



1 NORTH ELEVATION 2 (UNIT 13-22)

## FINISHES SCHEDULES

|                                                              |                                                                       |
|--------------------------------------------------------------|-----------------------------------------------------------------------|
| A Exterior walls rendered & painted with Dulux Malay Grey    | E Featured Elements & Louvres - Dulux Colorbond Basalt                |
| B Exterior walls rendered & painted with Dulux Pale Elements | F Aluminium Door, Window Frames & Louvres - Dulux Colorbond Night Sky |
| C Exterior walls - Face brick Bowral Brahman Granite         | G Front Feature & Fence - Timber-look Cladding Products               |
| D Top Level Wall Cladding - Horizontal Weatherboard Cladding | H Exterior walls rendered & painted with Dulux Lexicon Quarter        |



2 EAST ELEVATION 2 -UNIT 1&2,4-7

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|          |   |                   |            |
|----------|---|-------------------|------------|
| Revision | A | ISSUED FOR DA     | 26.06.2017 |
|          | B | ISSUED FOR DA RFI | 16.02.2018 |

NOMINATED ARCHITECT: NICHOLAS LYCENKO  
LICENSE NUMBER : 3010

Design by:

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e: info@bc-a.com.au  
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Drawing

|         |       |          |             |
|---------|-------|----------|-------------|
| DRAWN   | KK KP | PROJ NO. | 160615      |
| CHECKED | GB    | SCALE    | 1:100 on A1 |
|         |       | DATE     | JUNE 2016   |

NORTH ELEVATION 2  
EAST ELEVATION 2

Do not scale from drawings.  
Verify all dimensions on site before commencing work.

Project

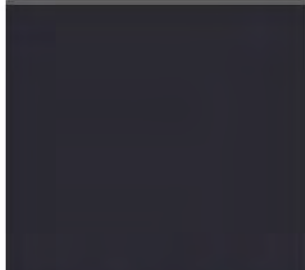
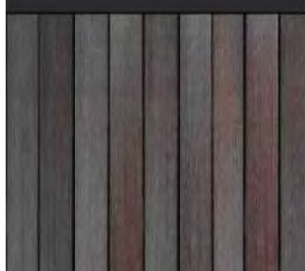
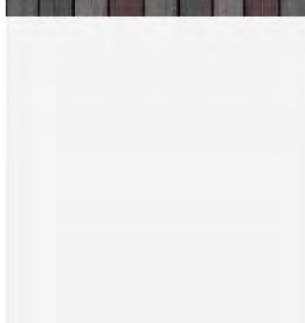
PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

DA-07.a

B



## FINISHES SCHEDULES

|                                                                                    |                                                              |                                                                                     |                                                                       |
|------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
|  | A Exterior walls rendered & painted with Dulux Malay Grey    |  | E Featured Elements & Louvres - Dulux Colorbond Basalt                |
|  | B Exterior walls rendered & painted with Dulux Pale Elements |  | F Aluminium Door, Window Frames & Louvres - Dulux Colorbond Night Sky |
|  | C Exterior walls – Face brick Bowral Brahman Granite         |  | G Front Feature & Fence – Timber-look Cladding Products               |
|  | D Top Level Wall Cladding – Horizontal Weatherboard Cladding |  | H Exterior walls rendered & painted with Dulux Lexicon Quarter        |



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Revision  
A ISSUED FOR DA  
B ISSUED FOR DA RFI

26.06.2017  
16.02.2018

NOMINATED ARCHITECT: NICHOLAS LYCENKO  
LICENSE NUMBER : 3010

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Drawing

DRAWN KK KP  
CHECKED GB  
PROJ NO. 160615  
SCALE 1:100 on A1  
DATE JUNE 2016

SOUTH ELEVATION  
WEST ELEVATION

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Project

PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

DA-08

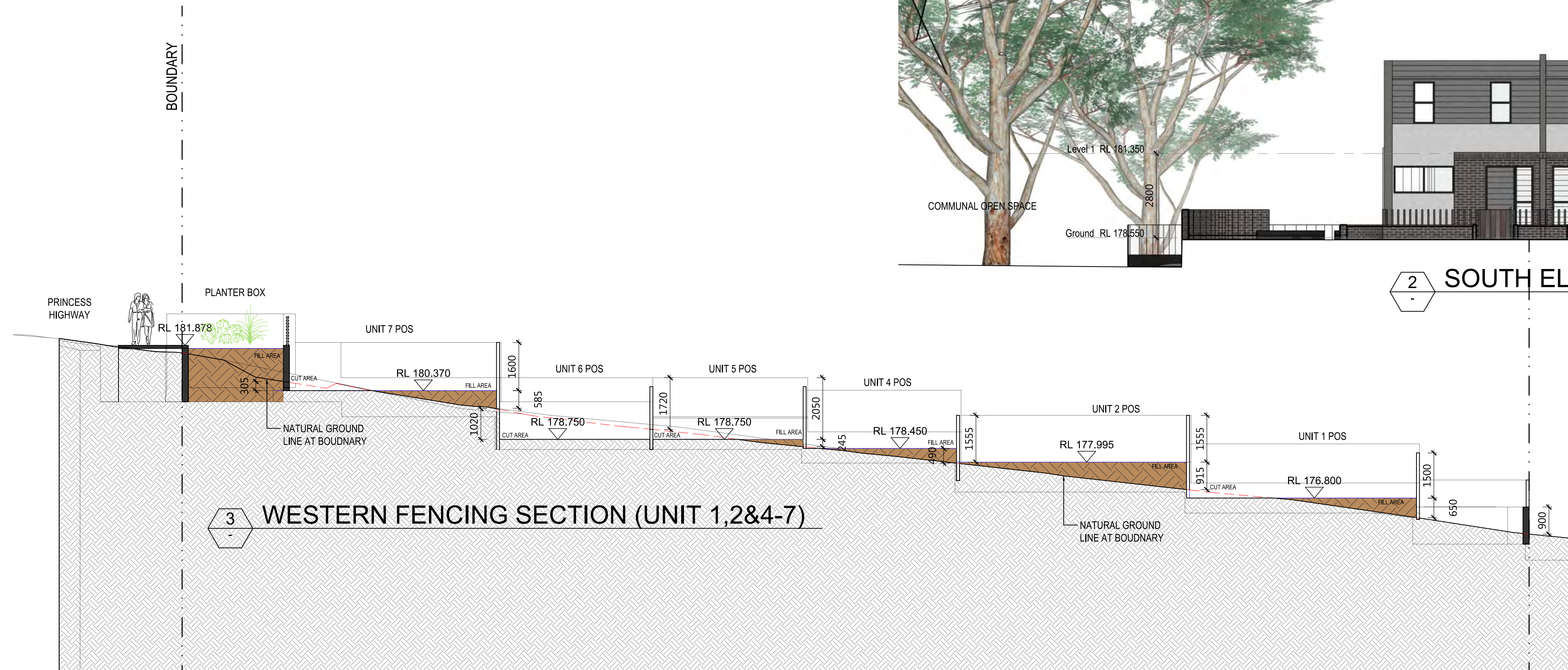
B



1 WEST ELEVATION 2 (UNIT 8 & 22)



2 SOUTH ELEVATION 2 (UNIT 8-12)



3 WESTERN FENCING SECTION (UNIT 1, 2 & 4-7)

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| Revision | Description       | Date       |
|----------|-------------------|------------|
| A        | ISSUED FOR DA     | 26.06.2017 |
| B        | ISSUED FOR DA RFI | 16.02.2018 |

NOMINATED ARCHITECT: NICHOLAS LYCENKO  
LICENSE NUMBER : 3010

Design by:

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Drawing

| DRAWN   | KK KP | PROJ NO. | 160615      |
|---------|-------|----------|-------------|
| CHECKED | GB    | SCALE    | 1:100 on A1 |
|         |       | DATE     | JUNE 2016   |

WEST & SOUTH ELEVATION 2  
WESTERN FENCING SECTION

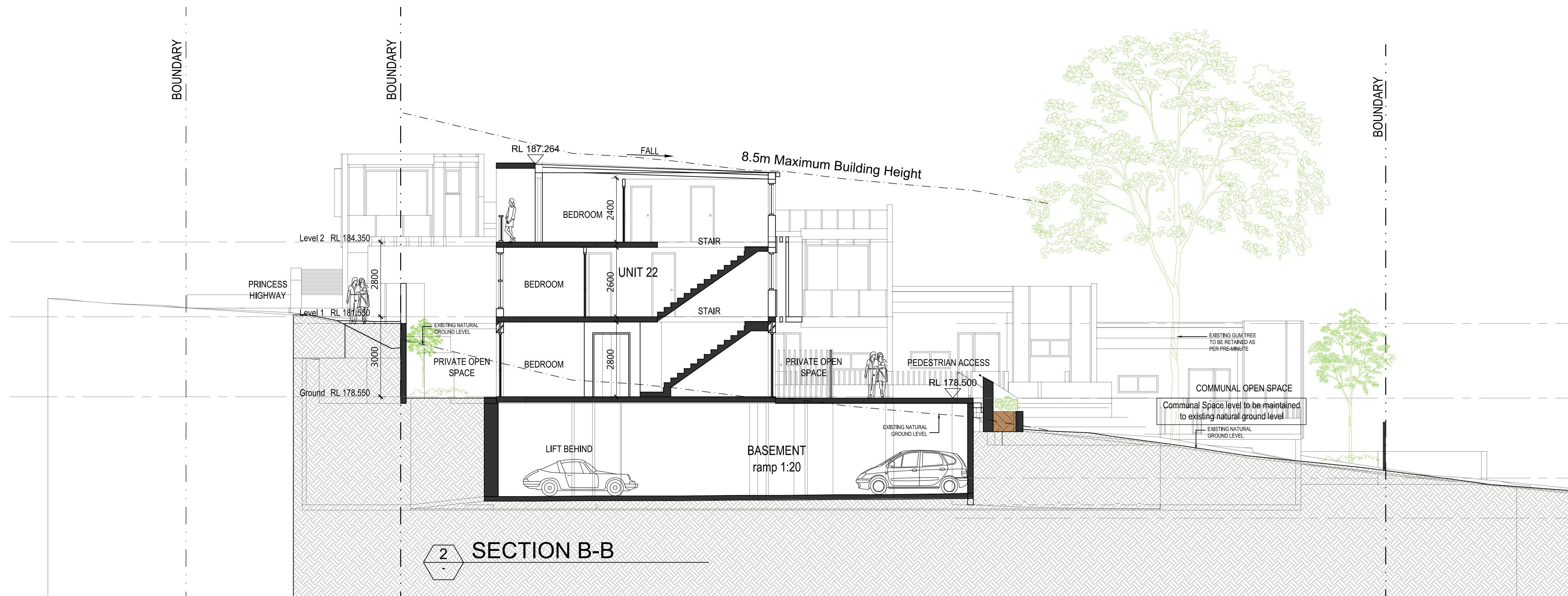
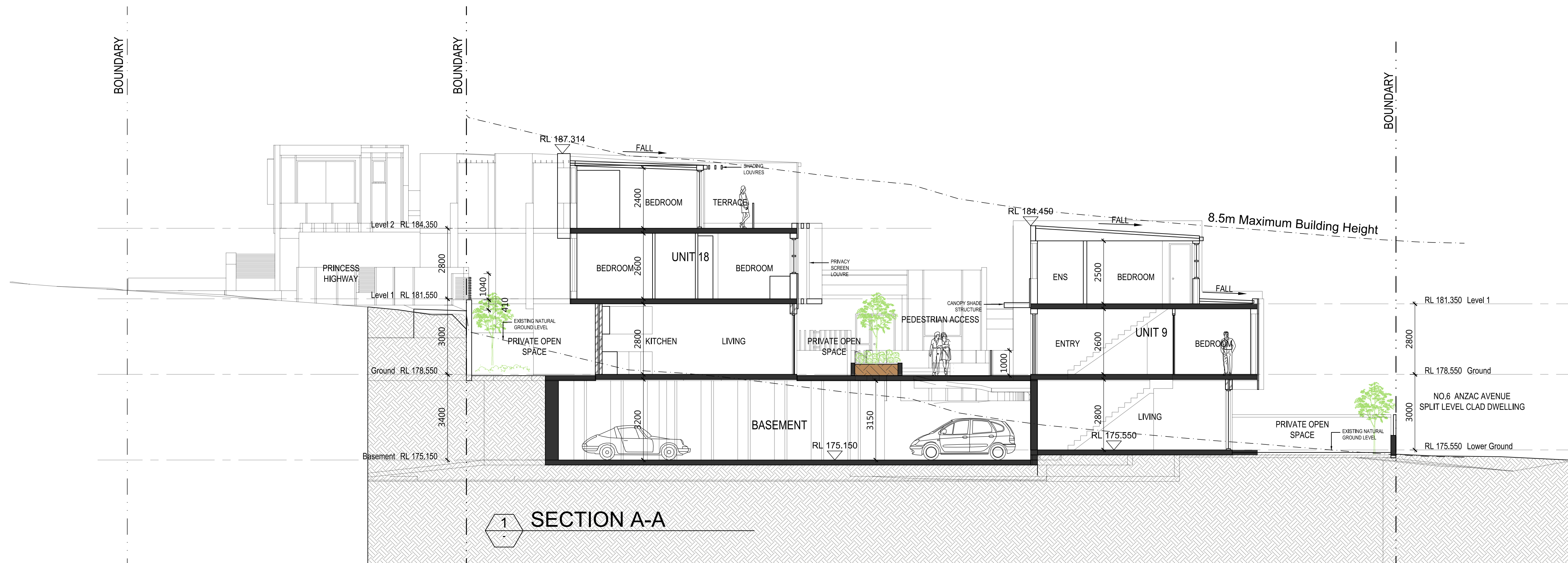
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Project

PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

DA-8.a

B



Revision

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A ISSUED FOR DA  
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26.06.2017  
16.02.2018

Design by:

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NOMINATED ARCHITECT: NICHOLAS LYCENKO  
LICENSE NUMBER : 3010

Drawing

DRAWN KK KP  
CHECKED GB  
PROJ NO. 160615  
SCALE 1:100 on A1  
DATE JUNE 2016

SECTION A-A SECTION B-B

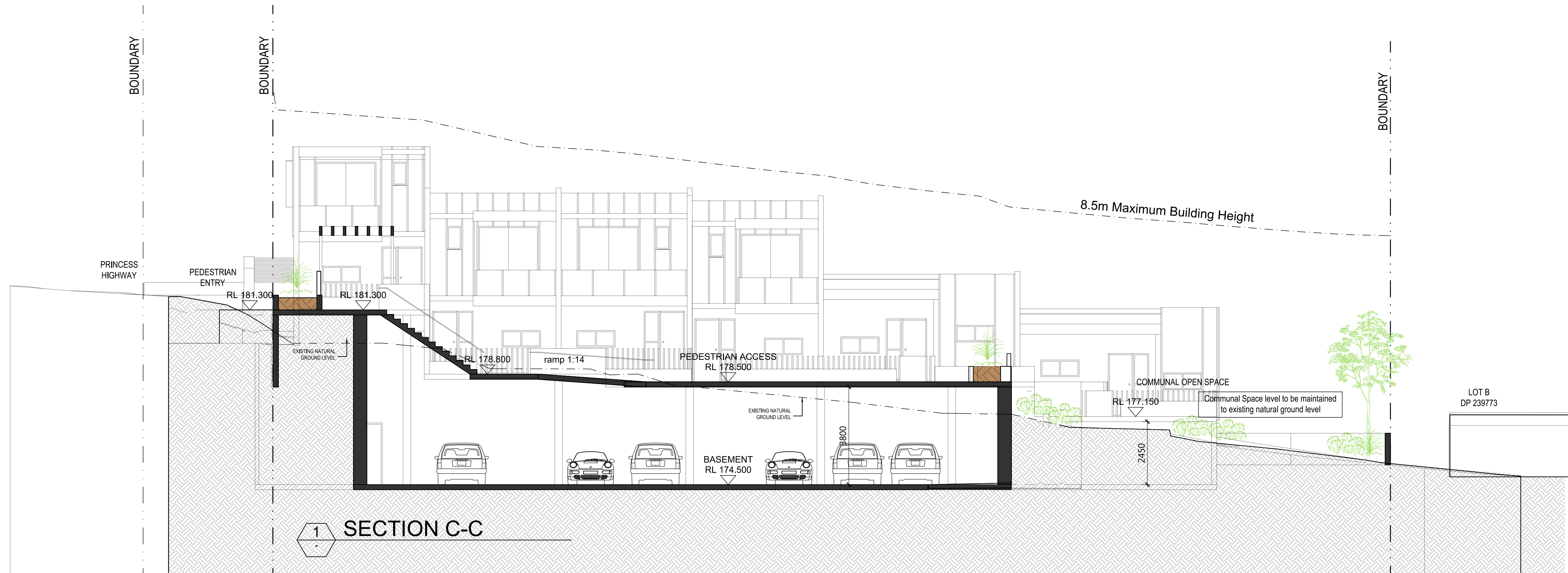
Do not scale from drawings.  
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Project

PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

DA-09

B



1 SECTION C-C



2 SECTION D-D

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A ISSUED FOR DA 26.06.2017  
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LICENSE NUMBER : 3010

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Drawing

DRAWN KK KP PROJ NO. 160615  
SCALE 1:100 on A1  
CHECKED GB DATE JUNE 2016

SECTION C-C SECTION D-D

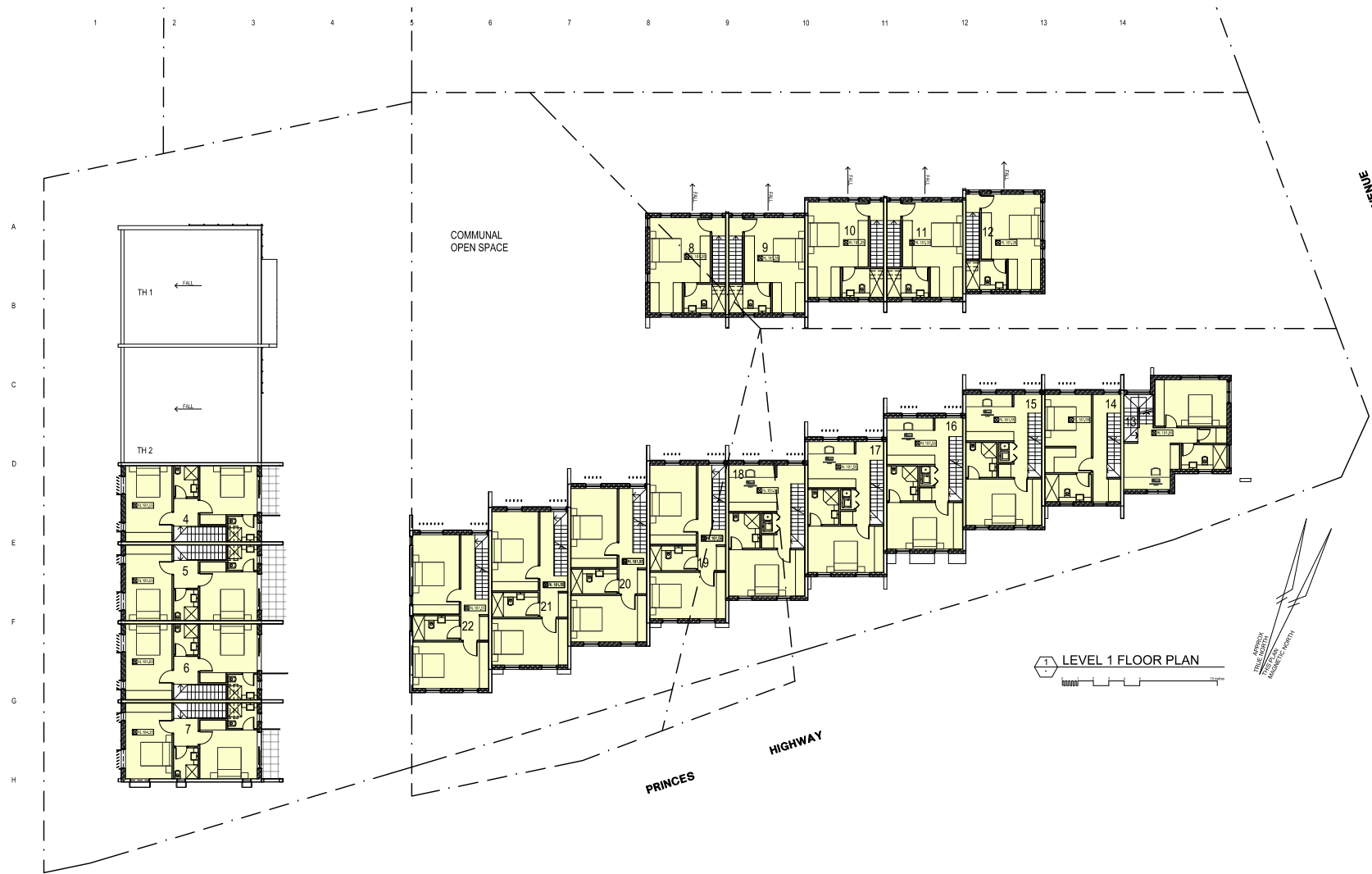
Do not scale from drawings.  
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Project

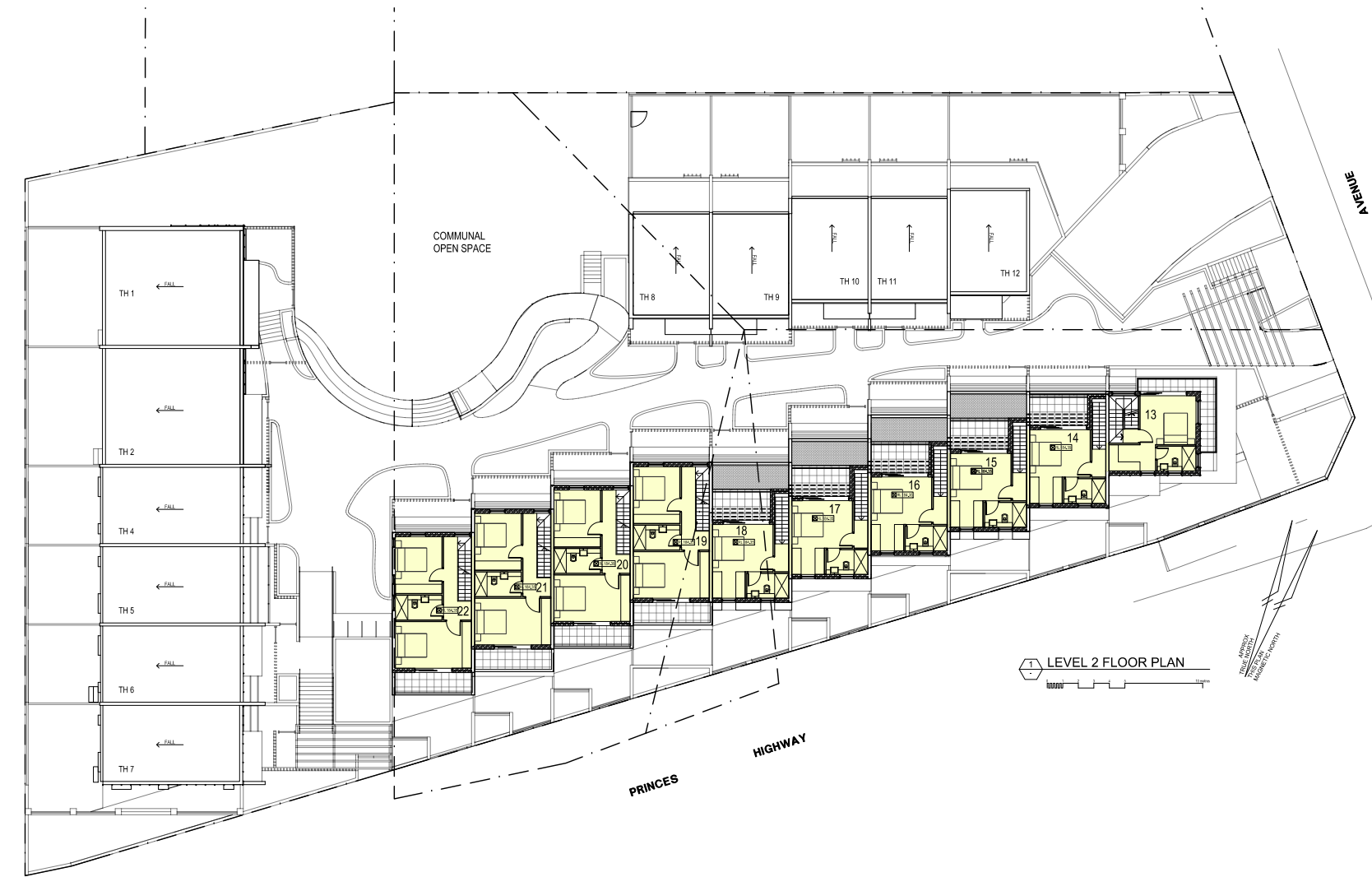
PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

DA-10

B



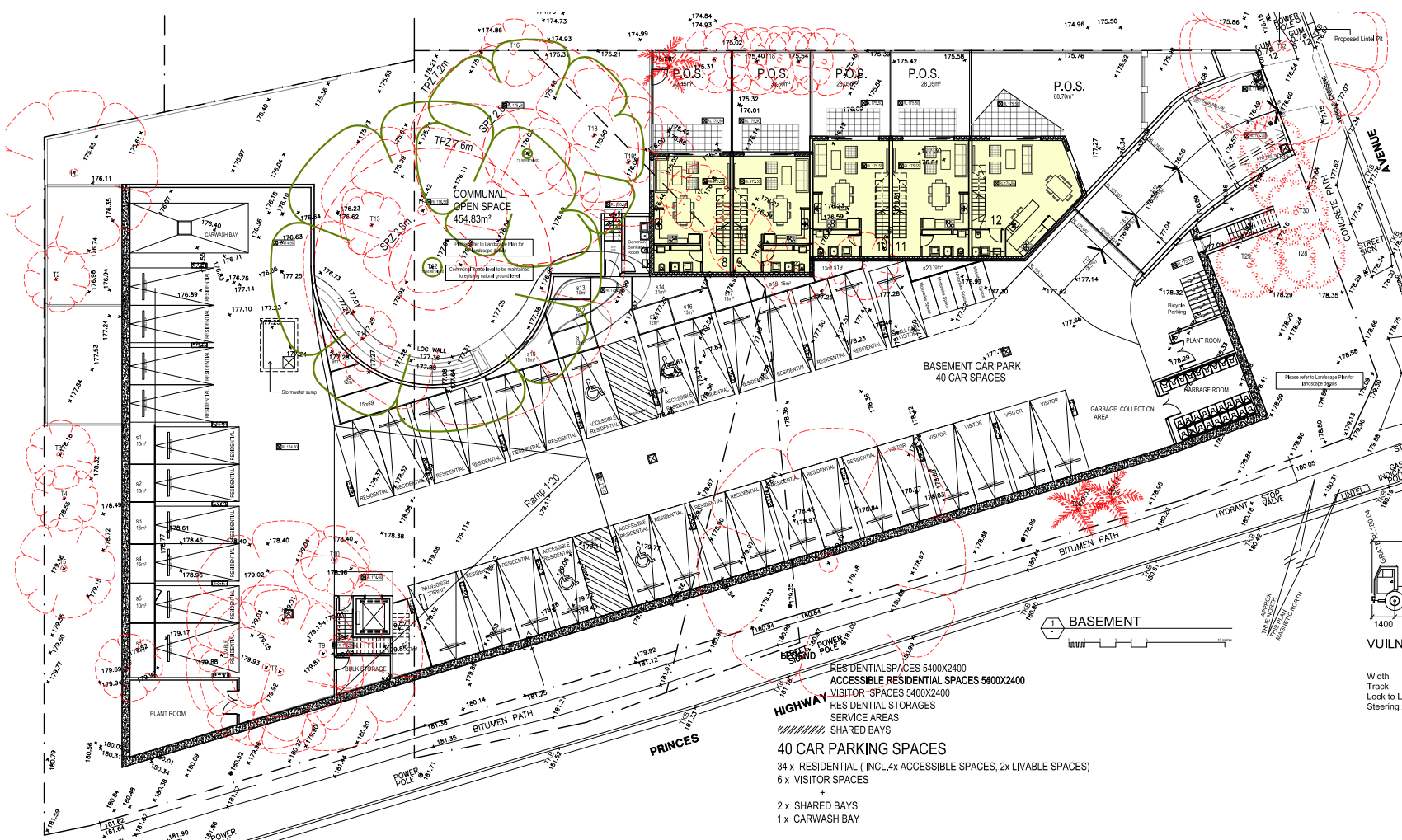
TOTAL LEVEL 1 GFA = 709.73m<sup>2</sup>



TOTAL LEVEL 2 GFA = 293.19m<sup>2</sup>



DEEP SOIL LANDSCAPE AREA = 1168.81m<sup>2</sup>  
COMMUNAL OPEN SPACE AREA = 454.83m<sup>2</sup>



TOTAL BASEMENT GFA = 192.15m<sup>2</sup>



TOTAL GROUND GFA = 895.51m<sup>2</sup>

SITE AREA: 3074.31m<sup>2</sup>  
PERMISSIBLE FSR : 0.550:1  
PERMISSIBLE GFA: 1690.87m<sup>2</sup>  
BONUS FSR PERMITTED : 0.5:1  
PERMISSIBLE GFA WITH BONUS : 3228.02m<sup>2</sup>  
REQUIRED LANDSCAPE AREA 30%: 922.29m<sup>2</sup>  
REQUIRED DEEP SOIL AREA 35%: 1076.0085m<sup>2</sup>

PROPOSAL: 21 AFFORDABLE HOUSING TOWNHOUSES  
PROPOSED FSR: 0.680:1  
PROPOSED TOTAL GFA: 2093.58m<sup>2</sup>  
PROPOSED LANDSCAPE AREA= 1680.74m<sup>2</sup> =54.67%  
PROPOSED DEEP SOIL AREA= 1168.81m<sup>2</sup> = 38.01%  
PROPOSED COMMUNAL OPEN SPACE : 454.83m<sup>2</sup> = 14.79%

TOTAL LEVEL 2 GFA = 293.19m<sup>2</sup>  
TOTAL LEVEL 1 GFA = 709.73m<sup>2</sup>  
TOTAL GROUND GFA = 895.51m<sup>2</sup>  
TOTAL BASEMENT GFA = 195.15m<sup>2</sup>  
TOTAL GFA = 2093.58m<sup>2</sup>

## 1 GFA, LANDSCAPE & DEEP SOIL AREA CALCULATION

Revision

A ISSUED FOR DA  
B ISSUED FOR DA RFI

26.06.2017  
16.02.2018

Design by:

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Drawing

DRAWN KK KP  
CHECKED GB  
PROJ NO. 160615  
SCALE 1:400 on A1  
DATE JUNE 2016

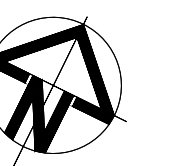
Project

PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

AREA CALCULATION

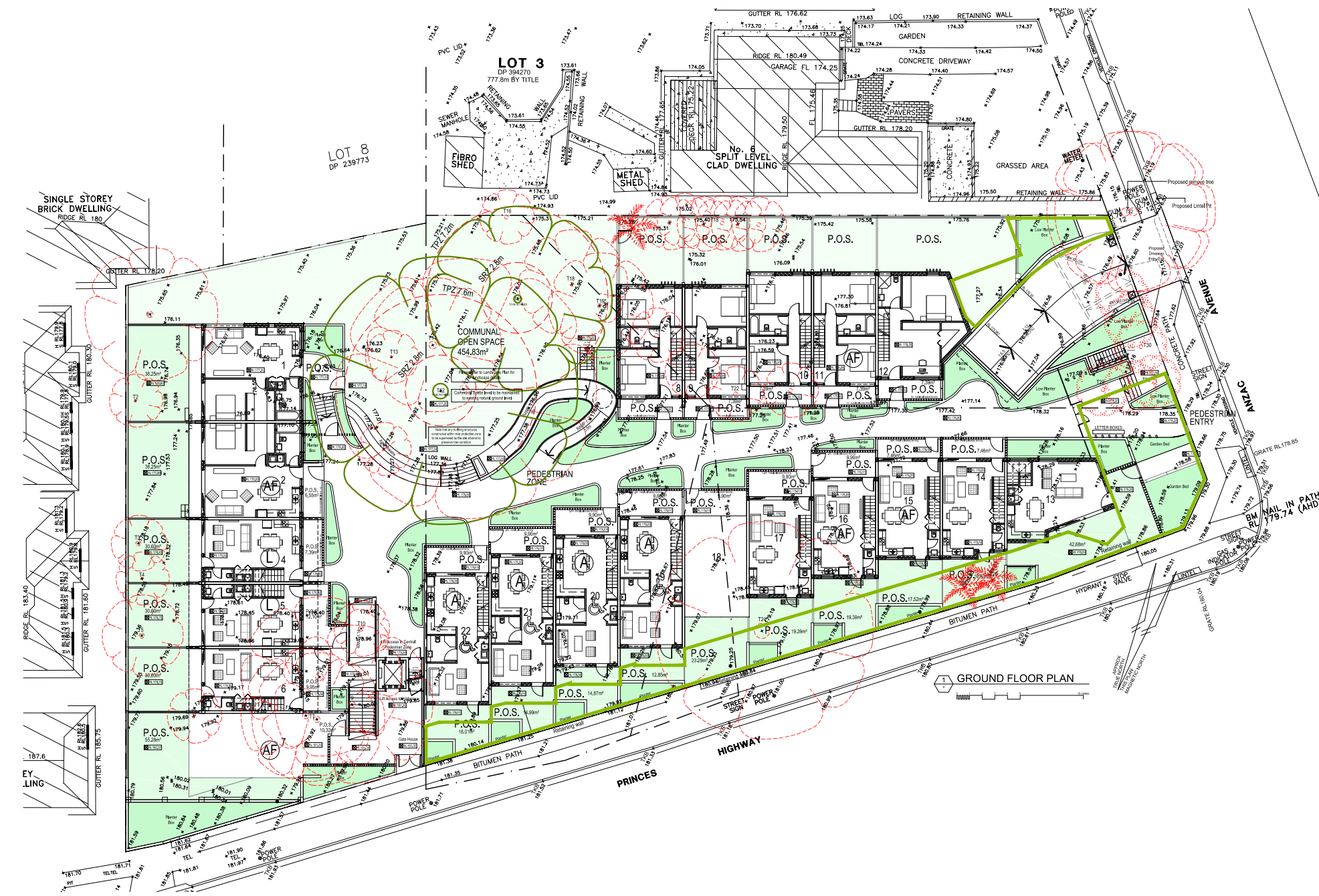
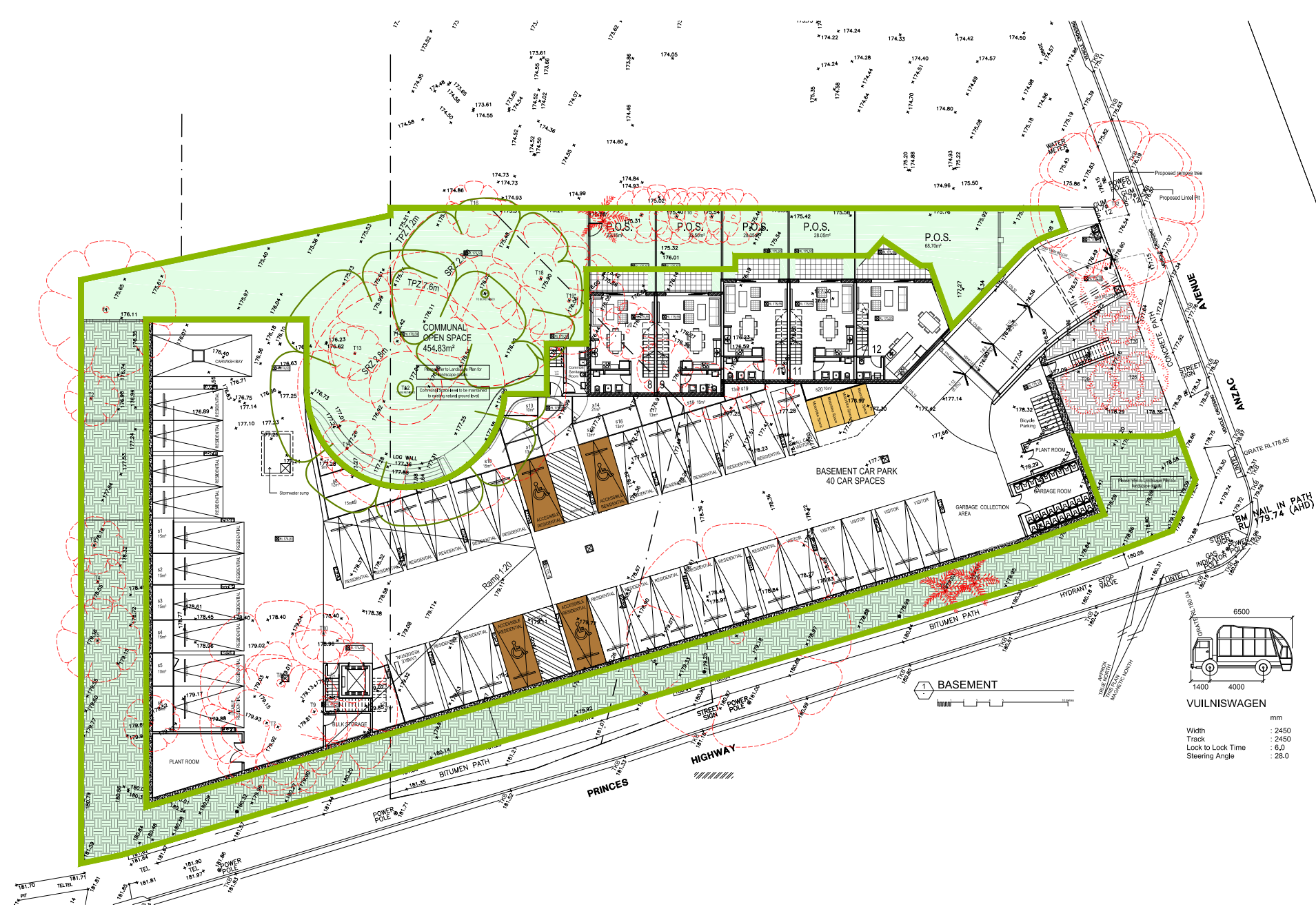
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DA-11  
B



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LICENSE NUMBER : 3010



# 1 GFA, LANDSCAPE & DEEP SOIL AREA CALCULATION

|                                                                                                                                                                                                                                                                                                           |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| SITE AREA: 3074.31m <sup>2</sup><br>PERMISSIBLE FSR : 0.550:1<br>PERMISSIBLE GFA: 1690.87m <sup>2</sup><br>BONUS FSR PERMITTED : 0.5:1<br>PERMISSIBLE GFA WITH BONUS : 3228.02m <sup>2</sup><br>REQUIRED LANDSCAPE AREA 30%: 922.29m <sup>2</sup><br>REQUIRED DEEP SOIL AREA 35%: 1076.0085m <sup>2</sup> |                         |
| PROPOSAL: 21 AFFORDABLE HOUSING TOWNHOUSES<br>PROPOSED FSR: 0.680:1<br>PROPOSED TOTAL GFA: 2093.58m <sup>2</sup><br>PROPOSED LANDSCAPE AREA= 1680.74m <sup>2</sup> =54.67%<br>PROPOSED DEEP SOIL AREA= 1168.81m <sup>2</sup> = 38.01%<br>PROPOSED COMMUNAL OPEN SPACE : 454.83m <sup>2</sup> = 14.79%     |                         |
| TOTAL LEVEL 2 GFA                                                                                                                                                                                                                                                                                         | = 293.19m <sup>2</sup>  |
| TOTAL LEVEL 1 GFA                                                                                                                                                                                                                                                                                         | = 709.73m <sup>2</sup>  |
| TOTAL GROUND GFA                                                                                                                                                                                                                                                                                          | = 895.51m <sup>2</sup>  |
| TOTAL BASEMENT GFA                                                                                                                                                                                                                                                                                        | = 195.15m <sup>2</sup>  |
| TOTAL GFA                                                                                                                                                                                                                                                                                                 | = 2093.58m <sup>2</sup> |

## Revision

|   |                   |            |
|---|-------------------|------------|
| A | ISSUED FOR DA RFI | 26.11.2017 |
| B | ISSUED FOR DA RFI | 08.02.2018 |

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## Design by:



NOMINATED ARCHITECT: NICHOLAS LYCENKO  
LICENSE NUMBER : 3010

## Drawing

|         |       |          |             |
|---------|-------|----------|-------------|
| DRAWN   | KK KP | PROJ NO. | 160615      |
| CHECKED | GB    | SCALE    | 1:400 on A1 |
|         |       | DATE     | JUNE 2016   |

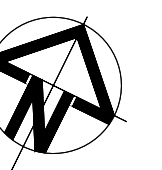
## DEEP SOIL AREA CALCULATION

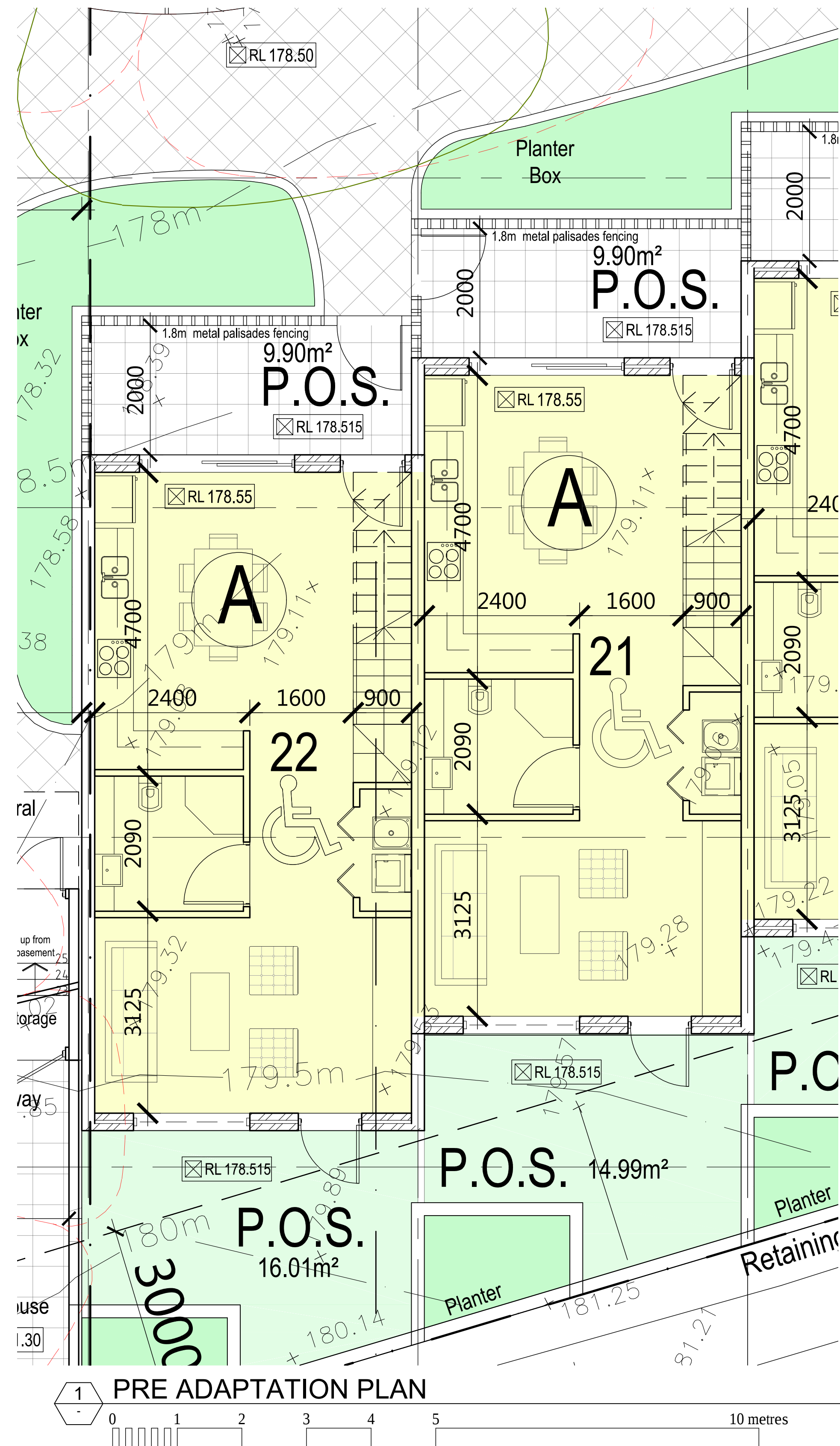
Do not scale from drawings.  
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## Project

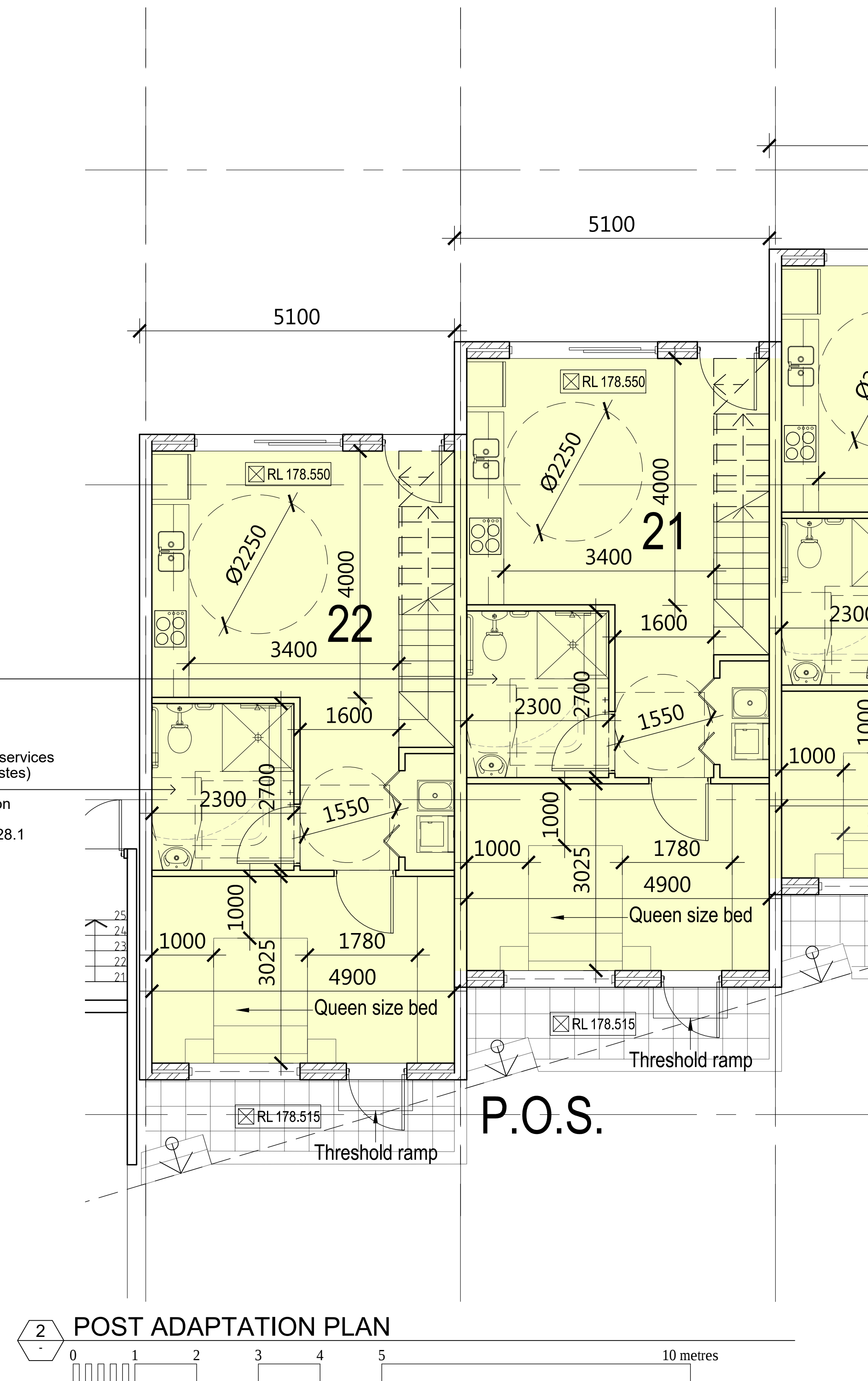
PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

DA-11.a  
B





Note: Provide extra capped off services (plumbing supply pipes and wastes) with suitable set-outs and clearances to allow for relocation of fixtures in post-adaptation locations to comply with AS 1428.1



Revision

A ISSUED FOR DA  
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26.06.2017  
16.02.2018

Design by:



Drawing

DRAWN KK KP  
CHECKED GB  
PROJ NO. 160615  
SCALE 1:50 on A1  
DATE JUNE 2016

Project

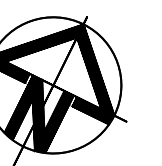
PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

ADAPTABLE TOWNHOUSE PLANS

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DA.12

B



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LICENSE NUMBER : 3010

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NOMINATED ARCHITECT: NICHOLAS LYCENKO  
LICENSE NUMBER : 3010

### Drawing

|         |       |          |           |
|---------|-------|----------|-----------|
| DRAWN   | KK KP | PROJ NO. | 160615    |
|         |       | SCALE    | N.T.S     |
| CHECKED | GB    | DATE     | JUNE 2016 |

## PERSPECTIVES 1

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Project

**PROPOSED AFFORDABLE RENTAL HOUSING**  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE

DA.16

B



Views from common pedestrian to Communal open space



View from Communal Open Space



Princess Highway Pedestrian Entry



Aerial View from Princess Highway

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|----------|-------------------|------------|
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NOMINATED ARCHITECT: NICHOLAS LYCENKO  
LICENSE NUMBER : 3010

Design by:

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| Drawing |       |          |           |
|---------|-------|----------|-----------|
| DRAWN   | KK KP | PROJ NO. | 160615    |
| CHECKED | GB    | SCALE    | N.T.S     |
|         |       | DATE     | JUNE 2016 |

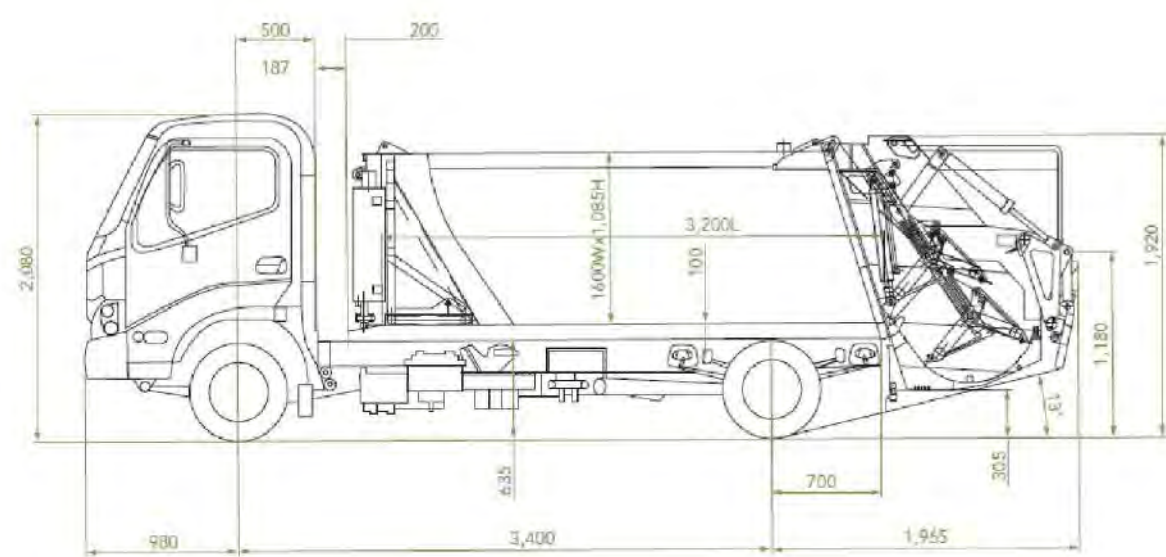
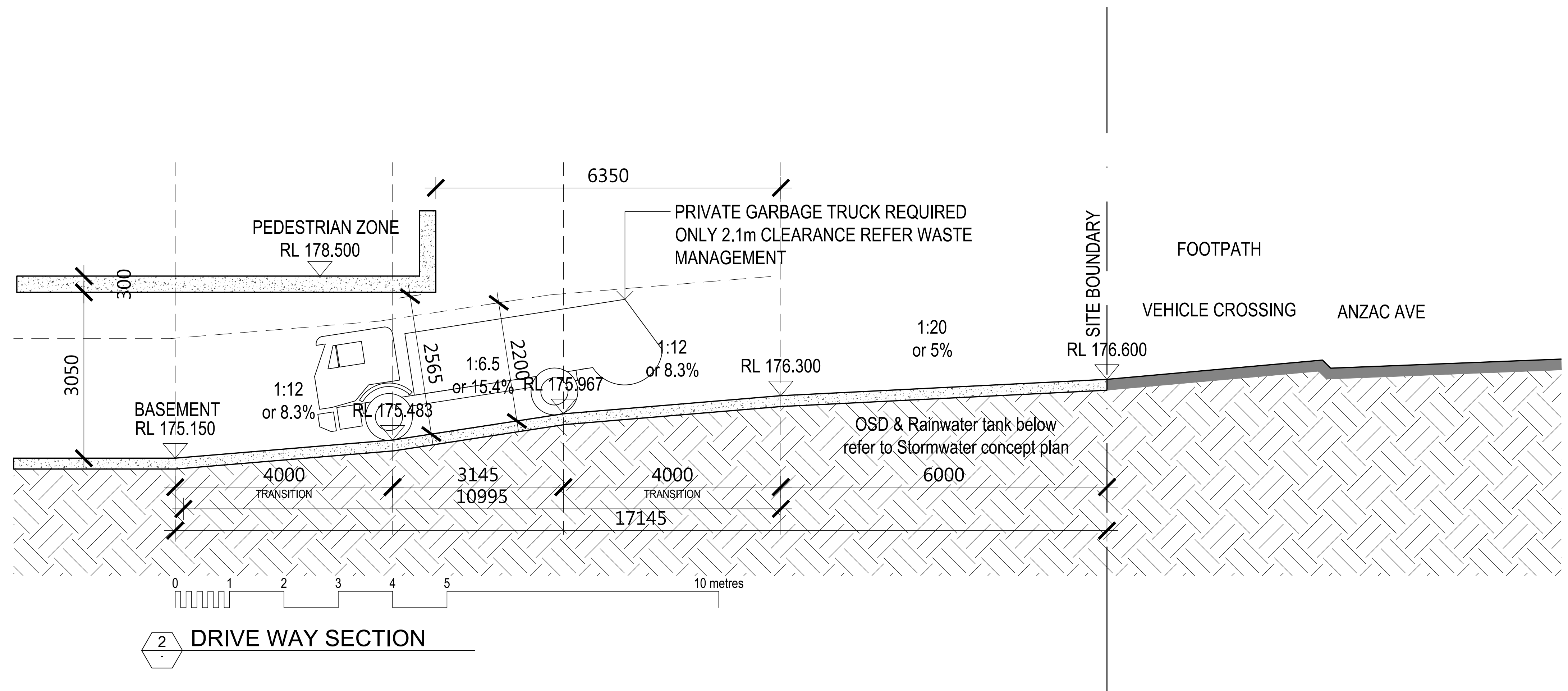
PERSPECTIVES 2

Do not scale from drawings.  
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| Project                                             |  |
|-----------------------------------------------------|--|
| PROPOSED AFFORDABLE RENTAL HOUSING                  |  |
| 2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE |  |

DA.17

B



Note: Refer to Wastewise Environmental's Letter. Their MINI Rear Loader vehicle will service this property. The MINI Rear Loader specifications are: 2.08m high, 6.4m long, 1.7m wide. Required minimum headroom: 2.1m

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Revision  
A ISSUED FOR DA 26.06.2017  
B ISSUED FOR DA RFI 16.02.2018

NOMINATED ARCHITECT: NICHOLAS LYCENKO  
LICENSE NUMBER : 3010

Design by:  
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p: +61 2 9746 6993

Drawing  
DRAWN KK KP PROJ NO. 160615  
CHECKED GB SCALE 1:50 @ A1, 1:100 @ A3  
DATE JUNE 2016  
DRIVEWAY SECTION  
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Project  
PROPOSED AFFORDABLE RENTAL HOUSING  
2-4 ANZAC AVENUE, 945-947 PRINCES HIGHWAY, ENGADINE  
DA.18  
B



West detail plan (see sheet 2)

East detail plan (see sheet 3)

|                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                      |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                                                                       |                                          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|                                                                                     |                                                              |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------|
|   | Existing trees to be removed<br>(Refer to Arborist's report) |
|  | Existing trees                                               |
|  | Proposed evergreen trees                                     |
|  | Proposed Deciduous tree                                      |
|  | Low shrubs / ornamental grasses                              |
|  | Larger shrubs                                                |
|  | Groundcovers                                                 |
|  | Lawn areas                                                   |
|  | Concrete                                                     |
|  | Private open space tiles / pavers                            |
|  | Common open space tiles / pavers                             |
|  | Retaining walls                                              |
|  | Survey layer under                                           |



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PROJECT: PROPOSED RESIDENTIAL RENTAL HOUSING  
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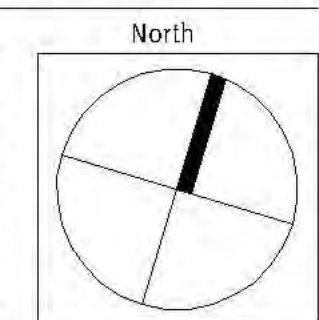
DWG: MASTERPLAN

|                  |                  |
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| DATE: 13.2.18    | SCALE: 1:150 @A1 |
| JOB REF: 17/1934 | SHEET No: 1 OF 5 |
| ISSUE: 1         | —                |

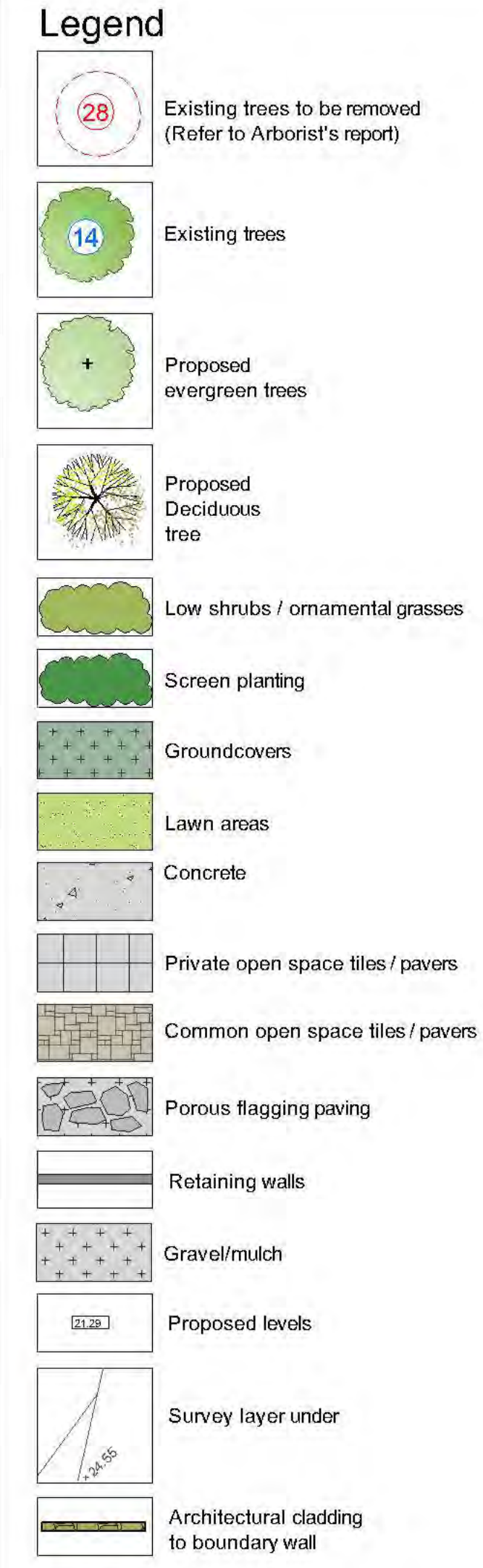
Builder must verify all dimensions of the site before work commences. Figured dimensions should be used in preference to those called out.

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## AMENDMENTS



A horizontal number line is shown, starting at 0 and ending at 10. Major tick marks are labeled at 0, 1, 2, 3, 4, 5, and 10. There are also minor tick marks between the major ones, representing intervals of 0.5 units. The segments between 1 and 2, and between 3 and 4, are shaded gray.



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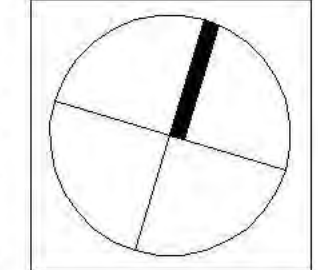
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DWG: WEST DETAIL PLAN

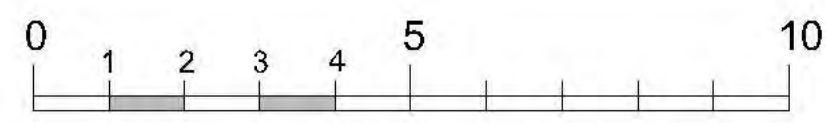
Builder must verify all dimensions of the site by two week commencing.  
Figured dimensions should be used in preference to those called off.

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| AMENDMENTS | North |
|------------|-------|
|------------|-------|



East detail plan 1:100 @A1



- Legend**
- Existing trees to be removed (Refer to Arborist's report)
  - Existing trees
  - Proposed evergreen trees
  - Proposed Deciduous tree
  - Low shrubs / ornamental grasses
  - Screen planting
  - Groundcovers
  - Lawn areas
  - Concrete
  - Private open space tiles / pavers
  - Common open space tiles / pavers
  - Porous flagging paving
  - Retaining walls
  - Gravel/mulch
  - Proposed levels
  - Survey layer under
  - Architectural cladding to boundary wall

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DWG: EAST DETAIL PLAN

|                  |                  |
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| DATE: 13.2.18    | SCALE: 1:100 @A1 |
| JOB REF: 17/1934 | SHEET No: 3 OF 5 |
| ISSUE:           |                  |

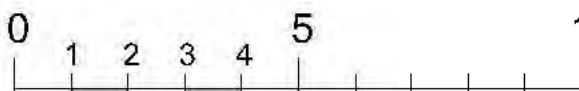
Amendments

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North

**Arborist:**  
**Scott Freeman** -  
Principal  
Horticultural Management Services  
9 Hickson Circuit  
Harrington Park, NSW 2567  
Ph: 0425 308 275  
Email: scott@hortmanagement.com.au

Soil calculations /  
Planting plan 1:150 @A1



Planting schedule

| Symbol                                          | Botanical name                  | Common name                                                     | Cont. size | Staking              | Mature height | No. req. |
|-------------------------------------------------|---------------------------------|-----------------------------------------------------------------|------------|----------------------|---------------|----------|
| <b>Canopy trees</b>                             |                                 |                                                                 |            |                      |               |          |
| ALT                                             | Allocasuarina littoralis        | Black She Oak (native narrow growing med tree)                  | 75Lt       | 3x50x50x1800         | 6-9.0.0M      | 6        |
| ANO                                             | Angophora costata               | Sydney Red Gum (large native tree. Striking bark colour)        | 200Lt      | 3x50x50x1800         | 16-25.0M      | 3        |
| BAS                                             | Banksia serrata                 | Old Man Banksia (Small native. Gnarled trunk & serrated leaves) | 75Lt       | 3x50x50x1800         | 4-6.0M        | 5        |
| BIN                                             | Banksia integrifolia            | Coast Banksia (medium indigenous tree)                          | 75Lt       | 3x50x50x1800         | 12-15.0M      | 6        |
| CUP                                             | Cupaniopsis anacardoides        | Tuckeroo (small to medium native tree. Hardy street tree)       | 100Lt      | 3x50x50x1800         | 5-7.0M        | 8        |
| ER                                              | Elaeocarpus reticulatus         | Blueberry Ash (indigenous small tree)                           | 45Lt       | 3x50x50x1800         | 6-8.0M        | 10       |
| EUH                                             | Eucalyptus haemastoma           | Scribbly Gum (small-med indigenous tree)                        | 45Lt       | 3x50x50x1800         | 6-9.0M        | 2        |
| GLO                                             | Glochidion ferdinandii          | Cheese Tree (indigenous medium tree)                            | 100Lt      | 3x50x50x1800         | 8-10.0M       | 3        |
| LAI                                             | Lagerstroemia indica            | Crepe Myrtle (small deciduous tree for planterbox)              | 45Lt       | 3x50x50x1800         | 5-6.0M        | 6        |
| PLU                                             | Plumeria acutifolia             | Frangipani (Small flowering deciduous tree in raised planter)   | 45Lt       | nil                  | 3-4.0M        | 6        |
| SYF                                             | Waterhousea floribundum         | Weeping Lilly Pilly (native screen tree)                        | 75Lt       | 3x38x38x1800         | 8-10.0M       | 1        |
| SYG                                             | Syncarpia glomulifera           | Turpentine                                                      | 100Lt      |                      | 30.0M         | 1        |
| <b>Shrubs / standards / small feature trees</b> |                                 |                                                                 |            |                      |               |          |
| CKS                                             | Callistemon Kings Park Special  | Bottlebrush small (native tree for planterbox)                  | 300mm      | 2x50x50x1800         | 3-3.5M        | 1        |
| EOM                                             | Enostemon australasius          | Pink Wax Flower (flowering native shrub)                        | 200mm      | nil                  | 2.0M          | 1        |
| GRG                                             | Grevillea Robyn Gordon          | Robyn Gordon (native flowering screen plant. Can be hedged)     | 250mm      | nil                  | 2.0M          | 7        |
| MLG                                             | Magnolia 'Little Gem'           | Little Gem (small ornamental standard tree)                     | 300mm      | 2x50x50x1800         | 2.5-3.0M      | 4        |
| MP                                              | Murraya paniculata              | Orange Jessamine (flowering screening plant)                    | 300mm      | hedged               | 1.2-2.0M      | 82       |
| SPI                                             | Syzygium austral 'Pinnacle'     | Pinnacle Lilly Pilly (narrow vertical frowning screening plant) | 300mm      | nil                  | 3-5.0M        | 43       |
| SWL                                             | Syzygium 'Winter Lights'        | Winter Lights Lilly Pilly (flowering screening plant)           | 200mm      | hedged to req height | 1.6-2.8M      | 36       |
| SYR                                             | Syzygium 'Resilience'           | Resilience Lilly Pilly (native screen plant)                    | 300mm      | hedged               | 2.3-3.0M      | 24       |
| WFN                                             | Westringia fruticosa 'Grey Box' | Ozbreed Grey Box® (hardy low screen can be hedged)              | 200mm      | hedged               | 0.7M          | 19       |

Planting schedule (continued)

| Symbol                                          | Botanical name                     | Common name                                                    | Cont. size | Staking                | Mature height | No. req. |
|-------------------------------------------------|------------------------------------|----------------------------------------------------------------|------------|------------------------|---------------|----------|
| <b>Ferns / Palms / Succulents</b>               |                                    |                                                                |            |                        |               |          |
| CAA                                             | Cyathea australis                  | Tree Fern (Native tree ferns)                                  | 300mm      | nil                    | 2-4.0M        | 8        |
| DOE                                             | Doryanthea excelsior               | Gynera Lily (striking palm like). Tall red flower on spikes)   | 300mm      | nil                    | 1.5-2.0M      | 27       |
| DRD                                             | Dracaena draco                     | Dragon Tree (striking feature plant)                           | semi adv.  | nil                    | 2.5-3.5M      | 1        |
| LAV                                             | Livingstonea australis             | Cabbage Tree Palm                                              | 25Lt       | nil                    | 6.0M          | 11       |
| XM                                              | Xanthorrhoea media                 | Grass Tree (Striking ornamental Grass tree with tall spike)    | 200mm      | nil                    | 1-5-2.5M      | 2        |
| <b>Groundcovers/Climbers</b>                    |                                    |                                                                |            |                        |               |          |
| GPR                                             | Grevillea 'Poinardia Royal Mantle' | Grevillea Groundcover (native low groundcover)                 | 150mm      | nil                    | 0.2M          | 15       |
| HIS                                             | Hibbertia scandens                 | Guinea Flower (flowering climber / groundcover)                | 200mm      | nil                    | 0.3M          | 12       |
| MYP                                             | Myoporum parvifolium               | Creeping Boobialla (native cascading groundcover)              | 150mm      | nil                    | 0.2M          | 49       |
| PJ                                              | Pandorea jasminoides               | Bower Plant (native climbing/cascading groundcover)            | 200mm      | wire supports on fence | 2.5M          | 14       |
| PP                                              | Pandorea pandorana                 | Wonga Wonga Vine (native climbing plant / groundcover)         | 200mm      | wire supports on fence | 3.0M          | 21       |
| SOJ                                             | Solanum jasminoides                | Potato Vine (deciduous climber over pergola)                   | 300mm      | over pergola           | 3.5M          | 3        |
| TJ                                              | Trachelospermum jasminoides        | Star Jasmine (flowering climber / groundcover)                 | 200mm      | nil                    | 0.3M          | 49       |
| VH                                              | Viola hederacea                    | Native Violets (native low groundcover)                        | tubes      | nil                    | 0.1M          | 180      |
| WIS                                             | Wisteria sinensis                  | Chinese Wisteria (deciduous climber over pergola)              | 300mm      | over pergola           | 5.0M          | 2        |
| <b>Ornamental grasses/strappy leaved plants</b> |                                    |                                                                |            |                        |               |          |
| ANG                                             | Anagostandus flavidus              | Kangaroo Paw (native ornamental grass like. Red flower)        | 150mm      | nil                    | 0.8M          | 7        |
| CM                                              | Civrea miniata                     | Kaffir Lily (shade tolerant groundcover)                       | 200mm      | nil                    | 0.5M          | 34       |
| CRP                                             | Crimum pedunculatum                | Swamp Lily (native mass planted groundcover)                   | 200mm      | nil                    | 0.5-0.7       | 20       |
| DIC                                             | Dianella caerulea                  | Blue Flax Lily (native grass like plant)                       | 150mm      | nil                    | 0.4M          | 50       |
| FIN                                             | Isolepis (Fimbricia) nodosa        | Knobby Club Rush (native ornamental grass)                     | 150mm      | nil                    | 0.8M          | 77       |
| HVI                                             | Hardy Evergreen Giant              | Native Sarsparilla                                             | 150mm      | nil                    | 0.2M          | 50       |
| LIM                                             | Liriodendron latifolium            | Turf Lily (shade tolerant groundcover)                         | 150mm      | nil                    | 0.4M          | 121      |
| LOT                                             | Lomandra 'Tanika'                  | Dwarf Mat Rush (native mass planted groundcover)               | 150mm      | nil                    | 0.4M          | 141      |
| SDR                                             | Strelitzia Regenia Dwarf           | Dwarf Bird of Paradise (Small ornamental strappy leaved plant) | 150mm      | nil                    | 0.6M          | 56       |

Planting schedule species to be sourced from local nurseries supplying plants of local provenance wherever possible. Landscape contractor is to check plant numbers on plan against the schedule prior to submitting tender price. Contact landscape architect if any number discrepancies are found. Council compliance controls require that any substitution of species variety or container size MUST be confirmed with landscape architect to ensure a compliance certificate can be issued that meets the specific development consent conditions of the project.

General construction notes

- Site preparation**  
Any existing trees and vegetation to be retained shall be preserved and protected from damage of any sort during the execution of landscape work. In particular, root systems of existing plants must not be disturbed if possible. Any nearby site works should be carried carefully using hand tools. To ensure the survival and growth of existing trees during landscaping works, protect by fencing or arming where necessary. Trees shall not be removed or lopped unless specific written approval to do so is given or is indicated on plan. Storage of materials, moving of materials, vehicle parking, disposal of liquids, machinery repairs and refuelling, site offices and sheds, and the lighting of fires shall not occur within three (3) metres of any existing trees. Do not stockpile soil, rubble or other debris cleared from the site, or building materials, within the drip-line of existing trees. Vehicular access shall not be permitted within three (3) metres of any tree.
- Soil preparation**  
All proposed planting areas to be deep ripped to 200mm (where possible) and clay soils to be treated with clay breaker. Apply at least 200mm depth good quality garden soil mix to all garden planting areas. To comply with AS 4419 Turf areas to be Soft leaf Buffalo or Soft Leaf Buffalo to be laid over 150mm good quality turf underlay over existing soil which is to be deep ripped to 200mm depth prior to installation. To be worked in with rotary hoe except where tree root damage would otherwise occur. In such situations care to be taken to hand cultivate in any area where existing tree roots exist to preserve health of trees and to comply with the requirements of the Arborist's report. Where planting is to occur in existing soil profiles analyse soil conditions and compute worked into the top 200mm profile. To comply with AS 4454:1999.
- New plantings**  
Newly planted trees and large shrubs should be secured to stakes with hessian ties to prevent rocking by wind. Planting holes for plant material should be large enough in size to take root ball with additional space to take back filling of good quality planting mix. (Please note mature heights of planting as shown on planting schedule can vary due to site conditions, locations in constructed deep soil or over slab planters and so forth) Also shall be taken into account any existing planting heights. Nominated heights for plantings in raised planters over slabs are nominated as less than their normal expected heights in acknowledgement of the contained soil environment. For other deep soil tree heights are subject to particular site conditions, and intended hedging or pruning for functional requirements such as available planting width, intended access under branches and solar access.
- Planter boxes & waterproofing**  
All slab areas to be waterproofed and 'Atlantis' drainage call installed with good textile fabric. Refer Engineer's details for structural details for planter box construction. All internal planter slab levels to fall to drainage outlets as detailed by Hydraulic Engineer. Ensure 50mm cavity between planter box and building wherever planter joins building. Keep cavity clear of debris by providing capping row butted against building. Exterior finishes as per Architect's detail. Ensure base of cavity is able to drain via weep holes in event water seeps into cavity so as to not build up against building wall. Containers to be at height as indicated on Architects' drawing. All planting containers to have the following:
  - 2 coats of waterproof sealant to all interior areas as specified by the Architects' construction details
  - Impervious waterproof membrane along base and up to top of soil level of containers
  - 'Atlantis' drainage call at base to be connected to drainage system of development, see detail this sheet
  - A.N.L. planter box soil mix or equivalent to comply with AS 4419 and AS 3743Contractor to install all planter box finishes after other site works are completed to ensure no deterioration of waterproof membrane. Contractor to be responsible for the integrity of the waterproofing of the planter boxes.
  - All planter boxes are to have automatic drip-line irrigation system. Connecting pipes to be installed in slab structures prior to slab pour.
- Mulching**  
All planting areas to be mulched with a minimum 75mm thick cover of recycled hard wood chip mulch and then all plant areas to be thoroughly soaked with water. To comply with AS 4454.
- Fertiliser**  
All planting areas to be fertilised with 9 month NPK slow release fertiliser.
- Staking**  
To those plants indicated on the planting schedule provide hardwood stakes as nominated and driven into ground to a depth able to achieve rigid support.
- Lawn edging**  
All ground level garden beds adjacent to site boundary or paved areas to have 150mm raised concrete edging as nominated on the plans.
- Turfing**  
Turfed nature strip areas to be Soft Leaf Buffalo or Soft Leaf Buffalo 'shademaster' to be laid over 100mm good quality turf underlay over existing soil which is to be deep ripped to 200mm depth prior to installation. 300mm soil underlay over slab areas as per detail 7 sheet 4.
- Structural**  
All structural details: whatever to Engineer's details.

Soil area calculations

|                               |            |          |
|-------------------------------|------------|----------|
| Site area                     | 3075.0 m²  | 100.00 % |
| Deep soil                     | 1021.71 m² | 33.2 %   |
| 1000mm deep planter over slab | 120.3 m²   | 3.9 %    |
| 600mm deep planter over slab  | 26.8 m²    | 0.8 %    |



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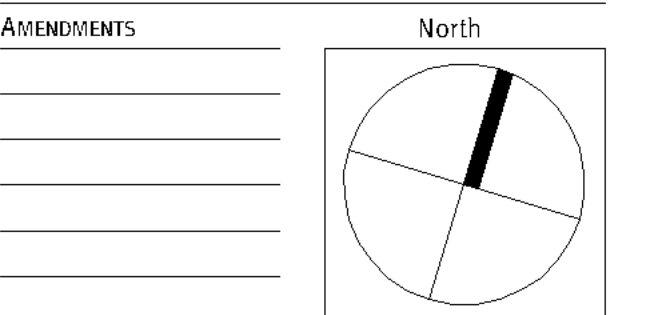
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DWG: SOIL CALCULATIONS PLAN/  
PLANTING PLAN

DATE: 13.2.18 SCALE: 1:150 @A1  
JOB REF: 17/1934 SHEET No: 4 of 5  
ISSUE: 1

Builder must verify all dimensions of the site before work commences. Revised dimensions should be used in preference to those listed on this plan.

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Shrub planting detail n.t.s



Soil preparation for compacted / poor soils n.t.s.

Timber edge detail n.t.s.

Wire supports for climbers on fence n.t.s

Timber sleeper steps & granite steps n.t.s



Section. n.t.s



Synthetic turf over sand n.t.s



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DWG: SECTIONS AA &amp; BB

DATE: 13.2.18

ISSUE: 1

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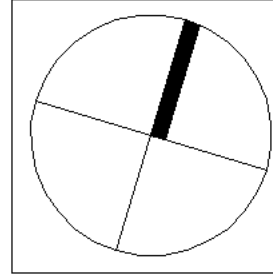
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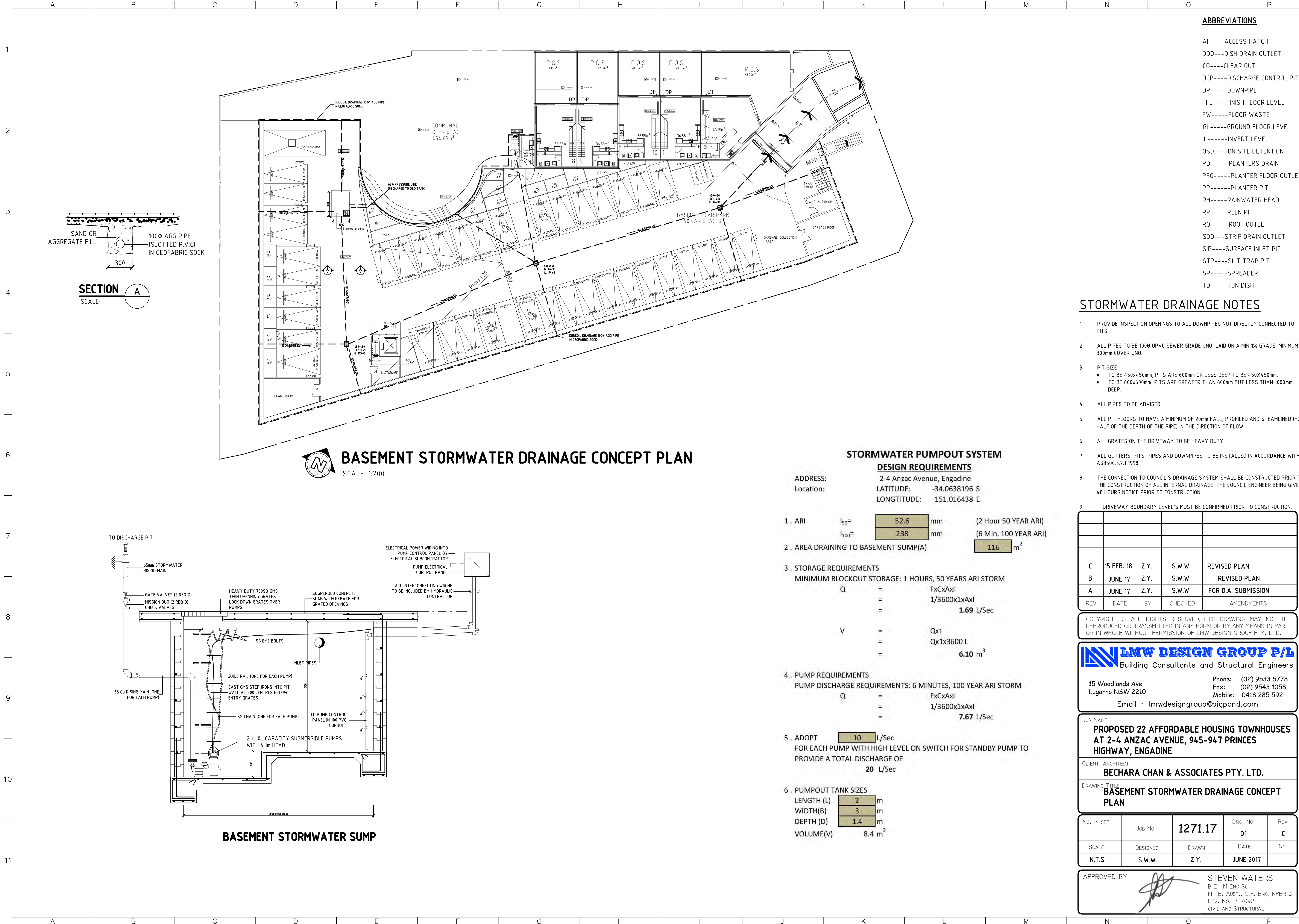
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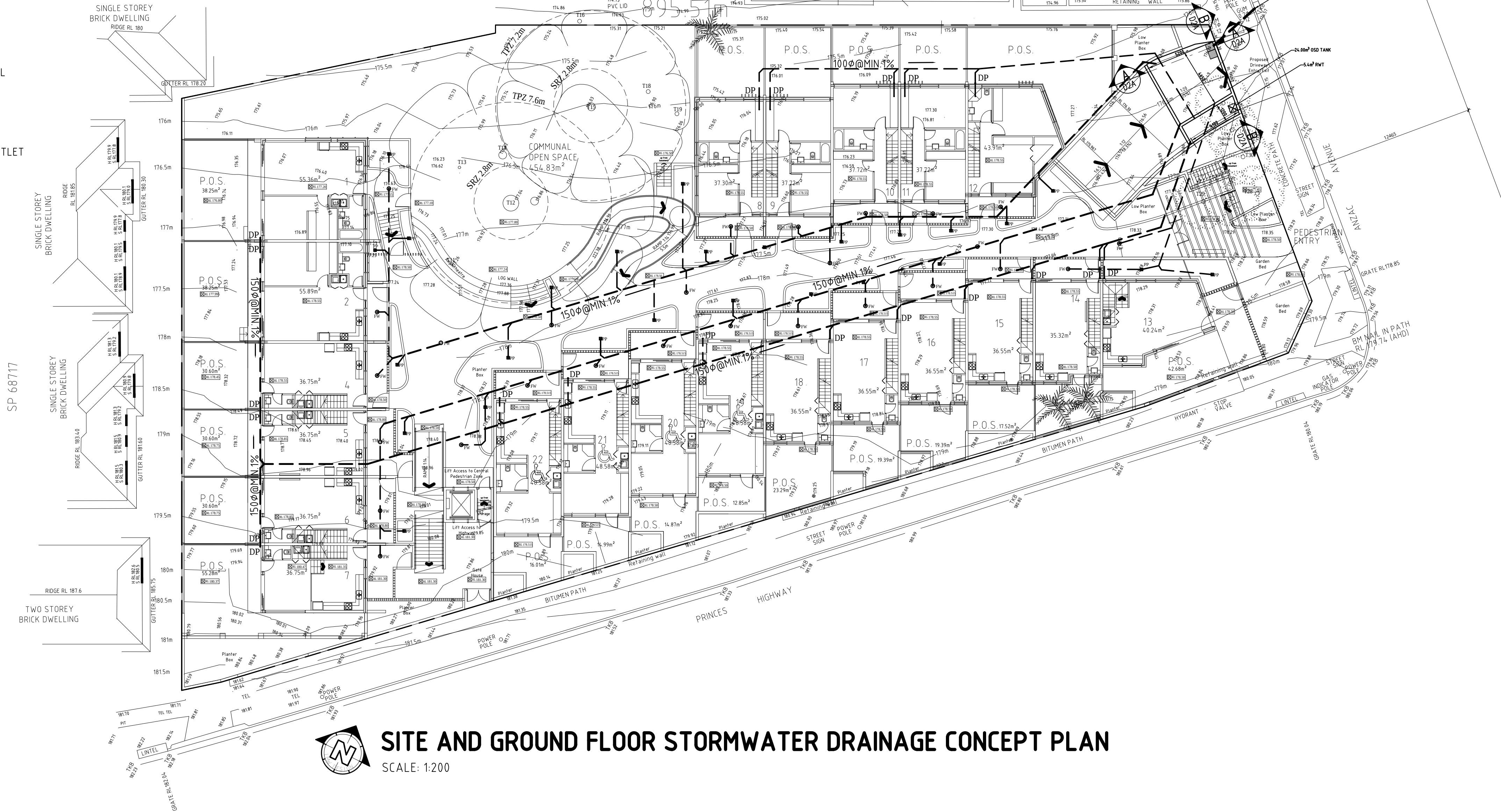
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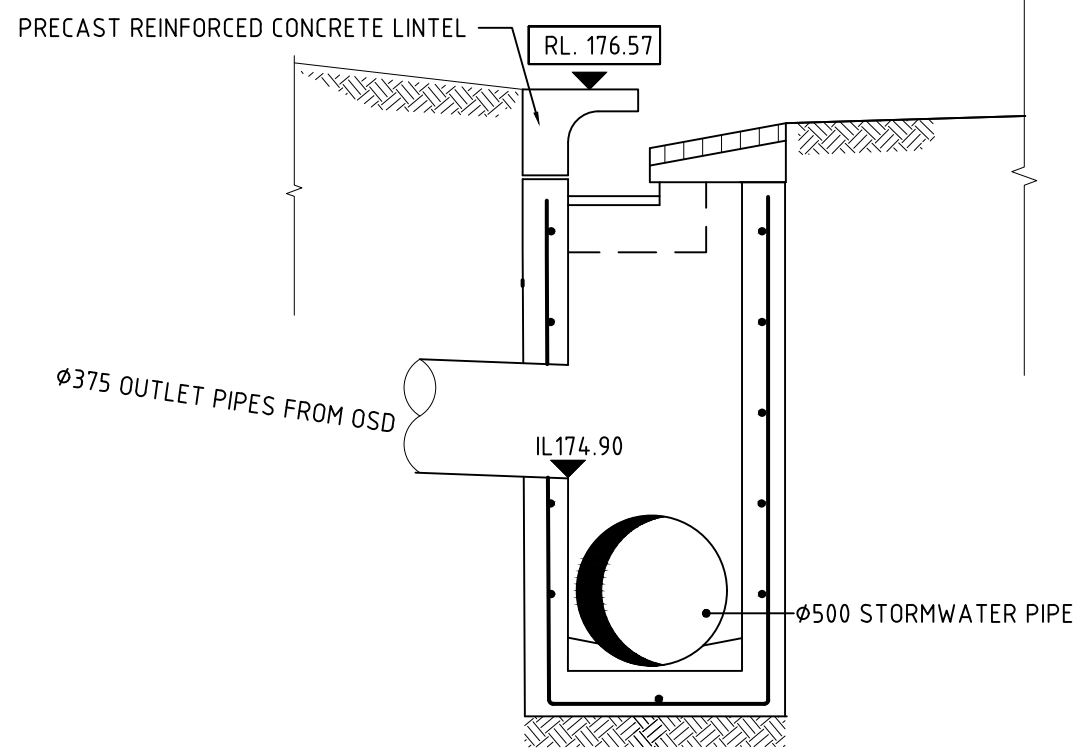
ABBREVIATIONS

- AH----ACCESS HATCH  
DDO---DISH DRAIN OUTLET  
CO----CLEAR OUT  
DCP----DISCHARGE CONTROL PIT  
DP-----DOWNPIPE  
FFL----FINISH FLOOR LEVEL  
FW-----FLOOR WASTE  
GL-----GROUND FLOOR LEVEL  
IL-----INVERT LEVEL  
OSD-----ON SITE DETENTION  
PD-----PLANTERS DRAIN  
PFO-----PLANTER FLOOR OUTLET  
PP-----PLANTER PIT  
RH-----RAINWATER HEAD  
RP-----RELN PIT  
RO-----ROOF OUTLET  
SDO---STRIP DRAIN OUTLET  
SIP----SURFACE INLET PIT  
STP----SILT TRAP PIT  
SP-----SPREADER  
TD-----TUN DISH

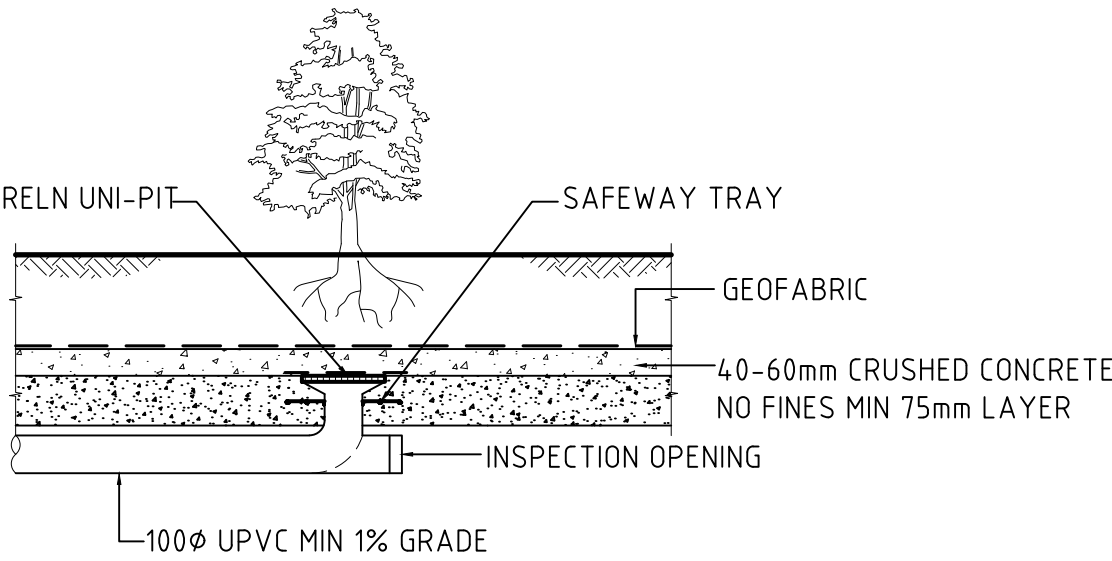


SITE AND GROUND FLOOR STORMWATER DRAINAGE CONCEPT PLAN

SCALE: 1:200



CONNECTION TO EXISTING LINTEL PIT



FLOOR WASTE-PLANTERS  
TYPICAL DETAIL

RAINWATER REUSE NOTES:

1. EVERY FIXTURE SERVICED FROM THE RECYCLED WATER SUPPLY MUST BE NOTED WITH A PLAQUE FOR IDENTIFICATION AND MARKED WITH "NOT FOR HUMAN CONSUMPTION" OR "NON-POTABLE WATER".
2. OVERFLOW FROM RAINWATER TANK TO BE CONNECTED TO STORMWATER DRAINAGE SYSTEM.
3. ALL RECYCLE WATER PIPES TO BE COLOUR CODED FOR IDENTIFICATION.
4. WATER AUTHORITY MUST BE CONTACTED REGARDING RECYCLED WATER ON THE BUILDING AND FOR THE BACKFLOW PREVENTION REQUIREMENTS AND TOP-UP SYSTEM.
5. ANY GARDEN OR CARWASH TAPS CONNECTED RECYCLE SYSTEM MUST BE LOCATED 15m MIN. ABOVE THE SURFACE.
6. FOR PERIOD OF LOW WATER LEVEL IN THE RAINWATER TANK, A CONNECTION TO WATER MAIN IS NEEDED AND TO BE PROVIDED IN ACCORDANCE WITH THE WATER AUTHORITY.
7. PUMPS AND FILTERS ON OUTLETS FROM RECYCLE SYSTEM TO BE SUPPLIED AS MAY BE REQUIRED.

STORMWATER DRAINAGE NOTES

1. PROVIDE INSPECTION OPENINGS TO ALL DOWNPIPES NOT DIRECTLY CONNECTED TO PITS.
2. ALL PIPES TO BE 100Ø UPVC SEWER GRADE UNO, LAID ON A MIN 1% GRADE, MINIMUM 300mm COVER UNO.
3. PIT SIZE
  - TO BE 450x450mm, PITS ARE 600mm OR LESS DEEP TO BE 450X450mm.
  - TO BE 600x600mm, PITS ARE GREATER THAN 600mm BUT LESS THAN 1000mm DEEP.
4. ALL PIPES TO BE ADVISED.
5. ALL PIT FLOORS TO HAVE A MINIMUM OF 20mm FALL, PROFILED AND STEAMLINED (FOR HALF OF THE DEPTH OF THE PIPE) IN THE DIRECTION OF FLOW.
6. ALL GRATES ON THE DRIVEWAY TO BE HEAVY DUTY.
7. ALL GUTTERS, PITS, PIPES AND DOWNPIPES TO BE INSTALLED IN ACCORDANCE WITH AS3500.3.2.1 1998.
8. THE CONNECTION TO COUNCIL'S DRAINAGE SYSTEM SHALL BE CONSTRUCTED PRIOR TO THE CONSTRUCTION OF ALL INTERNAL DRAINAGE. THE COUNCIL ENGINEER BEING GIVEN 48 HOURS NOTICE PRIOR TO CONSTRUCTION.
9. DRIVEWAY BOUNDARY LEVEL'S MUST BE CONFIRMED PRIOR TO CONSTRUCTION.

| REV. | DATE       | BY   | CHECKED | AMENDMENTS          |
|------|------------|------|---------|---------------------|
| C    | 15 FEB. 18 | Z.Y. | S.W.W.  | REVISED PLAN        |
| B    | JUNE 17    | Z.Y. | S.W.W.  | REVISED PLAN        |
| A    | JUNE 17    | Z.Y. | S.W.W.  | FOR D.A. SUBMISSION |

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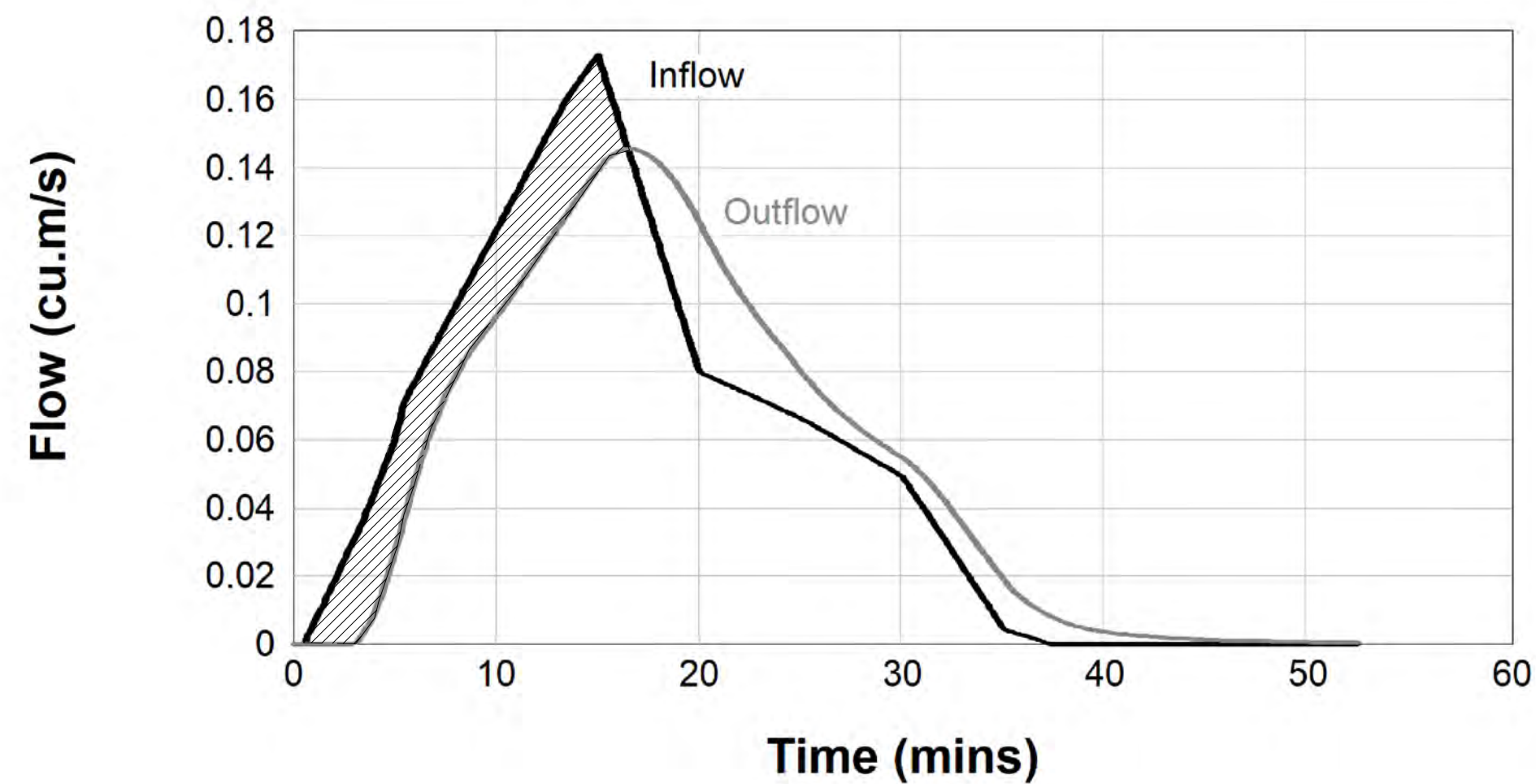


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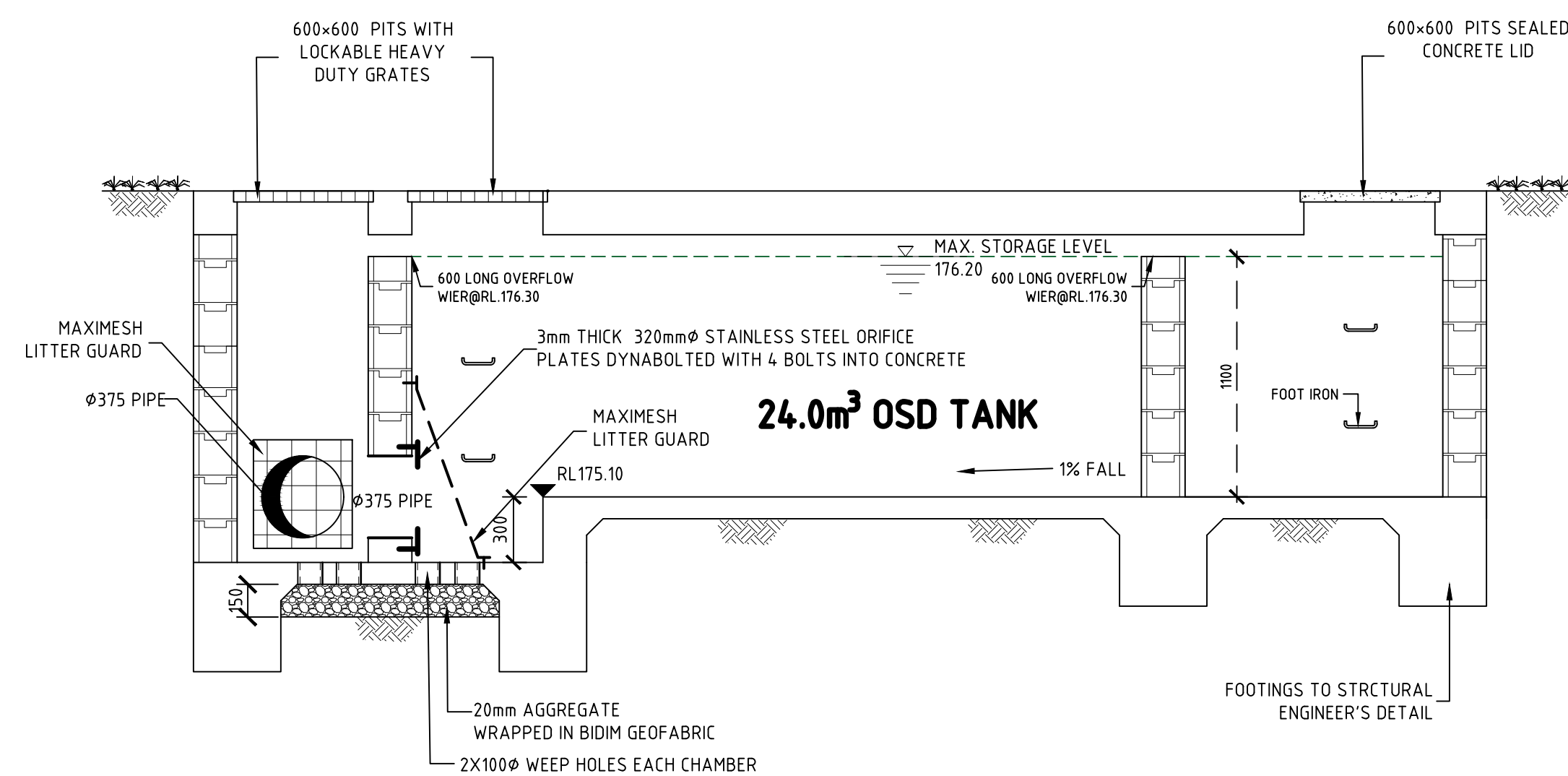
JOB NAME  
**PROPOSED 22 AFFORDABLE HOUSING TOWNHOUSES  
AT 2-4 ANZAC AVENUE, 945-947 PRINCES  
HIGHWAY, ENGADINE**  
CLIENT, ARCHITECT  
**BECHARA CHAN & ASSOCIATES PTY. LTD.**  
DRAWING TITLE  
**SITE AND GROUND FLOOR STORMWATER  
DRAINAGE CONCEPT PLAN**

| No. in SET | JOB No   | 1271.17 | DRG. No   | REV |
|------------|----------|---------|-----------|-----|
|            |          |         | D2        | C   |
| SCALE      | DESIGNED | DRAWN   | DATE      | No. |
| N.T.S.     | S.W.W.   | Z.Y.    | JUNE 2017 |     |

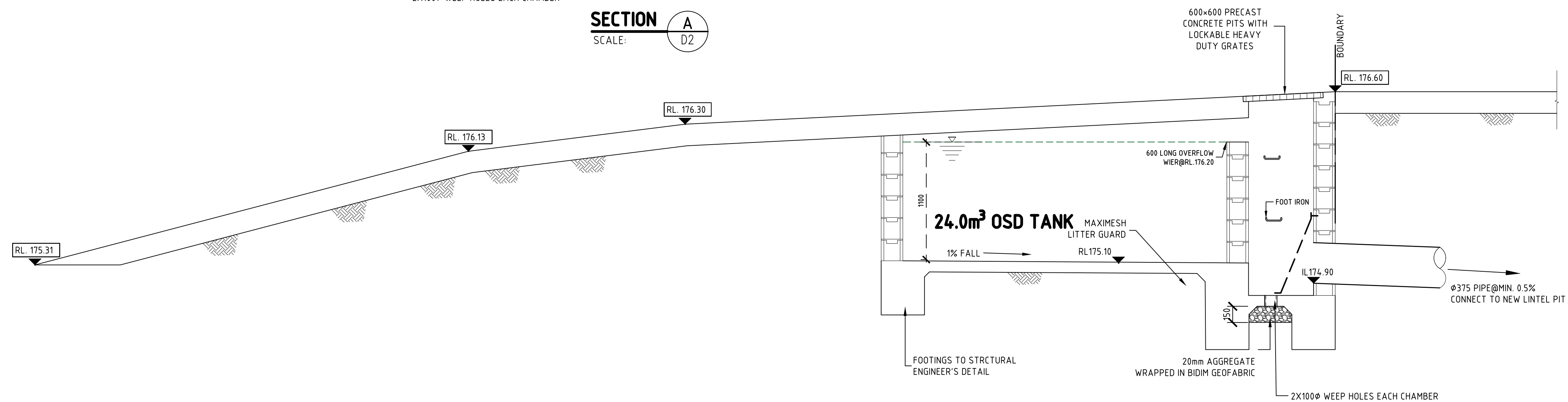
APPROVED BY  
  
STEVEN WATERS  
B.E., M.Eng.Sc.  
M.I.E. Aust., C.P. Eng, NPER-3  
REG. No. 417092  
CIVIL AND STRUCTURAL



**FLOW RATE THROUGH ON-SITE DETENTION TANK, AR2R**  
**100YRS, 30min STORM**  
**PEAK INFLOW: 169L/s**  
**PEAK OUTFLOW: 148L/s**  
**(NOTE: SHADED AREA INDICATES STORAGE AREA)**



**SECTION** A  
**SCALE:** D2



**SECTION** B  
**SCALE:** D2

**SITE INFORMATION:**

- TOTAL SITE AREA: 3074.3 m<sup>2</sup>
- TOTAL IMPERVIOUS AREA: 1184.1 m<sup>2</sup>
- IMPERVIOUS AREA PERCENTAGE: 61.48%
- PERMISSIBLE DISCHARGE RATE (Q<sub>i</sub>): 171L/s (100YRS)

ON-SITE DETENTION CALCULATION:

1. COUNCIL REQUIREMENT:

DESIGN ARI: 100YRS  
PERMISSIBLE SITE DISCHARGE ( $Q_c$ ): 171L/s

2. TRIANGULAR HYDROGRAPH METHOD (USING DRAINS):

| STORM                                          | PEAK FLOW (m <sup>3</sup> /s) |
|------------------------------------------------|-------------------------------|
| AR&R 100yrs, 5min STORM, AVE. 253mm/h, ZONE 2  | 0.110                         |
| AR&R 100yrs, 10min STORM, AVE. 198mm/h, ZONE 2 | 0.129                         |
| AR&R 100yrs, 20min STORM, AVE. 149mm/h, ZONE 2 | 0.148                         |
| AR&R 100yrs, 30min STORM, AVE. 123mm/h, ZONE 2 | 0.143                         |
| AR&R 100yrs, 1hr STORM, AVE. 86.5mm/h, ZONE 2  | 0.141                         |
| AR&R 100yrs, 2hr STORM, AVE. 58.7mm/h, ZONE 2  | 0.139                         |

PEAK FLOW (Q<sub>0</sub>): 148L/s (AR&R 100yrs, 30MIN STORM, AVE. 123mm/h, ZONE 2)

STORM DURATION (WORST CASE): 30MIN (100YRS)

OSD VOLUME REQUIRED: 24.6m<sup>3</sup>

ALLOWABLE OFFSET BY RAINWATER TANK:  $5000L \times 0.33 = 1700L = 1.7m^3$

OSD VOLUME REQUIRED AFTER OFFSET: 22.9m<sup>3</sup>

OSD TANK PROPOSED: 24.0m<sup>3</sup>

| <b><u>ABBREVIATIONS</u></b> |                       |   |
|-----------------------------|-----------------------|---|
| AH----                      | ACCESS HATCH          | 1 |
| DDO---                      | DISH DRAIN OUTLET     |   |
| CO----                      | CLEAR OUT             |   |
| DCP----                     | DISCHARGE CONTROL PIT |   |
| DP-----                     | DOWNPIPE              |   |
| FFL----                     | FINISH FLOOR LEVEL    |   |
| FW-----                     | FLOOR WASTE           | 2 |
| GL-----                     | GROUND FLOOR LEVEL    |   |
| IL-----                     | INVERT LEVEL          |   |
| OSD----                     | ON SITE DETENTION     |   |
| PD-----                     | PLANTERS DRAIN        |   |
| PFO----                     | PLANTER FLOOR OUTLET  |   |
| PP-----                     | PLANTER PIT           |   |
| RH-----                     | RAINWATER HEAD        | 3 |
| RP-----                     | RELN PIT              |   |
| RO-----                     | ROOF OUTLET           |   |
| SDO---                      | STRIP DRAIN OUTLET    |   |
| SIP----                     | SURFACE INLET PIT     |   |
| STP----                     | SILT TRAP PIT         |   |
| SP-----                     | SPREADER              |   |
| TD-----                     | TUN DISH              | 4 |

|      |            |      |         |                     |
|------|------------|------|---------|---------------------|
|      |            |      |         |                     |
|      |            |      |         |                     |
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AT 2-4 ANZAC AVENUE, 945-947 PRINCES  
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DRAWING TITLE  
**OSD TANK DETAIL AND CALCULATION**

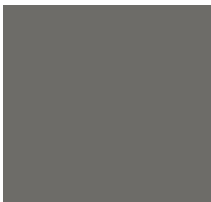
|            |          |         |           |     |
|------------|----------|---------|-----------|-----|
| NO. IN SET | JOB NO   | 1271.17 | DRG. NO   | REV |
|            |          |         | D2A       | C   |
| SCALE      | DESIGNED | DRAWN   | DATE      | NO. |
| N.T.S.     | S.W.W.   | Z.Y.    | JUNE 2017 |     |

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CIVIL AND STRUCTURAL

## Schedule of Colours and Finishes

2-4 Anzac Ave, 945-947 Princess Hwy, Engadine

- **A** Exterior walls rendered & painted with Dulux Malay Grey



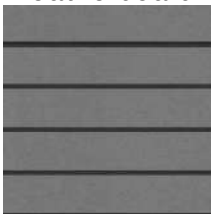
- **B** Exterior walls rendered & painted with Dulux Pale Elements



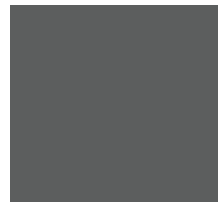
- **C** Exterior walls – Face brick Bowral Brahman Granite



- **D** Top Level Wall Cladding – Horizontal Weatherboard Cladding



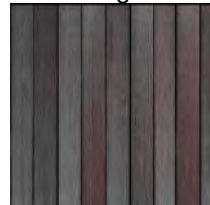
- **E** Featured Elements & Louvres - Dulux Colorbond Basalt



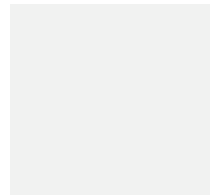
- **F** Aluminium Door, Window Frames & Louvres - Dulux Colorbond Night Sky



- **G** Front Feature & Fence – Timber-look Cladding Products



- **H** Exterior walls rendered & painted with Dulux Lexicon Quarter



\*\* All finishes can be changed to similar look