Section 7 – External Design

POLICE BUILDINGS DESIGN GUIDE
2007
## Amendments Record Sheet

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Section 7 External Design

7.1 Site Planning

7.1.1 Site selection

Shifting patterns of population mean that the existing police buildings can be in the wrong place to meet current needs, and indiscriminate acquisitions and conversions of buildings have also led to poor designs in the wrong place. The need for a neighbourhood policing was stressed in the 2005-08 National Policing Plan and the associated Government White Paper. The Constabulary and Local Police Authority produce the Policing Strategy for each area, and identify where the police stations and contact points are required.

Police Forces should provide community-focused policing with accessible facilities close to neighbourhood centres. Forces are recommended to replace large town centre buildings with fewer edge of town sites and in turn provide an increased number of smaller offices within communities. Town centres will not be abandoned altogether, however, but should be served by smaller central offices.

The location of the site should be part of a wider Estates Strategy taking into account the geographic and demographic make-up of the area. A widely dispersed rural population will have different needs to a large conurbation. A hub and node pattern of police stations will have different car parking requirements from the centralised facilities of a large county. The accessibility of public transport for public and staff should be considered. (see 7.6.1).

Changing patterns of population should be taken into account – the Government’s plans for additional homes and new towns on brownfield sites will need the police presence to be developed as they are built. County Structure plans identify areas for major development, such as the Sherford Valley in Devon where 4,000 homes are expected to be built between 2009 and 2016.

7.1.2 Community Policing

Greater community participation in policing has benefits for both police-community relations and actual levels of crime and disorder. One of the key priorities of the National Policing Plan is ‘to provide a citizen focused police service which responds to the needs of communities and individuals…and inspires public confidence in the police’. The visible police presence provides reassurance to the community.

There are several methods in which a new police building can assist community relations:

- Considered choice of the location of police stations within the community of an urban or rural environment through analysis of local demographics and crime levels

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1 Home Office Building Communities, Beating Crime: A better police service for the 21st century
2 Home Office National Policing Plan 2005-2008 p 01
• Co-locating police stations with other emergency services, such as fire or ambulance. This will aid communication between the local emergency services, which will enhance information sharing and collaborative working to benefit the community. For example, in Dorset, the fire service is reorganising, and the site of the Poole fire station is to be used for a new police station and divisional offices for both the emergency services.

• Historically, police stations have often been co-located with Court buildings, avoiding lengthy travel times for detained persons, and lowering security risks during transfers. The Crown Prosecutors are increasingly being located in police stations to provide early advice and guidance.

• Collaborative location of a small police presence with other community services, such as schools, hospitals, libraries, health centres and one-stop shops. This will increase visibility of the police and embed them into the community. This will also aid communication between the local services and the police, which could in turn enhance preventative / proactive policing. A police presence has also been found to decrease the amount of truancy from schools and reduce sickness absence. (See Section 13 Police/Public Interface)

Co-location of police with other functions makes collaboration on briefing and design essential.

7.1.3 Local Strategic Partnerships

A Local Strategic Partnership (LSP) is a single body that brings together different parts of the public sector as well as local private businesses, the wider community and the voluntary sector. LSPs are formed to take major decisions in a local area where multi-stakeholder buy-in is required. Such a decision might be the location of a new police building, or major changes to an existing police building. Forming an LSP in the decision-making process shows that the opinion of local people and their problems has been considered at a planning stage. This ensures the right actions are taken and right services delivered.

For further information refer to Department of Communities and Local Government publication Planning Together, Local Strategic Partnerships and Spatial Planning: a practical guide.

www.communities.gov.uk

7.2 The Site

7.2.1 Landscaping and External Environment

Once the location is agreed and the development brief drawn up for the specific requirements for each site, a master plan should be developed which will deliver the required facilities with a well considered site development proposal. The diagram below outlines the typical factors which influence the selection of the site and the form of the masterplan.

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3 Home Office National Policing Plan 2005-2008 p 03
7.2.2 Site Development

The masterplan should outline the proposed site development, to include analysis of the following key areas:

- Site specific requirements: e.g. development constraints and opportunities, environmental impact assessment, landscape features etc;
- Analysis of the project requirements that have been developed through the Design Quality process (see Section 6);
- Orientation of the building in relation to the sun path and most efficient sitting for conservation of energy and use of solar gain.

The development strategy will include zoning plans and diagrams that detail the proposed approach to the layout of the site.

7.2.3 Masterplanning

Site development should be in accordance with the Local Development Framework published by the local Planning Authority. Designers should liaise with the LA Planning Officer to ensure compliance with local policies.
The following principles should be considered in designing the masterplan for the site:

- potential impact on the Community: environmental and visual impact assessment
- zoning: effective organisation of activities; pedestrian and vehicular circulation
- landscaping and environmental issues: sensitivity to location and environment and creation of a sense of place
- materials: sensitivity to location; suitability for purpose and durability
- access to the facility: creating a sense of arrival and logical wayfinding
- full consideration shall be given to all current guidance on designing out crime in accordance with ‘Secured By Design’ principles. The Association of Chief Police Officers manage the Secured by Design initiative; for further information refer to web link below:
  www.securedbydesign.com

The design team should liaise with the force crime prevention team who provide secured by design advice on all building projects covered by the police force in question.

7.2.4 Landscape Design Strategy

The landscape design strategy should be developed to demonstrate the following qualities:

- good response to the character of the surrounding landscape types
- minimisation of any detrimental physical impact on the surrounding environment
- minimisation of visual impact of the proposals in areas of landscape sensitivity
- minimisation of removal of any existing woodlands, trees or hedgerows
- minimisation of impact on the topography of the site
- re-establishment of any vegetation that is removed with appropriate species
- utilisation of landscape elements that are characteristic to the locality
- minimisation of lighting impact

7.2.5 General Landscape Design Requirements

The aim of the landscape and external environment design is that the site should be assimilated into the local landscape context. It should be compatible with the existing landscape character and the district-wide enhancement strategy, as set out in the Planning Authority’s Local Development Framework.

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**Landscape Types** are landscapes with broadly similar patterns of geology, soils, vegetation, land use, settlement and field patterns. Landscapes belonging to a particular type - for example an ‘upper dale’ landscape - may be found in many different places.

**Character Areas** are unique areas - geographically discrete examples of a particular landscape type. For example ‘Upper Teesdale’ is a character area belonging to the ‘Upper Dale’ type.

The Durham Landscape, Durham County Council Information Service
The landscape development should be integrated with any strong landscape framework based on features found within the site’s ‘character area’ and should respect any long views over open countryside.

The masterplan should consider all factors contributing to the spatial quality of the landscape development, including, as a minimum:

- existing boundary hedgerows and plantation
- position of all existing trees
- details of existing and proposed levels
- details of landscape materials, especially hard surfacing materials which shall be considered in the light of increasing the permeability of the ground
- new planting that will not require high levels of maintenance or irrigation
- the creation of a wildlife rich environment and/or nature conservation areas

### 7.2.6 Building Form and Topography

The building footprint and levels of the site should be taken into account when siting the building. The Custody Suite should be contained within a single level. Access from the footpath or disabled parking should be via a single level. Ideally access from the Front Office to the Custody Suite should be on a single level, and layouts on sloping sites should be designed with this in mind.

Specific requirements for vehicle circulation may have a significant effect on the site layout – see 7.5

The amount of overlooking that it desirable between different areas should be considered at an early stage.

### 7.2.7 Planting

Planting should be of such a type as to:

- stimulate awareness of seasonal change
- provide sensory stimulation by emphasising colour, texture form and scent
- provide interest and enjoyment by including features or plants that attract birds/butterflies; poisonous plants shall be avoided.\(^4\)

### 7.3 Site security

#### 7.3.1 Security

The Police Force’s security advisors will carry out a security risk assessment once the site is selected, to determine the security requirements: physical, electronic and operational.

Home Office Property General Standards (HOPG Standards) Section should comment on initial proposals and provide access to specialist security advisors as required. HOPG Standards can also assist with advice and inspection during the design/build process and prior to final handover.

Refer to Security, 2 of this Guide

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7.3.2 Perimeter Security

Refer to Security Section 2 for specific perimeter security requirements.

The boundary of the site should be clearly defined with fencing or other equivalent means of construction. It should delineate the boundary effectively and be designed and constructed to restrict any unauthorised access to the facility.

The design of the boundary should take into account local planning issues and the requirements of the overall security system within the facility e.g. Closed Circuit Television monitoring system (CCTV).

The designer should remember that the primary purpose of perimeter security for a police site is to keep people out, or in custody situations keep people in. These essential security requirements should take precedence over purely aesthetic issues. This point may be strongly challenged by Planning Authorities and designers should ensure that they make a robust case.

Trees should not overhang the secure perimeter, and no object should be close enough to allow climbing onto and thus over.

The design for the perimeter should maximise the benefits achievable through careful use of landscape features, e.g.: use of ha-ha’s and defensive planting.

For many Police projects the need to protect the building against ram raid and other more extreme security threats will be required. These with their associated stand off distances etc. will have a significant effect upon the layout and usable size of the plot. For this reason the correct initial security assessment based on intended building use is of critical importance.

7.3.3 Urban Considerations

Urban police buildings will not necessarily have the space to allow for the recommended stand off distances, but have to use limited “brown field” sites within heavily built up areas. Land is scarce in inner city, high street and suburban areas. Police buildings can be overlooked by tall buildings nearby. In these cases careful assessment of the risks and additional security measures will be needed.

7.3.4 Access and Egress Points

The layout should ensure:

- rapid and direct access onto the public highway for operational vehicles responding to emergency incidents;
- segregation of vehicular and pedestrian access; the site design should be configured to keep people safe from vehicle movement, especially those responding to an emergency callout.
- one-way systems have been found to be effective within many police sites. A dedicated egress point for emergency response vehicles improves safety. Separation wherever possible between custody traffic, general operational traffic and building user car parking will also improve safety and decrease congestion.
- Urban sites also have additional considerations for the vehicle routes, Blue Light routes and secure transit of people in custody. Exit routes should avoid delivering vehicles into areas where people congregate.
Additional detail on the requirements for circulation within the site are included under 7.5 Vehicle Circulation below

7.4 Site Landscaping

7.4.1 Car Park Landscaping
The masterplan should demonstrate sensitivity to siting, layout, surfacing and detail, giving due regard to means of reducing the visual impact of parking areas both from the buildings and from outside the site. Parking areas should not be located against the faces of buildings.

Where practicable, a substantial green margin should be maintained between buildings and the paved parking areas.

Pedestrian routes should be designated crossing the car parking areas, defining direct routes to main buildings. The pedestrian path should be surfaced in a contrasting material to the car park surface.

The design of planting in car park areas should:

- avoid small planted areas
- avoid narrow shrub beds between rows of parked cars
- avoid trees with large leaves and which produce a sticky gum, such as lime trees.
- provide large shade trees, where practicable, to soften the visual effect of the car park areas
- site trees within the car park areas at least 1 metre from the kerb edge to avoid the overhang of larger cars
- use robust, low growing, hardy plants in areas near cars to resist exhaust fumes and trampling
- provide temporary fencing until the plants are established

7.4.2 Footpaths
Footpaths should be at least 2 metres wide and the surfaces should be non-slip in wet or dry conditions and fully self-draining. Slip-resistance should comply with standards and regulations generally accepted as good industry practice. The surface should not be over-roughened in texture and should have a firm base. Isolated single and double steps should be avoided. All footpaths should be adequately lit.

A change in texture on the approach to a hazard should be provided for the benefit of visually impaired people.

7.4.3 Staff Recreation/ Social Areas
Where appropriate, the site plan should include external areas where staff can take lunch breaks and/or meet on an informal or social basis. These areas should be carefully sited and screened to avoid potential conflict with operational activities and/or prevent visibility to members of the public. Ideally these should be located adjacent to any gym and catering facilities.

7.4.4 Staff Training Facilities
Consideration of the need for external staff training, fire evacuation spaces, or exercise facilities should be included in the initial information gathering process (see Section 6.1.6).
7.5 Vehicle Circulation

7.5.1 Vehicular Access and Circulation

The access points into the site will be limited by the requirements of the Local Authority Highways Department, and will be subject to planning permission. Larger schemes will require traffic analysis reports to determine traffic flows. Internal vehicular access routes shall take account of the existing highway network, including junction spacing criteria and carriageway widths. The design and provision of internal junctions will include the need to balance traffic flows, allow for capacity constraints and facilitate emergency access, as well as considering environmental and visual aspects.

Further information on the design of vehicular routes and junctions within the site can be found in the Planning Authority’s design guidelines and the Department of Transport’s Design Manual for Roads and Bridges (DMRB), available through the Highways Agency at: www.standardsforhighways.co.uk/dmrb/index.htm

The design within the site should have well-defined circulation routes, linked to the external access point with car parks, entrances and service areas, and shall be supported by a clear and simple signage system. See earlier comments regarding one way systems and separated entry and access points, 7.3.4. In particular, custody vehicle docks should be drive-through wherever possible.

The internal network should satisfy the requirements of the following:

- emergency service vehicles
- general vehicular traffic (visitors and staff)
- taxis, service and delivery vehicles
- custodial transport vehicles
- security van (cash) delivery vehicles

7.5.2 Emergency Vehicles - Access and Circulation

Safe routing arrangements for emergency vehicles should be established and agreed with the Planning Authority. The emergency vehicle - 'Blue Light’- route from the main access point should be short and free from general vehicular traffic. Routes for emergency vehicles responding to calls coming into the site should also be designated.

7.5.3 Servicing and Deliveries

The masterplan should provide routes that are direct and which segregate vehicles from pedestrian and cycle routes. Service areas should be located away from the main reception and should be screened to reduce noise and disturbance locally. The design shall give due regard to the design criteria set out in the latest edition of ‘Designing for Deliveries’, available from the Freight Transport Association www.fta.co.uk

Specific service functions (non-custodial) to be incorporated include:

- Collection and delivery of goods to the Property Management Stores
- Rubbish and material for recycling
- Stationery, furniture and equipment etc

Servicing and Deliveries to the Custody Suite are dealt with in Section 10 of this guide, and include
• Laundry, bed linen, food etc to the Custody Suite
• Some confidential and medical waste

7.5.4 Custody Suite
The Custody Suite has its own Security Perimeter, which encloses the Custody Envelope, and includes any external exercise yards, the Support Envelope, and where it extends to include secure external space. This space may comprise the vehicle dock(s), and any external route to the vehicle dock from the custody area.

The design should enable the movement of Detainees, staff, official visitors and the public to be monitored, separated, and controlled under normal as well as emergency conditions.

Detailed requirements for the Custody Suite are to be found in a Section 10 of this guide

7.5.5 Vehicle Maintenance/Wash Facility
Access will also be needed to an enclosed vehicle maintenance and wash facility, preferably for a minimum of two vehicles (to be detailed in another section of this guide).

7.5.6 SOC Facility
Access may also be required for vehicles to be delivered to a garage space for forensic examination. The maximum size of vehicle that will be examined, for example a large Transit-type van, should be decided and enough space allowed for the delivery vehicle to manoeuvre. (See Section 21 SOC).

7.5.7 Mobile facilities
Consideration should also be given to parking space for mobile facilities, such as mobile incident rooms or decontamination facilities, with power, data and drainage connections if required.
More than one mobile may be parked on some sites, such as catering vans where there is a central catering facility.

7.6 Public and Staff Access
7.6.1 Public Transport
A “Green Travel Plan” should be developed as part of the environmental management strategy. (See section 4.3)

A travel plan is a package of measures produced by employers to encourage staff to use alternatives to single-occupancy car-use. Such a plan for example, could include: car sharing schemes; a commitment to improve cycling facilities; a dedicated bus service or restricted car parking allocations. It might also promote flexible-working practices such as remote access and video conferencing.

Travel plans can offer real benefits not only to the organisation and its employees, but also the community that surrounds it. It may help to relieve local parking or congestion problems or improve public transport connections across the area. It may also relieve stress on employees through reducing
delays or providing the opportunity to cut their travel commitments by working from home on occasion.\(^5\)

The building should be designed to facilitate links with public transport services, for staff and visitors, and safe pedestrian routes should be provided within the site to coordinate with adjacent routes to public transport nodes.

### 7.6.2 Car Parking

Parking shall be provided on site to meet the categories of use set out below:

- Visitors
- Disabled visitors and staff
- Staff vehicles
- Operational Vehicles
- Service/delivery vehicles
- Emergency/overflow parking

In determining the number of parking spaces required, the nature of overlapping shift patterns should be considered as well as accessibility to public transport links and services etc. As a public service and with the intention to be a good neighbour, it is preferred that all parking should be contained on the site, limiting overspill car parking requirements. This number of parking spaces should be discussed with the Planning Authority at an early stage, as it may conflict with their general policies.

Generally there is a requirement for a higher than average number of motorcycle parking spaces. Spaces are also required for bicycles.

Parking provision for response and operational vehicles should be secure with perimeter fencing/walls and should be protected by CCTV. Allowance should be made for all vehicles to park in marked bays of the appropriate size and the parking areas should be illuminated to provide increased security and safety for staff. This is also a subject for discussions with the Planning Authorities at an early stage.

The design, layout and means of operation of the vehicle parking areas should not impede the flow of traffic on either internal access roads or the external highway network and should incorporate any relevant car parking recommendations and/or requirements included in the Planning Authority's Highway Design Guides.

The design of parking facilities should comply with the landscaping requirements and the inclusive design principles stated within Section 6.7

### 7.6.3 Pedestrian Access

A comprehensive network of secure, high quality pedestrian routes should be provided including routes from the main entrances to bus stops, car parks and external pedestrian networks.

Footways and on-site footpaths should be in accordance with the Planning Authority’s adoption standards and at least 2 metres in width, well lit, direct and laid out from point to point in a manner that minimises walk distances.

Pedestrian crossing facilities should be provided where necessary to maintain the integrity of pedestrian routes within the site.

\(^5\) Department of Transport website [www.dft.gov.uk/pgr/sustainable/travelplans](http://www.dft.gov.uk/pgr/sustainable/travelplans) accessed 07/09/2007
7.6.4 Cycle Routes
Proposed cycle routes should be direct and convenient, and designed to comply with the National Cycle Network Guidelines and Practical Details published by Sustrans: www.sustrans.org.uk.

Routes and facilities should also follow the guidelines detailed in the Institution of Highways and Transportation’s ‘Cycle Friendly Infrastructure’ www.iht.org/publications/technical/cyclefriendly.asp.

Further information can be found in the Department of Transport’s Traffic Advisory Leaflets www.dft.gov.uk/pgr/roads/tpm/tal

7.7 Site identity

7.7.1 Signage
Signage within the site, the buildings and from the surrounding immediate localities should give clear indications for all users and be fully integrated into the design of the new facilities. (See also the section on Wayfinding, Section 6.8.)

The signing to all rooms and facilities should be appropriate to define the purpose and provide effective wayfinding information to assist staff and visitors unfamiliar with the site. Where practicable, signage should be graphic, rather than textually based, to accord with Inclusive Design principles.

In accordance with the new law relating to smoke-free environments, a sign should be located within the main reception area and at each entrance to the facility, that:

- is the equivalent of A5 in area
- displays the international no-smoking symbol in colour
- is a minimum of 70mm in diameter
- carries the following words, in clearly legible font: “No smoking. It is against the law to smoke in these premises”.

7.7.2 Flag Pole
Where appropriate, a 10m high flag pole should be provided at a suitable location to the front of the facility, located within the site boundary. The flag pole should have an internal raising and lowering mechanism with appropriate operating gear.

7.7.3 Traffic Lighting
Lighting for vehicular, pedestrian and cycle routes should be provided in accordance with BS5489 Part 3 and Code of Practice BS EN 13201, and the ILE Environmental Guidelines for minimum light pollution www.ile.org.uk. The should comply with the requirements of Section 2 Security in respect of lighting needed to reduce crime risks.

7.7.4 Entrance and Reception
The main entrance should be easily identifiable on approach, and the means of access obvious. Any entry controls for out-of-core-hours entry should be well-lit and clearly visible. A draught lobby is needed for energy conservation.

The principal entrance should be accessible for all users. The current requirement of Part M of the Building Regulations is that the door should be able to be opened using a maximum force of 30N. In practice, mechanical
assistance is required. Inclusive Design is dealt with in Section 6.7 of this Guide.

7.7.5 Regional Values
Regional values and messages specific to a constabulary can be communicated to the local community through the exterior design of the building itself, design of the reception and entrance and artwork hanging in public areas. It is not only the Constabulary badge at the entrance through which the police identity is conveyed; the architecture, the interior design and the furnishings all express the constabulary identity and ethos.

7.7.6 Arrival
The visitors and users of the building should be sure that they have arrived at the right place. The name and function of the building should be confirmed at the entrance, and a list of the occupants if it is a shared facility. The security measures to be employed in the reception area should be defined in the security profiling of the project (see Section 2).

The front counter office serves as a reception point for the Police operational areas and should be visible from the entrance. Further details of the Front Office are to be found in Section 13 of this Guide.

7.8 Illustrative models
Images/case studies are to be added in further sections of this guide.