

CONSTRUCTION SPECIFICATION/BUILDING REGULATION NOTES

EXTERNAL WALL

Cavity wall construction comprising outer skin of 102.5 mm facing brickwork, stretcher bond all pointed in coloured mortar to a neat bucket handle finish. Main brickwork in buff with contrasting dark brick bands and plinth, 50 mm clear cavity and inner leaf of non load-bearing prefabricated timber studwork panels comprising breatherfoil FR on 9.5 mm external grade plywood sheathing on softwood studs with vapour check and 12.5 mm plasterboard internal finish. Insulation between studs to meet U value 0.35 W/sq.m.K.

Details where indicated on the elevations, e.g. window cills, shall be coloured precast concrete designed and supplied by specialists, with all necessary stainless steel fixing ties, restraints, cramps etc., designed by the Structural Engineer. All mortar joints shall be nominal 10 mm, with Group 3 mortar above dpc level. Mortar below dpc level to be Group 2 to Structural Engineer's specification.

External skin to have movement joints at maximum 12.0 m centres using a 10 mm joint with Plastazote sealing strip and Thioflex 600 sealant both by Expandite. Expansion joints tied across with 3 mm thick stainless steel de-bonded ties at 225 mm centres. Wall ties generally to be safety type in stainless steel to BS.1243:1978 at not more than 600 mm centres staggered horizontally, 375 mm centres vertically, and 600 mm centres vertically at all openings. DPM to be fully sealed to high performance polymeric DPC e.g. Hyload 2 or equal approved and discharge minimum 150 mm above ground level via weepholes at maximum 900 mm centres. Any structural steelwork within cavities to receive two coats bituminous paint up to 175 microns DFT in addition to Structural Engineer's finish specification.

Lintels to external walls over conventional door and window openings to comprise proprietary standard or purpose made stainless steel units designed and supplied by specialists and incorporating integral dpc with stop ends and proprietary plastic weepholes at max 900 mm centres and at ends of openings.

SUB STRUCTURE, FOUNDATIONS, GROUND FLOOR SLAB

Site preparation and treatment of any contaminated material on site will be in accordance with methodology issued by the Structural Engineer. Ground improvement/preparation shall be in accordance with Structural Engineer's requirements and recommendations.

All foundations shall be designed to B.S. 8004 1986 and BS 8110 : Part 1 : 1997 and either composite reinforced concrete raft type, or pad bases and strip footings, all to Structural Engineer's design. Ground floor slab to be in-situ ground bearing reinforced concrete or suspended precast slab designed by the Structural Engineer to carry a superimposed load of 2.5 plus 1 kN/sq.m., with top surface power floated smooth, to receive raised access floor or screed on closed cell insulation. Slab to be laid over 2000 gauge Visqueen dpm with all joints lapped and taped on sand blinded hardcore.

All reinforced concrete construction to be complete with all expansion, contraction and day joints as specified by the Structural Engineer. Slab to be isolated from external leaf by closed cell insulation.

SUPERSTRUCTURE

Generally two storey steel portal frame construction with steel beams providing support to first floor structure with tie beams to eaves level and cold rolled purlins supporting roof finish. All steelwork designed to the standards and loads as the Structural Engineer's specification.

ROOF

The roof will be pitched at 17.5° and constructed as a warm roof built-up system comprising 0.8mm hydro aluminium profiled sheet, glass-fibre insulation quilt, vapour control and internal 0.7mm galvanised steel liner sheet fixed to purlins. External finish to be mill aluminium complete with all trims and flashings to match. Panels to be fixed in accordance with manufacturers recommendations. Cold bridging to be minimised by the use of thermal breaks. The overall 'U' value of the roof is 0.25 W/sq.m.K and the roofspace is unventilated.

Roof anchor safety system to be installed by specialist to allow safe access to all parts of the roof for maintenance.

UPPER FLOOR CONSTRUCTION

First floor slab to be 130 mm grade C25/30 concrete, reinforced, on proprietary metal deck. Floor to be designed for a superimposed load of 2.5kN/sq.m. plus 1kN/sq.m. allowance for partitions and an allowance for suspended ceiling hangers. Floor to office area to be power float finished to receive full access metal faced raised flooring system with a total elevation of 125 mm. Floor to core area to receive 50mm closed cell insulation and 75mm power floated screed.

RAINWATER GOODS/FASCIAS/SOFFITS

Fascias and soffits to be in polyester powder coated flat galvanised steel pressings, designed and installed by specialists, all with discrete jointing and fixing system. Gutters to be in galvanised steel with stitched sealed joints, coated with two coats bituminous paint to weather face and weir overflows at all ends. Downpipes to be square section polyester powder coated galvanised steel to match fascia.

INTERNAL WALLS

Prefabricated timber studwork partitions to receive plasterboard finish. All walls to be taken up to underside of structural floor above at ground floor level, or 150mm above underside of suspended ceiling at first floor level. Partitions to have acoustic insulation between studs to achieve a noise reduction of 40dB(Rw).

INTERNAL STAIRCASE

Staircase to be steel construction to receive specified finishes, designed by specialist subcontractor or Structural Engineer. The general floor to floor height is 3375 mm and each staircase comprises 20 No. risers of 168.75 mm with goings of 250 mm. No flight to exceed 11 No. risers or 1800 mm. Structural flight width is 1152 mm in all cases, and all stairs are to comply with the requirements of Parts K and M of the Building Regulations to provide access for disabled persons. Handrails to both sides 983 mm above string and 1100 mm above landings. Distance between handrails 1000 mm.

Disabled access platform lift by Garteck or equal approved in accordance with BS 8300.

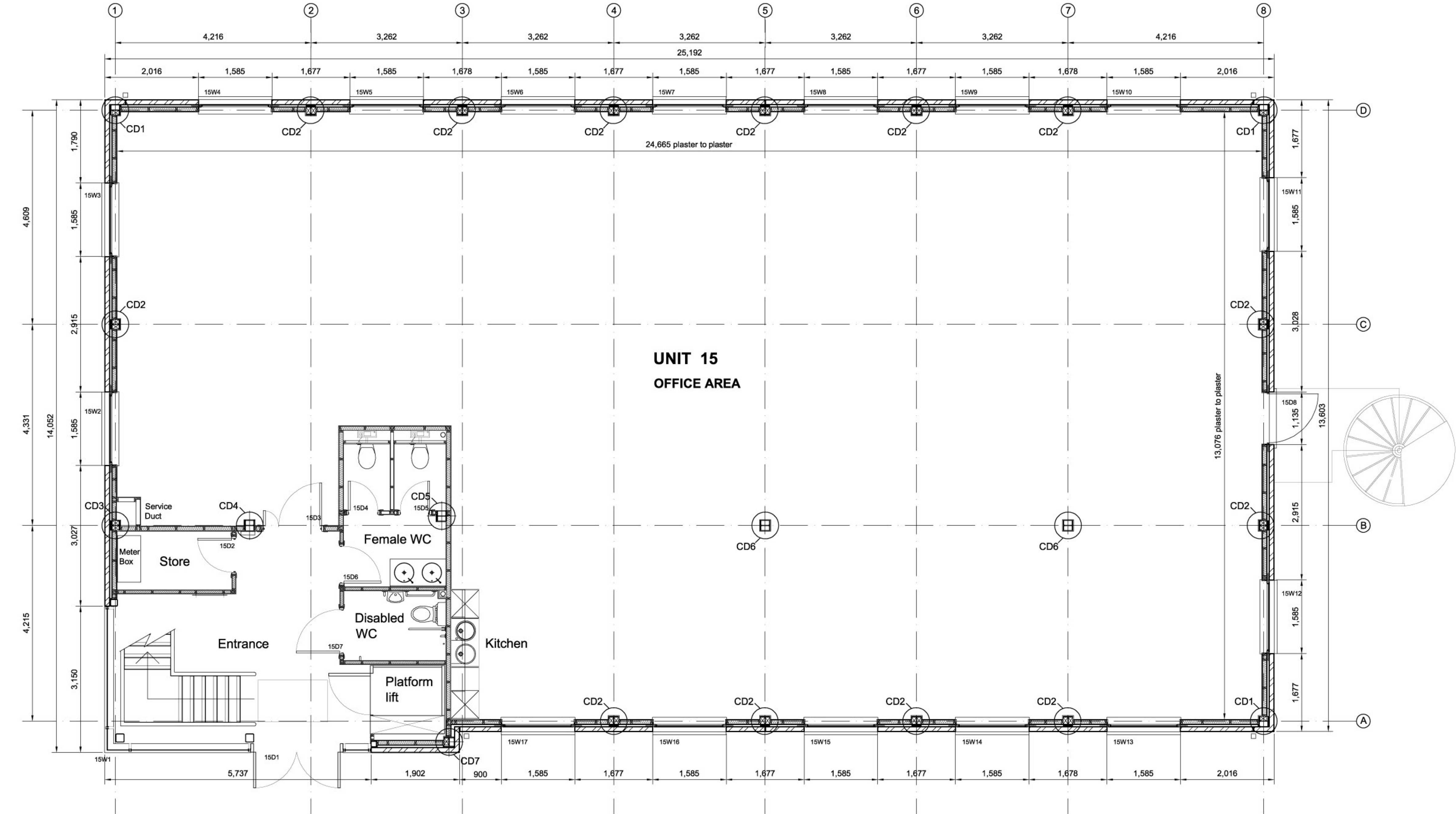
EXTERNAL FIRE ESCAPE STAIRCASE

Galvanised mild steel spiral escape stair with 2no. 27mm diameter balusters per open grill tread and galvanised flat handrails, all to specialist subcontractor's design to B.S. 5395, Part 2 1984 Category E(public stair).

CEILINGS

Office and entrance area :- Proprietary metal suspension system supporting a 600 x 600 Armstrong Dune mineral fibre ceiling tile with regular edge in 24 mm wide exposed metal tee, Class O/Class 1 surface spread of flame. Timber shadow batten and angle trim to perimeter.

Store :- to achieve half hour fire resistance comprising 12.5mm plasterboard either side of timber studwork fixed to stud walls. All joints sealed with intumescent mastic.



EXTERNAL WINDOWS, DOORS AND CURTAIN WALLING

Colour coated (polyester powder) aluminium framed double glazed units designed, supplied and installed by specialists. Aluminium to BS.1474, 6063T6, or HE9TF alloy. Opening windows to be outward opening on friction stays. Windows to have an opening restriction of max. 150 mm. Glazing to be clear in sealed double glazed units with 6mm inner and outer leafs.

Watertightness, air permeability and wind resistance shall all meet the requirements of B.S. 6375 Parts 1 & 2, taking account of the building use and exposure category (severe). All windows to be fully weather stripped and tested to severe rating in accordance with B.S. 4315 Part 1. Curtain walling shall be to CWCT (University of Bath) standard and guide to good practice in curtain walling. All frames throughout to be thermal break type.

Design of all window elements is by Specialist Sub-contractor and is to comply in all respects with Building Regulations Part L to achieve average U value of 2.2W/sq.m.K - 'Double glazing (Low - E, En = 0.05, 16 mm argon filled cavity.)'

Any areas of curtain walling to be 'look alike' panels shall be glazed with units comprising clear outer pane, clear airspace and solid back up panel comprising enamelled glass with insulation bonded to rear face backed with aluminium sheet, all to give a U value of 0.33 w/sq.m.K.

All windows/curtain walling to office areas to be provided with trickle ventilation to current Building Regulations. All fire exit doors are to be provided with panic release devices.

All glazing in critical locations, i.e. between finished floor level and 800 mm above this level within doors, or within 300 mm of the edge of a door shall be toughened glass to B.S. 6206: 1981. Where glazing extends to floor level on upper floors, the glass, framing system and fixings shall be designed so as to provide containment in accordance with Part K of the Building Regulations and B.S. 6180: 1985, and B.S. 6262 when subjected to horizontal internal loads as category "B" offices of B.S. 6399 Part 1.

INTERNAL DOORS/JOINERY

All internal doors shall be solid core interior quality with beech veneer face to both sides and solid edgings. Door frames to be solid beech, skirtings, architraves and windowboards to be beech veneered mdf. All ironmongery shall be good quality polished stainless steel. All door assemblies to have appropriate fire rating and be fitted with intumescent fire and smoke seals and self closing devices where necessary. All internal glazing in critical locations shall be toughened safety glass to B.S. 6206.

FLOOR FINISHES

All office areas shall be provided with a fully accessible, metal encapsulated raised floor system on pedestals on a 600 x 600 grid, medium grade, to Method of Building Performance Specification MOB PF2 PS/SPU, March, 1992, with a total elevation of 125 mm so as to provide a nominal clear void of 115 mm. Two coats of colour tinted sealer shall be applied to the structural floor prior to installation. The floor finish to the office and general circulation areas shall be good quality contract carpeting. The floor finish in the toilet areas shall be ceramic floor tiling with matching skirtings. Main entrance floor finish to be good quality contract carpeting as for office areas and include Jaymart Polyrib 2000 mat. In core areas at all levels, where a raised access floor is not provided, a built up screed of total thickness 125 mm shall be provided comprising 75 mm sand/cement on 50 mm dense polystyrene, by specialist manufacturer.

WALL FINISHES

Internal walls generally to receive emulsion paint finish on plasterboard dry lining with taped and skimmed joints. Office and general areas to be finished with one mist coat and two full coats of emulsion paint.

FIRE PRECAUTIONS/MEANS OF ESCAPE

All elements of structure are to be fire protected to give a fire resistance of half hour. Floor support beams and all structural steelwork within ceiling voids is to be fire protected using a proprietary rigid board or intumescent paint system. Internal columns and columns built into external walls to be protected where exposed using proprietary rigid board with skim coat plaster finish and Expamet corner beads. All dry lining to be fixed in accordance with the recommendations of the manufacturer. The main staircase shall be constructed as a protected shaft. Vertical fire barriers to be fixed above the core enclosure walls continuous to the underside of the roof to give half hour fire resistance. Details of fire alarms, smoke detectors, emergency lighting, escape notices, fire fighting equipment etc. all to Fire Officer's recommendations.

Emergency lighting is to be provided to all escape routes including office areas and escape stairs. Cavity barriers are to be provided to subdivide voids below raised floors and above suspended ceilings to a maximum of 20 m in any direction. Surfaces of floors and ceilings exposed to cavities to achieve Class O/Class 1 surface spread of flame to B.S. 476. Ceiling and roof void cavity barriers shall be mesh reinforced quilt giving half hour fire resistance mechanically fixed and jointed strictly to manufacturer's recommendation. Cavity barriers below raised floors shall be Rockwool TCB cavity barrier to suit void dimension. Ductwork passing through cavity barriers or any other fire resisting construction shall be fitted with fire dampers and fire stopped. Any service pipe over 40 mm diameter passing through fire resisting construction shall be fitted with an intumescent collar to maintain fire resistance. All floors are to be constructed as compartment floors having half hour fire resistance, to allow subdivision of the building into separate tenancies.

The main stair has a structural flight width of 1152 mm and a clear width between handrails of 1000 mm. Final exit doors shall be fitted with panic release devices and open outwards over level landings. Half hour fire resisting doors are to be fitted to the staircase enclosure and store rooms, all fitted with intumescent sealing strips, smoke seals and self closers. Smoke detectors linked to the alarm system shall be provided within the staircase enclosure and store to provide early warning.

SANITARY ACCOMMODATION AND ABOVE GROUND FOUL DRAINAGE

The buildings shall be provided with heating, cooling, (where applicable) mechanical ventilation, lighting and power, all to services consultant's specification. Disabled persons w.c.'s are to be provided at ground floor level with grab rails and fittings to comply with Part M of the Building Regulations, diagram 16.

All above ground drainage to be UPVC to current B.S.5572 and Building Regulations. Vent pipes to discharge through ridge vents. Wash hand basins drain through 75 mm deep seal traps to 32 mm diameter waste pipes. Sinks drain through 75 mm deep seal traps to 38 mm diameter waste pipe. W.c's drain through 100 mm diameter waste to SVP or below ground drainage. 7.5 litre cisterns to all w.c.'s and 50 mm anti-vac pipes where necessary. All internal manhole covers to be double seal screwdown type. Refer to drawings for details of sanitaryware.

UNDERGROUND DRAINAGE

Refer to Structural Engineer's drawings for details of all main foul and surface water drainage. Refer to Architect's drawings for details of final underground connections to internal foul fittings, and external rainwater pipes and external works drainage, all to be in vitrified clayware by Hepworth in accordance with their recommendations, the Building Regulations Document H, and B.S. 8301: 1985.

EXTERNAL WORKS

All kerbs shall be precast concrete to B.S. 7263: Part 1: 1994. Parking bays shall be in Marshalls Keyblock rectangular block paving in standard colour laid and jointed in sand, herringbone pattern, all to manufacturer's details, on sub-base to Structural Engineer's specification. Parking bays marked out in contrasting hit and miss coloured pavloirs laid soldier course pattern. Circulation area to car park in black tarmacadam on sub-base to Structural Engineer's specification. Footpaths and other pedestrian areas in Marshall's 'Saxon' paving flags, natural finish, size 450 x 450 x 50 laid and jointed to manufacturer's recommendations on sub-base to Structural Engineer's details. Soft landscaped areas all to Landscape Architect's details. Refer to drawings for details of hard landscaping features, fencing, bollards and bin store housing.

MECHANICAL AND ELECTRICAL SERVICES

Refer to Service Engineer's drawings/specification for details of any mechanical and electrical elements, external services and statutory authorities supplies.

STRUCTURAL

Refer to Structural Engineer's drawings/specifications for details of foundations, floors, steel frame, foul and surface water underground drainage, roadworks, and external works ground preparation/substructures.

Revisions	
Rev. A	23.01.2007 Ceiling tile specification, toilets and kitchen updated. jrw
22.02.2008	Drawing previously issued as 0311/02/01 - Unit 2.
Project	
SOLENT 2, SOUTHAMPTON for BUSINESS HOMES	
Title	
Unit 15 - Ground Floor Plan	
1:50	22.02.2008
Drawn by jrw	0311 / 15 / 01 A

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