

Greater Manchester Police

designforsecurity

Crime Impact Statement

River Street, Manchester

Car Park

For SP Architects Ltd

Version A: 7th June 2012

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Not Protectively Marked

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Crime Impact Statement

River Street, Manchester

Car Park

2011/0783/CIS/01

For SP Architects Ltd
Version A: 7th June 2012

Executive Summary

☐ **Significant material changes are advised**

☒ **Proposal is satisfactory in principle but minor changes are advised**

☐ **Proposal is generally acceptable subject to the advice in this report**

The current levels of reported crime in the area around the site are high. It is therefore essential that the proposed development does not create opportunities to generate additional crime or increase the fear of crime at the site in order to protect customers, their vehicles and others in the area.

The structure in its current form is not ideal for the purpose proposed, and the scope for alteration of the site is limited and is unlikely to provide a secure car park environment. It is therefore essential that the shortcomings in the layout are compensated by effective site management.

Our support for this scheme is therefore subject to the implementation and maintenance of a comprehensive management plan.



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Contents

1 Visual Audit 4

2 Crime Statistics & Analysis 6

2.1 Crime Count

2.2 Vehicle Crime (Car Park Use Only): Risk Analysis

2.3 Vehicle Crime: Risk Analysis

2.4 Wounding: Risk Analysis

2.5 Criminal Damage and Robbery: Breakdown

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

3 Risk Factors 8

4 Design Considerations 9

4.1 Safer Places (2004) ODPM, London

4.2 Secured by Design (SBD)

5 Design & Layout Appraisal 9

5.1 Positive Aspects of the Proposal

5.2 Changes and Amendments Needed

6 Physical Security 10

6.1 Boundaries

6.2 Landscaping

6.3 Lighting

6.4 CCTV

6.5 Communal Areas

6.6 Other

7 Management & Maintenance 12

8 Construction 12

Appendix

A Contact register 13

B Associated Documents 13

C CIS Version History 13

D Glossary 14

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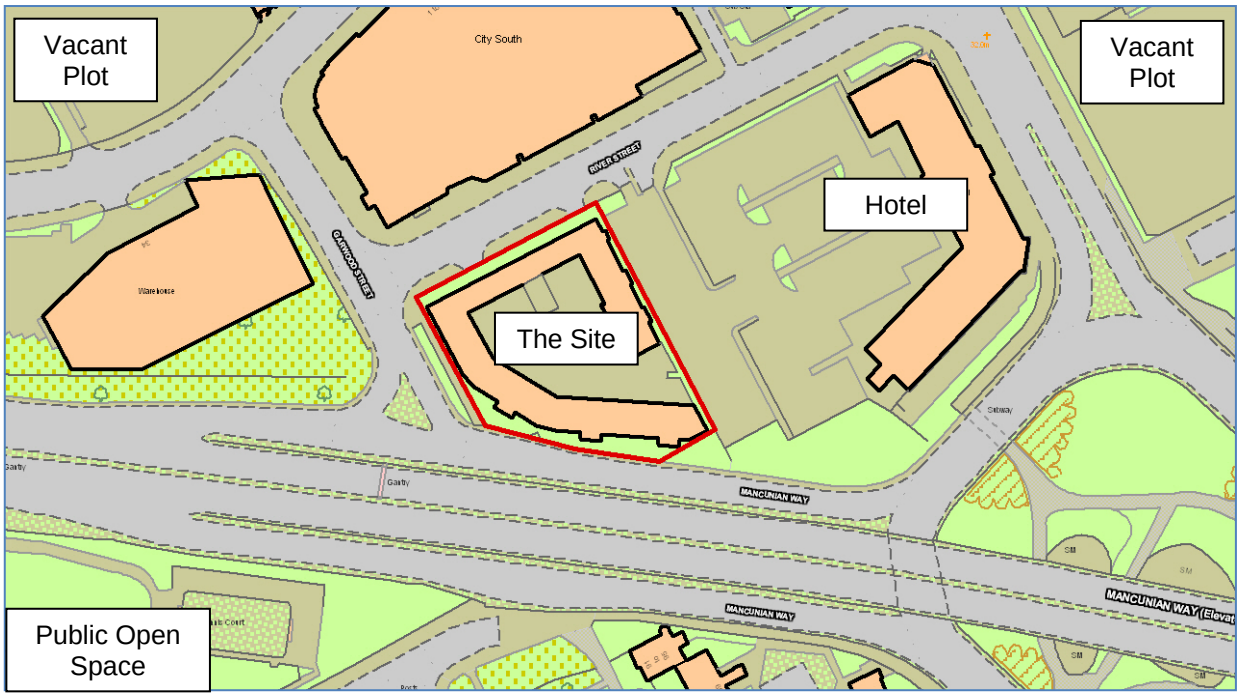
1 Visual Audit

The diagram below highlights relevant local features that could have an impact upon the security of the scheme and/or indicate the presence of crime and antisocial behaviour in the surrounding area.



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- The site is located on the edge of central Manchester, about 1km south of Albert Square.
- The area is in transition, containing established and recently completed residential buildings, student accommodation, hotel, industrial and commercial buildings, and extensive areas of vacant land awaiting redevelopment.
- The A57(M) Mancunian Way adjoins the southern side of the site, and the road forms the boundary with the Hulme district.
- Due to its proximity to the city centre and major road network, the area is popular for commuter car parking, with some of the nearby vacant plots finding an interim use for as car parks.
- The site is currently occupied by a partially completed building, with just the framework structure in situ. The lower 2 stories appear to be laid out to accommodate car parking, intended for users of the completed building. The site perimeter is enclosed with a weld-mesh fencing system and hoardings, which has not been totally effective in excluding intruders. Internal areas of the site have not been maintained for a considerable time, and naturalised vegetation has established around the periphery.

Pictures

1 River Street, looking west with the proposed site visible in the background. On the left of the picture, behind the brick wall/ railings is a car park serving the adjacent hotel.

2 The site viewed from River Street, showing the incomplete structure. The low wall adjacent to the boundary has provided an aid to climbing over the fence, and additional measures have been installed to discourage this.

3 The southern side of the site borders the Mancunian Way. Note the vegetation that has established within and around the site.

4 Garwood Street looking south with the proposed development site visible in the left background. The building nearest to the camera is a residential block that contributes to the vitality of the area and provides useful natural surveillance. The dense canopy of trees on the right of the picture fall within the boundary of a former industrial unit, now used for commuter car parking.

5 The interior of the site, showing the derelict nature of the existing structure. The vehicular ramps giving access to under croft and upper parking levels can be seen in the foreground of the picture.

6 Some parts of the under croft level are not easily visible from outside the site, and intruders have been able to access this area without fear of detection.

7 The two parking levels are also linked by steps. There are also gaps in the concrete wall around the edge of the lower level.

8 The eastern boundary adjoining the hotel car park. Note the vegetation that could provide cover for criminal / antisocial behaviour.

9 Great Jackson Street contains some former industrial premises that have been adapted to provide space for daytime car parking. Streets around here are generally very quiet outside the peak commuter times.

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2 Crime Statistics & Analysis

All data below is based on crimes recorded between 1st April 2011 and 2012.

2.1 Crime Count

Figure 1: Recorded Crime in Km² Centred on Site

Burglary Dwelling	Burglary Other	Criminal Damage	Less Serious Wounding	Misc. Thefts	Robbery	Serious Wounding	Theft from Motor Vehicle	Theft of Motor Vehicle	Theft of Pedal Cycle
42	57	99	191	184	60	<20	105	<20	77

2.1.1 In the last 12 months the volume of crime in the local area has been very high and this reflects the site's location close to the city centre. In particular there have been a high number of robberies, thefts of bicycles and theft from motor vehicles.

2.2 Vehicle Crime (Car Park Use Only): Risk Analysis

The data below relates to vehicle crime within car parks, recorded in the North Manchester area.

Figure 2: Vehicle Crime – Day Range

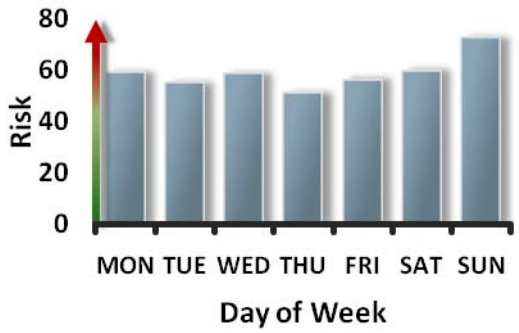
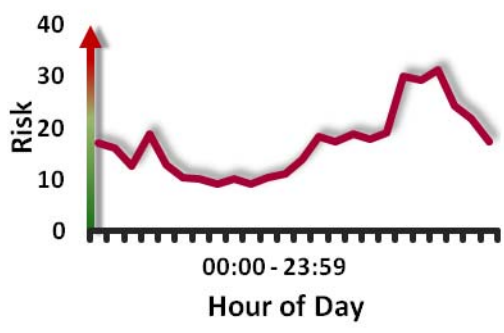


Figure 3: Vehicle Crime – Time Range



2.2.1 Day Range: During the week the risk of vehicle crime does not vary greatly with the highest risk experienced on Sunday, when car parks in the area have no staff presence.

2.2.2 Time Range: In this area the risk of vehicle crime increases in the afternoon and into the evening, where it peaks between 8pm and 9pm. Vehicles are likely to be targeted at these times, when surrounding areas are less busy and it is dark, with offenders perceiving the risk of being caught or identified as low.

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2.3 Vehicle Crime: Risk Analysis

The data below relates to vehicle crime committed within a Km² centred on the site.

Figure 7: Vehicle Crime – Day Range

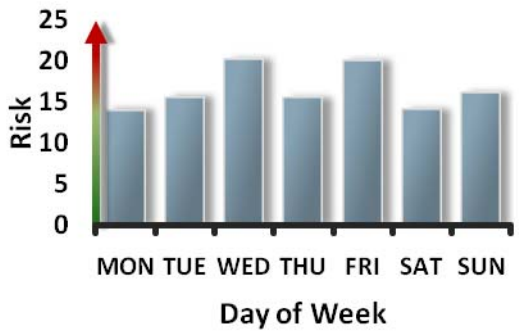
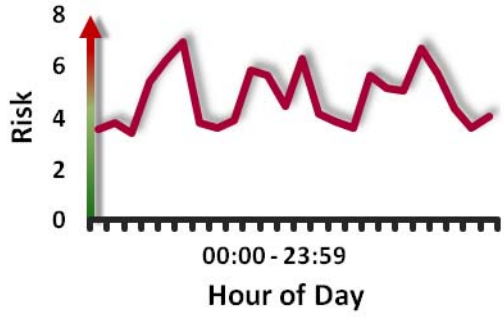


Figure 8: Vehicle Crime – Time Range



2.3.1 Day Range: During the week the risk of vehicle crime in the local area does not vary greatly with the highest levels of risk experienced on Wednesday and Friday. In general the risk of vehicle crime between Monday to Friday and at the weekend is similar.

2.3.2 Time Range: During the day the risk of vehicle crime in the local area is not concentrated at any particular period and there is a slight peak in the early hours of the morning.

2.3.3 Location: In this area the majority of theft from vehicles has occurred in car parks (see 2.2) – with a high proportion occurring in multi-storey car parks. Vehicles are often targeted in multi-storey car parks where offenders can walk in, unchallenged, through pedestrian and vehicle entrances. Offenders often target vehicles on levels that are not busy (typically higher levels or lower basement levels). Theft off vehicles has typically occurred where vehicles have been parked on streets.

2.4 Wounding: Risk Analysis

The data below relates to instances of wounding committed within a Km² centred on the site.

Figure 9: Wounding – Day Range

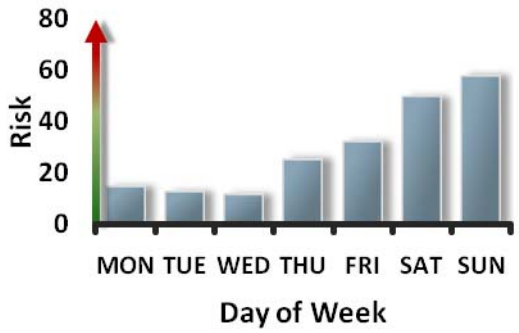
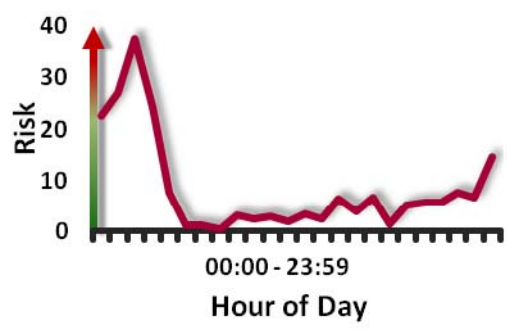


Figure 10: Wounding – Time Range



2.4.1 Day Range: Violent crime peaks at the weekend. Between Friday and Sunday a greater number of people descend on the city centre area, attending licensed premises and often drinking for longer periods of time.

2.4.2 Time Range: The risk of violent crime increases in the late evening into the early hours of the morning, peaking between 1am and 4am. At these times, those attending licenses premises are more likely to be intoxicated and violent disorder is more likely to breakout in licensed premises, taxi ranks and takeaways.

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2.5 Criminal Damage and Robbery: Breakdown

The data below relates to criminal damage and robbery offences committed within a Km² centred on the site.

Figure 11: Criminal Damage Targets

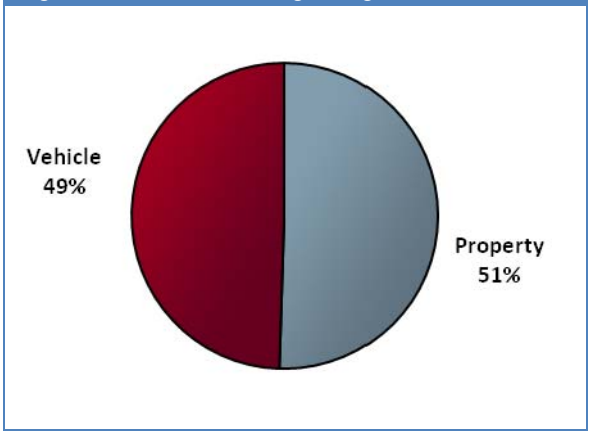
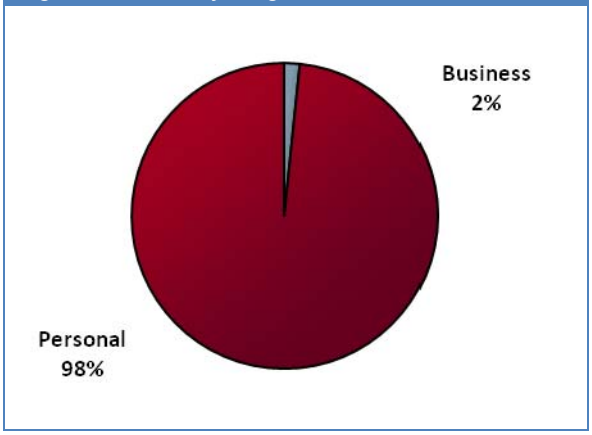


Figure 12: Robbery Targets



2.5.1 Criminal Damage Targets: In the local area there is not a great difference between the level of criminal damage directed at vehicles and property, with property being marginally affected more frequently. The most common occurrences include windows or premises and cars being smashed and damage to car body work.

2.5.2 Robbery Targets: There have been a high number of robberies in the local area. Robbery against the person is much more prevalent than against businesses in this area. The risk of robbery increases when victims take more secluded routes through / from the city centre, alone.

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

2.6.1 Theft from vehicles parked in the evening and overnight

Possible Solution - It is unclear if the site is in operation at night. If so, access controlled gates are considered essential to secure any parked vehicles, particularly given this area will be quiet and will benefit from little natural surveillance at night. There should be no induction loop controlling the gates (i.e. access control both 'in' and 'out'), so that criminals cannot gain access to the area, steal vehicle and escape.

2.6.2 Theft of money from parking meters

Possible Solution – Operators should consider use of alternatives to cash payment. Any ticket machines should be emptied regularly, preferably daily, be alarmed and covered by CCTV. Avoid locating machines in secluded areas where they cannot be seen from the street.

3 Risk Factors

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

- Robbery
- Arson
- Criminal damage to vehicles
- Theft of/from parked vehicles
- Cycle theft
- Theft and criminal damage during the construction period
- Antisocial behaviour
- Unauthorised access to buildings/private space

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4 Design Considerations

The design and layout of your development will be appraised both in this document and through face-to-face meetings if and when required. Design for Security does recommend however that designers and developers refer to:

4.1 Safer Places (2004) ODPM, London

Seven attributes of sustainable communities that are particularly relevant to crime prevention are detailed within Chapter 2 of this ODPM publication. Annex 3 also contains many useful references. You can download 'Safer Places' at www.designforsecurity.org

4.2 Secured by Design (SBD)

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/

5 Design & Layout Appraisal

5.1 Positive Aspects of the Proposal

5.1.1 The site is well defined with boundary fencing and hoardings. The solid sections of hoarding should be replaced with visibly permeable fencing that would allow views into and out of the site. The perimeter should be examined for potential climbing aids. The entrance to the site should be gated to allow it to be secured when not in use, and it is not recommended that any additional pedestrian entrances are created away from the River Street frontage.

5.2 Changes and Amendments Needed

5.2.1 Measures should be introduced to prevent unauthorised access to upper levels of the structure. The design of any balustrade, handrails and barriers installed for safety reasons (e.g. beside the steps) should not create obstacles to surveillance or potential hiding places.

5.2.2 Vegetation round the edge of the site should be removed or cut back and maintained at a low level, in order to remove potential climbing aids and obstacles to vision.

5.2.3 An effective lighting scheme is required for the car park (see section 6.3), and the under-croft level should be illuminated at all times that the car park is open.

5.2.4 In general the complex layout of the structure does not facilitate good levels of natural surveillance. It is essential that surveillance of the site should be upgraded using a monitored CCTV system (see section 6.4).

5.2.5 Payment machines. These should be located in obvious positions where they can be easily observed and covered by CCTV. Do not site them in places where a person could be trapped or feel threatened by others (who may just be queuing to pay). If the car park is to be staffed, cash should be stored in a secure area or vehicle, and no money should be kept on site overnight. Site managers should carry out comprehensive risk assessments in relation to cash handling, appropriate to the method of payment.

5.2.6 The proposed layout of the car park should not allow for people to be cornered or trapped in remote parts of the site. Clear pedestrian routes should be provided within the site to guide people safely to and from the exit / entrance.

5.2.7 Parking bays should be clearly marked and aligned in straight bays.

5.2.8 Effective signage should be used throughout the site to direct users to spaces and exits, and include safety and security information. Security information is important to assist people in feeling comfortable using the facility and should be provided at all pay machines. This should include information about how the car park is managed and what to do / who to contact in case of emergency, or simply if they wish to

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report a broken lamp or offensive graffiti. Directions to pedestrian and vehicular exits should be clear. Pedestrian routes should be distinguished by differential surface colouring that would guide people to the exit(s).

5.2.9 There have been significant graffiti problems affecting the site previously. It is highly recommended that a graffiti resistant coating is applied to the surfaces around the car park levels to allow any unauthorised markings to be removed easily.

5.2.10 Site management. It is appreciated that the proposed use of the site for public car parking is an interim measure and thus major alterations to the existing structure are not likely to be implemented. The structure in its current form is not ideal for the purpose proposed, and without some substantial alterations / additions, is unlikely to provide a secure car park environment. It is therefore essential that these shortcomings in the layout are compensated by effective site management, including an on-site staff presence at all times that the car park is open, and a highly developed procedure for dealing with any security incidents that arise. Periodic security patrols should be undertaken throughout the car park, in particular at off-peak periods and times of higher risk.

6 Physical Security

The following standards and features will be required for this development to demonstrate a level of physical security acceptable to Design for Security.

6.1 Boundaries

6.1.1 Secure boundary treatments should generally be 2400mm high and of welded wire mesh construction.

6.1.2 There should be minimal ground clearance beneath the fence, to reduce the potential for crawling in to secure areas.

6.1.3 The site boundary treatment should be positioned on hard standing ground. Where this is not possible, the ground conditions should be reviewed as extra measures may be required to create a secure boundary.

6.1.4 Gates should be in keeping with the height of adjacent boundary treatments and incorporate either:

- A pad lockable bolt to the midpoint of the internal face, or
- A key operable deadlock

Double gates should have lockable (or externally inaccessible) drop bolts to each leaf.

6.2 Landscaping

6.2.1 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.

6.2.2 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).

6.2.3 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.

6.2.4 There should be no hard landscaping that could inadvertently create seating or loitering spots. These features can encourage anti-social behaviour and raise the fear of crime.

6.3 Lighting

6.3.1 Lighting to car parks should be in accordance with BS 5489.

6.3.2 Lighting to basement and/or under croft parking areas should display an average lux level of 75-100, with a uniformity level of no less than 50%.

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6.3.3 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.

6.3.4 Lighting fixtures must not be positioned to provide climbing aids over boundary treatments.

6.4 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:

6.4.1 CCTV systems (and lighting that support them) require regular cleaning and maintenance to remain effective.

6.4.2 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.

6.4.3 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.

6.4.4 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. Suitable locations would be: Main entrances, ramps, stairwells, payment machines and the more remote sections of the car park.

6.5 Communal Areas

6.5.1 Any public open space or amenity areas not under the ownership of residents should be subject to an effective maintenance contract. This should ensure that all damage is rectified in a timely manner, and that any such space will not be detrimental to its surroundings.

6.6 Other

6.6.1 Bays and directional markings should be clearly demarcated, with pedestrian routes/directions clearly signed.

6.6.2 Where feasible, a one-way system should be implemented to reduce the likelihood of collisions and conflict.

6.6.3 There must be no features of the building envelope which create sheltered/hiding places or ledges, which could endanger passers-by or encourage loitering.

6.6.4 Any rainwater pipes should be square in profile and fixed back to the building fabric to prevent climbing to upper levels.

6.6.5 Any cycle stores should be secure, lockable enclosures. For further information refer to our cycle storage guidance document: http://www.designforsecurity.org/uploads/files/DFS_Cycles.pdf

6.6.6 Places that may be vulnerable to graffiti such as expanses of blank wall and doors should have a protective coating applied at the outset in order to facilitate rapid removal (e.g. 'easy on' – see www.urbanhygiene.com for details).

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7 Management & Maintenance

7.1.1 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 process known as 'the broken window theory'. A maintenance plan should be drawn up to address issues such as:

- Litter removal / graffiti removal
- Repair to communal areas (lighting, signage, access controls)
- Trimming and pruning to shrubs and trees
- Cash machines should be emptied daily.
- In addition to CCTV, periodic security patrols should be carried out throughout the car park.

8 Construction

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.

For further information regarding site security, please contact your local Crime Reduction Advisor, **John Sargeson**, on **0161 856 3046**.

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A Contact register

Date	Contact With	Summary of Contact
20/04/12	SP Architects	CIS Instruction Received

B Associated Documents

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

DWG No.	DWG Title	Date	Rev
341(pl)001	Existing Location Plan	28/10/11	

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	Status			Revisions Made
A	☐	☒	☐	

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D Glossary

Burglary Resistance Standards

BS 3621, 2007

Thief resistant locks. Key Egress.

The minimum standard for locks on external or entrance doors to be acceptable to the Association of British Insurers (ABI) and the police service. The effectiveness of the lock also depends on the quality of the door, frame and other hardware which is not tested by this standard and which may fail before the lock.

BS 8621, 2007

Thief resistant locks. Keyless Egress.

Same as above, but egress is possible without a key (by use of thumb turn or latch lever.

BS 7950, 1997

Specification for enhanced security performance of casement and tilt/turn windows.

BS 4873, 2005: Specification for aluminium windows.

BS 7412, 2007: Specification for plastic windows made from PVC-U extruded hollow profiles.

BS 644-1, 2003: Wood windows. Specification for factory assembled windows - various types.

BWF:TWAS: Timber window accreditation scheme.

BS 6510, 2005: Specification for steel windows, sills, window boards & doors.

BS PAS 23-1, 1999

General performance requirements for door assemblies.

A performance standard for door sets, which certifies that a particular door set is fit for purpose. Door products must also have BS PAS 24 certification.

BS PAS 24-1, 2007

General security performance requirements for door assemblies.

An attack test standard for door sets, which certifies that a particular door, frame, lock and hardware set has withstood a series of physical tests. This is the minimum police requirement for Secured by Design dwellings, and is also applicable to French/double doors, and sliding doors.

ENV 1627-30 (Security Ratings WK1 to WK6)

Windows, doors, shutters - Burglar resistance Requirements and classification

The classification system used in ENV 1627-30 is aimed at the commercial market and is based on five elements:

a) Resistance of glazing

b) Performance of hardware

c) Resistance to static loading

d) Resistance to dynamic loading

e) Burglary resistance by manual intervention

LPS 1175 (Security Ratings 1 to 6)

Specification for testing and classifying the burglary resistance of building components

This includes doors, shutters, garage doors and grilles typically for commercial premises and higher risk domestic premises and is acceptable to the ABI and the Police. The standard has 6 levels, 6 being the highest, with levels 1 and 2 equivalent in many respects to BS PAS 24 and BS 7950.

EN 356, 2000 (Ratings P1A to P8A)

Glass in building. Security glazing. Testing and classification of resistance against manual attack.

A performance standard for manual attacks on glazing. P2A is comparable to the performance of a 6.8mm laminated glass, and P4A to that of a 9.5mm laminated glass.

Commonly Used Acronyms

CIT

Cash in transit (refers to vehicles, personnel and routines).

CPTED

Crime Prevention Through Environmental Design
(Learn more at ***www.designforsecurity.org/about/cpted***)

CRA

Crime Reduction Advisor. Sometimes known as CPO (Crime Prevention Officer)

NPT

Neighbourhood Policing Team.

PVB/PolyVinyl Butyral (Glazing interlayer)

A commonly used interlayer used in the production of laminated glass.

LPCB (Loss Prevention Certification Board)

A brand of the BRE Global (Building Research Establishment) family. The LPCB work with insurers, Government, police, designers, manufacturers, contractors and end users to develop methods of assessing performance and reliability of security products to ensure their fitness for purpose.

UKAS (United Kingdom Accreditation Service)

The sole national accreditation body recognised by government to assess, against internationally agreed standards, organisations that provide certification, testing, inspections and calibration services.

Useful Websites

Secured by Design
www.securedbydesign.com

RIBA Product Selector
www.ribaproductselector.com

LPCB – Red Book Live
www.redbooklive.com

Crime Reduction (Home Office)
www.crimereduction.homeoffice.gov.uk

DAC (Design Against Crime) Solution Centre
www.designagainstcrime.org

Building for Life
www.buildingforlife.org

CLG (Communities and Local Government)
www.communities.gov.uk

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