

# Construction Management Statement for 145/147 Camden Road

# **Assumptions and Strategy**

Prepared by Colin Ingledew December 20<sup>th</sup> 2013 Updated by Paul Lindsay FEBRUARY 18<sup>th</sup> 2016

Documents available and used in review;

- Proposed scope of works for Iceni projects (Sustainability and Energy proposal)
- Design and Access Statement (May 2013) Paul McAneary Architects Limited
- Architects Drgs CP01, EX01, EX02, GA01, GA02, GA03, GA04, GA05, GA06, GA07, GA08, GA09, GA10
- Structural Engineers Drgs 10 Rev P2, 11 Rev P2, 12 Rev P2, 13 Rev P2, 14 Rev P2, 15 Rev P2, 21 Rev P2

Two separate site visits were made to review the site and the immediate environment access to site on both occasions was not possible. Further visits to the site have been possible since the original report was issued in January 2014

The purpose of this document is to demonstrate how the proposed development might be constructed given the constrained nature of the site and the immediate boundary conditions. Whilst the site is challenging in a number considerations there is nothing that cannot be overcome with further engagement and negotiation with the stakeholders involved.

In the time available and given the limited nature of the brief direct engagement with the relevant stakeholders has not taken place. Subsequent discussion will only help to refine the proposal and secure a mutually acceptable solution to all those involved in the realisation of the development.

There have been two key pieces of information that have been communicated verbally and these have been significant in the development of the Construction Management Statement, namely;

- 1. The Cantelowes Gardens access **cannot** be used to gain vehicular entry on to the site
- 2. There will be no suspension to the Red Route restrictions during the construction period

The works have been described in terms of distinct phases this is purely for reference purposes and it is assumed that the construction process would be a continuous sequence regardless of the procurement route finally selected. For information an indicative



programme has also been included in the report - please note this is for further discussion as there have been a number of assumptions incorporated into the logic of the programme that the client, design team and eventual contractor may not adopt.

#### APPENDIX REPORT TO BE ISSUED TO LB CAMDEN

#### Phase 1 Pre Construction - Secure Site & Protect Immediate Boundaries

It is proposed that the client/delivery team will invite the local interested parties to attend a regular meeting to discuss the local developments and allow any issues to be identified and options explored. RC believe that a full and open discussion can mean that all parties involved appreciate the circumstance and can work together to mitigate any impacts as the project develops. Eventually RC would encourage the meetings to take place on site but prior to establishing suitable facilities an alternative location will be required. The local Girls School may be prepared to hire a room to allow the meetings to take place?

As part of a successful project delivery RC would seek to inform the local community, particularly local children of the potential dangers of construction sites and this may also offer the opportunity to involve the local school in some form of monitoring role with associated site visits. This would be discussed with the local Girls School Head Teacher (Elizabeth Kitcatt) and RC suggests that this forms part of any on-going communications with the local community.

If as communicated there is to be no opportunity to utilise the Cantelowes Gardens entrance for access to the site and the car servicing business is to remain operational during the construction process then the only access onto the site will be via the existing dropped kerb. Given that the Camden Road is a Red Route this will dictate the delivery times of the materials and muck away process. It will further necessitate a number of weekend working sessions with associated lane closures (to be negotiated in advance of their requirements).

The boundary conditions dictate that appropriate crash decks (in accordance with the relevant specifications and standards) will be constructed with full scaffold designs to justify their assembly. Over the Autodeutsche building and on the Network Rail track land the crash decks will be assembled to only provide a mechanism to capture any loose debris that may inadvertently be dislodged outside the site boundary.

This provision is very much a final level of defence as the site processes and protocols will be designed to prevent any such occurrences during normal working. (\*See marked up drawing - Appendix A). It is hoped that a discussion with the responsible parties will allow part of the footpath in front of the site on Camden Road at ground level to have located the proposed temporary welfare facilities (office, Canteen and toilet facilities etc.). Above these it is proposed to create a loading deck for materials distribution and potential goods hoist. Any such site set up will maintain access to the utility positions for any essential servicing or repairs.

The nature of the site restricts the risk of unauthorised access to the site except for the boundary with the Cantelowes Gardens which gives further weight to a strip of the



Gardens.. On the Camden Road elevation a similar protective fan will be erected but the height restrictions for this will mean this is assembled later in the process after the piling and steel frame are complete.

#### APPENDIX REPORT TO BE ISSUED TO LB CAMDEN

### Phase 2 Construction - Complete Piling & Assemble Steel Frame

The historic nature for the site as a petrol filling station suggests a high probability that there will be hydro carbon contamination of the existing ground. Given the small and restricted nature of the site with no viable space for self-venting to atmosphere it is likely that all materials will need to be tested for contamination and where necessary removed to an approved dump. It is unknown the extent or robustness of historic site details regarding buried services but prior to any works on site it will be necessary to carry out an exhaustive survey of the site to determine the location of any buried services.

It is assumed that a displacement piling solution is proposed using a specialist contractor (lump sum contractor design solution) to determine the depth of the piles. The Site investigation and the loadings for the piling will be determined by the Structural Engineer.

It is proposed that the existing reinforced concrete slab is retained to act as the piling mat with local break out and probing to ensure free piling capacity. It will be necessary to have very limited number of muck away lorries on to site to remove the risings and whilst the slab will allow the site to remain reasonably clean each vehicle will be subject to inspection and where necessary any debris or soil removed from the vehicle prior to exiting the site. The vehicles used for much away will be standard 20 tonne 8 wheeled vehicles (max 15m3).

The use of displacement piling solution will be advantageous because of the minimal vibration and noise disruption (but this will be subject to Structural Engineer's confirmation). The utilisation of the railway abutment will potentially limit the requirement for piles on the West elevation to where foundations for steel frame are required piles and pile caps will be constructed. This process as well will allow the location of the steel frame foundations (local pile caps are assumed).

The piling works will be closely monitored given the presence of the existing fuel tanks that currently don't clash with the new substructure and foundation design however careful probing will need to take place prior to the piling process. The Autodeutsche building will be used during the construction phase for the storage of materials and temporary accommodation for the contractor and his supply chain.



## APPENDIX REPORT TO BE ISSUED TO LB CAMDEN

## Phase 3 Construction - Complete Foundations & Steel Frame Erection Options

The completion of the perimeter piling allows a choice to be made regarding how the process subsequently follows which means greater flexibility to the successful constructor.

Complete the pile caps and steel frame foundations and allow the concurrent assemble of the steel frame as the excavation is progressing concurrently (from a review of the drawings this would also require a degree of redesign). This option allows for the optimum construction programme but would increase significantly activity on site.

This option will be fully discussed with the design team but it is recommended that the ground floor slab be strengthened to allow vehicle loading again this capacity would introduce an element of flexibility within the delivery regime.

Immediately following the removal of the buried tanks and the completion of the excavation the foundations for the site crane (in the location of the building lift shaft) will commence. Subsequently the ground floor slab and the reinforced concrete waterproof foundations will commence. Location of the waterproof readymix concrete will be via a mobile pump and this will be located in Camden Road and by necessitate will require agreement with the local highways authority (either out of hours or at weekends).

The construction and subsequent curing of the crane base will then allow the erection of a suitable tower crane to be arranged. For the sake of this paper it is assumed that a luffing jib crane will be utilised but the advice of specialist crane providers will be sought by the contractor. The luffing crane allows for restrictions on over sailing by the crane and would be essential given the location of the site and its immediate neighbours.

As mentioned earlier and subject to agreement it is potentially feasible to create a loading point for vertical materials distribution on the East elevation via a material hoist and utilising window locations on that elevation. This option would increase the capacity of the site for materials delivery with no detrimental impact on the location or the immediate environment. It is proposed that delivery lorries will be called to site outside of the red route times (0700-19.00 hrs) and would park adjacent to the cross over locate on for unloading/loading during the night. It is also proposed to use the adjacent building, which is owned by Autodeutche, as storage for construction purposes.

#### APPENDIX REPORT TO BE ISSUED TO LB CAMDEN

## Phase 3 Construction - Complete Foundations & Steel Frame Erection Options cont

During these manoeuvrings the traffic management team will position chapter 8 compliant road signage to allow the traffic to be controlled and mitigate disruption (traffic and pedestrians alike).

Stakeholder and Neighbour Engagement



The establishment and regular meetings of a project delivery community group has already been touched on earlier in the paper. The primary purpose of this group is to keep the parties impacted by the delivery process informed as to the plans of the site team and up-date any variance from the prescribed plans furthermore the forum will allow any concerns to be raised and solutions explored before they escalate. The nature of the site and its associated safety screening will from the very outset require a clear and comprehensive dialogue. This clarity of the planned works will mitigate any surprise and allow neighbours to understand the planned sequence of activities as the building envelope evolves.

The assembly of the steel frame and associated Vierendeel truss or similar product construction will require out of hours delivery and assembly. The weight of the trusses will determine if associated additional mobile carnage and lane closures are required. The progressive column truss and floor construction will systematically create the platform for the next level of construction to be assembled. At the appropriate stage a crash deck will also be assemble to protect pedestrian and traffic alike on the Camden Road elevation. The design of the steel frame creates the opportunity for the cantilevered sections to progress as the building frame is assembled so that at 2nd floor level on GL 5 (A-D) the column assembly creates the cantilever potential which continues as the floors are installed, culminating in the installation of the truss sections to the fifth floor allowing the columns on GL 8 (A-D) to be assembled. The subsequent installation of the final level of hollow rib deck and subsequent RC pour creates the substrate for the roof construction to commence. As each level of the frame is installed so the appropriate edge protection will be fixed.

#### APPENDIX REPORT TO BE ISSUED TO LB CAMDEN

#### Phase 5 Construction - Complete External

#### Envelope & Fit Out

The fit out of the individual units will require the completion process to flip and allow the top down finishing sequence to commence as soon as the majority of the materials have been delivered to the 5<sup>th</sup> floor the goods lift will be progressively dissembled and the outer screen assembled from the walkway.

#### Phase 6 Construction - Reinstate Immediate Environment

Whilst the fit-out works and subsequent testing and commissioning works will progress internally with minimal impact on the external environment it will be opportune to remove the existing boundary conditions and make good all finishes and external details. The creation of the main entrance lobby may require a local scaffold licence with restricted pedestrian access but this will need to be assessed following the progressive fit out works.