

Construction Management Plan & Traffic Management Plan

Holwell Road, Pirton

(15/01618/1) - Condition 6

1. INTRODUCTION

1.1. Purpose of the Document

This Construction Management Plan and Traffic Management Plan has been prepared by CALA Homes (North Home Counties) in respect of land at Holwell Road, Pirton. The purpose of the document is to ensure potential impacts that may arise from the Construction Works approved by the Council in relation to Holwell Road are actively identified, managed and minimised in accordance with Condition 6 of the outline planning permission (application reference 15/01618/1).

This is a live document and will be maintained, reviewed and updated by the project team, as necessary and as required throughout the development process. The monitoring of progress and review of environmental performance on a regular basis is an essential part of our policy. It will also inform the creation of CALA's Health and Safety Plan.

1.2. Outline Planning Permission - Condition 6

Condition 6 of the planning permission states the following:

"Prior to commencement of the development full details of a Construction Management Plan shall be submitted to the Local Planning Authority for approval in writing. The Construction Management Plan shall contain the program of works on site, area for construction vehicle parking, storage and delivery of materials within the development site, construction vehicles wheel washing facilities, and details of construction vehicle routing to and from the site."

It is CALA Homes proposal to carryout the construction of its development off Holwell Road, Pirton in two separate phases.

Phase 1, which would include six number of houses with the roads and sewers that serve these plots. A car park for CALA operatives, which could also be used by the owners of the cottages adjacent to the site in Holwell Road, while the off site foul sewer connection is being constructed. A mini compound and storage area would be put in place to service these construction works. Phase one would therefore only constitute a similar amount of construction works to the recently constructed development in Royal Oak Lane which was undertaken without a Construction Management Plan in place. Access into the site for this phase will be via a temporary haul road constructed over plot 1. This is required to allow the Y junction and service diversions works to be undertaken alongside the 6 plots being built. The resident's car park will be accessed via the same haul road. A set of gates will be erected within the site to secure the site and still allow access into the car park while the site is closed. Please see Appendix VIII for the Traffic Management Plan for this phase.

CALA would manage the site in line with this CMP, adhering to the stated site working hours and delivery times. The idea behind this is to also have the S278 works running alongside this phase of the works and have them complete by the time we are ready to progress into the wider development.

The drainage, infrastructure and services for these plots will be connected and capped off from the wider site until they are ready to be connected to the wider scheme.

As the works for this phase will be undertaken on a significantly smaller scale, there will be fewer construction vehicles making deliveries. Phase 1 would take approximately 8-10 months to complete, this includes work to the Y junction.

Phase 2 of the development would be the construction of the remaining 72 units, roads, sewers and all landscaped areas. This phase would commence after the Section 278 works are in place and would take approximately another 25 months.

2. CONSTRUCTION METHOD STATEMENT

Construction and storage compounds (including areas designated for car parking)

Materials and plant will be stored in a suitable designated area located away from neighbouring buildings and sensitive receptors. A loading/unloading area will be provided to avoid deliveries being taken on the highway. The area will be big enough to allow for delivery vehicles to turn on site and exit the site in a forward gear.

An area of hard-standing will be used as a car park for site staff, contractors and visitors to use. The car park will be made large enough for all vehicles serving the site. No vehicles will be parked on the surrounding roads in Pirton or Holwell.

On site signage illustrating access status, pedestrian routes, vehicle routes, material storage areas, parking areas for staff and visitors will be displayed during the construction.

All construction traffic will be segregated from pedestrian routes and clearly demarcated with barriers. Construction plant and vehicles will operate hazard lighting and acoustic alarms at all time during movement on site.

Contractors will be encouraged to car-share and arrive in multi-occupancy vans where possible. CALA will record the daily journey details of our staff, operatives and delivery vehicles to the site to ensure the above arrangements are promoted throughout the construction period.

Screening and hoarding details

The boundary of the site will be secured by temporary plywood hoarding at a height of 2.4m and remain in place for the duration of the construction activities. The site entrance will be secured with metal gates which will display the company information and contact numbers.

Task specific barriers will be used to protect vehicles and pedestrians.

Control of dust and dirt emissions

Where dust is likely to be released due to construction activities, local damping will be employed by site labour using water hoses on spoil heaps and excavations. Activities such as cutting, sanding and grinding will only be undertaken in designated areas so that any dust can be adequately controlled and disposed of. Dust suppression tools will be provided along with debris netting to any scaffold areas facing the public.

Wheel washing facilities will be provided at the entrance to reduce the transference of mud/dust onto the local highways.

Wheel washing facilities

Wheel/body washing facilities will be provided at the site entrance/exit to prevent mud/dirt and debris from spreading onto the public highway. The wheel wash will be set up on a catch pit area, which will allow the run off water to drain through it and filter before being discharged into the site drainage. Water from the wheel wash will not run out of the site.

All reasonable practicable measures will be put in place to avoid/limit and mitigate the deposition of mud and other debris on the public highway. Following the initial site set up, road cleaning will be managed as follows:-

- Precautions for guarding against mud and similar materials entering the highway will be in the form of a jet washing facility on site.
- The location of the jet washing facility will be purposefully located to ensure all construction vehicles entering and leaving the site use this facility when needed.
- Inspections of the access road will be carried out on a daily basis to ensure compliance.
- The correct loading of vehicles and sheeting of loads where necessary to avoid spillage during their journeys.
- Additional resources will be employed by way of manual labour when required to maintain acceptable levels of road cleanliness.

A road sweeper will be employed as required to remove any dirt/debris from the carriageway. During activities such as ground works which are more likely to transfer dirt onto the roads the sweeper will operate on a more regular basis.

Site Lighting

Security lighting to the compound will be placed in such a position away from residential properties and lit areas will be confined to the site boundary. Street lighting/bollard lighting will be erected prior to the first occupation on the site.

CONSTRUCTION TRAFFIC MANAGEMENT PLAN

This Method Statement is for the traffic management and material delivery/collection operation which will be required as part of the development.

The objective of the Construction Traffic Management Plan is to ensure the development is kept to a minimum both in terms of physical impact and duration, and where possible impacts are avoided or mitigated through the management of the construction process.

The site access will be via Holwell Road through Pirton village and the exit will be via Holwell village, creating a one way flow of construction traffic. A traffic route plan will be issued to all contractors, suppliers and visitors to the site (please see appendix). The traffic route plan will detail the access route into site which must be adhered to. CALA will operate a two strike system in which contractors or suppliers caught taking a different route into/out of site will be warned. If found to be using a different route twice they will be removed from site. This will be mainly managed by the gate man who will be guiding vehicles into and out of the site and ensuring that they are following the correct route. The gate man will report any offenders to the site manager who will keep a record.

The access route into site comprises of narrow country roads which are not suitable for large articulated construction vehicles. Deliveries to site will be made by rigid vehicles as these are able to better navigate around the roads and into the site. Please see Appendix I for details of the type, capacity and dimensions of the construction vehicles that will serve the site. Our consultant has undertaken a swept path analysis (which included a buffer zone) on the largest vehicle and it has been shown as being able to navigate the route and enter the site. Please refer to Construction Management Plan – Route Options, dated 25th April 2017.

If for any reason a larger vehicle is required to make a delivery it will only be done so with prior consent from HCC as the Highway Authority at least a week before the delivery date. This will include certain pieces of plant such as a 360 excavator. The residents on Holwell Road will be notified at least 24 hours before arrival and if necessary, a temporary traffic management order will be sought.

CALA Homes will work with HCC to agree and clear any obstructions on highway land to help maximise forward visibility around bends, particularly at the 90° bend leading onto Waterloo Lane.

It has been confirmed by our technical department that roof trusses, steel beams and pre-cast slabs are all being designed to be transported on rigid vehicles. It will only be construction plant that will require delivery via articulated vehicles (which will only be required at the beginning and end of the project). When we require the articulated vehicles, an additional time allowance in the booking system will be made to eliminate any conflict with our own construction traffic on the highway.

In order to install the roof trusses, pre cast floors and steel beams a mobile crane will need to be hired in. The crane will be no larger than the largest articulated vehicle which will serve the site so that it can navigate the roads into site. The mobile crane is driven into the site by the operator who

parks and sets up the crane in the working area. The driver moves into the cab and operates the crane to perform the required lifts. Once complete the operator drives the crane out of the site.

A condition survey of the roads will be undertaken prior to any construction work taking place. The condition survey would be undertaken from the Royal Oak Road/Holwell Road junction and extend along the proposed route through to the junction at Holwell Road/Bedford Road. The condition survey will comprise of detailed photos and descriptions of the make up of the roads and footpaths. We would undertake one prior to any construction work and again once the project has finished. Any damaged caused as a result of our works will be rectified at CALAs cost.

A one way system will be set up within the site to allow vehicles to enter and exit the site in a forward gear, avoiding the need for vehicles reversing onto the carriageway. A vehicle loading/unloading area will be put in place to allow vehicles to queue up within the site and wait to be unloaded. This prevents the need for vehicles to wait on Holwell Road and block access. A gateman will be appointed and will be responsible for directing vehicles in to and out of the site. All deliveries must be booked in prior to their arrival so that the site team can allocate a delivery time and be prepared for when it arrives. During busier stages of the project there will be a larger number of vehicles serving the site.

It is anticipated that between 25-30 construction vehicles (HGV, grab lorries, skip exchanges etc.) will be serving the site during the peak construction period. Please see Appendix II for a table showing the daily average of vehicles and their types for each phase of the construction process. Once all of the superstructure work has been complete, there will be far less vehicles serving the site.

As vehicles exiting the site will not be turning left into Pirton, there will be no disruption to the access of surrounding properties as construction vehicles will not be passing them. Please see Appendix III showing the location of the properties surrounding the site entrance and the route into site.

Hours of working and hours during which deliveries may be taken at the site

The site working hours are as follows:

- Site hours are 08:00 to 17:00 on Monday to Friday
- 08:00 to 13:00 on Saturday
- No Sunday or Bank Holiday working

Site delivery hours as follows:

- Site delivery hours are between 09:00 and 15:00 on Monday to Friday. Deliveries/removals will not take place before or after these set hours.
- 08:00 to 13:00 on Saturday

The delivery times have been put in place with the local schools in mind so that minimal disruption is caused.

By changing the delivery times to 09:30 the build programme will lengthen as things like concrete pours and crane lifting operations have to be scheduled over more days due to the working day being shortened.

For example a mobile crane is required to lift the roof trusses for each of the 78 units on the development. During a usual, full working day the crane is able to complete a roof in a day. If the delivery window is shortened then it may have to run into a second day if it cannot get onto site early enough.

If you take the 69 number of roofs on the development as an example, then that is effectively another 2 and a half months that needs to be added onto the build programme due to the crane having to come back a second day.

The same principal applies to fitting the floor beams and trusses as these also require the mobile crane to be installed. So a minimum of 2 and a half months will need to be added on here too.

There would be a minimum of 5 months added to the build programme caused by the extra time needed for the crane alone. This does not include the impacts on other site activities.

Another example would be when we are pouring concrete for foundations. These pours are usually booked in on a roll-on, roll-off basis lasting all day in order to complete the scheduled plots. If the delivery hours are set to 09:30 it gives us a shorter window to complete the pours so therefore more days are needed to complete the pours.

CONSTRUCTION CODE OF CONDUCT

Health & Safety

A site specific Health and Safety Plan is available on site to manage the construction phase of the project.

Liaising with Local Residents

Residents will receive correspondence prior to commencement and during key stages of the development advising works involved, duration of development and necessary contact information. The site management team will liaise with residents and local businesses and make them aware of any changes to the working methods that may cause concern or have an impact on the local area. A contact number will be available and records kept for availability of local authority and health and safety representatives.

Vibration Control

Mechanical vibration is to be kept to a minimum where possible and local residents are to be kept informed of any major construction operations that may cause vibration.

Vibration control measures will be put in place on site and include:

- Activities with the potential to cause vibration will be identified prior to works commencing and managed with a precautionary approach.
- Compaction will be via vibrating rollers where possible.

Noise Control

CALA will implement any necessary management and operation controls in order to minimise any adverse impact on the local community from the construction activities.

Site working and delivery hours will be strictly adhered to at all times. Work and noise generation outside of these hours will be strictly prohibited.

The development has the potential to generate noise from the following areas:

- Site clearance
- Earthworks and excavation
- Transportation
- Construction operations
- Cleaning
- Waste management

All operations on site will be undertaken with the best practicable means of noise reduction. This approach will include effective site management, engineering controls, acoustic screening, restricted hours of working, sound insulation and noise monitoring.

CALA will control noise and vibration in accordance with the recommendations of BS5228: Parts 1 and 2.

CALA will screen the boundary of the site during the construction phase of the works which will help to contain the noise generated on site. This will be done in a temporary site hoarding.

The main noise control measures will be implemented as follows:

- All vehicles, compressors and plant will be fitted with effective silencers and noise reducing systems in accordance with BS5228: Part 1.
- Work practices will be adapted such that noise will be kept to a minimum.
- Where possible, noisy plant and equipment will be positioned away from noise sensitive boundaries.
- Any noise complaints from neighbouring residents will be investigated and appropriate action taken. A record of complaints is to be kept and made available to the Local Council.

Deliveries

Site deliveries are to be in accordance with the set delivery hours as detailed in the planning agreement. Delivery drivers will be told to contact the site manager prior to arrival on site so that the delivery can be made efficiently and with minimal disruption to the local highways.

In order to effectively manage and enforce vehicle deliveries CALA Homes will introduce a booking system which is to be strictly adhered to and agreed as part of the contractors appointment for the project. There will be a booking system within the Site Managers compound and it will be the Site Managers responsibility to ensure the booking system is appropriately managed to prevent any vehicles arriving outside of their designated delivery slot.

Subcontractors

All subcontractors will be made aware of their duties and responsibilities towards the local community, so as to cause minimum disruption. This will be reinforced during the site induction and at our pre start meetings. The site will also engage in the Considerate Contractors Scheme (CCS) and ensure that we are fully compliant with the objectives the scheme lays out.

Burning on Site

There will be no burning undertaken on site. All our materials will be segregated on site into separate skips and sent to the appropriate landfill/recycling sites under out site waste management plan for the site.

Considerate Contractors Scheme

This site will be registered on the Considerate Contractors Scheme (CCS) and will be assessed against its 5 codes of practice, as follows:

- Appearance
- Respect the Community
- Protect the Environment
- Secure Everyone's Safety
- Value the Workforce

CONCLUSION

The key area to ensure that this plan is adhered to and that minimal impact to local residents result are:

- 1. Communicate with residents at all times so they are always aware of any operations that are taking place that has the potential to affect them.
- 2. Ensure the permitted site working and delivery hours are adhered to at all times.
- 3. To ensure our measures are effective, capable of being monitored and reviewed throughout the construction period.
- 4. Any complaints will be dealt with in a professional way and ensure complaints are closed out sufficiently.
- 5. Actively engage with CCS (Considerate Contractor Scheme) and good working practices.
- 6. Educate the workforce on the need to keep noise to a minimum and the importance of this plan to ensure residents are not disrupted by our activities. This will be carried out at our site inductions and regular site meetings.

APPENDICES

APPENDIX I – VEHICLE DETAILS

APPENDIX II – DAILY AVERAGE NUMBER OF VEHICLES

APPENDIX III – ACCESS OF SURROUNDING PROPERTIES

APPENDIX IV – POSITIONS OF HOARDING

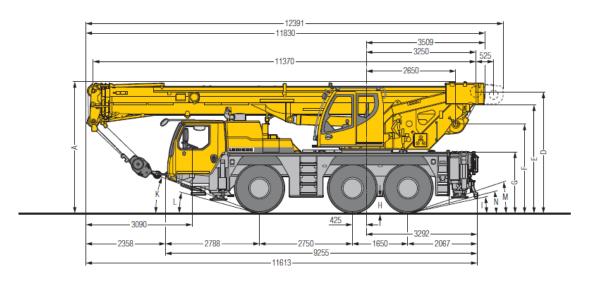
APPENDIX V – VEHICLE LOADING/UNLOADING

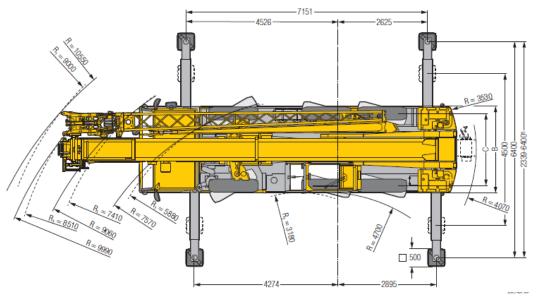
APPENDIX VI – VEHICLE ROUTES INTO SITE

APPENDIX VII – TRAFFIC MANAGEMENT PLAN FOR PHASE 1

APPENDIX I – VEHICLE DETAILS

Vehicle Type	Length (m)	Width (m)	Height (m)	Capacity
Concrete wagon	8.7	2.55	3.75	6m3
Concrete wagon	9.15	2.55	3.75	8m3
Grab lorry (muck away)	8.45	2.55	3.4	15m3
Tipper lorry (4 wheeler)	6.9	2.55	2.9	11.5t
Tipper lorry (6 wheeler)	7.9	2.55	2.9	16t
Tipper lorry (8 wheeler)	9.6	2.55	2.9	20t
Road sweeper	5.8	2.55	3.1	
3.5t dropside van	5.3	1.9	2	
18t rigid curtain slider	10	2.55	4	16 pallets
26t rigid curtain slider	12	2.55	4	18 pallets
Rigid silo refill	9	3	4.4	
Rigid silo lorry delivery	9	3	4.2	
Articulated lorry	15	2.55	4.5	
Mobile crane	12.3	2.55	3.9	70t lifting capacity





APPENDIX II – DAILY AVERAGE NUMBER OF VEHICLES

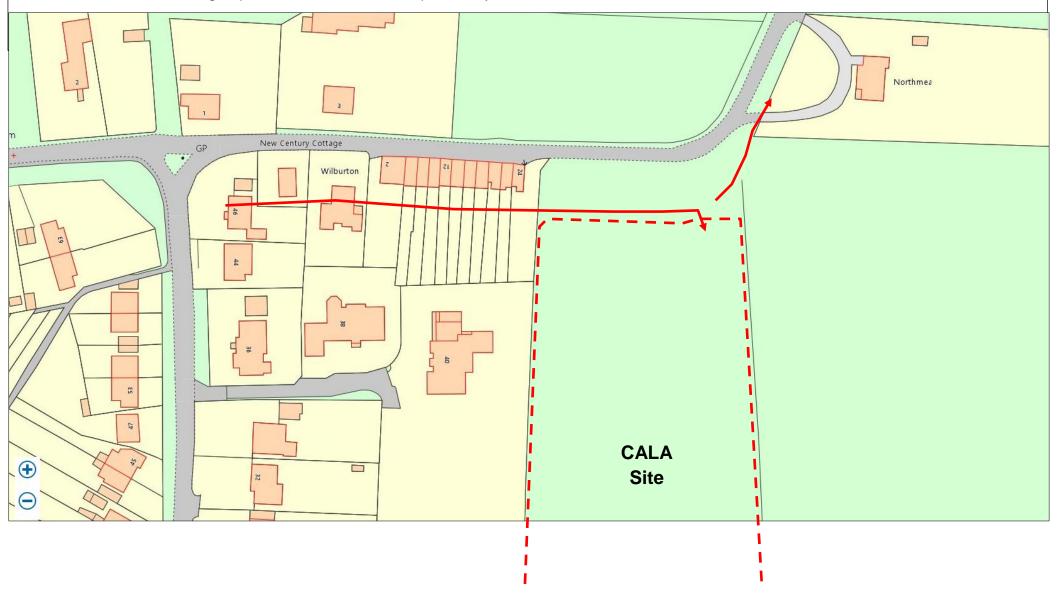
Site Set Up, Ground works, Foundations			
Muck away:	10		
Tipper lorry:	2		
Dropside van:	1		
Rigid lorry:	3		
Concrete	6		
wagon:			

Superstructure, Internals, Finishes			
Muck away:	6		
Tipper lorry:	2		
Dropside van:	6		
Rigid lorry:	6		
Concrete	6		
wagon:			
Silo refill:	1 weekly		
Crane:	2 a week during roof works		

APPENDIX III – ACCESS OF SURROUNDING PROPERTIES

All vehicles serving the site will be provided with the route they are to take into site. Therefore all vehicles will be entering the site through Pirton via Royal Oak Lane. Vehicles exiting the site are to follow Holwell Road towards Holwell village.

As vehicles will be unloaded towards the back of the site and follow a one way system out, it allows vehicles to queue within the site itself to be unloaded rather than having to pull over on the road and potentially block access.



APPENDIX IV - POSITIONS OF HOARDING

Hoarding will be erecting around the perimeter of the site in the positions highlighted in red on the below plan. The hoarding will be made up of Heras panels between timber posts. The panels will have debris netting attached to them to provide a screen.

The existing hedges and trees along the perimeter have been highlighted in green. Hoarding will not be required here as the hedges provide sufficient screening. Certain areas where the hedges are thin may require a Heras panel and debris netting to provide security.



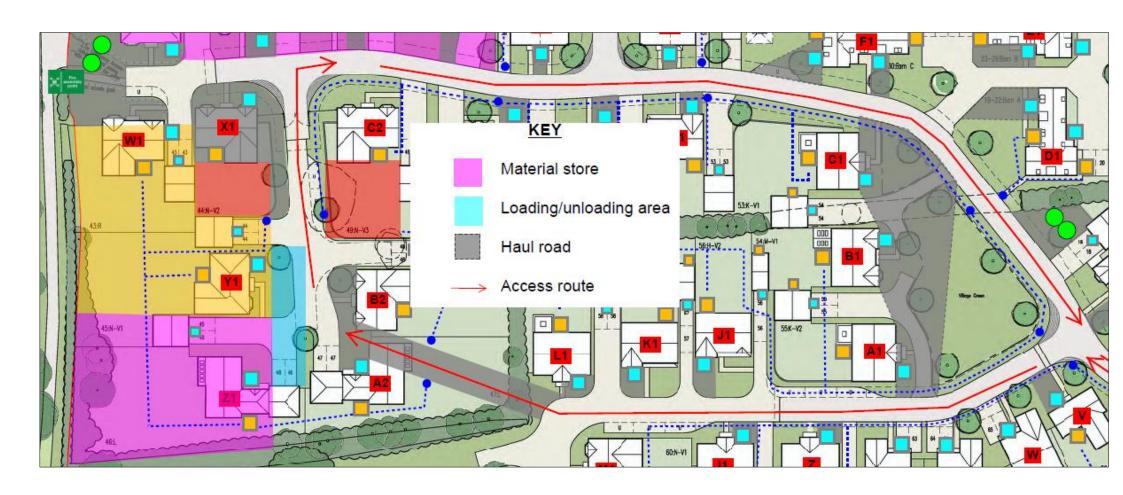
APPENDIX V - VEHICLE LOADING/UNLOADING

As seen on the below marked up drawing, we will lay a haul road to enable a one way system to be set up. This will allow vehicles to exit the site in a forward gear and not have to reverse onto Holwell Road. Vehicles will enter the site and follow the road through to the loading/unloading bay (orange marked area). The unloaded material will either be taken to the work area or placed in the material store (purple marked area). Vehicles waiting to load/unload will be able to pull into the site and queue on the haul road until the unloading area is free. This again ensures that vehicles do not have to wait on Holwell Road when they arrive at the site.

Suppliers will be required to phone the site management team to book their delivery in prior to arrival. This will allow the site team to prepare for the delivery and improve the offloading process. During busy periods in the build programme there may not be enough room for a vehicle to wait on site.

Plant and machinery will be locked in the plant store (purple marked area) overnight and when not in use. The store will have containers which will be used to secure work tools and equipment.

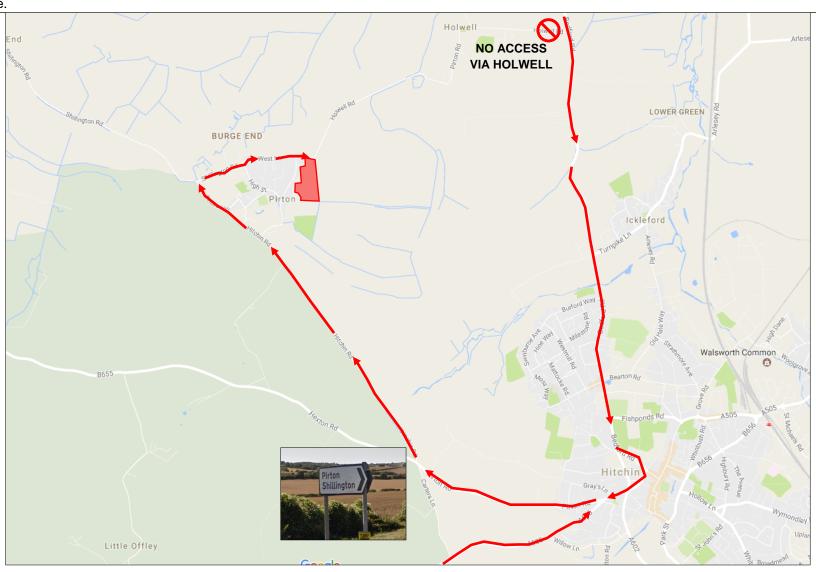
The area marked green on the drawing is to be used as a skip area. This area will contain several skips to allow waste to be segregated on site. The area is set back from the road to enable a wagon to access it and exchange the skips.



APPENDIX VI – VEHICLE ROUTES INTO SITE

From Luton: Head towards Hitchin on the A505. At the roundabout take the first exit onto Pirton Road. Continue straight on Pirton Road for approximately 1 mile and turn right at the turning signposted towards Pirton and Shillington. Continue on the Hitchin Road until you reach Pirton village. Continue straight onto Priors Hill until you reach the Shillington Road junction. Turn right onto Shillington Road and continue straight until you reach the West Lane junction. Slight left onto West Lane and continue straight until you reach the site entrance.

From A1: Exit the A1 at junction 10 onto the A507 towards Stotfold. Continue on the A507 into Stotfold, continue straight on the A507 through Arlesey until you reach the Airman Hotel roundabout. Turn left at this roundabout onto Bedford Road. Continue straight on Bedford Road through Henlow and continue on the road through to Hitchin. Continue through Hitchin past Hitchin Football Club and library. Go straight over the roundabout onto Pirton Road. Continue straight on Pirton Road for approximately 1 mile and turn right at the turning signposted towards Pirton and Shillington. Continue on the Hitchin Road until you reach Pirton village. Continue straight onto Priors Hill until you reach the Shillington Road junction. Turn right onto Shillington Road and continue straight until you reach the West Lane junction. Slight left onto West Lane and continue straight until you reach the site entrance.



The exit from the site is through Holwell, via Holwell Road.

Turn right out of the site onto Holwell Road and continue straight on the road through Holwell village. Continue straight through the village and continue onto Bedford Road (A600).



APPENDIX VII – PHASE 1 TRAFFIC MANAGEMENT PLAN

