

**TFL63D**

**Note on Kennington Green shaft site versus the alternative 373  
Kennington Road site: response to Kennington Green Supporters Group  
OBJ/158  
18 December 2013**

1. This note provides a response to issues raised by the Kennington Green Supporters Group (KGSG) (OBJ158) at the Inquiry on 11 and 12 December 2013.

**Land available for redevelopment if 373 Kennington Road site were used and head house was located to the east of the site**

2. TfL's advisers, Halcrow, have reviewed Tom Bartlett's revised alternative of moving the head house east of the shaft. This has been illustrated in the sketch at **Appendix A**. It should be noted that this sketch is indicative of an initial proposal which would need to be subject to further analysis on the following issues:
  - a. A review of the head house's internal spatial planning to reflect its new location.
  - b. Vehicle access arrangements to the head house require a swept path and vision splay analysis for ingress/ egress to the site.
3. A 5 metre set back from louvres has been assumed to establish the separation from any future redevelopment. However this may be increased once further modelling has been completed. Compliance with Building Regulations may also require the redevelopment proposals to increase this set back distance.
4. Locating the head house in this position will cause additional environmental impacts during construction. This is due to the increased depth of the basement adit as it carries extra service ducts and emergency access to the shaft. Due to the head house's close proximity to the Aulton Place residential properties it will be difficult to mitigate the construction noise impacts with an acoustic shed without the temporary closure of Aulton Place and further delays to the construction programme.
5. There will be further permanent impacts on surrounding properties as a result of this head house arrangement. Rights to light of the properties

on the corner of Milverton Street and Aulton Place would be negatively affected by this design. The proximity of the louvres could result in an unacceptable noise level due to the lower baseline of noise in this location. It is for this reason that it is assumed the louvres cannot face directly onto Aulton Place and further design work may result in the need to increase either the head house's footprint or height to provide greater surface area for the louvres.

6. While this head house arrangement results in a figure of 76% of the site available for redevelopment, this does not account for restrictions to the type of building that would be permitted directly over the tunnel shaft or adit. Accounting for this restriction, the available land for redevelopment is likely to be 47.3%, providing the head house footprint and associated set backs do not increase further.

### **Impact of using 373 Kennington Road site on construction programme**

7. During the cross-examination of Mr Gammon, the representative for the Kennington Green Supporters Group identified a "missing 6 weeks" in the alternative construction programme for the 373 Kennington Road site.
8. The delays to the construction programme of the shaft as a result of using the 373 Kennington Road site are explained in section 5.2 of the Report on Suitability of 373 Kennington Road **[NLE/G6]** and in section 12 of the Halcrow Technical Note that was issued to Mr Bartlett after a Freedom of Information (Fol) request. The delays are directly attributable to the additional activities that must be undertaken at 373 Kennington Road and not at the Kennington Green site.
9. The impact of using 373 Kennington Road site is summarised as below in terms of the time taken to undertaken this work:

Demolition of existing buildings	6 weeks
Acoustic shed: construction and dismantling	12 weeks
Removal of TBM *	6 weeks

(\*temporary dismantling of acoustic shed then reinstatement ahead of SCL tunnelling works)

10. The total amount of time this adds to the shaft's construction programme is 24 weeks. The impact on the overall NLE construction

programme is estimated to be 2 weeks. However the additional 24 weeks will incur additional costs to the project and will prolong the environmental impact of the shaft site on the local community.

**For how long does TfL need possession of the 420 m<sup>2</sup> encompassing the part of Kennington Park Road between the Green and the proposed head house?**

11. The section of Kennington Road west of Kennington Green is required for a period of 12 weeks (or three months) to construct the section of adit connecting the head house with the shaft below Kennington Green.
12. This was originally identified in the ES [NLE/A19/1] in paragraph 6.189 (third dot point) as a section of Montford Place. This description is corrected in paragraph 99 (third dot point) of the ESA [NLE/A19/8] to Kennington Road, west of the Green.
13. The distillery land will be occupied for the duration of the works and thereafter by the head house. In effect, the Kennington Green worksite will be a split site, briefly joined together for a period of 12 weeks before splitting again.

**Consultation**

*Consultation with the London Borough of Lambeth (SUPP44)*

14. The London Borough of Lambeth (LBL) was engaged at all stages of the development of the NLE scheme. Since the Spring of 2012 TfL conducted the Borough Liaison Meetings on a 4-weekly basis which LBL was a member of. This engagement clearly included discussions of alternative sites (such as 373 Kennington Road) before the TWA application was submitted, because at that time alternatives were already being raised by local residents which therefore fell to be considered.
15. In the period before TfL's application for the TWA Order, meetings were held with LBL, English Heritage and local residents specifically relating to the Kennington Green shaft site. These were as follows:

17 October 2012	residents of Kennington Green, TfL, LBL
17 January 2013	residents of Kennington Green, TfL, LBL

13 March 2013	Presentation to Borough Liaison Meeting
26 March 2013	residents of Kennington Green, TfL, LBL
9 April 2013	Meeting with LBL, EH and TfL

16. As a result of the consultation and engagement between TfL, LBL states in a letter addressed to the Secretary of State for Transport (4 November 2013, first paragraph on page 6, [TFL17A]) that “*The Council is also satisfied that the design of the proposed headhouse building at Kennington Green, within the Beefeater Distillery site, is acceptable at this sensitive location.*”

*Meetings between Chivas Brothers Limited (CBL- OBJ81) and TfL (and respective advisers)*

17. The Statement of Case of CBL (Section (A) (ii)), which KGSG refers to, lists three meetings with TfL and their advisers: 6 November 2012, 12 December 2012, 14 January 2013. This implies that TfL developed its plans in isolation and did not continue to update CBL on the progress of the design development for the shaft and head house at Kennington Green. It should be noted that CBL withdrew their objection on 26 November and in their letter (appended to TfL’s Summary of Objections Withdrawn and Additional Expressions of Support [TFL85]) asked that no reliance should be placed on their evidence submitted to the inquiry.

18. After TfL became the sole promoter of the NLE scheme it has maintained frequent dialogue with CBL concerning the selection of the shaft site at Kennington Green, the design of the head house and mitigation of the impacts of construction and operation of the shaft and head house. The meetings that took place since November 2012 are listed below and demonstrate the frequent nature of the dialogue that took place between TfL and CBL (and others where noted):

- 12 November 2012
- 10 December 2012
- 14 January 2013
- 26 February 2013
- 16 April 2013
- 9 May 2013 briefing with Kate Hoey MP
- 23 May 2013
- 7 June 2013

12 June 2013 briefing with Kate Hoey MP  
26 June 2013  
15 July 2013 (am) with officers of London Borough of Lambeth  
15 July 2013(pm)

19. In direct response to CBL's feedback to consultation, TfL acquired the Tesco land to facilitate the expansion of the distillery (which will accommodate the tanker, sprinkler system and other aspirations held by CBL) in conjunction with the proposed head house on part of the distillery's land. TfL does not accept that the points made in material supplied to the Inquiry relating to consultation are correct, nor does it accept that any reliance can be placed on this material which has been expressly withdrawn by CBL.

*Consultation with local businesses*

20. Section (A) (iii) of CBL's Statement of Case states (first paragraph, page 8), "TfL appear not to have engaged with local businesses in any direct way other than through the consultation mail shot. One example of this is TfL's failure to talk to or write to our neighbouring business, Paperlink Limited at 356 Kennington Road."
21. The Consultation Report **[NLE/A7]** describes the several phases of consultation that took place through the NLE scheme's development. A range of channels was used to promote the NLE consultations and these are described in the consultation report. It included leaflets to over 40,000 addresses along the proposed route, letters and notices to affected landowners, posters at stations and emails to TfL's Oyster card data base. In addition, in June 2013, TfL sent letters via Royal Mail, to over 1,900 businesses along the proposed route. This included letters to Paperlink Limited and Space Module Limited to advise them of the TWAO submission.
22. TfL met with Paperlink Limited on 14 August 2013 and on 1 November 2013 they withdrew their objection.

*Consultation with the owner of 373 Kennington Road*

23. TfL met with the business Space Module Limited (the owner of 373 Kennington Road) at a public event on 25 July 2013 and has been in regular email correspondence about the suggestion made by the

Kennington Green Supporters Group (OBJ158) to site the shaft and head house at their premises.

24.Space Module Limited has informed TfL that the company *“plans to continue to grow a community of businesses based at 373 Kennington Road. The site currently supports jobs for around 55 staff in the art and creative industries, as well as ancillary and administrative staff employed directly by Space Modules Limited. One of the current tenants has a number of high profile clients, including British Airways. In early 2014 Space Module Limited plans to sign a 15 year lease with the first of a number of new tenants who will provide high quality creative and media jobs. The company intends to eventually house around 90 staff, develop further retail and introduce a café attached to the contemporary art gallery Space Station Sixty-Five”*.

#### *Consultation with HSE and LFEPA*

25. The issues relating to safety that were raised by CBL have been addressed by TfL through the changes in design of the head house.

26.TfL met with representatives of the Health and Safety Executive (HSE) on 28 August 2013. This meeting resolved their objection and in their letter withdrawing its objection (dated 7 October 2013) the Office of the Rail Regulation states, *“both organisations have been reassured that the risks in question will be managed appropriately and our concerns are now withdrawn both organisations have been reassured that the risks in question will be managed appropriately and our concerns are now withdrawn”*.

27.TfL met with representatives of the LFEPA on 25 July 2012, 5 December 2012 and 30 July 2013. In a recent letter dated 23 September 2013 the LFEPA expressed its support for the proposed NLE design.

#### *Consultation with English Heritage*

28.The statement in the CBL Statement of Case (Section (A) (v)) which states that English Heritage was never consulted on the alternative site at 373 Kennington Road is incorrect. In fact, English Heritage states in their July 4th 2013 letter to TfL that TfL has *“engaged both the local authority conservation staff and English Heritage staff in an open and collaborative way through the design process”* and go on to say that *“considerable thought has gone into both site selection and reconciling*

*what will clearly be significant interventions into potentially sensitive locations.”*

29. TfL met with English Heritage in March 2013 during which EH made a number of constructive suggestions regarding the elevation of the head house which were incorporated into the design.

30. In particular, English Heritage suggested including the addition of vertical reveals and confirmed that the design approach addressed the Green appropriately through the use of scale, proportion and articulation as they noted in their letter dated August 20th 2013 and that *“appropriate mitigation through design has [been] achieved”* and that *“the proposed structures respond appropriately to their sensitive context.”*

31. English Heritage have confirmed in their letter of 11 September 2013 that they are *“now satisfied with the design of the Head Houses at both Kennington Park and Kennington Green.”*

### **Access to 373 Kennington Road**

32. Two alternatives for construction vehicle access to 373 Kennington Road were proposed at the Inquiry. These two proposals, via Milverton Street or via Kennington Road, have been assessed using the same vehicles which were used to assess the other NLE worksites: 10m rigid truck; large tipper; low loader; and fire tender.

33. Access by construction vehicles to 373 Kennington Road is shown in Figures 1-11 which are located at **Appendix B**. Figures 6 to 9 show vehicle access arrangements with an expanded worksite.

34. Table 1 provides further information about the contents of each figure.

**Table 1 – Access to 373 Kennington Road**

<b>Figure</b>	<b>Comment</b>
1	Shows a 10m rigid construction vehicle waiting to turn right towards Milverton Street and blocking the movement of northbound traffic on Kennington Road. This would delay vehicles travelling northbound on Kennington Road.
2 and	Figure 2 shows a 10m rigid construction vehicle accessing the 373 site via Milverton Street. The vehicle goes past the site and then reverses in. This

Figure	Comment
2a	<p>means it can depart in a forward gear.</p> <p>Figure 2a shows a 10m rigid construction vehicle accessing the 373 site via Milverton Street. The vehicle turns left into the site from Milverton Street. This means the vehicle has to reverse out of the site and then move forward to exit via Kennington Road.</p> <p>These drawings show that when the vehicle turns right from the northbound carriageway of Kennington Road the body of the vehicle overruns the footway near 355 Kennington Road (this is shown by the green line on the drawing) and this provides the potential for conflict with pedestrians on the footway. The body of the vehicle also overruns the footway adjacent to 363a Kennington Road and 22 Aulton Place and the wheels overrun the kerb adjacent to the eastern side of Old Town Hall. On the exit from the site the vehicle moves very close to the kerb and swings out into the northbound carriageway of Kennington Road which leads to a potential conflict with vehicles travelling northbound.</p> <p>Four parking spaces need to be temporarily suspended to facilitate these vehicle movements.</p>
3	<p>Shows a large tipper construction vehicle accessing the 373 site via Milverton Street. The vehicle goes past the site and then reverses in. This means it can depart in a forward gear.</p> <p>The drawing shows that when the vehicle turns right from the northbound carriageway of Kennington Road the body of the vehicle overruns the footway near 355 Kennington Road (this is shown by the green line on the drawing) and this provides the potential for conflict with pedestrians on the footway. The body of the vehicle also overruns the footway adjacent to 363a Kennington Road and 22 Aulton Place and the wheels overrun the kerb as adjacent to the eastern side of Old Town Hall. On the exit from the site the vehicle moves very close to the kerb and swings out into the northbound carriageway of Kennington Road which leads to a potential conflict with vehicles travelling northbound.</p> <p>Four parking spaces need to be temporarily suspended to facilitate these vehicle movements.</p>
4	<p>Shows a low loader construction vehicle accessing the 373 site via Milverton Street. The length of the vehicle means that it must drive into the site in a forward gear.</p> <p>There is insufficient space with the current worksite layout to enable this movement and the drawing shows that the planned location of a security booth would interfere with this movement. The low loader would be required to reverse out of the site and several backwards and forwards</p>



Figure	Comment
	<p>movements would be required to turn the vehicle and enable it to exit towards Kennington Road. These would be difficult movements given the narrow width of Milverton Street (see Photograph 1 provided at the end of this note).</p> <p>The drawing also shows that when the vehicle turns right from the northbound carriageway of Kennington Road the body of the vehicle overruns the footway near 355 Kennington Road (this is shown by the green line on the drawing) and this provides the potential for conflict with pedestrians on the footway. The body of the vehicle also overruns the footway adjacent to 363a Kennington Road and 22 Aulton Place and the wheels overrun the kerb in several places adjacent to the eastern side of Old Town Hall. On the exit from the site the vehicle moves very close to the kerb and swings out into the northbound carriageway of Kennington Road which leads to a potential conflict with vehicles travelling northbound.</p> <p>Four parking spaces need to be temporarily suspended to facilitate these vehicle movements.</p>
5	<p>Shows a fire tender accessing the 373 site via Milverton Street. The vehicle goes past the site and then reverses in. This means it can depart in a forward gear. The body of the vehicle overruns the kerb adjacent to 363a Kennington Road and 22 Aulton Place.</p>
6	<p>Shows a 10m rigid construction vehicle accessing the 373 site from the southbound carriageway of Kennington Road. The 373 site is assumed to be extended and part of Milverton Street is to be closed. The vehicle enters the site in a forward gear and is able to turn around within the site boundary and hence can leave in a forward gear. On exit from the worksite the vehicle is required to cross into the northbound carriageway of Kennington Road which leads to a potential conflict with vehicles travelling northbound.</p> <p>One disabled parking space needs to be temporarily suspended to accommodate the expanded worksite.</p>
7	<p>Shows a large tipper construction vehicle accessing the 373 site from the southbound carriageway of Kennington Road. The 373 site is assumed to be extended and part of Milverton Street is to be closed. The vehicle enters the site in a forward gear and is able to turn around within the site boundary and hence can leave in a forward gear. On exit from the worksite the vehicle is required to cross into the northbound carriageway of Kennington Road which leads to a potential conflict with vehicles travelling northbound.</p> <p>One disabled parking space needs to be temporarily suspended to</p>

Figure	Comment
	accommodate the expanded worksite.
8	<p>Shows a low loader construction vehicle accessing the 373 site from the southbound carriageway of Kennington Road. The 373 site is assumed to be extended and part of Milverton Street is to be closed. The vehicle enters the site in a forward gear but is unable to turnaround within the extended site and it would be unable to reverse back onto Milverton Street to turn around. This means that the low loader would be required to reverse back onto Kennington Road and this would require vehicles travelling in both northbound and southbound directions to stop.</p> <p>One disabled parking space needs to be temporarily suspended to accommodate the expanded worksite.</p>
9	<p>Shows a fire tender accessing the 373 site from Kennington Road. The 373 site is assumed to be extended and part of Milverton Street is to be closed. The vehicle enters the site in a forward gear and is able to turn around within the site and hence can leave in a forward gear. On exit from the worksite the vehicle is required to cross into the northbound carriageway of Kennington Road which leads to a potential conflict with vehicles travelling northbound.</p> <p>One disabled parking space needs to be temporarily suspended to accommodate the expanded worksite.</p>
10	Provides a schematic representation of the access route to the 373 site from Milverton Road.
11	Provides a schematic representation of the access route to the 373 site from Kennington Road.

*Existing use of Milverton Street near 373 Kennington Road*

35. At present, Milverton Street near 373 Kennington Road provides pedestrian access to Aulton Place. No other buildings are provided with access to or from this section of Milverton Street.

36. Milverton Street is shown in Photograph 1 below. Milverton Street has an approximate width of 2.9m at its narrowest point.

**Photograph 1 – Milverton Street looking north**

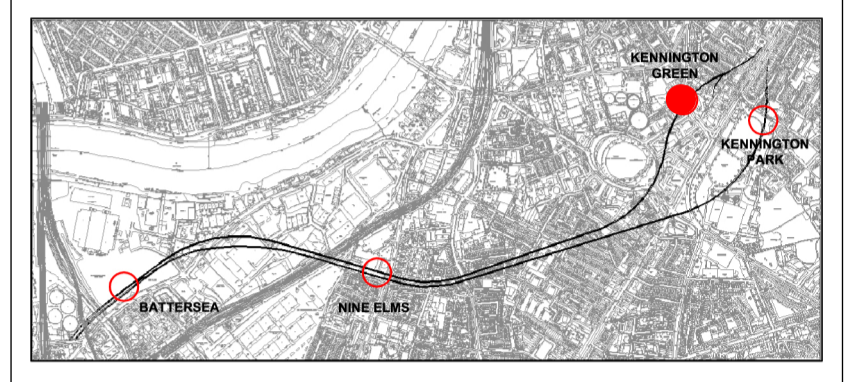
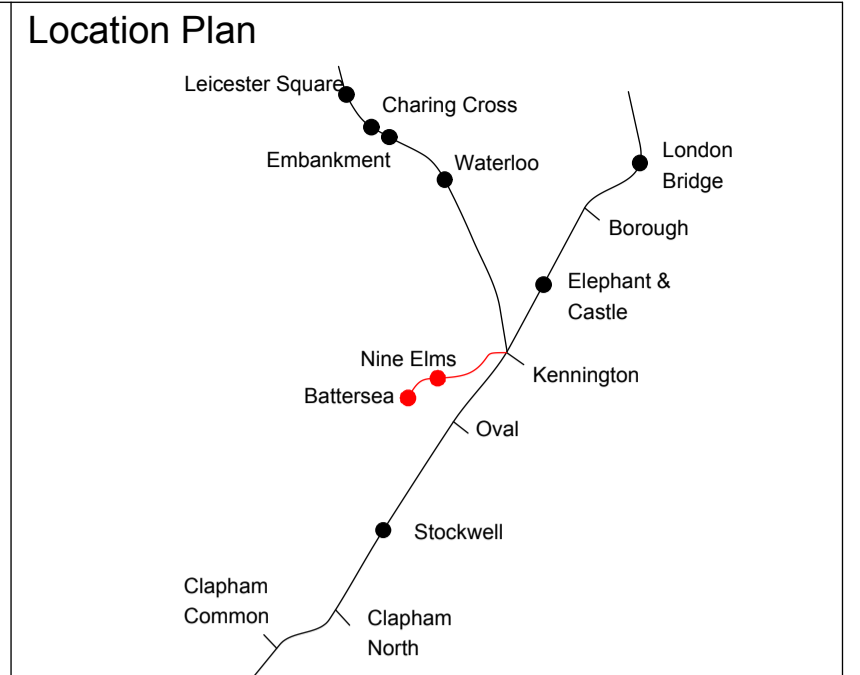
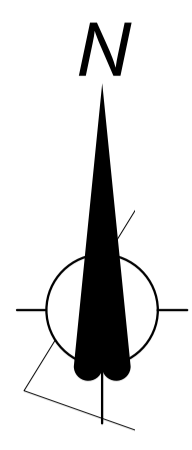
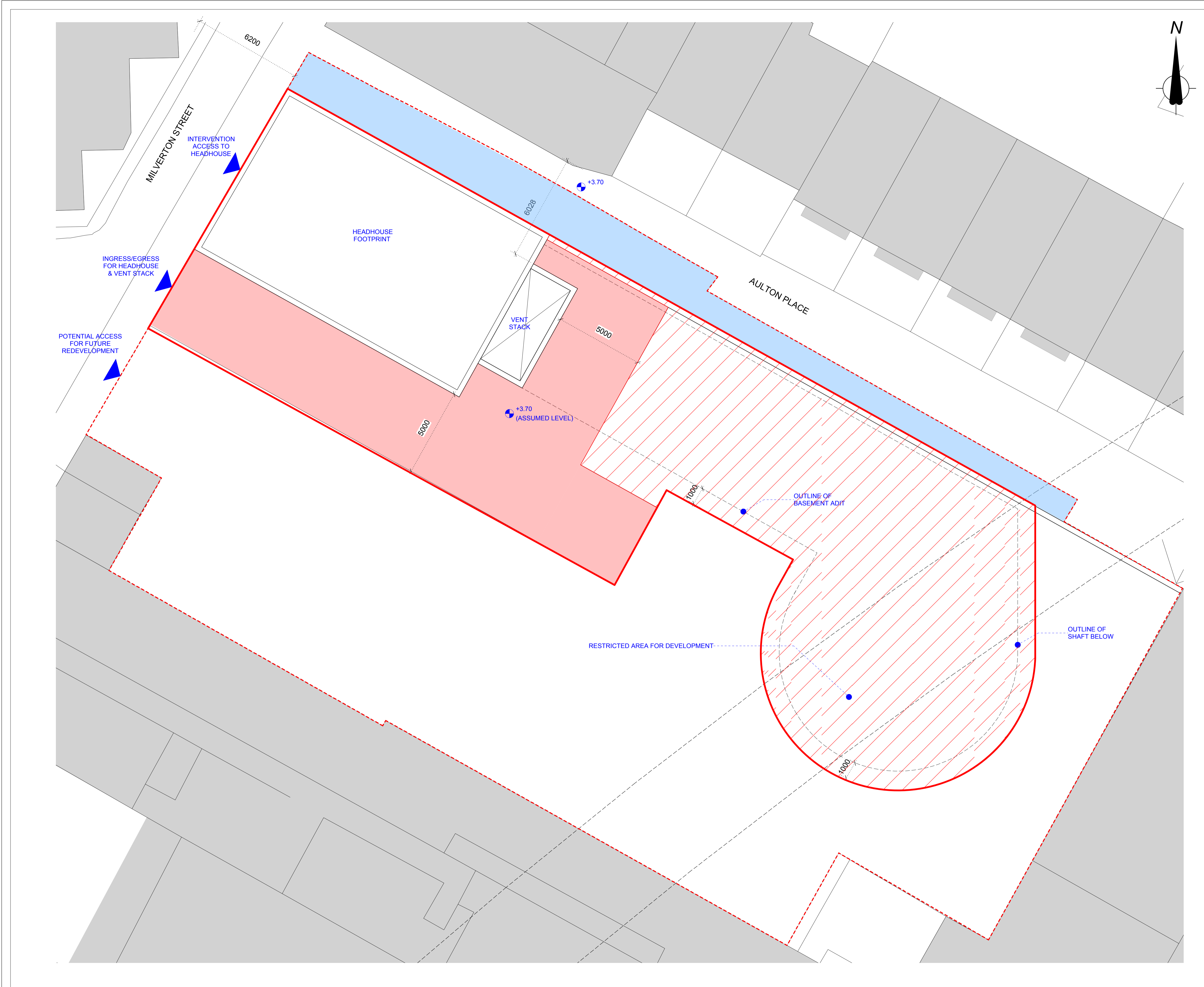


*(Source of image Google Streetview and confirmed as accurate by site visit on 17 December 2013)*

37. The closure of part of Milverton Street as shown in Figures 6-10 would require vehicles, cyclists and pedestrians to divert around the Old Town Hall building. The introduction of the hoarding would be visually intrusive, particularly for the adjacent Old Town Hall.

## Appendix A

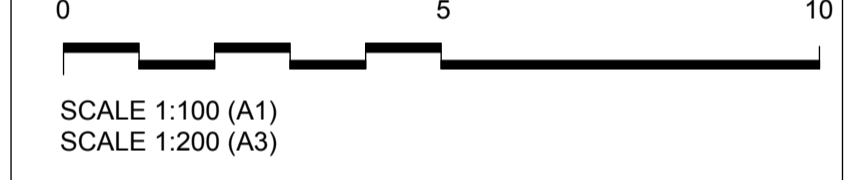




- 373 Kennington Road site boundary
  - hardstanding and 5m notional set back for headhouse louvres = 212 sqm
  - Restricted Area for Development
  - Area of 373 given over to Aulton Place
- Total site area within 373 site boundary = 1688sqm  
 Restricted Area For Development = 375sqm  
 Headhouse & Vent Stack = 198sqm  
 Area given over to Aulton Place = 104.5 sqm  
 Net space remaining for redevelopment = 798.5 sqm (47.3%)

The sketch shows the approximate potential proportion of the site that could be used for future redevelopment.

Swept path and highway vision splay analysis for maintenance and/or emergency vehicles has not been undertaken and is not included.



Client

**Transport for London**



Halcrow Group Ltd.  
 A CH2M HILL COMPANY  
 Elms House, 43 Brook Green  
 Hammersmith, London W6 7EF  
 TEL: 020 3479 8000  
 FAX: 020 3479 8001  
 www.halcrow.com

**Halcrow**

Project: **NORTHERN LINE EXTENSION TO BATTERSEA TWAO FOR TfL**

Sketch: **373 KENNINGTON ROAD PLAN OF HEADHOUSE ON CORNER OF MILVERTON STREET & AULTON PLACE**

Scale: 1:100 @A1

SKETCH No. 609 Rev B 18.12.2013



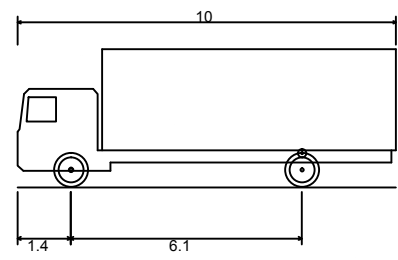
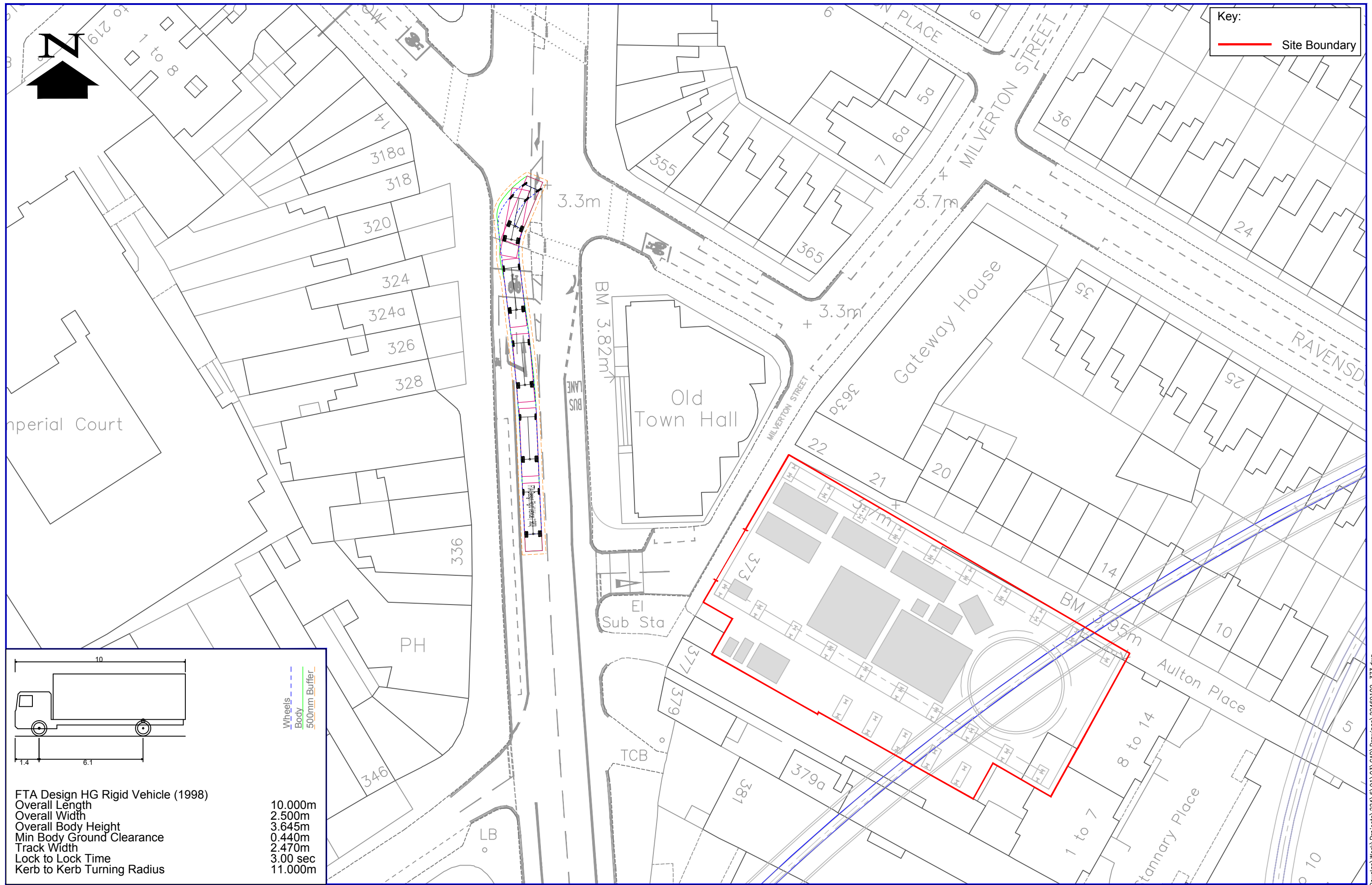
## **Appendix B**







Key:  
 Site Boundary



Wheels  
 Body  
 500mm Buffer

FTA Design HG Rigid Vehicle (1998)	
Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to Lock Time	3.00 sec
Kerb to Kerb Turning Radius	11.000m

**Northern Line Extension**

373 Kennington - 10m Rigid Track Analysis - Vehicle waiting to turn right into Milverton Street - Access from Milverton Street

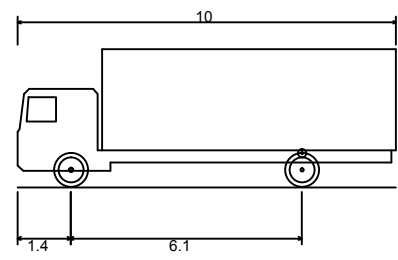
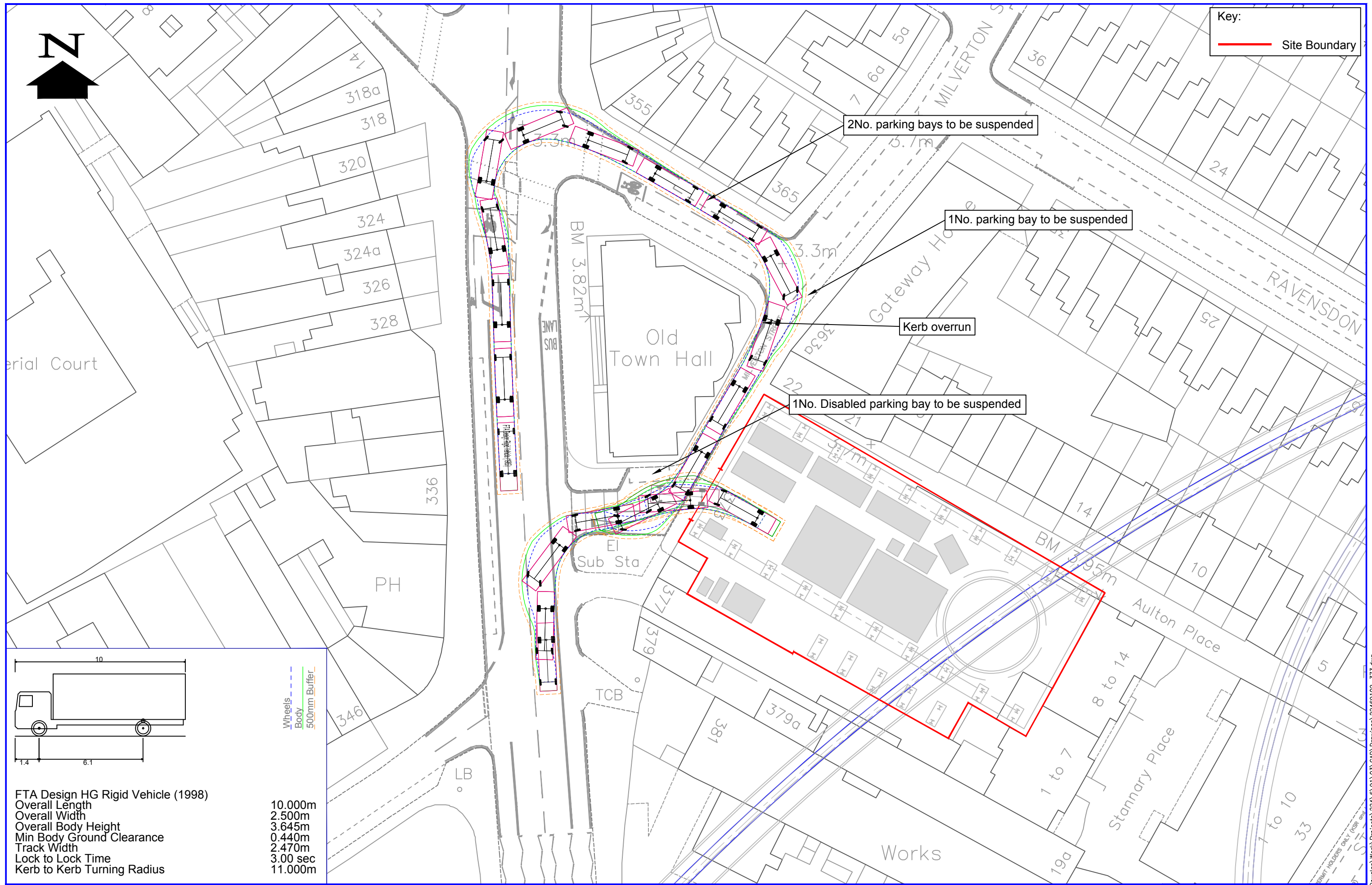


Drawn: MG	Date: 16/12/13	Scale: 1:500	Figure No: 1
--------------	-------------------	-----------------	-----------------

CAD REFERENCE: \Douglas Work\Projects\224\6\91\03\CAD\Drawings\22469102-373.dwg



Key:  
 Site Boundary



Wheels  
 Body  
 500mm Buffer

FTA Design HG Rigid Vehicle (1998)	
Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to Lock Time	3.00 sec
Kerb to Kerb Turning Radius	11.000m

**Northern Line Extension**

373 Kennington - 10m Rigid Track Analysis - Acces from Milverton Street

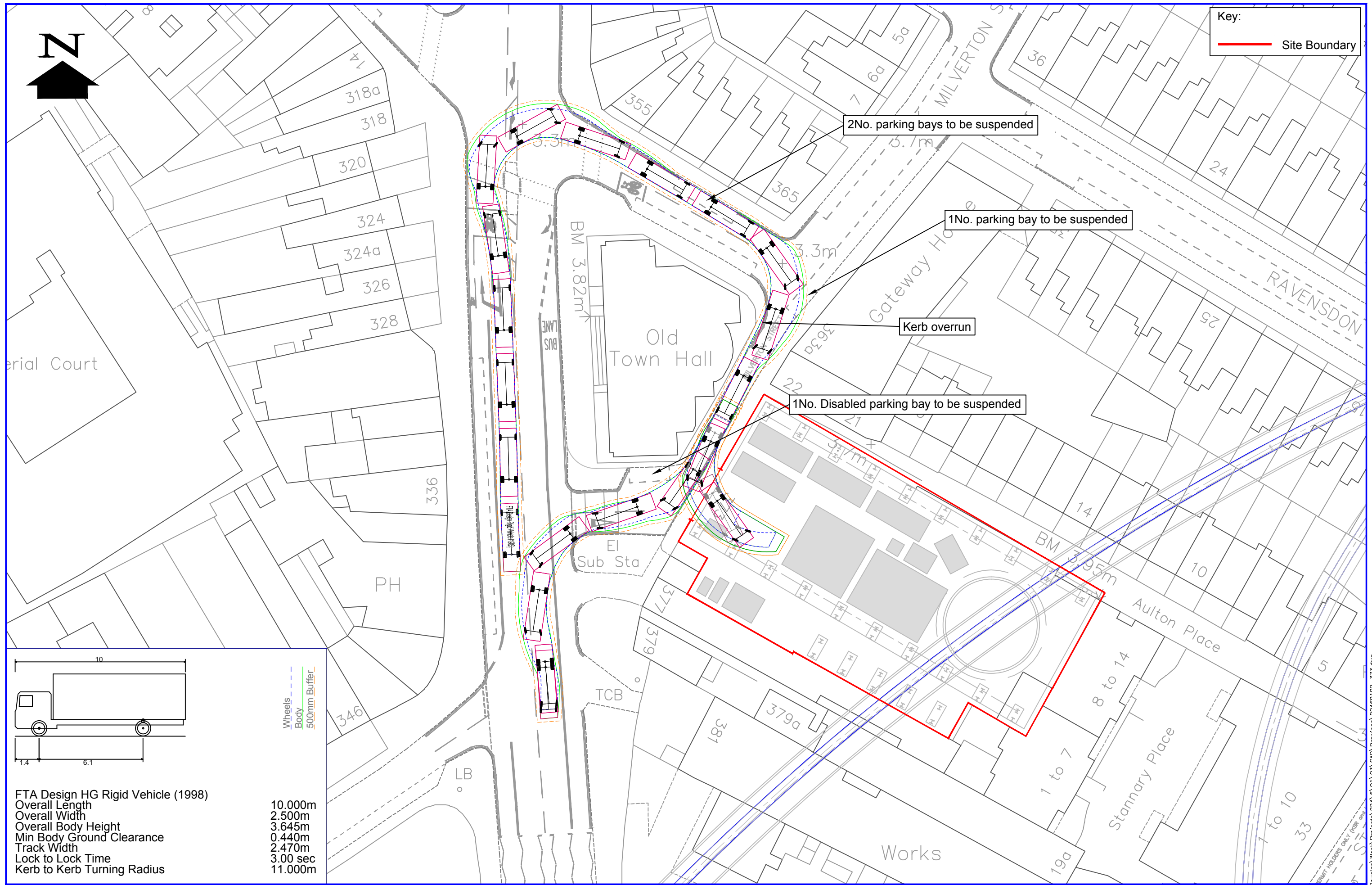


Drawn: MG	Date: 16/12/13	Scale: 1:500	Figure No: 2
--------------	-------------------	-----------------	-----------------

CAD REFERENCE: \D:\Projects\224\6\91\03\CAD\Drawings\22469102-373.dwg

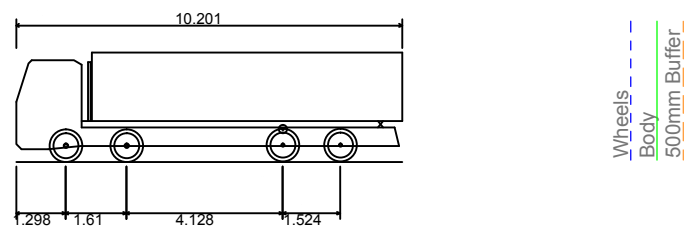
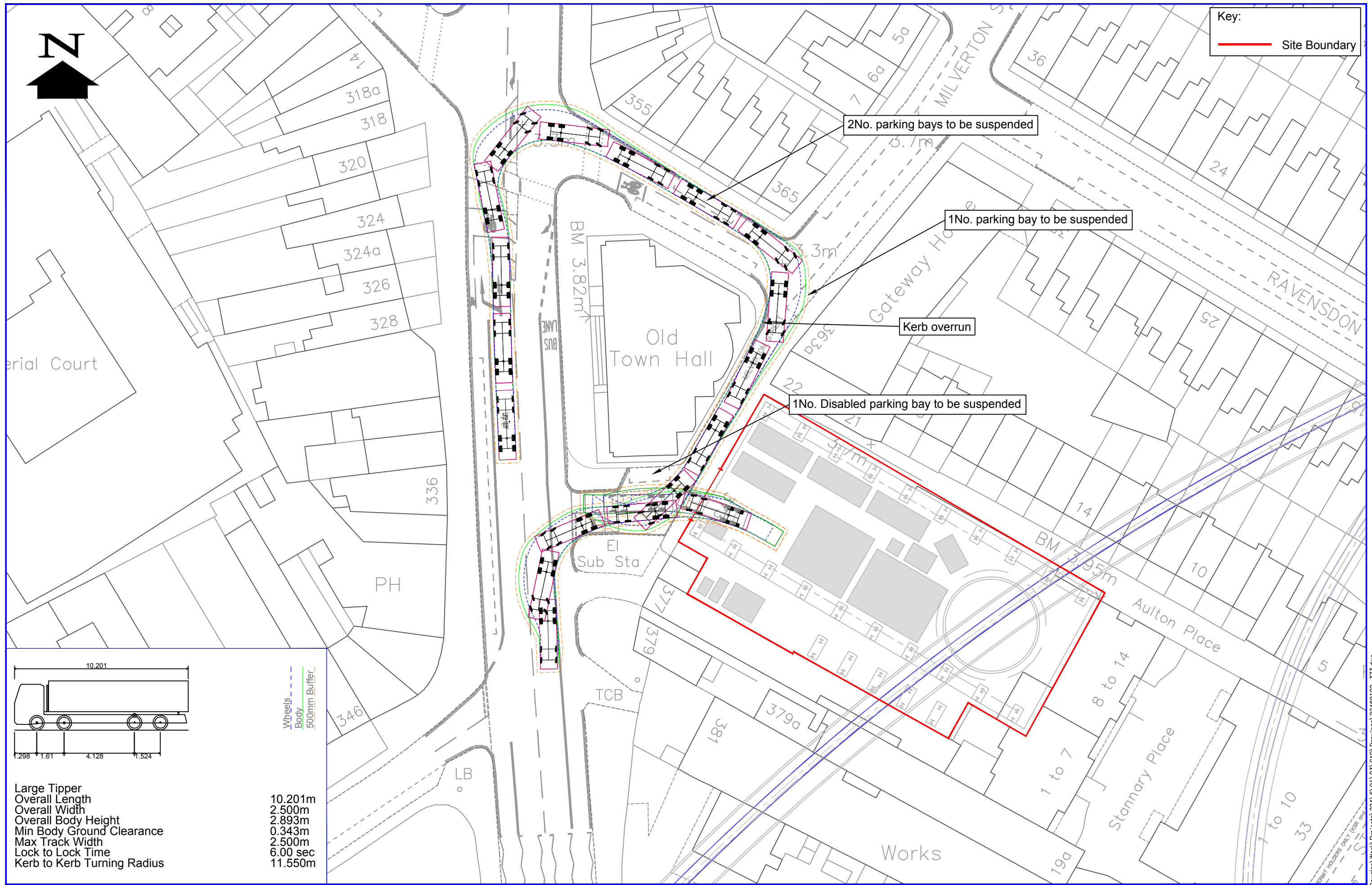


Key:  
— Site Boundary





Key:  
— Site Boundary



Large Tipper  
 Overall Length 10.201m  
 Overall Width 2.500m  
 Overall Body Height 2.893m  
 Min Body Ground Clearance 0.343m  
 Max Track Width 2.500m  
 Lock to Lock Time 6.00 sec  
 Kerb to Kerb Turning Radius 11.550m

**Northern Line Extension**

373 Kennington - Large Tipper Track Analysis - Access from Milverton Street

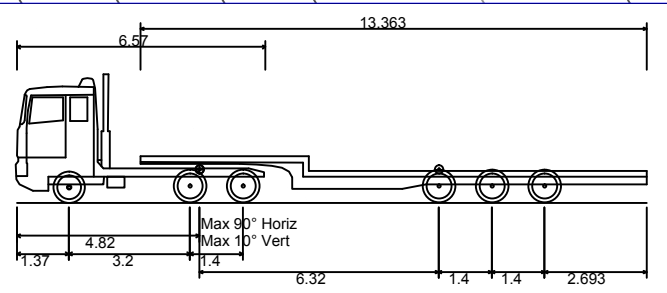
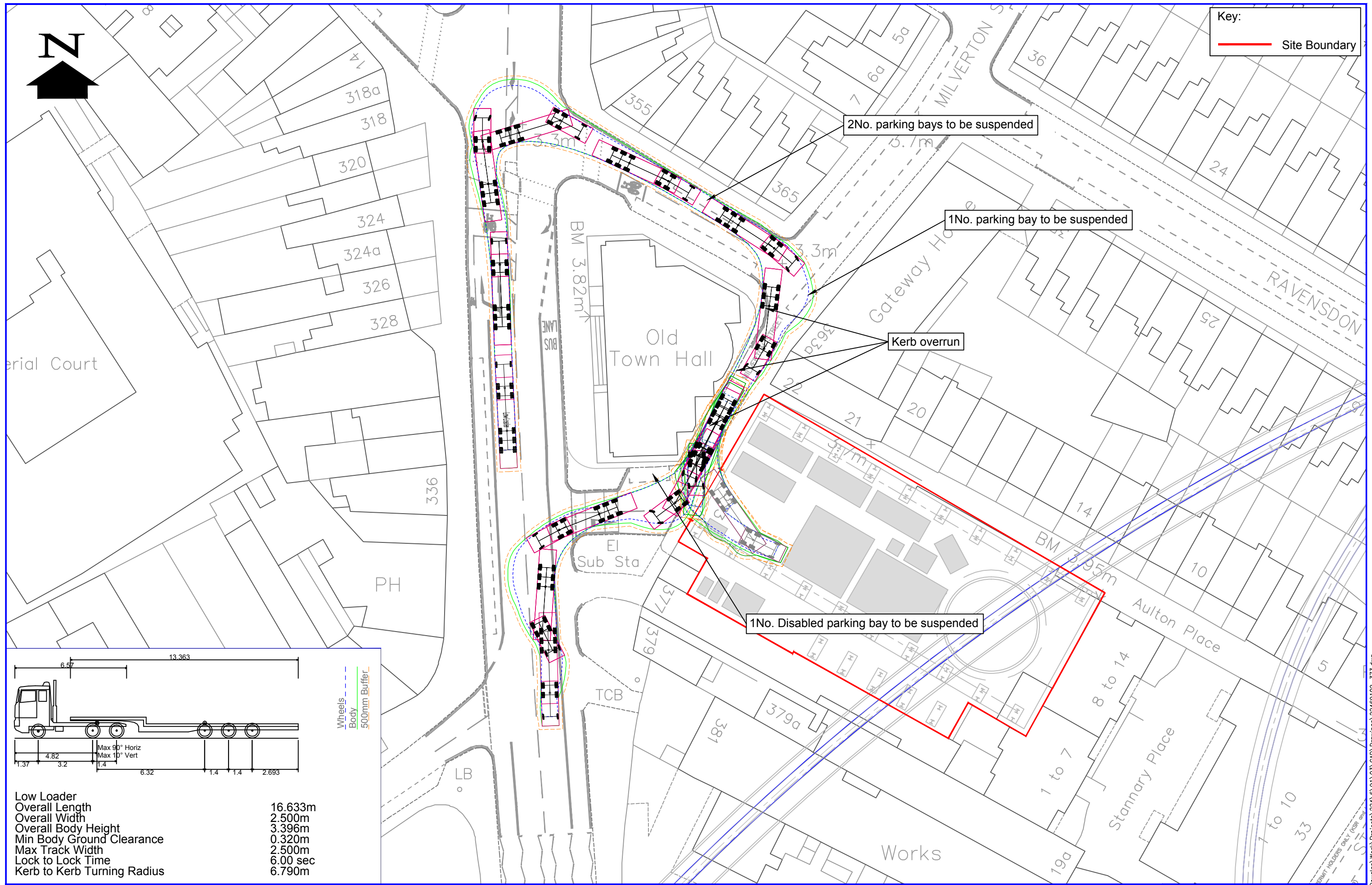


Drawn: MG	Date: 16/12/13	Scale: 1:500	Figure No: 3
--------------	-------------------	-----------------	-----------------

CAD REFERENCE: \D:\Projects\224\6\91\03\CAD\Drawings\22469102-373.dwg



Key:  
— Site Boundary



Low Loader	
Overall Length	16.633m
Overall Width	2.500m
Overall Body Height	3.396m
Min Body Ground Clearance	0.320m
Max Track Width	2.500m
Lock to Lock Time	6.00 sec
Kerb to Kerb Turning Radius	6.790m

**Northern Line Extension**  
 373 Kennington - Low Loader Track Analysis - Access from Milverton Street

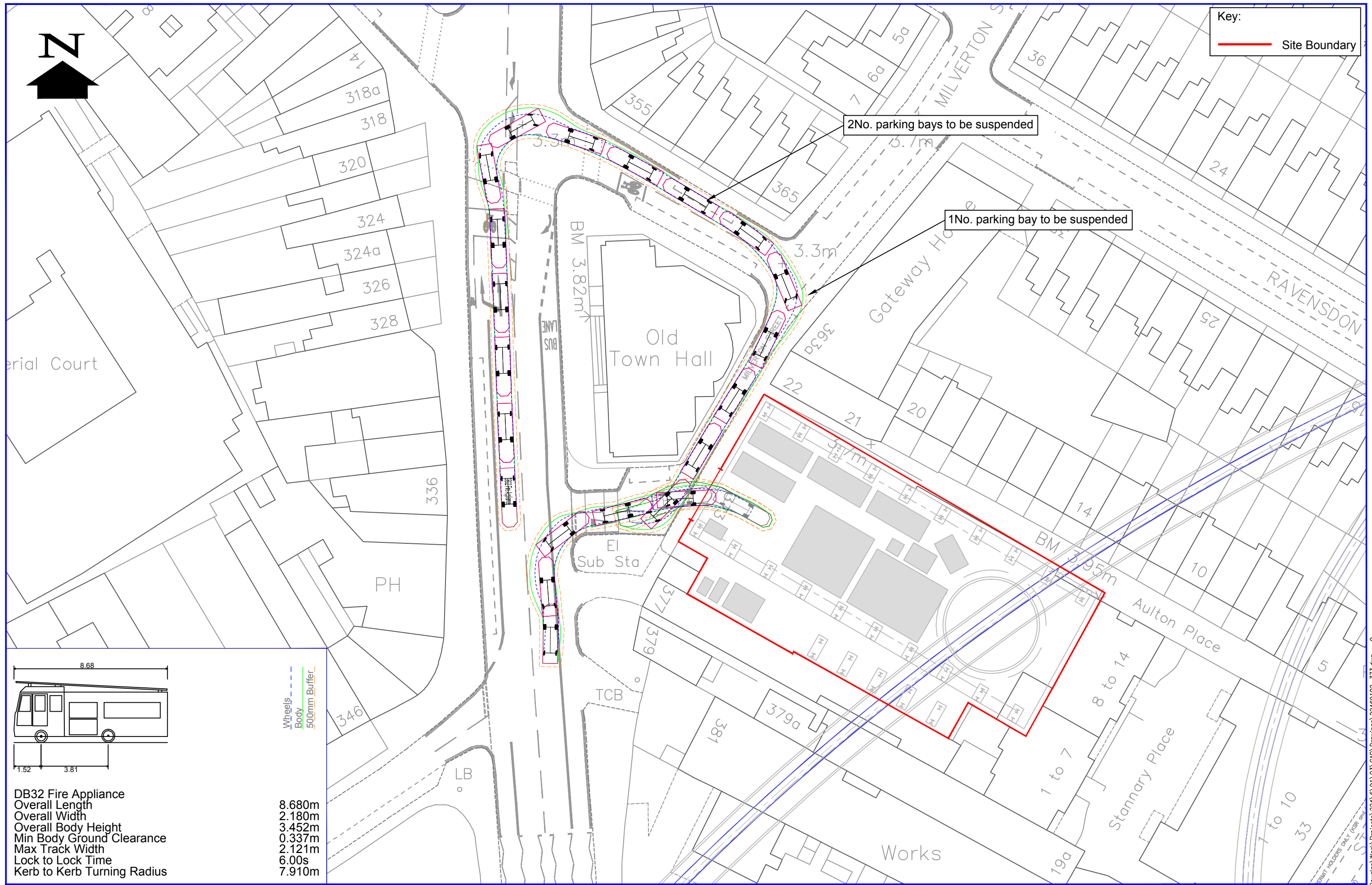


Drawn: MG	Date: 16/12/13	Scale: 1:500	Figure No: 4
--------------	-------------------	-----------------	-----------------

CAD REFERENCE: \D:\Projects\224\6\91\03\CAD\Drawings\22469102-373.dwg



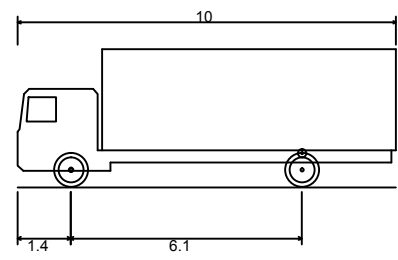
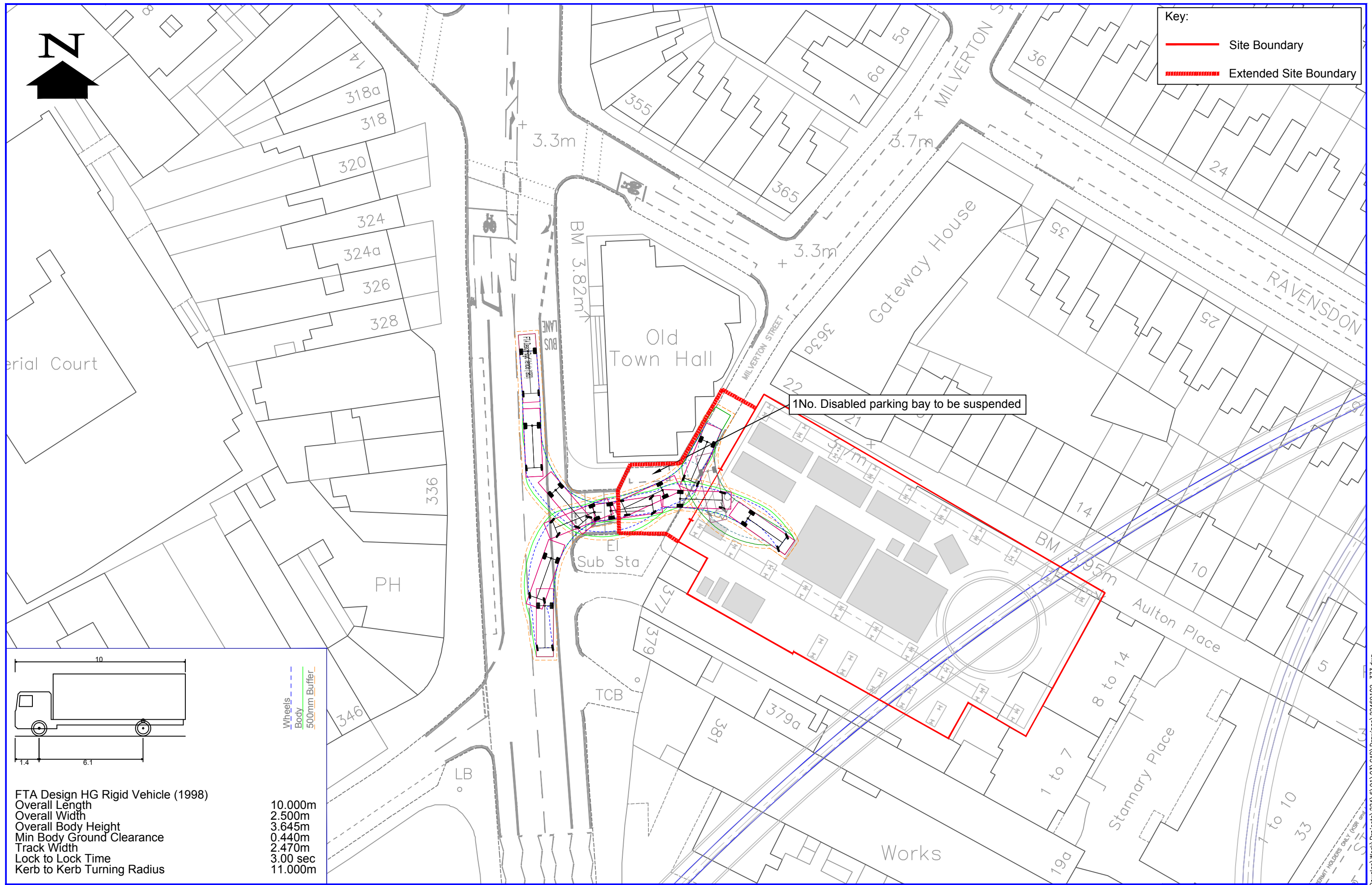
Key:  
— Site Boundary





Key:

- Site Boundary
- - - - - Extended Site Boundary



Wheels  
Body  
500mm Buffer

FTA Design HG Rigid Vehicle (1998)	
Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to Lock Time	3.00 sec
Kerb to Kerb Turning Radius	11.000m

**Northern Line Extension**  
373 Kennington - 10m Rigid Track Analysis - Access from Kennington Road



Drawn: MG	Date: 16/12/13	Scale: 1:500	Figure No: 6
--------------	-------------------	-----------------	-----------------

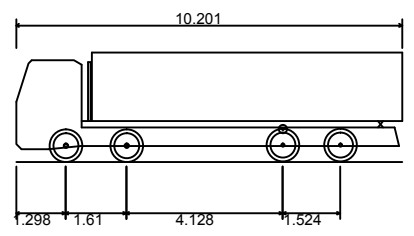
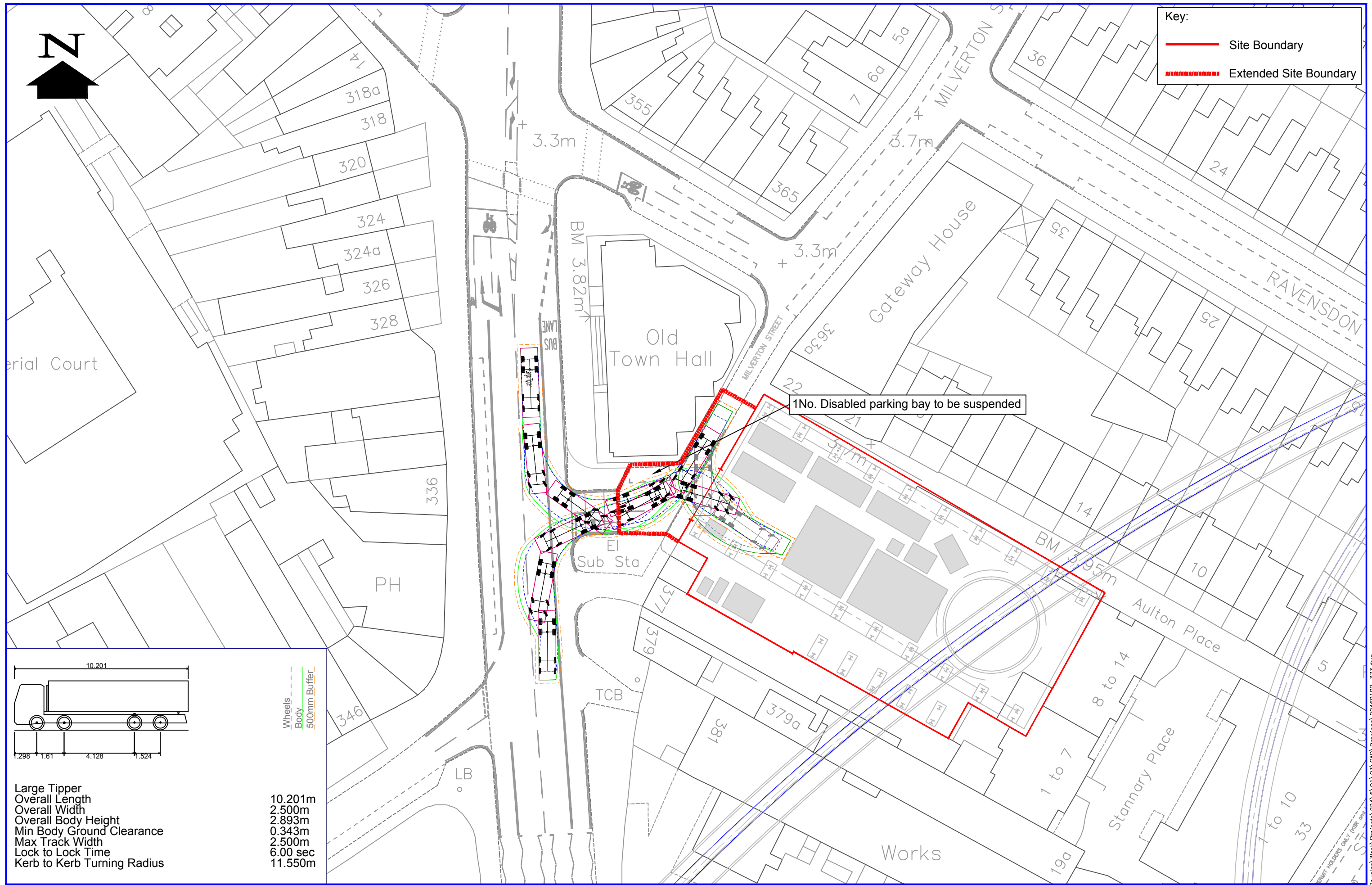
CAD REFERENCE: \D:\Projects\224\6\91\03\CAD\Drawings\22469102-373.dwg





Key:

- Site Boundary
- ▬ Extended Site Boundary



Wheels  
Body  
500mm Buffer

Large Tipper	10.201m
Overall Length	2.500m
Overall Width	2.893m
Overall Body Height	0.343m
Min Body Ground Clearance	2.500m
Max Track Width	6.00 sec
Lock to Lock Time	11.550m
Kerb to Kerb Turning Radius	

**Northern Line Extension**  
Kennington Road Milverton Street



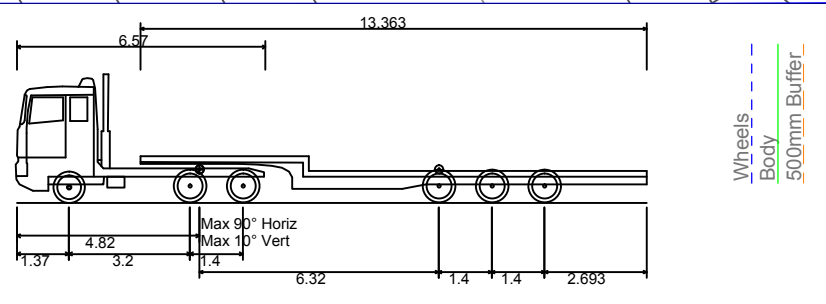
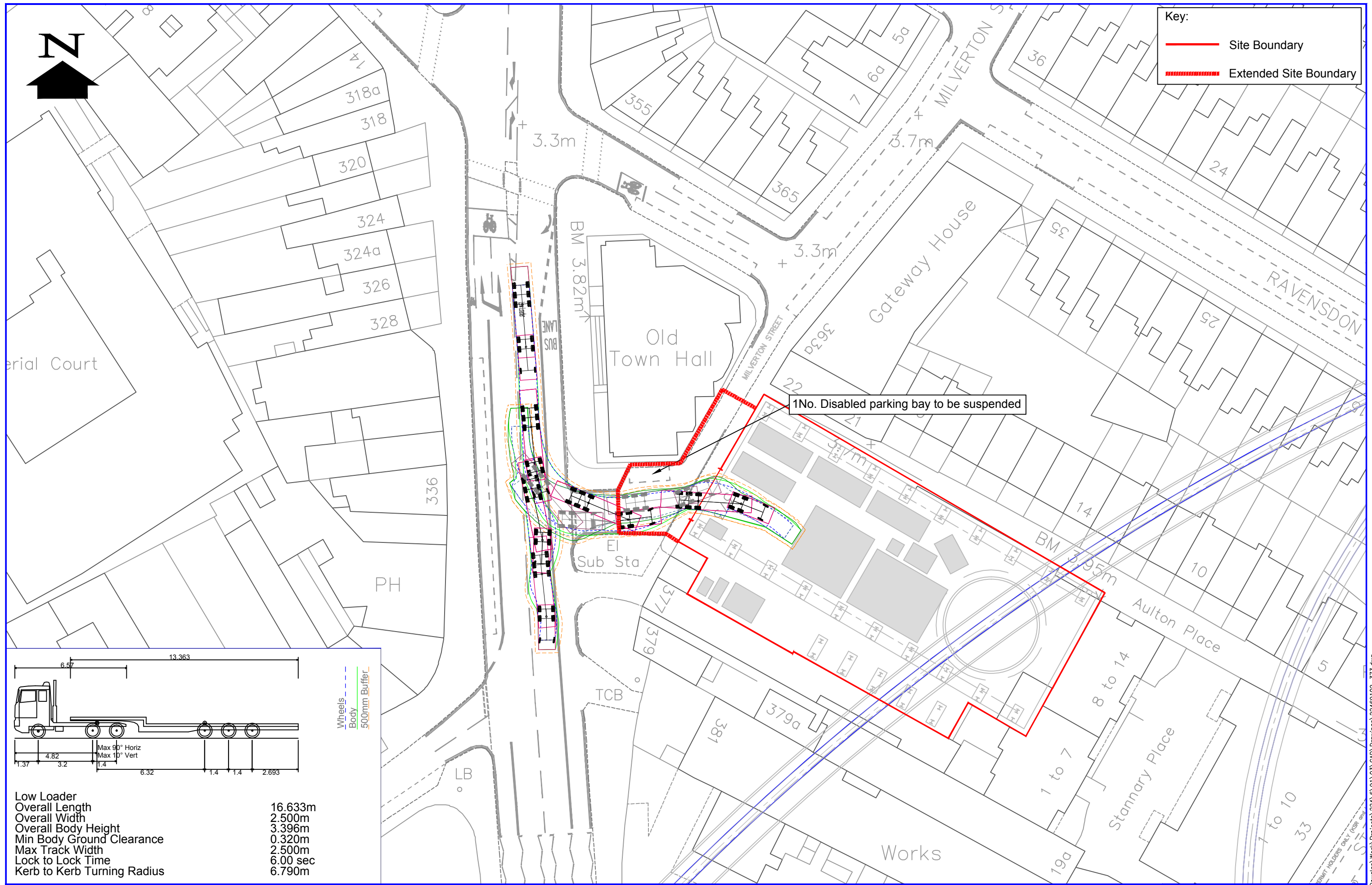
Drawn: MG	Date: 16/12/13	Scale: 1:500	Figure No: 7
--------------	-------------------	-----------------	-----------------

CAD REFERENCE: \Douglas Work\Projects\224\6\91\03\CAD\Drawings\22469102-373.dwg



Key:

- Site Boundary
- - - - - Extended Site Boundary



Low Loader	
Overall Length	16.633m
Overall Width	2.500m
Overall Body Height	3.396m
Min Body Ground Clearance	0.320m
Max Track Width	2.500m
Lock to Lock Time	6.00 sec
Kerb to Kerb Turning Radius	6.790m

**Northern Line Extension**  
 373 Kennington - Low Loader Track Analysis - Access from Kennington Road



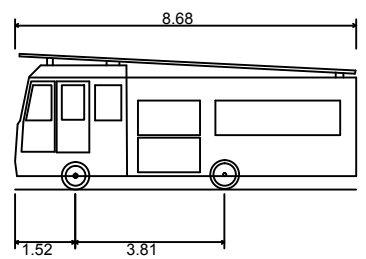
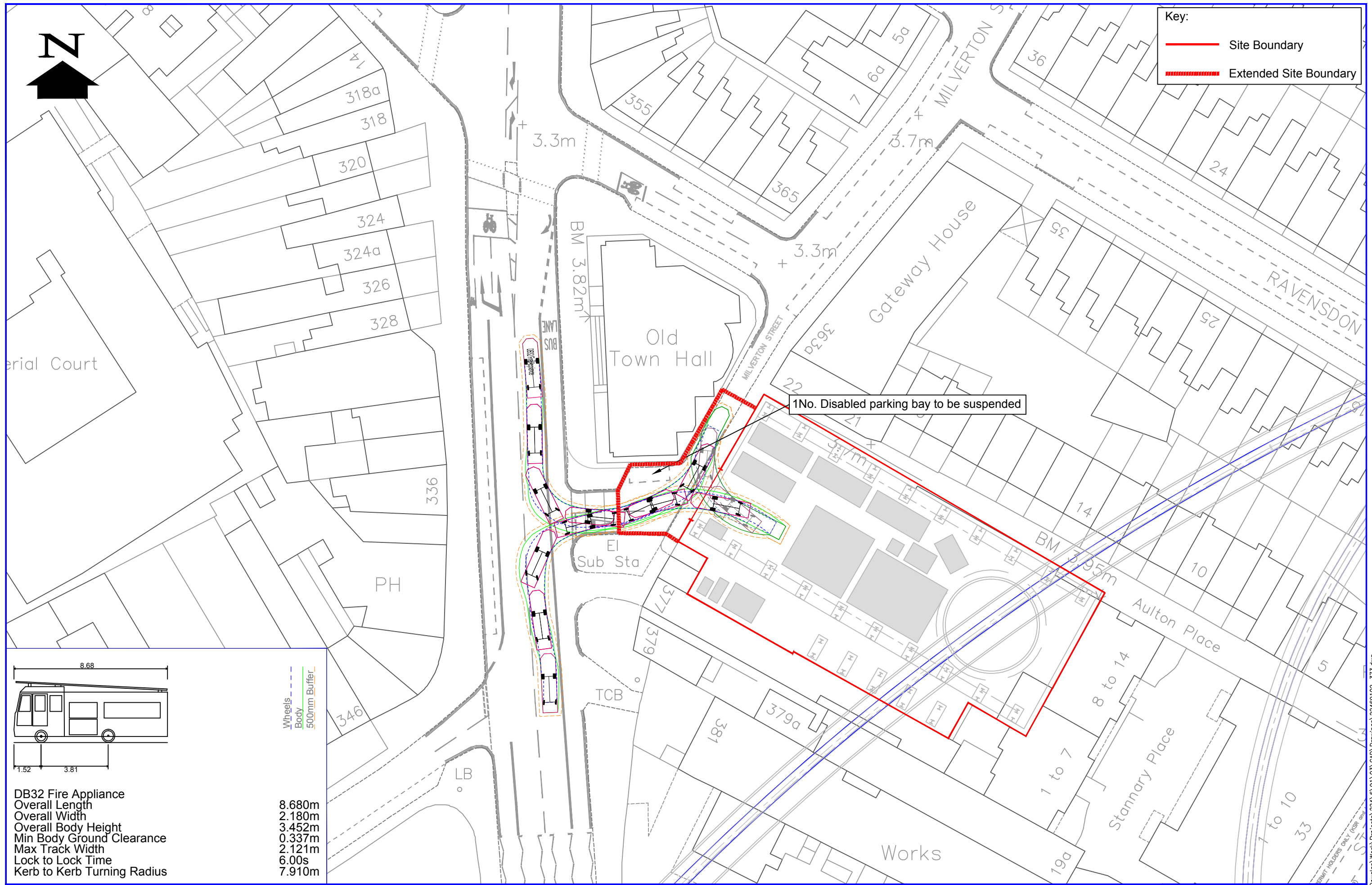
Drawn: MG	Date: 16/12/12	Scale: 1:500	Figure No: 8
--------------	-------------------	-----------------	-----------------

CAD REFERENCE: \D:\Projects\224\6\91\03\CAD\Drawings\22469102-373.dwg



Key:

- Site Boundary
- ▬ Extended Site Boundary



Wheels  
Body  
500mm Buffer

DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to Lock Time	6.00s
Kerb to Kerb Turning Radius	7.910m

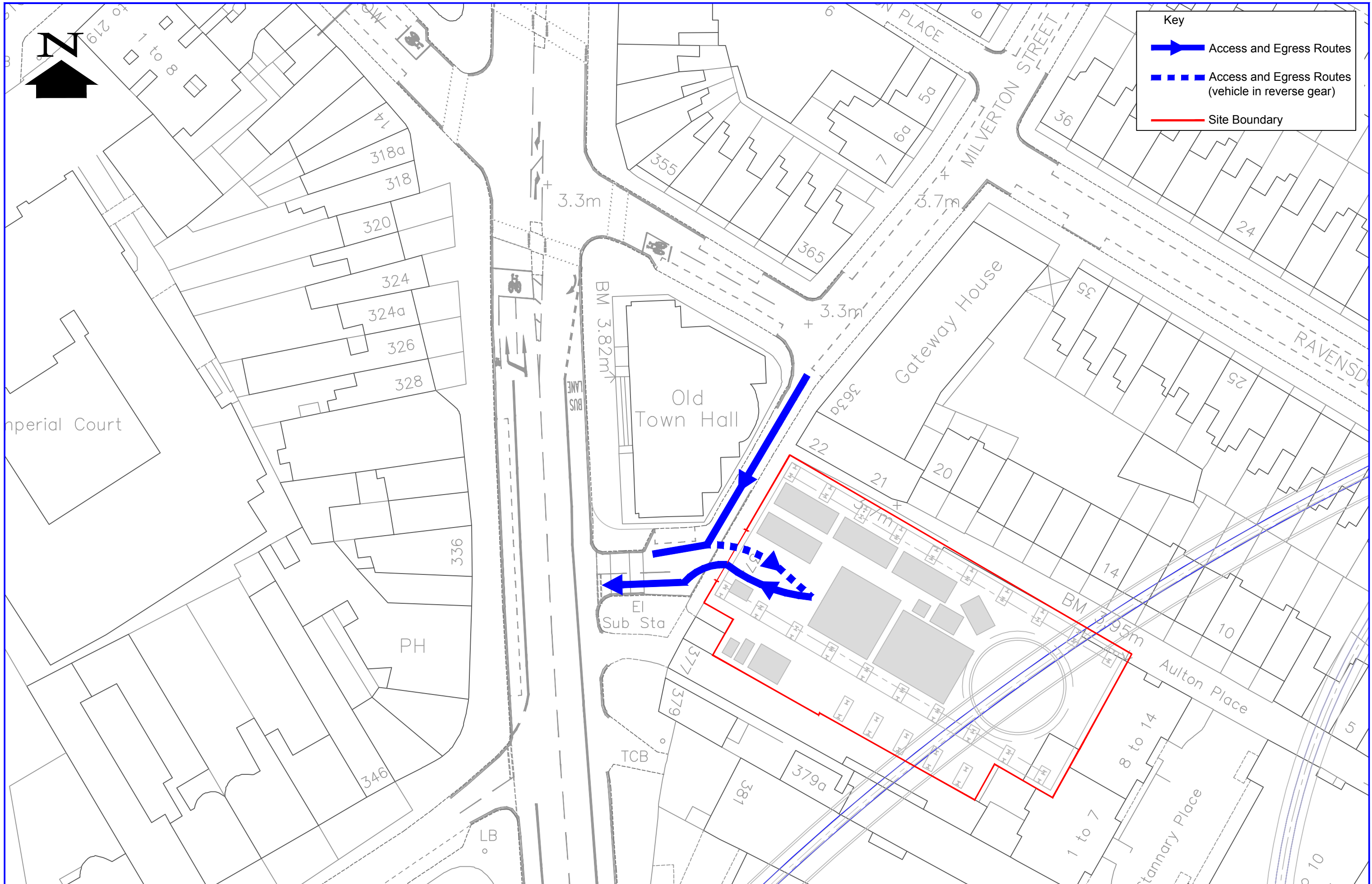
**Northern Line Extension**

373 Kennington - Fire Appliance Track Analysis - Access from Kennington Road



Drawn: MG	Date: 16/12/13	Scale: 1:500	Figure No: 9
--------------	-------------------	-----------------	-----------------

CAD REFERENCE: \\Douglas Work\Projects\224\6\91\03\CAD\Drawings\22469102-373.dwg



**Northern Line Extension**

373 Kennington - Milverton Street - Access and Egress Routes



Drawn: MG	Date: 16/12/13	Scale: 1:500	Figure No: 10
--------------	-------------------	-----------------	------------------

CAD REFERENCE: \Douglas Work\Projects\24\6\91\03\CAD\Drawings\22469102-373.dwg



**Key**

- Access and Egress Routes
- Access and Egress Routes (vehicle in reverse gear)
- Site Boundary
- Extended Site Boundary

