



**Proposed Public House and Restaurant, Bognor Regis
for Marston's Plc.**

PO22 9NG

NGR 494240 100855

Construction Management Plan

Planning Condition 7: BE/120/15/OUT

This Management plan has been created to set out the procedures that will be observed during the construction process to comply with current legislation and planning policies. This has been drawn up to outline the specific measures that will be undertaken during the construction period to mitigate the impact of the project and is a living document which will be updated as required.

The proposed development site is located behind Portfield Car Sales on the corner of Shripney Road, Bognor Regis. It is centred on NGR 494240 100855. The site area is accessed via a newly constructed access road that services the Wickes Home Improvement centre/depot and Sainsbury Supermarket.

a. Type of Vehicles expected to deliver Plant, Materials & Equipment to the site during Construction Operations:

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 bowsters).
- Vehicles delivering bulk quantities of concrete blocks and facing bricks – will have mechanical off loading facilities.
- 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 / heating 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) should be parked in the designated site area, and will generally remain there until the end of the working day. This will be updated if arrangements can be made with Sainsbury / Wickes (see below).

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

The number of traffic movements is based on a preliminary construction programme which may change when the project design is finalised. 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 contractor's compound area, and will generally remain there until the end of the working day.

Delivery & unloading of materials.

No Contractor vehicles should be parked on the 'local road network' (which includes the private road which joins the public highway A29 known as Shripney Road that services the Wickes Home Improvement centre/depot and Sainsbury Supermarket) except for 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. If a vehicle needs to be reversed within the site area it will be supervised by a trained banksman, at no time will vehicles be allowed to reverse either in or out of the site on the 'local road network'.

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.

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

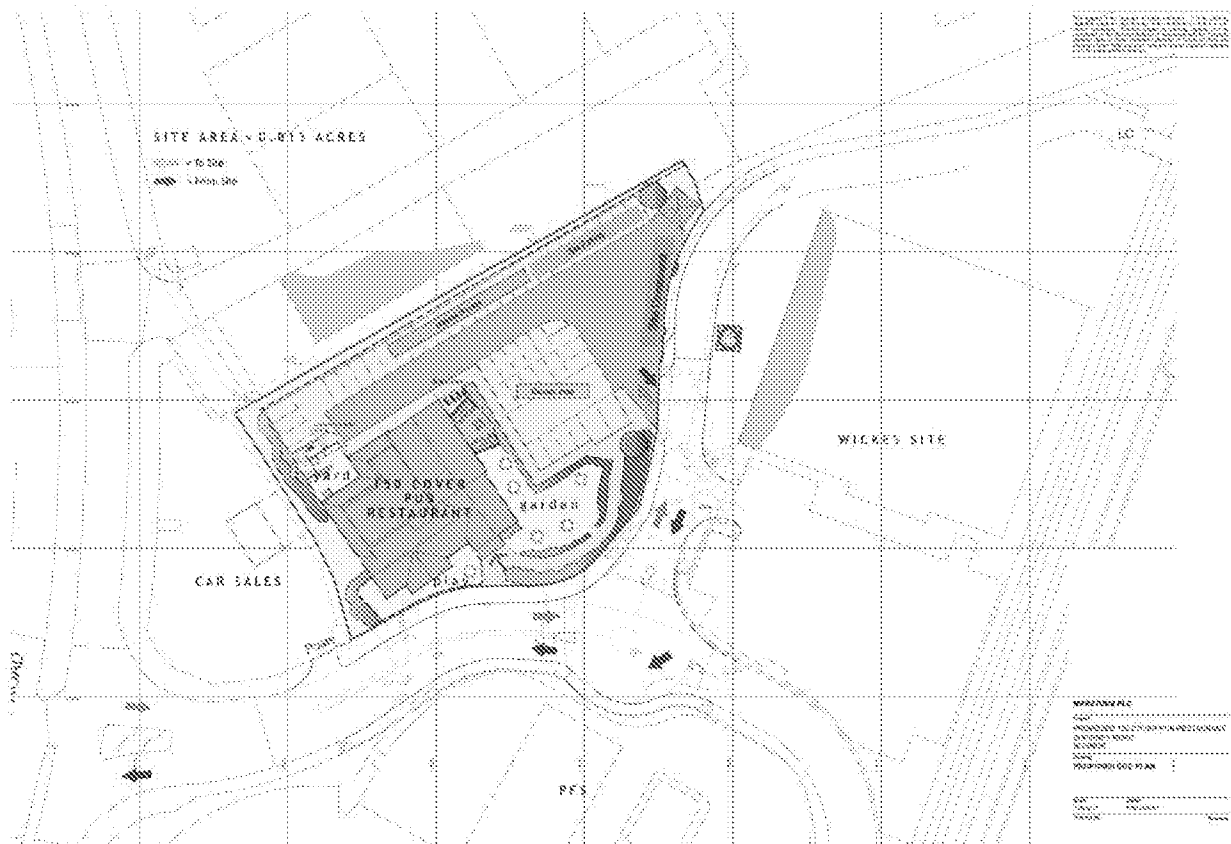
Delivery of materials & equipment will be needed throughout each working day, Monday to Friday. However, these deliveries will be scheduled to avoid busy traffic periods such as morning and evening rush hours to ensure a minimum of inconvenience is caused to the 'local road network'. The deliveries will 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, and advised of the restrictions and arrangements for access to the site.

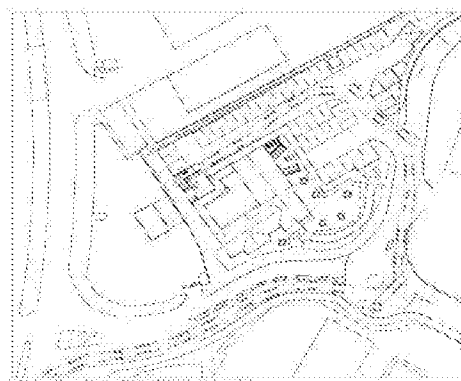
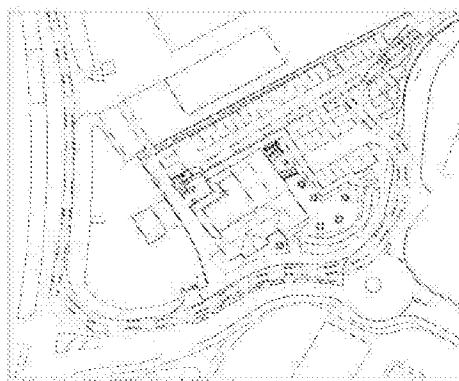
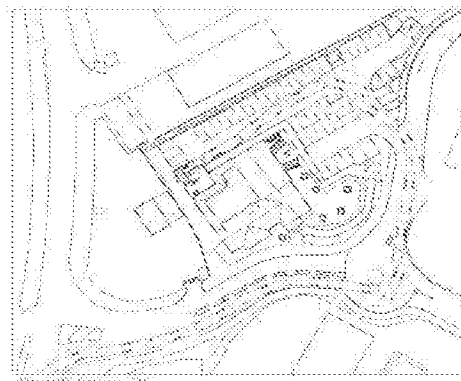
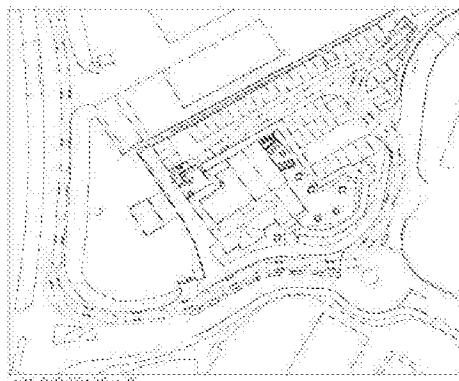
All vehicles entering the site will be subject to a traffic management system within the site area, and all vehicles travelling on the site will be restricted to a speed limit of 5mph. Appropriate signage will be

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.

Traffic Management Plan



Vehicle Swept Path Analysis: Simpson Engineering Record 13174 – SK02A



e. Storage of Materials, Construction Plant and Construction Fuels & Chemicals.

Steps will be taken to guard or protect obvious hazards when the site is unoccupied, i.e. excavations, pits, trips hazards, collapse of stored materials, secure storage of hazardous materials.

Materials

- Holes and excavations will be securely covered or fenced. Those containing water more than 250 mm deep, will be fenced.
- Deep excavations will be fenced and warning signs displayed.
- Tools and loose equipment will be kept in locked containers.
- Materials will be stacked in such a manner that they cannot be dislodged, collapsed, or easily moved.
- Hazardous substances will be stored in secure locked containers.
- Gas cylinders will be stored in locked cages away from any heat source or naked flames.
- Material storage will be located so that tree protection measures will not be compromised.

Plant

- When not in operation, construction plant will be stored in a designated area within the site.
- All vehicles and plant will be effectively immobilised after work ceases.
- Fuel for construction plant will be stored in double banded fuel bowsters and kept in the designated plant storage area which will also be used for refuelling.
- There shall be no emptying of engine sumps or hydraulic oil pipelines on site as part of routine plant maintenance.

Fuels

- Fuel deliveries made in bulk by tanker and stored in banded fuel bowsters. The site will be provided with a number of spill kits and drip trays to deal with any spillage that may accidentally occur. Waste material as the result of spillage, once cleared up, will be removed, and disposed of as hazardous waste. All tanks shall be clearly marked with the following information:
 - i) The content of the tank
 - ii) The tank capacity
 - iii) A notice giving details of safe delivery procedures
 - iv) Details of what to do in an incident

Oils & Chemicals

- Oils and chemicals will be stored in secure steel storage units for secondary containment and located in the compound area.
- Safety Data Sheets will be kept onsite and readily accessible to all site Staff.
- Limit orders to what is needed. Very small quantities are expected to be used on this project.
- Keep containers sealed onsite whenever not directly in use.
- Return any unused substances to the storage facilities at the end of the day or whenever not directly in use.
- The site will be provided with a number of spill kits and drip trays to deal with any spillage that may accidentally occur.

Inspection of Fuel, Oil, and chemical containers:

- Check that all storage tanks, bowsters and associated pipework is in good order before filling.
- Inspect containers frequently for signs of damage, corrosion, bulging, unauthorised use and interference.
- Monitor usage – an abnormally high rate of consumption may indicate that fuel storage is leaking.
- Provision and location of spill kits is to regularly checked by the Site Manager.

EMERGENCY PROCEDURES

In the event of a spillage or pollution incident occurring the following procedures must be adopted.

Report the incident immediately

If a spillage of oils, chemicals or other polluting construction material occurs report the incident immediately to the site management team.

The Site management team shall assess the pollution incident and where considered necessary gain advice from the Environmental Agency on;

Environmental Incident Hotline: 0800 80 70 60

The site management team shall report the incident as part of the relevant internal procedures and shall, if a "Controlled Water" has been affected, notify the local Environment Agency Local Office and the Local Authority Environmental Health Officer. If a surface water or foul sewer is affected the Sewerage Undertaker must also be notified.

All relevant information is recorded on site and to ensure procedures are put in place to prevent similar polluting incidents do not occur again.

It should be noted that the protocol given above for the reporting of pollution incidents should not take precedent over or delay the implementation of the following measures for dealing directly with an incident.

1. Locate the Source

- i) Try to identify the source of pollution and stop the flow immediately.
- ii) Switch off any sources of ignition.

2. Isolate the Source

- i) Avoid the spillage spreading to receptors such as watercourses drains and sewers.
- ii) Stop the flow of pollution if possible.
- iii) Dam the flow with earth/sand/polythene. Divert the flow from drains, sewers or watercourses. Prevent the flow entering into surface water drains by surrounding gullies with sand.
- iv) Place a boom across watercourses at surface water drain outfalls as a precaution.
- v) If pollution enters A surface water drain plug the outfall immediately.

3. Get a Spill Kit

- i) Use absorbent materials to soak up any spillage of oil or chemicals.
- ii) DO NOT wash the spillage into any drainage system.
- iii) Never use detergents

4. Dispose of materials/waste correctly

- i) Oil pools can be removed by gulley-gulper.
Waste oils and sludge must be disposed as HAZARDOUS WASTE.
- ii) Used absorbent materials must be disposed as HAZARDOUS WASTE.

Spill Kits will be available in the site office, refueling station and storage compound. Example of contents below:



Caution Tape, Disposal Bags and Ties will also be available on site for labelling and storage.

As previously mentioned Waste oils and sludge must be disposed as HAZARDOUS WASTE.

Used absorbent materials must be disposed as HAZARDOUS WASTE.

f. The Erection and Maintenance of security hoarding.

Currently the site Southern and Western boundaries comprise of existing timber hoarding over a metal frame, wherever possible this will be retained during the construction phase. The remainder of the perimeter of the site will have a steel mesh security fence (Heras) with designated vehicle and pedestrian's access and egress lockable gates at the entrance to the site (new construction) this will be supervised and inspected under BS 5975 – Temporary Works.

g. Provision of wheel wash facilities - preventing Mud and Dirt being deposited on the Highway:

Hardcore material will be imported into the site, laid and compacted to form an access road into and out of the site. No fill material will be imported or excavated material removed until the access road is completed.

The site 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.

A wheel wash facilities will be provided at the Marston's site entrance to clean vehicle wheels of residual dirt, mud, silt and deleterious material prior to leaving site. In the interest of energy conservation and resource management, preference will be given to a wheel wash unit that is energy efficient and where possible the supply of water will be from the rainwater harvesting water butts or reused from the settled sump stores, the facilities will consist of a pressure jet wash unit. To prevent any water run off flowing outside the site or disperse into the sub strata impacting on the ground water quality, a dedicated washing area shall be installed so that run off is:

- isolated – tanked using polythene membrane to ensure that no silty water is discharged without prior treatment to settle or remove suspended solids.
- levelled with a gradient to control fall.
- directed to a silt trap/settlement tank.
- settled solids removed regularly, collected and disposed offsite by a licensed waste management operator.

Arrangements for Protecting Air Quality - Provision of Dust Suppression:

Generation of dust during the construction operations, particularly demolitions, 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 –

- Customers and Staff of the neighbouring Sainsbury's Petrol Filling Station and Wickes
- Pedestrians and traffic on the surrounding local road network.
- Customers and staff of the neighbouring car sales yard.

Before work commences each day 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 surrounding businesses. 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**.

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

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, under a detailed regular inspection and 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. Public Engagement – prior to and during construction.

Prior to our commencement on site we ensure that all neighbouring properties receive our 'Good Neighbour' letter, this outlines the details of project, expected timeframe and the contact details of our Senior Management should they require further information or have any concerns.

This initial contact is followed up by personal visit by one of our companies' representatives, usually one of our Contracts Managers and / or Site Managers to introduce themselves and again to answer any questions, concerns and ensure that our neighbours are fully aware of our commitment to ensure minimal impact on their amenity.

During the construction phase we proudly advertise our company details along with Management contact details on the perimeter of the site. A compliments and complaints register is kept onsite; this is monitored to ensure that we respond in an effective manner to any public stakeholders. We encourage contact from the public and endeavour to address all concerns in a timely manner.

i. A Scheme for recycling/disposing of waste resulting from construction work.

Skips for the collection of material waste will be located inside the site area. The number of skips possible for the segregation of waste will depend on the space available. A Site Waste Management Plan will be operated to manage the waste produced by the construction works.

- ***A Waste Management company will be employed to provide skips for the storage of waste material, and the waste will be transported to a licenced transfer station for sorting, recycling and disposal to a licenced landfill site. All information regarding the destination of the waste generated will be recorded in the Site Waste Management plan.***

- ***Our Company Policy in respect of the 'Site Waste Plan Regulations' is to use the Building Research Establishment's on-line 'SMARTWaste Plan'. This is an on-line software tool for preparing, implementing, and reviewing Site Waste Management Plans.***

Our company policy is to set targets on all our projects. We can confirm that our target for non-hazardous construction waste generated by the building's construction phase (excluding excavation waste) on this project is 13.3m³ per 100m² of floor area.

We can also confirm that a target of at least 80% by volume of non-hazardous waste generated by the project to be diverted from landfill has been agreed. This target will be achieved by -

- Reusing on site (in-situ or for new applications)
- Reusing on other sites
- Salvaging/reclaiming for reuse
- Returning to the supplier via a 'take-back' scheme
- Recovering from site by an approved waste management contractor and recycling.

Waste materials will be sorted into separate key waste groups (according to the waste streams generated by the scope of the works) either onsite or offsite through a licensed waste contractor for recovery.

Responsibilities and Accountabilities –

The commitment of all site personnel to the successful implementation of this Construction Management Plan begins at the highest levels of Management. As part of our commitment, the Managing Director will designate –

- Specific management representative(s) with defined responsibility and authority for implementing the CMP
- The key responsibilities; ensuring they are well defined and communicated to all personnel concerned.

Issues that have been considered in implementing the CMP are -

- provision of resources;
- action to prevent non-compliance;
- identifying potential problems;
- recommending solutions to problems and verifying their implementation;
- acting in emergency situations.

Management will ensure that an appropriate level of resources is provided to ensure all aspects of this statement are; established, implemented, maintained and effective.

Training –

To be successful, responsibilities will be supported by the necessary authority and training to enable the individuals to carry out their tasks effectively. An effective and on-going training programme will be provided, where necessary for all levels of the company to ensure awareness of environmental issues. Training needs will be assessed, taking into account the job to be carried out, and the skills, education and experience of the individuals in charge.

Tool Box talks will be used as an effective form of site based training that will instruct on the objectives and action of the CMP. It will address the significant impacts, actual or potential, and the benefits of

improved performance. Equally, it will highlight the potential consequences of departure from this specified plan.

Revision 1.

18th April 2017



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