St Ann's Hospital

Construction Logistics Plan

St. Ann's Hospital

On behalf of **Barnet, Enfield and Haringey Mental Health NHSTrust**

Barnet, Enfield and Haringey
Mental Health NHS Trust

Project Ref: 25232-002 | Rev: 2 | Date: June 2014

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1 Introduction

1.1 Introduction

1.1.1 This Construction Logistics Plan (CLP) has been prepared for the proposed development of a residential-led mixed-use and modern healthcare campus and demolition of various buildings- at the existing St Ann's Hospital site, Haringey, London.

1.1.2 The CLP sets out how the transport impacts of the demolition and construction works on site are proposed to be reduced through good transport management and planning.

1.2 Purpose of a CLP

1.2.1 CLPs "*provide a framework to better manage all types of freight vehicle movement to and from construction sites*", (Building a better future for freight: Construction Logistics Plans, Transport for London (TfL) May 2013).

1.2.2 The guidance states that a CLP should be drafted as part of the Transport Assessment and that it should be tailored to the specific needs of the site. The CLP should encompass a number of principles to ensure the proactive management of deliveries to reduce the number of vehicle movements by the use of sustainable modes where possible.

1.3 Site Location

1.3.1 The site is located along the B152 St Ann's Road, to the north of the overground railway line in the London Borough of Haringey.

1.3.2 The site is bounded by to the east by Hermitage Road, to the south by a railway line, to the west by residential units and to the north by St Ann's Road.

1.4 Development Proposals

1.4.1 The site is currently occupied by Barnet, Enfield and Haringey Mental Health Trust and a number of other NHS organisations.

1.4.2 The development proposals comprise of the retention of 28,000sqm of existing Hospital buildings with the construction of approximately 5100sqm of new healthcare provision, 148sqm of retail provision, together with the development of up to 470 dwellings (50% flats, 50% houses) on approximately 11.24ha of land.

1.5 This Report

1.5.1 The focus of this report is to consider how the transport impacts of the site clearance and construction of the proposed development can be reduced. The structure of this report is therefore as follows:

- Section 2 of this report reviews the design of the proposed development, and a review of the on-site logistical challenges highlighting how materials will be stored and accessed.
- Section 3 will review the procurement strategy for the site with consideration given to sourcing materials and suppliers.
- Section 4 considers how operational efficiencies can be achieved through the management of deliveries and reducing impacts on local roads and residents.

- Section 5 provides details on the waste management strategy for the site.
- Section 6 sets targets and identifies how monitoring and review of the CLP will be undertaken.

2 Design and on-site Logistics

2.1 Development Phasing

2.1.1 The demolition and construction of the proposed development is anticipated to be split into 4 key phases over a projected 6 year period. These are indicated on the plan below.

2.1.2 Prior to the demolition and construction Phase 1, the proposed secondary residential access located towards the west of the site will be constructed and will provide construction vehicle access to Phases 1, 2 and 3.

2.1.3 The first phase on site will be the demolition of the buildings located in the Phase 1 area (located to the northwest corner of the site) and the construction of the residential units. The site clearance is projected to take approximately eight weeks, with construction taking a further ten weeks (approximately).

2.1.4 The second phase on site will be the demolition of the buildings located in the Phase 2 area (located to the southwest corner of the site) and the construction of the residential units. The site clearance is projected to take approximately eight weeks, with construction taking a further ten weeks (approximately).

2.1.5 The third phase on site will be the demolition of the hospital buildings located in the Phase 3 area (located to the centre of the site) and the construction of the residential units. The site clearance is projected to take approximately eight weeks, with construction taking a further ten weeks (approximately).

2.1.6 The fourth phase on site will be the demolition of a small number of buildings located in the Phase 4 area and the refurbishment of a number of existing buildings. This element of the

project is projected to take approximately 18 weeks. Construction vehicle access for Phase 4 will be via the existing access along the B152 St Ann's Road and the proposed secondary hospital access along Hermitage Road.

2.1.7 The total demolition and construction period is therefore projected to take approximately 40 weeks with an additional 32 weeks for demolition / site clearance. However, it is noted that if possible, site clearance of the following phase may take place during construction of the previous phase.

2.2 Access and Movement

2.2.1 Access to the site is currently via an all-mode access located along the B152 St Ann's Road. This access road measures between 4.2-6.4m in width and will be the primary access for the future residential element of the site. An additional all-mode access is located along Hermitage Road although this access is currently not in use. This access will form the future secondary access for the hospital.

2.2.2 Traffic generation assessments and swept path analysis undertaken as part of the Transport Assessment show that the existing hospital access is fit for purpose for the final development, including access for refuse collection.

2.2.3 Access to the site for construction vehicles will be via the proposed secondary residential access (for Phases 1, 2 and 3) and via the existing access along St Ann's Road and the proposed secondary access via Hermitage Road, for Phase 4.

2.2.4 Swept path analysis for all site access points show that a dumper truck (approx. dimensions – length: 23.5, width: 12.8m) and a large tipper (approx. dimensions – length: 33.5, width: 8.2m) are able to access the site, albeit they will take up the majority of the two-way access. The swept paths can be seen in Appendix A. It is proposed that this size of HGV is used during the construction phase as it is commonly used by many contractors and suppliers and is considered suitable for this scale of development.

2.2.5 Prior to the start of construction, a risk assessment will be completed by the developer to assess and mitigate any potential risks associated with the access proposals for the construction period.

2.2.6 Construction vehicles will enter and exit the site in a forward gear. The on-site turning area will be kept clear of construction materials throughout the construction period.

2.3 On-site Storage

2.3.1 Dedicated weather protected storage points will be provided on-site in order to minimise damage, loss and waste of materials.

2.4 Security

2.4.1 Materials are to be stored in on-site sheltered, secure locations away from on-site activities in order to avoid criminal damage to reduce the chance of the loss and waste of materials.

2.4.2 The site is currently accessible 24 hours a day and the Hospital will continue to be accessible during demolition and construction. Areas of the site under demolition or construction will therefore be fenced off using hording to restrict access to the public and out-of-hours access.

2.4.3 A manned checkpoint will be implemented in order to allow delivery vehicle access to the site and to keep a daily log of construction and delivery vehicles.

3 Procurement Strategy

3.1.1 A Procurement Strategy will be developed in order to demonstrate an awareness of the vehicle activity on site, the impacts associated with the construction of the development and measures to reduce the impacts. This will be undertaken by the main contractor and continually reviewed to respond to issues through the duration of construction.

3.1.2 The Strategy will consider how best to obtain materials and services through a commitment to safer, more efficient and more environmentally friendly distribution channels whilst retaining their cost plan.

3.1.3 Use of hauliers that are part of a best practice scheme, for example, the Freight Operations Recognition Scheme (FORS) set up by TfL, will be encouraged in order to minimise the number of suppliers so deliveries to site can be minimised.

3.1.4 Suppliers and sub-contractors with good environmental track records will be encouraged.

Local Suppliers

3.1.5 In line with the Procurement Strategy, local suppliers for construction materials will be sought, in order to reduce the impact of the development on the surrounding highway network, as well as promoting a more sustainable development. Reductions in delivery costs, fuel usage and pollution along with congestion may be achieved.

3.1.6 The promotion of local suppliers also benefits the local community with investments into local employers and services.

4 Operational Efficiency

4.1 Deliveries

4.1.1 To reduce the likelihood of congestion during both the site clearance and the construction phases of the proposed development, suppliers will be requested to consolidate deliveries to single vehicles where multiple orders are placed. Deliveries will also be requested to arrive outside of the network peak hours (0800-0900 and 1700-1800).

4.1.2 To manage delivery vehicles entering and egressing from the single access point, strict monitoring and control will be implemented to ensure each vehicle has a pre-arranged delivery time. These would be undertaken by a Banksman who would agree times and the size / type of vehicles with all contractors to ensure vehicles are not kept waiting at the site entrance point on the B152 St Ann's Road.

4.1.3 In addition, the Banksman will be required to aid in the manoeuvring of HGVs into and out of the site to minimise the number of manoeuvres required. The Banksman will also be required to assist whilst deliveries are taking place, helping to ensure the safety of pedestrians and cyclists to ensure no conflicts occur.

4.1.4 Demand smoothing techniques would be implemented, where possible, to reduce and peaks and troughs in the demand for materials over the construction period of the site. This would involve reviewing the programme of works on site and identifying how these can be 'smoothed' to reduce transport resources, materials and labour to complete the tasks.

4.1.5 In the instance that an abnormal load is required on site then the site manager will notify Haringey Council of the delivery. Contact details for Haringey Council are given below:

Haringey Council
Civic Centre
High Road
Wood Green
London
N22 8LE
Tel 020 8489 0000

4.1.6 Any damage to the public highway occurring as a result of an abnormal load requirement will be reported to the developer to allow the Highways Authority to be informed accordingly.

4.2 Construction Traffic Routeing

4.2.1 The strategic highway network can be seen on the plan below.

4.2.2 From the strategic highway network the site can be accessed via the A504 in the north, the A503 in the east and the A105 in the west.

4.2.3 The A504 runs between West Hendon in the west and Seven Sisters in the east, terminating at the A10 / A503 junction approximately 1.6km east of the Hospital. Within the vicinity of the site the A504 is a single lane, two-way carriageway road. The A504 connects to the A10 in the east which in turn provides direct access to the M25.

4.2.4 The A503 runs between Camden Town in the south west and Woodford in the northeast and measures approximately 14km in length. Within the vicinity of the site the A503 has two lanes

in each direction for general traffic, along with a third bus lane. The A503 connects to the A10 in the north which in turn provides direct access to the M25.

4.2.5 The A105 runs between Canonbury in the south to Enfield Town in the north and measures approximately 14km in length. Within the vicinity of B152 St Ann's Road the A105 (Green Lanes) varies between single and two lane carriageways interspersed with parking areas and bus lanes. The A105 connects to the A406 North Circular Road in the north.

4.2.6 There are no known restrictions along these routes that would prohibit HGV movements and therefore HGVs could travel from any direction.

4.3 Traffic Management

On-site

4.3.1 The effective management of vehicles on-site is an important part of the demolition and construction process to ensure the minimum impact on the surrounding highway network and local residents.

4.3.2 Deliveries and the routeing of HGV's will be set out prior to works commencing and will be managed through a strict booking system to reduce congestion.

4.3.3 To maintain the condition of the local highway network effective wheel cleaning facilities will be employed at the site entrance to reduce the potential for waste and materials to be deposited on the surrounding roads.

Off-site

4.3.4 Construction operatives and on –site employees driving to the site either by private car or van will park within a designated compound area. Site operative parking will be discouraged in the vicinity of the site.

4.3.5 The site is accessible by a range of sustainable modes and all employees will be encouraged to travel in this way.

4.3.6 The nearest bus stops to the site are located along the B152 St Ann's Road 30m west and 50m east of the existing access. The stops both consist of a shelter with seating and lighting and timetable information. There are also three tube stations and a railway station located within a 20 minute walk of the site. These are Green Lanes overground, Turnpike Lane underground and Seven Sisters overground and national rail.

4.3.7 Public transport timetables will be provided to on-site employees to encourage sustainable travel to and from the site.

4.3.8 The Banksman will ensure that manoeuvring HGVs are aware of any passing pedestrians or cyclists.

4.4 Road Trip Impact Reduction

Construction Trips

4.4.1 Currently there are no standards available for the estimation of the volume of construction traffic that will be generated by a development. Therefore this calculation has been based on the likely number of vehicles that will be required to construct the development using the data contained within the following table. It should be noted that these lists are not exhaustive and the number of vehicles generated may vary.

Item	Anticipated no. of vehicles
Builder – 6 days/week, 6 weeks, 2 vehicles	72
Plumber - 5 days, 1 vehicle	5
Electrician – 5 days, 1 vehicle	5
Deliveries	10
Total estimated vehicles per house	92
Total vehicles for housing construction within the development	**41,400**
Total vehicles for housing construction within the development - per phase	**10,350**

4.4.2 Based on the table above it is anticipated that approximately 41,400 vehicle movements will be generated by the demolition and construction of the development. Assuming this is carried out over 6 years, this equates to approximately 22 vehicles a day Mon-Sat.

4.4.3 Due to the nature of the hospital element and the fact that the majority of this section (Phase 4) of the development is likely to consist of refurbishment of existing buildings, it is difficult to estimate the number of trips to and from the site. However, it is predicted that the number of trips to and from the site is likely to be less than for each of the previous three phases.

4.4.4 The above figures are estimated and are considered to be robust. In reality, these figures are likely to be reduced due to the fact that:

- one delivery vehicle may deliver goods for a number of units during a single trip,
- a vehicle delivering goods to the site may also be able to remove unwanted material (reducing a trip on the local highway network)
- a number of construction workers (from the same company) are likely to car share,
- sustainable travel will be promoted to all employees.
- it is understood that where possible, demolition material will be re-used in the construction of the site, reducing the number of trips to and from the site.

Hours of Operation

4.4.5 HGV movements to and from the site will only operate during certain times to minimise their impact on the local highway network and on residents.

4.4.6 To avoid adding to local congestion all HGV access and egress from the site will take place outside of the network peak hours of 0800 – 0900 and 1700 – 1800 during weekdays and 1000 – 1300 on Saturdays.

4.5 Communication and Managing Change

4.5.1 It is not envisaged that any changes to the CLP will be required, but should any changes be necessary then the site manager will be required to communicate these changes to all employees.

4.5.2 Records of any changes to the CLP will be made and kept in the site office for reference and supplied to Haringey Council for their records.

Neighbours

4.5.3 The site is bound to the west by the rear garden fences of surrounding residential properties on Warwick Gardens and so contact will be established with the relevant occupiers and landowners to inform them of the construction works proposed.

4.5.4 Strong communication with local residents will be retained, with frequent updates on the progress of the construction of the development. The site manager will be responsible for providing this information and dealing with any queries raised on site. Any queries which cannot be resolved by the site manager will be passed to the developer to resolve.

5 Waste Management

5.1 Site Management

5.1.1 Waste generated from the refurbishment and demolition works will be carefully managed to ensure the re-use and recycling of materials meet or exceed the Mayor of London's target of 95% re-use and recycling.

5.1.2 It is estimated that a total of approximately 9,000 tonnes of waste could arise from construction of the development. However, because demolition and construction works are expected to be completed in phases over a number of years, the annual rate of construction waste generated will be lower.

5.1.3 The majority of construction waste materials will be typical of construction projects and include for example concrete, bricks, timber and metal. Hazardous materials are unlikely to arise during construction except in small quantities, such as residual paint and solvent waste.

5.1.4 Waste arising during construction will be dealt with on site or at nearby facilities.

5.1.5 The introduction of residential accommodation and retail uses will result in a minor increase in the operational volume of municipal waste arising from the site (when compared to the previous use as a hospital). This waste stream will be dealt with in accordance with established local authority processes. The new development will provide infrastructure sufficient to meet future national recycling targets of 50% municipal and over 60% commercial.

5.2 Site Waste Management Plan (SWMP)

5.2.1 In accordance with the Site Waste Management Plans regulation 2008, any construction project worth over more than £300,000 (excluding VAT) must prepare a Site Waste Management Plan (SWMP) before construction work begins.

5.2.2 Therefore, prior to the start of construction works, a SWMP will be submitted to and agreed with Haringey Council, which contractors will be required to manage during the construction phases on site.

5.2.3 The plan will set out the following:

- Types of waste expected to be produced
- Quantity of waste expected to be produced
- Identification of waste management action proposed including
  - Re-using
  - Re-cycling
  - Recovery
  - Disposal
- How monitoring and review will be undertaken.

5.2.4 The SWMP will be kept in the site office or on-site at all times for reference with its location provided to all contractors entering the site or carrying out any works associated with the construction.

5.3 Noise, Dust and Smoke Control

5.3.1 During the demolition and construction of the site it is likely that noise and dust / smoke will be produced. The hours of operation during the construction works will reduce the impact of noise and dust / smoke on local residents but the on-site risk assessments will identify any needs for the management of noise or dust / smoke production. It should however be noted that these impacts are temporary.

5.3.2 During excessive dry periods damping will be carried out as needed on site routes to reduce air borne dust.

6 Targets and Monitoring

6.1.1 A programme of monitoring and review will be implemented to assess the success of the CLP in reducing the impact of the proposed demolition and construction works on the local area. This will review the impact of the deliveries, HGV movements and waste management on both local residents and the local highway network.

6.1.2 The following targets are to be set for this CLP:

- No penalty charge notices as a result of delivery vehicles parked on St Ann's Road
- No damage to neighbouring properties or street furniture resulting from demolition or construction procedures
- No complaints from local residents resulting from demolition or construction procedures.

6.1.3 This monitoring process will provide the opportunity for construction operations and procedures to be reviewed and new management measures implemented if necessary, with monitoring records made available to Haringey Council upon request. Monitoring and review of the construction activity will be the responsibility of the site manager.

7 Summary

7.1.1 This CLP has been prepared for the proposed development of a residential-led mixed-use and modern healthcare campus and demolition of various buildings- at the existing St Ann's Hospital site, Haringey, London.

7.1.2 The CLP sets out how the transport impacts of the demolition and construction works on site are proposed to be reduced through good transport management and planning.

7.1.3 The demolition and construction of the proposed development is anticipated to be split into 4 key phases over a projected 6 year period.

7.1.4 Access to the site for construction vehicles will be via the proposed secondary residential (for Phases 1, 2 and 3) and via the existing access along St Ann's Road and the proposed secondary access via Hermitage Road, for Phase 4.

7.1.5 Materials are to be stored in on-site sheltered, secure locations away from on-site activities in order to avoid criminal damage to reduce the chance of the loss and waste of materials.

7.1.6 A manned checkpoint will be implemented in order to allow delivery vehicle access to the site, to keep a daily log of construction and delivery vehicles and to ensure strict monitoring and control.

7.1.7 A Procurement Strategy will be developed in order to demonstrate an awareness of the vehicle activity on site, the impacts associated with the construction of the development and measures to reduce the impacts. As part of the strategy, local suppliers will be sought, in order to reduce the impact of the development on the surrounding highway network.

7.1.8 Suppliers will be requested to consolidate deliveries to single vehicles where multiple orders are placed. Deliveries will also be requested to arrive outside of the network peak hours.

7.1.9 Demand smoothing techniques would be implemented, where possible, to reduce and peaks and troughs in the demand for materials over the construction period of the site.

7.1.10 Deliveries and the routeing of HGV's will be set out prior to works commencing.

7.1.11 To maintain the condition of the local highway network effective wheel cleaning facilities will be employed at the site entrance.

7.1.12 The site is accessible by a range of sustainable modes and all employees will be encouraged to travel in this way.

7.1.13 There are anticipated to be approximately 22 vehicles a day to and from the site.

7.1.14 Strong communication with local residents will be retained, with frequent updates on the progress of the construction of the development.

7.1.15 Waste generated from the refurbishment and demolition works will be carefully managed to ensure the re-use and recycling of materials meet or exceed the Mayor of London's target of 95% re-use and recycling. Prior to the start of construction works, a SWMP will be submitted to and agreed with Haringey Council.

7.1.16 A programme of monitoring and review will be implemented to assess the success of the CLP in reducing the impact of the proposed demolition and construction works on the local area.

Appendix A Construction Vehicle Swept Paths

Secondary Residential Access - Dumper Truck In

Secondary Residential Access - Dumper Truck Out

Primary Residential Access - Dumper Truck In

Primary Residential Access - Dumper Truck Out

Primary Hospital Access - Dumper Truck In

Primary Hospital Access - Dumper Truck Out

Secondary Hospital Access - Dumper Truck In

Secondary Hospital Access - Dumper Truck Out

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UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake his own investigation where the presence of any existing sewers, services, plant or apparatus may affect his operations.

St Ann's Hospital
Construction Vehicle Access and Egress
Dumper Truck

Mark	Revision	Drawn	Date	Chkd

Drawing Status: For Planning Purposes

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Secondary Residential Access - Large Tipper In

Secondary Residential Access - Large Tipper Out

Primary Residential Access - Large Tipper In

Primary Residential Access - Large Tipper Out

Primary Hospital Access - Large Tipper In

Primary Hospital Access - Large Tipper Out

Secondary Hospital Access - Large Tipper In

Secondary Hospital Access - Large Tipper Out

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Architect
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St Ann's Hospital
Construction Vehicle Access and Egress
Large Tipper

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