## Construction Management Plan



South Camden Community School





This Construction Management Plan has been produced by BAM Construction for the part demolition, and the reconstruction and refurbishment of the South Camden Community School in Charrington Street, North London.

## 1.0 Proposed Programme

## Enabling works

Commence: 16<sup>th</sup> August 2010

Duration: 6 weeks

#### Main Contract Works

Commence: 27th September 2010

Duration: 153 weeks

#### 2.0 Introduction

This is a proposal for the site known as South Camden Community School in North London. The propose works include heavy and light refurbishment to existing buildings as well as demolition of certain existing buildings and new build construction to create a new high tech. educational establishment.

The school is operational and will remain so throughout the construction process.

The works will be phased to minimise the disruption to the school. Temporary accommodation will be provided to the school to facilitate continued school operations during the construction process.

The refurbished and new buildings will consist of a new Sopts Hall (structural steel); a refurbished Medburn Centre with fully cleaned elevations together with new timber clad infill area.. Anew theatre block together with new kitchen and dining facilities. A refurbished Salisbury block and a new high tec education block together with linked arcade to the Medburn Centre with vented glazed roof.

The agreed contents of the Construction Management Plan must be complied with unless otherwise agreed with the council. The Project Manager shall work with the council to review the Construction Management Plan should any problems arise in

relation to the construction of the development. Any future revised plan must be approved by the council and complied with thereafter.

## 3.0 Construction Start/Completion Dates

We are awaiting confirmation from London Borough of Camden regarding the exact start and finish dates. However the target dates for the project are:

## **Enabling Works**

Start date: 16 August 2010

Completion date: 27 September 2012

#### Main Contract Works

Start date: 27 September 2010

Completion date: 2 September 2013

## 4.0 Proposed hours in which vehicles will arrive and depart

In general the hours in which vehicles will arrive and depart will coincide with site hours which are 8.00am to 6.00pm in the evening. However there will be occasions when heavy/wide loads will need to be delivered and removed from site outside of these hours. Such deliveries would be for piling rigs and tower cranes and a BAM member of staff would be in attendance at all times. On such occasions the local neighbours will be notified some 6 weeks earlier via a BAM Newsletter. Any parking bays that may need to be closed off will be carried out by BAM with full consultation with Camden/appropriate neighbours.

## 5.0 Access arrangements for Vehicles

As mentioned earlier South Camden Community School is a project that is to be carried out in four Phases in order to cater for the continued live occupation of the school and its students.

#### Phase 1

This is the demolition and construction of the new Sports Hall. Access to this part of the site will be via Chalton Street. It will be a good secure entrance which will enable

us drive not only lorries onto the site but also position skips in secure grounds. It should perhaps ben noted, that access to Phase 1 works is to the rear of Sussex House in Charlton Street (please see location maps in section 6).

Vehicles will arrive in Chalton Street from the west and approach the site via Cranleigh Street, cross Chalton Street and onto the site. On exiting the site, vehicles will join Eversholt Street via Aldenham Street. We will use the existing pavement crossover that currently serves the School.

In all cases, access/egress for delivery and removal of materials will be planned, scheduled and coordinated by our logistics manager, and all vehicle movement both on and around the site will be controlled by competent and certified banks men.

#### Phase 2

Comprises heavy refurbishment of the Medburn Centre as well as demolition to part section of the Medburn Centre. Access will be the same route as for Phase 1.

During the demolition a gantry will be constructed over the footpath to enable lorries to be loaded with demolition materials. These lorries will approach Chalton Street via Cranleigh Street. A banksman will be in attendance at all times whilst this operation is taking places.

Once demolition is complete the gantry will be dismantled.

#### Phase 3

This is the main part of the works, demolition of the 60's building, theatre block, dining and kitchen block. At this stage the Medburn Centre and new Sports Hall are now operational by the school. Construction access therefore will be relocated to Charrington Street. The access will be formed between the existing 60's building and the 90's building. Vehicles will be able to enter the site during the demolition period and main frame construction keeping Charrington Street relatively free from construction traffic. A new pavement crossover will need to be constructed (subject to agreement with LBC). A secondary means of access will be via the Salisbury building utilising the existing pavement crossover.

#### Phase 4

At the start of this phase all school buildings will be complete. This phase is the demolition of the 90's building and the removal of the temporary accommodation to allow construction of the remaining MUGA's (multi use games area). A new

temporary crossover will need to be formed (subject to agreement with LBC). Construction vehicles will be able to enter the site for loading/unloading and exit the site in a forward direction, avoiding the need to reverse onto Charrington Street.

All vehicles will be controlled by a trained banksman.

#### Banksman/Road Marshall - a Key Role

A strict delivery procedure will be implemented to ensure that Charlton Street and Charrington Street are not overrun with site and delivery vehicles. Our banksmen will ensure that traffic flow on both roads is maintained at all times.

The Road Marshall will act as banksman when vehicles enter the site (both entering in forward gear and should the need arise in reversing).

All sub contractors and suppliers will be required to give 48 hours notice of deliveries. The movement of materials will also be controlled by our Road Marshall. He will be responsible for the coordination and control of all aspects of material deliveries and movement.

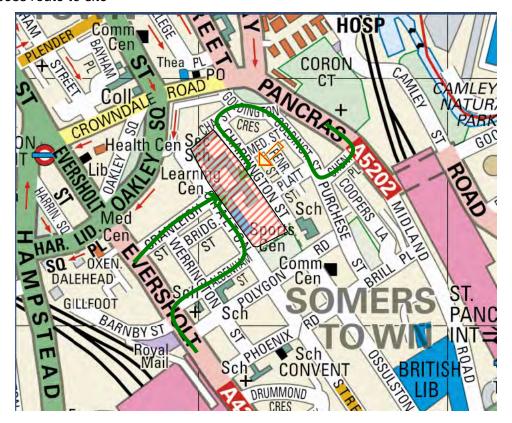
## 6.0 Proposed routes for Vehicles between the site and TFL Network

Details of agreed access/egress routes will be issued to all our suppliers and subcontractors. This will be policed as far as practical but it must be recognised that we have no jurisdiction over the vehicles once they have left our site.

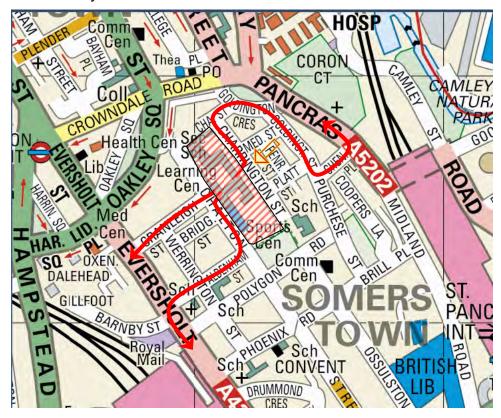
Vehicles will approach the site from the west when approaching Chalton Street (via Cranleigh St), and from the east when approaching Charrington Street. (via Pancras Road)

See overleaf for access maps

### Access route to site



#### Access route away from site



#### 7.0 Size of Vehicles

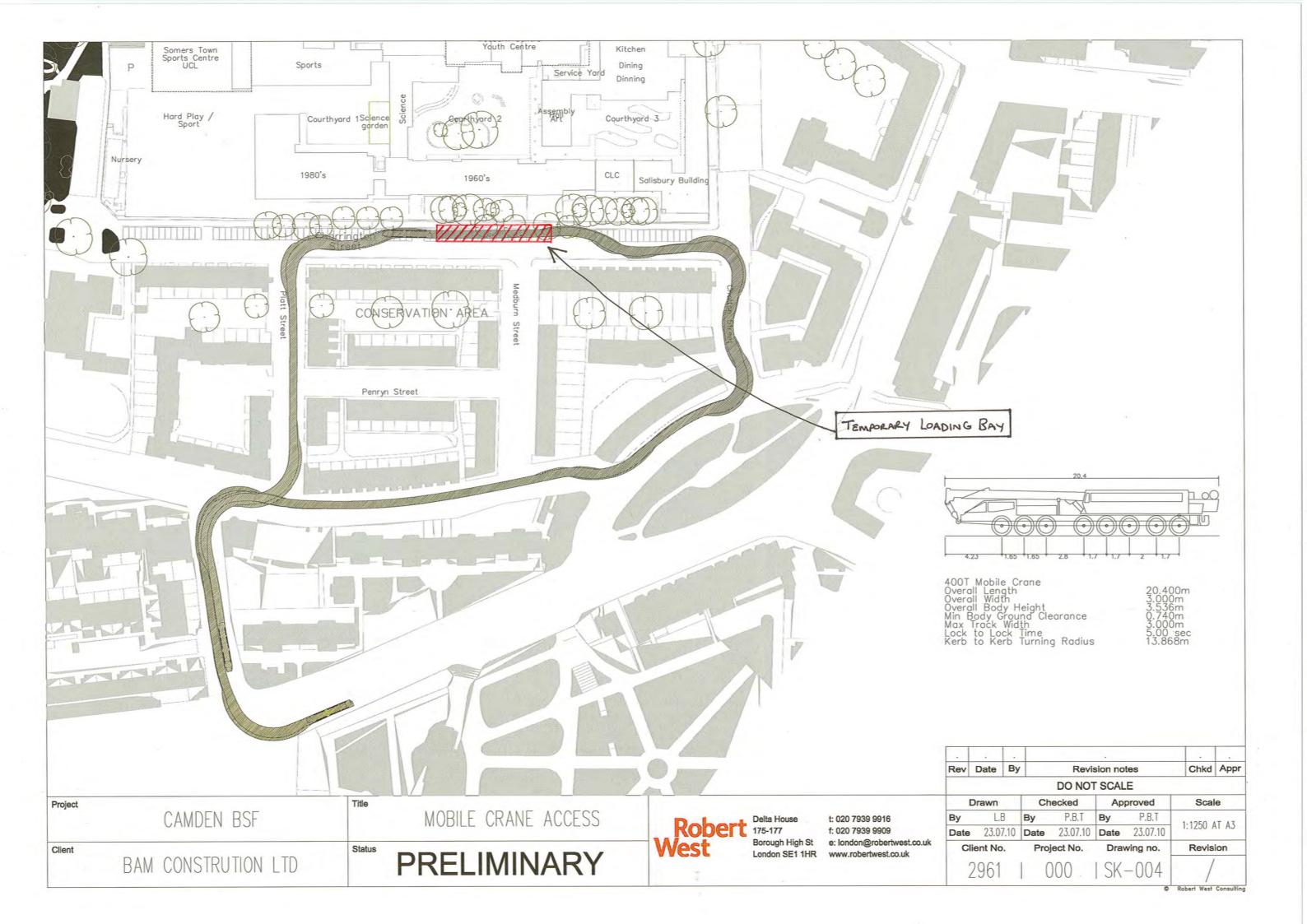
Numerous types of delivery vehicles will be used to bring materials to and from the site. These include:

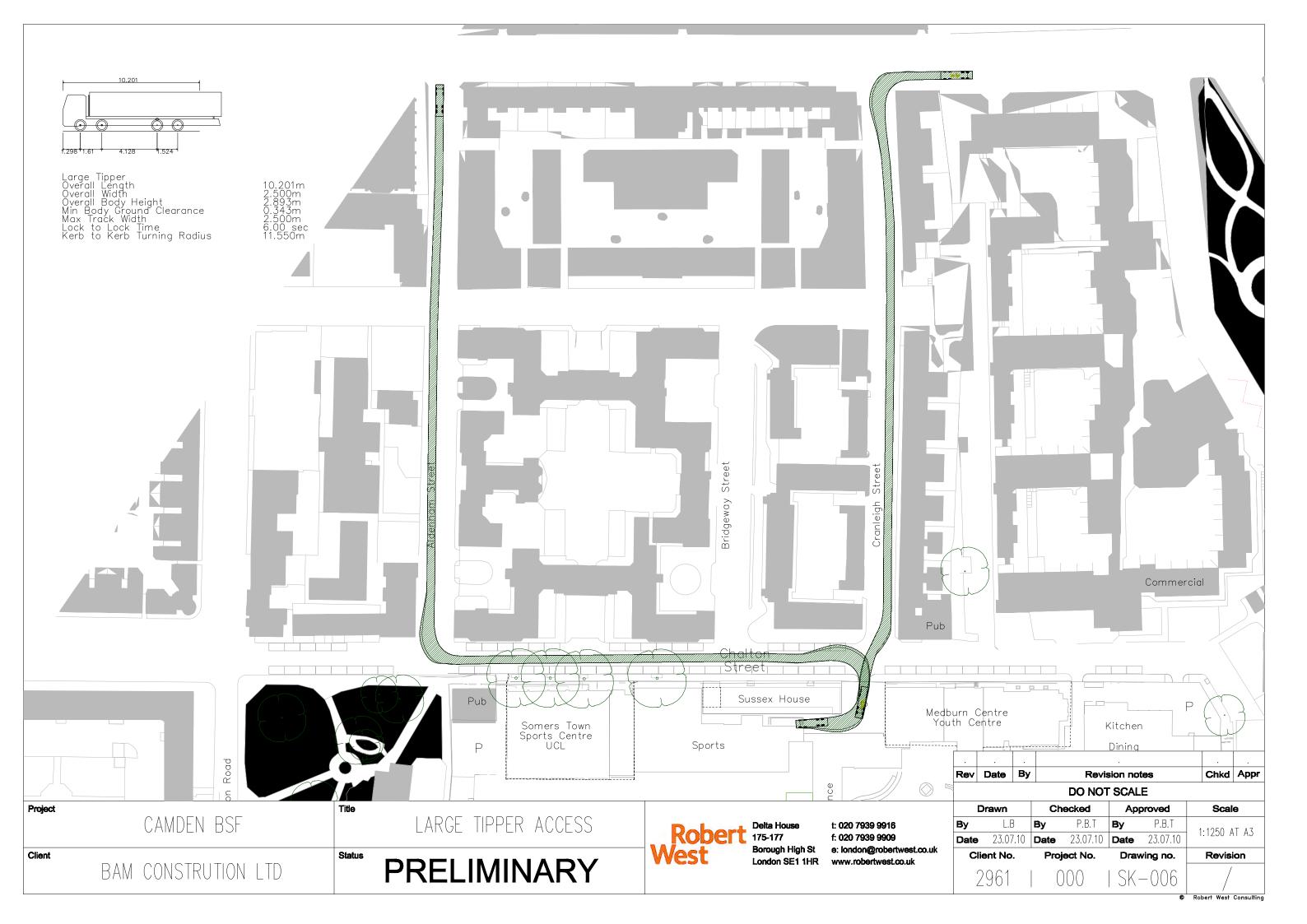
- Skip lorries. These will include roll on/roll off skips for major demolition works (approx size 7.5m long and 2.4m wide) and standard 8 yard skips for waste (approx size 7m long and 2.4m wide.
- Ready mix concrete lorries. (approx size 8.25m long and 2.45m wide).
- Flat bed delivery vehicles for the delivery of various materials including scaffolding, steelwork, reinforcement, bricks/blocks, timber, roofing materials, plaster, joinery etc. (approx size 8.5m long and 2.45m wide.
- Articulated Lorries, for delivery of pre cast concrete units and other cladding components.

The projected vehicle movements are approximately 5 per day during the enabling works and 15 - 20 per day during the main contract works period.

## 8.0 Swept path drawings for tight maneuvers into the site

Please see overleaf for 2 No. swept path diagrams.





## 9.0 Details of any highway works necessary to enable construction to take place

Following a meeting with London Borough of Camden (Highways Management on 17th June 2010 it was agreed that BAM would be allowed to construct their temporary site accommodation in the "hammerhead" area of Chalton Street (east side). (Subject to application) Other works will be limited to forming the pavement "crossovers' in Charrington Street.

## 10.0 Parking and Loading Arrangements

A strict delivery procedure will be implemented to ensure that Chalton Street and Charrington Street are not overrun with site and delivery vehicles. Our road marshalls will ensure that traffic flow on both streets is maintained at all times.

All subcontractors and suppliers will be required to give 48 hours notice of deliveries. The movement of materials, particularly in the main contract works stage, will also be controlled by our road marshalls. He will be responsible responsible for the control and coordination of all aspects of material deliveries and movement.

Vehicles will pull into the site for unloading wherever possible.

A tower crane will be provided to facilitate easy and quick unloading of delivery vehicles. The crane will be up to 50m in radius, but the luffing jib will prevent the oversailing of adjacent properties.

Materials will be stored within the boundary of the site.

No parking will be permitted on site and all sub contractors will be informed at the pre order meeting that the surrounding area is for resident parking only. All subcontractors will be encouraged to use public transport.

## 11.0 Parking bay suspension and Temporary traffic management orders

Suspension of resident parking bays will be kept to an absolute minimum. (Meeting required with LBC to discuss).

### 12.0 Proposed overhang of the Public Highway

Scaffolding will be erected around the Medburn Building and whilst it will be erected within the school railings it will overhang the footpath in Chalton Street at first floor and above. However, during the demolition phase of the Medburn Centre, subject to agreement with Camden Highways Management we would like to erect a scaffold gantry over the footpath to facilitate a safe method of demolition of the central part of the Medburn Centre. This would also include a temporary crossover in Chelton Street, centrally positioned of the Medburn Centre elevation (please refer to Logistics Plans (Phases 1-4), overleaf).

The scaffolding will be enclosed with a hoarding and we will ensure that a minimum of 1.3m of clear footpath remains open to the public.

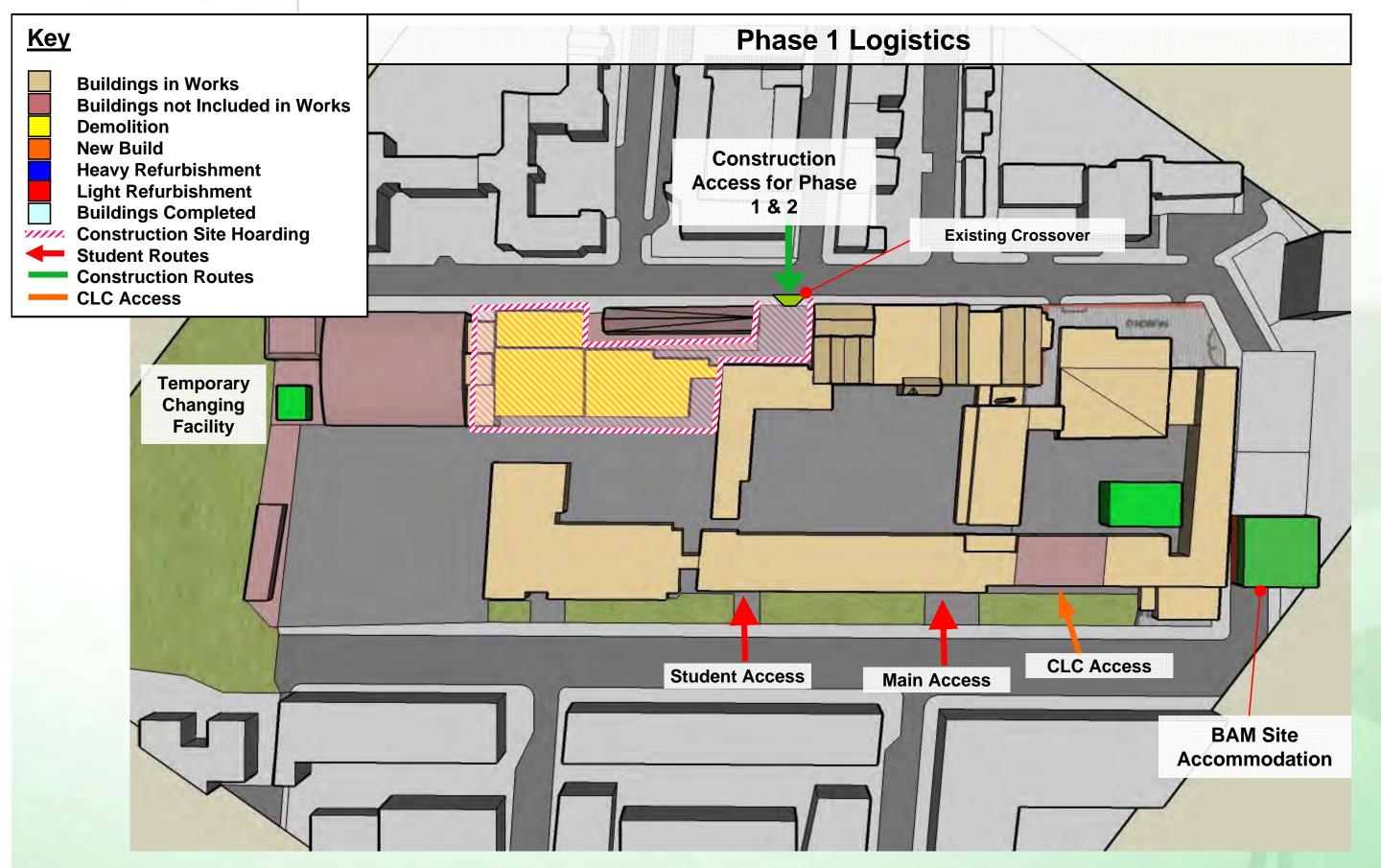
Scaffold will also extend onto the footpath when constructing the new Sports Hall and again every effort will be made to maintain the minimum width of footway required.

The tower crane that we propose to use will have a luffing jib, thereby eliminating the need for oversailing, except for unloading/loading from the loading bay in Charrington Street. This will be limited to the unloading bay and carried out under the supervision of a trained banksman. These cranes will be left in their "parked" position at the end of each days work, keeping them within the site boundary.



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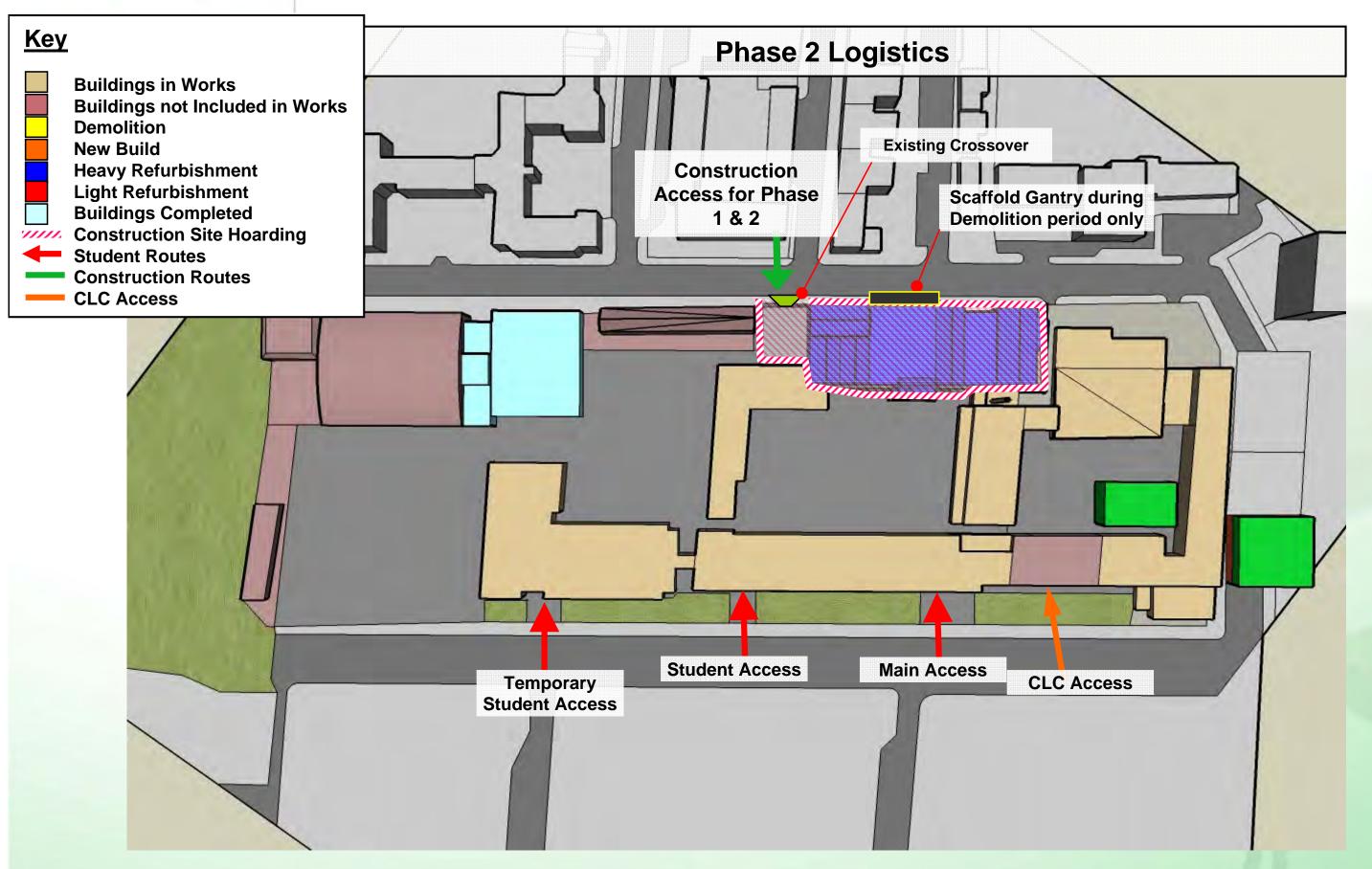






## Camden BSF - South Camden Community School Camden BSF - South Camden Community School Camden BSF - South Camden Community School **Logistics Plan**

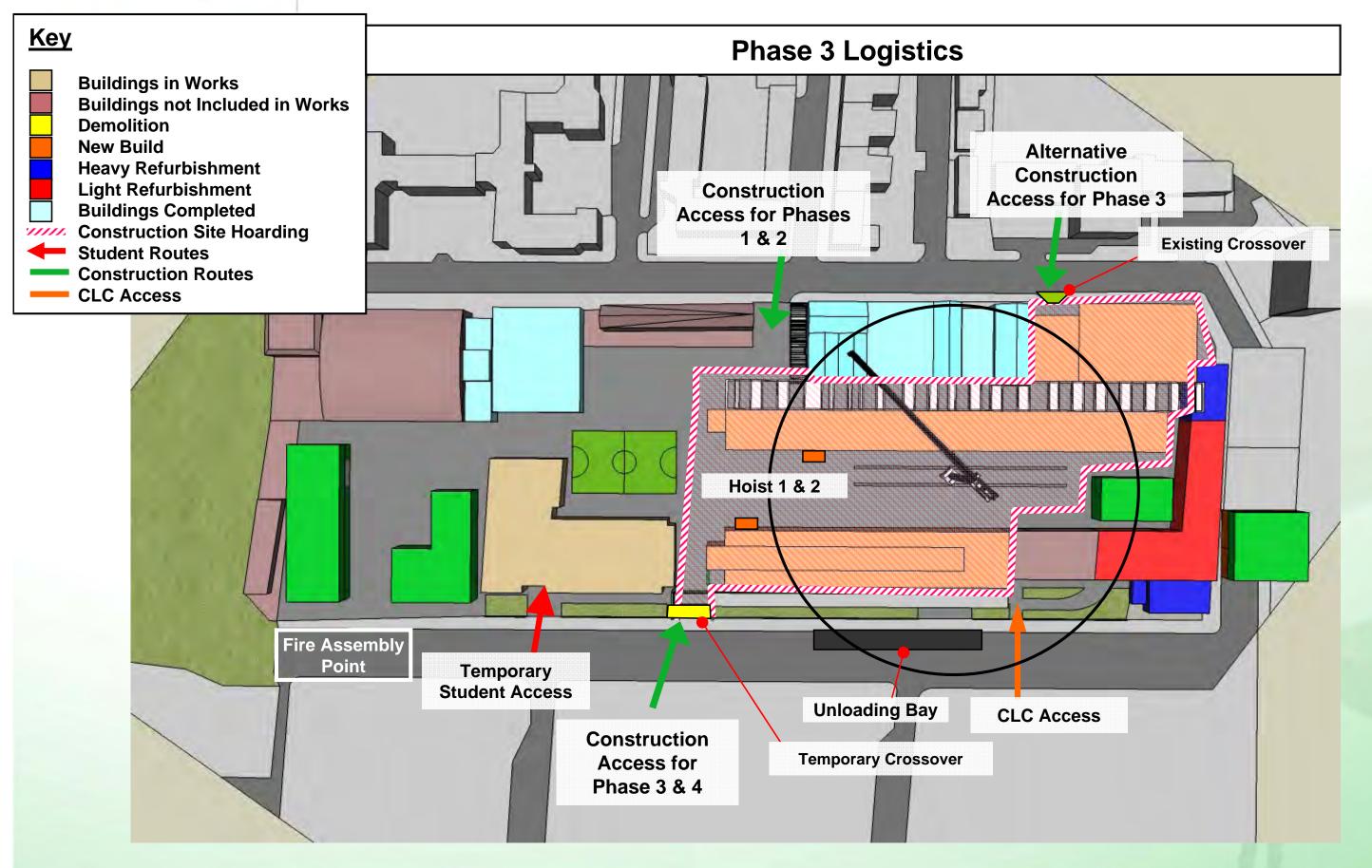






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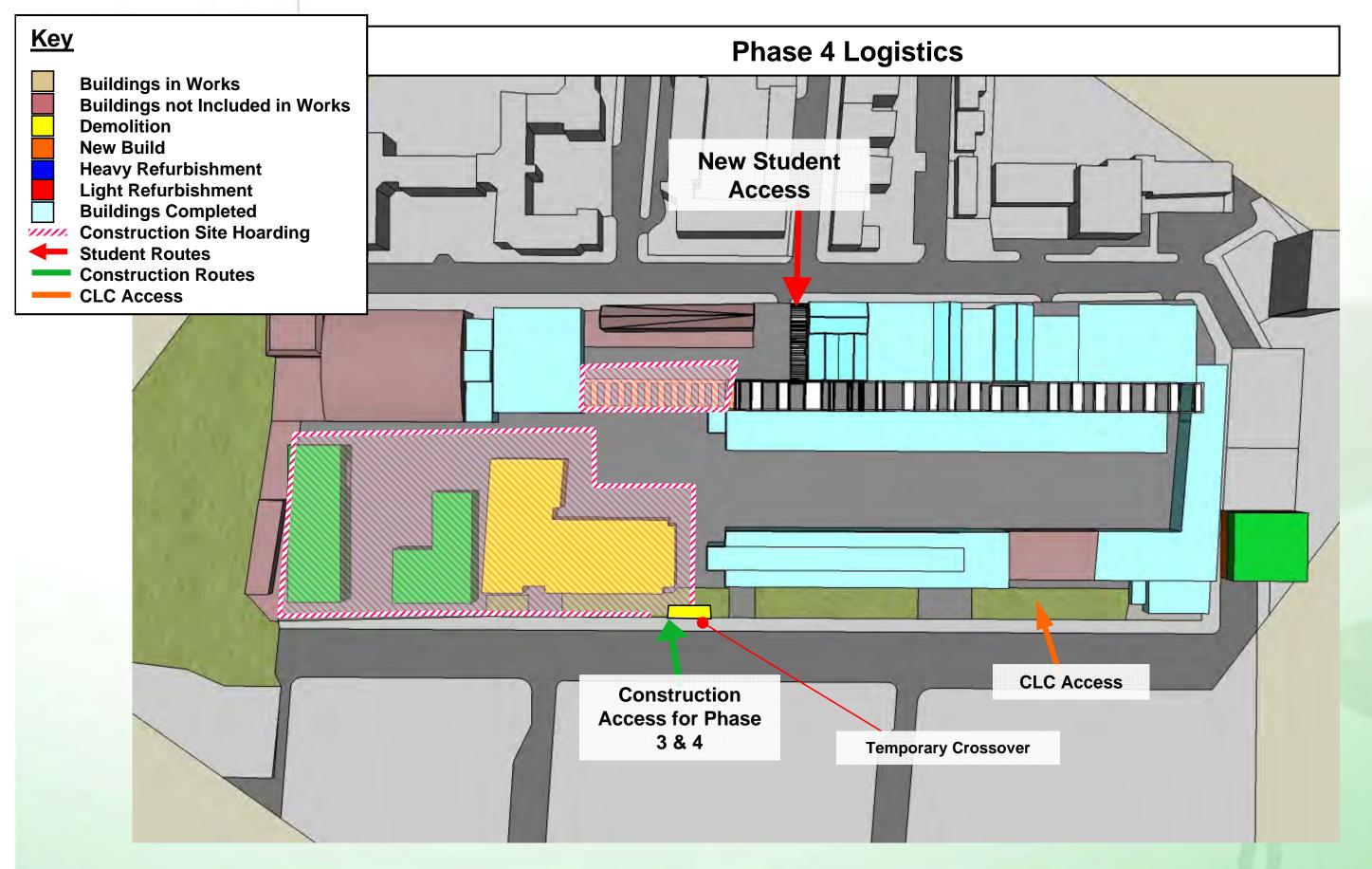






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## 13.0 Details of any Hoardings

The site area and the contractors compound, will be enclosed with a 2.4m high metal hoarding. This will be adapted as necessary, and will be painted as agreed with SCCS/LBC. Vision panels will be provided in the hoardings.

We will ensure that hoarding panels are maintained and kept clean for the duration of the project.



Example of typical BAM hoarding

The hoarding will generally be fixed to the scaffolding and where the building sets back, scaffolding will be fixed to an independent scaffold framework.

## 14.0 Details of how pedestrian and cyclist safety will be maintained

When vehicles are entering or leaving the site, these will be supervised by our road marshalls. Where vehicle are unloading in Charrington Street, this will be supervised by either road marshalls or crane banksman.

The general public/pedestrians will have right of way along the pathways that surround the site. The construction site gates will be kept closed and monitored by site security, only when deliveries are made to the site will they be opened to allow vehicles onto the site, at which time barriers will be put across the pavement to prevent access by pedestrians. These barriers will be manned by our site security. All delivery vehicles will be supervised/controlled by a banksman. When unloading via the tower cranes in Charrington Street the footpath will be closed off and pedestrians will be requested to use the pavement on the opposite side of the road.

The appointed Logistic's Manager will also ensure that the external perimeter of the site is regularly patrolled (twice a day) to ensure that any debris is kept clear of the pavements.

With regard to cyclist safety any delivery vehicle parked within the loading area will be coned off to direct the cyclist around the lorry.

Should there be any complaints arising from the works, local residents will be able to call personally to the site offices. Any residents visiting site to raise a complaint will be requested to sign-in and our security guard will escort the visitor to the site offices. Our Community Liaison Manager will deal personally with comments or complaints from the public or neighbours and will ensure that they are resolved swiftly. A record will be kept of all comments and complaints.

## 15.0 Management of traffic to reduce congestion

Within BAM's Management Structure is a Logistic's Manager. The Logistic's Manager will be responsible for the day to day management of all deliveries to the site. These will be booked in using a Delivery Schedule so as to prevent lorry congestion to the road network that surrounds the site. Should a lorry/vehicle arrive that has not been booked in, that lorry will be turned away.

Wherever possible lorries will be brought onto site keeping the roads free for general traffic movement.

In order to reduce traffic movements, we shall call off full loads whenever possible and only accept part loads when essential.

We shall encourage our sub contractors to use public transport to travel to site. We shall also inform potential subcontractors that parking is very restricted in the local area and that residents parking bays are not to be used. We will monitor parking, especially on neighbouring roads, to ensure off site parking is dealt with considerately

## 16.0 Control of dirt and dust on the public highway

Mud and debris on the road is one of the main environmental nuisance and safety problems arising from construction sites. BAM will make provision to minimise this problem.

In the early stages of the project when demolition and ground works are being carried out, wheel washers will be used to wash down all vehicles that enter/leave the construction site.

The wash bay area will be impermeable and isolated from the surrounding area by a raised kerb or roll over bund to contain solids, with effluent directed to the foul sewer (subject to discharge consent).

We will also make provision for cleaning of the road if required by an approved road sweeper.

We will insist on all muck away lorry's be fully sheeted to minimise the risk of any mud over-spilling onto the highway.

We will consider spraying a fine spray to suppress dust on the following:

- Structures and building during demolition.
- Unpaved areas that are subject to traffic or wind.
- Sand, spoil and aggregate stockpiles.
- During loading/unloading of dust generating materials.

## 17.0 Details of consultation with local businesses or neighbours

As individual citizens, as a company and in partnership with London Borough of Camden and our supply chain, we will take due care of the community and environment within which we will be working.

The site team will have direct responsibility for fostering good community relations with all neighbouring residents and businesses. From the start of this project an individual directly involved in the management of the site will be identified as being specifically responsible for community relations (Community Liaison Representative). This single point of contact will be established for all liaison with the general public.

We will initiate early and honest communications to establish a good rapport with the community which will help reduce problems that may arise during the construction process. Part of the process will be the inclusion of regular Newsletters keeping our neighbours up to date with what has and will happen on site.

We will ensure that any particularly sensitive works or issues are dealt with in a professional and accountable manner, with the public and local community kept informed at all times. This may include things like out of hours delivery of large items of plant such as piling rigs etc.

Information boards will be displayed on the site hoarding which will highlight the key personnel on site including their contact details. The regular newsletters will also highlight the key personnel and their contact details. In the event of a complaint the Community Liaison Manager will respond by return or as soon as they can. All complaints will be logged, all actions tracked and each item closed out to the satisfactory agreement of all parties.

Prior to any person being allowed on site they have to go through a Health, Safety and Environment Project Induction which, amongst others, will highlight the requirements set out in the Considerate Constructors Scheme and in BAM's own project procedures.

18.0 Working Group and other measures to reduce the impact of

the site

The communication process with the local community has already started and a series of open meetings will be held throughout the duration of the project. A working

group will be established to conduct these further meetings.

Before work commences we will send out letters to the neighbours informing them of

what will be happening and giving them our contact name and telephone number.

This will include a 24hr emergency hotline. This will also be published on the

Councils website.

We will also maintain full and regular communications with affected neighbours

regarding site activity, deliveries and traffic.

Should there be any complaints, as we have stated earlier, local residents will be

able to call personally to the site offices. A record will be kept of all

comments/complaints.

Other points that we will action:

Ensure that site lighting does not affect neighbours.

Provide viewing apertures in the hoardings.

We will ensure that our workforce maintain a respectable standard of dress code.

Encourage operatives not to leave site in their dirty work clothes.

Register the project with the Considerate Constructors Scheme.

Provide ID cards/badges for all operatives.

19.0 Details of any other Construction Sites in the local area

Contractor: BAM Construction Ltd.

Site: Unison House, Euston Road, London.

Contact: Paul Joyce.

Contact: 07753 811499

## 20.0 Targeting zero non-hazardous waste to landfill

As part of our environmental approach we seek to source materials from local companies provided that specification requirements and costs are met.

## 21.0 Energy usage

Where practicable, we seek to source green energy providers for the construction phase. Meters will be supplied for the site enabling energy consumption levels to be monitored.

## 22.0 Fuel consumption

We strive to procure local contractors for the project therefore minimising transport costs and impact on the local environment.

## 23.0 Waste Management

Our approach to the treatment of waste is to employ a specialist waste management contractor as a trade package. This contractor is responsible for:

- Ensuring the site is kept clean and safe.
- The collection of waste from a central point.
- Segregation of waste on site.

The waste management contractor will ensure that all access routes, fire escapes and staircases are swept and kept clear of debris on a regular basis to maintain high standards of health and safety on the project. All general areas of the project will be swept clean on a weekly basis.

Sub contractors will be responsible for removing waste emanating from their works to a central point on site.

Please see BAM Sustainability Initiative, overleaf.



## Environment & Sustainability

Protecting the environment is of the utmost importance to BAM and as such we have developed a bespoke environmental management system which is certified to ISO 14001 standards. In addition, we have a comprehensive environmental policy and we issue yearly environmental targets to all staff (copy of 2009 targets attached overleaf).

Our site teams are supported by a network of experienced regional and national Environmental staff and they also have access to the BAM Intranet site which contains all company procedures and templates. All our sites are required to sign up to the Considerate Constructor's Scheme, of which BAM are Associate Members, and to target a CCS audit score of at least 32 out of a possible 40.

Previous Experience of Environmental Elements

BAM have a substantial amount of experience with sustainable technologies both on completed and ongoing projects around the UK and we fully support the environmental benefits of such components. The following list of BAM projects is a small sample of those that included a Green Roof, similar to that which has been specified for the Camden schools:

- Ashburton Court, Winchester
- Ashmolean Museum, Oxford
- Crawley Library
- Tesco, Orpington
- North West Kent College
- C4.1 Milton Keynes

#### Sustainability during Construction

Our environmental procedures and targets along with a project specific Environmental Management Plan will form the basis of our operations throughout the duration of the Camden Schools and will assist us in meeting the sustainability requirements of the client. In brief, we aim to:

- Minimise environment impact
- Prevent pollution
- Minimise energy use
- Minimise mains water use
- Minimise waste
- Maximise waste recycling
- Maximise the use of recycled and sustainable materials
- Increase environmental awareness of staff
- Improve environmental performance of subcontractors and suppliers
- Implement and maintain environmental operating procedures

#### Minimising On-Site Energy Usage

We carefully monitor all gas, electricity, water and fuel usage on our sites against the company targets. These figures are then passed to our company Climate Change Manager who calculates an overall carbon footprint for our UK operations (which is available on our website www.bam.co.uk). We are also able to monitor the CO2 produced by the transportation of goods and people to and from site. Effective monitoring allows us to identify areas for improvement and helps meet requirements such as BREEAM. The following measures are used to minimise emissions:

- Reducing the use of CO2 intensive generator electricity, by connecting to grid electricity supplies wherever possible
- Minimising energy demand of site accommodation / offices e.g. using low energy 'Eco Cabins'
- Effective set up of site temporary electricity supply to ensure power can be shut down easily and efficiently
- Use of energy efficient lighting for offices, site and for the building prior to permanent lighting being fitted
- Use of energy efficient plant options e.g. 'soft start cranes/hoists'
- Using our central energy management team to design the most energy efficient site set up early on in project planning





## Construction Objectives and Targets for 2010

The table below sets out the Organisations Objectives, along with specific targets for BAM Construction for the current year. A guide to possible actions projects and individuals can take to help achieve these targets are also noted. References are also made to individual procedures where more information can be found. Each new project is to include their specific actions, including targets based on the figures below, within the Environmental section of the Project Management Plan.

BAM Construct UK Objective	BAM Construction Target	Possible Site Actions
Minimise the environmental impact of its operations on the environment.	All sites in excess of 6 weeks duration to register with the Considerate Constructors Scheme and achieve a minimum score of 32 out of 40.	Implement nuisance reduction measures.     Distribute news letters on a regular basis     Implement waste management processes
2. Prevent pollution of the environment.	Zero pollution incidents that result in prosecutions, formal notices, warnings, or letters from a statutory authority.	Store all materials, inc oil correctly     Ensure all waste is dealt with correctly     Ensure compliance with all other legislation
3. Minimise energy use wherever technically and commercially practicable.	All sites to measure electricity, gas, and site fuel use on a monthly basis, and aim for maximum CO2 emissions of 16,000 Kg CO2 / £1million contract value.	Meter supply and monitor usage and CO2 emissions     Consider Eco cabins from BAM Plant     Implement energy efficiency measures
4. Minimise mains water use wherever technically and commercially practicable.	All sites to measure mains water use (in m³) on a monthly basis, and aim for a maximum water use of 95m³ / £1million contract value.	Meter supply and monitor usage     Toilets to be fitted with cistermisers and push taps     Turn off hoses when not in use
5. Minimise waste production wherever technically and commercially practicable.	• All sites to measure waste production (in m³), and aim for a maximum skip waste production of 160m³ / £1million contract value.	Design out bulk excavations / off site disposal     Prefabrication / pre cutting off site     Implement     SWMP initiatives

BAM Construct UK Objective	BAM Construction Target	Possible Site Actions
6. Maximise the percentage of waste sent for recycling wherever technically and commercially practicable.	Divert at least 75% of all waste produced on site away from landfill in 2010.	Aim for 'Near Zero' waste to landfill by 2015.     Send excavated waste to exempt sites where possible     Segregated Inert / Wood / Metal / Gypsum skips     Paper / Cardboard / Plastic Compactors
7. Maximise the use of recycled and sustainable materials wherever technically and commercially practicable.	All timber to be supplied from a legal and sustainable Chain of Custody source. (FSC, PEFC, CSA, SFI)	Specify FSC, or equivalent, timber products     Check delivery tickets for confirmation of source     Specify high recycled content products where possible
8. Increase environmental awareness of all BAM staff.	Include environmental news and/or 'Your Opinion' question on the intranet at least once per fortnight. All staff to undertake appropriate environmental training.	Submit     Environmental     News to Intranet     news team     Attend     environmental     training courses     when required     Keep up-to-date     on environmental     best practice
9. Work with subcontractors and suppliers to improve their environmental performance.	Conduct     Environmental     Toolbox Talks on     every project.     All targeted trade     contractors used     to hold, or sign up     for, environmental     management     certification     (ISO14001/BS8555) )	Ensure Toolbox     Talks are     conducted once a     month     'Targeted Trades'     currently include     Groundwork,     Piling, and     Concrete Frame     subcontractors
10. Implement and maintain operating procedures for each business unit, which give information and guidance on achieving the above.	Maintain up to date construction operating procedures.     All projects to produce a Project Environmental Management Plan and Site Waste Management Plan.	Feed back     best practice to     Environmental     team     Publicise Web     access to the     procedures is     available     Produce     Environmental     Management Plan

