MOUNT VERDE

ARCHITECTURAL

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Section 2 Development Controls

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MVE Architectural Development Controls

2_1 Introduction

Mount Verde Estate carves out a holistic approach to well-being and health. By prioritizing agriculture, whole food, community connection, and outdoor living. Enjoying the local harvest and the Estate's many layers of outdoor activities and experience shall promote optimal wellness and health.

Living in an agriculturally integrated community leads to emotional benefits. It also provides a sense of belonging and acceptance. Growing, gathering, harvesting, and enjoying food with your neighbours has shown to be a socially rewarding pursuit.

2_2 Design Philosophy & Core Design Principals

The underlying principles have an overriding commitment towards climatic responsiveness, with energy-efficient and responsible design, such as working with the climate - not against it and ensuring informed occupant/s smart behaviour.

To enhance the sense of place and ensure harmonious and attractive streetscapes through attention to the exterior architectural language of the built structures, creating a socially sensitive built environment whilst retaining a sense of privacy where required.

A contemporary (unembellished) architectural interpretation with an emphasis on simplicity, scale, proportion, and refined detail. To foster and promote aesthetics that are of high architectural quality and relevant to the environment and each site specifically.

2_3 Design & Character

- Scale, proportion and clean pure forms with large volume spaces
- Draw from traditional and contemporary farm buildings
    - Simplistic shed or barn-like form and footprint
    - Barn door types
    - Ventilators and roof lights
    - Window/opening proportions
    - Materials such as corrugated sheeting (both as roofing material and vertical cladding), stone walls
    - Verandahs and porches
    - Screens, shutters and shading devices
    - Use of colour, consider the use of one colour (different tones to complement natural materials) as an accent or feature (e.g. on barn doors to add interest) with strict minimal coverage
- Truth to material, the use of materials where it is most appropriate without concealing its innate qualities, its right use and possibilities. e.g. exposed concrete left unpainted, timber's natural grain highlighted, copper's natural patina left untouched, exposed steelwork.
- The use of locally sourced material – preferably 200 km from the site, where reasonably obtained
- Courtyards and defined outside living areas; inside-out living: playing with the boundaries between interior and exterior

- Climatic, energy, water, *and waste*-conscious response (making use of passive design principles)
- Frontages, streetscapes, boundary treatment and access that positively address the public realm
- Promote continuation of farming practices across remaining arable portions of the sites falling outside of the permitted 10% non-agricultural use.
- Built structures must have a minimal visual impact on the landscape.

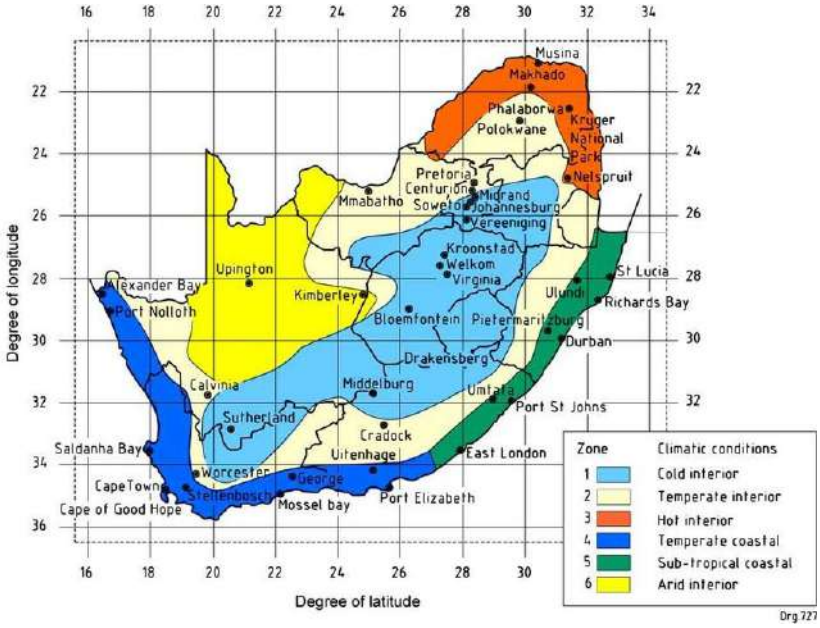
2_4 Climate

By arranging building elements and materials in such a manner to consider orientation and taking advantage of the local climate to maintain comfortable internal temperature throughout the seasonal change.

Well-orientated buildings incorporating sufficient cross-ventilation, effective insulation, thermal massing, and effective shading to reduce or eliminate the need for additional heating and cooling and thereby reduce additional energy input.

All buildings to adhere to The South African National Standards (SANS) 10400-XA and SANS 204 Regulations.

SANS 204 Climatic Zone Map:



The Cedara climate station (near Hilton) is in the Cwb climate zone which is classified as a Subtropical Highland climate. Cwb is known for sharing characteristics with oceanic climates, though it also tends to experience noticeably drier weather during the "low-sun" season (Weatherbase, 2019).

These regions also tend to experience mild summers and noticeably cooler winters due to its mP (marine polar) air masses (Weatherbase, 2019 and Flower, 2019). The climograph shows Cedara experiences warm/wet summers and dramatically colder and drier winters.

2_5 Terms & Definitions

Agrihood	An organized community that integrates agriculture into a residential neighbourhood.
Additional Dwelling	A self-contained residential building of limited size, which may be attached to, or detached from, the principal dwelling with no means of internal access to the principal residence.
Agricultural Activities	Agricultural uses and practices including and are limited as defined in the Land Use Rights in terms of the uMngeni Town Planning Scheme.
Agricultural Buildings	Structures designed for farming and agricultural practices
Amorphous	Free-form without regular clearly defined shape or form.
Awnings	A lightweight secondary covering or self-supporting overhang attached to the exterior wall of a building, often located above a window, door and/or walkway to provide shade.
Balcony	An unenclosed open area on the first floor is usually cantilevered from a façade or elevation to provide a private outdoor space.
Basement	A portion of a building whereby the finished floor level of which is at least 2.0m below, or the ceiling of which is at most 1.0m above, a level halfway between the highest and lowest natural levels of the ground immediately contiguous to the building. Usage to be limited to a garage, storeroom, service/laundry and/or similar.
Building	In addition to the meaning assigned thereto, any structure or erection whatsoever, irrespective of its nature and size.
Building footprint	The total extent of building works on the erf and includes the garage and over areas covered by a permanent roof structure.
Building height	The limit to the vertical extent of a building as measured in metres above the mean natural ground level. Also, the maximum number of storeys permitted as a multiple of 4.0m
Building line	A line delimiting the area measured from the boundary of a land unit, or from a setback, within which no building or other structure higher than 500mm, except a boundary or yard fence, wall and/or buttress wall may be erected.
Carbon Footprint	The amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organization, or community.
Courtyard	An unroofed area that is completely or partially enclosed by walls or buildings.
Coverage	Total area expressed as a percentage of a site which may be covered by buildings and measured from the outer face of external walls and covered roofs, provided that the area of an eave, roof overhang or similar projection of less than 1m shall not be included in the calculation of permissible coverage. MVEDRC reserve the right to include pergolas in the coverage calculation where these structures are deemed to have the potential to be enclosed.
Development Area	10% of the erf identified for the development or utilisation of non-agricultural purposes. Development areas are identified on the Master Plan.
Omnibus Servitude	Services servitude, services necessary for the use and enjoyment of all of the homes on the parent property are provided on a communal basis.
Frontage	The length of the building or plot of land, measured alongside the road/street/open space onto which the structure fronts.
Hedgerow	Fence or boundary formed by a dense row of shrubs or low trees. Hedgerows enclose or separate fields, protect the soil from wind erosion, and serve to keep cattle and other livestock enclosed.

Loft	A room or space directly under the roof and is considered a storey if the side walls extend above the floor.
Mezzanine	A low storey between two others in a building, typically between the ground and first floors.
Non-agricultural use	10% Area for residential development located substantially within the development footprint as indicated in the layout plan.
Proportion	Proper and harmonious relationship of one part to another or the whole.
Retaining walls	Rigid wall supporting soil laterally so that it can be retained at different levels on the two sides, designed to restrain soil to a slope that it would not naturally keep to.
Scale	The relative size or extent of something. the size of something compared to a reference standard or the size of something else (like a human being).
Simplicity	Simple buildings are neat and functional, using minimalistic elements which are showcased in their honest form. nothing extraneous, no add-ons, no decorations.
Specialised structures	Greenhouse, grow tunnels, composting systems etc.
Truth to materials	Materials should be used where it is most appropriate and their nature should not be hidden.

2_6 MVE Architectural Development Controls: Mount Verde Ridge

This section of the development controls must be read in conjunction with Part 4: Statutory Controls.

PTN's A6 to A15 (Portion 1) & B1 to B19 (Portion 2), C8 to C12 (Portion 3), Maqwood illustrated in light green.

Mount Verde Ridge 454HA

2_7 Building Elements Design Controls & Guidelines

Consideration should always be given to the carbon footprint of the building. It is recommended to make use of locally sourced sustainable materials, reduce waste and or make use of recycled material.

2_7.1 Orientation:

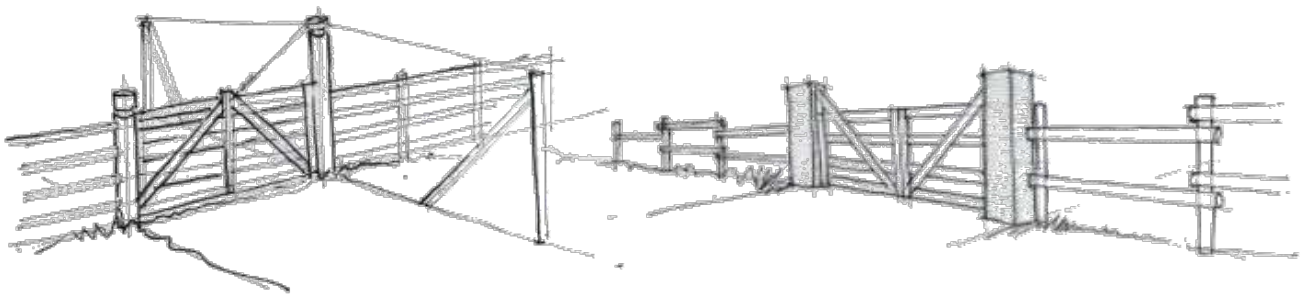
Buildings should be optimally orientated to maximise natural light and ventilation. Special care is to be taken to protect from bad weather whilst taking advantage of views.

2_7.2 Streetscapes & Frontage:

Frontage is defined as the length of a building or plot of land, measured alongside the road/street/open space onto which the structure fronts.

Frontage types play an important role in defining the character of the neighbourhood and enhance the public streetscape by providing a sense of layering, cohesion, individual expression. In addition, the frontage can also be used to create enclosure and privacy by dictating how pedestrians interact with the access point/buildings and or farmstead and may include landscaping elements such as indigenous tree planting, hedges, shrubs, and fencing.

Street Frontage:



All street frontages to be articulated with the following elements:

- Farm gates
- wooden farm style gates coated with weatherproof wax
- post and rail fencing.

Fence and Boundary Treatment:

- A suitable hedgerow to the erf perimeter to form a barrier, and or
- to mark the erf boundary to be provided where applicable.

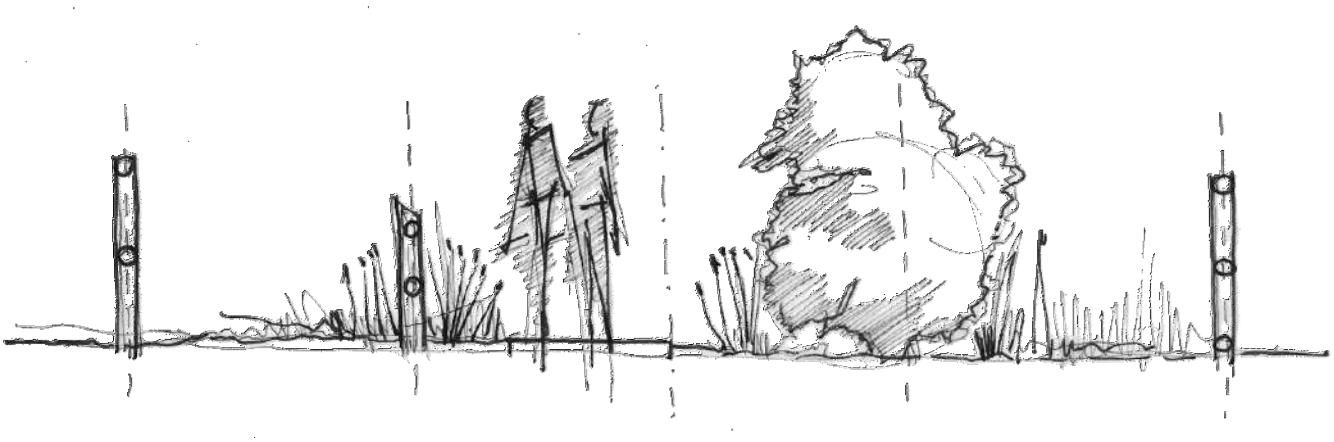
Refer to Landscaping Development Controls for plant list.

Non-permeable fences will only be permitted on the boundaries of the areas identified as non-agricultural residential use should this be required.

Such fence lines must be demarcated and detailed for submission to the MVEDRC for prior approval.

Exclusions:

- *Brick pier-and-palisade*
- *precast concrete walling*
- *masonry wall*



2_7.3 Driveways:

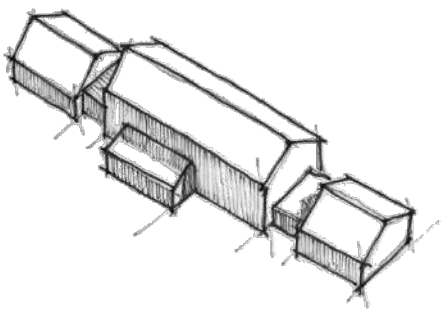
- Only one driveway access per site
- Driveway entrance to be 90deg with road frontage with an uninterrupted width at the access point of max 6m.
- Driveway alignment with homestead or garage may not be in a straight direct line.
- Driveways must be designed and constructed to minimum engineering specifications.
- Driveways must tie in with main roads and tonally match the surrounding road surface and may only be paved/finished with:
    - Stabilized stone & gravel
    - Basalt pavers
    - Clay brick paving
    - Concrete block pavers
    - Stabilized grass paving
    - Combination of above
    - Chip & spray with kerb detail similar to estate roads

Exclusions:

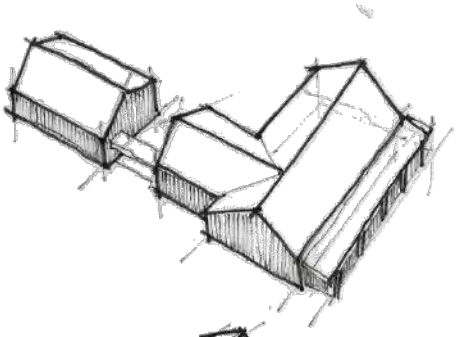
- *Asphalt without kerb detail*
- *chip & spray without kerb detail*
- *imprint paving*
- *post coloured/painted in-situ concrete*

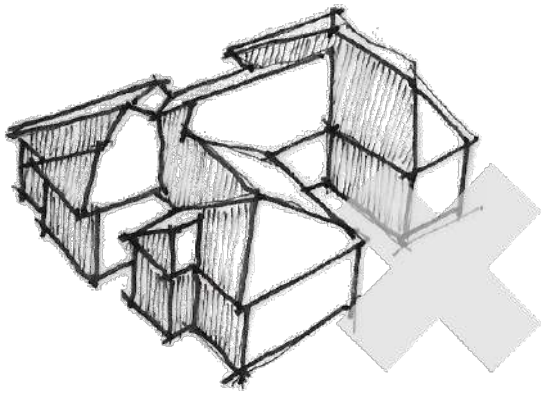
2_7.4 Building Form & Mass:

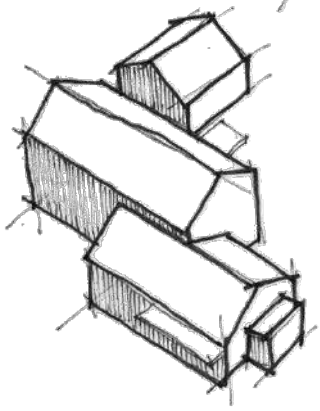
- It is intended that the architecture be harmonious, well proportioned, and always considerate of the human scale.
- Unnecessary large building forms must be avoided.
- Large building forms must be broken up into smaller well-defined components.



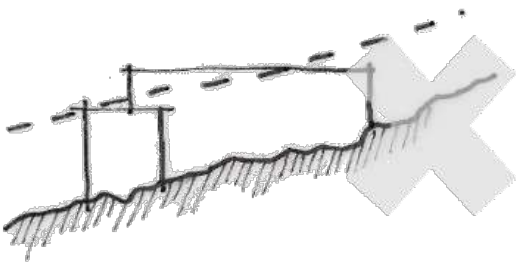
- Main building forms are to be simple rectangular, square, square-rectangular, or composite-rectangular and linked with secondary elements.
- The size, proportion, organisation, and placement of buildings must be a response to climatic conditions and not merely a view-driven response.
- Outbuildings must be of the same form as the main house if they are freestanding.
- Integration of building form with courtyard/service yard or boundary wall is encouraged where appropriate.

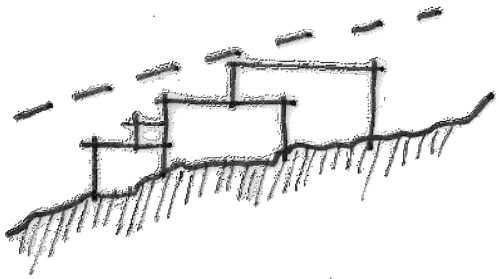






- No more than 10% of each erf may be developed or utilised for non-agricultural purposes.
- Development areas must be fragmented and staggered to compliment the natural topography.
- The 10% development areas (sloped sites) may not be on a single level or platform.
- No excessive retaining structures, berms or batters will be permitted.
- Consideration will be given to a site-by-site solution.
- The maximum bench level may not exceed 10m in width perpendicular to the contours.





Exclusions:

- *amorphous/free-form and or irregular forms are generally excluded and will only be considered in exceptional cases. Public/civil use buildings on a very prominent corner position would be an appropriate example*.

2_7.5 Restricted Buildings/Use

(Refer Part 4: Statutory Development Controls: Land Use Rights):

- Dwelling House: 1 Primary Dwelling per erf
- Additional Dwelling: 1 per erf provided that the building area does not exceed that of the Primary Dwelling and is included in the 10% non-agricultural residential area.
- Agricultural Buildings: As required and approved by the MVEDRC
- Staff/Workers accommodation: Permanent accommodation provided for staff within the 10% non-agricultural residential area. Must form part of plan approval submission to the MVEDRC.
- Kraal: Defined and secured are for the safekeeping of livestock. To be approved by MVEDRC.
- Home Business: MVMA approval is required prior to submission of the consent application.
- Agricultural Industry: MVMA approval is required prior to submission of the consent application.
- Recreation Area: MVMA approval is required prior to submission of the consent application.

2_7.6 Walls:

- Wall surfaces must be plain and without decoration. Simple plaster or timber surrounds to openings are acceptable but quoins, rustic and decorative mouldings are not permitted.
- Exterior walls to be predominantly plastered masonry. The use of external cladding, such as natural materials including timber, stone, metal sheeting or a combination thereof is encouraged. Particular attention to transition details from surface to surface is required.
- Screening elements used for privacy and or climatic control must be on a different plane to assist in the softening of the buildings' visual impact.
- Large glass walls and areas of glazing must be screened and of non-reflective glazing.

2_7.7 Fenestration & Openings:

- Vertical proportions are preferred, and excessively large, glazed areas are to be avoided. The proportion and style of the window should be consistent throughout. Only window opening sections of the same size & type may be grouped.
- Doors and windows to have clearly defined square or rectangular proportions with vertical or horizontal separations.
- Where large, glazed areas are suited, these areas are to be shaded with overhangs and or screened to avoid glare.
- Solar/light and ventilation control elements are encouraged.
- All openings towards adjacent properties that might infringe on privacy must be carefully considered.
- Generally large and frequently used openings should be positioned towards the North, while openings on the Eastern and Western sides will require sun-control elements.

Door & Window Types:

- Large vertical and horizontal sliding mechanisms are permitted (with overhang or cover)
- Top-hung casement or sash/mock sash windows
- Top lights and fanlights over swing doors are encouraged for natural ventilation

Exclusions:

- *Highly reflective mirror glass or film is not permitted.*
- *Clearstory gable windows and or special window elements of a simple suitable design may be considered upon presentation to the MVEDRC.*

2_7.8 Materials & Colours:

- Natural or painted timber
- Painted or galvanised mild steel
- Anodised or powder-coated aluminium
- Glazing to be clear and/or sandblasted where applicable. High-performance, low-E glazing with non-reflective solar treatments are encouraged
- Colours include natural timber, charcoal, black, dark grey, silver, brown/beige or white anodized powder-coated aluminium

Exclusions:

- *Win-block type pre-cast concrete window frames*
- *glass blocks, stained or reflective glass*
- *Decorative sandblasted or acid-etched patterns to entrance doors visible from a public road will be considered upon presentation to the MVEDC*

2_7.9 Roofs:

- Well insulated roofs (walls and floors) will moderate internal temperature fluctuations.
- Insulation requirements must be calculated in terms of SANS 10400.

Form & Pitch:

- Dominant roof forms to be uncomplicated and range from simple double-pitched roof structures with gable-ends to hipped or Duch hipped roofs with deep overhangs.
- Primary roof form to be double pitched. Major plan elements to be roofed individually with flat or lean-to roofs as secondary linking elements.
- No more than two sloping roof pitches will be permitted on a single roof structure, excluding flat and lean-to roof portions.
- No water storage tanks, geysers, heat pumps, air-conditioning units or similar are permitted to be visible on roofs.
- Mezzanine and or loft spaces of limited size above first-floor level will be considered provided it is within the roof space and applicable height restrictions. A loft or mezzanine is considered a storey if the side walls extend above the floor.
- Double pitched gable roofs are suitable (gables must be simplified and not embellished)
- Flat soft roofs are limited to a 5deg pitch (15deg if lean-to roof)
- Flat concrete roofs (with suitable waterproofing) are permitted if used as a secondary roof in conjunction with 1 other roof type. Green roof systems with low maintenance vegetation can be considered.
- Predominantly pitched 25 to 45deg in traditional style, simple double-pitched, hipped and half-hipped are recommended.

Exclusions:

- *amorphous roof shapes*
- *domed roofs*
- *barrel vaulting*
- *A-frames*

Dormer & Roof Lights:

- Roof lights and solar panels must reasonably be positioned within the same plane as roof surfaces on pitch or lean-to roofs where possible and must be concealed with a parapet or suitable screen on flat roofs.
- Dormer windows and roof lights will be subject to approval.

Roof Material & Colour:

- Standing seam and or Victorian profile corrugated metal and fibre-cement sheeting, black slate, flat square-cut metal and fibre-cement roof tiles, flat concrete roofs with stone chip covering and/or planted green roofs.

- Colours are limited to natural colours including grey, charcoal, and sandy colours.
- Any exposed roof element should be finished to reduce visual impact from above.

Exclusions:

- *Natural thatch and Harvey-Thatch*
- *highly reflective roof sheeting (unfinished galvanised sheeting)*
- *blue/green/red tones*

Gutters & Down Pipes:

- Seamless aluminium or chromadek gutters and downpipes are recommended.
- Gutters, downpipes, and rainwater harvesting systems must be considered during the design process to be integrated and enhance the elevations.
- Gutters and downpipes to complement or match roof finish.

Overhangs, Fascias & Bargeboards:

- Fascia and bargeboard colours to complement the roof finish. Bargeboard and fascia elements to be natural timber (preferred) or fibre-cement (no bullnose fasciae will be permitted).
- Max. depth of bargeboard and fascia limited to 250mm.
- The use of smaller timber elements is encouraged. Alternative composite materials may be considered.

2_7.10 Agricultural Buildings/Structures and Farm Sheds:

- Building form must be derived from local precedents and examples of successful shed structures.
- The structure must be of a modular, composite-rectangular form. Secondary extruded elements and additions to the basic form will be considered if they do not compromise the overall simplicity of the building.
- Passive design and orientation to take priority, to ensure optimal function of the structure in terms of natural light, ventilation etc.
- Clustering of secondary (non-residential buildings) is desired.
- Specialised structures (greenhouse, grow tunnels, composting systems etc.) will be carefully considered by the MVEDRC and Farming Cooperative. Plastic tunnel installation (without foundations and/or concrete floor)
  - Maqwood Farms and Farmettes has been identified for higher density tunnel farming and may apply with the MVEDRC for approval. Consideration to appropriate screening, environmental factors and tunnels visible to neighbours and the public shall be factored in the approval process

- Sites A6 to A10 to A16, B1 to B9 1 Tunnel of maximum size 8 x 12m per 5Ha can be applied for
- Position of grow tunnels on the property to be agreed with MVEDRC and affected neighbours.
- Plant screens or suited screening will be required around tunnels visible from public areas.

Roof form:

- Primary roof form double pitched. Attached secondary building forms may be roofed with lean-to and/or flat roofs behind parapet walls.
-

Materials:

- Walls: Primary wall finish to be smooth plaster, bagged brickwork and/or sheeting to match roof finish.
- Secondary finishes may include natural timber, fibre-cement boarding (horizontal/vertical only), rammed earth, dry-pack natural stone, metal sheeting (Victorian profile or standing seam)
- Roof: standing seam and/or Victorian corrugated metal, fibre-cement sheeting, flat concrete roofs covered with stone chip and/or planted roofs (secondary roof)

Exclusions:

- *face brick other than approved samples*
- *artificial stone*
- *stone ribbon cladding*
- *half-log timber walls*
- *natural stone + face brick combinations*
- *distressed paint, and specialised plaster effects*
- *Cementitious coloured plaster is not recommended for the climate*

*Other materials will be considered upon presentation of design and suitable samples to the BC. Wendyhouses and log cabins are excluded.

2_7.11 Miscellaneous:

Balconies:

- Balconies are to be designed and placed such that the privacy of neighbouring homes is not compromised. Placement and design are subject to MVEDRC approval.

Burglar bars:

- Horizontal/vertical (design suited) will be permitted and must align to window mullions where applicable. Internal and/or external security shutters are encouraged. NO external or heavily ornate burglar bars will be permitted.

Service Yards/Drying Yards & Screens:

- Service and drying yards to be fully enclosed and screened from public view. Screen walls to be min 1.6m up to a max of 2.0m in height. Contemporary timber fences, hedges, dry-pack natural stone in approved colour range and style is encouraged.

Gates & Entry Doors:

- Gates and entry doors to match the height of the surrounding wall, screen, or fence where applicable.
- Gates used in plastered masonry walls to be painted mild steel and/or timber. Timber gates to be framed and braced with T&G hardwood boards or slats and finished to match external timber structures. Gates in steel fencing to be of the same material and colour to match. Alternative composite materials may be considered.
- All vehicular and pedestrian gates are to be included as part of the submission to MVEDRC.

Exclusions:
- *wrought iron and/or ornate gates.*

Garages, Carports & Parking:

- Garage and/or carport structures are to be treated as integral elements of the architectural composition and façade modulation.
- Garage doors are encouraged to be natural timber or if painted, to match window and door finish.

Exclusions:
- *Pitched and/or domed shade-cloth structures*
- *steel-framed shade-ports*
- *temporary carports*

Pergolas, Canopies, Columns & Balustrades:

- Balustrades to be simple and no ostentatious designs are allowed. Only vertical or horizontal balustrading will be permitted.
- Columns, piers and supports to verandas or external structures are to be of a simple design and functional. No ornate, fluted, or decorative columns are permitted.
- Concrete columns, rectangular or round timber or painted steel supports are encouraged

- Verandas, pergolas, and external structures are considered as coverage if less than 70% perforated or open. Only laminated pine or treated hardwood structures are permissible if timber is used. Timber pergola and or round latte screens to be mounted on lightweight steel and/or square/rectangular timber structure. Alternative composite materials may be considered.
- Canopies to match primary roofing structure and material.

Exclusions:
- *Ornate pre-cast concrete elements*
- *ornamental and/or wrought iron elements*
- *over-embellished Victorian "Broekie Lace"*
- *Polished stainless steel*
- *resin balustrades*

Awnings & Blinds:

- Dropdown blinds and retractable awnings in muted, monochromatic colours are encouraged.
- All shading structures are to be detailed and submitted to MVEDRC as part of the submission.

Exclusions:
- *Lemon wedge and/or multicolour shade-cloth structures*

Braai Areas & Fire Pits:

- To be built within the 10% coverage area. Design should be integrated and form part of the layout.

Pools:

- Natural (chemical-free)/eco pools are recommended.
- Square, rectangular or round.
- Pools and pumps must be within the 10% coverage area. No pumps, heat pumps or any other plant may be visible to the public.
- Pool wastewater may not be discharged into a wetland or watercourse.

Note: all swimming pool enclosures to comply with SANS 10400-D and are subject to approval by the MVEDRC.

Exclusions:
- *Amorphous or free-form pools*
- *wire-frame plastic sheet*
- *pre-cast fibreglass pools*

Tennis Courts:

- Tennis court placement is to be designed and treated as an integral part of the architectural composition.

Signage:

- All signage is to be submitted to the MVEDRC as part of the submission. All house and Farmstead names must be registered with the MVEDRC to avoid duplication.

External Lighting:

- External lighting must be limited and where necessary be downward facing and shielded to prevent light pollution. Solar-powered lighting is encouraged.

Exclusions:
- *external spotlights/floodlights*
- *coloured lighting*

Retaining Walls:

- Dry-packed natural stone walls, Gabion walls using locally sourced rock.
- The Maximum exposed retaining wall height is 1.2 meters unless agreed by MVEDRC.

Exclusions:
- *Planted interlocking retaining block systems (e.g., Loffelstein)*
- *Face brick/exposed brick retaining walls*

General Building Services:

- Air conditioning units, heat pumps and piping (wall mounted units should be hidden from neighbours and general view and to be positioned so as not to cause noise for neighbours).
- Satellite dishes are to be positioned discreetly and not be visible from the road. They may not be mounted on chimneys or masts and ideally should be concealed in roof spaces.
- No TV aerials may project above the ridgeline of the roof.
- Swimming pool & water feature filtration plants to be housed and placed to minimise disturbance to neighbours.
- All waste pipes are to be concealed within walls, ducts or service yards and may not be exposed to the exterior.
- Washing lines and kitchen yard areas are to be concealed behind a screened wall.
- Waste bins are to be concealed in animal-proof enclosures. (“wheelie” type waste bins are encouraged)

2_8 Services:

As part of a continuous endeavour to develop sustainable communities and reduce our carbon footprint and dependency on natural resources it is recommended to consider alternative and complementary energy solutions as part of the design process. Recycling and water conservation is also critical to this endeavour.

The proposed development must demonstrate a 20% reduction in projected operational energy consumption, water use and embodied energy in materials as compared to typical local practices. The intention is to encourage and promote technical solutions during the design process to reduce operational costs and environmental impact through design development and execution of the project.

The 20% reduction will be measured against a base model (benchmark) set out in three categories:

- Energy use
- Water consumption
- Material

2_8.1 Electricity:

- Electricity is currently supplied from the ESKOM supply grid.
- Each Owner will be responsible for the purchase and installation of a prepaid meter in the distribution kiosk provided along the site boundary.
- An LV cable will be installed from the metering kiosk to the closest point on each property. The supply cable to the dwelling will be joined to this cable at the homeowners' cost.

Transformer:

· Seller shall install the transformer at the Purchaser's cost. 25kVA 3.3kV/400V transformer and install it along the 3,3kV cable.

Prepaid Meter Supplier:

· Prepaid meter supplier: Currently Netvendor and is subject to change.

A minimum 20% energy consumption saving (calculated from baseline energy consumption) must be achieved.

2_8.2 Sewer:

Septic Tank and Soak-away systems:

· No Septic Tank and or Soakaway system will be permitted within 100m of a wetland or watercourse, with the exception of Sites A7 & A11.

- The proposed position must be clearly indicated on building plans submitted to the Building Committee and within the area indicated on the Site Restriction Diagram.
- Minimum specification: a septic tank and soak-away system designed and installed in terms of the SANS 10400.

    - Sites A6, A7, A8 are not permitted to install Septic Tank or Soakaway system and must install a conservancy tank.

Owners are advised to consider the merit of package type systems, other than conventional septic tank soakaway systems.

Preferred and approved System:

- MASKAM Water, sewage and water treatment
- NanoTech Water Technologies
- Aqua Plan Water Treatment Engineering

2_8.3 Water:

- Potable water will be supplied by the uMgungundlovu District Municipality. All proposed dwellings must include water saving measures and rainwater harvesting technologies to ensure water conscious building designs.
- Where boreholes are permitted, application must be made to WARMS and MVMA for approval prior to the sinking of a borehole.
- Each Owner will be responsible for the purchase and installation of a water meter as specified by MVMA.

2_8.4 Stormwater Management:

- Stormwater management should seek to make project flood neutral and so not lead any flows directly to watercourses without approved form of retention.
- No drains, whether from buildings or roads, should discharge directly into watercourses.
- Released flows should be spread over a wide area and be allowed to percolate through vegetation until the channel is reached.

2_9 Alternative Energy Sources

- The South African National Standards (SANS) 10400-XA and SANS 204 Regulations not only regulate energy use in buildings but have made it mandatory throughout South Africa to supplement Eskom power with renewable energy sources.
- Diesel and petrol backup generators are not sustainable forms of supplementary energy provision and recommend consideration of sustainable alternatives such as photovoltaic (PV) solar panels and battery

- back-up, solar geysers, and or heat exchangers for hot/chilled water. Gas should be considered for cooking and water heating.
- All residential dwellings must comply with the energy-efficient design requirements of the National Building regulations SANS 10400 specifications.
- A minimum 20% energy consumption saving (calculated from baseline energy consumption) must be achieved.

2_10 Rainwater Harvesting

- As part of water-saving measures on the Estate, owners are encouraged to harvest rainwater.
- Water may be stored in submerged reservoirs or above ground tanks if treated as integral elements to the architectural composition and façade expression.
- Water storage must clearly be indicated on the building plans submitted to the MVEBCC for approval.
- No "green Jojo tank"' water tanks will be permitted without sufficient screening.

2_11 Grey Water Recycling

The use of a double pipe system to collect wastewater from showers, baths and basins are encouraged. The design is to include a suitable filtration system.

2_12 Waste Recycling

Waste separation at the source is required. Sculleries and service yards must be designed to accommodate three bins that will regularly be collected by the MVMA or its appointed contractor.

- Bins allocation for waste separation as follow:
- Recyclables (glass, metal, plastics, paper, and cardboard)
- Non-recyclables (polystyrene, alkaline batteries, etc.)

2_13 Design Review Panel Requirements

- All Building designs are to be submitted in complete sketch plan form to the Mount Verde Estate Design Review Committee (MVEDRC) for approval prior to submission to the Local Authority.
- Plans must be submitted initially as sketch/concept design and thereafter as final working drawings. If stamped and approved, must form part of the normal submission drawings to the local authority
- Scrutiny fees are payable to the MVEDRC on submission. Subsequent alterations/amendments required after approved must be submitted to the MVEDRC.

2_13.1 Submission of Building Plans

The review procedure consists of TWO stages aiming to avoid unnecessary time and cost delays. The preliminary plans and models will be examined at the MVEDRC meeting for "approval in principle".

No approval will be given for "Future" phases and/or additions. All built structures are to be included as part of the submission.

The owner will be advised of the MVEDRC comments regarding the submission by email, within a week of said meeting. Should comments be favourable the owner/Architect can proceed with design development and formalization of the drawings. Please note that if for whatever reason the client's ideas change regarding the planning or aesthetic of the buildings, an additional meeting is required to be arranged for pre-approval by the MVEDRC.

Final drawings are to represent what has been approved along the way.

On completion of construction, and one week before the intended occupation, MVEDRC is to be contacted to arrange for an inspection of the property to ensure all is as per the approved stamped drawings.

Upon request members of the MVEDRC committee shall be allowed onto site during the building process.

Adherence to municipal building regulations and any other applicable legislation is solely the responsibility of the owner. Architects or Architectural Technicians are best positioned to advise owners of these regulations as they are constantly changing.

STAGE 1 – Preliminary Review Submission (Conceptual)

- All building designs are to be submitted in a complete sketch plan form, including a site development plan (site-specific) prior to submission to the Local Authority.
- Approved sketch plans/concept design may form part of the normal submission drawings to the Local Authority.

STAGE 2 – Final Review Submission

- Drawings prepared for submission to the Local Authority to be submitted for final approval and stamped prior to submission to the Local Authority.

2_13.2 Submission Document Requirements

The following documentation is required when submitting plans for approval:

- Two complete sets of plans and associated documentation (1 colour + 1 black/white copy), including Architectural certification and specifications (templates attached), energy efficiency & sustainability checklist and owner/Architect details.
- Proof of payment
- Architects's letter of appointment for contract administration and site inspection or the owner's declaration of responsibility for building work.
- Format: Paper size A1, A2 or A3 (drawing information to scale) with the site, Architect and owners details visible. Soft copy of complete submission in PDF format.

2_13.3 Information Required on Plans

The following minimum information is required when submitting plans for approval. The review committee may at its discretion request additional information to motivate and/or substantiate the design and or part thereof.

Dimensioned Site Plan, including

- 0.5m contours
- north arrow
- building footprint (existing and proposed where applicable)
- building restriction lines
- servitudes (existing and proposed where applicable)
- access position
- site works
- water storage tanks drainage and means of stormwater dispersion and existing vegetation to be retained.

The site plan should reflect the design concept in its entirety:

  - position of the driveway
  - parking
  - loading bays and collection points where applicable (loading and waste collection should be separate)
  - paving
  - yard and retaining walls
  - annotations of the intended vegetation cover with the position of any vegetable tunnels or greenhouses if proposed
  - landscaping and or natural areas to be conserved
  - undeveloped areas such as flood lines; rivers; wetlands; etc.

Surveyed Contour Plan

By registered Professional Land Surveyor. The surveyed plan must show

- detailed contours
- benchmark all existing and proposed engineering service connection positions
- natural site features such as trees, rocky outcrops and/or sensitive vegetation

Dimensioned Floor & Roof Plans

- To scale 1:100 or 1:50.
- Roof plan to include falls and rainwater harvesting system.

General Elevations & Sections

- With heights above MSL and referenced to site benchmark, roof pitches and balustrade heights.

Detailed cross/site section

- Indicating relationship between internal and external floor levels, landscaping and retaining walls.

Door & Window Schedule

- Showing glazing and frame type.

Stormwater management

- Detail including the position of gutters, down-pipes, pipe-runs
- Rainwater harvesting tanks to be indicated on the site plan, floor plans and section.

Detail Drawings

- For all passive design elements, screens, awning details, fences, balustrades, chimneys, shading structures, eaves, downpipe position and rainwater harvesting system, retaining walls (detail to be approved by engineer), outdoor artwork, vegetable tunnels and greenhouses.

3 Dimensional Drawings

All submissions to include a minimum of :

- eye-level and 1 birds-eye-view of the development
- Black and white drawings will be acceptable
- 3D renderings are not compulsory

MVEDRC Specification Sheet

- Indicating coverage, finishing schedules and registered owner information.

2_13.4 Special Conditions

The MVEDRC reserves the right to interpret this manual and approve plans at its discretion.

Mount Verde Estate Design Review Committee Requirements

All Building designs are to be submitted in complete sketch plan form to the Mount Verde Estate Design Review Committee (MVEDRC) for approval prior to submission to the Local Authority. Plans must be submitted initially as sketch/concept design and if stamped and approved, may form part of the normal submission drawings to the local authority.

Scrutiny fees are payable to the MVMA on submission. Subsequent alterations/amendments required after approved must be submitted to the MVEDRC.

2_1_1 Submission of Building Plans Summary

The review procedure consists of TWO stages aiming to avoid unnecessary time and cost delays. The preliminary plans and models will be examined at the MVEDRC meeting for "approval in principle".

No approval will be given for "Future" phases and/or additions.

All built structures are to be included as part of the submission.

The owner will be advised of the MVBC comments regarding the submission by email, within a week of said meeting. Should comments be favourable the owner/architect can proceed with design development and formalization of the drawings.

Please note that if for whatever reason the client's ideas change regarding the planning or aesthetic of the buildings, an additional meeting is required to be arranged for pre-approval by the MVBC.

Final drawings are to represent what has been approved along the way.

On completion of construction, and one week before the intended occupation, MVBC is to be contacted to arrange for an inspection of the property to ensure all is as per the approved stamped drawings.

Upon request, please allow members of the MVBC committee onto your site during the building process.

Adherence to municipal building regulations is solely the responsibility of the owner. Architects or Architectural Technicians are best positioned to advise owners of these regulations as they are constantly changing.

- Stage 1 – Preliminary Review Submission (Conceptual)
  - All building designs are to be submitted in a complete sketch plan form, including a site development plan (site-specific) prior to submission to the Local Authority. Approved sketch plans/concept design may form part of the normal submission drawings to the Local Authority.

- Stage 2 – Final Review Submission
  - Drawings prepared for submission to the Local Authority to be submitted for final approval and stamped prior to submission to the Local Authority.

2_1_2 Submission Document Requirements

The following documentation is required when submitting plans for approval:

- Two complete sets of plans and associated documentation (1 colour + 1 black/white copy), including:
  - architectural certification and specifications (templates attached)
  - energy efficiency & sustainability checklist and owner/architect details
- Proof of payment
- Architect's letter of appointment for contract administration and site inspection or the owner's declaration of responsibility for building work.
- Format:
  - Paper size A1, A2 or A3 (drawing information to scale) with the site, architect and owners details visible.
  - Soft copy of complete submission in PDF format.

2_1_3 Information Required on Plans

The following minimum information is required when submitting plans for approval. The review committee may at its discretion request additional information to motivate and/or substantiate the design and or part thereof.

1. Dimensioned Site Plan

Including 0.5m contours, north arrow, building footprint (existing and proposed where applicable), building restriction lines, servitudes (existing and proposed where applicable), access position, site works, water storage tanks drainage and means of stormwater dispersion and existing vegetation to be retained. The site plan should reflect the design concept in its entirety. Position of the driveway, parking, loading bays and collection points where applicable (loading and waste collection should be separate), paving, yard and retaining walls. Annotations of the intended vegetation cover with the position of any vegetable tunnels or greenhouses if proposed, landscaping and or natural areas to be conserved, undeveloped areas such as flood lines; rivers; wetlands; etc.

2. Surveyed Contour Plan

By registered Professional Land Surveyor. The surveyed plan must show detailed contours, benchmark, and all existing and proposed engineering service connection positions, as well as natural site features such as trees, rocky outcrops and/or sensitive vegetation.

3. Dimensioned Floor & Roof Plans

To scale 1:100 or 1:50. Roof plan to include falls and rainwater harvesting system.

4. General Elevations & Sections

With heights above MSL and referenced to site benchmark, roof pitches and balustrade heights.

5. Detailed cross/site section

Indicating relationship between internal and external floor levels, landscaping and retaining walls.

6. Door & Window Schedule

Showing glazing and frame type.

7. Stormwater Management

Detail including the position of gutters, down-pipes, pipe-runs, and rainwater harvesting tanks to be indicated on the site plan, floor plans and section.

8. Detail Drawings

For all passive design elements, screens, awning details, fences, balustrades, chimneys, shading structures, eaves, downpipe position and rainwater harvesting system, retaining walls (detail to be approved by engineer), outdoor artwork, vegetable tunnels and greenhouses.

9. 3 Dimensional Drawings

All submissions to include a minimum of 4 eye-level and 1 birds-eye-view of the development. Black and white drawings will be acceptable and 3D renderings are not compulsory.

10. Architectrual Specification Sheet

Indicating coverage, finishing schedules and registered owner information.

2_1_4 Special Conditions

The MBVC reserves the right to interpret this manual and approve plans at its discretion.

Date: Click or tap to enter a date.

Architectural / Landscape Architectural Certification

Note: all sections must be completed

Registered Owner

Name		Sales Ref No.	
Tel No.		Erf No.	
Email		Erf Area (m²)	

Review Panel Scrutiny Fee (R)

Fee paid Yes☐ No☐

Professional Persons

Architectural Practice		Structural Engineer	
Name		Name	
Tel No.		Tel No.	
Responsible Architect		Email	
Person			
Tel No.			
Email			

Attached Plans Signed? Yes☐ No☐

Coverage & Floor Area	**Allowed**	**Actual**
Gross Building Area (m²)		
Open verandah (m²)		
Total Footprint Area (m²)		
Erf Area (m²)		
Coverage (%)		

Supervision of Building Work by: Architect☐ Owner☐

Plans certified as “my work” and coverage and floor areas certified being correct:

Signed by Architect:

Date:Click or tap to enter a date.

2_2.1 Architectural Specifications Part 1

Note: all sections must be completed

External materials, finishes & colours

	Material and Finishes	Colour name & code
Roof		
Walls:		
Ground Floor		
First Floor		
Other		
Door / Window Frames		
Shutters		
Front Door or Gate		
Chimneys		
Balustrades		
Facias		
Gutters / Downpipes		
Boundary Wall / Fence		
Street / Frontage		
Side / Rear		
Boundary		
Paving - landscaping		

Signed by Architect:

Date:Click or tap to enter a date.

2_2.2 Architectural Specifications Part 2

Note: all sections must be completed

Energy Efficiency & Sustainability Checklist

Passive Measures:

- North facing opening (with appropriate overhangs) ☐
- Screened west-facing openings ☐
- Cross Ventilation in all habitable rooms ☐
- Limited pipe runs from HWC's to appliances ☐
- Low-E or Double Glazed Windows ☐
- Water-saving fittings & fixtures ☐
- Recycled and/or Sustainable Building Materials ☐
- Effective Insulation measures ☐

Active Measures:

- Solar Water Heating and/or Heat pumps ☐
- Low energy lightbulbs ☐
- Rainwater harvesting ☐
- Greywater harvesting ☐
- Gas for cooking ☐
- Wind Turbines ☐
- Photovoltaic Panels ☐
- Blackwater Treatment ☐
- Biogas Digester System ☐
- Energy Efficient Appliances ☐

Smart Landscaping: Landscape Architect

- Topsoil conservation ☐
- Storm water runoff minimisation ☐
- Soil building using Composting and/or Vermiculture ☐
- Locally Indigenous ☐
- Tree and hedgerow planting ☐
- Biodiverse Landscaping ☐
- Urban Agriculture ☐
- Waterwise gardening - right plant right place ☐
- Planting for climate ☐
- Non-potable water use for irrigation ☐
- Dark Sky lighting methods, fixtures and design ☐

Signed by Architect :

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