PRICE&MYERS

Construction Logistics Plan

254 Kilburn High Road

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254 Kilburn High Road

Construction Logistics Plan

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Appendices

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1 Introduction

- 1.1 Price & Myers (P&M) have been appointed by Aitch Group Ltd to provide transport consultancy advice for the redevelopment of 254 Kilburn High Road in London Borough of Camden (LBC). P&M have prepared this Construction Logistics Plan (CLP) to accompany the planning application for the new development.
- 1.2 This CLP has been produced in consultation with LBC and London Borough of Brent (LBB) and demonstrates that the proposed development supports a number of national, regional and local policy objectives.
- 1.3 The project is the redevelopment of 254 Kilburn High Road located within the London Borough of Camden. The existing site comprises of 4 distinct buildings currently used as a marble storage yard.
- 1.4 The proposed development will provide 62 new residential properties and 1,024m² Gross Floor Area (GFA) of commercial units.
- 1.5 The site is bound to the west by Kilburn High Road which is the main frontage of the site, by Kilburn Grange Park to the east. The site is within an urban area of London. The northern and southern boundaries are formed at party walls with adjacent commercial and residential properties respectively.
- 1.6 From the outset, the construction team are fully committed to manage the complete logistics approach for the project including the whole supply chain management, all deliveries and vehicular movements coming and going from site.
- 1.7 It is envisaged that this CLP will be conditioned as part of any forthcoming planning consent. The CLP will remain a live document for the construction phase and will be reviewed by the construction delivery team on a bi-monthly basis throughout the life of the project.
- 1.8 The aim of this report is to show that as a result of construction works; construction traffic should not have a detrimental effect on the highways or the local community. The CLP provides a framework to better manage all types of freight vehicle movements to and from the site.
- 1.9 This CLP will form the basis of agreeing the construction arrangements with LBC and LBB, as appropriate. The logistics will be dependent on the suppliers, working methodology and programme will be co-ordinated by the principal contractor.
- 1.10 One of the key constraints of the development is the vehicle entry and exit routes to the site; possible solutions have been proposed to mitigate some of the issues, all of which will be finalised at detailed design stage as the project progresses. Queuing of construction vehicles on Kilburn High Road (A5) is not an option for this site and the plan takes this into consideration.
- 1.11 The CLP has been prepared following best practice and in accordance with Transport for London's (TfL) Construction Logistics Plan Guidance (April 2013). Following the preapplication advice from the officers at LBC regarding the scope of the supporting documents to support the planning application, the sections of the report are set out as follows:

- Section 2 outlines the national and local policies and guidelines;
- Section 3 examines the site location;
- Section 4 discusses the construction proposals;
- Section 5 presents the CLP objectives;
- Section 6 presents the delivery and servicing management measures and sets out the traffic management;
- Section 7 discusses the construction environmental management plan; and
- Section 8 details the proposed methodology for monitoring and review.

2 Policy Context

National Planning Policy Framework (NPPF), 2012

2.1 The NPPF aims to promote the use of sustainable transport throughout the UK, safe road design and efficient and sustainable delivery of goods and supplies.

Traffic Management Act (2004)

2.2 This approach outlines the responsibility of the Local Authority to manage traffic networks within their geographical area of responsibility; this includes efficient use of network and the requirement to make measures to avoid contributing to traffic congestion.

The London Plan (2011)

2.3 This makes specific references to CLPs as a way of making more efficient use of road network. Chapter 6 of the London Plan encourages developers to submit CLPs and consider freight.

Camden Development Policies 2010 – 2025

- 2.4 The Local Policy is contained within the Camden Development Policies which aims to ensure that the Local Development Framework (LDF) is carried through. There are a number of LDF objectives relating to sustainable travel and transport which the Core Strategy (CS) and Development Policy (DP) support.
- 2.5 Policy CS11 states the movement of goods can have a significant impact on the environment, in terms of noise and disturbance, and air pollution. These impacts are particularly severe in an urban, densely populated borough, such as Camden. The Council will also seek to ensure that the impact of construction traffic and the servicing of future developments are kept to a minimum.
- 2.6 Policy DP16 seeks to help deliver Camden Core Strategy by ensuring that the transport implications of development are managed, and additional transport infrastructure is delivered where needed, in order to ensure that growth in the borough is integrated with existing places and transport networks, and does not generate excessive demands on transport infrastructure.
- 2.7 Policy DP20 sets out the Council's requirements for new developments in relation to the movement of goods and materials both during construction and when in operation. The CS promotes the use of freight consolidation as a key measure in reducing the number of trips made by goods vehicles, and indicates that there may be potential for a freight consolidation facility serving Camden's Central London Area (Core Strategy paragraph 11.23). The Council will expect developments to take advantage of existing freight consolidation facilities for service deliveries, where they exist.
- 2.8 Policy DP22 outlines that the council will require developments to incorporate sustainable design and construction measures. All proposals for demolition and reconstruction should be fully justified in terms of the use of resources and energy, and the energy and water efficiency of the existing and proposed buildings. Where the

demolition of a building cannot be avoided we will expect either the re-use of materials on-site or the salvage of appropriate materials to enable their re-use off-site. Where materials cannot be salvaged whole and where aggregate is required on-site, this demolished material should be crushed on-site for re-use, with measures taken to minimise dust and noise. Where appropriate, the Council will ensure that applicants provide Construction Management Plans to demonstrate how a development will minimise impacts from the movement of goods and materials during the construction process. Construction Management Plans should deal with the hours of site activity; pick-up and delivery times for materials and equipment; limits on construction vehicle size; trip numbers and routes; the safety of road users during construction; and any temporary use of the highway for siting of construction plant. They should also deal with any temporary disruption or severance of highway links needed during the development process, as well as any other relevant measures needed to manage the construction phase.

2.9 Policies DP26, DP28 and DP32 – "Managing the impact of development on occupiers and neighbours" sets out how the council expects development to limit the disturbance from noise, vibration, dust and emissions due to demolition and construction.

3 Site Information

Site Location

- 3.1 The site is located on Kilburn High Road, London with the post code of NW6 2BS. The site location is identified on the map below. The size of the existing site is approximately 0.20 Ha.
- 3.2 The site is located within the London Borough of Camden, surrounded by a mixture of residential, retail and commercial building use. The surrounding transport network is good and the A5, B510, B507, B509 and A41 are within close proximity.
- 3.3 The site lies on Kilburn High Road (A5), a busy main road and major transport artery into London from the north and northwest. This road is maintained by LBB who are the Local Highway Authority for this road.

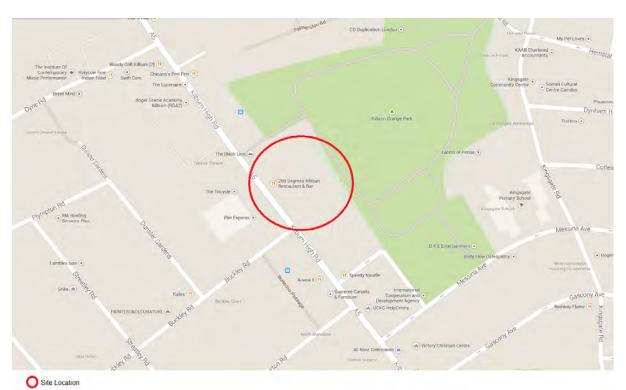


Figure 1 - Site Location Map



Figure 2 - Existing Development

4 Construction Proposals

4.1 The proposals are to provide 62 units of C3 residential in a new 4/5 storey building and 1,024m² of B1 commercial space for light industries on the ground floor. A full detail of the design layout is outlined in the planning documents submitted for the named site.

Table 1 - Development Scheme

Land Use	Use Class	Proposed Area (GFA)			
Residential	C3	4,725 m ²			
Commercial	B1	1,024 m ²			
Total		5,749 m ²			

Construction Phasing Program

- 4.2 The development construction proposals have been divided into two phases. Each phase has been subdivided into a monthly time scale. The phases are grouped as deconstruction/demolition and construction sequences.
- 4.3 Planning for enabling works, deconstruction, demolition and construction are broad at this stage and may be subject to modification during detailed enabling planning. This initial assessment is based on reasonable assumptions at this early stage and experience from similar projects.

Site Access and Egress

- 4.4 The primary and main access will be available from Kilburn High Road with no other secondary access routes.
- 4.5 For the demolition and substructure works the site access will also be via Kilburn High Road.
- 4.6 Secure access points with wheel cleaning facilities will be established at the site entrance locations. Pedestrian access points will generally be located close to the main vehicular access gates with separate pedestrian gates and footpaths provided.
- 4.7 Each vehicle will pull in from Kilburn High Road, unload and then under the direction of a banksman, will pull out back onto Kilburn High Road. No turning around on Kilburn High Road will be permitted. The footpath directly adjacent to the site will be suspended for public safety. Cycle and bus lanes directly outside the site area will also be required to be suspended for public safety and for vehicle unloading as detailed above.
- 4.8 The indicated egress route from Kilburn High Road on is very restricted and will need careful control and management (see Appendix B). The Local Highways Authority's approval will be required to permit the freight vehicles to access and egress the site via the planned route.
- 4.9 Site access gates will be established and used for the construction access and egress to the site over the anticipated construction program.

Construction Travel Plan

- 4.10 A construction travel plan will be created at the start of the project detailing all aspects of travel to the site including deliveries, personnel and visitors. The site will not have provision for parking for site staff, sub-contractors or visitors due to the restricted site access and space. Parking of any vehicles on-site is not an option for this project.
- 4.11 All personnel will be inducted prior to commencement of work on-site. The site induction is the primary means of communicating the project travel plan and supporting information. The site induction will be carried out by the projects principal construction team. The expectation is that the majority of the staff and personnel involved in the project will travel to work by sustainable means of transport, it is anticipated that this trend will continue throughout the project duration. In conjunction to the public transport usage, initial use of vehicles dropping off work tools and other large equipment that cannot be carried on public transport will be permitted.

Parking

4.12 On-site parking for construction workers will not be permitted due to the restricted access. Parking on local streets is available within public metered areas; however public transport will be encouraged at all times. The construction team will be vigilant in ensuring that site personnel or visitors do not park illegally or in any allocated resident parking spaces.

Public Transport

4.13 Alternatives to private car will be considered by the construction team and efforts will be made to communicate the advantages of public transport to all site personnel. Site personnel and visitors will always be encouraged to use public transport.

Bicycles

4.14 With the national and local policies emphasis on sustainable transport (cycling to work) and the development's sustainability commitments; the use of bicycles as mode of transport will be encouraged with bicycle storage and shower facilities made available on-site. The construction team will provide parking for everyone who already cycles to work plus another 50%. When cycling facility reaches 70% capacity, it will be increased by 20% and will be revised periodically.

Deliveries

- 4.15 To minimise the likelihood of congestion during demolition and construction periods, strict monitoring and control of vehicles entering and egressing and travelling across the site and Kilburn High Road will be implemented. All on-site construction deliveries will be pre-booked and pre-arranged as part of the efficient operation and construction work. The use of a booking system and having delivery times agreed with contractors means that vehicles are not caused to wait prior to site delivery.
- 4.16 Delivery schedules will be produced at detailed design stage in order to look at the profiles of up and coming vehicles and regulate deliveries to avoid/eliminate bottle necks.

- 4.17 Contractors will be issued a project route map to pass on to their delivery drivers and suppliers. Delivery vehicles could be held at an off-site holding area until the site is ready to receive the delivery. Radio contact links will be provided and maintained between the site and the holding area to call vehicles into the site area on a controlled basis. Specific time slots will be allocated to contractors for the use of cranes and hoists, to ensure the main plant will be utilised efficiently.
- 4.18 The proposed construction delivery/vehicle access routes will avoid using minor roads as far as possible, specifically avoiding residential roads adjoining the site. These measures will ensure that delivery vehicles have minimal impact on the surrounding residential roads close to the site. In addition, vehicles waiting will be evaded through the strict management of delivery times.

5 Construction and Logistic Plan Objectives

- 5.1 This CLP will form the basis of agreeing the construction arrangements with the Local Authority as appropriate. The logistics will be dependent on the suppliers, working methodology and programme to be co-ordinated by the principal contractor.
- 5.2 It is envisaged that this CLP will be conditioned as part of any forthcoming planning consent.
- 5.3 CLPs developed through the planning process seek to support sustainable development. This CLP will therefore seek to achieve the following objectives:
 - Demonstrate that the plan supports and promotes national, regional and local developing policies and procedures;
 - Establish that construction materials can be delivered and waste removed in a safe, efficient and environmentally-friendly way;
 - Identify deliveries that could be reduced, re-timed or even consolidated particularly during peak periods;
 - Minimise congestion on local roads and ease pressure on the environment; and
 - Improve the reliability of deliveries to the site.

Operation/Site Hours

The anticipated core site hours for demolition and construction will be between 08:00 – 18:00, Monday to Friday excluding Bank Holidays and 08:00 - 13:00 on Saturdays.
 There will be occasions whereby work will need to be carried-out outside these hours which will only be done with approval from relevant parties.

Health and Safety

5.5 This CLP will integrate with other planning documentation produced relating to this project. In accordance with Construction Design & Management (CDM) Regulations (2007), a detailed strategy for managing health and safety will be developed. This document will be available at detail design stage and will always be available for review on-site.

Procurement Strategy

- 5.6 The procurement process should demonstrate an awareness of all vehicle activity associated with the site, its impacts and appropriate measures to reduce it. This will be undertaken by the principal construction management team.
- 5.7 The procurement strategy should demonstrate commitment to safe, more efficient and more environmentally friendly distribution by contracting operators registered with a best practice scheme such as FORS.

Materials and Storage

- 5.8 The building will be constructed using a range of construction materials, concrete, steel, cladding, internal finishes and all the other customary materials normally associated with building of this classification. The existing building will be demolished to make way for the new design. Accurate design information, material specifications and drawings will be produced at detailed design stages specifying all the design information, building components, building layouts and elevations. This will enable the supply chain to precisely enumerate materials needed on-site. The correct use of the information during ordering process reduces the risks of wastage and reworking.
- 5.9 Contractors should also be encouraged to source materials locally, or from the same supplier, to reduce the number of deliveries required.
- 5.10 Material storage on-site will be minimal due to insufficient on-site space. In the event when materials are stored on-site, it will be positioned in a manner to prevent the likelihood of damage and waste. Due to limited storage space on-site, sub-contractors will be encouraged to deliver materials on a timely basis, this limits the amount of materials stored on-site. To achieve timely deliveries (e.g. "just in time") efficiently, accurate progress reporting of the projects' programme and position is required on a regular basis. Material delivery schedule should be in line with the materials required on-site.

Supply Chain Management

- 5.11 It is recognised that there will be impacts from the proposed development on the local community and the environment and so the supply chain will be encouraged and challenged to provide the best service at all times. The key initiatives to be promoted to the supply chain includes sharing delivery operations by ensuring full loads are delivered to site and not part loads. Existing and potential suppliers and subcontractors will be made aware of these initiatives and their importance to the project will be detailed. Effective communication will be required in this case to ensure procedures and systems are known and adhered to.
- 5.12 The project is expected to promote local employment and stimulate the local economy. Where feasible the source of services, materials and equipment will be obtained locally. This will improve the local environment by reducing freight impacts such as fossil fuel usage, congestion, pollution and road casualties.

Freight Operator Recognition Schemes (FORS)

5.13 FORS is a free membership scheme that helps van and lorry operators in London to be safer, more efficient and more environmentally friendly. FORS members or those who can demonstrate that they meet the FORS membership standards will where possible be the contracted suppliers and haulage companies.

Waste Management

5.14 In accordance with the principles of the national *Waste Strategy (2000)*, a principal aim during demolition and construction will be to reduce the amount of waste generated and exported from the site. This approach complies with the waste hierarchy whereby

the intention is first to minimise, then to treat at source or compact and finally, to dispose of off-site as necessary.

- 5.15 All principal and sub-contractors will be required to produce Site Waste Management Plans (SWMP) on a phase by phase basis which should contain:
 - Classification of all wastes;
 - Performance and targets setting against waste forecasts;
 - Measures to minimise waste generation;
 - Opportunities to re-use and recycle;
 - Provision for the segregation of waste on-site that are clearly labelled;
 - Recording of proposed carriers and licences for disposal sites;
 - An audit trail including waste disposal activities and waste consignment notes;
 - Measures to avoid fly tipping by others on land being used for construction; and
 - Measures to provide adequate training and awareness through 'toolbox talks'.
- 5.16 All relevant contractors will be required to investigate the opportunities to minimise and reduce waste generation by:
 - Agreements with material suppliers to reduce the amount of packaging or to participate in a packaging take-back scheme;
 - Implementation of a 'just in time' material delivery system to avoid materials being stockpiled on-site, which increases the risk of damage and disposal as waste;
 - Attention to material quantity requirements to avoid over-ordering and generation of waste materials;
 - Use standard size components in design detailing to eliminate risk at source where possible to do so;
 - Re-use of materials where feasible, e.g. re-use of excavated soil for landscaping or re-using crushed concrete from the demolition process to fill (crushed using an off-site concrete crusher);
 - Segregation of waste at source where practical;
 - Re-use and recycling of materials off-site where re-use on-site is not practical (e.g. through use of off-site waste segregation facility and re-sale for direct re-use or re-processing);
 - Burning of wastes or unwanted materials will not be permitted on-site; and
 - Colour coded skips will be made available and signposted to reduce the risk of cross contamination, and covered to prevent dust and debris blowing around the site. These will be cleared on regular basis.

6 Delivery and Servicing Management Measures

Code of Practice for Construction Sites

6.1 LBC and LBB's Code of Construction Practice have been referred to in terms of construction vehicle routes and parking.

Traffic Management Plan

- 6.2 As previously discussed in section 3, Kilburn High Road will be the main approach for all construction delivery vehicles. Demolition and construction deliveries will be carefully planned with a load booking and management system. A holding area nearby will be used to control the number of construction vehicles coming into the site.
- The site's construction management team will produce weekly programme of deliveries. Drafts of this programme will be presented at weekly project progress meeting to ensure that the proposed delivery schedule meets the projects' programme requirements. Issues and obvious clashes must be smoothed out at these meetings such that each week a copy of the programme, identifying provisional delivery times and quantities for the next week are sent out to the relevant suppliers.
- Suppliers will be allocated specific times to deliver their materials to site. Should vehicles arrive outside their allocated time, then they may be turned away and delivery organised for another time that is suitable. In such cases, the construction project manager will make contact with the supplier to agree an alternative delivery time. Suppliers and sub-contractors who abuse the system will be reprimanded initially, and if the issue recurs on a regular basis; in accordance with the construction team policy, contracts can be terminated and alternative companies will be sought.
- 6.5 Highway alteration works are proposed at the existing road junctions. These are fairly minor in nature and extent. Notices and details of traffic management proposals will be given under the Highways Acts 1980 and Road Traffic Act 1998 and agreed with Transport for London (TfL) to minimise the impacts on the surrounding area.

Road Closures and Diversions

Road closures are not anticipated however, they may be required in order to establish and remove tower cranes or to deliver large items of building plants and infrastructure items. This will be agreed with LBC and LBB prior to commencement. Notices regarding any planned road closures and diversions of either roads of footpaths will be given by the principal contractor to LBC and/or LBB, the police, fire brigade and other emergency services sufficiently in advance of the required closure or diversion.

Pedestrian Routing

- 6.7 Pedestrians, the general public and any on-site employees, local residents and employees associated with existing uses across the site will be kept separate from the deconstruction/demolition and construction activities at all times.
- 6.8 During construction works, existing pedestrian routes and footpaths will be maintained as far as is reasonably practicable.

6.9 Where temporary closures may be required for e.g. erection of scaffolds and incoming services connections, permission and licences will be obtained for the re-routing of pedestrians paths. In the events of more extensive closures or diversions, temporary proposals will be agreed with the Local Authority.

Neighbour and Community Liaison

- 6.10 Contact with various landowners, residents, business and other local representatives will be established including the emergency services, informing them of the construction project.
- 6.11 The site's construction team will deal with any queries and provide immediate response to any issued raised. The site will be screened; all hoardings will be maintained to a high standard throughout the progress of the project.
- 6.12 A community strategy and community liaison officer will be appointed to maintain an active dialogue with residents, in order to ensure that the neighbourhood is not detrimentally affected by the construction works.

7 Construction Environmental Management Plan

- 7.1 A phase specific Construction Environmental Management Plan (CEMP) will be developed for the construction phases and will include a strategy to minimise environmental impacts such as carbon emissions. The CEMPs will details the approach for a range of resource efficiency principles including locally sourcing materials and servicing, auditing materials to demonstrate environmental performance and options for the re-use of supplies.
- 7.2 The CEMPs will be carried out alongside a carbon foot printing procedure that will minimise carbon demand of the development, identify the use of renewable resources of energy and incorporate efficiency energy supply and low carbon technologies such as photovoltaic cells and solar thermal units where feasible.
- 7.3 The form of delivery management of vehicles will be set out at the tender stage and reinforced on-site. The success of the proposals will be monitored through the CEMP.
- 7.4 Effective wheel cleaning facilities will be provided at the main entrance gate together with concrete hard standing. Recycled water will be used wherever possible and supplementary cleaning will be provided as necessary using suitable means to keep the surrounding highway clean. Collected debris will be disposed of as controlled waste at a licenced waste disposal facility.

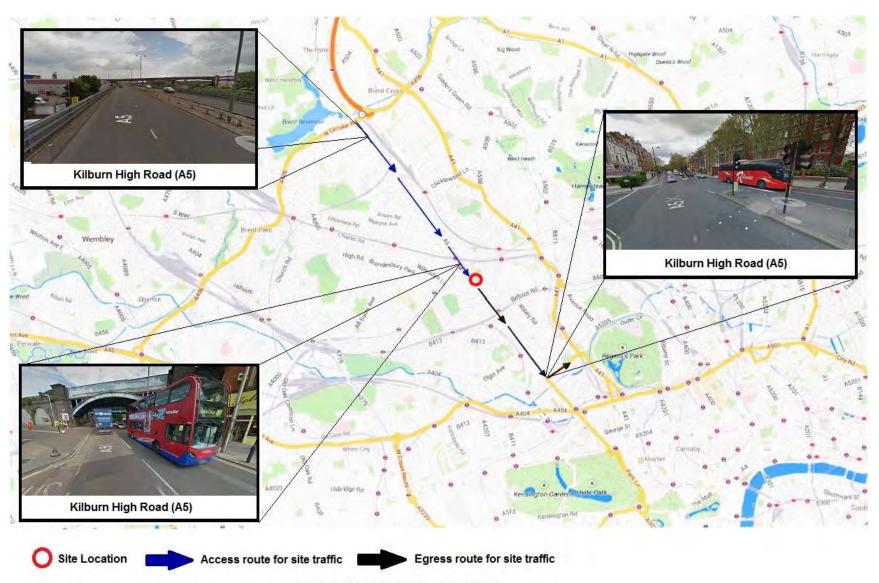
Noise, Vibration, Dust and Emissions

- 7.5 During the detailed design phase, full assessments of the potential impacts of the demolition and construction works on air quality and noise vibration will be prepared. The measures that could be adopted to mitigate these nuisances are:
 - Setting 'Action Levels' for noise and vibrations;
 - Routine monitoring of noise, vibration and dust at site boundary and sensitive receptors;
 - Use of hoardings for as long as practicable to act as acoustic screening;
 - Requirement for engines and equipment to be switched off on-site when not in use, use of quieter plant, regular plant maintenance and screening of plant if appropriate;
 - Spraying areas with water to dampen down dust when conditions dictate;
 - Effective wheel/body washing facilities to be provided and used as necessary;
 - Use of road sweepers whenever the need for road cleaning arises;
 - Sheeting of vehicles carrying waste materials off-site; and
 - Strictly prohibiting fires on-site.

8 Monitoring and Review

- 8.1 Monitoring and review of the CLP will be implemented to provide the opportunity for construction operations and procedures on-site to be reviewed and new management measures to be implemented (if necessary) to achieve the objectives of the CLP.
- 8.2 Monitoring will be documented and any updates of the CLP will be made available to the Local Authority.

Appendix A – Site Access Plan – Access and Egress Routes Demolition and Construction Phase



SITE ACCESS PLAN - OPTION 1

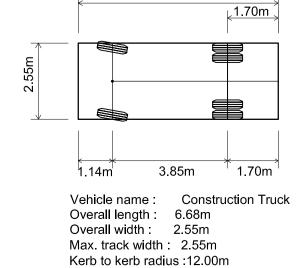


SITE ACCESS PLAN - OPTION 2

Appendix B – Construction Vehicle Tracking and Examples of Construction Vehicles for Construction in Confined Spaces



- 2. Do not scale from this drawing in either paper or digital form. Use written dimensions only. To check drawing has been printed to the intended scale this bar should be 50mm long @ A1 or 25mm long @ A3.
- 3. Health & Safety: All specific drawing notes are to be read in conjunction with the project "Information Pack" and "Site Rules".



INFORMATION ONLY

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P1	17.04.14	АН	ССТ	Issued for Information	
Rev	Date	Drawn	Eng	Amendment	

LONDON

VEHICLE TRACKING CONSTRUCTION TRUCK TO SITE

Drawn AH	Eng CCT
Scales NTS at A1	NTS at A3
Drawing No	Rev
22408-500	P1

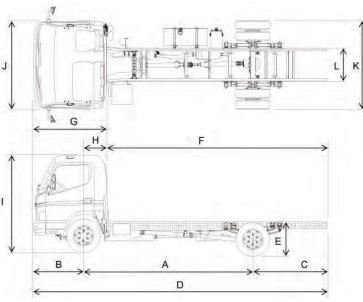
Consulting Engineers
30 Newman Street London W1T 1LT T 020 7631 5128 F 020 7462 1390 E name@pricemyers.com www.pricemyers.com





4x2 Single Cab 3.5t GVW





Dimensions (mm)

	3C13			3C15				
A Wheelbase	2500	2800	3400	3850	2500	2800	3400	3850
B Front overhang	1140	1140	1140	1140	1140	1140	1140	1140
C Rear overhang	1145	1195	1395	1695	1145	1195	1395	1695
D Overall length	4785	5135	5935	6685	4785	5135	5935	6685
E Chassis height (chassis cab unladen)	710	710	710	710	710	710	710	710
F Back of cab to end of frame	3120	3470	4270	5020	3120	3470	4270	5020
G Bumper to back of cab	1665	1665	1665	1665	1665	1665	1665	1665
H Front axle to back of cab	525	525	525	525	525	525	525	525
I Overall height (chassis cab unladen)	2130	2130	2130	2130	2130	2130	2130	2130
J Cab width (excluding mirrors)	1995	1995	1995	1995	1995	1995	1995	1995
K Rear axle width (to tyre wall)	1951	1951	1951	1951	1951	1951	1951	1951
L Frame width	748	748	748	748	748	748	748	748
Cab to body gap (minimum)	100	100	100	100	100	100	100	100
Maximum possible body length	3375	3855	4815	5535	3375	3855	4815	5535
Maximum possible body width	2550	2550	2550	2550	2550	2550	2550	2550
Turning circle (kerb to kerb) m	8.8	9.6	11.4	12.6	8.8	9.6	11.4	12.6
Turning circle (wall to wall) m	10.0	11.0	12.6	14.0	10.0	11.0	12.6	14.0

Weights (kg)

0 (0)								
Chassis cab weight total	1870	1880	1900	1920	1870	1880	1900	1920
Chassis cab weight front axle	1420	1400	1410	1450	1420	1400	1410	1450
Chassis cab weight rear axle	450	480	490	470	450	480	490	470
Front axle capacity	1900	1900	1900	1900	1900	1900	1900	1900
Rear axle capacity	2500	2500	2500	2500	2500	2500	2500	2500
Maximum gross vehicle weight (GVW)	3500	3500	3500	3500	3500	3500	3500	3500
Maximum gross train weight (GTW)	7000	7000	7000	7000	7000	7000	7000	7000
Body and payload allowance	1630	1620	1600	1580	1630	1620	1600	1580

Weights and dimensions are for guidance only

For bodybuilding calculations refer to the Canter body/equipment directives available from the Fuso bodybuilder portal

Manufacturing tolerance for chassis height and overall height is $\pm 25 \text{mm}$

Manufacturing tolerance for chassis cab weights is $\pm 5\%$

Chassis cab weights include 20 litres of fuel and exclude the driver

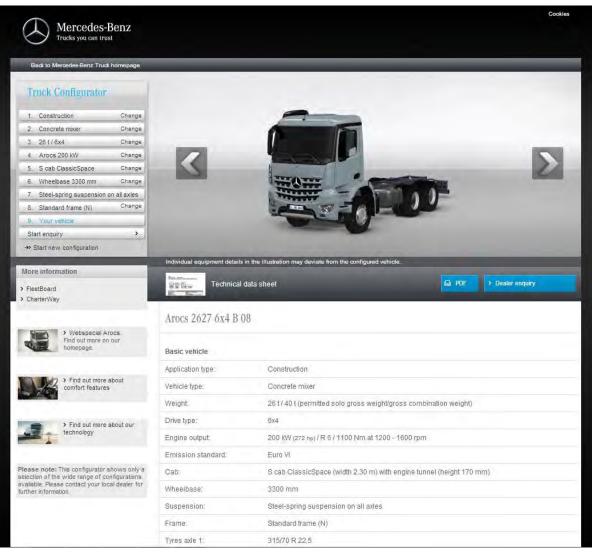
Maximum possible body length dimension is based on 60% overhang. Rear overhang must be extended to achieve this.

Front axle loading must be a minimum of 25% of GVW

Maximum possible body width dimension is valid only with additional side indicators and long-stay mirrors set to the 'outside set' position









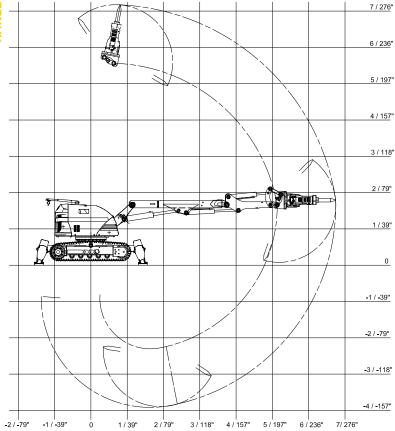
Even more heavy-duty demolition power

THE NEW BROKK 400 offers higher capacity and robustness, along with its renowned mobility and versatility. All parts of the undercarriage are upsized to make it the perfect machine for all applications that require extensive tracking. The upgraded hydraulic system and improved stability gives you an unparalleled performance even with the most demanding tools. With a reach of almost 7 meters (23.1 feet) and a full 360-degree turning radius, the Brokk 400 provides excellent access to the work area without the need for time-consuming repositioning.

The Brokk 400 weighs 5100 kg and can handle tools up to 600 kilos in weight. With this impressive power-to-weight ratio, the machine has the muscles to take on heavily-reinforced concrete structures while eliminating the need for expensive shoring. It's also very productive in open spaces. And in all applications, the operator remains at a safe distance, away from vibration and falling debris.

APPLICATIONS

A favorite for the toughest heavy-duty work, such as removing heavily-reinforced concrete vaults and foundations with speed and accuracy.



Hydraulic breaker in illustrations SB 552 Load and stability diagram can be ordered from Brokk AB

Performance

Slewing speed 20 sec/360° Transport speed, max. 2.5 km/h; 0.7 m/s; 1.6 mph Incline angle, max. 30°

Hydraulic system

Hydraulic system capacity

160 l; 42.3 US gal

Pump type

Variable load-sensing piston pump

System pressure to cylinders,

attatchment and motors, max. 17.0 MPa; 2,466 psi
System pressure, increased to attachment, max 23.0 MPa; 3,336 psi
Pump flow max* 50 Hz 115 l/min; 30.4 US gal/min
60 Hz 130 l/min; 34.3 US gal/min

Electric motor

Type ABB
Output** 30kW
Current** 65A
Starting device Soft start/Direct start

Control system

Control type Portable control box Signal code Digital Transfer Cable/Radio

Weight

Weight of base machine excl. attachment 5,100 kg; 11,240 lbs Recommended max. attachment weight 600 kg; 1,323 lbs

Noise level

Sound power level Lwa, measured according to directive 2000/14/EC 100 dB (A)

* Max pump flow and max system pressure cannot be delivered at the same time as the engine will overload

** Valid for 400V/50Hz



