

APPENDIX B

TRAFFIC MANAGEMENT PLAN (TMP)





ZAYED CENTRE FOR RESEARCH INTO RARE DISEASES IN CHILDREN

GOSH

Great Ormond Street NHS
Hospital for Children
NHS Foundation Trust







Erith Construction Ltd.

TRAFFIC MANAGEMENT PLAN (TMP)



CONTENTS

	SECTION
INTRODUCTION	1
Objectives	2
Traffic affected	3
Persons at risk	4
Site working hours and access times	5
Signage	6
SITE LOGISTICS & MANAGEMENT OF VEHICLES:	
Road Transport	7
On site management of vehicles	8
Site car parking	9
Pedestrian access	10
Storage areas	11
Material handling equipment	12
Ground load bearing capacities	13
Cleaning and aesthetics	14
Information, Instruction and Training	15
Inspections and Monitoring	16
Summary of main points	17
APPENTICES:	
Traffic Management Risk Assessment	1
Driver induction sheet	2



1 - INTRODUCTION:

The site works impact on the external areas of the GREAT ORMOND STREET HOSPITAL (GOSH) and especially the surrounding streets of the new Zayed Centre for Research into Rare Diseases in Children (CRRDC).

The site works will potentially impose an increase to the vehicles entering and leaving the environment each day. Therefore it is necessary to introduce controls in order to minimise the impact of the additional traffic, hence the purpose of this Traffic Management Plan.

2 - Objectives:

The aim is to safely plan deliveries, collections and vehicle movement on and around site in order to prevent traffic congestion within the confines of the site, public roadways that access to and from the site address (20 Guilford Street, WC1 1DZ) and nearby residential and commercial properties.

This is achieved by giving a clear understanding of the overall management of the construction site traffic throughout the project duration.

It will endeavour to determine the specific responsibilities of the Erith Project Management Team, in particular the logistics manager and Traffic Marshals.

It describes access/egress arrangements to the Working areas, holding area, loading area, and public access areas around the Site complex for both vehicle and pedestrian traffic.

The plan will be regularly reviewed and amended by the Project Management team in order to incorporate any modifications to the construction site environment affecting vehicle and/or pedestrian traffic.



3 - Traffic affected

The groups of traffic affected are:

- Traffic accessing and working on Site.
- Traffic connected directly with delivery/collection vehicles, Staff vehicles, Emergency vehicles and visitors' transport.
- Vehicles of other Contractors and Suppliers to other projects in the local area.
- Other passing traffic
- Cyclists

4 - Persons at risk

Persons that can be affected or put at risk by the traffic on and off site are:

- Site Staff and all Operatives including Subcontractors
- Visitors to site
- Members of the public
- Persons with disability

5 - Site Working Hours and Access Times

The site working hours will be:

- 8.00am to 6pm on Monday to Friday
- 8.00am to 1.00pm on Saturdays
- No working on Sundays or Public Holidays
 Occasionally, non-noisy works and deliveries may occur outside of the main site working hours,
 subject to prior notice and approval.

There will also be, on occasion, the need to Mobilise or Demobilise Large Vehicles outside these hours due to Third Party Imposed Traffic Orders (Notices will be posted as detailed below). Installation of the Tower Crane will be erected over the course of a single weekend when these site hours will be increased as agreed with the relevant Authorities.

Erith will give written notice of all exceptionally large or exceptionally heavy loads entering the site and will ensure that all vehicles carrying such loads use the agreed routes set out in advance by relevant authorities (TFL, Police etc.) under Traffic Movement orders (TMO's).

6 - **Signage**

All areas leading to the project will have signage placed appropriately leading to the main / official construction traffic route to site. This will be restricted to the local vicinity of the site, the extent of the signage will be agreed with Camden Council.

Site traffic logistics and Management of vehicles

7 - Road Transport routes and off site holding area:

Site deliveries will be via Guilford Street. A one way system will be in operation. Lorries can only access the Site from the east, via Gray's Inn Road (A5200). All subcontractors and suppliers involved in the



project will be briefed on this preferred and designated route and issued with route maps. This route will also form part of the scope of works for our suppliers and subcontractors. (See Fig. 1 – route map)



Fig. 1 - The red cross indicates routes not used by Site traffic

No arrangements will be necessary for delivery vehicles to park temporarily off site as all vehicles will be pre-booked and expected and all checks will be carried out within the site hoarding. This will ensure the site can receive deliveries without causing traffic congestion.

During peak times, on occasion it may be necessary to utilise an off-site vehicle holding area away from the site. Should this facility be required vehicles will be informed in good time and directed to the holding area which will be located near to Regents Park in advance at time of booking or via radio contact. This holding area is currently successfully being used in agreement with Camden and incorporated into the CMP for another working Erith site (79 Camden Road). The Works at 79 Camden Road will complete a few weeks prior to the start of the GOSH basement works and will therefore not create any additional congestion to current levels. (See Fig. 2 - location map)

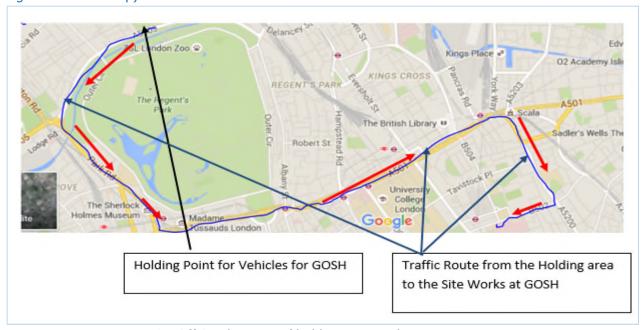


Fig. 2 - Off Site location of holding area and route to site

Vehicles arriving at the site must approach via Guilford St and vehicle, 'check in' will occur at the Holding Area within the site boundary (below the Gantry). At no time will the Holding Area to be used as a place to park unless work being carried out necessitates this. Emergency vehicles will however be given priority. The vehicle loading area will accommodate up to 3 Lorries at a single time.



Delivery and collection vehicles will be booked to on site via the dedicated Logistic Manager at least 24 hours in advance. During the Excavation phase the gateman, when the density of vehicles will be increased, will be notified via radio at least 10 minutes before vehicle arrival, so that Traffic Marshals can be assigned and be able to co-ordinate and manage an organised and controlled access to the Site.

In the same way, Traffic Marshals will be assigned to co-ordinate and manage controlled egress from site heading west, this will minimise traffic interruption using Westbound Guilford Street and ensure safety is paramount throughout the whole manoeuvre for the vehicles and Cyclists. Vehicles exiting the Holding Area and must fully comply with direction given by the Traffic Marshals.

Full information and instruction of the above arrangements will be relayed to all parties via agreed mediums including, but not restricted to, email, initial induction and Toolbox Talks for updates as necessary.

8 - On Site management of vehicles:

Once the vehicles enter the site gate a Banksman will Marshal it to the Holding Area where "Check-in" will take place. Drivers will be given Driver induction sheet on first entry. (see Appendix 2)

Vehicle engines must be switched off whilst on site, no idling will be permitted other than authorised vehicles which require a running engine to facilitate an operation. (e.g. concrete vehicles; which must keep engines running to ensure fluidity of concrete is maintained, diesel delivery vehicles etc).

Only during the excavation phase some vehicles may need to access inside the works area. On these occasions a Traffic Marshal/Banksman will be required to ensure that safety is maintained during vehicle movements.

Reversing operations on site, if necessary, will be controlled using a Banksman or Traffic Marshal. For Safety, Traffic Logistics have been devised to avoid reversing vehicles.

Reversing out of the site will not be permitted.

Drivers must not leave any vehicle unattended without informing (and depositing key with Security). For example when using the onsite welfare facilities.

Smoking will only be permitted in the designated smoking areas. These will always be within the site and out of site from the general public.

9 - Site car parking

There will be no parking on site for staff/operatives due to the lack of space. In order to minimise local parking disruption, congestion and carbon emissions, all staff, operatives, visitors, suppliers and subcontractors will be encouraged to use public transport.

10 - Pedestrian access

The main pedestrian access to site will be via a dedicated entrance in Millman St. There will be another in Guilford Place for emergency use, entrance will be via a key pad system with a Door Bell for Occasional Visitors. No unauthorised access will be permitted. A notice providing access instructions will be posted at the site entrance to site.

Persons not inducted and / or visitors will be directed or accompanied to the induction room or the site office as appropriate.



Pedestrian access and egress through the vehicle access gates will be strictly prohibited and discouraged.

A temporary pedestrian crossing installation on Guilford Street, to the East of the Junction with Millman St has been agreed with Camden Councils' Highways Licencing Dept. in order to divert footfall away from site. It is estimated this will be in place approximately 6 weeks from receipt of the site Application. In order to facilitate the new crossing, parking bays to the South side of Guildford Street will also be suspended.

Within the site compound there will be complete segregation between the site traffic and working areas, with defined access routes and appropriate signage and lighting in place. All routes and segregation on site will be continuously maintained, monitored and reviewed as the works proceed. This will be coordinated by the site management team.

11 - Storage areas

Storage of materials will be in segregated, designated areas only and will not obstruct either vehicle or pedestrian access ways.

12 - Material Handling Equipment

If equipment is used for the distribution of materials only competent persons in possession of a valid relevant CPCS certificate will operate them. Reversing alarms, amber flashing beacons and mirrors will be fitted to all load handling equipment in accordance with PUWER regulations.

A competent slinger/signaller/ Banksmen will be used as necessary. Suitable lifting Plans detailing the procedures relating to the any lifting operations will be in place prior to operations in accordance with LOLER regulations.

LOLER and PUWER registers will be maintained on site.

13 - Ground load bearing capacities

Any loading will necessitate specific risk assessment and approval by the Site Engineer. This will be communicated to all subcontractors and will be detailed in the Lift Plans.

14 - Cleaning and aesthetics

The surrounding routes must be kept clean and clear and will be regularly inspected.

A wheel wash and/or Jet wash will be used to clean the wheels of vehicles before they leave site. Drivers will ensure vehicle wheels are clean before they leave site and this will be enforced by Traffic Marshals.

A road sweeping vehicle will be used to clean the surrounding roads when necessary. Traffic Marshals will ensure footpaths are kept free from debris and obstacles and cleaned if necessary.

15 - Information, Instruction and Training

As the Traffic Management Plan affects all personnel on site, it will be included as part of the Safety induction and periodically information regarding any changes will be delivered via toolbox talks or pre start briefings.

All persons who have a responsibility under the Traffic Management Plan e.g. Site managers, Logistics Operative/Team Leaders/Storeman, Traffic Marshal, Banksman, Security Guards or new employees; will have training in order to carry out their duties safely.



All delivery drivers will be issued with Erith's 'Driver induction' sheet by the Security Guards or Traffic Marshals on first arrival onto site. A copy of the induction sheet is included in the Traffic Management Plan document (see Appendix 2).

All operatives and Staff will be fully inducted at first access to site. All visitors will receive a brief induction by authorised personnel and will be accompanied at all times whilst on site. Any 'young persons' will be risk assessed and appropriately mentored whilst on site.

16 - Inspection & Monitoring

As part of the duties of the Project Manager, the Project Team will carry out regular site inspections within the construction area as well as outside of the site boundaries as required. Regular Audits and/or spotting reports will be conducted by Erith's in house Safety, Health, Environment & Quality team (SHEQ team). Additionally, Erith's 'Conduct Manager' will regularly visit the site to ensure high standards are being met and maintained in all areas on and around the site.



17 - Summary of main points:

- The site will operate a one way system.
- All deliveries/collections will be planned at least one day in advance via the dedicated Logistics Manager who will confirm site access information and logistics map has been received and understood. (Occasionally it may be necessary for short notice vehicles to visit the site, such as Fitters for Break Downs etc.)
- The Logistics Manager will inform the TM's at their pre-start briefing of the number and types of vehicles expected each day.
- Drivers will contact the Logistics Manager 10 minutes before arrival to check the site is ready for the vehicle, so that the Traffic Marshals and Banksman can prepare to receive them.
- A Traffic Marshal will be in place / deployed to the junction of Gray's Inn Road / Guilford Street in advance of expected large vehicles (e.g. cement lorries, Skip lorries etc.)
- All vehicle movements will be controlled by the vehicle marshals on arrival.
- Any unauthorised vehicles arriving at the site gate will be turned away and advised to contact the Logistics manager.
- Vehicle exits from site will not be permitted until Traffic Marshals are in place and ready to control and manage the exit safely.
- A strict 5mph speed limit will be in place for all vehicles once on site.
- No reversing out of site will be permitted.
- A Driver induction sheet will be issued to drivers on first visit to site (see Appendix 2)
- Vehicles engines must be switched off; no idling other than authorised vehicles (see onsite management section).
- No private parking is available on site.
- No Smoking permitted in the vehicle access area.
- A wheel wash and/or a hose will be available at the site exit to prevent the spread of any mud/debris onto surrounding roads.
- A road cleaning / sweeper vehicle will periodically be deployed onto surrounding roads to ensure they are free from mud and debris.



APPENDICES

Appendix 1 – Traffic Management Risk Assessment

Appendix 2 – Driver induction sheet



Appendix 1

Traffic Management Risk Assessment

(The designated HSEQ team member must review this document and approve (TMP – Risk Assessment).

© Erith	TRAFFIC MANA	AGE	MEI	NT R	ISK ASSESSMENT	CRRDC - GOSH NHS	- UC	CL -	
		Lev	el of	Risk				vel of	f risk ntrols
Hazards	Risk / Persons at risk	Probability	Severity	Global	Controls to be intro order to reduce the		Probability	Severity	Global Assessment
Delivery Vehicles entering/leaving and travelling towards site	Vehicle striking/crushing operatives, Traffic marshals, members of the public or property causing damage to property resulting in serious injury of death	4	5	20	Traffic Management Plan selecting un followed by all the site vehicles. TMP manoeuvre of site vehicles in surrount to be trained and competent as per active vehicles to be maintained, inspected a manual and road worthy as per currer Competent and trained Traffic Marsha site vehicles accessing, egressing or content the site hoarding. Operatives on site the vests. Pedestrians to be given priority access only to working areas. Segregated pedestrian routes. Speed limits to be strollowing of GCWC, CCS, FORS and Compared the surrounding site of the site of t	restricting any reversing ding site areas. Drivers ctions described in TMP. as per manufactures nt regulations. als to be in place when rossing footpaths near o wear high visibility at all times. Authorised ated vehicle and adhered.	1	5	5
Plant entering/leaving and travelling on site	Vehicle striking operatives, members of the public or property causing damage to property resulting in serious injury of death	4	5	20	Traffic Management Plan selecting un followed by all the site vehicles. TMP manoeuvre in surrounding site areas. and competent as per actions describe maintained, inspected as per manuroad worthy as per current regulation: Competent and trained Traffic Marshasite vehicles accessing, egressing or contestive the site hoarding. Operatives on site twests. Pedestrians to be given priority access only to working areas. Segregapedestrian routes. Speed limits to be a GCWC, CCS, FORS and CLOCS guidelimaintained as per PUWER regulations speed of 5MPH.	restricting any reversing Drivers to be trained ed in TMP. Vehicles to ifactures manual and s. Ils to be in place when rossing footpaths near oo wear high visibility at all times. Authorised atted vehicle and adhered. Following of nes. Plant to be	1	5	5
Loading and unloading of vehicles	Operative falling from height resulting in injuries or possible leading to fatality. Operative being struck or crushed during loading/unloading.	3	5	15	Fall arrest system with rescue plan to prevent falls or airbag system to redu Operatives to be trained in the use of driver to leave the vehicle when being other machinery i.e. telehandler/ exca Unloading/loading carried out by a co to be trained and competent as per ac Competent and trained Banksmen to load to follow the FORS guidelines with according to a system of the system	ce injury from a fall. PFA. Operatives and I loaded/unloaded by Ivvator/ crane. Impetent person. Drivers ctions described in TMP. The in place. All vehicles	1	5	5
Manual handling	Operatives sustaining/contracting: - Muscular/skeletal injuries. Cuts and abrasions. Weil's disease.	4	4	16	Operative to be trained in manual har be worn to prevent cuts and abrasion: eating, drinking or smoking. Adequate Good housekeeping to be adopted wit kept clear of waste. Mud to be kept or by cleaning of vehicles and plant befouse of regular visits by road sweeper.	s. Wash hands before e illuminated work areas. th main access routes ff of footpath and roads	1	4	4
Slips and trips	Operative, visitors, members of the public slipping or tripping on footpaths and walkways. Local traffic suffering lack of grip while traveling on roads near the site due to build-up of mud on the roads or icy conditions	4	5	20	Adequate illuminated work areas. Goc adopted with main access routes kep be kept off of footpath and roads by coplant before leaving site and the use of sweeper. Access routes on site to regit to be flat and trip free. Rock salt and during icy/freezing conditions. Reuse when possible to reduce production or	ot clear of waste. Mud to cleaning of vehicles and of regular visits by road ularly cleaned Surfaces grit to be deployed of materials on site	1	3	3



Hazards	Risk ,	sons	Level of Risk							
Plant stability risk Operative, and memb the public injured or c possibly res	Risk / Persons at risk Operative, visitors and members of	Probability					Level of risk after controls			
	the public being injured or crushed possibly resulting in death	4	Severity	Global Assessment	Controls to be introduced in order to reduce the risk			Severity	Global Assessment	
Vehicle pollution	Excessive noise and pollution annoying local residence. Exhaust fumes entering trenches and buildings resulting in carbon monoxide poisoning of operatives. Sounding of the vehicle horn and unnecessary reversing of the engine	3	5	20	tested as per curren Excavations to have baulks in place whei expected. Competer marshal to be in pla inside the site hoard and when crossing if any reversing mano surrounding site are lift/carry loads withi Tracking or driving if	ual and inspected and nt PUWER regulations. e red and white timber re vehicle presence is nt and trained Traffic acce for reversing vehicles ding, for access/egress footpaths. TMP restricting euvre of site vehicles in ass. Machine to only in its designed capability. machines across slopes to		5	5	
Vehicle traction	Vehicle becoming stuck due to loss of grip resulting in the blocking of access ways for other vehicles and plant and possibly emergency services	4	5	15	Switch off engines vengine revs to a mir trained Traffic mars in place for helping possible. Hold waitin holding area inside: people to vehicles accessing/waiting/ereduce waiting time noise, vibration and when acceptable levenging results.	 Monitoring system for dust switching on alarms vels are overtaken. activity and checking 	1	1	1	
Vehicle traction with other vehicles	Loss of grip resulting in the vehicle sliding into other vehicles, plant, excavations, property or persons. Could result in overturning causing crush injuries to Occupants of buildings, drivers of plant/vehicles or pedestrians resulting in injury or fatality.	4	5	20	Remove snow and it where allowable to and prevent refreez to be adopted with clear of waste. Mud footpath and roads and plant before learegular visits by roa on site to regularly of lat and trip free. Re	ce and apply rock salt provide grip, aid thawing ing. Good housekeeping main access routes kept		1	2	
Plant travelling on the road, from site entranc to storage area.	Plant striking persons of eproperty resulting in property damage, injury of possibly death. Prosecution for noncompliance with road traffic act	5	5	20	Remove snow and it where allowable to and prevent refreez baulks in place at the route edges. Good hadopted with main of waste. Mud to be roads by cleaning of before leaving site a visits by road sweet to regularly cleaned	ce and apply rock salt provide grip, aid thawing ing. Suitable timber ench and pedestrian housekeeping to be access routes kept clear expected the kept off of footpath and for vehicles and plant enchances. Access routes on site is Surfaces to be flat and materials on site when		1	2	



	<u>ACT</u>	IVITY R	ISK /	ASSI	ESSMEN	NT TABI	<u>LE</u>			
	Risk /	Lev	el of	_				_	vel of er co	risk ntrols
Hazards	Persons at risk	Probability	Severity				be introduced in luce the risk	Probability	Severity	Global Assessment
Probability of	1	1	2	3	4	5				
•	2	2	4	6	8	10				
occurrences	3	3	6	9	12	15				
	4	4	8	12	16	20				
	5	5	10	15	20	25				

"low" risk "Medium" Risk



Appendix 2

Driver Induction Sheet

DRIVER INDUCTION SHEET - (INSERT SITE NAME HERE)





YOUR VEHICLE MUST NOT LEAVE WITHOUT THE INSTRUCTION AND AID OF A TRAFFIC MARSHAL OR BANSMAN



ON SITE AT ALL TIMES





IF YOU GET OUT OF YOUR VEHICLE WHILST ON SITE YOU MUST WEAR A HARD HAT, HI-VIS VEST / JACKET, GLOVES AND SAFETY BOOTS, NO SHORTS ARE PERMITTED



ZERO ALCOHOL POLICY



NO SMOKING OTHER THAN IN THE DESIGNATED SMOKING ZONE WHICH IS TBC



YOU MUST REPORT ANY ACCIDENTS, INCIDENTS, NEAR MISSES OR UNSAFE ACTIONS TO BOTH YOUR ESCORT AND THE ERITH TEAM AS SOON AS POSSIBLE



IN CASE OF AN EMERGENCY EVACUATION THE MUSTER POINT IS: corner of Guilford St. / Guilford Place



THE FIRST AIDERS ON SITE IS TBC FIRST AID is available in the ERITH SITE OFFICE

"I HAVE READ AND	UNDERSTOOD THE ABOVE INDUCTION".
NAME:	COMPANY:
REGISTRATION:	DATE & TIME:
8IGNED:	