11.2 Site and Building Access

Accessibility has been a specific constraint to this scheme due to the various different uses of the buildings on site.

The proposal has demanded a particular design approach to the site which offers access to the different buildings at different times throughout the day, as shown in the diagrams below.

The temporary open space is open to the public throughout the day, with gates and fences securing the space at night. A secure fence differentiates the ownership boundary between the Workspace and open space while maintaining visual permeability.

A secondary entrance has been provided for direct access from Starcross Street to the CSC building for evening access.

This simple defined access strategy will offer each of the buildings and temporary open space security whilst not affecting the design.

11.2.1 Monday to Friday, Dusk to Dawn Access

Access route/entrance to Multiuse Hall, Workspace, CSC

11.2.2 Monday to Friday, Evening Access

Access entrance to Multiuse Hall, Workspace, CSC

Open Space is closed at dawn

11.2.3 Weekend Access

Access entrance to Multiuse Hall

Workspace and CSC closed at weekends

Open Space is open from dusk until dawn at weekends

11.3 Servicing

11.3.1 Servicing and Deliveries - Preferred Option 01

The proposed scheme has been arranged to ensure simple servicing of both the proposed and existing buildings on the site and to limit any impact on surrounding streets. It also seeks to make the travel distance from the primary road network into the site as short as possible.

The preferred Option 01 proposes the use of Hampstead Road as the main servicing and delivery access to the site. The existing gate at the end of North Gower Street would be moved further south, to allow vehicles to enter the north west corner of the site from the Hampstead Road. A widened access controlled gate would be installed at the same location as the existing vehicle access gate. Refuse and large deliveries and servicing for both the CSC and Workspace would be located in this single location, away from view, pedestrian walkways and cycle routes and both North Gower and Starcross Streets. Adequate turning space is available for all vehicle types to allow exit of the site in forward gear.

11.3.2 Emergency Access

Swept path analysis has been undertaken to ensure Fire Tender Access and emergency vehicles can access each of the buildings on site, with adequate turning space provided for all vehicle types.

North Gower is open to traffic from the south - up until the gates onto Hampstead Road. This access provides fire tender access to both the existing school building and adjacent residential building. Access to the residential would remain whilst fire tenders could use the new access off Hampstead Road.

Fire tenders will also need access to the front of the managed workspace and into the open space to ensure that the development meets current fire regulations on hose lengths between tenders and the building. These locations use the proposed gates and are shown on the diagram to the right.

Services and Deliveries Strategy Option 01

Key:

- Fire Tender Access
- Emergency Fire Access / Occasional Delivery Access
- Refuse Storage and Collection Point
- Cycle parking
- Main Entrance, day to day deliveries (parcels/catering)

11.3.3 Services and Deliveries Option 02
Option 02 proposes to locate the main service and deliveries point for the site via Starcross Street and along the south of North Gower Street.

Day to day deliveries for both the workspace and Construction Skills Centre will be undertaken on-street from Starcross Street and North Gower Street.

Occasional deliveries - generally once a term - to the Construction Skills College will access the site at the existing vehicle access point but widened and realigned at the northern end of North Gower Street. These vehicles will head northbound along North Gower Street to reach this access, via the 'pedestrianised' section.

Refuse would be collected from two locations, one to the west of the workspace building and one to the east of the CSC. Refuse stores would be secure, have roofs over the bins and managed by the building occupiers. They will be provided with external taps and gulleys to wash down. The bin store alongside the Workspace would also be screened by new planting and collected from North Gower Street, whilst the CSC bins would be pulled down the out of hours access path to ensure they are within 10m of the public highway for collection.

The amount of bins provided are of appropriate capacity to the building types, size, number of occupants/users and predicted volume of waste that will arise from daily and weekly operational use.

11.3.4 Cycle Parking
As a sustainable means of travel, cycling is encouraged within the scheme. An external cycle storage facility will be provided adjacent to both the Workspace building and the new CSC building. Our transport consultant has worked with officers and within planning policy to ensure we are providing adequate cycle parking spaces and supporting facilities such as lockers, showers and changing rooms required.

Services and Deliveries Strategy Option 02

Key:

- Fire Tender Access
- Emergency Fire Access / Occasional Delivery Access
- Refuse Storage and Collection Point
- Cycle parking
- Main Entrance, day to day deliveries (parcels/catering)

12.0

Other Aspects

12 Other Aspects

12.1 Sustainability - Building fabric

12.1.1 Constraints on specification.
The constraints on the project from HS2 and client fire requirements have had a impact on the materials that can be used. Noise is a significant problem that has removed the potential on the CSC for much lighter weight building frames and fabric without using more complex 'layering' that results in a more costly design overall. The requirements for the facade to meet the highest fire standards has also reduced the available material palette to very few choices.

Although the building is a 'Meanwhile' use for the site, it needs to meet appropriate standards that can provide a successful education facility and office Workspace.

12.1.2 Early ideas on modularisation
During the design development stages and conscious about the 'meanwhile' use, we explored the use of modular construction for the CSC in the form of shipping containers. The theory behind this was to build multi-container modules for classrooms, offices and ancillary functions such as WC's, stairs and lifts. These could be used in the future for other education projects needing a short term solution to an immediate need.

Investigating this further, it became apparent that once the sides are removed from containers - in order to provide wide enough classroom spaces - the amount of structural integrity lost from the container 'box' had to be put back again in additional steel work. This wasn't a sensible cost or material use. Other forms of modular construction could work but the level of repetition in the scheme wasn't significant enough to make it viable nor particularly usable in the future.

The challenges around the acoustic constraints and lack of thermal mass, floor loadings required for part of the first floor (workshops) meant that the building would need have to use a mixture of approaches leading to likely higher waste and inefficiencies as well as cost.

We therefore moved to a more traditional component based approach of a framed building but have looked to simplify build ups and material palette and use modular elements as much as possible to remove wastage and make it easier to deconstruct.

Container approach

12.1.3 Simple fixings
With the metal and concrete block cladding, we have looked at systems and approaches that mechanically fit together rather than glued or bonded. The aim is to minimise site wastage and maximise the opportunity to reuse or recycling material as easily as possible when the building is decommissioned or relocated to another site. These are;

- The metal cladding and fixing rails can be unscrewed and lifted off. Mineral wool insulation is simply compressed behind and can be removed
- Blockwork walls can be crushed down to produce hard core or aggregates. Re-using blocks is generally difficult and not cost or time affective due to cracks and knocks. Full height concrete panels (A) made to the exact size required, cut down on wasted cut/broken blocks and mortar application.
- Steel frame can be unbolted and disassembled (B).
- Floors need to have concrete/screed toppings for robustness, weight distribution and acoustics. These are not easy to remove but with a layer of insulation below, once its starts to be broken up, it can be removed and separated and reused as aggregate. Insulation is unlikely to be reusable
- Precast planks (D) can are concreted in at the ends. This makes them difficult but not impossible to reuse but are much easier to separate than a composite steel-liner with concrete floor.

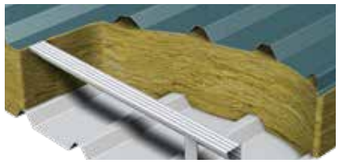
12.1.4 Building relocation.
Although large sections of the building could be used to re-create the building on another site in the future, there is always a limit on how much is reusable in its original form versus recycled as crushed aggregate etc.

The period it takes for a building to be decommissioned, moved and rebuilt also takes time and would need the occupants to move out to another facility before moving back months or years later.

(A) Metal cladding

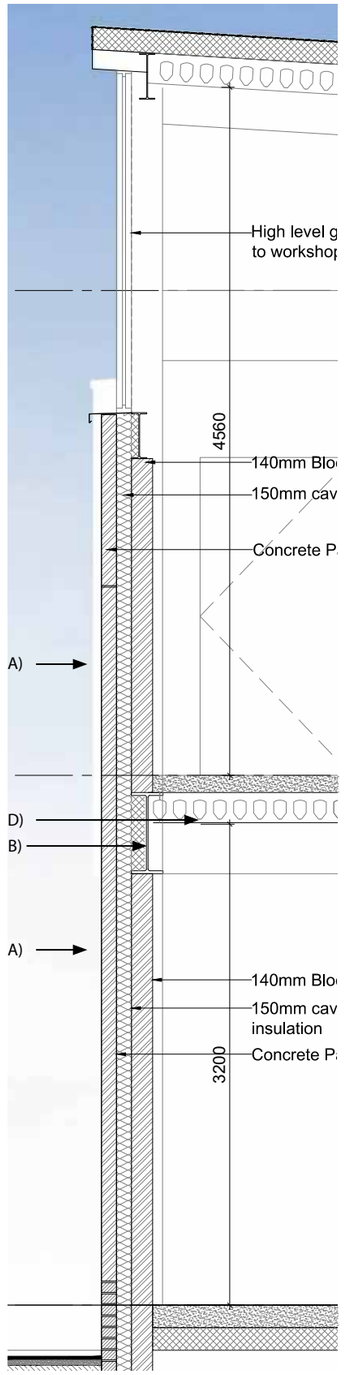
(B) Blockwork

(D) Wall panels

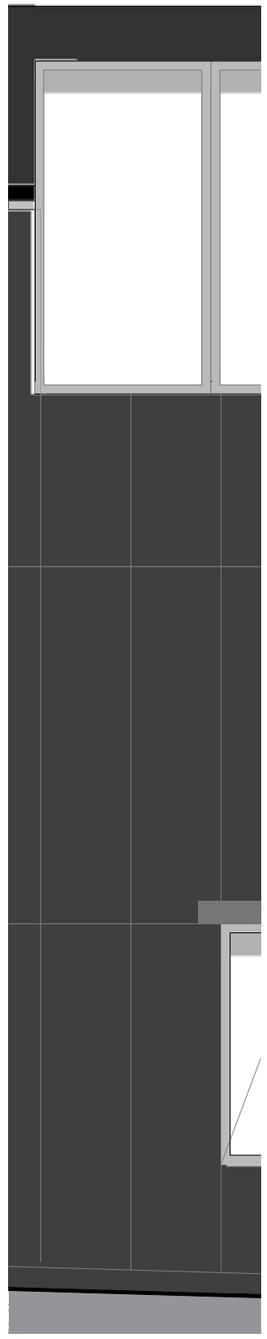


(E) Cladding components

(F) Precast floors on steel frames



Typical CSC wall section



CSC - part elevation

12.2 BREEAM

12.2.1 Introduction
In the best interest of delivering a robust, and high quality scheme, considering all sustainability issues, the clients and design team have examined the BREEAM 2018 criteria. As the scope of BREEAM 2018 has changed considerably, there has been an extensive design investigation at an earlier level such as energy and material studies which make a significant impact on costs and overall building strategy.

The scheme seeks to achieve as many of the BREEAM criteria as feasible within the budgetary constraints of the project, with many of those credits being embedded within the design philosophy. Thus, the design team have been focusing on delivering a sustainable building outcome through simple, uncomplicated engineering and design.

A BREEAM Accredited Professional has been appointed to support the project team to deliver the sustainability goals and meet BREEAM targets for the scheme. This has benefited the project in facilitating the design teams efforts to successfully schedule activities, set priorities and negotiate the trade-offs required to achieve a high target BREEAM rating.

12.2.2 CSC
Due to the temporary nature of the scheme, the CSC seeks to secure a 'Very Good' (55%) BREEAM rating with an aspiration for 'Excellent' (70%+). All site and landscape works are also being provided within the scope of the CSC assessment

From the initial consultation and target setting, the project is already achieving a 'Very Good' BREEAM Rating. This target embeds many of the key sustainability principles of BREEAM, as well as pushing the team to target quite onerous requirements in many areas. The target of 'Very Good' frees the design team from undertaking protracted and often costly work, when this is not wholly in benefit of the projects ten year life cycle, which could also complicate the design of what is in essence a very simple building.

12.2.3 Workspace Refurbishment
The main Workspace is also in line to secure a Very Good rating assessment along with the CSC. The Workspace aims to promote a sustainable refurbishment, in order to mitigate the life cycle impacts of the existing building on the environment in a robust and cost effective manner.

A full BREEAM report accompanies the application submission.

12.3 Air Quality

12.3.1 Introduction
The development falls within the London Borough of Camden, which suffers from elevated levels of air pollution, primarily due to high levels of traffic. An air quality assessment for the proposed development has been carried out by Aether.

The findings show that the installation of NOx / NO2 filters is required as the air quality objectives are predicted to be exceeded. In addition, other measures such as providing secure and covered cycle storage, car share schemes, and installing electric charging point(s), have been considered to reduce the emissions arising from the development. In addition, the developer is encouraged to refer to the IAQM's 'Guidance on the assessment of dust from demolition and construction' in order to minimise the impact of the construction/demolition phase on local air quality.

12.4 Acoustics

12.4.1 Introduction
It is likely that over the next circa 10 years, noise across the site will be dominated by the neighbouring HS2 construction activity. An acoustic assessment for the proposed development has been carried out by Spectrum Acoustic consultants and forms part of the submission documents.

As the scheme comprises of two parts; conversion of the main school building to Workspace and the new CSC building, a full mechanical ventilation approach to both buildings has been proposed as a natural ventilation approach would result relatively regularly in noise levels exceeding guidelines.

12.4.2 Workspace
Key acoustic elements for the refurbishment of the Workspace building will include the following:

- Noise from the mechanical plant on the roof will be controlled through the use of an acoustic enclosure to meet the relevant standards.

- Double glazing to all windows to improve acoustic performance.

A full Acoustic assessment report accompanies the application submission.

12.4.3 CSC
The appropriate acoustic performance standards set out in BB93: Acoustic Design of Schools – Performance Standards, EFA, have been followed for the design of the CSC building. Along with the wider design team including Structures and M&E, the building has been designed to meet the appropriate acoustic performance standards and testing requirements for the acoustic principles of:

- Sound insulation: Acoustic consideration has been given to the acoustic design of walls, floors and ceiling elements by using insulating construction materials such as blockwork for the walls and concrete for the floors and ceilings to achieve appropriate sound insulation.

- Indoor ambient noise level: Considering the acoustic constraints of the site, the building will operate an entirely mechanically ventilated system.

- Room acoustics: The control of reverberation, sound absorption, and speech transmission in teaching and meeting rooms through the use of sound absorption panelling in walls and ceilings.

12.5 User Accessibility

12.5.1 Approach to the Building
A holistic approach to accessible design has ensured that all aspects of the building, including the site curtilage, thresholds, external areas, lighting and internal circulation have been considered from the outset. The design proposals will comply with Part M of the Building Regulations and BS 8300:2009. Both public and staff entrances and approaches to both the Workspace and CSC buildings comply with the following:

- Approaches are step-free, level and clear of obstruction;
- Approach routes have a minimum clear width of 1200mm;
- All public areas at ground floor level will be accessible via min 1500mm wide corridors, with clear vision panels to all cross corridor doors and lift lobbies (in compliance with Approved Document M).
- There is a level 1500x1500mm landing outside the entrance;
- A clear turning circle, 1500mm in diameter is provided inside the entrance area;
- The reception areas will be designed to accommodate a wheelchair check in facility within the main desk.
- Accessible toilet provision is provided at each floor level.
- All lifts are designed to be accessible for wheelchair users with braille.

12.6 Fire Strategy

In the existing school building escape distances will meet the necessary building regulation requirements and the building benefits from three staircases - all of which provide direct-to-outside exits. .

The CSC building will be purpose built for its use and includes two protected staircases with direct to outside escape to the side and rear of the building. There is a protected corridor serving rooms upstairs whilst the classroom off the central open atrium space has two different means of escape.

The facade materials proposed are non-combustible.

Fire tender access to all buildings has been considered with access routes integrated into the landscape through gates that are 3.1m minimum wide. In the event of a fire, emergency vehicles will be able to stop within 18m of a dry riser inlet. See the transport statement for further details including tracking.

12.7 SUDs

A sustainable urban drainage system has been designed to reduce the potential impact of the new and existing developments with respect to surface water drainage discharges.

The landscape design has been considered in conjunction with a full SUDS design. A drainage statement forms part of the submission documents along with a landscape proposal that includes permeable landscape.

Marked up site plan following DCO meeting.

12.8 Security

Security and safety are a key consideration in designing a successful building, landscape and community.

FBM met with the Designing out Crime Officer (DOCO), Jim Cope, of the Metropolitan Police at an early stage in the design process with the aim to achieve Secured By Design (SBD) accreditation for the scheme. Sited in an area in which anti-social behaviour has been a considerable issue, the following strategies seek to prevent crime through its design:

- Defined spaces through landscape design
- Take advantage of the potential for natural surveillance
- Encourage a sense of community, by creating spaces and positive features which attract the right sort of activity.
- Visually permeable fencing
- Fenced/gated areas of the park closed after dark
- Adequate lighting, greater visibility creates a sense of security, the use of directed light will ensure walkways and entrances are illuminated but light leakage minimal.

The DCO recommended a number of key principles to implement which included the following,

- Cycle storage – to the front of the buildings.
- Planting or railings to 'push people away from walls' to make it more difficult to tag/graffiti.
- Provide arm rests mid-bench to stop people laying down on them.
- Trees – ensure high canopy height, more than 2m of trunk visible.
- Don't use bollard lighting in public spaces.
- Lighting to be high level to ensure faces and upper bodies are visible on CCTV cameras.
- Secondary exit/access for CSC out of hours needs careful controls and management but understood reasons for route.
- Avoid hidden recessed fencing/walls.
- 1800mm high fencing throughout. Accepts the use of vertical railings given the nature of the park and setting.
- Consider low level treatment behind the railings to make it more difficult to conceal items in the ground, within planting or walls.

12.9 Open Space Management

The open space will be managed in line with the applicants other parks sites across the Borough. It is open during daylight hours. The space is intended to be a temporary public open space and as such we have sought to encourage use during the day for a range of activities. As the site is likely to be quite busy from users of the buildings and has good passive surveillance during the day, this will go some way to minimise Anti Social Behavour (ASB) issues.

There are two street lights along Starcross St which will provide lighting along the perimeter – a specific concern of residents. Lighting along the CSC out of hours path and from the CSC itself, along with the Workspace building during operating hourse will also contribute to a certain amount of lighting to the space without 'floodlighting' the space out of hours and causing a light nuisance for local residents.

In terms of security we feel that the boundary measures are reasonable in the circumstances and a balance of being secure versus 'prison' like. The railings to the space are reclaimed from St James Garden which have a 200mm high finial to their top, making it more difficult to climb. The advice from the DOCO as listed previously is there to help mitigate ASB.

12.10 Cycle Storage

Adequate cycle parking has been provided to comply with the current London Plan, with all cycle parking consistent with the London Cycling Design Standard;

- 33 cycle spaces for the Workspace Building (Use Class B1).
- 28 cycle spaces for the CSC (Use class D1).

Supporting facilities such as lockers, showers and changing rooms have also been accommodated for in both buildings.

This will be included in the Transport Statement that accompanies the application submission.

12.11 Parking Strategy

It is proposed that there will be no parking on site. We have reviewed the transport infrastructure in the area, access and routes to public transport and use of on-street parking to ensure that the needs of those with mobility issues are taken into account.

This will be included in the Transport Statement that accompanies the application submission.


CSC EUSTON

13.0

Appendices

Planning Drawings

13 Appendix

TOTAL Site Area	6231 m2	0.62 Hec.	Developable Area	6231	0.62	Hec.
Made up by (m2)	/	0	/	0	/	0 /

1) EXISTING AREAS	FLOOR	Ground		First		Second			TOTALS	
	AREA	NIA	GIA	NIA	GIA	NIA	GIA		GIA	
Main School Building	m2		**906.0**		**898.0**		**812.0**		**2616.0**	m2
	ft 2		**9752.1**		**9666.0**		**8740.3**		**28158.4**	ft 2
Gym	m2		**397.0**		**0.0**		**0.0**		**397.0**	m2
	ft 2		**4273.3**		**0.0**		**0.0**		**4273.3**	ft 2
Single Storey block	m2		**297.0**		**0.0**		**0.0**		**297.0**	m2
(facing Starcross Street)	ft 2		**3196.9**		**0.0**		**0.0**		**3196.9**	ft 2
Single storey building	m2		**41.0**		**0.0**		**0.0**		**41.0**	m2
(facing North Gower Street)	ft 2		**441.3**		**0.0**		**0.0**		**441.3**	ft 2
Two storey teaching building	m2		**181.0**		**181.0**		**0.0**		**362.0**	m2
(North west corner of the site)	ft 2		**1948.3**		**1948.3**		**0.0**		**3896.5**	ft 2
TOTAL - All Buildings	m2	**0.0**	**1822.0**	**0.0**	**1079.0**	**0.0**	**812.0**		**3713.0**	**m2**
	ft 2	**0.0**	**19611.8**	**0.0**	**11614.2**	**0.0**	**8740.3**		**39966.4**	**ft 2**

2) PROPOSED	FLOOR	Ground		First		Second			TOTALS	
	AREA	NIA	GIA	NIA	GIA	NIA	GIA		GIA	
Main School Building - Workspace	m2		**920.0**		**902.2**		**816.0**		**2638.2**	m2
	ft 2		**9902.8**		**9711.2**		**8783.3**		**28397.3**	ft 2
Multi-use hall	m2		**397.0**		**0.0**		**0.0**		**397.0**	m2
	ft 2		**4273.3**		**0.0**		**0.0**		**4273.3**	ft 2
Sub-total of Workspace and Multi-use hall									**3035.2**	m2
									32670.6	ft 2
Construction Skills Centre (CSC)	m2		**697.0**		**660.0**		**0.0**		**1357.0**	m2
	ft 2		**7502.4**		**7104.2**		**0.0**		**14606.6**	ft 2
TOTAL - Workspace + Hall + CSC	m2	**0.0**	**2014.0**	**0.0**	**1562.2**	**0.0**	**816.0**		**4392.2**	**m2**
	ft 2	**0.0**	**21678.5**	**0.0**	**16815.4**	**0.0**	**8783.3**		**47277.2**	**ft 2**

3 CAR PARKING	No.	
Parking	0	
Commercial Parking	0	

4) CYCLE STORAGE	Use	Occupany		Standard		Required	
		Staff	**Students**	**Long Stay**	**Short**		
Workspace Building	B1	240		1 per 90m2	1 per 500m2	28+5	33
Multi-use hall	B1/D2	0		1 per 8 staff	1 per 100m2	3	3
CSC	D1	35		1 per 4 staff		8.75	
			100	1 per 20 FTE students	1 per 7 FTE students	5+14	28

FBMArchitects