available information, the Incident Commander will identify an appropriate floor to establish a Forward Control Point.
- BA wearers don sets and go into air, confirm communications link with the Incident Commander and proceed to the identified floor
- On arrival at the identified floor confirm communications link and suitability of floor for use as a Forward Control Point
- In the event that the identified floor is unsuitable due to fire conditions, proceed to floor below and confirm suitability. Inform Incident Commander
- 2 BA wearers( Team Leader with communications) to remain on identified floor, prepare firefighting equipment and commence firefighting operations
- 1 BA wearer(designated lift operator with communications) to return in lift to ground level, report to BAECO and remove BA set, then undertake lift operator duties

##### **SECOND APPLIANCE ATTENDING**

- Lift operator will return to the identified floor with OIC of second appliance.
- Provide 2 BA wearers and driver to take over original pump operator duties
- The 2 BA wearers, OIC of second appliance\* and original BAECO should proceed to Forward Control Point and re-site the BA entry control point at the Forward Control Point
- The Incident Commander will take charge of all operations at ground level and ensure that no unauthorised persons gain access to any risk areas at the incident by establishing and maintaining an appropriately sited cordon.
- Conduct a reconnaissance of all sides of the building and inform the OIC of Forward Control Point of any relevant information
- Lift operator to return to ground level to transport to the identified floor any additional personnel and equipment resources required
- Assist to ensure water supplies are provided

### **3. Health and Safety Executive Enforcement Action**

As a result of the safety failures detailed above, the HSE issued the Brigade with an improvement notice. The notice required the Brigade to take action on a number of issues, which are outlined, briefly, below:

- To secure the health, safety and welfare of all employees engaged in firefighting in high rise premises.
- To secure the health, safety and welfare of persons not in their employ, and
- To ensure a safe system of work

The Brigade undertook an extensive investigation into the incident and as a result of this process, pro-active measures to prevent the likelihood of a similar occurrence were devised. These are now contained within the revised Operational and Technical Note A48, Firefighting in High Rise Buildings. The amendments contained within this document will ensure Firefighter safety by providing an enhanced level of protection to all those likely to work within this particular sphere of activity. The note is also supported by Operational and Technical Note A89, Incident Command which, among other things, deals with inner cordon security.

It must be stressed that, despite the HSE's enforcement action, the Brigade has provided its employees with a safe system of work for all incidents involving high rise premises. Strathclyde's Fire Crews, who attend almost a thousand high rise fires each year, have followed this to successfully and safely conclude this type of incident. The action taken by the Brigade, to review and revise this existing procedure, ensured our compliance with the terms set by the HSE and resulted in the lifting of the Improvement Notice on 25<sup>th</sup> March 2004.



### THIRD APPLIANCE ATTENDING

- Report to Incident Commander at the Ground Floor Level Control Point.
- Provide an additional high rise carrier to the Forward Control Point
- Assist in the control of movement of personnel and other agencies entering risk area
- Provide 2 BA wearers at the Forward Control Point.
- Further actions as directed by the Incident Commander.
- NOTE: A fire involving the first four floors may be treated as a Low-Rise property.
- The Forward Control Point and the Ground Floor Level Control Point must have an identified individual in charge at all times.

\* NOTE: IF THE OIC OF THE SECOND APPLIANCE ATTENDING IS OF A MORE SENIOR RANK TO THAT OF THE INITIAL INCIDENT COMMANDER THE MOST SENIOR OFFICER WILL ASSUME COMMAND AT GROUND FLOOR LEVEL

### ALL SUBSEQUENT ATTENDING RESOURCES

- Report to the Ground Floor Level Control Point for deployment/briefing instructions.
- All personnel committed to firefighting and rescue operations to report to Forward Control Point for briefing as to allocated task.