MOTT MACDONALD

Charing Cross & Grange Road, Birkenhead

Stage 01 & 02 Report

Revision	Date	Originator	Checker	Approver	Description
D	020822	Alice Gallareto Liz Jones	Tom Roberts	Tom Roberts	Issue

Information class: Confidential

Contents

1 Introduction

1.1 Introduction

This Study

Mott MacDonald has been commissioned by Wirral Council to undertake a two-stage study to progress concept options and costings for Charing Cross and Grange Road, Birkenhead.

In early 2020, Mott MacDonald, Avison Young & OPEN worked together with Wirral Council to develop early ideas for Charing Cross and Grange Road, in Birkenhead Town Centre. Wirral Council have subsequently been awarded £2.969 million from the Department for Levelling Up, Housing and Communities (DLUHC)'s Future High Street Fund to deliver this scheme.

The purpose of this report is to provide a more focused brief for subsequent design stages.

This report therefore consists of the following:

- **Existing conditions**: an assessment of baseline conditions and identification of issues and opportunities.
- **Concept options**: outlining potential options for the scheme, derived from both our baseline assessment and associated stakeholder consultation.
- **Cost plan**: outlining the costs associated with each of the concept options.

Charing Cross Junction

2 Existing Conditions

2.1 Then & Now

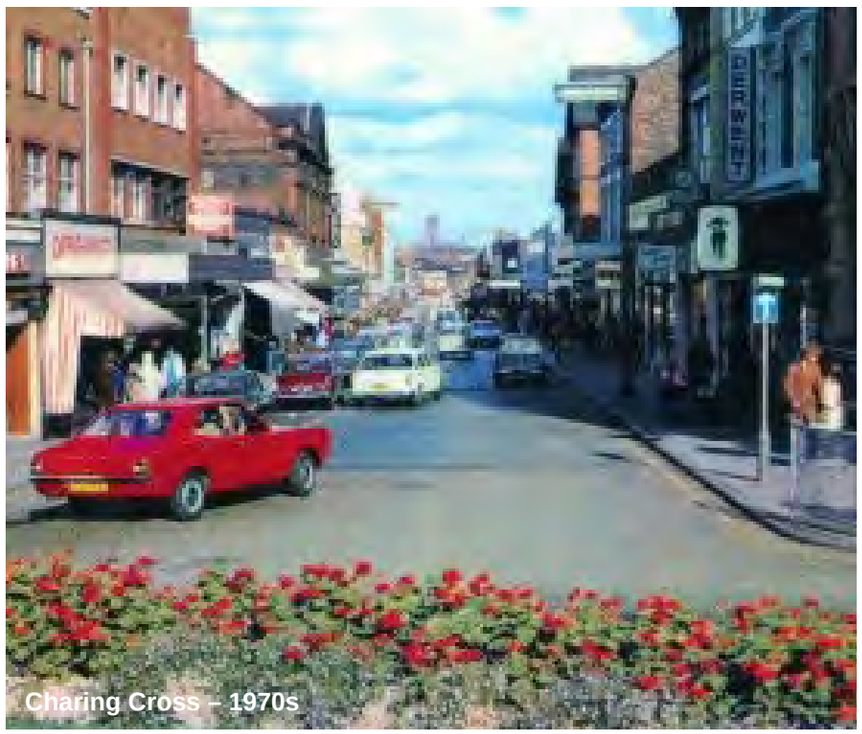
Grange Road – 1950s


Grange Road West – 1960s

Grange Road – 1960s

Charing Cross – 1950s

Charing Cross – 1960s


Charing Cross – 1970s

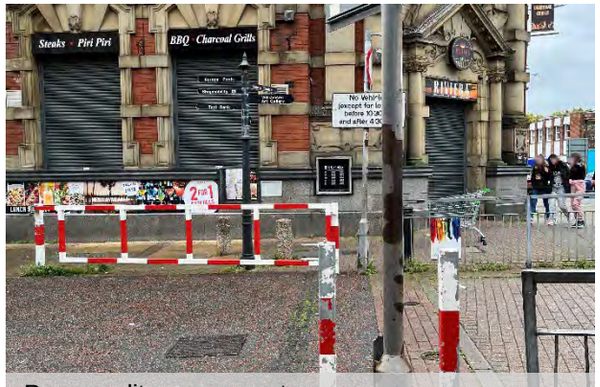
Grange Road - today

Charing Cross - today


Charing Cross - today

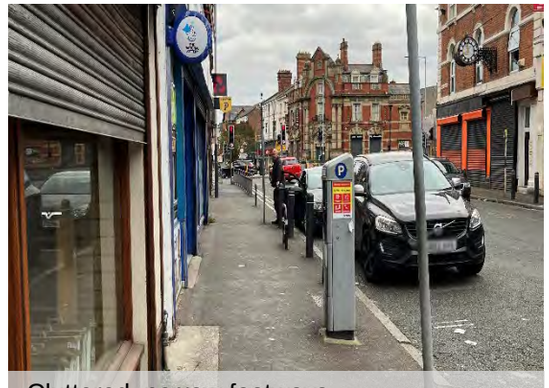
Grange Road West - today


Tired, underwhelming public realm



Poor quality access gate


Historic building form


Cluttered, narrow footways

Clutter and vehicles on footway

Guardrail, cracked tactile surface


Excessive junction footprint


Poor pedestrian crossings

Grange Road – Significant issues with fly-parking on side streets.

2.2 Existing Land Uses

Figure 2.1 identifies existing land uses across the study area, focusing on ground floor uses.

Ground floor uses on Grange Road are predominantly large retail premises facing the pedestrianised area. There are also two entrances to the Pyramids Shopping Centre from the street.

The few professional services along Grange Road are concentrated towards the Charing Cross end, offering access to banks and few small businesses.

There is a cluster of food and drink establishments around Charing Cross junction, as well as smaller units on Oxton Road and Whetstone Lane. These uses generate frequent trips from takeaway delivery services.

Grange Road West is characterised by smaller convenience stores and off-licence shops – but several sites are currently not in use. The street also hosts the Little Theatre - a Wirral based Theatre that has its own resident theatre company.

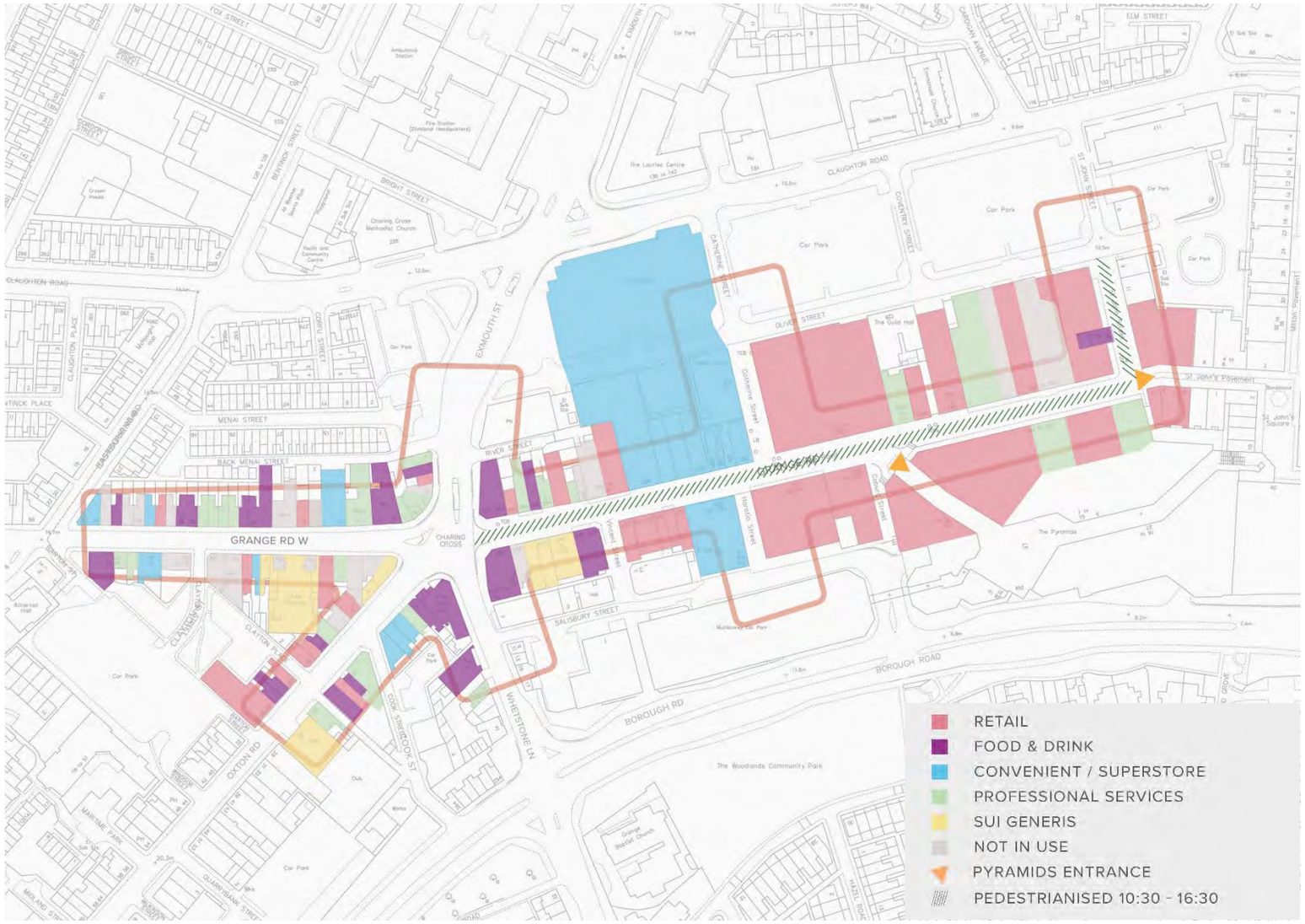


Figure 2.1 – Existing Land Uses

2.3 Listed Buildings

Figure 2.2 identifies listed buildings within the study area. The building at 1-7 Charing Cross is listed on the National Heritage List for England as a Grade II.

1-7 Charing Cross

257 Grange Road, at the junction with Charing Cross, is also listed as a Grade II.

257 Grange Road

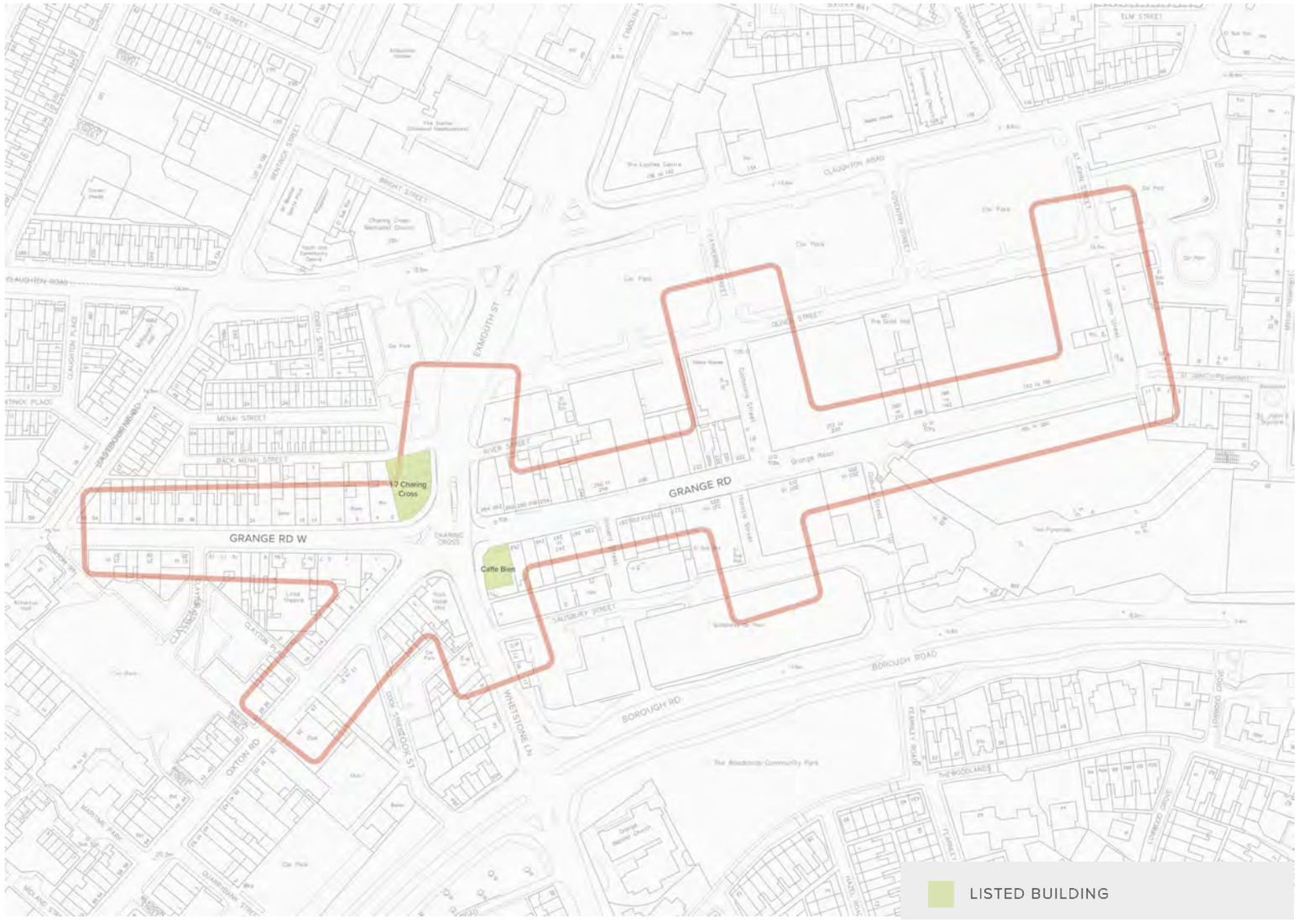


Figure 2.2 – Listed Buildings

2.4 Pedestrian Movement & Desire Lines

Figure 2.3 identifies existing pedestrian movement and desire lines across the study area.

Grange Road and adjacent streets host the majority of pedestrian movement across the area – thanks to the variety of shops and services facing Grange Road, two accesses to the Pyramids Shopping Centre, several nearby car parks and bus stops.

Still, one of the key issues across the study area is the conflict between pedestrians and vehicles on Grange Road and its side streets – as cars obstruct pedestrian movement and reduce accessible space for walking, particularly for those using a wheelchair or scooter.

The crossing movement at Charing Cross, due to the current junction layout including guardrail, dog-legs and refuges, is notably more convoluted than the pedestrian desire lines.

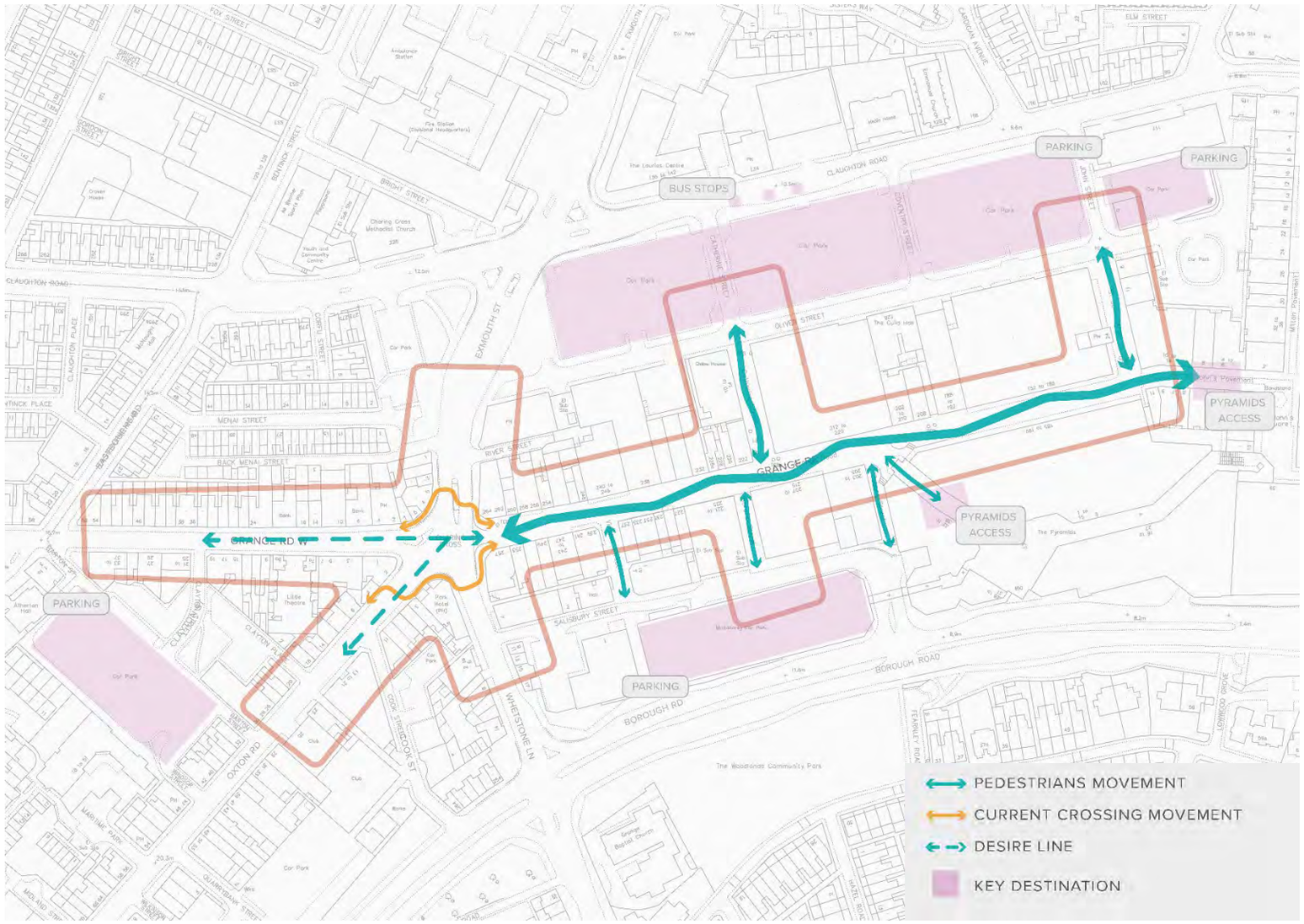


Figure 2.3 – Pedestrian Movement & Desire Lines

2.5 Typical Street Section

Figures 2.4 and 2.5 show existing street cross sections at Grange Road and Grange Road West. Despite a width of over 13m, pedestrian space along Grange Road is often reduced by clutter and parked vehicles obstructing pedestrian movement. Overall, the public realm materials are tired and in need of renewal.

Grange Road West is currently dominated by the carriageway width, with narrow footway on both sides and on-street car park on the north side of the street. Clutter and footway obstructions can reduce the independence of many people, especially older or disabled people with visual or mobility impairments.

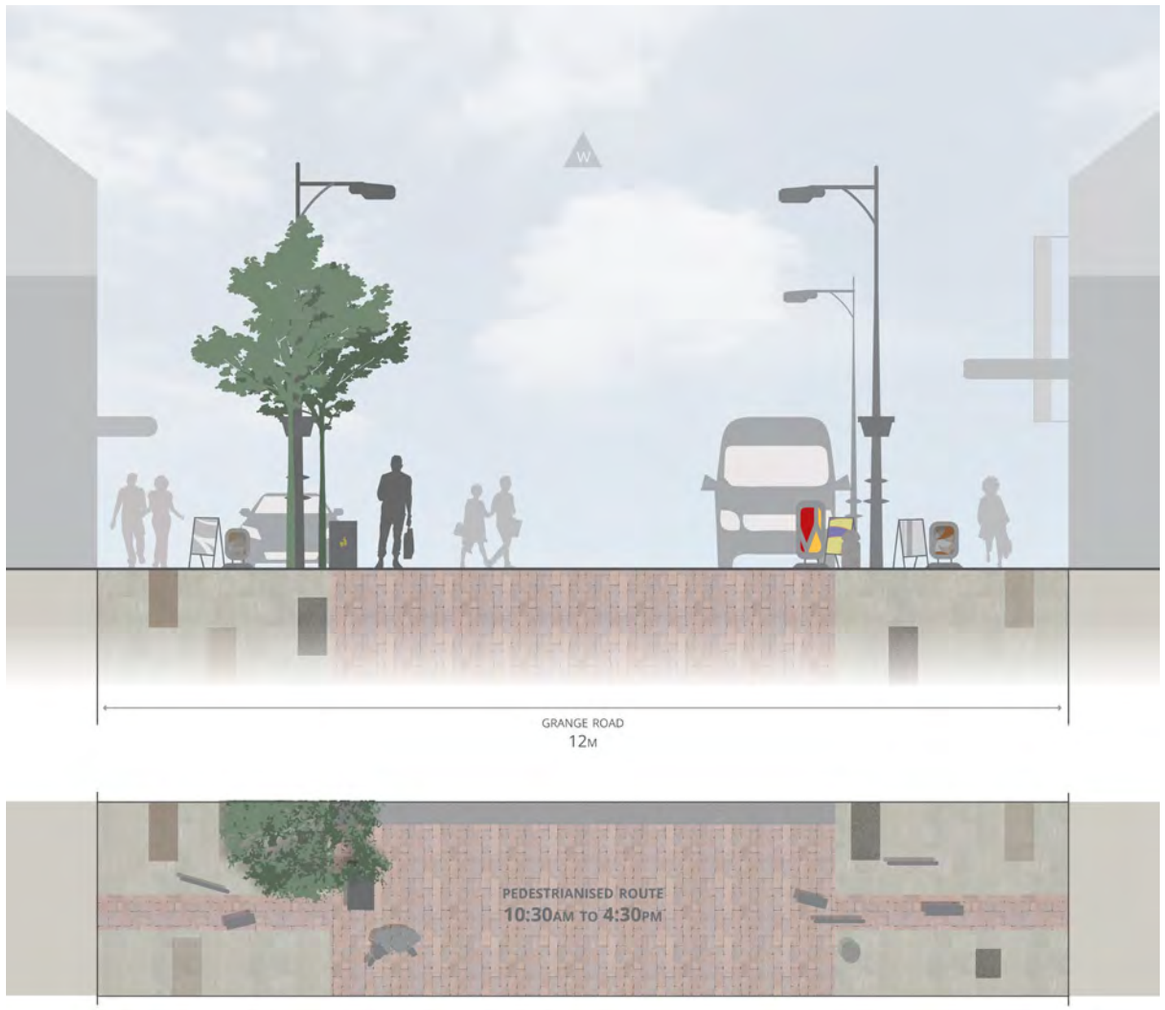


Figure 2.4 – Grange Road – Existing Section

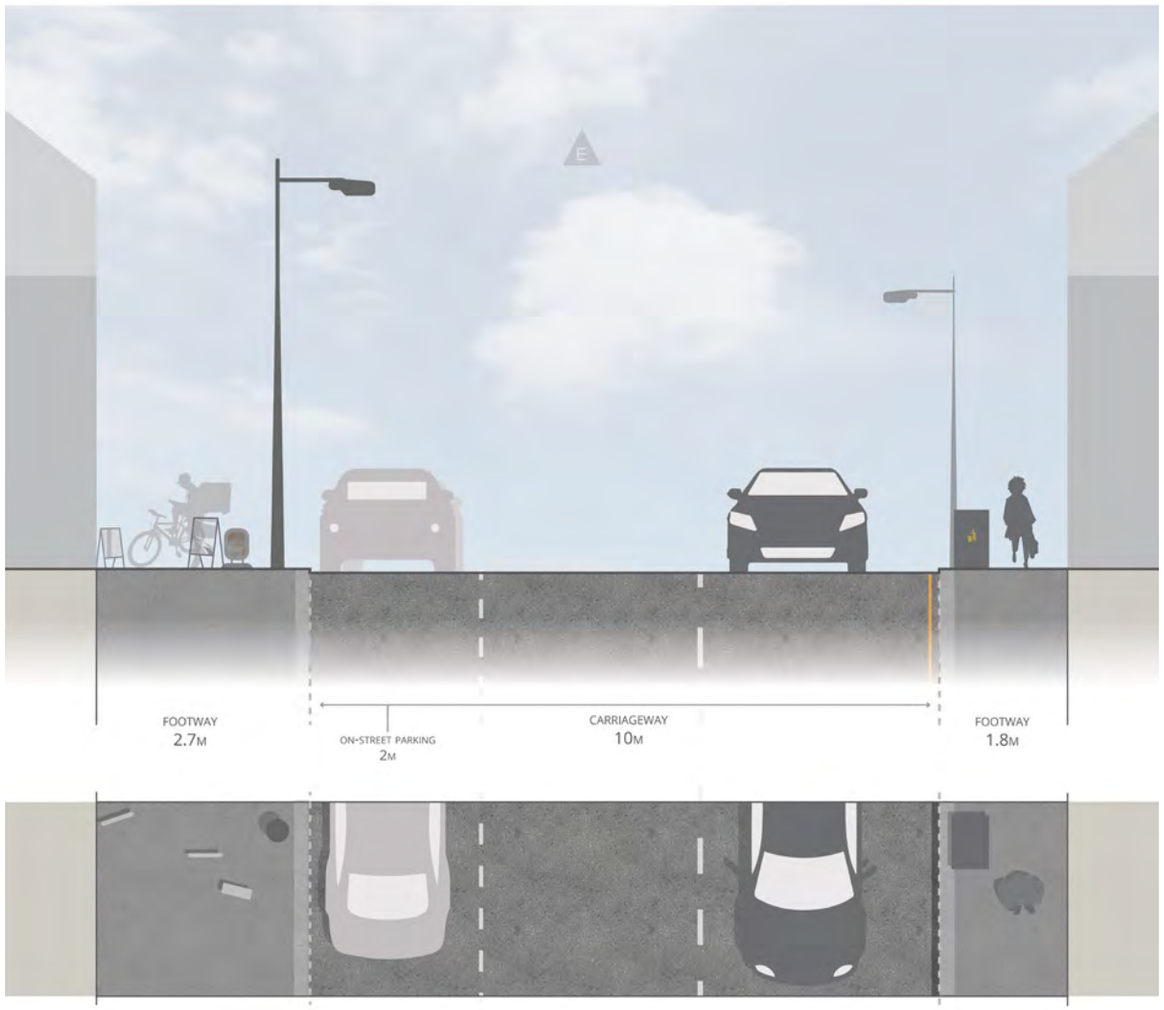


Figure 2.5 – Grange Road West – Existing Section

2.6 Recorded Crime

Figure 2.6 identifies crime hotspots across the study area, according to police.uk records between August 2020 to 2021.

The key crime hotspots are mainly situated in or around the larger supermarkets on Grange Road (ASDA and Iceland), mostly reporting shoplifting.

A high number of crime has also been recorded on River Street, to the back of McDonalds, as well as Menai Street and Back Menai Street, which are residential streets. Back Menai Street is due to be gated using funding from the Home Office Safer Streets Fund.

There has been six reported bicycle thefts in or close to the study area. Cyclists are not permitted on Grange Road and currently there is no provision for secure cycle parking.

Anecdotal feedback and comments from the latest business survey highlighted how antisocial behaviour on Grange Road and Grange Road West is a cause of concern for residents. There have also been anecdotal reports of antisocial cycling behaviour by groups of young people on Grange Road, particularly intimidating for elderly and more vulnerable members of the community.

Figure 2.6 – Recorded Crime

2.6 Car Parking

Figure 2.7 shows both on-street and off-street car parking provision across the study area and surroundings.

As shown in Table 2.1 there is a significant amount of public parking available in close proximity to the study area, including two large multi-storey car parks for ASDA and the Pyramid Shopping Centre which are a 5-minute and 3-minute walk from Charing Cross junction.

The majority of public parking available is ‘pay and display’, this includes parking connected to the south of Grange Road West and parking at the north end of St John Street.

On-street parking on Grange Road West is a mix of pay and display and free short stay. Barton Street car park is accessible from Grange Road West by Clayton St and from Oxton Road by Barton Street.

Multi storey spaces	Public surface level spaces	On street spaces	Total spaces
1385	242	54	1681

Table 2.1: Car Parking Provision

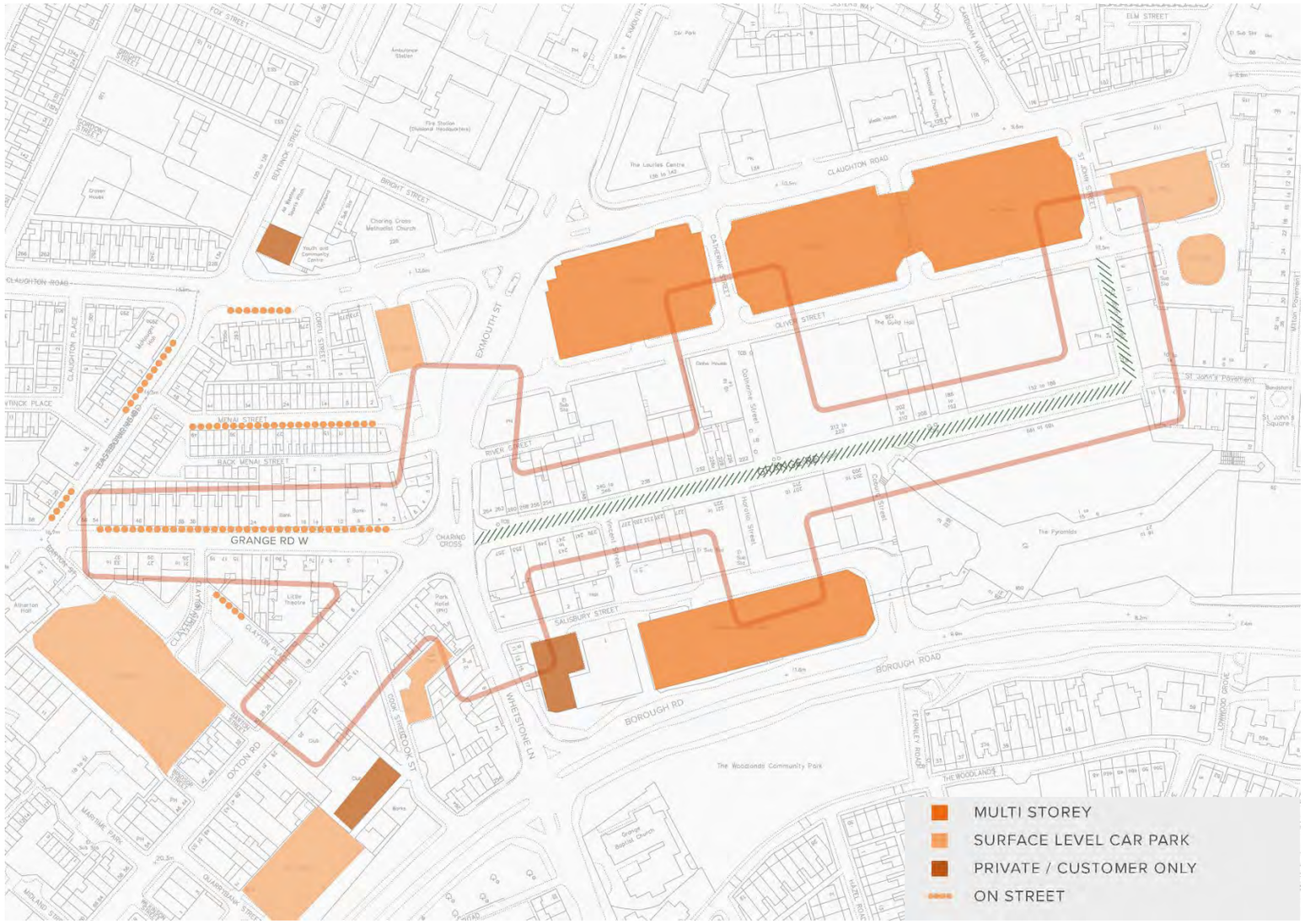


Figure 2.7 – Car Parking

2.7 Bus Provision

Figure 2.8 shows the existing bus services which run through the study area, as well as bus stops on adjacent streets.

There are two bus stops on Oxton Road with an average of 3 buses per hour running northbound and 5 buses per hour southbound. These services travel in a circular route through Birkenhead, running through the study area along Oxton Road and Exmouth Street.

Bus stops with more frequent services are located just outside of the study area, approximately a three-minute walk from Charing Cross junction. Westbound services are located on Claughton Road/ Catherine Street, and eastbound on Borough Road/Whetstone Lane. Birkenhead Bus Station is a 9-minute walk from Charing Cross.

These bus stops offer connections to a wide range of locations across Wirral and Liverpool.

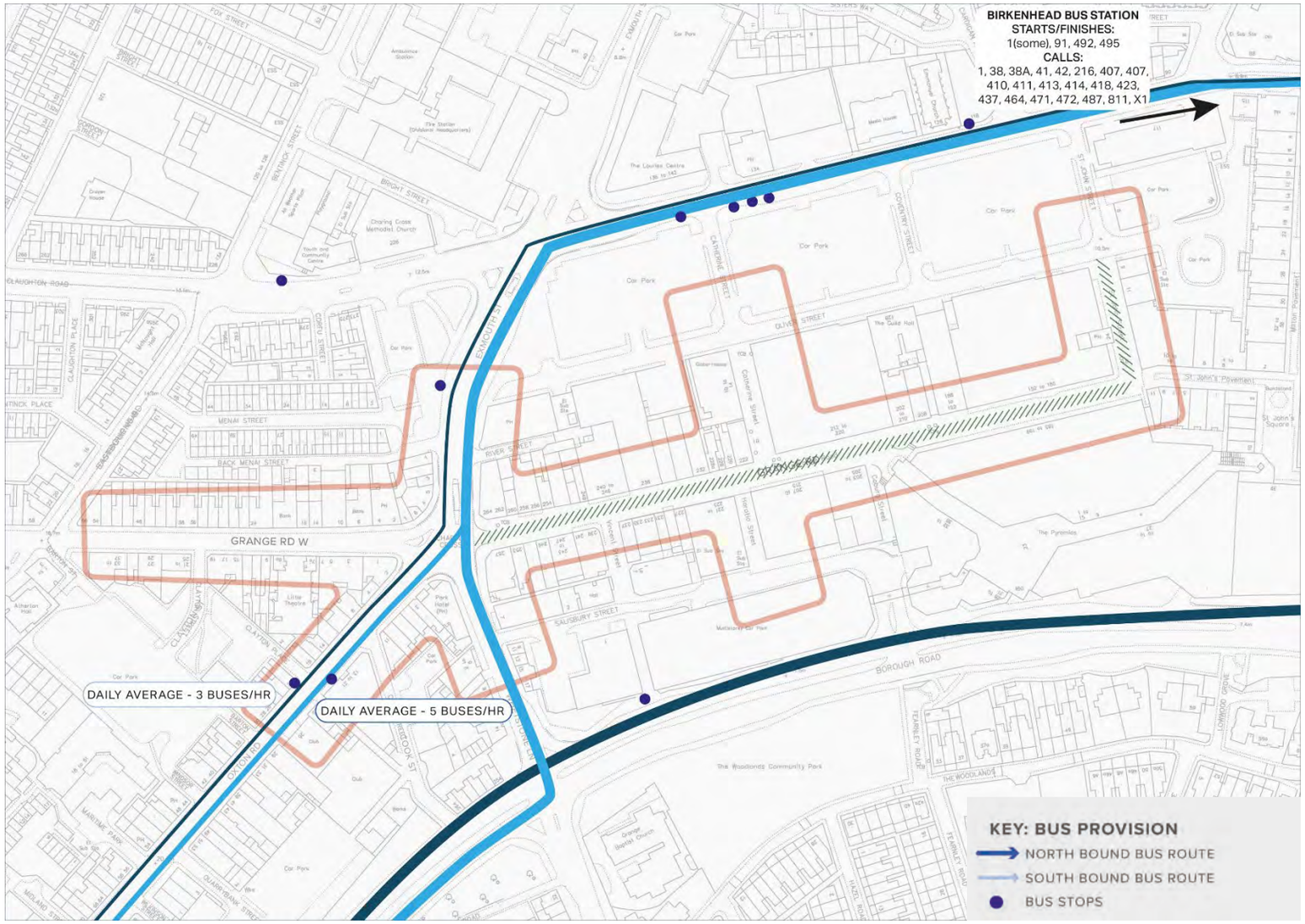


Figure 2.8 – Bus Provision

2.8 Collisions Involving Active Travel Users

Figure 2.9 shows the location of all active travel collisions (involving pedestrians or cyclists) which have occurred within or close to the study area between 2017-2021.

There are a total of 9 active travel collisions in the study area, including one fatal pedestrian collision at Charing Cross junction – involving one vehicle.

Four collisions recorded within the study area involved cyclists. Charing Cross junction layout is particularly challenging for cyclists due to the level of traffic and lack of cycling facilities, creating an overall poor environment for people on bikes.

Clusters of collisions have been recorded at junctions in the surrounding area. There have been 7 serious injury incidents - and 9 slight injury incidents.

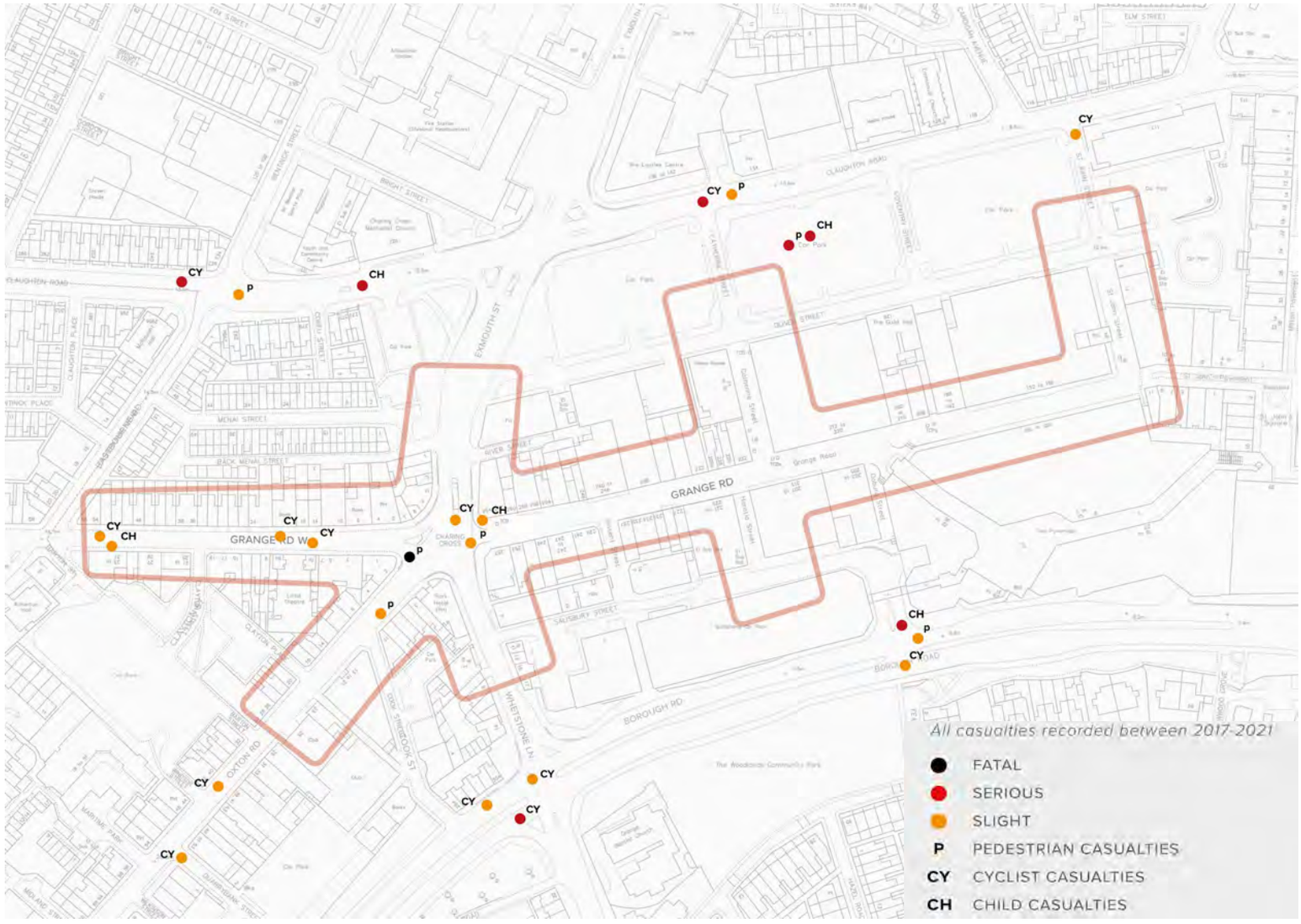


Figure 2.9 – Active Travel Collisions

2.9 All Collisions

Figure 2.10 shows the location of all traffic collisions which have occurred within or close to the study area between 2017-2021.

There are a total of 10 collisions in the study area, and 35 have been recorded at junctions in the surrounding area. The highest frequency of collisions has been recorded at Borough Road / Whetstone Lane junction and Borough Road / Salisbury Street junction.

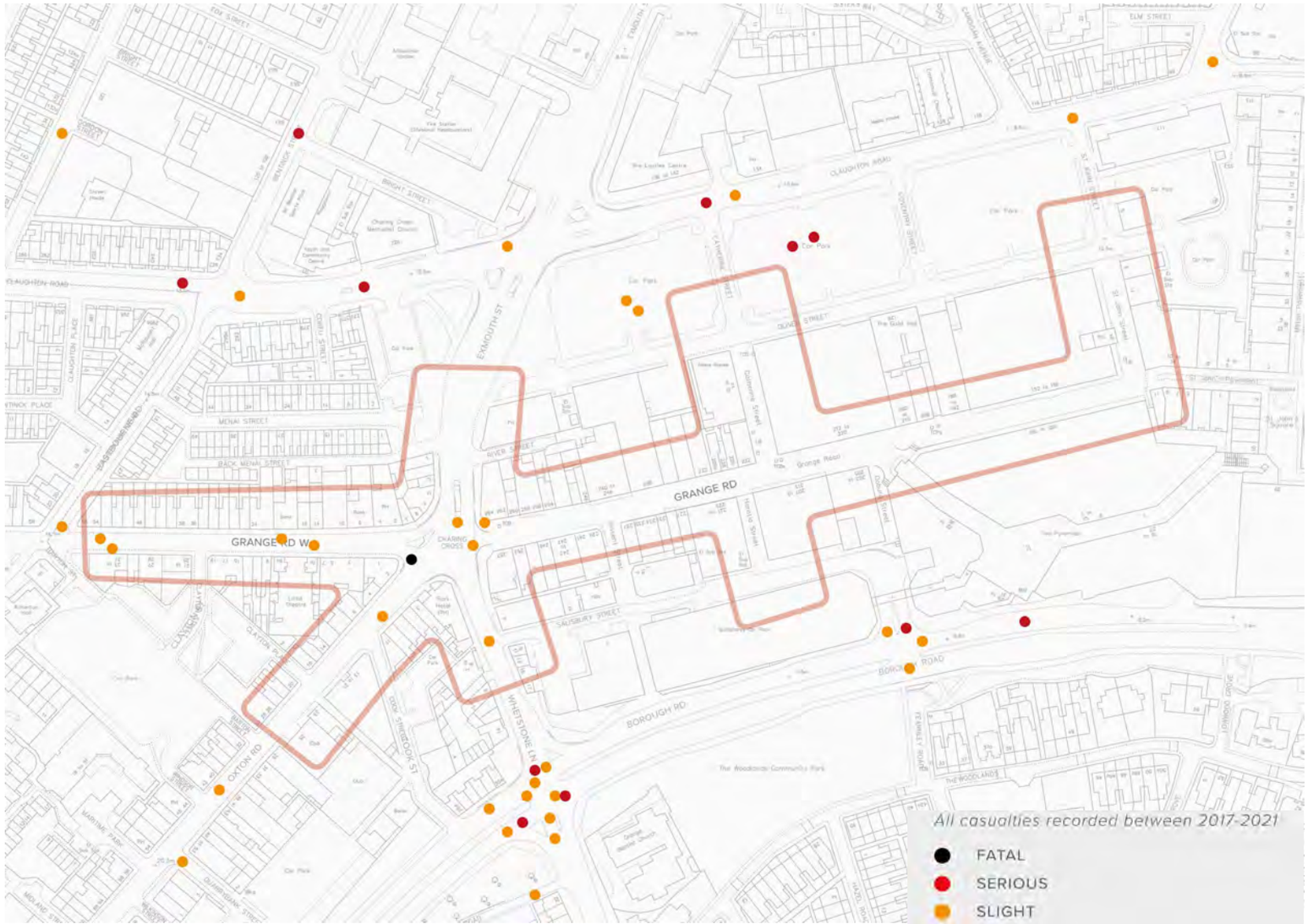


Figure 2.10 – All Traffic Collisions

2.10 Public Realm Conditions

Figure 2.11 highlights public realm conditions throughout the study area covering Grange Rd, Charing Cross and Grange Rd West.

- Current public realm is generally in a tired, underwhelming state. Surfacing is inconsistent through the study area: often patchy, mis-matched in colours and materials.

- There is a change in level in front of the Pyramids entrance on the south side of Grange Road.

- There is a significant amount of clutter throughout, particularly clustered towards Charing Cross end: different style/materials bollards, large A-Boards, outdated signage, goods and signs from shops, and poorly placed street furniture.

- There are several cycle parking stands across the study area, but many are in poor condition.

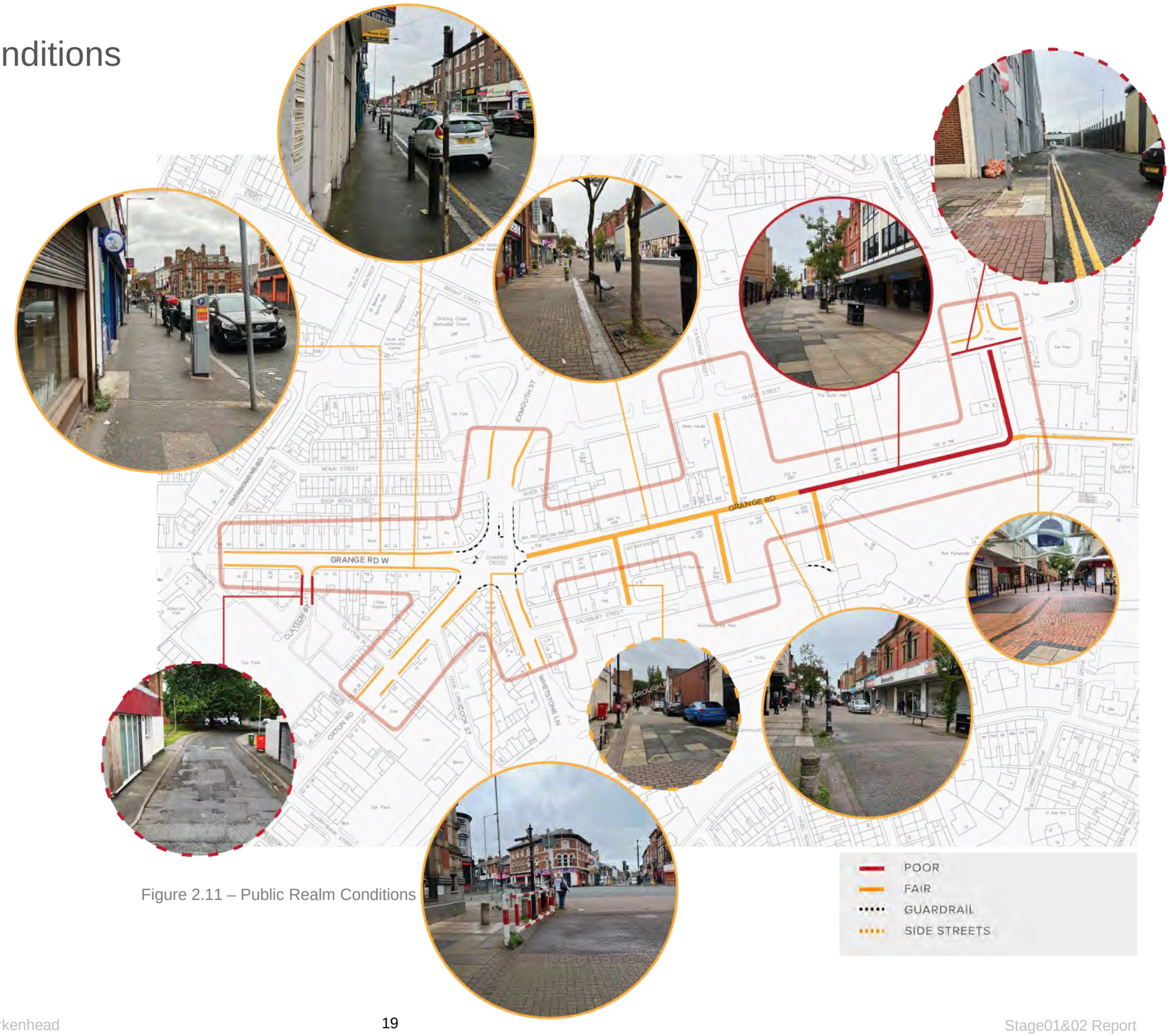


Figure 2.11 – Public Realm Conditions

2.11 Healthy Streets Audit

A Healthy Streets Audit was undertaken to determine baseline conditions on Grange Road and Grange Road West.

The Healthy Streets approach was developed by Transport for London to assess streets against a series of 10 evidence-based indicators of what makes streets appealing, healthy, inclusive places. Each indicator describes an aspect of the human experience of being on the street and helps to determine strengths and weaknesses.

Figure 2.12 shows how Grange Road performs fairly well on the Healthy Streets scoring, as being pedestrianised conflicts between pedestrian and live traffic are strongly reduced. Still, the current poor state of the public realm reduces attractiveness and physical accessibility – e.g., footway materiality is inconsistent, and clutter can obstruct pedestrian passage. Due to the majority of retail facing the street, natural surveillance is not granted during hours of darkness.

Figure 2.13 showcases how Grange Road West performs poorly on overall attractiveness and comfort for pedestrians – this predominantly due to narrow, cluttered footways and vehicle dominance along the street.

Figure 2.12 – Healthy Streets Audit – Grange Road

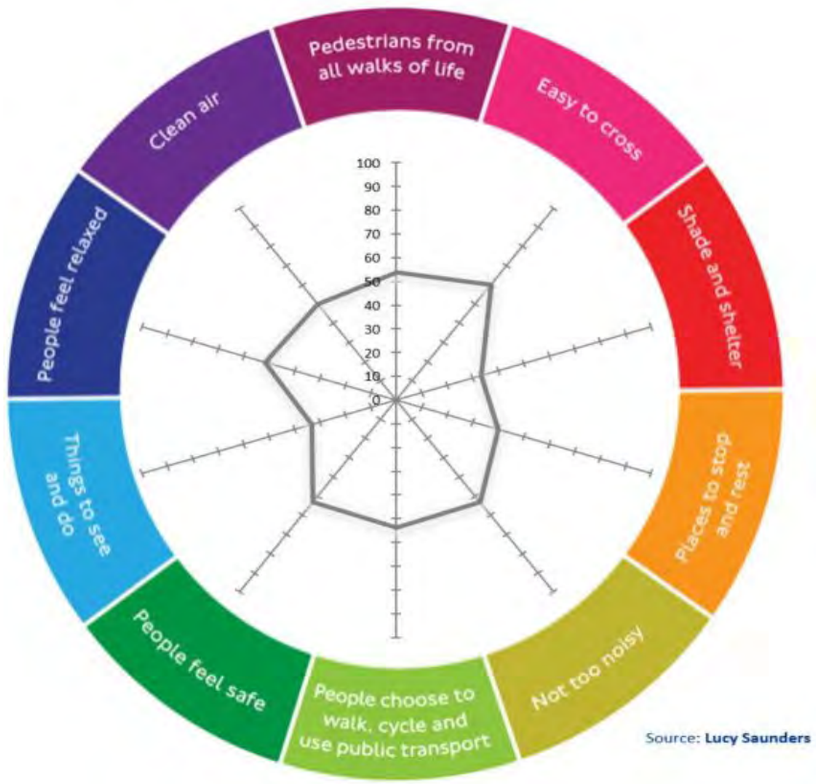


Figure 2.13 – Healthy Streets Audit – Grange Road West

2.12 Traffic Management

Grange Road is pedestrianised between Charing Cross and St John Street - with loading vehicles permitted before 10:30am and after 4:30pm. Out of pedestrianisation hours, Grange Road works as an eastbound one-way route.

Traffic Regulation Order

The existing Traffic Regulation Order (TRO) restricts vehicle access and parking during peak shopping times along Grange Road. At present, Wirral Council is unable to legally enforce moving traffic offences. This means that enforcement of the existing TRO can only be undertaken by Merseyside Police, and contravention has to be witnessed in person by a Police officer. This has led to daily disregard of the TRO by those driving and parking on the street during operational hours.

Figure 2.14 – Grange Road – Existing Traffic Restrictions

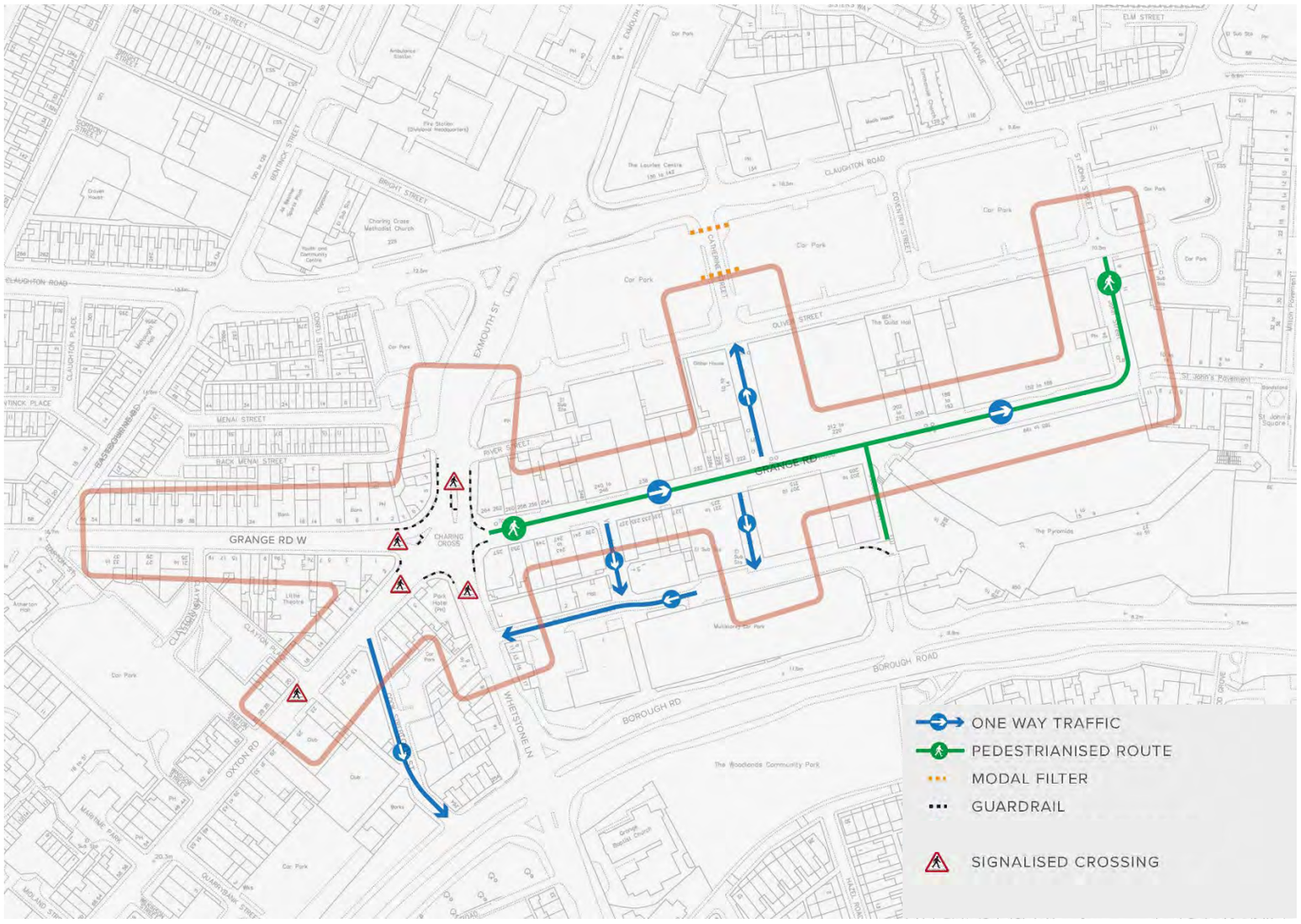


Figure 2.15 – Traffic Management Plan

Due to frequent disregard for the vehicular restrictions, barriers have been recently installed at the junction of Grange Road and Charing Cross. A lockable gate has been installed to reinforce the existing Traffic Regulation Order in place, as a temporary solution – as shown in Figures 2.16 to 2.18.

The barrier has been installed at the western-end of the route, next to McDonald's, and it should be locked between 10.30am and 4.30pm, in line with the existing order. However, this relies on daily manual operation, and the gate was observed to be open on a site visit.

Hostile Vehicle Mitigation

Grange Road has been identified by the Counter Terrorism Policing North West (CTPNW) as an area potentially vulnerable to 'vehicle as a weapon attack'. This because unrestricted access for vehicles into Grange Road shopping area from Oxton Road and Grange Road West could allow vehicles to gain high speed into an area.

Therefore implementation of Hostile Vehicle Mitigation measures are required. The temporary lockable gate partially provides this, though it was observed to be open during pedestrianised hours during a site visit.

Options for both the revision and enforcement of the TRO, and implementation of improved Hostile Vehicle Mitigation measures, are considered in Chapter 3 of this report.

Figure 2.16 Grange Road – Gate at Charing Cross junction (1/3)

Figure 2.17 Gate at Charing Cross junction (2/3)

Figure 2.18 Gate at Charing Cross junction (3/3)

2.13 Highway Ownership

Figure 2.19 shows the extent of the highway ownership across the study area. All areas of interest appear to be under the ownership of Wirral Council.

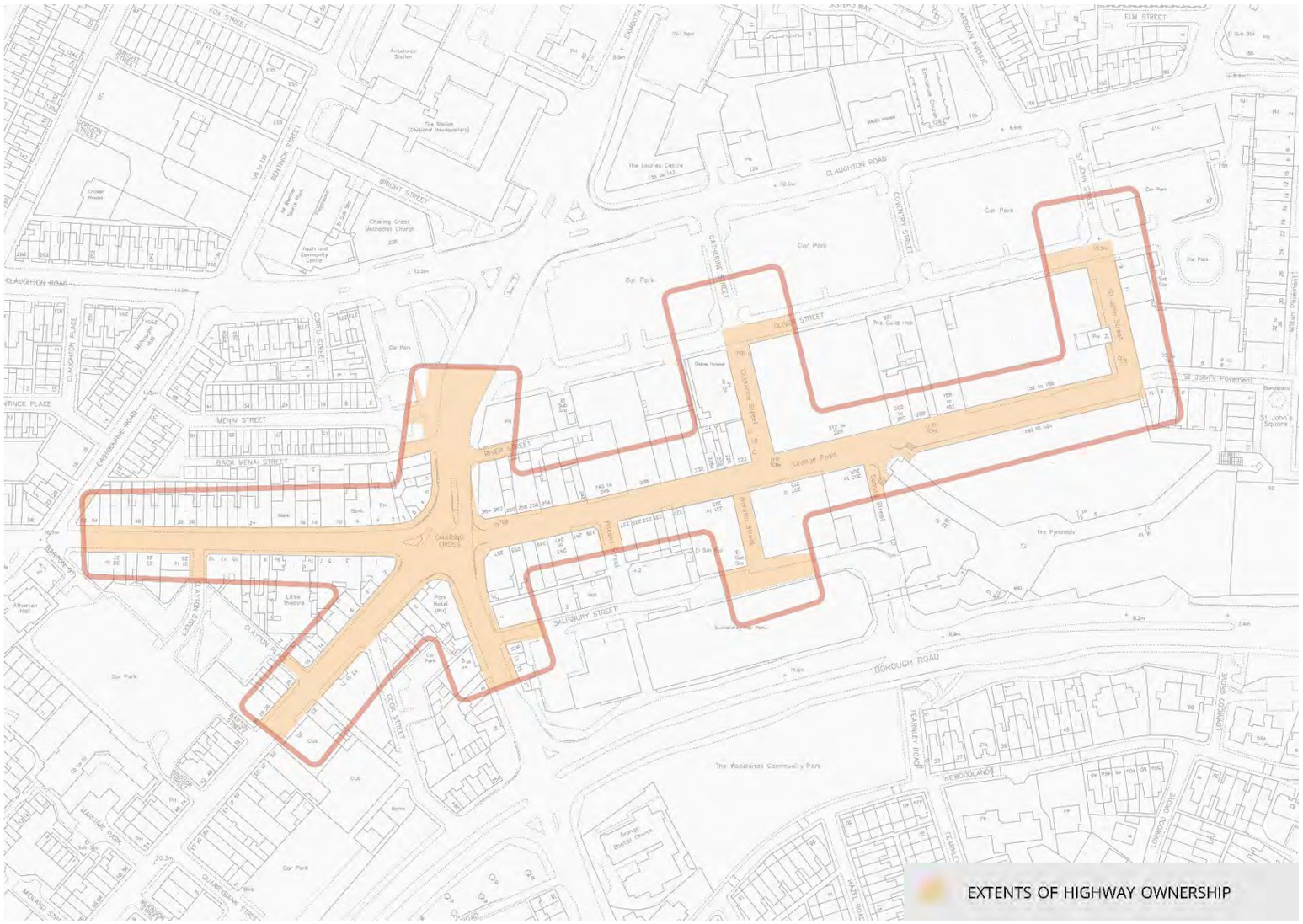


Figure 2.19 – Highway Ownership

2.13 Traffic Flows – Charing Cross

Figure 2.20 and 2.21 illustrate the traffic flow for all turning movements at Charing Cross for the Base Year 2015, extracted from Wirral Transport Model. With the majority of traffic running on Whetstone Ln and Exmouth Street, vehicular flows are fairly consistent between AM and PM scenarios. There is however a notable increase of westbound and northbound traffic from Whetstone Lane in the PM peak

Out of the 1,666 vehicles recorded in the AM and 1,984 vehicles recorded in the PM:

- Traffic on Grange Road West accounts for less than 2% of total vehicle flows; while
- 70% of AM traffic and 88% of PM traffic run on the north/south axe of Exmouth Street and Whetstone Ln.

Charing Cross junction will need to be re-modelled at the next Riba Stage with updated traffic flow data.

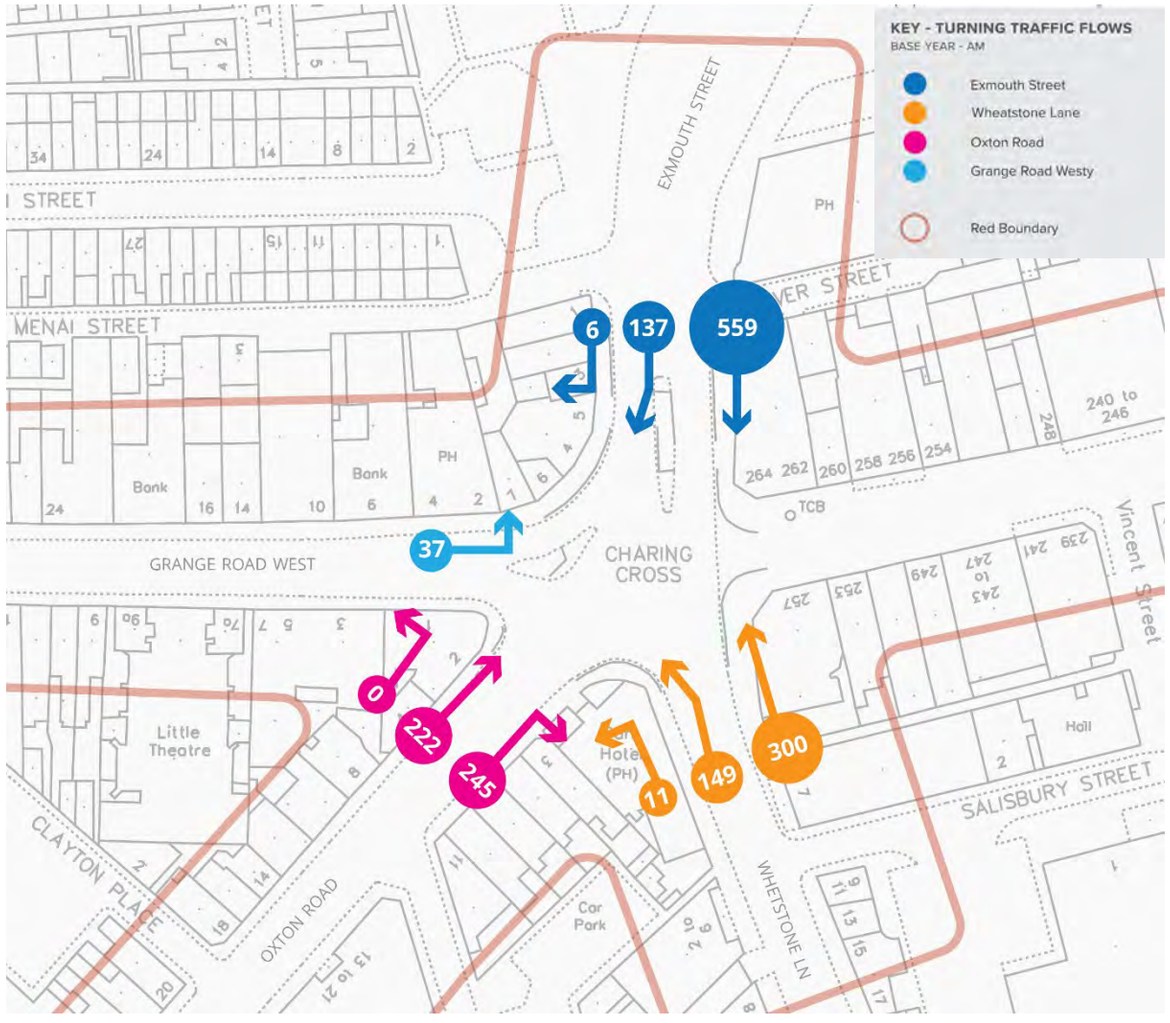


Figure 2.20 – Charing Cross Traffic Flows – 2015 AM

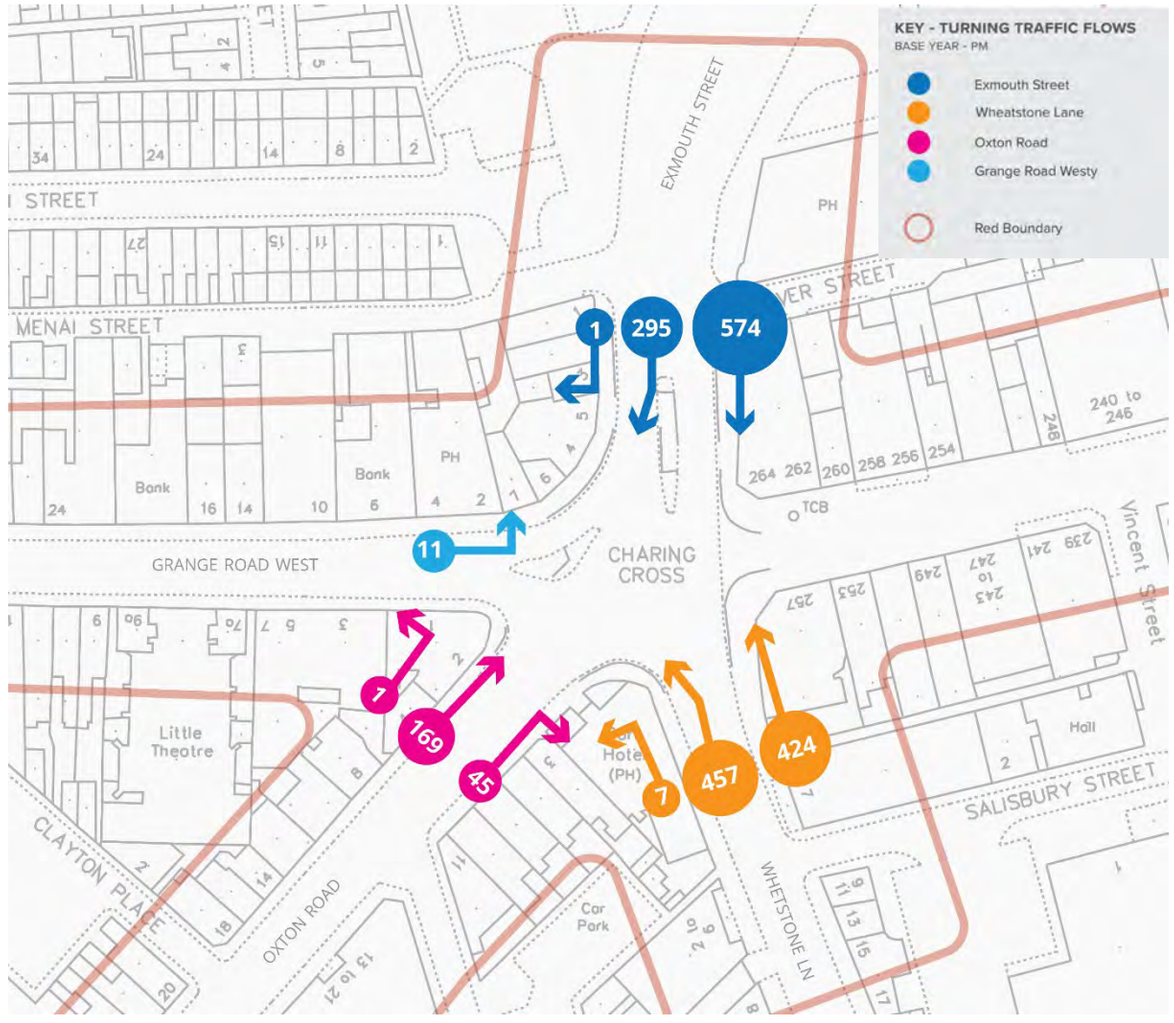


Figure 2.21 – Charing Cross Traffic Flows – 2015 PM

2.13 Junction Modelling – Charing Cross

A Linsig microsimulation model has been developed to assess the existing function of the Charing Cross junction, in the 2015 Base Year. LinSig is a software which allows traffic engineers to model traffic signals and their effect on traffic capacities and queuing. LinSig also optimises signal timings to reduce delay or increase capacity at a junction or group of interlinked junctions.

The Charing Cross model in Figures 2.22 and 2.23 is showing the junction as working at borderline capacity in the AM – with Exmouth Street, Whetstone Lane and Oxton Road working at > 85% capacity. The PM scenario shows the Whetstone Lane and Oxton Road arms are overcapacity. This means the arms at borderline / over capacity will experience congestion and queueing, reducing the junction performance. The current Linsing model is based on estimated signal timing, the model will need to be refreshed at the next Riba Stage to reflect baseline updates and actual signal timing.

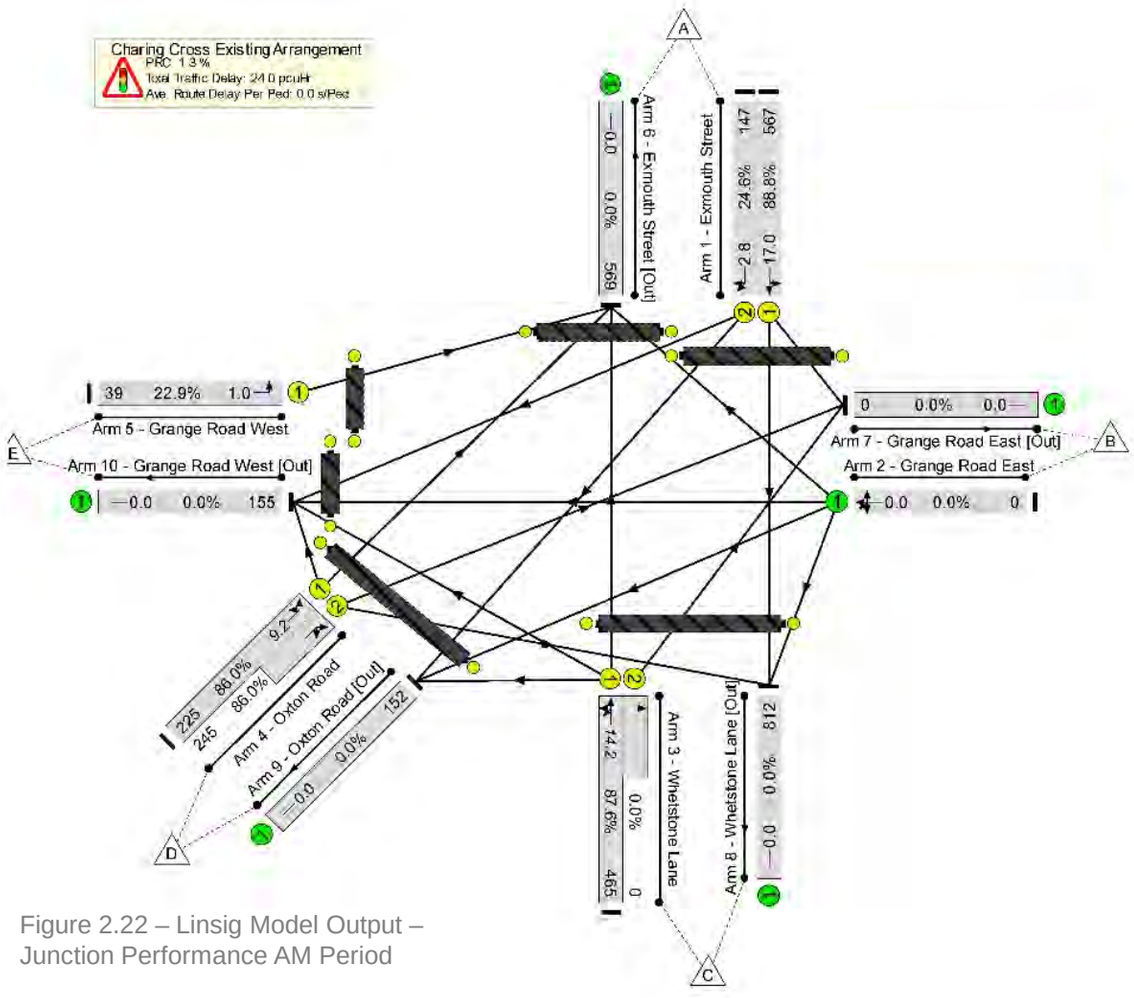


Figure 2.22 – Linsig Model Output – Junction Performance AM Period

PCU: passenger car unit. PCS is a measure used to assess highway capacity, for modelling purposes. Different vehicles are assigned different values, according to the space they take up. A car has a value of 1; smaller vehicles will have lower values, and larger vehicles will have higher values.

PRC: practical reserve capacity. PRC is a measure of how much additional traffic could pass through a junction whilst maintaining a maximum degree of saturation of 90% on all Links. Negative PRCs show that the junction is congested and queues will form.

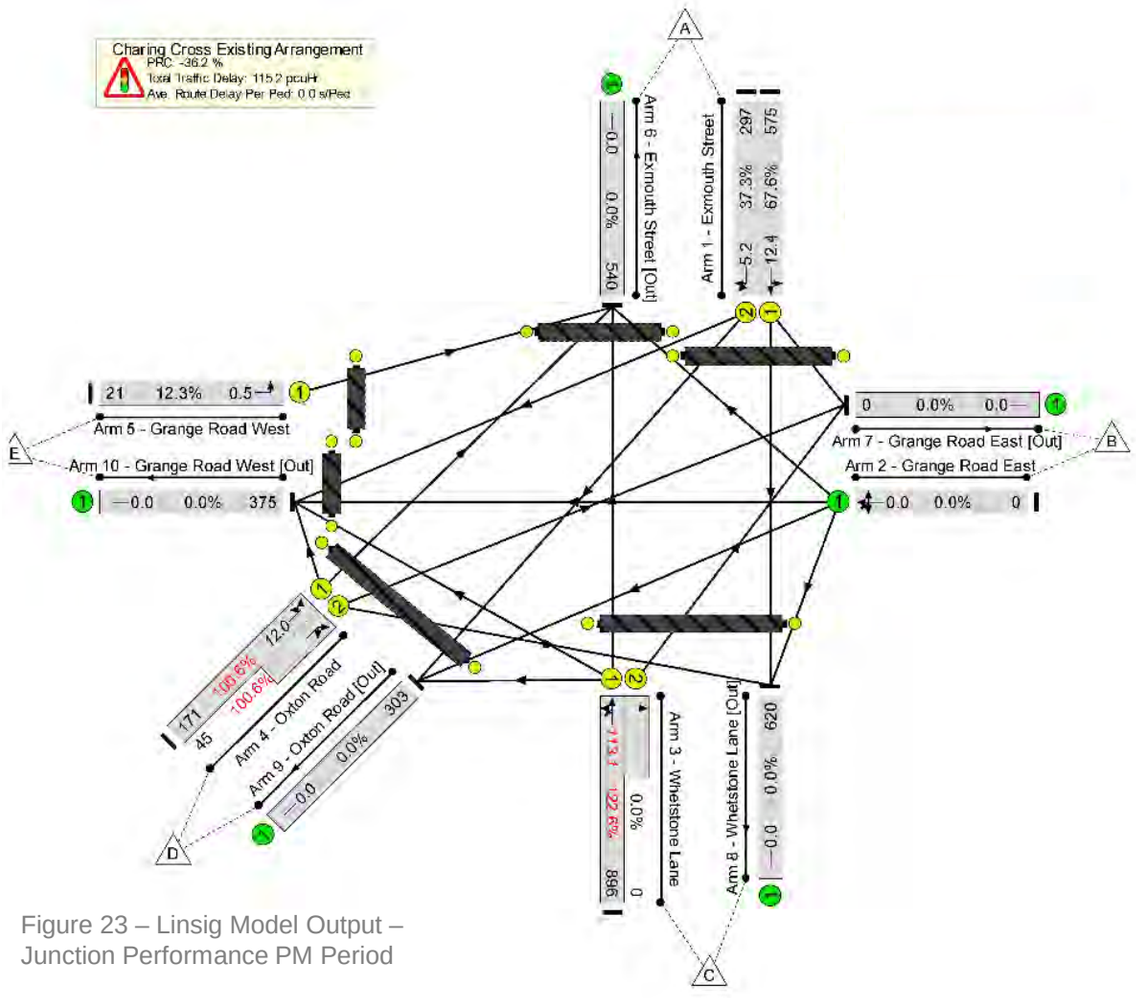


Figure 23 – Linsig Model Output – Junction Performance PM Period

2.14 Utilities (C2)

This chapter provides an initial briefing on the C2 Stat searches undertaken to identify early risks and potential clashes. This will support the following costing exercise. A C2 search is the most comprehensive search available covering all the main utilities as e.g. cable, independent utilities and highways specific searches.

Full detailed plans are provided in the report appendix.

Figure 2.24 on the right showcases the approximate depth of the utilities apparatus at Charing Cross:

Approximate Depths

Shallow (350mm max)
- Cable TV / Communications
- Telecommunications

(350 – 750mm deep)
- Low voltage Electricity
- Gas

Deep (750mm min)
- Water
- High voltage Electricity (varies between 450mm – 1200mm)

Utilities Present in Grange Road

- Cadent Gas
- BT Broadband
- Scottish Power
- United Utilities
- Virgin Media
- Vodafone

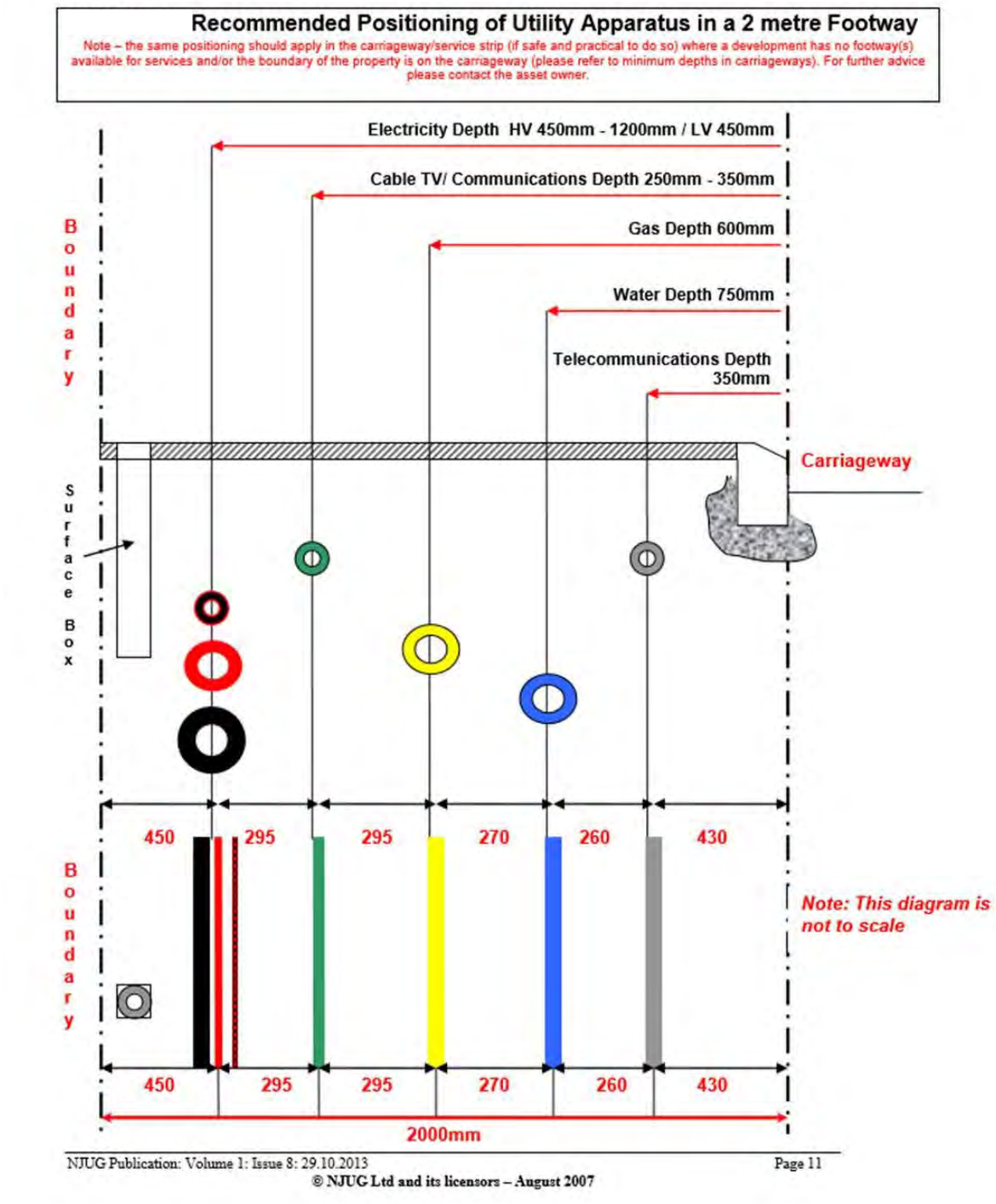


Figure 2.24 – Approximate Utilities Depths Source - National Joint Utilities Group (NJUG)

Cable TV & Telecommunications (Shallow)

- BT Broadband
- Virgin Media
- Vodafone

Cable TV & Telecommunications are the most likely utilities to be found underground as they have depths that range between 200mm to 350mm deep. However, the gradient along Grange Road varies in some sections and therefore some of the utilities will potentially be deeper than usual.

Virgin Media and BT are typically the shallowest telecommunications however, they can also be very expensive to relocate due to their large number of manholes and chambers. These can be found on the footway level. The stats plans produced show that both Virgin Media and BT have utilities within the red line boundary underneath Grange Road.

Vodafone utilities are located underneath Charing Cross junction only - therefore it is very unlikely that they will have an affect on the proposed designs.

Clash Checks:

- **Only affect tree locations**
- **Avoid BT & Virgin Media where possible to reduce cost**

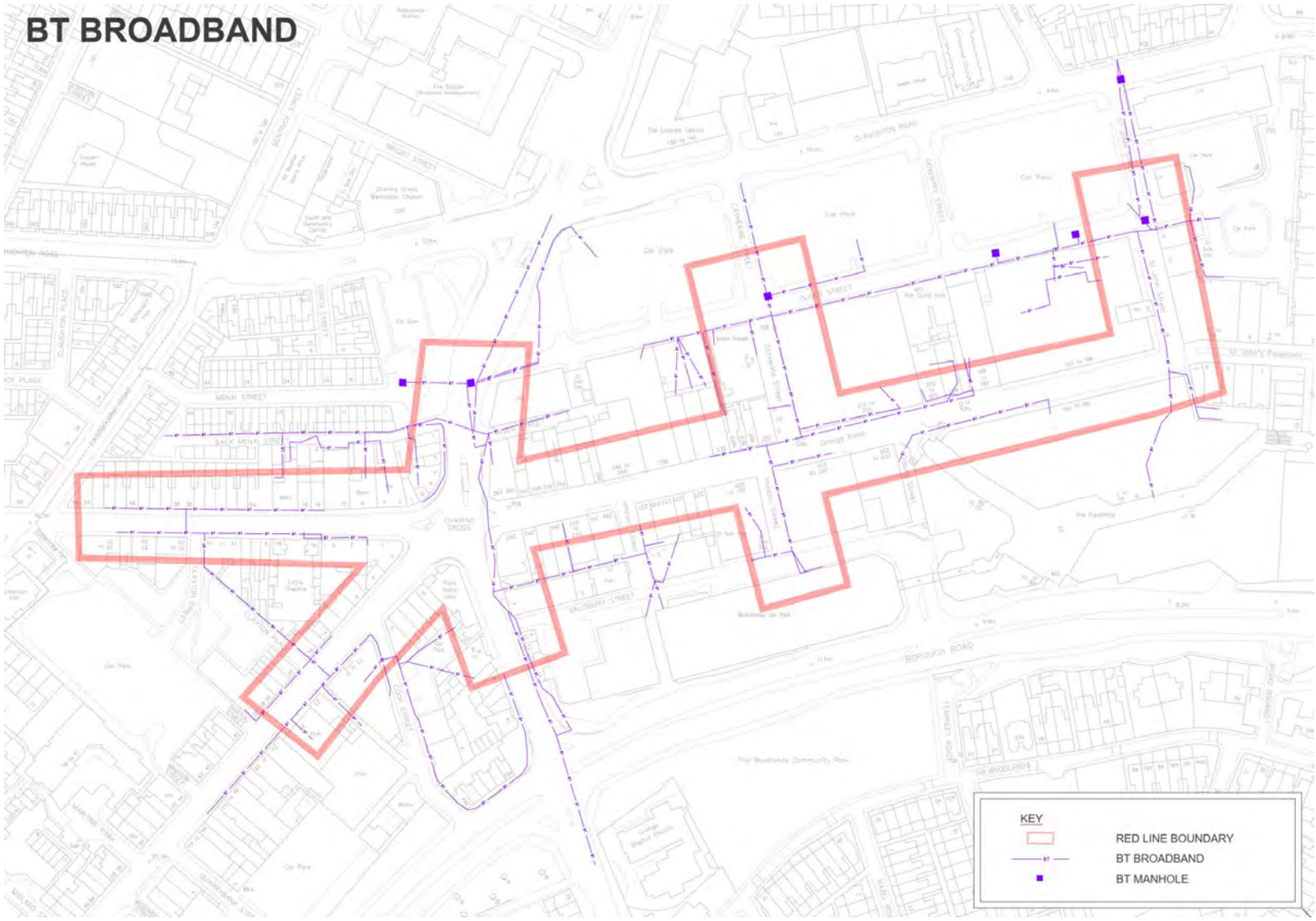


Figure 2.25 – Stats Location Plan – BT Broadband

Scottish Power (450mm – 1200mmDeep)

- Low Voltage
- High Voltage
- 33 kV
- 132kV

Low voltage electricity cables are typically the shallowest electricity utilities, They are just 450mm deep and therefore likely to affect tree locations. Figure 18 shows that there is a large amount of low voltage cables situated beneath both the north and south side of Grange Road. However, they are not as expensive to relocate as BT and Virgin Media.

High voltage and 33kV cables can also be as shallow as low voltage as they contain depths between 450mm to 1200mm and may also affect tree locations. There is a live high voltage cable that is situated on the eastern side of St John's Street so it is important that we do not plant any trees here to help reduce costs. In contrast, the 33kV cables can also be just as shallow as 450mm however, they are only situated beneath the Charing Cross junction and not in location of proposed trees.

The 132kV cables are likely to be the deepest but also the most expensive. Fortunately, it is unlikely that these cables will affect the proposed designs.

Clash Checks:

- **Only affect tree locations – Remove those proposed if there are too many clashes with other utilities**
- **Avoid all High Voltage cables where possible**

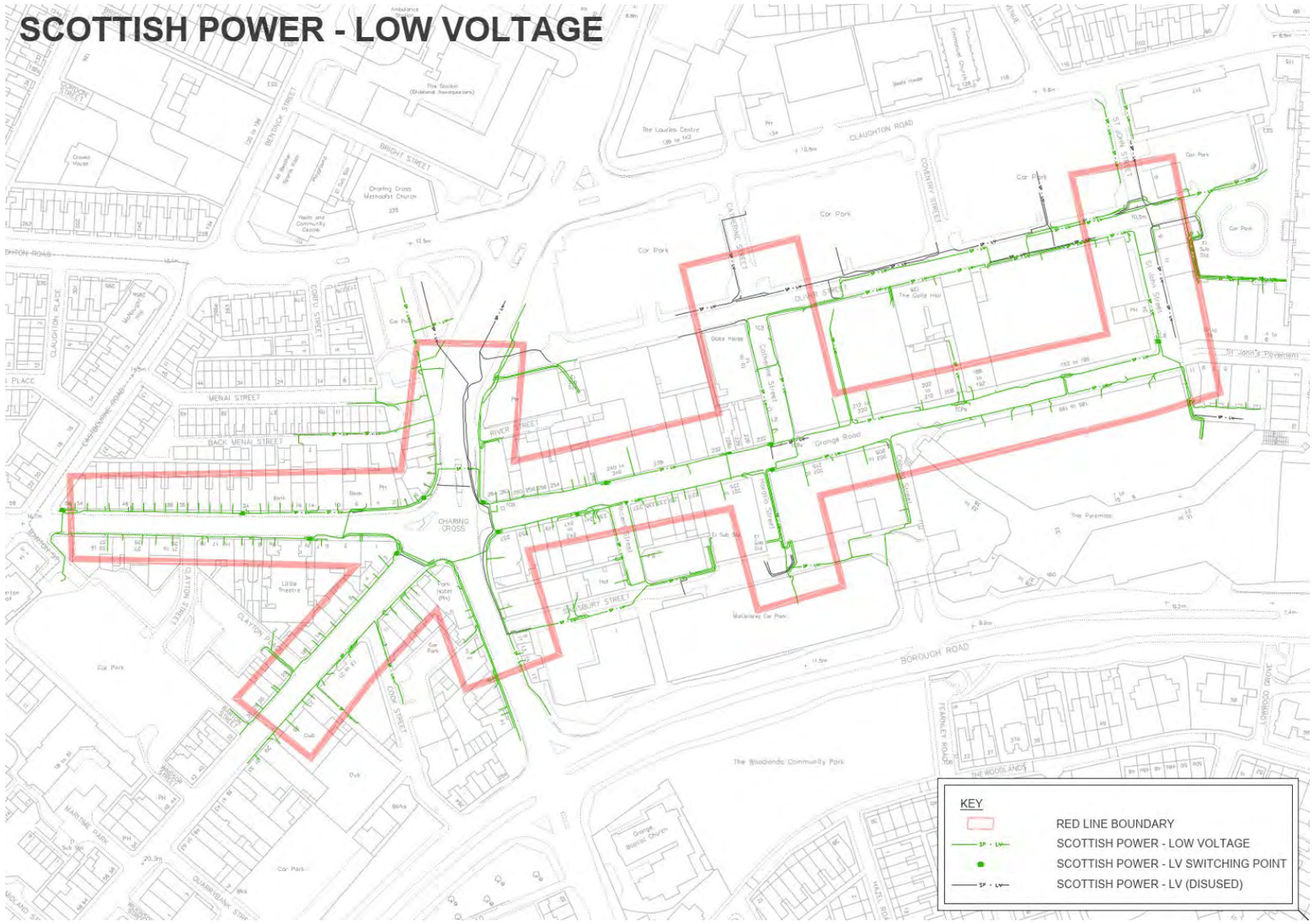


Figure 2.26 – Stats Location Plan – Cadent Gas

Cadent Gas (600mm Deep)

- Low Pressure

Gas pipes are not as shallow as cable tv or telecommunication utilities since they have depths of approximately 600mm. However, this still needs to be taken into consideration when allocating trees planting – as large depth required for trees to be put in place.

Figure 19 shows that there are no high pressure gas pipes within the red line boundary. However, there is a low pressure gas pipe that is situated along the southern side of Grange Road.

Clash Checks:

- **Only affect tree locations – Remove those proposed if there are too many clashes with other utilities**

United Utilities (750mm Deep)

- Clean Water
- Waste Water

All water pipes are typically the deepest utilities in the ground and therefore deeper than most high voltage electricity cables. They are approximately 750mm deep.

Both clean and waste water pipes will contain similar depths to one another. Despite the large amount of utilities present, it is highly unlikely that United Utilities infrastructure will affect any of the proposed designs

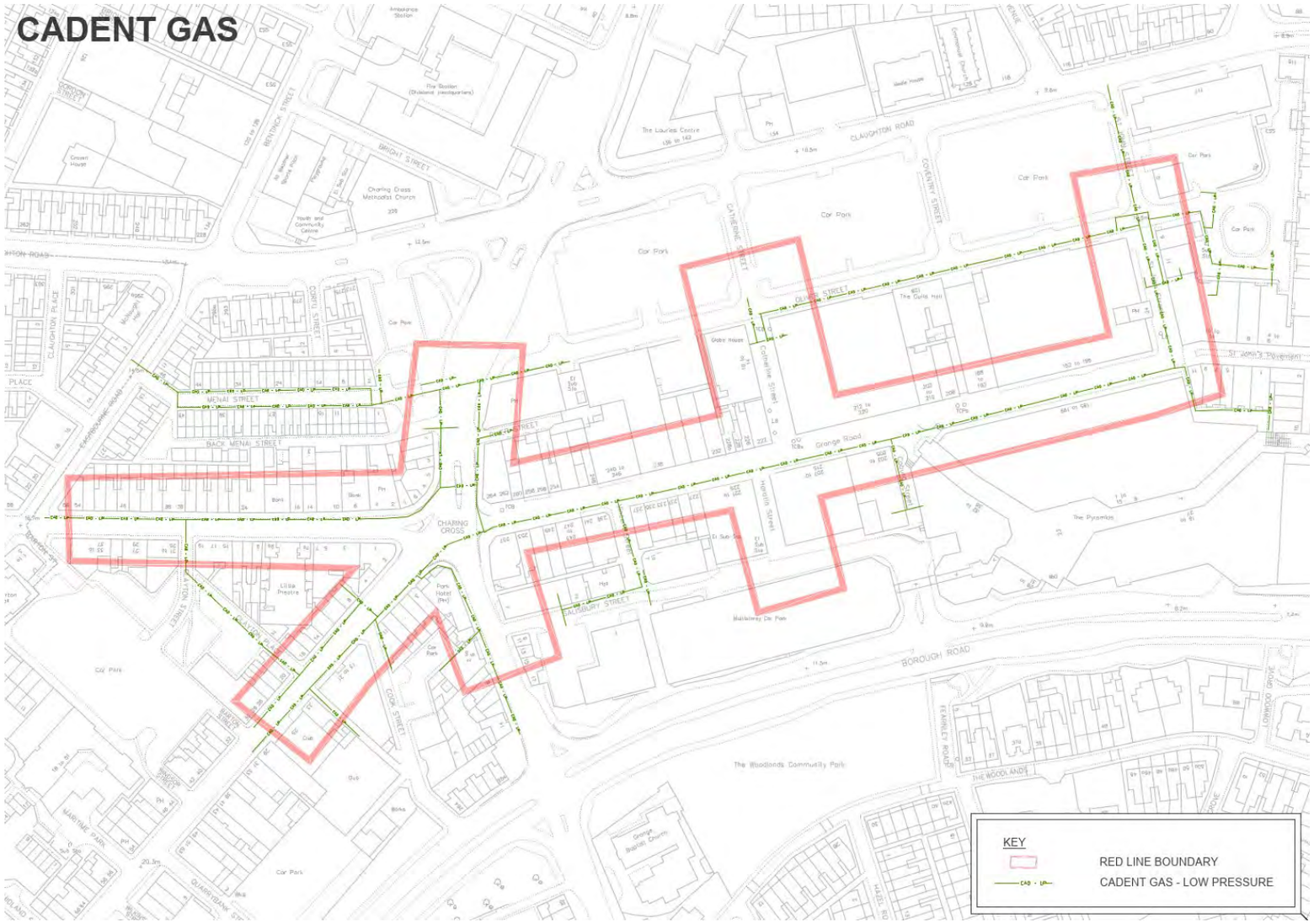


Figure 2.27 – Stats Location Plan – Cadent Gas

3 Concept Schemes

3.1 Scheme 1 - Grange Road

The proposed scheme includes:

- Full replacement of public realm materials within the pedestrianised area to improve the look and feel of the street;
- Introduction of new planting to complement the existing street trees;
- New street furniture including benches, cycle stands and waste bins;
- Implementation of Hostile Vehicle Mitigation measures at the junction of Grange Road & Charing Cross;
- Revision of the Traffic Regulation Order.

Through the design development phases, the potential for improvements on Salisbury Street has also emerged. This, together with a full street light condition survey covering Grange Road – should be implemented at next Riba Stage 3.

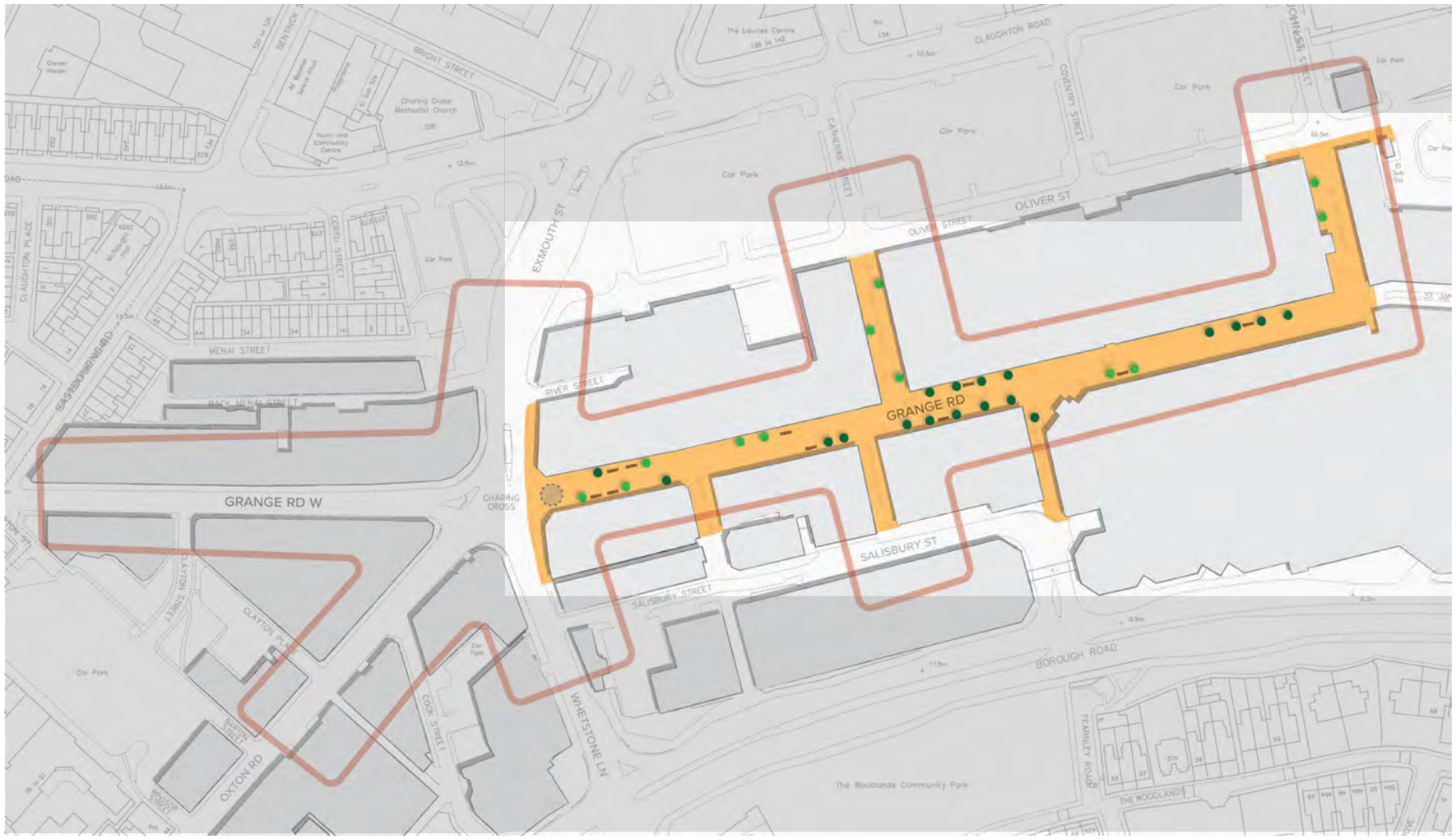


Figure 3.1 – Scheme 1 Diagram: Grange Road

Scheme 1 – Grange Road

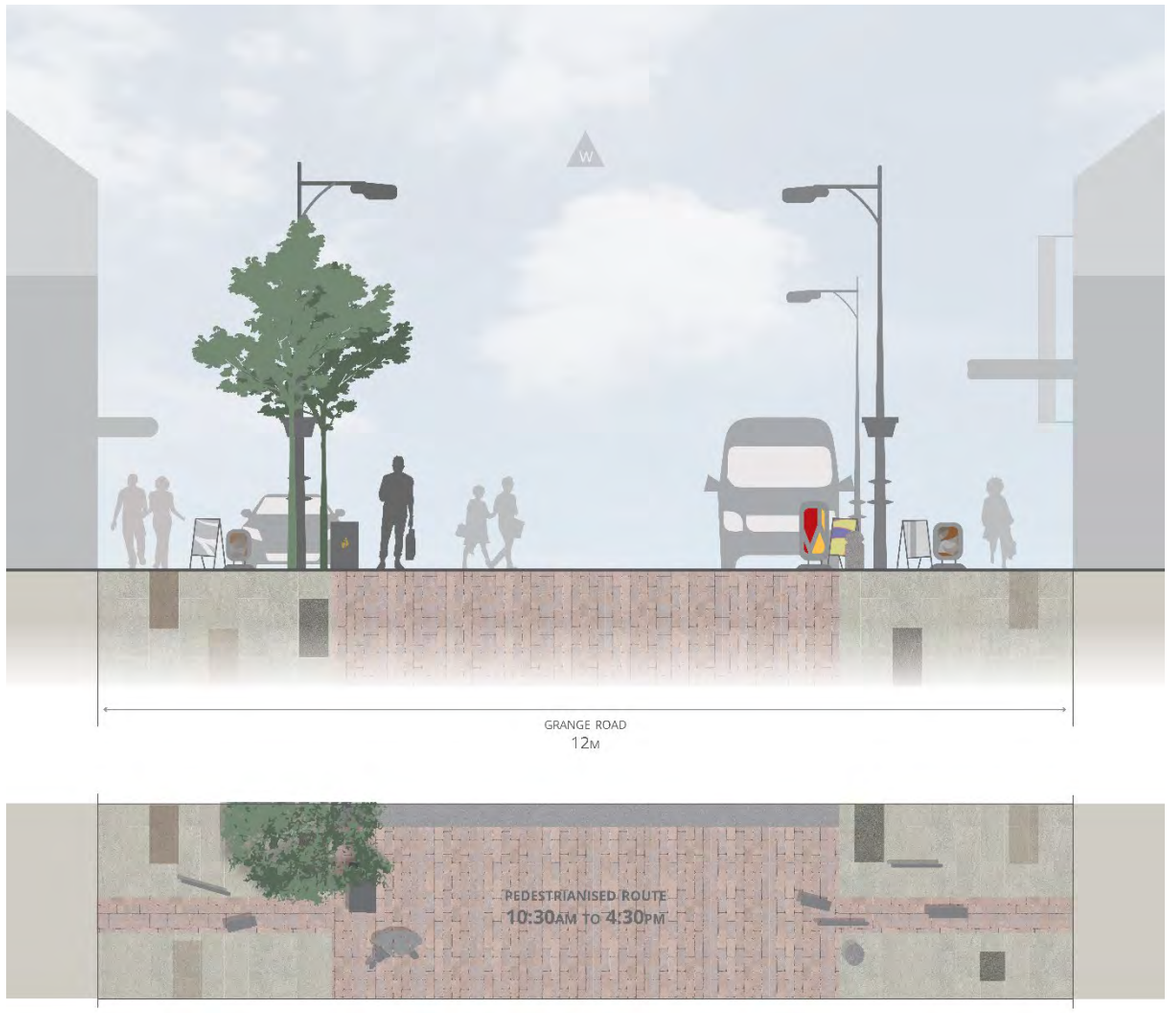


Figure 3.2 – Grange Road – Existing

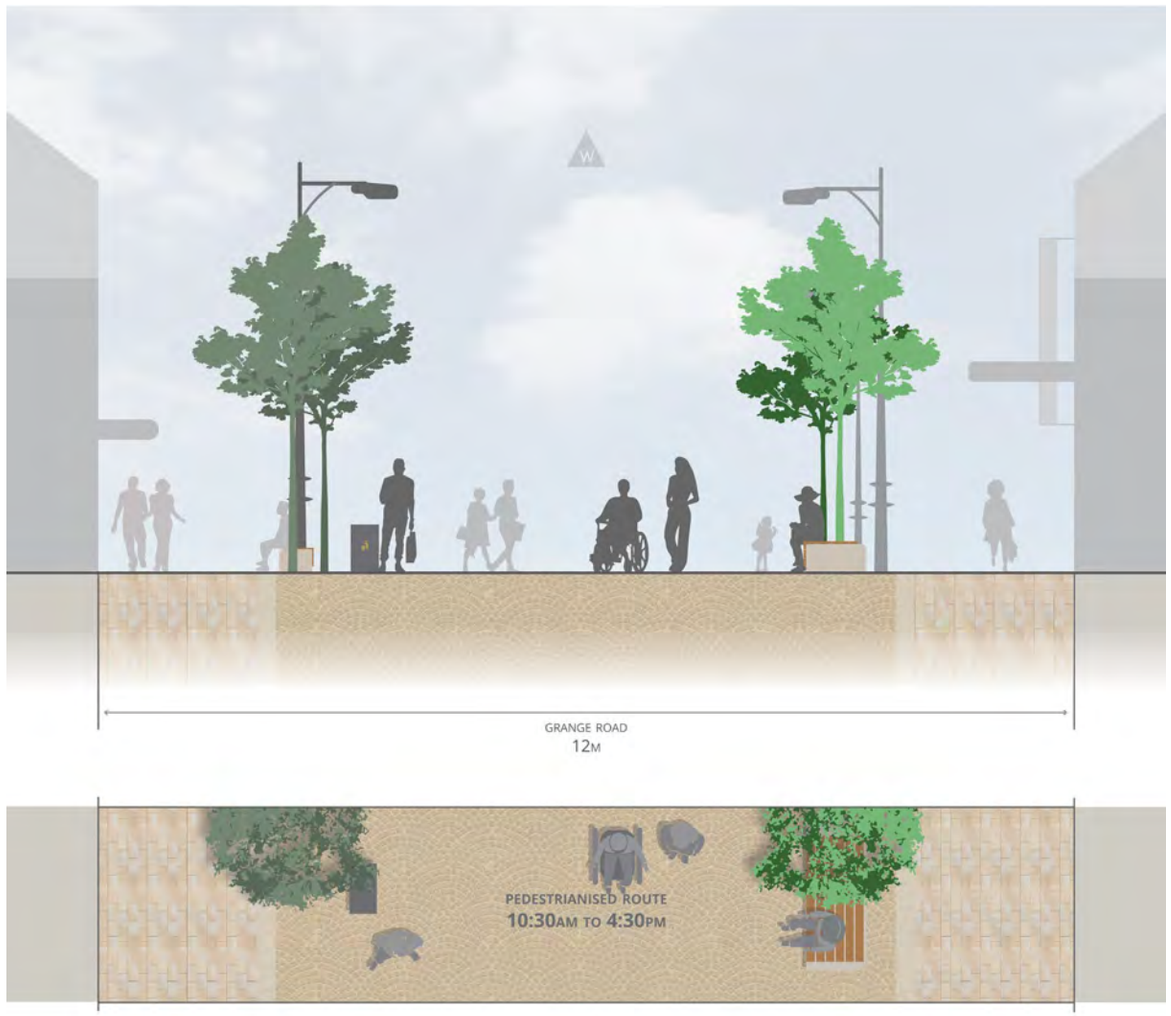


Figure 3.3 – Grange Road – Proposed

Benchmark - Shaws Road, Altrincham

- Altrincham labelled as a ghost town - 30% of stores were empty.
- £3m invested in public realm improvements, including at Shaws Road.
- Street trees have been introduced throughout the scheme, alongside contemporary-style wooden benches, new bins and bike-racks.
- Footfall across Altrincham town centre has increased more than 5% since 2016, following the regeneration schemes.

Source/all image credits: Trafford Council Consultation, Altrincham News, Altrincham & Bowdon Civic Society

Inscription on tree grills


Segmental Arch


Shaws Road (Before)


Shaws Road (After)

Grange Road - Existing

Grange Road - Proposed

3.2 Scheme 2 – Grange Road & Charing Cross

The proposed scheme includes implementation of Scheme 1, plus the below works at Charing Cross:

- Removal of all existing guardrail;
- Removal of existing refuges and islands;
- Introduction of direct single stage crossings on all junction arms;
- Introduction of advanced stop lines (ASL) on all arms to improve cyclists safety.

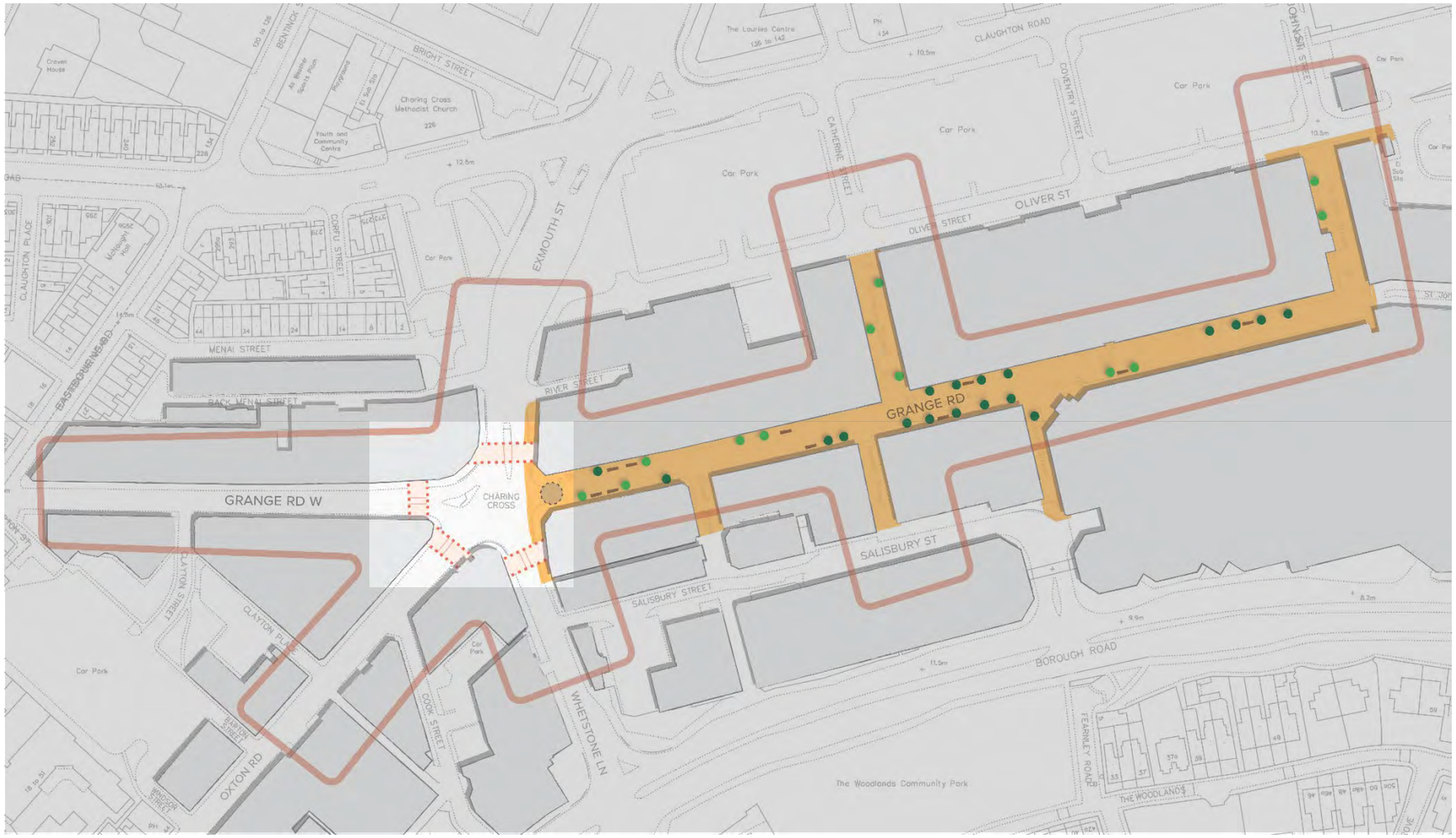


Figure 3.4 – Scheme 2 Diagram : Grange Road & Charing Cross

KEY - SCHEME 2

Charing Cross Improvements

New direct single-stage crossings: guardrail, island and crossing refuges removal.

Scheme 2 – Grange Road & Charing Cross

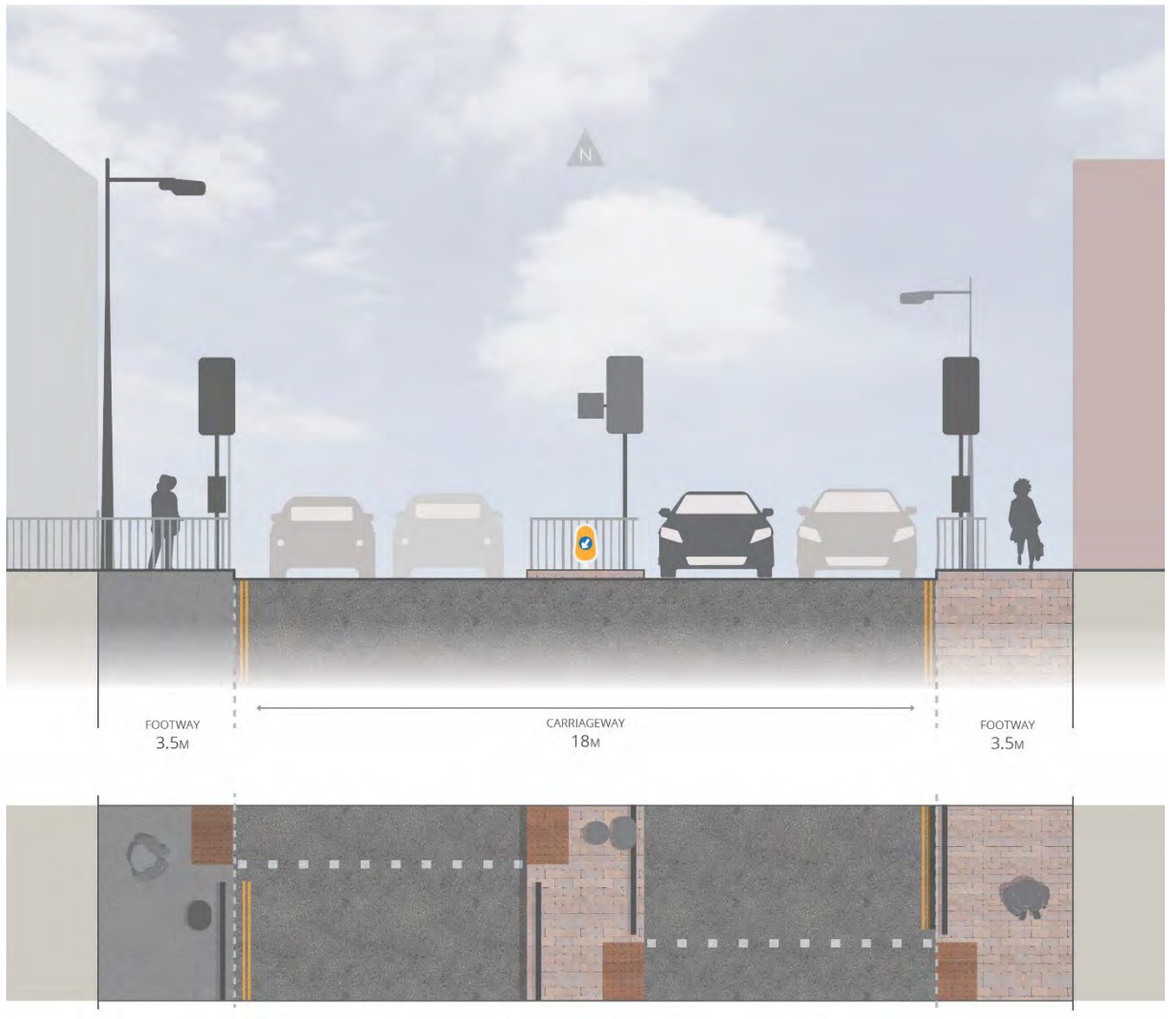


Figure 3.5 – Exmouth Street Pedestrian Crossing – Existing

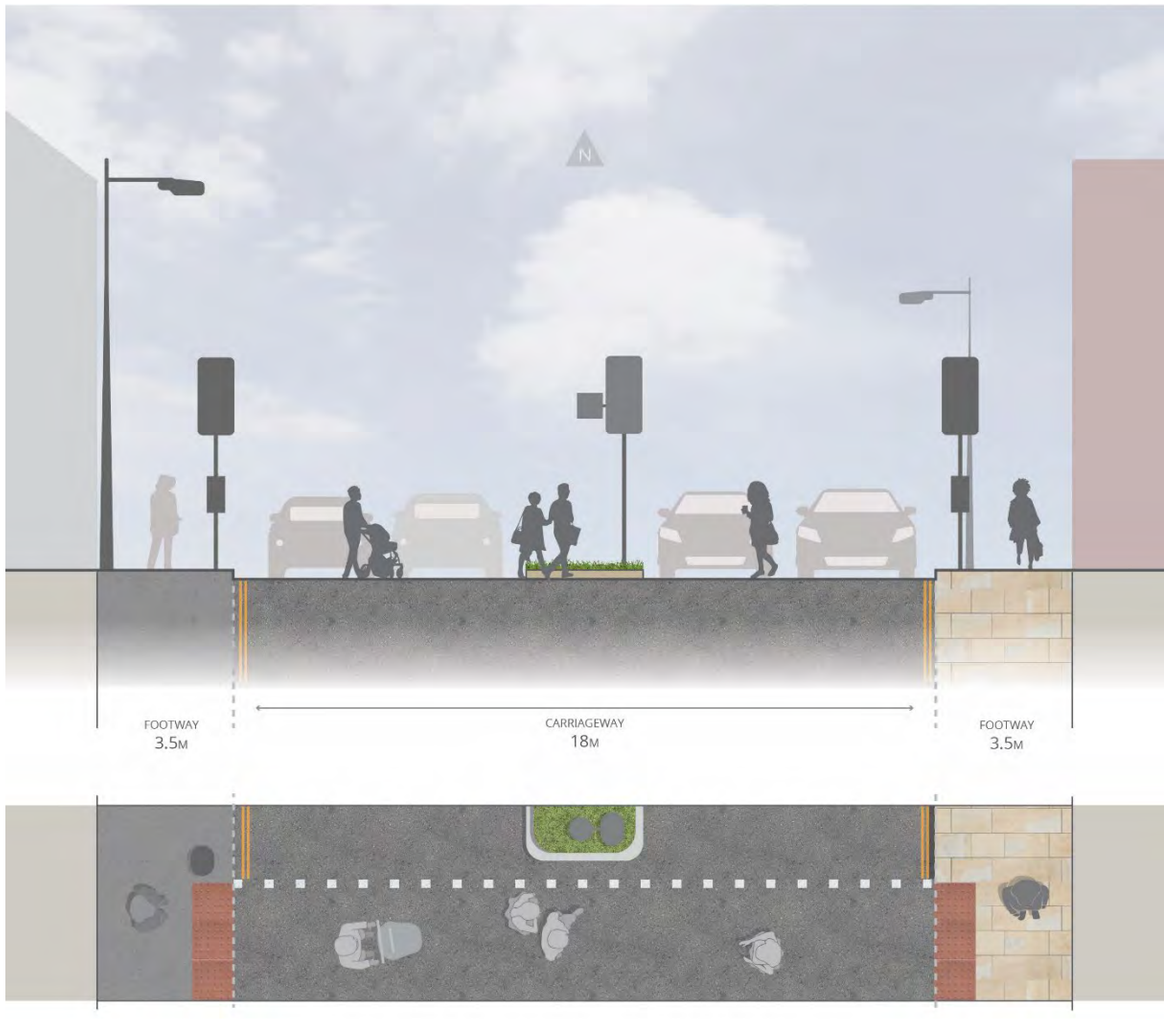
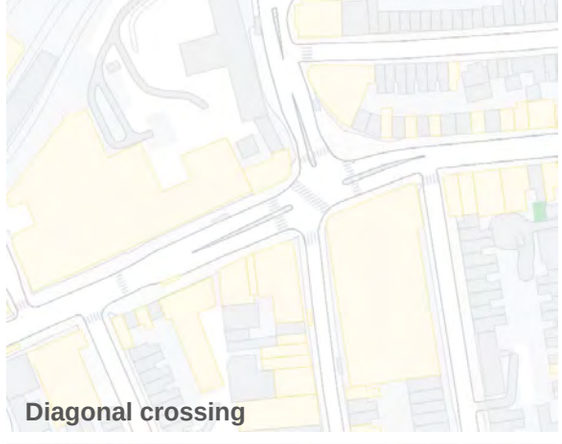


Figure 3.6 – Exmouth Street Pedestrian Crossing – Proposed

Benchmark - Clapham Junction remodelling

- All dog-leg pedestrian crossings were removed and replaced with single-stage straight ahead crossings.
- Unnecessary street clutter like guardrailing and phone boxes were removed to make walking through the town centre easier and less congested.

A TfL study of all junctions across Greater London where guardrail and dog-leg crossings had been removed demonstrated a reduction in KSI collisions of 56%.


Diagonal crossing


Dog-leg crossing removed

Clapham Junction (Before)

Clapham Junction (After)

Source: Cyril Richert

Charing Cross - Proposed

3.4 Scheme 3 - Grange Road, Charing Cross & Grange Road West

The proposed scheme includes implementation of Option 1 & 2, plus the below works at Grange Road West:

- Trial pedestrianisation of Grange Road West between Charing Cross junction and Clayton Street. Further details around pedestrianisation timing and retained cycle access to be define at next Riba Stage.

- Introduction of bollards at either end of the pedestrianised area – barriers to be a combination of permanent and removable bollards to allow vehicular access;

- Use of street paint and ‘pop-up’ interventions within the pedestrianised area to enhance the street environment:

Figure 3.7 Example of Street Paint by Sound Mind Creative – Photo Source: Justin Mitchell

Figure 3.8 Example of Pop-Up Street Furniture by Meristem

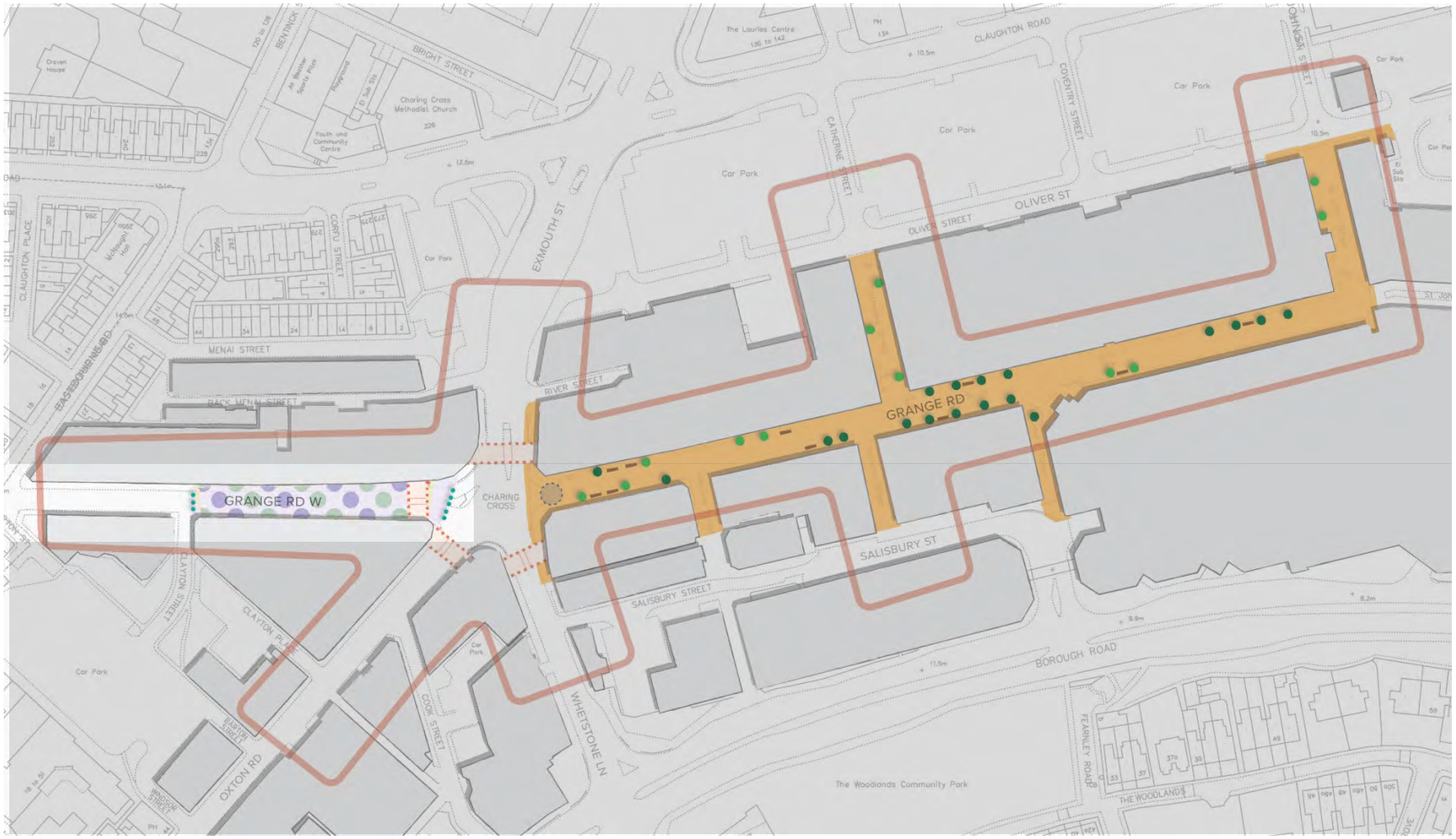


Figure 3.9 – Scheme 3 Diagram : Grange Road & Charing Cross & Grange Road West

Scheme 3 – Grange Road West

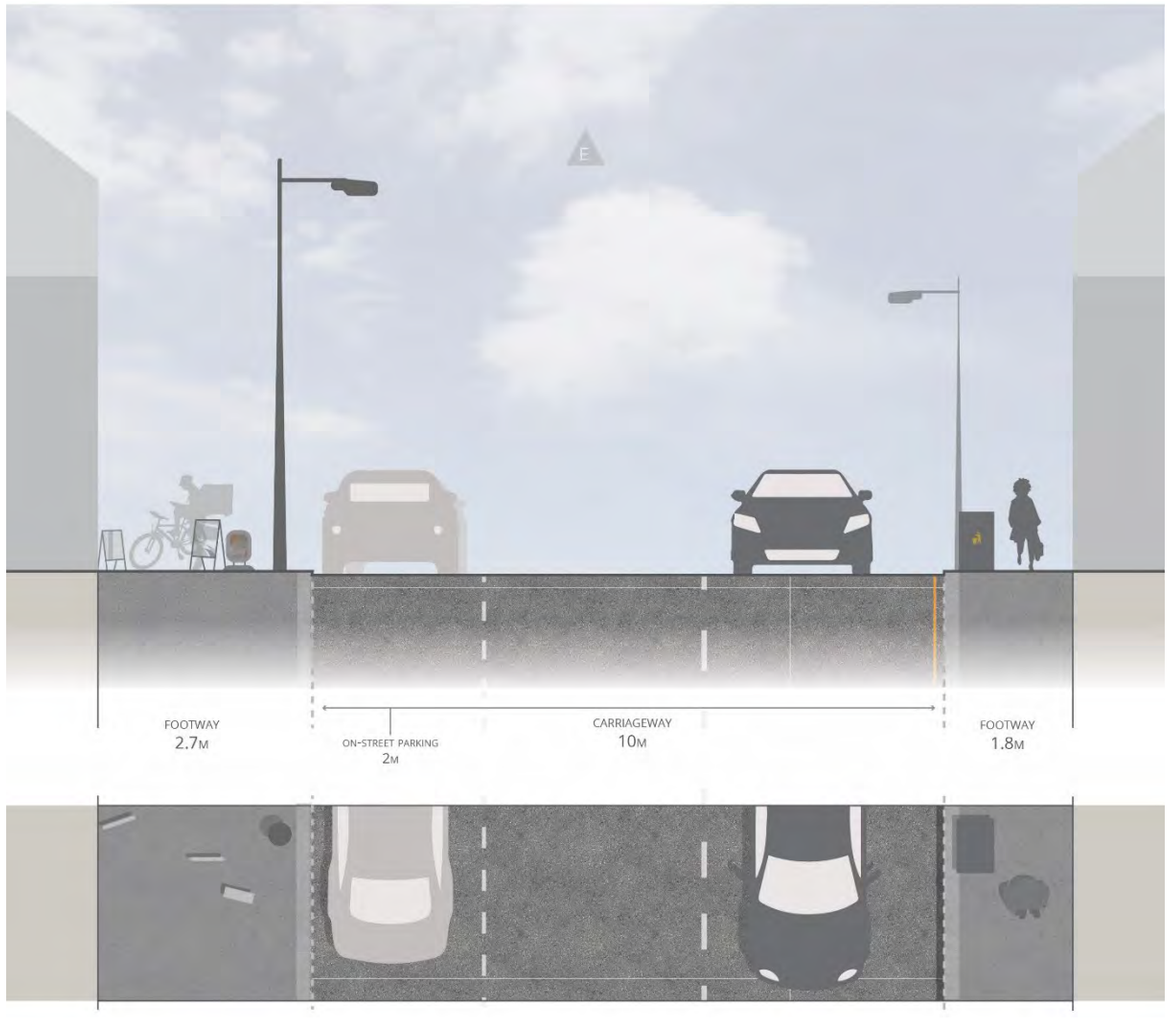


Figure 3.10 – Grange Road West – Existing

Figure 3.11 – Grange Road West – Proposed

Benchmark - Broad Street to Broad Meadow, Oxford

- The western half of Broad Street has been temporarily pedestrianised, turning it into Broad Meadow
- Two-way cycle street remains open throughout Broad Street
- The space has made use of recycled materials to build planters and seating, including pallets used to transport vaccines and protective equipment during the pandemic.
- The scheme is designed to support the city's post-pandemic recovery, and to inform long-term options for creating better quality, car-free public spaces across Oxford city centre.

Wooden seating made from local recycled material


Floorspace artwork by artist Bryony Benge-Abbott

Source: The Oxford Magazine, BBC, Experience Oxfordshire, Jon Lewis for Oxford Mail

Broad Street (Before)

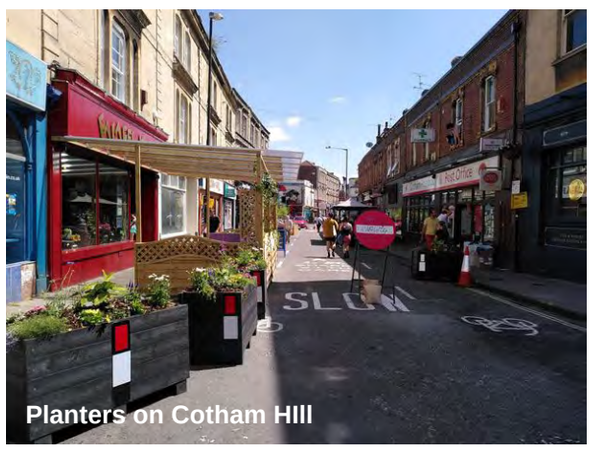

Broad Street Meadow (After)

Benchmark - Cotham Hill, Bristol

- Bristol City Council temporarily closed off Cotham Hill to motorists to support businesses during the pandemic
- Planters and signage replaced red and white plastic barriers
- Many café's were able to offer outdoor seating, meaning people spent more time in the area

Source: Bristol Live


Outdoor seating area installed


Planters on Cotham HIll


Cotham Hill - Before


Cotham Hill - After

3.5 Concept Masterplan

Figure 3.12 below shows the totality of the proposals across Grange Road, Charing Cross and Grange Road West. This to show the integration of scheme 1, 2 and 3 if all fully implemented.

Figure 3.12 – Concept Masterplan

4 Grange Road Access Options

4.1 Traffic Regulation Order Options

Table 4.1 (right & overleaf) provides a range of options for the implementation of a new permanent Traffic Regulation Order (TRO).

'Type A' shows Pedestrian Zone. Both Options 1 & 2 would provide the appropriate means for Wirral Council to enforce against parking contraventions, whilst maintaining the same operation of the current TRO.

Option 1 would however would prohibit cycles, adapted cycles and mobility scooters. This is not in line with the Equalities Act 2010.

Option 2 permits cycles, adapted cycles and mobility scooters. Whilst recognising the concerns identified around Access Sharing Benefit (ASB) and nuisance cycling, this should be dealt with as a police matter and it should not be attempted to enforce through the TRO. New cycle parking is proposed on Grange Road to encourage users to dismount at appropriate locations while accessing shops and services.

'Type B' (overleaf) shows a Restricted Parking Zone. This would allow enforcement of parking on the street only, and therefore would permit use of the street for vehicles. Loading would also not be permitted on the street.

Type	Details	Benefits	Issues/Risks
A. Pedestrian Zone **Opt 1**  **Opt 2**  ***Times & days shown are for illustrative purposes only.**	Pedestrian zones are generally areas such as shopping streets where pedestrians will normally predominate and have full use of the width of the road, either at all times or at certain times of day. The roads may be fully paved for pedestrians or comprise a carriageway with separate footways. Where alternative access to premises is available, it might be possible to prohibit all vehicles from a pedestrian zone without any exceptions. However, in most cases some form of access will be required. This might be for deliveries, disabled badge holders, buses etc. Depending on the access requirements, a pedestrian zone might or might not need parking controls. It might be desirable to impose a prohibition of waiting and, possibly, loading during the hours when entry into the zone is prohibited. This would provide a means of enforcement where a vehicle has legally entered the zone and parked there but does not leave when the zone becomes operational. Emergency vehicles, security cash delivery vehicles, road works vehicles, statutory undertakers' vehicles, domestic removals, funerals etc. are not usually signed as exceptions as it is common for them to be exempted from the requirements of the traffic regulation order. There are two types of entry sign depending on whether ridden pedal cycles are permitted within the zone. Opt.1 includes the "no vehicles" roundel and should be used where ridden pedal cycles are prohibited. Opt.2 includes the "no motor vehicles" roundel and should be used where ridden pedal cycles are permitted. The yellow "no waiting" panel is intended mainly for pedestrian zones that have waiting restrictions but no yellow lines.	• Reduces the dominance of vehicles and restores public space. • Vehicular / pedestrian conflict reduced. • Provides a more attractive environment. • Traffic sign is prescribed within the Traffic Signs Regulations and General Directions (TSRGD), no special authorisation from Department for Transports (DfT) required. • Loading available outside operational times. • Parking contraventions can be enforced by the Council's Civil Enforcement Officers.	• Without physical measures in the form of rising bollards/barrier control to support TRO / control vehicle movements this will lead to an increase in vehicular/pedestrian conflict and rely on frequent police enforcement. • Likely to receive objections from cycling groups should pedal cycles be restricted. • Significant costs (statutory processes, detailed design, infrastructure, future maintenance).

Table 4.1 (a)– TRO Option Comparison

Recommendations

- We recommend that Type A, Option 2 are taken forward. This would allow better enforcement of parking issues occurring on the street, and also continue to permit loading.
- Option 2 is preferred as it would continue to permit use by cycles, adapted cycles and mobility scooters. The exclusion of these modes under Option 1 is likely to contravene the Equalities Act 2010 and could ultimately lead to legal challenge.
- Anti-Social Behaviour should be raised with the community policing team.
- Type A, Option 2 should be supplemented with Hostile Vehicle Mitigation Measures – explored further overleaf.

B. Restricted Parking Zone  ***Times & days shown are for illustrative purposes only.**	Restricted parking zones were originally developed for historic areas or where very narrow roads resulted in conventional yellow lines being visually intrusive. Zones are now also used in urban areas and town centres where it is desired to enhance the environment, for example by improved road surface treatment. They might also be considered where the road surface, such as cobble stones, is not conducive to the application of yellow lines. Restricted parking zones are therefore suitable only for single streets or clearly defined small areas. They are not suitable for through routes with heavy traffic or facilities which create a demand for parking greater than can be accommodated in on-street bays and any convenient off-street parking. Unlike a pedestrian zone, there is no restriction on entry into a restricted parking zone. Waiting and loading restrictions, which must be uniform throughout the zone, are indicated by zone entry signs and time plates within the zone, but without yellow lines or kerb marks.	• Traffic sign is prescribed within TSRGD, no special authorisation from DfT required. • Loading available outside operational times. • Enforcement can be undertaken by the Council's Civil Enforcement Officers.	• No restriction on vehicular access. • Potential increase in vehicular / pedestrian conflicts. • No Loading permitted could lead to possible objections from businesses.

Table 4.1 (b) – TRO Option Comparison

4.2 Hostile Vehicle Mitigation Options

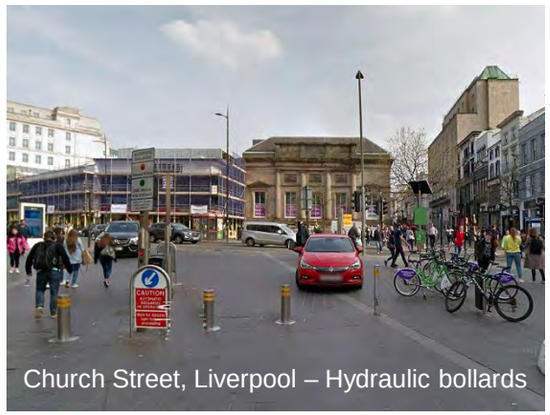
‘Hard Measures’

‘Hard Measures’ are intended to *stop* vehicular access to the street, supporting both the need for HVM and better TRO enforcement.

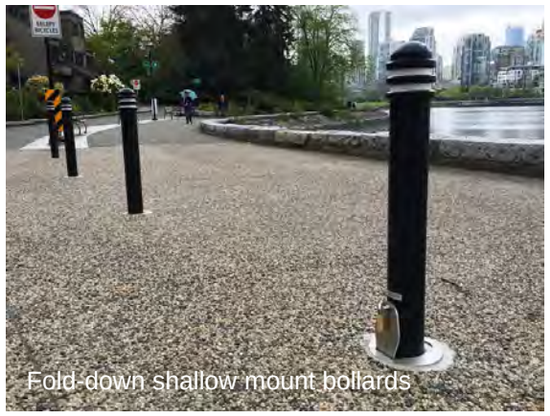
Hard measures include physical barriers, permanent or time scheduled, blocking vehicles access on the street. Table 4.2 highlights the advantages and disadvantages of removable lockable bollards and hydraulic bollards.

In response to the 2018’s terror attacks across Britain and Europe, many town and cities introduced safety measures to induce lower speeds or close access to vehicles through public spaces. Liverpool introduced new lower speed limits and a number of hydraulic bollards. The bollard system in place was designed for traffic management and its function in terms of preventing terror attacks mainly relied on being a visual deterrent.

Use of a gate across the street is not recommended as a permanent solution, due to the implications for pedestrian movement and visual impact.



Church Street, Liverpool – Hydraulic bollards



Fold-down shallow mount bollards

Lockable bollards		Hydraulic bollards	
Advantages	**Disadvantages**	**Advantages**	**Disadvantages**
Increase pedestrian safety and prevent accidents		Increase pedestrian safety and prevent accidents	Low temperatures can be a problem for hydraulic power units as the oil can become thick. And this could lead to the bollard not working properly.
Regulate vehicular access while allowing pedestrian flow	Requires twice daily physical visit to put up/down	Regulate vehicular access while allowing pedestrian flow	Higher price than fixed or removable bollards – as per purchase price and ongoing maintenance costs
Preserve clear lines and the spaciousness of open areas	Could have issues with lost or stolen keys	Preserve clear lines and the spaciousness of open areas	Bollards can jam in the upright or lowered position, causing loss of access for businesses
Decorative bollards offer the additional option of bolting onto existing concrete.	Remains permeable to mopeds	Can be controlled remotely by any access control system	Vehicles can become caught on rising bollards
Light enough to unlock and remove several times a day	Less durable	Extremely vandal resistant as they are designed to withstand vehicle impact	Remains permeable to mopeds
Easy to manually remove in case of emergency		Can be lowered and raised quickly with no physical effort	
Low maintenance and can withstand extreme environmental conditions			

Table 4.2 – HVM Option Comparison

‘Soft Measures’

‘Soft Measures’ are intended to *slow* vehicular access to the street, principally supporting the need for HVM but not physically enforcing a TRO.

HVM can be designed in a range of ways, including ‘hidden’ within the public realm like the lettering in front of the Emirates Stadium in North London. This is a permanent barrier designed to stop or deter threats.

Emirates Stadium, London

On Grange Road, this could include fixing discreet but obstructive street furniture to create a chicane movement. Obstacles can include trees, planters, benches or compact boulders.

Giant Planter

Giant Planter

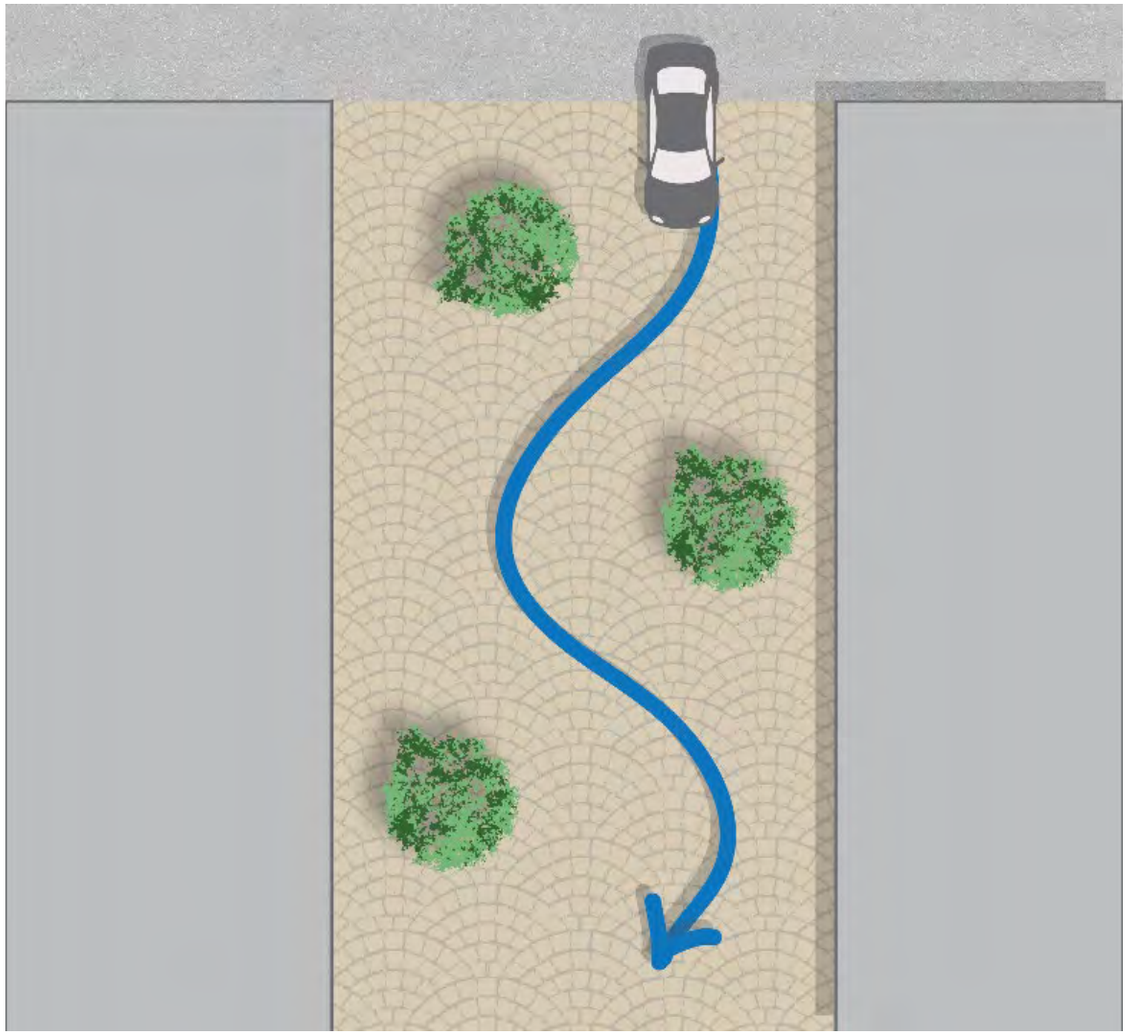


Figure 4.3 – Example Outcome of a ‘Soft Measures’ Approach

HVM Preferred Approach

Figure 4.4 shows the HVM preferred approach. A combination of permanent and rising bollards is proposed at Charing Cross, Catherine Street and St John Street approaches on Grange Road – to allow vehicles access for deliveries and emergency services.

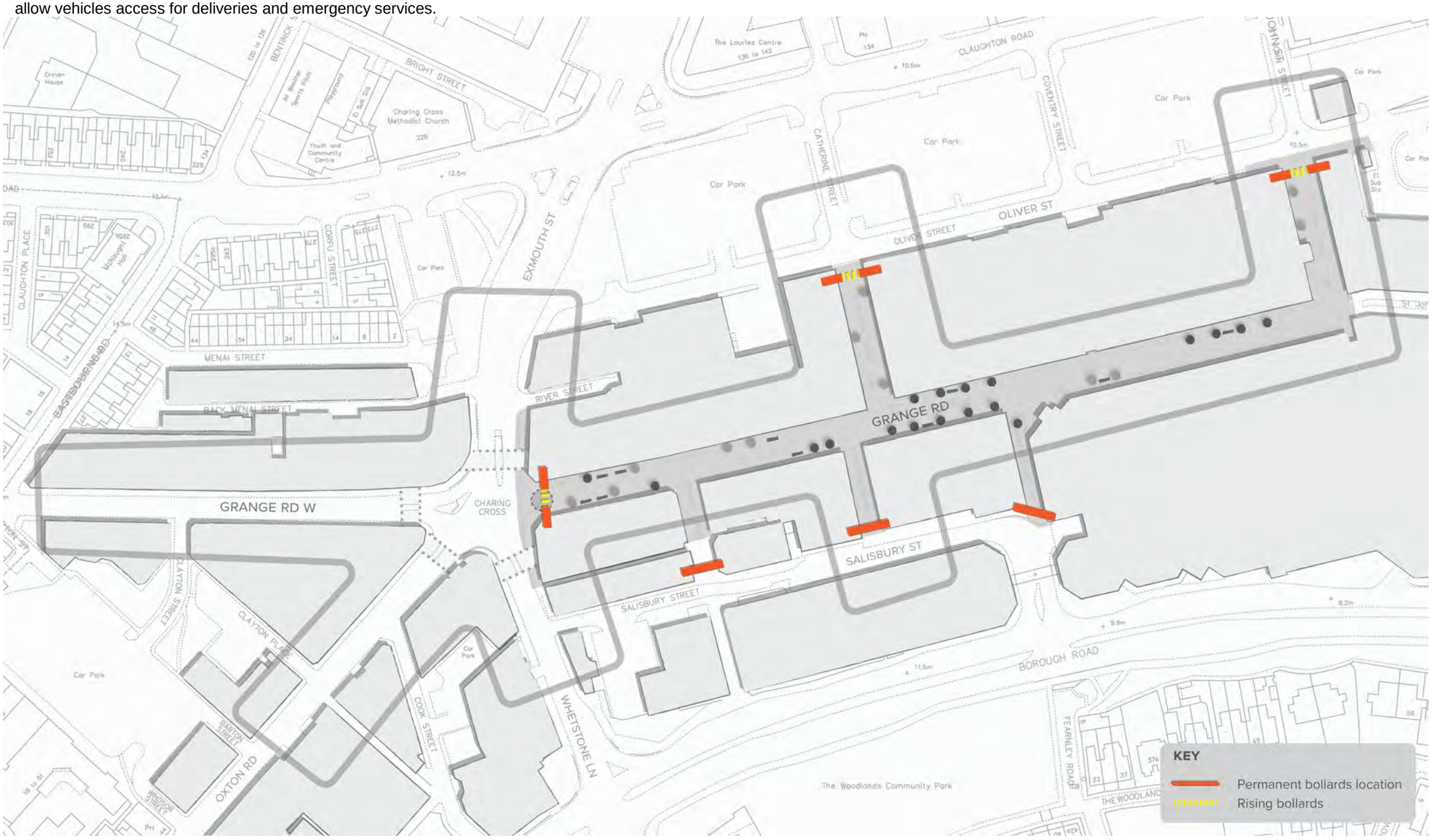


Figure 4.4 – Hostile Vehicle Mitigation Preferred Approach

4.3 Grange Road West – Access Requirements

Figure 4.5 shows the detailed land uses currently present on Grange Road West.

Access to the north side of Grange Road West is from Back Menai Street. This offers loading access for some uses from the back of the property. Back Menai Street also appears to have a loading bay at the back of the NatWest Bank. Back Menai Street is narrow and used by residents for waste. The street has been gated as a result of antisocial behaviour issues.

Access to the south side of the street is via Clayton Place, with some permit space parking and storage facilities.

At the next Riba Stage, further work is required to understand the detailed access requirements for Grange Road West, though at this point it is likely that the NatWest Bank will require access for cash in transit security vehicles. This would require a solution that retains the ability for vehicular access at particular times of the day.

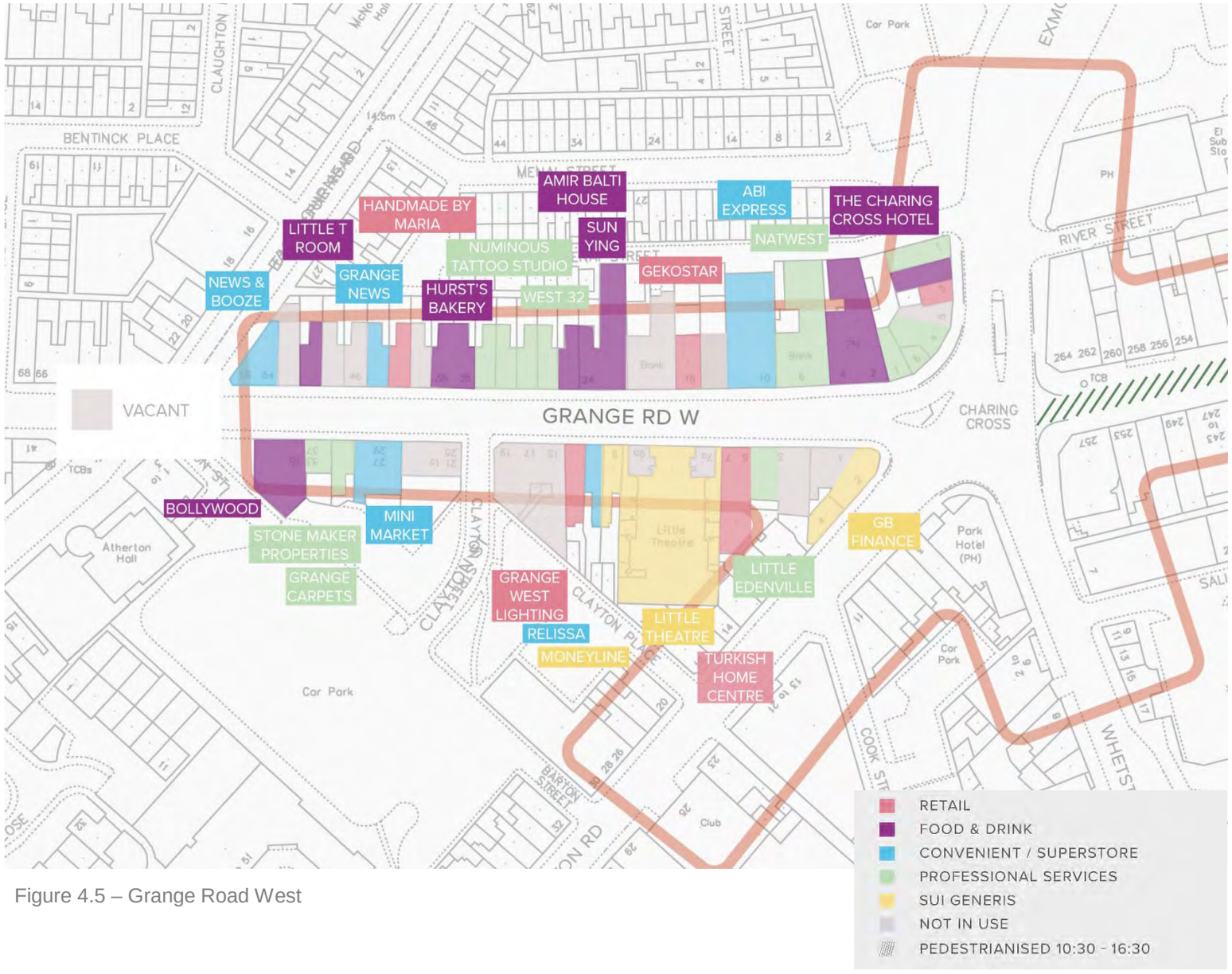


Figure 4.5 – Grange Road West

5 Cost Plan

5.1 Cost Plan

Cost estimates have been produced for each of the three proposed schemes as shown in Table 5.1.
Cost estimate is high-level and should be used as indicative only at this early stage.

Exclusions from high-level budget cost estimate are as follows:

- Traffic Management
- Utilities works
- Abnormal ground conditions or remediation

No allowance made for replacement of street lighting at this stage.
A street lighting condition survey is recommended at next Riba Stage.

	Scheme 1 – Grange Road	Scheme 2 – Charing Cross	Scheme 3 – Grange Road West
Material & Item Costs Subtotal	£1,863,902.87	£276,415.00	£107,900.00
Main contractor preliminaries – 20%	£372,780.57	£55,283.00	£21,580.00
Construction Sub-Total	**£2,236,683.44**	**£331,698.00**	**£129,480.00**
Project / design team fees (inc supervision) – 15%	£335,502.52	£49,754.70	£19,422.00
Optimism Bias (DfT TAG Unit A1.2 - Stage 1) – 21%	£469,703.52	£69,656.58	£27,190.80
Inflation - 5%	£111,834.17	£16,584.90	£6,474.00
Project Sub-Total	**£3,153,723.66**	**£467,694.18**	**£182,566.80**

Combined Schemes (1) + (2) Cost	**£3,621,417.84**
Combined Schemes (1) + (2) + (3) Cost	**£3,803,984.64**

Table 5.1 – Cost Estimates

6 Business Engagement

6.1 Business Engagement Method

Business engagement has been a key part of the Charing Cross & Grange Road design development – to collect local feedback and ensure full transparency of the project progress. Wider public engagement will be undertaken in summer 2022.

The consultation was addressed towards businesses along Grange Road, Charing Cross and Grange Road West, and it did include:

- One letter drop
- One door-to-door visit
- One online survey

The **letter drop** was addressed to over 60 businesses within the study area shown in Figure 6.1, and delivered on the 8 of March 2022 - to introduce the proposed schemes and provide links to the online survey. The consultation letters comprised three consultation boards – as shown in Figure 6.3 on the next page – showcasing a rendered plan, before/after cross-sections and a visual of the proposal for each scheme.

Following the letter drop, a **door-to-door visit** was undertaken by a Wirral Council engagement officer. This was to encourage survey responses and ensure all active venues within the study area received the consultation pack and were aware of the ongoing project.

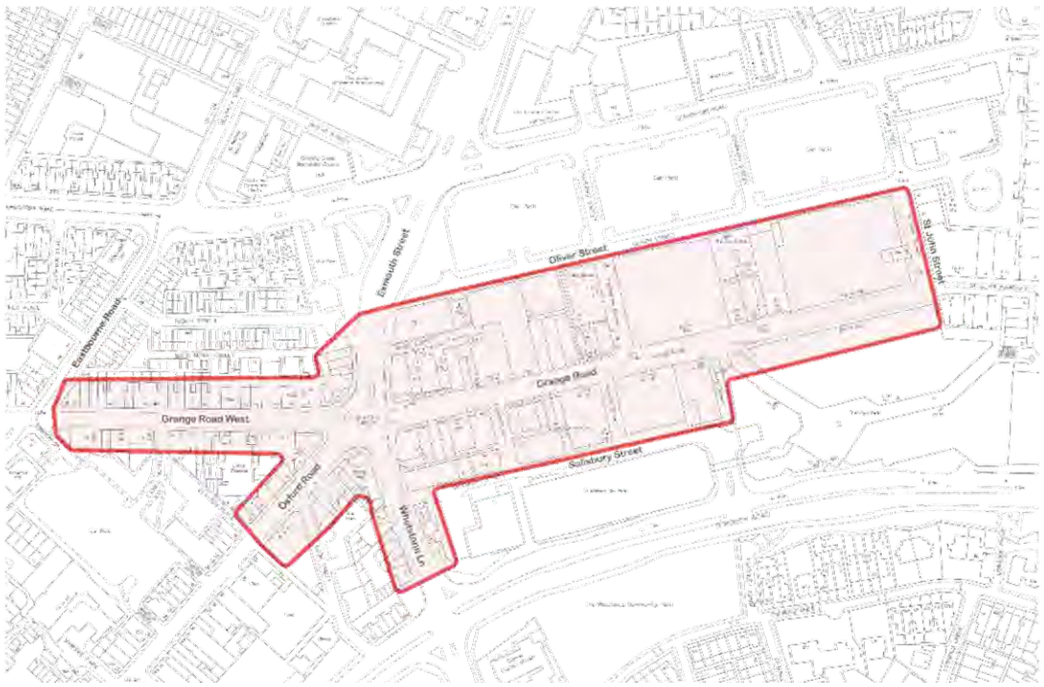


Figure 6.1 –Business Consultation Area

The **online survey** ran between Tuesday 8 March and Thursday 31 March 2022. All surveys present some limitations in terms of accessibility and accuracy, however alternative options to make the consultation inclusive were offered where possible e.g. paper copies of the survey were available on request and were also offered as an alternative during the door-to-door visit.

The online survey interface on mobile phones is show in Figure 6.2 below:

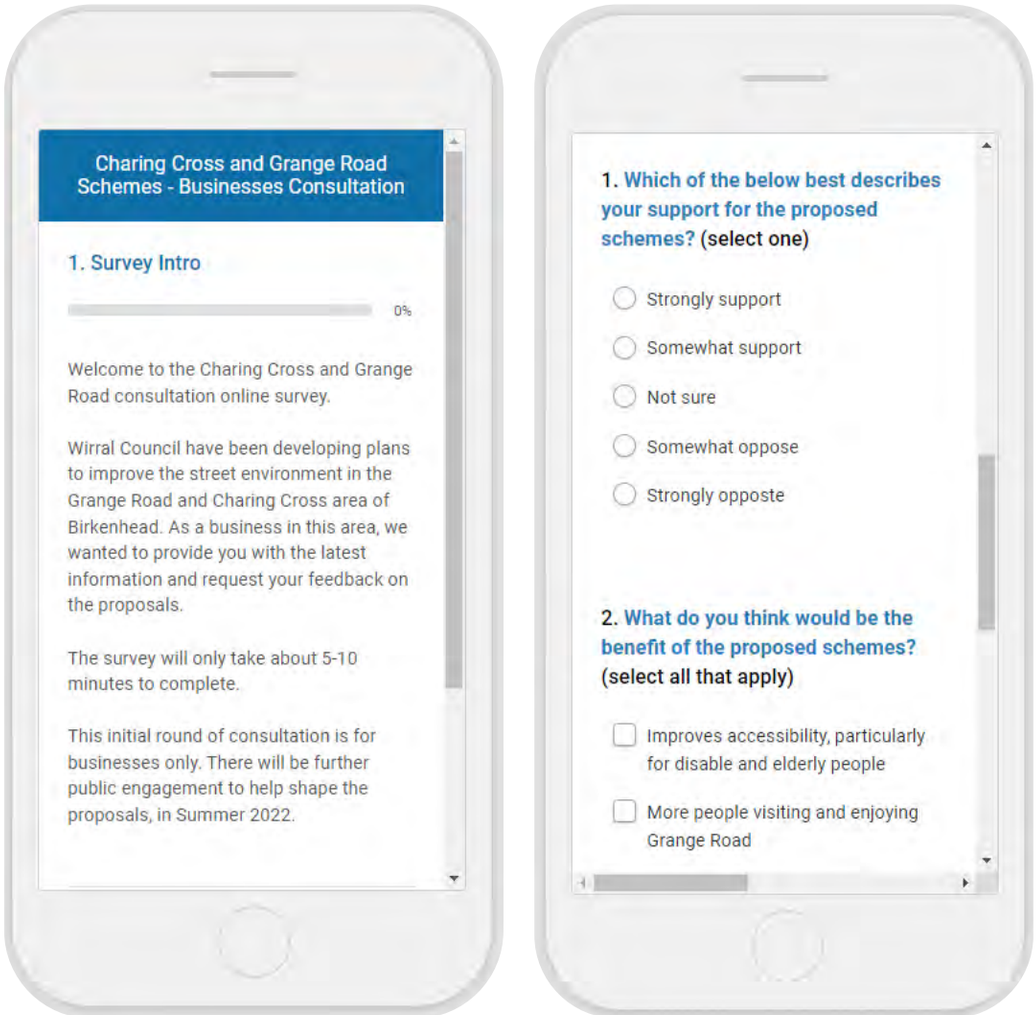


Figure 6.2 – Business Consultation Online Survey

Figure 6.3 – Business Consultation Board – Scheme 1 – Grange Road

This scheme aims to improve the look and feel of Grange Road, and to improve accessibility for all - especially disabled and elderly people. The proposed design includes:

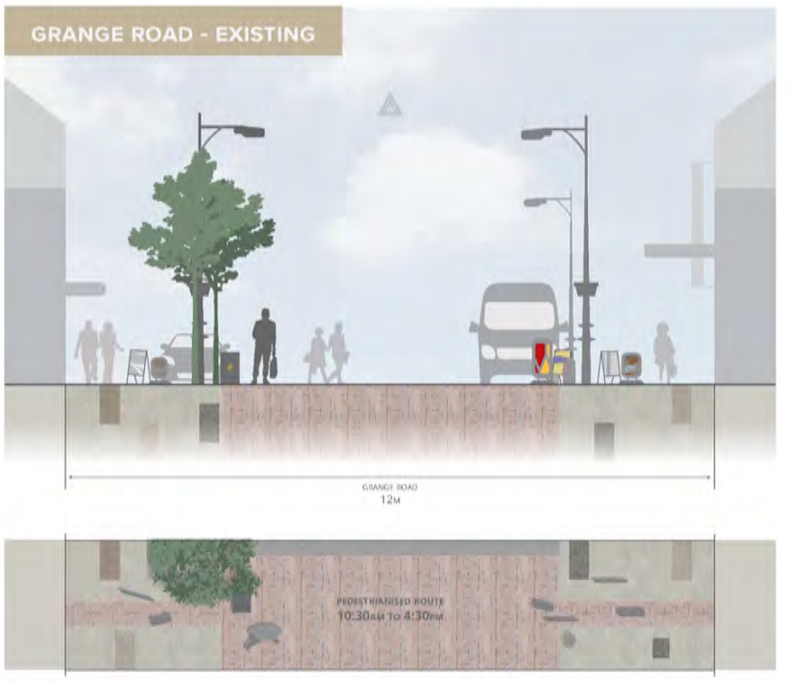
» Full replacement of public realm materials within the pedestrianised area to improve the look and feel of the street;

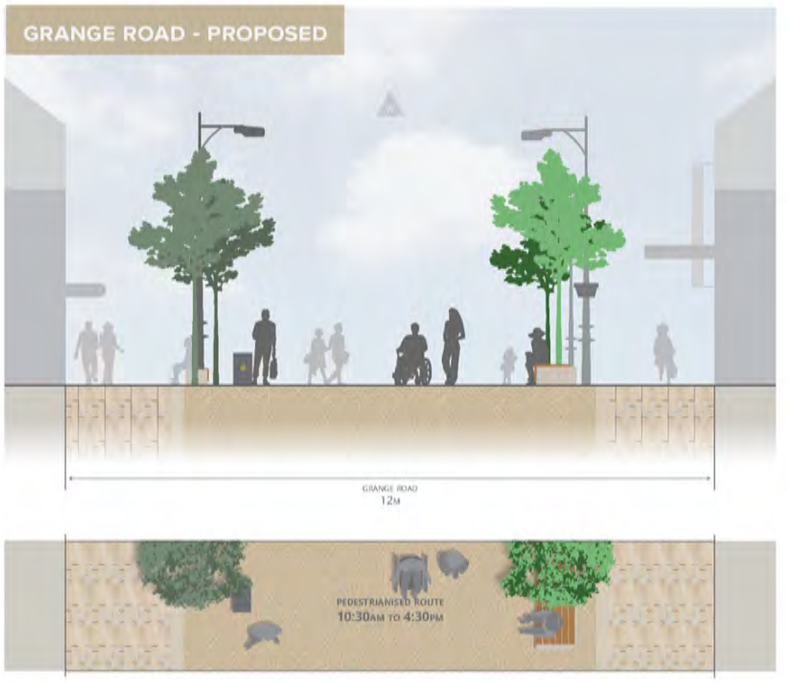
» Introduction of new planting to complement the existing street trees;

» Improved street furniture;

» Implementation of timed vehicular access restrictions to reduce fly-parking on the street and keep people safe;

» Revision of the Traffic Regulation Order.





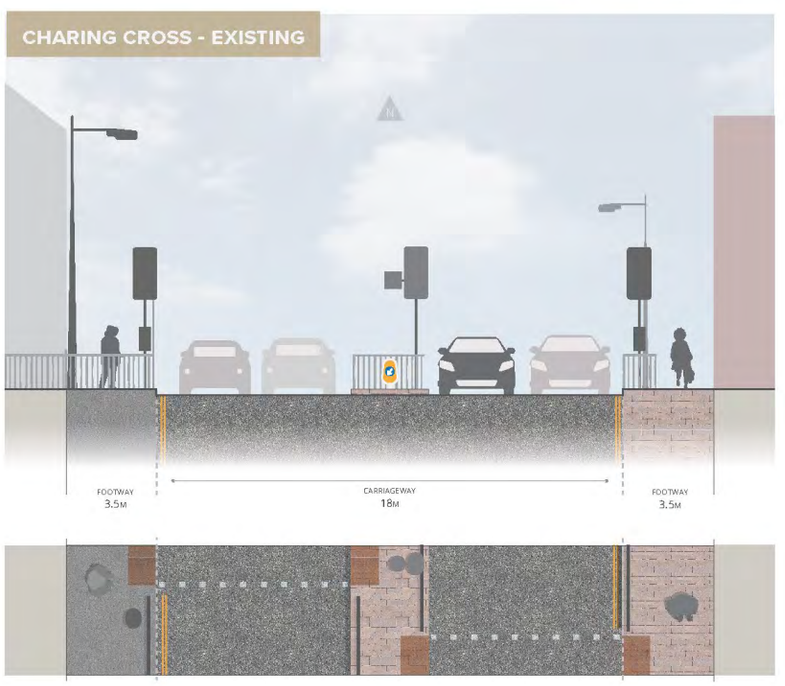
SCHEME 2 - CHARING CROSS

Figure 6.4 – Business Consultation Board – Scheme 2 – Charing Cross

This scheme aims to improve road safety at the Charing Cross junction. The proposed design includes:

» Replacement of the existing crossings with wide, straight crossings allowing pedestrians to cross the road more quickly and easily;

» Replacement of the current tired pavement with quality surfacing to improve the look and accessibility of the street environment.



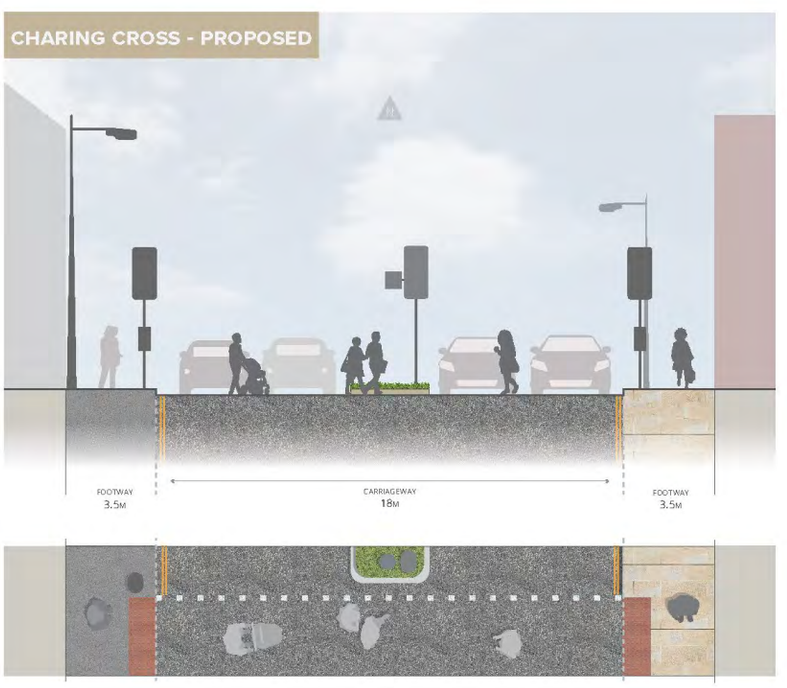


Figure 6.5 – Business Consultation Board – Scheme 3 – Grange Road West

This scheme is a potential trial pedestrianisation of Grange Road West – between the Charing Cross junction and Clayton Street.

Street paint, temporary planters and removable bollards would be used to mark the pedestrianised area and enhance the street environment – encouraging more people to visit and dwell along Grange Road West. The removable bollards would allow us to retain vehicular access to the street at permitted times.

The proposed design includes:

» Trial pedestrianisation of Grange Road West between Charing Cross junction and Clayton Street;

» Introduction of planters at either end of the pedestrianised area; and

» Use of street paint and 'pop up' interventions within the pedestrianised area to enhance the street environment.

6.2 Door-to-Door Engagement

A door-to-door visit was undertaken by a member of the WBC engagement team, on Thursday 24 March. The engagement officer was able to dialogue with 62 business/shop owners out of 65 open venues to explain the proposed schemes and consultation process – while handing out the consultation pack including the full schemes' boards and introductory letter.

Table 6.1 to 6.4 showcase the list of local businesses and shop visited during the in-person consultation – highlighting 24 venues that are currently closed/permanently shut.

Overall, the predominant feedback from the in-person consultation has been in favour of all the schemes. The key concerns raised from the business owners have been about:

- The risk that new/additional street furniture could attract anti-social behaviours (e.g. day drinking).
- The need of clarity on how the timing for closure to vehicles would work on Grange Road West – while maintaining access for shops deliveries and a safe level of accessibility for visitors and business owners.
- How to reinforce the parking restrictions on Grange Road effectively, as despite the existing bollards cars are parked at the top of Grange Road outside the shops all day – usually coming up Vincent Street and then parking on Grange Road for the rest of the day.

Grange Road				
	Business	**Engaged with owner/staff**	**Closed/permanently shut**	**Responded to Online Survey**
1	Riveria Bar and Grill	-	Yes	-
2	Friendly Discount Store	Yes	-	-
3	Ladbrooks	Yes	-	-
4	Casino	Yes	-	-
5	Pound Bakery	Yes	-	-
6	Independent Jewellers	Yes	-	-
7	Brighthouse	-	Yes	-
8	London Nails	Yes	-	-
9	Barbers No 1	Yes	-	-
10	Biga Byte	Yes	-	-
11	Iceland	Yes	-	-
12	Boots	Yes	-	-
13	Shush		Yes	-
14	Superdrug	Yes	-	-
15	Pyramid Cut Cutting	Yes	-	-
16	YMCA	Yes	-	-
17	JD Sports	Yes	-	-
18	HSBC	Yes	-	-
19	Santander	Yes	-	-
20	TK Maxx	Yes	-	-
21	Fitness 4 Less	Yes	-	-
22	Polka Dot Travel		Yes	-
23	Barclays	Yes	-	-
24	Waterstones	Yes	-	-
25	Hays Travel	Yes	-	-
26	Halifax	Yes	-	-
27	Primark	Yes	-	-
28	Asda	Yes	-	-
29	Bonmarch	Yes	-	-
30	Casino	Yes	-	-

Table 6.1 – Grange Road Door-to-Door Engagement

Charing Cross / Grange Road West				
	Business	**Engaged with owner/staff**	**Closed/permanently shut**	**Responded to Online Survey**
31	Top Nails	Yes	-	-
32	Lee Marvins	-	Yes	-
33	Boots Hearing	-	Yes	-
34	Northwest Barbers	-	Yes	-
35	Christopher Boyton Salon	Yes		Yes
36	Charing Cross Cosmetics		Yes	-
37	Katie Nails	Yes	-	-
38	Charing Cross Hotel	Yes	-	-
39	Natwest Bank	Yes	-	Yes
40	Abi Express yes	Yes	-	Yes
41	Book Store	-	Yes	-
42	Gekostar	Yes		-
43	Sun Ying	-	Yes	-
44	Balti House	-	Yes	-
45	Robert Boys Accountants	Yes	-	-
46	West 32	Yes	-	Yes
47	Hursts Bakery	Yes	-	-
48	Wirral Furniture	-	Yes	-
49	Grange News	Yes	-	-
50	Glamour Clinic	-	Yes	-
51	Caribbean Spice	-	Yes	-
52	Little Troon	-	Yes	-
53	News Booze	Yes	-	-
54	Bollywood	-	Yes	-
55	Stonemakers Properties	Yes	-	-
56	Mr Waffle	-	Yes	-
57	Mini Market	Yes	-	-
58	Mission Centre	-	Yes	-
59	St Vincents Mission	Yes	-	Yes
60	Grange West Lighting	Yes	-	Yes
61	Belissa Nails	Yes	-	-
62	Moneyline	-	Yes	-
63	Wirral Taxis	-	Yes	-

Table 6.2 – Charing Cross & Grange Road West Door-to-Door Engagement

Charing Cross / Grange Road West				
	Business	**Engaged with owner/staff**	**Closed/permanently shut**	**Responded to Online Survey**
64	Little Theatre	-	-	Yes
65	Turkish Floor Centre	Yes	-	-
66	Edenville Play Centre	Yes	-	-
67	Moneyshop	-	Yes	-
68	Mollys Ice cream	Yes	-	-
69	Makas Barbers	Yes	-	-
70	My Shop	Yes	-	-
71	Fishbowl pets	Yes	-	-
72	Heliya Cafe	Yes	-	-
73	Salvation Army	Yes	-	-
74	Polski Food Shop	Yes	-	-
75	Girl Code Gym	Yes	-	-
76	Meeting Place	Yes	-	Yes
77	Regal Nails	Yes	-	-
78	Oxton Rd General Store	Yes	-	-
79	Mersey Mobile	-	Yes	-
80	Hair Caribbean	Yes	-	-
81	Papa Pizza	-	Yes	-
82	Numinous Tattoo and Piercing Studio	-	-	Yes
83	Handmade by Maria	-	-	Yes

Table 6.3 – Charing Cross & Grange Road West Door-to-Door Engagement

Whetstone Lane				
	Business	**Engaged with owner/staff**	**Closed/permanently shut**	**Responded to Online Survey**
84	Not Just Coffee	Yes	-	-
85	Alex taylor Funeral	Yes	-	-
86	Moscroft Estates	Yes	-	-
87	Higgins Solicitors	Yes	-	-
88	Brook	Yes	-	-
89	Pram Store	-	Yes	-

Table 6.4 – Whetstone Lane Door-to-Door Engagement

6.3 Online Survey Outputs

Once the online survey was closed on Thursday 31st March – 10 completed surveys were collected. This accounts for 15% of all the open business venues. The breakdown of the recorded feedback for scheme 1 is shown in Figure 6.6 and 6.7. Overall the Grange Road scheme scored 100% positive support.

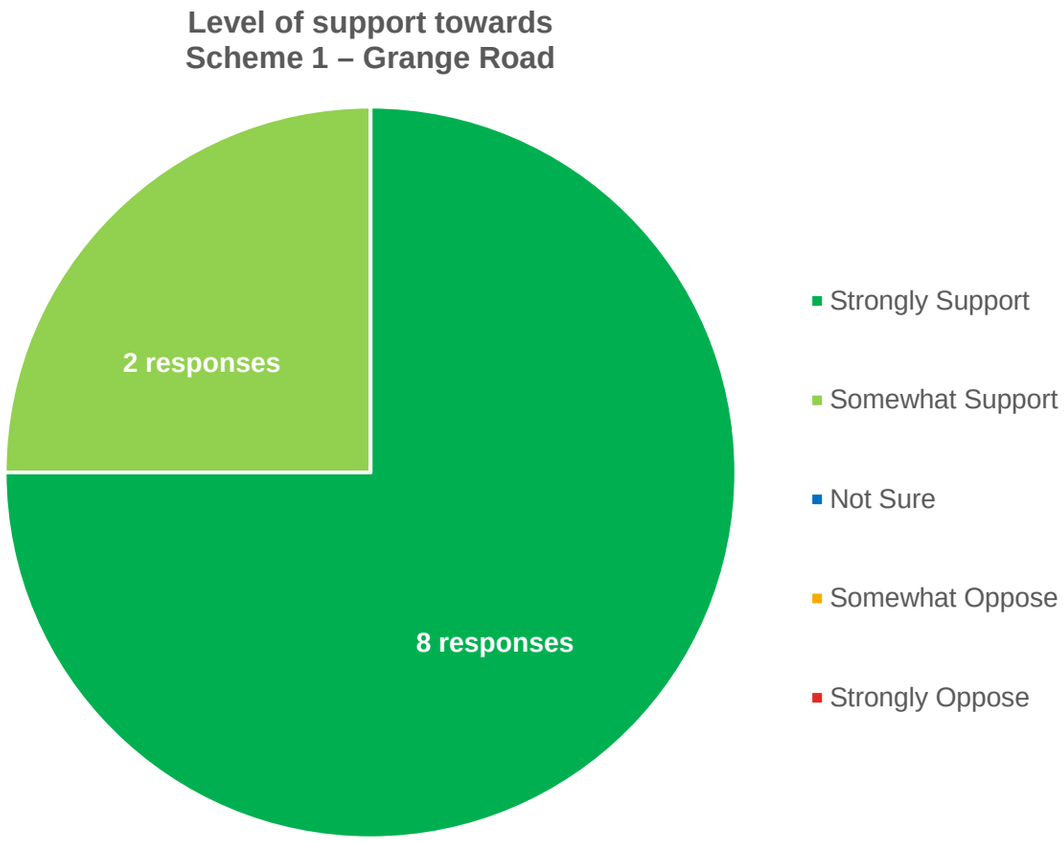


Figure 6.6 – Online Survey Q1 - Which of the below best describes your support for the proposed schemes (select one) - (Scheme 1 – Grange Rd)?

The recorded open comments can be summarised as per points below:

- Suggest maintain access for deliveries and goods collections
- Suggest introducing wayfinding/signposting to showcase businesses along Grange Road
- Suggest reinforcing CCTV/surveillance to tackle anti-social drinking and drug dealing behaviours
- Suggest widening Clayton St due to poor visibility risks
- Suggest introducing better options for local business parking

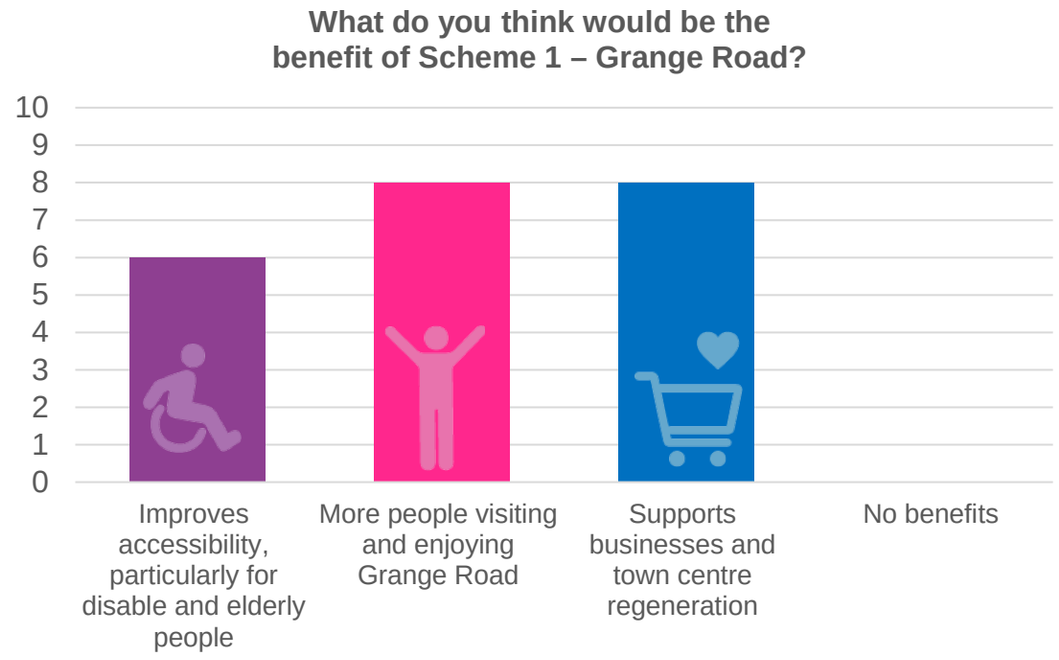


Figure 6.7 – Online Survey Q2 - What do you think would be the benefit of the proposed schemes? (select all that apply) - (Scheme 1 – Grange Rd)?

The breakdown of the collected feedback for scheme 2 is shown in Figure 6.8 and 6.9. Overall the Charing Cross scheme scored 100% positive support.

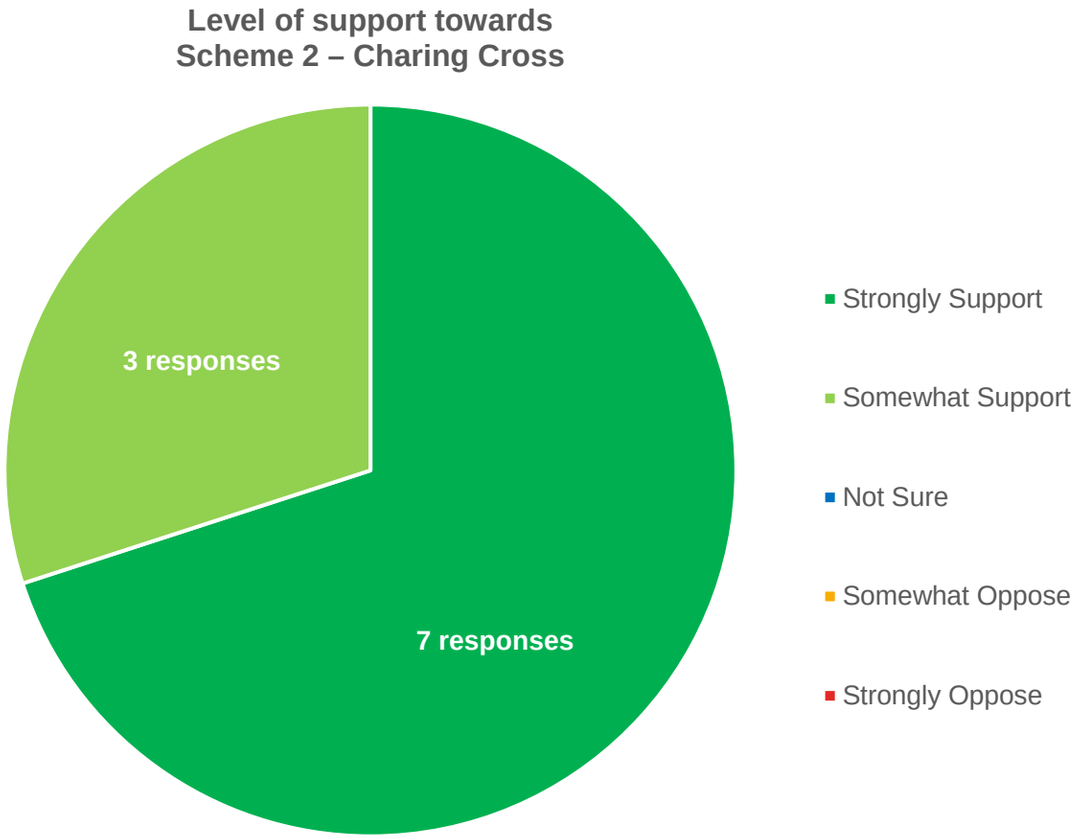


Figure 6.8 – Online Survey Q4 - Which of the below best describes your support for the proposed schemes (select one) - (Scheme 2 – Charing Cross)?

Summary of recorded open comments as follow:

- Confirmed that the current layout of Charing Cross junction stops a lot of people going from Grange Road further west towards Grange Road West and Oxton road
- Suggest to remove street furniture to avoid encouraging anti social behaviours

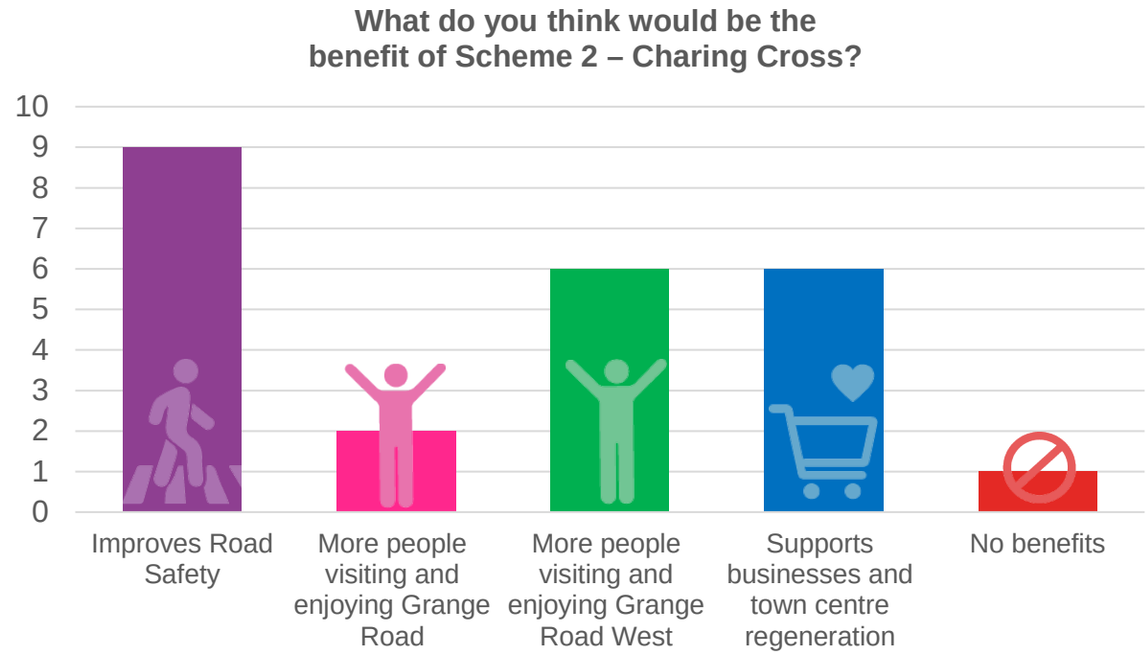


Figure 6.9 – Online Survey Q5 - What do you think would be the benefit of the proposed schemes? (select all that apply) -(Scheme 2 – Charing Cross)?

The breakdown of the collected feedback for scheme 3 is shown in Figure 6.10 and 6.11. Overall, Grange Road West scored 70% positive support, 10% unsure and 20% opposition. As part of the online survey it was also asked to the businesses if they required street access: general feedback confirmed local businesses do require access during day-time, not only for deliveries but to support customers' safe accessibility.

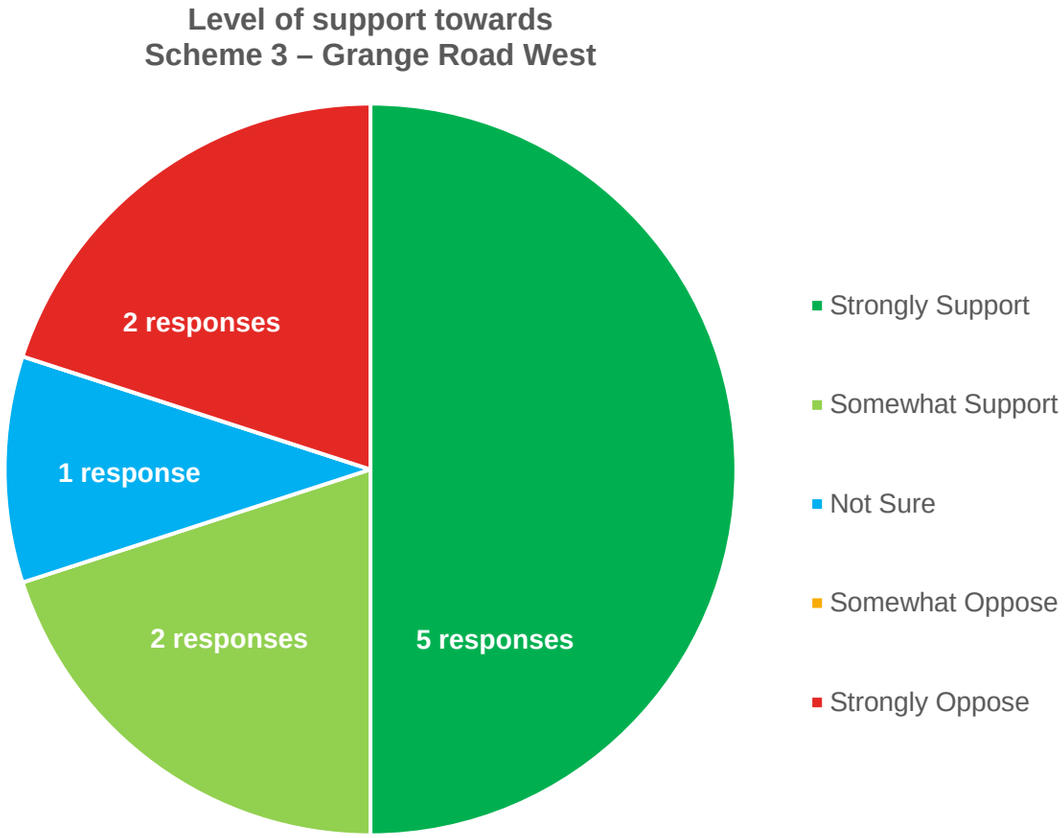


Figure 6.10 – Online Survey Q7 - Which of the below best describes your support for the proposed schemes (select one) - (Scheme 3 – Grange Road West)?

Summary of recorded open comments as follow:

- Expressed opposition due to elderly and disable customers currently accessing the street by car
- Expressed support as existing customers are concerned about safety in the area and under the proposed scheme the street would feel more welcoming
- Suggest extending the pedestrianised area up to Clayton Street, closing off Charing Cross
- Suggest to remove street furniture to avoid encouraging anti social behaviours
- Expressed concerns for anti social behaviours brought by more people dwelling in the street
- Suggest improving the car-park at the rear of the street for better accessibility (e.g. better light)
- Suggest addressing the currently empty shops to get them back into use

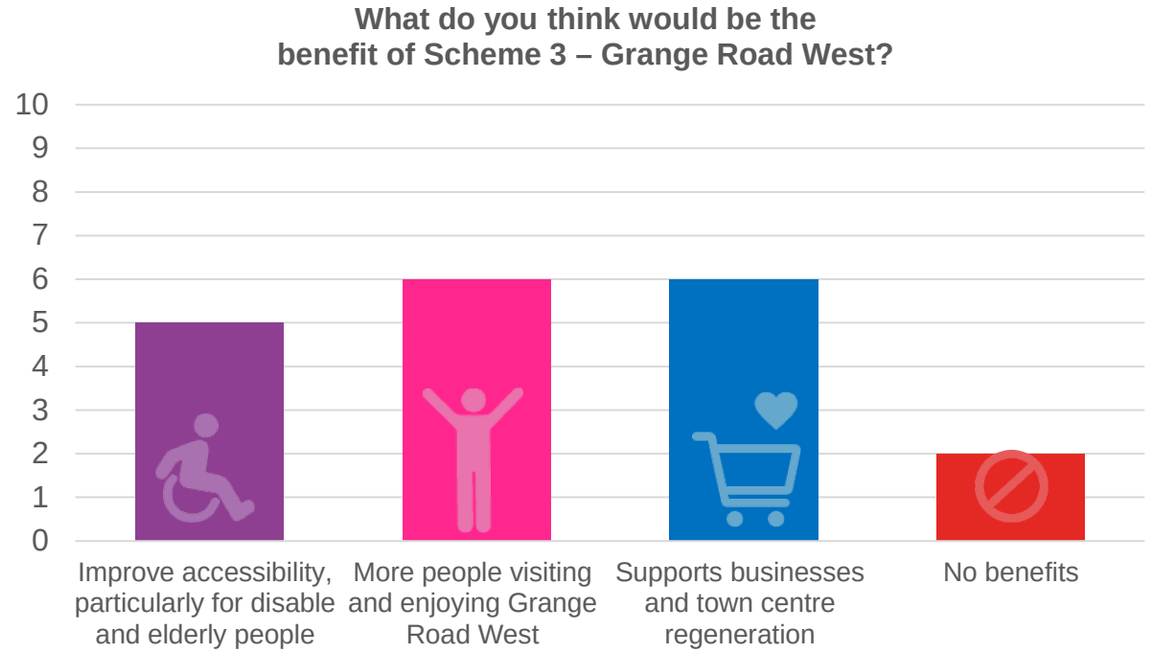


Figure 6.11 – Online Survey Q8 - What do you think would be the benefit of the proposed schemes? (select all that apply) - (Scheme 3 – Grange Road West)?

Figure 6.12 breaks down the expressed level of support towards the proposed schemes by responders' location. It is relevant to note all of the online survey's responders are based on Grange Road West and Oxton Road.

Figure 6.12 – Business Consultation – Summary of Feedback

Figure 6.13 illustrates the most recurrent key words from the businesses consultation feedback – showing customers, accessibility, street environment, car access and parking as main themes.

Figure 6.13 – Business Consultation Feedback – Key Words

7 Summary

7.1 Next Steps

The Stage 01&02 report has set the context for future change on Grange Road, Charing Cross and Grange Road West. It has provided a summary of key issues and opportunities and a set of concept designs to provide inspiration and high level budgeting for a reimagined streetscape.

Stage 03 will need to address further design considerations including:

- Review of Existing Lighting & Electrical Design Information
- Hardworks Plan
- Softworks Plan & Planting Schedule
- Furniture Plan
- Strategic Levels Plan
- Road Safety Audit
- Equality Impact Assessment

At present, whilst there has been extensive business engagement, there has been no public engagement. This is scheduled to be undertaken in summer 2022, to ensure public input to the design process is fully considered – and the process is robust and transparent.

Grange Road - 2022

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