

# Office Warehouse Development 21 Oak Road, Wiri - Auckland Outline Specification

10 April 2018 - Rev 8.

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## 1. OUTLINE SCOPE OF WORK

### 1.1 The Site

The site is located at 21 Oak Road, Wiri, Auckland. Refer drawing SK 101-20a dated 21/02/2018.

### 1.2 Scope of Works

The works include:

- 1 x Office/Warehouse building. The sizes are shown on SK 101-20a.

This Outline Specification has been divided into four main sections with associated subsections, as follows:

- Building Works
- Building Services
- Site Works
- Exclusions

### 1.3 Material and Workmanship

The proposed works shall comply with the following requirements:

- a) Statutory laws and regulation
  - b) The Building Act
  - c) Local Authority Bylaws
  - d) New Zealand Building Code
  - e) Appropriate NZ Standards
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## 2. BUILDING WORKS

### 2.1 WAREHOUSE

#### 2.1.1 Structural Steel and Roof

- Structural steel members to have appropriate corrosion protection applied, consisting of blast to Sa 2 ½ standard and apply epoxy shop primer to 75 microns DFT.
- Allow for approx. 49mt. clear span Steltech portal frames
- Approx. minimum clear operational height in the warehouse of 10.5m.
- The roof to be clad with 0.55BMT metal roof sheeting.

- Roofing underlay to be installed on the underside of the roof on galvanised safety netting. “Flamestop 524 white facing” to be used.
- Translucent sheeting to 10% roof area to be provided to the roof and warehouse canopy.
- Externally fixed Roof access ladder to access warehouse and office roof for maintenance.

### 2.1.2 Floor

- The concrete floor slab will be a PT slab 35MPa with nominal thickness of 170mm, design to carry a forklift with a maximum axle load of 16 tonne or a reach truck with 2 tonne pallet load
- Racking loads (columns at 2700 x 900 mm nominal centres with 300mm clear between columns of back to back racking) with a maximum rack column load (G+Q)= 7 tonne
- Maximum uniformly distributed load = 30kPa
- Floor to be constructed level with minimum joints
- Floor flatness to be constructed in accordance with Eurocode EN15620 to meet the requirements of level FM2
- Slab quality: Burnished finish to U3 standard.
- Vapour barrier to the underside of the slab.
- Apply 1 coat surface seal to contain dusting. Sealer to be Ashford Formula or equivalent approved by the Lessor.
- Lesa system (or equivalent approved by Lessor) black steel plates to all construction joints.
- Further design criteria – Floor loading to comply with unlimited repetitions of a forklift with max axle load of 16 tonne and a reach truck with 2 tonne pallet load. 80 kN post racking load and 30kPa distributed loads to developers engineer’s design.
- Further design criteria “Racking” – The slab shall accommodate a racking load to be 7 shelves high all off floor fully loaded with pallets of 1 tonne 100% of the time. Racking to be a standard grid approx.. 2700 x 900 each bay. Back to back racks 300mm apart with 3000 aisle between. Base plate to each leg 100 x 140.

### 2.1.3 Walls

- The exterior perimeter walls of the proposed warehouse buildings to be 150 thk low height concrete panels and 200thk FRR Concrete panels, as required by the Fire Report, with galvanised steel girts and metal cladding. All seals to be weather-proof and UV resistant.
- Precast concrete panels height to be a minimum of 2.4m high from FL. (2.8 total height which includes 400 in-ground)
- No graffiti guard required to lower panels
- The metal cladding to be 0.4BMT metal sheeting prefinished.
- Foil is not required to walls.
- Steel PFC’s to trim concrete panels at roller shutter door openings.
- Bird and vermin proofing at the interface with the roof to be installed.

### 2.1.4 Doors

- Electrically operated powder coated roller doors will be installed in walls in locations and numbers shown on SK 102-14-131509. Doors to be 5mm wide x 5.5mm high. Exact locations to be confirmed.
- Conventional personnel doors will be installed for fire egress purposes to meet Building Code requirements.
- Further design criteria – Motors to be 3 phase Industrial
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### 2.1.5 Stormwater Runoff

- Drainage of storm-water runoff from the roof will be provided by external and internal gutters and PVC downpipes, which will discharge directly into the Stormwater drainage system, via a detention system.

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## 2.2 OFFICE & AMENITIES

### 2.2.1 General

- Open plan office, toilet facilities to comply with building code requirements.
- Allowance of \$10,000 + GST for a kitchen and cupboard above.
- Male toilets: 2WC, 1 urinal, 1 basin
- Female toilets: 2WC, 1 basin
- 1 x Accessible toilet and shower
- Cleaners cupboard with a stainless cleaners sink.

### 2.2.2 Structural Steel and Roof

- Structure to consist of structural steel frame galvanised purlins and girts.
- Structural steel members to have appropriate corrosion protection applied, consisting of blast to St 2 standard and shop primer to 75 microns DFT and top coat to architects selection.
- The roof to be clad using a base metal thickness of 0.55mm Colorsteel or Colorcote
- Roofing underlay to be installed on the underside of the roof, insulation on galvanised safety netting.
- Drainage of Stormwater runoff from the roof will be provided by gutters and PVC downpipes, which will discharge directly into the Stormwater drainage system.

### 2.2.3 Floor

- The floor slab will be in-situ reinforced concrete slab 100thk, over damp proof membrane.

### 2.2.4 Walls

- Exterior linings to perimeter walls are as per approved elevations. Allow for timber framing, Building paper, RAB, batten and Aluminium Composite Panels.
- All offices, amenities and toilets will be timber framed with GIB board lining to level 4 finish and paint finish.
- All perimeter walls to be insulated.

### **2.2.5 Windows and Doors**

- Windows to be selected colour powder coated commercial section aluminium joinery with tinted glass. Allow for curtain walling system.
- Front entry door to be framed glass.
- Internal doors to be painted standard size doors/with hardware.

### **2.2.6 Ceilings**

- Ceilings in the office to be exposed both ways prefinished aluminium grid suspended ceiling systems with tiles. Allow for Mineral fibre tiles with some NRC properties.
- Ceilings in toilets to be GIB board with level 4 finish painted.
- The floor to ceiling height will be 2.7m.

### **2.2.7 Floor Coverings**

- 2mm thick sheet vinyl flooring will be laid in all toilet and wet areas.
- Commercial grade carpet tiles to office areas.

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## **2.3 CANOPY**

- The canopy will be a mono-pitch structure of steel beams and purlins with an operational height of approx. 6.0m within the canopy area.
- Structural steel members to have appropriate corrosion protection applied, consisting of blast to Sa 2½ standard and apply zinc spray to 150 microns DFT and top coat to architects selection colour.
- The roof will be clad with roof sheeting using a base metal thickness of 0.55mm.

### **2.3.1 Stormwater Run-off**

- The gutters and downpipes to include vermin protection.
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## **3. Building Services**

### **3.1 Stormwater Drainage**

- Stormwater drainage will be provided to drain all Stormwater runoff from the Warehouse and yard areas.

### 3.2 Electrical and Lighting

- Power to roller shutter doors.
- Lighting to the warehouse office and yard.
- Allow high bay LED's to warehouse 200 lux average at 1m above floor level and LED troffers to office to 500lux average at 800mm above floor level. Surface mounted LED fitting to amenities to 150lux with occupancy sensing and control.
- Emergency lighting to comply with building code requirements.
- Exterior Lighting: Building perimeter areas:- Exterior LED floodlights 20 lux generally with photocell daylight sensor. Mounted from building and on 6m mounting height poles in office carpark. Design to avoid light spill on neighbours.
- Supply one 100mm duct from street to the main office building to a demark point with draw-wire for supply of fibre by Lessee's comms company.
- Canopy Lighting – 160 Lux average at 1m above floor level. Exterior grade LED fittings
- Amenities: sockets for shavers and hair dryers in each of main toilet rooms
- Office: Double 10 amp socket outlets @ 1 per 5 lineal meters of office perimeter wall.
- Main supply 3 phase from utility provider terminated at main switchboard, mounted on the inside of an external wall (to be determined by developers electrical design consultant).
- Main board 250 amp supply. Office Supply 70W psm diversified load and 100W psm max load.
- Warehouse supply:10W psm for perimeter power (not dedicated equipment).
- Main switchboard form 3B rated and have suitable take off for tenant sub mains DB's
- Base build distribution boards 18 way TP and N metal cabinet type. Allow for 30% additional capacity.
- Electrical metering of offices and sub-metering of Warehouse and external lighting. Power and tariff mains metering. Cloud based metering. Integrated with circuit breakers.

### 3.3 Mechanical Services

#### 3.3.1 Warehouse Ventilation

- Warehouse ventilation shall be by natural means through opening roller shutter doors and roof passive ventilators. Design to be confirmed by the mechanical engineer to comply with NZBC requirements.
- Allow for ventilation roof mounted fans to Warehouse.

#### 3.3.2 Offices

- Office is fully ducted HVAC with split units. To developers mechanical engineers design.

### 3.4 Hydraulic services

- Plumbing and drainage to toilets and kitchenette.
- Stormwater drainage to all gutters, downpipes, roofs and runoff water from yards, ROW and road.

### 3.5 Fire Protection

- The buildings to be sprinklered.
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## 4. SITE WORKS

### 4.1 Yard

- A new yard area to be formed as shown on SK 102-14-131509.
  - Yard area and main truck routes to be 175 thk fibre reinforced concrete.
  - Carpark areas are 25mm thick hotmix on 250mm hardfill.
  - Car parking and landscape areas around the proposed warehouse office and yard to be formed as shown on SK 102-14-131509.
  - Footpaths around main office entry – exposed concrete finish.
  - Fencing – Black plastic coated galvanised hurricane mesh 2.1m high. 2.5mm wire x 50mm diamond. 3 x HTR6 barbed wire around top of fence and gate (3 x 2.5mm HT). 50 dia galv steel posts and corners and end (painted black). 40 dia galv. steel tube posts into concrete footings.
  - Gates – 2.1m high. Size as per plan. 40mm dia galv steel tube frame with 25 dia. Tube brace. 3 x HTR6 barbed wire along top. Infill with galvanised hurricane mesh (black coated mesh and black painted galv frame). Manually operated gates. Secure locking system fixed to gate. Sliding bolts to secure to ground.
  - Landscaping where areas permit landscaping eg. Around office building and to the side of the ROW accessway. As per final architect/developer design.
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## 5. Exclusions

The following items are excluded from the scope of works:

- Tenant hard and soft fit out works including appliances
- Specialist electrical reticulation
- Security system, barriers and access gate automation
- Data and telephone distribution cabling, hardware, hubs, racks, PABX etc.
- Racking, shelving and storage units
- Gas reticulation
- Tenant signage
- Specialist lighting
- Courtyard
- IT room fitout and special construction items
- Office and amenity walls and door not included
- Specialist lighting
- Security system
- Musak system
- Telephone and communication cabling
- Telephone system and installation fees
- Data system, trunking and reticulation and power to workstations
- Emergency generator, distribution board and cabling
- Soft fitout FF&E

- Rubbish disposal system
  - Loose furniture and moveable partitions
  - Drapes and blinds
  - Whiteware and kitchen appliances eg. Oven, microwave, fridges etc..
  - Racking, shelving and storage units
  - Archives storage systems and shelving
  - Tenant signage
  - Power factor correction and surge protection provision.
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