

FINKENSTEIN HOMEOWNERS ASSOCIATION

DESIGN MANUAL

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DESIGN MANUAL

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DESIGN MANUAL

1. INTRODUCTION

Finkenstein Estate ("the Estate") is a residential development where privacy, open spaces, blending of the development into the environment, the protection of fauna and flora, the protection of members' rights and a peaceful rural atmosphere are the primary objectives. The development borders Moltkeblick Game Farm ("MBGF") and the Finkenstein Homeowners Association ("FHA") has entered into an agreement with MBGF, which allows free movement of members and game over the common boundary. While the movement of members over the common boundary is regulated, movement of game into the Estate will only occur if the conditions are favourable.

The purpose of this document is to ensure that the development has the least possible impact on the natural beauty of the Estate and that the primary objectives are met. While each individual property ("the Erf") in the Estate is large, a landowner (the "Owner") will only be allowed to develop and fence in a "comfortable" portion of the Erf (hereinafter referred to as the "Plot") at a location to be agreed with the FHA as determined later in this document.

An individual character of design is promoted in this development and landowners have the freedom to have their residences designed to any style of their liking, subject to the requirements set out in this document.

2. ARCHITECTURAL INPUT

The FHA endeavours to promote an architectural link between the environment and character of the development within the practical requirements and constraints of present day living. Although freedom of design is allowed and the implementation and maintenance of a unified character on different erven is not a condition of the development, styles of architecture should not be detrimental to the environment and designs must establish and maintain a high standard of aesthetics, construction and character.

The design and positioning of residences must take due cognisance of other Owners' rights in terms of visual obstructions and hindering aspects such as high buildings, noise, antennas, satellite dishes, glass reflections, towers, swimming pools, sport facilities, etc.

The use of natural material such as stone, and timber is encouraged, although the use of such materials will not be a prerequisite. It is, however, important to note that no materials may be sourced *in loco*. Any architectural style will be accepted but the design must comply with and consider the guidelines and requirements provided in the Design Manual. The internal design and character of the buildings is not restricted.

Any specific conditions relevant to each Erf will be indicated on the diagram that will be issued in terms of clause 3.8.3 of this document.

The discretion as to what is considered acceptable in terms of this document is delegated to the FHA Architect. The duties of the FHA Architect in regard to design are:

- 1. to ensure that a high standard of architectural design is maintained,
- to ensure freedom of design, and to provide guidelines to allow individualistic designs within acceptable architectural norms, and
- 3. to ensure that designs do not clash or interfere with other Owners' rights.

The FHA through the FHA Architect reserves the right to request such design changes that it deems necessary, in its sole discretion, to preserve the environment and aesthetical character of the Estate. All property owners are to take note that this document is to be read with the Finkenstein Homeowners Association Rules and Regulations as in force on the Estate at any time.

The appointed FHA Architect is Architects INK. Where the FHA Architect acts as a client's architect, the duties of the FHA Architect will be transferred to Sven Nieberle Architects for that specific project.

3. SUBMISSION OF BUILDING PLANS

- 3.1. No building may be erected or altered without approval of the aesthetic and structural soundness of the design by the FHA Architect. This includes and applies to internal alterations to existing buildings. All buildings have to conform to SANS 10400 ("The application of the National Building Regulations", previously called SABS 400). The owner shall pay a deposit of N\$50,000 to the FHA and formally apply on the attached application form (Appendix A), for approval of plans subject to the regulations adopted in terms of the Constitution of the FHA, this Design Manual as well as the Construction Regulations. The deposit covers:
 - i. the fees of the FHA Architect, the FHA Engineer and the FHA Land Surveyor
 - ii. the cost of the water and electricity meters
 - iii. the cost of repair of damage to FHA property (if any), which will be determined by the FHA and payable by the owner.
- 3.2. Building alterations or additions that require the submission of building plans are likewise subject to the regulations in the Design Manual and the Construction Regulations. Alterations/additions will be classified as a SMALL or LARGE project at the discretion of the FHA Architect. Large projects will be subject to a deposit of N\$15,000 payable. This deposit covers:
 - i. the fees of the FHA Architect, the FHA Electrical Engineer and the FHA Land Surveyor (if needed)
 - ii. the cost of repair of damage to FHA property (if any), which will be determined by the FHA and payable by the owner.
- 3.3. The balance of the deposit will be refundable after the owner has obtained a Final Completion Certificate.
- 3.4. Small projects will not be subject to a deposit. Should any inspections be deemed necessary by either the FHA Architect, the FHA Electrical Engineer or the FHA Land Surveyor, these costs will be added to the levy account of that Member.

- 3.5. Where proposed alterations or additions to existing buildings are likely to affect the quality of life (e.g. view) enjoyed by a neighbour, the Owner must obtain the consent of such a neighbour before the plans are submitted for approval. Such consent shall not unreasonably be withheld. In the case of a dispute in this regard, the FHA will attempt to mediate. If such mediation fails to bring resolution to the dispute, the FHA will exercise its discretion as to what is "reasonable".
- 3.6. Should any provision of this Design Manual be regarded as contrary to the National Building Regulations, the latter shall take preference.
- 3.7. The FHA *may* consider requests to waive any mandatory specifications under special circumstances.
- 3.8. The FHA shall provide the following documents to each Owner on request:
 - 3.8.1. Design Manual (this document)
 - 3.8.2. Construction Regulations
 - 3.8.3. Site diagram with contours and water, electrical and sewer connection points
 - 3.8.4. Approved Site Plans of adjacent erven. This information is as received from the Developer, the Finkenstein Development Trust, and the FHA does not accept any responsibility or liability for incorrect information.

4 APPROVAL OF BUILDING PLANS

- 4.1 The Owner formally applies on official documentation from the FHA office for the approval of building plans and pays the deposit at the FHA Office in accordance with the regulations adopted in terms of the Constitution of the FHA, this Design Manual as well as the Construction Regulations.
- 4.2 The Owner informs the FHA of his / her choice of architect and requests the information listed in clause 3.8 above. (The selected architect will be referred to as the "Client Architect").
- 4.3 The Client Architect prepares drawings and documents and sends 1 x Paper copy of the drawings to the FHA for scrutiny by the FHA Architect.

- 4.4 After scrutiny, a meeting will be set up with the client, the Client Architect and the building committee, where the FHA Architect will give feedback on the plans submitted for approval. The Building Regulations and required inspections will also be discussed at this meeting.
- 4.5 The Client Architect will submit 3 x paper copies of the corrected submission drawings to the FHA Architect for approval. The following drawings must be submitted:
 - 4.5.1 Site Placement (1:500) showing the developments on adjacent erven, the driveway and street access
 - 4.5.2 Site Plan showing fence (with fence description) and Sewer Details (1:200)
 - 4.5.3 Floor Plans (1:100) including Electrical Plan.
 - 4.5.4 Sections (1:50)
 - 4.5.5 Elevations (1:100)
 - 4.5.6 At least 2 x 3D views on A3
 - 4.5.7 Letter from Structural Engineer where applicable
 - 4.5.8 Structural Drawings
 - 4.5.9 Window and Door Schedules
- 4.6 The FHA Architect will study the documentation submitted and will communicate his/her findings with the Client Architect.
 - 4.6.1 If approved, the documents will be stamped and distributed as follows:
 - 4.6.1.1 The FHA shall retain at its office one copy of the approved building plans.
 - 4.6.1.2 The Owner will receive an approved copy, who shall at all times during the construction of the building have a copy of the approved building plans available on site.
 - 4.6.1.3 The FHA Architect will retain one copy of the approved drawings.
 - 4.6.2 If designs or documentations are found to be unacceptable, the FHA Architect will confirm the status in writing and provide comments as to the reasons why the submission was not approved.
 - 4.6.3 If any corrections are made to the technical documents, three sets of the corrected drawings must be re-submitted.
 - 4.6.4 If a third or further scrutiny is required because of the non-performance of the client or his Architect, an up-front payment of the hourly rate of the FHA Architect shall be paid by the client for every submission thereafter prior to such scrutiny being allowed.

- 4.7 Once the Construction Drawings are approved, the owner must notify the FHA office when construction will start as per the conditions stipulated in the Construction Manual.
- 4.8 Submission of drawings to the City of Windhoek for approval remains the sole responsibility of the Owner and his/her Architect. Owners should take note that City of Windhoek clearance is required to transfer a property, and it is therefore a requirement to submit As-Built plans to the City of Windhoek upon completion of construction.
- 4.9 **No construction** shall commence prior to confirmation of Erf pegs by a qualified land surveyor and approval of the building plans by the FHA Architect.
- 4.10 The Client Architect must confirm that the setting-out of the building was done by qualified land surveyor and also confirm the presence of a temporary construction fence on the Erf before any construction may commence. Any deviations from the approved plans must be resubmitted for approval. Before the Practical Completion Certificate will be issued, the Client Architect must certify the as-built position of the building and a qualified land surveyor must certify the size of the fenced-in area.
- 4.11 The author of the design shall be responsible and accountable for quality control on main structural components. To this extent, the Client Architect (and applicable engineer(s)) have to certify design compliance and must certify the physical correctness of the fenced-in area as indicated on the as-built drawings. The FHA Architect may insist on the services of a structural engineer being included with the professional team of the development.
- 4.12 Samples of all external finishes and colour schemes must be presented to the FHA architect for approval.

5 COMPLETION

5.1 The Owner shall apply for a Practical Completion Inspection by the FHA Architect on completion of the building works in accordance with the Construction Regulations. Notwithstanding practical completion issued by the Client Architect, the FHA will not be liable for any security risk.

- 5.2 The Owner shall apply to the FHA Architect for a completion certificate not later than three months after Practical Completion and will submit 1 x Paper copy of the as-built drawings with the application.
- 5.3 The FHA Architect will do the final inspection within one week from notification and will notify the Owner of any discrepancies between the drawings and the buildings on site.
- 5.4 The Owner must submit 1 x duresta/cepia set of the revised as-built drawings as well as an electronic copy of these drawings, to the FHA Architect for final approval.
- 5.5 These drawings will be kept by the FHA office for record purposes. Should the Owner require a copy for their own records, they should prepare an additional set.
- 5.6 Any disputes shall be dealt with as per the FHA's Dispute Resolution Policy.
- 5.7 Applications for Granny Flats as well as additions and/or alterations shall be dealt with as if a new development is intended and all stages shall apply, unless considered to be superfluous by the FHA. (refer 3.2 above)

6 SERVITUDES

The FHA has registered a servitude of right of way, 5 meters wide, along each boundary of all properties. This is to enable members and their guests to pass on foot, on horseback or on a bicycle. This area may not be fenced in, nor may any permanent structures be erected in this area.

7 LOCATION OF BUILDINGS AND SITE RESTRICTIONS

- 7.1 Building lines are 10m on all boundaries
- 7.2 All Buildings should be located within the building lines.
- 7.3 No fence may be placed closer than 5m from any border.
- 7.4 No building or fence will be placed closer than a radius of 25m taken from any external corner of buildings or fences on adjacent erven.

- 7.5 The FHA might grant relaxation of a building line and 25m restriction upon the written application from the Owner on condition that the neighbour's permission was sought.
- 7.6 The positioning of buildings will be adjudicated and allowed on a first come first served basis. Thus, the Plot development plan approved and registered with the FHA first, will have preference of location of buildings.
- 7.7 The approval of the extent to which a building may be located relative to the boundary, the position thereof, ridge position, etc. shall be at the discretion of the FHA Architect.
- 7.8 The maximum area fenced in on any Erf will be restricted to 2,500 m². A discretionary allowance up to an extra 10% may be considered by the FHA in special circumstances, i.e., to allow for topographical variances. This excludes the entrance road of a maximum width of 4 meters. In the case of a property being sold, a clearance certificate will not be issued if this area exceeds the limit.
- 7.9 It is not compulsory to fence-in properties, and should an Owner elect not to provide a fence around his Plot, then the following rules will apply to the property:
 - 7.9.1 No pets may be kept by the owner
 - 7.9.2 The Owner will indemnify the FHA, other owners and the public against any and all possible claims directly or indirectly from the Owner or any third party and will provide confirmation of insurance to that effect;
 - 7.9.3 Owners will not be permitted to have an open swimming pool, fish pond or any other external water feature;
 - 7.9.4 The owner will at all times have securable, self-closing garage doors;
 - 7.9.5 No open yards or carports will be permitted; and
 - 7.9.6 Rubbish bins are to be secured against access by wild animals and birds.
- 7.10 Should an Owner elect to provide a partly fenced/walled-in area, then the FHA may waive or provide alternative regulations in terms of clause 7.9 where such waivers are considered justifiable by the FHA but taking into consideration clause 15.
- 7.11 No construction, structure or container, other than the driveway, water tank (refer to 17.8), and septic tank shall be allowed outside the Fenced in Area.

7.12 No temporary structures, e.g. portable toilets, containers and vinyl swimming pools will be allowed after practical completion.

8 BUILDINGS AND OUTBUILDINGS

- 8.1 As per definition of the National Building Regulations, the maximum building coverage on any Plot will be 800 m² and the minimum 250 m², inclusive of all buildings. For example, if an outbuilding and/or granny flat has a coverage of 250 m², the primary living unit will be limited to 550 m² Coverage refers to the total area of the footprint of the structure(s). This includes all areas under a roof such as verandahs, entertainment areas and carports.
- 8.2 Only one Primary Living Unit (with or without an Outbuilding) may be constructed on an Erf.
- 8.3 A Primary Living Unit will mean:
 - 8.3.1 A house (with or without an out-building) consisting of mutually adjacent rooms with a kitchen and at least one bedroom and toilet facilities;
 - 8.3.2 The Primary Living Unit is designed for occupation by a single household and may, subject to the restriction of this manual or any Erf restrictions, include outside entertainment areas and swimming pool
- 8.4 In addition to the Primary Living Unit, a Supplementary Living Unit (Granny Flat) and an Outbuilding is permitted within the restrictions of the fenced in area. The combined total area of the outbuilding and the granny flat may not exceed 250 m².
- 8.5 In this context a Supplementary Living Unit will mean:
 - 8.5.1 A Flat for residential occupation by a maximum of two people. The Flat may be attached or separate from the Primary Living Unit.
- 8.6 An Outbuilding will mean rooms separate from the Primary Living Unit designed to be used for one of the following purposes:
 - 8.6.1 Covered Parking
 - 8.6.2 Domestic Worker's Rooms
 - 8.6.3 Staff Toilets, Bathrooms and Showers
 - 8.6.4 A Store for use in reasonable connection with the Living Unit (limited to a maximum of 40 m²⁾ included in the total area of the outbuilding.

- 8.7 An Owner may apply to the FHA to do the development of the Plot in phases. Such an application may be considered if:
 - 8.7.1 the initial development consists of the primary living unit, with or without outbuildings,
 - 8.7.2 the total development is not more than two phases that shall be completed within 5 (five) years and
 - 8.7.3 each phase is a sensible, self-contained unit that has been approved as such by the FHA Architect.
- 8.8 No sectional title registration is allowed on any Erf.
- 8.9 The maximum height of any building shall be measured as 8 meters above the platform level prepared for such building, i.e. not more than two stories.
- 8.10 Any section of the building such as basements of which no man-made part is visible from any angle of the building will not be taken into consideration when calculating the height.
- 8.11 The FHA might grant relaxation of the 8m height restriction upon the written application from the Owner on condition that neighbour permission was sought.

9 PLATFORMS AND LEVELS

Preparation of platforms for the construction of buildings should be avoided and the natural ground levels and slopes should be used as far as possible. However, if the natural topography necessitates the creation of such platforms the extent thereof must be limited to the absolute minimum and must be approved by the FHA. Cut-and-fill slopes so created must be protected, stabilised and planted.

10 SITE CLEARING AND PLANTING

- 10.1 No alien plants may be planted or indigenous plants that are poisonous, for example Euphorbias.
- 10.2 Recommended plants are as indicated as indigenous to the Finkenstein area in the following publications:
 - 10.2.1 *Le Roux and Muller's Field Guide to Trees & Shrubs of Namibia* as revised and expanded by Coleen Mannheimer and Barbara Curtis.

10.2.2 Grasses of Namibia by M. A. N. Muller and expanded by Johan van Eck

10.2.3 Aloes: Aristocrats of Namibia by Sakkie Rothmann

10.2.4 Botanic Garden Plant List

11 TREE FELLING

11.1 No trees or shrubs with a stem of more than 100 mm diameter or designated to be preserved

and indicated as such on the design and construction documentation, will be permitted to be

removed without the written consent of the FHA.

11.2 Any such trees which are removed from an Erf without authority must be replaced with a like

specimen at the Owner's cost before a completion certificate will be issued.

12 PREVENTION OF EROSION

Due to the construction of unnatural structures as streets and walls of buildings and boundaries, storm water will find new routes to escape, increasing the risk of erosion. In consultation with the FHA Architect the required preventative measures are to be put in place to limit erosion as far as possible. Storm water run-off shall be addressed by the construction of the driveway of every Erf.

13 LETTERING AND SIGNS

13.1 No illuminated signs will be permitted without the express permission of the building

committee.

13.2 All signs other than house names, street names and Owners' names are to be submitted to

the FHA for their written approval.

13.3 No signs are allowed outside the owner's Erf, except for a sign containing only the house

number, street name and the owner's name.

14 CARAVANS, TRAILERS AND BOATS

Caravans, trailers, boats and commercial type vehicles may not be used as dwellings and may not be kept on the public or private roads. These type of vehicles should be neatly stored and preferably be out of view from the street and from neighbouring properties.

15 LAUNDRY AND REFUSE

- 15.1 Laundry drying areas and refuse bins must be appropriately screened for aesthetic purposes.
- 15.2 If the laundry and/or refuse bin areas are not within a fenced-in Plot, then they must be enclosed by walls that are of such design not to permit any animal or bird to enter the enclosure.

16 TELEVISION AERIALS, SOLAR PANELS, HOT WATER GEYSERS, AIR CONDITIONERS, EVAPORATIVE COOLERS, BIRD DETERRENTS ETC..

- 16.1 Solar panels must be flush with the roof and preferably mounted so as to be as inconspicuous as possible.
- 16.2 No solar water heating panels, hot water geysers, water storage tanks, air-conditioning or water cooler systems, etc. may protrude above the roofline.
- 16.3 No reflective bird deterrent devices may be installed on any area of the property, as it will cause unwanted glare to surrounding properties.

17 TEMPORARY STRUCTURES / ADDITIONAL STRUCTURES / WATER TANKS

*Definition of a <u>temporary structure</u>: Any built or prefabricated structure additional to any approved building plans, placed for a specific temporary function on an Erf, valid for a specified period until its use or function expires. E.g a 'jungle gym' installed for young children that will be removed after its function expires.

17.1 All temporary or additional structures require prior approval by the FHA. Existing structures not yet approved by the FHA must therefore be submitted for approval in line with the regulations below.

- 17.2 Shade net structures, hacks and plastic covered structures are not permitted. Trees, shrubs, and vegetables may be protected against pests and frost by frost bags or bird nets. Vegetable tunnels/green houses, are allowed only if they correspond to the FHA approved *designs. One vegetable tunnel/greenhouse is permitted per erf. The maximum size allowed is 4 meters wide x 6 meters long x 1,8 meters high.
- 17.3 All new temporary structures and structures added after final completion including braai areas, carports, jungle gyms, wendy houses, vegetable tunnels/green houses and water tanks must be approved by the FHA Architect before erection.
- 17.4 No additional structures may be placed outside the building lines as specified under Paragraph7.
- 17.5 Submissions for approval must include a site plan, indicating the position of the structure as well as 3D pictures, photos or detailed drawings of the proposed structures indicating proposed materials to be used and finishes.
- 17.6 Permission must be obtained from all immediate neighbours that will be affected by the structure, e.g. if it is in their line of sight.
- 17.7 The installation of rainwater, greywater and freshwater tanks is encouraged to alleviate the dependency on Namwater supply. All water tanks must be installed in line with the prescriptions of the Design Manual. Subject to paragraph 17.8, rainwater, greywater and freshwater tanks must be installed inside the fenced-in area and should preferably be enclosed within a wall or an appropriate screen. A tank that is not enclosed, should be painted in the same colourscheme as the predominant colour of the house walls. All pipes, fittings and equipment associated with the water tanks must be direct and visually integrated or hidden from sight.
- 17.8 The installation of any water tanks outside the fence will only be considered provided the tank is installed against or within 1m of the fence and must be enclosed within a wall or an appropriate screen. Any water tanks located more than 1m from the fence should be placed entirely below ground level. All pipes, fittings and equipment associated with the water tanks outside the fence must be direct and visually integrated or hidden from sight and not pose a hazard or a danger to wild animals. Connecting pipes from and towards the tanks should be placed well below ground level.

17.9 Water delivery connection points may not be located more than 5m away from the street edge.

18 ACCESS AND DRIVEWAYS

- 18.1 All Plot driveways must be surfaced with a permanent paved finish with a colour and type determined by this manual.
- 18.2 The design of all driveways is to be included in design documentation presentations for approval.
- 18.3 Only one access will be allowed per property unless special approval has been obtained from the FHA.

19 SEWERAGE

- 19.1 Each Owner must install/construct at his/her own cost a septic tank according to the specifications provided by the FHA, and he/she is at all times responsible for the effective functioning thereof.
- 19.2 The minimum capacity of the septic tank is 4,000 litres, and it must be connected to the main FHA sewer system via an overflow line with an outlet measuring a maximum diameter of 50mm. The design of the outlet must be such that no solids will be allowed to enter the main sewer system.
- 19.3 A rodding eye must be installed directly after the outlet from the septic tank, as well as at the connection of the overflow line to the main sewer line. Rodding eyes must be installed at a maximum distance of 25m on the sewer line from the house to the septic tank, as well as from the septic tank to the main sewer line connection point. The overflow of water from the septic tank will be accommodated in a specialised waterborne sewer system.
- 19.4 The septic tank must be pumped out when necessary by a certified contractor at the cost of the owner. Septic tanks spilling overflow into the environment will be pumped out by the FHA and the house owner will be invoiced.

20 ELECTRICITY SUPPLY

- 20.1 The electrical design and specifications of the planned structures may not exceed the capacity of the breaker size provided in the connected kiosk or minisub. The existing capacity should be confirmed with the FHA Estate Manager.
- 20.2 Any request to upgrade the existing breaker size at the connected kiosk or minisub by an owner should first be evaluated by the FHA Electrical Engineer to confirm if sufficient capacity is available for such upgrade. Based on the constraints, the requested upgrade can then be approved and implemented at the owner's cost. In the case of additional upgrades being required to the electrical infrastructure to accommodate the owner's breaker upgrade request, the owner shall be liable for all costs involved. For new and existing buildings, breaker upgrade requests must be done prior to the approval of building plans by the FHA Architect.
- 20.3 Should an owner contemplate the installation of equipment to existing structures that will require an upgrade of the breaker to accommodate an increased load, the FHA Electrical Engineer must evaluate and approve such application first, based on the same requirements as mentioned in 20.2.

21 PV SOLAR INSTALLATIONS

- 21.1 The owner must submit an application to the FHA for permission to install a PV solar and/or battery storage system and specify the type of installation. The relevant form is available from the FHA Office and on the website.
- 21.2 The owner is responsible for all costs regarding the design, installation, operation and maintenance of the PV solar and/or battery storage system
- 21.3 The PV solar and/or battery storage system must meet all applicable standards established by the National Electricity Regulator (NER), the Institute of Electrical and Electronics Engineers, and applicable rules, regulations and codes of the NER.
- 21.4 Grid Tied Systems must be specified as either simple PV grid inverter systems or PV systems with additional battery inverters that may operate in island mode during grid power failure.

- 21.5 Members that install a Grid Tied PV solar system must replace the existing electrical meter in the kiosk with a similarly sized bi-directional meter at their cost.
- 21.6 Members wanting to run an off-grid system must continue to pay the "monthly basic capacity charge" for the next 12 months at the circuit breaker level of the three months before going off-grid.
- 21.7 Members wanting to reconnect to the grid will be charged a reconnection fee of N\$5,000 if he (or a subsequent owner) wants to go on-grid again.
- 21.8 PV solar and/or battery storage installations must be inspected by the FHA Engineer for all relevant SANS safety regulations applicable for such domestic installations. Inspection and certification costs will be charged to the homeowner.
- 21.9 All grid tied PV inverter system applications must be accompanied by a single line diagram for the PV System components drawn by the PV solar contractor to show the connection to the main grid. Further, the application must be accompanied by the safety certificates for the grid inverters to be installed.
- 21.10 After installation and commissioning, the owner shall not add additional generation capacity in excess of the standard rating of the PV solar system /inverter or otherwise modify the generating capacity without prior application and written approval of the FHA and FHA Engineer.
- 21.11 Should alterations to the existing electrical distribution board be necessary for the connection of the PV solar system, a certified electrical contractor must provide these alterations which must be inspected for compliance by the FHA electrical inspector. The electrical contractor must provide an updated single line diagram for the distribution board to be altered with the application for the PV system.
- 21.12 Only suitably qualified and certified contractors will be accepted to perform PV solar and/or battery storage installations.
- 21.13 For PV solar systems with additional battery inverters (island supply), the PV solar contractor shall install an additional decoupling relay to solely and independently monitor the grid power and will disconnect the consumer supply from the grid at set voltage/frequency

threshold values whenever the inverter operates in island mode. The decoupling relay shall be installed at the incomer cable supply to the house before the main circuit breaker preferably in a separate sealable enclosure.

- 21.14 The PV solar and/or battery storage contractor shall supply the relevant safety standard certificates of the decoupling relay for approval with the application.
- 21.15 Furthermore, in case of island mode operating PV systems the electrical contractor/PV solar contractor shall clearly label and partition the various different power sections of all DBs. Warning labels must be installed for sections that might be energized in island mode during grid power failure.
- 21.16 The FHA may require the owner to limit energy backfeed or excess generation to a determined value or to implement zero backfeed and excess generation into the FHA Electrical network.
- 21.17 The FHA may limit the connection of Grid tied PV systems due to limits imposed by the stability requirements of the FHA distribution network as determined by technical studies performed by, and practical experiences of the FHA.
- 21.18 Connection of solar PV systems to the FHA electrical distribution network will be done on a first-com first-serve principle until the limits contemplated in sub rule 21.17 above are reached.
- 21.19 After successful commissioning of the installed PV and/or battery storage systems the PV Contractor shall provide a Certificate of Compliance for the installation by an electrician registered as such with the City of Windhoek.
- 21.20 At any time during the operation of an owners system, the FHA may require the owner to reduce or interrupt the output of his PV solar system due to emergencies or maintenance operations.

22 SPORT FACILITIES

Tennis courts, squash courts, or any other sport fields will be permitted on individual erven subject to special permission from the FHA and informed consent from the neighbouring property Owners and as determined by FHA.

23 GUIDELINES FOR DEVELOPMENT

Please note that this list is not fully inclusive and is indicative only.

	ELEMENTS	NOT ACCEPTABLE	RECOMMENDED BUT NOT RESTRICTED TO THIS ONLY
22.1	ROOFS	 Mansard roofs Strong dominant colours Unpainted galvanised roofs, gutters downpipes White roofs No thatch roof 	 ✓ Pitch 15°-45° to main structure ✓ Pitch 5° or less behind parapet ✓ Traditional Victorian roof sheeting with a chromadeck finish or natural galvanised and painted. ✓ Natural slate roof ✓ Shingle, charcoal to black ✓ Pitched dormers for tiles or sheet roofs ✓ Screens or Perspex / glass type roof lights ✓ Concrete roof tiles
22.2	SUPERSTRUCTURE WALLS	Pebble dash or other plaster Spanish plaster White Strong dominant colours (colour must be approved by FHA Architect)	 ✓ Painted bagged brickwork ✓ Smooth or traditional slave plaster, painted ✓ Stone plinths and walls ✓ Stone piers also to chimney breasts ✓ Colours to be approved – preference will be given to earthy colours
22.3	WINDOWS & EXTERNAL DOORS	× Reflective glass × Steel windows × Steel external door frames	✓ Large windows, set back / shaded ✓ Glazed French and sliding doors ✓ Single windows vertically proportioned or square ✓ Aluminium windows and glazed doors (natural, bronze or black anodised or powder coated) ✓ Timber (Natural oiled) ✓ Glazed walls set back from building edge behind veranda ✓ Wind blocks and glass blocks
22.4	CHIMNEYS, VERANDAS, BALCONIES, BALUSTRADES, PERGOLAS AND OTHER EXTERNAL ELEMENTS	 No glass conservatories attached to main structure without approval from Trustees No reflective bird deterrent devices 	 ✓ Elements to be consistent with style of house ✓ Timber posts or brick piers to pergolas ✓ Colours consistent with main house ✓ External grade timber decking ✓ 330mm plastered columns with plaster trim ✓ Verandas and stoeps are encouraged ✓ Diamond deck

	ELEMENTS	NOT ACCEPTABLE	RECOMMENDED BUT NOT
22.5	GARAGES OUTBUILDINGS	 Precast concrete Fibreglass cladding No aluminium tip up or sectional overhead No shade netting 	RESTRICTED TO THIS ONLY ✓ Construction consistent with main structure ✓ Garage doors in aluminium painted section overhead ✓ Preferably not integrated with main structure ✓ Colour consistent with house
22.6	GARDEN ENCLOSURES, BARBEQUE AND LAPAS	 Vibracrete type panels Barbed or razor wire Unenclosed wash line area No boundary walls around the entire Erf – unless approved by Trustees or appointed architect 	 ✓ Yard wall maximum 2m high ✓ Plastered masonry ✓ Painted bagged brick work ✓ Colour consistent with house ✓ Natural stone walls ✓ Garden walls to be integrated in overall design layout ✓ Barbeque to be visually integrated or separateClay face brick
22.7	PAVING, DRIVEWAYS AND VISITOR PARKING	Unpaved drivewayIn-Situ Presser ConcreteBitumen	 ✓ Clay pavers ✓ Cement pavers ✓ Cobble stones ✓ Colours to blend in with the environment
22.8	SWIMMING POOLS AND SPAS	No portable poolsVisible pump and filter	 ✓ Pool paving to be natural material ✓ Landscaped water features ✓ Sound proofed pumps ✓ Pool behind screen walls
22.9	SIGNAGE AND STREET SCAPE	No illuminated signs	All signs other than house names to be submitted to the Trustees for approval
22.10	LANDSCAPING	Vast expanse of lawn discouraged	 ✓ Indigenous trees & aloes encouraged ✓ Natural stone terraces as necessary ✓ Natural savannah grass ✓ Compliances with FHA guidelines on landscaping
22.11	SECURITY	Barbed wire on walls	 ✓ Electronic perimeter beams ✓ Electric fencing with ground beams (to include stormwater openings) ✓ Alarm and security glass ✓ Security systems linked to Control Room
22.12	BOUNDARY FENCES AND WALLS	 No Vibracrete No corrugated sheets No Diamond mesh fences. No solid boundary wall higher than 300mm above natural ground level–exceptions to be approved by the Building Committee. 	 ✓ Palisade steel fence with brick, stone or pre-cast patent columns, all with ground beam 300mm above natural ground level ✓ Must at all times be parallel to topography and in maximum height of 2.1m ✓ Electric fence to form integrated part of design

	ELEMENTS	NOT ACCEPTABLE	RECOMMENDED BUT NOT RESTRICTED TO THIS ONLY
22.13	GENERAL		Natural materials will be accepted
			and use thereof in raw format is
			encouraged.