

DEVELOPMENT AND DESIGN MANUAL FOR
LA LUCIA RIDGE BUSINESS ESTATE
prepared on behalf of
MORELAND DEVELOPMENTS (PTY) LTD.
by
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1.0 THE ETHIC OF LA LUCIA RIDGE BUSINESS ESTATE

1.1 Although a development entity in its own right, the La Lucia Ridge Business Estate emulates the distinguished quality of development that is the hallmark of La Lucia Ridge Office Estate and is regarded as a distinctive component of the wider emerging node of Umhlanga Ridge New Town Centre. It is intended to reflect these same qualities in terms of:

- 1.1.1 consolidating the distinctive sense of place emerging in the area
- 1.1.2 extending the same landscaping quality and general theme that has been established in the area
- 1.1.3 carrying through the predominantly white architecture that is a characteristic of the area
- 1.1.4 undertaking all development with the same attention to quality demanded in the area.

1.2 While it is understood that the commercial buildings that characterise business parks is different in scale and form from the offices in the area, it is nonetheless the intention to promote a predominantly “white architecture” in the Business Estate with dove-grey, charcoal and black as integrated secondary colours. Where, owing to corporate identity or branding requirements, there is a desire to use additional colours in the architecture of a particular development, these are to be accommodated as accent colours played against the predominantly white backdrop of the overall development.

2.0 DEVELOPMENT RIGHTS

2.1 Zoning in respect of all sites:

Uses:	Office, warehouse, showroom, light industries, limited retailing and service uses including storage and distribution
FAR:	0,50
Coverage:	50%
Height:	3 storeys maximum
Parking:	6 bays/100 sq.m retail floor area 4 bays/100 sq.m office floor area 1 bay/100 sq.m other floor area
Minimum Landscaping:	25%
Special Conditions:	Site Development and Landscape Plans are required to be approved in addition to building plans

Site owners are obliged to be members of the La Lucia Ridge Business Estate Management Association

A Parkway Reserve is to be registered on sites abutting the N2

- 2.2 All development in the area is subject to an Environmental Management Plan, a copy of which is included and initialled by the purchaser as part of the sales agreement documentation. It is a specific requirement that the impact on the environment from increased stormwater flows be minimised. Since ground conditions are generally favourable for on-site stormwater disposal, each site is to be designed and developed on the basis that only stormwater from the roof will be allowed to drain into the piped stormwater system provided. All other stormwater, whether from parking areas, driveways, paths, decks, terraces, balconies and hard or soft landscaped areas, is to be accommodated on site and designed to soak away. Site specific soil testing and designs will have to be carried out by suitably qualified practitioners and no increased nor concentrated flow of stormwater may be allowed to discharge onto adjacent sites, roads or open spaces.

3.0 DESIGN REVIEW

- 3.1 The La Lucia Ridge Business Estate Management Association is represented by its Design Review Panel (the Panel).

- 3.2 The design review process is as follows:

- 3.2.1 Pre-design conference and statement of intent

- 3.2.2 Presentation of conceptual design

- 3.2.3 Presentation of sketch plans presented for approval in principle

- 3.2.4 Council submission plans and landscape plan perused and signed off by the Panel prior to submission to Council

- 3.2.5 Inspection of completed development for certificate of final approval.

4.0 SITE WORKS AND SITE LAYOUT

- 4.1 Much of the site is re-contoured to achieve gentle falls over wide areas. Additional platforming is permitted in respect of individual sites within the following guidelines:

- 4.1.1 Platforms should be confined as far as possible to specific aspects of the site's proposed development e.g. the footprints of the warehouse

section, the office component, service yards, trucking areas and car parking areas. Each component is to be regarded as a separate entity and (without compromising the relationship of one element to another) should be expressed as a discrete level in each case.

- 4.1.2 Care should be taken to exploit any changes of level within individual sites to achieve trucking dock facilities, covered parking and visual screening of service, plant, parking and trucking areas, for example.
- 4.1.3 Extensive earth retaining structures are discouraged and should be ameliorated into several smaller changes in level.
- 4.1.4 Earth retaining systems such as Terraforce are permitted, together with reinforced concrete or clay masonry retaining walls, although these must be amply planted to allow for the substantial screening of such systems by sustainable vegetation.
- 4.1.5 All embankments or retaining systems are to be accommodated entirely within the curtilage of individual sites provided that these requirements may be waived by the Panel in cases of individual merit.
- 4.1.6 No retaining structure or embankment may be constructed on a site so as, in the Panel's view, to create an injurious condition to an adjacent site.
- 4.2 Each site is subject to the site layout parameters included in Appendix A and indicates:
 - 4.2.1 the envelope intended for accommodating the office component of the development
 - 4.2.2 the envelope intended for accommodating the warehouse component of the development
 - 4.2.3 the zones intended for accommodating the trucking, car parking and service yard components of the development
 - 4.2.4 the points at which it is intended that entrance for various classes of traffic be taken to each site
 - 4.2.5 any non-user servitudes that may apply to individual sites
 - 4.2.6 landscaping zones to be planted by individual developers and any Estate landscaping that is to be augmented by developers
 - 4.2.7 building lines, build-to lines and points of architectural accentuation that may be required
- 4.3 No open-air storage nor outdoor working areas other than service yards are permitted, providing that the Panel may waive this

requirement in cases of individual merit. No washing nor repair of vehicles, equipment or plant may take place on a site other than that which is minor and incidental to the day-to-day operations of the enterprise and provided that such activity takes place within a building or within a suitably screened, approved area. Any storage of goods in the form of containers, crates, boxes, palletes or stacking is to take place within a suitably screened and approved area and may not exceed a height of 4m provided that the Panel may consent to a waiver in cases of individual merit. Where lightweight roofing systems are intended to provide cover to outdoor storage or yard areas, these are to comply with the following:

- 4.3.1 the area designated for such use may not be visible from any adjacent roads
- 4.3.2 the area must be suitably screened from adjacent developments where there is, in the Panel's view, the threat of compromising the outlook of an adjacent development
- 4.3.3 any structure erected to provide cover to outdoor storage areas is to be of a substantial nature and in keeping with the overall integrity of the development
- 4.3.4 any outdoor storage area must be suitably screened with earth mounds, planting and/or screen walls designed in the ethic of the overall development.

5.0 PARKING

- 5.1 No parking is permitted within the building line areas applicable to MR94 or the N2, provided that the Panel may consent to limited encroachments of parking into these areas provided that such parking is uncovered surface parking, part of a parking structure integral to the building (but excluding any carports of all descriptions) and suitably screened and landscaped when viewed from these main roads.
- 5.2 A minimum of 50% of all on-site parking is to be covered, provided that where such cover is provided within car-port structures, such carports are to be of a substantial nature in keeping with the architectural ethic of that portion of the building to which it most closely relates. Black shadecloth may be used as a short-term measure on suitably designed and substantial pergolas in order to provide shade for cars and keep decomposing vegetation off vehicles once approved creepers have established themselves over the pergola.
- 5.3 Any parking provided in excess of the minimum required is to be subject to the provisions in 5.2 above.

- 5.4 Where the parking of vehicles, either for storage or display, forms part of a development's "stock in trade", such parking is to be subject to the provisions of 5.2 above.
- 5.5 All uncovered surface parking areas for cars are to be constructed of burgundy clay paver driveways with concrete reinforced grass blocks of approved quality and suitably grassed to form the parking bays.
- 5.6 All surface car parking areas are, as far as possible, to be fragmented into smaller areas rather than extensive car parks and generously landscaped with substantial shade trees.
- 5.7 All trucking areas and areas used for loading and off-loading purposes are to be suitably screened from adjacent developments and roads and constructed of suitably durable and easily maintained materials such as concrete interlocking block, concrete panels or tarmac.
- 5.8 Apart from MR94 and the N2 (which carry the restrictions noted in 5.1 above), no surface parking area may be within 3m of a road frontage provided that the Panel may waive this restriction in cases of individual merit.
- 5.9 All uncovered surface car parking areas are to be suitably screened from adjacent developments and roads by means earth berms and landscaping.

6.0 FENCING AND SECURITY

- 6.1 The perimeter security fence for the outer extent of the Business Estate is non-electrified green V-Beam Palisade.
- 6.2 The Panel may permit the electrification of the V-Beam fence by individual owners in cases of individual merit and provided that such electrification is within the private property side of the fenceline, does not project above the top of the fence by more than three strands and is mounted so as to be parallel with the top of the fence. All attachments to the fence in terms of electrical strands and outriggers must make use of the pre-drilled holes in the stanchions of the fence and no further drilling, welding or cutting is permitted.
- 6.3 Additional security related to the perimeter fence, if desired by individual developers, is to be separate from the perimeter fence and should observe the following guidelines:
 - 6.3.1 an additional fenceline will occur no closer than 2.5m to the established perimeter fence at any point
 - 6.3.2 the additional security line is to be of visually permeable fencing only and may not consist of any solid panels nor piers

- 6.3.3 the additional security line is to be suitably landscaped so as to minimise the visual impact of the additional fenceline while remaining an obvious deterrent to would-be trespassers
- 6.3.4 no barbed nor razor wire is permitted
- 6.3.5 a multi-stranded, 2.5m high electrified fence on slender stanchions at 3m centres is recommended
- 6.4 All perimeter security to individual sites facing onto internal roads within the Business Estate is to be according to a pre-determined design being a simple white pier and white, lightweight steel palisade of vertical members. This may be electrified at the discretion of the individual developer according to the specifications of the pre-determined design.
- 6.5 Additional security beyond this pre-designed item is to be subject to the provisions of 6.3 above.
- 6.6 Security arrangements on common boundaries between sites and not subject to the provisions of 6.1, 6.3 and 6.4 above are to be considered as integral with the design of the site's development with the following guidelines to apply provided that the Panel may waive any of these in cases of individual merit:
 - 6.6.1 the boundary line should be secured primarily by means of the fencing systems described in 6.3 and 6.4 above
 - 6.6.2 solid sections of the boundary treatment should not exceed 3.5m at any point relative to the neighbouring finished ground level and should not exceed lengths of 15m for any single section
 - 6.6.3 the height of the general side-boundary treatment should not exceed 2.5m at any point relative to the neighbouring finished ground level
 - 6.6.4 no barbed nor razor wire is permitted
 - 6.6.5 electrification of boundary walls or fences should consist of no more than 3 horizontal electric strands on white supports with white insulators
 - 6.6.6 all boundary treatment is to be suitably landscaped as an integral part of the overall site's landscape design.
- 6.7 All gates, gatehouses and arrangements for security personnel dealing with the security of individual sites are to be designed as integral parts of the site's development.

7.0 ARCHITECTURE

- 7.1 The ethic of a “white architecture” applies to all buildings within the Business Estate.
- 7.2 In respect of colour:
 - 7.2.1 The primary colour is to be in the range of white to silver with clear glazing being regarded as contributing to the primary colour.
 - 7.2.2 Dove grey is to be considered integral to the architecture’s primary colouring provided that, in the event of it constituting a substantial proportion of the development’s primary colouring, such use of dove grey is to be off-set by its use on recessive planes and by using white elements in the architecture to frame the dove grey panels or by using white highlighting elements to mitigate the visual dominance of the dove grey. Where dove grey does not constitute a significant proportion of the primary colouring, it may simply be included in the overall calculation of the development’s primary colouring.
 - 7.2.3 The building is to be substantially of the primary colour (i.e. 70% or more of any single elevation and its associated roof).
 - 7.2.4 The secondary colour is to be in the range of medium grey to darker grey to charcoal to black.
 - 7.2.5 Secondary colours should account for no more than 20% of any single elevation and its associated roof.
 - 7.2.6 Accent colours (that is, colours not in the primary or secondary ranges) may account for no more than 10% of any single elevation and its associated roof.
 - 7.2.7 Facebrick is to be included in the calculation of secondary colouring and no less than 15% of the combined facades of the buildings on a site is to be facebrick.
 - 7.2.8 Satin or travertine Roan facebrick (or similar approved) is the sole facebrick permitted.
 - 7.2.9 Extensive, low-pitched roofs are characteristic of business estates and, because of higher-lying vantage points surrounding the Estate, roofs are to be white or very light grey. Apart from the thermal advantages from a warehousing point of view of reducing heat absorption, the impression of roofs from the surroundings will be a powerful one and it is important that the integrity of a “white architecture” be expressed in the roofscape as well as in the other elements of the developments.
- 7.3 Apart from higher quality materials associated with the office component of a development on a site, various sheeting options and

industrialised building systems are permitted in respect of elevational treatment. These, however, should be confined primarily to those portions of the development associated with warehousing.

- 7.4 It is nevertheless acceptable that no distinction be made between the warehousing, showroom or office components of the development and a single palette of materials may be used to express the commonality of architectural ethic throughout the development.
- 7.5 The design of an elaborate office or showroom component with a standardised warehouse simply “tacked onto” this is discouraged and the exploration of the warehousing component as an important, even dominant, element of the site’s architecture is encouraged.
- 7.6 The height of a roof structure may not exceed 3m above wall plate level (or equivalent level where no wall plate exists) provided that not more than 10% of any roof section as it appears on any single elevation may exceed this height and provided further that, in cases of individual merit, the Panel may waive this requirement.
- 7.7 Attention must be paid to the way the transition from the roof element of the warehouse component into its facades is handled. Many of the warehouse/factory building systems simply handle this transition as a bullnose crank in the profiled sheeting used and the result is an architecture that is more suited to an industrial development. Care must be taken in the architectural design and detailing of the transition (be this in the form of a cornice line, eaves overhang, sun-screening device or some particular architectural feature).
- 7.8 The scale of the architectural elements associated with a Business Estate requires particular attention:
 - **height** – as far as possible the maximum height allowance of 3 storeys is encouraged in respect of the office component of the development in order to bring the warehouse component into scale with the remainder of the development. The height of the warehouse component at eaves should not exceed 12m with height at the pitch of the roof being in the order of 15m
 - **expanse** – the horizontal extent of the warehouse component of the development should be consciously modulated to de-emphasise the scale of warehouse elements
 - **meeting the ground** – because of the sheer extent of the warehouse component it is important to address the way in which the ground plane is designed as a conscious aspect of the development’s architecture
 - **meeting the sky** – the tendency of many factory systems to blur the distinction between façade and roof element requires that

particular attention be paid to the architecture of the roof of the warehouse component

- **attention to scale** -- under-scaled or non-existent fenestration in facades not required to provide interior natural light means that many facades in the warehouse component tend to be bland, featureless planes and need to be addressed as a conscious design concern
- **over-scaling of certain elements** – various elements such as apertures to accommodate trucking and bulk handling can be over-scaled to modulate the sheer expanse of the warehouse component of the development
- **roofs designed to provide top-lighting** – the roofscape derived from top-lighting concerns has the ability to bring dynamic possibilities to the architecture of the warehouse component and needs careful attention in the overall design of the development
- **careful integration of mechanical plant**-- mechanical ventilation is an important element of warehousing and the plant associated with this must be considered as a conscious aspect of the design
- **venting as a design opportunity** -- ventilation and extraction requirements and how these impact on the architecture of the roof offer interesting possibilities in creating a warehouse architecture of distinction

8.0 LANDSCAPING

8.1 The basic principles in respect of landscaping are as follows:

8.1.1 the re-instatement of natural coastal forest is to be used and augmented by individual developers alongside the N2 and MR94 and as elsewhere designated in the design parameters governing individual sites.

8.1.2 simple landscaping is sought (such as rolling, manicured lawns with dense shade trees of stature to mitigate the scale and extent of facades) to enhance the clean lines of the anticipated architecture.

8.1.3 any areas, after development, not requiring to be flat are to be re-contoured to create an undulating landscape in keeping with the rest of the surrounding area.

8.1.4 even though the boundaries of individual sites are likely to be treated with security fences, the ethic of trying to create landscapes that flow from one site into another is to be encouraged and developers are

required to demonstrate the extent to which the landscaping of a site takes cognisance of that of adjacent developments.

- 8.1.5 the list of plants permitted is included as Appendix B.
- 8.1.6 Attention is drawn to the importance of fragmenting surface car parking, as far as possible, into smaller parking lots with ample shade trees as set out in 5.6 above.

9.0 SIGNAGE AND LIGHTING

- 9.1 A major reason for purchasing a business site adjacent to the N2 or MR94 is to capitalise on exposure to these highways. It is therefore important that companies be permitted to display signage on those facades facing surrounding roads.
- 9.2 Nevertheless, signage must be governed by the following guidelines and any waivers granted by the Panel in this regard will be in terms of considerations of individual design merit:
 - 9.2.1 no company name may appear other than as an integral part of the building's design
 - 9.2.2 pylon signage is expressly forbidden provided that, if designed as an integral part of the main building and not exceeding 12m in height, the Panel may waive this requirement in respect of a single pylon only
 - 9.2.3 only the name of the company having naming rights to the building may display its name on the building's façade
 - 9.2.4 where a development has been designed as a series of discrete units, more than one company name may be displayed provided that only one name appears on each unit and that the sign is suitably reduced in scale to relate to the unit to which it applies
 - 9.2.5 no product may be displayed nor advertised
 - 9.2.6 all other signage, such as advertising billboards is expressly forbidden
 - 9.2.7 not more than one sign may be displayed on any one façade of a building provided that the Panel may waive this restriction where the length, proportions and form of the façade merit such waiver
 - 9.2.8 no sign may project above the point at which the façade of a building meets the roof of the building
 - 9.2.9 no characters nor items of a sign may exceed 1,2m in height and the sign may not exceed 10m in length provided that the Panel may, in the

individual circumstances of a development, decide that such size may be inappropriate and reduce or increase such sizing parameters

- 9.2.10 should the sign envisaged not suit the proportions noted above, the guide will be followed that the overall area of the entire sign shall not exceed 12 sq. m subject to the proviso noted in 9.2.9 above
- 9.2.11 the favoured fixing method of signs discourages backing boards affixed to a building or signwriting directly onto the façade of a building
- 9.2.12 the favoured fixing method encourages each character of a sign to be pin mounted individually at least 20mm from the surface of the façade
- 9.2.13 where backing boards are to be used as the basis of a sign, such boards are to be designed as integral parts of the building's architecture
- 9.2.14 lighting of signage is to be in the form of concealed lighting only and may not shine directly through the material forming the sign
- 9.2.15 no flashing nor moving components on signage is permitted
- 9.2.16 as far as possible the signage on buildings will be confined to monochromatic colours in the range from silver to white to grey to black
- 9.2.17 only in instances of corporate livery or branding will accent colours be used in a sign with such colours being timeless rather than faddish colours that tend to date
- 9.2.18 materials used in the manufacture of signs are to be of high quality, matt finish and of enduring materials and colourings
- 9.3 Each site is permitted, as an integral part of its site entry, a sign that observes the above provisions but which does not exceed an overall area of 5 sq.m
- 9.4 The address of the concern may also be reflected as an integral part of the site's entrance subject to the above guidelines and provided that the address does not exceed 200mm high and 1 200mm long.
- 9.5 Flags and banners are discouraged and are subject to detailed review by the Panel.
- 9.6 Signs relating to security services contracted on a particular site are to be limited in their numbers and displayed discreetly.
- 9.7 All mechanical plant, masts, and antennae are to be designed and placed as an integral part of the overall development of a site and no such plant or services are to be surface mounted on the outside

facades of a building other than as a conscious expression of the building's architecture.

- 9.8 All lighting on the exterior of a building or within the surrounds of a development on a site is to be of a white light type.

10.0 DUE PERFORMANCE

- 10.1 It is in the interests of the Association and tenants within individual buildings, that the conduct and performance of on-site contractors are exemplary throughout the Business Estate's development. To this end it is required that certain matters related to tendering and construction procedures come before the Panel.
- 10.2 Whether a negotiated or open tender, the nature of such tender is to be reported to the Panel. In all cases it will be required that an additional contract governing due performance be entered into between the applicant and the Association.
- 10.3 In the case of all developments and irrespective of tender procedures and the proposed appointment of a successful tenderer, it is required that the Association receive a full report on the successful tenderer and the position regarding bank guarantees. Where the successful tenderer's work is unknown to the Association, it will be required for such contractor to appraise the Association of previous work.
- 10.4 In all instances a special retention is to be lodged by the developer with the Association, in the form of a bank guarantee, to cover damages to the public and semi-public domain and/or failure to comply with due performance criteria, late finish or failure to complete any aspect of the development satisfactorily. This sum has currently been set at R50 000.00.
- 10.5 A Clerk of Works, at the discretion and cost of the Association, is to be appointed to ensure due performance of contractors in respect of the interests of the Association. The Clerk of Works will report to the Panel on a regular basis.
- 10.6 Prior to commencing on site, all contractors are to furnish to the Association, for approval of the Panel, full particulars of their intended site establishment, arrangements for contractors entrances, materials and plant storage, fencing details, site office arrangements, security of the site and ensuring security for adjacent sites, and site management procedures.
- 10.7 As contractors proceed on-site they are to furnish to the Clerk of Works updated copies of work programmes and sub-contractors responsibilities to enable the Clerk of Works to monitor progress and report back to the Panel.

- 10.8 On completion of the development, and based on the assessment of the Clerk of Works, the Panel will, if satisfied, issue a certificate of completion in respect of all aspects of the development of the site. Such certificate of completion is a pre-requisite of official hand-over and the payment of the retention noted in 10.4 above.

APPENDIX B

PLANT LIST : LA LUCIA RIDGE BUSINESS ESTATE

TREES

Acacia Robusta	Splendid Acacia
Albizia Adianthifolia	Flatcrown
Baphia Racemosa`	Natal Camwood
Bridelia Micrantha	Coastal Silver Leaf
Croton Sylvaticus	Forest Fever Berry
Dombeya Rotundifolia	Common Wild Pear
Ekebergia Capensis	Cape Ash
Euclea Natalensis	Natal Guarri
Ficus Sur	Broom Cluster fig
Hapephyllum Caffrum	Natal Plum
Millettia Grandis	Umzimbeet
Podocarpus Falcatus	Outeniqua Yellowwood
Rauvolfia caffra	Quinine Tree
Sideroxylon Inerme	White Stinkwood
Syzygium Cordatum	Waterberry
Tabernaemontana Ventricosa	Forest Toad Tree

PALMS

Chrysalidocarpus Lutescens	Bamboo Palm
Hyphaena Coriacea	Lala Palm
Phoenix Reclinata	Natal Date Palm
Raphia Australis	Kosi Palm
Roystonea Regia	Royal Palm

SHRUBS

Acokanthera Oblongifolia	Dune Poison Bush
Bauhinia Galpinii	Pride of the Kaap
Carissa Macrocarpa	Amatungulu
Calpurnia Aurea	Natal Laburnum
Dombeya Burgessiae	Pink Wild Pear
Iboza Riparia	Misty Plume Bush
Leonotis Leonorus	Wild Dagga
Makaya Bella	River Bells
Pavetta Lanceolata	Weeping Brides Bush
Plectranthus Ecklonii	Large Spur Bush
Plumbago Auriculata	Cape Primrose
Psycotria Capensis	Blackbird Berry
Strelitzia Reginae	Crane Flower
Tecomaria Capensis	Cape Honeysuckle

GROUND COVERS AND PERENNIALS

Agapanthus Africanus	Agapanthus
Agapanthus Nana	Agapanthus Dwarf
Asparagus Densiflorus	Asparagus Fern
Asystasia Gangetica	Creeping Foxglove
Carissa Prostrata	Dwarf Amatungulu
Carpobrotus Edulis	Hottentot Fig
Chlorophytum Comosum	Hen and Chicken
Clivia Miniata	Bush Lily
Crassula Multicava	Fairy Crassula
Dietes Grandiflora	Wild Iris
Dracaena Alteriformis	Large Leafed Dragon Tree
Dimorphotheca Sinuata	African Daisy
Felicia Amelloides	Kingfisher Daisy
Gazania Rigens	Treasure Flower
Mesembryanthemum Spp	Vygie
Orthosiphon Labiatus	Pink Shell Plant
Plectranthus Ciliatus	Wild White Sage
Plectranthus Verticiliatus	Gossip Plant
Senecio Macroglossus	Natal Ivy

CLIMBERS

Ponranea Ricasoliana	Port St. John's Creeper
Rhoicissus Tomentosa	Common Forest Grape
Senecio Tamoides	Canary Creeper