

These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9.

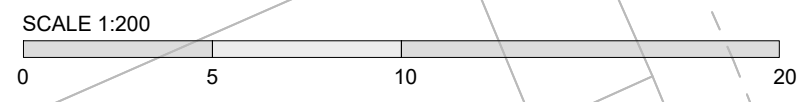
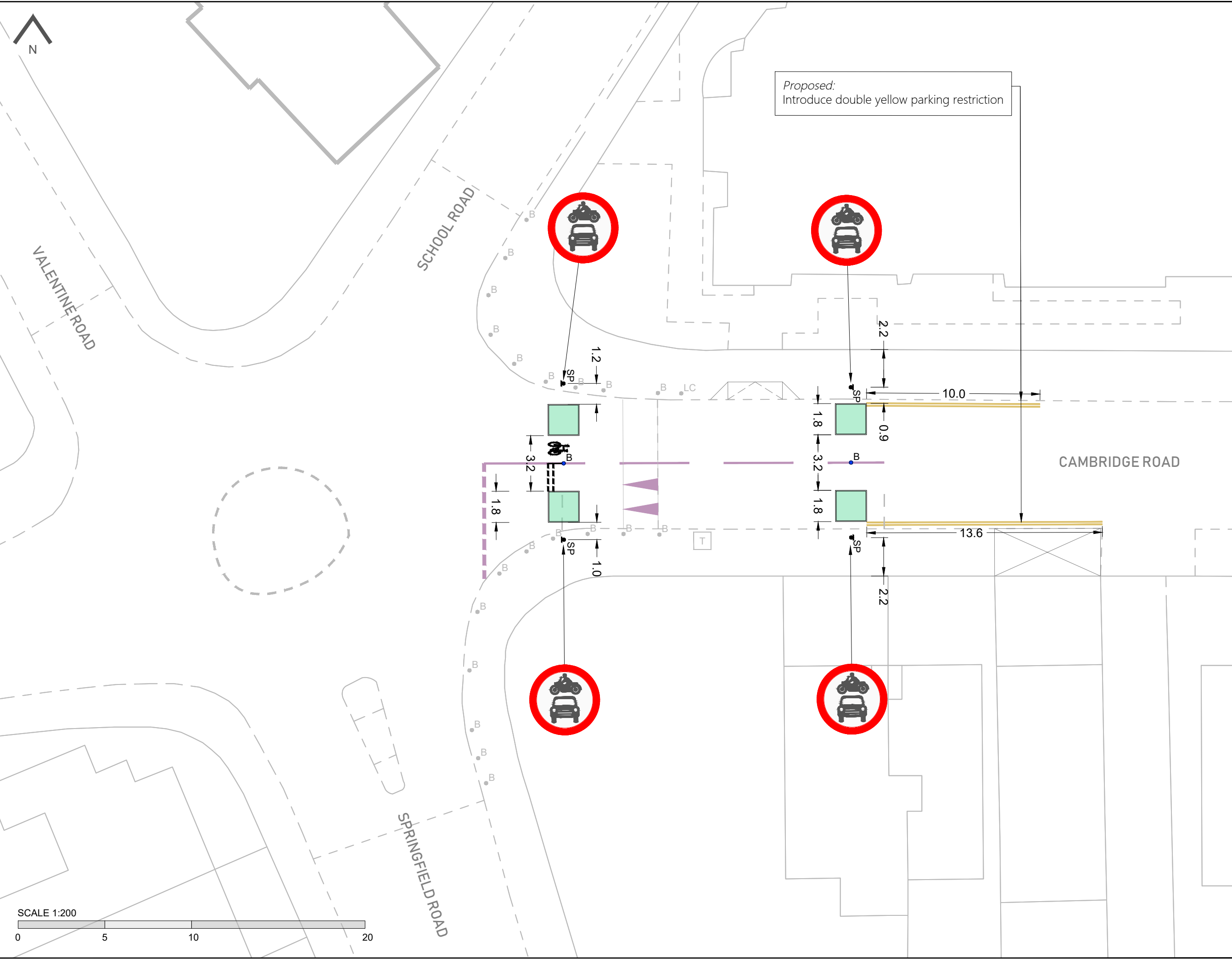
Copyright © Phil Jones Associates Ltd / PJA Civil Engineering Ltd

Notes

- All measurements in metres unless otherwise stated.
- Layout based on OS base mapping.
- Planters to be heavy duty timber with drainage clearance and fixed to carriageway.
- This drawing is for technical approvals and are not to be used for construction purposes and it is the responsibility of the client and contractor to identify risks associated with the construction stage and to design appropriate measures to mitigate.
- Fold down bollard with padlock to enable emergency vehicle access and match day access if required. Specification - CIS Type 194/153 Folding Coffin Box Bollard.
- 75mm yellow line marking.

Key

- Proposed Footway Resurfacing
- Proposed Keybloc Grey
- Proposed Buff Surface Dressing
- Proposed Planter
- Remove road surface
- Proposed Carriageway Resurfacing
- Proposed Asphalt Table
- Proposed Kerb
- Proposed Dropped Kerb Flush
- Existing Line Marking
- Existing Line Marking Removed
- Proposed White Line Marking
- Proposed Yellow Line Marking
- Existing / Proposed Tree
- Existing / Proposed Lamp Column
- Existing / Proposed Sign Post
- Existing / Proposed Bollard
- Proposed Fold-down Bollard
- Existing Street Furniture Removed
- Existing / Proposed Gully



Rev	Date	Description	Drawn	Checked
A	04/09/20	Annotations added	JMC	JMQ

The Aquarium
King Street
Reading
RG1 2AN
www.pja.co.uk



Project
King's Heath Low Traffic Neighbourhoods

Drawing
Cambridge Road Modal Filter

Concept Design

Client
Birmingham City Council

Drawing No.
04965-PM-KH-C-05-01

Status	Date	Revision
For Discussion Only	25/08/20	A

Scale at 1:200
Designed: JMC, Checked: JMC, Approved: JMC

Ordnance Survey (c) 2020. All rights reserved. Licence number xxxxxxxx

These drawings have been produced with reference to the CDM Regulations 2015. Please note that these are pre-construction phase drawings and should be subject to further design risk management as required in accordance with Regulation 9.

- Notes**
- All measurements in metres unless otherwise stated.
 - Layout based on OS base mapping.
 - Planters to be heavy duty timber with drainage clearance and fixed to carriageway.
 - This drawing is for technical approvals and are not to be used for construction purposes and it is the responsibility of the client and contractor to identify risks associated with the construction stage and to design appropriate measures to mitigate.
 - Fold down bollard with padlock to enable emergency vehicle access and match day access if required. Specification - CIS Type 194/153 Folding Coffin Box Bollard.
 - 75mm yellow line marking.

- Key**
- Proposed Footway Resurfacing
 - Proposed Keybloc Grey
 - Proposed Buff Surface Dressing
 - Proposed Planter
 - Remove road surface
 - Proposed Carriageway Resurfacing
 - Proposed Asphalt Table
 - Proposed Kerb
 - Proposed Dropped Kerb Flush
 - Existing Line Marking
 - Existing Line Marking Removed
 - Proposed White Line Marking
 - Proposed Yellow Line Marking
 - Existing / Proposed Tree
 - Existing / Proposed Lamp Column
 - Existing / Proposed Sign Post
 - Existing / Proposed Bollard
 - Proposed Fold-down Bollard
 - Existing Street Furniture Removed
 - Existing / Proposed Gully

Rev	Date	Description	Drawn	Checked
A	04/09/20	Annotations added	JMC	JMQ

The Aquarium
King Street
Reading
RG1 2AN
www.pja.co.uk



Project
King's Heath Low Traffic Neighbourhoods

Drawing
School Road Modal Filter

Concept Design

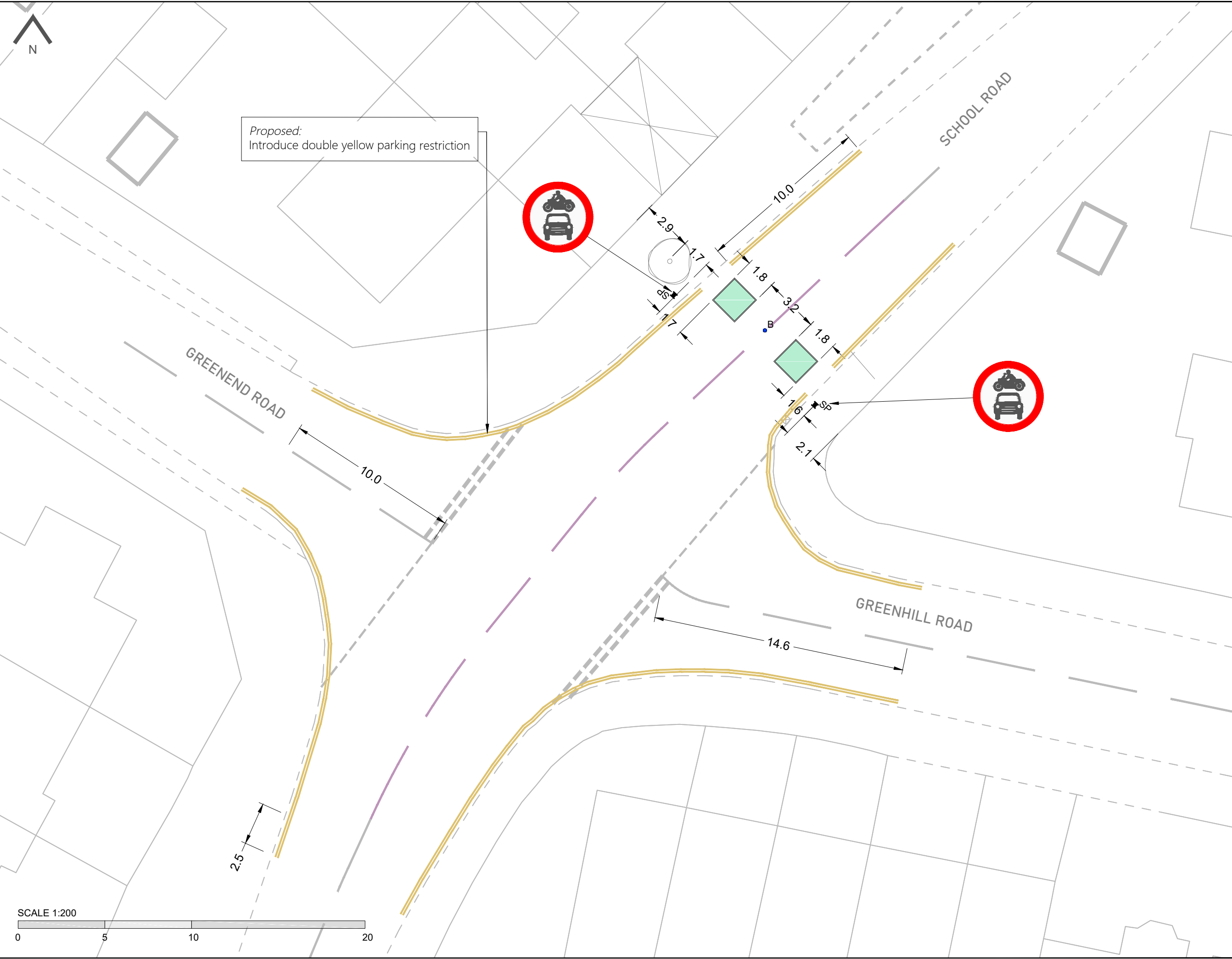
Client
Birmingham City Council

Drawing No.
04965-PM-KH-C-05-02

Status	Date	Revision
For Discussion	25/08/20	A

Scale at 1:200
Designed: JMC
Checked: JMC
Approved: JMC

Ordnance Survey (c) 2020. All rights reserved. Licence number xxxxxxxx





Key:

	Existing kerb
	Existing line markings
	Existing lighting column
	Existing bollard
	Existing gully
	Existing sign post
	Existing telegraph pole
	Existing vehicle crossover
	Existing tree
	Proposed collapsible bollard with reflective strip
	Proposed 1.2m x 0.9m x 0.6m planter with reflector
	Proposed yellow line markings
	Location Plan

Approximate Quantities
 1x collapsible bollards with reflective strips
 3x planters 1.2m x 1.2m x 0.6m with reflectors
 2x signs to TSRGD 619 (post mounted)
 1x signpost

- Notes:**
- Not all road markings or street furniture shown.
 - Drawing based on OS base, all dimensions and street furniture positions to be checked on site and any discrepancies to be reported.
 - Proposed street furniture to be checked on site.
 - Proposed street furniture to be aligned with existing, ensuring vehicles cannot pass the filter on the carriageway or footway.
 - Maximum spacing between building lines, planters and street furniture to be 1.7m, preventing cars from passing. If this is not possible, designers to be notified and design to be amended.
 - Use brackets and bolts to fix planters in place.
 - Construction to not affect highway drainage.

- General Notes:**
- All dimensions in metres, unless otherwise noted.
 - Do not scale off plan.
 - Dimensions are to be checked by the contractor prior to commencement of work. Any discrepancy shall be reported immediately to Sustrans.
 - Drawing based on OS base plan.
 - Co-ordinates based on OS grid.
 - Levels based on OS datum (Newlyn).
 - This drawing is to be read in conjunction with all other relevant drawings and specifications.
 - All work shall be carried out in accordance with Birmingham City Council statutory authority and health & safety requirements and regulations.
 - The position of services is based on information provided by other parties at the time of design and is for guidance only. It is the responsibility of the Client and Contractor to verify the exact position of any services before commencing works on site.
 - Temporary traffic works must be undertaken in accordance with Chapter 8 parts 1 & 2 of the Traffic Signs Manual, Safety at Street Works and Road Works Code of Practice 2013 and any other relevant H&S legislation.
 - These drawings have been produced under the CDM 2015 Regulations. The client is directed to their duties under Regulation 4 of CDM 2015.
 - The delivery of this drawing in electronic format shall not be construed to provide any authorisation or right of the recipient or any other person to rely upon, alter or otherwise use the information provided. Any use of this information is at the sole risk and liability of the user and Sustrans assumes no liability for unauthorised use or alteration of the information contained herein.
 - To ensure the most up to date drawings are being used the project drawing register should be referred to.
 - For further information on drawing and design revisions, see decision log or contact Sustrans project manager.
 - This drawing has been produced to be read in colour, for the sheet size specified below. Printing or copying in black and white, or on a different sheet size may lead to misinterpretation of the design.

Rev	Description	Drawn	Check	Appr	Date
-					

sustrans

JOIN THE MOVEMENT

70 Cowcross Street London EC1M 6EJ
 020 7017 2350 www.sustrans.org.uk

Project:
 Low Traffic Neighbourhood - Castle Vale

Title:
 Yatesbury Avenue
 General Arrangement

Drawn: DC **Check:** **Appr:** **Date:** 17/09/2020 **Scale at A3:** 1:100

Status: **FINAL**

Drawing No: 13020-D-GA-01-00-05 **Revision:** -

Proposed planters to be installed in line with existing trees. Gaps no larger than 1.7m, to prevent vehicles from passing. Bollards to be installed between planters and trees if necessary. Ensure minimum 200mm gap to kerb line, in order to not affect highway drainage. TSRGD diagram 619 signs mounted to existing lighting column or new sign posts if required.



Ensure gap between planter and tree trunk or telegraph pole does not exceed 1.7m

Proposed planters to be installed in line with existing trees. Gaps no larger than 1.7m, to prevent vehicles from passing.

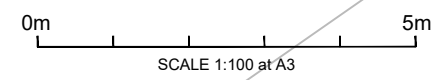
New sign post with TSRGD 619.

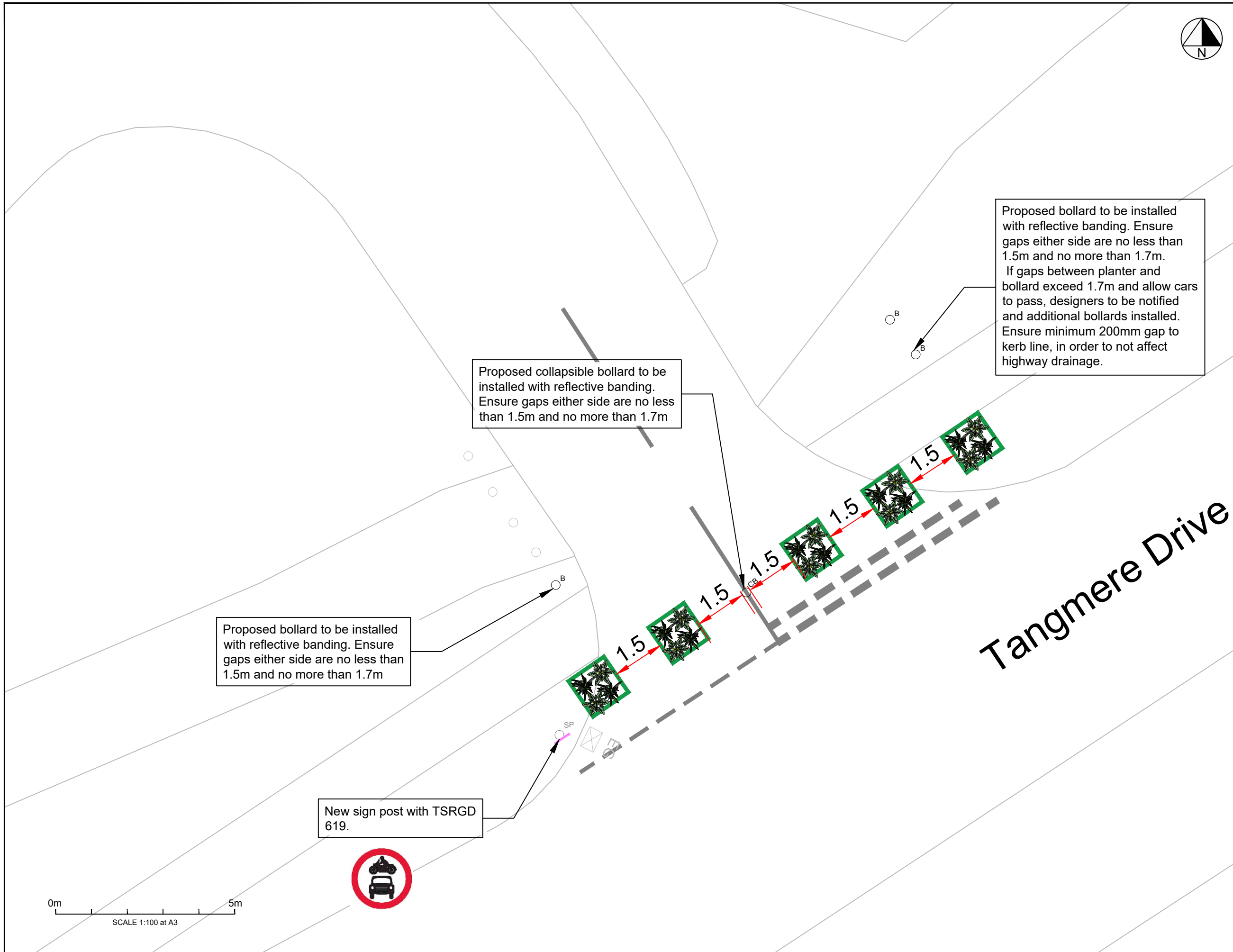


If gaps between tree and building line exceed 1.7m and allow cars to pass, designers to be notified and bollard installed.

Proposed collapsible bollard to be installed with reflective banding. Ensure gaps either side are no less than 1.5m and no more than 1.7m

Ensure gap between planter and tree trunk or telegraph pole does not exceed 1.7m
 Bollards to be installed to maintain this distance if required.





Key:

	Existing kerb
	Existing line markings
	Existing lighting column
	Existing bollard
	Existing gully
	Existing sign post
	Existing telegraph pole
	Existing vehicle crossover
	Existing tree
	Proposed collapsible bollard with reflective strip
	Proposed 1.2m x 0.9m x 0.6m planter with reflector
	Proposed yellow line markings
	Location Plan

Approximate Quantities
 1x collapsible bollards with reflective strips
 6x planters 1.2m x 1.2m x 1.1m with reflectors
 3x fixed bollards with reflective strips
 2x signs to TSRGD 619

- Notes:**
- Not all road markings or street furniture shown.
 - Drawing based on OS base, all dimensions and street furniture positions to be checked on site and any discrepancies to be reported.
 - Proposed street furniture to be checked on site.
 - Proposed street furniture to be aligned with existing, ensuring vehicles cannot pass the filter on the carriageway or footway.
 - Maximum spacing between building lines, planters and street furniture to be 1.7m, preventing cars from passing. If this is not possible, designers to be notified and design to be amended.
 - Use brackets and bolts to fix planters in place.
 - Construction to not affect highway drainage.

- General Notes:**
- All dimensions in metres, unless otherwise noted.
 - Do not scale off plan.
 - Dimensions are to be checked by the contractor prior to commencement of work. Any discrepancy shall be reported immediately to Sustrans.
 - Drawing based on OS base plan.
 - Co-ordinates based on OS grid.
 - Levels based on OS datum (Newlyn).
 - This drawing is to be read in conjunction with all other relevant drawings and specifications.
 - All work shall be carried out in accordance with Birmingham City Council statutory authority and health & safety requirements and regulations.
 - The position of services is based on information provided by other parties at the time of design and is for guidance only. It is the responsibility of the Client and Contractor to verify the exact position of any services before commencing works on site.
 - Temporary traffic works must be undertaken in accordance with Chapter 8 parts 1 & 2 of the Traffic Signs Manual, Safety at Street Works and Road Works Code of Practice 2013 and any other relevant H&S legislation.
 - These drawings have been produced under the CDM 2015 Regulations. The client is directed to their duties under Regulation 4 of CDM 2015.
 - The delivery of this drawing in electronic format shall not be construed to provide any authorisation or right of the recipient or any other person to rely upon, alter or otherwise use the information provided. Any use of this information is at the sole risk and liability of the user and Sustrans assumes no liability for unauthorised use or alteration of the information contained herein.
 - To ensure the most up to date drawings are being used the project drawing register should be referred to.
 - For further information on drawing and design revisions, see decision log or contact Sustrans project manager.
 - This drawing has been produced to be read in colour, for the sheet size specified below. Printing or copying in black and white, or on a different sheet size may lead to misinterpretation of the design.

Rev	Description	Drawn	Check	Appr	Date

sustrans

JOIN THE MOVEMENT

70 Cowcross Street London EC1M 6EJ
 020 7017 2350 www.sustrans.org.uk

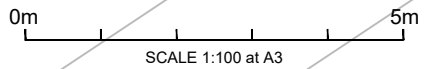
Project:
 Low Traffic Neighbourhood - Castle Vale

Title:
 Cosford Crescent
 General Arrangement

Drawn: DC **Check:** DC **Appr:** DC **Date:** 17/09/2020 **Scale at A3:** 1:100

Status: **DRAFT**

Drawing No: 13020-D-GA-01-00-06 **Revision:** -





Key:

	Existing kerb
	Existing line markings
	Existing lighting column
	Existing gully
	Existing vehicle crossover
	Existing tree
	Proposed collapsible bollard with reflective strip
	Proposed 1.2m x 0.9m x 0.6m planter with reflector
	Proposed yellow line markings
	Location Plan

Approximate Quantities
 1x collapsible bollards with reflective strips
 6x planters 1.2m x 1.2m x 1.1m with reflectors
 2x signs to TSRGD 619
 2x fixed bollards

- Notes:**
- Not all road markings or street furniture shown.
 - Drawing based on OS base, all dimensions and street furniture positions to be checked on site and any discrepancies to be reported.
 - Proposed street furniture to be checked on site.
 - Proposed street furniture to be aligned with existing, ensuring vehicles cannot pass the filter on the carriageway or footway.
 - Maximum spacing between building lines, planters and street furniture to be 1.7m, preventing cars from passing. If this is not possible, designers to be notified and design to be amended.
 - Use brackets and bolts to fix planters in place.
 - Construction to not affect highway drainage.

- General Notes:**
- All dimensions in metres, unless otherwise noted.
 - Do not scale off plan.
 - Dimensions are to be checked by the contractor prior to commencement of work. Any discrepancy shall be reported immediately to Sustrans.
 - Drawing based on OS datum.
 - Co-ordinates based on OS grid.
 - Levels based on OS datum (Newlyn).
 - This drawing is to be read in conjunction with all other relevant drawings and specifications.
 - All work shall be carried out in accordance with Birmingham City Council statutory authority and health & safety requirements and regulations.
 - The position of services is based on information provided by other parties at the time of design and is for guidance only. It is the responsibility of the Client and Contractor to verify the exact position of any services before commencing works on site.
 - Temporary traffic works must be undertaken in accordance with Chapter 8 parts 1 & 2 of the Traffic Signs Manual, Safety at Street Works and Road Works Code of Practice 2013 and any other relevant H&S legislation.
 - These drawings have been produced under the CDM 2015 Regulations. The client is directed to their duties under Regulation 4 of CDM 2015.
 - The delivery of this drawing in electronic format shall not be construed to provide any authorisation or right of the recipient or any other person to rely upon, alter or otherwise use the information provided. Any use of this information is at the sole risk and liability of the user and Sustrans assumes no liability for unauthorised use or alteration of the information contained herein.
 - To ensure the most up to date drawings are being used the project drawing register should be referred to.
 - For further information on drawing and design revisions, see decision log or contact Sustrans project manager.
 - This drawing has been produced to be read in colour, for the sheet size specified below. Printing or copying in black and white, or on a different sheet size may lead to misinterpretation of the design.

Rev	Description	Drawn	Check	Appr	Date
-					

sustrans

JOIN THE MOVEMENT

70 Cowcross Street London EC1M 6EJ
 020 7017 2350 www.sustrans.org.uk

Project:
 Low Traffic Neighbourhood - Bournville

Title:
 Franklin Road
 General Arrangement

Drawn: DC **Check:** DC **Appr:** DC **Date:** 17/09/2020 **Scale at A3:** 1:100

Status: **DRAFT**

Drawing No: 13020-D-GA-01-00-07 **Revision:** -

Proposed planters to be installed in line with existing lighting column and sign post. Gaps no larger than 1.5m, to prevent vehicles from passing. Ensure minimum 200mm gap to kerb line, in order to not affect highway drainage. Existing signage to be removed from sign post and replaced with TSRGD diagram 619 for length of road closure.



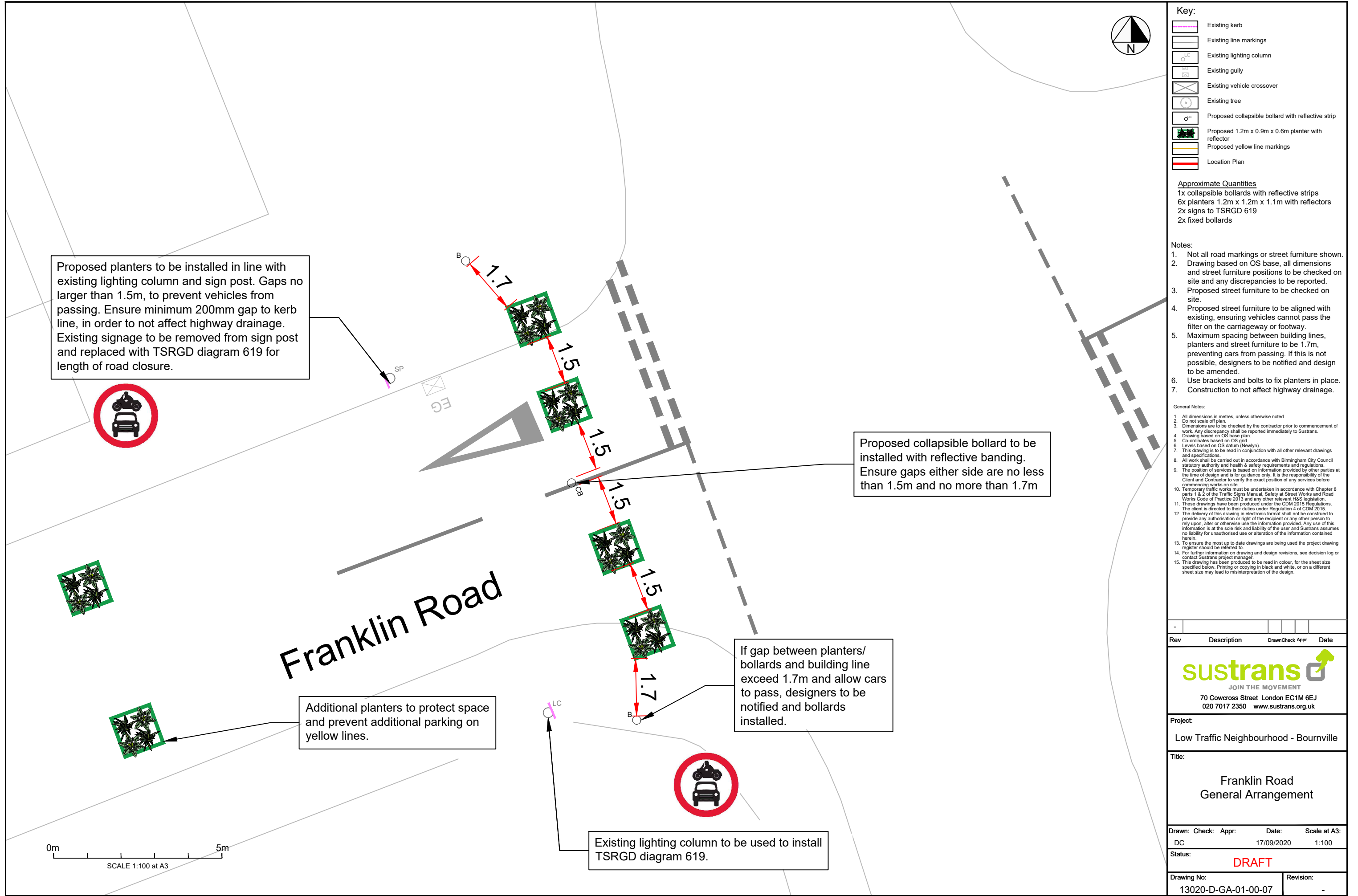
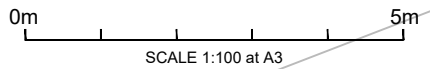
Proposed collapsible bollard to be installed with reflective banding. Ensure gaps either side are no less than 1.5m and no more than 1.7m

If gap between planters/bollards and building line exceed 1.7m and allow cars to pass, designers to be notified and bollards installed.

Existing lighting column to be used to install TSRGD diagram 619.

Additional planters to protect space and prevent additional parking on yellow lines.

Franklin Road



Woodbrooke Road



Key:

	Existing kerb
	Existing line markings
	Existing lighting column
	Existing sign post
	Existing sign to be removed from sign post
	Existing road markings to be removed
	Existing vehicle crossover
	Existing tree
	Proposed collapsible bollard with reflective strip
	Proposed 1.2m x 0.9m x 0.6m planter with reflector
	Proposed yellow line markings
	Location Plan

Approximate Quantities

- 4x planters 1.2m x 1.2m x 1.1m with reflectors
- 16x brackets to bolt down planters
- 4x signs to TSRGD 619
- 4x custom signs
- 1x fixed bollards with reflective strips

- Notes:**
- Not all road markings or street furniture shown.
 - Drawing based on OS base, all dimensions and street furniture positions to be checked on site and any discrepancies to be reported.
 - Proposed street furniture to be checked on site.
 - Proposed street furniture to be aligned with existing, ensuring vehicles cannot pass the filter on the carriageway or footway.
 - Maximum spacing between building lines, planters and street furniture to be 1.7m, preventing cars from passing. If this is not possible, designers to be notified and design to be amended.
 - Use brackets and bolts to fix planters in place.
 - Construction to not affect highway drainage.

- General Notes:**
- All dimensions in metres, unless otherwise noted.
 - Do not scale off plan.
 - Dimensions are to be checked by the contractor prior to commencement of work. Any discrepancy shall be reported immediately to Sustrans.
 - Drawing based on OS base plan.
 - Co-ordinates based on OS grid.
 - Levels based on OS datum (Newlyn).
 - This drawing is to be read in conjunction with all other relevant drawings and specifications.
 - All work shall be carried out in accordance with Birmingham City Council statutory authority and health & safety requirements and regulations.
 - The position of services is based on information provided by other parties at the time of design and is for guidance only. It is the responsibility of the Client and Contractor to verify the exact position of any services before commencing works on site.
 - Temporary traffic works must be undertaken in accordance with Chapter 8 parts 1 & 2 of the Traffic Signs Manual, Safety at Street Works and Road Works Code of Practice 2013 and any other relevant H&S legislation.
 - These drawings have been produced under the CDM 2015 Regulations. The client is directed to their duties under Regulation 4 of CDM 2015.
 - The delivery of this drawing in electronic format shall not be construed to provide any authorisation or right of the recipient or any other person to rely upon, alter or otherwise use the information provided. Any use of this information is at the sole risk and liability of the user and Sustrans assumes no liability for unauthorised use or alteration of the information contained herein.
 - To ensure the most up to date drawings are being used the project drawing register should be referred to.
 - For further information on drawing and design revisions, see decision log or contact Sustrans project manager.
 - This drawing has been produced to be read in colour, for the sheet size specified below. Printing or copying in black and white, or on a different sheet size may lead to misinterpretation of the design.

Proposed planters to be installed across junction. Gaps no narrower than 1.5m and no larger than 1.7m, to allow cycles but prevent vehicles from passing. Ensure minimum 200mm gap to kerb line, in order to not affect highway drainage.

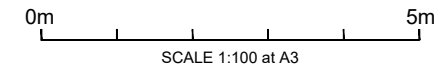
Proposed collapsible bollard to be installed with reflective banding. Ensure gaps either side are no less than 1.5m and no more than 1.7m

Either side of junction create a ramp to kerb (in absence of dropped kerb)

New sign post to be used to install TSRGD diagram 619.

Proposed bollard to be installed with reflective banding. Ensure gaps either side are no less than 1.5m and no more than 1.7m

Existing lighting column to be used to install TSRGD diagram 619.



Rev	Description	Drawn	Check	Appr	Date
-					

sustrans
JOIN THE MOVEMENT
70 Cowcross Street London EC1M 6EJ
020 7017 2350 www.sustrans.org.uk

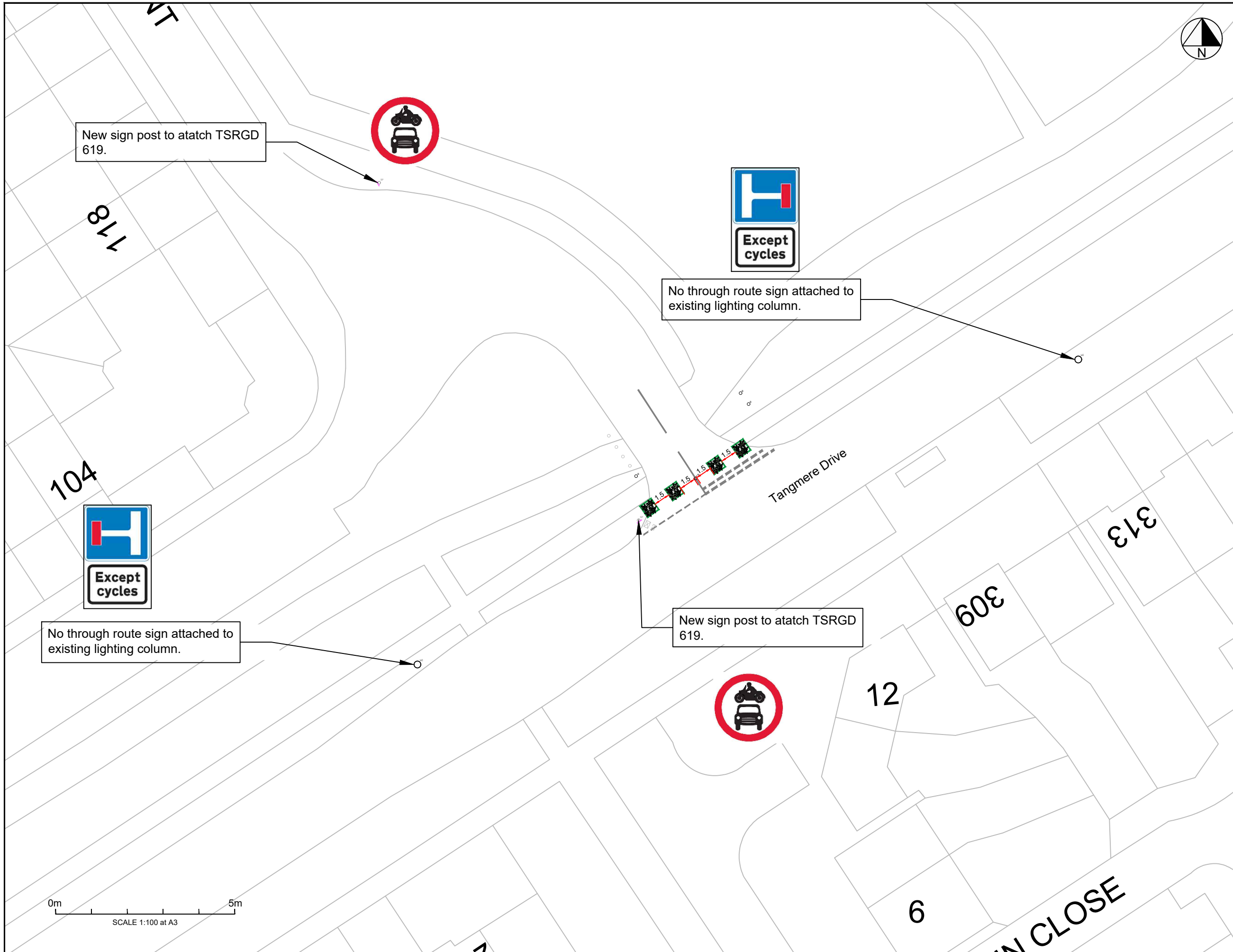
Project:
Low Traffic Neighbourhood - Bournville

Title:
Oak Tree Lane
General Arrangement

Drawn: DC **Check:** DC **Appr:** DC **Date:** 17/09/2020 **Scale at A3:** 1:100

Status: FINAL

Drawing No: 13020-D-GA-01-00-08 **Revision:** -



Key:

- Existing kerb
- Existing line markings
- Existing lighting column
- Existing sign post
- Existing sign to be removed from sign post
- Existing road markings to be removed
- Existing vehicle crossover
- Existing tree
- Proposed collapsible bollard with reflective strip
- Proposed 1.2m x 0.9m x 0.6m planter with reflector
- Proposed yellow line markings
- Location Plan

- Approximate Quantities**
- 2 x new sign posts
 - 2 x TSRGD 619
 - 1 x TSRGD 817 (A)
 - 1 x TSRGD 817 (B)

- Notes:**
1. Not all road markings or street furniture shown.
 2. Drawing based on OS base, all dimensions and street furniture positions to be checked on site and any discrepancies to be reported.
 3. Proposed street furniture to be checked on site.
 4. Proposed street furniture to be aligned with existing, ensuring vehicles cannot pass the filter on the carriageway or footway.
 5. Maximum spacing between building lines, planters and street furniture to be 1.7m, preventing cars from passing. If this is not possible, designers to be notified and design to be amended.
 6. Use brackets and bolts to fix planters in place.
 7. Construction to not affect highway drainage.

- General Notes:**
1. All dimensions in metres, unless otherwise noted.
 2. Do not scale off plan.
 3. Dimensions are to be checked by the contractor prior to commencement of work. Any discrepancy shall be reported immediately to Sustrans.
 4. Drawing based on OS base plan.
 5. Co-ordinates based on OS grid.
 6. Levels based on OS datum (Newlyn).
 7. This drawing is to be read in conjunction with all other relevant drawings and specifications.
 8. All work shall be carried out in accordance with Birmingham City Council statutory authority and health & safety requirements and regulations.
 9. The position of services is based on information provided by other parties at the time of design and is for guidance only. It is the responsibility of the Client and Contractor to verify the exact position of any services before commencing works on site.
 10. Temporary traffic works must be undertaken in accordance with Chapter 8 parts 1 & 2 of the Traffic Signs Manual, Safety at Street Works and Road Works Code of Practice 2013 and any other relevant H&S legislation.
 11. These drawings have been produced under the CDM 2015 Regulations. The client is directed to their duties under Regulation 4 of CDM 2015.
 12. The delivery of this drawing in electronic format shall not be construed to provide any authorisation or right of the recipient or any other person to rely upon, alter or otherwise use the information provided. Any use of this information is at the sole risk and liability of the user and Sustrans assumes no liability for unauthorised use or alteration of the information contained herein.
 13. To ensure the most up to date drawings are being used the project drawing register should be referred to.
 14. For further information on drawing and design revisions, see decision log or contact Sustrans project manager.
 15. This drawing has been produced to be read in colour, for the sheet size specified below. Printing or copying in black and white, or on a different sheet size may lead to misinterpretation of the design.

Rev	Description	Drawn	Check	Appr	Date
-					

sustrans

JOIN THE MOVEMENT

70 Cowcross Street London EC1M 6EJ
020 7017 2350 www.sustrans.org.uk

Project:
Low Traffic Neighbourhood - Castle Vale

Title:
Tangmere Drive
Advanced Warning Signage

Drawn: DC **Check:** DC **Appr:** DC **Date:** 17/09/2020 **Scale at A3:** NTS

Status: FINAL

Drawing No: 13020-D-GA-01-00-09 **Revision:** -