



BREEAM Security Needs Assessment Hea 06 - Saffron Hill, Farringdon, London

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Document Purpose & Restrictions

This document has been prepared for Saffron Hill Investment Holdings Limited for the purpose of providing a BREEAM HEA 06 Security Needs Assessment for the development of the NCP car park at Saffron Hill, Farringdon, London.

Advice given, and recommendations made herein do not constitute a warranty of future results by SGW Safety & Security Limited (SGW).

Recommendations made are based on information provided by the client and other information available at the time of writing. No express or implied warranty is given in respect of any judgment made or to changes or any unforeseen escalation of any factors affecting any such judgment.

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SECTION 1 | INTRODUCTION





1.0 Project Background

Saffron Hill Investment Holdings Limited are seeking to redevelop an NCP multi-storey car park situated on the corner of Saffron Hill and St Cross Street in Farringdon, London. The intention is to demolish the existing car park and create a mixed use commercial and cafe space consisting of eight floors, with a new basement being added for plant requirements.

The design intent is to create a café on the ground floor along with a standalone office unit, affordable workspace and office reception.

The site is anticipated to have limited stand-off on St Cross Street, where the access to the café, standalone office unit, and the main reception is to be located. There is also limited stand-off on Saffron Street and Saffron Hill where other entrances are proposed. This could pose concerns for safety and security measures in relation to CPTED and glazing selection as the limited stand-off could restrict applicable CPTED measures and require a more robust glazing standard.

There are a number of entrance points considered for the demise. There is access to the standalone office on St Cross Street along with the main reception and the café. There is also access to the affordable work space from Saffron Hill. Additionally, there is access to the bicycle store and BOH fire exit on Saffron Street, as well as a double-leaf door to the standalone office unit.

It will be critical to the overall safety and security of the development that access and circulation is carefully considered for the design to ensure that commercial and office users are compartmentalised, with access control present to ensure only specific tenants can enter their own space.



Site location on Saffron Hill

SGW Safety and Security Ltd have been appointed to provide a Security Needs Assessment (SNA) for the project to help meet BREEAM Outstanding. The SNA will cover the full development footprint of the site.



1.1 Existing Site Location

The existing site location is sited on the corner of St Cross Street and Saffron Hill, near Farringdon Overground and London Underground stations in Holborn, central London. Both stations are approximately 250m to the southeast. The site is centrally located, with Kings Cross 2km to the north-east and central London 2.5km to the southwest.

The current site is an NCP multi-storey car park formed of six levels, with two office levels on the 7th and 8th floors. The site is currently operational whilst foundation investigations continue. The existing car park occupies part of the block defined by Farringdon Road to the east, St Cross Street to the south, Saffron Hill to the west and Saffron Street to the north. The existing NCP shares party walls with three neighbouring properties. The surrounding buildings are a mix of commercial and residential use.

There are currently several entrances to the existing site. There is the main vehicle entrance to the NCP car park on St Cross Street. There is also a vehicle exit, adjacent to a pedestrian access to the lift lobby that serves the NCP offices on the upper floors. There is also a pedestrian fire exit on Saffron Hill and Saffron Street.



Site location on St Cross Street



1.2 BREEAM HEA 06

BREEAM awards a point towards a development's rating if an SNA is completed and the recommendations from that report (this document) are implemented.

The aim of HEA06 is to recognise and encourage effective measures that promotes Security of Site and Buildings.

1.3 Security Needs Assessment (SNA)

This process included a site-specific SNA that includes the following:

- 1. A visual audit of the site and surroundings, identifying environmental cues and features pertinent to the security of the proposed development. (Conducted on 20 October 2023)
- 2. Formal consultation with relevant stakeholders, including the local Designing Out Crime Officer (DOCO) Architectural Liaison Officer (ALO), Counter-Terrorism Security Advisor (CTSA) in order to obtain a summary of crime and disorder issues in the immediate vicinity of the proposed development.

SGW contacted the relevant Designing Out of Crime Officer (DOCO) for the Metropolitan Police on 20 October 2023. The DOCO for the Metropolitan Police for the region that includes Farringdon contacted SGW on 2 November 2023 to advise that support for the project was available. An MS Teams meeting was held on 6 November 2023 to discuss the project in detail.

SGW also accessed both <u>www.police.uk</u> and <u>www.UKCrimeStats.com</u> to support the SNA.

- 3. Identify risks specific to the proposed, likely or potential use of the building
- 4. Identify risks specific to the proposed, likely or potential user groups of the building.
- 5. Identify any detrimental effects the development may have on the existing community.

The purpose of the assessment is to inform stakeholder decision-making and allow the identification and evaluation of security recommendations and solutions.

1.4 Design Information

The following documents were submitted to SGW to assist with this Security Needs Assessment:

- Site images
- 22068_DRP_Presentation
- 22068-AHMM-ZZ-01-DR-A-00101-104
- 22068-AHMM-ZZ-05-DR-A-00105
- 22068-AHMM-ZZ-06-DR-A-00106
- 22068-AHMM-ZZ-07-DR-A-00107
- 22068-AHMM-ZZ-08-DR-A-00108
- 22068-AHMM-ZZ-09-DR-A-00109
- 22068-AHMM-ZZ-B1-DR-A-00098
- 22068-AHMM-ZZ-GF-DR-A-00100
- 22068-AHMM-ZZ-LGF-DR-A-00099



1.5 Police Designing Out Crime Officers (DOCO)

SGW contacted the Designing Out of Crime Officer team for the Metropolitan Police North-West region on 20 October 2023 as outlined within the SNA HEA06 process. SGW received communication from the DOCO for the North-West region on 2 November 2023 advising that support could be given. An MS Teams meeting was held between the SQSS and the DOCO on 6 November 2023 where the following points were discussed;

- The area does record a high level of acquisitive crime including burglary, robbery and theft from the person.
- Burglary can be an issue on Saffron Hill due to it being considerably quieter than Farringdon Road and other streets in the vicinity.
- The quieter streets do mean that Natural Surveillance is not as high as it is on Farringdon Road.
- The DOCO raised concerns with the proposed design and the apparent recessed areas adjacent to entrance points that could provide shelter for the transient homeless community and associated vagrancy issues however the use of planters or other street furniture to discourage this behaviour is welcomed. The DOCO stated that SBD does highlight that 300mm should be the maximum depth for recessed areas.
- Further, the DOCO highlighted that if the recessed areas are to remain, consideration should be given to how these entrance points would be managed operationally and how potential vagrancy issues would be dealt with.
- Compartmentalisation was deemed a major factor for the DOCO and potential SBD accreditation. The
 DOCO repeatedly stressed that areas proposed to have different uses or occupied by separate tenants
 should have no means of cross- access. Doors and Access Control should be designed in such a manner
 so as to prevent individuals from moving between separate units.
- The DOCO also raised concerns over the safety of the cycle store entrance suggesting that it should be LPS 1175 standard for the external door and then PAS 24 for any internal doors leading into the cycle store itself. The DOCO also advised that signage should not be added to the entrance to the cycle store so as to avoid drawing attention as to where bicycles are kept.
- Finally, the DOCO advised that consideration is given to a higher rated doorset for the external entrance points due to the risk of burglary in the area. Much will be dependent on other measures; operational security presence, Access Control, CCTV and Intruder Detection, however, the DOCO referenced LPS 1175:SR2 and LPS 2081;SRB as standards to be considered for the external doorsets to the development.

SGW also accessed <u>www.Police.uk</u> and <u>www.UkCrimestats.com</u> to support the SNA crime analysis.

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1.6 Site Survey

A physical visual audit of the site was conducted during the morning of 20 October 2023 in good conditions. The SQSS began the site audit at the exterior of the existing site located on St Cross Street.



St Cross Street - west (left) and east (right)

The SQSS conducted a full external assessment of the site and the surrounding buildings, commencing on St Cross Street and moving in a clockwise direction to Saffron Hill, Saffron Street and Farringdon Road to understand the existing environment.

The main entrance is located on St Cross Street, with an adjacent pedestrian access at this location which grants access to the NCP offices on 7th and 8th floor.



Existing main vehicle entrance - internal view (left) and external view (right); Office entrance (below)







The site building extends to occupy around half of the façade on Saffron Hill, with the remainder formed of a residential block. There are signs of low-level anti-social behaviour on the Saffron Hill façade of the building. There is also an emergency exit located on Saffron Hill.



Saffron Hill aspect

Saffron Hill is a narrow one-way street that is formed of high, multi-floor residential and commercial buildings. There is limited stand-off, with adjacent buildings in close proximity.

The proposed site also extends to Saffron Street, which is perpendicular to Saffron Hill, and runs east-to-west. The streetscape is similar to Saffron Hill, with the site building occupying part of the street façade and tall buildings located adjacent and opposite. As with Saffron Hill, the street is narrow, with limited stand-off. There is also an emergency exit from the NCP car park.



Saffron Street aspect with adjacent tall properties.

The SQSS also reviewed the environment on Farringdon Road, which is a short distance from the site location. Farringdon Road is a busy arterial route, linking the King's Cross and Clerkenwell areas in the north to areas close to the River Thames around Blackfriars.

Vehicle and pedestrian traffic are noticeably higher on Farringdon Road when compared to traffic volumes and pedestrian traffic on Saffron Hill and Saffron Street. It is anticipated that most users to and from the development would use Farringdon Road as the main pedestrian access route, with the overground and underground stations just off Farringdon Road.

INTRODUCTION





Farringdon Road in relation to the site

The site is an existing NCP multistorey car park. It is formed of eight floors, the upper two of which are office space for the NCP organisation. Six levels above ground are split-level floor plates, providing spaces for vehicles. There is lift and stairwell access to the floors via the ground level.



Typical layout of floor spaces in NCP Saffron Hill

As part of the design intent, the above ground floors are to be demolished, with the foundations retained to build the office floors. Additional levels are to be added, raising the height of the building to above the existing NCP structure.

The wider environment is typical of a busy city centre setting, located in central London. The surrounding premises are a mix of retail, commercial, residential and hospitality.

The site's location, having an aspect on three surrounding streets and close to Farringdon Road, as well as the intention to add floors, does increase Natural Surveillance.

There is also likely to be continued pedestrian and vehicle traffic along St Cross Street, Saffron Hill and Saffron Street which also supports good Natural Surveillance, while the presence of surrounding tall buildings and other properties can act as informal surveillance, mitigating some forms of criminality. However, there is a noticeable difference between traffic and pedestrian volumes on Farringdon Road than on Saffron Hill, which could limit the volume of Natural Surveillance present with Saffron Hill being considerably quieter.

Natural Surveillance, which forms part of Crime Prevention Through Environmental Design (CPTED), is known to deter and reduce criminal behaviour due to the perceived risk the would-be offender feels around being seen and potentially caught. As such, this is a positive factor in regard to acquisitive crime.



However, there is the risk that some offenders are unconcerned about being seen. This is more related to violence, terrorism, and expressive crime – vandalism, criminal damage and ASB, where the offender will commit the offence and depart the area rapidly. The scheme has considered elements of CPTED including Natural Surveillance, Target Hardening, Access Control and Territoriality. This is deemed positive. These elements have been further referenced in this report.

There is also the potential that the development could be perceived as a target for ASB and other forms of criminality due to its close proximity to the public realm. This could allow would-be offenders easy access to areas of the development, particularly if there are secluded and/or recessed areas within the design. Reference to glazing to allow good Natural Surveillance and the use of planters within the scheme in the Design and Access Statement to reduce the risk of recessed areas being used for unlawful activity is considered positive.





SECTION 2 | SECURITY NEEDS ASSESSMENT



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2.0 Security of Site and Buildings

A credit for this element is achieved if:

- A Suitably Qualified Security Specialist (SQSS) conducts an evidence-based Security Needs Assessment (SNA) during or prior to Concept Design (RIBA Stage 2 or equivalent). The purpose of the SNA will be to identify attributes of the proposal, site and surroundings which may influence the approach to security for the development.
- 2. The SQSS develops a set of security controls and recommendations for incorporation into the proposals. Those controls and recommendations shall directly relate to the threats and assets identified in the preceding SNA.
- 3. The controls and recommendations shall be incorporated into proposals and implemented in the as-built development. Any deviation from those controls and recommendations shall be justified and agreed with the SQSS.

When confirming whether the recommendations or solutions set out by the suitably qualified security specialist(s) have been implemented at the post-construction stage, it may be necessary for the assessor to use one or more of the following evidence types, supplied by the design team:

- Desk-based evidence e.g. manufacturers literature/certificates etc
- Site-based evidence e.g. site inspection report/photographs etc

2.1 Suitably Qualified Security Specialist

An individual achieving 1–3 or 4 of the following can be considered to be suitably qualified for the purposes of compliance with BREEAM:

- 1. Minimum of three years' experience in a relevant security profession (in the last five years). This experience must clearly demonstrate a practical understanding of factors affecting security in relation to construction and the built environment, relevant to the type and scale of the project being undertaken.
- 2. Holds a qualification relevant to security.
- 3. Maintains a full membership to a relevant professional body, institute or certification scheme that has a professional code of conduct, to which members adhere.
- 4. A specialist registered with a BREEAM recognised third-party licensing or registration scheme for security specialists.

An SQSS may be any practising security professional (e.g. a private security consultant or advisor, an ALO, CPDA, CTSA, or an individual associated with the client team), however they must demonstrate that they hold the experience, qualifications and memberships required by the SQSS criteria.

When appointing the SQSS, consideration should be given to the appropriateness of the individual to carry out the task assigned. The SQSS should be able to demonstrate that they have experience dealing with similar projects with equal security levels and similar risks. The following are currently recognised as a third-party licensing or registration schemes for an SQSS - Criteria 4.

SABRE

SGW Safety and Security Ltd satisfies all four of the above criteria to meet the purposes of BREEAM compliance. BREEAM SABRE registration for SGW Registered Assessor and Registered Professional can be found here:

https://www.redbooklive.com/search/displaycompany.jsp?searchgrouptypeid=20&searchgroupid=150&companyid=2417&id=948

Further evidence of the SQSS criteria can be found in Section 6 of this document.



2.2 SABRE Scheme

SABRE is the only compliant risk-based security rating scheme recognised within the BREEAM UK new construction 2018 scheme. By achieving SABRE certification (to any SABRE rating), all new construction projects, regardless of the type of BREEAM Assessment being undertaken, can increase their BREEAM score by 1 percentage point over the award for satisfying the standard HEA 06 criteria. BREEAM target ratings will determine the amount of professional services needed for design consultancy, risk assessment, security management advisory services and assessment.

By achieving SABRE certification to any rating, a construction project can increase their BREEAM score by 1 percentage point over the award for the standard Hea 06 assessment.

BREEAM Target Rating	HEA 06 Criter	% Contribution Uplift		
	Standard Criteria	Exemplary Criteria (SABRE)	by using SABRE	
Outstanding	0.85	2.00	↑ 1.15	
Excellent	1.05	2.48	↑ 1.43	
Very Good	1.34	3.16	↑ 1.82	
Good	1.64	3.87	↑ 2.23	
Pass	2.46	5.79	↑ 3.33	

If SABRE assessment services are required for this project, please contact SGW and let us know the BREEAM and SABRE target ratings required. SGW will then provide a revised fee proposal to include SABRE Assessment.





2.3 Area Crime Statistics

Crime statistics for the site location are available at https://www.ukcrimestats.com/Postcode/EC1N8UN

The postcode centroid of 'EC1N 8UN' was matched to this Lower Layer Super Output Area (LSOA): E01000916

Lower Layer Super Output Areas are a geographic hierarchy designed to improve the reporting of small area statistics in England and Wales.



Crime incidents plotted within 1.6km of EC1N 8UN from February 2023 - January 2024

Crime Breakdown - Feb 2023-Jan 2024 Other Theft 8,127 Theft From the Person 5,833 Bike Theft 826 Shoplifting 1,965 Criminal Damage and Arson 993 Drugs 794 Violent Crime 4,429 Violent Crime 4,429 Criminal Damage 1,029 Burglary 1,250 Vehicle Crime 1,159

Crime breakdown for the EC1N 8UN postcode can be broken down as follows:

¹ <u>https://www.ukcrimestats.com/Postcode/EC1N8UN</u>



Postcode crime rank for the last 24 months for England, Wales and Northern Ireland. Where 0 equals lowest and 100 equals highest ranked crime rate. Values higher than 75 (higher risk) have been highlighted in yellow:

Crime Type	Rank
All Crime & ASB	95.287
All Crime (No ASB)	94.578
Anti Social Behaviour	95.620
Burglary	99.308
Robbery	97.852
Vehicle Crime	98.208
Violent Crime	66.705
Drug Crimes	57.294
Criminal Damage & Arson	98.940
Shoplifting	85.496
Other Theft	69.927
Other Crime	73.303
Bike Theft (from May 2013)	97.435
Theft From the Person (from May 2013)	99.331
Possession of Weapons (from May 2013)	73.807
Public Order (from May 2013)	69.482

The figures from <u>https://www.ukcrimestats.com/Postcode/EC1N8UN</u> show that the overall crime rate is relatively high. As the postcode covers areas of central London, the overall crime rate is relatively simple to comprehend as crime rates are higher in urban centres. The higher crime types as demonstrated above are primarily acquisitive and expressive crime, which could impact the development on Saffron Hill.

Figures from <u>https://www.police.uk</u> show the breakdown in recorded crime for the month of January 2024, showing that Theft from the Person (27.6 percent) and Other Theft (25.7 percent) and are the highest recorded offences, reflecting the risk associated with acquisitive crime. Violence and Sexual Offences (12.1 percent) and Anti-Social Behaviour (11.8 percent) also ranked relatively highly.

While relatively low percentages, there are a number of crime types that could be pertinent to the development, particularly acquisitive crime – Burglary and Robbery, whilst registering single-digit percentages, these crime types are relevant to the development, where accessibility to the office areas could present possible opportunities for offending.



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Туре	Total	Percentage 🗸 🗸
Theft from the person	157	27.6%
Other theft	146	25.7%
Violence and sexual offences	69	12.1%
Anti-social behaviour	67	11.8%
Public order	30	5.3%
Shoplifting	21	3.7%
Drugs	18	3.2%
Burglary	17	3%
Robbery	12	2.1%
Vehicle crime	12	2.1%
Criminal damage and arson	10	1.8%
Bicycle theft	7	1.2%
Other crime	2	0.4%

The above graphic outlines the overall level of offending for January 2024, showing which offences record the highest. In relative terms when compared to other areas of central London, the Holborn and Covent Garden policing ward, where the development is located, experiences moderate-to-high levels of crime, recording 568 offences for January 2024. Neighbouring policing wards record similar or higher figures, in some cases exceeding 2,300 offences during the same reporting period in St James's, but significantly lower in the adjacent Clerkenwell policing ward, where just 218 was recorded in January 2024.

The overall levels of offending across the 12-month reporting period from February 2023 to January 2024 shows a sharp increase in criminality from October 2023 to November 2023, where the overall monthly figures increased from 616 to 775. Post November 2023, the level of offending returned to previous levels, sitting at high 500s and low 600s. aside from November 2023, the level of monthly offending is largely stable with the lowest being January 2024 at 568 and the highest March 2023 and December 2023 at 643, with November 2023 being an outlying month.

²<u>https://www.police.uk/pu/your-area/metropolitan-police-service/holborn-and-covent-garden/?yourlocalpolicingteam=about-us&tab=statistics</u>



Of value for this assessment is the level of offending within close proximity of the project site. The below graphics show the volume and type of crime reported within approximately 200m of the site.



The two graphics illustrate that the site is located close to an adjoining policing ward, Clerkenwell. The site is located in the Holborn and Covent Garden policing ward and the graphics also show that the site is positioned closely to recorded crime incidents during January 2024 across both wards.

The type of offences registered in relatively close proximity to the site underpin the need for considered security measures at the Saffron Hill development.

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³https://www.police.uk/pu/your-area/metropolitan-police-service/holborn-and-covent-garden/?yourlocalpolicingteam=aboutus&tab=crimemap



2.4 Identified Risks for Site and User Groups

Identify risks specific to the proposed, likely or potential use of the building:

The site user groups will generally be office tenants, and visitors to those office spaces. It is anticipated that as part of the development, site users will also be patrons of the café.

As demonstrated by the crime statistics analysis, the proposed development location is in a moderate crime area when compared to other areas of the United Kingdom. Possible risks specific to the proposed development could include:

- Anti-social behaviour near the development
- Theft from staff, visitors and other users of the development
- Theft within the development
- Criminal damage or arson.
- Bicycle theft from surrounding area
- Vehicle-related crime from surrounding area
- Public order offences including such as aggressive begging, harassment and abusive behaviour.

At the time of issue of this report, the threat level for international terrorism in the UK set by the Joint Terrorism Analysis Centre (JTAC) was set at **SUBSTANTIAL** <u>https://www.mi5.gov.uk/threat-levels</u>, meaning an attack is 'likely'. The proposed project location is not considered to be a high-profile location in relation to terrorism, although it is close to Farringdon Overground and Underground stations.

Crime figures suggest the area does experience criminal activity. This is reflected in the <u>https://www.ukcrimestats.com/</u> shown below. The below crime Risk Levels are based on crime rates within 1.6km of the site development, which includes areas closer to central London⁴ This introduces areas with higher crime levels, which are reflected in the overall Risk Level Scores. UKCrimeStats ranks the Risk Levels - Where 0 equals lowest and 100 equals highest ranked crime rate.

All Crime and Anti-Social Behaviour (ASB):



Ranked as 95.287, where 0 equals lowest and 100 equals highest ranked crime rate, indicating the high ranking of all crime

All Crime (No ASB):

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level									\checkmark	

Ranked as 94.758 where 0 equals lowest and 100 equals highest ranked crime rate.

⁴ <u>https://www.ukcrimestats.com/Postcode/EC1N8UN</u>



Anti-Social Behaviour (ASB):

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level									\checkmark	

Ranked as 95.620, where 0 equals lowest and 100 equals highest ranked crime rate. ASB was the fourth highest recorded crime in January 2024 according to <u>www.Police.uk</u>, and was also the third highest ranked offence across the 12-month period from February 2023 to January 2024.

Burglary:

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level									\checkmark	

Ranked as 99.308, where 0 equals lowest and 100 equals highest ranked crime rate, with burglary illustrating the risk of acquisitive crime to the building and the wider development, although burglary rated relatively low with <u>www.Police.uk</u>

Robbery:

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level									\checkmark	

Ranked as 97.852, where 0 equals lowest and 100 equals highest ranked crime rate. Robbery was also recorded in close proximity of the development as per the January 2024 figures.

Vehicle Crime:

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level									\checkmark	

Ranked as 98.208, where 0 equals lowest and 100 equals highest ranked crime rate. Although vehicle parking is not park of the design, there is the risk of associated acquisitive crime.

Violent Crime:



Ranked as 66.705, where 0 equals lowest and 100 equals highest ranked crime rate. Violent Crime equated to 11.6 percent of all recorded crime in the last 12 months, and ranks relative highly, suggesting it is a possible risk to building users.



Drug-related Offences

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level					\checkmark					

Ranked as 57.294, where 0 equals lowest and 100 equals highest ranked crime rate. Drug-related crime could be a concern for the development.

Criminal Damage & Arson:

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level									\checkmark	

Ranked as 98.940, where 0 equals lowest and 100 equals highest ranked crime rate. Criminal Damage and Arson is a legitimate concern, but ranks relatively low in the Holborn and Covent Garden policing ward.

Other Theft:

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level						\checkmark				

Ranked as 69.927, where 0 equals lowest and 100 equals highest ranked crime rate. This ranking underpins the overall concern related to acquisitive crime in this area.

Other Crime:

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level							\checkmark			

Ranked as 73.303 where 0 equals lowest and 100 equals highest ranked crime rate.

Bike Theft (from May 2013):

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level									\checkmark	

Ranked as 97.435, where 0 equals lowest and 100 equals highest ranked crime rate. This could be cause for concern for the development with bicycle storage part of the design.



Theft from the Person (from May 2013):

Risk Level:	1 Low Risk	2	3	4	6	7	8	9	10 High Risk
Identify Risk Level								\checkmark	

Ranked as 99.331 where 0 equals lowest and 100 equals highest ranked crime rate. Acquisitive crime is a relevant crime type for the development, reflected by the high ranking for Theft from the Person.

Possession of Weapons (from May 2013):

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level							\checkmark			

Ranked as 73.807, where 0 equals lowest and 100 equals highest ranked crime rate.

Public Order:

Risk Level:	1 Low Risk	2	3	4	5	6	7	8	9	10 High Risk
Identify Risk Level						\checkmark				

Ranked as 69.482, where 0 equals lowest and 100 equals highest ranked crime rate.

Identify risks specific to the proposed, likely or potential user groups of the building:

Specific risks to users within the development are most likely to be acquisitive crime and anti-social behaviour aimed at general building users rather than specific targeting of certain individuals.

Users, both staff of the commercial units and other tenants and occupiers, could be targeted as they arrive and depart the building, exposing them to other forms of offending, which could potentially be violent or more aggressive than city centre-related ASB and minor crime. There is also the potential of unauthorised individuals attempting to gain entry to the different building entrances to target assets within the development. This could be via surreptitious measures or through forced entry. As such, consideration should be given to applying access control and access and circulation measures to ensure only authorised personnel can enter both the commercial and corporate units, and applying suitable physical security to the project.

Any detrimental effects the development may have on the existing community:

The development of the existing plot is deemed as positive. It is currently used as an NCP car park, with several levels showing signs of minor anti-social behaviour. The introduction of a commercial and office development is anticipated to enhance the existing environment and likely reduce the level of criminality.

Natural Surveillance and Territoriality is expected to be enhanced as the offices will be occupied. There is also an anticipated decline in vehicle-related crime. However, the presence of office and commercial units could increase the risk of acquisitive crime to the development. Measures outlined in the Design and Access Statement, including reference to Access Control, Natural Surveillance and Territoriality do help to mitigate anticipated risk.



2.5 Situational Crime Prevention

Crime prevention, or the intervention to prevent a crime occurring, can generally be achieved in two ways - by changing the offenders' disposition or by reducing their opportunity to commit crime. In this case, it is not possible to change the offenders' disposition, however, the opportunities to commit crime can be reduced. This can be achieved in several ways:

1	Increase the effort of the crime.	This method involves target hardening – using physical measures, locks and electronic access control countermeasures where appropriate.
2	Increase the risk.	Offenders are generally more concerned about the risk of being caught rather than the consequences. Good natural surveillance of the area outside the building, supplemented with adequate video surveillance coverage can deter an offender. A good level of external lighting will also deter many types of crime.
3	Reduce the reward.	This method involves decreasing the benefit of committing a crime. Measures can include ensure CRAVED - Concealable, Removable, Available, Valuable, Enjoyable and Disposable – Assets are removed, protected, and/or stored accordingly.
4	Remove excuses.	Many offenders rationalise their criminal acts, this can be neutralised by installing clear signage that delineates public from private space – No Parking, No Unauthorised Access and No Waiting signage is also valid.

Applying elements of Situational Crime Prevention in this context would improve the overall security function, reducing the likelihood of crime on the development.

2.6 Crime Prevention Through Environmental Design (CPTED)

Crime Prevention Through Environmental Design (CPTED) is a collection of inter-linked design principles used in the built environment both externally and internally that encourages the legitimate users of a buildings, park or community areas to feel secure and safe, but discourages would-be ASB or criminality and offending.

Wide-ranging recommendations to architects include the planting of trees and shrubs, the elimination of escape routes, the correct use of lighting, and the encouragement of pedestrian and bicycle traffic in streets. Tests show that the application of CPTED measures overwhelmingly reduces criminal activity.

The core principles of CPTED are:

- Natural Surveillance Natural surveillance is the informal observation of the development by development users, members of the public, employees, visitors, and other passers-by. The intention is that buildings will have their main entrance facing public realm areas. This will allow the building entrance and fire exits to be readily seen, thus an alarm can be raised in the event of forced entry or potential criminal activity.
- **Territoriality** Is the subconscious assertion that the development belongs, although not formally, to a legitimate user group. This can be achieved by change of gradient, change of surface colour, soft landscaping using fencing or thorny, short but broad shrubs to demark the site, wayfinding, and signage to direct visitors. Ideally, visitors should be directed to certain entry points where controls are in place to verify why they are present, at a reception or entrance lobby for example.



- Access Control –Man-made access control measures can be applied in this context to create single, clearly identifiable points of entry to the site with appropriate controls.
- Maintenance Ensuring an area remains well-maintained will reduce the likelihood of further ASB, loitering and criminality. The presence of minor littering, vandalism, graffiti, and nuisance crime could prompt further, and more serious offences.
- Activity Support Encouraging legitimate users of the development to occupy and use open areas within the development perimeter will increase territoriality and natural surveillance and deter would-be offending.
- **Target Hardening** This is the application of physical security measures to deter unauthorised access. Measures can include walls, fences, and other barriers to the development.

CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED) – LANDSCAPE ARCHITECTURE



Territoriality & Image Maintenance



Permissive but space-defined and the boundaries are clear (unconscious rule-setting)







Access Control



Natural Surveillance







The view is blocked by shrubs.





See and be seen - a key fear of crime mitigation

Activity Support

Encouraging legitimate linger opportunities creating ambience that unsettles criminals and nuisance – it will support natural surveillance by increasing 'eyes on the street'







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Physical security measures relate to four main areas: **Deterring** intruders, **Detecting** and **Delaying** attackers, and **Responding** to an attack.

A premises with multiple floors and user areas should be compartmentalised where possible. Providing layered access controls, the task of an adversary can be made more difficult and time consuming, giving occupants or staff a better chance of alerting assistance. There is reference to layering within the Design and Access Statement and this should be further developed.



All hard landscaping and street furniture, such as railings, should be robust and securely fixed to prevent removal, vandalism and use as potential ammunition.

There should be no accessible areas of centre that does not benefit from Natural Surveillance i.e., overlooked by windows from used rooms, neighbours, or the general public. Natural Surveillance has been referenced in the Design and Access statement in relation to ensuring suitable glazing is applied to ensure good external Natural Surveillance.

CPTED measures cannot completely replace security measures but can be considered as a lower cost alternative on which security measures can be built.

For example:

Security Approach	CPTED Approach
Electronic access control – electronic locks, card readers, biometric readers, turnstiles.	Minimise points of entry to the site wherever possible. Include front-of-house areas that are permanently staffed.
Hierarchy of access – ensure site users are only given access to areas they need to access, require photo identification at all times.	Locate sensitive activities in safe areas. Locate high value assets in secure areas with multiple layers surrounding to complicate accessibility to outsiders.
Video surveillance systems, guard tours, guard posts.	Natural surveillance, unobstructed site lines, orientation of activities.
Site perimeters – fences, barriers, walls.	Clear demarcation and delineation between public realm areas and private space. Symbolic barriers or landscaping to separate different space.
Intrusion detection systems.	Occupancy, ownership, shared responsibility of site users to question presence of persons who do not seem to have a reason for being on the site.





2.7 Physical Security Approach

LPS 1175 Security Ratings are the different categories the LPS 1175 standard defines the resistance grade of a physical security product.

The performance ratings SR2 through to SR6 are designed to imitate different specific risk scenarios.

Requirements and testing procedures for the LPCB approval and listing of intruder resistant building components, strongpoints, security enclosures and free-standing barriers.

LPS 1175 covers the broadest scope of physical security products and services of any publicly available standard in the world. LPS 1175 is the result of many years of work by LPCB, Government, Insurers and Police, and has rapidly become a core element of physical security specification across many sectors.

The standard comprises a number of security ratings with test requirements of ascending intensity. These are measured in terms of attack tools and time available to the attacker and enables specifiers to select products according to the risks that they and their property face.

Below is a description of each LPS 1175 rating, including the attack time, attack duration and the attack tool specification:



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Application		Minimum Performance Required	Notes
HIGH RISK Very high security Doorsets		LPS1175 Security Rating (SR) 6	Products certified to these security standards have resisted a series of professional attack tests each lasting up to 30 minutes
		LPS1175 SR 5	using a wide variety of powerful mains operated tools.
MEDIUM RISK Doorsets or Rolling Shutters		LPS1175 SR 4	Products certified to these security standards have resisted a
for door and window openings.		LPS1175 SR 3	series of professional attacks, each lasting up to 30 minutes (SR 4) or 20 minutes (SR 3), using a wide variety of battery operated power tools.
LOW RISK Doorsets, Rolling Shutters,		LPS1175 SR 2	Products certified to these security standards have resisted
Security Grilles or Windows for door and window		BS.PAS 24	a series of professional attacks, each lasting up to 15 minutes (SR 2 & PAS 24) or 10 minutes
openings.		LPS1175 SR 1 and 2 BS7950	(SR 1) using a variety of hand tools such as hammers, crowbars, chisels and hacksaws.
MINIMUM Locking devices for doors & windows.	AINIMUM ocking devices for oors & vindows.		These standards cover the mechanical performance of the lock-set or cylinder for doors. They do not guarantee the resistance of the door to which they are fitted, although they can enhance the resistance to certain forms of attack.

The development is considered to be relatively low-to-moderate risk and PAS 24 or LPS 2081 products, or equivalent are recommended to Ground floor entry points to provide a level of resistance to attack as an absolute minimum.

Advice from the Metropolitan Police DOCO suggests a higher doorset should be considered for the main entrance points – LPS 2081 or LPS 1175 to provide that additional protection.

LPS 1175 products should also be considered where practical to provide enhanced resistance to attack in a lockdown scenario; to critical asset areas and to any external accessible plant areas.



PAS 24

PAS 24 is a security standard that can only be achieved once a product has undergone thorough testing and has been assessed for high security performance levels. The reasoning behind PAS24 is to help to ensure that properties are sufficiently protected against the threat of opportunistic criminals.

PAS 24 is a 'minimum standard' of compliance and only offers a very basic level of security.

What this means is that unlike LPS 1175 with 8 different levels, a product either passes of fails PAS 24 compliance.

PAS 24 is also primarily based on a criminal threat in a residential environment, meaning an attack test does not break panes of glass for example.

STS 202

STS 202 is a security test developed by Exova Warrington and is an alternative to LPS 1175. Both these tests are considered more robust and demanding than PAS 24.

Attack levels vary in intensity and force, with BR1 and BR2 categories focusing on intrusions involving little noise and hand tools, levers and physical force.

Categories BR3 and BR4 revolve around criminals using loud tools in well-prepared attacks.

Higher categories are typically found in commercial areas, while residential security should focus on categories BR1 and BR2.

EN 1627-30: 2011

EN1627-30:2011 represents the European Standard for the burglar resistant classifications of a range of security products like LPS 1175 including, again, Revolving Doors and Security Portals. EN1627-30:2011 standard distinguishes six classifications with increasing resistance levels: Resistance Class 1 to Resistance Class 6 (RC1 to RC6). The latest version of EN1627-30 is now 2011, which replaces the earlier version from 1999.

The EN1627-30:2011 standard defines the resistance to burglary, a subset of criminal intent, with the LPS 1175 scope far wider covering intrusion whether by a criminal, terrorist, activist or protestor. This has led to some significant differences in the methods used to define the tests being conducted, the range of tools, how they may be used during the tests and what results are achieved.

Whilst both standards utilise a complete product placed in a test rig in a controlled environment, there are a number of key differences between EN1627-30:2011 and LPS 1175:

- 1. Range of tools which is restricted in comparison to LPS 1175 standards.
- 2. Method of attack LPS 1175 is based on physical attack whereas EN 1627 is based on use of stealth (burglary for example).
- 3. Tests conducted to LPS 1175 include attacks aimed at undermining the products integrity, including electric, electronic and electromagnetic systems where components are not suitably protected. This is not considered within EN 1627.
- Attack readiness EN 1627 only assesses an access points resistance to forced entry when the product is fully secured. Conversely, LPS 1175 evaluates resistance to forced entry in different modes of operation (day / night).

The LPS 1175 certification provides far higher levels of resistance to intrusion whether by a criminal, terrorist, activist or protestor. As such, a product achieving an LPS 1175 B3 (Security Rating 2) classification will almost certainly provide significantly greater resistance to forced entry than that achieving an RC2 classification.



2.8 External Door Sets

The security of door sets in the development should meet the following minimum standards:

- LPS 2081: SRB
- LPS 1175; SR2

LPS standards are considered more appropriate for the development considering the level of crime within the immediate environment and the historical crime context of the area. Liaison between the DOCO and the SQSS has also highlighted the need for a higher security rating for the door set, outlining the benefits of LPS 2081; SRB or LPS 1175: SR2 above the PAS 24 products. LPS rating is considered superior to PAS 24 and should be considered for this project.

It is expected that all proposed door set products are fit for purpose and therefore certification to the following material specific standards is also required:

- BS 6510:2010 (Steel)
- BS 7412:2007 (PVCu)
- BS 644:2012 (Timber)
- BS 8529:2017 (Composite)
- BS 4873:2016 (Aluminium

It is important that doorset ironmongery to any external escape-only doors is permitted under the security certifications – BS EN 179, BS EN 1125 and BS EN 13637.

All escape only doors should be alarmed – with local alarm upon opened, with no external ironmongery allowing potential external entry.

Recessed doorways should, where possible, be avoided as they provide opportunities for crime and anti-social behaviour, for example graffiti, arson and burglary.

In the event that the building design or location requires such recesses, efforts should be made minimise such negative consequences. This may include a requirement for higher security rated door sets and surrounding building material to be fire retardant and anti-graffiti surface treatments to be applied to both. Additional lighting and CCTV coverage is also advised for recessed areas.

2.9 Mechanical Locking Systems

Mechanical locking mechanisms incorporating cylinders should include an assessment to BS EN 1303:2015.

BS EN 1303:2005 classifies cylinders for locks using an 8-digit coding system. Features assessed include durability, fire resistance, key related security and attack resistance. The resulting 8-digit code can be used to directly compare the performance of one cylinder range against another. Specified cylinders should be:

- Anti-snap
- Anti-pick
- Anti-drill
- Anti-bump

Mechanical cylinder locks should meet the BSI Kitemark TS007 3-star cylinder rating.

Multi-point locking systems should be considered to provide a higher level of security.



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Application		Minimum Performance Required	Notes
HIGH RISK Very high security Doorsets		LPS1175 Security Rating (SR) 6	Products certified to these security standards have resisted a series of professional attack tests each lasting up to 30 minutes
		LPS1175 SR 5	using a wide variety of powerful mains operated tools.
MEDIUM RISK Doorsets or Rolling Shutters		LPS1175 SR 4	Products certified to these security standards have resisted a
for door and window openings.		LPS1175 SR 3	series of professional attacks, each lasting up to 30 minutes (SR 4) or 20 minutes (SR 3), using a wide variety of battery operated power tools.
LOW RISK Doorsets, Rolling Shutters,		LPS1175 SR 2	Products certified to these security standards have resisted
Security Grilles or Windows for door and window		BS.PAS 24	a series of professional attacks, each lasting up to 15 minutes (SR 2 & PAS 24) or 10 minutes
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MINIMUM Locking devices for doors & windows.	IMUM king devices for rs & dows.		These standards cover the mechanical performance of the lock-set or cylinder for doors. They do not guarantee the resistance of the door to which they are fitted, although they can enhance the resistance to certain forms of attack.

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2.10 Glazing Design Considerations

Attack-resistant glazing should be installed where the glazing is easily accessible. This includes the commercial frontages on St Cross Street, Saffron Hill and Saffron Street. As a baseline, ground-floor windows should incorporate one pane of laminated glass to a minimum thickness of 6.8mm or glass successfully tested to BS EN 356:2000 Glass in Building. Glazing meeting P1A should be considered as a minimum standard; consideration should be given to a higher rating. It would be required to apply LPS 1270 for glass associated with LPS products.

As a general principle laminated glass should be specified for all new projects as it provides a significant improvement in blast resistance and manual attack resistance for a minimal increase in cost.



Laminated glass is available that can withstand a varied level of attack, by combining the glass thickness for strength and the amount of interlayer that binds the glass together to improve penetration resistance. Even when broken, laminated glass can still provide protection and slow an adversary down considerably. Compliance with Building Regulations for heat loss generally dictates the use of double-glazed units which are able to accommodate the increase in thickness required for laminated glass.

Where the glass may be impacted by people such as exterior glass facing public areas, then the glass should also be designed in accordance with BS 6262: Glazing in buildings - Part 4:2018 Safety related to human impact, which may require toughened laminated glass to be used for both panes.

Further slight improvements in safety may be achieved for laminated glass by selective strengthening of the glazing assembly, for example by adding fixing screws to beading and/or the frame.





2.11 Site Lighting

Good lighting is essential, both as a security measure and as a valuable aid to creating a safe environment and so to reduce fear in people using the building. The security lighting will provide sufficient light for the security systems to operate correctly to their design performance and for the operators to be able to undertake their tasks. Lighting is also essential for correct operation of video surveillance systems.

Lighting requirements that should be considered for the site are as follows:

- Lighting must provide a level of illumination that is higher than the surrounding conditions, when required, and shall be activated permanently or switched via manual or system interfaces.
- Lighting levels must be sufficient to allow for the detection of security incidents either directly or while viewing VSS monitors.
- Exterior lighting design must be integrated with landscaping features to avoid creating dark or shadowy areas.
- Exterior lights must be protected against tampering or vandalism with protective lenses and secured switch boxes; cabling must be housed in a metal conduit.
- All local codes (that exceed requirements described herein) must be met.
- Security lighting must be on a separate, independent backup power system and switch boxes must be secured.
- Any exterior door intended for employee, resident, or visitor use must be illuminated to a minimum maintained level of 50 lux (five foot-candles).
- Pedestrian areas must be illuminated to a minimum maintained level of 10 lux (one foot-candle) at ground level.
- Building exits (normally locked) should be illuminated to 10 lux.
- Elevators should be illuminated to 100-200 lux.
- Stairwells should be illuminated to 50 200 lux.

Emergency lighting should automatically engage on a loss of mains power, the system will change within 10 seconds and shall be a minimum of 10 lux and shall remain illuminated for a minimum of 90 minutes.

Example of difference between LED white light and sodium lighting:





2.12 Access Control System (ACS)

ACS should be considered to the mixed-use building so that building management can control who can enters the building and when access is permitted. Keys can be lost, stolen or copied, leaving assets vulnerable and requiring expensive change of locks. If an electronic access control card is stolen, access rights can be immediately cancelled, and a staff member can be reissued with a low-cost smart card as a replacement.



There are generally four grades of access point grading, Grade 2 is generally recommended for this project, although some areas may require Grade 3 technology where critical assets are located:

Grade	Rating	Typical Technology Type
1	Low Risk	Card reader with electronic lock – stand-alone
2	Low to Medium Risk	On-line system using card reader with electronic lock
3	Medium to High Risk	On-line system using card reader + keypad with electronic lock
4	High Risk	On-line system using card reader + biometric reader with electronic lock

The access control system should utilise a TCP/IP network infrastructure for communication between the central access control server and the electronically controlled doors. Door controllers should be capable of operating independently of the main server, with a minimum of 4-hours battery backup integral to each door controller so the system will continue to work during a mains power supply failure. Users could be issued with contactless cards or fob to gain access to specific areas of the buildings that are not accessible to the public.

The access control system should communicate with all door controllers over TCP/IP Ethernet protocol, and should be fully programmable to allow staff to programme different levels of access for staff & contractors.

The system functionality will include user restrictions which will determine which user or user template can access various areas of the building. Commercial areas and office areas, as well as back-of-house areas should be segregated where appropriate to ensure users remain within their own demise. Elevators should also be fitted with access control.

Building users will be able to programme cards, so they automatically become invalid after a set period of time, or instantly remove a user's access rights if required.

Where feasible, the ACS should be integrated with the CCTV system for the building.

The Access Control strategy should be further developed as the project progresses.



Readers to actuate locking devices should include the following type of reader as required based on ACS grade:

Low security-Digilock

Low to medium security-Card reader



Medium to high security-Card reader + keypad





An ACS strategy applying card or fob readers would be appropriate for the design.

The access tokens should allow access to various areas based on the user's authorisation level.

Electronic Lock Options:

Solenoid Locks

Handle controlled solenoid locks fitted within wooden or metal doors are recommended for selected doors.

The locks can be electrically controlled by the access control system, either via card reader locally or remotely.

The locks can be used in both exit doors and fire rated doors (EN). Only the handle on the none-secure side will be controlled, the lock can always be opened by inside handle.



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Motorised Locks

A motorised lock is recommended for double acting or single acting swing doors. The lock operates in fail safe mode and is suitable for concealed mounting in the door leaf or door frame, vertically or horizontally.

As soon as the door stays in aligned position with the lock, the prism shaped bolt moves motorised into the strike plate and locks the door.

When power is applied, the bolt is locked. When power is removed, the bolt immediately unlocks (fail-safe).

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It is not considered appropriate for good security to apply electromagnetic locking to external doors or doors placed on a fire escape route. Consideration should be given to applying the above locking types.

A flexible access control system could be utilised in this environment, to allow different area locking mechanisms and access groups to be changed if additional users and staff require differing lengths and types of access.

An access control strategy for the mixed-use building should be further considered and developed as the project progresses.

IDS (Intruder Detection Systems) doors contacts are recommended for the exits, fire exits and critical asset areas to annunciate locally in the event of forced opening.





2.13 ACS Standards & Building Regulations

Any door that is defined as an escape door must be fitted with escape-compliant hardware. This will need to be appropriate to the risk in the specific application, which is governed by the type of user and the number of users who may need to escape through the door. Approved Doc B of the building regulations states that a single operation to unlock and open the door is the best method of egress, and solutions which achieve this will be CE Certificated to either BS EN 179 for emergency escape or BS EN 1125 for panic escape.

Currently under the requirements of the Construction Products Regulation, which is European legislation embedded into UK law, it is mandatory to fit CE certificated hardware to a fire-rated or escape door where it falls under the scope of a harmonised European standard. In order to comply with the UK building regulations, the installation must comply with the Construction Products Regulation.

With regards to the use of an electromagnetic lock or a fail unlocked electric strike that has to be electrically unlocked to allow escape, there is a new standard that applies. This is BS EN 13637 'Electrically Controlled Exit Systems For Use on Escape Routes' which is a published standard (published in 2015) and will be considered best practice. The use of any electromagnetic lock or electric strike must be as part of an Escape Door System (EDS) which conforms to the requirements of this standard in order to be a best practice solution.

Approved Document B of the building regulations does still allow the use of a magnet and a green break glass solution. However, the specifier, installer and building operator will be liable for the performance of the locking solution as an escape solution. If they were called to do so following an incident, they would have to confidently be able to prove that the solution they provided was fit for purpose.

In the building regulations, there is now the addition of Approved Document 7 which deals with 'Workmanship and Materials'. Therefore, the need would be to satisfy the requirements as defined within this document, as to whether the solution is designed for the purpose, using adequate and proper materials which are appropriate for the circumstances in which they are applied, used or fixed so as adequately to perform the functions for which they are designed.

The best way of providing this evidence is the CE certification or third-party assessment to a known and published performance standard e.g. BS EN 13637.

Another consideration when defining the solution to be used should be the security of the site. It is not recommended to use fail safe electric locking solutions such as electromagnetic locks or electric strikes which fail unlocked on external perimeter doors as in the event of a power failure the building will become insecure.

The publicly available TS010 technical performance standard quite clearly details that an electromagnetic lock must be part of an EDS to BS EN 13637 if it is used on an escape door (the same principle applies in that the door is electrically released).







DDA

Disability Discrimination Act, now superseded by the Equality Act.

Equality Act

Created for equal opportunities in the workplace and in wider society, covering access to buildings for people with disabilities.

BS EN179

Emergency Escape Doors. Applies to areas of a public building that are non-public areas with trained staff.

BS EN1125

Panic Escape Doors. Applies in public areas (assemblies).

EN 1303

Cylinder resistance to physical attack, durability and key security.

EN 12209

Mechanical resistance for mechanically operated locks, latches and locking plates.

EN 14846

Covering both electric locks and electric striking plates, allowing the specification of electric locking to defined levels of security and durability.

EN 1634-1

Fire test classification 30 or 60 minutes.

BS EN 60839-11-1:2013

Alarm and electronic security systems. Electronic access control systems. System and components requirements.



2.14 Video Surveillance System (VSS)

Installing VSS (Video Surveillance System) equipment within the development will potentially deter crime and anti-social behavior and will provide a visual record of who has entered and exited the development.

Adequate lighting to ensure the area outside buildings is well illuminated provides a welcoming safe environment, while limiting areas of shadow where criminal activity can take place. Careful coordination of lighting schemes with VSS is essential at an early design stage. Video surveillance systems is recommended to deter and detect criminal activity in these areas.





Installation of an IP VSS system utilising a high resolution digital recording system will assist the following:

- Reduction of criminal incidents by increasing the risk of an offender being caught in the act or being investigated post-event and linked to a crime.
- Collection of digital video evidence that can be used to convict offenders.
- Provide visual insights and real-time data such as people counting of visitors entering the building that support fire safety and evacuation plans.
- Providing a safe and secure environment for users. VSS can act as a deterrent to prevent any incidents that could result in threats made against staff/volunteers and site users.
- Provide evidence against false claims of injury, criminal incidents or harrassment.

VSS operational requirements define the specific requirements of each camera located around the site. The requirements generally fall into four main categories:

Detect	After an alert an observer would be able to search the display screens and ascertain with a high degree of certainty whether or not a person is there.	25 pixels/metre
Observe	At this scale, some characteristic details of the individual, such as distinctive clothing, can be seen, whilst the view remains sufficiently wide to allow some activity surrounding an incident to be monitored.	62 pixels/metre
Recognise	Viewers can say with a high degree of certainty whether or not an individual shown is the same as someone they have seen before.	125 pixels/metre
Identify	Picture quality and detail should be sufficient to enable the identity of an individual to be established beyond reasonable doubt.	250 pixels/metre

Good practice is to ensure entrance points to buildings are covered with a camera capable of achieving 250 pixels per metre to ensure an unknown person entering the building- can be successfully identified. At present, there are no 'official' standards regarding pixel density and its relation to image purposefulness at time of writing. The indicated purposefulness of each image is based on interpretation of what currently seems to be the accepted standards in the UK security industry. Previously, analogue technology was based on the percentage height level of detail of a person filling the surveillance monitor as shown on the following page.

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With the development of IP technology, pixels per metre are now used as a measure of operational requirements when specifying and designing video surveillance systems. Some examples of pixels per metre are shown below:



Cameras capable of achieving a minimum of 250 pixels per metre on all entry points to the proposed building should be considered to identify people entering.

All cameras should be enabled with motion detection, H.264 / H.265 encoding and should have 1080p high-definition resolution as a minimum. All cameras should record for a minimum of 30 days.

Adequate signage should be installed around the building to inform persons that video surveillance is in operation. Video surveillance systems must be installed in accordance with BS EN 62676-4:2015.



2.15 Intruder Detection Systems (IDS)

IDS Grade

Four grades of IDS exist, based on increasing levels of resilience against attack by intruders with anticipated levels of knowledge and tools.

Grade 1: Intruders expected to have little knowledge and limited tools. Alarm is suitable for a low risk

Grade 2: Intruders expected to have limited knowledge and some tools. Alarm is suitable for a low to medium risk

Grade 3: Intruders expected to have knowledge and full range of tools. Alarm is suitable for medium to high risk.

Grade 4: Intruders expected to have sophisticated knowledge and tools. Alarm is suitable for a high risk.

EN 50131 defines four grades of IDS, 4 being the highest. The grade is measured by how resilient the alarm system is to attacks by intruders and other outside influences. All components of the system are graded, including the control panel, motion detectors (PIRs) and signaling equipment.

Whilst most security installers will design a system using components of the same grade, it may sometimes be appropriate to mix grades of components. However, the overall system will be graded of that of the lowest graded component. Most commercial premises will require a Grade 2 or 3 alarm system.

The majority of insurance companies require a Grade 3 where the system is a requirement of insurance cover. A Grade 3 system with dual path signaling capability is recommended for this development, however, this should be confirmed with the relevant building insurer prior to implementation.

Consideration should be given to installing for the commercial areas that are unlikely to be occupied at all times.



The IDS should monitor all fire exit doors and alarm in the event of false opening.



Police Response Levels:

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Police response is only available on professionally monitored alarm systems, installed to EN 50131 standards. Often referred to as a Type 1 alarm, which meets required criteria.

A police response alarm is not directly connected to the police, instead it is connected to an Alarm Receiving Centre (ARC). The ARC's role is to monitor the alarm system, and in the event of an alarm activation, analyse the signals sent from the activated alarm, and if the required criteria is met, contact the police.

A Unique Reference Number (URN) is required for all police response alarms. The unique number is a police identifier specific to the property. The ARC will pass the URN to the police once a police response is deemed required.

There are two main levels of police response in the UK; Level 1 and Level 3

Level 1 – Immediate Response (subject to priorities) Level 2 – No longer applicable Level 3 – No Police Response (withdrawn) due to three false alarms within a 12-month rolling period

A PD 6662 monitored system, at Grades 2,3 or 4, is vital to obtain a police URN.

Liaison with NSI, insurers, and Metropolitan Police / SBD is advisable prior to engaging ARC services.



2.16 Bicycle Security and Storage

The project design proposes cycle storage within the lower ground floor area. The storage area is perceived to be attractive to would-be offenders and appropriate access control measures should be applied to ensure access is restricted. There is reference in the Design and Access Statement regarding a 'secure' entrance, however, this should be further developed.

Metropolitan Police advise that in a bicycle storage design, such as Saffron Hill, where external access is present the security rating should be LPS 1175: SR2 for the bicycle storage external entrance door. A further internal door should be applied meeting PAS 24 before an individual can reach the actual storage area.

The Metropolitan Police also advise that the storage of bicycles should be within a permanent structure, ideally the building itself as is the case for this project. The doors to the storage should be access-controlled and aligned with the ACS present across the site.

Typical bicycle storage racks are prone to criminality and application of such products should be done so with security in mind.

Key points:

- Stands with a tapping bar are preferable to those without. This restricts criminals who wish to place the bicycle lock on the ground and then force the lock off with tools
- The tubing of the stands are hollow. These should be filled or protected to prevent them from being sawn through and the bicycle removed with the locks intact.
- Stands should be sunken into the ground with no visible fixings accessible to tamper
- Users should be advised as to which type of cycle locks are most effective and the proper procedures for securing a bicycle to a stand – front wheel + frame, rear wheel + frame and frame.
- Externally-accessible bicycle storage areas should have doorsets that meet LPS 1175:SR2 as a minimum
- Ideally, a secondary doorset should be installed within an externally-accessible bicycle storage area
- Internally-accessible bicycle storage areas should have doorsets meeting PAS 24 as a minimum
- Access control aligned with the rest of the site should be applied to all bicycle storage areas



SECTION 3 | RECOMMENDATIONS



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The below is a summary list of security recommendations based on the Security Needs Assessment:

- 1. Implementation of Crime Prevention Through Environmental Design (CPTED) principles to enhance the security of the development where practicable as outlined in Section. 2.6.
- Doors to the development should be designed to be attack resistant to delay a potential intruder, to a suitable standard as referenced in Section 2.8. DOCO advice regarding doorsets should be considered, with LPS 2081 SRB or LPS 1175:SR2 regarded as the appropriate standard.
- 3. Laminated glass should be specified for new projects as it provides a significant improvement in protection for a minimal increase in cost as outlined in Section 2.10. BS EN 356:2000 P1A glass should form the minimum baseline for accessible glass at street level. However, a higher rating should be considered due to the lack of stand-off. This would include LPS 1270 if LPS 1175 or LPS 2081 products are applied.
- 4. All external lighting for the development should comply with BS 5489-1:2013. General lighting should be designed to create a safe and secure environment that supports the use of video surveillance cameras in low light conditions as referenced in Section 2.11. Lighting to the site should be designed by a specialist consultant, to ensure the scheme assists with crime prevention.
- 5. Installation of Access Control System (ACS) to allow access to authorised site users and restrict access to non-authorised users as illustrated in Section 2.12. Specific requirements must be applied to compartmentalise the building so to ensure only authorised users can access relevant areas. Consideration should be given to elevator access control.
- 6. Ensure the ACS design fully integrates with the building fire strategy, ensuring a balance is struck between life safety and security of the development.
- 7. Installation of Video Surveillance Systems (VSS) to the site to deter criminal activity and provide digital evidence in the event of an incident as per Section 2.14.
- 8. Installation of Intruder Detection Systems (IDS) within the development as outlined in Section 2.15. Specific IDS requirements are anticipated for fire exits and critical asset areas which should alarm in the event of forced opening.
- The externally-accessible bicycle storage area should be appropriately protected as per the advice from the Metropolitan Police. Doorsets to an externally-accessible bicycle storage area should meet LPS 1175:SR2 standards with internal doorsets meeting PAS 24.



SECTION 4 | SECURITY STANDARDS





PAS 24: 2016: Enhanced security performance requirements for door sets and windows in the UK. Door sets and windows intended to offer a level of security suitable for dwellings and other buildings exposed to comparable risk:

PAS 24:2016 is a Product Assessment Specification and a primary reference in the Building Regulations Approved Document Q1.

This standard specifies test methods and acceptance criteria relevant to the enhanced security performance of door sets and windows intended to resist methods of attack experienced or associated with the casual or opportunistic burglar.

STS 201: Enhanced security requirements for door sets to satisfy the requirements of PAS 24 – Warrington Certification:

This standard defines the technical requirements for certification of door sets, tested in accordance with PAS 24 and BS 6375.

The type of door sets to be certified are defined in PAS 24.

This standard is intended to cover security performance, as well as general or material specific performance including weather, operation and strength requirements.

STS 202: Burglary resistance requirements for construction products including door sets, windows, curtain walling, security grilles, garage doors and roller shutters – Warrington Certification:

This standard defines the technical requirements for classification of burglary resistance and general performance.

This standard is intended to cover but is not limited to door sets, windows, curtain walling, security grilles, garage doors, roller shutters, and also other construction products where burglar resistance is a requirement.

This standard does not provide for certification against European standards EN 14351-1, prEN 14351-2, prEN 16034 for doors & windows and EN 13241-1 for industrial and commercial doors & gates.

BS 6510:2010 (Steel): Steel-framed windows and glazed doors - specification:

Covers requirements relating to the design and fabrication of steel-framed windows and glazed doors.

BS 7412:2007: Specification for windows and door sets made from unplasticised polyvinyl chloride (PVC-U) extruded hollow profiles:

Gives performance and design requirements for PVC-U extruded hollow profiled windows and glazed door sets. Applies to profiles that incorporate fusion welded corner joints. Covers components, appearance and finishes, fabrication, glazing, use, cleaning and maintenance, security, safety, weathertightness, operation and strength characteristics, hygiene, health and the environment, acoustic performance and energy conservation.

BS 644:2012: Timber windows and door sets. Fully finished factory-assembled windows and door sets of various types - specification:

Provides design, construction, performance requirements for fully finished and glazed factory-assembled timber windows and external pedestrian door sets of various types.

BS 8529:2017: Composite doorsets - domestic external doorsets - specification:

Details design, construction and performance requirements for domestic external composite doorsets and is applicable for hinged single and double leaf doorsets.

Covers: handing, components, appearance and finish, glazing, installation, use, cleaning and maintenance, security, safety, weathertightness, acoustic and energy conservation.



BS 4873:2016: Aluminium alloy windows and doorsets - specification:

Provides design, construction and performance requirements for aluminium alloy windows and external pedestrian doorsets. Applicable to hinged, projecting, pivoted, sliding, fixed lights and casement, parallel opening, double opening French casement, louvered windows and single-leaf single-swing, double-leaf single-swing, single track sliding and single-track folding doors.

EN 1303:2015: Building hardware. Cylinders for locks. Requirements and test methods:

This European Standard applies to cylinders and their keys for such locks as are normally used in buildings and are designed to be used with cylinders, where the locks have an operational torque of maximum 1,2 Nm. This European Standard specifies performance and other requirements for the strength, security, durability, performance and corrosion resistance of cylinders and their original keys.

The standard establishes one category of use, three grades of durability, three grades for fire and four grades corrosion resistance all based on performance tests as well as six grades of key related security based on design requirements and five grades on performance tests that simulate attack.

This European Standard includes tests of satisfactory operation at a range of temperatures. It specifies test methods to be used on cylinders and their protective measures linked with these cylinders and recommended by the manufacturer. Corrosion resistance is specified by reference to the requirements of EN 1670 on corrosion resistance of building hardware.

The suitability of cylinders for use on fire or smoke-door assemblies is determined by fire performance tests conducted in addition to the performance testing required by this standard. Since suitability for use on fire doors is not essential in every situation the manufacturer has the option to state if the cylinder conforms to these additional requirements or not. If so claimed, cylinders will comply with the requirements in Annex A.

Assessment of fire resistance of grade 1 doors is beyond the scope of this document. On occasions there may be a need for additional functions within the design of the cylinder. Purchasers should satisfy themselves that the products are suitable for their intended use.

BS EN 12209: 2016: Building hardware – locks and latches – mechanically operated locks, latches and locking plates:

This European Standard specifies requirements and test methods for durability, strength, security and functionality of mechanically operated locks and their locking plates: a) for use in doors in buildings; b) for use on fire and smoke compartmentation doors fitted with door closing devices, to enable such doors to close reliably and thus achieve self-closing in the event of fire; and c) for use on locked fire doors to maintain the fire integrity of the door assembly.

This European standard covers locks and their locking plates which are either manufactured and placed on the market in their entirety by one producer or produced by more than one producer or assembled from sub-assemblies produced by more than one producer and designed to be used in combination.

This European Standard specifies mechanically operated locks and locking systems intended for use in different environmental and security conditions, thus necessitating different grades. This European standard does not specify Multipoint locks or their locking plates which are specified by prEN 15685.

This European Standard specifies the dimensions and properties required for security Assessment of the contribution of the product to the fire resistance of specific fire resistance and/or smoke control door set assemblies is beyond the scope of this European Standard.

BS EN 14846: 2008: Building hardware. Locks and latches. Electromechanically operated locks and striking plates. Requirements and test methods:

This standard details only those requirements and test methods that are relevant to the electrical / electronic components of electromechanically operated pedestrian door locks and/or their associated striking plates (but not permanent magnet or electromagnetic devices). Requirements and test methods for assessing purely mechanical features (e.g. resistance to side load on bolt) are covered by reference to BS EN 12209.



BS EN 1906:2012: Building hardware. Lever handles and knob furniture. Requirements and test methods:

This European Standard specifies test methods and requirements for spindle and fastening elements, operating torques, permissible free play and safety, free angular movement and misalignment, durability, static strength and corrosion resistance for sprung and unsprung lever handles, knobs for doors, push pads and similar devices in combination with backplates or roses operating latches.

This European Standard is applicable only to lever handles and knobs that operate a latch or a lock and other devices. It specifies four categories of use according to frequency and other conditions of use.

BS 3621:2017: Lock assemblies operated by key from both the inside and outside of the door:

This standard gives performance requirements and test methods for thief resistant mechanically operated singlepoint lock assemblies, covering locks, cylinders, lock assembly vulnerability and assessment, differs and master keyed locks.

BS EN 12608-1:2016: Unplasticised poly(vinyl chloride) (PVC-U) profiles for the fabrication of windows and doors. Classification, requirements and test methods. Non-coated PVC-U profiles with light coloured surfaces:

This standard specifies the classifications, requirements and test methods for non-coated unplasticised poly(vinyl chloride) (PVC-U) profiles with light coloured surfaces intended to be used for the fabrication of windows and doors.

LPS 1175 (Loss Prevention Standard):

Requirements and testing procedures for the Loss Prevention Certification Board (LPCB) certification and listing of intruder resistant building components, strongpoints, security enclosures and free-standing barriers.

LPCB's Loss Prevention Standards (LPS) are now widely recognised and applied in fire and security sectors around the world. LPCB offers third-party certification confirming that products and services have met and will continue to meet these standards. Full details of the Loss Prevention Standards (LPS) are available online.

http://www.redbooklive.com/lps.jsp

BS EN 60839-11-1:2013: Alarm and electronic security systems. Electronic access control systems. System and components requirements:

Includes the minimum functionality, performance requirements and test methods for electronic access control systems and components used for physical access in and around buildings and protected areas.

BS EN 60839-11-2:2015: Alarm and electronic security systems. Electronic access control systems. Application guidelines:

Includes the minimum functionality, performance requirements and test methods for electronic access control systems and components used for physical access in and around buildings and protected areas.

NCP 109 NSI Code of Practice for Planning, Installation and Maintenance of Access Control Systems, NSI:

NCP 109 Code of Practice for the design, installation and maintenance of access control systems is NSI's 'in house code of practice expressly written for installers of access control systems, and against which NSI will routinely audit NSI Gold and Silver approved companies to verify compliance.

It draws on the Equality Act 2010, British Standard BS 7273-4 for fire protection (activation of release mechanisms for doors) and BS 7671 for electrical installations, all key to safe and well-designed systems.



BS EN 50486 Equipment for use in audio and video door-entry systems:

This European Standard specifies the requirements for equipment installed in audio and video door-entry systems.

BS EN 1363-1:2020: Fire resistance tests. General requirements:

This document establishes the general principles for determining the fire resistance of various elements of construction when subjected to standard fire exposure conditions. Alternative and additional procedures to meet special requirements are given in EN 1363-2.

The principle that has been embodied within all European standards relating to fire resistance testing is that where aspects and procedures of testing are common to all specific test methods e.g. the temperature/time curve, then they are specified in this test method. Where a general principle is common to many specific test methods but the details vary according to the element being tested (e.g. the measurement of unexposed face temperature), then the principle is given in this document, but the details are given in the specific test method. Where certain aspects of testing are unique to a particular specific test method (e.g. the air leakage test for fire dampers), then no details are included in this document.

The test results obtained might be directly applicable to other similar elements, or variations of the element tested. The extent to which this application is permitted depends upon the field of direct application of the test result. This is restricted by the provision of rules which limit the variation from the tested specimen without further evaluation. The rules for determining the permitted variations are given in each specific test method.

Variations outside those permitted by direct application are covered under extended application of test results. This results from an in-depth review of the design and performance of a particular product in test(s) by a recognized authority. Further consideration on direct and extended application is given in Annex A.

The duration for which the tested element, as modified by its direct or extended field of application, satisfies specific criteria will permit subsequent classification.

All values given in this document are nominal unless otherwise specified.

BS EN 1364-1:2015: Fire resistance tests for non-loadbearing elements. Walls:

This European standard specifies a method for determining the fire resistance of non-loadbearing walls. This European Standard is used in conjunction with EN 1363-1. It is applicable to partitions (non-loadbearing walls) with and without glazing, non-loadbearing walls consisting almost wholly of glazing (glazed non-loadbearing walls) and other non-loadbearing internal and external non-loadbearing walls with and without glazing. The fire resistance of external non-loadbearing walls can be determined under internal or external exposure conditions. In the latter case the external fire exposure curve given in EN 1363-2 is used. It is not applicable to: a) curtain walls (external non-loadbearing walls suspended in front of the floor slab), unless explicitly permitted under EN 1364-3 or EN 1364-4 which shall contain details of the methodology to be used. b) non-loadbearing walls containing door assemblies which shall be tested to EN 1634-1. Specific requirements relating to the testing of glazing are given in Annex A. Specific requirements relating to the testing of non-loadbearing external and internal walls designed to span horizontally between two independently proven fire resisting vertical structural elements are given in annex B.

Disability Discrimination Act 1995:

The DDA is an Act of the Parliament of the United Kingdom which has now been repealed and replaced by the Equality Act 2010, except in Northern Ireland where the Act still applies. Formerly, it made it unlawful to discriminate against people in respect of their disabilities in relation to employment, the provision of goods and services, education, and transport.

Equality Act 2010:

The Equality Act 2010 is an Act of Parliament of the United Kingdom with the primary purpose of consolidating, updating, and supplementing the numerous prior Acts and Regulations, that formed the basis of antidiscrimination law in Great Britain.



BS EN 179: Building hardware - emergency exit devices operated by a lever handle or push pad, for use on escape routes. Requirements and test methods:

The main purpose of the performance requirements of this standard is to give safe and effective escape through a doorway with one single operation to release the device although this can require prior knowledge of its operation, i.e. for locked doors on escape routes where panic situations are not foreseen.

BS EN 1125: Building hardware. Panic exit devices operated by a horizontal bar, for use on escape routes. Requirements and test methods:

The main purpose of the performance requirements of this standard is to give safe and effective escape through a doorway with minimum effort and without prior knowledge of the device, i.e. for locked doors on escape routes where panic situations can be foreseen.

BS EN 62676-4:2015: Video surveillance systems for use in security applications. Application guidelines:

This standard gives recommendations and requirements for the selection, planning, installation, commissioning, maintaining, and testing video surveillance systems (VSS) comprising of image capture device(s), interconnection(s) and image handling device(s), for use in security applications.

The objectives of this part of IEC 62676 are to: - provide a framework to assist customers, installers, and users in establishing their requirements; - assist specifiers and users in determining the appropriate equipment required for a given application; - provide means of evaluating objectively the performance of the VSS.

BS EN IEC 62676-5:2018 Video surveillance systems for use in security applications. Data specifications and image quality performance for camera devices:

Describes representation and measuring methods of performance values to be used in user manuals and specifications of video surveillance camera equipment.

BS EN 50131: Intruder alarms and hold-up systems:

This European Standard is for intruder alarm systems and hold-up systems.

EN 50131 defines four grades of Intruder alarm system, 4 being the highest. The grade is measured by how resilient the alarm system is to attacks by intruders and other outside influences.

All components of the system are graded, including the control panel, detectors and signalling equipment.

The majority of insurance companies require a Grade 3 system where the system is a requirement of insurance cover.

BS EN ISO 6385:2016: Ergonomics principles in the design of work systems:

ISO 6385:2016 establishes the fundamental principles of ergonomics as basic guidelines for the design of work systems and defines relevant basic terms. It describes an integrated approach to the design of work systems, where ergonomists will cooperate with others involved in the design, with attention to the human, the social and the technical requirements in a balanced manner during the design process. Applicable to the design of Security Control Rooms (SCRs) or VSS monitoring centres.



SECTION 5 | SITE PLANS & LAYOUT DRAWINGS



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SITE PLANS & LAYOUT DRAWINGS



Site Location







Proposed Lower Ground Floor Plan





Proposed Ground Floor Plan





Proposed First to Fourth Floor Plan





SECTION 6 | SUITABLY QUALIFIED SECURITY SPECIALIST (SQSS) EVIDENCE



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Alan Meyrick, BA(Hons), MSc, CPP, CSMP, CCTP, MSyl, MISMI



PROFILE

Alan is a highly-skilled security practitioner with 22 years of experience. With his knowledge of risk and security methodologies and theories, he provides a robust underpinning to the consultancy work he undertakes, allowing him to deliver risk-based projects across numerous environments and sectors.

Alan has successfully transitioned his own roles, focusing on delivering risk assessments and risk analysis products for transnational clients, and providing support to fee-paying clients in the sports and leisure services, financial and petrochemical industries.

Alan's area of expertise includes the application of Risk Management and the Risk Assessment cycle (ISO 31000), Crime Prevention Through Environmental Design (CPTED), Situational Crime Prevention paradigms and Counter-Terrorism Strategy.

COMPLETED KEY PROJECTS

- Etihad Rail Deutsche Bahn, UAE Consultant Lead for Security Strategy, Security Policy and Procedures
- Dishoom Restaurant Chain Full Threat and Risk Assessment across portfolio, creation of Security Strategy documentation
- Queen Mary University London Full Threat and Risk Assessment across all five campuses, creation of Security Strategy documentation
- Hyatt, Abuja, Nigeria Threat and Risk Assessment, Gap Analysis, and Concept Design
- Hyatt, Lagos, Nigeria Threat and Risk Assessment, Gap Analysis and Concept Design
- Marriot, Abuja, Nigeria Threat and Risk Assessment, Gap Analysis and Concept Design
- Jarir Commercial Investments, Saudi Arabia Threat and Risk Assessment, Gap Analysis and Concept Design
- BMW, UK Threat and Risk Assessment
- LAU-Rizk Hospital, Beirut, Lebanon Threat and Risk Assessment, Security document review and assessment
- BRE SABRE Assessment
- Natl Amusements Emergency Management Plan creation, Business Continuity Plan creation, Security documentation creation – Strategy documentation, Policies and Procedures
- Metaswitch Head Office, London Threat and Risk Assessment, Gap Analysis, and Concept Design
- Ecclesiastical Insurance Head Office, Gloucester, Threat and Risk Assessment, Gap Analysis and Concept Design
- Nordic Entertainment Group Head Office, London Threat and Risk Assessment
- Multiple Clients Leeds, York, Doncaster, London, Hastings, Portsmouth, Manchester, Gloucester, Nottingham, Thetford, Towcester, Northamptonshire, – Security Needs Assessment (SNA)

PROFESSIONAL QUALIFICATIONS

MSc Security and Risk Management – University of Leicester Certified Security Management Professional (CSMP) Certified Counterterrorism Practitioner (CCTP) Certified Protection Professional (CPP) -ASIS

PROFESSIONAL MEMBERSHIPS

Member of the Security Institute (MSyl) Member of the International Security Management Institute (ISMI) Member of the American Society for Industrial Security (ASIS)





PROFESSIONAL CERTIFICATION BOARD

VERIFIES THAT

Alan H. Meyrick, CPP

HAS RECERTIFIED AS A

CERTIFIED PROTECTION PROFESSIONAL

THROUGH

December 2018

15787

Certification Number



PCB President

60





SQSS EVIDENCE



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THE SECURITY

This is to certify that

Alan Meyrick

has been elected a

Member

of the Security Institute

on this date 24 January 2018 Membership Number M501

Chairman, Validation Board

prison Watered

Chairman, Board of Directors





FACULTY OF THE SOCIAL SCIENCES It is hereby certified that Alan Henry John Meyrick was admitted to the degree of

Master of Science in Security and Organisational Risk Management on the twenty fourth day of January 2003

Muchael Chych CHANCELLOR

VICE - CHANCELLOR

REGISTRAR AND SECRETARY

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