LONDON BOROUGH OF CROYDON

To: Croydon Council website Access Croydon & Town Hall Reception

STATEMENT OF EXECUTIVE DECISIONS MADE BY THE CABINET MEMBER FOR TRANSPORT AND ENVIRONMENT ON 29th July 2015

This statement is produced in accordance with Regulation 13 of the Local Authorities (Executive Arrangements) Meetings and Access to Information) (England) Regulations 2012.

The following apply to the decisions listed below:

Reasons for these decisions: are contained in the attached Part A report

Other options considered and rejected: are contained in the attached Part A report

Details of conflicts of Interest declared by the Cabinet Member: none

Note of dispensation granted by the head of paid service in relation to a declared conflict of interest by that Member: none

The Leader of the Council has delegated to the Cabinet Member the power to make the executive decisions set out below:

CABINET MEMBER'S EXECUTIVE DECISION REFERENCE NO. 42/15/TE Decision title: Quietway Route 5 (Waterloo to Croydon) -Design Amendments

Having carefully read and considered the report and the requirements of the Council's public sector equality duty in relation to the issues detailed in the body of the report, the Cabinet Member for Transport and Environment,

RESOLVED

- 1. To approve amendments to the original design interventions listed below, and as shown at Appendix 2, which were presented to Traffic Management Advisory Committee (TMAC) on 29 April 2015 as Cycle Quietways Route 77.
 - Intervention 32: Brook Rd j/w Melfort Rd (Bensham Manor Ward)
 - Intervention 33: Brigstock Rd (Bensham Manor Ward)
 - Intervention 34: Pawsons Rd between Pitt Rd and Mayo Rd (Selhurst Ward)
 - Intervention 36: Northcote Rd between its j/w The Crescent and Sydenham Rd (Selhurst Ward)

- Intervention 37: Sydenham Rd j/w St James' Rd (Selhurst Ward and Fairfield Ward)
- Intervention 38: Sydenham Rd (Fairfield Ward)
- Intervention 38: Sydenham Rd j/w Dingwall Rd (Fairfield Ward)

Additional Intervention

• Intervention 32: Brook Rd j/w Quadrant Road.

Experimental Order: Trail Closure

- Intervention 37: Sydenham Rd j/w Gladstone Rd (Selhurst Ward)
- 2. That the General Manager of Operations and Infrastructure (Highways and Parking) be delegated authority to carry out Statutory Consultation and make the necessary Traffic Management Orders under the Road Traffic Regulation Act 1984 (as amended) in order to implement the Recommendation above; and
- 3. Note that where material objections are received these will be reported back to a future meeting of the Traffic Management Advisory Committee for determination by the Cabinet Member for Transport and Environment.

Date: 15 September 2015

REPORT TO:	Councillor Kathy Bee,
	Cabinet Member for Transport and Environment for decision under delegated authority
SUBJECT:	Quietway Route 5 (Waterloo to Croydon)
	Design Amendments
LEAD OFFICER:	Jo Negrini,
	Executive Director Place
CABINET MEMBER:	Councillor Kathy Bee,
	Cabinet Member for Transport and Environment
WARDS:	NORBURY, UPPER NORWOOD, THORNTON HEATH,
	BENSHAM MANOR, SELHURST, FAIRFIELD
CORPORATE PRIORIT	

The proposal supports The Croydon Promise: Growth for All objectives including:

Croydon will be a place that is easy to move around

Genuine alternatives to the private car will be available, offering people the choice to travel by train, tram, bus, bicycle, or on foot

• Easier and safer to cycle in Croydon

We will raise the status of cycling as a means to travel around the borough aiming eventually to put Croydon on a par with the most cycle-friendly cities in Europe

• Better pedestrian links

Network of walkable routes will provide connections to key destinations including our interchange hubs where people will be able to easily change modes to cycle, bus, tram or rail.

AMBITIOUS FOR CROYDON & WHY ARE WE DOING THIS:

The proposals support ambitions for Croydon including:

- ambitious for a Croydon where everyone is proud to live and work
- give disabled people, pedestrians and cyclists greater protection and make their journeys safer
- work with residents to establish 'play streets', where children are able to play safely in front of their homes with their friends and where communities can meet
- seek to significantly increase the number of journeys in Croydon by bicycle by undertaking a fundamental review of how the council supports cycling

FINANCIAL IMPACT

There are no costs to be met by Croydon Council. All costs of delivering the Croydon leg of Quietways Route 5 will be fully met from the Transport for London's (TfL)

Quietways Budget.

KEY DECISION REFERENCE NO.:

Not a key decision

1. **RECOMMENDATIONS**

That the Cabinet Member for Transport and Environment under delegated authority from the Leader of the Council dated **10 July 2015**:

- 1.1. Consider and approve:
- 1.1.1 Amendments to the original design interventions listed below, and as shown at Appendix 2, which were presented to Traffic Management Advisory Committee (TMAC) on 29 April 2015 as Cycle Quietways Route 5.
 - Intervention 32: Brook Rd j/w Melfort Rd (Bensham Manor Ward)
 - Intervention 33: Brigstock Rd (Bensham Manor Ward)
 - Intervention 34: Pawsons Rd between Pitt Rd and Mayo Rd (Selhurst Ward)
 - Intervention 36: Northcote Rd between its j/w The Crescent and Sydenham Rd (Selhurst Ward)
 - Intervention 37: Sydenham Rd j/w Gladstone Rd (Selhurst Ward)
 - Intervention 37: Sydenham Rd j/w St James' Rd (Selhurst Ward and Fairfield Ward)
 - Intervention 37: Sydenham Rd (Fairfield Ward)
 - Intervention 37: Sydenham Rd j/w Dingwall Rd (Fairfield Ward)
- 1.1.2 An additional Intervention 32 at Brook Rd j/w Quadrant Road.
- 1.2 Delegate to the General Manager of Operations and Infrastructure (Highways and Parking) authority to carry out Statutory Consultation and make the necessary Traffic Management Orders under the Road Traffic Regulation Act 1984 (as amended) in order to implement Recommendation 1.1 above.
- 1.3 Note that where material objections are received these will be reported back to a future meeting of the Traffic Management Advisory Committee for determination by the Cabinet Member for Transport and Environment.

2. EXECUTIVE SUMMARY

- 2.1. This report provides details of amendments to the original key design interventions as presented to TMAC on 29 April 2015 and one additional intervention. These design amendments have been developed by Sustrans.
- 2.2. The amendments arose as a result of concerns raised in the Road Safety Audit which was carried out on the original designs. London Borough of Croydon (LBC) Officers have reviewed the amended designs and are satisfied that these are deliverable and are suitable to Croydon's Highway infrastructure. This has

been an on-going process which has resulted in the refinement of the designs. The majority of the fundamental design issues have been resolved as detailed in this report.

- 2.3. They require urgent approval so as to meet TfL's spring 2016 Quietways delivery deadline. Approval is required prior to undertaking the necessary public consultations. The results of which is to be presented to September 2015 TMAC.
- 2.4. <u>Please note;</u> the route number has been changed from Route 77 to Route 5 by TfL.

3. DETAIL

<u>Quietways</u>

- 3.1. Quietways are part of the Mayor of London's Cycling Vision to provide a network of routes on safer, lower-traffic back streets, aimed at new and less confident cyclists. They will be routes where people will want to cycle, by providing direct and comfortable journeys to key destinations across London, using parks and green spaces where suitable.
- 3.2. These routes will have easy to use signage and way finding to identify the routes and make it appeal to the less confident cyclists.
- 3.3. Quietways are a £120m programme to be delivered over 10 years.
- 3.4. The Quietways qualifying criteria defined by TfL and the Cycling Commissioner include:
 - Directness and cohesion
 - Attractiveness to users
 - Traffic composition and impact to other users
 - Buildability
 - Political support
 - Network priority

Quietway Route 5: Waterloo to Croydon

- 3.5. Much of the proposed 12 mile route already fulfills the Quietway criteria and the route utilises some good existing cycling infrastructure, notably parts of London Cycle Network routes 5 and 3.
- 3.6. The total cost of the entire Waterloo to Croydon Quietway Route 5 delivery outside of the <u>Central London Grid</u> is estimated to be £2,962,596.
- 3.7. The total cost of the package of measures which would be delivered in LBC is estimated to be £890k which will be met from TfL Quietways Budget.
- 3.8. Signage would also be provided at key locations (such as intersections) and at regular intervals along the route to ensure legibility for riders using both vertical signs and surface markings.

- 3.9. The overview of the proposed route through the Borough of Croydon, shown in <u>Appendix 1</u>.
- 3.10. LBC requested Sustrans to undertake Road Safety Audit (RSA) of their concept designs for the Croydon leg of Quietway Route 5 and they were received on 27 March 2015. The amendments described in this report are necessary so as to resolve the safety concerns identified in the RSA.
- 3.11. The amendments to the design of the interventions are listed below:

Intervention 32: Brook Road jw Melfort Road (Bensham Manor Ward)

3.12. The junction of Melfort Road and Brook Road forms a crossroad, with Melfort Road having the priority. There is a Zebra crossing on the northern arm of Melfort Road. Brook Road slopes up eastbound across the junction.

Currently cyclists using Brook Road face potentially long wait times to cross Melfort Road and the heavy traffic on Melfort Road can make it an intimidating junction for cyclists.

- 3.13. Originally it was proposed to:
 - Alter the junction priority from Melfort Road to give priority to the Quietway alignment on Brook Road. This will also slow traffic on Melfort Road.
 - Proposed calming on Brook Road to consist of centre line removal and introducing 1.5m wide advisory cycle lanes.
 - Existing zebra crossing on Melfort Road to be relocated approximately 5m further from its junction with Brook Road, to make space for give way and zig zag markings, improve inter-visibility, and allow a medium sized vehicle to clear the crossing and wait at the give-way line.
 - Introduce 'at any time' parking restrictions on all approaches to the junction to improve sightlines.
- 3.14. Amendments to the original proposals:
 - Remove the existing zebra crossing on Melfort Road.
 - Build out the kerbs at the junction Brook Road and Melfort Road tightening the junction to shorten pedestrian crossing distances. The proposed kerb build outs also improve the alignment of the newly positioned uncontrolled crossing facilities onto the pedestrian desire line.
 - In addition to the previously proposed double yellow line (DYL) on all approaches to the junction, it is also proposed to upgrade the existing single yellow line (SYL) on the south eastern side of Brook Road, from its junction with Melfort Road to Beulah Road, to DYL.
 - Introduce red surfacing on both entries to Melfort Road raising awareness of the priority change.
 - Maintain the extents of the existing raised table, but reduce the length of the ramps to make the table more effective in reducing vehicular speeds. Ramp gradient to be no more than 1:20.
 - To realign the centre line markings along Brook Road to assist in introduce an advisory cycle lane.
- 3.15. For further details see drawing number HWY-CYC-1265-005-01 attached as part of <u>Appendix 2</u>.

Additional Intervention 32: Brook Road jw Quadrant Road (Bensham Manor Ward)

3.16. This existing layout of this junction has wide entries which encourages high vehicular speeds.

The junction has single yellow lines on all approaches.

- 3.17. Proposed to:
 - Buildout the kerblines tightening the junction radii to reduce the turning speeds and decrease the crossing distance for pedestrians.
 - Upgrade the existing 'SYL' operational Mon-Sat from 8am to 5pm to 'DYL' at any time restrictions on all approaches to the junction.
 - Upgrade the existing SYL to DYL on the south-eastern side of Brook Road between Melfort Road and the north-south arm of Brook Road.
- 3.18. For further details see drawing number HWY-CYC-1265-005-01 attached as part of <u>Appendix 2</u>.

Intervention 33: Brook Rd jw Brigstock Road (Bensham Manor Ward)

3.19. The junction of Brook Road and Brigstock Road forms a crossroad where Brigstock Road, a wide high street and bus route, has priority. There is a zebra crossing over Brigstock Road on the eastern junction arm.

Potentially long wait times and intimidating for less confident cyclists crossing Brigstock Road.

Sustrans originally offered two options for this junction, which was to introduce pedestrian refuge islands (Option 1) to create a central reservation pocket for cyclist or to signalise the junction (Option 2).

3.20. Following safety concerns raised by the Road Safety Audit and LBC officers regarding the proposed refuge islands and central reservation pocket for cyclists, the preferred option for this junction is to have it signalised for cyclists crossing Brigstock Road.

Signalisation

- 3.21. Originally proposed to:
 - Signalise the junction, with pedestrian crossings and advance stop lines for cyclists on all arms.
 - The signals will have a pedestrian phase on request.
 - Remove the existing zebra crossing.
 - Buildout the kerbs to improve the alignment of the junction and to shorten the crossing distance
- 3.22. Additionally it is proposed to:
 - Introduce yellow box to keep the junction clear at all time.

- Upgrade the single yellow lines on approach to the junction to double yellow lines.
- Reduction of 1 pay and display shared use parking bay on Brook Road.
- Relocate the existing bus top on Brigstock Road further away from the junction with Boswell Road.
- 3.23. For further details see drawing number HWY-CYC-1265-005-02 attached as part of <u>Appendix 2</u>.

Intervention 34: Pitt Rd jw Pawsons Rd and Pawsons Rd jw Mayo Rd (Selhurst Ward)

3.24. Pawsons Road has two mini-roundabouts at its junctions with Pitt Road and Mayo Road respectively. Pawsons Road is fairly wide with central hatchings and formalised footway parking on either side. It also has 2 speed cushions and a central pedestrian refuge island.

Mini-roundabouts can be intimidating to cyclists. Speed cushions, traffic islands and parking encourage erratic swerving behaviour from motorists.

- 3.25. Originally proposed to:
 - Remove the two existing mini-roundabouts at the junctions of Pitt Road and Mayo Road with Pawsons Road and replace with a give way priority to favour the Quietway Route, to maintain the traffic calming effect.
 - Remove the existing informal refuge island and replace it with a raised zebra crossing. This improves the level of service to pedestrians and serves as traffic calming.
 - The proposed zebra crossing with its associated zig-zag markings will result in the loss of approximately 7 footway parking spaces. All other formalised footway parking to remain.
 - Remove existing speed cushions, centre line and central hatch markings.
 - Install 3 new sinusoidal humps on Pawsons Road. One before either approach to the proposed give ways at the junctions with Pitt Road and Mayo Road respectively and another between these two junctions.
- 3.26. Additionally it is proposed to:
 - Introduce kerb buildouts providing a deflection to slow vehicles entering this section of the quietway and prevent illegal parking on the junction. The junction treatment will also serve to enhance the priority change.
 - Apply red surfacing to emphasis the priority change.
 - Introduce some additional double yellow lines.
- 3.27. For further details see drawing number HWY-CYC-1265-005-03 attached as part of <u>Appendix 2</u>.

Intervention 36: Northcote Rd/Selhurst Rd and its jw The Crescent and Sydenham Rd (Selhurst Ward)

- 3.28. Northcote Road is a busy bus route. The Crescent joins it at a T-junction with tight corner radii. Sydenham Road joins it at a wide T-junction with a speed hump and informal pedestrian crossing with a pedestrian refuge island near the junction mouth. A zebra crossing sits on Northcote Road between the The Crescent and Sydenham Road.
- 3.29. Currently there is informal/illegal footway parking taking place on both side of Northcote Road west of its junction with The Crescent. Due to the restrained dimensions of the carriageway and footways in this location it would <u>not</u> be possible to formally allow parking to take place on both the northern and southern footways.
- 3.30. Northcote Road is a busy and intimidating road for less confident cyclists, especially when turning right into Sydenham Road.
- 3.31. The original proposal is being discarded as the highway lacked the physical space to accommodate the design.
- 3.32. The new proposal include:
 - Removing the existing Zebra Crossing on Northcote Road, between the The Crescent and Sydenham Road.
 - Introducing two new raised Zebra Crossings, one on Selhurst Road immediately east of its junction with Sydenham Road and the other on Northcote Road immediately west of its junction with The Crescent. These will provide pedestrian crossing facilities; introduce breaks in traffic flows and slow traffic on approach to this section of the Quietway.
 - Introducing a Sinusoidal Speed hump on Northcote Road, between The Crescent and Sydenham Road to maintain low vehicular speeds between the raised tables.
 - Building out the footways on the northern side of Northcote Road/Selhurst Road from its junctions with The Crescent and Sydenham Road to reduce the vehicular running lanes to two 3 metres lanes promoting cyclists into the primary position.
 - Introduce a 1.5m wide pedestrian refuge island on Northcote Road just west of its junction with The Crescent. The island allows for a protected right turn pocket for cyclists on Northcote Road across the junction of The Crescent.
 - Introducing a kerb buildout on the entry into Sydenham Road to tighten the junction and decrease turning speeds. The existing refuge islands to be relocated to accommodate the proposed buildout and improve pedestrian crossing facilities.
 - Upgrade the existing single yellow line waiting to restrictions to double yellow lines for this section of Quietway to keep the carriageway clear to traffic at all times.
 - Upgrade the existing single yellow line waiting to restrictions to double yellow lines on the southern side of Northcote Road from the junction of The Crescent to its junction with Beaconsfield Road to remove the illegal/unsafe parking on the footway.
- 3.33. The introduction of the raised zebra crossing with the 1.5 metre refuge island will reduce the parking capacity on the footway west of the junction with The Crescent. Under this proposal there is a loss of two footway parking spaces on the northern side Northcote Road if the parking is formalised. This does not

account for the loss of spaces on the southern side of Northcote Road as the carriageway dimensions does not allow for them in a formal arrangement. Please see <u>Appendix 4</u> showing the constrained carriageway layout unable to formally accommodate the current parking practice of parking on both footways on Northcote Road.

3.34. For further details see drawing number HWY-CYC-1265-005-05 attached as part of <u>Appendix 2</u>.

Intervention 37: Sydenham Rd jw Gladstone Rd (Selhurst Ward)

3.35. Sydenham Road is a long, straight residential road with parking on both sides in places and speed cushions in places. There is a narrow rail bridge midway with mini-roundabout at its junction with Gladstone Road.

Gladstone Road is currently used as a rat-run from Gloucester Road to Sydenham Road by motorists avoiding the junction of Whitehorse Road and St James's Road. The motorists also avoid the heavily calmed and heavily parked Gloucester Road.

Long, straight road encourages rat-running and speeding vehicles resulting in an intimidating environment to cycle in.

- 3.36. Originally proposed to;
 - Replace the two existing speed humps on the Sydenham Road Bridge with sinusoidal humps.
 - Remove the existing mini-roundabout at the junction of Sydenham Road and Gladstone Road. This gives priority to the Quietway on Sydenham Road.
 - Introduce a point closure at the entry of Gladstone Road to Sydenham Road, allowing access to cyclists only. This will reduce the rat-run traffic northbound on Sydenham Road.
 - Create a turning facility at the point closure on Gladstone to assist small vehicles.
- 3.37. The closure will serve to reduce the number of vehicles using Sydenham Road.
- 3.38. Additionally it is proposed:
 - Upgrade the existing single yellow lines (SYL) to double yellow to prevent park cars impeding visibility. The existing SYL are operational Mon to Sat from 7am to 7pm.

Experimental Closure

- 3.39. Officers recommend implementing the partial road closure on Gladstone Road under an experimental order to allow the consultation (trial) to run for 6 months to gather data on the effects of the closure. After the 6 month period the closure can be removed or made permanent pending the results of the trial.
- 3.40. For further details see drawing number HWY-CYC-1265-005-06 attached as part of <u>Appendix 2</u>.

Intervention 37: Sydenham Rd jw James's Rd (Selhurst Ward and Fairfield Ward)

- 3.41. This junction is signalised with narrow approach lanes into the junction.
- 3.42. Originally proposed to;
 - Introduce Advance Stop Lines (ASL's) on all arms of the junction to assist cyclists making turning movements and get ahead of motor vehicles.
- 3.43. Additionally it is proposed to:
 - Introduce a sinusoidal speed hump on Sydenham Road on the approach to its junction with St James' Road.
 - Introduce lead in lanes to gain easy access to the proposed ASL's where carriageway width allows.
- 3.44. For further details see drawing number HWY-CYC-1265-005-07 attached as part of <u>Appendix 2</u>.

Intervention 37: Sydenham Rd (Fairfield Ward)

- 3.45. There is currently no pedestrian crossing provision for St Mary's RC Junior School.
- 3.46. Originally proposed to;
 - Introduce a Zebra Crossing outside St Mary's RC Junior School. The zebra crossing and its associated zig zag markings are proposed to replace the existing school keep clear markings.
- 3.47. Amendments:
 - Minor relocation of the proposed Zebra Crossing as not to impede existing vehicular crossovers.
 - Introduce two sinusoidal speed humps, one either approaches to the crossing.
 - The new location of Zebra Crossing removes one parking space, however to negate this, a new bay will be added at the other end of the row of bays.
- 3.48. For further details see drawing number HWY-CYC-1265-005-08 attached as part of <u>Appendix 2</u>.

Intervention 37: Sydenham Rd jw Dingwall Rd (Fairfield Ward)

- 3.49. This junction is signalised.
- 3.50. Originally proposed to;
 - Introduce ASL on all 3 approaches to the junction to assist cyclists making turning movements and get ahead of motor vehicles.
- 3.51. Additionally it is proposed:
 - Reduce the width of the existing parking bays on Sydenham Road and Dingwall Road from 2.5 metre to 2 metre. This free up space to accommodate lead in cycle lanes.

- Introduce lead in lanes on all approaches to gain easy access to the proposed Advanced Stop Lines.
- 3.52. For further details see drawing number HWY-CYC-1265-005-09 attached as part of <u>Appendix 2</u>.

4. CONSULTATION

Statutory Consultation

- 4.1. The legal process requires that the formal consultation takes place in the form of Public Notices published in the London Gazette and a local paper (Croydon Guardian) together with relevant documents being made available for inspection at the council's principal offices. Although not a legal requirement, the Council also affixes street notices to lamp columns in order to ensure that as many people as possible are aware of the proposal.
- 4.2. Official bodies such as the Fire Brigade, Ambulance Service, Police, Freight and Road Haulage Associations will be consulted separately at the same time as the public notice. Other organisations are also consulted, depending on the relevance of the proposal.

5 FINANCIAL AND RISK ASSESSMENT CONSIDERATIONS

The effect of the decision

5.1. The decision has no direct financial consequences for the council.

Risks

5.2. There is a risk that if the schemes cannot be implemented, for example, by negative outcome of feasibility studies or consultation, TfL would then have to reallocate the funding either within Croydon or another London Borough.

Options

5.3. Should the schemes not be agreed then the do nothing option remains.

Savings/ Future efficiencies

- 5.4. The proposals are not expected to bring direct and short-term savings / efficiencies to the Council. However in the longer term, the implementation of Quietways and other such proposals to encourage cycling are intended to bring health benefits, thus reducing the health and care costs that might otherwise fall on the council.
- 5.5. Approved by: Dianne Ellender, Head of Finance and Deputy S151 officer

6. COMMENTS OF THE COUNCIL SOLICITOR AND MONITORING OFFICER

- 6.1. The Solicitor to the Council comments that Section 6, 124 and Part IV of Schedule 9 to the Road Traffic Regulation Act 1984 (as amended) provides powers to introduce, vary and implement Traffic Management Orders. In exercising this power, section 122 of the Act Imposes a duty on the Council to have regard (so far as practicable) to secure the expeditious, convenient and safe movement of vehicular and other traffic (including pedestrians) and the provision of suitable and adequate parking facilities on and off the highway. The Council must also have regard to such matters as the effect on the amenities of any locality affected.
- 6.2. The Council needs to comply with the necessary requirements of the Local Authorities Traffic Order Procedure (England and Wales) Regulations 1996 by giving the appropriate notices and receiving representations. Such representations must be considered before a final decision is made.
- 6.3. Approved by: Gabriel MacGregor Head of Corporate Law on behalf of the Council Solicitor and Monitoring Officer

7. HUMAN RESOURCES IMPACT

- 7.1 There are no human resources implications arising from this report.
- 7.2 Approved by Adrian Prescod, HR Business Partner, for and on behalf of Director of Human Resources.

8. EQUALITIES IMPACT

8.1. People without access to cars will benefit if cycling in the borough is made easier.

9. ENVIRONMENTAL IMPACT

9.1. The introduction of Quietway Route 5 through Croydon will help to make to borough more accessible to all levels of cyclist and to reduce traffic congestion by making cycling more viable as an option. A modal shift to sustainable travel will help to improve air quality.

10. CRIME AND DISORDER REDUCTION IMPACT

10.1. There are no crime and disorder reduction impacts in this report.

11. REASONS FOR RECOMMENDATIONS/PROPOSED DECISION

11.1 The proposed scheme should assist the Council in encouraging more sustainable transport use such as walking and cycling by reducing vehicle speeds and improving safety and the perception that the streets are safer and more user friendly. Any modal shift to more sustainable transport achieved will

also assist in improving air quality and reducing carbon emissions contributing to the Council's objectives

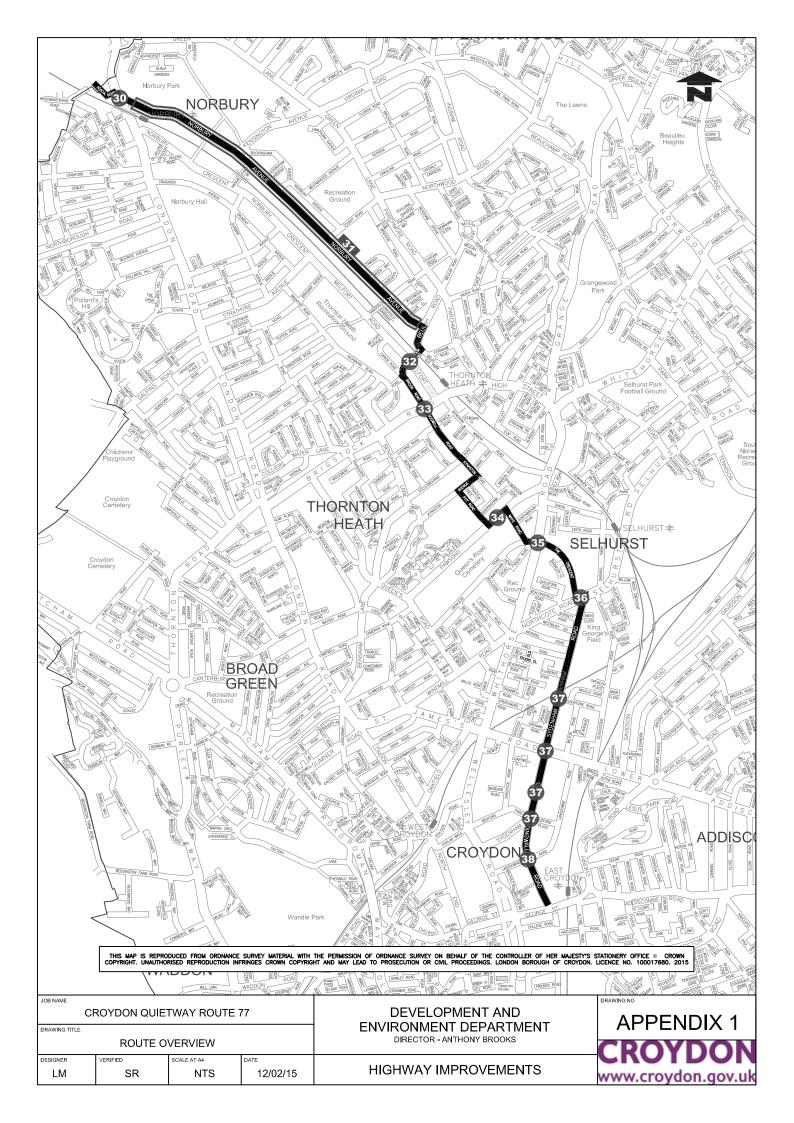
12. OPTIONS CONSIDERED AND REJECTED

12.1 None

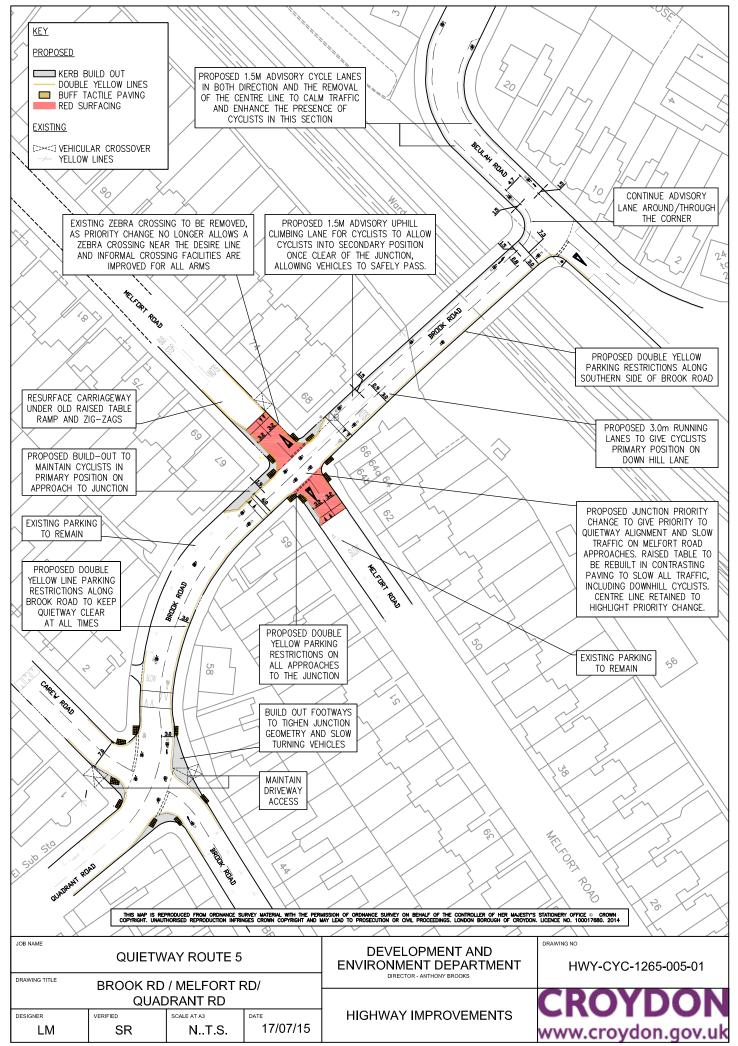
CONTACT OFFICER:

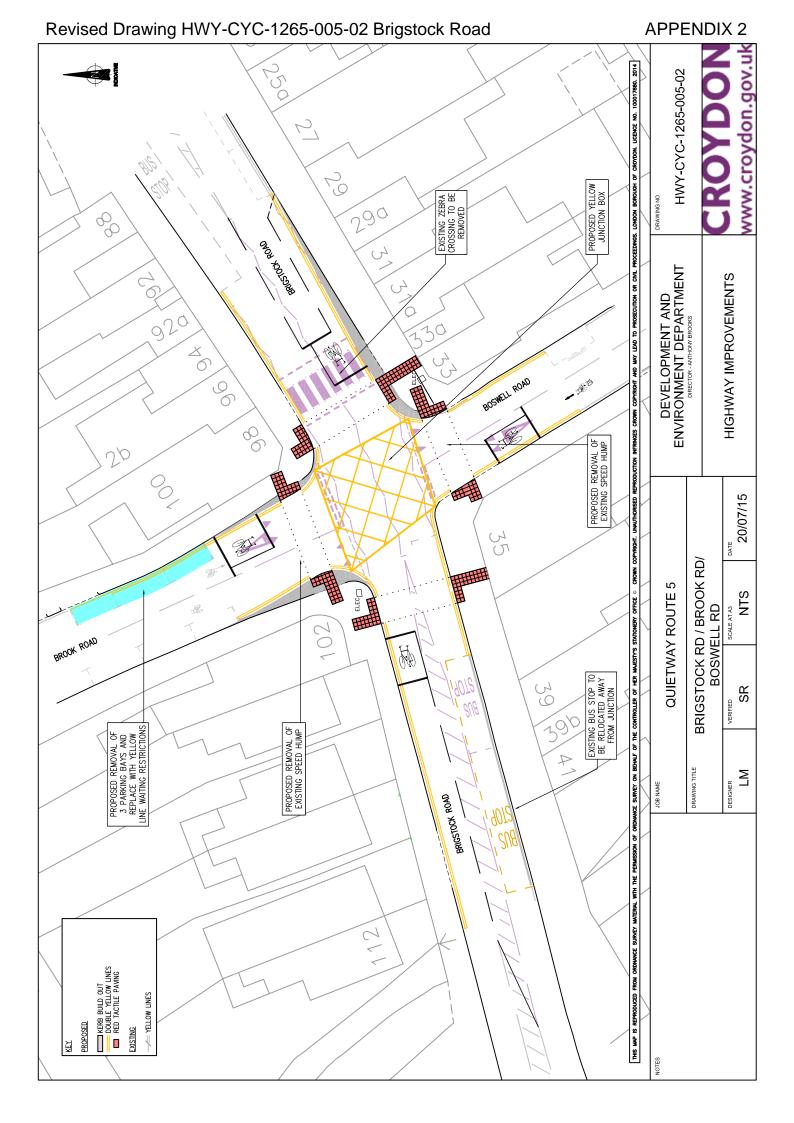
Sue Ritchie, Senior Engineer, Network Improvement Team 0208 726 6000 ext 63823 Report Author Leonardo Morris, Engineer, Network Improvements Team 0208 726 6000 x63159

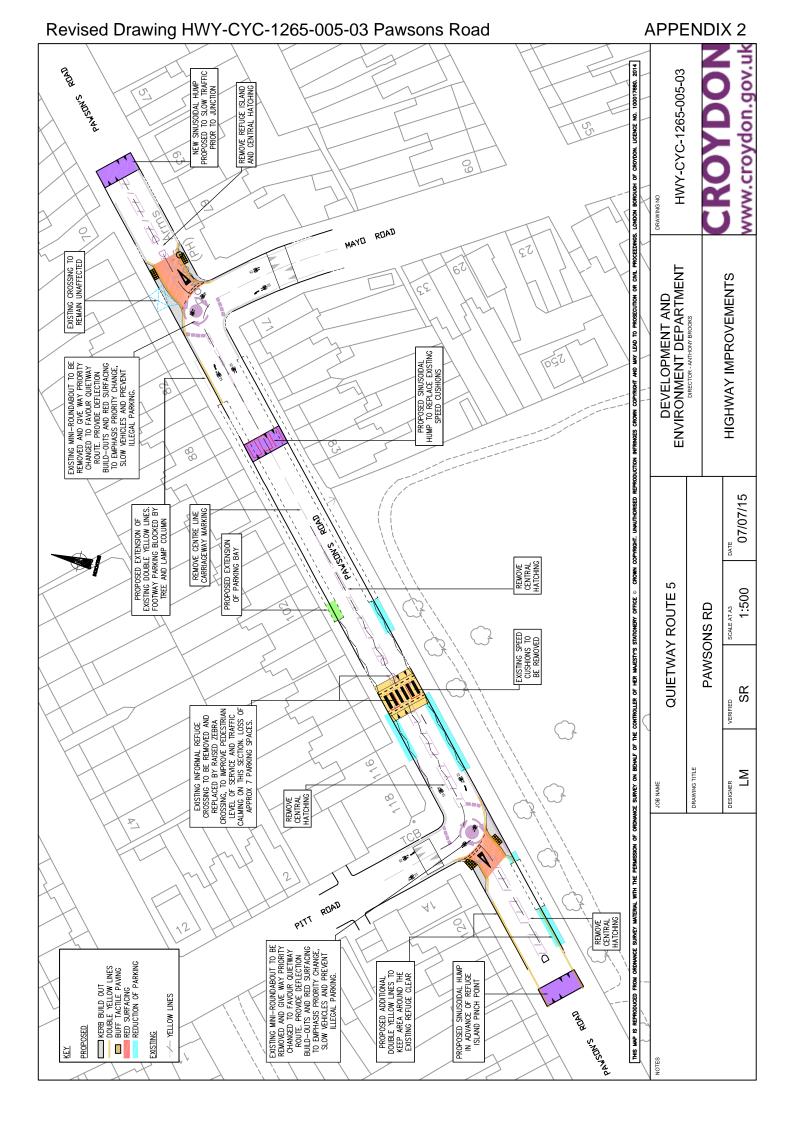
BACKGROUND PAPERS - TMAC 290415 Cycle Quietways Route 77



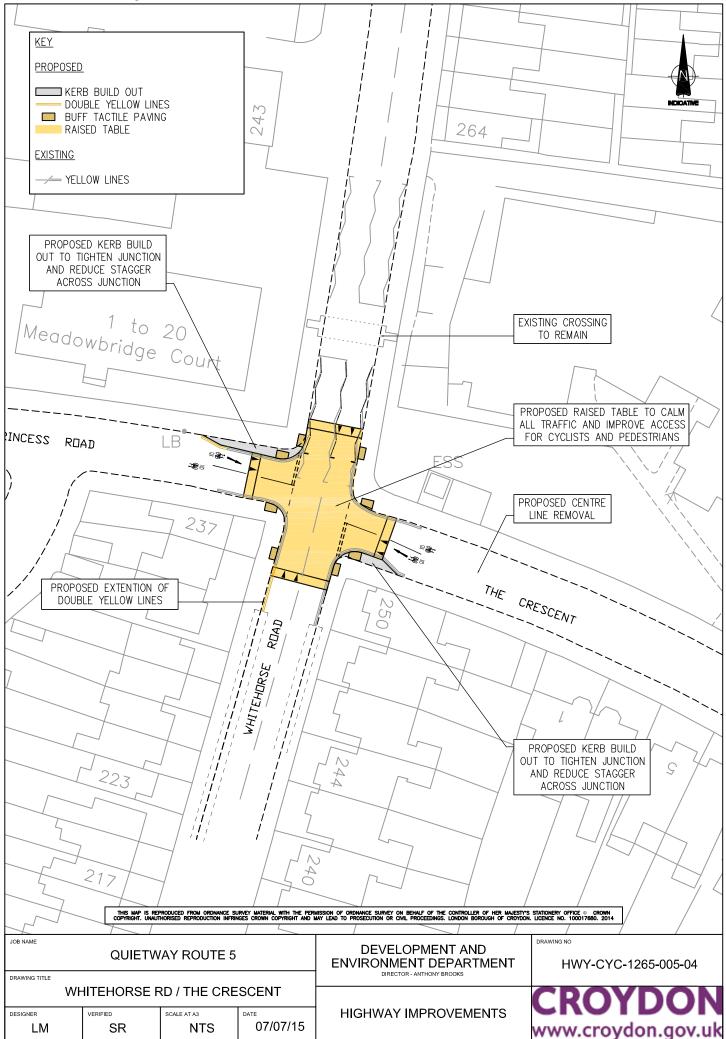
Revised Drawing HWY-CYC-1265-005-01 Brook Road

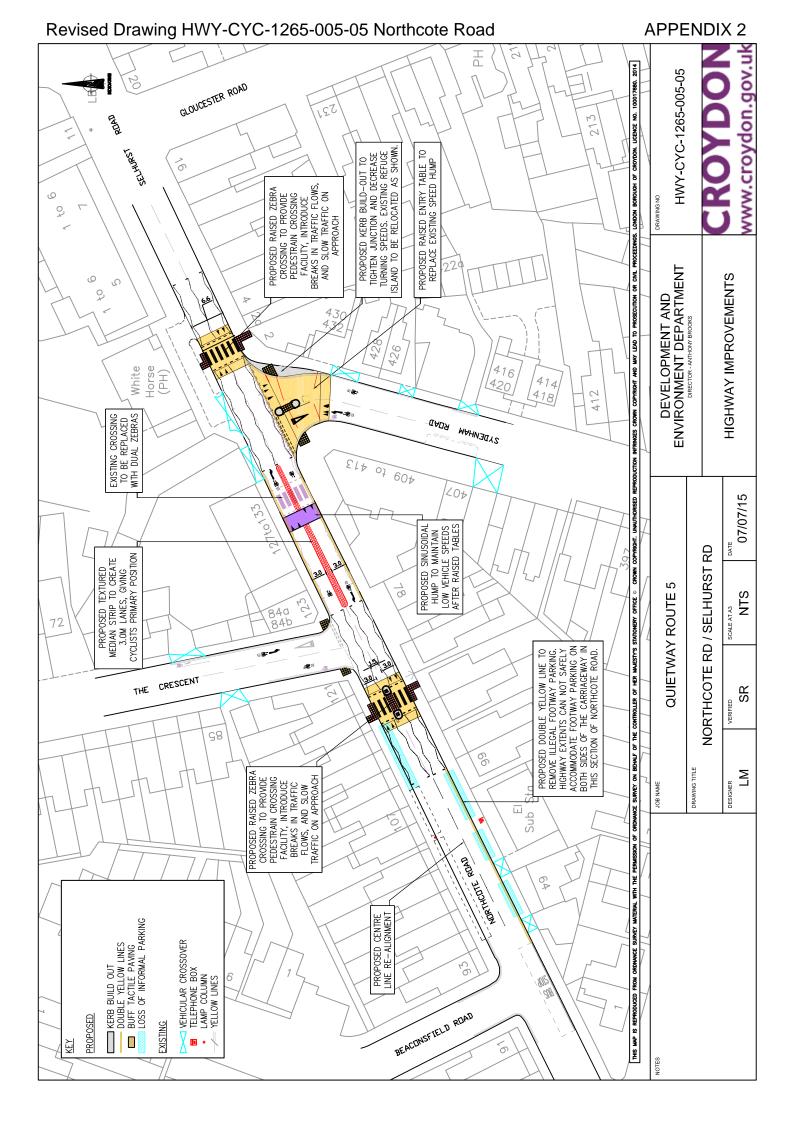




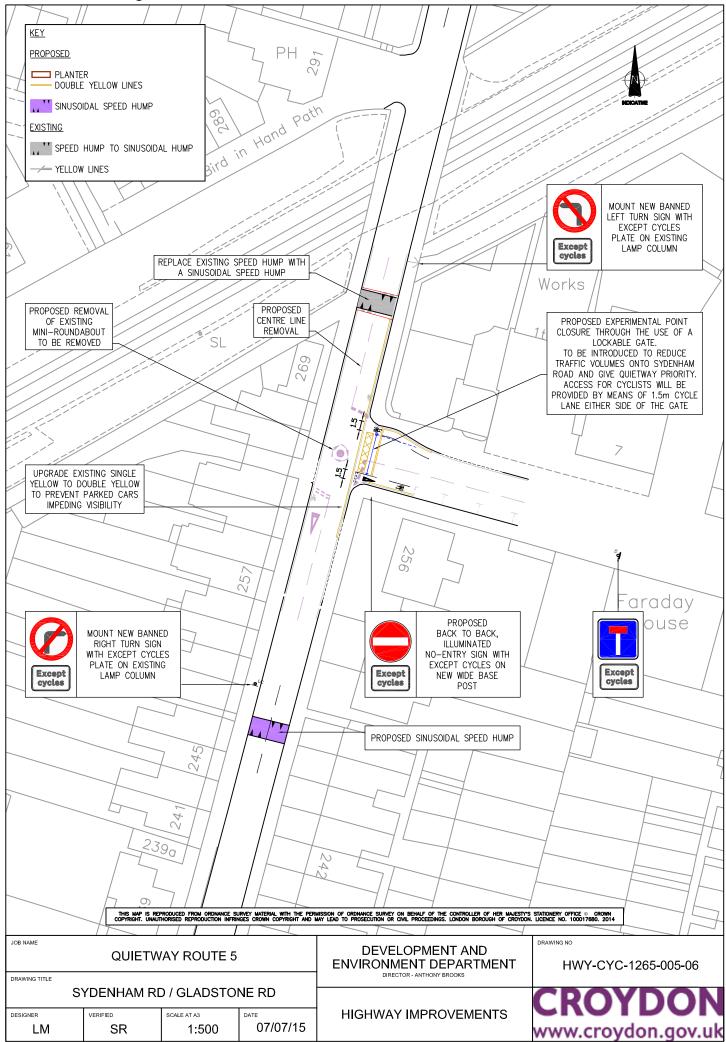


Revised Drawing HWY-CYC-1265-005-04 Whitehorse Road

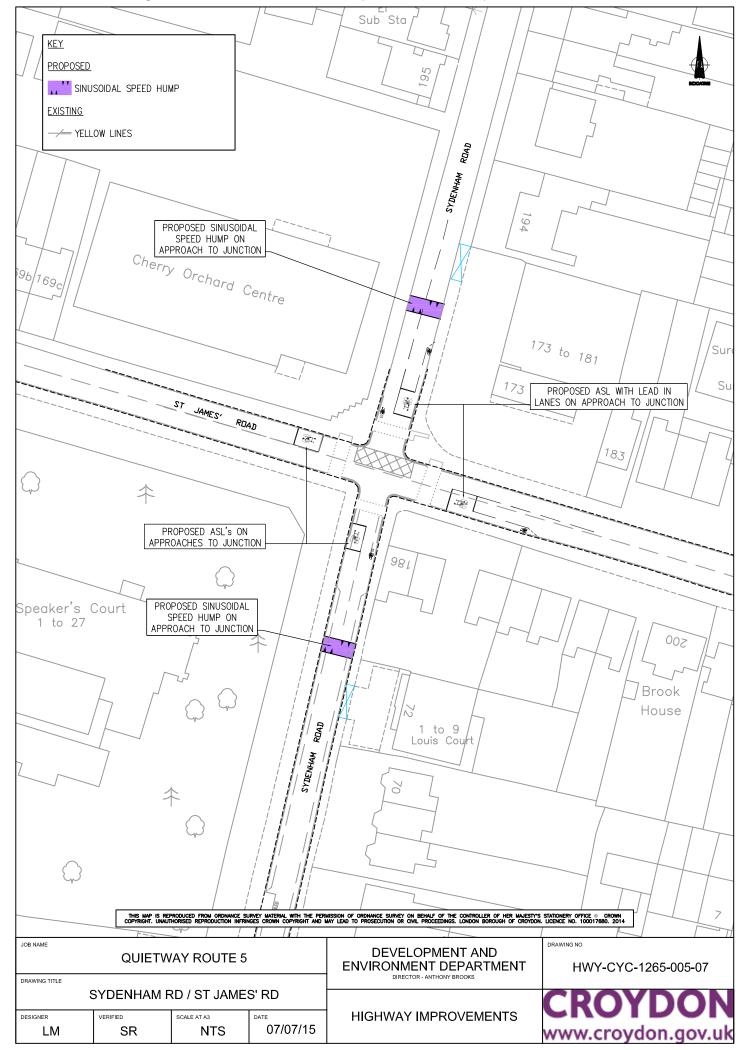




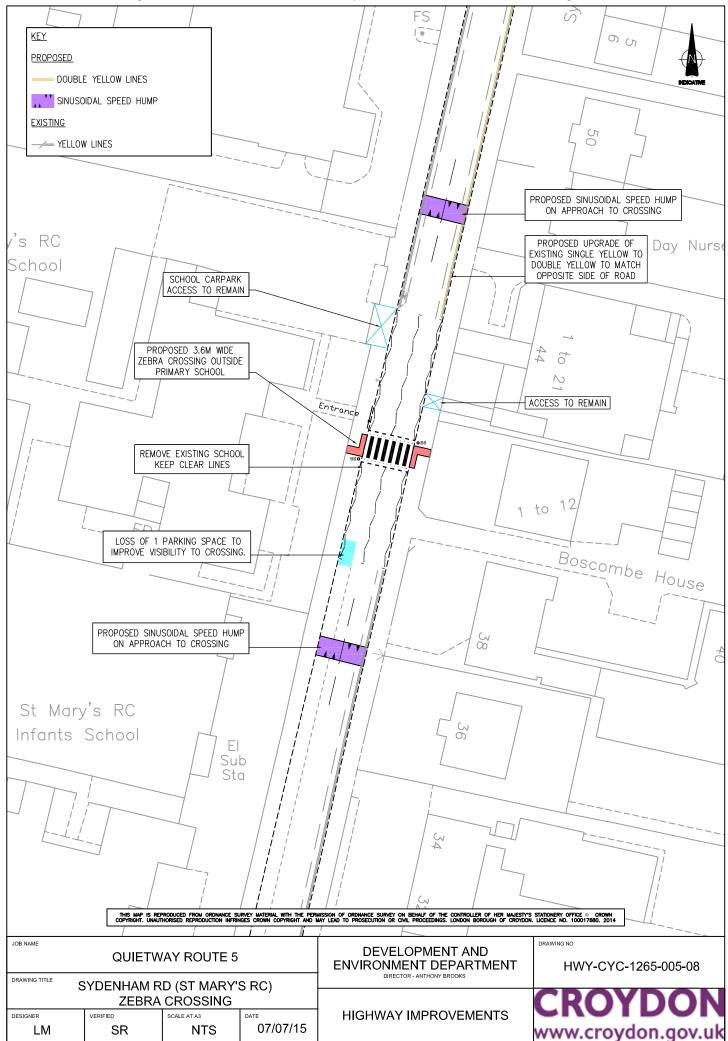
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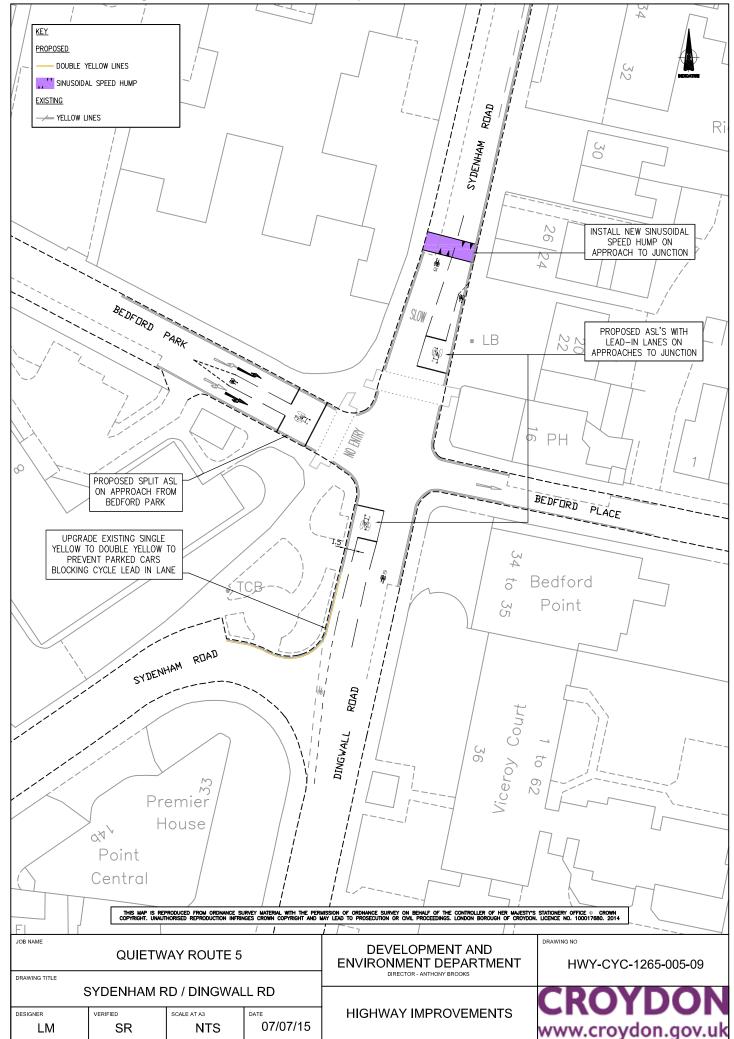


Revised Drawing HWY-CYC-1265-005-07 Sydenham Road j/w St James

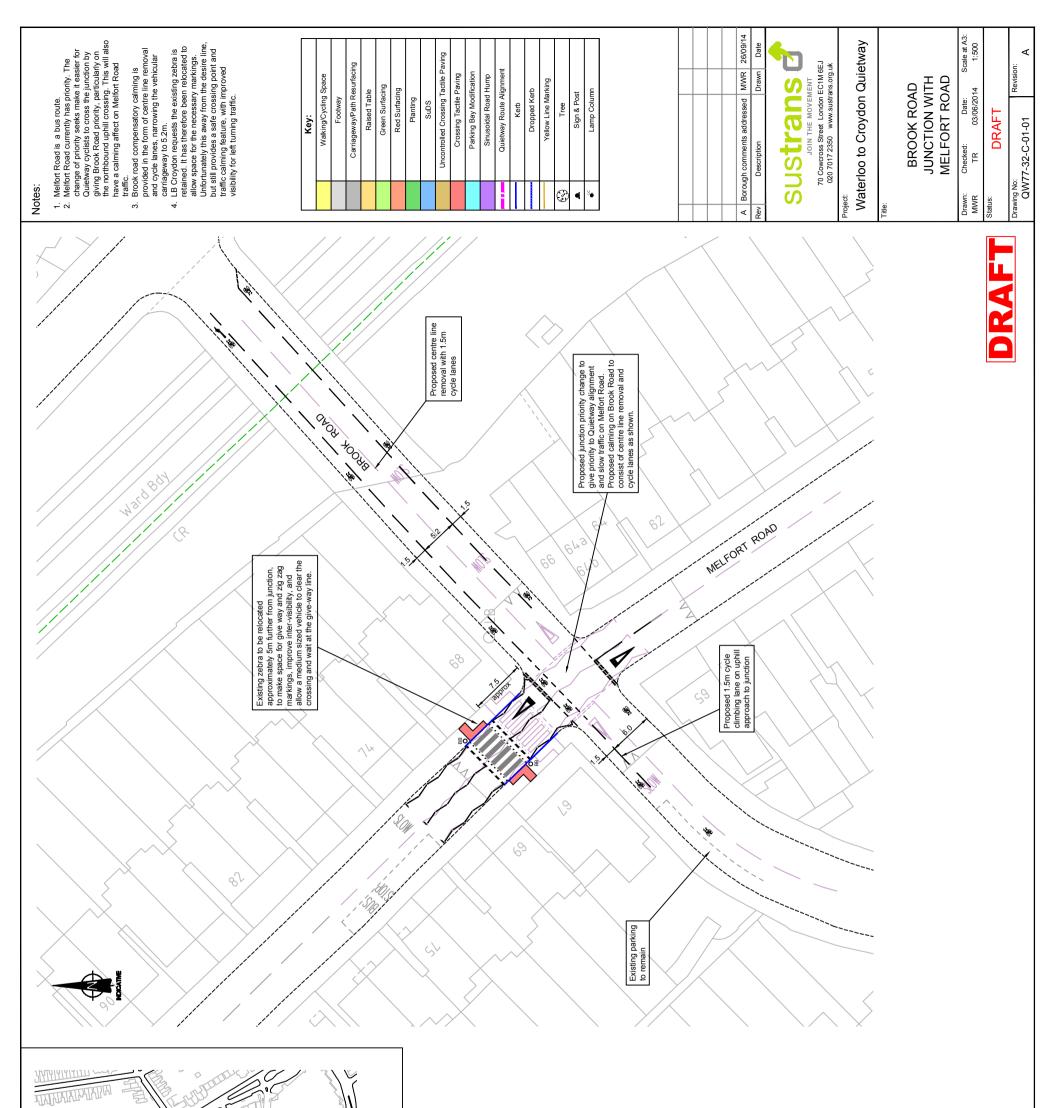


Revised Drawing HWY-CYC-1265-005-08 Sydenham Rd Zebra Crossing

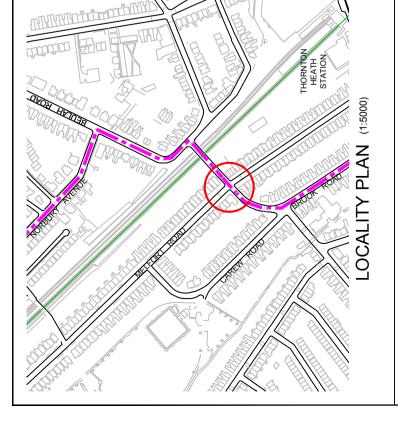




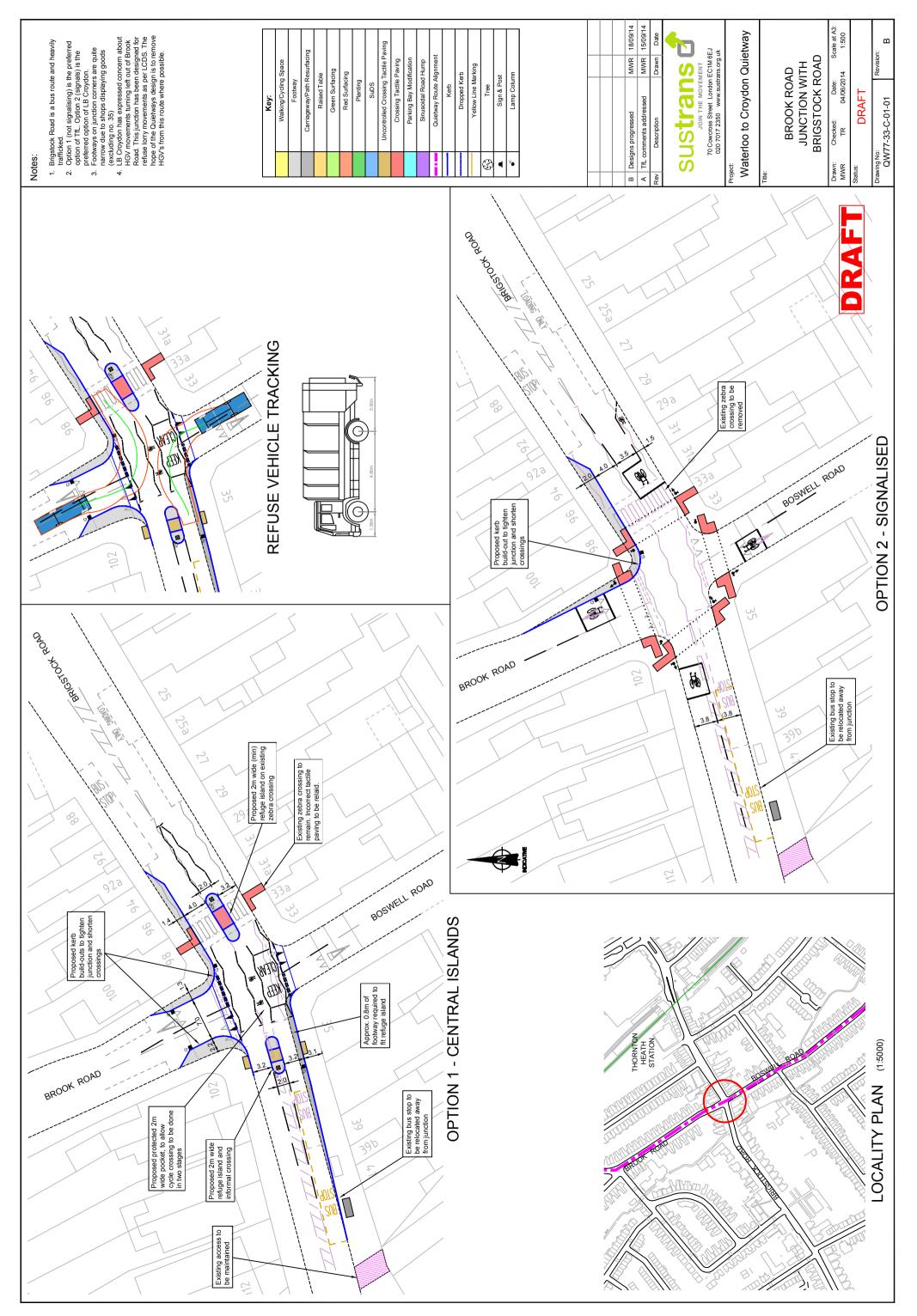
Revised Drawing HWY-CYC-1265-005-09 Sydenham Road j/w Bedford Park APPENDIX 2



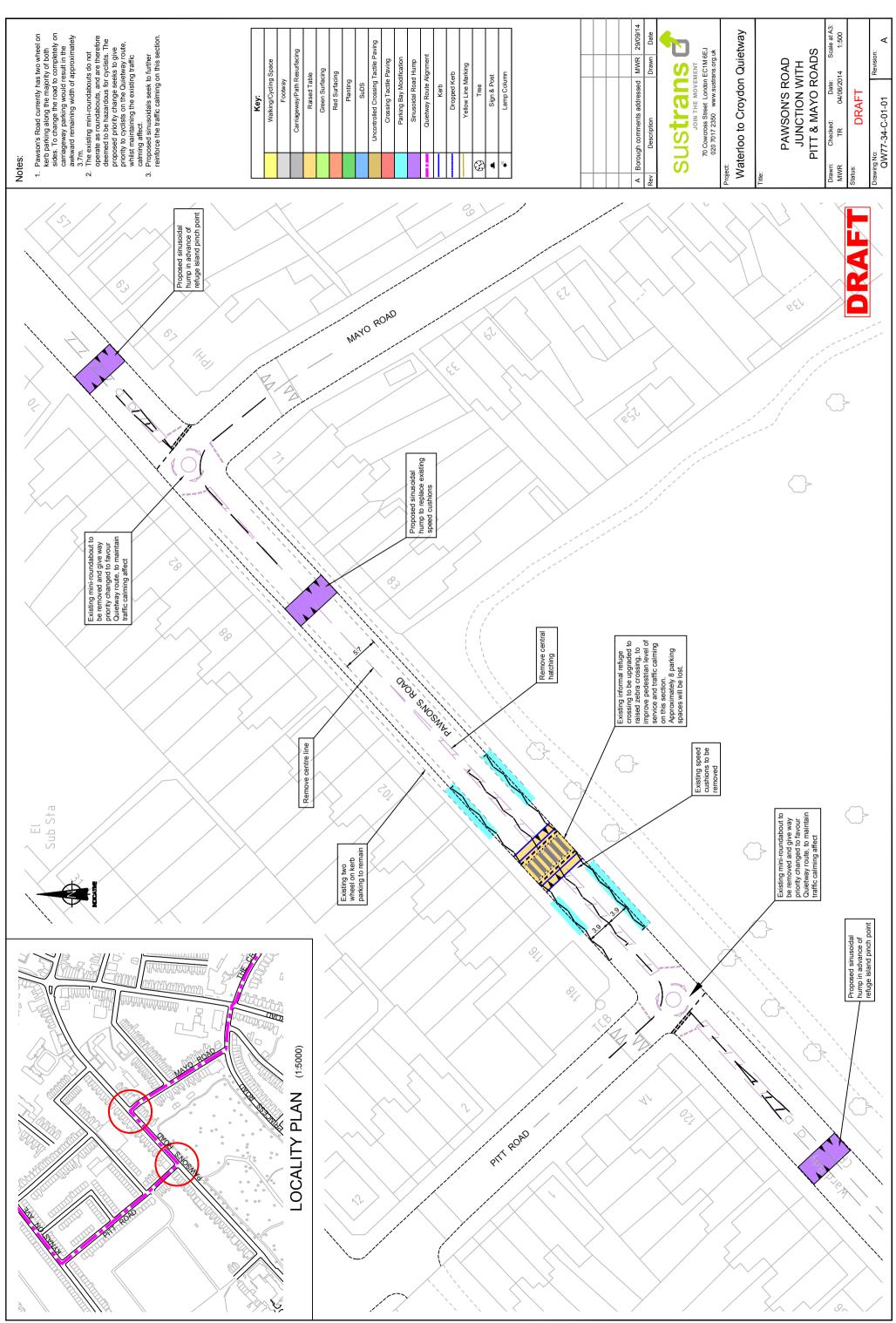
Sustrans original drawing QW77-32-C-01-01 Rev A - Melfort Rd



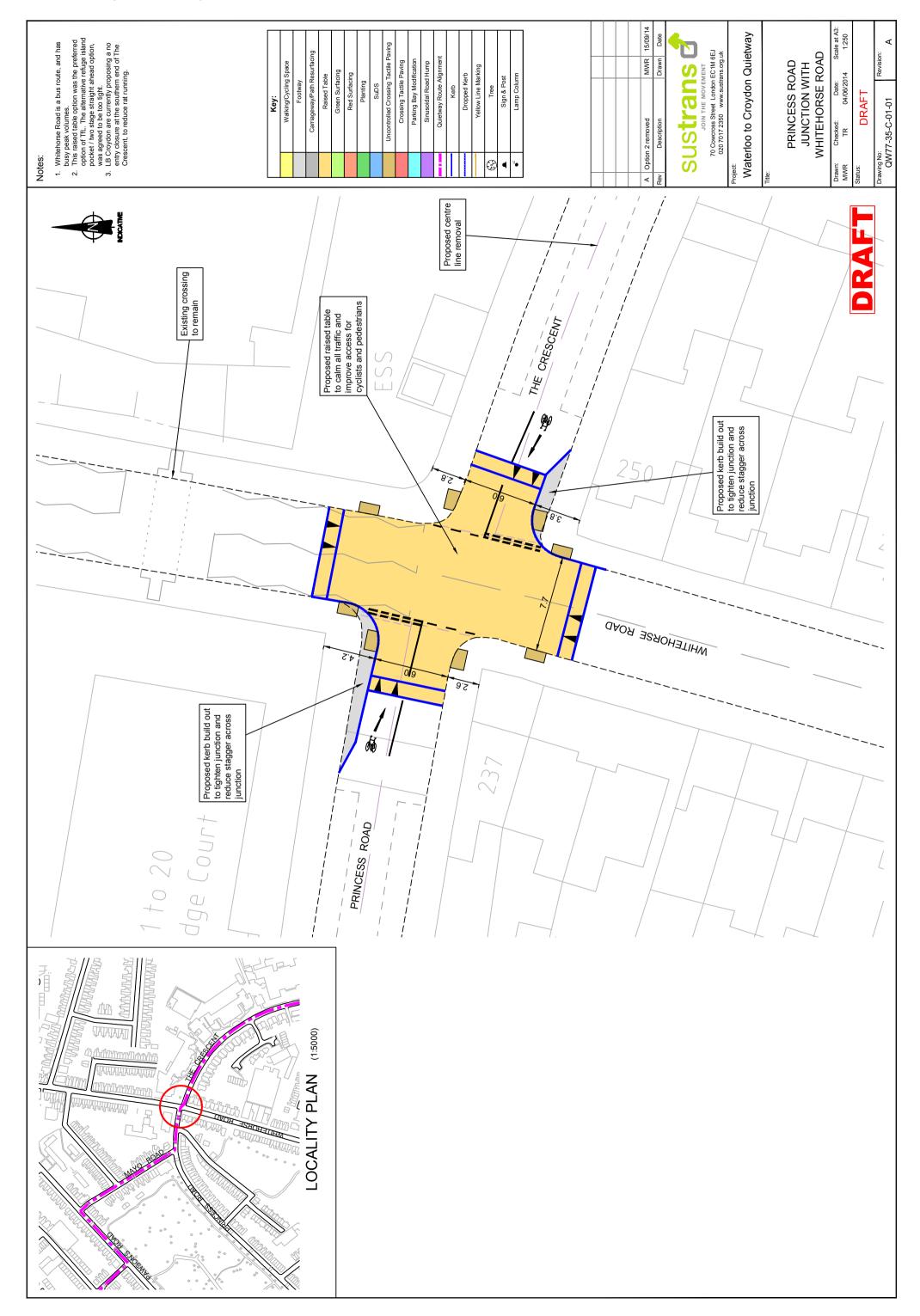
Sustrans original drawing QW77-33-C-01-01 Rev B - Brigstock Rd



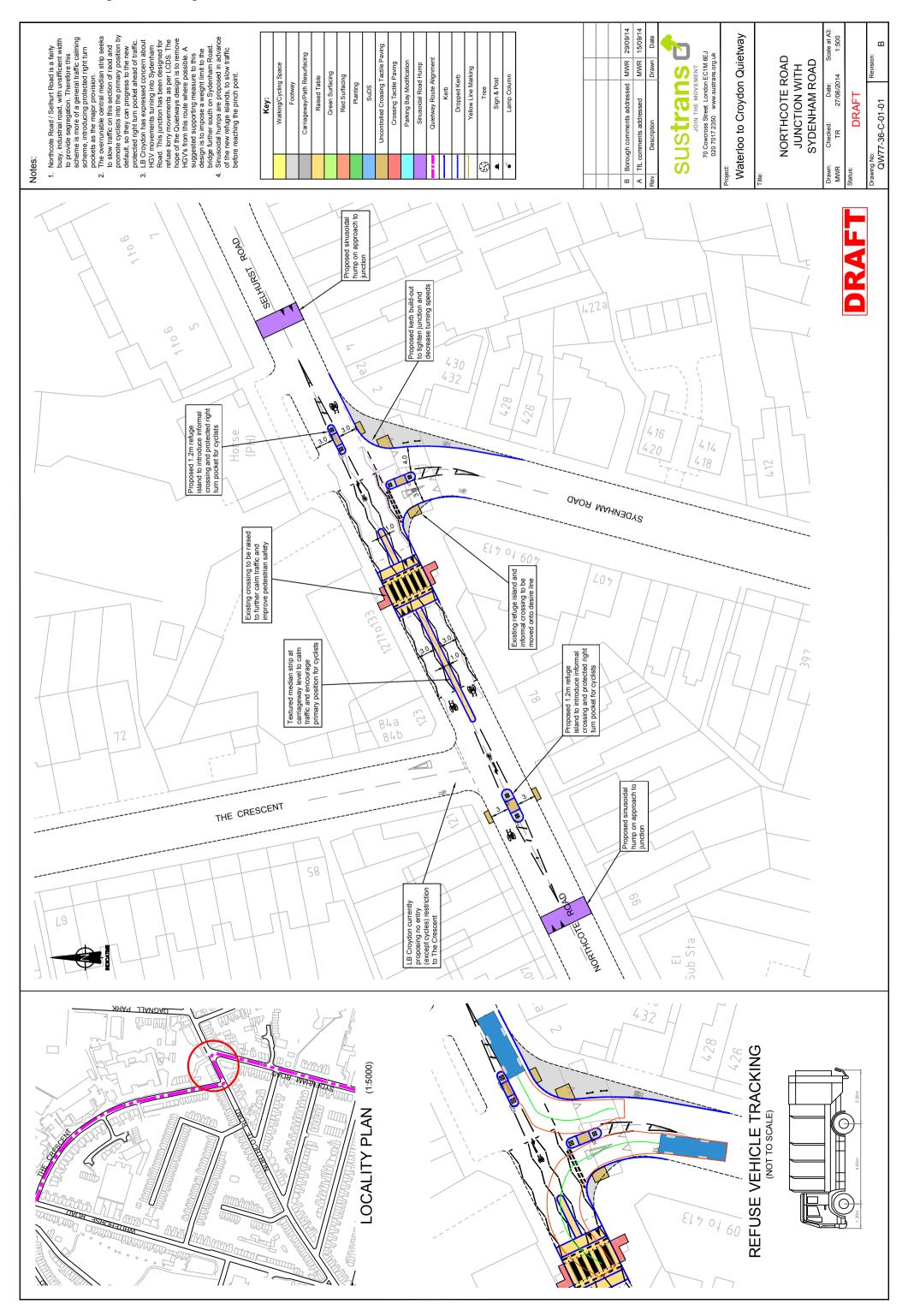
Sustrans original drawing QW77-34-C-01-01 Rev A - Pawsons Rd



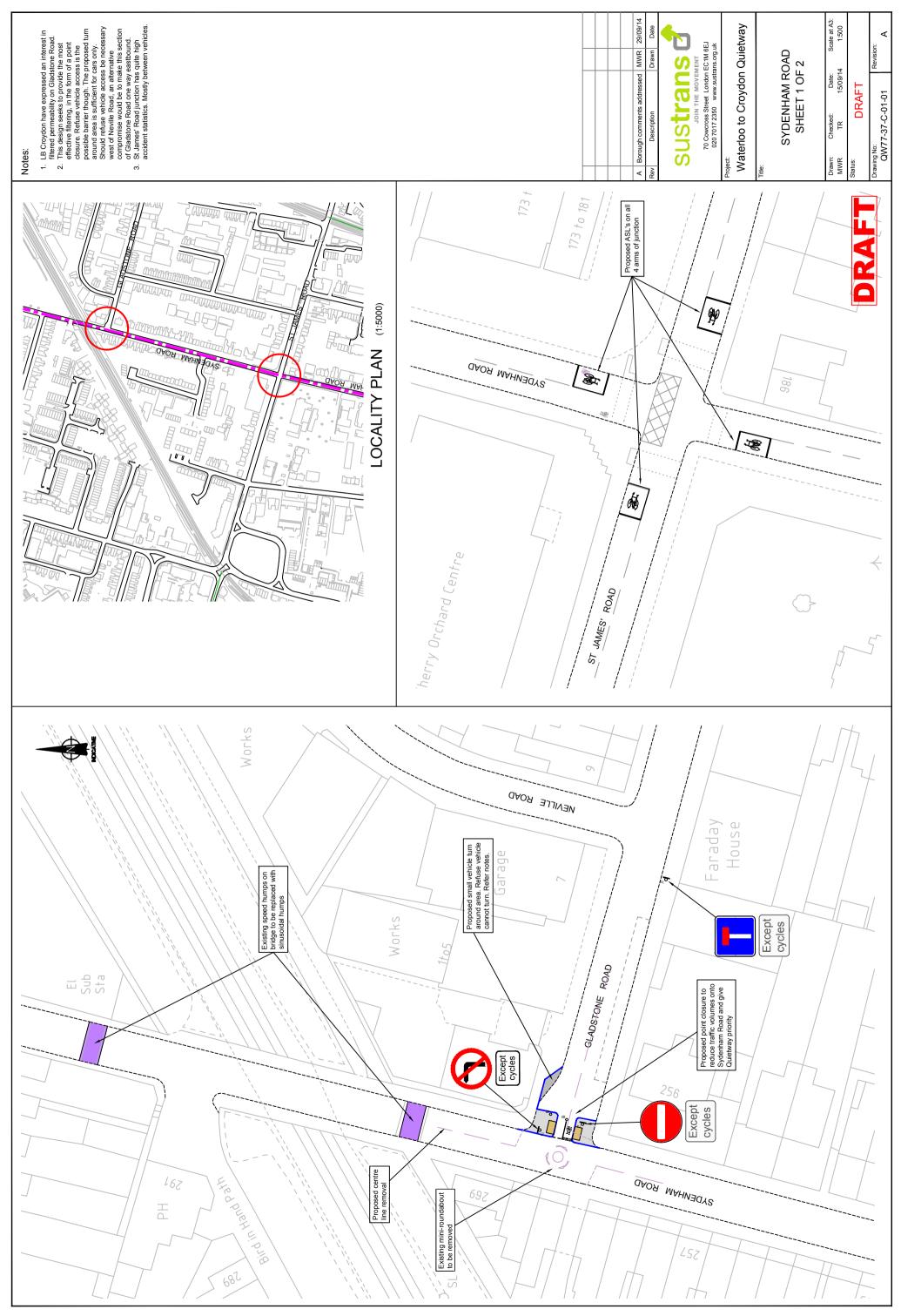
Sustrans original drawing QW77-35-C-01-01 Rev A - Whitehorse Rd



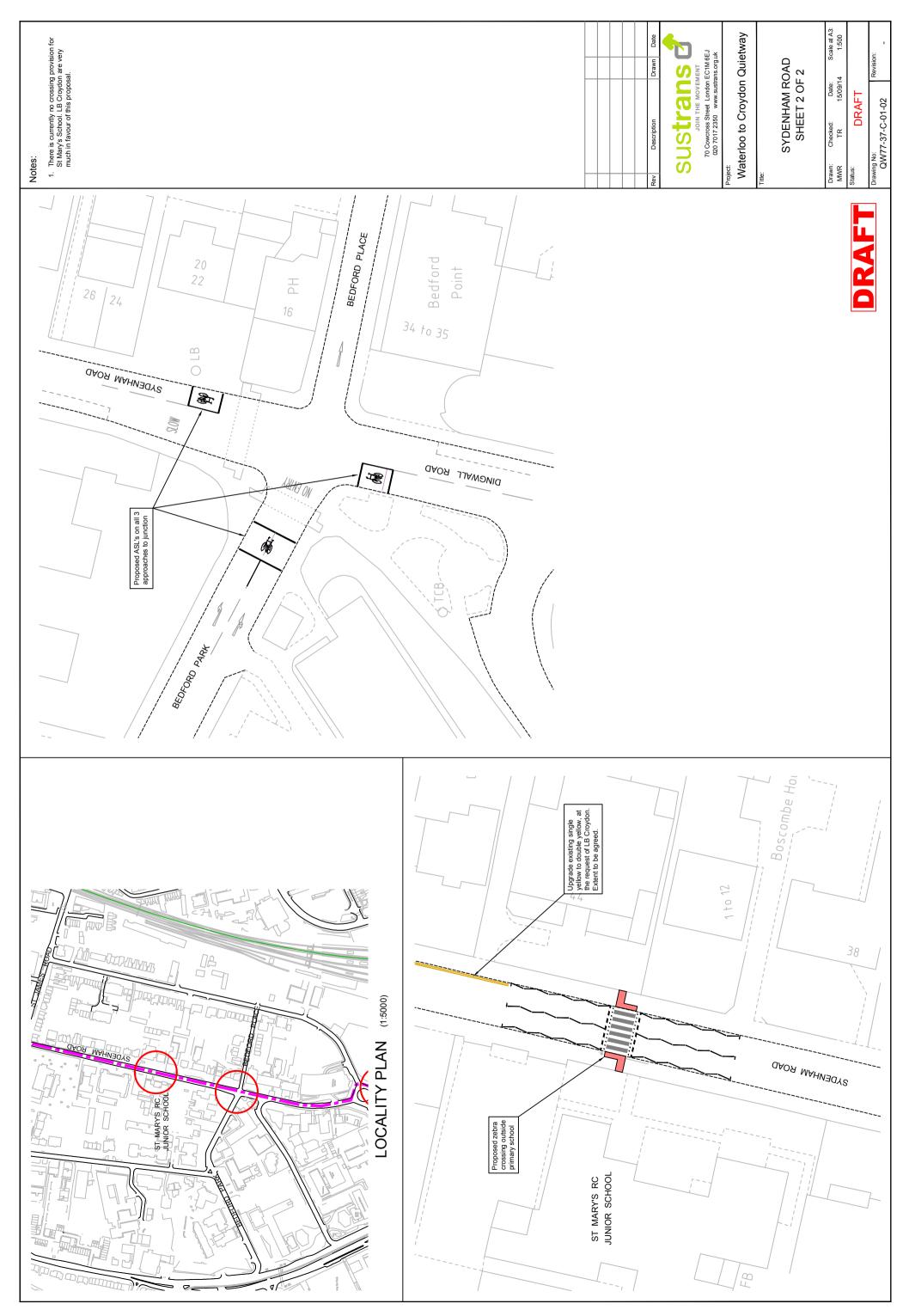
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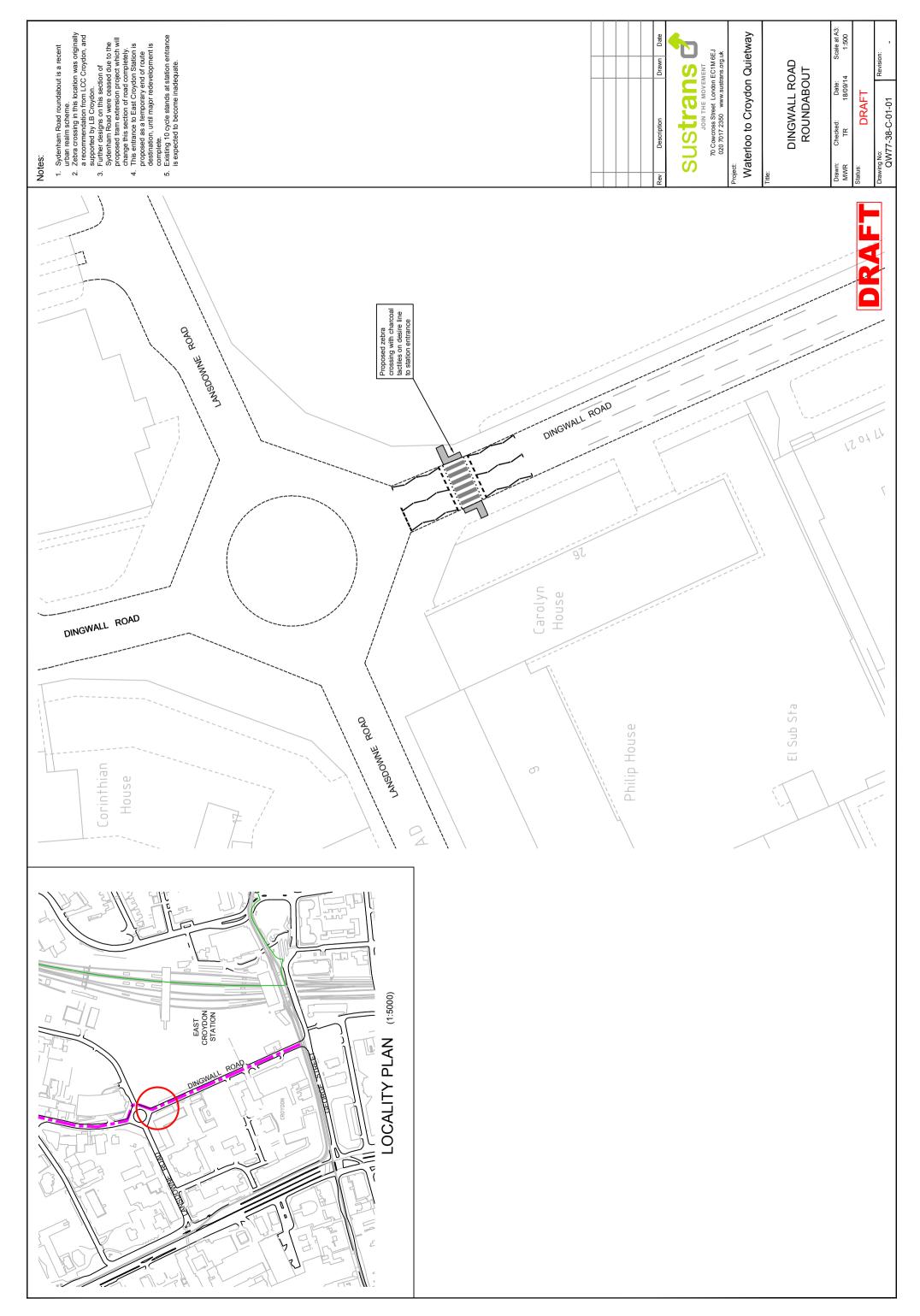
Sustrans original drawing QW77-37-C-01-01 Rev A - Sydenham Rd

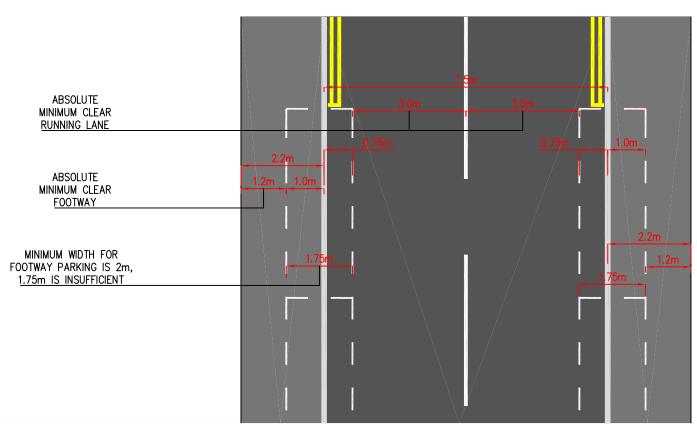


Sustrans original drawing QW77-37-C-01-02 - Sydenham Rd



Sustrans original drawing QW77-38-C-01-01 - Dingwall Rd jw Lansdowne Rd





EXISTING LAYOUT

PROPOSED LAYOUT

