

THE ARCHES

Neighbourhood Planning Design Support



Quality information

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Revision History

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**Background and
introduction**

01

1. Background and introduction

1.1. Introduction

Through the Ministry of Housing, Communities and Local Government (MHCLG) Neighbourhood Planning Programme led by Locality, AECOM has been commissioned to provide design support to the Arches Neighbourhood Planning Forum (the Forum).

The Forum is making good progress in the production of its Neighbourhood Plan and has requested to access professional advice on public realm regeneration in the Neighbourhood Plan Area. This document should support the Forum's effort in improving the streetscape, encouraging walking, and reduce the dominance of cars.

1.2. Objective

The main objective of this report is to advise the Forum on how it can encourage the regeneration of the public realm in the Neighbourhood Plan Area. More specifically, it seeks to: analyse existing public realm issues, identify areas of intervention, and provide design solutions for public realm improvements.

1.3. Process

Following an inception meeting and a site visit with the Arches Neighbourhood Planning Forum group members, AECOM carried out a high-level assessment of the area. The following steps were agreed with the group to produce this report:

- Initial meeting and site visit;
- Urban design analysis;

- Preparation of design interventions to guide future improvements to the urban realm of Luton Road and its surrounding area;
- Draft report with design interventions; and
- Final report.

This report builds on top of Forum development assistance provided to the Arches Neighbourhood Planning Forum by AECOM in early 2020. The main findings of the study are treated in a separate report and will not be covered in this document.

1.4. Area of study

The Neighbourhood Plan Area is the area covered by the Arches Neighbourhood Planning Forum, which stretches across two local wards east of Chatham town centre (see Figure 1 opposite). It takes its name from the Luton Arches, an iconic elevated viaduct in the local street scene with great importance. The structure forms the Eastern gateway to Chatham and carries the main North Kent railway route between London and Dover over the A2 carriageway.

Within the Neighbourhood Plan Area, a study area was identified, a suburban zone of the town mostly to the south-east of the railway arches. It is a built-up district dominated by a network of Victorian and Edwardian housing that concentrates along the Luton Road corridor and neighbouring streets. This corridor makes up 1/3 of the character of the area. Elsewhere in the boundary, there's the post-war housing known as Shipwrights and the commercial district towards the river known as the Brook.

The area has direct access to the core town centre and local amenities, with a wide range of independent businesses trading in the area.

It is notably one of Medway's most ethnically and culturally diverse areas but suffers from substandard quality housing, environmental issues, and high levels of social segregation within the community,

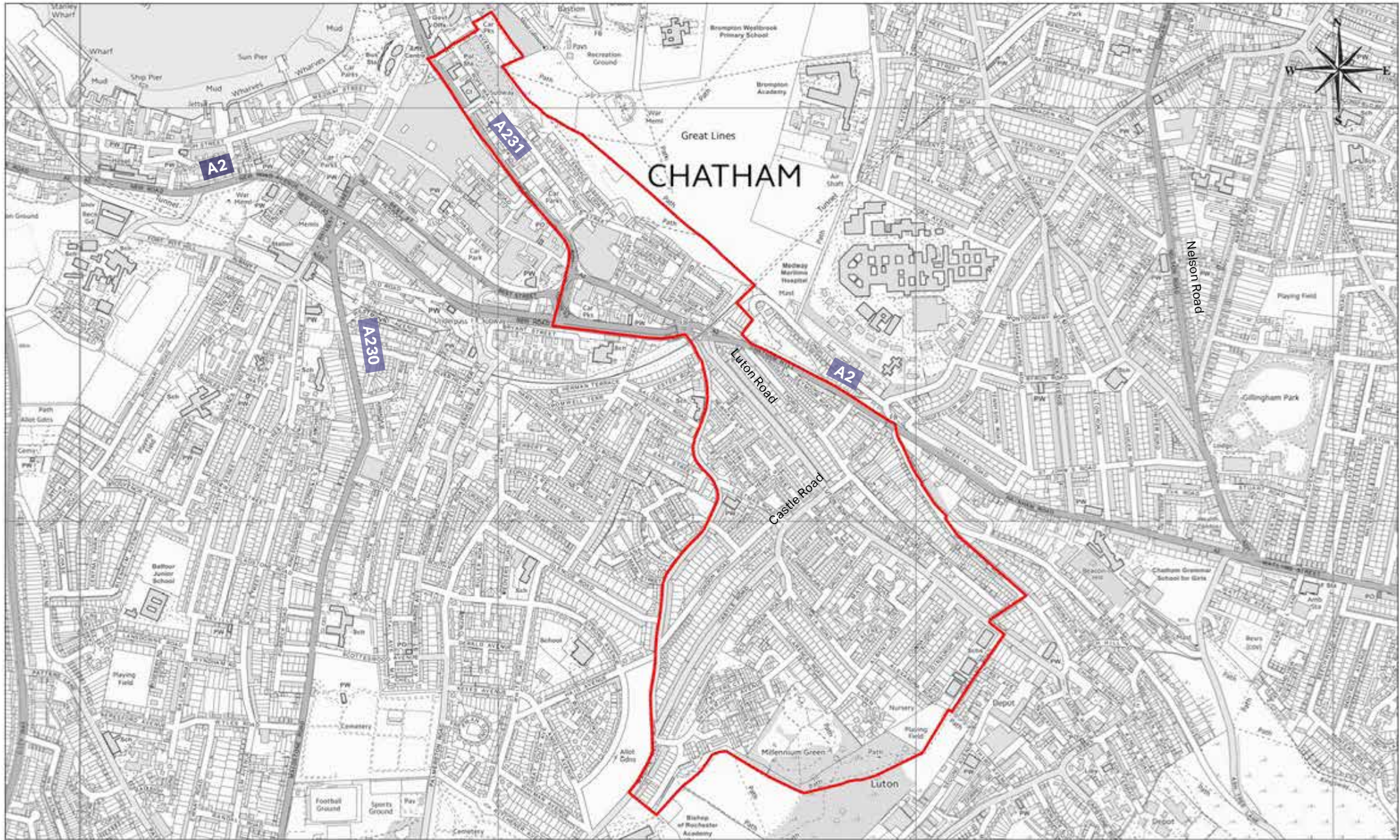


Figure 1: Map showing the area covered by the Arches Neighbourhood Planning Forum in red (© Crown copyright and database rights 2019 Ordnance Survey licence number 100024225).





Site analysis

02

2. Site analysis

This section outlines the broad physical and contextual characteristics of the Luton Road area of the Neighbourhood Planning area. It analyses the streets and public realm, the pattern and layout of buildings, building heights and rooflines, and parking in the area. The images in this section have been used to portray the built form of this area.

2.1. General area characteristics

The area is negatively affected by traffic along Luton Road, with high levels of air pollution and congestion. The high level of traffic is largely external because a large proportion of households in the area don't own cars (49%, Census 2011).

There are some good examples of period housing, but a sizeable shift between owner and buy to let in the early 2000s created a market for absentee landlords, single dwelling flat conversions and HMOs. This has contributed to poor upkeep of the housing stock and a transient population that includes in recent years many people displaced from London councils. Results: low sense of belonging, poor social investment into the area, and perception of the area as a "dumping ground" which further discourages positive forces.

There is a high proportion of vulnerable people and immigrants, with schools having large classes with some non-English speaking students. Local religious groups are largely disconnected from the local community and serve a drive-in congregation.

The community has had limited benefits associated with S106 or nearby regeneration projects. The area has been excluded from the Local Plan and from the wider regeneration narrative.

This has resulted in a sense of being left and kept behind, and a loss of faith in those who are 'planning for them.'



Figure 2: Positive examples of period housing in the area.



Figure 3: The car centric Luton Arches gateway.



Figure 4: Negative example of modern infill development.



Figure 5: Eastward view along Luton Road showing a car-centric public realm.

2.2. Issues

Whilst the Luton Road corridor holds many attractive features and assets, it is not serving its community to its full potential in functioning as a vibrant destination to live and shop in. This is partly due to a poor public realm that results from a car-centric design of the public realm. Some of the main issues and activities that are contributing to this matter are:

- The physical severance between the Neighbourhood Plan Area and the Chatham town centre caused by the A2 and the roundabout;
- The quality of the public realm;
- High levels of traffic congestion and the accompanying noise and air pollution;
- Street cluttering with posts, pedestrian guardrails, bollards;
- Narrow and poorly maintained footways;
- Poor visibility under the bridge arches;
- Lack of green infrastructure;
- Vacant ground floor retail spaces; and
- The poor upkeep of some private properties.

The paving material and the street furniture is in poor condition and not well maintained with paving often replaced with tarmac.

The streetscape is cluttered which detracts from the historic quality of some buildings along the road.

The area has some interesting landmarks and historic features that assist in orientation and legibility along the street. However, there is a lack of visual connection which can be achieved through tree planting or compatible street furniture and active frontage.

A2 roundabout and junction

Main entrance to Luton Road from the town centre but acts as a hostile barrier. The six-arms layout is confusing to both drivers and pedestrians. It makes Luton Road a through-route to get to the A2 – more traffic than Luton Road should handle. Parts of the junction comes under highway control – Network Rail plans to do future work there are hampered by not being able to easily get permissions to close the road due in part to complexity of the road layout.

The layout is hostile to pedestrians: confusing layout, designed for high speed, guardrails, need to cross several roads (including a footbridge) to get from one side to another, etc. all increase the crossing distance and time for pedestrians and encourages them to cross irresponsibly.

A resident-led organisation, Arches Local, had commissioned a redesign of the roundabout to inspire change and prompt discussion, but the scheme hasn't improved the overall design of the junction.

The arches and Luton Road entrance

Pedestrian access issues: overcomplicated pedestrian crossings, street furniture decreasing walkability, poor pedestrian access resulting in poor shopping footfall.



Figure 6: Poor pedestrian environment along Luton Road.



Figure 7: Frequent car crashes in Luton Road.

Traffic safety issues: the junctions are designed for speed and collisions occur frequently at that location. Limited forward visibility and poor lighting.

Luton Road

Luton Road was not designed for the levels of traffic it receives.

A high proportion of the traffic on Luton Road is through-traffic going to and from the shopping centre or the A2. This has contributed to high levels crashes, including several fatalities.

There are a number of successful independent businesses that contribute to the wider area, but a lot of retail spaces are vacant, and some are being converted (or have been) to flats. The group isn't opposed to commercial-to-residential conversions where it is appropriate but wants to avoid sub-standard housing and the oversupply of non family homes.

The pavement narrows and widens in different locations and is in very poor condition. The pavements on the south side has in parts been encroached by extensions that fuel the discontinuity. The north side of Luton Road has a retaining wall due to the terrain which is in terrible condition.

Luton Road's Service Road and Luton Road Shoppers Car Park

Luton Road's service road, referred to as Pig Alley, is lined one side predominately with garages and former back garden driveways with the other side backing on housing. This

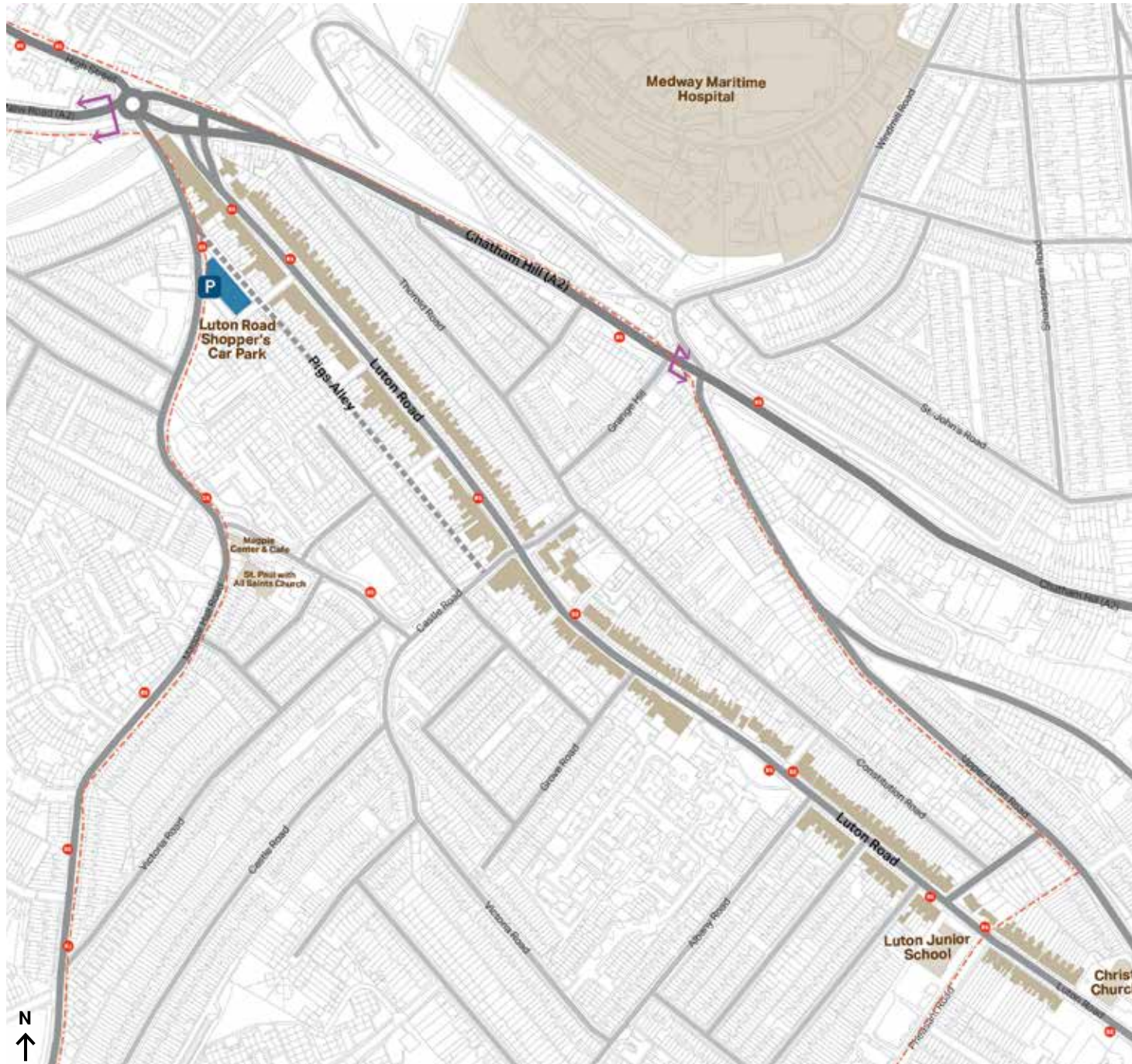
becomes a lost space with high levels of anti-social behaviour and drug dealing observed.

The council-owned car park has free, unmanaged parking with a 23-hour limit in parts. The car park has been identified as a site for redevelopment by the Local Authority despite its 80% year round capacity.

The Local Authority has explored the possibility of housing which retains the car park in some fashion, but these were met with disapproval by local people. If the car park were to be redeveloped, the forum strongly prefers a place that favours existing people and the wider community. The forum has discussed re-purposing as a green space, multi-use sports area, or a market to help with economic development.



Figure 8: Negative housing proposals for Luton Shoppers Car Park.



Key





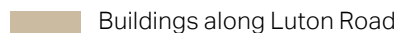



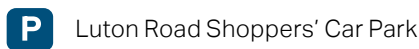
-  Neighbourhood Plan Area boundaries
-  Primary roads
-  Secondary roads
-  Local roads
-  Buildings along Luton Road
-  Public car park
-  Pedestrian footbridge
-  Bus stops
-  Luton Road Shoppers' Car Park

Figure 9: Map showing the main features within the study area.

2.3. Aims

Overarching aims have been developed in response to the site analysis. These are:

- Improving the public realm, with particular consideration into widening the pavement by reclaiming back the public realm and through introducing possible areas of interventions;
- Creating a more pedestrian-friendly environment;
- Regenerate the Road, making it an inviting centre rather than a thoroughfare;
- Reducing the dominance of motor vehicles and de-prioritising vehicle traffic.

A better quality pedestrian environment would be achieved by de-cluttering and reducing street furniture. This is especially relevant when street furnitures are obstructing pedestrian movement. Interventions should include increasing pavement widths, developing a palette of materials and colours to unify elements of the space and reflect the different characters of the road, with an overall focus on designing high quality space for pedestrians. This creates a space where other means of travel are enjoyable and enables people to positively interact with one another. It is also important to identify possible areas of intervention which can become public spaces that enhance the mix of uses and provide a more dynamic street environment. Overall, a well-designed and well-maintained public realm would promote a healthy local economy and create a greater sense of community.

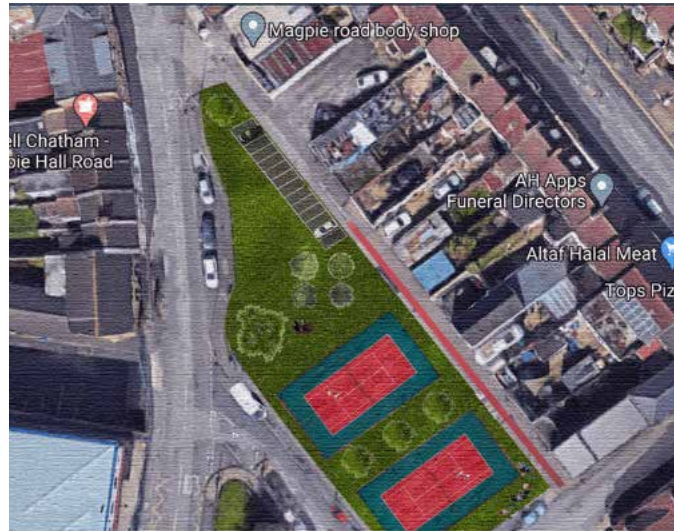


Figure 10: The Forum's community-minded proposals for the car park.



Figure 11: Lost space create an opportunity to abuse the public realm, Henry St.



Figure 12: Community-minded business, Persian Rugs World.



Figure 13: Lost spaces created an opportunity for exploitative businesses.



Figure 14: Example of a positive business, Bowen Motor.



Figure 15: Poor investment in properties, Luton Road.



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Public realm strategy

03

KEEP CLEAR

STOP

we buy, we sell, we know
FAST CASH
www.rightmove.co.uk

423
ME4
4NU

lutonarchesdental
NHS 844 121
www.lutonarchesdental.co.uk

Remember the Sabbath day, to keep it holy. Six days shall thou labour, and do all thy work: but the seventh day is the sabbath of the Lord thy God.

Stop over about 10 minutes

3. Public realm strategy

This section sets out the guidance that will influence the design of potential public realm interventions along Luton Road. Where possible, images from The Arches are used to exemplify the design guidelines. Where these images not available, best practice examples from elsewhere are used.

3.1. Introduction

Due to poor quality housing, environmental issues, and high levels of social segregation within the community, residents and businesses of the study area have long felt the effects of neglect towards their urban environment. This section of the report proposes a set of design interventions and strategies aimed at improving the public realm in the study area and revive its character.

The proposed interventions should as much as possible, reinforce the character of the area and further facilitate the communities that live in it. Contemporary and flexible design should be encouraged and must always sit comfortably within this context.

The current public realm is vehicle-focused, leaving minimum room for pedestrian comfort or public realm amenities. A shift towards a more pedestrian-friendly environment as well as a higher-quality public realm is required in order to revive Luton Road and provide more space for social interactions in a diverse community. Improving the public realm will alleviate much of the stresses brought on by the congestion caused by Luton Road's layout as a parallel road to the A2 and reclaim the space for local residents.

The width of the pavement along the road, in front of houses and shops, should be reviewed to consider where pavements can be widened in order to facilitate pedestrian movement, shorten crossing distances, and accommodate street planting and overall urban greening where possible.

It is proposed that the public realm should be simplified, and the quality of its elements improved with the aim to create a pedestrian orientated environment. To establish and maintain a visually appealing public realm, repurposing street elements such as kerb or pavement buildouts and adding street planting may alleviate problems of fly-tipping on Luton Road as well as neighbouring streets and alleys.

Similarly, the placement and arrangement of bollards and pedestrian guardrails should be revisited by the highway authorities. The ones that do not serve any purpose should be removed or relocated. Cycle storage should be strategically positioned along the road to provide space for residents and visitors and encourage an increase in cycling.

Public realm elements such as street lighting and bins should be of similar designs and colours as this will create a visual coherence making for a more pleasing street scene. Bins should be located near sources of rubbish such as bus stops, benches, shop entrances and other areas where people are likely to congregate.

Ease of servicing with adequate room around the bin for emptying should be considered. Placement near other items of street furniture will reduce the total area taken up by street furniture collectively and reduce the obstruction these elements present to pedestrian.

The public realm of areas with low natural surveillance should be improved by adding street planting and pushing forward entrance gates to avoid recessed spaces from the sight line.

The service road's through traffic, poor pedestrian offer (no pavements) and questionable behaviours from some businesses have been recognised to increase levels of antisocial behaviour and fly-tipping, such as Luton Road Shoppers Car Park, should be considered for repurposing as a multi-use public space (preferably) or complete redevelopment to provide added benefits for the communities.

All of the above will contribute towards a better and more dynamic street life.



Figure 16: A rendering of Luton Road with new pavements, buildouts, and street greening (source: The Arches Neighbourhood Planning Forum).



Figure 17: Arches Loca's vision of a new Luton Arches.



Figure 18: Forums ideas around creating a Victorian-era park.



THE KING'S
TOWN
PHARMACY

GX55 172



Public realm interventions

04

4. Public realm interventions

This section sets out potential streetscape improvements that will enhance the sense of place and improve the pedestrian experience in the Neighbourhood Plan Area. Images from Chatham and best practices from elsewhere are used to illustrate the interventions proposed.

4.1. Introduction

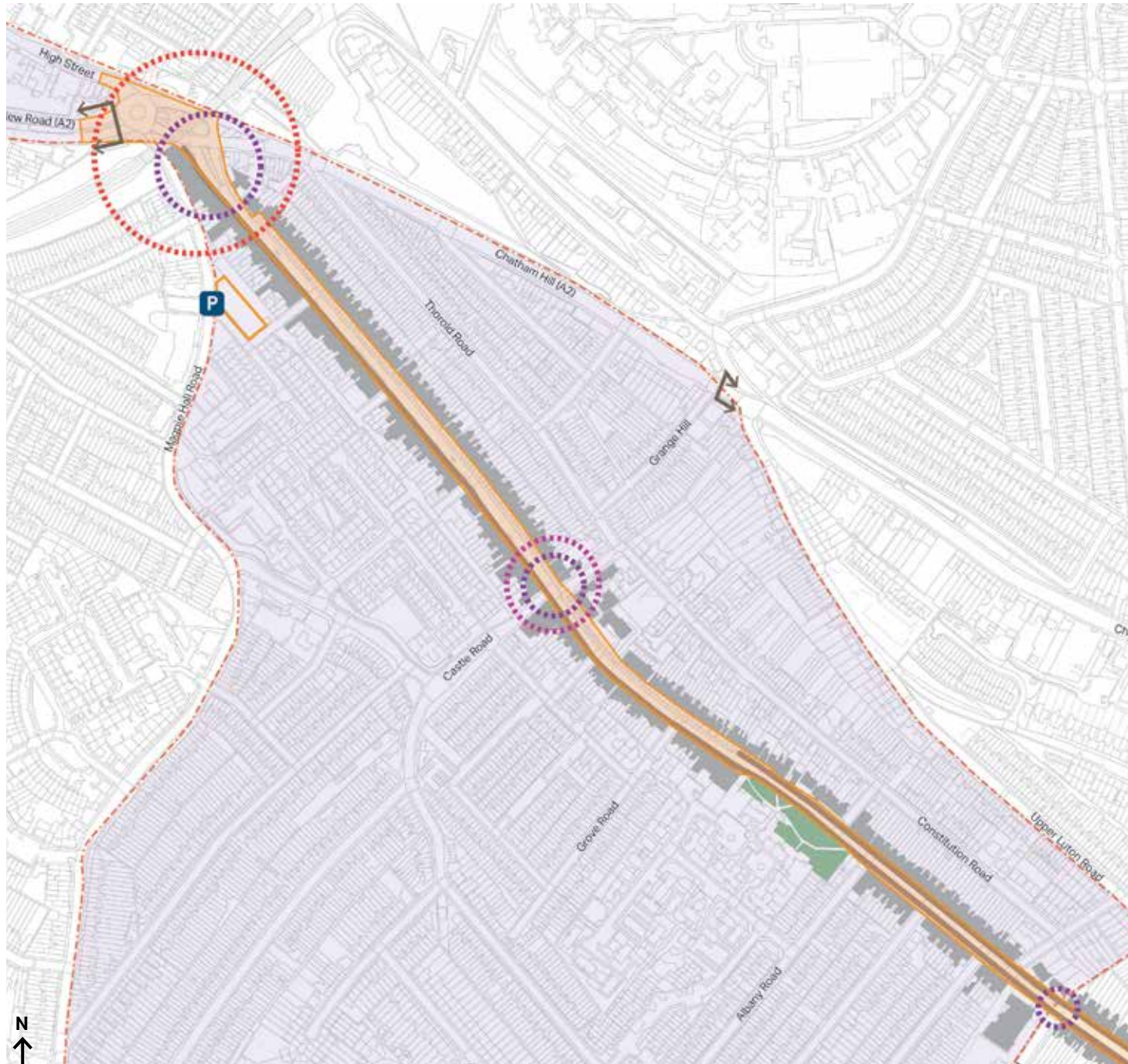
Following the site analysis, a list of possible streetscape improvements was proposed and refined after further feedback from members of the Forum. The interventions vary in scale and location; although some are proposed for specific areas of the Neighbourhood Plan Area, others can be applied to the entire area or multiple areas, while some may include areas outside of the main area of intervention. Most of the proposals bring tangible changes in the public realm, however a minority are studies or changes in regulations that enable a wider array of changes to take place subsequently.

A number of these interventions can take place independently from the others, however their timing and mutual impact must be carefully considered. Interim uses via a “tactical urbanism” approach have been considered; this approach acknowledges that light interventions can be applied rapidly and at relatively little cost to improve the public realm instead of waiting for the necessary funding needed for costlier and lengthier permanent interventions.


The map on the opposite page summarises the location of some of the proposed intervention, which are detailed in the following sections. It should be noted that some interventions will be implemented throughout the Neighbourhood Plan Area.

The following pages provide a short description, illustration, and location(s) of a particular intervention, before evaluating the proposal according to the following four parameters:

- Implementation timeframe;
- Ease of implementation;
- Direct impact; and
- Cost.




Key

 Neighbourhood Plan Area boundaries


 Buildings


 Pedestrian footbridge

 Luton Road Shoppers' Car Park

Proposed Interventions for Highways

 Perimeter of traffic modelling studies

 Perimeter of parking studies

 20 mph speed limit zone

 Reconfiguration of the A2 roundabout




 Reconfiguration of A2-Luton Road junction

Figure 19: Map showing the location of proposed interventions for traffic flow in the Neighbourhood Plan Area







Figure 20: Map showing the location of proposed interventions for accessibility and movement in the Neighbourhood Plan Area

Key

-  Neighbourhood Plan Area boundaries
-  Buildings
-  Pedestrian footbridge

Proposed Interventions for Pavements

-  Raised junctions and entry treatments
-  Redesigned kerb extensions and buildouts
-  Filtered permeability with collapsible bollards
-  Entrance gates to alleyways moved forward



Key

- Neighbourhood Plan Area boundaries
- Buildings
- P Luton Road Shopper's Car Park

Proposed Interventions for Tactical Urbanism and Re-greening

- Removal or replacement of bollards
- Pavement reconstruction
- Street greening
- Sustainable urban drainage systems (SuDS)
- Murals
- Conversion of Luton Road Shopper Car Park into a community asset - see pp 38-43 for different possible interventions

Figure 21: Map showing the location of proposed interventions to improve the pedestrian and cycling environment in the Neighbourhood Plan Area

Traffic and parking studies

Professional traffic and parking studies are needed to collect reliable data. Although they will not in themselves bring any direct benefits, they are nevertheless crucial to support the proposed interventions in this report. Accurate time- and place-based information on traffic levels, speeding, and parking utilisation will allow stakeholders to predict the impacts of these interventions with more confidence and precision.

Location: Luton Road and key intervention areas. Note: the study areas may differ from those examined in this report.

Benefits: no direct benefits, but will be essential to build the case for the traffic calming measures and other improvements proposed in this report.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	None
Cost	Low

Traffic modelling study

A traffic model is needed to examine the impact of a potential reduction of the speed limit to 20 mph speed limit (see following sections). The study in itself will not have any direct impact but the data will be crucial to support the case for life-saving lower speed limits in the area.

Location: Luton Road and key intervention areas. Note: the study areas may differ from those examined in this report.

Benefits: no direct benefits, but will be essential to build the case for the traffic calming measures and other improvements proposed in this report.

Implementation timeframe	Medium
Ease of implementation	Difficult
Direct impact	None
Cost	Medium

20 mph speed limit

A high-importance cornerstone measure. Lowering the speed limit from 30 to 20mph is key to reducing the number and severity of collisions, improves the air quality, and creates a less intimidating walking and cycling environment. An area-wide 20mph speed limit also allows for (and must be accompanied by) a wider range of traffic calming engineering solutions that would not be allowed under higher speed limits. These traffic calming measures will make the speed limit self-enforcing instead of relying on policing or the compliance of road users.

Location: neighbourhood plan area or wider area.

Benefits: reduced speeding; fewer and less severe collisions; safer walking and cycling; potential reductions in air and noise pollution. A 20 mph speed limit also make feasible a wider range of self-enforcing traffic calming engineering measures.

Implementation timeframe	Medium
Ease of implementation	Medium
Direct impact	High
Cost	Medium

Raised junctions and entry treatments

Raised junctions and entry treatments are flat sections of carriageway that are raised closer to the level of the neighbouring footways, usually at a pedestrian crossing, a street entrance, or an entire junction. These traffic calming measures most often require a 20mph speed limit. The traffic calming is self-enforcing because it requires approaching vehicles to lower their speed. Because the carriageway level is closer to that of the neighbouring footways, they also enable wheelchairs and buggies to cross the street more easily. Particular treatments such as continuous footways, which visually emphasise pedestrian priority over turning vehicles, should also be explored as part of this intervention.

Location: Luton Road entrance from A2; Castle Road junction; pedestrian crossing at Luton Junior School; Luton Road mid-block crossing points; side road entrances.

Benefits: self-enforced speed reduction; fewer and less severe collisions; safer walking and cycling; more comfortable walking.



Figure 22: Raised entrance to a residential street in London combined with kerb buildouts at corners.

Implementation timeframe	Medium
Ease of implementation	Medium
Direct impact	Medium
Cost	Medium

Parking Study

A parking study is needed to collect data on how Luton Road Shoppers Car Park is currently used and how much of it can be converted to other uses without causing parking spillovers. Although it will not in itself bring any direct benefits, it is nevertheless crucial to support the interventions proposed for the car park site.

Location: Luton Road Shoppers Car Park.

Benefits: no direct benefits, but will be essential to build the case for the interventions proposed for the car park site in this report.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	None
Cost	Low

Kerb extensions and buildouts

Kerb extensions and buildouts are sections of footways with additional width, usually at pedestrian crossing points, street corners, and busy pavements. They constitute traffic calming measures that reduce the speed of approaching vehicles by requiring motorists to drive through a narrower carriageway more carefully and negotiating turns more slowly. They also improve visibility at junctions and discourage parking at street corners. They may host street furniture, planting, or SuDS, however these should not impede pedestrian movement and access. Some street corners along Luton Road have buildouts, however they are poorly maintained and their geometry does not provide clear indications on where parking is allowed. As a result, illegal pavement parking has been observed at these locations. Thus, opportunities to rebuild them with double-height kerbs and integrated street greening to prevent vehicle overrun on footways must be sought.

Location: key junctions and crossing points - see map p 23.

Benefits: self-enforced speed reduction; safer walking and cycling; more space for walking.

Implementation timeframe	Medium
Ease of implementation	Medium
Direct impact	Medium
Cost	Medium



Figure 23: Left: a kerb buildout used to shorten pedestrian crossing distances and calm traffic. Right: a buildout with street greening and a double kerb to prevent vehicle overrun. Note: tactile paving areas are likely to be required to guide visually impaired pedestrians.

Reconfiguration of A2 junction and roundabout

The A2 junction and roundabout are car-centric environments that are hostile to pedestrians and create a severance between Luton Road and the centre of Chatham. This measure potentially will have the highest impact but will be the most difficult and time-consuming. It should however be pursued in parallel to easier and less costly improvement measures. In the long run, it will be key in reducing car traffic in the wider area and reconnecting Luton Road with the rest of Chatham.

It should include:

- Removing the pedestrian footbridge to be replaced by a ground-level alternative such as a signalised crossing
- Segregated cycle tracks integrated within the existing road space
- Narrowing the central reservation along New Road A2 and adding street trees to create a 'boulevard'
- Potential creation of a bus gate lane turning on from Chatham Hill to Luton Road to eradicate the majority of through traffic towards Walderslade/Lordswood.

Location: roundabout and Luton Road junction with A2.

Benefits: reduced speeding; fewer and less severe collisions; safer walking and cycling; potential reductions in air and noise pollution; more space for walking; improved streetscape quality.



Figure 24: The A2 junction and roundabout must be reconfigured to improve safe at-grade pedestrian access and reconnect Luton Road to the centre of Chatham.

Implementation timeframe	Long
Ease of implementation	Difficult
Direct impact	High
Cost	High

Reconfiguration of traffic island and/or road geometry

The western entrance of Luton Road has a configuration that encourages speeding at the expense of pedestrian safety. The design of the traffic island is misaligned with pedestrian desire lines. The entrance could be rebuilt with a raised entrance and a new traffic island configuration that improves pedestrian safety and give motorists a clear signal that they are entering a pedestrian-friendly area. The reconstruction will normally not affect the A2 directly.

The road space given to cars could also be narrowed. For example, removing one lane on the exit approach of Luton Road onto Chatham Hill.

Location: Luton Road entrance from A2.

Benefits: reduced speeding; fewer and less severe collisions; safer walking and cycling; potential reductions in air and noise pollution; more space for walking; improved streetscape quality.



Figure 25: Guardrails at the mouth of Luton Road and inconvenient crossings through a pedestrian island denote a hostile environment built for vehicle speed above quality of life or pedestrian comfort.

Implementation timeframe	Long
Ease of implementation	Difficult
Direct impact	High
Cost	High

Temporary kerb extensions and buildouts

Temporary kerb build outs can be employed as a pilot/trial project to deliver the same benefits as traditional build outs at a fraction of the construction cost and time. Their temporary nature allows them to deliver tangible benefits and “quick wins” without lengthy construction times or heavy financial commitments, and can therefore serve as catalysts for more permanent and complex traffic calming and public realm improvements.

Location: key junctions and crossing points.

Benefits: self-enforced speed reduction; safer walking and cycling; more space for walking.



Figure 26: Painted kerb buildouts with movable planters at a mid-block crossing in New York, United States. Note: complementary delineation devices such as wider tactile paving areas are likely to be required to guide visually impaired pedestrians (© New York City Department of Transportation).

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low

Removal of bollards

There are a number of bollards along Luton Road, especially at street corners. Although their aim is to protect pedestrians from turning vehicles and prevent undesired parking, their poor aesthetic value and upkeep diminish the quality of the public realm and denote a car-focused environment. A 20mph speed limit will make their safety role largely redundant. Protecting pedestrians and preventing footway parking can also be achieved via better designed kerb buildouts with higher kerbs and integrated greening. Their removal will provide more room for walking and improve the quality of the streetscape. Any new bollard that is installed should be required to justify and earn its place in the public realm, have high design quality, and be easy to maintain.

Location: Neighbourhood Plan Area - see map p 23.

Benefits: More space for walking; improved streetscape quality.



Figure 27: Unattractive and poorly maintained bollards denote a car-oriented environment and restrict pedestrian movements.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low

Pavement reconstruction

Existing footways are in a poor state of repair and in many places have uneven surfaces that do drain poorly. Rebuilding them in high-quality materials will improve the quality of the streetscape and ensure adequate drainage. To have any significant impact, however, the reconstruction must be accompanied by other traffic calming and pedestrian improvement measures, especially those that will improve walking conditions such as providing more space for pedestrians.

Location: Luton Road; key junctions.

Benefits: Improved streetscape quality; improved drainage.



Figure 28: If accompanied by complementary measures to improve the walking experience, footways can be rebuilt with a range of different durable materials to highlight the importance of Luton Road as a place rather than a thoroughfare.

Implementation timeframe	Medium
Ease of implementation	Medium
Direct impact	Medium
Cost	High

Removal of pedestrian guardrails

Guardrails, like bollards, contribute to a car-focused public realm, restrict pedestrian movements, and their presence denotes a street environment that is hostile and unsafe for pedestrians. When poorly maintained or damaged without immediate replacement, they also decrease the quality of the public realm. A 20mph speed limit will make their safety role largely redundant. Their removal will provide more room for walking and improve the quality of the streetscape.

Location: Neighbourhood Plan Area.

Benefits: More space for walking; improved streetscape quality.



Figure 29: Guardrails such as those at the mouth of Luton Road denote a car-oriented environment and reduce the amount of space available for pedestrians.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low

Filtered permeability with collapsible bollards

Collapsible bollards are less visually obtrusive than vehicle barriers and can be installed to restrict access from general traffic while allowing vehicles from local residents, businesses, and emergency services only. The traffic reduction will benefit pedestrians and cyclists by keeping out rat running and non-local traffic. Most importantly, it will enable a range of other traffic calming and placemaking interventions by re-purposing areas that are not needed for traffic and parking.

Location: Pig Alley.

Benefits: safer walking and cycling; more streetscape improvement interventions made possible.



Figure 30: Collapsible bollards can be used to enable access to pedestrians and cyclists while retaining vehicle access for local residents, businesses, and emergency services only.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low

Pushing forward the entrance gates to side alleys

The entrance gates to the housing estate west of Pig Alley are currently recessed from the sight line, which creates corners where anti-social behaviour has been observed. Pushing the gates forward to align with the neighbouring fences could help improve the natural surveillance, discourage anti-social behaviour, and curb littering.

Location: Pig Alley.

Benefits: improved natural surveillance/safety.



Figure 31: Photo of a recessed gate showing an accumulation of detritus.

Implementation timeframe	Short
Ease of implementation	Medium
Direct impact	Low
Cost	Low

Cycle storage/parking

As the area makes a shift away from car dominated streets, bike storage will be an important factor in increasing modal share of cycling. Many of the family homes have been converted into poor small spaces where residents often do not have space for bike storage. Thus, the provision of on-street cycle storage would provide residents and visitors with a secure space and encourage more use of bicycles.

Location: Luton Road Shoppers Car Park, Pig Alley, Luton Road

Benefits: Secure on-street cycle storage for residents and visitors; improved streetscape quality



Figure 32: Examples of on-street cycle storage in London.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low

General conversion of Luton Road Shopper Car Park into a community asset

Luton Road Shoppers Car Park offers the opportunity to correct the dearth of quality public squares in the area. A “tactical urbanism” approach could be applied to convert at least parts of the car park into a range of different uses and configurations that all help activate the space and turn the area into a new community asset. The approach allows for cheap and rapid experimentations with a range of different interventions for the space from which observations can be gathered on how the public uses the new space. This experimental approach could lay the groundwork for making permanent the more successful interventions and therefore turning the car park into a permanent place that serves as a meeting place for the local community.

The following pages contain a more detailed range of interventions that could be applied on the car park site either jointly or independently.

Location: Luton Road Shoppers Car Park.

Benefits: improved streetscape quality; improved natural surveillance/safety; more comfortable walking; community engagement.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low

Pop-up public square

There are opportunities to create a pop-up public square out of at least a section of Luton Road Shoppers Car Park as a test for how local residents will use the new asset. The new pedestrian space could be delimited rapidly and at low cost with paints, bollards, and movable planters that require minimal construction and excavation. To ensure that the space is well-used and looked after, this measure must be combined with complementary interventions such as public seating, greening, or even a community hub depending on spatial requirements. A follow-up study documenting how the new space is used is required.

Location: Luton Road Shoppers Car Park.

Benefits: improved streetscape quality; improved natural surveillance/safety; community engagement.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low

Movable planters and street furniture

Movable planters and street furniture, especially seating, are important in helping activate the pop-up public space rapidly and at little cost. They enable its use as a modular and easily adaptable place where different configurations and uses can be tested.

Location: Luton Road Shoppers Car Park.

Benefits: improved streetscape quality.

Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low



Figure 33: Before and after Poblenuu 'Superblock', Spain 2018. A scheme to reclaim public space from private vehicles and making it available for public transport, bicycles and pedestrians (publicspace.org).

Murals

Given the nature of the local pre-war housing, there are many end-of-terrace houses in the area that could be aesthetically improved through murals.

Murals and similar art forms can take many different shapes; many community organisations across the world have used this form of art to improve the quality of the streetscape, celebrate the history and culture of their neighbourhood, and help change public attitudes about some neighbourhoods and communities. They may also provide an opportunity for community engagement when the creation process actively involves local residents, and provide visibility to local artists.

Location: Luton Road north side retaining walls, Pig Alley, Short Street, Hare Street, and Henry Street.

Benefits: improved streetscape quality; community engagement.



Implementation timeframe	Short
Ease of implementation	Easy
Direct impact	Medium
Cost	Low



Figure 34: A mural under the Luton Arches local railway landmark by artist Lionel Stanhope, presented by the Arches Local and Network Rail (source: The Arches Neighbourhood Planning Forum) and below are examples of potential mural locations in Hery St (left) and Maida Rd (right).

Street greening

The public realm has currently very little street greening. New planting, even in the form of low-level planting in a few targeted locations, would improve the appearance of the streetscape and reduce the car-dominated character of the area. Studies have also shown that they can indirectly improve the mental health of street users and reduce urban heat island effects. There are opportunities to incorporate street greening into new kerb buildouts and traffic islands, however it must not reduce the width of pavements or restrict pedestrian movement. If possible, planting areas should incorporate sustainable urban drainage systems (SuDS) for greater environmental impact.

Note: also see street trees section below.

Location: key junctions with kerb buildouts; traffic islands; Pig Alley; car park.

Benefits: improved streetscape quality; improved drainage if combined with SuDS.



Figure 35: New street planting on a kerb buildout in London. Note: the location of new trees must be reviewed to avoid impeding visibility at junctions and crossing points.

Implementation timeframe	Medium
Ease of implementation	Medium
Direct impact	Medium
Cost	Medium

Sustainable urban drainage systems (SuDS)

SuDS can be combined with street planting to reduce rainwater runoff levels. The planting will also have aesthetic benefits and reduce the car-dominated character of the area. SuDS may take different forms such as roadside swales, rain gardens, and permeable pavement depending on the location.

Location: key junctions with kerb buildouts; traffic islands; Pig Alley; car park.

Benefits: improved streetscape quality; improved drainage.



Figure 36: Roadside swales with low-level planting and new trees in Stockholm, Sweden (left) and London (right).

Implementation timeframe	Medium
Ease of implementation	Difficult
Direct impact	Medium
Cost	Medium

Street trees

Street trees are needed to correct the relative lack of vegetation in the public realm. They can also bring shade and reduce the heat island effect in the car park. Tree pits may also host other types of low-level planting to increase the local biodiversity and provide more aesthetic variety. This will be particularly important if the car park is to be converted into a place designed to attract pedestrians. In other places, tree pits must be created where they do not result in inadequate walking spaces or impede visibility at junctions and crossings.

Location: Luton Road Shoppers Car Park; Neighbourhood Plan Area.

Benefits: improved streetscape quality; potential reductions in air pollution.



Figure 37: A narrow tree pit in London with a variety of low-level planting.

Implementation timeframe	Medium
Ease of implementation	Medium
Direct impact	Medium
Cost	Medium

Community allotments

Community allotments can bring additional greenery to the area by reclaiming impervious paved areas and contribute to the local biodiversity. Their function as places for growing could also complement the role of the community hub in addition to bringing more natural surveillance to the area.

Location: Luton Road Shoppers Car Park.

Benefits: improved streetscape quality; community engagement.

Implementation timeframe	Short/ medium
Ease of implementation	Medium
Direct impact	Medium
Cost	Medium



Figure 38: Grenville Allotment Gardens in Islington, London.

Community hub

A new community hub could complement the pop-up square or other public realm interventions in Luton Road Shoppers Car Park to extend its role as a meeting space. In addition to its main role, the community hub could also provide the square with more natural surveillance and contribute to its maintenance. Coordination with local residents and organisations is vital to ensure that it is relevant to local needs. Options for the hub to be hosted in an existing building in the vicinity must be considered in priority. Alternatively, the hub could be hosted in a temporary structure or permanent structure on the square itself if proven successful.

Location: Luton Road Shoppers Car Park.

Benefits: community engagement; improved natural surveillance/safety.

Implementation timeframe	Medium/ long
Ease of implementation	Difficult
Direct impact	High
Cost	High





WOODBINE
COTTAGES

Next steps

05

5. Next steps

This report builds on the work already done by the Arches Neighbourhood Planning Forum to offer advice on how the area’s public realm can be improved. The recommendations are rooted in the engagement work that the Forum has undertaken, combined with the specialist skills of AECOM’s urban designers. The following table summarises the key proposals, feedback on implementation, and commentary of implementation.

Proposal	Benefits	Risks and considerations	Potential key partner/ action owner	Potential complementary measures	Funding streams
1. Traffic and parking studies	No direct benefits but essential for many traffic calming measures	Study area might not coincide with neighbourhood plan area Current traffic may not reflect normal patterns	Medway Council		To be discussed
2. Traffic modelling study	No direct benefits but essential for many traffic calming measures	Study area might not coincide with neighbourhood plan area	Medway Council		To be discussed
3. 20 mph speed limit	Reduced speeding Fewer and less severe collisions Safer walking and cycling Potential reductions in air and noise pollution. More self-enforcing traffic calming engineering measures made feasible	Political opposition due to fear of impact on congestion 20 mph area might not coincide with neighbourhood plan area	Medway Council	Traffic/parking study Traffic modelling study	Medway Council To be discussed

Proposal	Benefits	Risks and considerations	Potential key partner/ action owner	Potential complementary measures	Funding streams
4. Raised junctions and entry treatments	Self-enforced speed reduction		Chatham	Traffic/parking study	Medway Council
	Fewer and less severe collisions		Medway District	20 mph speed limit	To be discussed
	Safer walking and cycling				
	More comfortable walking				
5. Kerb extensions and buildouts	Self-enforced speed reduction	(Potentially) removal of some on-street parking	Medway Council	Traffic/parking study	Medway Council
	Safer walking and cycling			20 mph speed limit	To be discussed
	More space for walking				
6. Temporary kerb extensions and buildouts	Self-enforced speed reduction	(Potentially) removal of some on-street parking	Medway Council	Traffic/parking study	Medway Council
	Safer walking and cycling	Limited lifespan		20 mph speed limit	To be discussed
	More space for walking	Lack of political will for reconstruction with permanent materials			
7. Removal of bollards	More space for walking	Should not be done before lowering the speed limit to 20 mph	Medway Council		Medway Council
	Improved streetscape quality				
8. Pavement reconstruction	Improved streetscape quality	Should not be done without accompanying traffic calming measures	Medway Council		Medway Council
	Improved drainage	Traffic disruption during construction			To be discussed
9. Street greening	Improved streetscape quality	Maintenance cost or "adoption" by local residents/businesses	Medway Council	Kerb buildouts/ extensions	Medway Council
	Improved drainage if combined with SuDS		(Potentially) local residents/ businesses	(Potentially) removal of some on-street parking	To be discussed
	Potential reductions in air pollution				

Proposal	Benefits	Risks and considerations	Potential key partner/ action owner	Potential complementary measures	Funding streams
10. Sustainable urban drainage systems (SuDS)	Improved streetscape quality	Maintenance cost or "adoption" by local residents/businesses	Medway Council	Kerb buildouts/ extensions	Medway Council
	Improved drainage			(Potentially) removal of some on-street parking	To be discussed
11. Removal of pedestrian guardrails	More space for walking	Should not be done before lowering the speed limit to 20 mph	Medway Council		Medway Council
	Improved streetscape quality				
12. Reconfiguration of A2 junction and roundabout	Reduced speeding	Partly outside of neighbourhood plan area	Department for Transport	Traffic study	DfT (?)
	Fewer and less severe collisions	Construction length and cost	Network Rail		Medway Council
	Safer walking and cycling	Coordination with numerous stakeholders			To be discussed
	Potential reductions in air and noise pollution	Severe traffic disruption during construction			
	More space for walking				
	Improved streetscape quality				
13. Reconfiguration of traffic island and/or road geometry	Reduced speeding	Construction cost	Medway Council	Traffic study	Medway Council
	Fewer and less severe collisions	Traffic disruption during construction			To be discussed
	Safer walking and cycling				
	Potential reductions in air and noise pollution				
	More space for walking				
	Improved streetscape quality				
14. Murals	Improved streetscape quality		Private owners		Medway Council
	Community engagement				To be discussed

Proposal	Benefits	Risks and considerations	Potential key partner/ action owner	Potential complementary measures	Funding streams
15. Street trees	Improved streetscape quality	Maintenance cost or "adoption" by local residents/businesses	Medway Council		Medway Councils
	Potential reductions in air pollution		(Potentially) local residents/ businesses		To be discussed
16. Cycle storage/parking	Secure on-street cycle storage for residents and visitors	(Potentially) removal of some on-street vehicle parking	Medway Council		Medway Council
	Improved streetscape quality	Maintenance			
16. Filtered permeability with collapsible bollards	Safer walking and cycling	Coordination with local residents and businesses	Medway Council		Medway Council
	More streetscape improvement interventions made possible		Local residents		
17. Pushing forward the entrance gates to side alleys	Improved natural surveillance/safety	Coordination with local residents and businesses	Local residents		To be discussed
			Housing estate management company		
18. Parking study	No direct benefits but essential many interventions proposed for the car park site		Medway Council		Medway Council
			Car park management company		To be discussed
19. General conversion of Luton Road Shopper Car Park into a community asset	Improved streetscape quality		Medway Council	Parking study	Medway Council
	Improved natural surveillance/safety		(Potentially) local residents/ businesses	Public space usage study	To be discussed
	More comfortable walking		Car park management company		
	Community engagement				
20. Pop-up public square	Improved streetscape quality	Limited lifespan	Medway Council	Parking study	Medway Council
	Improved natural surveillance/safety	Lack of political will for reconstruction in permanent materials	(Potentially) local residents/ businesses	Public space usage study	To be discussed
	Community engagement	Follow-up/ public space usage study	Car park management company		

Proposal	Benefits	Risks and considerations	Potential key partner/ action owner	Potential complementary measures	Funding streams
21. Movable planters and street furniture	Improved streetscape quality	Maintenance or "adoption" by local residents or businesses	Medway Council (Potentially) local residents/ businesses Car park management company	(Temporary) conversion into public space Public space usage study	To be discussed
22. Community hub	Community engagement Improved natural surveillance/ safety		Medway Council Private landowner Local residents Local organisations Car park management company	Parking study	To be discussed
23. Construction of new housing	Increase in housing stock Improved natural surveillance Improved streetscape quality Potential S106 improvements	Impact on parking and congestion Ensure that the new housing serves the local needs	Medway Council Private landowner	Parking study	Private
24. Community allotments	Improved streetscape quality Community engagement	Maintenance or "adoption" by local residents or businesses	Medway Council Local residents	Parking study	To be discussed



Figure 39: Chatham and Medway should find long-term solutions to reconfigure the A2 roundabout to reconnect the Neighbourhood Plan Area with the town centre and change its car-dominated character.

