DETAILED CONSTRUCTION LOGISTICS PLAN

Shell Budgens Welwyn Garden Fuel Station.

Premier
FORECOURTS & CONSTRUCTION

Shane Fairburn
Premier Forecourts and Construction
5/5/2022

CONTENTS.

CONSTRUCTION LOGISTIC PLAN
SHELL BUDGENS WELWYN GARDEN FUEL STATION.

1. INTRODUCTION

Development name:	Shell Budgens Welwyn Garden - Partial KDR & EV Charger Installation.
Landowner:	Shell U.K. Oil Productions Limited.
Site address:	Shell Budgens Welwyn Garden Stanborough Road Welwyn Garden City
Site postcode:	AL8 6XA
Existing site use:	Fuel Service Station
Summary of works:	Proposed Knock Down & Re-Build of Existing Sales Building together with Installation of New Electrical Vehicle Charging Stations.
24hr Site Contact During Development work:	TBC – Site Manager Or Premier office – 01792 310600
Construction Logistics Manager:	Owain James (Premier Forecourts & Construction).
Phone number:	01792 310600
Email:	Owain.james@premierfcltd.com
Logistics provider contact name:	Various Please see list of logistics providers associated with the requirements of this development.

Written & Approved by:

Produced by:	Signature	Date
Shane Fairburn	[redacted]	2022
Approved by:	Signature	Date

1.1 CLP OBJECTIVES

This section should set out the objectives of the CLP, such as reduced vehicles or lower associated emissions.

The overall objectives of this CLP are to:

- Lower emissions with respect to transport to and from site during construction period by way of controlling required traffic movement on Stanborough road and surrounding areas. (A6129 largely).
- Enhance safety – Ensure vehicle and road user safety within the locality of the site whilst construction works are undertaken. Ensuring that all site required traffic is thought out and planned appropriately. Principle safe area to be maintained around A6129 directly outside of the site.
- Reduce congestion – reduced trips overall, especially in peak periods together with the need to park or stop outside the curtilage of the site.

To support the realisation of this objective, several sub-objectives have been agreed and include:

- Encouraging construction workers to travel to the site by non-car modes of transport where possible.
- Promote smarter operations that reduce the need for construction traffic or that reduce or eliminate trips in peak periods. This is achieved by way of planning deliveries and start on site times being made specific. – Note: There is limited parking on Shell Budgens Welwyn site.
- Encouraging greater use of sustainable freight modes.
- Encouraging the use of greener vehicles.
- Managing the on-going development and delivery of the CLP with construction contractors.
- Communication of site delivery and servicing facilities to workers and suppliers; and
- Encouraging the most efficient use of construction freight vehicles.

1.2 SITE CONTEXT

Shell Budgens Welwyn Garden is a Fuel Station located within the Welwyn Hatfield Borough Council of Welwyn Garden City. The site is located on Stanborough Road, A6129 off from the A1(M). Immediately North, East and West of the site, within proximity are residential houses located on Rooks Hill and Stanborough Close. The only current point of access and egress to the site is from Stanborough Road (A6129).

Less than one mile Northeast of the site, Welwyn Garden City Train Station offers services to London Kings Cross, Moorgate, Sevenoaks, and Cambridge.

The proposed site opening hours whilst under construction is 8am until 6pm weekdays and 8am – 1pm on Saturdays. No bank holiday working is proposed and there is no heavy plant or machinery is permitted either before or after these designated times.

1.3 DEVELOPMENT PROPOSAL

The proposed development is coded with the client as a Partial KDR. This refers to the Partial redevelopment of the proposed site, in that the existing shop is to be demolished and re-constructed as a larger footprint within the site curtilage.

The larger shop will provide more convenience store offering with a leading brand food provision. With the additional site wide redevelopment works including 4 Electrical Vehicle Charging Bays, a re-pump to the forecourt together with boundary treatment improvements.

2. CONTEXT, CONSIDERATIONS AND CHALLENGES

This section describes the local context and issues identified that will need to be considered and addressed during construction.

2.1 POLICY CONTEXT

This section of the outline CLP references policies we have considered in the preparation of the document.

The Traffic Management Act (2004)

The act makes ‘provision in relation to the management of road networks; to make a new provision for regulating the carrying out of works and other activities in the street’.

It acknowledges that highways may be occupied due to construction activities and identifies the

appropriate changes levied for any extended occupation.

Designing for Deliveries, Freight Transport Association (2006)

Published in 2006, Designing for Deliveries, provides specifications for the size of delivery vehicles, turning radii and clearance requirements and should be used to ensure that delivery vehicles can safely and efficiently access the construction site.

2.1 POLICY CONTEXT "CONTINUED".

Vision Zero

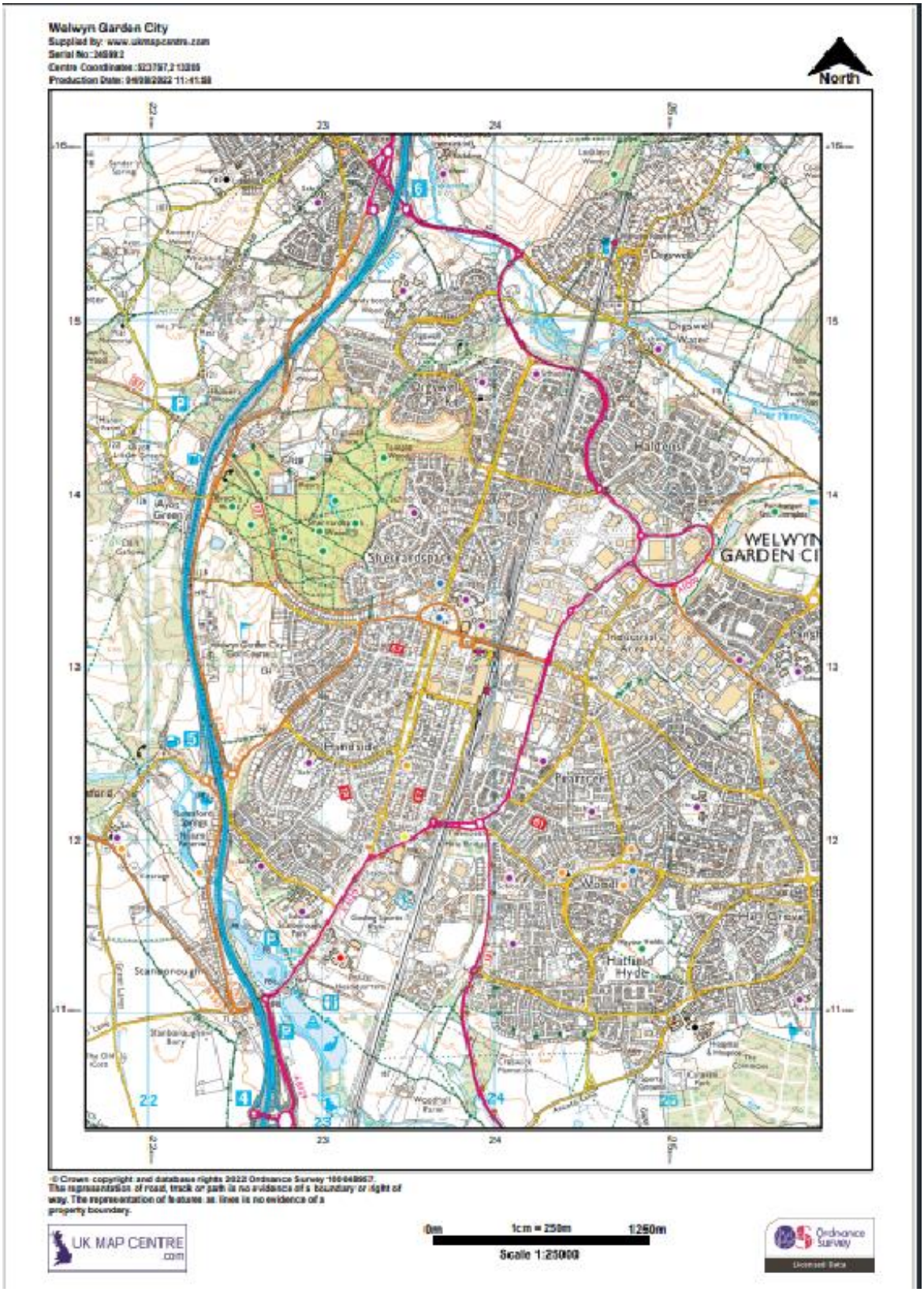
- Reducing risk for people in the vicinity of construction sites – this will comprise the encouragement of innovative traffic management which enables the safe movement of people past the site.
  This will comprise consistent inspections and guidance to minimise risks to road users.

- Improving the surface conditions of construction sites – the need for 'off-road' HGVs with large 'blind spots' will be reduced by improving the surface conditions of construction and waste sites.
  Additionally, Action 6 of the document aims at raising HGV safety standards by:
  "Launching the world's first Direct Vision Standard for HGVs. An associated permit scheme will be launched, with permits issued from 2019 and enforcement starting from 2020. The scheme will be further rolled out and the standards tightened by 2024.

- Working with the European Union and manufacturers to change European standards on direct vision.
- Requiring all operators in the GLA family supply chain starting new contracts advertised from November 2018 to be accredited to a minimum of FORS Silver and FORS Gold by April 2024.

2.2 THREE PLANS AT DIFFERENT SCALES

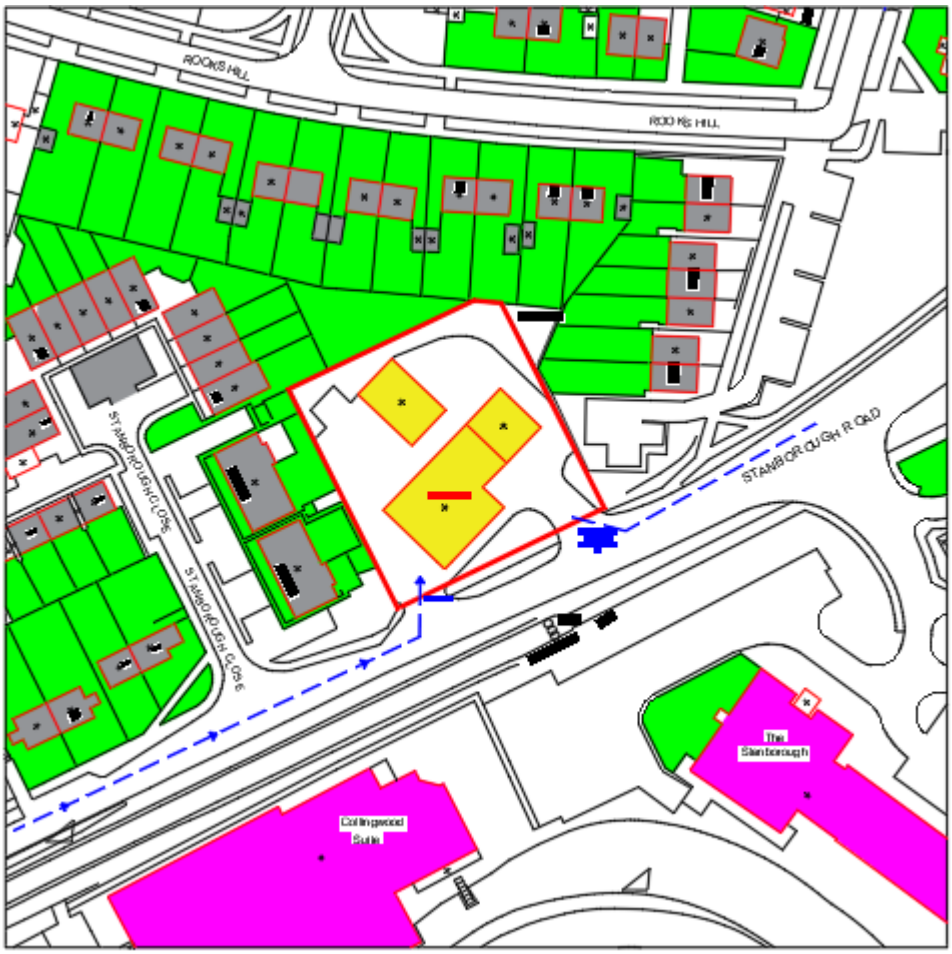
- Regional Plan - Scale 1:25000:



KEY: Scale 1:25000

- Proposed Development Site
- Vehicle Routes
- Schools & Collages
- Green Spaces
- Hospitals & Medical Centres
- Places of Worship
- Police Station / Fire Station
- Community centres / Libraries

- Local Context Plan – Scale 1:1250



Proposed Development Site

Vehicle Routes for Deliveries – A110, A112, A1037 & 1069 – Roads Shown Above are as follows;

Sewardstone Rad = A112. ----- Lea Valley Road & Kings Head Hill = A110

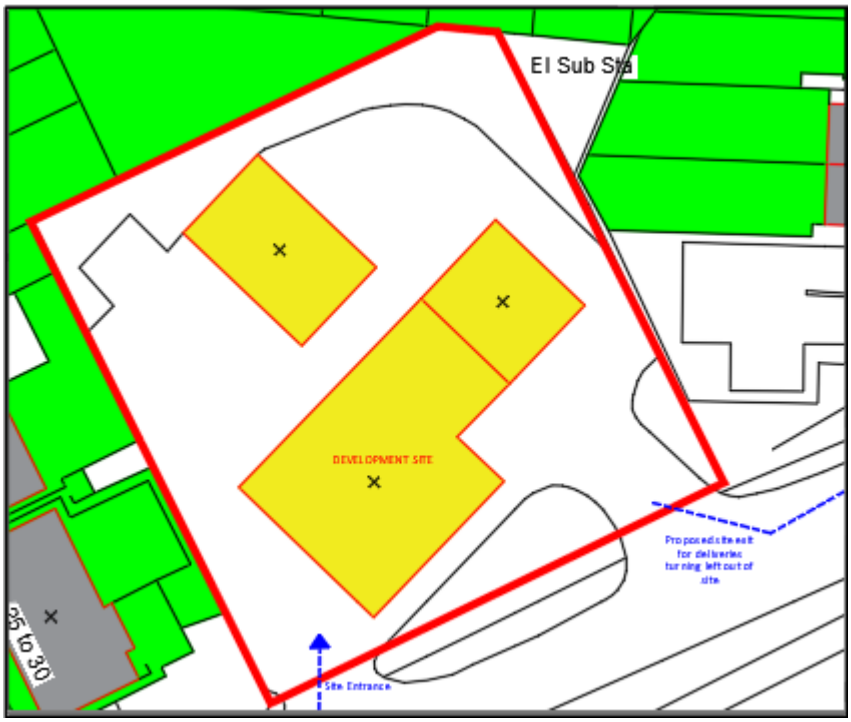
Industrial / Retail / Local Businesses.

Local Residential Properties. Combinations of dwellings, flats and apartment blocks.

Proposed Green Areas – Largely Gardens and Public Areas.

Reservoir

- Site Boundary Plan – 1:500 @ A3: **Proposed Development Site Outlined in Red**.



2.3. LOCAL ACCESS INCLUDING HIGHWAY, PUBLIC TRANSPORT, CYCLING, WALKING.

2.3.1. HIGHWAYS, CARRIAGEWAYS AND FOOTWAYS

The site is located along the A6129, Stanborough Road, situated East of Stanborough Close. There is a footway established along the A6129 the leading road adjacent to the site.

As existing, the principal entrance to the site is accessed from Stanborough Road, the existing vehicular and pedestrian entrance to the site is proposed, located off Stanborough Road, at the South side of the site. This will provide the primary access for all construction vehicles servicing the site and will serve as the permanent vehicle access to the development.

2.3.2. RAILWAY / UNDERGROUND

Welwyn Garden City Line Station is located approximately 0.7 miles, Northeast of the proposed development site. Hatfield Train Station is 2.7 miles South of the development site.

There will be no impact on either of the railway lines during the construction of the development. No tower cranes to be used, however a mobile crane to lift the proposed building structure into position will not over sail any Network Rail asset whilst in use.

All cranes will be positioned and specified to comply with Network Rail's tower crane operational restrictions.

2.3.3. BUS ROUTES

The site is within walking distance of bus services. Bus stops are both located within:

- Longrcroft Green – 200ft
- Stanborough Close – 295ft
- Broadwater Crescent – 0.2m

601 The Alban Way - the named bus services provide access to the following routes:

- Welwyn Garden City to Boreham
- Boreham to Welwyn Garden City

The construction of the project will not disrupt the bus service

2.3.4. CYCLING & WALKING

The site is accessible by all modes being within walking and cycling distance of several local amenities. There is an existing segregated trail adjacent to the A6129, which incorporates Great North Way, Stanborough Park and Lemsford Lane.

There are several other nearby dedicated trails and bike friendly roads, such as Great North Way and Cassie's Field, located near the A1000, approximately 0.5m East of the site.

These cycle routes will remain unaffected by the construction of the development.

2.4. COMMUNITY CONSIDERATIONS & CHALLENGES.

The Proposed Shell Budgens Welwyn Garden Partial KDR development does not have significant issues and challenges associated with its construction that cannot be addressed. We will have to consider impacts of demolition and construction on environmental factors. Further details can be found in the submitted Construction and Demolition Method Statement.

As Principal Contractors, we are a registered Considerate Contractor and always adopt the principles of the Considerate Construction Scheme (CCS). The CCS scheme aims to recognise and encourage management of construction sites in a socially considerate, responsible, and accountable manner.

2.4.1. SCHOOLS

The closest schools to the site are Stanborough School located 0.6m Southwest of the Site, situated at Lemsford Lane.

Our Lady Catholic Primary School, located off Woodall Lane is 0.6m Southeast of the site.

Peartree Primary School is located 0.6m East and is located off Peartree Lane.

Parkway Pre-School is 0.6m North of the site, located at the junction of Barleycroft Road and Parkway.

Additionally, North of the site as an equally distanced 0.7m is Barn Close Pre-School. Located just off Barn Close.

All the nearby schools are **NOT** likely to be impacted by the construction works due to their relative locations to the site. As principal contractors we maintain a clean boundary fence to the whole perimeter which will be secure throughout the construction process

2.4.2 HOSPITAL

The nearest hospital is New Queen Hospital located to the southeast of the site. Approximately 1.7 Miles away. Again, due to the proximity to the site there will be no disruption from the construction works on site.

2.4.3. LOCAL RESIDENTIAL PROPERTIES

The Northern, Eastern and Western boundaries are home to residential properties together with local businesses adjacent to the A6129. All boundaries will be secure and any interaction between vehicles during the initial stages of the project and residents will be closely supervised by competent Banksmen and Traffic Marshals.

The existing site entrance will be maintained and will be untouched throughout the development and will be utilised as the primary vehicle and pedestrian access for all construction vehicles and

workers. This entrance will be manned during site hours by competent Banksmen and Traffic Marshals to ensure any crossovers between pedestrians, cyclists and vehicles is managed safely and appropriately.

2.4.4. ADDITIONAL COMMUNITY CONSIDERATIONS

There are some places of worship within close proximity of the site (within 1 mile), located West just off Marsden Road together with a cluster North along Parkway. There is no work planned within the typical worship timetables indicated. There is no Sunday working planned nor working hours beyond 6pm in the weekday evenings.

With reference to additional significant locations such as Woodhall Community centre 0.8m / Woodhall Library 1.1m located Southeast of the site along Mill Green Road and Cole Green Lane will not be impacted by the proposed development given their location.

3. CONSTRUCTION PROGRAMME AND METHODOLOGY

The construction programme of this Fuel Station redevelopment is set out and expected to take in the region of 17 weeks. A relatively short programme as the nature of the works simply involves the demolition and re-build of the site kiosk together with the installation of EV chargers.

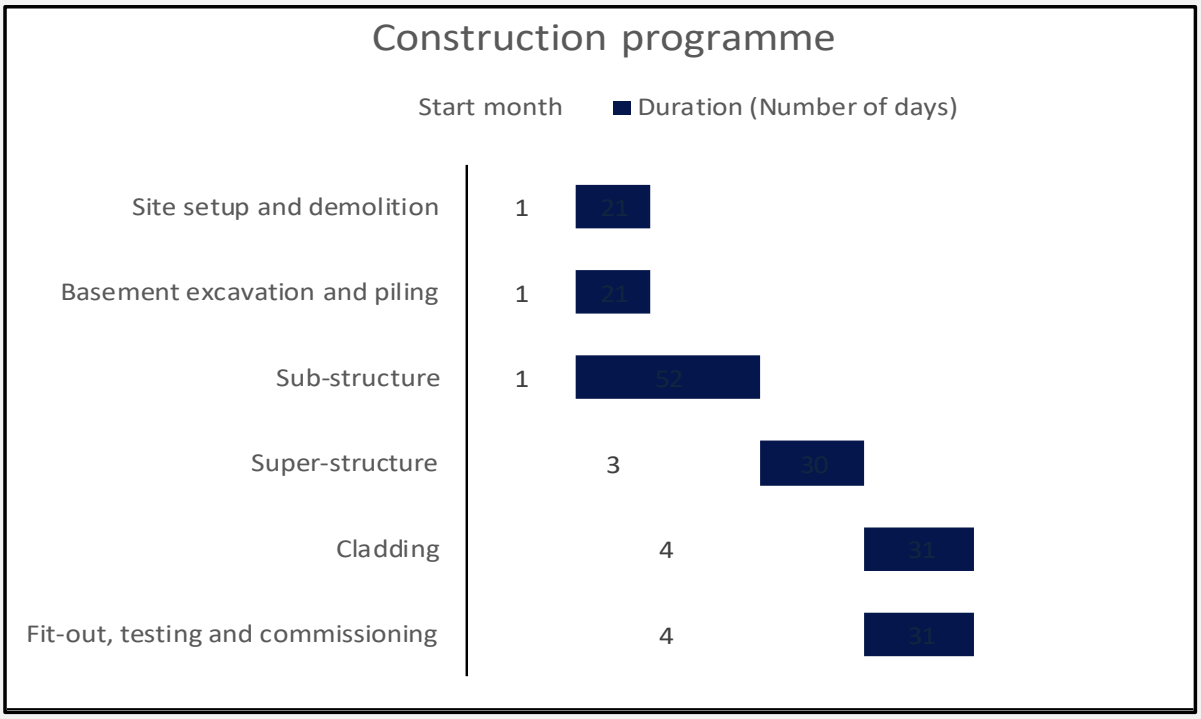
Table 1 provides a breakdown of the programme by the key construction stages.

The durations below cover all five sub phases as the construction programme assumes both concurrent and sequential phases throughout the site, from the first block to the last.

Table 1 & Construction Programme:

CONSTRUCTION PROGRAMME OVERVIEW

Construction stage	Start Month Number	End Month Number
Site setup and demolition	1	2
Basement excavation and piling	1	2
Sub-structure	1	3
Super-structure	3	4
Cladding	4	5
Fit-out, testing and commissioning	4	5



CONSTRUCTION PROGRAMME PHASES

3.1.1. SITE SETUP AND DEMOLITION

The initial site works will include the fencing off to all boundaries, creating a safe and secure site.

The creation of a sterile area complete with all welfare and storage requirements.

Establishing lay down areas and waste control locations throughout the site for the various phasing of the works.

Isolation of existing services, making safe the existing fuel within the tanks by way of uplifting, cleaning, and water filling the existing fuel tanks to make safe on the site.

During these initial days / weeks there will be some waste to be removed from the site via grab lorries & skips, however where possible materials will be stored for future reuse on site.

Existing hardstanding and obstructions across the site will be segregated for disposal.

3.1.2. BASEMENT EXCAVATION AND PILING

The redevelopment proposals do not include any basement space. No piling is proposed for the proposed substructure requirements either.

The proposed slab once as existing is broken up and removed will be cast as a raft at the required depths calculated by the Structural Engineer.

The number of vehicles arriving each day are envisaged to be predominately concrete delivery vehicles and muck away lorries where necessary. There will be some additional deliveries of steel reinforcement however this is not envisaged to be delivered every day.

3.1.3. SUB-STRUCTURE

The substructure will be formed from a concrete raft with steel reinforcement. The expected deliveries with respect to this element of work would be a 6m3 ready mix cement lorries which weighs approximately 26t and is a maximum 9m in length together with a twin axle flat bed lorry for the steel deliveries which will weigh approximately 26t also. This excludes the weight of the steel which will of course be offloaded at site. Both vehicles will be allowed to enter site at eh principle entrance via the gates man (on pre-appointment). Whilst the vehicles are within the site they will be safely directed into position via the assistance of a banksman. However, on leaving the site they will hand over all paperwork to the gates man and will be directed safely out onto the highway via the assistance of a suitably qualified traffic martial. (See page 19 for job descriptions / rolls & responsibilities of traffic martialling personnel)

3.1.4. SUPER-STRUCTURE

At this stage there will be a steel frame structure erected to the recent power floated slab finish.

The roof structure is also of steel purlins, and all will be constructed with the use of a 40T mobile crane, split over a 10-day period. The suitable position of the crane is to be near the egress of

the site and all proposed lifting plans are to be compiled and approved prior to any tank element getting underway.

All steel components will be brought to site in relatively large, prefabricated sections, with simple cuts detailed and fully welded connections for the majority.

The insulated panels that get fixed following the roofing sheets having been fitted into position will mean that the whole building structure will be complete within a 3-week period. Leaving only all trims and fittings and fixtures to externally to be completed thereafter. Using large, premanufactured components, the number of vehicles accessing the site will be reduced significantly than that of a traditional building method.

3.1.5. CLADDING

As highlighted above, the Prefabricated cladding panels and curtain walling proposed to the shop front will be delivered to site and installed via mobile cranes. This will be delivered in consolidated loads and loaded into the building frame on mass.

3.1.6. FIT - OUT, TESTING AND COMMISSIONING

Where possible elements of the fit out will be manufactured off site and brought to site ready for final install – this will reduce the number of small vehicles and ad-hoc deliveries required to the site.
Current proposals for elements to be manufactured offsite include but are not limited to bathroom and wall panelling, chillers, and various component parts for mechanical aspects of the store.

Complete shop fit out will largely be made up on site with materials being transported to site in smaller delivery vehicles.

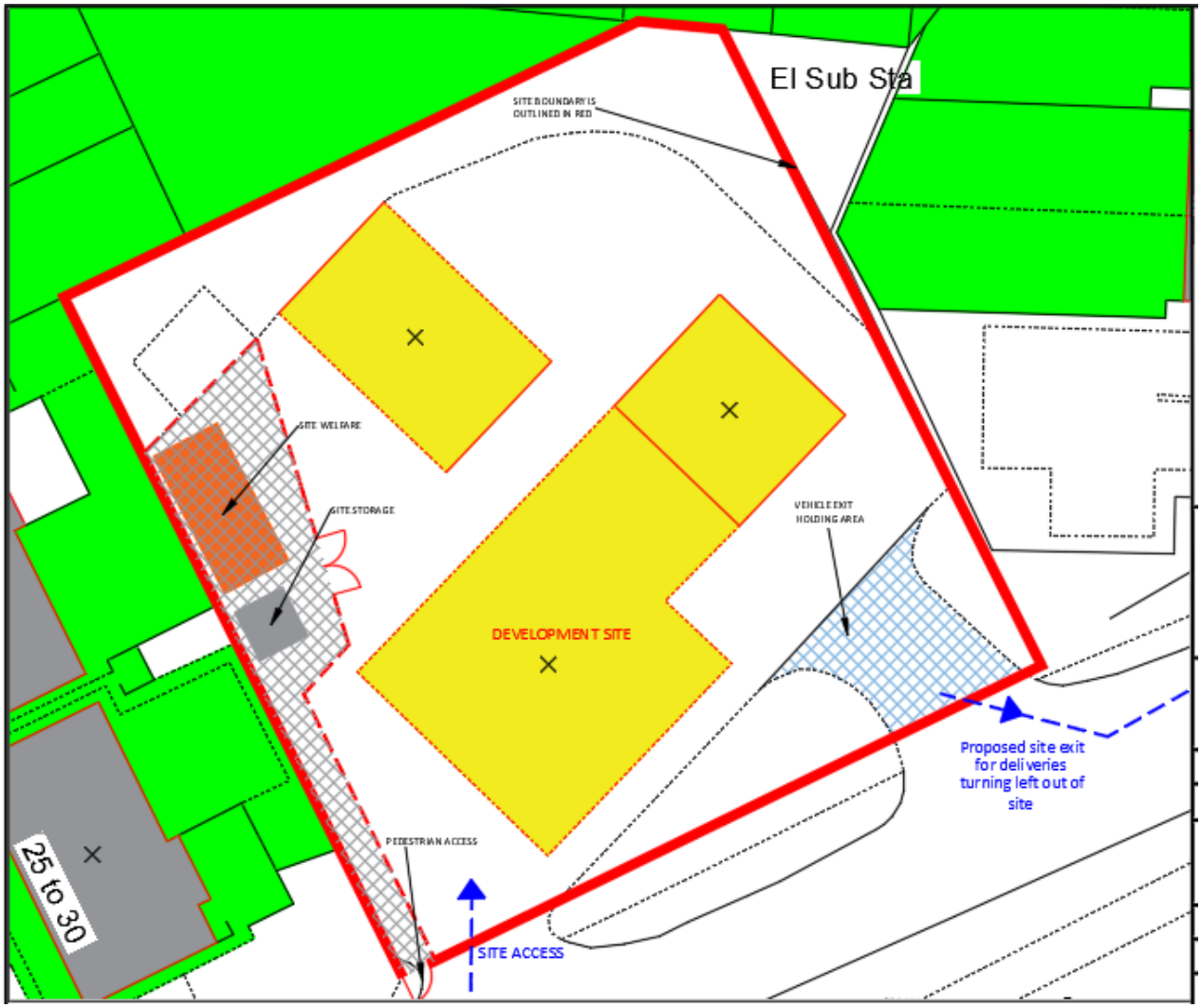
There will be a high-volume delivery requirement for various internal components as part of the fit out works such as sales counter works, ceiling, lighting, floor tiling back of house wall boarding, shelving and other display features etc.

All required resting and commissioning will require additional and high volume of personnel; however, we will manage suitable timeframes to complete each task and ensure that all forecourt works are largely complete by such time to ensure there is suitable on-site parking available.

INFRASTRUCTURE PROGRAMME PHASES

3.2.1. SITE ESTABLISHMENT, CLEARANCE, AND ALTERATIONS

- Insert Drawing



SITE SET UP PROPOSALS: To comprise of the following:

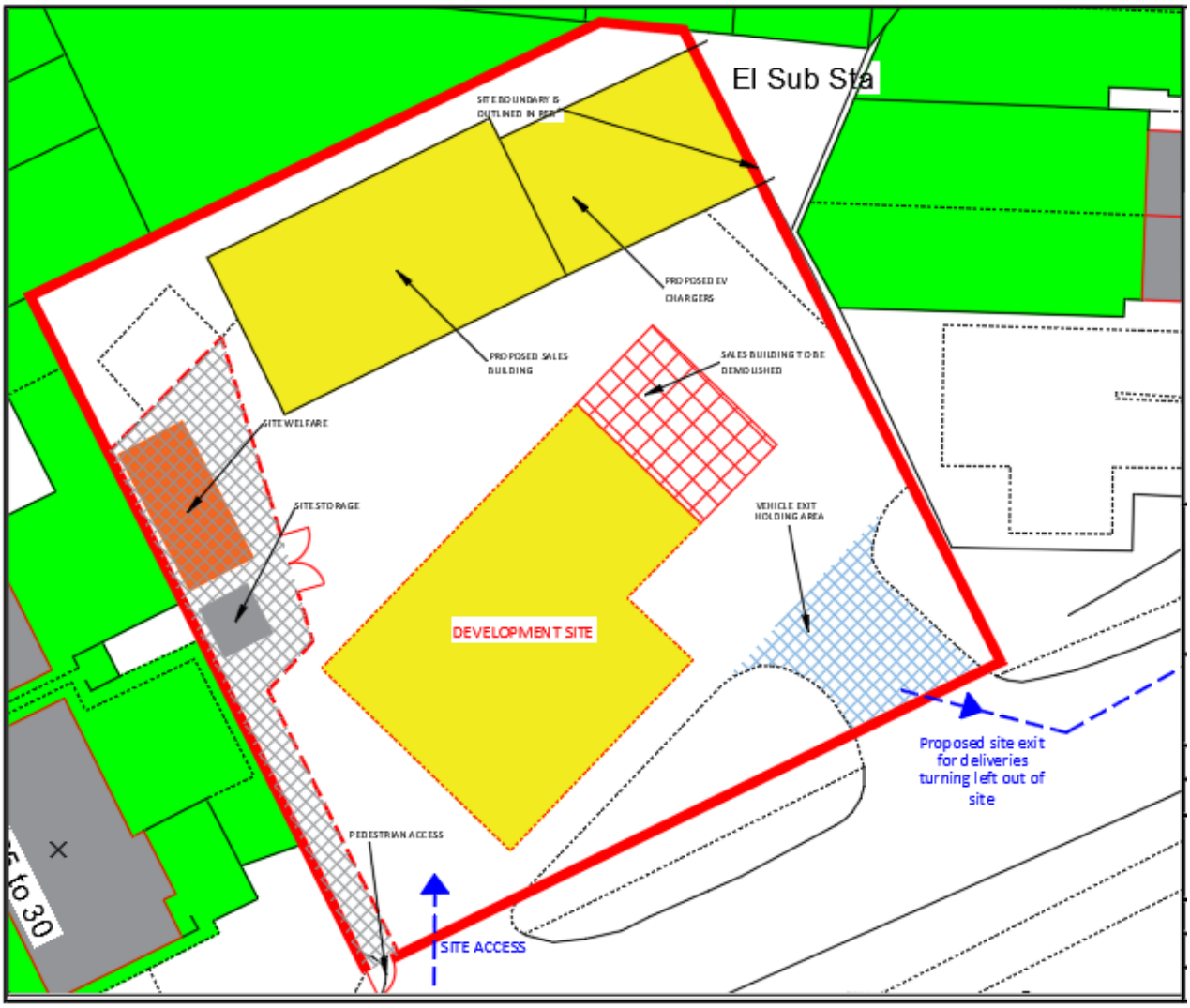
Typical Welfare: Large Site Office (22ft) complete with additional sink. 22ft Canteen for work operatives, 12ft Secure Site Storage Unit. 20ft Toilet unit (2 + 1 arrangement). 12ft Drying Room.

Security: Heras (mesh) 6" Panels complete with back stays. Netting to all panels with reflective bands. Locked vehicular gates and pedestrian gates. Extensive Warning / display signage.

Traffic Management: Chapter 8 barriers, Temporary signage to fencing, all plant to have banksmen, all heavy construction traffic to be marshalled through site.

Gatesman / Traffic Martial to be present at all times to manage traffic safety onto and off site.

3.2.2. CONSTRUCTION PHASE SITE SET UP



Site Safety:

The proposed site is to be managed by an approved safety management system.

As part of the requirements and shown above, first aid provision will be always provided from the site and sign posted for location also.

The controlled fire point is to be located within the sterile welfare area and is to be complete with a fire alarm to sound to the site in the event of an emergency.

A muster point / assembly point is established, and sign posted at the entrance area of the site.

All suitable control of works boards, paperwork and permits etc are kept within the site office and maintained by the site manager. All this information is discussed within site inductions and regular inspections, toolbox talks, and audits are undertaken in order to maintain the required level of safety compliance.

4. VEHICLE ROUTING AND SITE ACCESS

The site benefits from direct access to the 'A' road network given that it is located directly adjacent to the A6129.

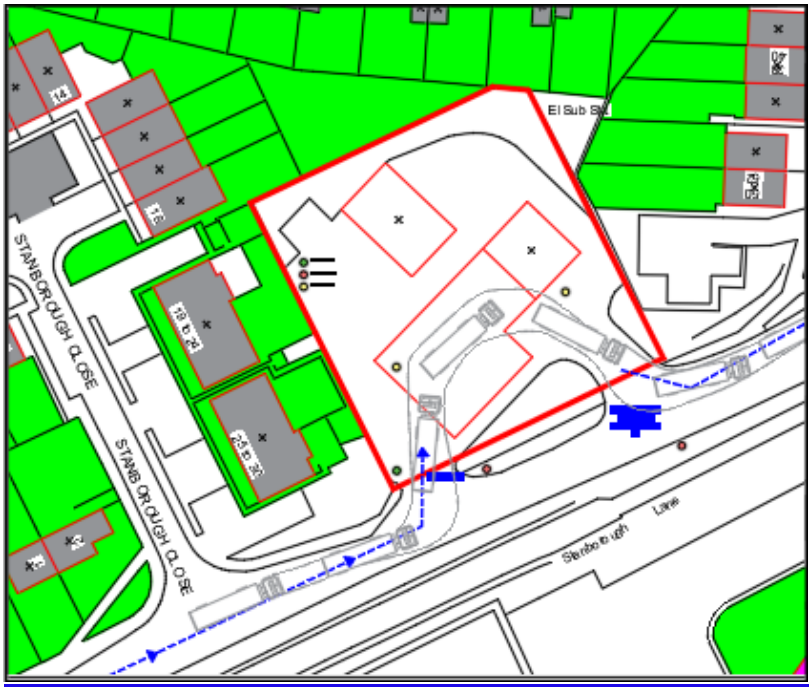
Access to the site during all phases of construction will be via the existing site entrance which is identified. This is immediately off the A6129.

With respect to the wider highway infrastructure, the A6129 to which the site is located when, travelling West bound connects with the A1(M), A414 and the A1001 via the roundabout thus, further connects onto the town of Hatfield thereafter.

The site benefits from excellent carriageway visibility and already provides appropriate geometry for coaches and refuse / service vehicles, and therefore smaller construction vehicles will readily be able to access the site. The geometry of the site as existing has also been confirmed as appropriate for use by larger construction & delivery vehicles and using Swept Path Analysis (SPA) as per drawing provided demonstrates turning within the site's compound, ensuring no reversing or loading/unloading is required on the adjacent public highway. The site as existing occupied the fuelling and delivery of fuel from heavy goods vehicles.

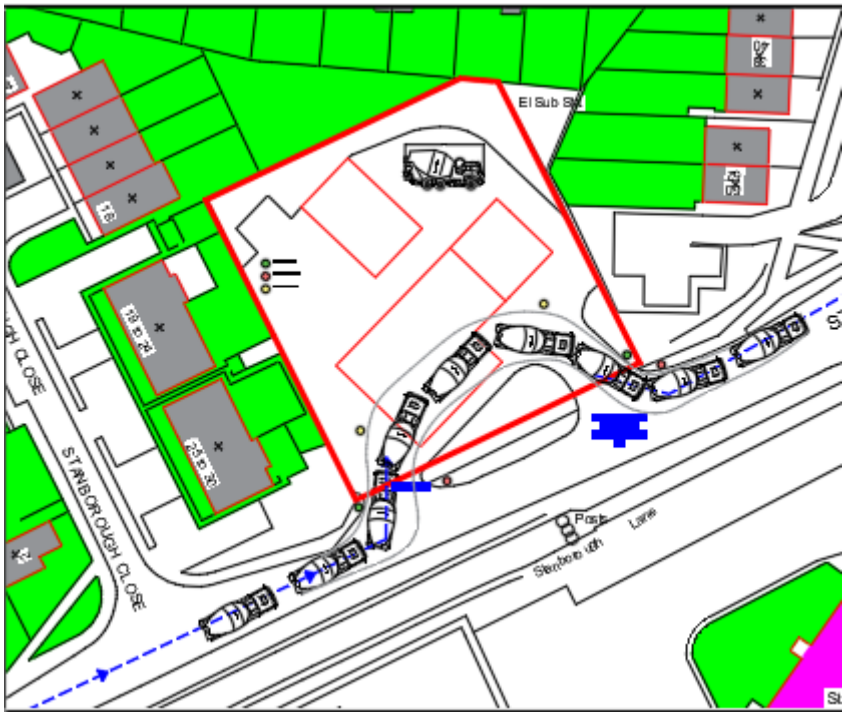
Proposed plans shown on pages 17 highlight the swept plan analysis for both a 22T articulated lorry and a 10T rigid lorry accessing and egressing the site. These drawings show the vehicle tracking within the site, of which will outline the entire fleet of HGV movements for the whole duration of the project.

4.1. SWEPT PATH ANALYSIS: Large Articulated Vehicles. (Dwg Shows Tracking for 22T lorry)



Note: The above plan highlighted the vehicle routing / site access and egress plan.

4.2. SWEPT PATH ANALYSIS: Medium Size Vehicles. (Dwg Shows Tracking for 10T lorry)



Note: Both SPA plans outline the drop zones within the site for delivery offload. Deliveries are to be scheduled and pre-arranged drop zones selected. The movement of the materials once on the site will be via forklift and managed safely via banksman when moving to the required working areas. On site material storage is kept to a minimum and deliveries are specific to tasks outlined on the works programme.

4.3 VEHICLE ROUTING MANAGEMENT:

On approach to the site a gates man will be the first point of contact with any visiting or delivery vehicle. As shown on the site plans, the whole site is herraced fenced off and secured from members of the public.

The site entrance gates of the site are to be recessed to that site / delivery vehicles entering or leaving the site can manoeuvre and wait off the highway whilst awaiting entry or exit to or from the site without causing obstruction.

The gatesman will have prior knowledge / register of the delivery vehicles expected and will check for drivers PPE prior to entry. Gates will be opened once check is undertaken, and vehicles are authorised to enter.

From this point and once a delivery vehicle is onto the site, a designated banksman is in place to guide the vehicle through the site safely whilst avoiding any work areas, parked vehicles and guided to one of the outlined delivery drop zones identified.

Once delivery is made, subject to the size of the vehicle. The banksman will either ensure that the safe manoeuvring is undertaken to turn the vehicle around within the site itself in order to leave via the principal entrance situated on Stanborough road. Alternatively, the larger articulated vehicle will follow the tracking path within the site to exit at the alternative point within the site also located on Stanborough Road. On the lead up to the exit, the gatesman will ensure safe egress onto the road, while a suitably qualified designated Traffic Martial will take over the safe guidance of the departing vehicle by positioning themselves to stop traffic and ensuring that safety considerations are given to pedestrians, cyclists and other motorists when leaving the site.

It is noted that the forecourt within the site which will house site staff parked vehicles will be barriered off away from delivery vehicle turning / tracking routes. Such vehicles will remain in position when other vehicles are manoeuvring within the site itself.

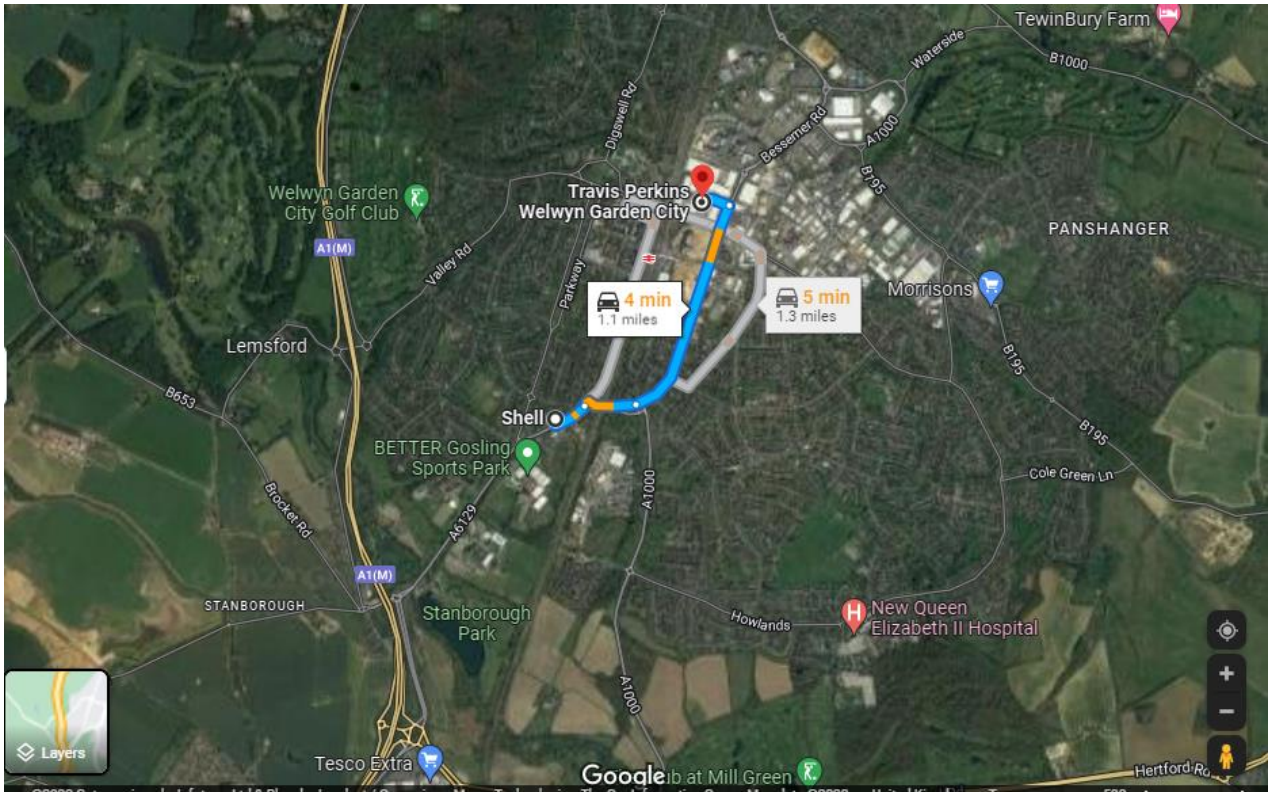
Details of all expected delivery or loading vehicles are to be set out daily which co-insides with the procurement schedule. Gatesman, Traffic Martials and Banksmen are to be readily available when deliveries are booked in.

Please note: There is no loading / offloading outside of perimeter fencing to the site. The recessed area is to be used for vehicles to stop and wait (off the highway). As outlined above, the delivery vehicles are to offload within the site as outlined above.

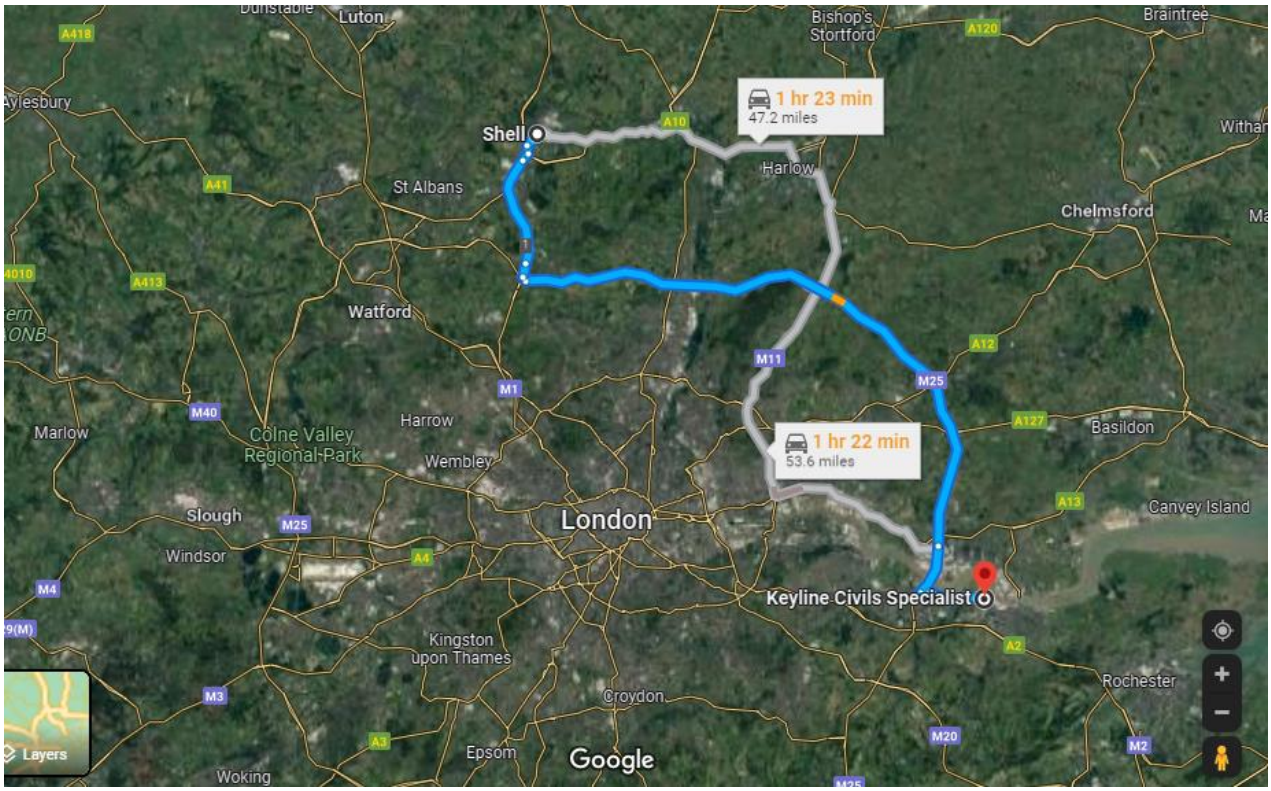
4.4. THREE VEHICLE ROUTING PLANS:

The following 3 images highlight the location of the main / most frequent delivery suppliers and the distance / routes to & from site.

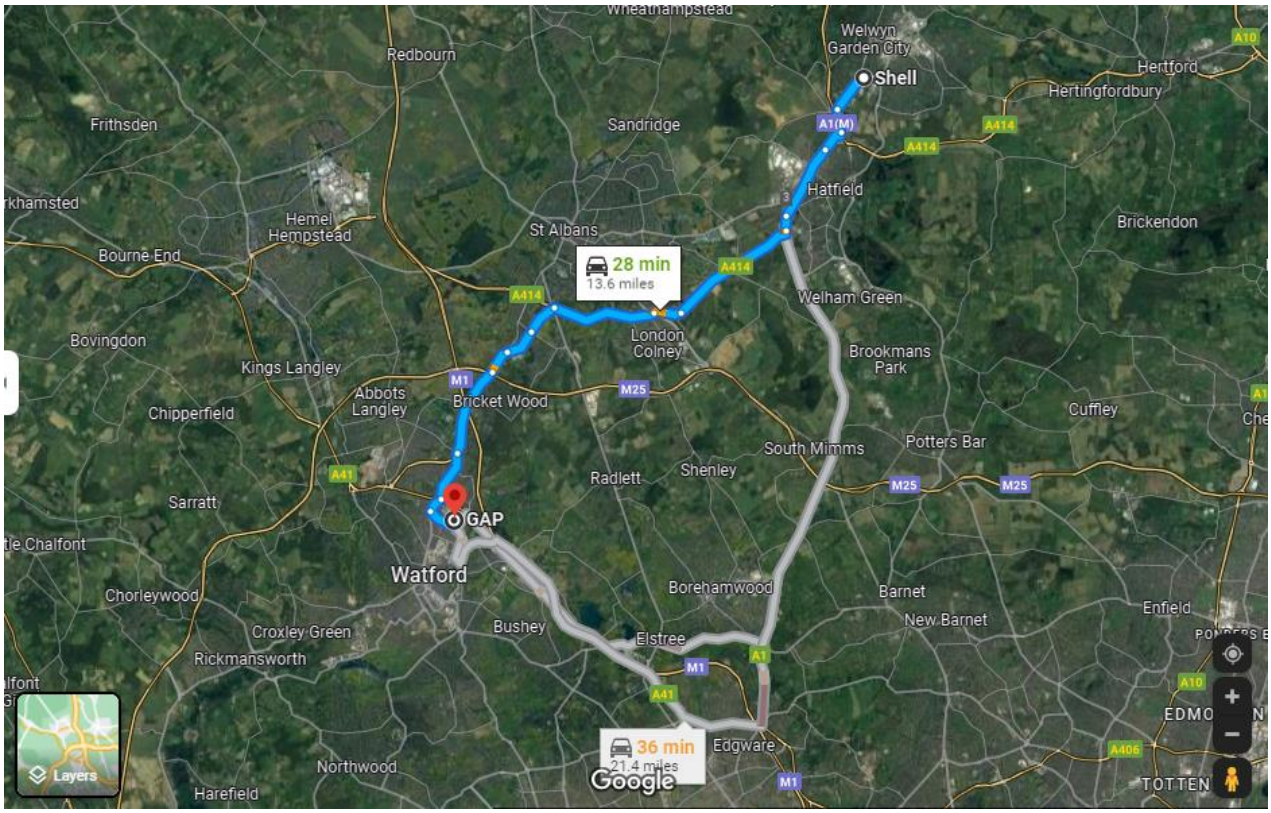
Note: Image Below Highlights the Local Travis Perkins Depot for the supply of Building Material.



Note: Image Below Highlights the Keyline Depot for the supply of Building Material.



Note: Image Below Highlights the GAP Depot for the supply of all plant, machinery, tools & site equipment.

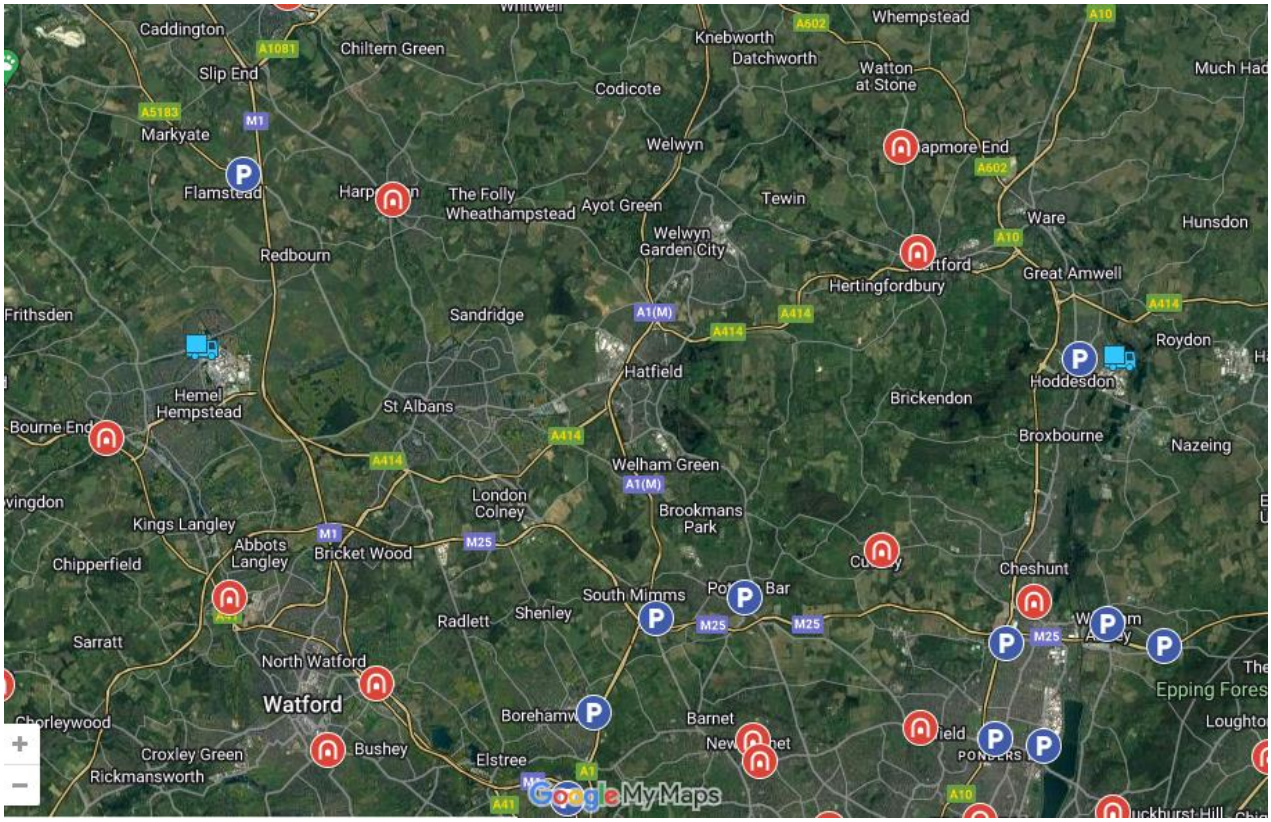


Note: This route has a restricted / abnormal load restriction as highlighted. Guidance set around the use of these restrictions are outlined in this section of the document.

- Safe Height 16'- 6"

Note: Image Below Highlights the Low Bridges surrounding Welwyn Garden City

- A119 (14'9) Welwyn Rd
- A119 (15'0) High Road Hertford
- B652 (12'6) Station Road in Harpenden
- B462 (15'9) Hartspring Lane Watford.



5. STRATEGIES TO REDUCE IMPACTS

As Principal Contractor on the proposed “Medium Impact Site”, we shall consider & implement the following measures whilst under development.

The following planned measures should be committed to:

- Safety and environmental standards and programmes
- Adherence to designated routes as outlined
- Implement a staff travel plan (On-site parking or escorted workforce throughout)

The following planned measures is proposed for further study/detail:

- Delivery scheduling
- Re-timing for out of peak deliveries
- Use of holding and vehicle call off areas (Principal Merchants and Concrete Plants largely).
- Re-use of material on site
- Smart procurement to ensure local merchants and supplies – thus reducing travel distances.:
- Design for Manufacture and Assembly (DfMA) and offsite manufacture (Shop Structure and Envelope).

High Impact Site Planned Measures Checklist	Committed	Proposed	Considered
Measures influencing construction vehicles and deliveries.			
Safety and environmental standards and programmes.	X		
Adherence to designated routes	X		
Delivery Scheduling	X		
Re-timing for out of peak deliveries		X	
Re-timing for out of hours deliveries	X		
Use of holding area and vehicle call of areas		X	
Use of logistic and consolidation centres		X	
Measures to encourage sustainable freight			
Freight by water			X
Freight by Rail			X
Material Procurement Measures			
DFMA and off-site Manufacture		X	
Re-use Material on-site			X
Smart Procurement		X	
Other Measures			
Collaboration amongst other sites in the area		X	
Implement a staff travel plan	X		

5.1.1 MEASURES INFLUEINCING CONSTRUCTION VEHICLES AND DELIVERIES

The primary objective of the Delivery and Servicing Plan (DSP) is to manage deliveries and servicing activity to and from the site to ensure that such activity is undertaken successfully and without conflict between vehicles and other users.

The DSP will, therefore, manage deliveries and servicing to the premises to:

- Ensure that, where possible, deliveries are planned to minimise the potential for deliveries to coincide, therefore reducing any wait time.
- Ensure that, where possible, deliveries are undertaken by small to medium sized vehicles.
- Ensure that vehicles load/unload for the minimum time necessary, to ensure that the Development and adjacent highway is not obstructed or congested.

- Ensure that servicing activity is manged to ensure appropriate access and egress can be achieved.
- Refuse and recycling containers will be kept within the compound area for removal by private waste collection contractor (s) as required.

5.1.2. SAFETY AND ENVIRONMENTAL STANDARDS AND PROGRAMMES

Environmental impacts of the construction works will be mitigated as far as possible. This will include the following:

- Contractor following environmental management system processes including the development of a construction environmental management plan (CEMP) specific to the site.
- Training and site induction of all site operatives.
- Management of waste on site.
- Following best practice pollution guidance from the Environment Agency.
- Ensuring all site timber is responsibly sourced in line with the UK Government's Timber Procurement Policy.
- Damping down of materials where required during any building demolition.
- Regularly inspecting and wet suppressing materials/soil stockpiles where necessary (including wind shielding or completely enclosing, storing away from site boundaries, and restricted height of stockpiles).
- Appropriate orientating of material stockpiles.
- Providing wheel washing and wet suppressing during the loading of wagons vehicles.
- Covering vehicles carrying dry soil and other wastes.
- Shielding of dust-generating construction activities.
- We are committed to ensuring all contractor and sub-contractor vehicles arriving at site comply with sufficient safety measures and requirements relating to Work Related Road Risk.
- Outline measures / checks will be undertaken to ensure that all delivery vehicles adhere to FORS (silver), CLOCS and other standards and programmes.

5.1.3 ADEHERENCE TO DESIGNATED ROUTES

Details of routes to be used for journeys to and from site for road operations are provided in

Section 4. These access routes have been reviewed with respect to potential impacts, conflicts, and hazards. Junctions and parts of the routes of potential concern have been identified in terms

of coming into conflict with other road users, with particular attention paid to pedestrians and cyclists around access to the site.

A copy of the route plan will be given to all suppliers when orders are placed to ensure drivers are fully briefed on the required route to take. The supplier will be made aware that these routes are required to be followed at all times unless agreed or alternative diversions are in place.

5.1.4 DELIVERY SCHEDULING AND MANOEUVRE PROCESS

The development is likely to generate a maximum of 1-4 deliveries on an average day, however this does not suggest that this will be an “every day” volume of traffic. This will likely be the case for 1-2 days per week.

With smaller items and muck away requirements during certain stages of the project, this could exceed to 5-8 per **specific** day, for which the majority will be undertaken by low-loader heavy goods vehicles and smaller transit and Luton van type vehicle.

The vehicles will each pull off the highway into the recessed area initially prior to be escorted onto site by the traffic martial to unload. Whilst on site, the vehicle movements will be monitored and supervised by a designated banksman, who in turn will oversee the save delivery / drop of manoeuvres together with the driving through site to 2nd egress or turning within site to leave at once again at the principal entrance as shown.

On leaving the site, the Traffic Martial will coordinate the vehicle leaving the site by way of ensuring all pedestrians, cyclists and road traffic are clear of the egress area.

Once again, the volume of delivery traffic would be specific to tasks on site and limited to certain periods of the projects and days of the week. Likely not to exceed 1-2 days within limited number of days of the project.

All deliveries are pre-booked and scheduled for designated time slots in advance throughout each week Whilst adhering to the non-peak timescales, site personnel along with site manager will monitor the slippages if any and continue to liaise with supplier with respect to efficiencies.

Such arrangements will not therefore impact the free flow of traffic on the local highway network, nor impact the local bus stops.

5.1.5 RE-TIMING FOR OUT OF PEAK DELIVERIES

Re-timing out of peak time will aid the operational efficiency of the construction site and the neighbouring area. The developer commits to attempting to re-time as many deliveries as possible out of the morning period, however specifically between the hours of 9.30am and 3.30pm to avoid peak congestion periods.

5.1.6 RE-TIMING FOR OUT OF HOURS DELIVERIES

We have no plans for out of hour deliveries throughout the whole development.

We will endeavour to have all deliveries during normal working hours however will apply for permission if any extended delivery times are required.

5.1.7 USE OF HOLDING AND VEHICLE CALL OFF AREAS.

Once construction is underway the site will have limited storage area and due to the congested nature of the site location, it is intended that a holding point local to the site will be allocated. This will allow vehicles to arrive early and delay their final approach to site until the pre-arranged delivery time if required. This will lead to greater logistics efficiency and reduced disturbance in the surrounding areas.

5.1.8. USE OF LOGISTICS AND CONSOLIDATION CENTRES

An efficient and effective logistical operation is of high importance to Premier Construction, and we will therefore strongly encourage the use of consolidation centres – this will be dependent on feasibility by each sub-contractor however will be encouraged wherever possible.

Where consolidation centres can be used, deliveries will be more efficient and will be able to be “just in time” helping to reduce damage to materials.

5.2 MEASURES TO ENCOURAGE SUSTAINABLE FRIEGHT

5.2.1. FREIGHT BY WATER

Due to the location of the site together with the basic raw materials that will be more often used, it is unlikely freight will be able to be brought to site via any local waterways however this option will be explored.

5.2.2. FREIGHT BY RAIL

It is again unlikely that materials will be able to be brought to the site via rail however this option will be further explored if it is deemed possible for any part of a materials journey.

5.3. MATERIALS PROCUREMENT MEASURES

5.3.1 DESIGN FOR MANUFACTURE AND ASSEMBLY AND OFF-SITE MANUFACTURE

Reducing delivery numbers and effective delivery management is extremely important to both Premier Construction and this development. Options for off-site manufacture will be explored wherever possible and discussed with each sub-contractor prior to appointment. Specific elements such as the shop fabric and internal fit out will be simply assembled on site.

5.3.2. REUSE OF MATERIALS ON SITE

A number of measures will be explored to re-use materials on site for example crushing exiting hardstanding and in ground obstructions to form the crane mat and the reuse of existing soils across the site wherever possible. We will aim to re-use as many materials as possible on site to decrease the environmental impact and also to reduce the number of vehicles required to deliver to site.

5.3.3. SMART PROCUREMENT

Premier Construction will look to source materials form local suppliers where possible as well as from the same suppliers as other local sites if appropriate to reduce the number of vehicles movements and length of journeys for materials to arrive on site.

5.4. OTHER MEASURES

5.4.1 Collaboration amongst other sites in the area

Where possible we will look to share holding areas or services with other sites in the local area.

5.4.2. IMPLEMENT A STAFF TRAVEL PLAN

There will be limited on-site parking for staff and workers on site. Restrictions within the local road network will prevent on-street parking and all operatives will be encouraged to travel to site by public transport wherever possible.

6. ESTIMATED VEHICLE MOVEMENTS

The Proposed charts below highlight the estimated number of vehicles accessing the site over the 6 main phases of works outlined.

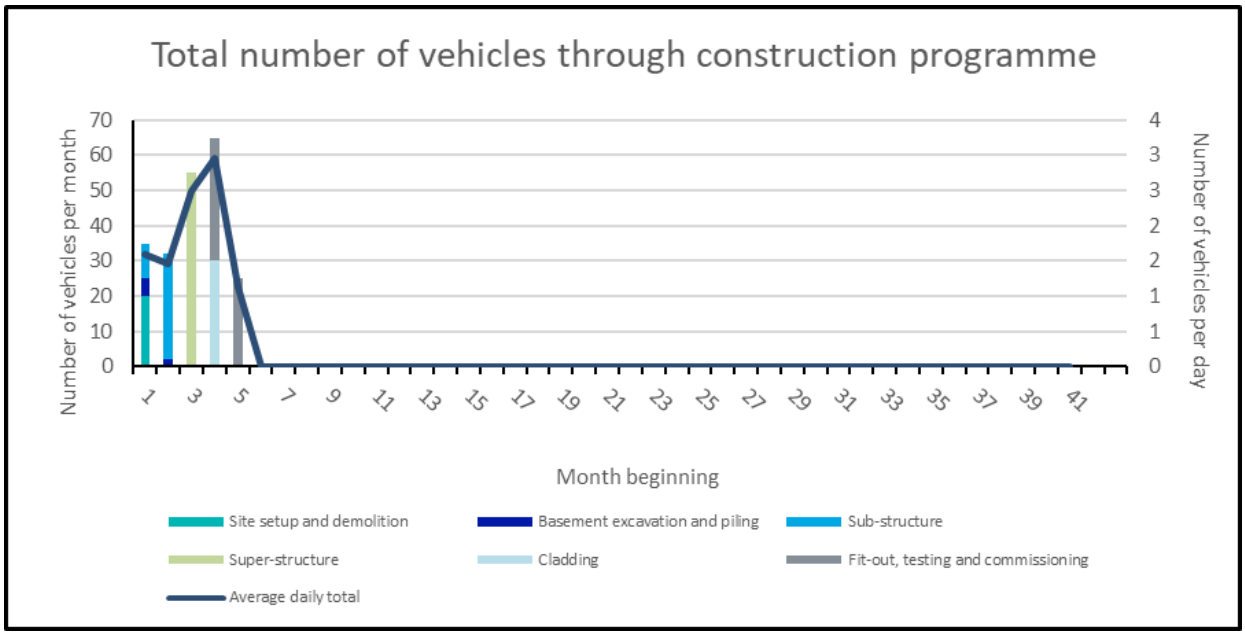
Estimated Construction Vehicles Daily & Monthly.

NO. OF VEHICLES IN PEAK PHASE (EX. OTHER PHASES)

Construction Stage	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site setup and demolition	Q1	20	1
Basement excavation and piling	Q1	5	0
Sub-structure	Q1	30	1
Super-structure	Q2	55	2
Cladding	Q2	30	1
Fit-out, testing and commissioning	Q2	35	2
Peak period of construction	Q2	65	3

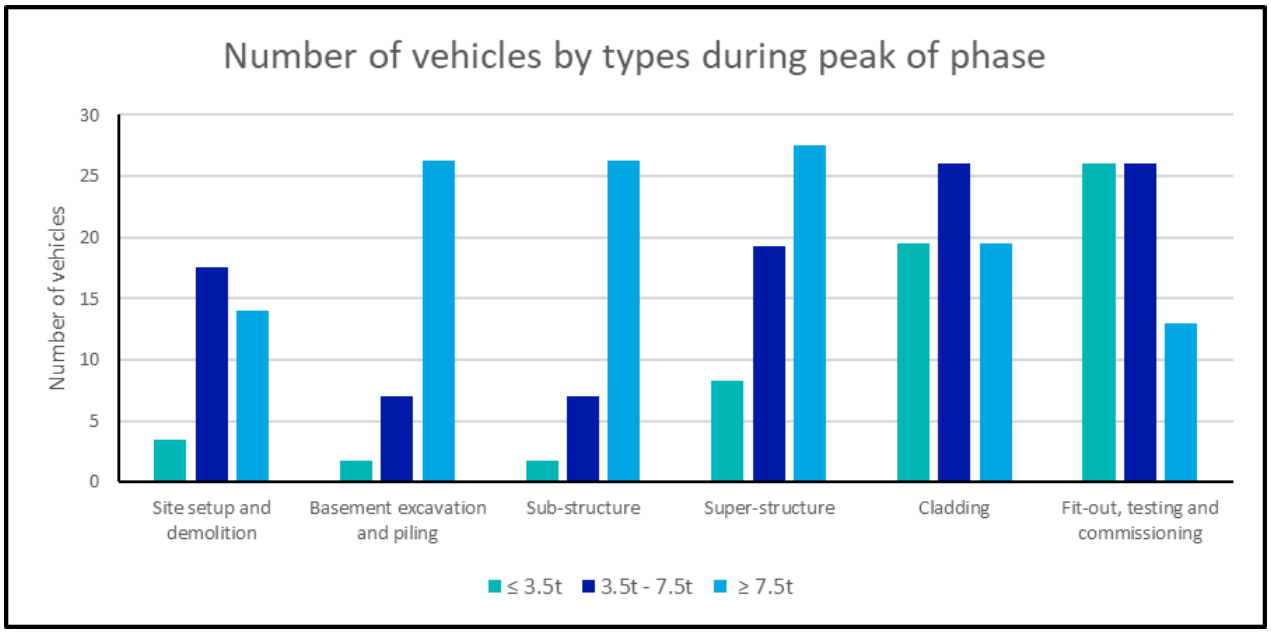
NO. OF VEHICLES IN PEAK PHASE (INC. POSSIBLE OVERLAP OF SUBSEQUENT PHASES)

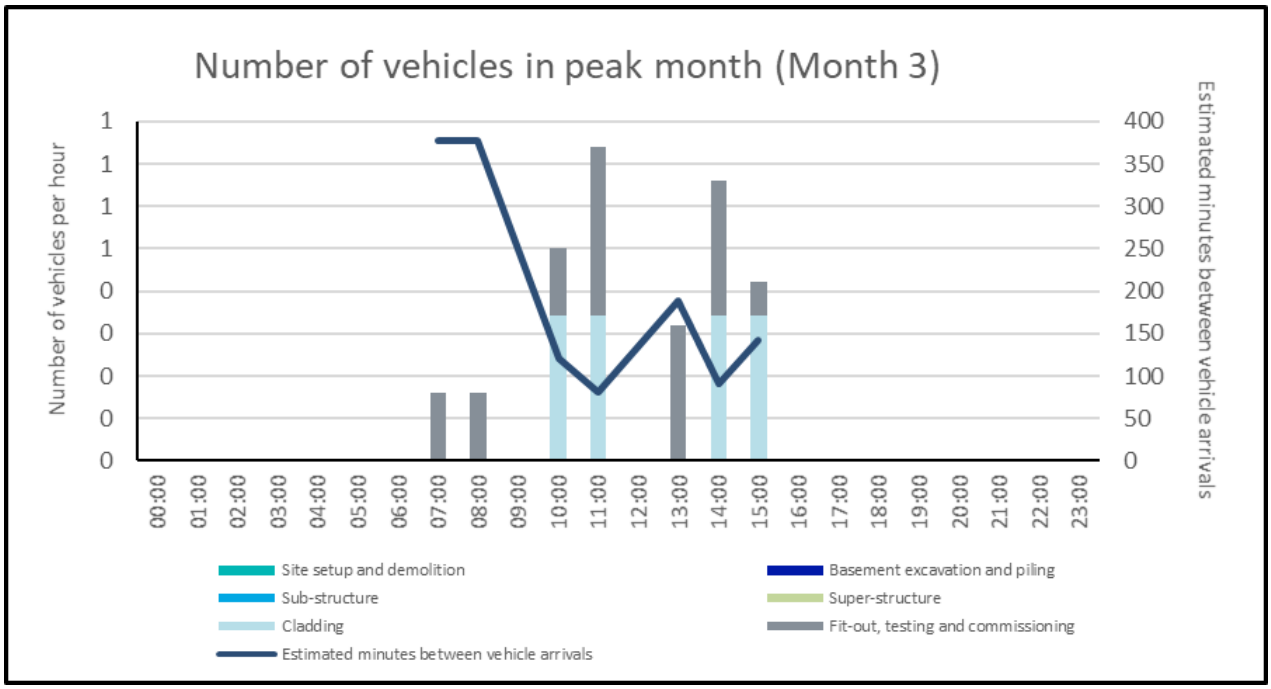
Construction Stage	Period of stage	No. of trips (monthly)	Peak no. of trips (daily)
Site setup and demolition	Q1	35	2
Basement excavation and piling	Q1	35	2
Sub-structure	Q1	35	2
Super-structure	Q2	55	3
Cladding	Q2	65	3
Fit-out, testing and commissioning	Q2	65	3



During the peak weeks of the construction, approximately 50- 60 vehicles will be access the site in a 4–6-week period month. This equates to 2-3 vehicles per day on average and up to 5 during specific days. Largely these vehicles will comprise of small delivery vans, concrete wagons and muck away lorries. All of which range between 2 & 10T. Each will be expected to be on site for between 10-30 minutes depending on its load and therefore there is sufficient space on site to accommodate the estimated delivery numbers.

The anticipated number and type of vehicles accessing the site during each stage of construction are shown in figure 15 below.





Peak times will be avoided for deliveries. The exact summary of the average daily construction trips during each construction period will be refined once the contractor is appointed and the construction programme is finalised. Premier Forecourts & Construction will provide specific delivery schedule information when appointed.

7. IMPLEMENTING, MONITORING AND UPDATING

All site activities are to be over seen by the designated Premier FC LTD Site Manager.

An appointed Construction Logistics Manager will oversee the deliveries to site by way of pre-planning and procurement, (based at head office), however the designated Site manager will control the call off requirements to co-inside with the development programme.

The appointed site-based contracts manager David Evans will be implementing the call off materials when required and physically managing the space available on site as necessary.

Part of their rolls will also include collecting data on:

- Number of vehicle movements on site - collected through the delivery booking system.
- Types of vehicles on site.
- Time spent on site.
- Delivery accuracy compared to schedule.
- Vehicle routing, unacceptable quieting, or parking.
- FORS accreditation.
- Low Emissions Zone (LEZ) compliance.
- Non-Road Mobile Machinery compliance (NRMM) of plant on site.
- Staff travel modes to sites.
- Driver inductions and briefings including accreditation/qualification checks where required.
- A site waste management plan will be developed and will monitor waste production on site.
- The site manager should take noise measurements prior to and during exceptionally noisy works, with records kept. This will provide opportunities to optimise mitigation for works and minimise noise break-out from site, thereby reducing noise levels as far as practicable on nearby residents.
- All waste transfer tickets, and delivery sheets are to be kept and filed.
- Sign in register is to be maintained throughout the project of all site personnel and their vehicles to be rationed given the space available and the non-allowance of waiting permitted outside the side.

- Clear delivery processes are to be maintained throughout the project by way of off-road delivery bay areas managed by a gates man to allow access to site swiftly.
- Further plans to be implemented throughout the development include the following:
  - Near Miss Reporting
  - Operational Controls to include First Aid & Emergency Procedures
  - Fire & Evacuation Plan
  - Traffic Management
  - Waste Management
  - Temporary Services
  - Contractors H&S Handbook & Delivery Drivers Handbook also.