



Asbestos Removal Case Study

# Asbestos Removal Aspire Defence Capital Works



Experts in Providing  
Specialist Services  
Nationwide



# Project Allenby & Connaught Army Basing Programme (ABP) – Phase 3

Aspire Defence Capital Works (ADCW), part of KBR Aspire Defence, is a construction management business that was formed in 2006 as the Building Contractor responsible for delivering new and refurbished living and working accommodation for the British Army across Salisbury Plain and at Aldershot. These include Larkhill, Bulford, Tidworth, Perham Down, Warminster and Aldershot garrisons.

This formed part of the Project Allenby & Connaught (PAC) PFI Contract with the MOD. PAC is the largest infrastructure Private Finance Initiative (PFI) ever let by the MOD. At contract award, the total through-life value of Project Allenby/Connaught (PAC) was stated as circa £8 billion.

Together, both the MOD and Aspire manage and deliver a modern, flexible living and working environment for soldiers in the Aldershot and Salisbury Plain area that will support the military, enhance UK defence infrastructure and provide long-term value for the MOD.

During 2016, KBR Aspire Defence secured a contract variation to deliver the Army Basing Programme (ABP) with a capex value of c. £900M. Shield Services Group were contracted by their client ADCW as their only asbestos remediation contractor on-site for the whole of the ABP project works. Our scope of work varied from each asset and location, from simple removal/remedial works of non-notifiable products, to the removal of various notifiable products, with projects lasting anything from a few days to a number of months.

With a final contract value of circa £20m, the entire project ran from April 2016 until November 2022. During the Project, our range of works included, but not limited to:

- Floor Tiles & A/C products
- Sprayed Coatings
- Asbestos Insulation Board (AIB)
- Asbestos Pipe Insulation
- Contaminated Soil Remediation
- Soft stripping and demolition back to concrete shell of all internal fixtures & fittings, Mechanical/Electrical/Water services, walls and floors etc.

Both semi-controlled and fully controlled conditions, and a number of removal techniques were used which included:

#### **Semi controlled**

- Floor Tiles & A/C products - Controlled Suppression & Removal

#### **Fully controlled Conditions**

- Sprayed Coatings – Controlled Injection, Suppression, Removal & Encapsulation
- Asbestos Insulation Board (AIB) – Controlled Suppression & Removal
- Asbestos Pipe Insulation - Controlled Injection / Removal &

#### **Wrap & Cut**

- Soft stripping and demolition back to concrete shell of all internal fixtures & fittings, Mechanical / Electrical / Water services. In addition, walls, wall coverings etc.

Based on the programme requirements, there were between 6 – 60 Shield operatives on site at any one time. The total number of contractors from the multi-disciplined trades on site at any given time was in excess of 1,400 contractors. Over the course of the entire project, Shield operatives worked on 375 separate building assets at numerous locations, around 1,625 (35m<sup>3</sup>) skips were used and a total of 13,069 tonnes of asbestos waste was safely disposed of.

The main challenges and highlights of the project were as follows:

#### **Programme:**

In order to minimise disruption to the Army and soldiers on the ground, work zones and assets were handed over to ADCW on a rolling programme of works. This was subject to continuous review and change, sometimes at relatively short notice, but was a requirement to allow the MoD to maintain its military operations and overall commitments.

Due to the nature of the contract, full R&D surveys were not possible until after assets were fully handed over to ADCW from their client, the MoD. Once these surveys were received, Shield were generally the first contractor into each asset and were therefore required to react and resource each project efficiently, in order to minimise any programme delays to follow on work works that had been planned.

#### **Working Environment:**

As all works were carried out on or within fully operational military sites with both welfare and accommodation areas for military personnel, it was imperative that a strict security protocol was fully adhered to at all times, and that all works had minimal disruption to all military aspects and operations on the bases.

Our teams underwent mandatory MoD vetting prior to works commencing. Mandatory ADCW site inductions were also carried out by all employees before gaining access to the various sites. This in turn ensured that all potential site operatives were in possession of all relevant and up to date training/competency qualifications for both asbestos related and construction industry standards.

#### **Environmental:**

Due to the size and logistical location of the Garrisons/Camps, consideration to the surrounding environment was kept at the forefront of any planning and subsequent delivery of the works. The locations of work especially on Salisbury Plain is in close proximity to Stonehenge, and is a location of high archaeological significance. As such, our teams worked closely with English Heritage, the Environmental Agency and other associated bodies to ensure minimal, if any, impact to the surrounding environment.

#### **Communication:**

Due to the sheer scale of the Project, programme delivery and physical number of contractors on site at any given time, it was essential to hold daily meetings for each project in order to ensure each contractor and their site teams were fully aware of each other's plans for the events of the day.

Numerous pre-start programming meetings were also held with both ADCW and interfacing contractors. This continued both on a daily and weekly basis with all parties for the duration of the Project. These meetings not only added benefits to programme delivery, but more importantly, ensured that all sites maintained the highest standards of Health & Safety. Shield are proud to have achieved 16,904 man days or 135,096 hrs without a recordable lost time accident/injury.

Shield employees also had full access and visibility of site RAMS, which formed part of their Shield specific site induction. All works were undertaken in line with daily task specific task sheets and relevant tool box talks.

### Site Management

As with all construction sites in general, site management is vital to ensure the safety of anyone working or present within the site and a number of measures were put in place to achieve this.

- Shield site compounds were segregated and secured with heras fence system.
- All site visitors and workers were required to sign in/out at all times.
- Shield site inductions were carried out to all site staff and visitors prior to gaining access to site.
- Both Industry Standard and Shield own branded signage was strategically placed around Shield areas of works.
- Site logistic plans which included but not limited to access/egress, waste/transit routes were strategically located around Shield sites.
- CCTV systems were strategically located both within and around the Shield areas of work.

### Specialist equipment and training

For each asset of works, Shield took full control and responsibility for the duration of our works. Each area of works undertaken had to have a full site establishment set up to facilitate our works. This included, but was not limited to full site welfare - drying rooms, site offices, storage containers, power & water supplies and both Nomad & Static Decontamination Units etc.

Additional equipment operated by trained Shield operatives included: Mechanical Excavators, Mobile Elevated Working Platforms (MEWP's) of various sizes, Telescopic Forklifts and Dumper Trucks.

Shield site operatives also undertook specialist Confined Space training and Ground Investing CAT Scanning training.

As with all projects of this complexity, there are factors which could not have been anticipated both at tender and planning stages which inevitably resulted in contract variations being awarded. Shield undertook a number of contract variations and by working pro-actively with ADCW, these were managed and delivered in a timely manner.



Example of challenges and works undertaken. Purpose built and designed fixed scaffolding erected over roof and first floor areas, to facilitate asbestos remediation works to these areas of the former Bakery Building within Bulford Barracks by SES.



Internal view of roof working area prior to commencement of SES asbestos remediation works to the former Bakery Building within Bulford Barracks.



Former Bakery building after completion of works to roof and first floor areas. First floor perimeter walls along with full internal removal of all walls, wall coverings and floor screed was carried out as part of the asbestos remediation works.

## Client Testimonial

In October 2016, Aspire Defence Capital Works was contracted to work on the Army Basing Programme (ABP), delivering new and refurbished single living and working accommodation for the Army over a four-year construction period. Although a lot of hard work had already been completed through design, we were in reality, just starting to look at innovative ways in which we could successfully mobilise and deliver through a professional and competent supply chain. I was delighted that Shield Services Group became one of our early supply chain partners and who have proven to be truly professional and able in delivering and surpassing our expectations, despite the numerous challenges that have been given to them.

Shield started work in April 2016 with some critical notifiable asbestos removal and remediation works that would then allow the main works to proceed as planned. Working on an aging Army estate has its challenges and with over 150 demolitions to be completed throughout the build phase, this has brought about a number of challenges that I am delighted Shield have completed safely, while also meeting the right quality standards and in a timely manner. Their organisation has a great set of Values that comes from some passionate and inspirational leadership and this is visible throughout their business and the people they employ on the ground, who carry out their work in a diligent and efficient manner. It should also be recognised that apart from

carrying out the asbestos removal, they also carried out watching briefs on other trades, both on the ground and during demolition works where it was required to meet the necessary Regulations.

The overall sub-contract value will be c.£17M and over the course of the programme, Shield will have successfully achieved the following key events and one that they should be extremely proud of - I know I am!!

- Worked over 56 months and 120,000 safe man hours from commencement of their sub-contract without a Lost Time incident.
- Received 7 'Contractor of the Month' awards
- 60 operatives on-site during peak construction
- Worked on 375 buildings
- Specialist waste removal of 12,000t and 1500 sealed asbestos skips.

I am delighted with the service that KBR Aspire Defence has enjoyed from Shield throughout the course of the ABP Works and definitely a supply chain partner of choice. So, a big thank you to the Shield team in all that you have done that has played a significant part in improving the living and working infrastructure for the British Army that ultimately will make soldiers' lives better.

**Paul Dempster**  
Managing Director  
Aspire Defence Capital Works