



CRIME IMPACT STATEMENT

Redby Street, Openshaw, Manchester

School & Nursery (3,220sq m)

FOR: Create IT Studio Architects

VERSION A: 10th June 2022

REFERENCE: 2022/0251/CIS/01

Greater Manchester Police

design**for**security

Redby Street

2022/0251/CIS/01

EXECUTIVE SUMMARY

Recommendations made

This development has been assessed against the principles of 'Crime Prevention Through Environmental Design' (CPTED - <http://designforsecurity.org/about/crime-prevention-through-environmental-design/>), to reduce the opportunities for crime and the fear of crime. The following areas have been identified as a concern and should be addressed (see section 3.3 for more details).

- Defensible space to the Whitworth Street elevation.
- Site boundaries, access control and physical security of the buildings should be carefully considered.

Additionally, there are a number of recommendations made in section 3.3 of this report which would enhance the security of the development, and it is highly recommended that these are considered. It is also recommended that the development is built to Secured by Design standards.



Patrick Babb

Consultant

e: patrick.babb@designforsecurity.org

Contents

1	Visual Audit.....	4
2	Crime Statistics & Analysis.....	5
	2.1 Crime Summary	
	2.2 Common Use-Specific M.O.s (Modus Operandi)	
	2.3 Risk Factors	
	2.4 Non-Domestic Burglary Educational Facility: Risk Analysis	
	2.5 Theft Educational Facility: Risk Analysis	
	2.6 Vehicle Crime: Risk Analysis	
3	Layout Appraisal.....	8
	3.1 Proposed development	
	3.2 Positive Aspects of the Proposal	
	3.3 Changes Needed and Recommendations	
4	Physical Security	9
	4.1 Doors	
	4.2 Windows and Shutters	
	4.3 Glazing & Building Fabric	
	4.4 Alarms	
	4.5 Access Control	
	4.6 Boundary treatments	
	4.7 Landscaping	
	4.8 Lighting	
	4.9 CCTV	
	4.10 Car Parking/Drop off	
	4.11 Other	
5	Management & Maintenance	11
6	Construction	12
7	Useful References.....	12
	7.1 Secured by Design (SBD)	

Appendix

A	Contact register	13
B	Associated Documents.....	13
C	CIS Version History	13

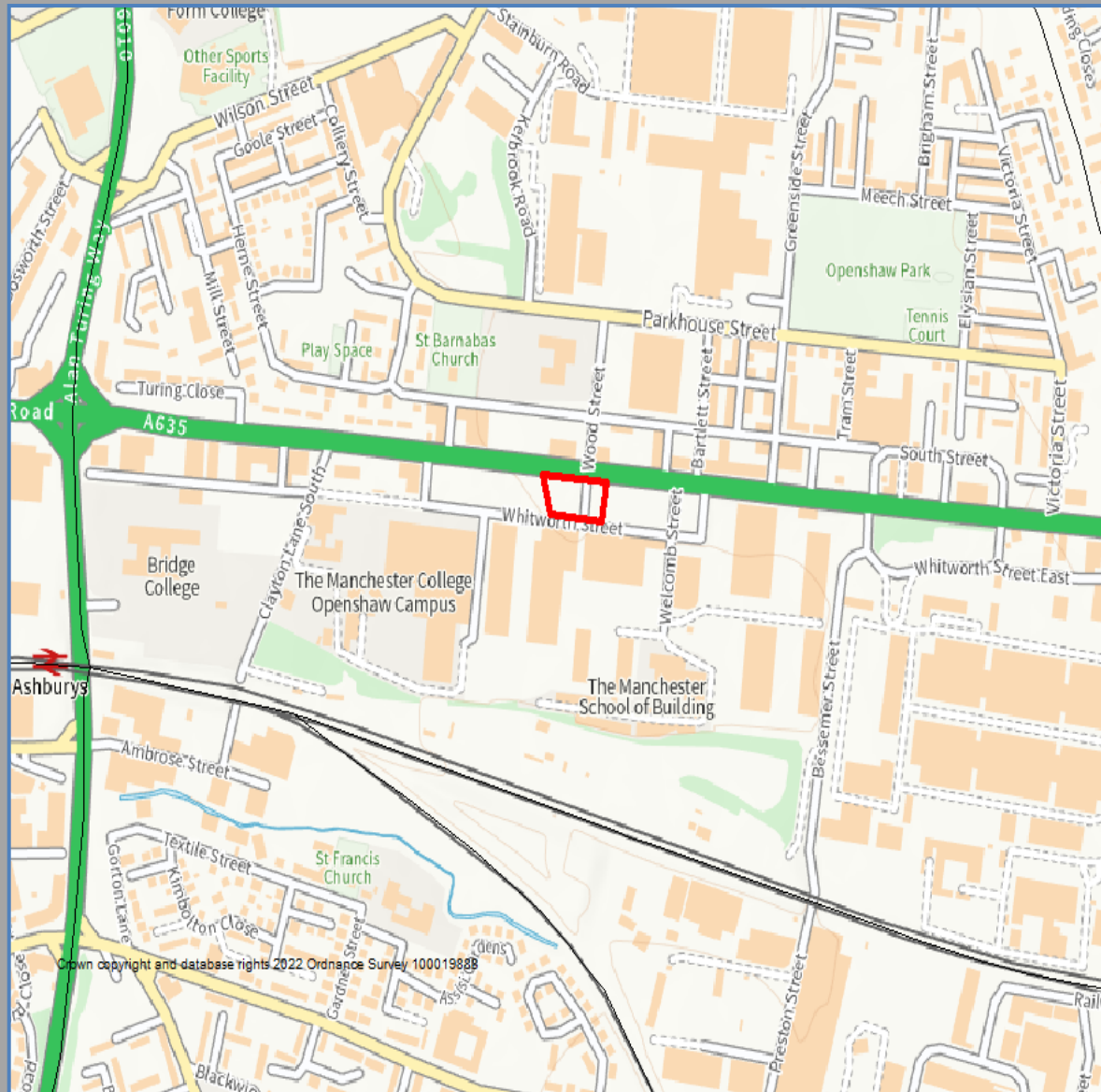
1 Visual Audit

The proposed development site can be seen on the adjacent map edged in red. The site is located in the Openshaw area of Manchester.

The development site is roughly rectangular, and it is bound to the North by Ashton Old Road, to the East and West by vacant land, and to the South by Whitworth Street.

The site is dissected by Redby Street which is now disused as a public highway. The site is presently undeveloped and seeded either side of the disused road. There is an advertising billboard to the East of the site.

The local area is predominant commercial/industrial in nature but there are a number of education uses nearby including The Manchester College Openshaw Campus, Bridge College and The Manchester School of Building, all to the South of the site.



2 Crime Statistics & Analysis

All data below is based on crimes recorded between 1st May 2021 and 30th April 2022.

2.1 Crime Summary

Figure 1: Recorded Crime within 500m of Site

Domestic Burglary	Non-Domestic Burglary	Criminal Damage	Less Serious Wounding	Theft	Robbery	Serious Wounding	Theft from Motor Vehicle	Theft of Motor Vehicle	Bicycle Theft
12	7	35	115	25	7	<5	21	10	<5

- 2.1.1 The overall crime rate in the local area is low for Manchester, with less serious woundings, criminal damage and vehicle crime being the highest recorded offences. The majority of offences have taken place to the north of the proposed site where a residential area is located.
- 2.1.2 Less serious woundings have taken place throughout the local area, with a hotspot of offences taking place to the north of the proposed site, around Parkhouse Street, Colliery Street and the surrounding roads. Assaults, harassment and public order offences have been the highest recorded less serious woundings taking place, with offences often involving incidents between known associates and domestic incidents.
- 2.1.3 Criminal damage offences have taken place throughout the residential estates located to the north of the proposed site, particularly around Mill Street and Parkhouse Street. Offenders have targeted glazing in windows and doors of dwellings and vehicles. Offenders have also used bodily pressure in order to damage the body work of vehicles, causing a dent/scratch.
- 2.1.4 Theft from a motor vehicle and criminal damage to a vehicle has been the highest recorded vehicle crime in the local area. Offenders have targeted glazing, smashing windows with implements in order to gain access and remove items, or cause damage. Offenders have also targeted work vans which have been left insecure, removing tools from within. Wheel clamps have also been stolen from vehicles.

2.2 Common Use-Specific M.O.s (Modus Operandi)

- 2.2.1 Use of tools/implements to smash glazing in windows to force entry.

Possible Solution – Ground floor windows should be certified to the relevant burglary resistant standard (i.e. BS PAS 24) and be restricted in opening to 100mm. All glazing in ground floor doors and windows should contain a pane of laminate glazing to prevent it from being easily smashed.

- 2.2.2 Doors were forced open by targeting locks or glazing smashed in door windows.

Possible Solution - External doors should be certified to an appropriate burglary resistant standard (see section 4.1 for more details). A secure boundary should prevent offenders from gaining access to external doors, particularly those that are not overlooked and subject to natural surveillance from adjacent streets. Glazing should be laminated so that it cannot be easily smashed. Laminated glazing does not smash or shatter which could afford entry to offenders.

- 2.2.3 Mobile phones, wallets and bags were targeted for theft from pupils/staff and visitors when left insecure.

Possible Solution – Staff and pupils should be able to secure personal property, i.e. in lockers. Class and staff rooms should be capable of being secured when not in use.

- 2.2.4 Forced open secure shutters using bodily force and implements.

Possible Solution – Any shutters should be certified to a relevant security standard i.e. LPS 1175 SR2.

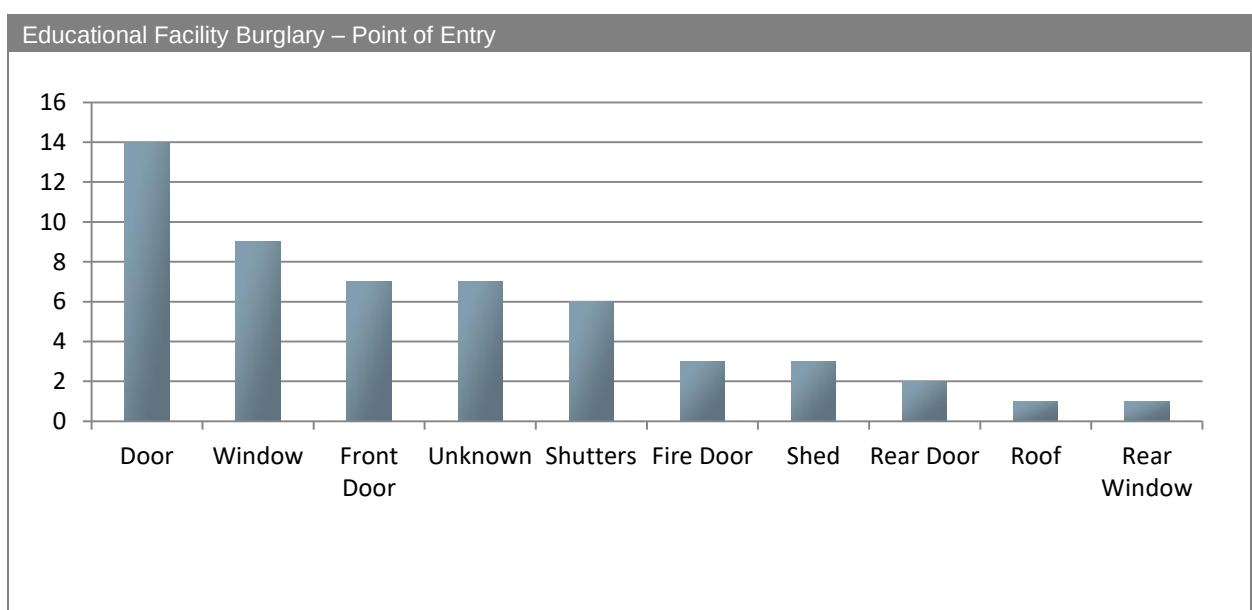
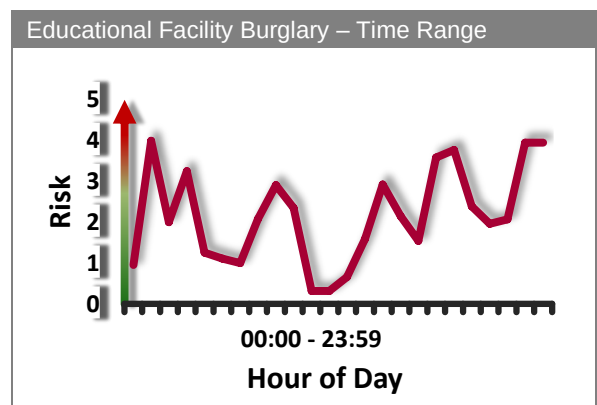
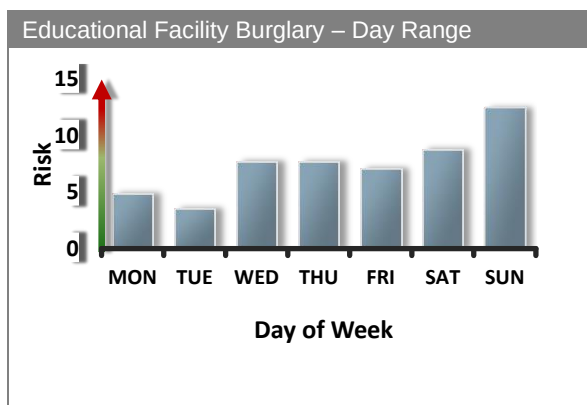
2.3 Risk Factors

The typical security risks for a development of this nature are:

- Burglary
- Criminal damage to property
- Unauthorised access to buildings and private spaces
- Antisocial behaviour
- Loitering groups
- Internal theft
- Theft of staff / pupil belongings
- Staff, pupil and parent safety
- Acts of criminal damage during the construction period

2.4 Non-Domestic Burglary Educational Facility: Risk Analysis

The data below relates to non-domestic burglary offences within / against educational facilities, recorded in the Manchester area during 2018 - 2019.



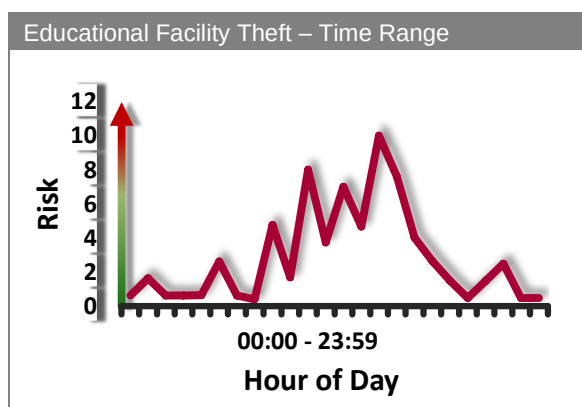
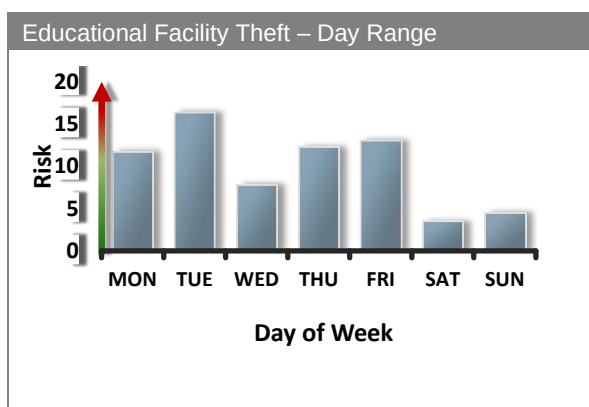
2.4.1 **Day / Time Range:** The risk of burglary at education facilities in the local area peaks on a Thursday, Friday and a Sunday. The risk is relatively high throughout the day, peaking in the late evening and early hours of the morning (9pm – 5am). Offenders target educational facilities during the evening when it is dark, streets are quieter as the risk of being caught / identified lessens.

2.4.2 **Point of Entry:** In the local area the following entry points and MO's have been utilised most frequently:

- Opening secure doors using bodily pressure and implements to gain access to the premises.
- Exploitation of insecure doors and windows to gain entry to the property.
- Climbing perimeter fencing to gain access to the grounds and approaching secure sheds use implements and bodily pressure to gain access.
- Climb onto roofing and remove tiles to gain entry to the premises.
- Force open shutters using bodily pressure and implements to gain access.
- Smashed glazing in windows and doors to gain entry to the property.
- In cases where the point of entry is unknown, offenders have often posed as legitimate students/visitors and entered restricted areas by means of insecure doors.

2.5 Theft Educational Facility: Risk Analysis

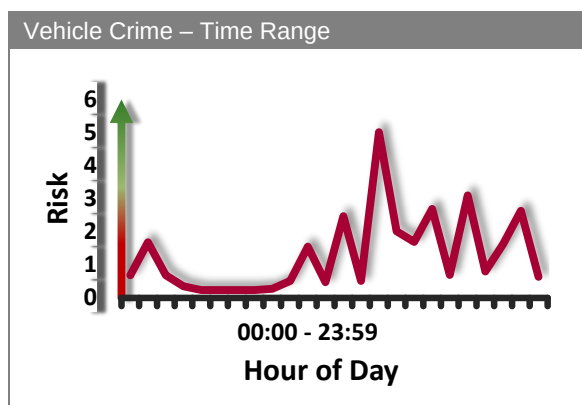
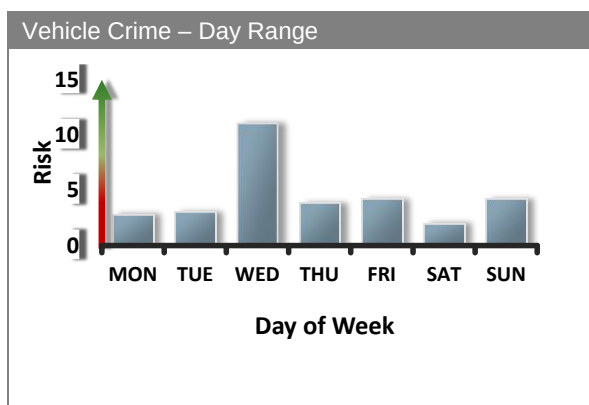
The data below relates to thefts within / against educational facilities, recorded in the Manchester area during 2018-2019.



2.5.1 **Day / Time Range:** The risk of theft at educational facilities peaks on a Tuesday during the morning and into the afternoon (8am – 4pm.) The thefts carried out involve thefts of personal items, mostly mobile phones and bags, as well as equipment owned by the facility, mostly laptops and computing equipment.

2.6 Vehicle Crime: Risk Analysis

The data below relates to vehicle crime committed within 500m of the site.



-
- 2.6.1 **Day/Time Range:** The risk of vehicle crime in the local area peaks on a Wednesday during the afternoon and into the late evening. Offenders often target vehicles during this time as they are likely to be left unattended for longer periods of time, out of sight of the owner, reducing the possibility of being caught.

3 Layout Appraisal

3.1 Proposed development

- 3.1.1 The proposed development is of a new build primary school and nursery.

3.2 Positive Aspects of the Proposal

The following proposed features would make a positive contribution to the prevention of crime and fear of crime.

- 3.2.1 The footprint/design of the extensions have been kept simple, with no deep recesses within the building line, where partially hidden windows/doors could be vulnerable to attack unseen.
- 3.2.2 There is evidence of fly-tipping and littering, which is typical of vacant sites. The redevelopment of the site will reduce the potential for this activity which will be beneficial for the area and local businesses.
- 3.2.3 The proposed building has no single storey elements and no features that would make the building easily climbable.
- 3.2.4 Ashton Old Road is a busy road used by pedestrians and those in cars, providing passive surveillance opportunities.
- 3.2.5 The building will provide active frontages to both Ashton Old Road and Whitworth Street.
- 3.2.6 There is a car parking area which will allow staff to park on site rather than in the surrounding streets. The car parking areas can be viewed from the school building. The car park is accessed from Whitworth Street and won't cause congestion on Ashton Old Road.
- 3.2.7 There is ample on street parking available for parents dropping off and collecting children. The area is not residential and won't cause conflict between local residents and parents.
- 3.2.8 The main entrances to the school can be seen from Ashton Old Road and they can be viewed from the public highway - allowing for natural surveillance opportunities.
- 3.2.9 The proposed nursery has a dedicated entrance on the front elevation with a separate play area, with a gate off the public footway for dedicated access for parents.
- 3.2.10 There is a second doorway between the nursery entrance and classrooms within the building, preventing visitors/parents/guardians from accessing the main areas of the nursery without being permitted access.

3.3 Changes Needed and Recommendations

The following points have been identified for further consideration and would need to be addressed for Design for Security to support the proposed scheme.

- 3.3.1 Defensible space, in the form of a low boundary, or shrubbery, should be provided to protect the Whitworth Street elevation of the building. This elevation of the building should be illuminated to a high standard to deter antisocial and criminal behaviour. Any ground floor windows should be restricted in opening to 100mm so that they cannot be left insecure.
- 3.3.2 The site boundary should be defined with a minimum 2400mm high paladin fence to reduce the potential for offenders to scale the fence to gain entry. The fence panel should be close knit (i.e. 358 style) and there should be installed flush with the ground, positioned on a hard standing.
- 3.3.3 The reception should be staffed at all times when the building is operational. The external entrance doors (of the school and nursery) should be capable of being secured and controlled remotely by reception staff if required (e.g. if the building is open late or the reception is unstaffed), to prevent unauthorised access or nuisance/antisocial behaviour in/around the entrance lobby.
- 3.3.4 Outside of main arriving/departing times for pupils and staff, unauthorised access into the school grounds should be prevented (i.e. access to the staff car parking area and beyond).

-
- 3.3.5 The proposed car parking area and pedestrian routes within the site should be illuminated to BS 5489. All bays/directional markings should be clearly demarcated, with pedestrian routes/directions clearly signed.
 - 3.3.6 All car parking areas and the pupil drop off zone should be clearly sign posted to avoid any confusion or conflict between users. Directional arrows and bays should be clearly demarcated to assist vehicular floor. Any designated pedestrian crossings should be clearly signed and marked.
 - 3.3.7 If the school is to be used for out of hour events, community use, or private use of the sports facilities then the building should capable being zoned, so that people are guided appropriately to where they need to go and prevented from accessing other areas. There should be a robust access control system in place to prevent unauthorised access and the alarm system should be zoned so that during any out-of-hour/community use the unused areas of the school building can still be secured and alarmed.
 - 3.3.8 Bicycle stands should be Sheffield style or similar, allowing both wheels and the frame of the bicycle to be secured. Any bicycle stands should be robust and weatherproof to encourage use. The cycle stand at the front of the school building should be capable of being overlooked from the school building.
 - 3.3.9 The design of any vehicular/pedestrian gates should not feature any climbing aids such as horizontal bars or exposed hinges. The distance between the gate and the road should be minimal to prevent an offender crawling under.
 - 3.3.10 Staff should be provided with a secure area to store personal belongings (i.e. lockers) within a secure area of the school building which is restricted to staff, such as the staff room.
 - 3.3.11 All elevations of the school buildings, and particularly doorways, should be illuminated with dusk-til-dawn lighting.
 - 3.3.12 A monitored alarm system should be installed to cover the entire building, linked to contacts on all external doors and PIR detectors covering all ground floor areas with windows.
 - 3.3.13 The school building should be covered with a comprehensive CCTV system.

4 Physical Security

The following checklist forms the physical security requirements for this scheme to achieve Secured by Design accreditation.

4.1 Doors

- ☐ External doors must be compliant with and certified to BS PAS 24, STS02, or LPS 1175 SR2.
- ☐ External escape-only doors (as with external doors in general) should be certified to BS PAS 24, or LPS 1175 SR2. It is crucial that the door ironmongery is permitted for use on these doors under the security certification of the product.

4.2 Windows and Shutters

- ☐ Windows must be compliant with and certified to BS PAS 24 or BS 7950.
- ☐ Ground floor and easily accessible opening lights (escape requirements permitting) must be key-lockable and have fixed/lockable opening restrictors (not releasable from the outside) limited to 100mm.
- ☐ Shutters must be tested and certified to LPS 1175 SR2 (or SR1 if perforated laths are required) and installed in accordance with manufacturer's instructions.

4.3 Glazing & Building Fabric

- ☐ Glazing to a height of 2400mm (or if otherwise accessible) must incorporate at least one pane of glass with a 1.5mm PVB interlayer (e.g. 7.5mm laminated glass), or a glass rated as P4A under EN 356. The remaining pane in a double-glazed unit may be toughened glass.
- ☐ Any curtain walling panels should include laminated glazing and should be securely fixed directly to the floor slabs where possible, rather than to perimeter columns.

4.4 Alarms

- ☐ A monitored alarm system should be installed to cover the entire building, linked to contacts on all external doors and PIR detectors covering all ground floor areas with windows, with a signal terminating at a recognized Alarm Receiving Centre (ARC) or security control room.

4.5 Access Control

- ☐ Access control systems should be operable by swipe card or fob, and not numeric keypads. The following areas/doors should operate on access control:
 - The internal doors taken off the main entrance lobby
 - Doors needed to provide internal zoning and restrict access to parts of the building not in use (e.g. during evenings/weekends or community use)
 - Doors to staff only areas
 - Rooms containing IT equipment
 - Server room
- ☐ All internal doors/frames to classrooms, offices and stores should be solid core (minimum 44mm thick), with 3 hinges and a deadlock, so that the rooms can be secured when unoccupied.

4.6 Boundary treatments

- ☐ The site boundary should be a 2400mm high paladin fence. The fence should have a close-knit weld-mesh system such as a 358 panel to make climbing difficult.
- ☐ Care should be taken to ensure that any new panels are fixed securely to the posts (preventing tampering/removal) and that any level changes do not inadvertently facilitate climbing or leave large gaps underneath the panels/gates. There should be no centrally located horizontal bars to aid climbing and any gates should be located away from other climbing aids, such as low walls, lighting columns, trees etc. Exposed hinges and large sliding bolt apertures/locking points should be avoided or fitted with shrouding/protective plates (see opposite) to avoid the creation of footholds. The gap at the bottom of any gates should be small enough to stop anyone crawling through.
- ☐ The design of any vehicular/pedestrian gates should not feature any climbing aids such as horizontal bars or exposed hinges. The distance between the gate and the road should be minimal to prevent an offender crawling under.
- ☐ Any existing site boundaries to be retained should be inspected for damaged and repaired/replaced where necessary.



4.7 Landscaping

- ☐ In vulnerable locations such as entrances, parking areas and footpaths, low planting should not exceed 1000mm in height, and tree canopies should fall no lower than 2m from the ground. This is in order to allow people to see their surroundings better, make a rational choice of routes and eliminate hiding places. A maintenance agreement should stipulate that these planting dimensions would be adhered to.
- ☐ Loose surface materials in the publicly accessible areas of the scheme should be avoided. Small fragments of ground covering can be used as missiles against people and premises (both to gain entry and to commit criminal damage).
- ☐ Planting must be avoided that will aid climbing over boundary treatments. The security of fences can be compromised if trees or street furniture are placed close by.

4.8 Lighting

- ☐ External lighting must be provided to pedestrian routes and car parking areas in accordance with BS 5489.
- ☐ Fittings should produce 'white' light, as opposed to yellow/orange light. Metal halide (or bulbs with a comparable output) should be used, as these offer superior colour rendition over alternatives such as high- and low-pressure sodium bulbs.
- ☐ Dusk 'til dawn lights, operated by photoelectric cell/daylight sensor, should be installed to all external doors.

4.9 CCTV

- ☐ Any CCTV system that may be used within this proposal will require certain specifications and intelligent placement of cameras to compliment the design of the development. Designers should consider the following points when planning a CCTV strategy:
- ☐ CCTV systems (and lighting that support them) require regular cleaning and maintenance to remain effective.
- ☐ Where necessary cameras that are vulnerable to damage should be protected from attack either by relocation to a higher level and using a bigger lens to achieve the view required or through the fitting of a vandal resistant housing.
- ☐ With regards to the retention of footage, the police prefer quality over quantity. The overall retention period should be dictated by what the system is designed to achieve, though it would be better to have good quality images over a 14-day period than poor ones over a 30-day period.
- ☐ Procedures for recovery of recordings are recommended to be established (e.g. trained staff / the CCTV system instruction manual to be readily available). This is to ensure that the images produced will be of an acceptable standard that will allow for identification of an individual which will stand up to scrutiny in court.
- ☐ **Acceptable Standard** - this generally requires a resolution of 720x576 pixels at a real time frame rate of 25 frames per second. (N.B. Both the camera and DVR must be capable of this – if the camera will only send low resolution images, then it does not matter how high the resolution of the recording unit is).
- ☐ **Identification** – One of three levels of field of view. To identify an individual, the image must capture no less than 120% of the field of view (at least from the top of the individuals head to their knees). The remaining two levels of field of view are 'Overview' and 'Recognition', which whilst effective for observational purposes, are less likely to result in the identification of a person/offender.
- ☐ The intelligent placement of cameras helps to provide clear facial identification of individuals.

4.10 Car Parking/Drop off

- ☐ Bays and directional markings should be clearly demarcated, with pedestrian routes/directions clearly defined and signed. Where feasible, a one-way system should be implemented to reduce the likelihood of collisions and conflict within the parking areas and drop off area.

4.11 Other

- ☐ There must be no features of the building envelope which create sheltered/hiding places or ledges, which could endanger passers-by or encourage loitering.
- ☐ Any rainwater pipes should be square in profile and fixed back to the building fabric to prevent climbing to upper floor windows.

5 Management & Maintenance

- 5.1.1 A comprehensive security regime for the management of the development must be prepared and remain in place for the day-to-day running of the site. There should be regular reviews/exercises to ensure that it remains accurate, workable and up-to-date. All staff and residents should understand and

accept the need for security measures, and it should be made easy for people to raise concerns or report observations.

5.1.2 The upkeep of a development over its lifetime can be crucial to the level of security and safety within. Aspects of a development, which are left to deteriorate, have the potential to attract further crime. A maintenance plan should be drawn up to address issues such as:

- Litter and graffiti removal to ensure that the site remains in good repair.
- Regular inspection, service and repair to security features (lighting, signage, access controls, CCTV, alarms, fencing & gates)
- Trimming and pruning to shrubs and trees to ensure that sight lines are maintained, and coverage of lighting and CCTV is not impaired.
- Ensure that the site management is for which the building / site was designed able to cope with the remains in place, such as 24 hour concierge / security patrols.
- Information regarding security features (such as specifications of windows / doors and systems performance) should be conveyed to the ultimate owners or managers of the site to ensure that any future replacements continue to provide the same level of security and maintain any security accreditation for the development.

5.1.3 All high value equipment (e.g. computers, projectors, flat screen monitors/televisions, tools etc.) should be property marked and securely fixed or stored to deter damage/theft. An accurate record should be maintained which logs all such items.

5.1.4 Adequate signage should be deployed in all areas not only to direct people throughout the building, but also to deter unauthorised access to certain areas.

6 Construction

6.1.1 Untidy sites and their surroundings can be littered with debris accessible to vandals who often use loose materials as missiles to commit crime. The client should take measures appropriate to secure their site during construction, and control pedestrian and vehicular access in to and out of the site curtilage. It is also recommended that the contractor on this scheme is a member of the 'Considerate Constructors Scheme', who has committed to be a considerate and good neighbour, as well as clean, respectful, safe, environmentally conscious, responsible and accountable.

6.1.2 Site security contractors should be SIA (Security Industry Authority) approved to ensure professional standards are adhered to (please see <http://www.sia.homeoffice.gov.uk/pages/acs-intro.aspx> for more details).

7 Useful References

7.1 Secured by Design (SBD)

7.1.1 Secured by Design focuses on crime prevention at the design, layout and construction stages of homes and commercial premises and promotes the use of security standards for a wide range of applications and products. To apply for Secured by Design certification for your development, visit our online application form at: <http://www.designforsecurity.org/secured-by-design/sbd-accreditation/>

A Contact register

Date	Contact With	Summary of Contact
26/05/2022	Saghir Hussain	CIS application received

B Associated Documents

This report is based on the following drawings and supplementary information submitted by the applicant.

Drawing No.	Drawing Title	Date	Rev
A141701AP000	Location Plan	03/05/22	
A141701AP001	Existing Site Plan	03/03/22	
A141702AP001	Proposed Site Plan	22/04/22	
A141702AP002	Proposed Ground Floor Plan	22/04/22	P5
A141702AP003	Proposed First Floor Plan	22/04/22	P5
A141702AP004	Proposed Second Floor Plan	22/04/22	P5
A141702AP005	Proposed Elevations	22/04/22	P5
A141702AP006	Proposed Elevations	22/04/22	P5
A141702AP007	Proposed 3D Views	22/04/22	P5
A141702AP008	Landscape Plan		P1

PLEASE NOTE - In the event of any subsequent material changes to the scheme, it will be necessary for Design for Security to reassess the comments made within this report.

C CIS Version History

Version	Revisions Made	Date
A		