## ITEM 7



# SCRUTINY MANAGEMENT COMMISSION 26 June 2007

Report of the Director of Corporate and Adult Services

## Fire at the Silk Mill, April 2002

#### RECOMMENDATION

1.1 That the Commission note the Report.

#### SUPPORTING INFORMATION

2.1 Scrutiny Management Commission requested a report relating to the fire at the Silk Mill. The matter was reported to the Overview and Scrutiny Commission, Culture and Prosperity on 31 July 2006, the emphasis for that Report being the length time of the closure of the riverside footpath. The Report does, however, give a full account of the events leading to the fire, the remedial work and the reasons for the ensuing delays in completing the replacement of the fire escape. A copy of the full Report is attached at Appendix A.

#### 2.2 In summary:

- The fire occurred during a project to replace the fire escape to the Riverside frontage of the Silk Mill
- the cause of the fire was a stray spark from cutting equipment igniting a bird's nest situated within the roof space during the initial stages of the removal of the fire escape. This, in turn, caused ignition of the roof timbers, destroying the attic area of the Silk Mill
- The fire brigade attended and extinguished the fire. The building and scaffold areas were safely evacuated and no injuries were sustained. Damage to the roof was extensive
- The roof was replaced, at no cost to the Council, under the Council's insurance policy
- Replacing the roof and subsequently the fire escape was long and protracted due
  to the complexities of securing funding, the technical issues involved and because
  listed building consent was needed. This resulted in the lengthy closure of the
  riverside footpath.

#### Issues arising in relation to the fire

- 2.3 The main project management issue arising in relation to the fire was that there was no permit to work system for hot work in place, although at design stage it was envisaged that the steel would be removed from the brickwork rather than cut off and there would be no hot work.
- 2.4 Implementation of a permit to work system remains a difficulty in respect of day to day / reactive maintenance where orders are not placed through Property Services:
  - hot work permits are a standard requirement on larger projects
  - maintenance is a more difficult area to regulate. The Council's main maintenance contractors for building and electrical (Environmental Services) and heating work operate a self regulatory system which is checked periodically and therefore the bulk of the work procured through Property Services is covered. Where others procure work direct, for example schools, the responsibility for has to lie with those placing the order. The Good Stewardship Guide, intended to promote good management practices in buildings, will introduce a requirement on 'responsible persons' to operate a hot work permit system in all buildings. This Guide is to be issued shortly alongside the Fire Policy and Fire Risk Assessment Guide being introduced in response to The Regulatory Reform (Fire Safety) Order, which became law on 1 October 2006.

#### Other recent developments

- 2.5 The Regulatory Reform (Fire Safety) Order replaces most of the previous fire legislation. The Order defines that 'responsible persons' those with some level of control in premises must take reasonable steps to reduce risks from fire and make sure people can escape if there is a fire. The Fire Service will no longer carry out risk assessments but will be the enforcing authority. Extensive guidance has been issued and the required risk assessment is comprehensive, looking not only at management practices but also the structure, for example, compartmentation, fire barriers, fire detection etc. We have started a programme of these assessments based on a prioritised approach beginning with residential homes and high occupancy buildings.
- 2.6 Sprinklers in schools. On 1 March, the DfES announced a new policy that all except a few low risk new or refurbished schools should have fire sprinklers installed. This will not be compulsory and will be subject to risk assessment with guidance to be issued in the summer. In advance of this, following the fire at Sinfin Community School, a decision was taken to include sprinklers in the design of three new schools, Sinfin, Normanton and the replacement Ivy House Special School.

| For more information contact: Background papers: | Chris Edwards 01332 255070 e-mail chris.edwards@derby.gov.uk  |  |  |  |
|--|---|--|--|--|
| List of appendices:                              | Appendix 1 – Implications   |  |  |  |
|  | Appendix A – Environment Commission Report on the closure of the Riverside Walk adjacent to Silk Mill |  |  |  |

#### **IMPLICATIONS**

#### Financial

1.1 None directly arising.

### Legal

2.1 None directly arising.

#### Personnel

3.1 None.

### **Equalities impact**

4.1 None.

### **Corporate Priorities**

5. Since most services that the Council provides are delivered from buildings, providing a safer environment for occupants contributes to most of the Council's priorities.



# **ENVIRONMENT COMMISSION** 31 JULY 2006

Report of the Director of Corporate Services

## Closure of the Riverside Walk adjacent to Silk Mill

#### **RECOMMENDATION**

1.2 To note the reasons for the temporary closure of the Walk.

#### SUPPORTING INFORMATION

- 2.1 The Overview and Scrutiny Commission, Culture and Prosperity, at its meeting in March, requested a report detailing reasons for the closure and the subsequent delay in re-opening the riverside walk adjacent to the Silk Mill.
- 2.2 A detailed account including timetable of events is included at Appendix 2 but the main events are...
  - The footpath was closed in April 2002 to allow the fire escape to the Silk Mill to be replaced. Early in that project there was a fire in the roof of the Silk Mill. Efforts then concentrated on re-roofing the building, this work being completed in March 2003, following negotiations with the insurer's loss adjusters and a tender process.
  - Following this, the Council's Environmental Sustainability Section determined
    that the fire escape was of historical and architectural interest and needed to be
    preserved. Because of its condition and access issues, the escape needed to be
    fenced and an application for listed building consent to do this was submitted in
    August 2003. Approval was received in January 2004.
  - A further inspection in February 2004 showed that the fire escape had deteriorated further to the extent that it was structurally unstable. For safety reasons, because of the danger of collapse, the footpath had to remain closed.
  - Initial estimates costed the remedial work at £100 000. Part funding was sought from English Heritage and a verbal 'promise' of a £70 000 contribution was obtained in Spring 2004. A Cabinet report in June 2005 approved expenditure of £30 000 to make up the balance of cost but noted that the funding from English Heritage was not formally secured. Listed building consent for restoration of the fire escape was submitted in August 2004 and this was granted in April 2005.

- A CAD drawing, photographic record and paint analysis were required by English Heritage. A detailed specification was prepared and tenders sought. These were received on 13 July 2005.
- Confirmation of grant funding was received by email on 13 September 2005.
- Work commenced on site in December 2005 and is due for completion at the end September. The completion date has been delayed due to additional work necessary that could only be ascertained after the structure was dismantled and components x-rayed. In addition, research had to be carried out to establish if replacement iron/steel members could be sourced from reclaimed/salvage materials
- 2.3 In summary, a number of events have come together to cause the lengthy closure of the footpath. These include the initial fire, the complexities involved in dealing with a listed building, the highly specialist nature of the refurbishment itself and securing the funding for the project.

#### The lessons learnt

- 2.4 A number of lessons have been learn throughout this process...
  - Communication could have been better between Council departments and both Members and the public could have been kept better informed. For example, footpath diversion notices could have been put up sooner and regular bulletin updates issued.
  - The process has been long and drawn out because of the technical complexities and the nature of heritage buildings, including listed building consent and heritage funding. It is important that discussions are confirmed in writing.
  - Departments need to work more closely and give priority to achieving a solution as quickly as possible. Had this happened, the programme may have been shortened by several months. However, given resource issues, this cannot always be achieved. For example, the Maintenance Strategy is aimed at keeping buildings safe and operational. Health and safety issues will always take priority.

| For more information contact: | Chris Edwards 01332 255070 e-mail chris.edwards@derby.gov.uk              |  |  |
|-------------------------------|---|--|--|
| Background papers:            | None  |  |  |
| List of appendices:           | Appendix 1 – Implications   |  |  |
|                               | Appendix 2 – Report on the closure of the Riverside Walk adjacent to Silk |  |  |
|                               | Mill  |  |  |

#### **IMPLICATIONS**

#### **Financial**

- 1.2 The cost of the refurbishment is estimated to be £130 000.
- 1.3 The cost of the remedial work following the fire was borne by the Council's insurers and the Council's costs were recovered in full. This is normal practice when building work is carried out in an existing building where it would be unreasonable and disproportionate for a contractor to insure the whole building. The insurer will make a judgement on whether to pursue a contractor to recover his costs.

#### Legal

2.2 Listed Building consent was required for the refurbishment scheme.

#### Personnel

3.2 None.

#### **Equalities impact**

4.2 None.

#### **Corporate Objectives and priorities for change**

5. The proposals promote the Council's priority to improve the quality of life in Derby's neighbourhoods – reinvigorating the city centre and river areas.

## REPORT ON THE CLOSURE OF THE RIVERSIDE WALK ADJACENT TO SILK MILL

#### 1.0 INTRODUCTION

- 1.1 This Report is produced to give full reasons for the protracted closure of the Riverside Footpath, the reason for the initial closure, and all related events that have necessitated the continued closure of the footpath to the general public.
- 1.2 Section 2 provides a short history of the Silk Mill, a narrative of events from the initial decision to replace the fire escape, the replacement of the roof structure following fire damage and, finally, the events leading up to the refurbishment and proposed reopening of the footpath, and the effect of the footpath closure on the Industrial Museum.
- 1.3 Section 3 lists all activities with dates, including a brief description of the actions taken.

#### 2.0 BACKGROUND HISTORY

#### **History of the Silk Mill**

- 2.1 The first silk mill was built on an island in the River Derwent by engineer George Sorocold in about 1702. It was not successful and was eventually taken over by John and Thomas Lombe. They decided to build a much larger five-storey building on the area now occupied by the Rolls-Royce gallery. The foundation arches of this building, again designed by Sorocold, can be seen next to the river. The mill used revolutionary machinery, the details of which had been obtained by deception from Italy by John Lombe.
- 2.2 About 300 people were employed making silk thread the first time such a large number of workers were used on one site. The mill was powered by a water wheel 7 metres 23 feet in diameter, which was located in the area now occupied by the RB 211 jet engine. Silk was processed at the mill until 1908.
- 2.3 In 1910 fire destroyed nearly all the building, but it was rebuilt, serving as a manufacturing chemists and later as a base for repairing electricity meters. In 1974 the silk mill re-opened as Derby's Industrial Museum.

#### The Fire Escape and closure of Riverside Walk

2.4 During 2001 a joint inspection of the fire escape to the Riverside elevation of Derby Silk Mill was carried out by the Council's Property Maintenance Team and a structural engineer. As a result of this inspection, the fire escape was condemned for use on two accounts:

- the fire escape did not comply with current Building Regulations
- structurally, the fire escape was deemed to be unsafe and not fit for purpose.
- 2.5 Following tender procedures, an order was placed for the removal of the existing structure with replacement by a new compliant fire escape.
- 2.6 The Riverside Walk footpath was closed to the general public to allow these works to be carried out.
- 2.7 During the initial stages of the removal of the fire escape a stray spark from cutting equipment ignited a bird's nest situated within the roof space. This, in turn, caused ignition of the roof timbers, destroying the attic area of Derby Silk Mill.
- 2.8 Following consultations with the loss adjuster, an independent consultant was employed to prepare specifications, obtain tender prices and administer the contract to replace the damaged roof structure and covering.
- 2.9 Alternative fire routes were created within Derby Silk Mill, thereby rendering the condemned fire escape obsolete, and facilitating a safe environment for the renovation work to the roof.
- 2.10 On completion of all re-roofing works, the Council's Environmental Sustainability Section determined that the fire escape was of historical and architectural interest and needed to be conserved in-situ.
- 2.11 Unfortunately, previous access problems had shown that adolescents used the fire escape to gain access into the roof areas of Derby Silk Mill. In view of this, it was decided to erect a fence around the base of the fire escape to restrict access. This required an application for approval to the Secretary of State, with notification to English Heritage.
- 2.12 Following Listed Building Approval, the Council's structural engineering section reinspected the fire escape and found that the structure had deteriorated to such an extent that there was a danger of collapse and that structural refurbishment was required before public access to the Riverside Walk footpath could be considered.
- 2.13 English Heritage was approached for grant funding towards the refurbishment of the fire escape and verbal agreement was received.
- 2.14 A Listed Building Application was subsequently submitted by the Council to the Secretary of State, including notification to English Heritage, for the total refurbishment of the structure.
- 2.15 The Application was approved. Confirmation of grant funding of £77,000 through the Heritage Economic Regeneration Scheme HERS was received from English Heritage by e-mail.
- 2.16 A detailed specification for the refurbishment was prepared and tenders sought. Prior to this CAD drawings, a photographic record and a paint analysis had to be produced.

- 2.17 Orders for the work were placed with the successful contractor and refurbishment of the fire escape commenced on site.
- 2.18 Following systematic dismantling of the fire escape, several items were discovered that required either the manufacture of specialist parts or replacement of entire structural elements.
- 2.19 These additional items have delayed the reopening of the Riverside Walk footpath by approximately 16 weeks.

#### Impact of the closure of the riverside walkway on the Silk Mill

- 2.20 Whilst it is not possible to directly attribute the following to the closure of the riverside walk, staff at the Museum have noted:
  - a marked increase in incidence of anti-social behaviour on Cathedral Green.
     This may be due to the reduced numbers of passers-by, and Cathedral Green effectively becoming a cul-de-sac
  - anti-social behaviour has included graffiti, drug dealing and drug abuse, large numbers of youths gathering to skateboard, and two firearms incidents. Police are called to deal with incidents, and we have on occasion asked the police to increase their regular foot patrols in the area
  - on occasion youths engaged in anti-social behaviour enter the building and cause problems through rowdiness, drunkenness or challenging behaviour
  - anti-social behaviour is an issue that causes the Silk Mill front line staff considerable worry and stress, and in order to support staff, management ran a behaviour management course for them in 2005
  - visitors wishing to visit the Silk Mill can be intimidated by large groups of youths congregating outside the building, and more serious anti-social behaviour is of course very off-putting to visitors
  - graffiti degrades the whole quality of the area, and is also most off-putting to visitors.

## 3 Chronology of Events

| 1              | Start on site date for the replacement of the fire escape   | 3 April 02  |
|----------------|---|---|
| 2              | Date of fire  | 5 April 02  |
| 3              | Notification to loss adjusters/insurers   | 5 April 02  |
| 4              | Original projected completion date for replacement of the fire escape   | 27 April 02   |
| 5              | Confirmation of appointed loss adjusters/planning supervisor  | 8 May 02  |
| 6              | Preparation of tender documents for replacement roof  | April-June 02   |
| 7              | Start date for the erection of the temporary roof   | 30 July 02  |
| 8              | Tenders returned/received   | 21 August 02  |
| 9              | Start on site date for roof renewal   | 4 October 02  |
| 10             | Completion date   | 23 March 03   |
| 11             | Listed Building Application for the erection of enclosure around the area of works to the fire escape submitted   | 7 August 03   |
| 12             | Listed Building Application granted   | 26 January 04   |
|                | ziotoa zananig / ippinoation grantoa  | 20 dandary 04   |
| 13             | Structure condemned by the Council's structural engineering section   | 20 February 04  |
| 13<br>14       | Structure condemned by the Council's structural engineering   | ·   |
|                | Structure condemned by the Council's structural engineering section  Grant funding: £70,000 proposed funding from English Heritage, £7,000 from Derbyshire County Council HERS and the remainder being made up from the Council's repair and  | 20 February 04  |
| 14             | Structure condemned by the Council's structural engineering section  Grant funding: £70,000 proposed funding from English Heritage, £7,000 from Derbyshire County Council HERS and the remainder being made up from the Council's repair and maintenance budget   | 20 February 04 May 04   |
| 14<br>15       | Structure condemned by the Council's structural engineering section  Grant funding: £70,000 proposed funding from English Heritage, £7,000 from Derbyshire County Council HERS and the remainder being made up from the Council's repair and maintenance budget  Laser scan and CAD drawings  Listed Building Application for restoration of the fire escape  | 20 February 04 May 04 June/July 04                              |
| 14<br>15<br>16 | Structure condemned by the Council's structural engineering section  Grant funding: £70,000 proposed funding from English Heritage, £7,000 from Derbyshire County Council HERS and the remainder being made up from the Council's repair and maintenance budget  Laser scan and CAD drawings  Listed Building Application for restoration of the fire escape submitted                                      | 20 February 04 May 04 June/July 04 12 August 04                 |
| 14<br>15<br>16 | Structure condemned by the Council's structural engineering section  Grant funding: £70,000 proposed funding from English Heritage, £7,000 from Derbyshire County Council HERS and the remainder being made up from the Council's repair and maintenance budget  Laser scan and CAD drawings  Listed Building Application for restoration of the fire escape submitted  Listed Building Application granted | 20 February 04  May 04  June/July 04  12 August 04  15 April 05 |

| 21 | Commencement report prepared and submitted              | 22 July 04      |
|----|---|-----------------|
| 22 | Paint analysis investigations and report                | July 05         |
| 23 | Confirmation of grant funding received by e-mail        | 13 September 05 |
| 24 | Commencement report signed by accountant                | 6 October 05    |
| 25 | Contract acceptance letter sent to contractor           | 7 October 05    |
| 26 | Works commenced on the refurbishment of the fire escape | 5 December 05   |
| 27 | Proposed completion date                                | 5 May 06        |
| 28 | Anticipated completion date                             | 29 September 06 |