2018/2019

Northwards Housing
North Manchester's Council Homes

NEW LIFT INSTALLATION PROPOSAL FOR VICTORIA SQUARE, MANCHESTER, M4 5DX

Performance specification

Contents

1.0 Project brief 2
2.0 Existing installation removal (applies to two lifts) 2
3.0 New installation (applies to two lifts) 3
3.1 Lift shaft 3
3.2 Lift car 4
3.3 Lift Control 6
3.4 Builders work 7
Appendix 1 8

1.0 Project brief

Work content: - Victoria Square – Removal of existing lift equipment and complete installation of two new MRL type lift installations:-

The two existing hydraulic lifts, all components and associated equipment shall be completely removed and replaced with machine room less lift system. The new Machine room less system shall be designed to be contained within the existing lift shaft and serve all the existing floors (Ground, 1, 2, 3, 4). The new MRL shall be fit for purpose in the environment it serves and all external finishes shall be anti-corrosive and weather proof. The machine shall be a high efficiency three phase AC – PM motor. The complete installation shall comply with EN81-20 / EN81-50 standards.

2.0 Existing installation removal (applies to two lifts)

- Complete removal of all existing lift equipment, to include all associated equipment located in the remote ground level lift motor room and within the building duct work, including all other associated components and trailing leads.

- Removal of the air conditioning units and all associated parts installed in each of the two existing lift motor rooms that relate to the cooling of the existing hydraulic system. The units shall be decommissioned. The refrigerant shall be removed from site and disposed of by a licensed contractor in accordance with present H&S regulations for the protection of the environment.

- Allow for the safe removal and disposal of hydraulic oil and all associated control/operating equipment. The hydraulic oil shall be removed from site and disposed of by a licensed contractor.

- All waste to be removed from site and disposed of by licensed contractors in line with present regulations. Any container e.g. skips to be lockable and secured with appropriate fencing and emptied / removed at the end of each working day to prevent ASB. Temporary location of these items to be confirmed.

3.0 New installation (applies to two lifts)

3.1 Lift shaft

- Entrances – Supply and fit complete new landing door assemblies at all openings, inclusive of doors / architraves / all auxiliary equipment / fittings e.g. gatelocks / door closers / emergency door release mechanisms (inclusive of the facility for the engineer to open the lower landing door from inside the lift shaft) / rollers / door shoes / top tracks / bottom reinforced tracks / TFT indication flush fitted in the horizontal top section of the architrave (landscape) / landing push units to incorporate illumination / sounder and to be flush fitted (portrait) within the upright of the landing architrave. Material to be utilised to fully comply in regard to fire retardation / protection to a minimum of 2 hours (316 grade stainless steel) Doors to incorporate “anti ramming” design.
- Supply and fit of galvanised shaft fascia’s between floor openings, inclusive of all fixings/ fittings.
- Supply and fit new LED lift shaft lighting (two way switching to be utilised) and incorporate self-contained emergency luminaires at the upper terminal and lift well areas to facilitate safe working practises in the event of mains supply failure. Emergency lighting test key switch to be located in the plant room, the switch shall be metal clad and manufactured by Volex.
- Supply and fit Wylex 16amp/30Ma, RCBO protected power outlet to lift well.
- Access the feasibility of reusing existing guide rails, inclusive of all alterations and new fixings.
- Supply and fit new lift car / Counter weight guide rails (if existing guide rails are not able to be used) to existing lift shaft structure, inclusive of all fixings / fittings as appropriate to support the new MRL equipment / car / Counter weight and safety gear.
- Supply and fit a safety screen at the mid way point within the lift shaft to prevent any potential impact / guillotine effect from the descending, ascending counter weight. This screen to be designed to provide safe visual access and / or simple removable sections to accommodate maintenance and inspection of the counter weight.
- Supply and fit new lift buffers to the lift shaft floor as appropriate to accommodate the new lift installation.

- Supply and fit a new lift well access ladder, inclusive of safety electrical interlock.

- Existing lifting beams to be inspected and tested and certificate issued as fit for purpose and marked with S.W.L.

- Supply and fit new metal clad Wylex three phase consumer unit, including all circuit protection devices, incorporating existing plant room circuits and surge and lightning protection. The board shall be sized to allow for 25% spare capacity. All new wiring and electrical work carried out to BS7671.

- Design, supply and fit internal water catchment system to prevent the flow of water on to components located in the lift shaft.

- Clean and seal lift pit from water ingress. Safety refuge area to be highlighted in accordance with present regulations.

3.2 Lift car

- Construct complete new car enclosures to existing parameters i.e. 16 person / 1200kg load capacity and in accordance with DDA regulations.

- If the shaft area is oversized in relation to the new car dimensions and equipment layout then the supply and fit of screening to reduce the risk of falls shall be included.

- To include a retractable lift car seat capable to withstand a minimum 120Kg static load.

- Lift car interior lower walls to be finished in stainless steel (linen affect) with the two side upper walls to be finished in a vandal resistant laminate (colour TBC).

- The interior rear car wall upper to be either safety toughened mirrored glass or highly polished stainless steel.

- New internal lift car flooring to be finished with flowcrete (colour TBC) and sealed.

- Ceiling (material to be discussed with client) to be of a suspended type to accommodate recessed energy efficient LED lighting complete with presence detection and inclusive of emergency lighting unit. Cut out to suit clients CCTV system (to be discussed). The lighting panel shall be designed to be accessible for a one person operation for maintenance and repair.

- The three lift car interior walls to have a suitably matching aesthetic stainless steel hand rail fitted.

- Supply and fit complete new car operation panel, inclusive of pushes (as per landing) / TFT indication / voice synthesiser and to accommodate auto dialler pictograms.

- Supply and fit new lift auto dialler system (Memcom) to car, car top / lift well / lift control (Line or GSM unit to be discussed in addition to the sim card if required).

- Trailing lead to contain all necessary cabling and also CAT5/6 and Coax for CCTV and future upgrades.

- Supply and fit new lift alarm system with local sounders to be fitted on car top and at the main lowest entrance (location of main entrance sounder TBC).

- Supply and fit new engineers control station to car top and lift well to assist with safe inspection / maintenance, inclusive of light / RCD power outlet.

- Supply and fit car top safety balustrades as appropriate.

- Supply and fit lift car ventilation system suitable to lift car dimensions.

- Supply and fit full height electronic sensitive edge.

- Supply and fit new car door operator (heavy duty type).

- Supply full as fit drawings/plans/schematics including lift shaft, landing entrances and details relating to alterations and modifications to existing plant rooms.

3.3 Lift Control

- Supply and fit MRL quality hoist lifting machine and associated equipment, Whittur, Ziehl Abegg or Lift equip.
- Supply and fit quality lift controller and drive, either Koll Morgan or Thames Valley.
- Supply and fit uncontrolled movement protection system.
- Supply and fit emergency UPS battery brake operation system to aid emergency passenger release.
- Supply electrical insulation safety mat and safety inspection barrier to aid with inspection / maintenance.
- Supply and fit new complete wiring to the full lift installation and all components to present regulations.
- All supplied / installed equipment is to be open protocol, to industry standards and suitable for this installation, UK supported with components readily available within the UK.
- Ensure forward compatibility of supplied systems and incorporate technical provision to accommodate future potential modernisation and upgrades with minimal remedial requirements.

3.4 Builders work

- Contractor to ensure all site surveys/inspections required to complete the full removal of existing lifts and the installation of the two new lifts are undertaken and any concerns reported prior to tendering.

- General making good to all surfaces affected by the proposed lift works and to re-instate decorative finishes to match existing prior to work being undertaken (floors / walls / surrounding areas within reason).

Appendix 1

- Supply full as fit drawings / plans / wiring schematics (laminated) including lift shaft, landing entrances, car structure and details relating to alterations and modifications to existing plant rooms.

- Contractor to include the maintenance / reactive repair 24/7 of the sole operating lift at each site until all works are completed and handed over to the client's satisfaction.

- To include all waste skips, disposal of waste, containers, fencing, full size steel hoardings securely lockable at each opening.

- Warranty period for each lift to commence from the completion of any "snag list" works identified by the client / clients representative being completed and the lift officially signed off and handed over.

- The warranty period to include the monthly maintenance / reactive repairs of each new lift (mis-use / vandalism not included).

- Response/attendance on site times for lift breakdowns during warranty period:- one lift out of service 4hrs – 2 lifts out of service 1hr – entrapments / H&S issues 1 hr all times are 24hours a day -365 days a year.

- Standards to be adhered to for this project (not exhaustive) EN81-20 / EN81-50 / EN13501-1 / EN81-70 / EN81-71 / EN81-73 /