## **Upper Wheelan Road**

7 Angelina Ave, Claremont TEL: 083 261 9481 / email: trevor@urbanhq.com

- DEVELOPMENT OF THREE HOMES AT ERF 48782
- UPPER WHEELAN ROAD, NEWLANDS JUNE 2020

#### **GENERALLY:**

- This specification supersedes all previous issues.
- This specification takes precedence should details herein conflict with those indicated in or on any other documents.
- The specification of an item does not imply that it is included unless indicated on the plans.
- The term "Prime Cost" (PC) and "Provisional Sum" (PS) shall mean the net cost of the articles and/or services mentioned, including VAT, and including 8% attendance for the main Contractor.
- Materials to be SABS standard wherever applicable.
- The preparation for the use and the application of all materials shall follow strictly the manufacturer's recommendations and/or instructions.
- All reinforced concrete shall be designed by a professional registered structural engineer, who
  shall inspect the placing of the reinforcing steel before the casting of the concrete and certify the
  soundness of the installation.
- In addition, the structural engineer shall inspect all excavations before casting of mass concrete footings.
- All timber roof construction shall strictly follow the design of a recognized computerized roof-truss firm, which shall certify satisfactory completion of the installation.
- All underground waste and soil drainage shall be inspected and approved by the relevant local authority before backfilling or covering over.
- The mixes for all mass concrete, mortar and plaster shall strictly follow the recommendations of the Portland Cement Institute.
- All stale concrete, mortar and plaster shall be discarded and removed from site.
- The Architect, the Structural Engineer, the Civil Engineer and the Land Surveyor engaged on the project shall be registered professional persons in terms of their respective registration Councils.
- The Contractor shall verify all dimensions and levels before commencement of any relevant stage
  of the work
- The term "or equal or similar approved" applies to all trade names used in this specification.

#### 1.0 CONSTRUCTION:

#### 1.1 Footings:

All in accordance with Engineer's specifications.

#### 1.2 Foundation Walls:

Clay brick walls of same width as superstructure walls above the floor slab level – with full width "brickforce" on top of the first layer of bricks and every alternate layer thereafter. Brickforce to overlap at least 600mm at foundation steps.

Cavity walls to be filled and well rammed with concrete (12mm stone) from the footing all the way up to the dpc.

#### 1.3 Ground Floor:

Floor finish as indicated on min. 25mm screed on 100mm 15Mpa concrete slab on 250micron damp proof membrane on compacted 100mm layer of clean sand on compacted fill, free of any clay, foreign substance or organic matter.

High density polystyrene 50mm floor insulation below ground concrete slabs. This insulates the floor structure from the soil, creating a far better insulation.

#### 1.4 External Walls:

230mm cavity clay imperial brick walls (50mm cavity).

5 x Butterfly wire ties per square meter of brickwork.

75mm brickforce in each skin in first two courses above lintels and in last two courses below wall plates.

375 micron "Brickgrip" dpc is to be installed wherever the cavity is bridged – at floor level (stepped with weepholes every 4<sup>th</sup> vertical joint), - at cills, lintels and full height of all reveals.

(All joints to be well lapped and taped).

Width of dpc and method of installation to comply with good building practice.

Heavy-duty galvanised hoop-iron is to be built into the walls as deep and as securely as possible, to coincide with the end of each roof rafter.

The hoop-iron is to be taken tight over the roof rafter and nailed securely into the side of the wall-plates.

Unless otherwise indicated on the drawings, 114 x 38mm wallplates to be installed above the inner skin of all external walls under timber rafters.

The outer skin of all external walls under roofing is to be beamfilled to the underside of the covering.

Precast concrete lintels to be installed over openings exceeding 900mm and up to a maximum of 3000mm span. For openings exceeding 3000mm span, refer to Engineer's details.

#### 1.5 Internal Walls:

Clay brick walls. 75mm brickforce in every sixth course and dpc at floor level as above. Precast concrete lintels over openings exceeding 900mm.

## 1.6 Internal Boundary Walls:

To be solid walls with "Pudlo" or "Sika" waterproof admixture to mortar and plaster from footing up to 2no. course above ground level and 400mm square piers to positions as per site plan, and reinforced to Engineer's details. All to Architect's design details.

### 1.7 Waterproofing:

Showers to be waterproofed with bituminous coating by specialists and to include sealing this to the floor trap that is to be pre-set in position. Coating is to be taken 1.7m up the walls of the showers 600mm beyond the enclosure, along the floor. Silica sand is to be incorporated in the coat as a key for the tiling over. (Sika cemflex with membrane or similar approved.).

#### 1.8 First Floor Slab:

Balconies and reinforced concrete roof slabs are to be waterproofed with "ABE Torch-on" or "Derbigum" membrane with 5 –stage acrylic-membrane counter flashing, all installed by specialists strictly in accordance with manufacturer's recommendations and guaranteed against failure (due to material and/or workmanship) for a period of five years after Practical Completion. (At balconies, the 4mm layer of waterproofing is to be taken continuously into the cavity walls adjacent and stepped up one course, over benching, onto the inner skin – this corresponding to and replacing the dpc where applicable).

## 1.9 Internal Lightweight Staircases.

Solid wood treads to Architects spec. Treads fixed to steel stringers.

#### 1.10 Internal handrails:

Painted steel balustrades with wooden handrails to Architects details.

### 2.0 ROOFING:

#### 2.1 Covering:

Charcoal Kliplok 0,7mm with a roof pitch of 30° fixed to sub-roof with concealed clips. Flashings to be done in Kliplok in accordance with manufacturer's instructions. . Roofing to be installed by recognised specialists who will furnish a guarantee against failure of any kind due to materials or workmanship, for a period of five years after practical completion.

This guarantee to be transferable to the first purchaser of the unit.

Standard gang-nail trusses to be supplied and fitted according to the manufacturer's instructions. The supplier to inspect and give an Engineer's compliance certificate.

### 2.2 Insulation:

"Sisalation 410" under sheeting.

125mm "Isotherm" over all rhinoboard ceilings. In accordance with part XA of SANS 204.

## 2.3 Fascia & Barge Boards:

Standard Aluminium gutter edge detail.

## 3.0 PLUMBER

#### 3.1 General:

All pipe work to be built into concrete, brickwork or plaster.

Balanced hot & cold water pressure system to be used throughout.

Copper piping to be used for all water supply unless otherwise stated.

All equipment shall be installed strictly in accordance with the manufacturer's instructions and recommendations for the highest grade of installation.

All water pipe work is to remain exposed under full pressure for three consecutive days to expose possible leaks.

The entire system is to be thoroughly flushed before the installation of taps and mixers.

All pipe work at exterior is to be buried at least 500mm below finished ground level.

All stopcocks are to be installed in approved stopcock boxes.

## 3.2 Water Supply:

## **EXTERNAL MAINS:**

The Contractor is to install a new water main connected to the municipal main – to be Class 12 HDPE Blue pipes with pressure fitting joints, including thrust block at end – all to local authority approval. (Local authority charges to be paid by the Developer.).

22mm piping is to be used from the Hot Water Cylinder (HWC) (for hot water) and (for cold water) from a position between the Pressure Reducing Valve (PRV) and the HWC to the bath and shower hot & cold mixers.

Thereafter, 15mm supply is to be taken to all other fittings.

1 x 300-litre, integrated heat pump/HWC to be installed, all with manufacturers recommended accessories (including stopcock, 2 x brass vacuum breakers, and plastic drip tray with drain).

To be installed in positions as per plan.

2 x 15mm threaded garden standpipes, with 15mm connections to the main supply, fixed to the main building in positions to be decided on site.

"Polycop" may be used to supply garden standpipes provided this is well buried or protected.

## 3.3 Sanitary ware / Brassware:

#### General:

Hot taps are to be positioned to the left of the cold tap.

All sanitary ware is to be white and will be installed as per the approved plan in accordance with the Architect's layout.

#### 3.4 Bathrooms:

Baths to be Libra white freestanding 1700mm with Grohe range bath mixer and Nicci spout. Showers to have Grohe range rose and taps. Wash hand basin to be white porcelain rectangle bowl & Grohe basin mixer. WC to have concealed cisterns with wall hung / floor standing pans to Architect's details.

## 3.5 Kitchen:

Franke 1½ underslung sink and Grohe sink mixer. Stop taps for dishwasher and washing machine. Prep bowl and Grohe sink mixer to island..

#### 4.0 GUTTERS/DOWNPIPES OR / AND ALUGUTTER:

Aluminium Gutter System consisting of half-round gutter, fixed with gutter brackets. 100mm diameter downpipes fixed to façade with Universal-Downpipe-bracket for hidden fixing.

#### 5.0 ELECTRICAL INSTALLATION:

#### 5.1 General:

All electrical work is to strictly follow all relevant regulations.

Temporary power during building operations will be for the account of the main

Contractor: This applies to both installation and cost of energy.

All switches and socket outlets to be Arteor Le Grande range with off white finish with push button dimmers.

Decorative light fittings and electrical appliances are to be supplied by the purchaser and installed by the electrical sub-contractor.

The main Contractor is to supply and install 75mm sleeves to the Energy Dispenser in the garage of each unit.

Each Unit to have a single-phase 80amp electrical connection.

All work to be in accordance with the detailed electrical drawings.

Should air-conditioning or under floor heating be required, the additional power requirements if any would be for the account of the Purchaser.

## 5.2 Internal Light Fittings:

LED down-lighters (warm white) to selected areas

Fluorescent lights to garage.

Any additional/ decorative light fittings to be supplied by purchaser and installed by the electrical subcontractor.

## 5.3 External Lights:

All external lights fittings to be to Architect's choice to later spec.

#### 5.4 Electrical Points:

Down lights (All directional)

Fluorescent lights

Dimmer switches

Two way switches

Single plugs

Double plugs

Heated Towel rail points

Under floor heating (optional extra)

Integrated hot water cylinders and heat pumps with isolator switches

Stove & Oven with isolator switches

TV points

Phone points

Intercom

Pre-paid meter

Distribution board

Power for Alarm, Garage door and irrigation computer

Alarm system

Alarm keypads

External lights

All weather plugs

WIFI connectivity

Quantity and position to be as per Architect's electrical plan. Any changes and additions to be for the clients account.

#### 5.5 Stove:

Provision is made for a 600mm wide fitted Bosch gas hob and electric oven together with a slimline extractor. The oven, hob and extractor to be supplied and fitted by the Developer.

## 5.6 Heights (to center of points):

Plug, TV & Phone points

120mm above finished floor level or as per dimensions on plan & as per Architect's detail.

#### 6.0 PLASTERER:

6.1 Walls:

All internal walls (except the garage) to be plastered and a rhinoglide top coat applied. External walls to have sand and cement plaster.

6.2 Underside of Reinforced Concrete Slabs:

Skimmed throughout.

6.3 Floors:

Minimum 25mm cement screed wood floated to house and steel floated to garage or tiles / cobbles to developers choice.

6.4 Exterior Window Cills:

One Coat, steel floated cement plaster.

## 7.0 CEILING CARPENTER:

7.1 Internal:

16x44mm Painted Cornices (with shadow lines) to architects detail.

Concrete Soffits:

Skimmed level.

Access Panels/Trap doors:

One access panel / trap door per house. 16mm Supawood dropped in on a standard flat aluminium T-section, painted ceiling colour.

Positions to be approved by architect.

## 8.0 DOORS & WINDOWS:

### 8.1 Generally Exterior:

Front feature door to be painted black timber slatted from specialist supplier in Meranti rebated hardwood frames. Door to be 2400mm high and 900mm wide.

Windows to be aluminium. Colour choice charcoal grey as per the Architect's window schedule.

#### 8.2 Generally Interior:

Doors to be painted 44mm MDF, horizontally slatted - finished with primer and two finishing coats. Doors to be approximately 2400mm high

All frames to be built in using minimum 3 x galvanized anchors both sides and protected during construction.

## 8.3 Ironmongery:

All units are to be supplied with standard high-grade handles, locks, catches, hinges, hold-open devices as installed by the manufacturer. Cabin hooks to all hinged exterior doors to be supplied and installed by the Contractor. All satin chrome natural anodized or stainless steel finish.

See P.C. amount for all handles, knobs, etc.

#### 9.0 DOOR SCHEDULE:

9.1 Front Door:

Door: As per plan.

Ironmongery: 3 x 100mm butts per leaf.

1 x 4-lever mortice lock with faceplate.

9.2 Kitchen Door

Door: As per plan.

Ironmongery: 1 x 4-lever mortice lock with faceplate.

1 x 100mm cabin hook and eye.

Architraves to Architect's detail.

9.3 Patio and Other Exterior Doors:

Door: As per plan. Aluminium sliding or stacking doors.

Ironmongery: 1 x lock as supplied by manufacturer.

1 x 100mm cabin hook and eye. Recessed finger grips both sides.

## 10.0 EXTERIOR DOORS, GATES ETC:

10.1 Entrance Gate:

Gate: Purpose made painted solid timber gate to Architect's detail.

10.2 Garage Doors:

Door: 5380w x 2500h Purpose designed charcoal aluminium and steel

slatted door, fitted with electronic opening device, with two

remote control units.

Frames: Standard stiles as supplied with door unit.

Finish: To Architects detail.

#### 11.0 INTERIOR CARPENTRY:

#### 11.1 General:

All catalogue references apply to Baltic Timbers and all materials used will be equal or similar.

All fixings shall be punched in and covered with approved stopping carefully coloured to match adjacent timber.

Refer Door Schedules above.

## 11.2 Skirtings:

Garage will not have skirting.

All other rooms (including Guest Cloaks) to have 130 x 22mm to Architect's detail.

#### 11.3 Window Cills:

All windows will have plastered reveals.

#### 11.4 Balustrades at Balconies:

Timber balustrade/screen to Architects details.

#### 12.0 ACCESSORIES:

#### 12.1 Bathroom accessories:

To be supplied by purchaser and installed by contractor.

#### 12.2 Extractor Fan:

To be installed to later detail and ducted to exterior.

To comply with local authority regulations.

#### 12.3 Wash Line:

1 x galvanized "Fold-a-Line" at Garage/Kitchen lobby.

#### 12.4 House Numbers:

To Architects details; as positioned by Architect.

## 13.0 SPECIALIST CONTRACTORS:

Each item is to be supplied and installed by specialist.

### 13.1 TV Aerial:

One satellite dish per unit – decoder not included.

## 13.2 Perimeter Security. Electric Fence to perimeter.

Non-lethal 4-joule 8000-volt six strand along top of all perimeter walls.

## 13.3 Individual Security:

Internal System

Infra-red intruder alarm system consisting of PIR's,2 cameras garden beams, 2 keypads and 1 siren per unit, with battery backup and telephone and radio connection link for future connection by purchaser.

#### 13.4 Pool:

To be installed as an optional extra of R100 000.00 (4m x 2m) assuming normal soil conditions. Decision to be made within 14 days of signature of the Offer to Purchase.

### 13.5 Intercom /Access Control:

Two handsets per unit (both video), each connected directly with entrance. Camera at gate.

## 13.6 Under Floor Heating:

To be installed as an optional extra to bathrooms only, controlled by wall thermostats of pattern to match the light switches.

## 13.7 Landscaping:

Garden by specialist Landscaper as per plan.

Computer controlled irrigation system per home.

## 13.8 Morso woodburning fireplace.

13.9 Braai as designed by Architect for entertainment area. To be installed as an optional extra of R30 000.

#### 14.0 GLAZING:

All to strictly follow the National Building Regulations. Double glazing where possible. All to be clear unless otherwise stated.

### 15.0 JOINERY:

#### 15.1 General:

All work to follow Architect's details.

High impact edging to all carcasses unless otherwise stated. High quality satin-chrome or aluminium knobs to be fitted to all doors.

All doors to be high gloss supawood in white to Architect's approved sample.

Stone and/or Vicostone tops/timber to approved sample or similar alternative.

All drawers to be installed on high quality ball bearing runners.

All hinges to be soft closing,

All plinths to be hardwood except kitchen to be aluminium clip-on.

Developer and Architect to control.

#### 15.2 Bedrooms & Linen Units:

White melamine carcasses with ducoed supawood doors to Architect's design.

## 15.3 Bathrooms:

White melamine carcasses with ducoed supawood doors to Architect's design.

## 15.4 Kitchen:

Each kitchen will be individually designed in conjunction with the Architect and kitchen Manufacturer to the standard of Assorelli Kitchens as per sample.

#### 16.0 TILES:

#### 16.1 General:

See PC schedule for amounts and also Developer's selection.

External horizontal and vertical corners to be mitred if choice of tile permits.

#### 16.2 Bathrooms Walls & Floors:

Tiles to purchaser's choice to splashback and to ceiling in shower, as per Architects Room Data drawings.

#### 16.3 Kitchen:

Walls: Where counters join the wall – 100mm high Vicostone (to match counter top). As per Room data drawing. Glass/tile splash-back above vicostone to underside of wall cupboard.

Stainless steel splashback to hob.

## 16.4 Entrance, bathrooms and covered patios.

Floor: Tiles to purchaser's choice.

#### 16.5 Accessories:

To be supplied by purchaser and installed by Contractor.

#### 17.0 **ENGINEERED TIMBER FLOORING**.

Oak timber to be fitted to the ground floor living areas.

## 18.0 METAL WORK, FENCING & SCREENS:

#### 18.1 General:

Metal work to be installed by recognized specialist.

All metal is to be hot-dipped galvanized and painted with vinyl-wash primer, 1 x coat universal undercoat and 2 x coats of gloss enamel.

## 18.2 Perimeter Boundary:

Combination existing walling and solid block walling to Architect's plan.

#### 18.3 Timber Screens:

Hardwood timber (to weather naturally) screens to Architects later details.

#### 19.0 CARPETING:

Carpeting with underfelt, to purchaser's choice, to bedrooms and landing. See PC schedule for amounts.

#### 20.0 PAINTING & DECORATION:

#### 20.1 General:

All paint used is to be manufactured by Dulux/Midas Paints – unless otherwise specifically stated.

Surfaces are to be properly cleaned before any paint is applied.

Switch-plates and escutcheons are to be removed and replaced after painting is completed.

All surfaces painted are to be fully protected until handover.

Methods of preparation and application are to strictly follow the manufacturer's recommendations.

To assist with internal finishes, brush-out samples are to be provided in order to determine colour choice.

External finishes to Architect's choice.

No painting required to downpipes and gutters.

20.2 Internal: Purchaser's choice.

External: Architect's choice. Colours to approximate those on 3D pictures.

20.3 Materials:

Interior & exterior wall surfaces: 1 coat plaster primer

2 coats pure acrylic - Cashmere

Skimmed wall surfaces: 1 coat plaster primer

2 coats pure acrylic - Cashmere.

Skimmed ceiling surfaces: 1 coat plaster primer

2 coats Copolymer acrylic

Timber at interior (natural): 3 coats of Rubbol.

Timber at interior (painted): 1 coat white undercoat

2 coats white enamel."

Exterior Timber (natural): to weather naturally.

Exterior Timber (painted): 1 coat white wood primer

1 coat universal undercoat2 coats non-yellowing enamel

Rhinoboard ceilings: 1 coat Alkaline Resistant Primer Sealer

2 coats of PVA

#### 21.0 PAVING & SITE WORKS:

## 21.1 Generally:

Site levels to be adjusted by the main Contractor to bring levels to those indicated on the Site Plan, Development Plan and the drainage drawings.

All trees are to be protected and maintained during construction. In this regard only trees that are directly in the way of construction may be removed and trimmed.

All paving to be laid on 100mm base-course compacted to 100% "mod aashto" – laid to falls as indicated on the Site Plan.

## 21.2 Roadway and Unit Entrances:

All driveway and road paving is to be executed by recognized specialists.

The specialist paving contractor is to supply and install heavy-duty manhole covers, suitable for trafficable surfaces and precast high-density culvert inlet gratings – all where indicated on the drawings.

Generally the paving is to consist of grey cobble pavers laid on flat with pattern as per Architect's design, cobble (2x) border, with falls to roadway.

#### 22.0 EXTERNAL TIMBER:

#### 22.1 Pergola / Screens:

Hardwood timber.

#### 23.0 PC AMOUNTS & PROVISIONAL SUMS:

The following PC (Prime Cost) and PS (Provisional Sums) amounts are included in the Builder's Contract Sum and are subject to detailed drawings and specifications.

Cost adjustments to the Building Contract up or down will be made corresponding to the final actual certified cost of the PC or PS subcontracts, which will include 8% attendance for the Main Contractor:

All figures exclude VAT at the prevailing rate of 15%:

ITEMPC AMOUNT/P.SUMSupply only of wall tiles per unit including sealingR300.00/ m²Supply only of floor tiles (in & out) per unit incl. sealingR300.00/m²Supply only of all Timber door handles, knobs etc.R200.00/doorSupply & installation of carpetsR350.00/m²

## 24.0 DEVELOPER'S NOTE:

#### 24.1 Minor Modification of Design & Documentation:

All purchasers have agreed and accepted that the marketing layouts may be subject to minor modification with regard to structure and detail, at the discretion of the Architect in consultation with the Developer.

#### 24.2 Architect's Decision:

Should these occur, they will be clearly documented by the Architect and communicated to all parties and may result in a Variation Order issued to the main Contractor, the cost of which will be for the account of the Developer.

## 24.3 Purchaser's Requests:

CICNATURES OF THE DARTIES.

Any changes necessitated by alterations requested by the purchaser will be clearly documented by the Architect and communicated to all parties, the certified cost of which will be for the account of the Purchaser.

SIGNATURES OF THE PARTIES	•	
Signed at	this theda	ay of

Contractor's name S	ignature
Witness	
Developer's name	Signature
Witness	
Purchaser's name	Signature
Witness	