

GREATER MANCHESTER SPATIAL FRAMEWORK

GM ALLOCATION 31 - EAST BOOTHSTOWN

TRANSPORT SUPPORTING STATEMENT

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1.0 INTRODUCTION AND BACKGROUND

- 1.1 This Transport Supporting Statement (TSS) has been prepared by TTHC Ltd on behalf of Peel Investments (North) Ltd to assist with the promotion of GM Allocation 31 – East Boothstown within the Greater Manchester Spatial Framework (GMSF).
- 1.2 The proposed ‘East Boothstown’ site would provide an urban extension of circa 300 residential units, with an opportunity to provide some early delivery of housing as part of a phased development.
- 1.3 The Site is located to the east of the existing residential area of Boothstown within the City of Salford, as shown in **Figure 1**.
- 1.4 The Site also lies immediately west of the RHS Garden Bridgewater site. Planning permission was granted for the garden and associated facilities in May 2017. Site development, access and the establishment of the garden is currently taking place and the RHS expect to open the first phase to the public in 2020.
- 1.5 This report provides information on site location and accessibility, and the development proposals, before considering the transport related implications of the proposed development.

2.0 SITE LOCATION AND ACCESSIBILITY

- 2.1 The Site is situated on the west side of the Greater Manchester conurbation, within the City of Salford. It is located immediately east of the existing area of Boothstown as shown in **Figure 1** and approximately 7 miles west of the Regional Centre which encompasses Manchester City Centre and parts of Salford and Trafford.
- 2.2 Within a transport context, the Regional Centre is highly accessible from its surrounding areas by an extensive public transport network which supports Greater Manchester. This includes local rail, Metrolink and bus services, including the Transport for Greater Manchester (TfGM) showcase rapid transit Leigh Salford Manchester Busway. Within the Regional Centre there are extensive interchange facilities including connections to destinations on the West Coast Mainline, Trans-Pennine routes and Manchester Airport.
- 2.3 More locally the Site is located on the eastern edge of Boothstown, Worsley.
- 2.4 Boothstown has a designated Neighbourhood Centre which is situated within 600 metres walking distance from the edge of the Site. The nearest town centre is at Walkden which is approximately 3km by road from the Site.
- 2.5 There are two primary schools located in Boothstown, and a third just to the north within Ellenbrook.
- 2.6 The nearest secondary schools are Walkden High School and Harrop Fold, approximately 2.6km and 3km respectively to the north of the Site.
- 2.7 **Figure 2** shows the Site in the context of its local area.

2.8 The Site is bounded to the north by the A572 Leigh Road, to the west by the existing Moorings Estate residential area, to the south by the Bridgewater Canal, and to the east by the RHS Garden Bridgewater site which is currently under development.

Local Highway Network and Access Opportunities

2.9 The Site would be accessed via a priority junction off the RHS Garden Bridgewater site access road (currently under construction), which will run south from A572 Leigh Road between the two sites, and which will have a signalised access junction onto Leigh Road. Peel has the necessary agreements in place with RHS in order to deliver this access.

2.10 The A572 Leigh Road is the main east-west road through Boothstown. As shown in **Figure 2**, it connects with the A580 East Lancs Road to the north-west of Boothstown, and to Worsley and the M60 Junction 13 (J13) to the east.

2.11 There are also other routes leading to the A580 East Lancs to the north off the A572, namely the A577 Mosley Common Road and Ellenbrook Road.

2.12 Within the vicinity of the Site, the A572 is a single carriageway road with a width between 8 and 10 metres. It has street lighting and a footway to its north side. The speed limit is 40mph through the RHS access junction and reduces to 30mph at the north west corner of the Site where the A572 enters Boothstown. With the development of the Site, it would be logical to extend the 30mph limit to the eastern edge of the new residential development.

2.13 There are a number of large detached properties on the north side, with private driveways providing direct access off the A572. As the Site is currently undeveloped, there is no footway on the south side along the site frontage. The development of the Site would deliver a footway to connect the Site with Boothstown.

- 2.14 To the west of the Site, the A572 passes through the centre of Boothstown before connecting to the A580 at the part-signal controlled gyratory junction (Queens Roundabout). In the opposite direction from the Site, the A572 connects with the A575 Walkden Road at M60 J13. With its connection to J13 and the A580, the A572 performs a distributor road function.
- 2.15 A577 Mosley Common Road and Ellenbrook Road also connect from A572 to A580 to the west of the Site, as does A575 Walkden Road to the east of the Site. All three roads have signal controlled junctions with A580.
- 2.16 The A580 East Lancs Road is part of the Primary Route Network (PRN) and is of dual carriageway standard. It routes east into the Regional Centre and west to M6 Junction 23, and beyond to Liverpool.

Walking and Cycling

- 2.17 The Institute of Highways and Transportation (IHT) produced 'Guidelines for Journeys on Foot' in 2000 which states that around 80% of walk journeys and walk stages are less than 1 mile (1.6km).
- 2.18 It is generally recognised that walking is the most important mode of travel at a local level, and has the greatest potential to replace car trips for distances up to 2km.
- 2.19 The distance that people are prepared to walk depends on the journey purpose. The IHT guidance also provides 'suggested acceptable walking distances'. The walking thresholds presented in **Table 1** are suggested:

Suggested Acceptable Walking Distances		
	Commuting, school and sightseeing (m)	Elsewhere (m)
Desirable	500	400
Acceptable	1,000	800
Preferred maximum	2,000	1,200

Table 1

- 2.20 Of course, these ‘Desirable’, ‘Acceptable’ and ‘Preferred Maximum’ walk distances are not absolute thresholds. In this regard, the IHT guidelines also state that around 80% of walk journeys and walk stages are less than 1 mile (1.6km), and hence 20% will be in excess of 1 mile (1.6km).
- 2.21 Manual for Streets (MfS) makes reference to ‘walkable neighbourhoods’ and suggests an appropriate walk of 10 minutes (800 metres) to access facilities. It also recognises that the quality and directness of the route are important factors.
- 2.22 Having regard to the above guidance, in terms of accessing local shops and facilities a walk of around 800m (or about 10 minutes) should be taken as a ‘comfortable’ walk, but the preferred maximum for such activity should be around 1.2km (or about 15 minutes).
- 2.23 The IHT guidelines suggest that people are prepared to walk further to access their place of work or education compared to accessing shops and facilities. Particularly in relation to schools for future residents of the Site, a 1km (approximately 12 minute) walk can be considered as a ‘comfortable’ distance, with 2km (approximately 25 minutes) representing the preferred maximum.
- 2.24 In order to understand these walking distances in relation to the Site, the 1.2km walking distance threshold is indicated in **Figure 3**. This also indicates the existing local Public Right of Way (PROW) network which is available, and the local shops and facilities falling within 1.2km. This includes local schools,

although as noted above, a 2km threshold is considered to represent the threshold for educational purposes.

- 2.25 **Figure 3** shows the Neighbourhood Centre in Boothstown, includes numerous retail, community, healthcare and leisure facilities, located approximately 600 metres west of the Site. All parts of the Site would lie within a 15 minute walk of the centre. There is also a Costcutter convenience store located on Ellenbrook Road just 350 metres walk from the Site.
- 2.26 **Figure 3** also shows three primary schools well within the 2km catchment for educational purposes: St Andrews (900m); Ellenbrook Community (1.1km); and Boothstown Methodist (1.25km).
- 2.27 The closest secondary school to the Site is Walkden High School which is located 2.6km walk north east of the Site and served by school buses from Boothstown. Also, Harrop Fold is located 3km walk north of the Site.
- 2.28 With regard to cycling, it is generally recognised that it can substitute car trips, particularly for journeys up to 5km. The area surrounding the Site has a good network of cycle links within this distance, as shown on the plan in **Figure 4**.
- 2.29 The 5km cycle catchment includes Boothstown and Worsley, Walkden town centre and railway station (approximately 3km), and extends as far as Swinton, Eccles (including the Metrolink stop at Eccles Interchange and the railway stations at Patricroft and Eccles), Trafford Park, Tyldesley and Astley.
- 2.30 There is a designated cycle route along the south towpath of the Bridgewater Canal (the Bridgewater Way). This follows the canal east to Worsley and beyond through Trafford Park to Stretford, where the canal and cycle route branches north into the Regional Centre and south to Altrincham. This cycle route can be accessed via the Vicars Hall Lane bridge crossing, located 250 metres west of the Site.

2.31 The towpath to the west of Vicars Hall Lane is currently unsurfaced, but there are proposals to extend the surfaced cycle path along the remaining unsurfaced stretch to Worsley (as shown in **Figure 4**). So far £650k Growth Deal funding has been secured, and SCC will apply for a further £2.7m from the Mayor's Challenge to deliver this scheme as well as connections to Leigh Road and Walkden station. These connections will be implemented in advance of development of the East Boothstown Site.

2.32 Also, within 800 metres of the Site there is a cycle route parallel to the A580 East Lancs Road, running east into the Regional Centre and west towards Leigh and beyond.

Public Transport

2.33 A walk distance of around 400 metres is generally recognised as an acceptable walk distance to a bus stop in urban areas, although the walk distance to a stop is not the only factor involved in the decision-making process in choosing which mode. The level of service at the bus stop is clearly an important factor, as is overall journey length, the pleasantness or otherwise of the walk route, and the journey purpose.

2.34 Several bus services route along Leigh Road immediately past the Site. There are bus stops located at both the north west and north east corners of the Site, and direct north-south walk links through the Site will minimise walk distances. Additional service route close to the Site along Booths Hall Way (150 metres walk from the Site via Quayside Close) and Ellenbrook Road (300 metres walk). **Figure 5** shows the existing public transport services.

2.35 The services which serve the site are summarised in **Table 2** overleaf.

Local Bus Services							
No	Route	Weekday				Saturday	Sunday
		0700 - 0900	1600 - 1800	Typical daytime freq	Daily total	Daily total	Daily total
Leigh Road (all stops between Boothstown and Worsley)							
26/34	Leigh – Boothstown – Salford – Manchester city centre	0	3	30 mins	40	40	25
	Manchester city centre - Salford - Boothstown - Leigh	2	3	30 mins	40	40	20
126	Leigh – Boothstown – Trafford Centre	2	1	Hourly	15	15	8
	Trafford Centre - Boothstown - Leigh	0	2	Hourly	14	13	8
132	Wigan – Boothstown – Trafford Centre	1	2	Hourly	10	9	No service
	Trafford Centre - Boothstown - Wigan	2	2	Hourly	13	12	No service
Leigh Road (at Ellenbrook Road)							
551/553	Boothstown - Walkden - Bolton	1	2	Hourly	16	16	14
	Bolton – Walkden – Boothstown	2	2	Hourly	16	16	14
554	St Mary's RC High School - Shakerley	0	1	School Service	1	No service	No service
Booths Hall Way - Hail and Ride (also Ellenbrook Road stops on Leigh Road)							
VH1	Boothstown – Mosley Common circular	4	4	30 mins	25	15	15

Table 2

2.36 Services 26/34, 126 and 132 all serve the existing stops on Leigh Road adjacent to the Site. As part of the RHS development, the stops opposite the RHS access will be upgraded, and a pedestrian crossing will be installed on Leigh Road opposite the access.

2.37 The main daytime service into the Regional Centre is the number 34 service which operates along Leigh Road adjacent to the Site, running on a 30 minute frequency.

- 2.38 Services 26 and 34 provide interchange opportunities with rail services at Salford Crescent as well as Metrolink and other services within Manchester city centre.
- 2.39 Service 132 provides interchange potential with rail services at Wigan. These services also serve the Trafford Centre Bus Station where there are additional connecting services to Warrington, Stockport, Manchester Airport and other destinations, and which will be served by Metrolink from 2020 when the Trafford Park Extension is completed.
- 2.40 Bus service VH1 provides a 'hail and ride' service on Booths Hall Way, also on a 30 minute frequency, and connects to the 'Vantage' services at the Newearth Road bus stops (opposite side of A580).
- 2.41 'Vantage' is TfGM's showcase route between Leigh, Atherton, Tyldesley and Salford/Manchester city centres via the Guided Busway and along the A580 East Lancs Road which has bus priority. The V1 service operates between Leigh and Manchester whilst the V2 operates between Atherton and Manchester. They each run on a 15-minute daytime frequency Monday to Saturday, and 30 minutes in the evenings and on Sundays. The combined frequency of the V1/V2 services is therefore one bus every 7 to 8 minutes (Monday to Saturday daytime).
- 2.42 The V1/V2 services also serve a Park & Ride site at Wardley (under the M60) which has 250 spaces and is free to bus passengers. The bus route also provides a direct connection with Salford Crescent railway station.
- 2.43 The guided section of the route and the bus priority measures provide for faster and more reliable journey times (particularly in the peaks). TfGM report that the new rapid transit services have proven successful, and are currently exploring the potential to expand the network in the future.

- 2.44 Additionally, the 551/553 services provide an hourly connection from Ellenbrook Road to Bolton, which passes through Walkden town centre.
- 2.45 There are also term-time services from Boothstown to Walkden High School. The 554 provides a service from St Mary's RC High School to Shakerley via Boothstown.
- 2.46 The nearest railway station to the Site is Walkden, located approximately 3km by road to the north. Walkden station is served by local trains on the Wigan-Manchester route, with connections to long-distance services at Wigan and Manchester Victoria.
- 2.47 The Site lies within walking distance of a range of existing shops and facilities within Boothstown, and it is also well placed for cycling trips via the Bridgewater Canal towpath. There are regular bus services running adjacent to the Site on Leigh Road, and other nearby bus services within walking distance. Development of this Site would therefore deliver housing which benefits from good non-car accessibility choices.

3.0 DEVELOPMENT PROPOSALS

- 3.1 The proposed masterplan is shown in **Appendix A**.
- 3.2 It is anticipated that around 300 residential units could be built out at the East Boothstown Site.
- 3.3 Vehicle access to the development would be via a priority junction on the west side of the RHS access road, which is due to open in 2020 for the RHS site.
- 3.4 The RHS access road will lead north to a signalised junction on the A572 Leigh Road which includes controlled pedestrian crossing facilities.
- 3.5 As shown on the masterplan, the site layout would retain the existing Public Right of Way through the Site from Poynt Chase. Additional pedestrian routes would be provided through the Site to provide desire line connections to Leigh Road, the Bridgewater Canal, Booths Hall Way to the west, and the RHS and the improved towpath to the east. At Leigh Road footpaths would lead into the north west corner of the Site to minimise walk distances into Boothstown Neighbourhood Centre.
- 3.6 There is currently no footway on the south side of Leigh Road adjacent to the Site. A new footway will be provided along part of the Site frontage with the new signalised access junction for RHS Bridgewater. The remaining section would be provided as part of the East Boothstown proposals, and this would also extend west beyond the Site to complete the missing section towards Boothstown.
- 3.7 There is a short section of Leigh Road to the west where there is no verge (for conversion to footway) within the adopted highway. However, the carriageway is wide at this point with central hatching, and so it would be possible to provide a footway by slightly narrowing and realigning Leigh Road at this point. This

would then connect into the existing footway at Falconwood Chase and provide a safe and convenient route west to the Neighbourhood Centre via Leigh Road. The road narrowing could form part of a 'gateway' feature at the entry to Boothstown 30mph zone.

- 3.8 Additional pedestrian and cycle access would be provided via Quayside Close to the west of the Site. This would provide a convenient route via the lightly trafficked route along Booths Hall Way to St Andrew's Primary School and the VH1 bus service which operates as "Hail and Ride" on Booths Hall Way.
- 3.9 Pedestrian and cycle connections would also be provided between the Site and Chat Moss to the south.

4.0 TRANSPORT IMPLICATIONS

Trip Generation

- 4.1 For simplicity, the same vehicular trip rates have been adopted across all the Peel GMSF sites. Robust residential trip rates were presented in connection with Peel planning applications within Salford. These rates were audited and agreed by Salford City Council (SCC), Highways England and Transport for Greater Manchester (TfGM). These agreed rates have been adopted in this assessment for consistency.
- 4.2 The rates were derived from the TRICS database using sites in the 'Houses Privately Owned' sub-category. The assessment considers the weekday peak hours. Town centre or edge of town centre sites have been excluded.
- 4.3 The agreed vehicular trip rates are detailed in **Table 3** below, and for completeness the TRICS data is attached at **Appendix B**.

Residential Trip Rates (trips per dwelling)			
	Inbound	Outbound	Two Way
AM Peak Hour	0.154	0.408	0.562
PM Peak Hour	0.385	0.224	0.609

Table 3

- 4.4 Applying the above trip rates to a maximum of 300 units results in the trip generation shown in **Table 4**.

Residential Vehicle Trips			
300 units	In	Out	Two Way
AM Peak Hour	46	122	168
PM Peak Hour	116	67	183

Table 4

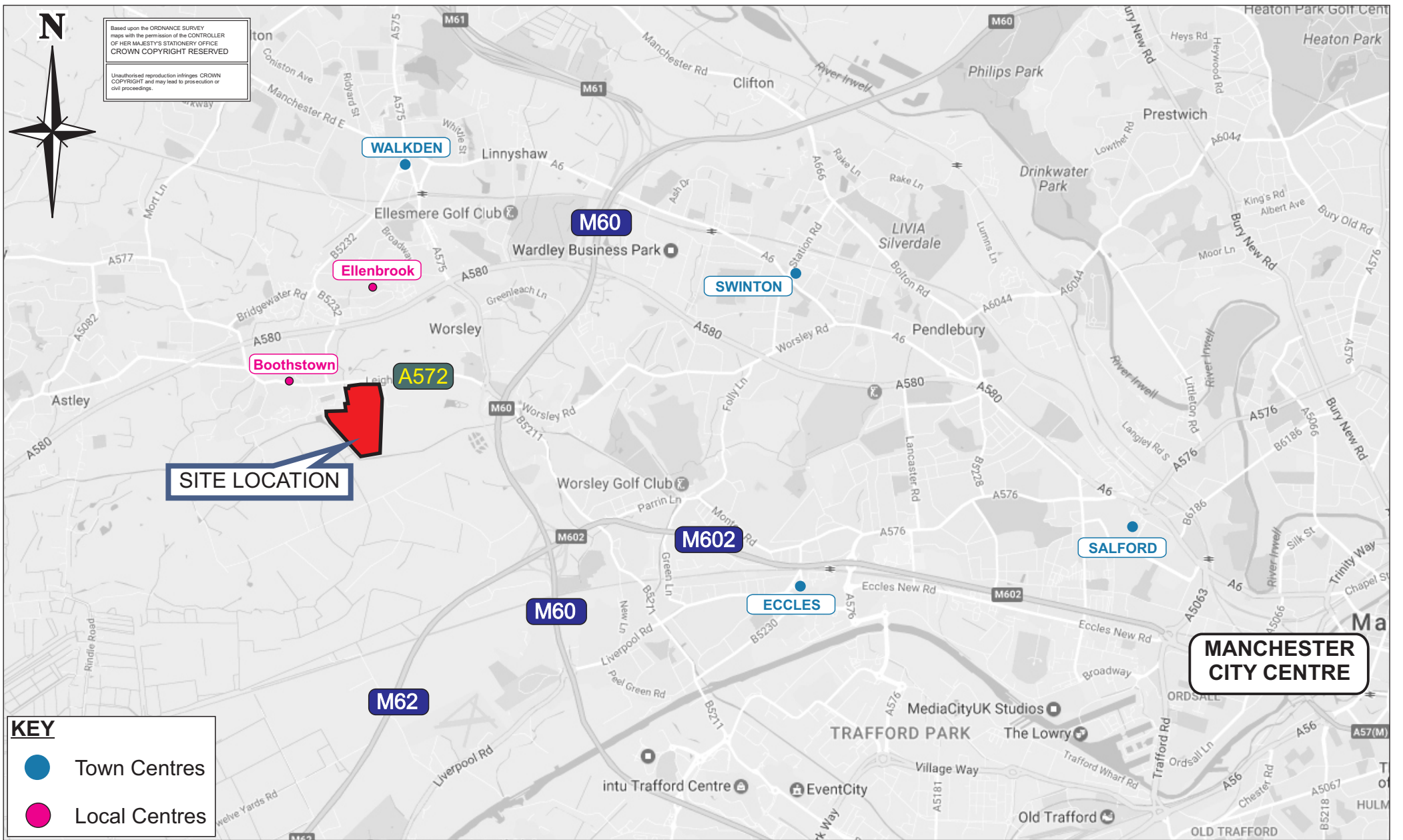
- 4.5 The RHS development includes a new signalised access junction on the A572 Leigh Road, as shown in **Appendix C**. Junction tests show that the RHS signalised access junction would be able to accommodate the additional traffic generated by the Site.
- 4.6 From here traffic would disperse east to M60 Junction 13 and west to Boothstown and A580. At the application stage, development would be supported by a TA and this would consider the detailed routing of traffic and its impact., plus any requirement for off-site highway improvements.

5.0 SUMMARY AND CONCLUSIONS

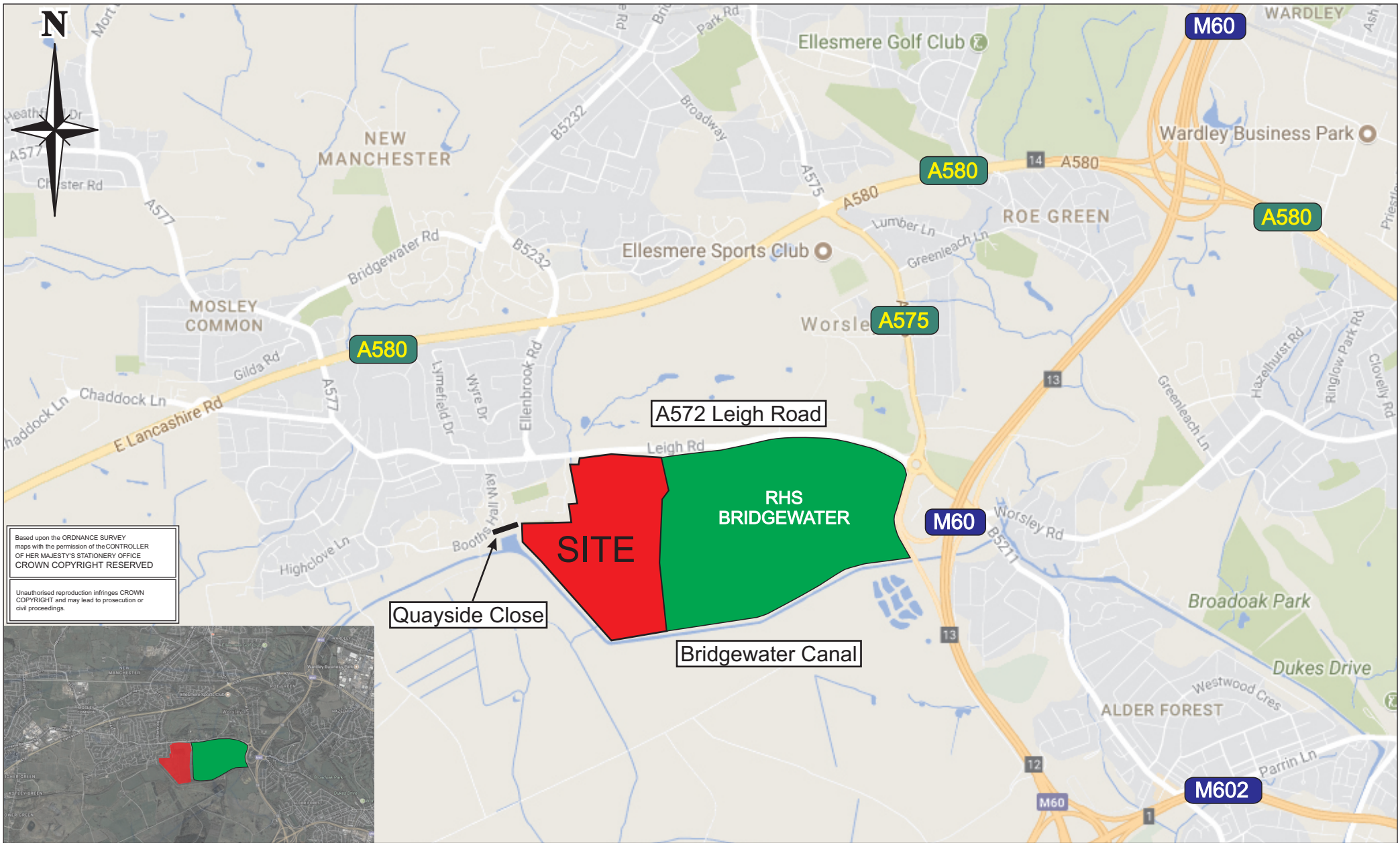
- 5.1 This Statement has been prepared in support of the inclusion of a Site within the Greater Manchester Spatial Framework (GMSF). The Site is GM Allocation 31 – East Boothstown and is located on the eastern edge of Boothstown within the City of Salford. The proposals are for residential development of circa 300 dwellings.
- 5.2 This Site is located 7 miles west of Manchester City Centre and the Regional Centre.
- 5.3 The Site is well-located in respect of local amenities, with the Neighbourhood Centre of Boothstown located 600m walking distance from the edge of the Site, whilst town centre facilities can be accessed at Walkden (3km from the Site). Minor alterations to the Leigh Road alignment would provide a safe pedestrian route along Leigh Road to the Neighbourhood Centre.
- 5.4 The Site benefits from frequent bus services which route along the A572 Leigh Road corridor immediately adjacent to the Site, and with other nearby services on Booths Hall Way and Ellenbrook Road. This provides the Site with numerous connections to the wider Greater Manchester public transport network.
- 5.5 Proposed improvements to the Bridgewater Canal towpaths (also immediately adjacent to the Site) will provide a good off-road east-west connection for cyclists.
- 5.6 The Site has a vehicular access solution with access via a signalised junction onto Leigh Road which is committed through the adjacent RHS Bridgewater development (currently under construction). From the access junction, traffic would disperse in both directions along Leigh Road. The detailed traffic impact would be identified through a TA, as would any need for any off-site highway mitigation.

- 5.7 The Site is well located to make use of existing facilities and transport links, and will be available for delivery in the short term, once the Leigh Road signalised access is in place (from 2020).
- 5.8 It is therefore concluded that there are no transport or highway related issues which would prevent development of this Site, and it should therefore be retained as an allocated site within the adopted Greater Manchester Spatial Framework.

Figures

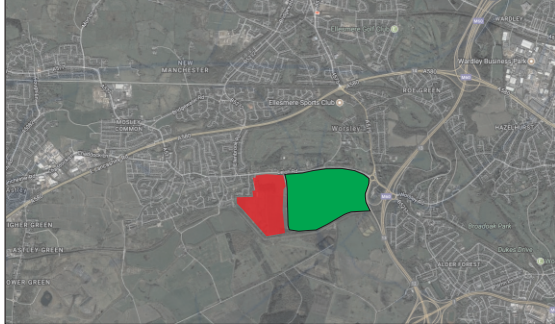



	Drawing No M16002(OA18)-C-001	Rev .	GREATER MANCHESTER SPATIAL FRAMEWORK - EAST BOOTHSTOWN	
	Date 13.04.2018	Rev Date .		
	Drawn By HG	Authorised CG	Scale NTS	FIGURE 1

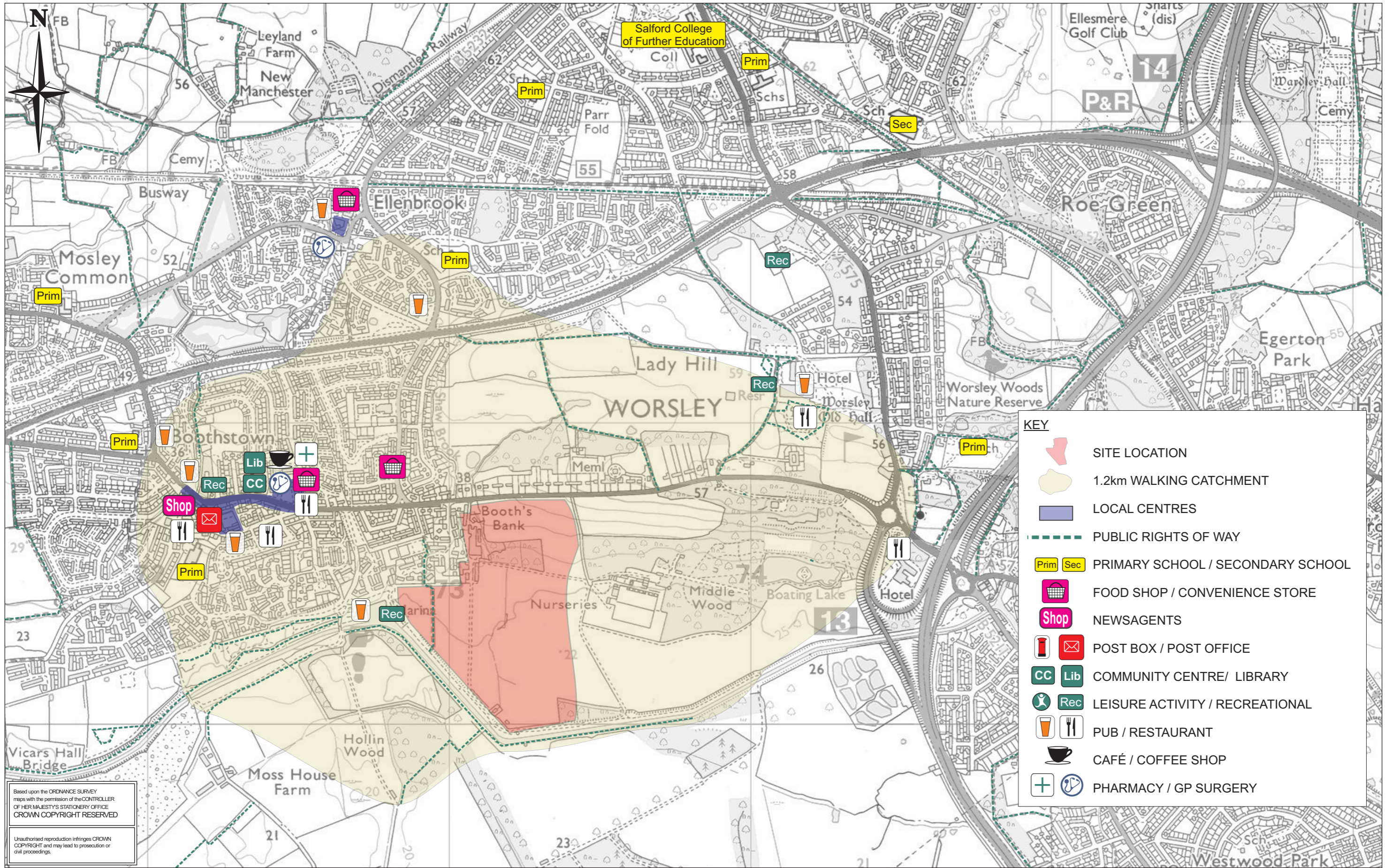


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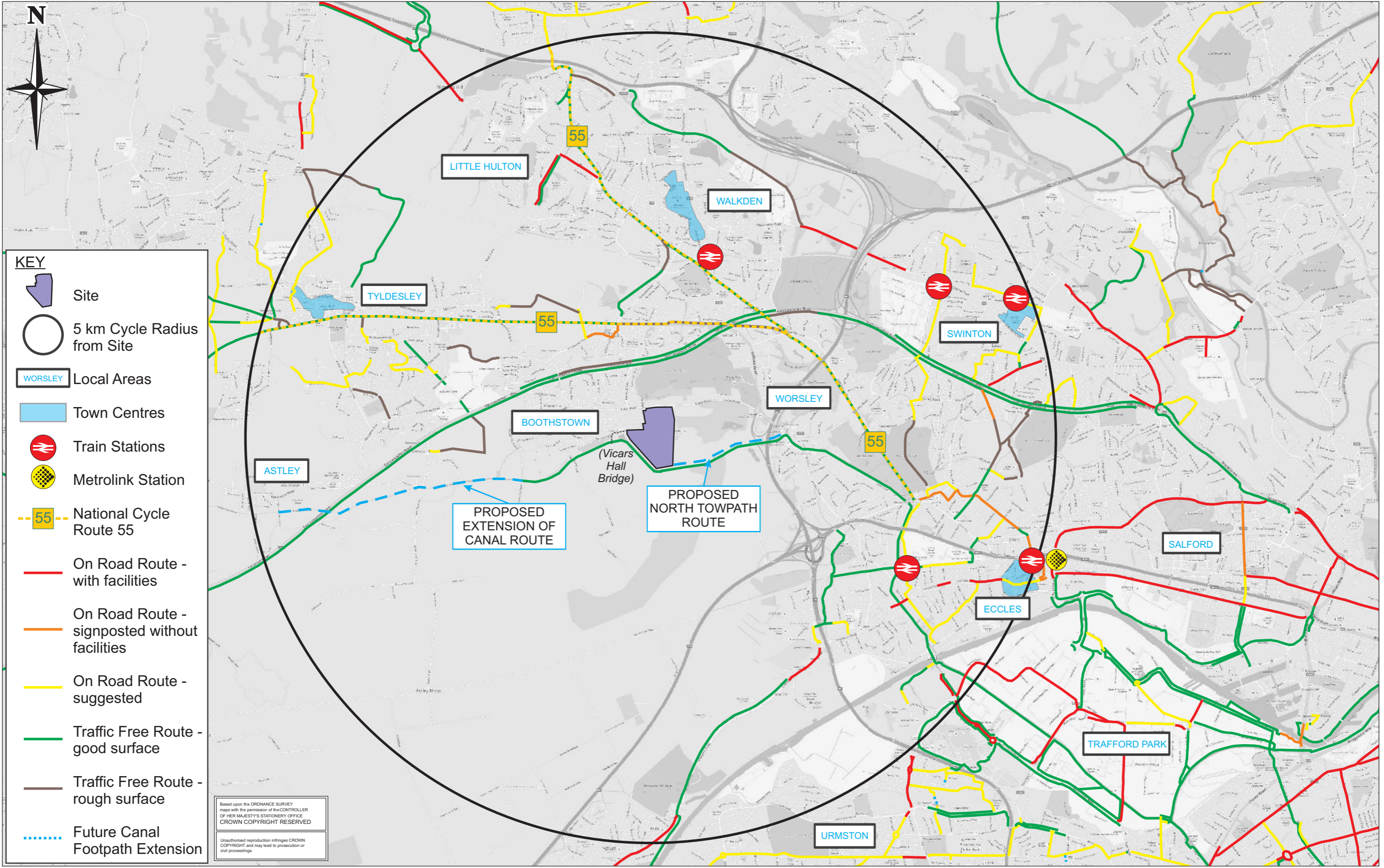
 <p>the Traffic, Transport & Highway Consultancy</p>	Drawing No M16002(OA18)-C-006	Rev .	GREATER MANCHESTER SPATIAL FRAMEWORK - EAST BOOTHSTOWN	
	Date 25.04.2018	Rev Date .	LOCAL AREA PLAN	
	Drawn By HG	Authorised CG	Scale NTS	FIGURE 2



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	Drawing No	Rev	GREATER MANCHESTER SPATIAL FRAMEWORK - EAST BOOTHSTOWN 1.2KM WALKING CATCHMENT AND LOCAL FACILITIES	
	M16002(OA18)-C-002	.		
	Date	Rev Date	FIGURE 3	
26.04.2018	.			
Drawn By	Authorised	Scale		
HG	CG	NTS		



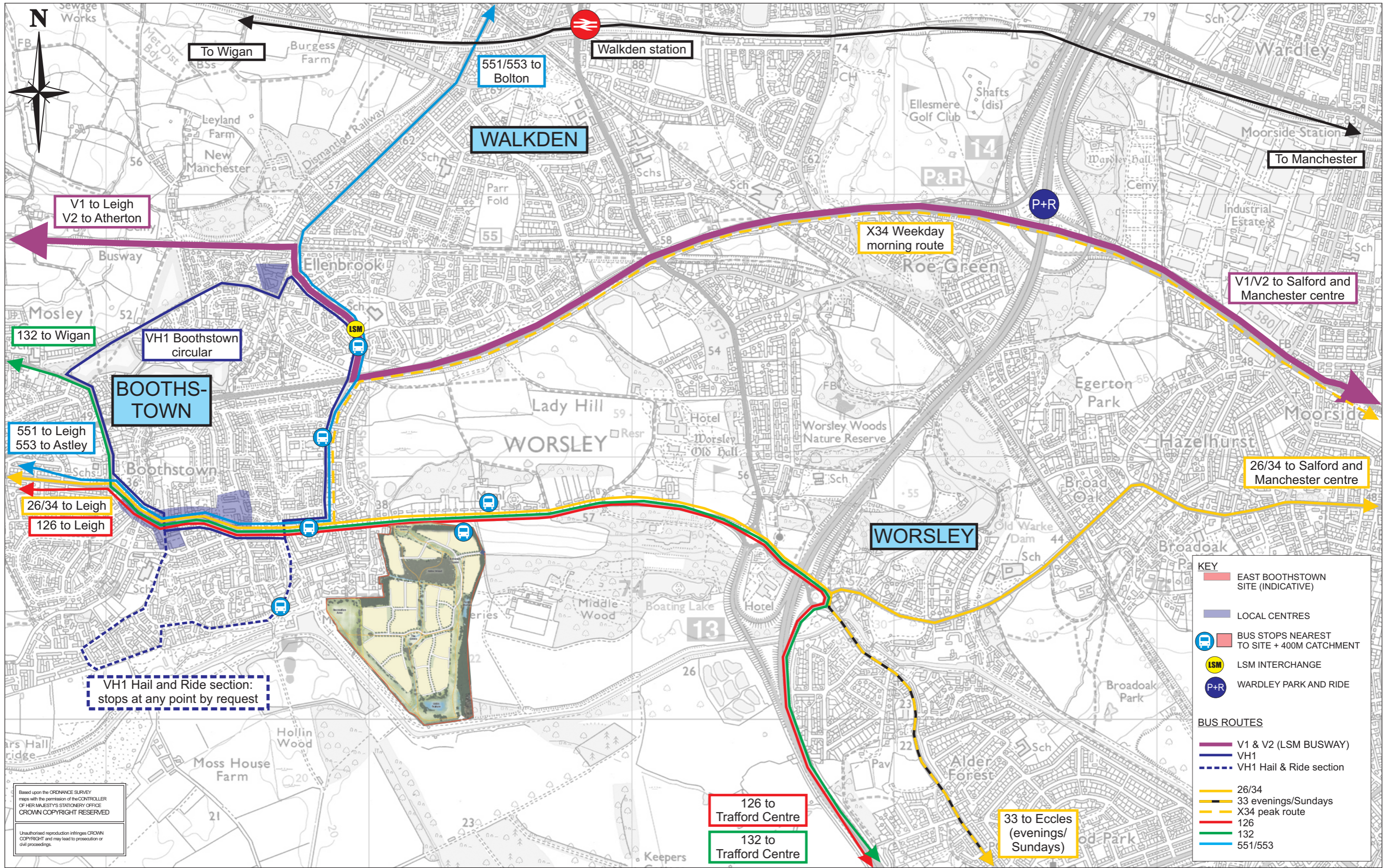
KEY

- Site
- 5 km Cycle Radius from Site
- Local Areas
- Town Centres
- Train Stations
- Metrolink Station
- National Cycle Route 55
- On Road Route - with facilities
- On Road Route - signposted without facilities
- On Road Route - suggested
- Traffic Free Route - good surface
- Traffic Free Route - rough surface
- Future Canal Footpath Extension

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<p>the Traffic, Transport & Highway Consultancy</p>	Drawing No M16002(OA18)-C-005	Rev .	GREATER MANCHESTER SPATIAL FRAMEWORK - EAST BOOTHSTOWN LOCAL CYCLE NETWORK	
	Date 13.04.2018	Rev Date .		
	Drawn By HG	Authorised CG	Scale NTS (A3)	FIGURE 4



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KEY

- EAST BOOTHSTOWN SITE (INDICATIVE)
- LOCAL CENTRES
- BUS STOPS NEAREST TO SITE + 400M CATCHMENT
- LSM INTERCHANGE
- WARDLEY PARK AND RIDE

BUS ROUTES

- V1 & V2 (LSM BUSWAY)
- VH1
- VH1 Hail & Ride section
- 26/34
- 33 evenings/Sundays
- X34 peak route
- 126
- 132
- 551/553



Drawing No	M16002(OA18)-C-004	Rev	.
Date	26.04.2018	Rev Date	.
Drawn By	HG	Authorised	CG

Scale	NTS
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GREATER MANCHESTER SPATIAL FRAMEWORK - EAST BOOTHSTOWN

PUBLIC TRANSPORT SERVICES

FIGURE 5

Appendix A

Proposed Masterplan



KEY

- East Boothstow Site
- Existing vegetation
- Existing watercourses and waterbodies
- Proposed vehicular access
- Proposed development area
- Proposed primary road
- Proposed secondary road
- Proposed green space
- Proposed trees and woodland
- Proposed waterbodies / wetlands
- Existing PROW
- Proposed key pedestrian routes
- Existing cycle routes
- Access to existing cycle routes

East Boothstow, Salford

Illustrative Development Framework Plan

March 2019

Appendix B

TRICS Assessment - Residential

TTHC OXFORD STREET MANCHESTER

Licence No: 734101

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
 VEHICLES

Filtering Stage 2 selection:

Parameter: Number of dwellings
 Actual Range: 20 to 372 (units:)
 Range Selected by User: 20 to 800 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/04 to 18/11/11

Selected survey days:

Monday	5 days
Tuesday	10 days
Wednesday	4 days
Thursday	9 days
Friday	5 days

Selected survey types:

Manual count	33 days
Directional ATC Count	0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	13
Edge of Town	18
Neighbourhood Centre (PPS6 Local Centre)	2

Selected Location Sub Categories:

Residential Zone	24
Out of Town	1
No Sub Category	8

TTHC OXFORD STREET MANCHESTER

Licence No: 734101

LIST OF SITES relevant to selection parameters

- | | | | |
|---|------------|---|---------------------|
| 1 | BD-03-A-01 | SEMI DETACHED, LUTON
NEW BEDFORD ROAD | BEDFORDSHIRE |
| | | LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 131
Survey date: THURSDAY 08/07/04 | Survey Type: MANUAL |
| 2 | BD-03-A-02 | SEMI DETACHED, LUTON
RIDDY LANE | BEDFORDSHIRE |
| | | LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 82
Survey date: TUESDAY 06/07/04 | Survey Type: MANUAL |
| 3 | CB-03-A-03 | SEMI DETACHED, WORKINGTON
HAWKSHEAD AVENUE | CUMBRIA |
| | | WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY 20/11/08 | Survey Type: MANUAL |
| 4 | CB-03-A-04 | SEMI DETACHED, WORKINGTON
MOORCLOSE ROAD
SALTERBACK
WORKINGTON | CUMBRIA |
| | | Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 | Survey Type: MANUAL |
| 5 | CH-03-A-02 | HOUSES/FLATS, CREWE
SYDNEY ROAD | CHESHIRE |
| | | CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 174
Survey date: TUESDAY 14/10/08 | Survey Type: MANUAL |
| 6 | CH-03-A-06 | SEMI -DET./BUNGALOWS, CREWE
CREWE ROAD | CHESHIRE |
| | | CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY 14/10/08 | Survey Type: MANUAL |
| 7 | CW-03-A-02 | SEMI D./DETACHED, TRURO
BOSVEAN GARDENS | CORNWALL |
| | | TRURO
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: TUESDAY 18/09/07 | Survey Type: MANUAL |
| 8 | DC-03-A-01 | DETACHED, POOLE
ISAACS CLOSE | DORSET |
| | | POOLE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 51
Survey date: WEDNESDAY 16/07/08 | Survey Type: MANUAL |

TTHC OXFORD STREET MANCHESTER

Licence No: 734101

LIST OF SITES relevant to selection parameters (Cont.)

9	DS-03-A-01 THE AVENUE HOLMESDALE DRONFIELD Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings: 20 Survey date: THURSDAY 22/06/06	SEMI D./TERRACED, DRONFIELD	DERBYSHIRE	Survey Type: MANUAL
10	ES-03-A-02 SOUTH COAST ROAD PEACEHAVEN Edge of Town Residential Zone Total Number of dwellings: 37 Survey date: FRIDAY 18/11/11	PRIVATE HOUSING, PEACEHAVEN	EAST SUSSEX	Survey Type: MANUAL
11	EX-03-A-01 MILTON ROAD CORRINGHAM STANFORD-LE-HOPE Edge of Town Residential Zone Total Number of dwellings: 237 Survey date: TUESDAY 13/05/08	SEMI-DET., STANFORD-LE-HOPE	ESSEX	Survey Type: MANUAL
12	GM-03-A-10 BUTT HILL DRIVE PRESTWICH MANCHESTER Edge of Town Residential Zone Total Number of dwellings: 29 Survey date: WEDNESDAY 12/10/11	DETACHED/SEMI, MANCHESTER	GREATER MANCHESTER	Survey Type: MANUAL
13	LC-03-A-22 CLIFTON DRIVE NORTH BLACKPOOL Edge of Town Residential Zone Total Number of dwellings: 98 Survey date: TUESDAY 18/10/05	BUNGALOWS, BLACKPOOL	LANCASHIRE	Survey Type: MANUAL
14	LC-03-A-29 REVIDGE ROAD FOUR LANE ENDS BLACKBURN Edge of Town Residential Zone Total Number of dwellings: 185 Survey date: THURSDAY 10/06/04	DETACHED/SEMI D., BLACKBURN	LANCASHIRE	Survey Type: MANUAL
15	LN-03-A-01 BRANT ROAD BRACEBRIDGE LINCOLN Edge of Town Residential Zone Total Number of dwellings: 150 Survey date: TUESDAY 15/05/07	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	Survey Type: MANUAL

TTHC OXFORD STREET MANCHESTER

Licence No: 734101

LIST OF SITES relevant to selection parameters (Cont.)

16	LN-03-A-02	MIXED HOUSES, LINCOLN HYKEHAM ROAD	LINCOLNSHIRE
		LINCOLN Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 186 Survey date: MONDAY 14/05/07	Survey Type: MANUAL
17	MS-03-A-01	TERRACED, RUNCORN PALACE FIELDS AVENUE	MERSEYSIDE
		RUNCORN Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Number of dwellings: 372 Survey date: THURSDAY 06/10/05	Survey Type: MANUAL
18	NT-03-A-03	SEMI DETACHED, KIRKBY-IN-ASHFD B6018 SUTTON ROAD	NOTTINGHAMSHIRE
		KIRKBY-IN-ASHFIELD Edge of Town Residential Zone Total Number of dwellings: 166 Survey date: WEDNESDAY 28/06/06	Survey Type: MANUAL
19	NY-03-A-01	MIXED HOUSES, NORTHALLERTON GRAMMAR SCHOOL LANE	NORTH YORKSHIRE
		NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 52 Survey date: TUESDAY 25/09/07	Survey Type: MANUAL
20	NY-03-A-05	HOUSES AND FLATS, RIPON BOROUGHBRIDGE ROAD	NORTH YORKSHIRE
		RIPON Edge of Town No Sub Category Total Number of dwellings: 71 Survey date: MONDAY 22/09/08	Survey Type: MANUAL
21	NY-03-A-06	BUNGALOWS/SEMI DET., BBDGE HORSEFAIR	NORTH YORKSHIRE
		BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 115 Survey date: FRIDAY 14/10/11	Survey Type: MANUAL
22	NY-03-A-07	DETACHED/SEMI, BOROBRIDGE CRAVEN WAY	NORTH YORKSHIRE
		BOROUGHBRIDGE Edge of Town No Sub Category Total Number of dwellings: 23 Survey date: TUESDAY 18/10/11	Survey Type: MANUAL

TTHC OXFORD STREET MANCHESTER

Licence No: 734101

LIST OF SITES relevant to selection parameters (Cont.)

23	SF-03-A-01	SEMI DETACHED, IPSWICH	SUFFOLK
	A1156 FELIXSTOWE ROAD		
	RACECOURSE		
	IPSWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	77	
	Survey date: WEDNESDAY	23/05/07	Survey Type: MANUAL
24	SF-03-A-02	SEMI DET./TERRACED, IPSWICH	SUFFOLK
	STOKE PARK DRIVE		
	MAIDENHALL		
	IPSWICH		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	230	
	Survey date: THURSDAY	24/05/07	Survey Type: MANUAL
25	SF-03-A-03	MIXED HOUSES, BURY ST EDMDS	SUFFOLK
	BARTON HILL		
	FORNHAM ST MARTIN		
	BURY ST EDMUNDS		
	Edge of Town		
	Out of Town		
	Total Number of dwellings:	101	
	Survey date: MONDAY	15/05/06	Survey Type: MANUAL
26	SH-03-A-04	TERRACED, SHREWSBURY	SHROPSHIRE
	ST MICHAEL'S STREET		
	SHREWSBURY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings:	108	
	Survey date: THURSDAY	11/06/09	Survey Type: MANUAL
27	TV-03-A-01	MIXED HOUSES/FLATS, HARTLEPL	TEES VALLEY
	POWLETT ROAD		
	HARTLEPOOL		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total Number of dwellings:	225	
	Survey date: THURSDAY	14/04/05	Survey Type: MANUAL
28	WL-03-A-01	SEMI D./TERRACED W. BASSETT	WILTSHIRE
	MAPLE DRIVE		
	WOOTTON BASSETT		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	99	
	Survey date: MONDAY	02/10/06	Survey Type: MANUAL
29	WM-03-A-01	TERRACED, COVENTRY	WEST MIDLANDS
	FOLESHILL ROAD		
	FOLESHILL		
	COVENTRY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Number of dwellings:	79	
	Survey date: FRIDAY	03/02/06	Survey Type: MANUAL

TTHC OXFORD STREET MANCHESTER

Licence No: 734101

LIST OF SITES relevant to selection parameters (Cont.)

30	WM-03-A-03	MIXED HOUSING, COVENTRY	WEST MIDLANDS
		BASELEY WAY	
		ROWLEYS GREEN	
		COVENTRY	
		Edge of Town	
		Residential Zone	
		Total Number of dwellings:	84
		Survey date: MONDAY	24/09/07
			Survey Type: MANUAL
31	WO-03-A-02	SEMI DETACHED, REDDITCH	WORCESTERSHIRE
		MEADOWHILL ROAD	
		REDDITCH	
		Edge of Town	
		No Sub Category	
		Total Number of dwellings:	48
		Survey date: TUESDAY	02/05/06
			Survey Type: MANUAL
32	WO-03-A-03	DETACHED, KIDDERMINSTER	WORCESTERSHIRE
		BLAKEBROOK	
		BLAKEBROOK	
		KIDDERMINSTER	
		Suburban Area (PPS6 Out of Centre)	
		Residential Zone	
		Total Number of dwellings:	138
		Survey date: FRIDAY	05/05/06
			Survey Type: MANUAL
33	WO-03-A-06	DET./TERRACED, BROMSGROVE	WORCESTERSHIRE
		ST GODWALDS ROAD	
		ASTON FIELDS	
		BROMSGROVE	
		Edge of Town	
		No Sub Category	
		Total Number of dwellings:	232
		Survey date: THURSDAY	30/06/05
			Survey Type: MANUAL

TTHC OXFORD STREET MANCHESTER

Licence No: 734101

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	33	119	0.075	33	119	0.283	33	119	0.358
08:00 - 09:00	33	119	0.152	33	119	0.413	33	119	0.565
09:00 - 10:00	33	119	0.177	33	119	0.215	33	119	0.392
10:00 - 11:00	33	119	0.154	33	119	0.194	33	119	0.348
11:00 - 12:00	33	119	0.189	33	119	0.185	33	119	0.374
12:00 - 13:00	33	119	0.202	33	119	0.186	33	119	0.388
13:00 - 14:00	33	119	0.186	33	119	0.178	33	119	0.364
14:00 - 15:00	33	119	0.194	33	119	0.199	33	119	0.393
15:00 - 16:00	33	119	0.295	33	119	0.218	33	119	0.513
16:00 - 17:00	33	119	0.331	33	119	0.198	33	119	0.529
17:00 - 18:00	33	119	0.396	33	119	0.234	33	119	0.630
18:00 - 19:00	33	119	0.286	33	119	0.224	33	119	0.510
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			2.637			2.727			5.364

Parameter summary

Trip rate parameter range selected: 20 - 372 (units:)
 Survey date range: 01/01/04 - 18/11/11
 Number of weekdays (Monday-Friday): 33
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 1

Appendix C

RHS Access Junction

HEALTH AND SAFETY INFORMATION








Hazards, that would not be foreseen by a reasonably competent contractor, have been identified by the designer.

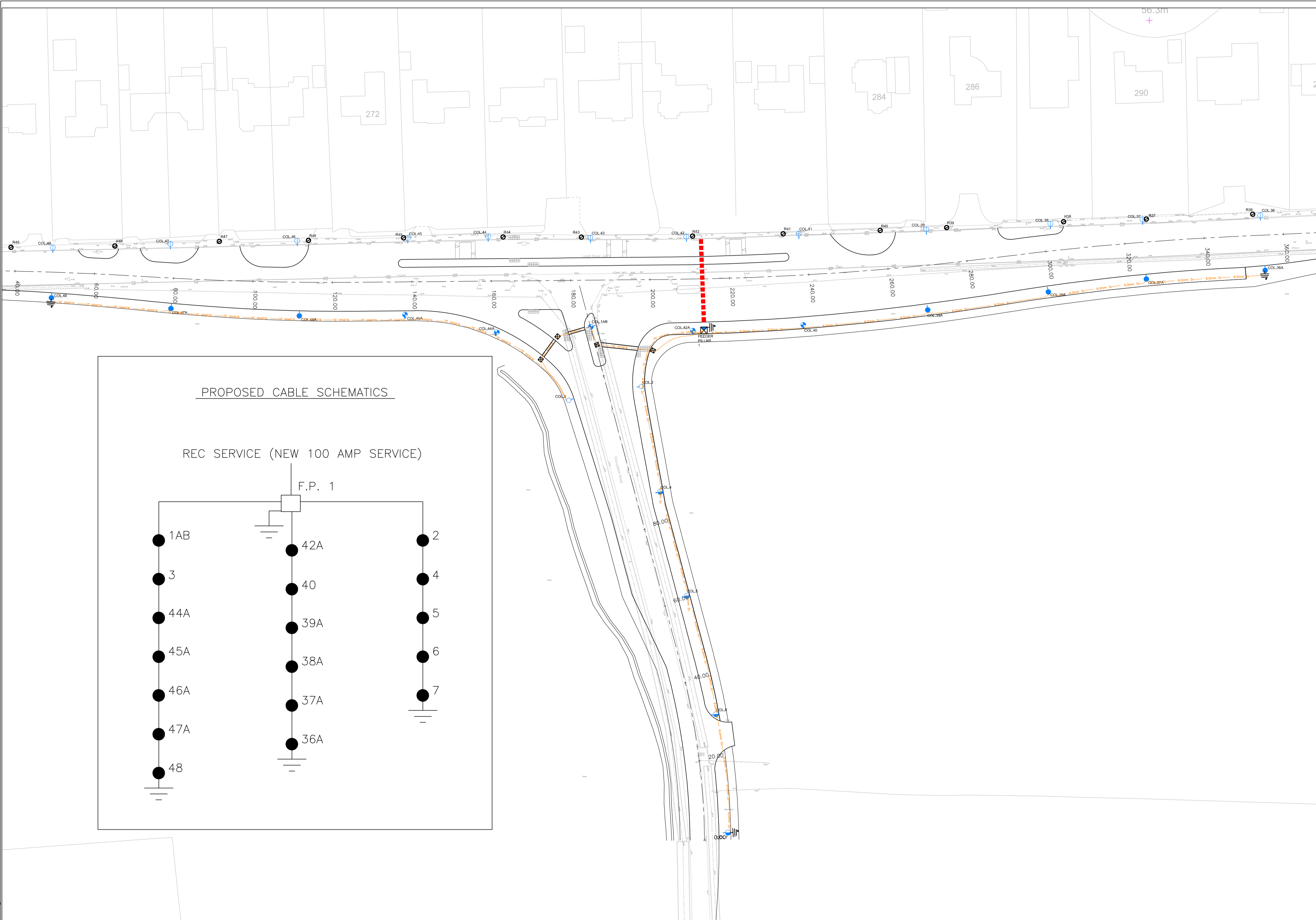
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DRAWINGS. ANY DISCREPANCIES, ERRORS OR OMISSIONS TO BE BROUGHT TO THE ATTENTION OF URBAN VISION.
2. ALL DIMENSIONS TO BE CHECKED BEFORE COMMENCEMENT OF WORK ON SITE.

SPECIFICATION

1. ALL WORKS TO COMPLY WITH THE CITY OF SALFORD STANDARD SPECIFICATION FOR HIGHWAY POWER SUPPLIES AND STREET FURNITURE INCLUDING ALL STANDARDS AND REGULATIONS LISTED WITHIN.
2. ANY CHANGE IN SPECIFICATION MUST BE AGREED IN WRITING WITH THE STREET LIGHTING ENGINEER.
3. ALL STREET LIGHTING INSTALLATION CONTRACTORS, WORKING ON THE ADOPTED HIGHWAY, SHALL BE AUTHORISED BY SALFORD CITY COUNCIL, PRIOR TO OPERATING ON SITE.
4. ALL STREET LIGHTING COLUMN POSITIONS TO BE MARKED ON SITE BY A STREET LIGHTING ENGINEERS REPRESENTATIVE. FOOTWAY TO BE MADE UP TO A MINIMUM OF BASE COURSE PRIOR TO MARKING/ERECTION ON SITE.
5. EXISTING COLUMNS/LANTERNS TO BE REMOVED FROM SITE.
6. INSPECTION CHAMBERS TO BE HIGH DENSITY POLYETHYLENE 450 X 450MM CLEAR OPENING WITH COMPOSITE POLYESTER COVER MARKED 'STREET LIGHTING', AND GALVANISED STEEL FRAME
7. L.A. CABLE TO BE 3 CORE XLPE/SWA/PVC Cu (SEE SCHEDULE FOR SIZE) INSTALLED IN A 50mm² dia. ORANGE, 5mm WALLED, SMOOTH BORED POLYETHYLENE, MARKED 'STREET LIGHTING' DUCT.
8. L.A. CABLE TERMINATIONS TO BE, TOFCO SMK F144DP & F144DP/2F-BW GLAND.
9. CABLE DUCT FOR L.A. CABLE IN CARRIAGEWAY TO BE 2No.100mm² dia. ORANGE, 5mm WALLED, SMOOTH BORED POLYETHYLENE, MARKED 'STREET LIGHTING' (DEPTH TO INVERT 1000mm)
10. ALL CABLE DUCT RUNS TO BE AGREED ON SITE.
11. ROAD CROSSING DUCT FOR ENW TO BE COLOURED RED DUCTING SHALL BE TO ENW SPECIFICATION AND THIS SHOULD BE CONFIRMED PRIOR TO INSTALLATION.

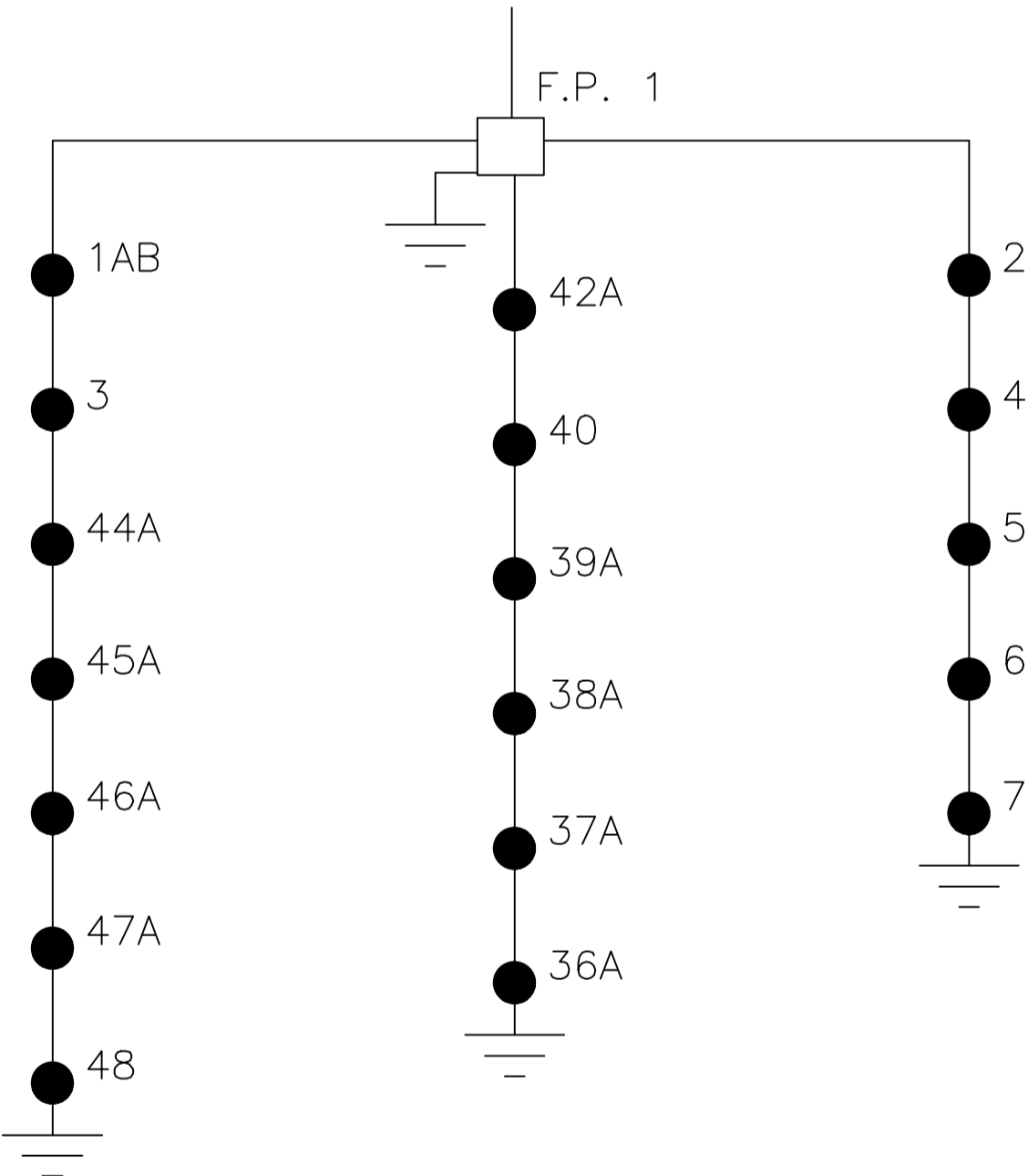
KEY

-  EXISTING COLUMN, SEE NOTE 5
-  3c Cu XLPE/SWA/PVC CABLE/50mm² ORANGE DUCT, SEE NOTE 7
-  100mm² ORANGE ROAD CROSSING DUCT, SEE NOTE 9
-  PROPOSED FEEDER PILLAR
-  PROPOSED CHAMBER, SEE NOTE 6
-  PROPOSED EARTH ELECTRODE.
-  PROPOSED REC DUCT, SEE NOTE 11




PROPOSED CABLE SCHEMATICS


REC SERVICE (NEW 100 AMP SERVICE)





PROPOSED


ALL LANTERNS TO BE SUPPLIED TO SCC SPEC. INCLUDING DIMMING TO 70% 00.00 TO 06.00 WITH ZODION SS8 PEC (1.0.5) AND 20 YEAR WARRANTY


 PROPOSED GALVANISED TUBULAR STEEL LIGHTING COLUMN OF 10M NOMINAL HEIGHT WITH PLANTED BASE AND POST TOP MOUNTED PHILIPS LUMA 1 R3 19KLM - COOL WHITE (5 DEGREES), WITH ELECTRONIC CONTROL GEAR AND PHOTOELECTRIC CONTROL UNIT 55LUX (RATIO 1.0.5)
LANTERN MATRIX- LUMA 1A R3 DS-CW 1 18000 CW LED

 PROPOSED GALVANISED TUBULAR STEEL LIGHTING COLUMN OF 10M NOMINAL HEIGHT WITH PLANTED BASE AND TWIN POST TOP MOUNTED PHILIPS LUMA 1 R3 19KLM - COOL WHITE (5 DEGREES), WITH ELECTRONIC CONTROL GEAR AND PHOTOELECTRIC CONTROL UNIT 55LUX (RATIO 1.0.5)
LANTERN MATRIX- LUMA 1A R3 DS-CW 1 18000 CW LED

 PROPOSED GALVANISED TUBULAR STEEL LIGHTING COLUMN OF 10M NOMINAL HEIGHT WITH PLANTED BASE AND POST TOP MOUNTED PHILIPS LUMA 1 R3 13.5KLM - COOL WHITE (5 DEGREES), WITH ELECTRONIC CONTROL GEAR AND PHOTOELECTRIC CONTROL UNIT 55LUX (RATIO 1.0.5)
LANTERN MATRIX- LUMA 1A R3 DS-CW 1 13500 CW LED

 PROPOSED GALVANISED TUBULAR STEEL LIGHTING COLUMN OF 10M NOMINAL HEIGHT WITH PLANTED BASE AND POST TOP MOUNTED PHILIPS LUMA 1 R3 13.5KLM - COOL WHITE (5 DEGREES), WITH ELECTRONIC CONTROL GEAR AND PHOTOELECTRIC CONTROL UNIT 55LUX (RATIO 1.0.5)
LANTERN MATRIX- LUMA 1A R3 DS-CW 1 13500 CW LED

 PROPOSED GALVANISED TUBULAR STEEL LIGHTING COLUMN OF 8M NOMINAL HEIGHT WITH PLANTED BASE AND POST TOP MOUNTED PHILIPS MINI LUMA R4 4.2KLM - COOL WHITE (5 DEGREES), WITH ELECTRONIC CONTROL GEAR AND PHOTOELECTRIC CONTROL UNIT 55LUX (RATIO 1.0.5)
LANTERN MATRIX- MINI LUMA R4 DS-CW 1 4200 CW LED

 PROPOSED GALVANISED TUBULAR STEEL LIGHTING COLUMN OF 8M NOMINAL HEIGHT WITH PLANTED BASE AND POST TOP MOUNTED PHILIPS LUMA 1 R1 10KLM - COOL WHITE (5 DEGREES), WITH ELECTRONIC CONTROL GEAR AND PHOTOELECTRIC CONTROL UNIT 55LUX (RATIO 1.0.5)
LANTERN MATRIX- LUMA 1A R1 DS-CW 1 10000 CW LED

rev	description	date	drawn	chk	app



Urban Vision Partnership Ltd, Emerson House, Albert Street, Eccles, Manchester, M30 0TE. T 0161 779 4800

client
SALFORD CITY COUNCIL

project
**RHS BRIDGEWATER
LEIGH ROAD RHS ACCESS**

drawing
PROPOSED STREET LIGHTING

approval status	date
<input type="radio"/> Feasibility / Sketch	OCT'16
<input type="radio"/> Design	NJG
<input checked="" type="radio"/> Tender	checked
<input type="radio"/> Construction	approved
<input type="radio"/> As Built	

project ref:
UV07149 scale @ A1
drawing number:
UV07149-1300-DR-0001 1:500
revision:
-

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