
1.1 Introduction

1.1.1 This Construction Traffic Management Plan (CTMP) has been prepared by Prime Transport Planning (Prime) on behalf of Conrad (Wrexham) Limited, a subsidiary of Conrad Energy (Developments) Limited, in respect of a proposed flexible power plant located within Wrexham Industrial Estate, Oak Road, Wrexham.

1.1.2 At the time of writing, the proposed development site is pending decision from Wrexham County Borough Council (WCBC) under planning application reference number 2018/0890. A consultation response supplied by the Planning Control Manager requests that the applicant produce a CTMP, including the following information:

- *Anticipated no. of daily construction vehicle movements ie/ HGVs, cars, vans visiting the site.*
- *Details of maximum number of construction related vehicles likely to be on site at any one time.*
- *Details of maximum size / length of HGV likely to visit the site including swept path details of such vehicles entering / leaving the site.*
- *Detailed layout plan indicating number of contractor parking spaces including details of how larger HGVs will turn on site.*
- *Details of proposed warning signs (ie/ signage schedule) during construction phase on approaches to site and access itself. Proposed signage details will need to be included in a revised CTMP.*
- *Statement that wheel washing facilities will be available on site and that a road sweeper will be made available to ensure adjoining highway is kept free from debris/ mud.*
- *Statement that no parking or stacking of vehicles (ie/ either staff vehicles, HGVs or Construction vehicles) shall occur on the public highway during the construction works or following completion of the works.*

1.1.3 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 Conrad Energy (Developments) Ltd company policy.

1.2 CTMP Objective

1.2.1 The objective of the CTMP is to ensure that the potential impacts that may arise during the construction phase of the development have been appropriately considered and that the traffic generated by the development through the construction phase is kept to a minimum, both in terms of physical impact and duration. Where possible, impacts will be avoided or mitigated through the management of the construction process.

1.2.2 The anticipated construction period will be approximately 6-months, during which this CTMP will remain in place.

1.3 Delivery Routing

1.3.1 The site is located to the north of Oak Road to the east of WIE.

1.3.2 The site is afforded good access to the strategic road network. Oak Road forms parts of a major carriageway which provides a continuous connection from the A534 to the north of WIE via the Industrial Estate Road/ Abenbury Way/ Ash Road North/ Bryn Lane roundabout, to the B5130 to the east. The A534 provides a connection to Crewe to the east and the A483 to the west via the A5156 bypass, the A483 providing a major link to Chester to the north and Welsh towns to the south. Due to the nature of WIE there are established routes southwards from the site, providing a connection to the A525, a major A-route from Rhyl to Stoke-on-Trent.

1.3.3 A plan detailing this preferred construction traffic routing is provided in **Appendix A**.

1.4 Signage

1.4.1 Temporary signage will be provided at the site access, to guide construction vehicles and provide warning to other road users of the likely traffic entering and egressing the site access. In line with Chapter 8 of the Traffic Signs Manual, and if considered appropriate, additional temporary signage will be placed on the local highway network to direct drivers to the site and minimise any impact to other road users.

1.5 Site Operational and Delivery Hours

1.5.1 In line with WCBC Information Leaflet L21, *Advice on Construction Noise*, operational hours should be limited to 07:30 to 18:00 Monday to Friday and 08:00 to 14:00 Saturday with no construction work or servicing undertaken on Sundays and Bank Holidays.

- 1.5.2 The site will not generate any general traffic during operation other than occasional service vehicles, which will typically be transit vans, small vans or cars, with servicing taking place once a week on average. Major servicing will typically only be required around once every five years.

1.6 Site Access and Manoeuvring

- 1.6.1 The site is located off Oak Road in WIE which is industrial in nature and provides access to a number of light industrial units.
- 1.6.2 There is currently no formal access to the site therefore dropped kerbs will be provided on Oak Road to allow access during the construction period. The dropped kerbs will be retained post construction to allow servicing vehicles to enter and egress the site.
- 1.6.3 The development site itself will be surrounded by palisade fencing, and during the construction period there will be no internal gates or fencing to allow construction vehicles to move without restrictions within the site.
- 1.6.4 **Drawing P18108-002** appended to this report in **Appendix B** shows a large articulated vehicle measuring 16.5m in length entering the site from Oak Road, turning within the site, and leaving the site in forward gear. This HGV is larger than most of the vehicles expected to use the site, therefore the swept path analysis represents that a very worst case scenario is achievable.
- 1.6.5 Once major construction works have been completed, internal fencing will be erected to provide three separate parcels within the site. All three parcels can be accessed via internal gates, wide enough to accommodate service vehicles such as transit vans if required. The central area between the three parcels will be retained and used for servicing, loading/ unloading and parking. Vehicles will be able to turn within this area and exit the site in forward gear.
- 1.6.6 **Drawing P18108-003** appended to this report in **Appendix B** shows a box van measuring 8m in length is able to access the site from Oak Road, turn within the central parking, loading/ unloading area whilst other vehicles are parked, and leave the site in forward gear. No formal vehicle parking will be required during operation as the facility will be unmanned however parked vehicles have been shown as a worst case scenario. The drawing also shows that a vehicle of this size will be able to access the other parcels within the site if required.

1.7 Vehicle Types and Frequency

- 1.7.1 The anticipated vehicle movements based on Conrad Energy (Developments) Ltd experience of similar sites is as follows:

Civils contractor:

- 2 large deliveries at the mobilisation phase for plant delivery
- 1 – 2 transit sized vans daily for the duration of the project (typical 12 – 16 weeks)

- 2 large deliveries at the de-mobilisation phase for plant off hire
- 2 – 3 deliveries per week (construction materials such as concrete mixers, stone etc.)

Electrical Contractor:

- 2 – 3 large deliveries for offloading transformers / switchgear / cable etc.
- 1 – 2 transit sized vans daily for the duration of their elements of the works (typically 4 weeks)

Generator Contractor:

- 5 – 6 large deliveries for offloading generation plant, BoP items etc.
- 1 x mobile crane (2 - 3 days) typically + ballast waggon
- 3 – 4 transit sized vans daily for the duration of their elements of the works (typically 4 weeks)

Gas Supplier:

- 2 large delivery's (gas meter + housing)
- 1 x transit van daily for duration of their element of the works (typically 1 – 2 weeks on site)

DNO / ICP Supplier:

- 2 large delivery's (switchgear + housing)
- 1 x transit van daily for duration of their element of the works (typically 1 – 2 weeks on site).

Project Management Team:

- 3-4 cars per week on an ad hoc basis

1.7.2 The site will be serviced, on average, one day per week with service personnel typically using transit vans, smaller vans or cars.

1.7.3 No parking or stacking of vehicles shall occur on the public highway during the construction works or following completion of works.

1.8 Materials Types and Waste Management

1.8.1 There will be no requirement for fuel deliveries to the site during operation.

1.8.2 Any construction materials will be brought to and handled on site. Any construction waste materials will be removed and 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.

1.9 Excavation Management

- 1.9.1 The site currently consists of low-level vegetation and young trees surrounded by wooden fencing. The vegetation will need to be removed and replaced a suitable construction surface. Any excavated materials will be removed from site and transported to a licenced transfer station for sorting, recycling and disposal to a licenced landfill site.

1.10 Storage of Materials and Plant

- 1.10.1 Delivery vehicles will drive directly into the site for unloading in designated secure storage areas, which will be identified prior to works commencing. Construction materials will be kept in designated storage areas, and kept in a tidy condition.
- 1.10.2 Tools and equipment will be kept in locked containers; materials will be stacked in such a manner that they cannot be dislodged, collapsed, or easily moved; any hazardous substances will be stored in secure locked containers; and gas cylinders will be stored in locked cages away from any heat source or naked flames. Oils and chemicals will be stored in secure steel storage units. Fuel for construction plant, if needed, will be stored in bunded fuel bowzers and kept in the designated plant storage area. When not in operation, construction plant will be store in a designated area within the site. All vehicles and plant will be effectively immobilised after work ceases.

1.11 Vehicle Parking

- 1.11.1 No formal vehicle parking will be required during operation as the facility will be unmanned. Construction vehicles and the vehicles of construction workers will be parked on-site in a safe location away from any construction works. All parking and loading/unloading will take place off the public highway.
- 1.11.2 Post construction, servicing vehicles will be able to park within the retained central area of the site.
- 1.11.3 Construction workers will be encouraged to car/van share where possible.

1.12 Public Engagement and Delivery Management

- 1.12.1 Local residents/businesses will receive correspondence prior to commencement and during key stages of the construction period 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.
- 1.12.2 It is envisaged that an on-site delivery manager will be appointed who will minimise disruption to local residents. The role of this individual will be to populate and keep up-to-date this CTMP, and advise delivery drivers/companies of appropriate routing and procedures when accessing the site.

1.13 Vehicle Cleaning

- 1.13.1 Wheel washing facilities will be provided at the site accesses to minimise the spill-over of any debris generated by the construction works onto the local highway network.
- 1.13.2 It is envisaged that inspections of the accesses will be undertaken daily to monitor compliance with the use of washing facilities. If necessary, a road sweeper will be deployed on the approach to the site accesses to remove any debris.

1.14 Noise and Dust Control Measures

- 1.14.1 The site will be managed so as to minimise disruption to residents, buildings and the environment associated with any noise and dust generated by construction on the site. Construction will only take place during the hours of 07:30 to 18:00 Monday to Friday and 08:00 to 14:00 Saturday with no construction work or servicing undertaken on Sundays and Bank Holidays.
- 1.14.2 Local damping will be employed by site labour using water hoses on any excavations and dust suppression tools will be provided.

1.15 Protection of Vulnerable Areas

- 1.15.1 No protected trees or listed buildings are present within the site, therefore special protection measures are not required.

1.16 Welfare

- 1.16.1 It is anticipated that no more than 10 construction workers will be on-site at any one time, therefore there is no requirement for a welfare compound. Portable toilets will be provided on-site during construction.

1.17 Temporary Services

- 1.17.1 Appropriate arrangements will be made for temporary connection to utilities, if required.

1.18 Power Provision

- 1.18.1 Site power is likely to be provided by generators housed in anti-vandal steel containers with integral bunded fuel tanks.

1.19 Fire Safety

- 1.19.1 Appropriate fire safety measures to minimise the likelihood and severity of fire risk at the site will be provided. These will include appropriate fire extinguishers as well as first aid kits.

1.20 Security

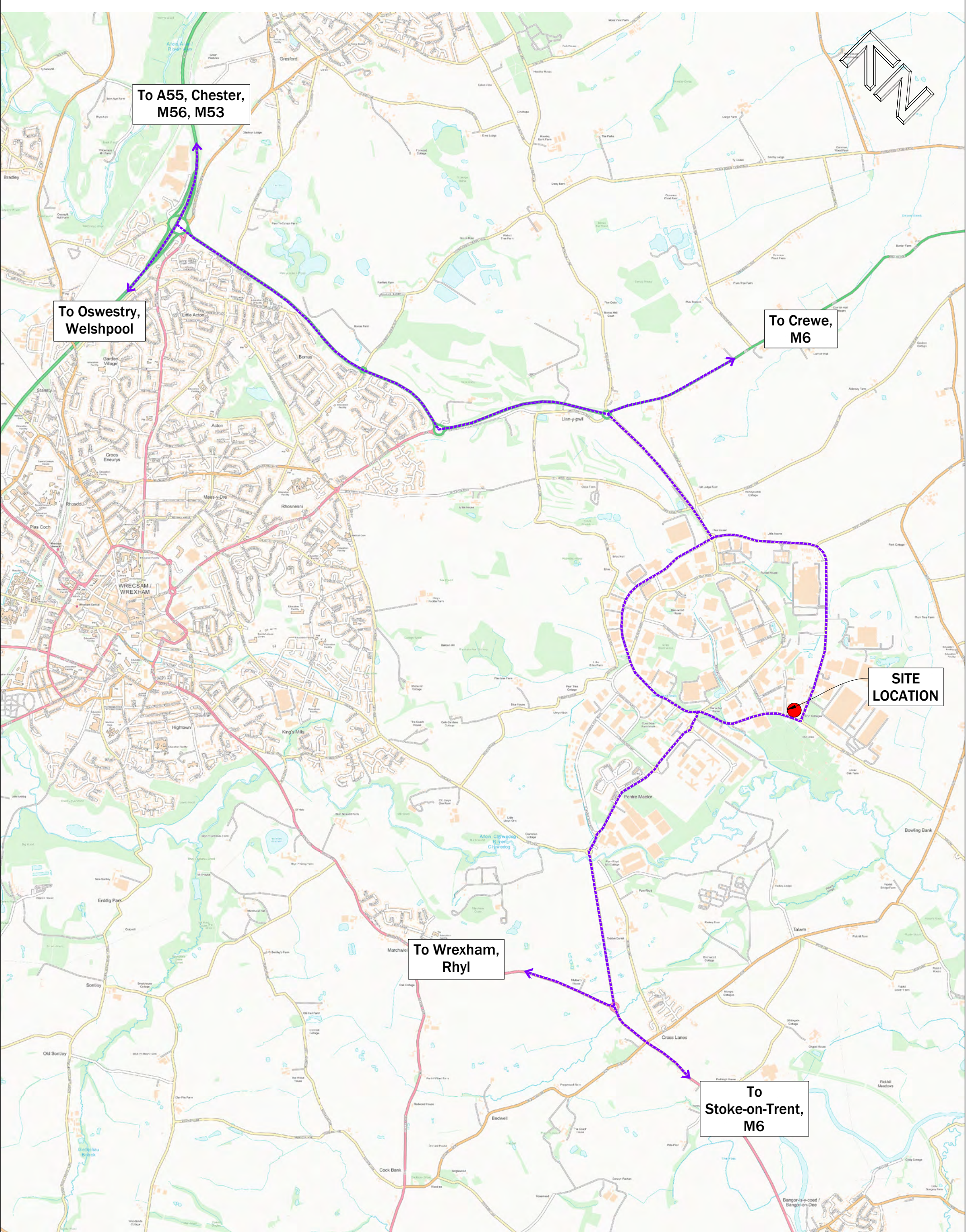
- 1.20.1 A range of site security measures will be provided, as appropriate, including but not limited to, secure fencing, gated accesses and CCTV.

1.21 Conclusion

- 1.21.1 Conrad (Wrexham) Ltd and its contractors will adhere to this CTMP to ensure minimal impact to local residents, businesses and the local highway network. The key ways to achieve this are as follows:

- Liaison with local residents to make them aware of any operations taking place that have the potential to affect them;
- Ensure that the permitted site hours of operation and construction are adhered to at all times;
- Actively monitor and review the measures and practices detailed in this CMTP;
- Any complaints will be addressed in a professional and timely manner;
- Actively engage with Considerate Contractor Scheme (CCS) and best working practices;
- Ensure the workforce are educated on the need to minimise noise and dust; and
- Educate the workforce on the need to minimise the impact of their activities on local residents, businesses and the local highway network.

APPENDIX A – CONSTRUCTION TRAFFIC ROUTING PLAN

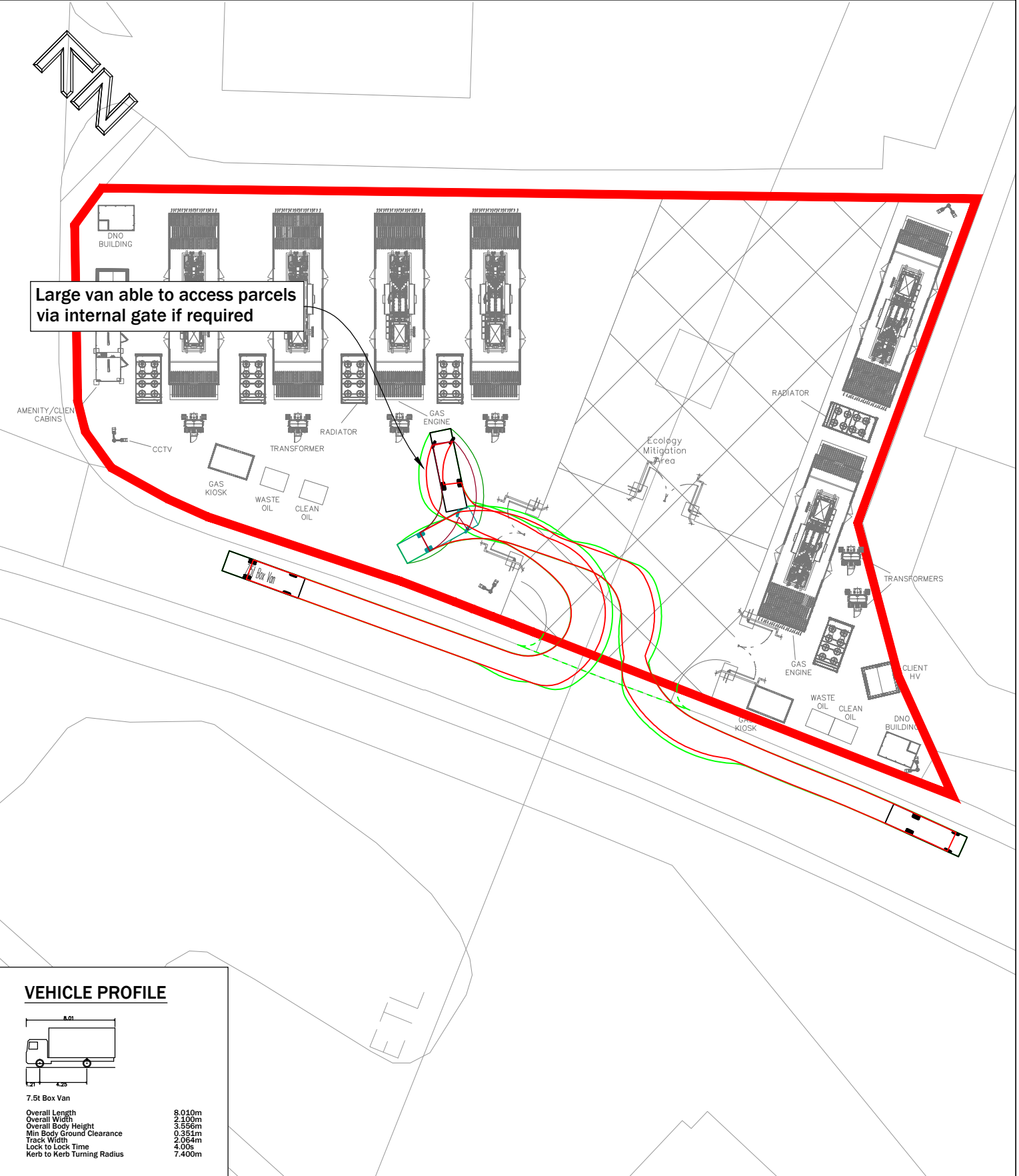
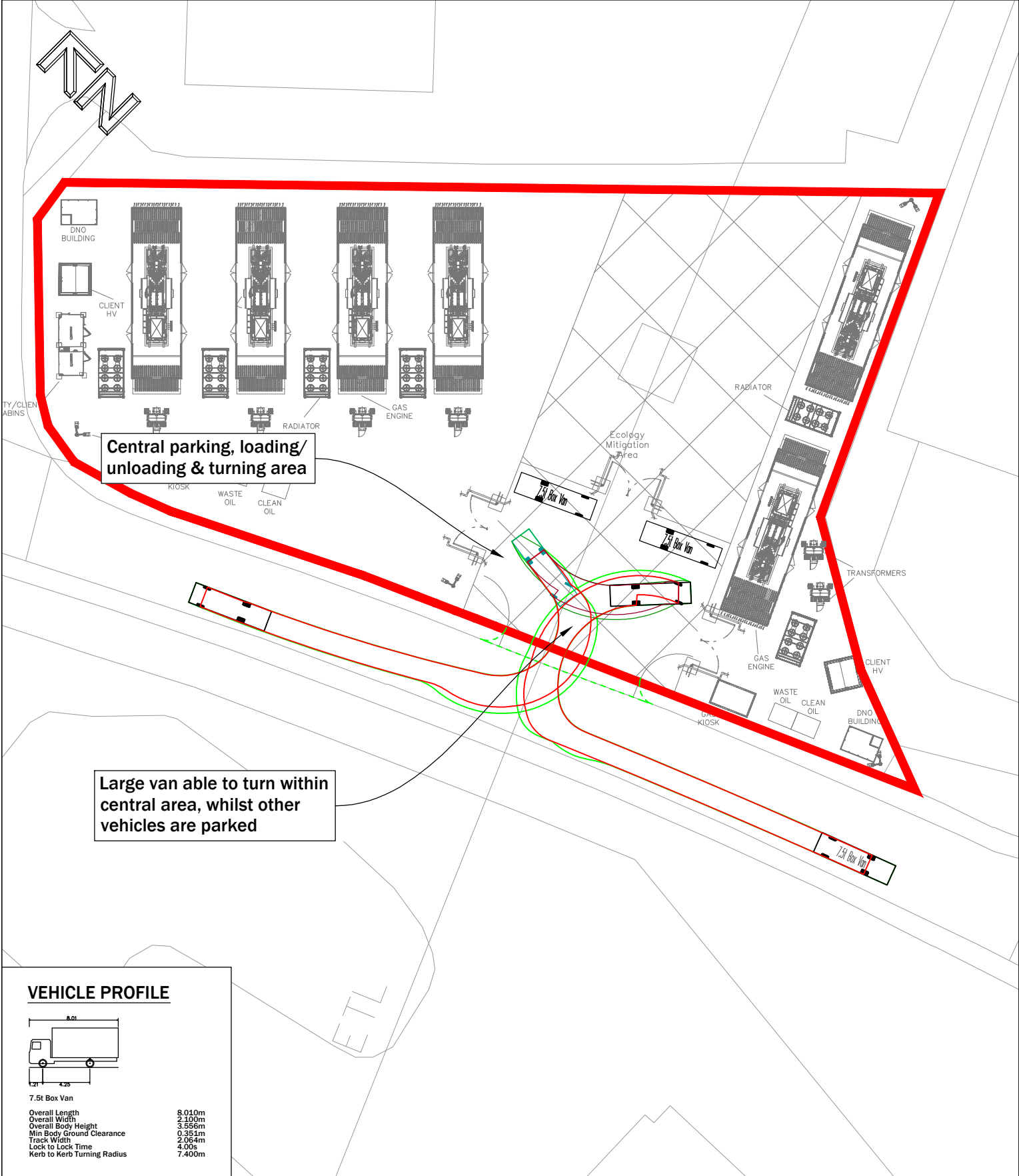


 9 Hurricane Court Liverpool International Business Park Estuary Boulevard Liverpool L24 8RL www.primetp.co.uk 0151 728 1860					Project OAK ROAD FLEXIBLE POWER PLANT, WREXHAM	Drawn by VB	Issue date 06 DEC 2018
	*	*	*	*		Scale(s) NTS	
	Rev	Date	By	Revision notes			
	Status	FOR INFORMATION				Title	Drawing No
CONSTRUCTION TRAFFIC ROUTING PLAN						CTMP - Appendix A	

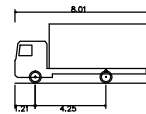
APPENDIX B – SWEPT PATH ANALYSIS DRAWINGS

P18108-002 – Swept Path Analysis During Construction

P18108-003 – Swept Path Analysis Post Construction

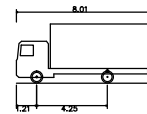


VEHICLE PROFILE



7.5t Box Van
Overall Length 8.01m
Overall Width 2.10m
Overall Body Height 3.55m
Min Body Ground Clearance 0.351m
Track Width 2.064m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 7.400m

VEHICLE PROFILE



7.5t Box Van
Overall Length 8.01m
Overall Width 2.10m
Overall Body Height 3.55m
Min Body Ground Clearance 0.351m
Track Width 2.064m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 7.400m



9 Hurricane Court
Liverpool International Business Park | Estuary Boulevard | Liverpool | L24 8RL
www.primetp.co.uk | 0151 728 1860

Rev	Date	By	Revision notes
*	*	*	*

Status: FOR INFORMATION

Project: OAK ROAD FLEXIBLE POWER PLANT, WREXHAM

Title: SWEPT PATH ANALYSIS POST CONSTRUCTION

Drawn by VB
Issue date 06 DEC 2018

Scale(s): 1:500 @A3

Drawing No: P18108-003