Proposed Lodge, Plas Coch, Wrexham
for Marston's Plc.
LL11 2BW

Construction Traffic Management Plan

This Traffic Management Plan has been created to set out the procedures that will be observed during the construction period to mitigate the impact of the project on the neighbouring Marston's Pub Restaurant and surrounding road network. This is a living document which will be updated as required and will inform the sites Construction Phase Health and Safety Plan.

The proposed development site is located to the east of the existing Plas Coch Pub Restaurant. The proposed scheme is designed to use the existing bell mouth arrangements that services the existing Public House and Restaurant. There will be realignment works and additional car parking space created within the existing car park as a part of the development. These works have been incorporated into the overall design to ensure that the existing access serves as the permanent access to the new property.

To ensure compliance with Construction (Design and Management) Regulations 2015 our Client Marston's Plc have appointed Carter Lauren Construction ltd as Principal Contractor. The demise will be the sole responsibility of Carter Lauren Construction ltd to plan, manage, monitor and coordinate the day to day management of Health, Safety, Environment and Quality performance.

The Construction works associated with this project, if not adequately managed, has the potential to materially impact upon the general public, businesses and the surrounding natural environment. This CLMP has been specifically drafted to give assurance to all stakeholders that adequate measures will be taken during our works to control and minimise these impacts, as far as is reasonably practicable.

a. Arrangements for parking vehicles on site:

- The site currently has a section of hard standing that will be used for deliveries and parking, the area will also provide site access for all personal. The existing hard standing will greatly reduce the risk of dirt and deleterious substances being deposited on the public highway.
- Vehicles of site operatives and visitors will be parked in a designated area within the site.
- This parking area will need to be moved, during the contract so that the final construction of that area can be completed. At this time, the parking area will be moved to a completed area of the permanent parking arrangements.
- Contractor site vehicles will not be parked on the local road network or Aldi store carparking facilities. This excludes in an emergency situation and unforeseen circumstances.

See Site Traffic Management Plan.

b. The number and sizes of vehicles visiting the site in connection with the development and the frequency of their visits;

Size & type of delivery Vehicles –

Vehicles required to deliver bulk or large quantities of the materials necessary for the construction of this project will typically be as follows –

- Rigid flatbed transport delivering & eventually removing the site welfare cabins.
- Flatbed vehicles delivering and eventual removal of scaffolding.
- 20tonne haulage wagons for delivery of hardcore, aggregates and for the removal of surplus excavated materials from the site.
- Articulated transport delivering construction plant.
- Flatbed trucks delivering and collecting tools and equipment from local hire companies.
- Fuel tankers delivering gas oil for construction plant – (stored in bunded fuel bowsers).
- Vehicles delivering bulk quantities of concrete blocks and facing bricks – will have mechanical off loading facilities plus ready-mix concrete wagons.
- Articulated vehicles delivering precast concrete floor beams – will be off loaded and placed by mobile crane.
- Articulated vehicles delivering timber frame components and roof trusses.
- Rigid flatbed vehicles delivering general building materials from local Builders Merchants and suppliers, e.g., drainage goods, plywood, timber,
- Large covered flatbed vehicles delivering specific bulk materials such as plasterboard, and insulation products.
- Vehicles of various sizes delivering equipment for the mechanical installation, including air conditioning equipment, metal ducting, electric fans, heating equipment, cellar equipment, walk-in cold stores and freezers.
- Vehicles delivering precast concrete kerbs, paving slabs, aggregates and macadam surfacing for the on-site roads, hard-standings, footpaths, and parking areas.
- In the latter stages of the contract there will be vehicles delivering furniture, carpets, catering equipment, fixtures and fittings.

To avoid / minimise the impact of delivery, vehicles will be scheduled on a 'just in time' basis. Delivery vehicles will operate 'In & Out' basis; leaving the site immediately after unloading. All subcontractors and staff vehicles, (vans & cars) will be parked in the designated site area and will generally remain there until the end of the working day.

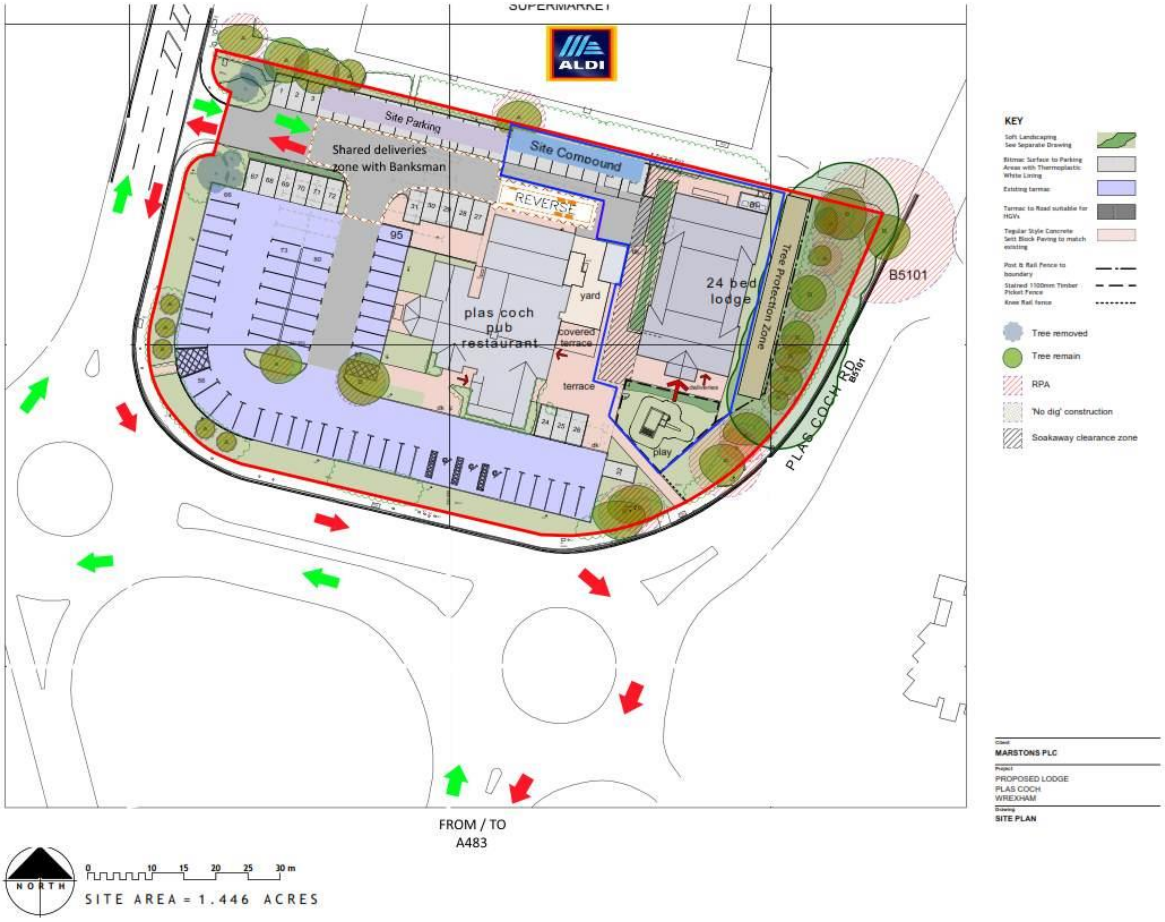
Assessment of the anticipated volume of construction traffic -

	Anticipated number of Deliveries Multi-axle Vehicles & Articulated Lorries (Movements Per month)	**Anticipated average labour volume** Staff & Sub Contractors Vans. (Movements Per day)
Month 1 - (Site Set-Up & Access)	40	18
Month 2 -	35	20
Month 3 -	35	25
Month 4 -	40	30
Month 5 -	30	35
Month 6 –	30	35
Month 7 –	30	35

Assessment of the volume of Operational Traffic to existing Pub Restaurant -

	Anticipated number of Deliveries Multi-axle Vehicles & Articulated Lorries (Movements Per month)	**Anticipated number of deliveries** Suppliers Vans, Cars, Contractors (Movements Per month)
Per Month -	39	22

Traffic Management Delivery Plan.



c. Delivery and unloading of materials

No contractors vehicles will be parked on the local road network with the exception of during an unplanned event occurring on site, such as emergency works.

Delivery vehicles will drive directly into the site for unloading in designated storage areas. Close communication and cooperation will be needed to ensure that all construction deliveries and Public House Deliveries are programmed to not clash. Vehicle will be required to be reversed within the site area, this will be supervised by the use of trained banksman, at no time will vehicles will be allowed to reverse either in or out of the site on the local road network.

The type of vehicles delivering materials and equipment to the site will vary from light goods vehicles to large flatbed and articulated vehicles, and the delivery traffic will continue throughout the contract.

The concentration of traffic will depend on the construction operations being carried out. Typically, the traffic, including the larger vehicles, will be busiest during the construction of the building shell and infrastructure works, after which deliveries will generally be on smaller vehicles.

d. Measures for the Control of Construction Traffic on the Surrounding Highways

Delivery of materials & equipment will be needed throughout each working day, Monday to Friday. However, these deliveries will be scheduled to avoid busy traffic periods such as morning and evening rush hours to ensure a minimum of inconvenience is caused to the local road network. The deliveries will also be scheduled to avoid the need for vehicles to park on the local road network outside the site while waiting to unload.

Suppliers and Sub-contractors will be advised of the delivery arrangements, advised of the restrictions and arrangements for access to the site.

All vehicles entering the site will be subject to a traffic management system within the site area, and all vehicles travelling on the site will be restricted to a speed limit of 5mph.

All traffic movements in and out of the site entrances will be supervised by a traffic banksman, and no vehicles will be allowed to reverse in or out of the site.

Appropriate signage will be located at the site entrance, and on the surrounding roads, to warn vehicles entering and leaving the site, and to warn traffic on the highway network of the presence of construction traffic.

All site personnel and deliveries will be instructed to access the site from the A483 via Plas Coch Road.

e. Preventing Mud and Dirt being deposited on the Highway:

The site currently has a section of hard standing that will be used for deliveries. The existing hard standing will greatly reduce the risk of dirt and deleterious substances being spread to the public highways. As part of the site Laborer's routine, the area directly outside our delivery area will be swept and kept clean. Should the need arise, a road sweeper will also be used to ensure the customers carpark and the adjacent public roads are kept clean, preventing Mud and Dirt form being deposited on the Highway.

The site itself will be excavated and filled while maintaining the access point, (i.e., an area will be excavated to formation level, stoned and compacted. The remainder of the site around the building footprints will be filled to level and covered with hardcore and compacted. Excavation of the foundations of the building, together with main drainage will involve some surplus material being removed from the site.

f. Noise:

Our working hours will be –
0700 to 2000 Monday to Friday, and 0700 to 1300 Saturday if necessary.

The likely receptors will be –

- Staff and customers of the Aldi Store.
- Staff and customers of the Marston's Public House and Restaurant.
- Pedestrians and traffic on the surrounding local road network.

The types of construction plant that will be used on this contract are listed below together with the noise levels that can be generally expected (Noise at source).

Construction -	**Noise at Source -**
360° tracked excavator 13tonne	between 70 & 85 dB(A)
360° small tracked excavator 3.5tonne	> 75dB(A)
Forward tipping dumpers	> 80dB(A)
Telescopic material handler	maximum of 85 dB(A)
Vibrating roller	> 80dB(A) without vibration 90 – 95 dB(A) when vibrating
Mobile Crane	Between 75 & 80 dB(A)

It is unlikely that all items of plant would be working at the same time, even so the noise levels produced by machines working at the same time are not accumulative, and the overall noise level is not increased above the level of the noisiest machine.
The noise levels given above are measured at source and will diminish the further away from the machine and at the site boundary.

With regard to the vibrating roller, it will only be required to operate for short periods during the day, and then mainly during the few weeks when the parking areas are being constructed. Even so noise levels outside the site boundary are not expected to materially harm the character of the area or impact on the amenity of the local residents.

There may be other items of plant needed from time to time, and delivery vehicles entering & leaving the site at regular intervals. None are anticipated to produce noise levels above the action levels referred to above. Therefore, the overall noise levels produced during the contract period will not cause a nuisance to occupants of the nearby premises.

There may be occasions during initial excavation operations when excavated material will require offsite disposal. This will require the use of several 20tonne tipper Lorries, which will be hired in as required. These Lorries will be hired from local haulage companies, suitable licenced and noise compliant for use on the public highway.

Any static plant and equipment that emits noise, such as silo and pumps, will be located as far from the receptors as the site location will allow. Acoustic screening can also be erected if considered necessary.

g. Arrangements for Protecting Air Quality - Provision of Dust Suppression:

Generation of dust during the construction operations, excavations for reduced level, foundations, drainage and car parking, has the potential to cause nuisance to the area surrounding the site.

The likely receptors will be –

- Staff and customers of the Aldi Store.
- Staff and customers of the Marston's Public House and Restaurant.
- Pedestrians and traffic on the surrounding local road network.

In order to ensure the amenity of local residents and Aldi / Marston's customers / staff the Site Manager will assess the wind strength and direction, to see if the generation of dust from the proposed works would present a nuisance to the adjacent properties. The site will be provided with a wind meter for this purpose.

If it is considered that dust suppression is necessary, the affected areas will be watered and kept wet while the work generating the dust is in progress. Dust suppression will take the form of a water bowser fitted with a sprinkler bar and towed by a dumper. Only clean water will be used for this purpose.

All vehicles travelling on the site will be restricted to a speed limit of **5mph**. All vehicles traveling on the site will be restricted to a speed of 5 mph.

Excavation and /or other construction activities will be stopped if wind conditions are such that dust suppression arrangements would not prevent dust from being carried beyond the site boundary.

Tools and equipment that may have the potential to generate dust will be fitted with dust suppression systems that will be activated when required.

All plant, tools and equipment used on the site will be maintained in good order, with a regular inspection and under a maintenance regime.

Haulage wagons used for delivery aggregates, and for the removal of surplus or waste materials, will be sheeted.

It is unlikely that excavated material will need to be stockpiled on site. However, if it becomes necessary the surface area will be kept to a minimum and dressed. The prevailing wind will be taken into account when locating stockpiles of excavated material which will be covered, if considered necessary, to prevent wind blown dust.
No fires or burning of waste will be allowed on the site.

Regular inspection of the site perimeter and access roads will be undertaken daily or as frequently as is considered necessary depending on the construction operations taking place. The site perimeter will be kept clean, tidy and free from rubbish and dust.

h. Site Lighting:

As the contract is expected to be undertaken during the Autumn / Winter months, our proposed working hours will mean that lighting of the site area may be required early mornings and late afternoons. We propose using mobile lighting towers to illuminate the work areas and traffic routes around the site to ensure safety and security of the workforce.

The lighting units when located will have the lamp units directed into the site, they are fitted with diffusers / shields that remove the upwards glare and provide control for the beam of light ensuring that they only illuminate forward and downwards. The units will be positioned as far away from the road and neighbouring properties as possible to eliminate, as far as reasonably practicable, any light pollution affecting the surrounding areas.

The lighting towers are retractable and for safe storage are only extended whilst in use. The towers will only operate during the site operating hours outlined above and will not be required overnight unless a specific security issue identifies for overnight lighting on the grounds of Health and Safety.

Adam Baudinette PIEMA, Tech IOSH
For and on behalf of
Carter Lauren Construction Ltd.

11th June 2018