

Cycle Superhighway 7

Part 2, Southern Section - Civils Works - Temporary to Permanent

Stage 1 Road Safety Audit Report

Ref: 4351/010/A24/TLRN/2024

Prepared for:

TfL - Investment and Delivery Planning (IDP)

By:

Road Safety Audit

TfL Engineering – Roads, Streets and Places (RS&P)

Prepared by: [REDACTED], Audit Team Leader

Checked by: [REDACTED], Audit Team Member

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Version	Status	Date
A	Audit report issued to Client	05/04/2024
B	Updated following swept paths	08/05/2024
C	Designer Response	16/05/2024



1.0 INTRODUCTION

1.1 Commission

- 1.1.1 This report results from a Stage 1 Road Safety Audit carried out on the Cycle Superhighway 7
- 1.1.2 , Part 2, Southern Section - Civils Works - Temporary to Permanent proposals.
- 1.1.3 The Audit was undertaken by TfL Road Safety Audit in accordance with the Audit Brief issued by the Client Organisation on 19 March 2024. It took place at the Palestra offices of TfL in March 2024 and comprised an examination of the documents provided as listed in Appendix A, plus a visit to the site of the proposed scheme.
- 1.1.4 The visit to the site of the proposed scheme was made on 21 March 2024 and 27 March 2024. During the site visits the weather was fine and dry and the road surface was dry.

1.2 Terms of Reference

- 1.2.1 The Terms of Reference of this Audit are as described in TfL Procedure SQA-0170 dated May 2014. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and how it impacts on all road users and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit. An absence of comment relating to specific road users/ modes in Section 3 of this report does not imply that they have not been considered; instead, the Audit Team feels they are not adversely affected by the proposed changes.
- 1.2.2 This Safety Audit is not intended to identify pre-existing hazards which remain unchanged due to the proposals; hence they will not be raised in Section 3 of this report as they fall outside the remit of Road Safety Audit in general as specified in the procedure SQA-0170 dated May 2014. Safety issues identified during the Audit and site visit that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in Section 4 of this report.
- 1.2.3 Nothing in this Audit should be regarded as a direct instruction to include or remove a measure from within the scheme. Responsibility for designing the scheme lies with the Designer and as such the Audit Team accepts no design responsibility for any changes made to the scheme as a result of this Audit.
- 1.2.4 In accordance with TfL Procedure SQA-0170 dated May 2014, this Audit has a maximum shelf life of 2 years. If the scheme does not progress to the next stage in its development within this period, then the scheme should be re-audited.
- 1.2.5 Unless general to the scheme, all comments and recommendations are referenced to the detailed design drawings and the locations have been indicated on the plan located in Appendix B.
- 1.2.6 It is the responsibility of the Design Organisation to complete the Designer's response section of this Audit report. Where applicable and necessary it is the responsibility of the Client Organisation to complete the Client comment section of this Audit report. Signatures from both the Design Organisation and Client Organisation must be added

within Section 5 of this Audit report. A copy of which must be returned to the Audit Team.

1.3 Main Parties to the Audit

1.3.1 Client Organisation

Client contact details: [REDACTED] – TfL IDP

1.3.2 Design Organisation

Design contact details: [REDACTED] – TfL Engineering

1.3.3 Audit Team

Audit Team Leader: [REDACTED] – TfL Road Safety Audit

Audit Team Member: [REDACTED] – TfL Road Safety Audit

Audit Team Observer: None present.

1.3.4 Other Specialist Advisors

Specialist Advisor Details: None present.

1.4 Purpose of the Scheme

1.4.1 The purpose of the scheme is to formalise the existing temporary cycle superhighway 7 (CS7) arrangements, along the southern section of CS7 between Colliers Wood (Priory Road) to Clapham South (Alderbrook Road).

1.4.2 The overall works for CS7 have been split into two work parts:

- Part 1 - Signs and Lines: Detail Design by TfL Engineering.
- Part 2 - Temporary to Permanent: Building the temporary kerbs and islands with permanent materials - Concept Design by TfL Engineering.

1.4.3 The Part 1 proposals were subject to a Stage 2 Road Safety Audit carried out in November 2023 by TfL Road Safety Audit (ref: 4262/010/A24/TLRN/2023). It is understood that the Part 1 works are yet to be installed (at the time this audit was undertaken), however they will be implemented prior to Part 2 works.

1.4.4 This RSA covers the Part 2 temporary to permanent proposed between Colliers Wood (Priory Road) to Alderbrook Road, which follows on from Part 1 "signs and lines" upgrade works. These Part 2 will provide permanent kerbs alterations and build outs.

1.5 Special Considerations

1.5.1 During the site visit, the cycle lane in the visibility of bus stop B opposite Oakmead Road was closed due to construction works.

1.5.2 The Audit Team has no further special considerations to raise.

2.0 ITEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

It should be noted that various elements of the overall CS7 scheme (temporary and permanent) were subject to the following Road Safety Audits carried out by TfL Road Safety Audit:

- Stage 1 RSA – Section 3 - 3932/010/A24/TLRN/2022 - May 2022.
- Stage 1 RSA – Sections 6 & 5 - 3880.01/010/A24/TLRN/2022 - November 2022.
- Stage 1 RSA – Section 4 - 4110/010/A24/TLRN/2023 - February 2023.
- Stage 2 RSA – Part 1 Sections 6 to 3 Permanent Works - 4262/010/A24/TLRN/2023 - November 2023.

However, given Part 2 of this scheme, which this report covers, has altered since the last applicable RSAs, problems raised in the above RSAs will not be referenced in this report.

3.0 ITEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT

This section should be read in conjunction with Paragraphs 1.2.1, 1.2.2 and 1.2.3 of this report.

3.1 DRAWING NO. CS7-TFL-010-10_05_06-DRG-TR-00001

3.1.1 PROBLEM

Location: A – Traffic island north of A24 Priory Road junction.

Summary: Absence of guidance may increase the risk of road users colliding with the traffic island.

The traffic island will be shortened as part of the scheme, however there are no proposals to relocate/ re-provide the existing bollard at the northern extent of the island. This may increase the risk of road users failing to identify the island and colliding with it.

RECOMMENDATION

Provide an appropriate (size & formation) bollard and ensure sufficient clearance is provided to the edge of the carriageway.

Design Organisation Response	Rejected
The existing island is not sufficiently wide enough to accommodate a bollard and provide sufficient clearance to traffic.	
Hatching is proposed to guide both vehicles and cyclists away from the island. Traffic cylinders are proposed on this approach to guide both vehicles and cyclists away from the island; these provisions should be more than adequate. Note in addition 20mph speed limit.	
Client Organisation Comments	
Agree with designer's comments	

3.2 DRAWING NO. CS7-TFL-010-10_05_06-DRG-TR-00002

3.2.1 PROBLEM

Location: B – A24 southbound cycle lane outside Colliers Wood tube station.

Summary: Absence of awareness may increase the risk of collisions between footway users and cyclists.

As part of the scheme the existing blue surfacing within the cycle lane will be removed. There is the concern that footway users exiting Colliers Wood tube station may step into the cycle lane to access the bus stop without due care and attention. This may increase the risk of collisions between cyclists and footway users. This is especially of concern during peak periods, when footfall levels are high and footway users may cross along the desire line away from the proposed relocated crossing.

RECOMMENDATION

Increase the conspicuity of the cycle lane.

Design Organisation Response	Rejected
<p>RSA wording “without due care and attention” – this element can not be designed out noting the cycle track is proposed black (same colour as carriageway) contrasting to the grey ASP of the footway. Suitable (compliant) crossing facilities are proposed.</p> <p>No collisions have been recorded at this location.</p> <p>Cyclists will be travelling slightly up-hill thus speeds reduced. Currently the use of blue surfacing is reserved for specific traffic conflict locations (e.g. side roads). Experiments with blue surfacing at bus stop by-passes are currently being undertaken however no conclusions have been made thus far.</p>	
Client Organisation Comments	
<p>Agree with designers comments</p>	

3.2.2 PROBLEM

Location: C – Walpole Road junction.

Summary: Highway arrangements may increase the risk of collisions between road users.

Hatching is proposed at the southern end the floating bus stop (L) island that extends across the entire Walpole Road junction. The audit team have the following concerns:

- Road markings will be regularly overrun and are likely to become worn and unclear quickly. Therefore, not providing guidance for approaching road users and increasing the risk of road users colliding with the build out.
- Hatching at this location may provide road users exiting Walpole Road with a false sense of security that they can wait within it, and overhang/ obstruct the cycle lane. This may increase the risk of collisions between cyclists and road users. This is especially of concern during peak periods where congestion levels are high.

RECOMMENDATION

Ensure the highway arrangements do not encourage poor driver behaviour or increase the risk of conflicts between road users.

Design Organisation Response	Rejected
<p>Additional hatching area has been provided to allow vehicles additional waiting space and to improve visibility to exiting vehicles and to guide east bound traffic away from the island / side road earlier – increasing visibility. Proposed island location remains generally as existing with some amended carriageway markings to increase driver awareness. Hatching should not be excessively over-run. Note the existing give-way marking locations in addition 20mph speed limit.</p>	
Client Organisation Comments	
<p>Agree with designers comments</p>	

3.3 DRAWING NO. CS7-TFL-010-10_05_06-DRG-TR-00003

3.3.1 PROBLEM

Location: D – Loading bay to the south of Briscoe Road.

Summary: Restricted visibility may increase the risk of collisions between emerging road users and mainline traffic.

The existing bay is proposed to be relocated to a location south of bus stop M. When the bus stop is occupied, this will restrict visibility for road users emerging from the bay to southbound traffic overtaking a stationary bus. This may increase the risk of rear end shunt or side swipe type collisions between emerging road users and mainline traffic.

RECOMMENDATION

Provide and maintain sufficient visibility between road users exiting the bay and southbound traffic.

Design Organisation Response	Rejected
Overtaking a stationary by bus westbound traffic is unlikely to occur regularly given the high volume of traffic on the main carriageway. There will be greater distance between an emerging vehicle and a vehicle overtaking a stationary bus than a vehicle travelling west bound within its designated traffic lane thus not an increased risk of a shunt style collision. Note in addition 20mph speed limit.	
Client Organisation Comments	
Agree with designers comments	

3.3.2 PROBLEM

Location: E – Southbound bus stop M.

Summary: Positioning of bus stop may increase the risk of collisions between road users entering/ exiting Briscoe Road.

Bus stop M is proposed to be repositioned directly opposite the Briscoe Road junction. The audit team have the following concerns regarding road users emerging from Briscoe Road:

- The swept paths suggest there will be limited margin of error for road users undertaking this manoeuvre and they may overhang/ overrun the centre line and when a bus is within the stop. This may increase the risk of sideswipe type collisions between buses and turning road users.
- They, or southbound road users overtaking a stationary bus, may fail to identify each other, increasing the risk of head on or sideswipe type collisions between road users.

RECOMMENDATION

Ensure the positioning of the bus stop (when occupied) does not create conflicts between road users.

Design Organisation Response	Rejected
The existing centre line location is retained thus exit manoeuvres / potential over sweeps are as existing. Note the original layout of cycle lane with traffic cylinders slightly proud of the proposed kerb edge of the bus stop build out thus again no additional issues other than already present. Note traffic is generally stationary / slow moving during peak hours existing meaning no real change to the location of a stopped 'vehicle' at this location.	
Client Organisation Comments	
Agree with designers comments	

3.4 DRAWING NO. CS7-TFL-010-10_05_06-DRG-TR-00004

The audit team has not identified any features of the scheme that could be removed or modified in order to improve the road safety of the measures.

3.5 DRAWING NO. CS7-TFL-010-10_05_06-DRG-TR-00005

The audit team has not identified any features of the scheme that could be removed or modified in order to improve the road safety of the measures.

3.6 DRAWING NO. CS7-TFL-010-10_05_06-DRG-TR-00006

3.6.1 PROBLEM

Location: F – Right turn pocket into Letchworth Street.

Summary: Highway layout may increase the risk of collisions between turning road users and mainline traffic.

A right turn pocket with a maximum width of 1.9m is proposed for northbound road users entering Letchworth Street. The audit team have the following concerns regarding the formation and positioning of the right turn pocket:

- Waiting right turning road users may obstruct visibility to northbound traffic for westbound crossing users on the central refuge island. Whilst the audit team acknowledges that this is a controlled crossing, there is a risk of footway users crossing outside of the signal phase and travelling within the northbound traffic lane when it is unsafe to do so. This may increase the risk of crossing users being struck by road users.
- Waiting right turning road users will be partly within the northbound traffic lane. This may increase the risk of side swipe collisions between northbound traffic and waiting right turning road users, or cyclists if northbound traffic enters the cycle lane to bypass a stationary vehicle.

Furthermore, the swept paths evidence that road users will be unlikely to utilise the right turn pocket as intended due to the limited size of the provision, and road users entering and exiting Letchworth Street overhang the right turn pocket. This may further increase the risk of collisions between road users.

RECOMMENDATION

Ensure the highway layout does not increase the risk of conflicts between highway users.

Design Organisation Response	Rejected
A right turn pocket was originally on street (pre-Covid) but was removed following the TTRO LSP scheme. Tooting High St (between Tooting Broadway and Beechcroft Rd) has seen an increase in collisions from turning vehicles. The proposed right turn pocket and lane markings are proposed to aid carriageway discipline as well as to reduce effective carriageway widths to mitigate vehicle speeds. Visibility changes from the existing (or pre-Covid) layout should not be unduly different from currently on street. A vehicle waiting in the proposed right turn pocket should be more obvious to opposing traffic of its intentions to turn. The proposals should also aid east bound vehicle movements and reduce ambiguity. Agree that available widths are tight and rely on accurate driver/vehicle positioning to be effective as intended.	
Client Organisation Comments	
Agree with designers comments	

3.7 DRAWING NO. CS7-TFL-010-10_05_06-DRG-TR-00007

3.7.1 PROBLEM

Location: G – Right turn pocket into Derinton Road.

Summary: Narrow right turn pocket may increase the risk of collisions between turning road users and mainline traffic.

A right turn pocket with a maximum width of 1.7m is proposed for northbound road users entering Derinton Road. This may lead to right turning road users sitting partly within the northbound traffic lane. This may increase the risk of side swipe collisions between northbound traffic and waiting right turning road users or cyclists if northbound traffic enters the cycle lane to bypass a stationary vehicle. Furthermore, the swept paths evidence that road users will be unlikely to utilise the right turn pocket as intended due to the limited size of the provision, and road users entering and exiting Derinton Road overhang the right turn pocket. This may further increase the risk of collisions between road users.

RECOMMENDATION

Ensure the highway layout does not increase the risk of conflicts between road users.

Design Organisation Response	Rejected
Tooting High St (between Tooting Broadway and Beechcroft Rd) has seen an increase in collisions from turning vehicles. The proposed right turn pocket and lane markings are proposed to aid carriageway discipline as well as to reduce effective carriageway widths to mitigate vehicle speeds. A vehicle waiting in the proposed right turn pocket should be more obvious to opposing traffic of its intentions to turn and reduce ambiguity. Agree that available widths are tight and rely on accurate driver/vehicle positioning to be effective as intended.	
Client Organisation Comments	
Agree with designers comments. Th	

3.8 DRAWING NO. CS7-TFL-010-10_05_06-DRG-TR-00008

The audit team has not identified any features of the scheme that could be removed or modified in order to improve the road safety of the measures.

3.9 DRAWING NO. CS7-TFL-010-10_04-DRG-TR-00001

3.9.1 PROBLEM

Location: H – End of southbound bus lane, near Streathbourne Road.

Summary: Limited merge distance may increase the risk of collisions between road users.

The end of the bus lane and merge positioning is proposed less than 10m prior to the existing central traffic island. The audit team are concerned that the merge distance prior to the central island may be insufficient, leading to forced merge and abrupt lane change behaviour. This may increase the risk of side-swipe collisions between road users and/ or road users striking the central island.

RECOMMENDATION

Ensure sufficient merge distance is provided prior to the central island.

Design Organisation Response	Part Accepted
End of bus lane ended an additional 5m north from Ritherdon Rd junction to aid merge on approach to the centre island.	
Client Organisation Comments	
Agree with designer comments	

3.10 DRAWING NO. CS7-TFL-010-10_04-DRG-TR-00002

3.10.1 PROBLEM

Location: I – Northbound parking bay, south of Upper Tooting Park junction.

Summary: Restricted visibility may increase the risk of collisions between road users.

The existing parking bay will be remarked in a location closer to the kerb. This may restrict junction visibility for road users emerging from Upper Tooting Park to northbound mainline road users, and forward visibility for southbound road users turning right to cyclists in the northbound cycle lane. Whilst it is acknowledged that there is already a parking bay at this location, there is the concern that relocating the bay closer to the kerb may restrict visibility further. This is especially of concern as this may exacerbate the existing collision trend involving road users turning into/ out of Upper Tooting Park and colliding with northbound cyclists.

RECOMMENDATION

Ensure sufficient visibility is provided and maintained. It may be necessary to relocate the parking bay.

Design Organisation Response	Rejected
The existing floating parking bay is to be changed to Loading 20mins only 10am to 4pm proposed in the Part 1 “signs and lines” works for CS7 (to be installed prior to these Part 2 works); this will dramatically reduce bay usage. The existing bay is proposed to be re-marked closer to the kerb edge; along with carriageway marking changes to improve the visibility to Upper Tooting Park Road and reduce vehicle speeds on this approach. Lane widths north of the bay are narrowed again to reduce vehicle speeds and mitigate cyclists left hooks.	
Client Organisation Comments	
Agree with designer comments	

3.10.2 PROBLEM

Location: J –Inset parking bays near Marius Road.

Summary: Restricted visibility may increase the risk of collisions between emerging road users and mainline traffic.



Inset parking bays are proposed on both sides of the carriageway south of Marius Road. The audit team are concerned that, when occupied, these bays may restrict junction visibility splays for road users emerging from Marius Road and Hamilton Hall. This may increase the risk of emerging road users colliding with mainline traffic.

RECOMMENDATION

Ensure the parking bays, when occupied, do not restrict junction visibility splays.

Design Organisation Response	Rejected
The two bays (north side Loading only, south side Loading with Disabled) are to be added as Part 1 “signs and lines”. These additions have been previously RSA audited – please see “part 1 RSA audit” for designer comments. Note that kerbside parking bays were present at these locations prior to the TTRO LSP works.	
Client Organisation Comments	
Agree with designer comments	

3.10.3 PROBLEM

Location: K – On-street parking outside 238 Balham High Road.

Summary: Positioning of parking bay may increase the risk of collisions between highway users.

An on-street parking bay is proposed in front of No.238. The audit team have the following concerns regarding the positioning of the proposed bay:

- When occupied the bay may restrict visibility for road users emerging from the church access, increasing the risk of collisions with northbound road users.
- When road users are entering/ exiting the bay they will have to travel within the cycle lane, increasing the risk of collisions between cyclists and other road users.
- When vehicle occupants are entering/ exiting the vehicle they will open doors into the cycle lane. This may increase the risk of cyclists being struck by vehicle doors.
- Immediately adjacent to the proposed bay is an existing tree and street furniture which are not proposed to be removed/ relocated as part of the scheme. This may increase the risk of vehicle occupants struggling to safely access the footway, and/ or slips trips and falls as the trip pit is uneven.



RECOMMENDATION

Ensure the positioning of the parking bay does not increase the risk of conflicts between highway users. It may be necessary to relocate the bay to a more suitable location.

Design Organisation Response	Rejected
The proposed Loading (20mins) with Disabled (3hrs) (10am to 4pm) is to be added as Part 1 “signs and lines”. These additions have been previously RSA audited – please see “part 1 RSA audit” for designer comments. Note that a parking bay was present at this location prior to the TTRO LSP works.	
Client Organisation Comments	
Agree with designers comments	

3.10.4 PROBLEM

Location: L – Southbound cycle lane at bus stop J, near Upper Tooting Park.

Summary: Narrow cycle lane and kerb alignment may increase the risk of cyclists falling from their bike.

The scheme will reduce the width of the cycle lane on approach to the bus stop and alter the kerb line. However, the kerb line to the north will protrude into the cycle lane, of which cyclists may be unaware of. This may increase the risk of cyclists, in particular those on larger bicycles, colliding with the protruding kerb line and falling from their bike, sustaining personal injury.

RECOMMENDATION

Provide a flush kerb line and a sufficiently wide consistent cycle lane.

Design Organisation Response	Rejected
The existing temporary build out is proposed rebuilt to align into the existing nearside kerb edge. The bus stop island proposed is to the current design standards. The light segregated cycle lane narrows from 2.9m to 1.5m passing the island (1.5m which is to TfL LCDS guidance) and is required to slow cyclists down prior to the pedestrian crossing; noting the proximity to the school. Hatching markings along with bollard installed on the island should provide suitable warning to cyclists on this approach.	
Client Organisation Comments	
Agree with designer comments	

3.11 DRAWING NO. CS7-TFL-010-10_04-DRG-TR-00003

3.11.1 PROBLEM

Location: M – Northbound inset parking bay by church.

Summary: Highway alignment may increase the risk of collisions between emerging road users and mainline traffic.

An on-street parking bay is proposed at the commencement of the bus lane. This may cause confusion and conflicts between road users, as mainline traffic/ buses may not anticipate a vehicle to be emerging from the bay. Emerging road users leaving the bay may also struggle to find an appropriate gap to exit between buses entering the bus lane and mainline traffic continuing northbound. This may increase the risk of side-swipe type collisions between road users exiting the bay and mainline traffic.

RECOMMENDATION

Ensure the highway alignment does not increase the risk of conflicts between emerging road users and buses/ mainline traffic.

Design Organisation Response	Rejected
The proposed Disabled only bay (10am to 4pm) is to be added as Part 1 “signs and lines”. These additions have been previously RSA audited – please see “part 1 RSA audit” for designer comments. Note that a parking bay (within the bus lane) was present at this location prior to the TTRO LSP works.	
Client Organisation Comments	

Agree with designer comments

3.11.2 PROBLEM

Location: N – Northbound inset parking bay by church.

Summary: Restricted visibility may increase the risk of collisions between emerging road users and mainline traffic.

An on-street parking bay is proposed between the two existing church accesses, which may restrict junction visibility for road users emerging from the church when occupied. This may increase the risk of emerging road users colliding with mainline traffic.

RECOMMENDATION

Ensure sufficient junction visibility is provided and maintained.

Design Organisation Response	Rejected
<p>The proposed bay is Disabled only (10am to 4pm) and is to be added as Part 1 “signs and lines”. These additions have been previously RSA audited – please see “part 1 RSA audit” for designer comments. Note that a parking bay (within the bus lane) was present at this location prior to the TTRO LSP works and did not appear to be a prior issue with the church access.</p>	
Client Organisation Comments	
<p>Agree with designer comments</p>	

3.12 DRAWING NO. CS7-TFL-010-10_03-DRG-TR-00001

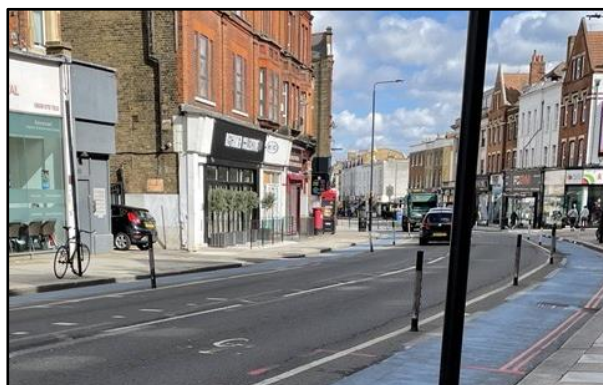
3.12.1 PROBLEM

Location: O – Northbound parking bay outside No.98 - 100.

Summary: Positioning of parking bay may increase the risk of collisions between road users.

The positioning of the proposed parking bay, when occupied, may:

- Restrict visibility for road users emerging from the private access, increasing the risk of collisions between emerging road users and southbound mainline traffic.
- Restrict visibility for emerging road users at the northern most extents of the bay, due to the curve in the carriageway alignment at this location, increasing the risk of collisions between emerging road users and northbound mainline traffic. This is especially of concern as cyclists will also be merging into the main traffic lane at this location as well.



RECOMMENDATION

Ensure the parking bay (when occupied) does not restrict visibility or create conflicts between road users. It may be necessary to relocate the bay.

Design Organisation Response	Accepted
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Agreed. Please note both north and south bound kerbside Loading with Disabled bays are to be implemented in Part 1 and have as such already been RSA audited and responded to – please see part 1 RSA audit. Both bays were added at the instruction of IDP Sponsorship.

Client Organisation Comments

This bay was added following a meeting between TfL, the MP and local business owners, where the latter explained the operational issues, they were now facing. We agreed to provide a loading/disabled bay on each side of the road to support the ongoing service arrangement – note that there is no access to the rear of the properties. The location of the bay was selected because of best visibility for cyclists and traffic, and to minimise the number of times a cyclist moves between the cycle lane and traffic lane. Agree with designer comments.

3.12.2 PROBLEM

Location: P – Proposed parking bays within the southbound cycle lane.

Summary: Absence of cycle lane transitions may increase the risk of side swipe collisions between cyclists and mainline traffic.

The existing vertical wands (alongside the cycle lane) are proposed be retained on approach to the proposed parking bays. As such, road users may not be expecting cyclists to merge into the main traffic lane at these locations. Additionally, there is no gradual merge arrangement for cyclists to exit and re-join the cycle lane surrounding the parking bays. This may increase the risk of side-swipe collisions between cyclists and northbound road users.

RECOMMENDATION

Provide appropriate transitions for cyclists to bypass parking bays.

Design Organisation Response	Accepted
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Agreed. Please note both north and south bound kerbside Loading with Disabled bays are to be implemented in Part 1 and have as such already been RSA audited and responded to – please see part 1 RSA audit. Both bays were added at the instruction of IDP Sponsorship.

Client Organisation Comments

This bay was added following a meeting between TfL, the MP and local business owners, where the latter explained the operational issues, they were now facing. We agreed to provide a loading/disabled bay on each side of the road to support the ongoing service arrangement – note that there is no access to the rear of the properties. The location of the bay was selected because of best visibility for cyclists and traffic, and to minimise the number of times a cyclist moves between the cycle lane and traffic lane. Agree with designer comments

3.12.3 PROBLEM

Location: Q –Parking bay to the south of bus stop E (outside No.57 to 59).

Summary: Restricted visibility may increase the risk of collisions between emerging road users and mainline traffic.

When the bus stop is occupied with a stationary bus, there is the concern that this may restrict visibility to southbound road users for those emerging from the proposed parking bays downstream. This may increase the risk of rear end shunts and/ or side-swipe type collisions between road users.

RECOMMENDATION

Ensure sufficient visibility is provided for road users emerging from the bay.

Design Organisation Response	Accepted
Agreed. Please note both north and south bound kerbside Loading with Disabled bays are to be implemented in Part 1 and have as such already been RSA audited and responded to – please see part 1 RSA audit. Both bays were added at the instruction of IDP Sponsorship.	
Client Organisation Comments	
This bay was added following a meeting between TfL, the MP and local business owners, where the latter explained the operational issues, they were now facing. We agreed to provide a loading/disabled bay on each side of the road to support the ongoing service arrangement – note that there is no access to the rear of the properties. The location of the bay was selected because of best visibility for cyclists and traffic, and to minimise the number of times a cyclist moves between the cycle lane and traffic lane. Agree with designer comments	

3.13 DRAWING NO. CS7-TFL-010-10_03-DRG-TR-00002

The audit team has not identified any features of the scheme that could be removed or modified in order to improve the road safety of the measures.

3.14 GENERAL

3.14.1 PROBLEM

Location: R – Throughout scheme.

Summary: Restricted visibility may increase the risk of collisions between turning road users and mainline traffic.

There is an absence of keep clear road markings at several side road junctions throughout the scheme. Given the levels of congestion observed during the site visit and the nearside cycle lane, absence of such markings may restrict visibility for turning road users to oncoming cyclists, increasing the risk of collisions between these users.

Absence of such road markings was noted to be inconsistent to various other side road junction in the vicinity/ other locations throughout the scheme.

RECOMMENDATION

Provide keep clear markings at appropriate locations to maximise visibility at side road junctions.

Design Organisation Response	Part Accepted
Some KEEP CLEAR markings at un-controlled side road junctions have been thought to be attributing factors to cyclists being hit by right turning vehicles; a vehicle stopped at a KEEP CLEAR marking seriously restricts the visibility of a cyclist travelling in a nearside cycle lane (protected or not). Whilst agreed vehicles blocking side roads potentially impacts traffic progression it is in many ways safer for cyclists. Collisions have been assessed throughout the whole of CS7 south and amendments made where deemed necessary. No KEEP CLEAR amendments are proposed in addition to proposals in Part 1 and / or part 2 works. Existing and Proposed Keep Clear markings have been rechecked and amended if needed.	
Client Organisation Comments	
Agree with designer comments	

End of list of problems identified and recommendations offered in this Stage 1 Road Safety Audit

4.0 ISSUES IDENTIFIED DURING THE STAGE 1 ROAD SAFETY AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

Safety issues identified during the audit and site inspection that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in this section. It is to be understood that, in raising these issues, the Audit Team in no way warrants that a full review of the highway environment has been undertaken beyond that necessary to undertake the Audit as commissioned.

4.1 ISSUE

Location: 1 – A24 northbound between Coverton Road and Gilbey Road.

Reason considered to be outside the Terms of Reference: For consideration to include within the detailed design.

The proposed cycle symbols within the northbound traffic lane may coincide with the existing 20mph roundels. It is recommended that the existing road markings are reviewed with cognisance to the proposed road markings, and the two are suitably spaced.

Design Organisation Response	Part Accepted
20mph roundel locations will be checked against the proposed cycle logo locations once the As-built drawings for the 20mph scheme are provided. Cycle logos will be amended if required	
Client Organisation Comments	
Agree with designer comments	

4.2 ISSUE

Location: 2 – Brook Close junction

Reason considered to be outside the Terms of Reference: For consideration to include within the detailed design.

The proposed keep clear markings may be insufficient in length to provide sufficient visibility to oncoming cyclists for right turning road users. It is recommended that the keep clear markings are extended to improve visibility.

Design Organisation Response	Accepted
Agreed – KEEP CLEAR markings lengthened	
Client Organisation Comments	
Agree with designer comments	

4.3 ISSUE

Location: 3 – Northbound carriageway merge on approach to bus stop H

Reason considered to be outside the Terms of Reference: Item for clarification.

It is unclear if the existing merge arrow will be re-provided as part of the scheme. It is recommended that this merge arrow is provided to guide northbound road users to merge into a single lane on exit from the signal-controlled junction.

Design Organisation Response	Accepted
Existing merge arrow will be retained – amended for clarity	
Client Organisation Comments	
Agree with designer comments	

4.4 ISSUE

Location: 4 – Balham Park Road junction.

Reason considered to be outside the Terms of Reference: Existing issue.

The existing signage at this location is currently obscured by overhanging/ overgrown vegetation. This is especially of concern during summer months/ growing seasons when the tree will be in bloom. It is recommended that sufficient visibility to the sign face is provided. Cut back and maintain vegetation.



Design Organisation Response	Accepted
Asset Operations will be made aware as this is a maintenance issue. Note additional off-side No Entry sign is also provided.	
Client Organisation Comments	
Agree with designer comments	

4.5 ISSUE

Location: 5 – Upper Tooting Park & Marius Road junctions

Reason considered to be outside the Terms of Reference: Drawing ambiguity.

It is unclear from the drawing if a raised table (as denoted by the key) or blue surfacing will be provided within the cycle lane across these two junctions. It is recommended that sporadic raised tables are not placed within the cycle lane at these locations.

However, blue surfacing to increase the conspicuity of the cycle lane may be beneficial.

Design Organisation Response	Accepted
Grey in the drawings depicts “existing retained” items and are hence not identified separately in the key. The items referred to here are the blue surfacing areas across the junctions which are proposed to be retained. Note where not warranted blue surfacing is removed as per TfL TAA justification requirements.	
Client Organisation Comments	
Agree with designer comments	

4.6 ISSUE

Location: 6 – North of Alderbrook Road.

Reason considered to be outside the Terms of Reference: For consideration within the detailed design.

It is unclear why the existing CS7 sign will be removed from its current location as part of the scheme. It is recommended this sign is retained to guide cyclists following the continuation of the CS7 route.

Design Organisation Response	Rejected
CS7 route finishes at Alderbrook Rd with cyclists directed north west on Alderbrook Rd on Quietway 5 (bypassing this section of Clapham Common South Side re-joining north east of Clapham Common station junction). A section north of Alderbrook Rd is shown for removal so as not to be confusing to cyclists and the prescribed route. Noting that existing CS7 markings are to remain north of this point to provide cyclists some mitigation.	
Client Organisation Comments	
Agree with designer comments	

5.0 SIGNATURES AND SIGN-OFF

5.1 AUDIT TEAM STATEMENT

We certify that we have examined the drawings and documents listed in Appendix A of this ~~Choose an item~~.report. The Road Safety Audit has been carried out in accordance with TfL Procedure SQA-0170 dated May 2014, with the sole purpose of identifying any feature that could be removed or modified in order to improve the safety of the measures. The problems identified have been noted in this report together with associated suggestions for safety improvements that we recommend should be studied for implementation.

No one on the Audit Team has been involved with the design of the measures.

AUDIT TEAM LEADER:

Name: [REDACTED] Signed: [REDACTED]
MEng (Hons), MCIHT, MSoRSA
Date: 08/05/2024

Organisation: Transport for London, Road Safety Audit
Engineering – Roads, Streets and Places

Address: 3rd Floor Palestra, 197 Blackfriars Road, London, SE1 8NJ

Contact: [REDACTED]

AUDIT TEAM MEMBER:

Name: [REDACTED] Signed: 
BSc. (Hons), MCIHT, MSoRSA
Date: 08/05/2024

Organisation: Transport for London, Road Safety Audit
Engineering – Roads, Streets and Places

Address: 3rd Floor Palestra, 197 Blackfriars Road, London, SE1 8NJ

Contact: [REDACTED]


5.2 DESIGN TEAM STATEMENT

In accordance with SQA-0170 dated May 2014, I certify that I have reviewed the items raised in this Stage 1 Road Safety Audit report. I have given due consideration to each issue raised and have stated my proposed course of action for each in this report. I seek the Client Organisation's endorsement of my proposals.

Name [REDACTED]

Position: Senior Engineer – Principle Designer

Organisation: TfL Engineering – RSP – Highways and Traffic

Signed: 

Dated: 16/05/2024

5.3 CLIENT ORGANISATION STATEMENT

I accept these proposals by the Design Organisation.

Name [REDACTED]

Position: Lead Sponsor

Organisation: Transport for London

Signed:

Dated: 04/09/2024

Click or tap to enter a date.

5.4 SECONDARY CLIENT ORGANISATION STATEMENT (where appropriate)

I accept these proposals by the Design Organisation.

Name:

Position:

Organisation:

Signed:

Dated: Click or tap to enter a date.

APPENDIX A

Documents Forming the Audit Brief

DRAWING NUMBER

CS7-TFL-010-10_03-DRG-TR-00001 to 0003 Rev P01.1
CS7-TFL-010-10_04-DRG-TR-00001 to 00004 Rev P01.1
CS7-TFL-010-10_05_06-DRG-TR-00001 to 00008 Rev P01.1
CS7-TFL-005-10_03-DRG-TR-00001 Rev P01.1
CS7-TFL-005-10_04-DRG-TR-00001 Rev P01.1
CS7-TFL-005-10_05_06-DRG-TR-00001 to 00003 Rev P01.1

DRAWING TITLE

CS7 Balham to Alderbrook Section 3 ~ Phase 2 Concept Design Sheets 1 to 3
CS7 Tooting Bec to Balham Section 4 ~ Phase 2 Concept Design Sheets 1 to 4
CS7 Colliers Wood to Tooting Bec Section 6 to 5 ~ Phase 2 Concept Design Sheets 1 to 8
CS7 Colliers Wood to Tooting Bec Section 3 ~ Phase 2. Concept Design. Vehicle Swept Path Analysis
CS7 Colliers Wood to Tooting Bec Section 4 ~ Phase 2. Concept Design. Vehicle Swept Path Analysis
CS7 Colliers Wood to Tooting Bec Section 6 to 5 ~ Phase 2. Concept Design. Vehicle Swept Path Analysis. Sheets 1 to 3.

DOCUMENTS

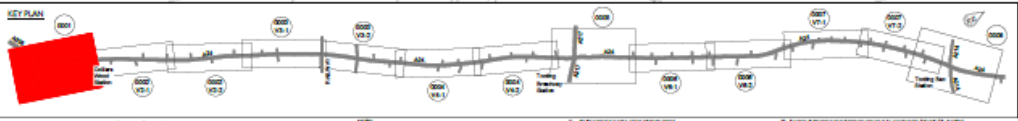
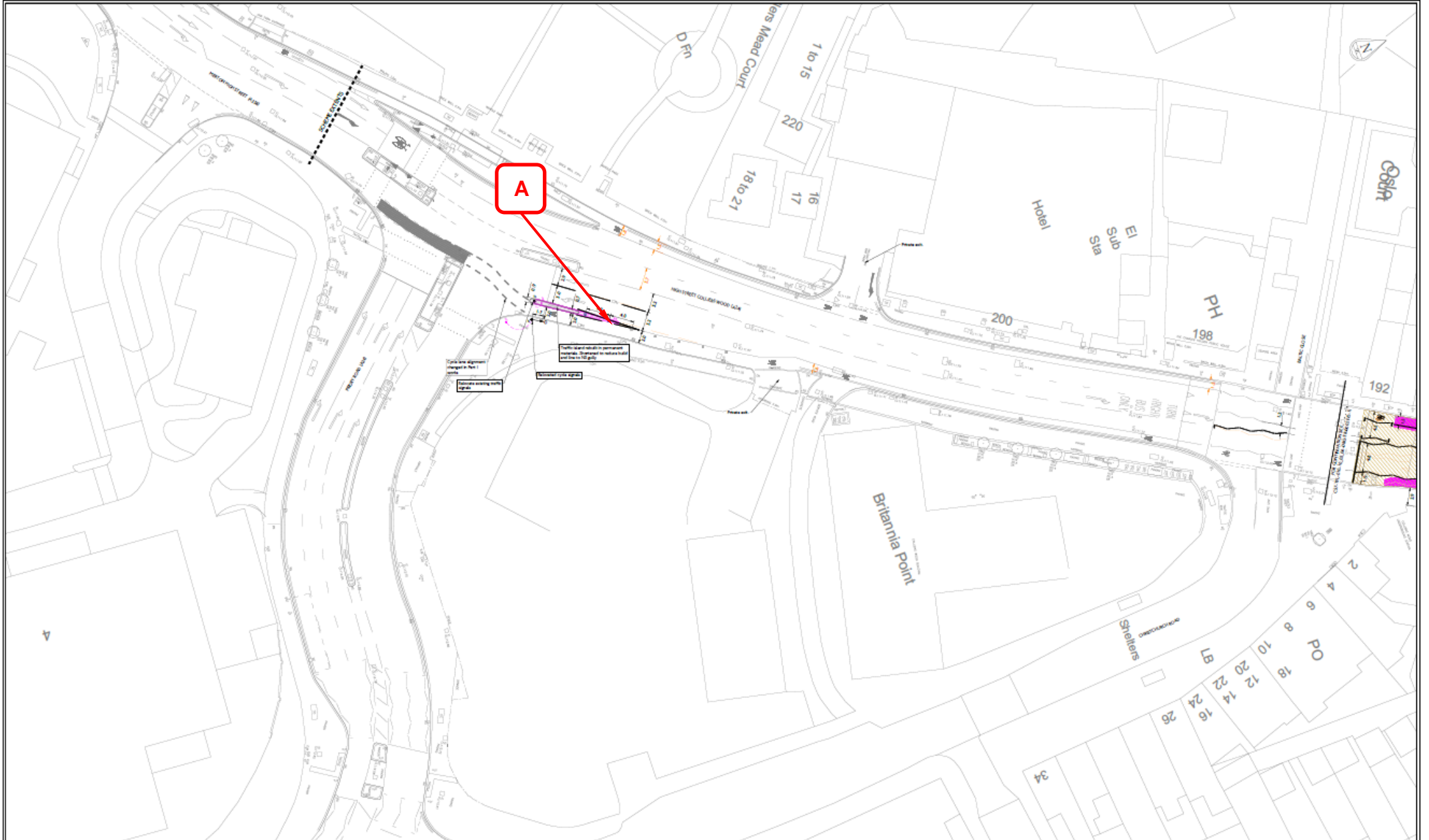
- Safety Audit Brief
- Site Location Plan
- Traffic signal details
- TfL signal safety checklist
- Departures from standard
- Previous Road Safety Audits
- Previous Designer Responses
- Collision data
- Collision plot
- Traffic flow / modelling data
- Pedestrian flow / modelling data
- Speed survey data
- Other documents

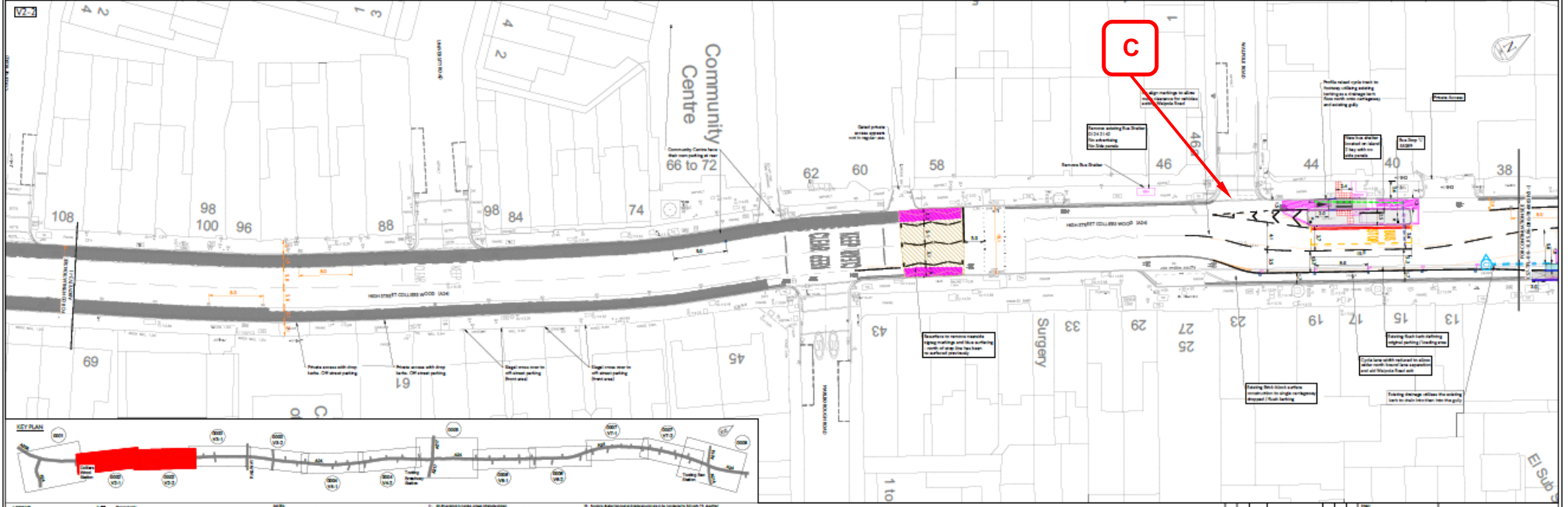
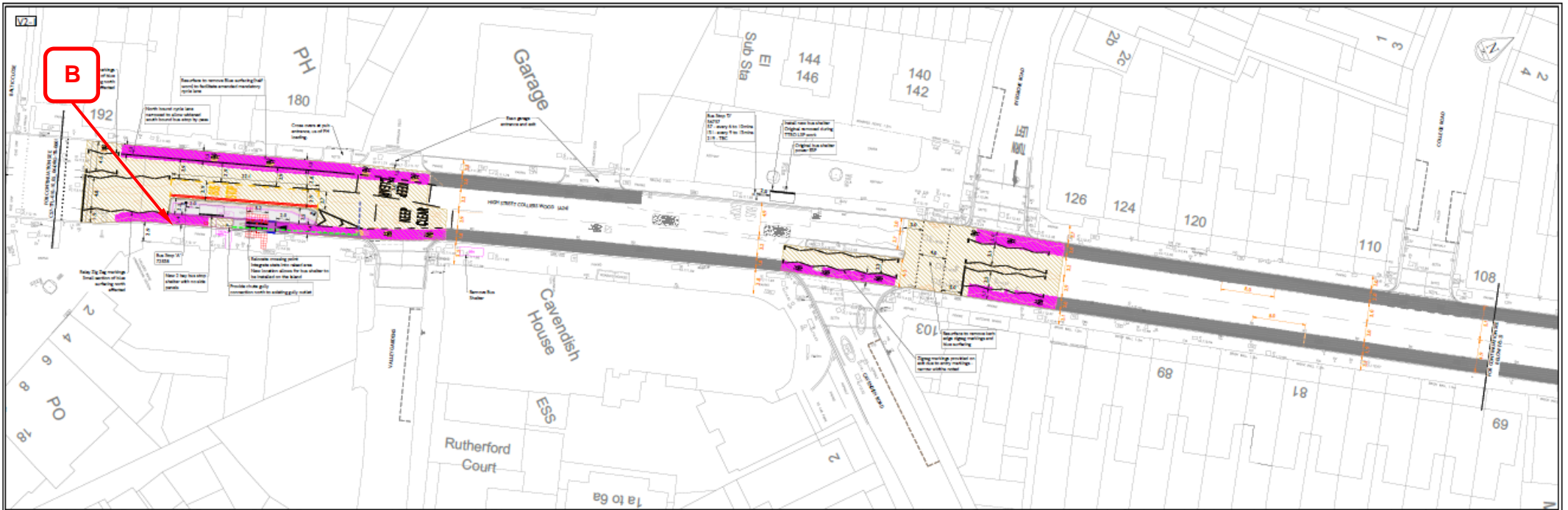
DETAILS (where appropriate)

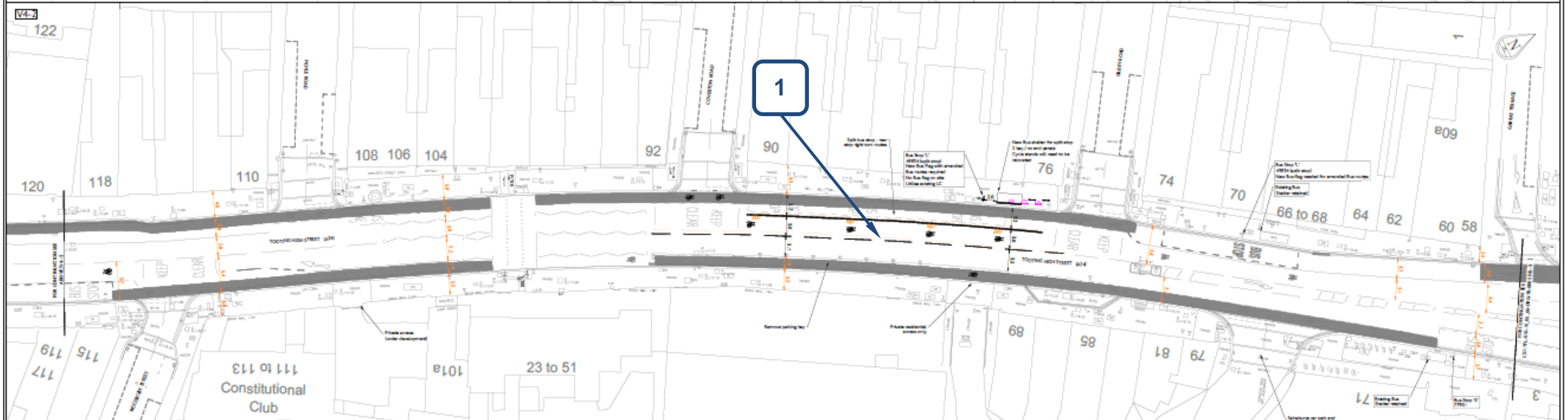
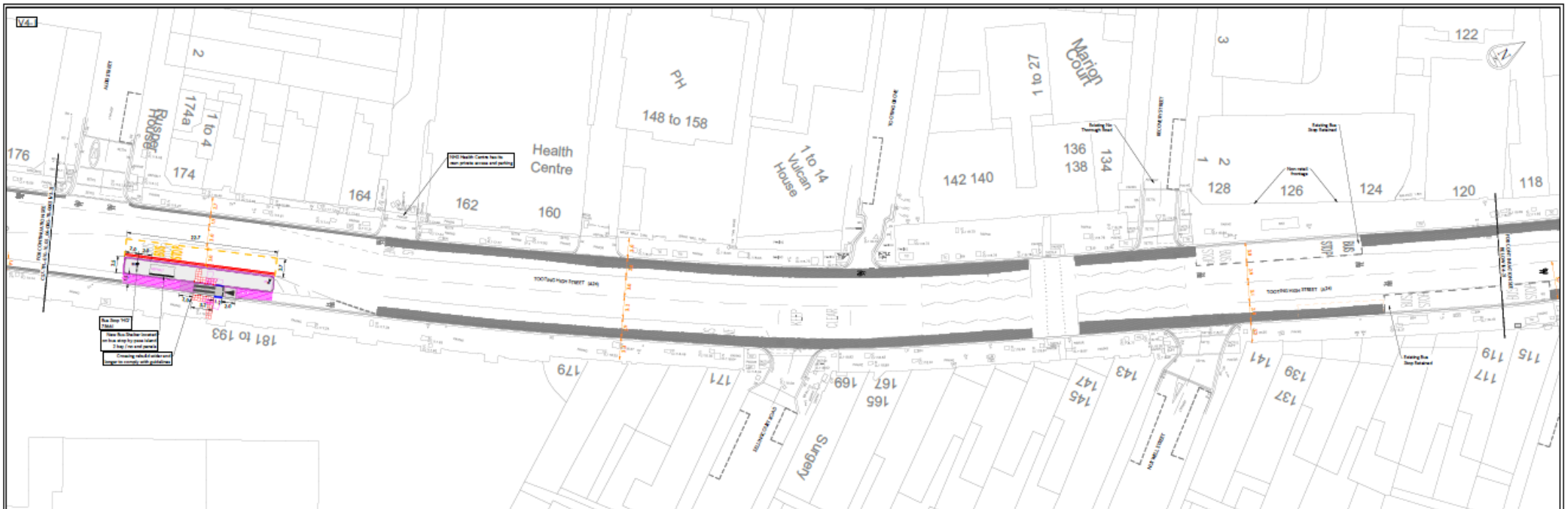
TfL Stage 2 RSA - 4262/010/A24/TLRN/2023

APPENDIX B

Problem Locations

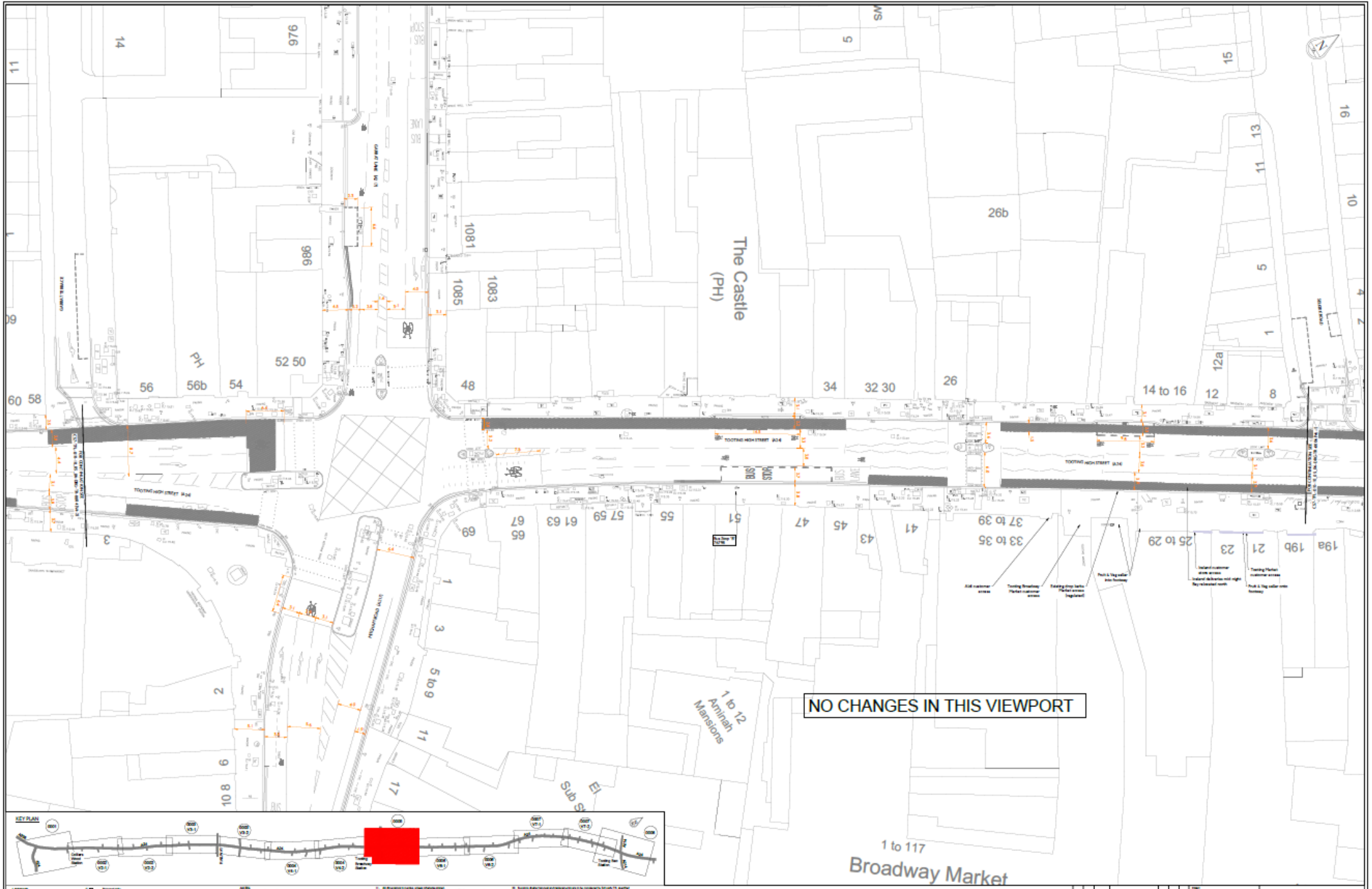


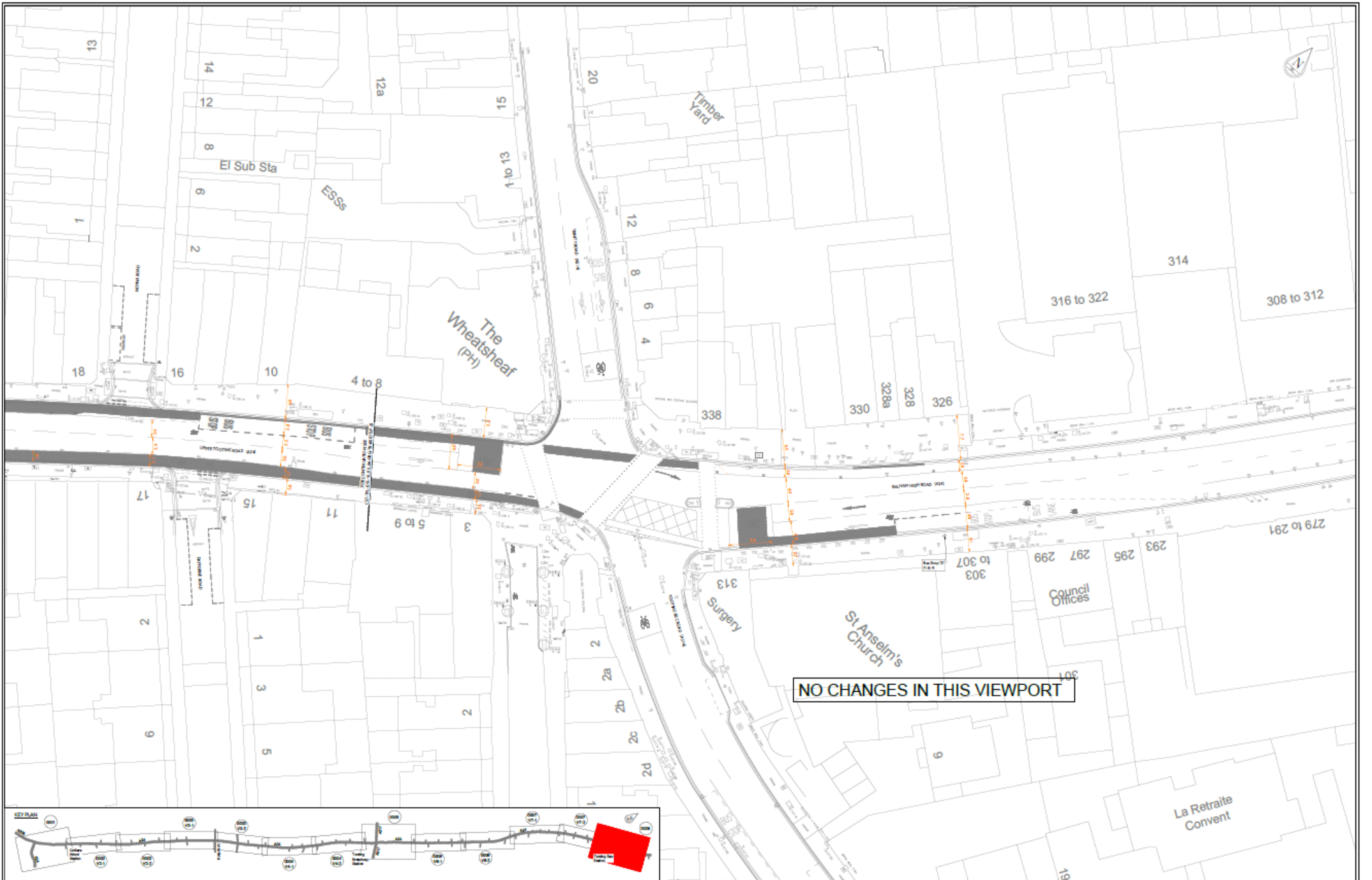




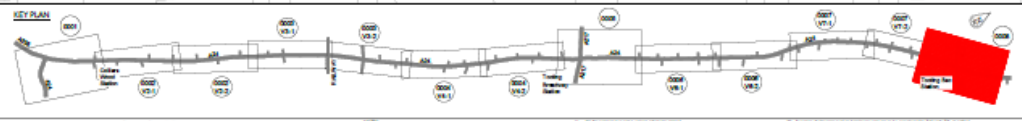
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Proposed boundary lines	Proposed	Proposed	Proposed
Proposed boundary lines	Proposed	Proposed	Proposed
Proposed boundary lines	Proposed	Proposed	Proposed
Proposed boundary lines	Proposed	Proposed	Proposed
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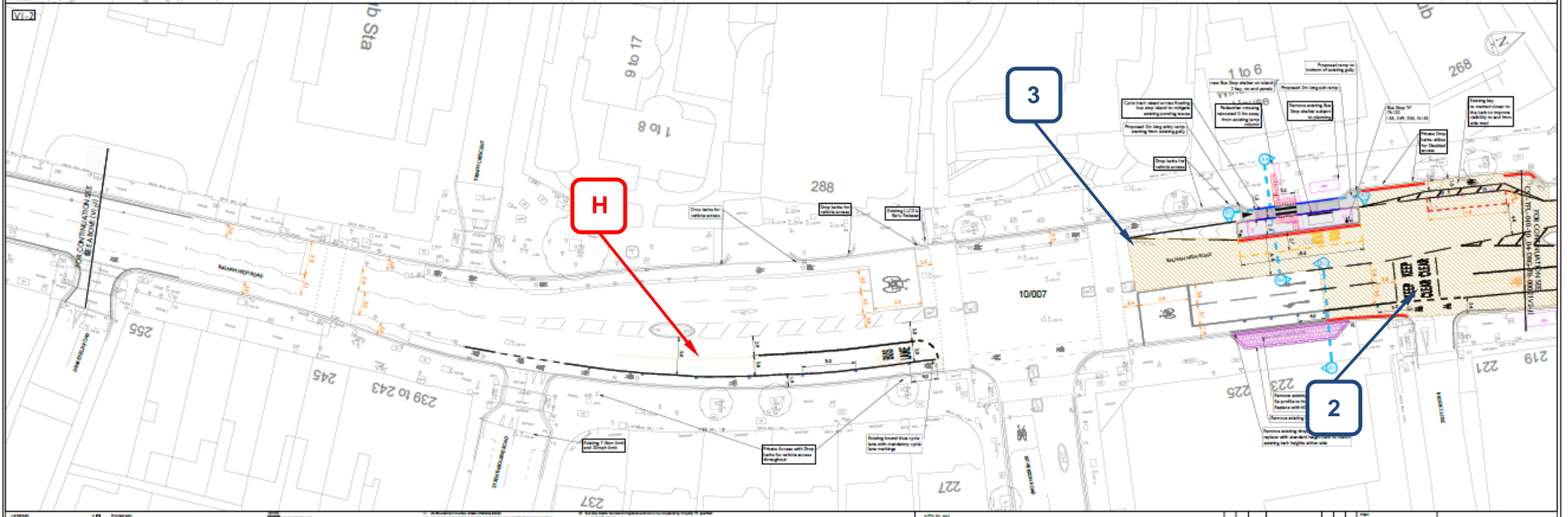
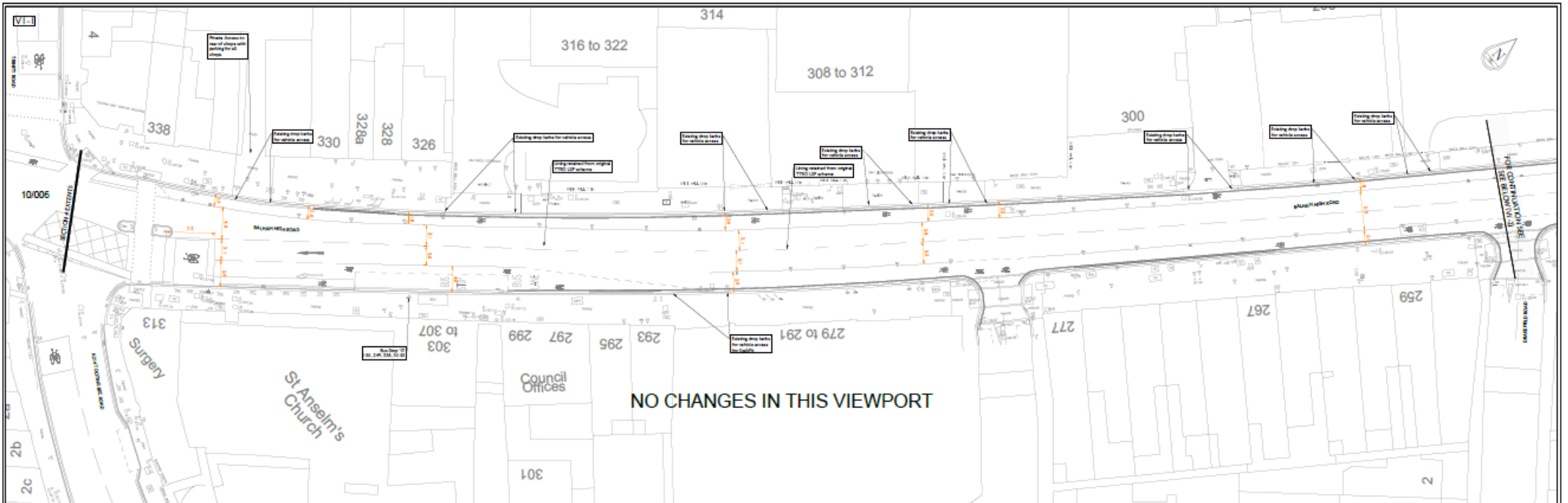
C&I Collier Wood to Tooting Station Section 8 to 9 - Phase 2 CONCEPT DESIGN	
Date Issued: 12/03/2024 Version: 1.0 Drawn: [Name] Checked: [Name]	
NO. [Number] OF SHEETS [Number]	PAGE [Number] OF [Number]





NO CHANGES IN THIS VIEWPORT





LEGEND

Proposed stop layout	Proposed stop layout for wheelchair access	Proposed stop layout for vehicle access	Proposed stop layout for wheelchair access
Proposed stop layout for wheelchair access	Proposed stop layout for vehicle access	Proposed stop layout for wheelchair access	Proposed stop layout for vehicle access
Proposed stop layout for wheelchair access	Proposed stop layout for vehicle access	Proposed stop layout for wheelchair access	Proposed stop layout for vehicle access
Proposed stop layout for wheelchair access	Proposed stop layout for vehicle access	Proposed stop layout for wheelchair access	Proposed stop layout for vehicle access

NOTES

1. The proposed stop layouts are subject to the final design of the station and the availability of space.
2. The proposed stop layouts are subject to the final design of the station and the availability of space.
3. The proposed stop layouts are subject to the final design of the station and the availability of space.
4. The proposed stop layouts are subject to the final design of the station and the availability of space.
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9. The proposed stop layouts are subject to the final design of the station and the availability of space.
10. The proposed stop layouts are subject to the final design of the station and the availability of space.

KEY PLAN

REVISIONS

No.	Description	Date
1	Initial Issue	01/10/2020

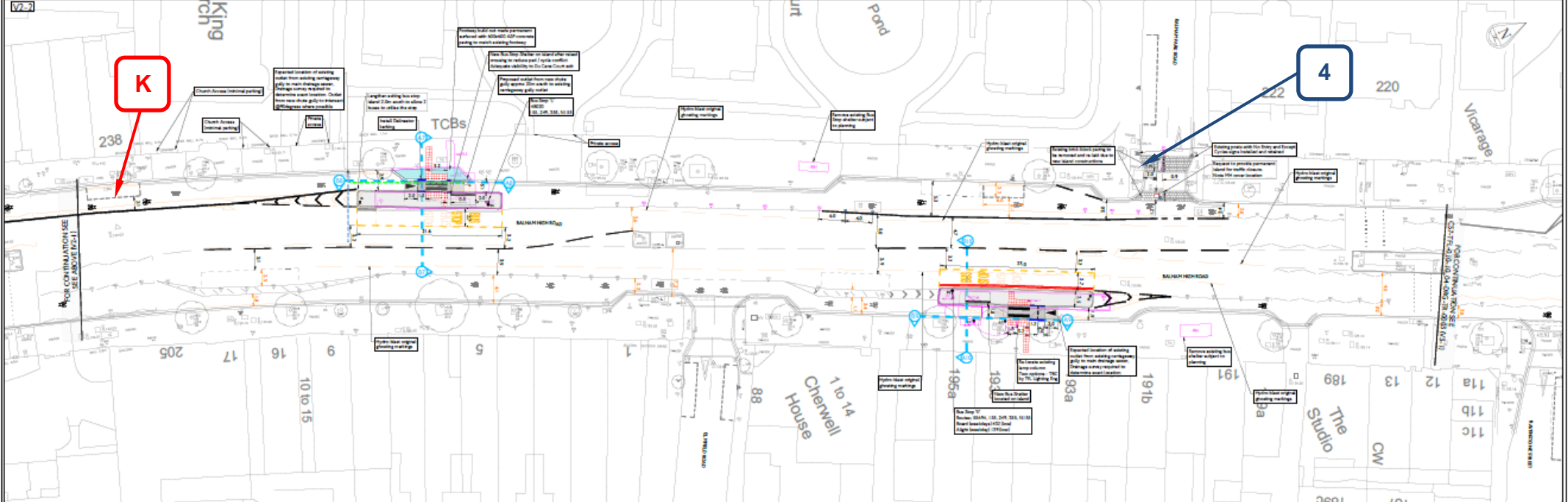
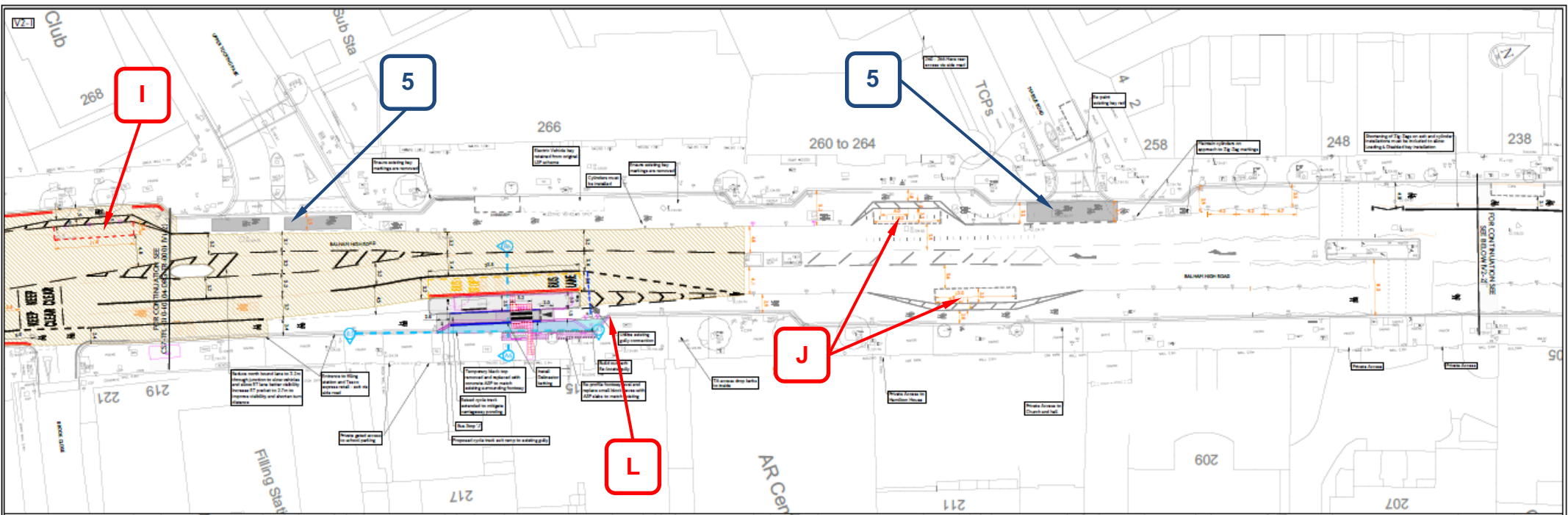
GENERAL ARRANGEMENTS

CSL
Troutling St to Belham
Section 4 - Phase 2
CONCEPT DESIGN

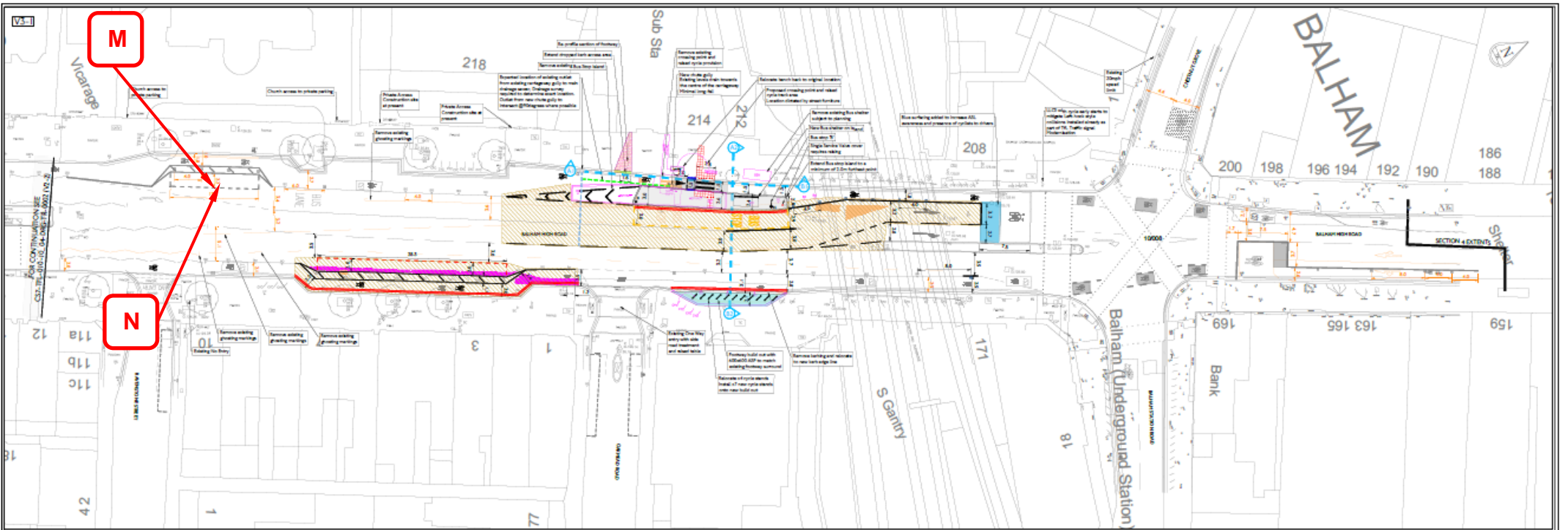
Client	Chisham Community Centre
Project	Transport for London
Drawn	
Checked	
Date	

TRANSPORT FOR LONDON

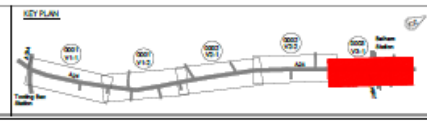
CSL
Troutling St to Belham
Section 4 - Phase 2
CONCEPT DESIGN
P01.1



<p>LEGEND</p> <ul style="list-style-type: none"> Proposed building Proposed parking Proposed road Proposed cycleway Proposed footway Proposed drainage Proposed landscaping Proposed lighting Proposed furniture Proposed signage Proposed street art Proposed public art Proposed green infrastructure Proposed utility Proposed other 	<p>GENERAL NOTES</p> <ol style="list-style-type: none"> 1. All proposed works shall be in accordance with the Design Statement and the Transport for London (TfL) Design Standards. 2. The proposed works shall be designed to provide a high quality, safe and accessible environment for all users. 3. The proposed works shall be designed to integrate with the existing environment and the surrounding area. 4. The proposed works shall be designed to be sustainable and resilient. 5. The proposed works shall be designed to be flexible and adaptable to future changes. 	<p>KEY PLAN</p>	<p>CLIENT TfL PROJECT Cycle Repair Hub 7 DATE 12/20/2020</p>	<p>Transport for London TfL Logo TfL Logo TfL Logo TfL Logo TfL Logo</p>
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SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[Orange outline]	Proposed boundary lines	[Blue outline]	Proposed cycle lane
[Yellow outline]	Proposed parking area	[Purple outline]	Proposed bus stop
[Red outline]	Proposed bus stop	[Light blue outline]	Proposed cycle lane
[Green outline]	Proposed cycle lane	[Light purple outline]	Proposed bus stop
[Blue outline]	Proposed bus stop	[Light orange outline]	Proposed cycle lane
[Light blue outline]	Proposed cycle lane	[Light green outline]	Proposed bus stop
[Light purple outline]	Proposed bus stop	[Light blue outline]	Proposed cycle lane
[Light orange outline]	Proposed cycle lane	[Light green outline]	Proposed bus stop
[Light green outline]	Proposed bus stop	[Light blue outline]	Proposed cycle lane
[Light blue outline]	Proposed cycle lane	[Light purple outline]	Proposed bus stop
[Light purple outline]	Proposed bus stop	[Light orange outline]	Proposed cycle lane
[Light orange outline]	Proposed cycle lane	[Light green outline]	Proposed bus stop



DATE	REVISED	DESCRIPTION

Scale	As shown
Drawn by	
Checked by	
Approved by	
Date	12/07/10

Transport for London

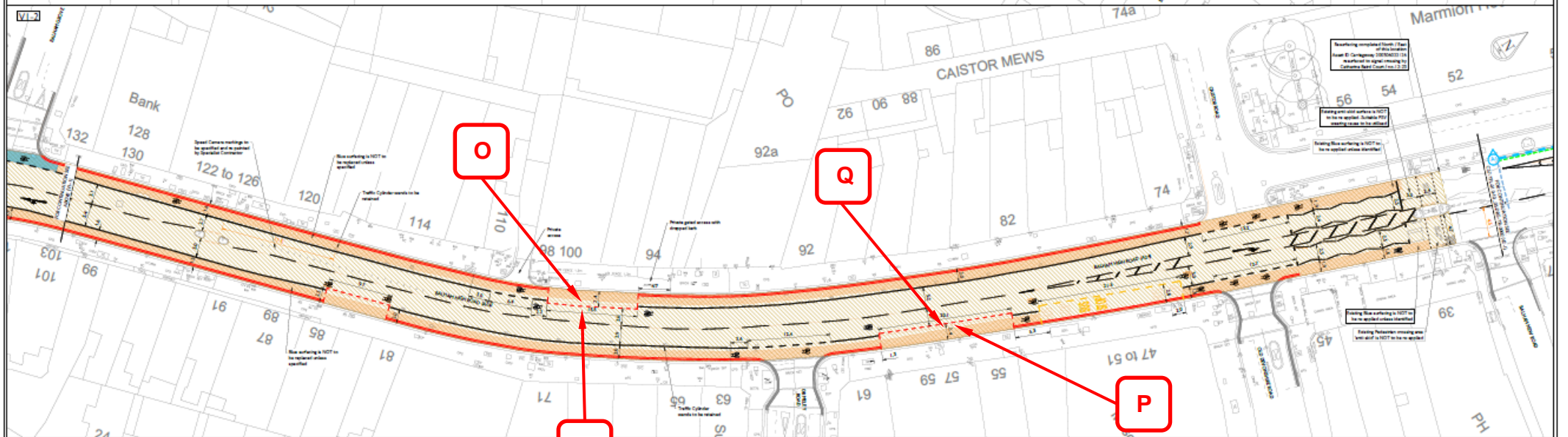
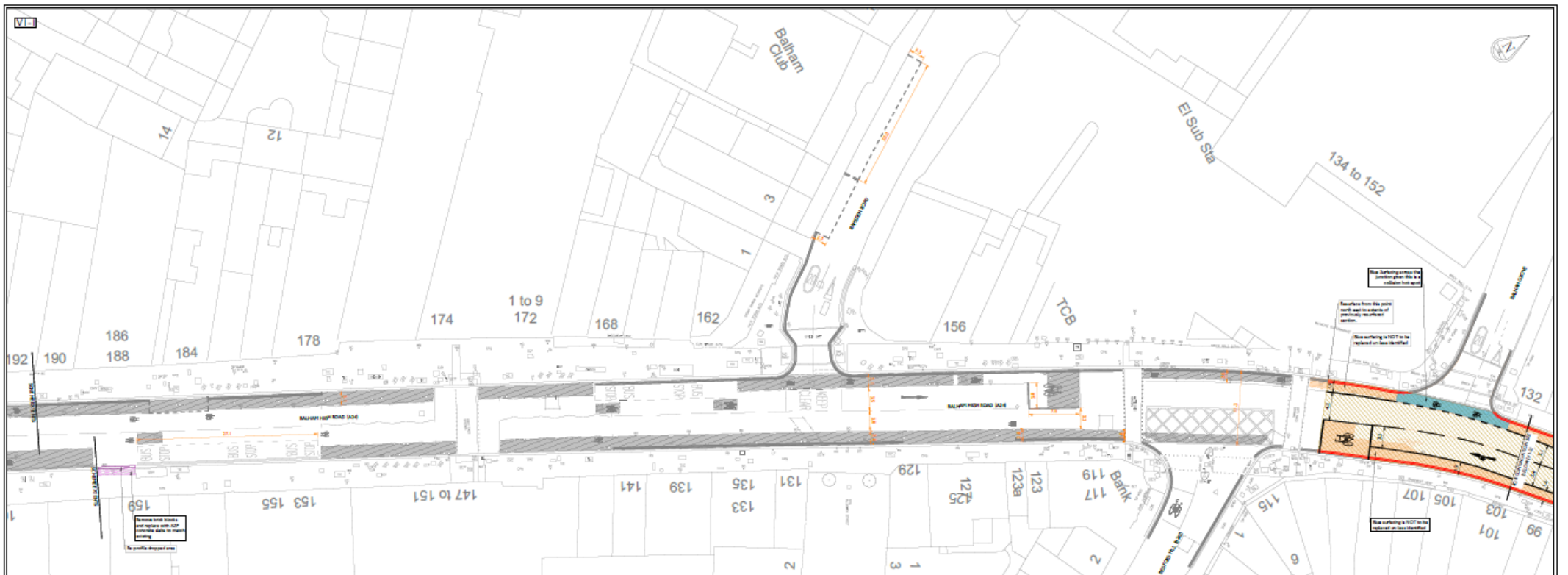
CBF
 Tooting Station Balham
 Section 4 - Phase 2
 CONCEPT DESIGN

Drawn by
Checked by
Approved by

Page 11 of 4

Transport for London

05/06/10 12:00:00
 GBL-TPL-410-10_04-DRG-TR-00003



Legend

	Proposed		Proposed		Proposed
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	Proposed		Proposed		Proposed

KEY PLAN



