

Hebron Road Urban Design Strategy

October, 2017

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Introduction

1.1 General

The purpose of the strategy is to provide a coherent approach to the planning, design and implementation of improvements to the character and fabric of the Hebron Road strategy area. The strategy has been prepared to meet the objective of the current City and Environs Development Plan to prepare an urban design framework for the Hebron Road. The strategy comprises two key elements;

1. a framework, which sets out an integrated approach to land use, movement and development; and
2. Guidelines for the improvement of the street and the development of key sites on the road. The framework and guidelines will be used by Kilkenny County Council to prioritise street improvements and to inform decisions on future planning applications on the road.

The Strategy can also be used to guide developers and the community when preparing or contributing to development proposals on the road. The strategy sets out a longer-term vision for the Hebron Road that will be achieved incrementally, in the context of current and likely future resources.

1.2 The strategy area

The strategy area includes the full length (approximately 1.4km) of the Hebron Road, stretching from MacDonagh Junction, at the western end of the road, to the N10/N77 (Ring road) junction at the eastern end of the road. The strategy area also includes an extension of the Hebron Road south towards Bishop Birch Place. (See Figure 1). The area was extended to include the road north of the cemetery at the request of the Council at the April meeting 2017. The Hebron Road now provides one of the main approaches to the city centre, from the N10 and the M9. John Street, one of the city centre's main streets, is located a short distance from the MacDonagh Junction. MacDonagh railway station is within a comfortable walking distance of much of the road. In common with many long-established approach roads to towns and cities across Ireland, the Hebron Road has witnessed incremental development over many years. The road is strategically well positioned, being within a short walking distance of the city centre and MacDonagh Station. It also benefits from direct access to the strategic road network.

The connection of the Hebron Road to the National primary road and motorway network has increased its prominence within the urban structure of the city and increased its role as a link approach. Significant sporting and civic uses of importance to the city and county are located on the road. Despite this, prominent undeveloped and underdeveloped or obsolete sites on the road remain in need of redevelopment. A coordinating urban design strategy is needed to address the lack of character of the road and to bring about a better image and coherence.



Fig. 1: Strategy Area

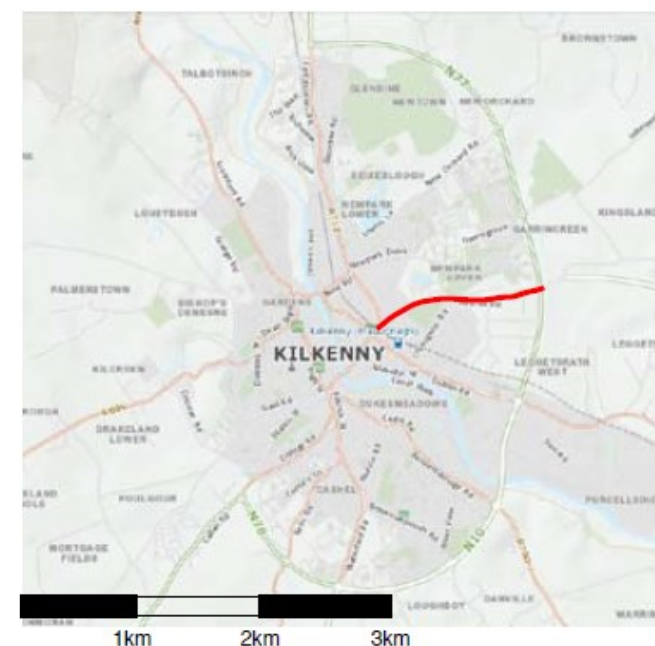


Fig. 2 Strategic Context



Access to the MacDonagh Junction Shopping Centre



Ossory Park frontage to the Hebron Road



Basement car park entrance to Shopping Centre

1.3. Policy Context

1.3.1 Kilkenny City and Environs Development Plan, 2014-2020

The current Development Plan sets out a range of relevant, higher-level policies and objectives around transport and urban design (Figure 3). It also includes specific local objectives for the Hebron Road. The study area is covered by a number of different zoning objectives, reflecting the mix of uses found in the area (Figure 3), including Mixed use, General business, Community facilities, Recreation, amenity and open space, Existing residential and Industrial/warehousing. A significant section of the Hebron Road frontage is covered by the mixed use zoning objective. The local objective (Z3) requires the preparation of Urban Design Framework Plan for the Hebron Road. Objective 10-O of the current plan is "To provide a second entrance to the Hebron Industrial Estate from the Hebron Road". The Hebron Road is also designated as a distributor road in the Development Plan. In addition, the Development Plan also includes a range of development management objectives covering important aspects such as scale and form, access and parking and residential amenity. These objectives and controls will remain in place and will not be affected by the guidelines and proposals included in this strategy.

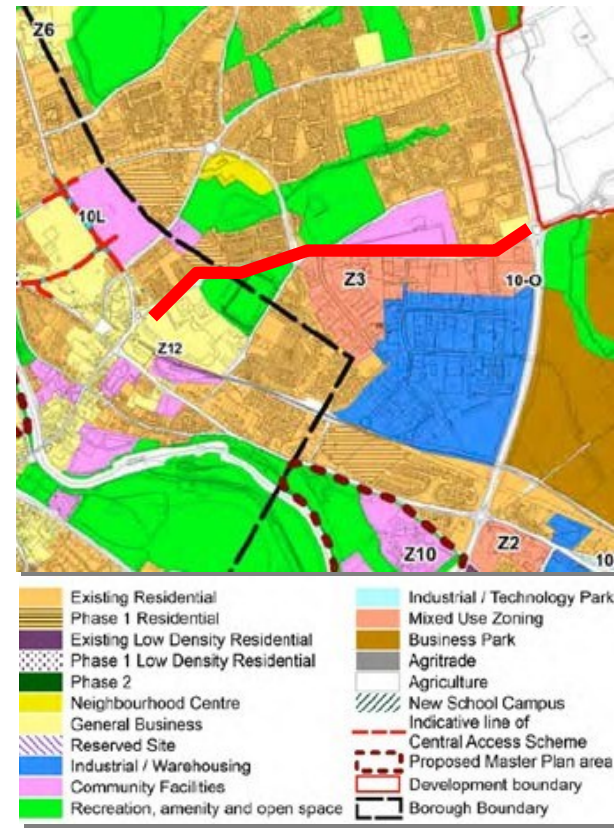


Fig. 3. Extract from Kilkenny City and Environs Development Plan 2014-2020 with Hebron Road highlighted in red.

1.3.2 General guidance

The Design Manual for Urban Roads and Streets (2013) (DMURS) provides the national-level guidance for local authorities for the design and improvement of urban roads and streets. It comprises a set of key principles, approaches and standards which aim to secure the implementation of the high-level policies of Smarter Travel at local level. It sets out guidance to achieve quality, safe streets and spaces, which balance the needs of all users. For existing streets, DMURS aims to provide a greater balance in favour of more sustainable transport modes and vulnerable street users such as pedestrians and cyclists. DMURS also promotes active and vibrant streets, which can balance their function as both a place and a link. Many of the measures required to improve existing streets involve a reconsideration of pedestrian, cycle and public transport facilities and the improvement of key components of streets including the carriageway and junctions.

The National Cycle Manual (2011) promotes cycling as a sustainable form of transport and seeks to rebalance design priorities towards a safer and more comfortable environment for cyclists. The Cycle Manual is aligned with DMURS and recognises the parallel need to reduce vehicular speed and improve road safety. On busier streets, such as the Hebron Road, dedicated cycle facilities are generally recommended. The Manual provides detailed guidance on the design of cycle facilities including on-street cycle lanes and raised cycle tracks and lanes. The Manual highlights the importance of other design measures such as narrower vehicular carriageways and tighter corner radii. On busier roads, such as Hebron Road, the Manual recommends raised cycle lanes or tracks.

The Urban Design Manual (2009) was published as guidance in support of planning guidelines for residential development. The Manual sets out a useful set of criteria to ensure better quality development outcomes.

Many of these criteria can also be applied to non-residential development in the mixed use, general business, and industrial/warehousing zoned areas in the strategy area.

1.4 Consultation

A local consultation workshop was held in February 2017 at the offices of Kilkenny County Council. The workshop was attended by representatives of the County Council, the project consultants, local residents, business owners and other interested parties. The aim of the workshop was to identify key concerns and opportunities for the Hebron Road. Follow up submissions were also invited from interested parties through other channels, such as the Council's online consultation portal. Many issues and opportunities were highlighted in the consultation. In essence, issues focussed on movement and character. The main issues relating to movement included:

- High traffic levels and congestion at certain locations and times;
- High traffic speeds;
- The safety and comfort of pedestrians and cyclist, particularly at junctions/roundabouts;
- The lack of local bus services/facilities; and
- Inadequate access arrangements for heavy goods traffic to the industrial estate.

The main issues around character included:

- Lack of green areas or urban space;
- Absence of public art;
- Lack of landscape elements, such as trees and screening;
- Lack of street furniture, such as benches and poor quality or generic street furniture, such as lamp posts;
- Clutter of signage; and
- Poor quality of frontages, such as buildings, walls and fences in key locations.

The consultation also addressed opportunities for the Hebron Road. The main opportunities highlighted included:

- Placing greater emphasis on the heritage of the road and the important events that occur there (GAA, possible World Cup Rugby 2023 venue, funerals etc.);
- Ensuring that the road is not considered as a primary traffic route for the city, by managing capacity and speeds;

- To provide new heavy goods traffic access to the industrial estate and to introduce new calming measures on the road for heavy goods traffic;
- Providing more road space to allow for better cyclist and pedestrian facilities;
- Improving junctions to provide for safer and more efficient access;
- Providing more car parking for key uses, both on and off-street, including park and ride;
- Retaining and improve existing landscaping, in the public and on private and public lands;
- Promoting the relocation of some older businesses to other suitable locations nearby to allow for redevelopment of the mixed-use area and the main Hebron Road frontage;
- Targeting greater business involvement in local initiatives;
- Addressing poor frontages such as walls, undeveloped corners and obsolete buildings;
- Providing new urban spaces along the road.

Many site-specific observations were also made and these have been considered in framing this strategy.



The local workshop (February 2017)

2.1 Historical Development

The Hebron Road has evolved from a minor rural road connecting the City and its agricultural hinterland. The road draws its name from Hebron House at Blanchfieldsland, which lies just east of the Ring road. Although the road did not lead directly to another settlement, it did serve large townlands east of the city, north of the Dublin Road (including Cellarstown and Mount George). Originally, the road terminated in John's Square (prior to the arrival of the railway in 1848). In the nineteenth century, development on the road was limited to the cemetery, a limekiln, a quarry and the Kilkenny Union Workhouse (The work house was opened in 1842. It was converted to a hospital in 1923 and operated as such until 1942, when it relocated to the Dublin Road. It was then used as a Council facility, until its refurbishment in 2007 as part of the MacDonagh Junction development). By the mid-1940s Council housing at Ossory Park had been developed opposite the former workhouse. Other notable developments at this time included Nowlan Park (1928) and St Kieran's Cemetery. The former burial ground on O' Loughlin Road (now

in use as open space) is still shown as operational in mapping in the 1940s. From the 1970s, much of the strategy area was developed as part of the Hebron Road Industrial Estate. Additional Council housing, including Bishop Birch Place, was developed in the area in the 1970s and 1980. In the late 1980s, the Government Offices were a significant addition to the road. More recently, housing was developed at Talbot Place/St. John's Road/Lakeview Drive. There has also been some notable, recent infill development and redevelopment in the strategy area, including the ALDI supermarket on the Bishop Birch Place access road and the MacDonalDs Fast Food Restaurant at the Ring road junction. These indicate a trend towards the development of higher value uses in the area. The eastern end of the road has been reconfigured to tie in with the completion of the N10 and the extension of the Ring road.

2.2 Landscape and topography

Hebron Road runs in an east-west orientation on relatively level topography sloping gently down towards MacDonagh Junction. Land south of the Hebron Road, including Bishop Birch Place is noticeably elevated. There are few notable landscape features in the area, apart from a number of established hedgerows and a small number of mature trees on undeveloped land. There are no watercourses in the strategy area, although there are adjacent waterbodies including the pond/ wetland at Lakeview Drive and the Pockocke stream, east of the Ring Road.

The Habitats Survey Report for Kilkenny City (2010) categorises much of the area as buildings and gardens and amenity grassland (sports facilities), with intensive agriculture east of the Ring road. The Lakeview Drive ponds are identified a key green infrastructure (GI) and the Pockocke River is identified as a key GI corridor. Hedgerows (unsurveyed) are noted around the cemetery and in small stretches in the strategy area.

2.3 Land uses

Although there is a range of uses on the road, they are not finely mixed. Land uses generally reflect the current zoning objectives for the road and they include:

- Commercial, retail and residential uses at MacDonagh Junction;
- Office use at the Government Offices, adjacent to MacDonagh Junction;
- Residential use at Ossory Park, Talbot Place, St Catherine's Court and Bishop Birch Place;
- A range of industrial and distribution uses between O'Loughlin Road and the Ring road;
- Significant sporting uses at Nowlan Park and the grounds of O'Loughlin Gaels; and
- Other commercial uses, such as local radio, fast food restaurant and supermarket.

There are also issues of compatibility of uses at certain locations, notably at Bishop Birch Place where the entrance to the development is via the Industrial estate.



Fig. 6: Hebron Road 1842-1848 (top) and 1940 (below) (Ordnance Survey).

Use structure

Residential	
Office	
Recreation	
Mixed use	
Retail and services	
Light industry etc.	
Car trade	
Community	
Vacant/ underused	



Fig. 5: Existing land uses

2.4. Movement

Hebron Road operates as a link route within the route structure of the City. As a strategic route, it includes facilities for vehicular traffic, cyclists and pedestrians. It provides connections to other link routes and local streets in the north and eastern environs of the city. The movement structure is shown in Fig 6 opposite.

General traffic

Since the opening of the M9 and N10 connection to the Ring Road, the Hebron Road has become a strategic approach route to the city for vehicles. The road also serves as a spine, providing access to the industrial estate and to surrounding business and residential areas. The road also provides links with orbital connections to the north to Newpark (Pennyfeather Way), and to the south and to the Dublin Road (via O'Loughlin Road). Added to this has been new trip generation from new uses such as retail and restaurant. As identified through the public consultation there is congestion on the Hebron Road at peak hours and during occasional events such as sporting occasions and funerals. Excessive vehicular speeds (outside periods of congestion) was also noted. It is likely that this is caused by a combination of the relatively straight alignment of the road, absence of active traffic calming measures (such as raised junctions and ramps), the absence of active building frontage and a lack of monitoring and enforcement of traffic.

Given the industrial, warehousing and distribution uses in and adjacent to the strategy area, there are relatively high levels of heavy traffic on the Hebron Road and on the access roads within the Industrial Estate. There are two principal points of access for traffic off the Hebron Road. One of these (Opposite O'Loughlin Gaels) is managed by an uncontrolled priority junction, the other (further east along the road, opposite the cemetery) is managed by signals (without pedestrian phases). The expansion of the industrial estate to the east of the Ring-Road is planned and zoned, with an underpass of the Ring Road south of the Hebron Road Roundabout providing access from the existing estate. The consultation for this strategy highlighted conflicts between heavy traffic and other more vulnerable road users (particularly pedestrians and cyclists) and it was suggested that heavy traffic movements could be controlled on the Hebron Road by a providing new, principal access point to the industrial area from the N10.

Route structure

Ring road (N77)	
Link street	
Local street	
Minor street/lane	
Pedestrian crossing	
Cycle lane	
Signal junction	
Uncontrolled junction	
Key entrance	
Railway catchment	

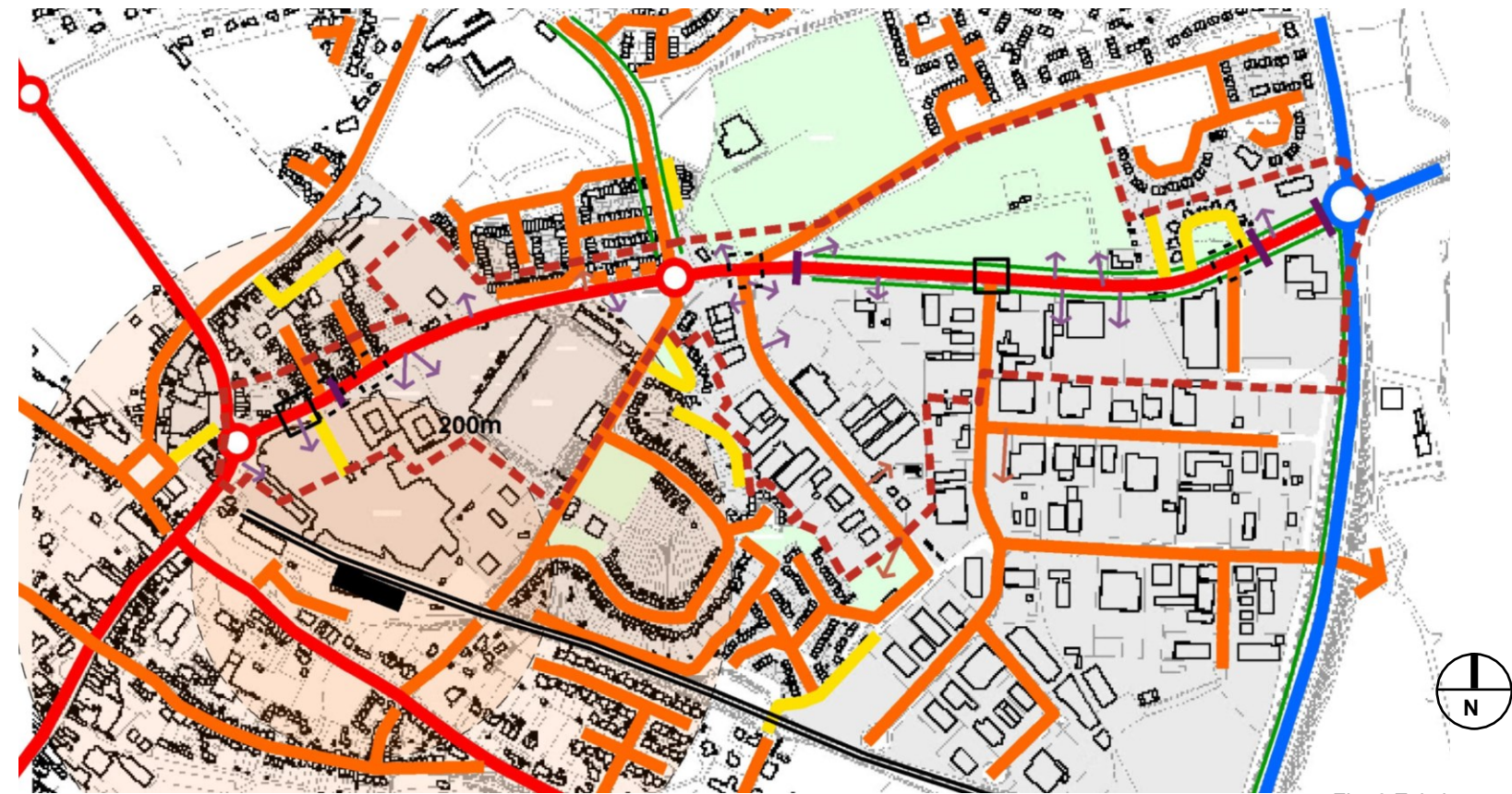


Fig. 6 Existing movement

Public transport

The Hebron Road is not a public transport route and as such there are no facilities of this nature along the road. Two new local bus routes are planned for the city with the assistance of the National Transport Authority. One of the routes (Green Route) will connect the north-eastern environs of the city and the city centre and will run twice-hourly. This route will traverse the Hebron Road at Pennyfeather Way/O'Loughlin Road. The Hebron Road is well connected to strategic public transport services. MacDonagh Station is located at the western end of the road and this provides access to National Intercity rail services. Bus Services are also located on the Dublin Road at MacDonagh Station.

Cycling

There is a combination raised cycle track and on-carriageway cycle lane facilities provided on Hebron Road between N10 junction and a point adjacent to the western end of the cemetery. There are no cycle facilities on the western section of the road, from the cemetery to MacDonagh Junction, although there are raised

cycle tracks on Pennyfeather Avenue, which terminate at the roundabout with the road. Navigation for pedestrians and cyclists at roundabouts is difficult and potentially unsafe, and this has also been observed at the O'Loughlin Road and N10 roundabouts.

Pedestrians

Basic pedestrian facilities are provided on Hebron Road and adjoining roads in the strategy area. Generally, there is a footpath on both sides of the carriageway of varying width and quality. There are a number of pedestrian crossing facilities along the Road, including uncontrolled crossings at and adjacent to the N10 roundabout, a pelican crossing adjacent to the cemetery and a signalled crossing with pedestrian phase adjacent to Ossory Park. The roundabouts provide poor levels of pedestrian comfort and safety. Issues of pedestrian safety and potential hazard were raised by members of the public in the consultation process. There are also issues of accessibility and permeability, notably at locations in the Industrial Estate and at Bishop

Birch Place. In terms of quality, pedestrian facilities in the area are basic. In some locations, there is a need to increase the width of footpaths to ensure better levels of comfort and safety. There is also an absence of landscape elements (trees and other planting) and basic street furniture.

2.5 Character and urban form

Over the years the Hebron Road has developed in an ad hoc manner without any overall strategy resulting in poor levels of visual and physical coherence. There is little fabric of historic interest or significance on the road given the relatively late period of development of the Road. The key issues around urban form could be summarised as:

- A weak urban structure with relatively few routes and connections to surrounding routes.
- Very large urban blocks resulting from large scale route network;
- Poor levels of permeability, particularly for pedestrians and cyclists, resulting from the large block sizes and large-scale route network;
- An absence of enclosing landscape elements such as trees, tree lines or hedgerows;
- A lack of continuity and enclosure of the road (e.g. building frontages) as a result of undeveloped sites, poor corner treatment, low scale buildings and set back of buildings;
- Dominance of car parking at many frontages;
- Poor visual quality of older industrial, warehousing and distribution frontage buildings, in terms and style and materials;
- General absence of secondary enclosing elements such as street trees and basic street furniture; and
- Presence of long stretches of solid walls of different heights which produce 'dead' and unattractive frontage at key locations, such as Nowlan Park and the Cemetery.

The character and urban form of the residential development on the Road contrasts with the industrial, warehousing and distribution areas. It is typically suburban in character and form and comprises typologies such as cottages, attractive, early municipal housing, semi-detached and terraced houses, and later townhouses and duplex apartments.

Urban form

Existing building frontage

Weak frontage

No frontage

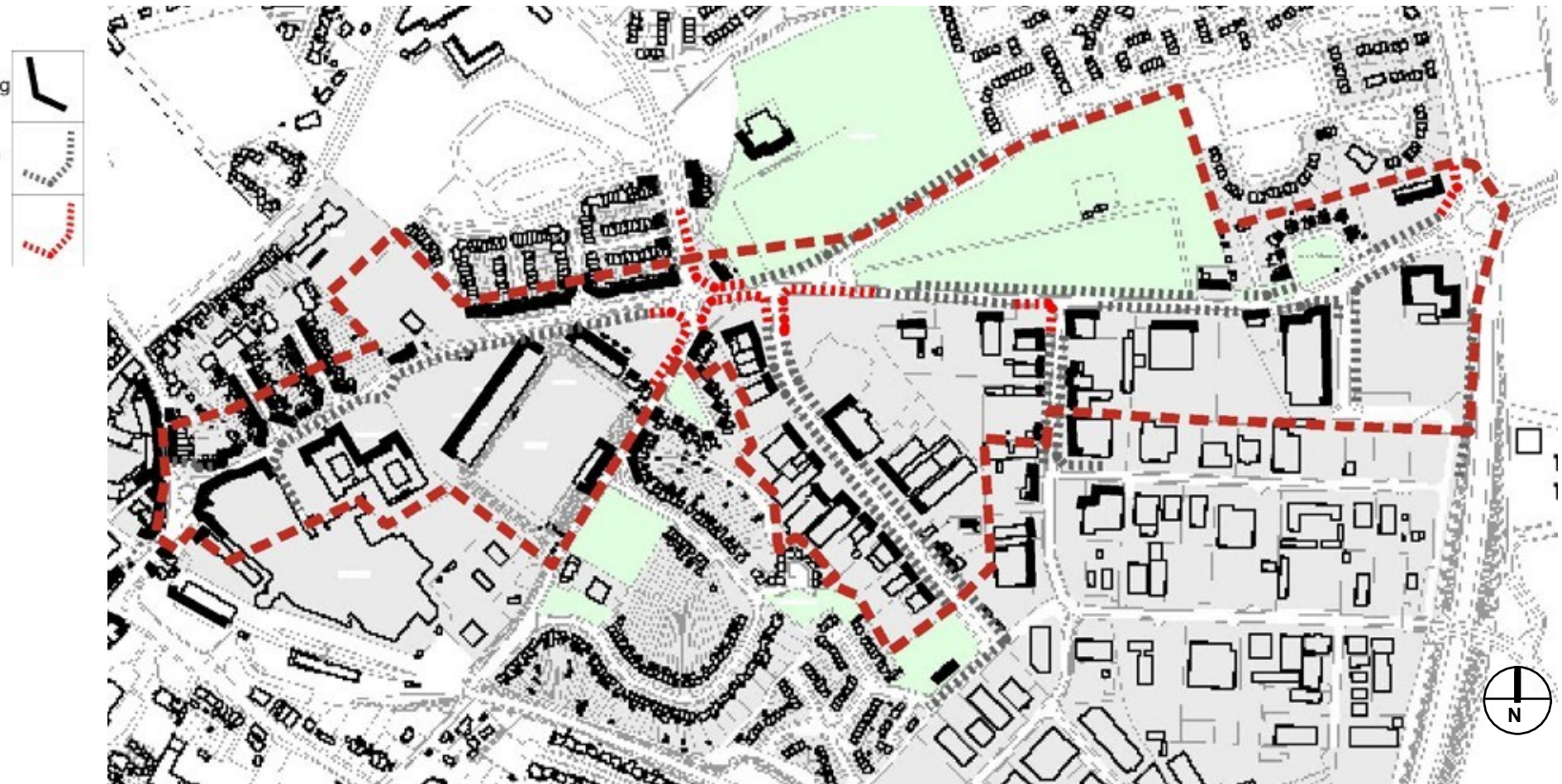


Fig. 7. Existing frontage

Urban Analysis



Established uses in the Industrial Estate



Lower value uses on the main frontage



'Dead' frontage at Nowlan Park



Entrance to Bishop Birch Place



More recent redevelopment of the Hebron Road frontage



Pedestrian wall feature



Main junctions on Hebron Road



Uncontrolled pedestrian crossing



Undeveloped land on the Hebron Road



Poor quality frontage



Heavy traffic on Hebron Road



Existing trees at Hebron Road in and adjacent to

Fig. 8: Survey images

Vision, principles and concepts

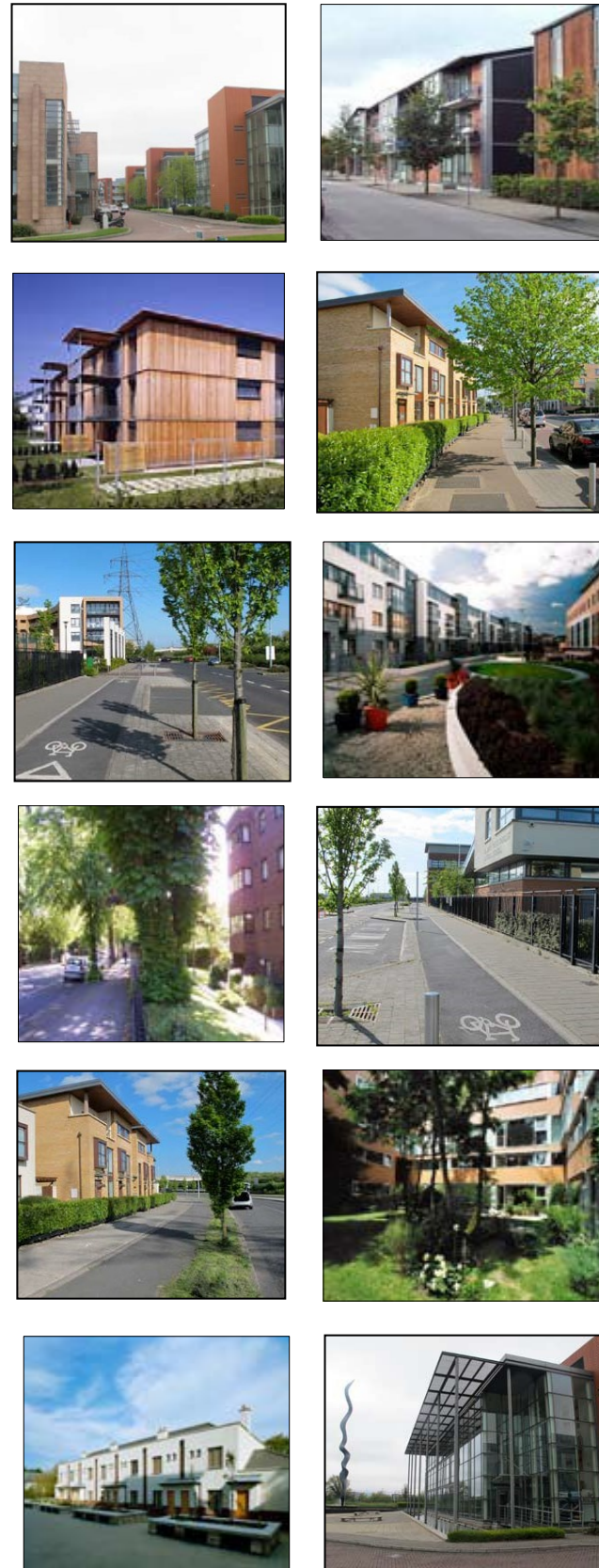
3.1. Vision

The vision for the Hebron Road is to achieve a vibrant mixed-use corridor, which is incrementally improved as a safe and attractive route, accommodating efficient and well-managed movement within a visually and physically coherent new avenue character.

3.2 Principles

A set of important principles underpin the vision and inform the framework and guidelines for the Road. They are:

- To secure important urban design objectives through redevelopment opportunities;
- To provide for improved and safer vehicular access and movement along the road;
- To provide for improved and safer vehicular access and movement along the road;
- To support and reinforce the mixed-use character and development of the road;
- To support the objectives of the City and Environs Development Plan;
- To develop an attractive and coherent urban form and landscape;
- To develop attractive and safe public spaces, including carriageways, footpaths and junctions;
- To prioritise pedestrians and cyclists by ensuring adequate facilities and managing vehicular movements.



3.3 Concepts

3.3.1 General

The framework provides the broad spatial concepts for the gradual improvement of the area. These concepts identify key actions and interventions and their locations. The framework consists of the following, four basic spatial concepts:

- Place concept;
- Movement concept;
- Urban form concept; and
- Green infrastructure concept.

3.3.2 Place concept

The place concept sets out the most basic and high-level spatial aims of the strategy. The place concept emerged from an understanding of the character of the Road, the feedback from the consultation and the potential of the road as a link and a place. The key components of the place strategy are:

- The development and enhancement of the Hebron Road as the main spine for the area, which will be reinforced in its movement, urban form and mixed-use function;
- Well connected and attractive secondary local and access streets linking with surrounding communities and activities; and
- Focal spaces at
 1. The Hebron Road / Ring Road junction (Hebron Gateway);
 2. The junction with Pennyfeather Way / O'Loughlin Road; and
 3. At Castlecomer Road / Hebron Road Junction (MacDonagh Junction).

The place concept is reinforced by the movement, built form and landscape concepts. Notably, in developing the focal spaces, short and longer-term actions will be required to improve junctions and develop corner sites with suitable scale and uses.

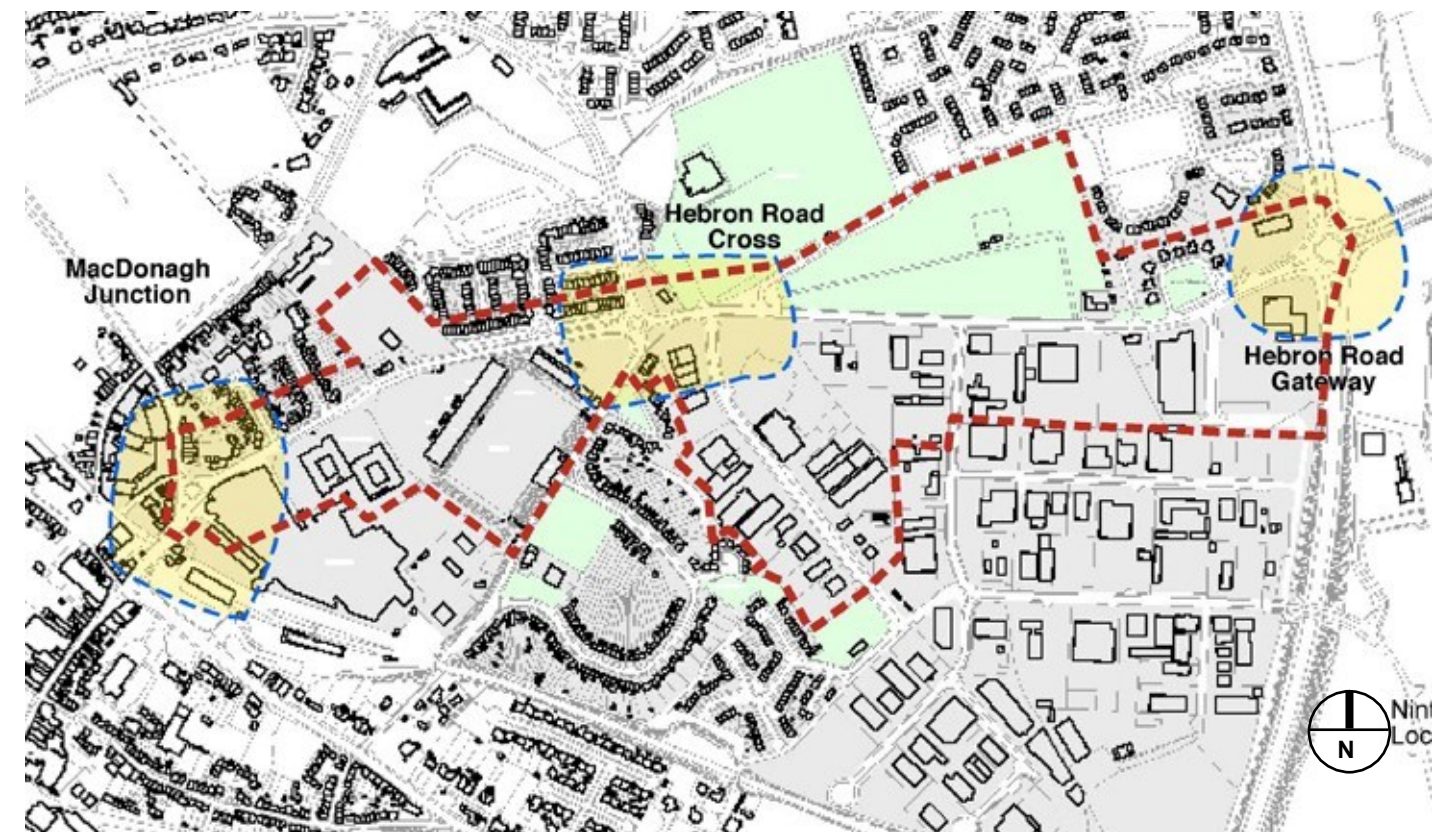


Fig. 9: Place Concept









3.3.3 Movement concept

The movement concept sets out the basic spatial aims for the all movement modes in the strategy area. It is developed from an understanding of the existing route structure and patterns of movement in the strategy area. It seeks to address the issues identified in the analysis and consultation within short to longer-term timescales.

The key components of the movement concept are:

- Improved cycle and pedestrian facilities, including:
- New and extended cycle tracks and lanes, and improved footpaths;
- Improved pedestrian crossing facilities;
- Upgraded junctions on the Hebron Road, with replacement of roundabouts with signal junctions in the longer term, subject to Transport Impact Assessment;
- To provide for new local streets in the industrial estate to improve local permeability;
- A new main access route to the industrial estate directly from the N10, east of the Ring Road;
- Introduction of new traffic calming measures to control vehicular traffic speeds and movements; and
- New traffic management for Heavy Goods Vehicles and larger commercial vehicles.

Movement concept

Ring road (N77)	
Link street	
Local street	
Minor street/ lane	
Potential local street connections	
Longer-term potential connections	
New/improved cycle/pedestrian facilities	
New/improved signal junctions/ pedestrian facilities	

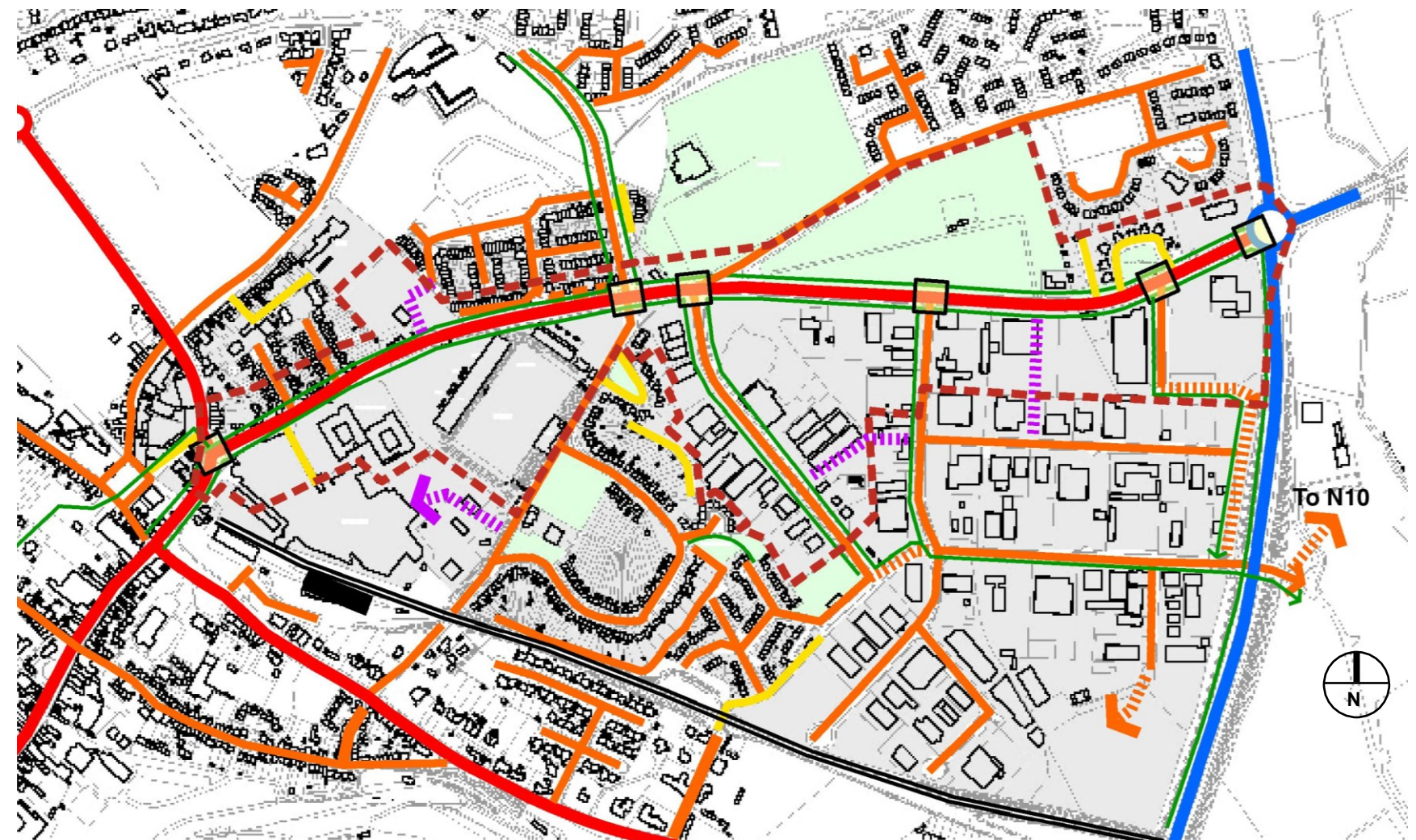


Fig. 10: Movement Concept

Vision, principles and concepts

3.3.4 Built form concept

The built form concept sets out the longer-term spatial aims for development on the Road. The built form strategy is derived from an understanding of the current weaknesses and opportunities that the Road presents. The concept focusses on the main frontages. The key components of the built form concept are:

- Coherence of physical elements, including buildings, boundaries and landscape;
- Continuity and enclosure of streets, mainly through the appropriate scale and design of redevelopment;
- Remedial action to 'dead' frontages such as extensive solid walls;
- New and consistent building lines, with better and more direct street interfaces;
- Strong building definition at corners and main junctions to enclose the focal spaces; and
- Identification of priority development/redevelopment sites.

The built form concept will be realised incrementally through the development and redevelopment of key sites. Improving the built form of the road will require a consistent approach over the longer-term. This will need to be applied consistently to decision-making in the development management process. The built form concept will also have important benefits for the movement concept in providing an enclosing and calming impact on traffic and its contribution to a safer and more attractive environment. The built form concept will be augmented by the green infrastructure concept.

Urban form concept






Existing building frontage	
Proposed indicative building frontage	
Improved landscape frontage	
New focal space	
Priority development site	



Fig. 11: Built form Concept

3.3.5 Green Infrastructure concept

Green infrastructure (GI) is a multi-functional spatial concepts, which combines considerations of biodiversity, amenity, local movement and water management. It typically comprises a network of places (hubs) and links between these places (corridors). The function and character of these elements of green infrastructure can change within this network – a corridor, for example, could be a stream or a tree-lined road. The Hebron Road can benefit from such a concept as the analysis shows that there are GI assets in the area, but they are poorly connected. The key components of the GI concepts are:

- Connection of existing features of amenity;
- Biodiversity and water management significance;
- Improved potential GI corridors, including the Hebron Road and adjoining secondary streets;
- New tree lines on all routes in the margins or as part of new structure on-street parking;
- New planting at major sporting facilities on the road;
- Preparation of a new landscape concept plan for the cemetery, including a new boundary treatment to the Hebron Road;
- Working with existing land owners to address 'dead' wall frontages;
- Requiring new planting between building frontage and the footpath in all new proposals;
- Integration of SUDS measures in street improvements; and
- Improved street furniture, including new benches, bins and lighting in selected locations.



Fig. 12: Green Infrastructure Concept

Urban Design Framework

4.1 General

The framework to the Hebron Road sets out the longer-term concepts for the improvement of the Hebron Road as detailed in the general guidelines. The framework brings together the main aspects of the guidelines for the street and development. These graphics are preliminary and indicative in nature and additional survey, planning and design is required prior to the improvements outlined in this framework being undertaken.

The framework is presented in sections as described in the place concept 3.3.2.

1. Hebron Road / Ring Road (Hebron Gateway);
2. The junction with Pennyfeather Way / O'Loughlin Road; and
3. Castlecomer Rd/Hebron Rd Junction (MacDonagh Junction).

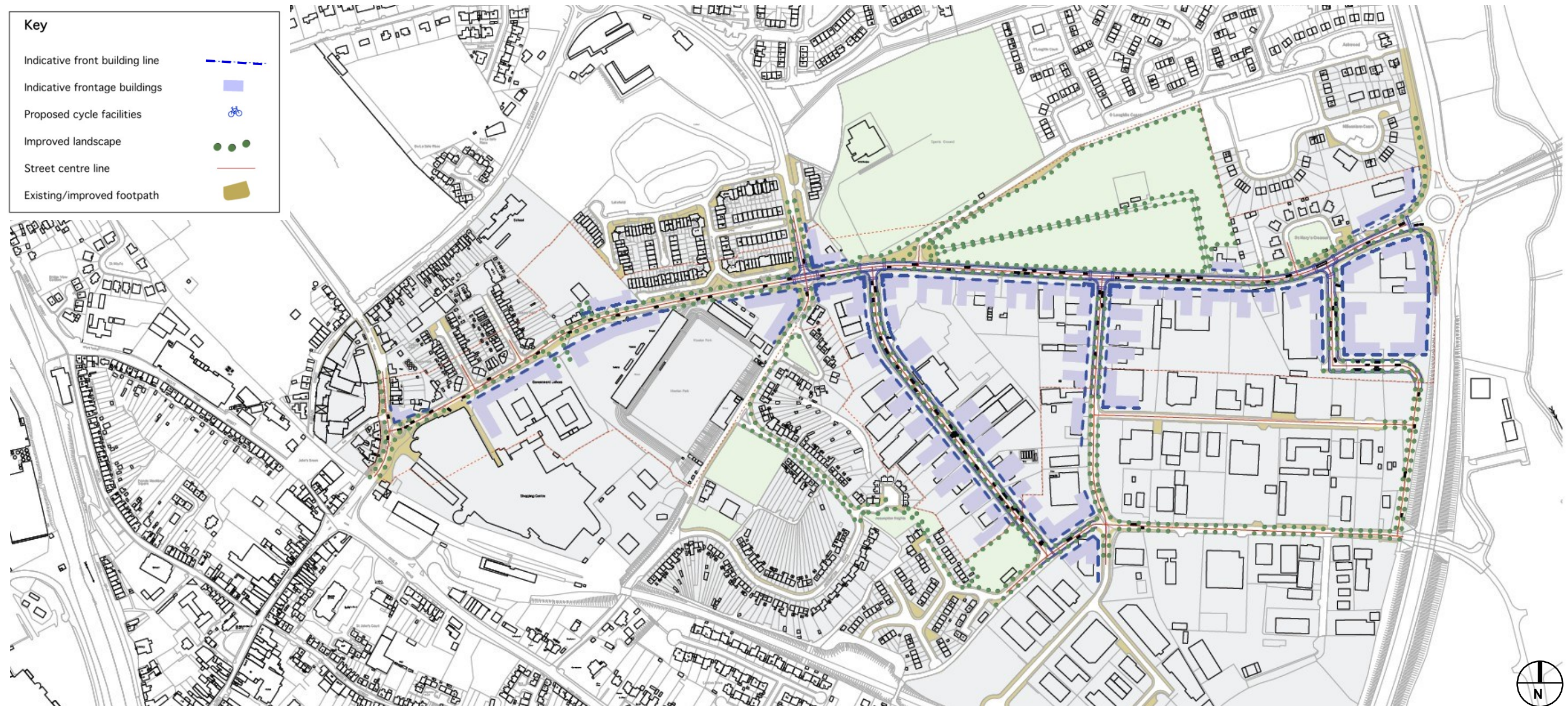


Fig. 13: Overall framework

Urban Design Framework

4.2 Hebron Gateway



3D image of gateway from the east



Fig. 14 Hebron Road Gateway

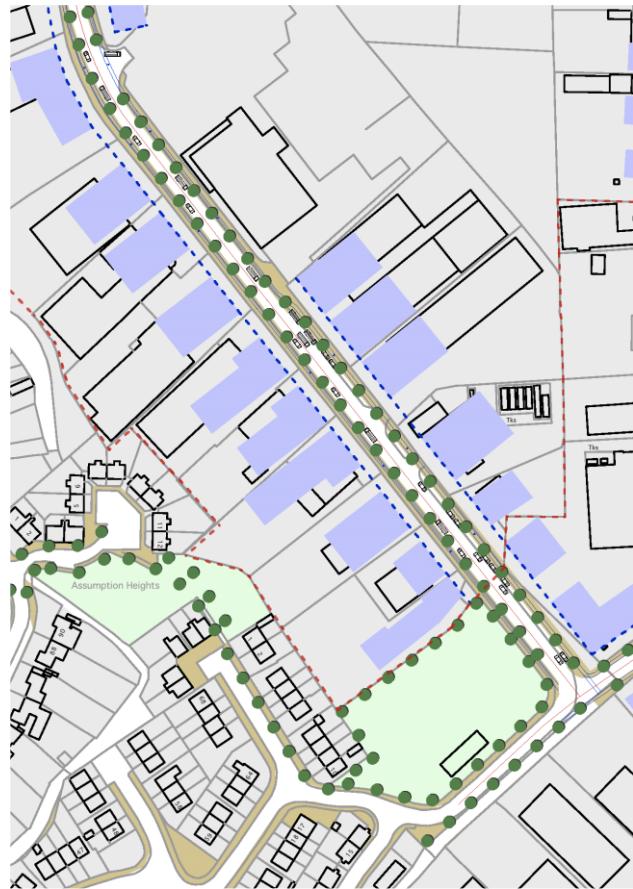


Ring road junction and extension of access road for the industrial estate



Improved and redevelopment T-junction

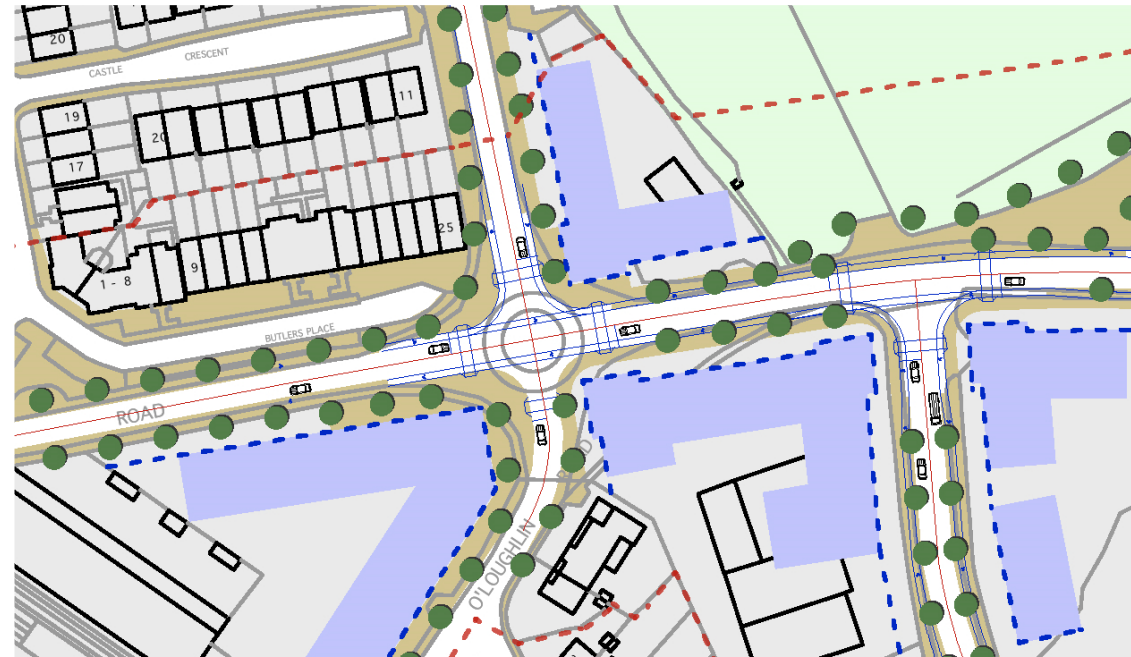
Urban Design Framework



The improved Bishop Birch Place Access Road.



The new link route at Bishop Birch Place.



Hebron Road Cross showing the two improved junctions.



3D image of the junction O'Loughlin Road/Pennyfeather Way

Key	
Indicative front building line	--- (dashed blue line)
Indicative frontage buildings	■ (blue rectangle)
Proposed cycle facilities	🚲 (blue bicycle icon)
Improved landscape	●●● (green dots)
Street centre line	— (red line)
Existing/improved footpath	■ (yellow rectangle)



Fig. 15: Hebron Road Cross

4.4 MacDonagh Junction



Improved frontage at Nowlan Park.



MacDonagh Junction improved by new frontage



Fig. 16: MacDonagh Junction



3D Image of new improved frontage at Nowlan Park

5.1 General

The following guidelines provide an approach to the improvement and development of key elements of the area. These are categorised as guidelines for the street, and guidelines for development. Guidelines for the street cover all components of the public space including the carriageway and junctions, pedestrian and cycle facilities and features such as street furniture and trees. Guidelines for development include the main considerations for the development of key frontages in the area, including boundaries, building lines, scale and car parking. The Guidelines are reflected in the framework as detailed in section 5.

5.2 Street

Improving the streets in the strategy area will be done in an incremental manner, reflecting funding and redevelopment opportunities. In the longer term, significant changes in the design and configuration will be required to achieve the principles for movement set out in this strategy. Some of these changes will require further, more detailed consideration. In the meantime, shorter-term actions can be taken to improve the function and character of the route, to address issues raised in the analysis and consultation of this strategy. It will be important to ensure that increased capacity in the area is provided for pedestrian and cycle modes in order to meet sustainable transport objectives. All improvements in the street will be required to comply with the principles and standards set out in DMURS (2013) and The Cycle Manual (2011).

5.2.1 New links

New links are proposed to address significant barriers to local permeability and to improve local accessibility. The new links will be designed to accommodate all modes (pedestrian, cycle and vehicular). They will be designed to accommodate structured parallel parking with new tree lines. The carriageways should be a maximum of 7.0m in width, with radii and vertical and horizontal alignments, and sight-lines in compliance with Design Manual for Urban Roads and Street (DMURS). The proposed new links are

- A new road connection between the access road to Bishop Birch Place and the adjacent Hebron Road Industrial Estate;(fig 10, 14 & 15)

- An extension of the existing north-south access road from the Hebron Road to internal roads adjacent to the Ring Road;(fig 10, 14 & 15); and
- A new road connection between the existing Hebron Industrial Estate/Ring Road underpass to the N10 east of the Ring Road junction (to be subject to further route study). This new connection should provide the principal means of access to the Industrial Estate.(fig 10)

5.2.2 Alignment and carriageway

In the longer term, the alignment of the Hebron Road will need to be adjusted to accommodate comfortable pedestrian and cycle facilities on both sides of the carriageway. Overall, the realignment will be modest in nature, but it will have implications for future development set-backs and building lines. The realignment will be facilitated by the reduction, where possible, of the carriageway width to 7.0m. This width is required to accommodate the frequent movement of heavy traffic to the Industrial Estate. It may be possible to reduce the carriageway to 6.5m with the introduction of a new, principal Industrial Estate Access at the N10 and in the implementation of traffic management measures (HGV weight and type limits). Any additional road space should be reallocated to footpaths and cycle facilities. Tighter turning radii may also be considered at existing junctions.

5.2.3 Footpaths

Footpath will need to be improved throughout the strategy area. The priority will be to ensure that adequate space is available to provide safe and comfortable service. A target width for pedestrian-only footpaths will be 2.0m. In the short term, 'pinch-points' or narrow sections of footpath should be identified and widened where possible. The quality of footpaths is also important. The priority should be for durable, smooth and consistent surfaces (asphalt or poured concrete) with a neat kerb and a standard detail at the back of the footpath. Additional details could be added at the focal spaces, important accesses and crossings.



Parallel parking with build outs and trees



Shared footpath and tree line



Cycle track with loading

5.2.4 Cycle facilities

Existing cycle facilities are intermittent and of different typologies on the Hebron Road. It is proposed to improve and extend these facilities as follows:

- Improve and raise cycle facilities along the Hebron Road from the Ring Road junction to the O'Loughlin Road junction (Hebron Cross);
- Provide shared cycle and pedestrian facilities along the Hebron Road, from Hebron Cross to MacDonagh Junction; and
- Provide new raised cycle facilities on the access road to Bishop Birch Place. This will be subject to further more detailed survey to reduce existing carriageway width (to between 6.0 and 6.5m, given low levels of larger vehicles at this location) and to widen existing footpaths.

5.2.5 Street trees

Street trees will be important in providing visual definition of the street in the strategy area. Trees also have positive traffic calming effects and assist in connecting the green infrastructure of the strategy area. Where possible, new tree lines will be incorporated into the footpath or in new, structured on-street car parking. On the Hebron Road, where widths are restricted, new tree lines may only be possible on one side of the road. The Bishop Birch Place access will be significantly enhanced by new tree lines on both sides of the road, both on the footpath and in new structured, on-street car parking areas.

5.2.6 Street furniture and lighting

The area lacks basic street furniture, such as benches. Street furniture should be provided along with the improvement of the footpaths. Where adequate space is available and where it is likely to be needed. It should be placed at the focal spaces and adjacent to the sports grounds and the cemetery. Street lighting should also be improved in the area. Consistent, energy efficient (LED) and contemporary lighting would be appropriate to the character of the Hebron Road. Lower level lighting might be considered at the cemetery.

5.2.7 Traffic calming

Traffic speed and conflict between vulnerable streets users and heavy traffic were highlighted as issues in the consultation. In existing streets, a combination of active and passive measures are commonly employed to address these problems. Passive measures can be provided by minimising carriageway width, introducing on-street car parking, adding enclosing elements such as tree lines and closer and ensuring more active building frontage and improved junctions. Active measures can include ramps and raised junctions. Active measures could be considered in the short term, pending the reconfiguration of the carriageway and footpaths. Raised junctions may also have benefits in the longer term for pedestrians, however, all active traffic measures must facilitate the cyclist.

5.2.8 Junctions

There is a need to improve the junctions on the Hebron Road to provide a more balanced service and to address safety and comfort issues for the vulnerable road users (pedestrians and cyclists). In the longer term, it is proposed to improve the junctions on the Road as follows:

- Replacement of the MacDonagh junction roundabout with a signalled junction with pedestrian and cycle facilities ;(Subject to traffic impact assessment);
- Replacement of the Hebron Road/Pennyfeather Way/O'Loughlin Road junction (Hebron Cross) roundabout with a signalled junction with pedestrian and cycle facilities;(Subject to traffic impact assessment);
- Improved signalled T- junction at Hebron Road (Lyng's Showrooms); and
- Improved T- junction with new signalled junction at Hebron Road (Walshe's Showrooms).

All improvements to junctions on the Road will be subject to Transport Impact Assessment and further more detailed planning and design. In the short-term, junction improvements could be advanced, along with active traffic management measures, such as control of turns, better road marking and warning signage.



Raised cycle track with parking



Cycle track with tree buffer to avenue



Functional and attractive lighting

5.2.9 Signage and road names

The Hebron Gateway at the Ring road junction is dominated by inter-urban road signage. In addition, there is little in the way of directional signage in the strategy area. Notably, there is no coherent signage for the many businesses in the industrial estate. The absence of proper street names within the Industrial Estate presents a problem for visitors and businesses. The Council will consider and nominate new street names for the main roads in the Industrial estate in conjunction with local businesses and communities in the area.

In terms of signage it is proposed to:

- Work with local businesses on coordinated directional signage for businesses in the industrial estate;
- Look at a reduction in road signage at the Hebron Gateway in consultation with the roads authority;
- Introduce new road names and signs for all main roads in the Industrial Estate; and
- Provide pedestrian and cyclist advisory and warning signs for motorists (short term measure).

5.2.10. Sustainable Urban Drainage Systems (SUDS)

The improvement of the physical fabric of the street presents opportunities to introduce measures for more sustainable management of surface water. SUDS reduce pressures on the piped infrastructure and can help to improve water quality. There are possibilities to introduce modest SUDS measures in the strategy area including:

- Permeable surfaces in new structured, on-street parking and loading; and
- Detention areas in footpath margins, tree pits or street build-outs.

SUDS measures in the street will also be enhanced by measures taken in new and existing developments.



SUDS - permeable parking areas

5.3 Development

5.3.1 General

The strategy area is undergoing redevelopment and its function and character is changing from lower value, more extensive uses, to higher value, mixed use. Previously developed and undeveloped sites have recently come, or will soon be coming forward, for development. This presents a major opportunity to transform the area in terms of its uses, built form and character. This strategy provides area-specific guidance for development, which will be used consistently alongside, and in the context of, the current control and objectives of the current, statutory City and Environs Development Plan.

5.3.2 New back of footpath and boundary treatment

The realignment of the Hebron Road will have impacts on some existing property boundaries. To achieve the proposed improvements additional space is needed for the Hebron Road to widen the footpath and provide better cycle facilities. This could affect properties on the south side of the road (between the Ring Road Junction and O'Loughlin Road junction) where up to 1.0m depth of frontage may be required. No buildings will be affected by this widening, as these areas are most commonly used for parking and loading. Elsewhere, street improvements will not require additional road space and will not affect existing property boundaries. It should be noted that street widening will be subject to appropriate consultation measures and more detailed survey, planning and design.

Where street widening occurs, a new and consistent boundary treatment will be required. This will improve the coherence of the frontage on the Hebron Road. This should comprise a quality, low wall and railings (subject to later, detailed design). Where street widening is not proposed, a more consistent approach to boundaries will be required, and new frontages should be required to share the same detail as proposed on Hebron Road. This will be required as part of any permission.



Mixed use redevelopment to transform the character of the road.



Detailing the footpath

5.3.3 Existing 'dead' walls

There are stretches of blank or 'dead' walls on the frontage of Hebron Road. The Council will aim to have these walls replaced by building frontage where appropriate or otherwise improved, by a reduction in height or their replacement with railings or sections of railing. The Council will consult with the landowners of these properties with a view to securing these improvements as their contribution to the overall improvement of the street. The Council will prepare proposals to improve the cemetery wall to the Hebron Road, including new railed sections and improved lighting and planting to the Hebron Road.



Quality low wall detail

5.3.4 New frontage – building lines and set-back

Good frontage is a combination of coherence of building line and set-back, appropriate scale, and an active interface of buildings and their activities with the street. New building lines will be required to bring buildings closer to the street and to provide greater continuity and enclosure of spaces. In general, these building lines will be set-back 5.0m from the back of footpath. Provision will be made for buildings to step forward at corners by up to 2.0m. The set-back of the building from the back of the footpath accommodates new building entrances, where additional landscape features (trees, hedge and planting) can be provided. The set-back can also serve as bio-retention (infiltration) of rainwater from buildings or other surfaces within the development before it is conveyed to the City drainage system.



Landscaped set-back area

5.3.5 Building scale and interface

Appropriate building height is required to ensure that streets are properly enclosed. Height should respond to local context. In general, wider streets require higher buildings to achieve adequate enclosure. In the case of the Hebron Road, building scale should be relatively modest given its suburban location and the distances between building frontages. Building height range should be between 2 and 4 commercial floors, or the equivalent. The interface of the building to the public space is important for street life. As such the main frontages and entrances to all buildings



3 storey commercial street scale

5.3.6 Building style and materials

No particular building style is proposed for commercial buildings, given the mixed use nature of the area. In general, contemporary design reflecting the use of the building is preferred. If possible, the more intensive activities (e.g. office, public area) of a development should be located to street. The balance between solid and void in the composition in the front elevations should be carefully considered. Glazed elements should be balanced with solid (e.g. masonry) elements. Materials should be durable and easily-maintained. These matters will be part of the normal development management assessment.



Well-designed frontage and public space

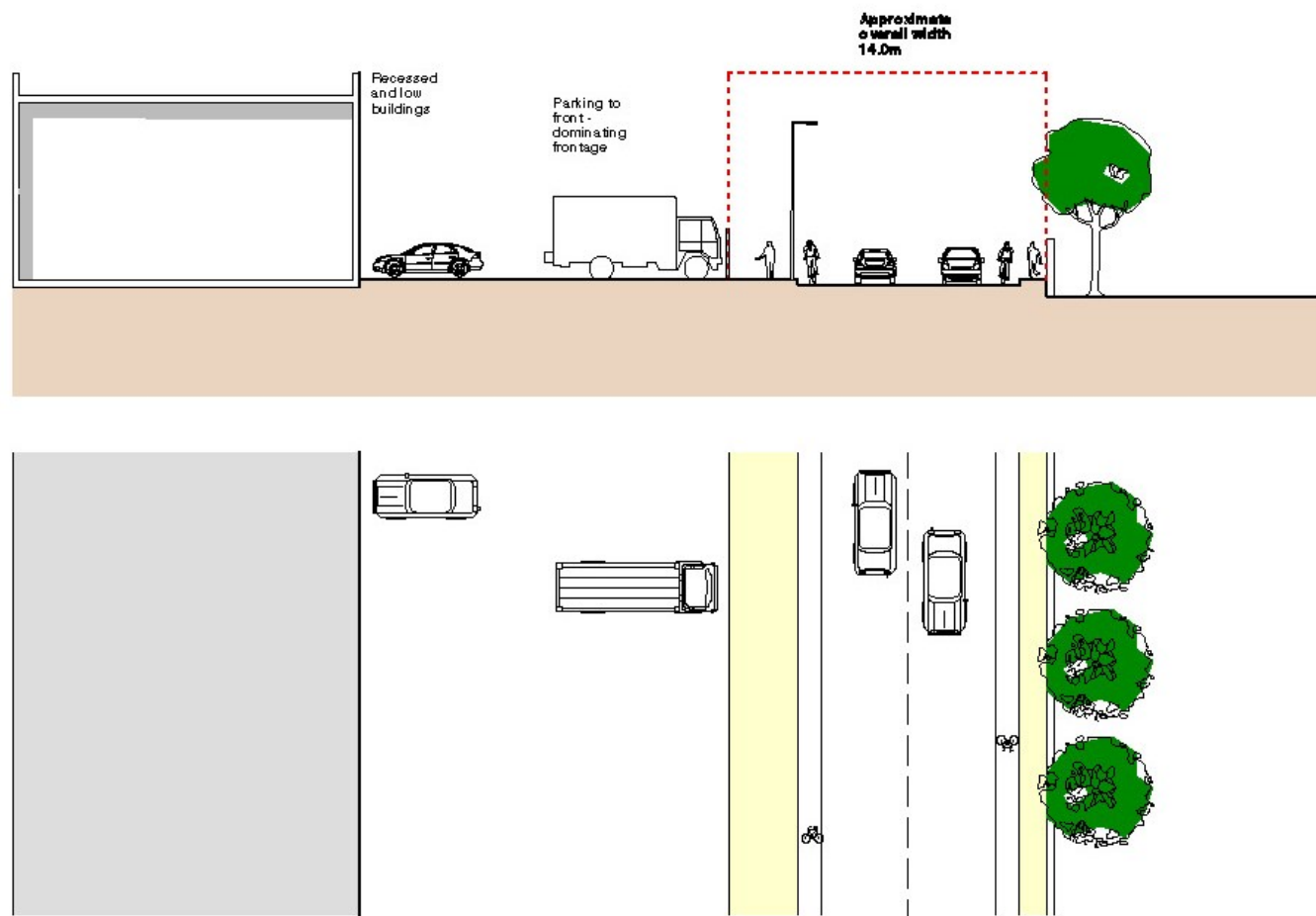
5.3.7 Access/loading and car parking

The location and width of vehicular accesses to developments may need to be reconfigured in the redevelopment of key sites. New accesses to developments will need to satisfy local traffic and transport considerations. Parking and loading to all development will be located behind frontage buildings. Parking may be permitted beside the frontage buildings where it is behind the building line and it is appropriate screened. Parking requirements will be as set out in the current Development Plan. Proposals for development should also include proposal for permeable surfaces and detention areas to contribute SUDS in the area.

5.4 Typical sections

Typical sections for Hebron Road providing an indication of how the street and development can be improved in an integrated way.

Hebron Road Existing Section
(No on-street parking, poor cycle facilities, recessed building line)



Hebron Road New Section
(Raised cycle tracks, new tree line, new back of footpath, new building line)

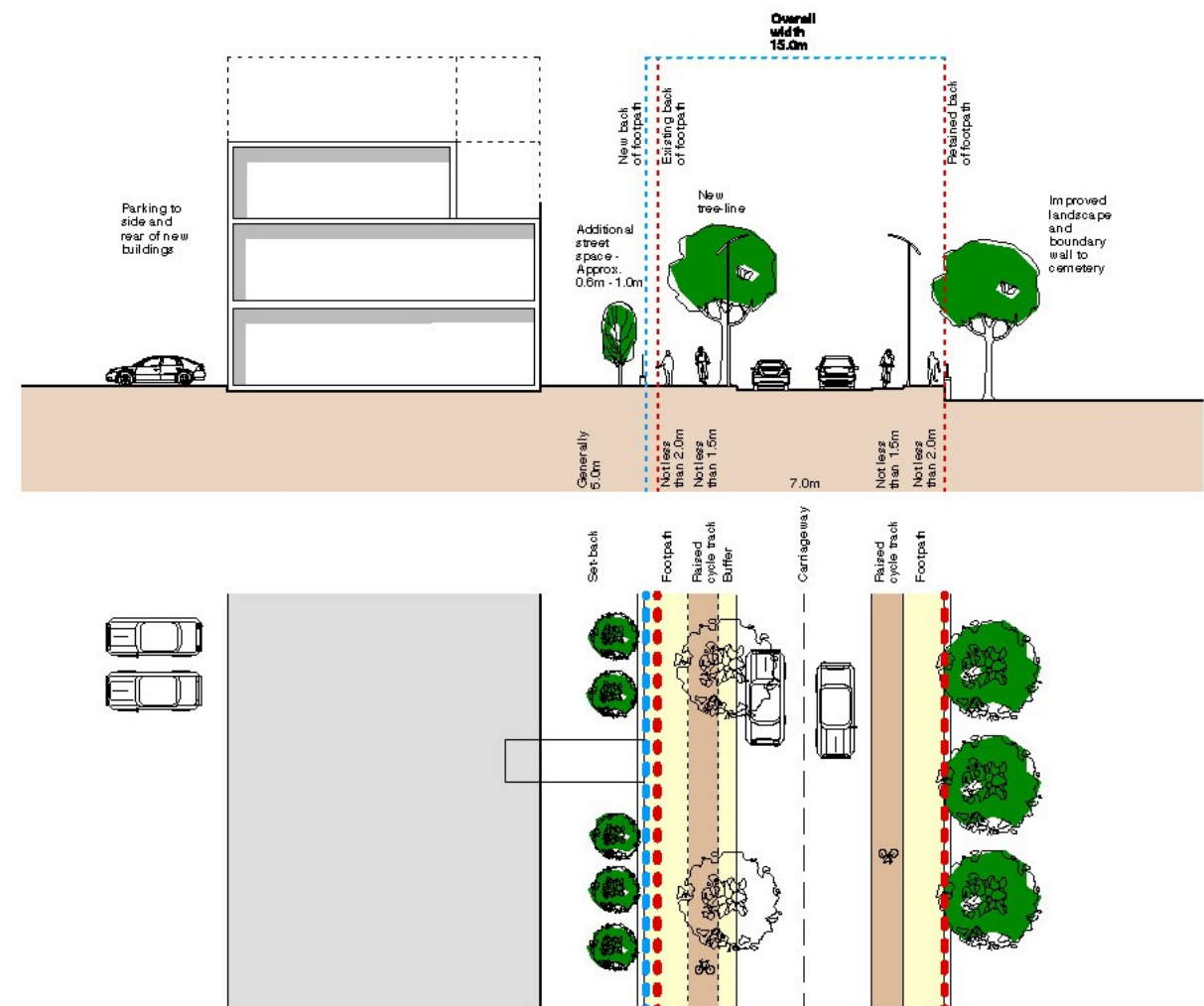
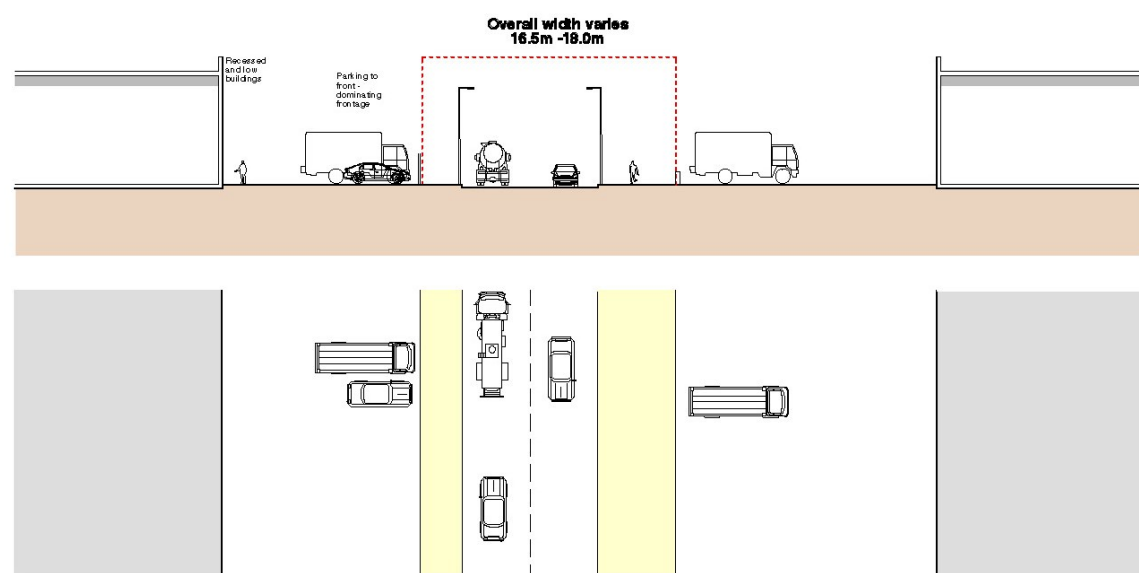


Figure 17: Hebron Road Section

Typical sections for Bishop Birch link road providing an indication of how the street and development can be improved.

Bishop Birch Link - Existing section
(No on-street parking, no cycle facilities, poor footpath)



Bishop Birch link road - New section
(On-street parking - one side/ with option alternate sides, improved cycle facilities and footpath, new building lines)

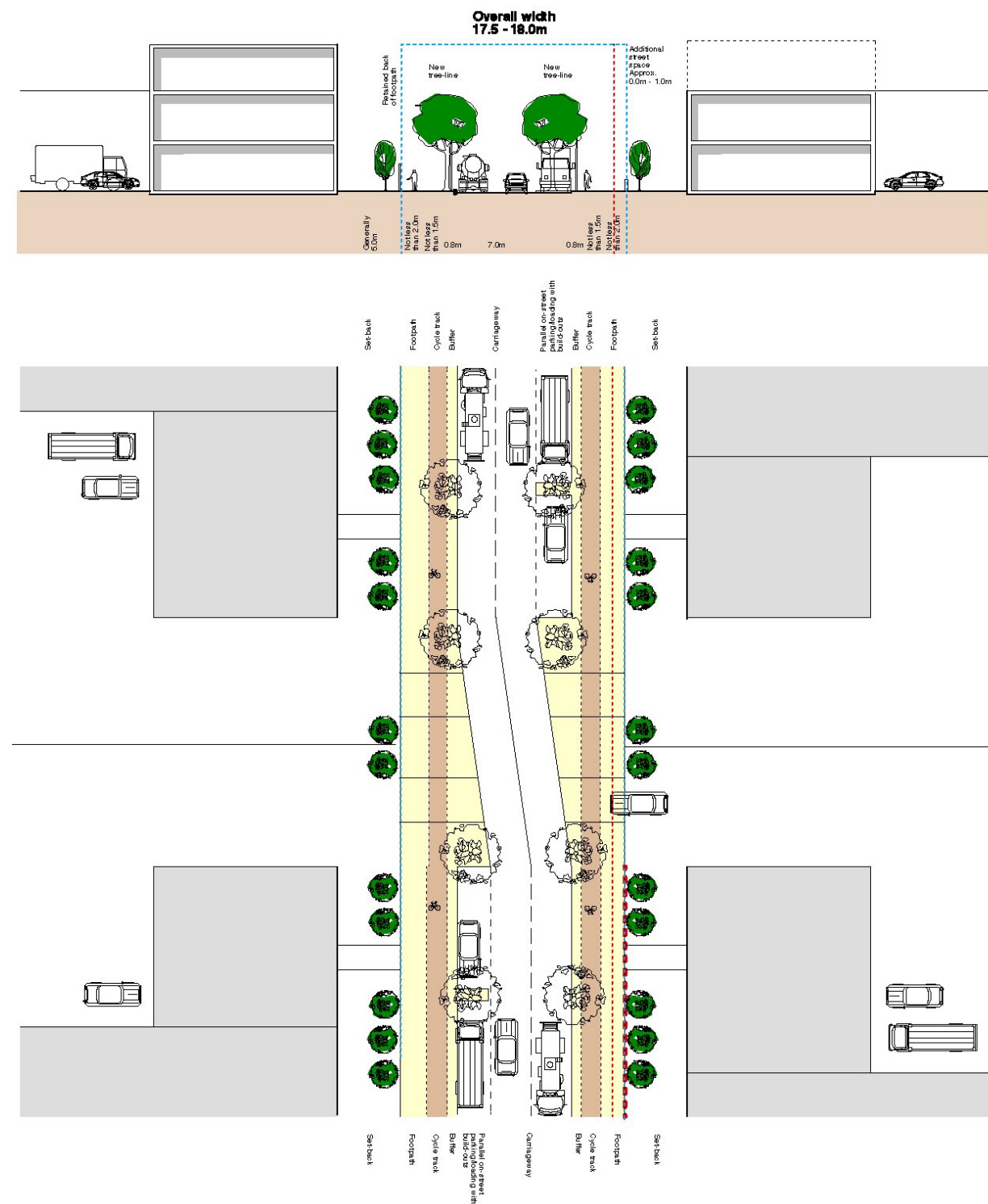


Fig. 18 Bishop Birch Place access road section

The urban design strategy for the Hebron Road will require a consistent and coherent approach to implementation, given the longer-term nature of change that is anticipated in the area. In essence, the improvement of Hebron Road will be delivered through two key mechanisms:

- Effective and consistent development management applied to development proposals as they emerge in the coming years; and
- Ongoing improvement in the physical fabric of the street.

The development management process will be crucial in securing appropriate land use, built form and access arrangement for development on the street. In addition, development and redevelopment proposals for key sites will allow improvements to adjoining public space (Carriageway, footpath and cycle track) to be negotiated as part of the development package. This may also be possible where a significant change of use is proposed.

The funding of street improvements, such as junctions and realignments, will be challenging. The widening of the street may also require acquisition of land if it cannot be secured through agreement. In the shorter term, some improvements can be made with existing capital budgets for road improvements. These may cover resurfacing and could be extended, for example, to include structured on-street car parking and new street trees.

An alternative funding source may be provided within the general development contributions scheme or through a separate, special development contributions scheme for the area.

Next Steps

The implementation of the strategy will need to be staged. The most critical stage is the next steps for the strategy, which include the following objectives:

- A programme for implementation of street improvements (Bishop Birch place) and Hebron road. Further survey, planning and design of the street improvements;
- A Transport Impact Assessment to consider in detail the implications of the restructuring of key road junctions, as identified in figure 10, is to be carried out in advance of, and to inform, the next City and Environs Development Plan Review (by 2020);
- Improvements secured through the development management processes as opportunities arise;
- Identify traffic management measures such as controlling turns, and calming measures such as raised junctions and ramps, improved pedestrian crossings, improved signage and surfacing within recurring budgets;
- Improvement of the cemetery boundary wall to the Hebron Road;
- Consultation with local land-owners on site-specific improvements; and
- Consideration of funding sources including development contribution scheme.

Monitoring of the strategy will be carried out on an annual basis by the Planning Department in consultation with a cross-disciplinary group within the Council. Issues to be progressed which are outside the remit of this strategy.

- Connection to the N10 via the underpass to the N10 to a location in the vicinity of Hebron House;
- Naming of existing road and streets in the area;
- Signage strategy for the area to be agreed with local stakeholders;
- Traffic management plan for matchday traffic / funerals.