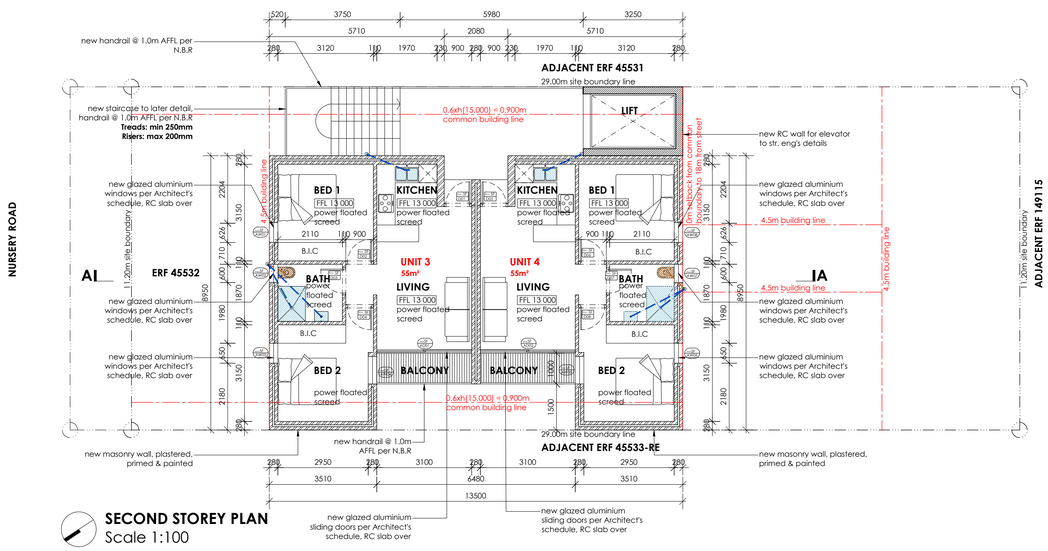
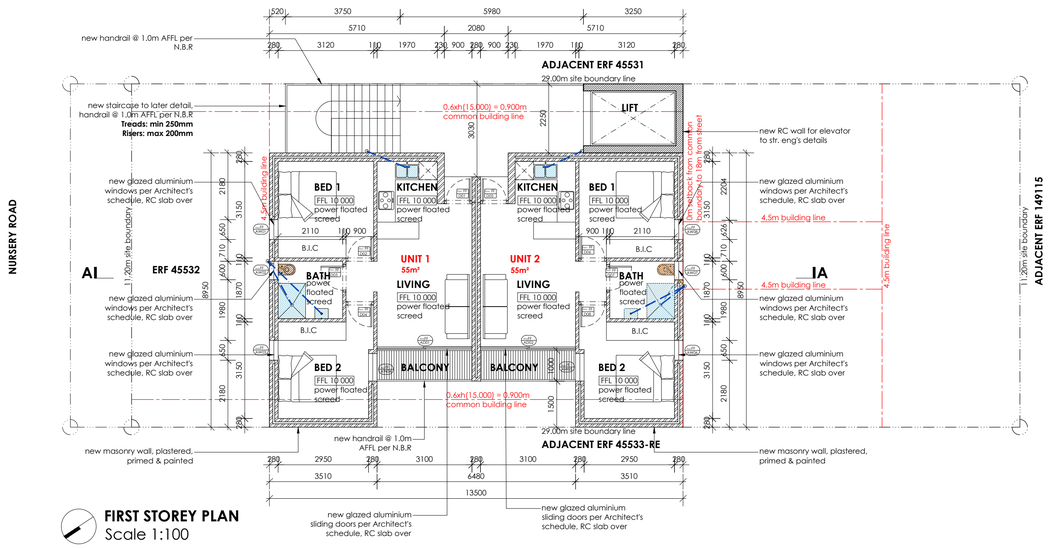
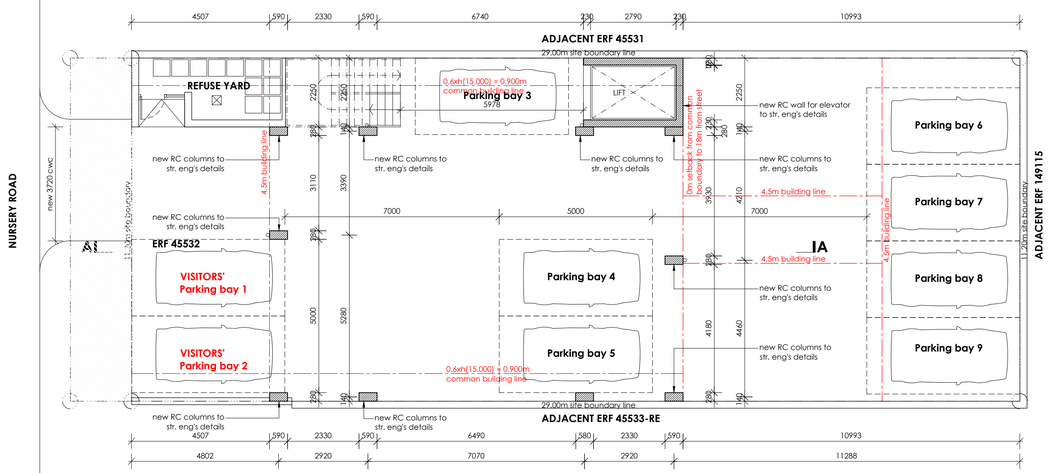


SECOND STOREY PLAN
Scale 1:100



FIRST STOREY PLAN
Scale 1:100



GROUND STOREY PLAN
Scale 1:100

PUBLIC SAFETY
To comply with SANS 10400 Part D & B

BALUSTRADES
1.0m high M3 balustrade per N.B.R. max 100mm spacings between balusters.
The balustrades are a design and supply contract, and the subcontractor must provide a professional engineers certificate on completion. All shop drawings submitted for approval, need to be first signed off by the subcontractors professional engineer prior to submittal.

STAIRS & STEPS
To comply with SANS 10400 Part M.
Min. 250mm treads
Max. 200mm high risers

WATERPROOFING
To comply with SANS 10400 Part L.

STORMWATER
To comply with SANS 10400 Part R.

RAINWATER GOODS
100mm seamless aluminium box gutters on 225x12mm fibre cement fascia.
PVC/ DC downpipes to discharge into catchpits and out to the street.

PAINTING
All material finishes & colours to be in strict accordance with estate approved specifications

ENERGY EFFICIENCY REGULATIONS
FLOORS:
Isoboard insulation under concrete slab min. R-Value of 1.0
Isoboard insulation around vertical edge perimeter of slab continuous from the finished ground level for the full depth of the vertical edge of concrete slab-on-ground min. R-Value of 1.0.

EXTERNAL WALLS
50mm cavity walls with R-value exceeding 0.35

FENESTRATION
To be in accordance with SANS 204 as per table to meet the minimum energy performance requirements.

ROOF ASSEMBLY
Min Total R-Value require = 3.7
Roof insulations as per SANS 204
Part XA calculations:
Ceiling R-Value 0.05
Ceiling insulation
- **Radiantshield R-value=1.36**
- **Isotherm R-value = 2.3**
- **Lambda R-value = 1.0**

R-Value 4.66
Roof cover R-Value 0.35
Total combined R-Value 5.06

HOT WATER SUPPLY
All exposed hot water service pipes to and from hot water cylinders to be insulated with a min. R-Value of:
1 for pipes with a diameter of ≤80mm of 1.5 for pipes with a diameter of more than 80mm.
15mm wall thickness for pipes smaller than 25mm Ø and 25mm wall thickness for pipes bigger than 25mm Ø
Hot water pipes to be insulated with Thermaflex
Thermal insulation to be installed in accordance with the manufacturer's instructions and be protected against the effects of weather, sunlight & be able to withstand the temperatures within the piping. Hot water vessels and tanks shall be insulated with a material achieving a min. R-Value of 2.0. Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation.
Pipes laid under walls or under surface slabs where any portion of a pipe passes under a building or slab, the following shall apply:
a. such portion shall be installed inside a sleeve of internal diameter of at least 15mm plus the outside nominal diameter of such pipe;
b. such portion shall be protected against the transmission of any load to it;
c. such portion shall be laid without any change of direction, without any junctions; and
d. the trench w/in which such portion is laid shall in no way impair the stability of any building, or interfere with, or affect any existing services.

DRAINAGE & PLUMBING
To comply with SANS 10400 Part P
50mm Ø PVC waste pipes, 110mm diameter PVC sewer soil & vent pipes . I.E's to all bends & junctions; I.E's to have marked covers at ground level.
All waste pipe to be fully accessible. Access covers to all ducts. Stainless steel covers to shower drains.
All sanitary fittings to be connected separately.
Drainage within driveways or under buildings or walls to be adequately protected. Any foundation within 1500mm of drain must be below the level of same drain line.
Hot water cylinder = min. 200l 400kpa solar panel geyser.
Min 50% of energy used in building to be renewable.
RE's or if's at all bends and junctions with marked covers at ground level.
Reseal all traps to waste fittings.All waste pipes to be easily accessible for repair and cleaning. Closed system enter at 45° junctions.
Access panels to sewer ducts to comply with part pp.20.2.(a).(ii)
of SANS10400600mm bends to drainage run.
MIN. depth 400mm above boundary i.c.
any drainage falling near to foundations or under driveways, to
be 102Ø pentapipe protected, in accordance with part p24 of
the NBR SANS10400.
75x51 PVC downpipes and 102Ø pipes and sumps to road.
Paved areas to be graded to the on site storm water system, backwash to sewer system.
Stormwater to be taken to road via surface channels.
Allow for the installation of 3 garden taps - positions to be confirmed on site.
Supply 20Ø water connection.
Supply 25Ø pipe with draw wire from dwelling to front boundary

CALCULATIONS FOR GUIDELINE COMPLIANCE

AREAS SUMMARY

SITE

First storey	=	108.50m²
First storey terraces	=	31.61m²
Second storey	=	108.50m²
Second storey terraces	=	31.61m²
Third storey	=	117.76m²
Third storey terraces	=	22.49m²
Fourth storey	=	117.76m²
ERF AREA	=	331m²

COMPLIANCE WITH THE CITY OF CAPE TOWN ZONING SCHEME

CURRENT ZONING: GENERAL RESIDENTIAL 4 (GR4)

Constraint	Allowable	Achieved	Compliance
FLOOR FACTOR	1.5	New TOTAL floor area: 470 sq.m. Erf size: 331 sq.m. Allowable Floor Factor = 497sq.m.	COMPLIANT
MAXIMUM HEIGHT ABOVE BASE LEVEL	24m 0.6H / 15m within 18m from street boundary	Top of Parapet: 15m	COMPLIANT
STREET BOUNDARY BUILDING LINE	4.5 m	4.5m	COMPLIANT
COMMON BOUNDARY BUILDING LINE	0m for first 18m perp. from street boundary line with max height 15m	0m and 1.5m on common boundary until 18m thereafter 4.5m	COMPLIANT
WINDOWS & DOORS	1.5m from all common boundaries	Min. 1.5m from all common boundaries	COMPLIANT
PARKING	PT1 AREA APPLIES 1.25 BAYS PER UNIT	9 BAYS (incl. 2x VISITORS BAYS) 6 UNITS - 8 BAYS REQUIRED	COMPLIANT
COVERAGE	60%	FOOTPRINT = m² = %	COMPLIANT

TOTAL NUMBER OF FLATS: 6 UNITS

SPECIFICATIONS

FOUNDATIONS
All foundations to comply with SANS 10400 Part H.
Excavations to comply with SANS 10400 Part G.
700x250mm concrete foundations to 280/250/230mm wall.
500x300mm concrete foundations to internal 115mm walls.
Reinforcing to concrete foundations as per Str. Eng. specifications. All concrete to foundations, floor slabs & beams to be ready-mixed type, strength to Str. eng. specifications. Articulation joints to Str. eng's specifications.

FLOOR CONSTRUCTION
To comply with SANS 10400 Part J and Parts B and H.
Floor finish on minimum 50mm cement screed on 170mm RC slab on 30mm Isoboard insulation on 250micron DPM on well compacted sand fill, compacted in layers not exceeding 150mm. DPC weepholes to be minimum 150mm above the finished ground level all around. All to str. eng's specifications & inspections.

WALLS
To comply with SANS 10400 Part K and Part B
External: 280mm & 230mm NFB SABS approved MAXI brick, smooth plastered & painted, colour to client's approval.
Internal: 110mm NFB SABS approved solid ROK clay brick, smooth steel trowel finish plastered & painted. Internal window cills to be plastered and painted.
Control and articulation joints to engineer's specifications.
Internal window cills to be plastered & painted. 375micron under all cills.
Galvanized brickforce to all walls every four brick courses and to every course to foundations plinth walls and to every course above pre-stressed concrete lintol height all around. Pre-stressed concrete lintols above all windows, doors and opening to be laid to manufacturer's specifications and have a minimum bearing of 250mm for spans up to 2.5m & 350mm for spans greater than or equal to 2.5m RC beams to engineer's detail.
375micron DPC under all cavity walls, above all windows, doors & external opening, vertical dpc to all windows & external doors.

OPENINGS
All beams/lintols over opening exceeding 1000mm to Structural Engineer's detail.
Lintols laid in accordance with manufacturer's specification.
P.C lintols & 4 courses brickwork with brick-force every course over all openings not exceeding 3.0m

SKIRTINGS
To be selected by client

ROOFS
To comply with SANS 10400 Part I

TYPE A - MAIN HOUSE
To comply with SANS 10400 Part I
TYPE A
Waterproofed RC slab to str. eng's details.
Min combined roof and ceiling assembly R-Value: 3.7

TYING OF ROOF
Rafters tied down to walls with 1.2mmx30mm GMS hoop iron straps embedded into wall.

CEILINGS
9mm rhino board ceilings fixed to 38x38mm Grade 7 SABS approved SA Pine brandering at max. 400c. centres. Apply double fibretape over butt joints and skimmed with cretestone and painted. Apply min. 2x coats of 'grippon'.
Cornices to be selected by client

WINDOWS AND DOORS
All external doors and windows to be powder-coated aluminium
All internal doors to be timber to separate schedule
All glazing to comply with SANS 10400 Part N
All windows and doors in brickwork to have full vertical and horizontal DPC
See window calculation schedule

LIGHTING AND VENTILATION
To comply with SANS 10400 Parts N & O
External doors and windows: epoxy coated aluminium internal timber doors. Codes refer to separate door schedule.
All habitable rooms to have:
- Min. 10% of floor area glazed
- Min. 5% of floor area for ventilation

Glazing: clear glazing to all windows to comply with SANS 10400 Part N & S 10137.
Glazing below 500mm from floor level, access doors or larger than 1m² to be safety glass.
Frames to receive glazing material to comply with SANS 727 or SANS 1553-2, or to be capable of withstanding the wind & impact loads in accordance with SANS 10400 - B.

ARCHITECT
PAT34897891
SIGNATURE

CLIENT/CLENT REPRESENTATIVE
SEE POA
SIGNATURE

VER	DATE	DESCRIPTION
0	23.10.2019	Issue for INFORMATION

ETERNITY SERVICES
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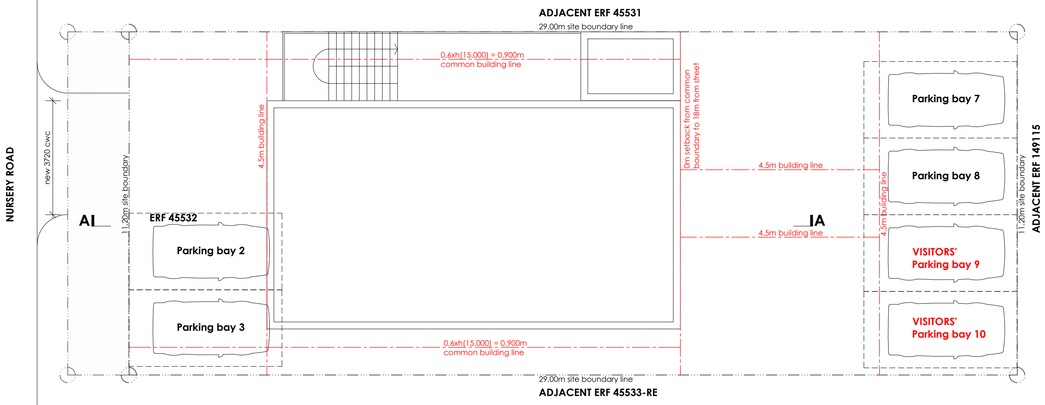
FAX +27 086 950 9790 REG 2012/16618/07
EMAIL admin@eternityservices.co.za

PROJECT TITLE: PROPOSED FLATS ON EXISTING PROPERTY
CLIENT:
ON ERF: 45532
8 NURSERY ROAD
RONDEBOSCH

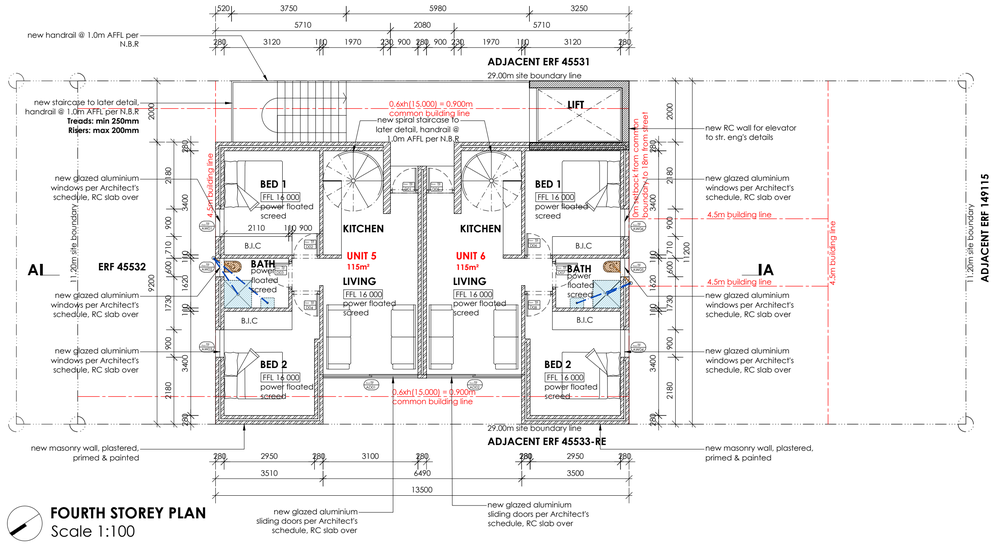
DRAWING TITLE: PLANS

SCALE: 1:100 A1 size
DATE : OCT 2019
DRAWN by: E.A-PAT34897891

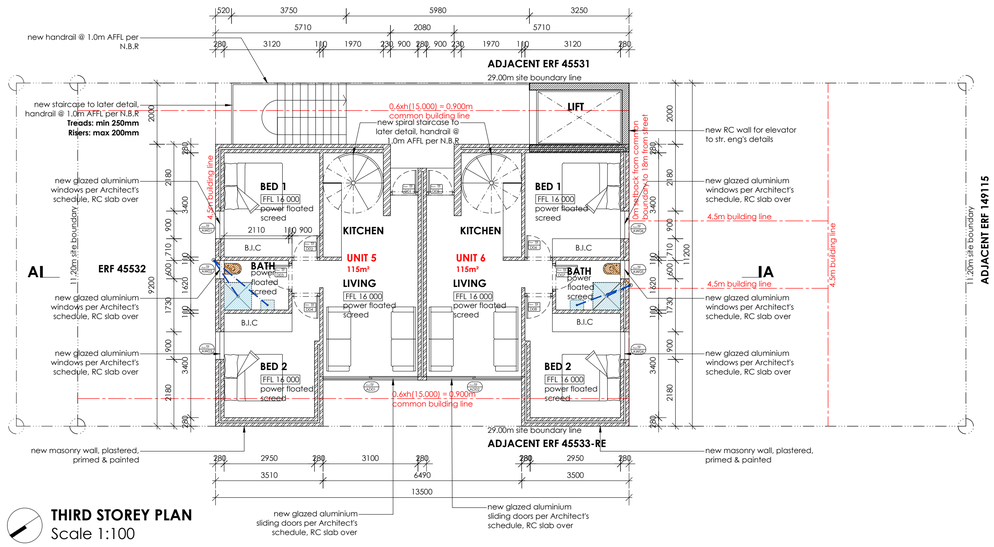
PROJECT No. 2019/700
DRWG No. NSY SC 101
VER: 0



SITE / ROOF PLAN
Scale 1:100



FOURTH STOREY PLAN
Scale 1:100



THIRD STOREY PLAN
Scale 1:100

PUBLIC SAFETY
To comply with SANS 10400 Part D & B

BALUSTRADES
1.0m high M3 balustrade per N.B.R. max 100mm spacings between balusters.
The balustrades are a design and supply contract, and the subcontractor must provide a professional engineers certificate on completion. All shop drawings submitted for approval, need to be fist signed off by the subcontractors professional engineer prior to submittal.

STAIRS & STEPS
To comply with SANS 10400 Part M.
Min. 250mm treads
Max. 200mm high risers

WATERPROOFING
To comply with SANS 10400 Part L.

STORMWATER
To comply with SANS 10400 Part R.

RAINWATER GOODS
100mm seamless aluminium box gutters on 225x12mm fibre cement fascia.
PVC downpipes to discharge into catchpits and out to the street.

PAINTING
All material finishes & colours to be in strict accordance with estate approved specifications

ENERGY EFFICIENCY REGULATIONS
FLOORS:
Isoboard insulation under concrete slab min. R-Value of 1.0
Isoboard insulation around vertical edge perimeter of slab continuous from the finished ground level for the full depth of the vertical edge of concrete slab-on-ground min. R-Value of 1.0.

EXTERNAL WALLS
50mm cavity walls with R-value exceeding 0.35

FENESTRATION
To be in accordance with SANS 204 as per table to meet the minimum energy performance requirements.

ROOF ASSEMBLY
Min Total R-Value require = 3.7
Roof insulations as per SANS 204
Part XA calculations:
Ceiling R-Value 0.05
Ceiling insulation
- **Radientshield R-value=1.36**
- **Isotherm R-value = 2.3**
- **Lambda R-value = 1.0**

R-Value 4.66
Roof cover R-Value 0.35
Total combined R-Value 5.06

HOT WATER SUPPLY
All exposed hot water service pipes to and from hot water cylinders to be insulated with a min. R-Value of:
1 for pipes with a diameter of ≤80mm of 1.5 for pipes with a diameter of more than 80mm.
15mm wall thickness for pipes smaller than 25mm Ø and 25mm wall thickness for pipes bigger than 25mm Ø
Hot water pipes to be insulated with Thermaflex
Thermal insulation to be installed in accordance with the manufacturer's instructions and be protected against the effects of weather, sunlight & be able to withstand the temperatures within the piping. Hot water vessels and tanks shall be insulated with a material achieving a min. R-Value of 2.0. Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation.
Pipes laid under walls or under surface slabs where any portion of a pipe passes under a building or slab, the following shall apply:
a. such portion shall be installed inside a sleeve of internal diameter of at least 15mm plus the outside nominal diameter of such pipe;
b. such portion shall be protected against the transmission of any load to it;
c. such portion shall be laid without any change of direction, without any junctions; and
d. the trench w/in which such portion is laid shall in no way impair the stability of any building, or interfere with, or affect any existing services.

DRAINAGE & PLUMBING
To comply with SANS 10400 Part P
50mm Ø PVC waste pipes, 110mm diameter PVC sewer soil & vent pipes . I.E's to all bends & junctions; I.E's to have marked covers at ground level.
All waste pipe to be fully accessible. Access covers to all ducts. Stainless steel covers to shower drains.
All sanitary fittings to be connected separately.
Drainage within driveways or under buildings or walls to be adequately protected. Any foundation within 1500mm of drain must be below the level of same drain line.
Hot water cylinder = min. 200l 400kpa solar panel geyser.
Min 50% of energy used in building to be renewable.
RE's or if's at all bends and junctions with marked covers at ground level.
Reseal all traps to waste fittings.All waste pipes to be easily accessible for repair and cleaning. Closed system enter at 45° junctions.
Access panels to sewer ducts to comply with part pp.20.2.(a).(ii)
of SANS10400600mm bends to drainage run.
MIN. depth 400mm above boundary i.c.
any drainage falling near to foundations or under driveways, to
be 102Ø pentapipe protected, in accordance with part p24 of
the NBR SANS10400.
75x51 PVC downpipes and 102Ø pipes and sumps to road.
Paved areas to be graded to the on site storm water system.
backwash to sewer system.
Stormwater to be taken to road via surface channels.
Allow for the installation of 3 garden taps - positions to be confirmed on site.
Supply 200 water connection.
Supply 250 pipe with draw wire from dwelling to front boundary

CALCULATIONS FOR GUIDELINE COMPLIANCE

AREAS SUMMARY

SITE

First storey	=	108.50m²
First storey terraces	=	31.61m²
Second storey	=	108.50m²
Second storey terraces	=	31.61m²
Third storey	=	117.76m²
Third storey terraces	=	22.69m²
Fourth storey	=	117.76m²
ERF AREA	=	331m²

COMPLIANCE WITH THE CITY OF CAPE TOWN ZONING SCHEME

CURRENT ZONING: GENERAL RESIDENTIAL 4 (GR4)

Constraint	Allowable	Achieved	Compliance
FLOOR FACTOR	1.5	New TOTAL floor area: 470 sq.m. Erf size: 331 sq.m. Allowable Floor Factor = 497sq.m.	COMPLIANT
MAXIMUM HEIGHT ABOVE BASE LEVEL	24m 0.6H / 15m within 18m from street boundary	Top of Parapet: 15m	COMPLIANT
STREET BOUNDARY BUILDING LINE	4.5 m	4.5m	COMPLIANT
COMMON BOUNDARY BUILDING LINE	0m for first 18m perp. from street boundary line with max height 15m	0m and 1.5m on common boundary until 18m thereafter 4.5m	COMPLIANT
WINDOWS & DOORS	1.5m from all common boundaries	Min. 1.5m from all common boundaries	COMPLIANT
PARKING	PT1 AREA APPLIES 1.25 BAYS PER UNIT	9 BAYS (incl. 2x VISITORS BAYS) 6 UNITS - 8 BAYS REQUIRED	COMPLIANT
COVERAGE	60%	FOOTPRINT = m² = %	COMPLIANT

TOTAL NUMBER OF FLATS: 6 UNITS

SPECIFICATIONS

FOUNDATIONS
All foundations to comply with SANS 10400 Part H.
Excavations to comply with SANS 10400 Part G.
700x250mm concrete foundations to 280/250/230mm wall.
500x300mm concrete foundations to internal 115mm walls.
Reinforcing to concrete foundations as per Str. Eng. specifications. All concrete to foundations, floor slabs & beams to be ready-mixed type, strength to Str. eng. specifications. Articulation joints to Str. eng's specifications.

FLOOR CONSTRUCTION
To comply with SANS 10400 Part J and Parts B and H.
Floor finish on minimum 50mm cement screed on 170mm RC slab on 30mm Isoboard insulation on 250micron DPM on well compacted sand fill, compacted in layers not exceeding 150mm. DPC weepholes to be minimum 150mm above the finished ground level all around. All to str. eng's specifications & inspections.

WALLS
To comply with SANS 10400 Part K and Part B
External: 280mm & 230mm NFB SABS approved MAXI brick, smooth plastered & painted, colour to client's approval.
Internal: 110mm NFB SABS approved solid ROK clay brick, smooth steel trowel finish plastered & painted. Internal window cills to be plastered and painted.
Control and articulation joints to engineer's specifications.
Internal window cills to be plastered & painted. 375micron under all cills.
Galvanized brickforce to all walls every four brick courses and to every course to foundations plinth walls and to every course above pre-stressed concrete lintol height all around. Pre-stressed concrete lintols above all windows, doors and opening to be laid to manufacturer's specifications and have a minimum bearing of 250mm for spans up to 2.5m & 350mm for spans greater than or equal to 2.5m RC beams to engineer's detail.
375micron DPC under all cavity walls, above all windows, doors & external opening, vertical dpc to all windows & external doors.

OPENINGS
All beams/lintols over opening exceeding 1000mm to Structural Engineer's detail.
Lintols laid in accordance with manufacturer's specification.
P.C lintols & 4 courses brickwork with brick-force every course over all openings not exceeding 3.0m

SKIRTINGS
To be selected by client

ROOFS
To comply with SANS 10400 Part I

TYPE A - MAIN HOUSE
To comply with SANS 10400 Part I
TYPE A
Waterproofed RC slab to str. eng's details.
Min combined roof and ceiling assembly R-Value: 3.7

TYING OF ROOF
Rafters tied down to walls with 1.2mmx30mm GMS hoop iron straps embedded into wall.

CEILINGS
9mm rhino board ceilings fixed to 38x38mm Grade 7 SABS approved SA Pine brandering at max. 400_ centres. Apply double fibretape over butt joints and skimmed with cretestone and painted. Apply min. 2x coats of 'grippon'.
Cornices to be selected by client

WINDOWS AND DOORS
All external doors and windows to be powder-coated aluminium
All internal doors to be timber to separate schedule
All glazing to comply with SANS 10400 Part N
All windows and doors in brickwork to have full vertical and horizontal DPC
See window calculation schedule

LIGHTING AND VENTILATION
To comply with SANS 10400 Parts N & O
External doors and windows: epoxy coated aluminium internal timber doors. Codes refer to separate door schedule.
All habitable rooms to have:
- Min. 10% of floor area glazed
- Min. 5% of floor area for ventilation

Glazing: clear glazing to all windows to comply with SANS 10400 Part N & S 10137.
Glazing below 500mm from floor level, access doors or larger than 1m² to be safety glass.
Frames to receive glazing material to comply with SANS 727 or SANS 1553-2, or to be capable of withstanding the wind & impact loads in accordance with SANS 10400 - B.

ARCHITECT
PAT34897891
SIGNATURE

CLIENT/CLENT REPRESENTATIVE
SEE POA
SIGNATURE

VER	DATE	DESCRIPTION
0	23.10.2019	Issue for INFORMATION

ETERNITY SERVICES
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FAX +27 086 950 9790 REG 2012/16618/07
EMAIL admin@eternityservices.co.za

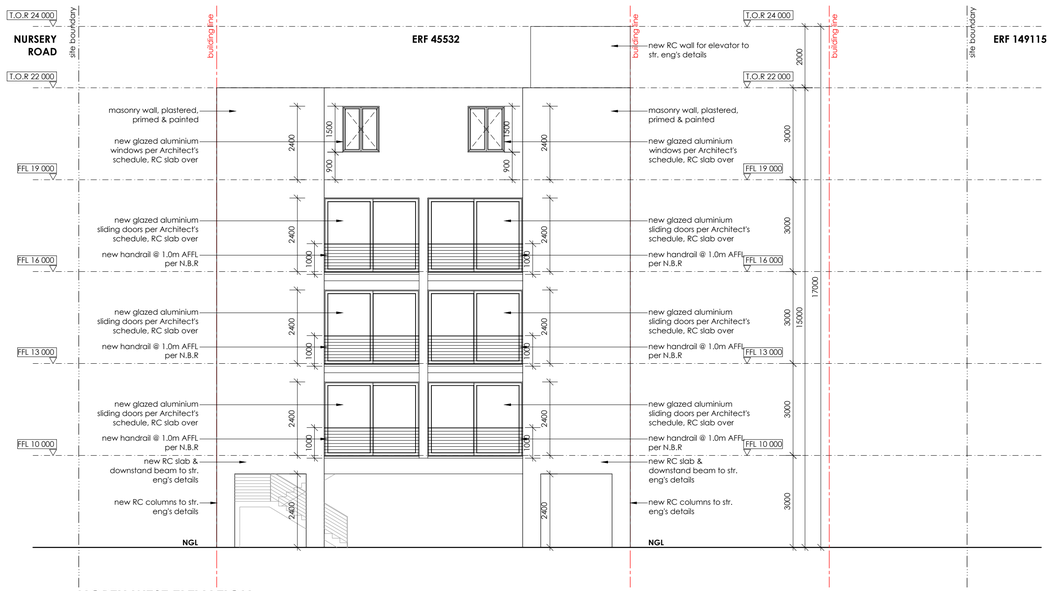
PROJECT TITLE: PROPOSED FLATS ON EXISTING PROPERTY

CLIENT:

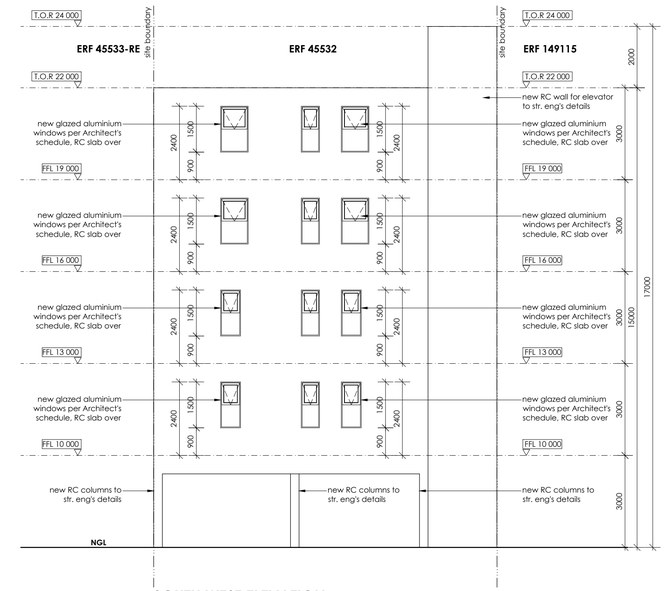
ON ERF: 45532
8 NURSERY ROAD
RONDEBOSCH

DRAWING TITLE: PLANS

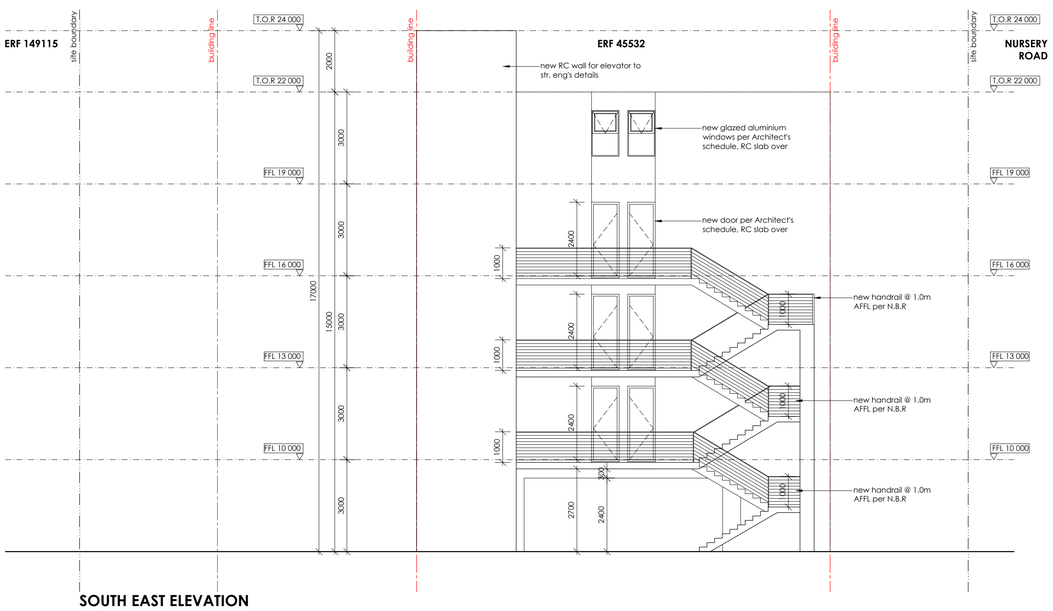
SCALE: 1:100 A1 size	**DATE :** OCT 2019	DRAWN by: E.A-PAT34897891
PROJECT No. 2019/700	DRWG No. NSY SC 102	VER: 0



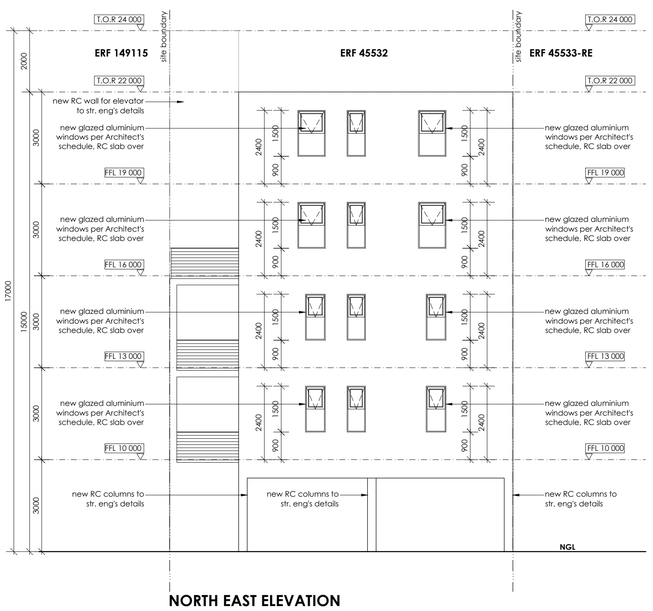
NORTH WEST ELEVATION
Scale 1:100



SOUTH WEST ELEVATION
Scale 1:100



SOUTH EAST ELEVATION
Scale 1:100



NORTH EAST ELEVATION
Scale 1:100

COMPLIANCE WITH THE CITY OF CAPE TOWN ZONING SCHEME			
CURRENT ZONING: GENERAL RESIDENTIAL 4 (GR4)			
Constraint	Allowable	Achieved	Compliance
FLOOR FACTOR	1.5	New TOTAL floor area: 470 sq.m. Erf size: 331 sq.m. Allowable Floor Factor = 497sq.m.	COMPLIANT
MAXIMUM HEIGHT ABOVE BASE LEVEL	24m 0.6H / 15m within 18m from street boundary	Top of Parapet: 15m	COMPLIANT
STREET BOUNDARY BUILDING LINE	4.5 m	4.5m	COMPLIANT
COMMON BOUNDARY BUILDING LINE	0m for first 18m perp. from street boundary line with max height 15m	0m and 1.5m on common boundary until 18m thereafter 4.5m	COMPLIANT
WINDOWS & DOORS	1.5m from all common boundaries	Min. 1.5m from all common boundaries	COMPLIANT
PARKING	PT1 AREA APPLIES 1.25 BAYS PER UNIT	9 BAYS (incl. 2x VISITORS BAYS) 6 UNITS - 8 BAYS REQUIRED	COMPLIANT
COVERAGE	60%	FOOTPRINT = m² = %	COMPLIANT

TOTAL NUMBER OF FLATS: 6 UNITS

PUBLIC SAFETY
To comply with SANS 10400 Part D & B

BALUSTRADES
1.0m high M3 balustrade per N.B.R. max 100mm spacings between balusters.
The balustrades are a design and supply contract, and the subcontractor must provide a professional engineers certificate on completion. All shop drawings submitted for approval, need to be first signed off by the subcontractors professional engineer prior to submittal.

STAIRS & STEPS
To comply with SANS 10400 Part M.
Min. 250mm treads
Max. 200mm high risers

WATERPROOFING
To comply with SANS 10400 Part L.

STORMWATER
To comply with SANS 10400 Part R.

RAINWATER GOODS
100mm seamless aluminium box gutters on 225x12mm fibre cement fascia.
PVC downpipes to discharge into catchpits and out to the street.

PAINTING
All material finishes & colours to be in strict accordance with estate approved specifications

ENERGY EFFICIENCY REGULATIONS
FLOORS:
Isoboard insulation under concrete slab min. R-Value of 1.0
Isoboard insulation around vertical edge perimeter of slab continuous from the finished ground level for the full depth of the vertical edge of concrete slab-on-ground min. R-Value of 1.0.

EXTERNAL WALLS
50mm cavity walls with R-value exceeding 0.35

FENESTRATION
To be in accordance with SANS 204 as per table to meet the minimum energy performance requirements.

ROOF ASSEMBLY
Min Total R-Value require = 3.7
Roof insulations as per SANS 204
Part XA calculations:
Ceiling R-Value 0.05
Ceiling insulation
- **Radiantshield R-value=1.36**
- **Isotherm R-value = 2.3**
- **Lambda R-value = 1.0**

R-Value 4.66
Roof cover R-Value 0.35
Total combined R-Value 5.06

HOT WATER SUPPLY
All exposed hot water service pipes to and from hot water cylinders to be insulated with a min. R-Value of:
1 for pipes with a diameter of ≤80mm of 1.5 for pipes with a diameter of more than 80mm.
15mm wall thickness for pipes smaller than 25mm Ø and
25mm wall thickness for pipes bigger than 25mm Ø
Hot water pipes to be insulated with Thermaflex
Thermal insulation to be installed in accordance with the manufacturer's instructions and be protected against the effects of weather, sunlight & be able to withstand the temperatures within the piping. Hot water vessels and tanks shall be insulated with a material achieving a min. R-Value of 2.0. Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation.
Pipes laid under walls or under surface slabs where any portion of a pipe passes under a building or slab, the following shall apply:
a. such portion shall be installed inside a sleeve of internal diameter of at least 15mm plus the outside nominal diameter of such pipe;
b. such portion shall be protected against the transmission of any load to it;
c. such portion shall be laid without any change of direction, without any junctions; and
d. the trench win which such portion is laid shall in no way impair the stability of any building, or interfere with, or affect any existing services.

DRAINAGE & PLUMBING
To comply with SANS 10400 Part P
50mm Ø PVC waste pipes, 110mm diameter PVC sewer soil & vent pipes . I.E's to all bends & junctions; I.E's to have marked covers at ground level.
All waste pipe to be fully accessible. Access covers to all ducts. Stainless steel covers to shower drains.
All sanitary fittings to be connected separately.
Drainage within driveways or under buildings or walls to be adequately protected. Any foundation within 1500mm of drain must be below the level of same drain line.
Hot water cylinder = min. 200 400kpa solar panel geyser.
Min 50% of energy used in building to be renewable.
RE's or it's at all bends and junctions with marked covers at ground level.
Reseal all traps to waste fittings.All waste pipes to be easily accessible for repair and cleaning. Closed system enter at 45° junctions.
Access panels to sewer ducts to comply with part pp.20.2.(a).(ii)
of SANS10400600mm bends to drainage run.
MIN. depth 400mm above boundary i.c.
any drainage falling near to foundations or under driveways, to
be 102Ø pentapipe protected, in accordance with part p24 of
the NBR SANS10400.
75x51 PVC downpipes and 102Ø pipes and sumps to road.
Paved areas to be graded to the on site storm water system, backwash to sewer system.
Stormwater to be taken to road via surface channels.
Allow for the installation of 3 garden taps - positions to be confirmed on site.
Supply 20Ø water connection.
Supply 25Ø pipe with draw wire from dwelling to front boundary

CALCULATIONS FOR GUIDELINE COMPLIANCE

AREAS SUMMARY

SITE

First storey	=	108.50m²
First storey terraces	=	31.61m²
Second storey	=	108.50m²
Second storey terraces	=	31.61m²
Third storey	=	117.76m²
Third storey terraces	=	22.69m²
Fourth storey	=	117.76m²
ERF AREA	=	331m²

SPECIFICATIONS

FOUNDATIONS
All foundations to comply with SANS 10400 Part H.
Excavations to comply with SANS 10400 Part G.
700x250mm concrete foundations to 280/250/230mm wall.
500x300mm concrete foundations to internal 115mm walls.
Reinforcing to concrete foundations as per Str. Eng. specifications. All concrete to foundations, floor slabs & beams to be ready-mixed type, strength to Str. eng. specifications. Articulation joints to Str. eng's specifications.

FLOOR CONSTRUCTION
To comply with SANS 10400 Part J and Parts B and H.
Floor finish on minimum 50mm cement screed on 170mm RC slab on 30mm Isoboard insulation on 250micron DPM on well compacted sand fill, compacted in layers not exceeding 150mm. DPC weepholes to be minimum 150mm above the finished ground level all around. All to str. eng's specifications & inspections.

WALLS
To comply with SANS 10400 Part K and Part B
External: 280mm & 230mm NFB SABS approved MAXI brick, smooth plastered & painted, colour to client's approval.
Internal: 110mm NFB SABS approved solid ROK clay brick, smooth steel trowel finish plastered & painted. Internal window cills to be plastered and painted.
Control and articulation joints to engineer's specifications.
Internal window cills to be plastered & painted. 375micron under all cills.
Galvanized brickforce to all walls every four brick courses and to every course to foundations plinth walls and to every course above pre-stressed concrete lintol height all around. Pre-stressed concrete lintols above all windows, doors and opening to be laid to manufacturer's specifications and have a minimum bearing of 250mm for spans up to 2.5m & 350mm for spans greater than or equal to 2.5m RC beams to engineer's detail.
375micron DPC under all cavity walls, above all windows, doors & external opening, vertical dpc to all windows & external doors.

OPENINGS
All beams/lintols over opening exceeding 1000mm to Structural Engineer's detail. Lintols laid in accordance with manufacturer's specification.
P.C lintols & 4 courses brickwork with brick-force every course over all openings not exceeding 3.0m

SKIRTINGS
To be selected by client

ROOFS
To comply with SANS 10400 Part I

TYPE A - MAIN HOUSE
To comply with SANS 10400 Part I
TYPE A
Waterproofed RC slab to str. eng's details.
Min combined roof and ceiling assembly R-Value: 3.7

TYING OF ROOF
Rafters tied down to walls with 1.2mmx30mm GMS hoop iron straps embedded into wall.

CEILINGS
9mm rhino board ceilings fixed to 38x38mm Grade 7 SABS approved SA Pine bradening at max. 400_ centres. Apply double fibretape over butt joints and skimmed with cretestone and painted. Apply min. 2x coats of 'grippon'.
Cornices to be selected by client

WINDOWS AND DOORS
All external doors and windows to be powder-coated aluminium
All internal doors to be timber to separate schedule
All glazing to comply with SANS 10400 Part N
All windows and doors in brickwork to have full vertical and horizontal DPC
See window calculation schedule

LIGHTING AND VENTILATION
To comply with SANS 10400 Parts N & O
External doors and windows: epoxy coated aluminium internal timber doors. Codes refer to separate door schedule.
All habitable rooms to have:
- Min. 10% of floor area glazed
- Min. 5% of floor area for ventilation

Glazing: clear glazing to all windows to comply with SANS 10400 Part N & S 10137.
Glazing below 500mm from floor level, access doors or larger than 1m² to be safety glass.
Frames to receive glazing material to comply with SANS 727 or SANS 1553-2, or to be capable of withstanding the wind & impact loads in accordance with SANS 10400 - B.

ARCHITECT
PAT34897891
SIGNATURE

CLIENT/CLENT REPRESENTATIVE
SEE POA
SIGNATURE

VER	DATE	DESCRIPTION
0	23.10.2019	Issue for INFORMATION

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ETERNITY SERVICES (PTY) LTD
REG 2012/16618/07

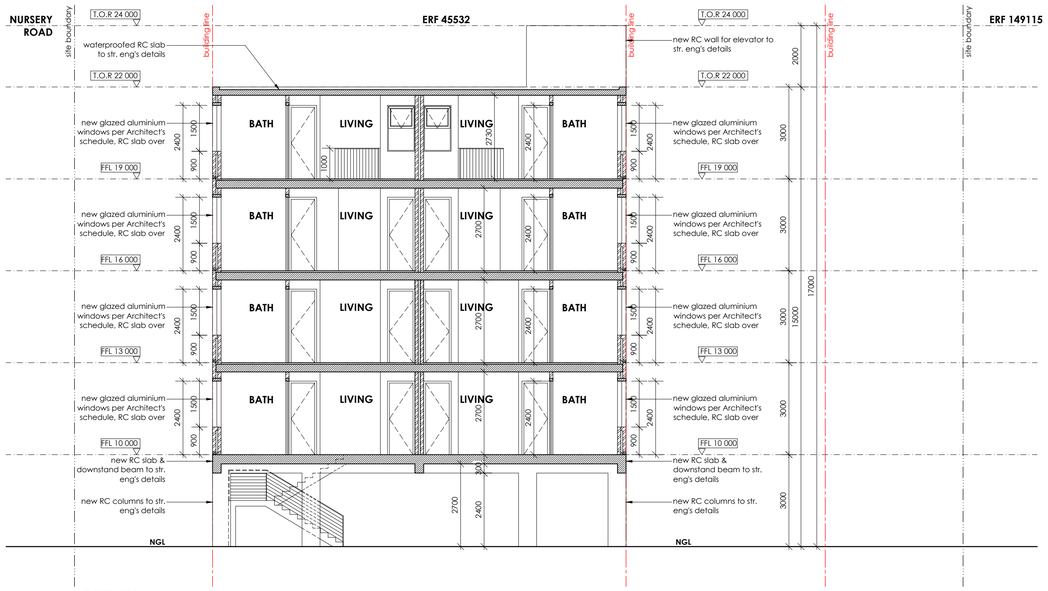
PROJECT TITLE: PROPOSED FLATS ON EXISTING PROPERTY

CLIENT:

ON ERF: 45532
8 NURSERY ROAD
RONDEBOSCH

DRAWING TITLE: ELEVATIONS

SCALE: 1:100 A1 size		**DATE :** OCT 2019 DRAWN by: E.A-PAT34897891	
PROJECT No. 2019/700	DRWG No. NSY SC 200		VER: 0



SECTION AA
Scale 1:100

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PUBLIC SAFETY
To comply with SANS 10400 Part D & B

BALUSTRADES
1.0m high M3 balustrade per N.B.R. max 100mm spacings between balusters.
The balustrades are a design and supply contract, and the subcontractor must provide a professional engineers certificate on completion. All shop drawings submitted for approval, need to be first signed off by the subcontractors professional engineer prior to submittal.

STAIRS & STEPS
To comply with SANS 10400 Part M.
Min. 250mm treads
Max. 200mm high risers

WATERPROOFING
To comply with SANS 10400 Part L.

STORMWATER
To comply with SANS 10400 Part R.

RAINWATER GOODS
100mm seamless aluminium box gutters on 225x12mm fibre cement fascia.
PVC downpipes to discharge into catchpits and out to the street.

PAINTING
All material finishes & colours to be in strict accordance with estate approved specifications

ENERGY EFFICIENCY REGULATIONS
FLOORS:
Isoboard insulation under concrete slab min. R-Value of 1.0
Isoboard insulation around vertical edge perimeter of slab continuous from the finished ground level for the full depth of the vertical edge of concrete slab-on-ground min. R-Value of 1.0.

EXTERNAL WALLS
50mm cavity walls with R-value exceeding 0.35

FENESTRATION
To be in accordance with SANS 204 as per table to meet the minimum energy performance requirements.

ROOF ASSEMBLY
Min Total R-Value require = 3.7
Roof insulations as per SANS 204
Part XA calculations:
Ceiling R-Value 0.05
Ceiling insulation
- **Radiantshield R-value=1.36**
- **Isotherm R-value = 2.3**
- **Lambda R-value = 1.0**

R-Value 4.66
Roof cover R-Value 0.35
Total combined R-Value 5.06

HOT WATER SUPPLY
All exposed hot water service pipes to and from hot water cylinders to be insulated with a min. R-Value of:
1 for pipes with a diameter of ≤80mm of 1.5 for pipes with a diameter of more than 80mm.
15mm wall thickness for pipes smaller than 25mm Ø and 25mm wall thickness for pipes bigger than 25mm Ø
Hot water pipes to be insulated with Thermaflex
Thermal insulation to be installed in accordance with the manufacturer's instructions and be protected against the effects of weather, sunlight & be able to withstand the temperatures within the piping. Hot water vessels and tanks shall be insulated with a material achieving a min. R-Value of 2.0. Insulation on vessels, tanks and piping containing cooling water shall be protected by a vapour barrier on the outside of the insulation.
Pipes laid under walls or under surface slabs where any portion of a pipe passes under a building or slab, the following shall apply:
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b. such portion shall be protected against the transmission of any load to it;
c. such portion shall be laid without any change of direction, without any junctions; and
d. the trench wh which such portion is laid shall in no way impair the stability of any building, or interfere with, or affect any existing services.

DRAINAGE & PLUMBING
To comply with SANS 10400 Part P
50mm Ø PVC waste pipes, 110mm diameter PVC sewer soil & vent pipes . I.E's to all bends & junctions; I.E's to have marked covers at ground level.
All waste pipe to be fully accessible. Access covers to all ducts. Stainless steel covers to shower drains.
All sanitary fittings to be connected separately.
Drainage within driveways or under buildings or walls to be adequately protected. Any foundation within 1500mm of drain must be below the level of same drain line.
Hot water cylinder = min. 200l 400kpa solar panel geyser.
Min 50% of energy used in building to be renewable.
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the NBR SANS10400.
75x51 PVC downpipes and 102Ø pipes and sumps to road.
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backwash to sewer system.
Stormwater to be taken to road via surface channels.
Allow for the installation of 3 garden taps - positions to be confirmed on site.
Supply 20Ø water connection.
Supply 25Ø pipe with draw wire from dwelling to front boundary

CALCULATIONS FOR GUIDELINE COMPLIANCE

AREAS SUMMARY

SITE

First storey	=	108.50m²
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ERF AREA	=	331m²

COMPLIANCE WITH THE CITY OF CAPE TOWN ZONING SCHEME

CURRENT ZONING: GENERAL RESIDENTIAL 4 (GR4)

Constraint	Allowable	Achieved	Compliance
FLOOR FACTOR	1.5	New TOTAL floor area: 470 sq.m. Erf size: 331 sq.m. Allowable Floor Factor = 497sq.m.	COMPLIANT
MAXIMUM HEIGHT ABOVE BASE LEVEL	24m 0.6H / 15m within 18m from street boundary	Top of Parapet: 15m	COMPLIANT
STREET BOUNDARY BUILDING LINE	4.5 m	4.5m	COMPLIANT
COMMON BOUNDARY BUILDING LINE	0m for first 18m perp. from street boundary line with max height 15m	0m and 1.5m on common boundary until 18m thereafter 4.5m	COMPLIANT
WINDOWS & DOORS	1.5m from all common boundaries	Min. 1.5m from all common boundaries	COMPLIANT
PARKING	PT1 AREA APPLIES 1.25 BAYS PER UNIT	9 BAYS (incl. 2x VISITORS BAYS) 6 UNITS - 8 BAYS REQUIRED	COMPLIANT
COVERAGE	60%	FOOTPRINT = m² = %	COMPLIANT

TOTAL NUMBER OF FLATS: 6 UNITS

SPECIFICATIONS

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Excavations to comply with SANS 10400 Part G.
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Reinforcing to concrete foundations as per Str. Eng. specifications. All concrete to foundations, floor slabs & beams to be ready-mixed type, strength to Str. eng. specifications. Articulation joints to Str. eng's specifications.

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WALLS
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OPENINGS
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Lintols laid in accordance with manufacturer's specification.
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SKIRTINGS
To be selected by client

ROOFS
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To comply with SANS 10400 Part I
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EMAIL admin@eternityservices.co.za

PROJECT TITLE: PROPOSED FLATS ON EXISTING PROPERTY
CLIENT:
ON ERF: 45532
8 NURSERY ROAD
RONDEBOSCH

DRAWING TITLE: SECTIONS

SCALE: 1:100 A1 size		**DATE :** OCT 2019 DRAWN by: E.A-PAT34897891	
PROJECT No. 2019/700	DRWG No. NSY SC 201		VER: 0