Fences Design Guide



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The London Borough of Barking & Dagenham

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Fencing and Boundary design Guidelines

Context

These guidelines will form part of a wider Public Realm Strategy and Streetscape design guide for the London Borough of Barking and Dagenham. The strategy will be adopted as interim Planning Guidance and will be incorporated into the emerging Local Development Framework. The Public realm strategy and streetscape guide, will build on the foundations of the Urban design Framework for Barking and Dagenham, which focuses on the form and structure, key spaces, places and distinctiveness of the Borough.







Timber / metal seating











1



Tree surrounds

from "The Barking Code" prepared for LBBD by Barnes + Nice

The primary aim of the Strategy and design guide will be to improve the aesthetic and functional qualities of the spaces that people experience and use every day. The Strategy and design guide therefore will cover all aspects of the design and quality of elements that combine to form the public realm.

Items such as seating. lighting, paving, litter bins, signage, tree planting, and other elements will be examined in relation to need. location, style, colour and durability. In addition, key issues such as safety. security, long term maintenance, procurement and implementation will also be explored. All of these aspects need to work together to create the desired improvements across the Borough, and to raise our aspirations for quality design. Appendix A indicates the contents of the draft Public Realm Strategy and Streetscape design guide.

Improving the quality of the public realm, not only helps in creating a more pleasant Borough that works and functions better, but is about creating distinctiveness, improving the image of Barking and Dagenham and providing the right kind of basis for inward investment opportunities for the benefit of all.



The strategy and design guide will be produced in loose leaf format to facilitate amendments, additions and ease of use. It will focus on the different elements that make up the public realm, special areas and character areas of the Borough and the contribution that the public realm makes or should make to these areas.

The strategy and design guide will be used to influence the decisions made by developers, designers, residents, businesses and the Council in creating and contributing to the Public Realm. It will be used in negotiations on planning applications, Section 106 agreements and in refining Council spending programmes.

A 5 year action plan for implementation in each Community Forum area will also be prepared to support the Strategy and the Local Development Framework in delivering improvements in line with the seven Community Priorities. It will also enable the community to engage in the decisions made about the Public realm in their area.

Part 1: Introduction

There are a number of different boundary treatments used in Barking and Dagenham.

Boundary treatments and the maintenance of them can signify a lot about a place, whether it is desirable, undesirable, maintained, accessible, vulnerable or safe. They can also speak volumes about the pride the local community and organisations working within that community have in the area, and the value that the area holds for them, physically, economically and psychologically.

The impact of boundary treatments on those living working and moving through an area is instant. The condition, type and location of boundary treatments have a direct impact on the image of an area by providing an instant snapshot of the general economy, funding on maintenance and improvements. The image of the area can affect the level of inward investment and attention to quality and detail that those considering investing in the area will give, or feel is necessary to provide, to bring the locality up to a standard that they can feel proud of or are prepared to invest in.



In considering the streetscape and public realm, the boundaries, i.e. fences, walls, landscaping, often provide the envelope within which the public realm is contained. They provide the interface between the public, semi-public, and

private realm and define spaces according to use and function. The design of boundary treatments therefore is a critical element of the public realm. Too often in design guidance however, fencing is given scant coverage, and is not covered in a holistic way.

Improvements to the Public realm and to fencing and boundary treatments, is an area where the council working with inward investment agencies, developers and local businesses can do much to change the image of the area for the better and attract the opportunities that the local communities desire and need across a number of sectors from employment to housing, social and leisure facilities.

The purpose and use of these guidelines

In approaching the issue our objectives are to create an harmonious, well designed and quality environment, which improves the image and appearance of Barking and Dagenham, without compromising on safety and security.



Our aim in this guide is to provide a range of fencing and boundary products that are widely available from manufactures. The guide provides a choice of boundary treatments for a number of different applications, to enable the developer, householder or council to choose a fencing/boundary treatment style within a matrix which is consistent with the design

principles and aspirations that the Council have for the area, without compromising on key aspects such as safety and security. However, we also aim to reduce the need for so many of the boundary treatments in the Borough by providing a more limited palette of materials that have more universal usage. This approach is outlined in **Part 3.**

The guidelines also include the Council's requirements for the implementation and long term maintenance of new fences and boundaries, to ensure that the public realm 'envelope' is kept in good order and helps to achieve the step change in image that we aspire to. These are outlined in **Part 6.**

These guidelines only cover fencing and boundary treatments that form part of the public or semi-public realm, in other words adjoining areas where the public have free and general access, including fronting onto roadways or public spaces. It will not deal with fences or boundaries that fall within the private realm, such as back or side garden boundaries, although we would encourage these standards to be adopted where ever possible.

The guidelines will be used in all pre-application discussions with developers and designers and will be used in negotiations regarding boundary treatments at planning application stages. In cases where planning approval is not required, i.e. where fences etc do not reach the height, they will be used in a targeted campaign to raise awareness of public realm design issues to influence the choices made by individuals on boundary treatments.

The guidelines will also be adopted and used by the Council, Its' partners and appointed contractors, in Council funded or sponsored schemes.

Part 2: Analysis

In order to understand the nature and extent of improvements that need to be made to achieve a step change in image, we need to observe and analyse what is happening in the Borough at present, and look at good examples and analyse why they achieve our objectives.

Why do we have fences and boundaries?

There are a number of reasons why we have fences or boundary treatments. Primarily they delineate ownership, provide security, privacy or a combination of these functions. There are good and bad examples of how these functions are addressed through boundary treatment choices. Occasionally fences or boundaries may also provide noise attenuation or decoration. However some types of boundary treatment seem to have no other purpose but to keep people from trespassing.







However, we are a nation of boundary builders! It is almost part of our culture. Boundaries are not used to the same extent in middle America for example, where many homes, social and community facilities do not have any fences or boundary demarcation at all.

We may not be able or want to go as far as that, but we need to question what function the boundary serves and why. We also need to examine the type of boundary treatment that is being proposed and what contribution it makes to the streetscape. It should only be a positive contribution in all senses. If the boundary treatment is not necessary, is too high for the required purposes or of a style, colour or material that detracts from the overall appearance of the street and public realm, it will not be looked on favourably.



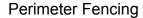


What kind of boundary treatments are used in Barking and Dagenham?

In taking simple trips across the Borough we identified around15 different types of boundary treatment. There are bound to be more than this, when different combinations are considered.

Some of these boundaries are necessary, others perhaps are not and other treatments may be more appropriate to provide demarcation.

The 15 boundary treatments identified are:-





Protective Railings





Trip rails (Post and rail)





Hedges



Shrub planting



Planters



Trees



Grass verges



Hard landscaping





Buildings

Shipping containers



Earth bunds



Kerbs



Or...... a combination of these together or adjacent to one another!









Do we need all of these Boundary treatments?

There is merit in having a variety of boundary treatments to add to the distinctiveness and legibility of the Borough. However, too much leads to a chaotic mishmash of treatments that look, and are, unplanned and detract visually from the environment.

We have too many 'boundaries' in Barking and Dagenham, most of which seem to be used to delineate ownership, to separate different 'zones' and may not be necessary. The need for boundary treatments needs to be challenged in certain applications, such as around amenity greens. This does not mean that all fencing should be removed or rejected, but the need should be examined in accordance with the matrix. The images below show some examples of boundary treatments that may not be necessary.





The removal of certain boundary treatments can create more usable space, and contribute to a more unified and harmonious environment. Other ways of delineating space which contribute to the overall public realm, can and should be found. The images below show examples of where and how this can be achieved.







In addition, each of the examples outlined in the section above have an enormous range of style, height, design, colour, composition, which together with wear and tear, quality of construction and maintenance means that there are countless examples of boundary treatments used in the Borough. This adds to the visual chaos and detracts from the quality of the environment.

To standardise boundary treatments completely by having one style throughout the Borough, would be inappropriate. It would detract from creating a distinctive environment that has local recognition, and reduce legibility. There is a need to balance variety with harmony. This can be achieved through careful consideration and a consistent approach to the treatments used and through the provision of a well considered but restricted palette of options for each application.

Security and safety issues

Fencing and boundary treatments are often erected to ensure safety of individuals or provide security of premises. These are still key considerations in the selection of boundary treatments. The aim of these guidelines is to suggest appropriate treatments which do not detract from these needs but also present a more unified and attractive visual alternative to many of the severe fencing styles currently used, often in inappropriate applications, such as galvanised palisade fencing.



Old style industrial palisade fencing



New style wire mesh

Part 3: Design Principles and the application of the matrix

Key Design Principles

The key design principles used in the Public Realm strategy and Streetscape design guidance document are followed through all elements and applications. These key design principles are shown in *Appendix B*. They may not seem entirely appropriate or relevant to the subject of fencing and boundary treatments as they should be seen to apply to the holistic treatment of the Public Realm.

However, with regards to the design approach to fences and boundary treatments which provide the 'envelope' of the public realm, the following **SACCS** principles should be applied.

- Simple
- Appropriate
- Co-ordinated
- Consistent
- Streamlined

What are the Key design issues we need to look at?

Having a range of different boundary treatments to tackle, the key issues to tackle are:

- Challenging the need for fencing or boundary treatments where the function and purpose is not clear, enabling freer access to public and semi-public areas.
- Creating harmony by reducing the variety of boundary treatments that lead to visual chaos
- Choosing appropriate boundary combinations that work well together and adjacent to one another to reduce visual chaos
- Providing a suitable and acceptable range of colours that will provide consistency in treatment
- Providing alternative boundary treatments to palisade fencing, that provide adequate levels of security

By tackling these issues we can begin to generate a set of design principles set out in the next section. These direct a range of boundary choices for different applications, which meet the Council's objectives and aspirations, raise design standards and improve the overall image and inward investment opportunities of Barking and Dagenham.

Where are boundary treatments applied?

We apply boundary treatments in 6 main areas in Barking and Dagenham. These can be broadly categorised as:-

- 1) Infrastructure
 - Roads
 - Railways
 - Waterways
- 2) Parks and green spaces
- 3) Housing areas
 - Parking areas
 - Amenity greens
- 4) Industrial sites
 - Industrial estates
 - Other employment sites
- 5) Commercial properties
 - Shops
 - Retail warehouse outlets
- 6) Community facilities
 - Schools
 - Playgrounds
 - Surgeries and health facilities
 - Sports facilities
 - Leisure facilities

The matrix below therefore relates to these 6 key areas, and provides a range of style variations that might be applied. The only exceptions to this are along trunk roads and main Borough Roads, where the TFL Streetscape design guidelines should be used, and in designated 'special areas' such as Barking Town Centre where specific design codes exist and should be applied. (See footnote below)

		ı		secu	rity				Recom	mended
	a. Roads		Description	people	vehicle	Sense of Division	Character / Impression	type	primary boundary use	Images
			> Trunk roads will be governed by TFL Streets requirements. > Motor vehicle carriage way and pavement. > Range from quiet residential streets to town centre high streets to major A roads		> in the public realm roadside barriers are designed to deter vehicular access and restrict pedestrian movement.		for intersections and bollards where required. Kerbs are		> safety > area definition	
Infrastructure	3. Railways		> This will be dictated by railtrack requirements in consultation with council > Tube and Main Line Railways > Safety considerations should be obvious but the main concerns are fast moving trains and electrified tracks > These safety concerns are paramount when considering the security of railway lines	must be the highest possible security be in line with tfl, Network Rail and highways policy	> controlled maintenance access is necessary	devision	 > high un-scalable > tfl & BR palisade > network rail have as part of their safety and environment plan (sect 3.1) stated that they will work with stakeholders to improve the visual appearance of their facilities. 	 > high un-scalable > tfl & BR palisade > network rail have as part of their safety and environment plan (sect 3.1) stated that they will work with stakeholders to improve the visual appearance of their facilities. 	> high level safety and security > area definition	
	C. Waterways		agency	the desire here would be to keep people out of the water at all costs however to do this may strip all aesthetic qualities that the waterways brings.	necessary at all water crossings and other	C4. > very strong	C5. > varies dramatically and must be considered with reference to other relevant uses identified in this matrix	C6 > soft landscaping; mounds, verges > railings > dock edge > saftey barriers	C7. > safety warning > ecological protection	Environment Agency
). Parks		> Defined opening and closing times the times	Parks need to have variable security; by day hey need to be fully accessible to all members of the public. By night every effort has be made to seep people out	maintenance and special events	D4. > ideally when a park is open the division from internal areas to the rest of the public realm will be close to seamless > after hours the park must be secure, traditionally the municipal park will be boarded by a somewhat regal fencing system (??)	D5. > every effort should be made to keep park fencing as unobtrusive as possible > where parks abut busy roads boundary treatments should be used to block the traffic noise	D6. > vertical bar, teamed with planting or hedging	D7. > After hours security	
Parks and green spaces	E. Green Spaces	The state of the s	E1. > Green Spaces are less defined open areas > No opening and closing	F2. Free movement :	Ξ3. > see D3	public realm	E5. > boundary treatments for this type of land use should thoroughly challenge the necessity of each boundary type obtrusive fences and hard edges should only be used where absolutely necessary	e > earth mounds		
	. Parking areas	i	F1. > large variety of type for housing parking areas. It ranges from > individual parking areas right through to the parking areas provided befor tower blocks.	level of security varies dramatically on a case by case basis , access by foot is obviously becessary.	=3. > car access may need to be controlled if the car- park is private or paid	F4. > similar to roadways - see 4.	F5. > obtrusive fences and hard edges should only be used where absolutely necessary	F6. > planting, bollards, post and rail	F7. > low level security	
	G. Amenity greens		G1. > Small areas of green open space in housing areas, often acting as boundary treatments in them selves.	52. NA	G3. NA	G4. See E4	G5. > low impact if at all	G6. > Planting or bollards	G7. > area definition	
Industrial sites	ł. Industrial estates		H1. > By the way industrial estates fit into the land use patterns of the British landscape they are usually "closed" to the general public they are usually characterised by wide roads, large lorries and limited footpaths > after hours access is a major security concern	rehicular movements as most of these measures will keep people out	H3. > Vehicular movement is the primary concern for securing an industrial site. The main issue is theft of expensive goods and machinery. > Due to the nature of industrial sites they have very poor passive surveillance making more elaborate thefts such ram raiding very possible.	H4. > there is a very clear sense of division in industrial estates starting with a strong awareness upon entering the estate.	H5. > strong, secure	H6. > secure weld mesh fencing	H7. > very high level security	
	Other employment sites		I1. > such as offices, low impact industrial, warehousing > usually more integrated with other land uses than industrial areas is > after hours passive surveillance is still limited.	2. • employment sites must be pedestrian friendly, it is the buildings which must be secure	3. > see I2	I4.> any areas with a single or limited land use such as employment areas will have a relatively strong sense of division	I5.where possible, boundary treatments in employment areas should not be obvious	I6.large planter boxes, hedgesrailingsbuildings	I7. > Medium level security	
Commercial properties	. Shops		J1. > usually situated in areas that are well connected to homes and public transport > this along with extended opening hours of general stores contributes to passive surveillance > these areas have a tendency to attract antisocial behavior	the area around shops is for pedestrians	J3. >see A3	J4. > see E4	J5. > low impact delineation	J6. > delineate with bollards, planters, and other hard landscaping	J7. > area definition	
				retail warehouse outlets need to have secure grounds after hours	NA	K4. > see I4	> closer to industrial than other employment	> weld mesh > buildings	> High level security	
	Schools		> schools have always been like a magnet for after hours antisocial behavior > similar security issues to parks (see D1) they must be secure by day and also after-hours.	.z. ee I2	> controlled access points	 > schools are very well defined places with strong boundaries. > there should always be a strong sense of division at the transition points for the pedestrian and motorist. > schools need to have strong and obvious entry and exit points 	> A similar look to that desired for parks	Secure post and rail fencing and hedging	> High level security	
Community facilities N	A. Playgrounds			playgrounds will either fit into a park or a green space or they will be the green space	NA	> playgrounds will be fenced by low picket type fences to prevent any ambiguity.	> these areas need to appear to be and also need to be secure	> bow top contour railing	> Low level security > Area definition	
		f	facilities	N2. • the buildings and waste areas must be very secure but otherwise the grounds do not need excessive security	N3. > the concern here is for the car park, see E3.	NA	NO. >	N6. > railings > buildings	N7. > Mid level security	
	O. Other residential		O1. > standard private residential developments >	D2. need to deter movement of people	O3. > needs to restrict cars	O4. > strong given that it is a private space	O5. > see E5	O6. > railings > buildings	O7. > Mid level security > Property delineation	

The use of Colour

Colour is very important in boundary treatments. Fences and boundaries should blend in with the general landscape and not present a highly intrusive visual feature. For this reason fences and boundary treatments, with the exception of brick or similar clad walls and soft landscaping, should be of a receding colour.











Receding colours, are generally the darker colours of the spectrum. Black is perhaps the best colour for metal fencing, railings and similar boundary treatments, and provides for a consistency of treatment and appearance. Darker shades of blue, green or grey with similar tones, will enable variations in treatment that harmonise and blend well together. The exception to this rule is in areas such as the Town Centre, where the Barking Code advocates stainless steel to provide distinctiveness in the Town Centre.

Part 5: Procurement

All of the boundary treatments and variations expounded in the matrix, are available from a number of well known manufacturers. These are indicated in *Appendix C.*

For procurement of fencing and boundary treatments in Council owned or managed facilities, the Council's approved contractors should be used.

Green Procurement

Permanent fencing and boundary treatments should be designed, built and installed to last. Procurement should be from sustainable sources, where at all possible, and sustainable accreditation should be sought from suppliers.

Part 6: Implementation and maintenance

Implementation of fencing and boundary treatments must be to the highest standards. Standards for implementation and maintenance are attached as *Appendix D*.

It is recommended that colour on fencing and boundary treatments should be powder coated, to ensure that a long lasting, non-peeling and good colour coverage is maintained for as long as possible. This will reduce long term maintenance and ensure that the boundary treatments look good for longer.

Part 7: Associated issues for resolution

There are a number of issues that need to be tackled in conjunction with the implementation of the fencing and boundary treatment design guide, in order to maximise the effectiveness of the guide.

Good boundary treatments can be marred by poor maintenance regiemes, weed growth, windblown litter, fly tipping and dumping, poor location of facilities and illegal signage.



















These aspects also impact on the visual chaos and on the overall image of the Borough.

Improved monitoring, maintenance and enforcement is required to ensure that the image improvements are achieved in relation to the public realm as a whole.

Tackling these issues and issues of procurement and sustainability may require a critical review of how systems operate to achieve optimum results. This may take some time, but is an essential component in improving the public realm.

Appendix A: Contents of London Borough of Barking and Dagenham's Draft Public Realm Strategy and Streetscape Design Guide.

1 introduction

purpose application looking forward accessibility

2 streets as living places

through history character of streets the historic environment

3 designing for best practice

design strategy the vision – Barking and Dagenham 2020 and beyond key design principles some examples of best practice

4 applying the design principles in the Barking and Dagenham

applying the principles
street types
townscape character areas
paving surfaces
street furniture
construction details
quality controls on utility companies
traffic management issues
street type style palettes

5 potential projects

regeneration area neighbourhood street transport interchange conservation area local shopping centre

6 design related issues

public art existing public art lighting advertising streetscape design against crime local agenda 21

7 implementation and procurement mechanisms managing quality integrated management

8 Acknowledgements, Glossary and reference

Appendix B: Key Design Principles from the London Borough of Barking and Dagenham's Draft Public Realm Strategy and Streetscape Design Guide.

KEY DESIGN PRINCIPLES

hues similar.

SIMPLE	ACCESSIBLE	SEAMLESS
Uncluttered Clutter is visually and physically confusing, crowded and untidy. Streets are untidy places, but this should emanate from the activities within them which can add to their character, not from the public infrastructure. 'Less is more' Seek to combine functions in single elements, e.g. traffic signals and lamp columns, cycle stands and guard rails. Material types Form follows function - layouts should avoid pattern making with mixed colours and textures unless they demarcate important hierarchies of space and movement. Material transitions Avoid placing two similar textures alongside each other. This causes visual confusion eg. grid bonded square modular parking slabs next to stagger bonded rectangular slabs. Colours These should be receding. Mixed colours should only be used where their tones are complementary, and their	Unobstructed Layouts of roads should zone necessary obstructions. Management procedures shall enforce a rigorous removal programme of unnecessary obstructions. Convenient Well-connected and direct routes for pedestrians without detours from desire lines. Comfortable Wide crossings and avoidance of steep gradients. Vehicular rights of way should be challenged where they discomfort the pedestrian. Legible Pedestrian routes and destinations should be understandable and immediately obvious by design, limiting the need for signage.	Appropriate Fitting the character of the area and surrounding buildings. Matching Tying in new design with existing patterns and materials to avoid visually or physically jarring results. Using scale and proportion in paving to reflect local buildings. Appropriate Street furniture should be colured to recede in view but not so as it is hidden from the visually impaired. The colour is to be black highlighted with gold where appropriate.

Appendix C: Suppliers of fencing and boundary treatments

Fencing Systems

JB Corrie & Co Ltd Frenchmans Rd Petersfield Hants GU32 3AP

tel: 01730 237100 fax: 01730 264915

SWE Contract Engineering Waterham Business Park Faversham Kent ME13 9EJ tel: 01227 751813

tel: 01227 751813 fax: 01227 751183

Darfen Unit B1, Eurolink Industrial Estate Sittingbourne ME10 3RL tel: 01795 414180

tel: 01795 414180 fax: 01795 414190

Alpha Rail Limited Alpha House Urban Road Kirkby-in-Ashfield Nottingham NG17 8AP

tel: 01623 750214 fax: 01623 756596

Havering Fencing Co 237 Chase Cross Road Romford RM5 3XS

Tel: 01708 747855 Fax: 01708 721010

Heras UK Fencing Systems Herons Way Carr Hill Doncaster South Yorkshire DN4 8WA IAE Fencing Brookhurst Industrial Estate Cheadle Stoke-on-Trent Staffordshire ST10 1SR tel: 01538 755888

tel: 01538 755888 fax: 01538 751300

Dirickx UK Limited 20 High Street Southrepps Norfolk NR11 8AH

tel: 01263 834436 fax: 01263 834391

Street Furniture - Bollards, Railings etc

Woodhouse UK plc Spa Park Leamington Spa CV31 3HL tel: 01926 314313

fax: 01926 883778

Bunkert Street Furniture
Unit 1A Southern Cross Business Park
Bray
Co. Wicklow
Ireland

tel: 0800 169 1523 (uk free phone)

Treatments - Powder Coating, Galvanising etc

MGC Galvanising & Powder Coating Castle Road EuroLink Industrial Centre Sittingbourne Kent ME10 3RN

tel: 01795 479489 fax: 01795 477598

G & G Powder Coatings LTD Rippleside Commercial Estate Barking IG11 0RJ

tel: 020 8592 4555 fax: 020 8592 4777

Appendix D: Implementation and maintenance Standards

(To be inserted from existing maintenance guide)