

Case study No. 2

Case study - Safety issues site movement and working at height

A multi-storey car park was being built at the Olympic Park. The construction involved the delivery, unloading and placing of hundreds of pieces of steelwork and pre-fabricated concrete flooring at the site (see photo 1 below).

These items then needed to be lifted into place using a large crane as shown in photo 2 below.

Identified Hazard:

Vehicle movement around the site and the lift of these items to height were identified as significant hazard to the workforce. The team undertaking the design of the car park and assessing the risks to the workforce decided that they needed to tackle two key issues; The movement of vehicle around the site and the safe lifting of the steel and concrete items to the top of the car park.

Although non-unionised site appointed health and safety representatives are in place amongst the main contractor this is not the case with all of the sub-contractors.

Photo 1 – Movement on site



Photo 2 – Lifting/working at height



QUESTIONS

In your group, discuss what role workplace consultation should play in deciding on safe working practice in relation to these two hazards.

- Who should be consulted in relation to these?
- What form should this consultation take?
- What legally does the main contractor have to consult on?
- What role do the sub-contractors play in this process?

Background Information for Facilitator

CASE STUDIES ON 2012 OLYMPICS CONSTRUCTION [1]

The Health and Safety Executive (HSE) has published a series of short case studies focusing on some of the new and practical solutions used to manage health, safety and welfare during construction of the London 2012 Olympic projects.

It is hoped that the case studies will be of use to others working in construction and that the information will inspire further ideas to deal with hazards and manage risk.

The case studies are related to:

- preventing falls during off-loading of vehicles
- safe installation of modular offices
- reduce risks using simple drilling jig
- improving pedestrian safety
- involving the workforce
- safer lifting operations
- safety and welfare of the Team Aquatics site
- managing work at height
- worker engagement in practice

Case Studies from London 2012

HSE has published a series of short case studies to promote some of the new and practical solutions used to manage health, safety and welfare during construction of the London 2012 projects. We hope that they will be of help to others working in construction and inspire further ideas to deal with hazards and manage risk.

Preventing falls during off-loading of vehicles

Background

A multi storey car park was built on the Olympic Park. The structure involved the delivery, unloading and placing of hundreds of items of steelwork and precast concrete floor slabs by tower crane.

Hazard

Vehicle movements around the structure and falls from vehicles were identified as significant risks since hundreds of vehicle movements would be taking place with materials and plant needing to be off-loaded (photo 1).

The team designing and constructing the car park considered the arrangements for managing vehicle movements and preventing falls from lorries during off-loading.

Solution

A traffic management plan was prepared and implemented with well-defined and signed routes to keep vehicles and pedestrians apart.

A mobile platform was installed and fitted with moveable overhead beams to which fall arrest systems were fitted. This system allowed those slinging loads to work safely at height (photo 2).

Photo 1 – Movement on site



Photo 2 – Lifting/working at height



Reference

- [1] Health and Safety Executive. The London 2012 Olympic and Paralympic Games: Case studies. www.hse.gov.uk/aboutus/london-2012-games/case-studies.htm