



Construction Route Plan

Land south of Holwell Road, Pirton, Hertfordshire

30 June 2017

Waterman Infrastructure & Environment Limited

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Client Name: CALA Homes
Document Reference: WIE11697-100-R-5-2-1-CRP
Project Number: WIE11697-100

Quality Assurance – Approval Status

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2008, BS EN ISO 14001: 2004 and BS OHSAS 18001:2007)

Issue	Date	Prepared by	Checked by	Approved by
5-2-1	30/06/2017	Andrew Trowbridge	Dave Martin	Andrew Trowbridge

A handwritten signature in blue ink, appearing to read 'A. Trowbridge', positioned below the 'Approved by' field.

Comments



Disclaimer

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We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

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- B. Proposed Route and Highway Improvements

1. Introduction

- 1.1. Waterman Infrastructure and Environment Ltd. have been instructed by CALA Homes (North Home Counties) Ltd to review the construction route for the proposed residential development site at Holwell Road, Pirton, Hertfordshire.
- 1.2. The site has Reserved Matters approval for 78 dwellings (31 affordable and 47 private) pursuant to outline planning permission reference 15/01618/1 which was granted on 30th May 2017.
- 1.3. An initial version of the Construction Management Plan (CMP) has been submitted to Hertfordshire County Council and agreed with the Highway Officers, subject to further vehicle tracking along the route.
- 1.4. The CMP was an individual agenda item on the planning committee of North Hertfordshire District Council on 16th March 2017. It is noted that there is strong opposition to the current route from the development site to and from the direction of Holwell.
- 1.5. As a result of this, and the item being deferred at planning committee, it has been agreed with CALA Homes (North Home Counties) Ltd that a further review of all options is undertaken and put forward to HCC and local residents.
- 1.6. It should be noted that the permission of the outline application confirms that from a planning perspective the site is deliverable, and that adequate construction routing can occur. The accompanying CMP by CALA Homes suggested initially that the route through Holwell was the preferred option.
- 1.7. A meeting was held on 12th June 2017 to discuss the construction routes in more detail which concluded in a final routing strategy being agreed. Following this meeting and the subsequent on-site meeting with representatives from the Highway Authority, CALA and Waterman the route detailed in this report is the result of extensive consultations with the Local Authorities with the consideration of local residents being accommodated as much as possible.

2. Proposed Construction Timeframe

- 2.1. Although the site gained planning approval for up to 82 residential units, CALA secured Reserved Matters approval for 78 units.
- 2.2. Within the original CMP there was a suggested limitation on delivery times for Heavy Goods Vehicles (HGVs) to only occur between 9.30am and 3pm. Following consultation with the CALA Homes construction team and suppliers, it is agreed that the restriction would be operational between 9.30am and 3pm.
- 2.3. In addition, given the rural nature of the surrounding road network, CALA committed to limiting the size of delivery vehicles to the site to 12m in length (with no articulated vehicles where practical). A review of the 12.4m long mobile crane has been undertaken along the route, and this is included later in this document.
- 2.4. The impacts of such a delivery schedule mean that less material can be brought to and from the site per day than a 'typical' construction site. The result is that not only are more, smaller, vehicles required but the overall construction programme is expected to take longer.
- 2.5. It is estimated that the construction of the development may last up to 3 years.

3. Construction Vehicle Routing

Overview

- 3.1. As the site, has Reserved Matters approval, there is acceptance that the site is deliverable from a construction point of view.
- 3.2. The site is located on the north-eastern edge of Pirton, with only a small number of potential routes being viable to bring HGVs to and from site.
- 3.3. Clearly, CALA Homes also have a responsibility as part of the Considerate Contractors Scheme to ensure that they and their contractors are acting in a safe manner during travelling to and from the site.
- 3.4. The routes have been explored by both CALA Homes' construction team and separately by members of the Waterman Infrastructure and Environment team. These routes have both been driven and walked.
- 3.5. A meeting was held on 13th June 2017, which discussed the routing options, resulted in a final routing strategy. A subsequent on-site meeting was undertaken which involved walking sections of the route which had particular road width constraints.
- 3.6. To this end, the route proposed is to provide one-way working therefore the opportunity for construction vehicles to pass one another is negated and vehicles will be spread over a wider area. The original route sought to minimise HGV mileage, however due to the consultations and further consideration it was decided that for the benefit for a majority of residents the route is extended to reduce this impact. In summary, the route is.
 1. Arrive along Priors Hill – Shillington – West Lane - Site
 2. Depart from Site – Holwell Road – Waterloo Road
- 3.7. It should be noted that an additional route was requested to be explored by local residents which involved construction vehicles being taken along an existing track from Hitchin Road. This route involves land outside of CALA's control and potentially involves a number of separate land owners and requires the crossing of existing Rights of Way / Bridleways. This has also been reviewed by HCC, who agree that the off-road route is not viable for this development site.

4. Proposed Construction Vehicle Route

- 4.1. As discussed previously in this report extensive consideration has been made regarding the proposed route involving meetings with the Local Authorities and a subsequent meeting with HCC, WIE and CALA walking along the most constrained lengths of the route to identify possible highway improvements. The route has been agreed with HCC. A plan showing the route is provided at **Appendix A**.
- 4.2. It has been identified that there is on-street residential car parking on Shillington Road and West Lane adjacent to the junction with High Street.
- 4.3. The key constraint of this route is the narrow section of road around Waterloo Lane, where forward visibility is limited, and vegetation reduces road widths. A gradient is also present leading from Holwell towards Pirton along this stretch of road.
- 4.4. This route has been reviewed in detail as part of the original CMP which highlighted the route's use by an hourly bus service and existing use by traffic of a range of sizes. No weight or width restrictions are present on the route.
- 4.5. Holwell itself is a smaller village settlement than Pirton with correspondingly lower pedestrian numbers. In addition, although it is acknowledged that some on-street parking does occur on Holwell Road around the church, the vast majority of the residential properties in Holwell have on-plot car parking.
- 4.6. The concern from many of the objection comments relates to the impact of vehicles passing each other, particularly along Waterloo Lane, where road widths are restricted. CALA Homes would have control over their own delivery drivers in terms of scheduling and ensuring that they would be released from site at a time not to coincide with bus services. Due to the one-way route the conflict between construction vehicle will be prevented.
- 4.7. Given the reduced number of properties be impacted upon, lower pedestrian footfall, fewer junctions and parked cars, it was decided that this was the preferred route for construction traffic to use.

5. Mitigation Measures and Strategy

- 5.1. Further potential mitigation measures have been considered for discussion with HCC in addition to those the measures already identified in the previously submitted CMP (which were far-reaching and significant improvements to construction operation).
- 5.2. The original CMP included the following mitigation measures:
- Limiting HGVs to rigid vehicles of no longer than 12m where practical;
 - Restriction in delivery times (after 9.30am and before 3pm) other than in agreed situations with HCC;
 - Scheduling of deliveries to be actively controlled by CALA to avoid interactions with the local bus service;
 - Use of remote passing bays for vehicles to wait prior to proceeding to site (again to avoid conflicts between construction traffic and the local bus service).
- 5.3. The following revised suggested mitigation measures are proposed:
- Limiting HGVs to rigid vehicles of no longer than 12.4m (to include mobile cranes) and low loaders / articulated vehicles if required;
 - Scheduling of deliveries to be actively controlled by CALA to avoid interactions with other construction traffic and the local bus service;
 - Implement a one-way working route to ensure construction vehicle will not need to pass one another;
 - Use of remote passing bays and road widening for vehicles (see Appendix B for details) to wait prior to proceeding to site (again to avoid conflicts between construction traffic and the local bus service), in locations including:
 - Junction of Shillington Road/Prior Hill
 - Waterloo Lane
 - Holwell Road
 - Letter drop to residents who park their cars on-street along the route;
- 5.4. The above amendments solely relate to the 12.4m long mobile crane. The 12.4m long mobile crane has been tracked using Autotrack along both routes, and the tracking plots are provided at **Appendix B**. The tracking shows that the mobile crane has a smaller and more manoeuvrable chassis / body than other rigid body (12m long) vehicles. The mobile crane is expected to be able to navigate to and from the construction site via either the Holwell or Pirton route (notwithstanding further mitigation measures as identified in this section).
- 5.5. The following temporary mitigation measures will be provided:
- Signage be erected at both ends of Waterloo Lane to communicate to drivers that this is a construction route and to expect the potential for HGV traffic;

- Signage be erected at both ends of the area adjacent to Walnut Tree Farm to act as above;
 - Signage be erected at both ends of the Hitchin Road / Walnut Tree Road junction to communicate to drivers that this is a construction route and to expect the potential for HGV traffic;
 - Limitations on the route that roof trusses can be brought to site –but potentially in and out via Pirton subject to some of the measures in the above bullet points. Mobile cranes have (as explained in the previous chapter) the ability to use either route.
- 5.6. It is believed that with suitable additional mitigation measures in place that the key pinch points on both routes can be managed to a satisfactory extent.
- 5.7. Details of the proposed route and temporary carriageway works along the route is provided at **Appendix C**. These details include construction details with level information which set out the principles of the works. The construction details will be subject to a detailed design process which will require the agreement of HCC prior to any works being undertaken.

6. Conclusion

- 6.1. This CMP Route Plan report provides of the HGV route to and from the development site at Holwell Road, Pirton.
- 6.2. There are acknowledged pinch points on both routes, although neither route is limited by weight, height or width restrictions.
- 6.3. The options considered in this report are for review by HCC and presentation to residents and council members for approval under the discharge of condition 6. Whilst no solution will appease all objectors, the additional mitigation measures identified within the report highlight that CALA Homes are willing to explore alternatives in order to reduce potential impacts.



APPENDICES



A. Proposed Construction Route

Potential suspension of on-street parking on construction delivery days

Temporary widening to be implemented to ensure construction vehicle can manoeuvre round bend.
To be reinstated after works have been complete (See construction Detail B on drawing WIE11697-SA-05-0038)

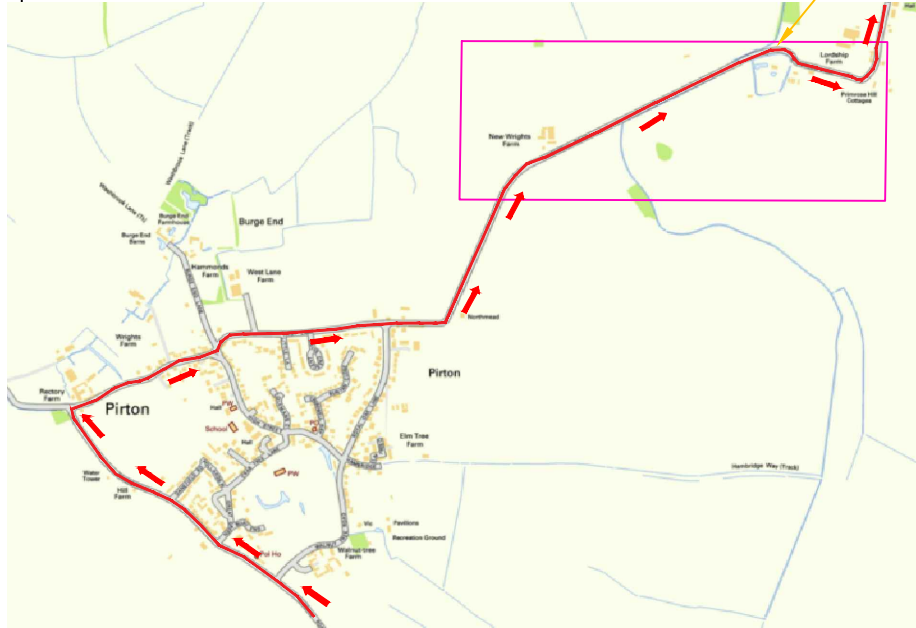
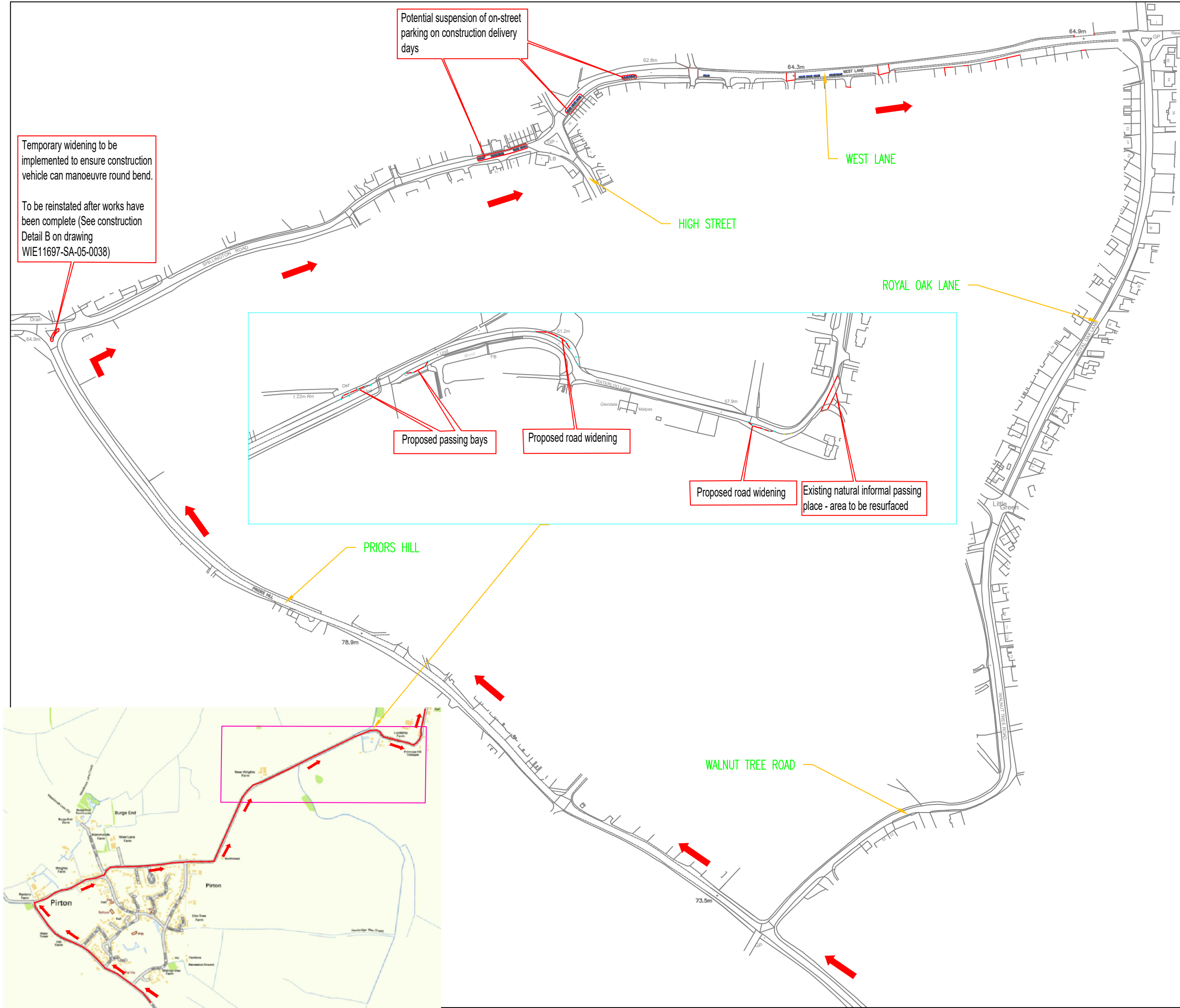
Proposed passing bays

Proposed road widening

Proposed road widening

Existing natural informal passing place - area to be resurfaced

KEY:
 DIRECTION OF TRAVEL FOR HGVs (ONE WAY WORKING)



Rev	Date	Description	By
A04	07.07.17	REFERENCE DWG AND MAP ADDED	JW
A03	19.06.17	WIDENING MOVED, ANNOTATIONS ADDED	JW
A02	14.06.17	MINOR AMENDMENTS	DM
A01	01.06.17	ISSUED	DM

Amendments	
Project	Holwell Road, Pirton
Title	Construction Vehicle Route
Client	CALA Homes



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Drawing Status
PRELIMINARY

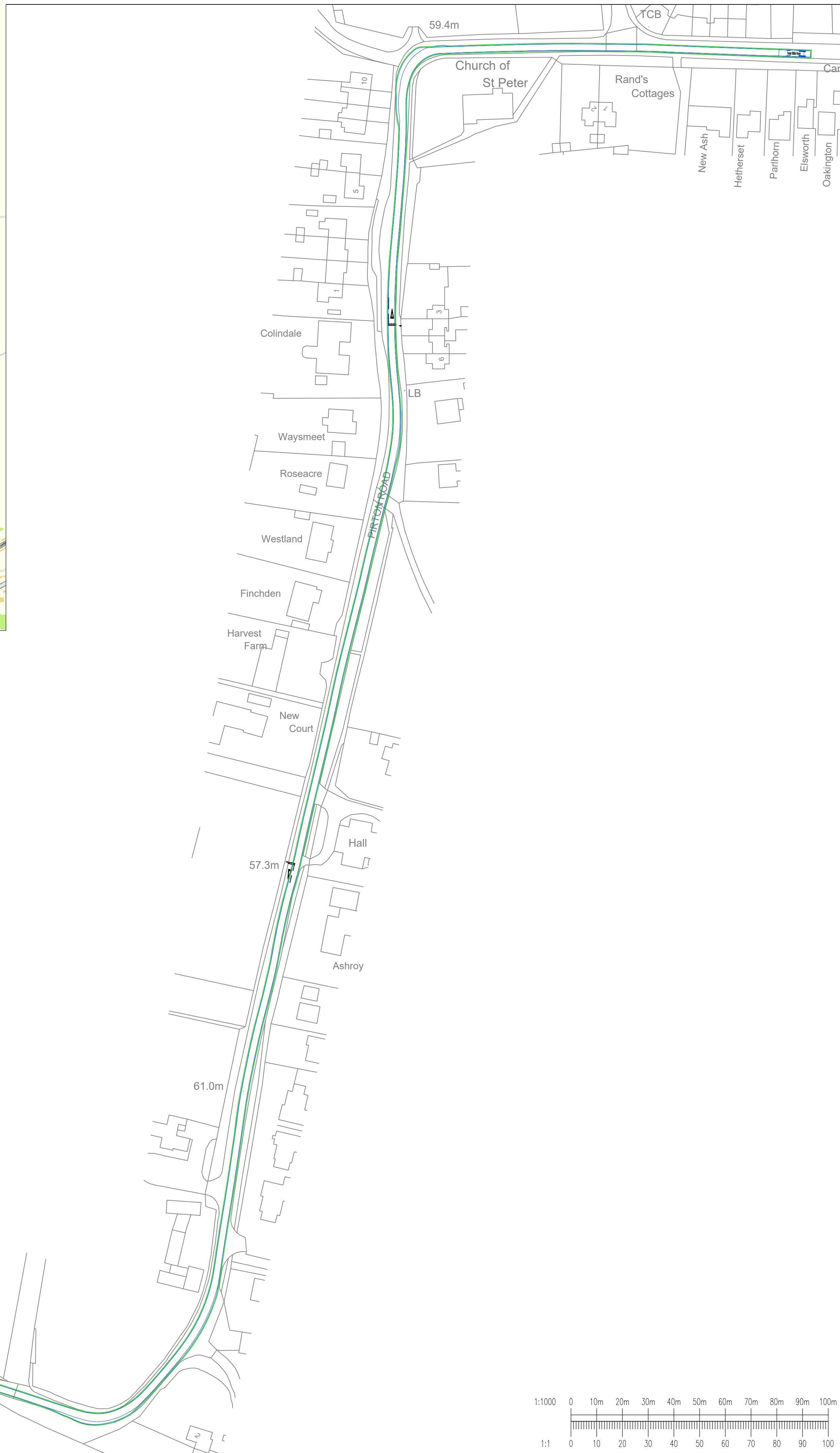
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Drawn by	JW	Date	June 2017	Computer File No	
Scales @ A3		NTS		WIE-11697-SA-05-0034-A04.dwg	
work to figured dimensions only					
Publisher	Zone	Category	Number	Revision	
WIE	SA	05	0034	A04	



B. Mobile Crane Route Tracking



Location Plan



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Key:

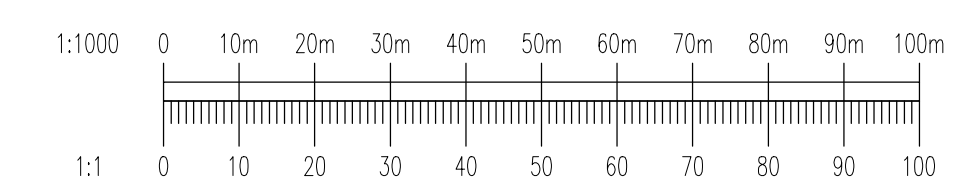
Large Mobile Crane	12.300m
Overall Length	4.710m
Overall Width	1.240m
Overall Body Height	2.430m
Min Body Ground Clearance	5.00s
Track Width	10.000m
Lock to lock time	
Kerb to Kerb turning Radius	

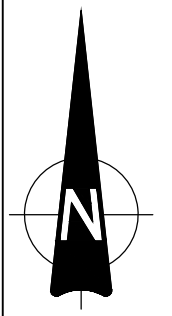
Rev	Date	Description	By
A01	12.04.17	FIRST ISSUE	JW

Amendments	
Project	Holwell Road, Pirton
Title	Proposed Construction Traffic Route Auto Track Analysis Large Mobile Crane Travelling towards Pirton via Holwell Rd
Client	CALA Homes (North Home Counties) Ltd

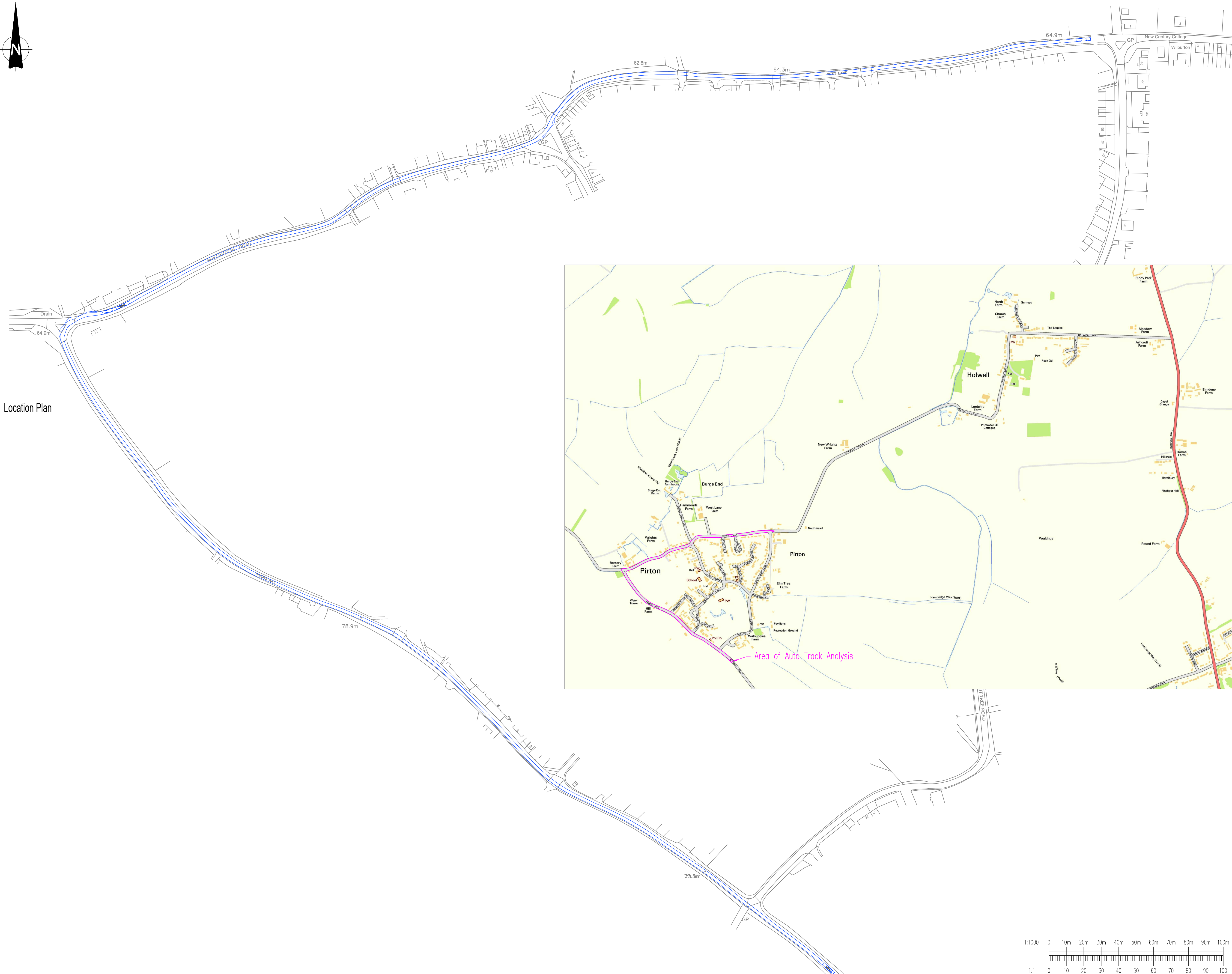
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Drawing Status				
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Designed by	Checked by	Project No	WIE11697	
Drawn by	JW	Date	April 2017	
Scales @ A1		1:1000	Computer File No	
work to figured dimensions only			WIE-11697-SA-05-012-A01 & 0013-A01.dwg	
Publisher	Zone	Category	Number	Revision
WIE	SA	05	0012	A01





Location Plan



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Key:

Large Mobile Crane	12.300m
Overall Length	4.710m
Overall Width	2.386m
Overall Body Height	2.500m
Min Body Ground Clearance	2.430m
Track Width	6.000
Lock to lock time	10.000m
Kerb to Kerb Turning Radius	

Rev	Date	Description	By
A01	20.06.17	FIRST ISSUE	JW

Project		Holwell Road, Pirton	
Title		Proposed Construction Traffic Route Auto Track Analysis Large Mobile Crane Travelling towards Holwell via Pirton	
Client		CALA Homes (North Home Counties) Ltd	

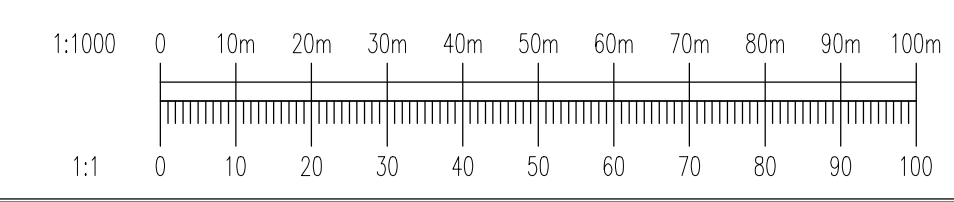


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Drawing Status: **PRELIMINARY**

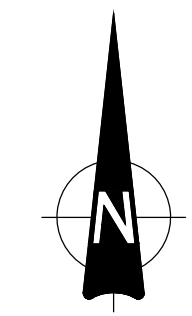
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Drawn by JW	Date June 2017	WIE11697
Scales @ A1 work to figured dimensions only		Computer File No WIE-11697-SA-05-041-A01.dwg
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Publisher	Zone	Category	Number	Revision
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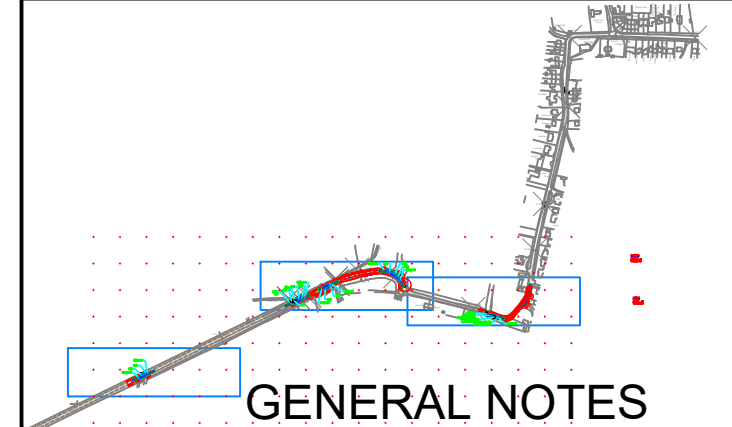




C. Proposed Route and Highway Improvements



GENERAL NOTES



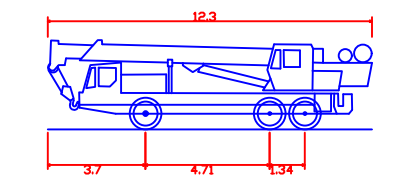
GENERAL NOTES

See construction detail drawing WIE11697-0040

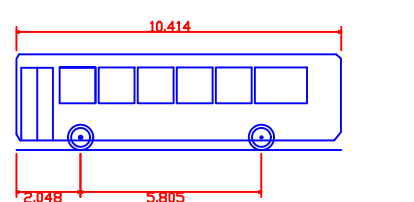
'Passing Place' signage to be provided to the satisfaction of HCC.

Key

- Proposed New carriageway construction
- Proposed Passing Place alignment/layout
- Extent of Highway Boundary



Large Mobile Crane
 Overall Length 12.300m
 Overall Width 5.350m
 Overall Body Height 5.050m
 Min Body Ground Clearance 0.300m
 Track Width 5.050m
 Lock to lock time 4.005m
 Kerb to kerb Turning Radius 10.000m



Dart SLF 10.50m
 Overall Length 10.414m
 Overall Width 5.350m
 Overall Body Height 5.050m
 Min Body Ground Clearance 0.300m
 Track Width 5.050m
 Lock to lock time 4.005m
 Kerb to kerb Turning Radius 9.495m

A05	04.07.17	VEHICLE TRACKING ADDED	JW
A04	30.06.17	ANNOTATIONS ADDED	JW
A03	19.06.17	ANNOTATIONS ADDED	JW
A02	13.06.17	ADDITIONAL PASSING POINTS ADDED	DM
A01	08.06.17	ISSUED	DM

Rev	Date	Description	By
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Amendments

Project **Holwell Road, Pirton**

Title **Large Car and Large Mobile Crane Tracking**

Client **CALA Homes**

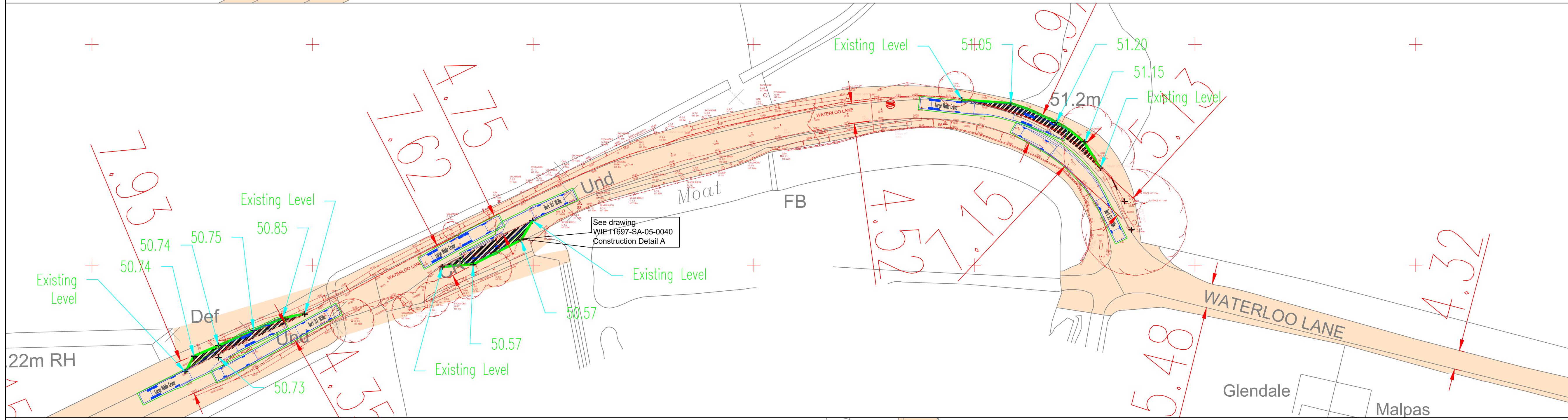
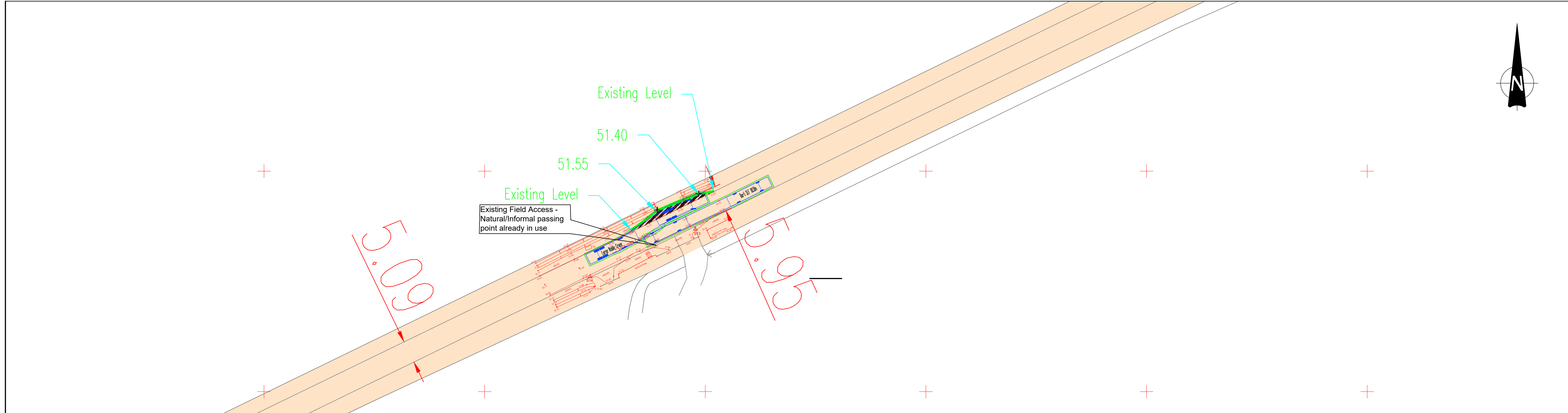
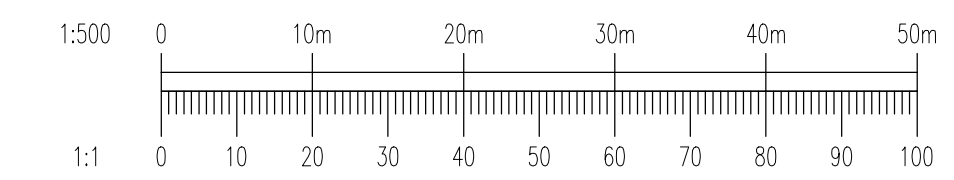


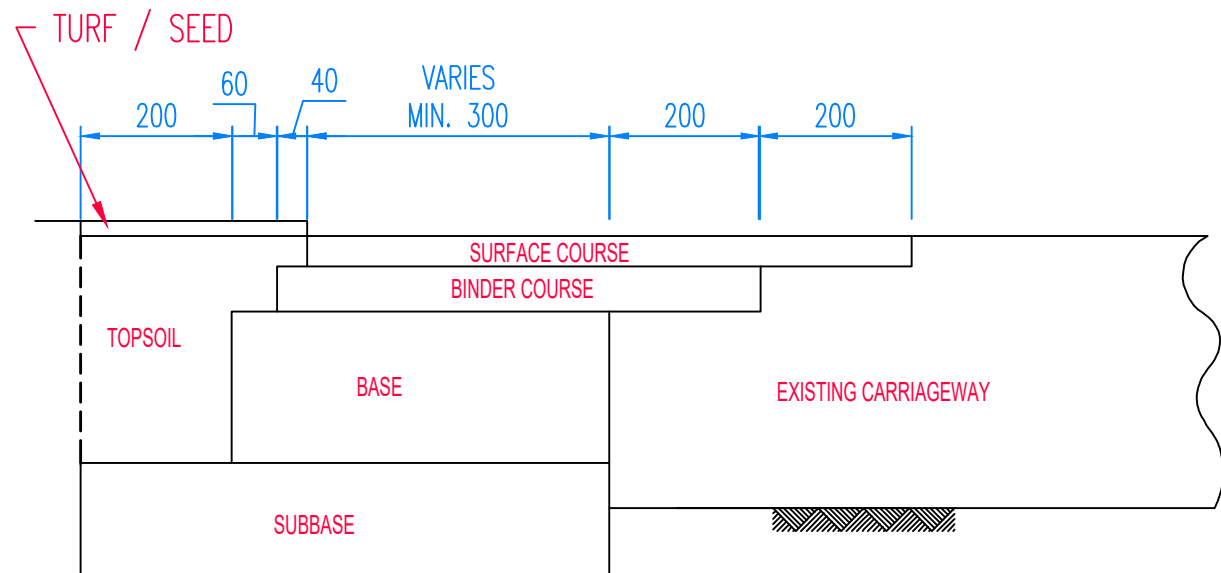
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Drawing Status **PRELIMINARY**

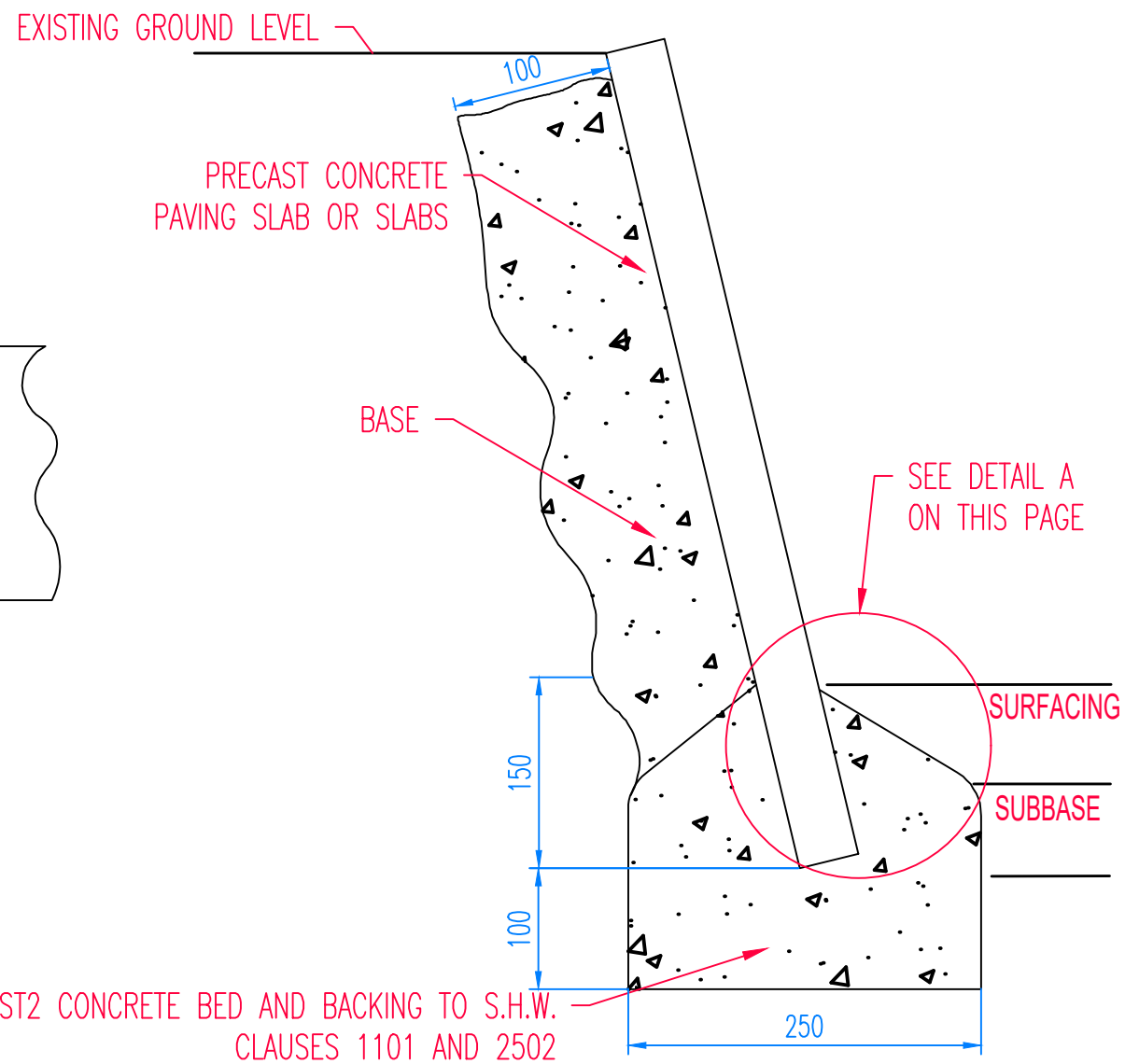
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Publisher	Zone	Category	Number	Revision
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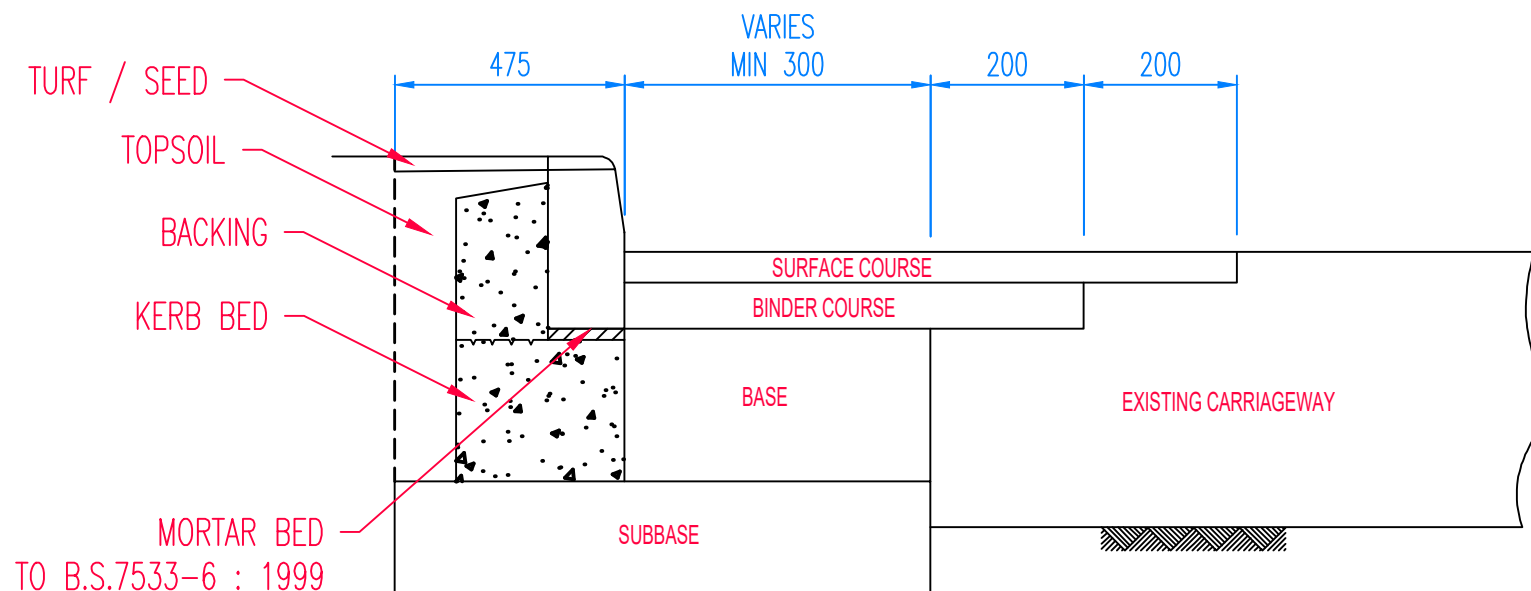




**CONSTRUCTION DETAIL A
CARRIAGEWAY WIDENING AND PASSING BAY**



**CONSTRUCTION DETAIL C
EDGE OF PAVEMENT DETAILS
PRE CAST PAVING SLAB ON EDGE**



**CONSTRUCTION DETAIL B
CARRIAGEWAY WIDENING WITH KERB**

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. DIMENSIONS OF PRECAST CONCRETE PAVING SLABS SHALL BE SPECIFIED.
3. SLOPE OF PAVING SLABS TO SUIT SITE CONDITIONS.
4. EXISTING GROUND LEVEL MAY BE LEVEL AS SHOWN OR SLOPPING DOWN TOWARD PAVING SLAB.

Rev	Date	Description	By
A01	16.06.17	ISSUED	JW

Amendments

Project
Holwell Road, Pirton

Title
**EDGE OF PAVEMENT DETAILS
PRECAST PAVING SLAB ON EDGE**

Client
CALA Homes



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Computer File No
WIE-11697-SA-05-0040-A01.dwg

Publisher	Zone	Category	Number	Revision
WIE	SA	05	0040	A01



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