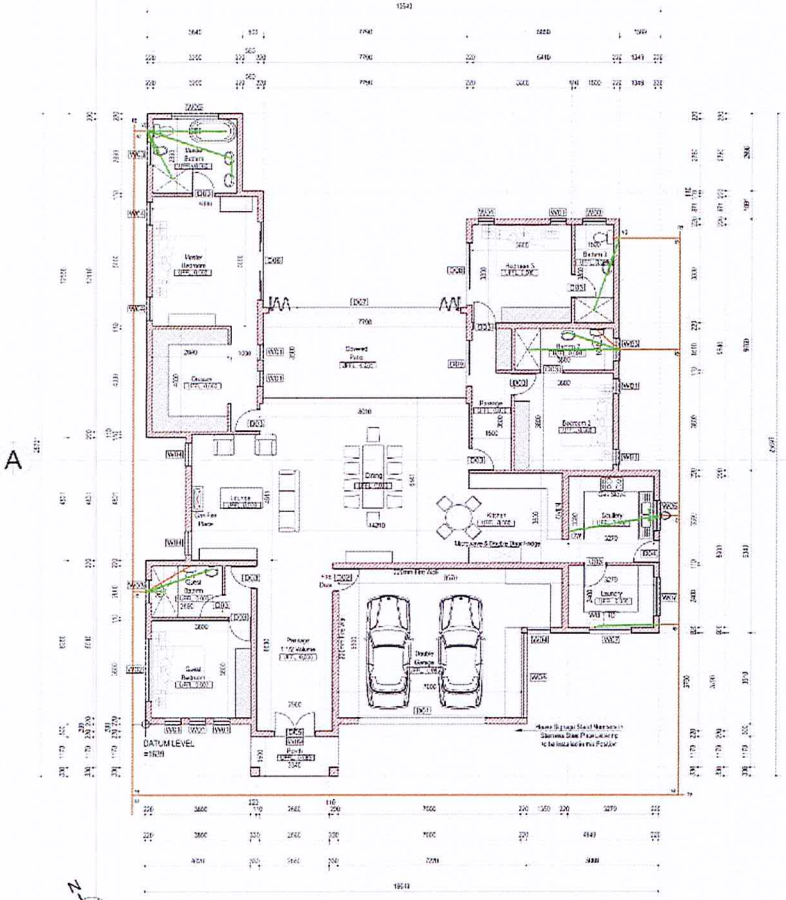
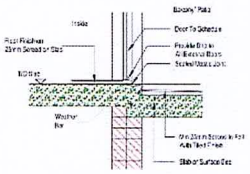
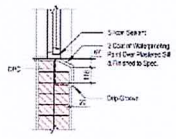


Ground Floor Plan
Scale 1:100



Door/ Weather Step Detail
Scale 1:20



DPC/ Window Sill Detail
Scale 1:20

AREAS SCHEDULE	
Ground Floor:	
Main Building	251.5sq.m.
Covered Patio	27.3sq.m.
Garage	45.9sq.m.
Porch	5.0sq.m.
Sub Total	340.7sq.m.
Total House	340.7sq.m.
Area of Stand	798.3sq.m.
Permissable Coverage	50.0%
Actual Coverage	43.2%
F.A.R.	0.432

DRAINAGE NOTES -

Bathroom -

WC - 1000 sq/p	Basin - 500 sq/p
Bath - 2100 sq/p	Shwr - 2100 sq/p

Kitchen -

Sink - 500 sq/p

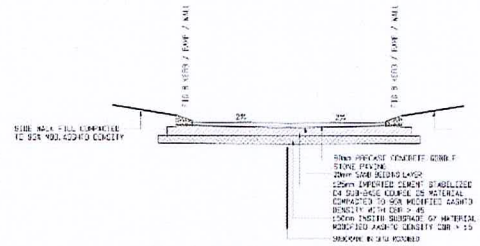
Provide at 100mm/h

Drainage design to be in accordance with NBR.

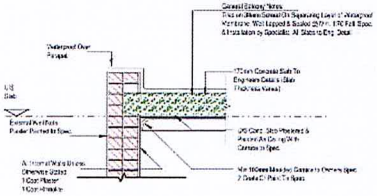
GLAZING NOTE:

Form of Exposure of Glass (m)	Maximum size of Glass (m)
3	0.75
4	1.0
5	2.1
6	3.7

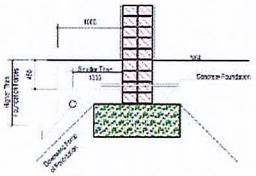
From Bar below: max. Pane 3.75mm = 6mm glass
Up to 1000mm = safety glass
All glass below = safety glass with markers



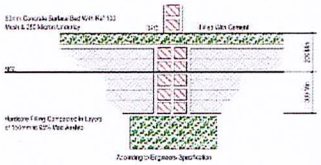
TYPICAL CROSS-SECTION FOR
PRECAST CONCRETE COBBLE STONE PAVING
SCALE 1:25



Slab/ Parapet Detail
Scale 1:20

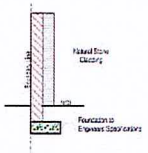


Sewer Detail
Scale 1:20

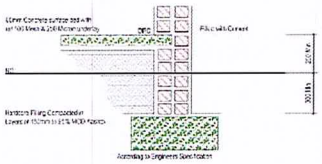


Foundation To Concrete Level
For Internal Walls
Scale 1:50

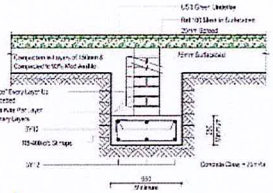
Boundary Wall Plan
Scale 1:50



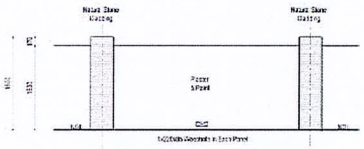
Boundary Wall Section
Scale 1:50



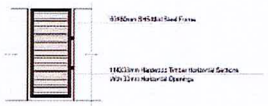
Foundation to Concrete Level
For External/ Loabearing Walls
Scale 1:50



Foundation Detail
Scale 1:25



Boundary Wall Elevation
Scale 1:50



Detail Elevation
Side Boundary Gates
Scale 1:50

GENERAL NOTES TO ALL CONTRACTORS

GENERAL NOTES:

- All work to comply with SANS 10400 and Local Council requirements as well as all relevant specifications and codes as well as the NHBRC Guidelines.
- Dimensions to be taken in preference to scaling. Check dimensions before commencing.
- All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architects before any work is commenced.
- All concrete foundations to be a minimum of 600mm x 200mm unless shown otherwise. Top of concrete foundation to be a minimum of 300mm below NGL.
- Finished floor levels to be a minimum of 200mm above external ground level unless otherwise shown. Fire walls to underside of roof covering. Minimum 150mm. Brickwall plus fire door to garage where interleaving with house.
- All doors to the exterior of the building are to have a 15mm step up to the inside on the inside of the door leaf and have opening areas are to have a 15mm step up step, the longitudinal overstriker of the door leaf.
- The Contractor is responsible for all waterproofing to floor surfaces and shall carry all lines of waterproofing to the satisfaction of the Engineer.

DRAINAGE NOTES

- All plumbing work to be carried out by licensed Drainlayers and plumbers.
- Drains under buildings to be straight runs, adequately protected and with IE's at ends. Concrete inspection pipes to be laid.
- Pipes and bends are not to be easily accessible. IE's to have marked covers at ground level. Rodding eyes to be provided where necessary.
- All soil pipes to be 110mm diameter uPVC with manhole or pipe drains and to have a minimum fall of 1:60. Top of any drain to be at least 300mm below G.L.
- All waste pipes to be 50mm internal diameter. All waste fittings to have deep "P" traps and to be 75 x 50mm accessible for rodders and cleaning.
- All vent pipes to extend 900mm above roof level. Vents pipes exceeding 6m to be vented. SVP's to be 50 OR having more than 250mm vertical discharge.
- All soil and waste fittings to be accessible along their entire length for maintenance and inspect. All traps and to be accessible for rodding by means of M.P.'s or cleaning eyes. A manhole to be provided within 1.2m of the stand boundary.
- SINGLE STACK SYSTEMS: Bends are required to be vented. Horizontal drain bends to have center radius of minimum 200mm, at a gradient and C.I.'s to have a 300mm radius. Vertical soils bend to start at 30°.

WATER PROOFING AND DAMP PROOFING

- 375 micron polyethylene DPC.
- DPC's under all soil and sewer pipes to be 150mm above trench or pipe laid level.
- DPC's under all slab, behind wall or boards and under edge beams. Vertical DPC's to all changes in floor level. Surfaces to be to be an approved waterproofing forming a continuous sealed membrane with the DPC's under walls. Flashings to all changes of roof levels and to chimneys. Impervious coatings to all balconies.
- Remove stormwater from buildings and site.
- WATERPROOFING TO ROOF SLABS: All waterproofing to roof slabs to be SCHOMAL SPM sheeting, all to be laid producing seamless and monolithic finishes strictly in accordance with manufacturer's instructions, with UV Bitumen coat paint to all exposed surfaces and guaranteed uncontrolled for ten years.

NATURAL LIGHT AND GLAZING

- All habitable rooms to have a minimum 10% natural light.
- All glazing to comply with parts N & O of the N.B.R. and SABS 0137:2000 Code of Practice: Safety and hazardous glass specifications to SABS 0121.
- All minimum doors and windows to conform to A.A.R.S.A. standards.
- Minimum thickness of glazing panes (panes not exceeding 0.7m2 in 3mm thick; panes not exceeding 1.0m2 in 4mm thick; panes exceeding 1.0m2 in 5mm thick.
- Safety glass to windows to be lower than 300mm from finished floor level.

STAIRS

- Stair treads to be 250mm minimum, stair risers to be 200mm maximum. Balustrade heights to be 1000mm minimum. Balustrade openings to be 100mm maximum.

PARTITIONS AND CEILINGS

- Dry wall partitions and suspended ceilings to comply with Sc 011 and Section 8 of SABS Test Method 418. Drywall loading to be 12.5mm "X" rated gypsum board.
- Drywall ceilings to be 6mm gypsum board. Exterior Dry wall cladding to be 6mm fibre cement boarding. 50mm Aerofoil insulation to be provided in the all external drywalls and between ceilings and roofing material.
- Dry wall cladding and ceilings to bathrooms to be 6mm fibre cement boarding.

WATERPROOFING TO ROOF SLABS

- All waterproofing to roof slabs to be 10mm cure SBR sheeting, all of which is to be laid and cured. Flashing and counter flashings strictly in accordance with the manufacturer's instructions, with UV bitumen paint to all exposed surfaces and guaranteed uncontrolled for ten years.

ELECTRICAL

- All electrical installations shall be to be approved electrician. A CERTIFICATE CERTIFICATE MUST BE ISSUED UPON COMPLETION OF THE INSTALLATION. This electrical installation shall have a "Pre-Payment" earth leakage system in the Submission issued.

CLIENT DETAILS

CLIENT

PROJECT:

NEW DWELLING

On ERF 2174, Eye of Africa
Estate, Midvaal

DATE: 05/8/2021

DRAWING DESCRIPTION:

FLOOR PLANS DETAILS

OPPERMAN CONSULTING
PO BOX 11151
SILVER LAKES, 0054
Fax: 0866 553 822
Cell: 082 878 2707
e-mail: admin@oppermanconsulting.com
ARCHITECTURAL & STRUCTURAL ENGINEER CONSULTANTS

PROPERTY OWNER	DULY AUTHORISED	DATE
G COSSUTTI (Member with Authority to Sign) CLIENT		05/8/2021 DATE
R. OPPERMAN (Member with Authority to Sign) OPPERMAN CONSULTING		05/8/2021 DATE

REVISION #	DATE	REVISION DESCRIPTION	BY
2	6	20/7/2021 New Plans For Approval	E.B.

ISSUE TYPE: (1) PRELIMINARY (2) APPROVAL (3) INFORMATION (4) TENDER (5) CONSTRUCTION (6) REVISED (7) AS BUILT (8) CANCELLED (9) OTHER

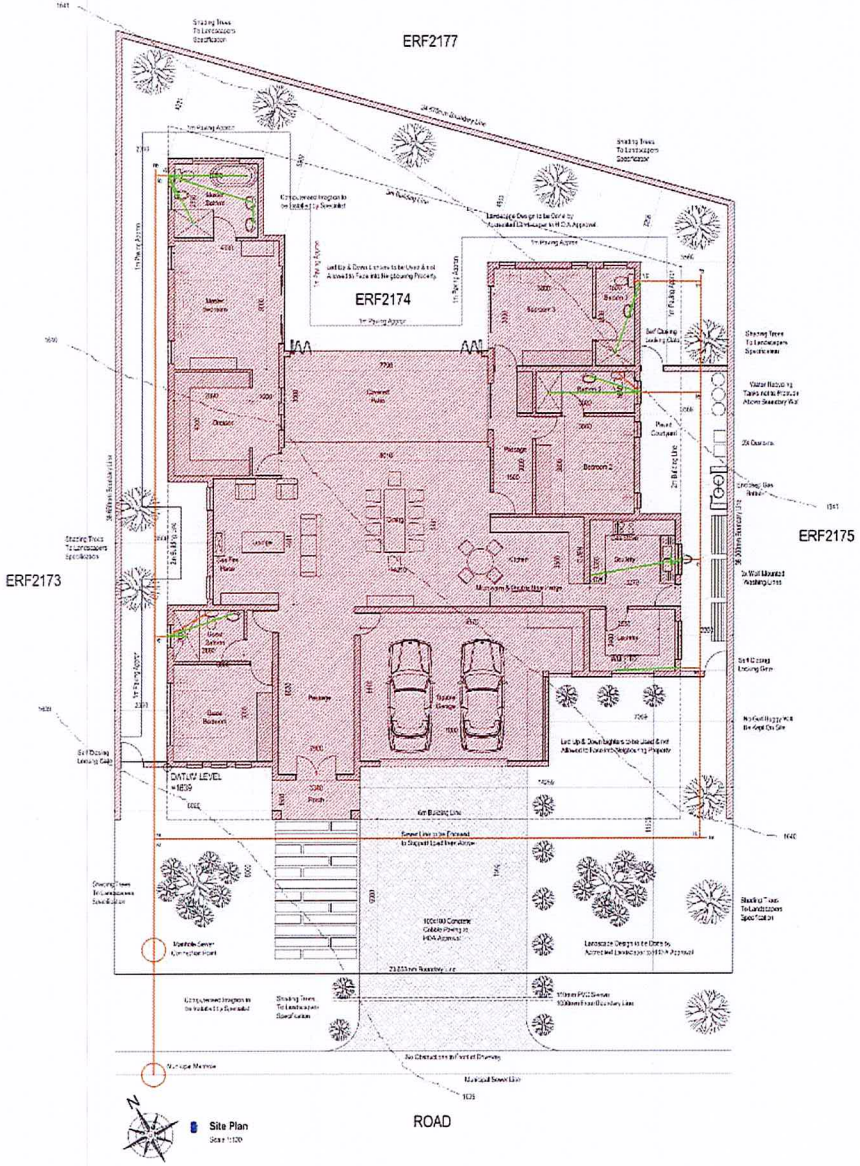
SHEET #: SHEET 1 OF 5

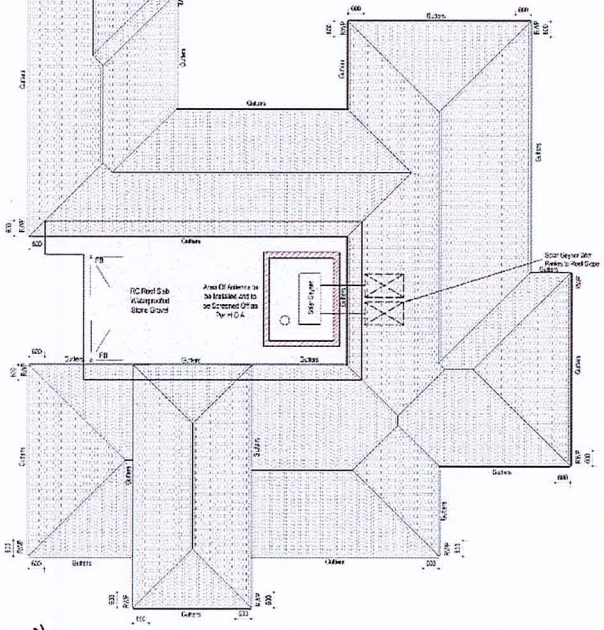
SHEET SIZE: A1

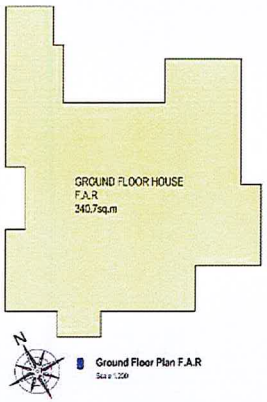
[ ] PREVIEW PLAN [ ] CONSTRUCTION PLAN
[X] PRELIMINARY PLAN [ ] AS BUILD PLAN

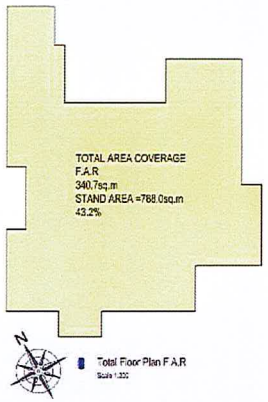
REVISION #	SCALE:	DRAWN:	CHECKED:
0	AS SHOWN	E.B. R.O.	E.B. R.O.

DRAWING No.: EOA-2174-100









GENERAL NOTES TO ALL CONTRACTORS

GENERAL NOTES:

- All work to comply with SANS 10400 and Local Council requirements as well as all relevant specifications and codes, as well as the NHBRC guidelines.
- Figured dimensions to be taken in preference to scaling. Overall dimensions supersede all other dimensions.
- All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architects before any work is put in hand.
- All concrete foundations to be a minimum of 600mm x 200mm unless shown otherwise. Top of concrete foundation to be a minimum of 300mm below NGL. Reinforced footings to be a minimum of 200mm above natural ground level unless otherwise noted. Fine sand to underside of slab covering. Minimum 150mm thick blinding plus fine sand to garage where interlocking will house.
- All doors to the exterior that are accessible are to have a 15mm step up to the space on the inside of the door leaf and those opening inward are to have a 15mm step up along the longitudinal centreline of the door leaf.
- The Contractor is responsible for all relevants by local authorities and inspectors and shall pay all fees in connection therewith.

DRAINAGE NOTES

- All plumbing work to be carried out by licensed Master Builders and plumbers.
- Drains under buildings to be straight runs, adequately protected and with ELBOW ends. Concrete waste pipes to be sleeved.
- Pipes and bends are only to be the easily accessible. RPs to have marked covers at ground level. Rodding eyes to be provided where necessary.
- All soil pipes to be 110mm diameter glazed earthenware or pvc drains and to have a minimum fall of 1:40. Top of any stack to be at least 100mm below eave.
- All waste pipes to be 50mm internal diameter. All waste traps to have deep "P" bends/traps and to be fully accessible for rodding and cleaning.
- All vent pipes to extend 900mm above roof level. Waste pipes exceeding 6m to be vented. 38 PVC to be all UV Ch having more than 150mm vertical drop.
- All back and waste fittings to be accessible and shall have anti-siphon for all traps and trivets. All drains are to be accessible at Junctions by means of 90° bends/cleaning eyes. A manhole to be provided within 1.2m of the stand boundary.
- SANITARY SYSTEMS: Waste pipes exceeding 6m to be vented. Horizontal drain bends to have center line radius of minimum 300mm, all subsidiaries and C.I.'s to have a 300mm vertical drop behind bend at junction.

WATER PROOFING AND DAMP PROOFING

- 375 micron polythylene damp proofing.
- DPC's under all walls and concrete walls to be 150mm above finished ground level.
- DPC's under all sills, behind weather boards and under slope tiles, metal DPC's to all changes in floor level. Surface beds to be on approved waterproofing forming a continuous sealed membrane with the DPC's under walls. Flashings to all changes of roof levels and to chimneys. Impervious coatings to all parapets.
- Remove stormwater from buildings and site.
- WATERPROOFING TO ROOF SLABS: All waterproofing to roof slabs to be DERBIGUM SPA/ sheeting, all to be laid strictly according and counter-flashings strictly in accordance with manufacturer's instructions, with 20yr guarantees, part to all exposed surfaces and guaranteed unconditionally for ten years.

NATURAL LIGHT AND GLAZING

- All habitable rooms to have a minimum 10% natural light.
- All glazing to comply with part N of the S.B.R. and SABS 0137:2000 Code of Practice. Safety and laminated glass to conform to SABS 1263.
- Aluminium doors and windows to conform to A.A.A.M.S.A. standards.
- Minimum thickness of glazing panes: panes not exceeding 0.5sq.m=4mm thick, panes not exceeding 1.5sq.m=6mm thick, panes exceeding 1.5sq.m=8mm thick.
- Safety glass to window panes lower than 500mm from finished floor level.

STAIRS

- Stair treads to be 250mm minimum, stair risers to be 200mm maximum. Balustrade heights to be 1000mm minimum. Balustrade openings to be 100mm maximum.

PARTITIONS AND CEILINGS

- Dry wall, partitions and suspended ceilings to comply with PC 111 and Section B of SABS Text Section 0136. Drywall ceiling to be 12.5mm "A" board gypsum board.
- Drywall ceilings to be finish gypsum board. Internal dry wall cladding to be finish flow cement backing. 50mm acoustic insulation to be provided in all external drywalls and to ceiling and roofing material.
- Dry wall contractor to provide certificate to be form flow cement bonding.

WATERPROOFING TO ROOF SLABS

- All waterproofing to roof slabs to be "Derbigum SPA" sheeting, all of which to be laid and cladding flashing and counter-flashings strictly in accordance with the manufacturer's instructions, with 20yr guarantees, part to all exposed surfaces and guaranteed unconditionally for ten years.

ELECTRICAL

- All electrical installations and wiring to be executed by a registered electrician. A COMPLIANCE CERTIFICATE MUST BE ISSUED WITH COMPLETION OF THE INSTALLATION. The electrical installation shall have a "Pilot Wire" earth leakage system in the Substation issued.

CLIENT DETAILS

CLIENT

PROJECT:

NEW DWELLING

On ERF 2174, Eye of Africa
Estate, Midvaal

DATE:	DRAWING DESCRIPTION:
05/8/2021	**Site Plan Roof Plan F.A.R**

OPPERMAN CONSULTING
P.O. BOX 13261
SILVER LAKES, 0054
Fax: 086 533 8202
Cell: 082 878 2767
e-mail: admin@oplan.co.za
ARCHITECTURAL & CIVIL ENGINEERING DESIGNERS

PROPERTY OWNER	DULY AUTHORISED	DATE
G COSSUTTI (Authorised to sign each Gate) OWNER OF THE PROPERTY ERF 2174		05/8/2021 DATE
R. OPPERMAN (Pr. Eng 20070136) OPPERMAN CONSULTING P.O. BOX 13261, SILVER LAKES, 0054 FAX: 086 533 8202 TEL: 082 878 2767 E-MAIL: admin@oplan.co.za		05/8/2021 DATE

"I HEREBY CERTIFY THAT I HAVE THE RIGHT TO COMMISSION THE WORKS FOR WHICH CONSENT IS SOUGHT AND THAT I AM AWARE OF THE RESTRICTIONS IMPOSED ON THE WORKS BY THE RELEVANT TITLE DEED CONDITIONS AND THE RESTRICTIONS IMPOSED BY ANY APPLICABLE SCHEME OR SUBDIVISION DEVELOPMENT GUIDELINES."

"I HEREBY CERTIFY THAT THE SUBJECT PROPERTY OF THE WORKS, OPERATIONS AND USE HEREIN DESCRIBED ARE ACCURATELY DEPICTED ON THE SITE PLAN."

REVISION #	DATE	DESCRIPTION	BY
2	0	26/07/2021 New Plans For Approval	EB

ISSUE TYPE: (1) PRELIMINARY (2) APPROVAL (3) INFORMATION (4) TENDER (5) CONSTRUCTION (6) REVIEW (7) AS BUILT (8) CANCELLED (9) OTHER

SHEET #: SHEET 2 OF 5

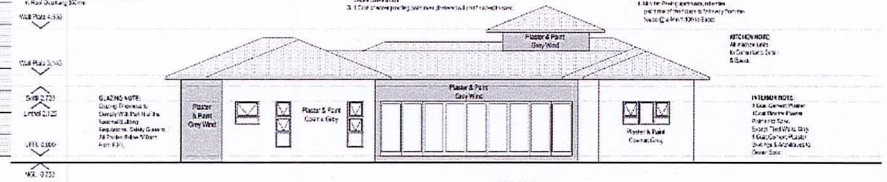
SHEET SIZE: A1

- [ ] PREVIEW PLAN
- [x] PRELIMINARY PLAN
- [ ] CONSTRUCTION PLAN
- [ ] AS BUILD PLAN

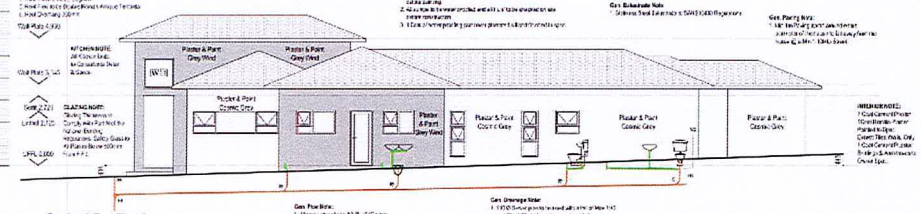
REVISION #:	SCALE:	DRAWN:	CHECKED:
0	AS SHOWN	E.B. R.O.	E.B. R.O.

DRAWING No.: EOA-2174-200

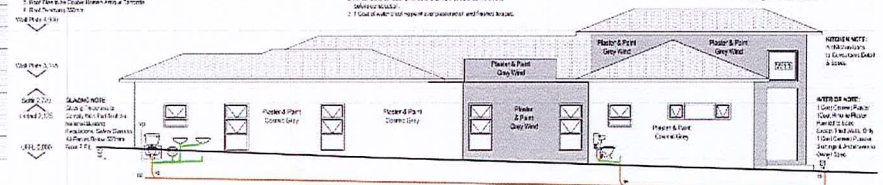
South West Elevation



North East Elevation



South East Elevation



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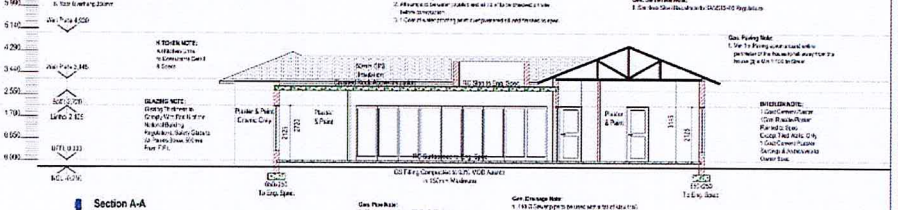
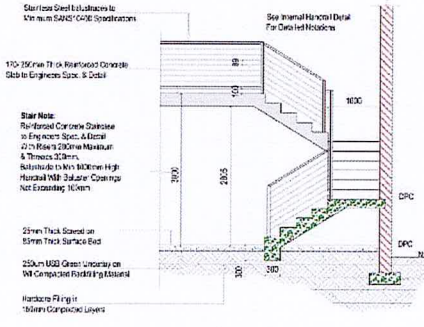
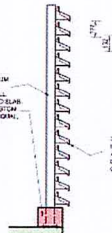


Section A-A

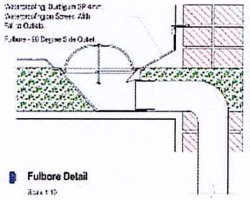


Typical Concrete Staircase & Handrail Detail

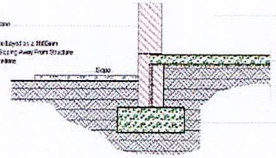


SCREENING LOUVRES

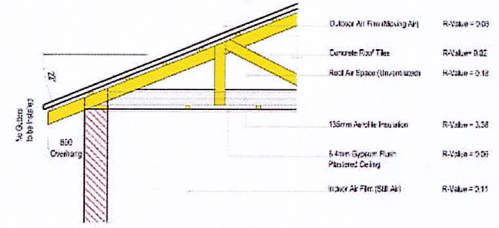
Scale 1:20



Fulbore Detail



Foundation & Surfacebed Insulation



Roof Structure Insulation

GENERAL NOTES TO ALL CONTRACTORS

GENERAL NOTES:

- All work to comply with SANS 10400 and Local Council requirements as well as all relevant specifications and codes, as well as the NHBRC guidelines.
- Figured dimensions to be taken in preference to scaling. Overall dimensions supersede all other dimensions.
- All drawings are revised and highlights to be checked prior to and any discrepancies to be reported to the architect before any work is put in hand.
- All concrete foundations to be a minimum of 600mm x 200mm unless shown otherwise. Top of concrete foundation to be a minimum of 300mm below NGL.
- Footings for walls to be a minimum of 200mm above natural ground level unless otherwise shown. Pers walls to underside of roof covering. Minimum 150mm. Brickwork plus the roof to garage walls to be 200mm above finished floor level.
- All cores to the exterior that accommodate pipes to have a 75mm clearance to the inside and the inside of the pipe and covering/covering sleeve, only to have a 10mm clearance along the longitudinal centreline of the pipe itself.
- The Contractor is responsible for all waterproofing to be certified and inspected and shall give a letter of confirmation to the Architect.

DRAINAGE NOTES

- All plumbing work to be carried out by licensed Drainlayers and plumbers.
- Drains under buildings to be straight runs, adequately protected and with IRCs at ends. Concrete encasement to be allowed.
- IRCs shall be kept and must be easily accessible. IRCs to have marked covers to ground level. Rodding eyes to be provided where necessary.
- All soil pipes to be 110mm diameter uPVC and ventilation pipes and to have a minimum of 1.8m, top of vent pipe to be at least 300mm below eaves.
- All waste pipes to be 50mm internal diameter. All waste fittings to have deep P/P traps and shall be fully accessible for repairs and cleaning.
- All vent pipes to extend 900mm above roof level. Waste pipes exceeding 6m to be vented. 50 P/P to be 1.8m having more than 150mm vertical discharge.
- All soil and waste fittings to be accessible. Any fitting with length for clearance and inserts. All traps and bends to be accessible or 30m continuity by means of 90° to 45° cleaning eye. A manhole to be provided within 1.2m of the stand boundary.
- SINGLE STACK SYSTEMS: Stack pipes exceeding 6m to be vented. Horizontal drain bends to have centre radius of minimum 150mm, all subsidiaries and C/Ts to have a 300mm radius, vertical easy bend to stack or 30m.

WATER PROOFING AND DAMP PROOFING

- 375 m/m damp course (Damtec 375).
- 3 P.C.S. under all walls and floors and to be 150mm above finished ground level.
- 3 P.C.S. under all E.B. Service ducts and floors and under edge beams. Vertical 3 P.C.S. to all pipes in floor level. Surface bed to be to approved waterproofing forming a continuous sealed membrane with the P.C.S. under walls. Flashings to all changes of roof levels and to chimneys, impervious copings to all parapets.
- Temporary downpipes from buttresses and gutter.
- WATERPROOFING TO ROOF SLABS: All waterproofing to roof slabs to be DEMOTAK SPM sheeting, all to be laid in accordance with the manufacturer's specifications, with 200 laps minimum and to be applied, surfaces and guarantee to be provided for ten years.

NATURAL LIGHT AND GLAZING

- All habitable rooms to have a minimum 10% window area.
- All glazing to comply with part N of the NBR and SABS 0137:2000 Code of Practice. Safety and protection glass to comply to SABS 1263.
- Aluminium doors and windows to conform to D.A.A. and S.A. standards.
- Minimum thickness of glazing panes and windows to be 3mm thick, panes not exceeding 1.5sq.m. 4mm thick, panes exceeding 1.5sq.m. 5mm thick.
- Safety glass to window panes lower than 800mm from finished floor level.

STAIRS

- Stair treads to be 250mm minimum, risers to be 200mm maximum. Balustrade heights to be 1000mm minimum. Balustrade openings to be 100mm maximum.

PARTITIONS AND CEILINGS

- Dry wall, partitions and suspended ceilings to comply with SC 011 and Section 8 of SABS 10400 Part Section 4 NBR. Drywall backing to be 12.5mm "X" board in bases.
- Drywall ceilings to be 9mm gypsum board. Enhanced Dry wall backing to be three times surface boarding. Where the installation is to be provided to the all external gypsolite and cement ceilings and roofing material.
- Dry wall backing and covings to bathrooms to be form form cement boarding.

WATERPROOFING TO ROOF SLABS

- All waterproofing to roof slabs to be "Demotak SPM" sheeting, all sheets to be laid in accordance with the manufacturer's specifications, with 200 laps minimum and to be applied and guaranteed uncondition only for ten years.

ELECTRICAL

- A certificate of compliance of all electrical installations, A COMPLIANCE CERTIFICATE IS TO BE ISSUED ON COMPLETION OF THE INSTALLATION. The electrical installation of all black "Pro-Armour" earth leakage system in the bathroom board.

CLIENT DETAILS

CLIENT

PROJECT:

NEW DWELLING

On ERF 2174, Eye of Africa
Estate, Midvaal

DATE: 05/8/2021

DRAWING DESCRIPTION:

Elevations Sections

OPPERMAN CONSULTING
PO BOX 11163
SILVER LAKES, 0054
Fax: 086 553 8201
Cell: 082 878 2787
e-mail: admin@oicie.com
MEMBERS OF SA CIVIL ENGINEER CONSULTANTS

PROPERTY OWNER / DULY AUTHORISED	DATE
G COSSUTTI (Managing Director) (Cert No 5488) CLEAN COAST PROPERTIES (Pty) Ltd	05/8/2021 DATE
R. OPPERMAN (Pr Eng 900187/95) OPPERMAN CONSULTING PO BOX 11163, SILVER LAKES, 0054 FAX: 086 553 8201 TEL: 082 878 2787 E-MAIL: admin@oicie.com	05/8/2021 DATE

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REVISION #	DATE	REVISION	BY
2	0	20/7/2021	New Plans for Approval	EB

ISSUE TYPE: (1) PRELIMINARY (2) APPROVAL (3) INFORMATION (4) TENDER (5) CONSTRUCTION (6) REMEDIAL (7) AS BUILT (8) CANCELLED (9) OTHER

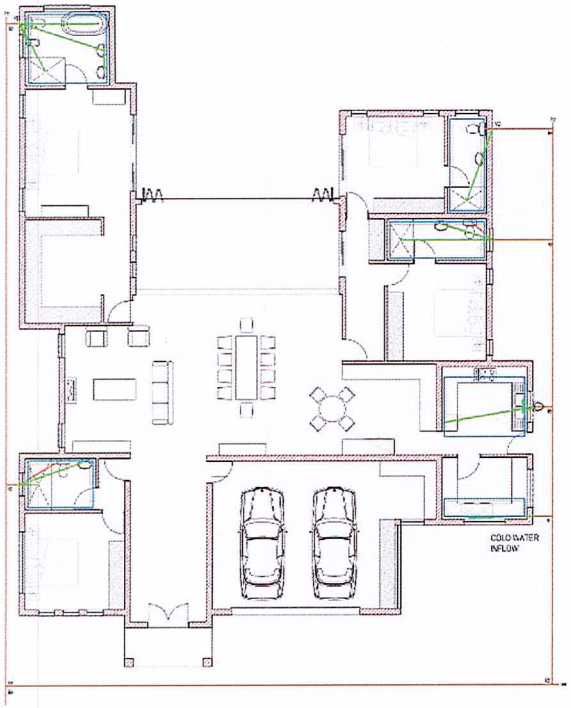
SHEET #: SHEET 3 OF 5

SHEET SIZE: A1

PREVIEW PLAN / PRELIMINARY PLAN / CONSTRUCTION PLAN / AS BUILD PLAN

REVISION #	SCALE:	DRAWN:	CHECKED:
0	AS SHOWN	E.B. R.O.	E.B. R.O.

DRAWING No.: EOA-2174-300

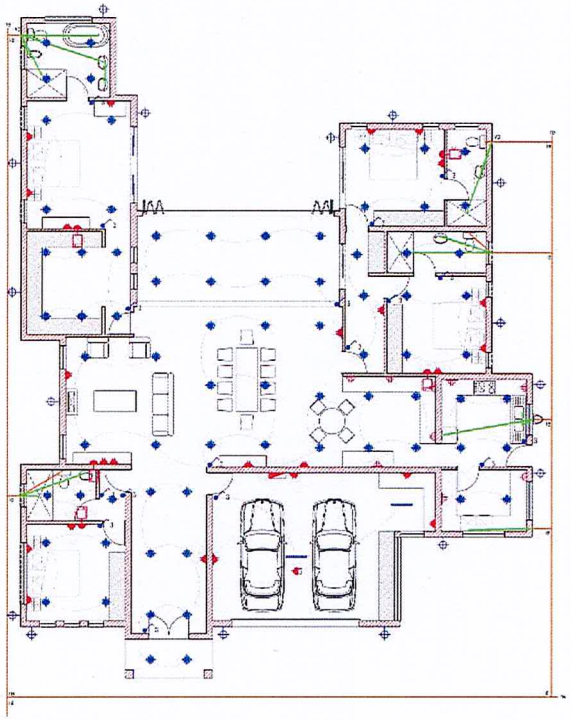


GEYSER NOTE:
Geyser screen to be 2 sides will. Plumbing and contribution to colour scheme of the house and must not be seen at the front or on exposed sides and screened off geyser needs.

WATER FLOW LEGEND
COLD WATER FLOW
HOT WATER FLOW

SOLAR GEYSER TO BE USED
WATER RESEVOIRS TO BE PLACED ON EXPOSED CONCRETE SLABS

GROUND FLOOR PLAN - HOT & COLD WATER
SCALE 1:100



GROUND FLOOR PLAN - ELECTRICAL LAYOUT PLAN
SCALE 1:100

LIGHTING AND SWITCHES LEDGEND

LIGHTING

- RECESSED LOW VOLTAGE DOWNLIGHT (LED)
- RECESSED DUAL END LIGHTING FIXTURE (ACCENTING FOLIAGE INSTALLATION)
- PENDANT LIGHT FITTING
- CHANDELIER
- FLORESCENT LIGHT FITTING
- LED SWIMMING POOL LIGHT
- EXTERNAL WALL MOUNTED LIGHT FITTING
- FLORESCENT LIGHT FITTING (CIRCULAR)
- GAZEBO FLOOD LIGHT

SWITCHES

- 3 SWITCH LIGHT SWITCH
- 4 SWITCH LIGHT SWITCH
- 6 SWITCH LIGHT SWITCH
- SMART CLIP AWEL SWITCH PANEL
- DIM RIGHT LIGHT SWITCH
- SECURITY ROLLER SHUTTER SWITCH

PLUGS AND ELECTRONICS LEDGEND

PLUG SOCKETS

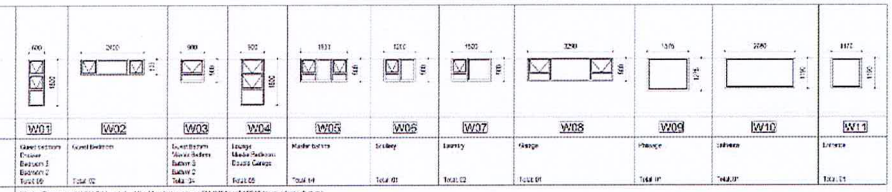
- SINGLE SOCKET OUTLET (300mm ABOVE COUNTER)
- DOUBLE SOCKET OUTLET (300mm ABOVE COUNTER)
- SINGLE SOCKET OUTLET (300mm ABOVE FFL)
- DOUBLE SOCKET OUTLET (300mm ABOVE FFL)
- EXT — EXTERNAL DOUBLE SOCKET OUTLET (300mm ABOVE FFL)
- DOUBLE SOCKET OUTLET (@ 1200mm ABOVE FFL) WITH DOUBLE SOCKET OUTLET BELOW (@ 300mm ABOVE FFL)
- CEILING MOUNT, SINGLE SOCKET OUTLET FOR GARAGE MOTOR
- CEILING MOUNT, DOUBLE SOCKET OUTLET FOR GARAGE MOTOR
- IN PLANTER, DOUBLE SOCKET OUTLET FOR CURTAIN OPENERS
- EX — HIGH LEVEL SINGLE SOCKET OUTLET FOR EXTRACTOR CONNECTION
- SH — SINGLE SHAVER SOCKET OUTLET (300mm ABOVE COUNTER)

OTHER

- STOVE AND OVEN CONNECTION
- OVEN CONNECTION POINT
- UNDERFLOOR HEATING CONTROL PANEL BELOW LIGHT SWITCH
- INTERCOM
- A/C SYSTEM TOUCH PANEL
- CAMERA SCREEN
- TELEPHONE CONNECTION POINT
- TV CONNECTION POINT (@ 1200mm ABOVE FFL) WITH CONDUIT TO EMPTY SOCKET BELOW (@ 300mm ABOVE FFL)
- DISTRIBUTION BOARD

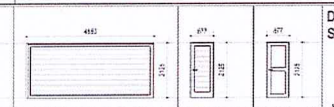
GENERAL NOTE:
All plugs, switches and telecommunication electrical components to be installed according to the manufacturer's specifications.

WINDOW SCHEDULE
Scale 1:100



REFERENCE NUMBER	W01	W02	W03	W04	W05	W06	W07	W08	W09	W10	W11
NUMBER	Guest bathroom Ensuite Bedroom 3 Bedroom 2 Total 09	Guest Bedroom Total 02	Guest Bathroom Master Bathroom Bedroom 3 Bedroom 2 Total 04	Lounge Master Bedroom Double Garage Total 06	Master bathroom Total 01	Scullery Total 01	Laundry Total 02	Garage Total 01	Passage Total 01	Bathroom Total 01	Bathroom Total 01
MATERIAL	Window Frames are ALUMINIUM and should be Manufactured by an "AAMSA" or "APEX" Approved manufacturer. ALL OPENINGS FOR ALUMINIUM FRAMES MUST BE MEASURED ON SITE BEFORE MANUFACTURING.										
FINISHING	All ALUMINIUM Windows must be Painted in Dulux Anodise. All ALUMINIUM Windows must be supplied in size which is 100 Micron thick glass silver finish protection.										
GLAZING	Opening Sections: Glazing to be 5mm Clear Float Glass, Insulation Specialist. Fixed Side panels: Glazing to be 5mm Clear Float Glass, Insulation Specialist, glass edges must be polished. Clear surface or Oil, Grease or Fingerprints.										

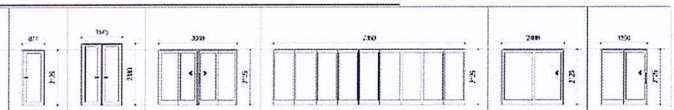
DOOR SCHEDULE
Scale 1:100



Wooden Doors

REFERENCE NUMBER	D01	D02	D03
NUMBER	Automatic Double Garage Door Total 01	Single Garage Fire Door Total 01	Internal Doors Total 01
FRAME — MATERIAL	Made to size and supplied with by Manufacturer	Imported Frame by Manufacturer	Imported Frame by Manufacturer
FRAME — FINISHING	Finish According to manufacturer specifications	Sanded and Sealed to Manufacturer specs	Sanded and Sealed to Manufacturer specs
LEAFS — MATERIAL	Standard PERMAWOOD Approved from panel Slatted Timber door by Specialist	Solid Core Two Panel Door, Custom Fire Rating by Specialist	Solid Core Panel by Specialist
LEAFS — FINISHING	Finish according to manufacturer specs and standards with DLA approval, measured on site before Manufacturing	Matte Horizontal Sealed by specialist. Variant right: Clear or Stained	Matte, Horizontal Sealed by specialist. Variant right: Clear or Stained

DOOR SCHEDULE
Scale 1:100



Aluminium Doors

REFERENCE NUMBER	D04	D05	D06	D07	D08	D09
NUMBER	Outside Door Total 01	Entrance Door Total 01	3000 Sliding Door Total 01	7200 Sliding Folding Doors Total 01	2400 Sliding Door Total 01	1500 Sliding Door Total 01
FRAME — MATERIAL	Door Frames are ALUMINIUM and should be Manufactured by an "AAMSA" or "APEX" Approved manufacturer. ALL OPENINGS FOR ALUMINIUM FRAMES MUST BE MEASURED ON SITE BEFORE MANUFACTURING.					
FRAME — FINISHING	All ALUMINIUM Doors must be Painted in Dulux Anodise. All ALUMINIUM Doors must be supplied in size which is 100 Micron thick glass silver finish protection.					
LEAFS — GLAZING	Glazing to Aluminium Panels to be 5mm Clear Float Glass, Insulation Specialist. Opening Sections: 6mm Clear Float Glass, Insulation Specialist					
LEAFS — FINISHING	Bronze Anodise. Clear Surface or Oil, Grease, or Fingerprints.					

GENERAL NOTES TO ALL CONTRACTORS

GENERAL NOTES:

- All work to comply with SANS 10400 and Local Council requirements as well as all relevant specifications and codes, as well as the NHBRC Guidelines.
- Figured dimensions to be taken in preference to scaling. Overall dimensions commencing from perimeter.
- All dimensions, levels and heights to be checked on site and any discrepancies to be reported to the architect before any work is put in hand.
- All concrete foundations to be a minimum of 600mm x 200mm unless shown otherwise. Top of concrete foundation to be a minimum of 200mm below NGL.
- Reinforced concrete lintels to be a minimum of 200mm above finished ground level unless otherwise shown. Reinforcement: Minimum 15dia. Steel bars plus the cost to garage walls, interlocking of houses.
- All doors to the exterior and access ways are to have a 75mm step up to the inside of the door leaf and the exterior and access ways are to have a 50mm step up along the longitudinal centreline of the door leaf.
- The Contractor is responsible for all workmanship, materials and equipment and shall pay all fees in connection therewith.

DRAINAGE NOTES

- All plumbing work to be carried out by licensed Drainlayers and plumbers.
- Drains under buildings to be straight runs, adequately protected and with IC's at ends. Concrete encased pipes to be sleeved.
- Pipes at least 3m and should be easily accessible. IP's to have marked covers at ground level. Rodding eyes to be provided where necessary.
- All soil pipes to be 110mm diameter galvanised mechanically or glue joints and to have a minimum fall of 1:40. Top of pipe to extend 1.0m above roof level.
- All waste pipes to be 50mm internal diameter. All waste fittings to have deep P traps and rodding eyes and to be accessible for rodding and cleaning.
- All vent pipes to extend 900mm above roof level. Waste pipes exceeding 3m to be vented. Gutter outlets to be having more than 150mm vertical discharge.
- All soil and waste fittings to be accessible along their axis to allow for maintenance and repairs. All drains and to be accessible at inspection eyes by means of 90° bends or cleaning eyes. A manhole to be provided within 1.2m of the same boundary.
- SINGLE STACK SYSTEMS: Waste pipes exceeding 3m to be vented. Horizontal drain bends to have centre line radius of minimum 500mm, all subsoils and CI's to have a 300mm radius, vertical axis bend to be at least 90°.

WATER PROOFING AND DAMP PROOFING

- 375 micron polythene membrane D.P.C.
- D.P.C's under all walls and screed walls to be 150mm above finished ground level.
- D.P.C's under all cills, behind weather boards and under edge tiles. Vertical D.P.C's to all changes of floor level. Damp proofing to be to approved waterproofer forming a continuous sealed membrane with the D.P.C's under walls. Flashings to all changes of roof levels and to all valleys, impervious copings to all parapets.
- Remove stormwater from building and site.
- WATERPROOFING TO ROOF SLABS: All waterproofing to roof slabs to be DERBOLAK SPW sheeting, all to be laid professionally flashing and corner flashing strictly in accordance with manufacturer's instructions, with UV2 Bitumen paint to all exposed surfaces and guaranteed uncontrollably for ten years.

NATURAL LIGHT AND GLAZING

- All habitable rooms to have a minimum 10% natural light.
- All glazing to comply with part N of the N.B.R. and SABS 0137:2000 Code of Practice. Safety and protective glass to conform to SABS 1263.
- All exterior doors and windows to conform to A.A.A.S.A. standards.
- Minimum thickness of bedroom panes (zones not exceeding 0.2sq.m) 4mm thick, panes not exceeding 1.5sq.m 4mm thick, panes exceeding 1.5sq.m 6mm thick.
- Safety glass at window panes lower than 800mm from finished floor level.

STAIRS

- Stair treads to be 250mm minimum, stair risers to be 200mm maximum. Balustrade heights to be 1000mm minimum. Balustrade openings to be 100mm maximum.

PARTITIONS AND CEILINGS

- Dry wall partitions and suspended ceilings to comply with R 111 and Section 8 of SABS Test Method 518. Dry wall boarding to be 12.5mm "X" rated gypsum board.
- Dry wall ceilings to be fixed to approved board. Installed Dry wall ceiling to be fixed to a cornice boarding. 50mm Acoustic insulation to be provided in the all external gyproc walls and to cove ceilings and roofing material.
- Dry wall boarding and cornices to bathrooms to be form flow cornered boarding.

WATERPROOFING TO ROOF SLABS

- All waterproofing to roof slabs to be 10mm cure SPW sheeting, all of which is to be laid professionally flashing and corner flashing strictly in accordance with the manufacturer's instructions, with UV2 Bitumen paint to all exposed surfaces and guaranteed uncontrollably for ten years.

ELECTRICAL

- A Certificate of Installation of all electrical installations in accordance with Rule A COMPLIANCE CERTIFICATE MUST BE ISSUED UPON COMPLETION OF THE INSTALLATION. The electrical installation of a fitted a "High Integrity" earth leakage system in the Sub-Main Board.

CLIENT DETAILS

CLIENT

PROJECT:

NEW DWELLING

On ERF 2174, Eye of Africa
Estate, Midvaal

DATE: 05/8/2021

DRAWING DESCRIPTION:

Water & Electrical Door & Window

OPPERMAN CONSULTING
P.O. BOX 13151
SILVER LAKES, 0054
Tel: 086 633 8021
Cell: 082 878 2797
e-mail: admin@oicie.co.za

PROPERTY OWNER / DULY AUTHORISED	DATE
G COSSUTTI (Member of Architect Gauteng)	05/8/2021 DATE
R. OPPERMAN (Pr Eng 20081189)	05/8/2021 DATE

REVISION #	DATE	ISSUE TYPE	
2	6	25/07/2021	New Plans For Approval EB

ISSUE TYPE:
(1) PRELIMINARY (4) TENDER (7) AS BUILT
(2) APPROVAL (5) CONSTRUCTION (8) CANCELLED
(3) INFORMATION (6) REVIEW (9) OTHER

SHEET #: SHEET 4 OF 5

SHEET SIZE: A1
PREVIEW PLAN / CONSTRUCTION PLAN
X PRELIMINARY PLAN / AS BUILT PLAN

REVISION #:	SCALE:	DRAWN:	CHECKED:
0	AS SHOWN	E.B. R.O.	E.B. R.O.

DRAWING No: EOA-2174-400

EE Supplemental Guide

Client's Name: NEW DWELLING
Site: ERF 2174, EYE OF AFRICA ESTATE, MIDVAAL

Consultant Project: Project Observer
Prof Registration No: Date/Time

Climatic Zone & Data

Site Location: Johannesburg
Latitude: -29.65 (South) Longitude: 29.54 (East)
Climatic Zone: 1 (Cold interior)

Average Conditions:

	Dry Bulb (°C)		Temperature (°C)	
Summer: Dec – Feb	23.2	Max	18.7	Max
Autumn: Mar – May	17.5	Min	11.25	Min
Winter: Jun – Aug	12	Max	10.87	Max
Spring: Sept – Nov	18.5	Min	16.87	Min

Average Solar Irradiation: 20145 J/m²/d Average Daily Irradiation: 16465 J/m²/d

Building Design – Occupancy Classification

Occupancy Classification: H4

Explanation:
Dwelling, including ancillary buildings and garages, and Guest House, including garage and Guest House ancillary buildings.

Building Design – Occupancy Times

Occupancy Times: 24 hrs/Day, 7 days/Week
168 hrs/Week, 8760 hrs/Year

Building Design – Population

Occupant Population – Reg. A22:
Zone Occupant Density:
Occupant Population: 8 No. of Bedrooms: 4

EE Supplemental Guide

Client's Name: NEW DWELLING
Site: ERF 2174, EYE OF AFRICA ESTATE, MIDVAAL

Consultant Project: Project Observer
Prof Registration No: Date/Time

Building Envelope – Fenestration

SANS 10400-X Compliance:

Compliance	Glass Area (m²)	Fenestration Area (m²)	Percentage (%)
Not Applicable			
Not Applicable	0.00 m²	0.00 m²	0.00 %

Compliance Achieved:

Compliance	
Not Applicable	
Not Applicable	SANS 10400-XA not applicable

Shading – Winter/Summer Relaxation:

North facing window shaded: N/A

Building orientation is assumed to be north-facing, so North facing windows form the relaxation scenario. As fenestration area does not exceed 10% of floor area, no shading is required in accordance with SANS 10400-XA – Table 4.2.2 of SANS 10400-XA.

Permissible air leakage – Glazing:

Maximum permissible air leakage for glazing elements:		
Operable glazing:	2.0	L/s/m²
Non-operable glazing:	0.01	L/s/m²
Glazed curtain walls, shop fronts and revolving doors:	0.5	L/s/m²

EE Supplemental Guide

Client's Name: NEW DWELLING
Site: ERF 2174, EYE OF AFRICA ESTATE, MIDVAAL

Consultant Project: Project Observer
Prof Registration No: Date/Time

SANS 10400-XA Compliance:

Fenestration Compliance – Ratio of Environmental Control:

Constructional U-value: 1.2
Solar Heat Gain Coefficient: 0.15

Description	Fenestration Ratio (Actual)			Fenestration Ratio (Allowed)		
	Actual	Actual	Actual	Allowed	Allowed	Allowed
Ground Storey	412.34	53.11	118.12	0.12		

Compliance Achieved:

Description	Compliance	Compliance Achieved
Ground Storey	SANS 204 applied	SANS 204 applied

Fenestration Summary:

Refer to Detail Fenestration Report for individual fenestration areas and U-values.

EE Supplemental Guide

Client's Name: NEW DWELLING
Site: ERF 2174, EYE OF AFRICA ESTATE, MIDVAAL

Consultant Project: Project Observer
Prof Registration No: Date/Time

Energy Demand (Power) – Lighting

Total lighting energy demand (W):	4000.00	Energy demand above table
Average lighting demand (W):	1333.33	Energy demand above table
or		
Total lighting energy demand (W/m²):	5.57	Energy demand above table

Energy Consumption – Lighting (permanent)

Total energy consumption (kWh):	11744.00	Energy consumption acceptable
Average energy consumption (kWh/a):	3196.00	Energy consumption acceptable
or		
Total energy consumption (kWh/m²):	13.40	Energy consumption acceptable

Total Energy Demand / Consumption – Whole Building Summary

Energy Demand

Max. Fenestration

Energy Demand – Heating (kW):	Not specified	
Energy Demand – Lighting (kW):	4.00	

Unlimited

Energy Demand – Lighting (kW):	0.00	
Energy Demand – Hot Water (kW):	4.00	

Available

Energy Demand – Heating (kW):	Not specified	
Energy Demand – Lighting (kW):	4.00	Energy demand above table

Energy Consumption (annual)

Max. Fenestration

Energy Consumption – Heating (kWh):	Not specified	
Energy Consumption – Lighting (kWh):	11744.00	

Unlimited

Energy Consumption – Lighting (kWh):	11744.00	
Energy Consumption – Hot Water (kWh):	4412.00	

Available

Energy Consumption – Heating (kWh):	Not specified	
Energy Consumption – Lighting (kWh):	3196.00	Energy consumption acceptable

EE Supplemental Guide

Client's Name: NEW DWELLING
Site: ERF 2174, EYE OF AFRICA ESTATE, MIDVAAL

Consultant Project: Project Observer
Prof Registration No: Date/Time

Building Envelope – Fenestration – Summary

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
1	Ground Storey		W1	4	0.600	1.200	2.880
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 5.775	Emissive: 6.651

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
2	Ground Storey		W2	1	2.400	0.600	1.440
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 8.511	Emissive: 9.618

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
3	Ground Storey		W3	4	0.900	0.600	2.160
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 12.766	Emissive: 14.427

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
4	Ground Storey		W4	2	0.900	1.200	6.100
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 18.413	Emissive: 20.811

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
5	Ground Storey		W5	3	1.200	0.900	3.630
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 9.353	Emissive: 10.568

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
6	Ground Storey		W6	1	1.200	0.900	1.080
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 10.473	Emissive: 11.730

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
7	Ground Storey		W7	2	1.000	0.900	2.200
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 11.370	Emissive: 12.732

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
8	Ground Storey		W8	1	1.000	0.900	1.000
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 5.775	Emissive: 6.651

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
9	Ground Storey		W9	1	1.200	1.200	2.880
	Heating System			Gas (No)		Diesel	Gas (No)
	Aluminium			Aluminium		5.730	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
	Monolithic annealed glass	Thickness (mm)	Orientation	Projection (mm)	Height (m)	Height (m)	Height (m)
		4	North	0.200	2.125	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
0.100	0.660	-0.370	1.000	-0.010	-0.370	0.984	0.364
			Fenestration Element Value:			Consumptive: 11.370	Emissive: 12.732

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
10			0	0	0.000	0.000	
	Heating System			Gas (No)		Diesel	Gas (No)
			0	0		0.000	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
			0	0	0.000	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
			Fenestration Element Value:			Consumptive:	Emissive:

Element	Storey Level	Fenestration Element	Number No.	No. of Units	Width (m)	Height (m)	Area
11			0	0	0.000	0.000	
	Heating System			Gas (No)		Diesel	Gas (No)
			0	0		0.000	0.000
	Glass Heater			Glass Heater		Heat Pump	Heat Pump
			0	0	0.000	0.000	0.000
Pitch	Factor (F1)	F2	F3	F4	F5		
			Fenestration Element Value:			Consumptive:	Emissive:

GENERAL NOTES TO ALL CONTRACTORS

GENERAL NOTES:

- All work to comply with SANS 10400 and Local Council requirements as well as all relevant specifications and codes as well as the NHBRC Guidelines.
- Figured dimensions to be taken in preference to scaling. Overall dimensions supersede other dimensions.
- All dimensions relevant to site to be checked on site and any discrepancies to be reported to the architect before any work is carried out.
- All concrete foundations to be a minimum of 600mm x 200mm unless shown otherwise. Top of concrete foundation to be a minimum of 200mm below NGL.
- Proposed floor levels to be a minimum of 150mm above natural ground level unless otherwise shown. Pole walls to underside of roof covering. Minimum 150mm. Overall plus the door or garage width. Pitching of floors.
- All doors to the exterior and accessible are to have a 75mm step up to the inside on the inside of the door and hold open by means, and to have a 15mm step up along the longitudinal centreline of the door leaf.
- The Contractor is responsible for all labour, waste, hoisting, hardware and fasteners, and shall cater for all types of construction frame.

DRAINAGE NOTES

- All plumbing work to be carried out by licensed Drainlayer and plumber.
- Drains under buildings to be sleeved, ductwork protected and will be to all ends. Concrete encasement to be observed.
- Eye and Ear traps are to be easily accessible. All to have marked covers at ground level. Rodding eyes to be provided where necessary.
- All soil pipes to be 110mm diameter glazed earthenware or pipe drains and to have a minimum fall of 1:40. Traps of any drain to be at least 300mm below G.L.
- All waste pipes to be 32mm internal diameter. All waste fittings to have deep P-traps and to be fully accessible for repairs and cleaning.
- All vent pipes to extend 900mm above roof level. Vents pipes extending far to be a minimum 50 mm in all of 20 metres more than 100mm vertical discharge.
- All soil and waste fittings to be accessible along their entire length for all maintenance and repairs. All drains are to be accessible at Inspection Eyes by means of Mole or closing eyes. A manhole to be provided within 1.2m of the stand boundary.
- SINGLE STAGE SYSTEM. Drain pipes exposed to fire to be vented. Horizontal drain bends to have center line radius of minimum 500mm, all sideblocks and C.I.'s to have a 300mm radius, vertical bends to have a 1:8 rise.

WATER PROOFING AND DAMP PROOFING

- 375 micron black polyethylene D.P.C.
- D.P.C's vertical all walls and adjacent walls to be 150mm above finished ground level.
- D.P.C's vertical all sills, behind weather boards and under edge tiles. Vertical D.P.C's to all changes of floor level. Services to be to be an approved water proofing forming a continuous sealed membrane with the D.P.C's vertical walls. Flashings to all changes of roof levels and to chimneys. Impervious coverings to all dormers.
- Remove stormwater from buildings and site.
- WATERPROOFING TO ROOF SLABS: All waterproofing to roof slabs to be: CERBOND SPM sheeting, as to be laid precisely, flashing and counter flashing strictly in accordance with manufacturer's instructions, with UBZ bituminous paint to all exposed surfaces and guarantees unconditionally for ten years.

NATURAL LIGHT AND GLAZING

- All habitable rooms to have a minimum 10% natural light.
- All glazing to comply with part N of the N.B.R. and SABS 0137:2000 Code of Practice: Safety and tempered glass to comply to SABS 1263.
- Auto door doors and windows to comply to A.A.A.M.S.A. standards.
- Minimum thickness of glazing panes, panes not exceeding 0.9sq.m-4mm thick, panes not exceeding 1.5sq.m-5mm thick, panes exceeding 1.5sq.m-6mm thick.
- Safety glass to window panes lower than 500mm from finished floor level.

STAIRS

- Stair treads to be 250mm minimum, risers need to be 200mm maximum. Balustrade heights to be 1000mm minimum. Balustar openings to be 100mm maximum.

PARTITIONS AND CEILINGS

- Dry wall partitions and suspended ceilings to comply with SC 1411 and Section B of SABS Test Method 418. Dry wall boarding to be 12.7mm. To avoid popping beads.
- Dry wall ceilings to be fixed to approved board. Extensively well checking to be made to a certain boarding. 25mm Acoustic insulation to be provided in all external gyproc and partition ceilings and sealing material.
- Dry wall ceiling and cornices to bathrooms to be form flow cornice boarding.

WATERPROOFING TO ROOF SLABS

- All waterproofing to roof slabs to be: "CERBOND SPM" sheeting, all of which is to be laid precisely, flashing and counter flashing strictly in accordance with the manufacturer's instructions, with UBZ bituminous paint to all exposed surfaces and guarantees unconditionally for ten years.

ELECTRICAL

- A CERTIFICATE OF COMPLIANCE MUST BE SIGNED UPON COMPLETION OF THE INSTALLATION. This electrical installation must have a "Pre-Installation" earth leakage system in the Distribution Board.

CLIENT DETAILS

CLIENT

PROJECT:

NEW DWELLING

On ERF 2174, Eye of Africa Estate, Midvaal

DATE: 05/8/2021

DRAWING DESCRIPTION:

XA Calculations

OPPERMAN CONSULTING
PO BOX 11213
SILVER LAKES, 0054
Tel: 0866 533 600
Cell: 082 578 2787
e-mail: admin@oicie.co.za
OICIE Opperman Consulting
MEMBERS & CERTIFICATE OWNERS CELEBRATING

PROPERTY OWNER	DULY AUTHORISED	DATE
G COSSUTTI (Managing Director)		05/8/2021 DATE
R. OPPERMAN (Consulting Engineer)		05/8/2021 DATE

OPPERMAN CONSULTING, PO BOX 11213, SILVER LAKES, 0054
Tel: 0866 533 600 | Cell: 082 578 2787 | E-MAIL: admin@oicie.co.za

REVISION #	DATE	REVISION DESCRIPTION	BY
2	0	20/07/2021 New Plans for Approval	EB

ISSUE TYPE:
ISSUE TYPE
(1) PRELIMINARY (4) TENDER (7) AS BUILT
(2) APPROVAL (5) CONSTRUCTION (8) CANCELLED
(3) INFORMATION (6) REVIEW (9) OTHER

SHEET #

SHEET 5 OF 5

SHEET SIZE		
A1	[ ] PREVIEW PLAN	[ ] CONSTRUCTION PLAN
	[X] PRELIMINARY PLAN	[ ] AS BUILD PLAN

REVISION #	SCALE:	DRAWN:	CHECKED:
0	AS SHOWN	E.B. R.O.	E.B. R.O.

DRAWING No.:

EOA-2174-500