



25th January 2022

T2 Water St, Manchester.

Application Reference Number **LPA Ref: 126648/FO/2020**

Condition Reference 14. Construction Management, Methodology and
Programme Plan (information to Discharge Condition)
Rev A

1.0 Introduction

This document describes the proposed methodology of construction and the programme duration for key activities to be carried out on the site at T2 Union.

The main aim throughout the build is to minimise impact on the surrounding properties and businesses as well as on the local highway and public spaces adjoining the development.

The following narrative explains in detail this methodology and timescales envisaged at the time of planning prior to more detailed proposals as we commence on site. This detailed proposal will include Project Management, Construction phase Health and Safety, Environmental management, and impact as well as site waste management, logistics and traffic management.

2.0 Emergency Contact and Public Relations

During the construction of the development Renaker will ensure that on the site hoarding and on signage by the main gates an emergency 24 hr a day telephone number will be displayed. This number is **0845 076 6405**. Details of the call will be handled by our trained and briefed customer care call centre and the correct Renaker Build Ltd member of staff notified.

If complaints are received, these will be dealt with and corresponded back to the complainant within 12 hours depending on the time of receipt. Acknowledgment of the complaint will be within 12 working hours, with follow up correspondence as required.

3.0 Programme

The construction programme will span a period of 160 weeks, within which there will be elements of ground works, frame construction, façade cladding and internal fit out. The plan is to complete the concrete frame elements of the development in as short a programme period as possible as generally these activities constitute the noisiest and most disruptive works and the shortest period therefore, minimises the effect on local businesses.

The proposed key dates and durations are shown below

- | | | |
|--------------------------|---|-----------|
| 1. Superstructure works | - | 19 Months |
| 2. Façade works | - | 23 Months |
| 3. Fit out to completion | - | 25 Months |

The above durations are shown as items and certain elements will run concurrently to achieve the 160-week overall development period.

4.0 Hours of Work

The above durations and programme are based upon normal working hours in line with Manchester City Council Guidance of 7.30hrs to 1800hrs Monday to Friday and 08.30hrs to 14.00hrs on Saturdays. Any further out of normal hours working will be generally limited to internal fit out operations.

We acknowledge the proximity of the neighbouring businesses and other construction sites. As such we will always endeavour to ensure the programme and working hours are adhered with respect to our neighbours.

During times when the site is not in operation (i.e., outside of the hours stipulated above or during public / bank holidays) then a full-time security guard will be present on site. The guards' duties involve regular patrols around the development and the site compound as well as the perimeter hoarding.

5.0 Construction Methodology

The following is a brief overview on the methodology to be adopted for the construction and fit out of the residential and communal elements of the development. The section also looks at general logistics as well as traffic management for the movement of materials to and the disposal of waste from the build.

5.1 Site Logistics

The site forms part of the wider Manchester Goods Yard Development and is opposite the T1 Union Development.

Hoarding will be installed to the perimeter of the development using a combination of traditional painted timber hoardings and high visibility "red and white" steel hoardings if required.

The existing footpath on the T2 site side of Water Street is already closed and hoarded to the gutter line on Water Street. It is envisaged to establish an access onto the site a vehicle gate will be formed into the hoarding at the existing cross over entrance. Gates will be permanently manned with trained, vehicle banksmen controlling all vehicle movements in line with schedules issued by the logistics manager. As RBL are also delivering T2, all works will be co-ordinated internally to aid with the running of the sites.

The public will continue to utilise the existing footpath.

We have engaged in with MCC highways department, to gain the required license to erect our hoarding around our compound at Street level.

Any additional licences associated with the construction phase will be agreed with Manchester City Council highways department and relevant diversion / notification signage put in place.

It should be noted that we have strong working relationships with MCC Highways and will fully comply with their requirements and ensure that at no time do we compromise the access requirements of either Laing O'Rourke, Lend Lease or any other highway user who are also utilising Water Street for key deliveries.

Appendix 1 of this document contains our site layout and site access plan.

Pedestrian access across to the site will be via a new turnstile positioned at and within the perimeter hoarding. It is critical that we always have a definitive list available of personnel on site to comply with emergency procedures. The turnstiles utilise biometric access controls thus restricting public and unauthorised access.

There is no parking available on or adjacent to the site, thus parking arrangements will be made for staff either on one of Renaker's other local sites or by leasing spaces on one of the local car parks. Parking on the highway will be restricted to deliveries about to enter the site for offloading and at no point will this compromise 3rd party access.

As part of striving to contribute to the local, national and world wide environmental strategies, and become an environmentally friendly contractor, our own staff, as well as those from sub contractor's and visitors will be encouraged to use the offering of public transport serving the development. This may include the major bus routes running in to the nearby city centre Bus terminus, or the rail link at both Salford and Deansgate stations, (both of which are a short walk away). Those individuals who have no other choice but to travel by private car will be encourage to car share and this will form part of our main site induction and sub-contractor tender documentation.

Material storage will again be shared with our existing Greengate development utilising the warehouse facility adjacent to the Greengate offices. Full time warehouse staff are employed to ensure that all vehicle movements to and from this facility along with the management of the offloading process are safely managed to minimise any interface with the public.

The ground floor slab will be used for storage from commencement on site, using a small low height manitou, fork lift truck, operated by a certified, directly employed driver. All our site forklifts are taxed and insured to operate on the highway and on the water street site this may be necessary due to the highly restricted storage areas.

Gatemen will additionally be responsible for keeping the highways clean of any detritus emanating from the site. Road sweepers will be utilised if required to maintain the highway. Should a road sweeper be utilised it can be assisted via our own “scarab” machine will be transferred from our Greengate warehouse to attend.

All loading and unloading of material deliveries will occur within the extended site boundary or at the warehouse storage facility.

Waste materials will be placed in skips, and these will be removed on a regular basis. Food waste from canteens and eating areas will be contained within large wheeled lidded bins and these will be exchanged weekly under a separate order from the general site waste. This eliminating the risk of rats and other vermin. Additionally, a pest control operative will visit the site regularly to assess and control the risk. This will be especially important on this site due to its proximity of the river where pests can be common.

The site will employ security guards during non-working hours to prevent and discourage nuisance. Regular patrols will take place throughout the shift. As an additional measure, CCTV will be installed to elements of the site and compound to aid early identification of potential issues.

5.2 Crane

It is our intention to utilise a single luffing tower crane erected adjacent to the main tower.

3rd party checks and certification of this base will be attained before erection progresses.

This will be erected to a height of 72m HUH and with a jib length of approximately 55m. The crane will climb once following the introduction of a temporary tie to its final height of 108m HUH.

The design and layout of the crane will be submitted to Manchester City Council, highways Dept for information prior to erection. The length of the jib allows the servicing of the entire site whilst also allowing the unloading of wagons from within the narrow section of road closure. It will not be permitted to lift loads above a live carriageway. A SMIE system will be adopted to prevent this, as well as ensuring there is no oversailing of adjacent land and properties. The tower crane will have several flood lights installed on its mast that will be active during working hours in the wintertime only. These will be switched off at night-time with low level lighting providing security and access lighting for our security guard.

5.3 Wheel Wash

Given the logistical restrictions of the site it will not be possible to utilise a wheel wash. However, as we intend to manage site cleanliness utilising:

1. Dedicated gateman at each access position who will ensure the standard and cleanliness of each vehicle is to the correct level before allowing it to exit site.

2. A jet wash unit located by the main exit gate for use by the gate man to wash down wheels, vehicle body and undercarriage. This wastewater gets collected and recycled and cleansed in an approved silt buster system prior to discharge to public drains in accordance with a UU discharge licence.
3. As required sweeping of the surrounding highway by road brush to maintain a clean and debris free highway (note – this is the last resort measure and mitigation measures above should be employed to prevent the need for external highway cleaning)

5.4 Construction

The works generally comprise of the following

- Installation of tower crane
- Construction of in-situ concrete frame, concrete stair cores and floors to roof level by concrete pump and jump form construction. Activities fully enclosed by climbing screen system.
- Waterproof Roof coverings
- Installation of aluminium and glass cladding to facades including windows and grilles
- Installation of external hoists to facilitate the movement of site operatives and materials to the upper floors.
- Installation of internal mechanical and electrical systems including 4 main lifts
- Fit out of apartments including walls, floors, ceilings, bathrooms, kitchens, and final finishes
- Removal of Tower crane
- Installation of permanent roof mounted “crane” system (BMU)
- Completion of internal finishes to communal space
- Completion of communal external space and links
- Decant from site and full occupation of the development

5.5 Infrastructure

The works generally comprise of the following

- Internal and rainwater drainage connections.
- Electrical connection and formation of new integrated substation with transformer.
- Mains water connection to main situated in Water Street.
- Gas connection to existing main situated in Water Street.
- Telecoms and data infrastructure connections, to water Street footpath, requiring new draw pits to be determined.

5.6 Traffic Management Plan

Whilst the T2 development relies entirely on deliveries along Water Street, it is evident from the construction activities that are using the highway that the overall traffic use has not been overly disrupted. Significantly with water Street this not providing public access beyond the Victoria and Albert hotel, public use is minimal. A full traffic management plan will be developed to address the following issues

- Integration of traffic management scheme with surrounding construction developments and calming measures
- Access, egress, drop off and turning areas
- Additions, alterations and positions of any temporary signage, road markings or protection barriers.
- Pedestrian access around site and relevant protection, lighting, and signage schemes
- Segregation of plant, materials and pedestrians on site and safe access routes between welfare and site areas.
- The provision of car parking, off and on site, and public transport strategy for staff and operatives.
- Loading bays, hoist positions and tower crane areas.
- Any other measures to ensure the safe integration of pedestrians, cyclists, and road users both on, off and surrounding the development.

In preparation of the above document, Renaker Build Protocol of timed and booked deliveries, and off-peak deliveries will be incorporated, managed by a full-time logistics staff member.

5.7 Deliveries

The key delivery routes for the major materials and items of plant will be via Quay Street and Trinity Way. We will endeavour to deliver outside of peak traffic hours to minimise local disruption and the normal workings of the surrounding properties.

As set out above, deliveries will be taken within the site access or within a possible pull in zone adjacent to the T2 hoarding.

6.0 Health and Safety

6.1 CDM

The project will be carried out in accordance with the Construction, (Design and Management) Regulations 2015, and all other relevant legislation and guidance

The applicant has been appointed as Principal Contractor by the client, VITA properties and can demonstrate competency in the management and execution of Health and Safety. Renaker Build Ltd have the correct management skills and procedures in place to control the activities of a complex, high rise city centre construction project.

As demonstrated by the engagement prior to site commencement, the Principal Contractor has been involved in the planning of the project and can influence the detailed design to remove construction and residual safety risks.

The Principal Contractor will produce a Construction Phase Health and Safety Plan prior to works commencing on site that will be reviewed and signed off by the client and their Principal Designer. This document will form the basis of the procedure for managing health and safety during the

construction phase and will be regularly reviewed by both RBL and the Principal Designer to ensure relevant risks are managed where these cannot be eliminated, as the work progresses.

6.2 Construction Materials

There have been no materials at this stage of the design process which are considered to generate a risk to construction personnel which will be unfamiliar to RBL as an experienced contractor. The hazards arising from the use of wet cement, epoxy resins and solvent based paints can be expected and appropriate measures to minimise any risk will be put in place by Renaker Build Limited.

6.3 Site Security and Safety

Protecting the public from risks to their health and safety arising from the construction work is a high priority. Every care will be exercised to prevent risk to members of the public and appropriate action, including the erection of perimeter fencing to a specified standard, will be taken.

Vandalism and theft of plant, equipment, materials and fuel is possible throughout the duration of the development. Renaker Build will take appropriate action, as described in previous sections, to ensure the site is secure from unauthorised access at all times. As described previously, the site will have metal turnstile access system controlled by an individual biometric system. In the event of an operative being removed from site the system can be updated to prevent this operative being able to access the site in the future.

We would consider the provision of CCTV if required to main site points and compound areas to assist in the prevention of unauthorised activities.

7.0 Environmental Management.

An Environmental Plan, in line with the Renaker Build Ltd environmental management system, will be developed to address and monitor the following issues.

- Applicable environmental legislation
- Pollution
- Nuisance (Noise, vibration, dust, emission and light)
- Public Relations.

7.1 Environmental Legislation

Applicable environmental legislation will need to be identified in a register, to ensure that appropriate systems are put in place to comply with the legal requirements in question.

7.2 Pollution

Renaker Build Ltd will establish procedures, to ensure the prevention of water and ground pollution, relating to the following risk activities.

- Concrete works (including washing out of concrete delivery vehicles and pumps)

- Storage and movement of fuels, oils, chemicals, and other such fluids
- Cleaning (including plant, machinery, and wheel washing)

It is particularly relevant on the T2 site given its adjacency to the River Irwell, that the environmental risk is considered. The risk of an Environmental incident is significant as surface water discharge from the site is directly into the canal basin and then makes its way to the river. As such it may be necessary to protect the Surface water manholes from site generated water discharge via temporary interceptors and catch pits. This will be assessed in more detail as the environmental plan is developed in detail.

7.3 Nuisance

The principal concerns relating to the nuisances of noise and vibration come from construction activities such as demolition, excavation, cutting, breaking out and plant movements. Mitigation measures will be considered to include low noise options, noise attenuation techniques and carrying out certain activities during agreed hours of the day.

The principal concerns relating to air quality and emissions from construction activities in the form of dust and fumes. The degree of dust deposition is usually dependant on the nature of the works. Increased levels of dust are most likely to occur during site activities related to demolition (of which there are limited planned on site) piling, moving construction traffic and ground works.

Blown dust from upper concrete slabs can also become a nuisance for adjacent properties. To mitigate this a regime of damping down may be required and all slab edge protection will need to be sealed to the slabs to prevent either wet or dry residue being blown onto adjacent buildings.

In order to minimise the dust and fumes, Renaker Build will consider the following;

- Providing a hard surface where vehicle movements occur
- Control measures and dust suppression techniques
- Minimising stock piling and positioning in a manner that reduces risk of dust arising through wind action
- Measures such as screening and covering
- Installation of appropriate body wash facilities
- Keep adjacent roads and pavements clean
- Ensure plant is turned off and not left running when not in use
- Selection of electrically powered plant where possible in lieu of diesel or petrol plant
- Ensuring no waste or unwanted construction materials are burned on site

Vibration risk will be managed by the selection of correct techniques and the monitoring of these techniques to ensure actual performance is aligned with theoretical principles.

7.4 Dust Management Plan.

The main hoarding will be a combination of solid construction along with perforated screening. This will assist in controlling the amount of dust that could leave the site.

Initially dust could be generated by minor excavation operations establishing working platforms. Dust suppression (damping down) may be necessary during this activity due to time of the year (predominantly summer) when this will be carried out.

Other activities that could generate dust and the mitigation required are:

- Concrete frame construction. Limited amounts of dust, possible damping down if required
- Glazed façade. Cast in items for fixings will eliminate drilling.
- Concrete drilling Early design works to ensure element cast into slabs.
- Waste / skip management All skips will be covered ahead of any movements off site.

7.4 Public Relations

The contractor will ensure that contact is made and maintained with local businesses to ensure they are kept up to date with general progress on the site. This is especially important for major work elements such as concrete works and tower crane erection and removal due to our proximity to adjacent properties. The key interface here will be the Victoria and Albert Hotel, located on Water Street, who will inevitably have numerous deliveries

Additionally, contact will be maintained with representatives from the adjacent developers and contractors who are active in the area. These include but will not be limited to:

- Laing O'Rourke
- Lend Lease
- Allied London.
- Numerous fit out contractors who will be deployed on the MGY site

As identified in section 2 RBL make a 24/7 phone number available to facilitate communication of any complaints. These are routed back to the site management team from the head office thus ensuring that business leaders are also aware of any complaints and can ensure that they are dealt with in a timely and professional manner.

Within our induction process we make specific reference to interfaces with both the residents in the adjacent block and the passing public, and how we expect our site operatives to be always respectful and well mannered. Clear references on employers PPE can assist us to identify perpetrators of any complaints, and these can be dealt with via our internal disciplinary process that can ultimately lead to removal from site.

We will also make every effort to ensure local footpaths are kept clean of any rubbish that could emanate from our construction site. This will be done via regular inspections and a cleaning regime, as necessary.

8.0 Waste Management Strategy

In line with the “Site Waste Management Plan Regulations 2008”, a site waste management plan (SWMP) will be developed by the principal contractor and shared with Manchester City Council.

8.1 Operational Waste Removal

Waste generated during the construction phase is to be cleared daily to a main holding skip. Each floor plate will have a designated waste area that will see bins located within it that can be emptied at the end of each shift. During high waste activities, such as dry lining, this waste removal may need to occur several times a day via the hoists and as such general operatives will be employed to ensure this will occur. Hazardous waste will be stored and disposed of separately, but main waste will enter a common skip where our supplier will sort at their transfer station before issuing us recycling data.

To reduce the volume of waste sent to landfill, waste from site will be segregated at the waste transfer station into the following categories.

- CAT A: Hazardous waste – Paint tins, mastic etc
- CAT B: Metal
- CAT C: Timber
- CAT D: Plasterboard
- CAT E: General Waste

All our carriers of waste will hold a valid waste transfer licence and provide certification to the main contractor for all elements of the process.

9.0 Noise and Vibration

9.1 Noise

See Appendix 3 for a summary of the Identification and evaluation of local potential receptors during construction including the threshold noise values.

Using calibrated noise monitoring equipment, we will record the noise generated during the heavy construction stage made by plant and activities on site against the threshold levels identified in Appendix 2. Noise will be monitored continually throughout the working week, this assessment will be on-going (Mondays, Wednesday, and Fridays) throughout the project, and Renaker will do everything practicable to mitigate any excess noise. If the noise levels are exceeded, the works will cease, and appropriate mitigation measures installed.

Monitoring and Control.

Considerations and mitigation measures will be implemented as follows.

- General maintenance- plant will be maintained regularly to aid in reducing noise and vibration.
- Training and communication of operatives in correct use of machinery.

- Attitude- of operatives to the making of noise to be addressed, to have an understanding that work activities influence those around not just operatives but residents and the public. This will be achieved through toolbox talks and daily activity briefings.
- Hours of operation and activity- consideration to the time of day for particularly noisy activities will be made. E.g., Carry out these activities in the afternoon rather than 1st thing in the morning.

Noise will be considered regularly throughout the planning of site operations, and much consideration will be given to our methods of installation and location of noisy activities. For example, we have a requirement to fix cladding brackets on slab edges, this involves bolting them to the concrete slab. We are proposing casting channels into the slab in lieu of drilling at source, this will dramatically reduce noise, dust, and vibration impacts.

The principal concerns relating to the nuisances of noise and vibration come from construction activities such as demolition, excavation, cutting, breaking out and plant movements. Mitigation measures will be considered to include low noise options, noise attenuation techniques and carrying out certain activities during agreed hours of the day.

Examples of these low noise options and mitigation measures are as follows: -

Screens surrounding the concrete slabs and proprietary formwork wrapping the stair and lift core to minimise noise break out from concreting activities

Figure 9.1.1 – Screens surrounding concrete works



Figure 9.1.2 - Acoustic screens used to shield metal pipe cutting or concrete cutting activities on site



Figure 9.1.3 - Proprietary acoustic cutting stations for cutting metal wall studs

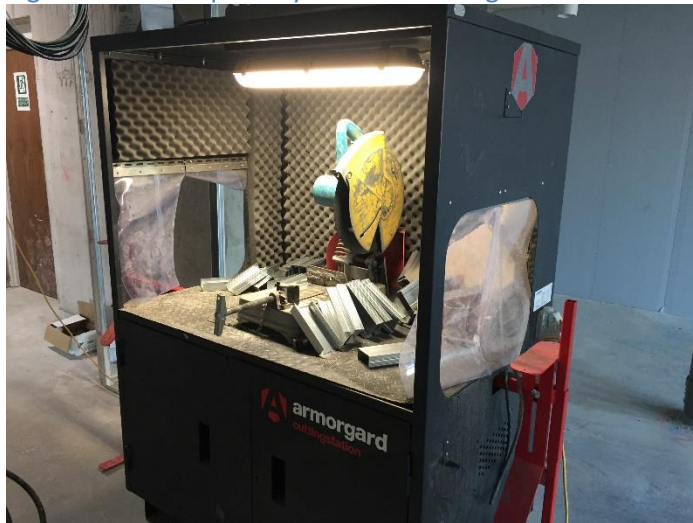


Figure 9.1.4 - Gas fork lifts and electric pallet trucks in lieu of diesel forklifts



Other examples are described in more detail later in this section

Good relations with people living and working in the vicinity of site operations are of paramount importance to Renaker. Early establishment and maintenance of these relations during site operations will go some way towards allaying people's fears. We hope to maintain good relations by keeping people informed of progress and by treating complaints fairly and expeditiously. Renaker will appoint a responsible person to liaise with the public and external stakeholders.

Training

Operatives will be trained to employ appropriate techniques to keep site noise to a minimum and should be effectively supervised to ensure that best working practice in respect of noise reduction is followed. All employees should be advised regularly of the following, as part of their training:

- a) The proper use and maintenance of tools and equipment.
- b) The positioning of machinery on site to reduce the emission of noise to the neighbourhood and to site personnel.
- c) The avoidance of unnecessary noise when carrying out manual operations and when operating plant and equipment.
- d) The protection of persons against noise.
- e) The operation of sound measuring equipment (selected personnel).

Persons issued with ear protection equipment should be instructed on its use, care, and maintenance. A programme of monitoring will be implemented to ensure that condition limits are not exceeded and that all the relevant recommendations are met.

General

There are many general measures that can reduce noise levels at source such as:

- a) Avoid unnecessary revving of engines and switch off equipment when not required.
- b) Keep internal haul routes well maintained and avoid steep gradients.
- c) Use rubber linings in, for example, chutes and dumpers to reduce impact noise.
- e) Start up plant and vehicles sequentially rather than all together.

The movement of plant onto and around the site should have regard to the normal operating hours of the site and the location of any noise sensitive areas as far as is reasonably practicable. The use of conventional audible reversing alarms has caused problems on some sites and alternatives are available. Audible reversing warning systems on mobile plant and vehicles should be of a type which, whilst ensuring that they give proper warning, have a minimum noise impact on persons outside sites.

Enclosures

As far as reasonably practicable, sources of significant noise should be enclosed. The extent to which this can be done depends on the nature of the machine or process to be enclosed and their ventilation requirements. The use of screens will be implemented where it is deemed that the activity is too loud and too prolonged, and it is safe to do so.

Examples of mitigation strategies and noise attenuation.

All generators used on site will be contained within noise reducing containers see images. This reduces the noise by 10 decibels.

Figure 9.1.5 Generator noise levels uncontained.



Figure 3.4.8 - Generator noise levels contained.



Above ground works i.e. frame construction, will take place behind safety screens, these screens will go some way to attenuating noise levels. The concrete cores will be constructed using a fully encapsulated “jumpform” climbing system, this will again attenuate a significant amount of noise breakout. (See pictures and example previous)

Concrete pumps will be in operation during construction, these pumps will be serviced regularly to make sure they are running optimally thus reducing noise levels. During operation all hatches will be closed to attenuate noise levels. As a secondary measure a wall of sound barrier or echo blankets will be used to reduce noise levels further. Vibration readings will be taken during pumping operations and All concrete pumping plant will be strategically planned to be located on the opposite side of site to the most sensitive receptors. A solid timber hoarding is in place around the perimeter of the site which will also attenuate noise levels.

9.2 Vibration

There are no major sources of vibration in reasonably proximity to the site. A train line is located approximately 150 meters from the proposed development. The distance is such that there will be considerable attenuation of ground borne vibration and thus it is not considered necessary to conduct measurements of train generated vibration at and around the site.

CFA piling is the preferred method of piling, this is the least intrusive piling method and will be monitored closely through the activity. Meeting with the V&A are already in progress to keep the hotel management informed of all current and forthcoming activities.

No Adverse comment would be expected in any area of the proposed development due to the existing levels of vibration via other sources such as road vehicles.

Appendix 1

Proposed Site and Access Plan



VT2 Appendix 2 – Noise Thresholds

RBL Reference: Fisher Acoustics T2 Environmental statement (Noise and Vibration)

Construction

There are, or will be, several potentially sensitive receptors around the Site during the Construction phase. The closest sensitive receptors to the Site are as follows:

- Residential Dwellings on Stanley Street ('The Slate Yard') and on Quay Street ('Left Bank').
- Offices within the St John's Masterplan area ('Manchester Goods Yard', 'The Bonded Warehouse' and 'Globe & Simpson').
- Hotels on Water Street (Marriott) and on Great John Street ('Great John Street Hotel')

The buildings within the St John's Masterplan area are under construction at the time of writing but are expected to be complete prior to completion of the construction of the structural frame of Union. Therefore, the St John buildings are expected to become sensitive receptors during the Union build programme.

There is the potential for environmental noise effects at the above receptors from the following during the construction phase of the project:

1. Temporary addition to traffic flows on local roads due to construction traffic
2. Construction of Proposed Development

Construction noise impact at the following sensitive receptors has been assessed:

- A. Dwellings on Stanley Street ('The Slate Yard') (120 metres from Site)
- B. Dwellings on Quay Street ('Left Bank') (180 metres from Site)
- C. Hotel on Water Street ('Marriott') (40 metres from Site)
- D. Offices within the St Johns Masterplan area ('Manchester Goods Yard') (10 metres from Site)

The identified distances above are the distances from each receptor to the closest point of the Site to that receptor.

Whilst there are other receptors around the Site, these other receptors are at greater distances from the Site than the receptors identified above and with similar exposure to the existing noise sources in the areas. Therefore, the achievement of acceptable noise levels at the assessed receptors would lead to acceptable noise level at receptors at a further distance from the Site.

With reference to the guidance discussed above and the results of the noise surveys, the threshold noise values for potential significant effects due to construction (Daytime) are as below:

- A: The Slate Yard (residential) - 65db, LAeq
- B: Left Bank (residential) – 75db, LAeq
- C: Marriott Hotel (commercial/residential) – 75, LAeq
- D: Manchester Goods Yard (Office) – 75, LAeq