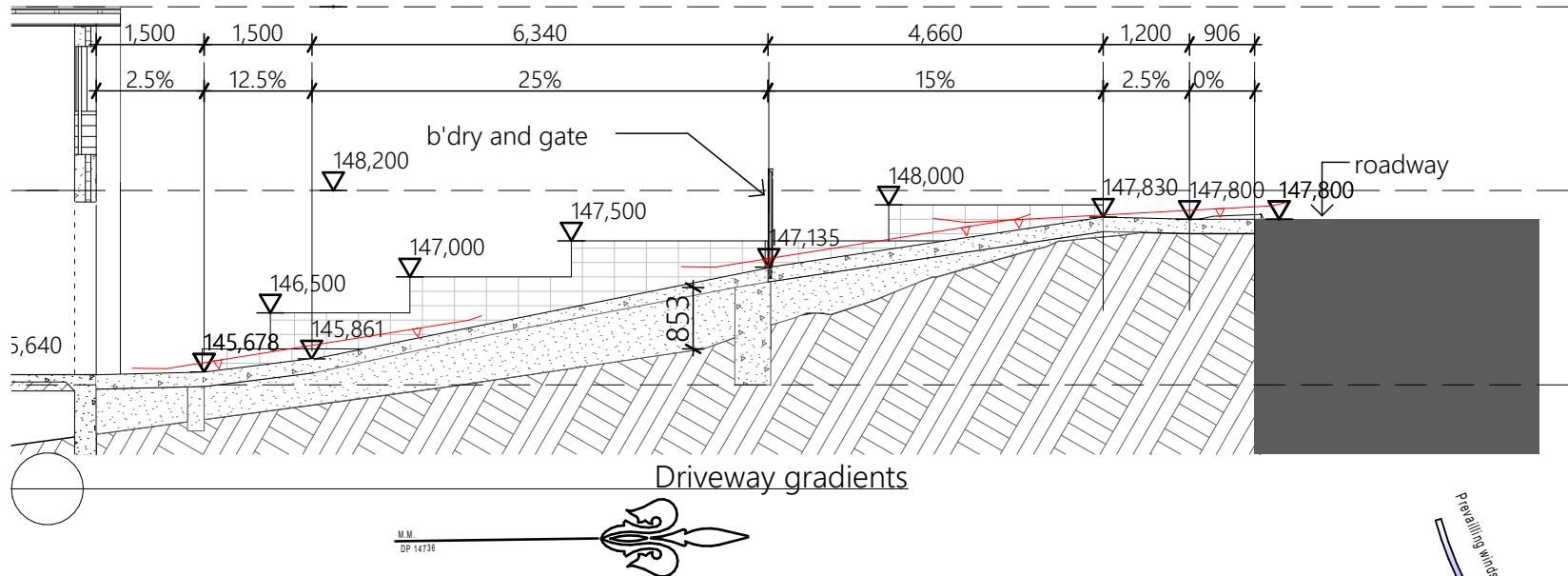
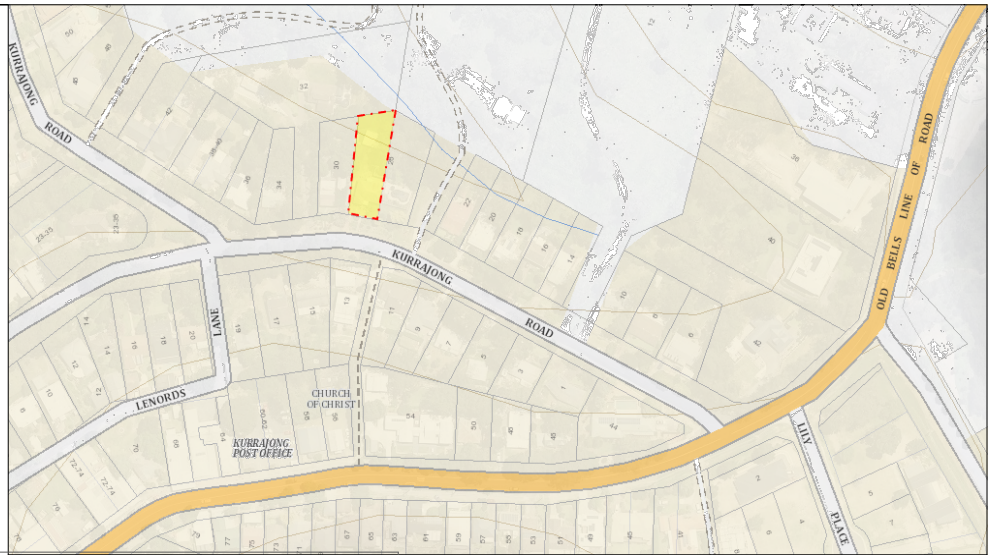


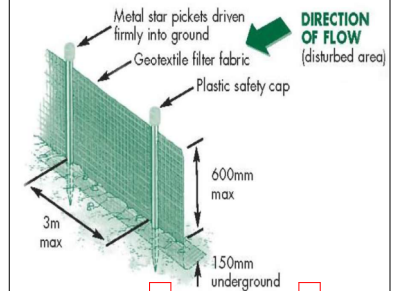
| Sheet Index |                       |
|-------------|-----------------------|
| Layout No:  | Layout Name           |
| DA01        | SITE PLAN             |
| DA02        | GROUND FLOOR PLAN     |
| DA03        | LOWER LEVEL PLAN      |
| DA04        | ELEVATIONS SHEET 1    |
| DA05        | ELEVATIONS SHEET 2    |
| DA06        | SECTIONS              |
| DA07        | SHADOWS               |
| DA08        | WINDOWS, DOOR & BASIX |
| DA09        | LANDSCAPING           |

| Layout No: | Layout Name           |
|------------|-----------------------|
| DA01       | SITE PLAN             |
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| DA06       | SECTIONS              |
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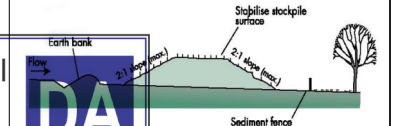


|                      |              |
|----------------------|--------------|
| <u>Areas</u>         |              |
| Site Area            | 912.8 sq m   |
| Ground floor         | 161.8        |
| <u>Lower</u>         | <u>173.2</u> |
| Total                | 335 sq m     |
| Garage               | 48.9 sq m    |
| Deck                 | 117.2 sq m   |
| Soft landscaping 55% | 505.7 sqm    |
| POS 20.5%            | 187.5 sqm    |

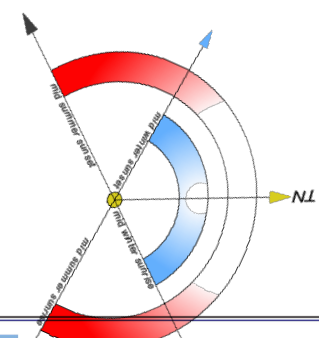
**Erosion and Sediment Control Notes:**  
Avoid stripping and excavating until ready to build.  
Minimise the reshaping of the land; any fill needs to be well compacted. Allow stormwater to flow around the building area and any disturbed areas.  
Allow room for a sediment barrier (i.e. sediment fence) to be located along the lower end of the disturbance.  
Ensure that stockpiles are stored within the sediment fence. Limit the amount of material on-site to what is required at any one time. Ensure that all material is immediately removed from the site at completion of work. Instruct site workers on the need to prevent materials from washing or blowing into the stormwater system. Ensure that all materials are immediately removed from the site when work is completed.



**Construction Notes** Construct sediment fences as close as possible to follow the contours of the site. Drive 1.5m long posts into the ground, maximum three metres apart. Staple to 40mm square hardwood posts or wire tied to steel posts. Dig a 150mm deep trench along the up-slope line of the fence for the bottom of the fabric to be entrenched. Backfill trench over base of fabric and compact on both sides.



Stockpiles and building materials are not to be stored on the footpath or within the road reserve. Where necessary, stockpile losses can be minimised with the use of covers. All stockpiles and building materials should be behind the sediment controls. Stockpiles should be protected from run-on water by placing diversion banks up-slope and with sediment control structures placed immediately down-slope. The location of all stockpiles on-site should be at least 25 metres (preferably five metres) from hazard areas, especially likely areas of concentrated or high velocity flows such as waterways, kerb inlet pits, paved areas and driveways. The height of the stockpile should be less than two metres.



Hawkesbury City Council  
**DEVELOPMENT  
CONSENT**

Development Consent No. DA0536/24

**Consent Date: 31/03/2025**

| ISSUE | DESCRIPTION                | DATE       | CHECKED |
|-------|----------------------------|------------|---------|
| A     | Concept                    | 18/11/2023 | BT      |
| B     | Development Application    | 17/09/2024 | BT      |
|       | Driveway gradients revised | 9/11/2024  | BT      |
|       |                            |            |         |
|       |                            |            |         |

CHECK ALL DIMENSIONS ON SITE. REFER ANY DISCREPANCIES  
TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.



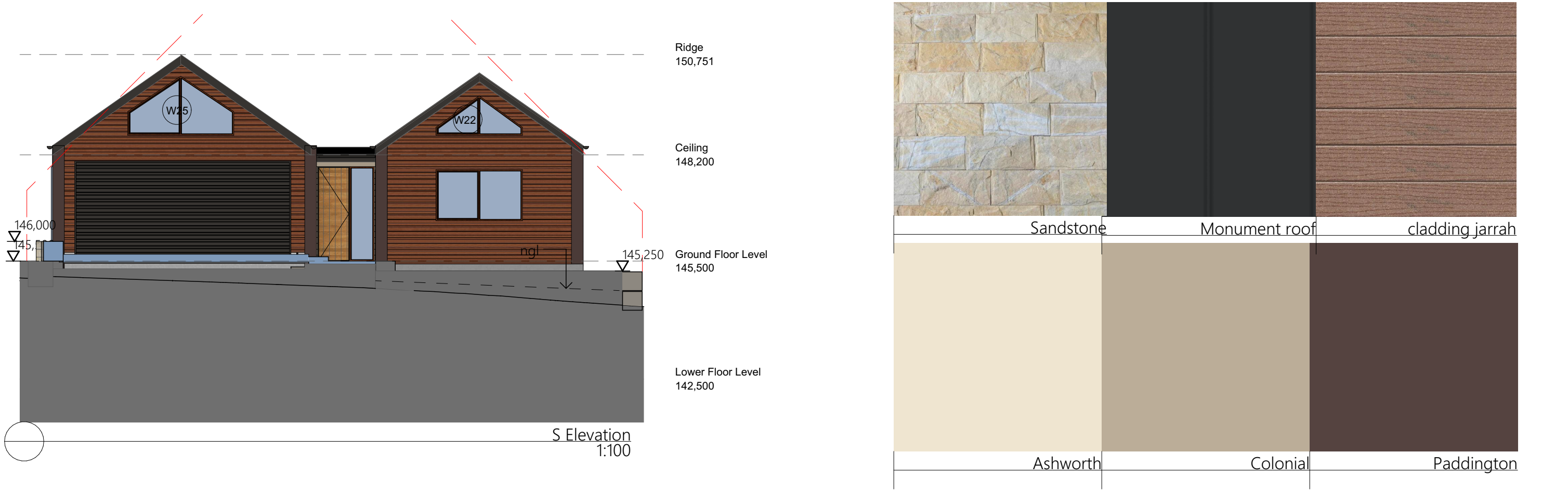
PROJECT  
28 Kurrajong Road  
Kurrajong

|                      |                  |                    |               |                    |            |
|----------------------|------------------|--------------------|---------------|--------------------|------------|
| PROJECT No<br>221122 |                  | DRAWING No<br>DA01 |               |                    | ISSUE<br>B |
| SCALE<br>As Shown    | SHEET SIZE<br>A3 | DRAWN<br>BT        | CHECKED<br>BT | DATE<br>16/11/2023 |            |

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p 02 4572 2105  
e barbara@btarchitects.com.au

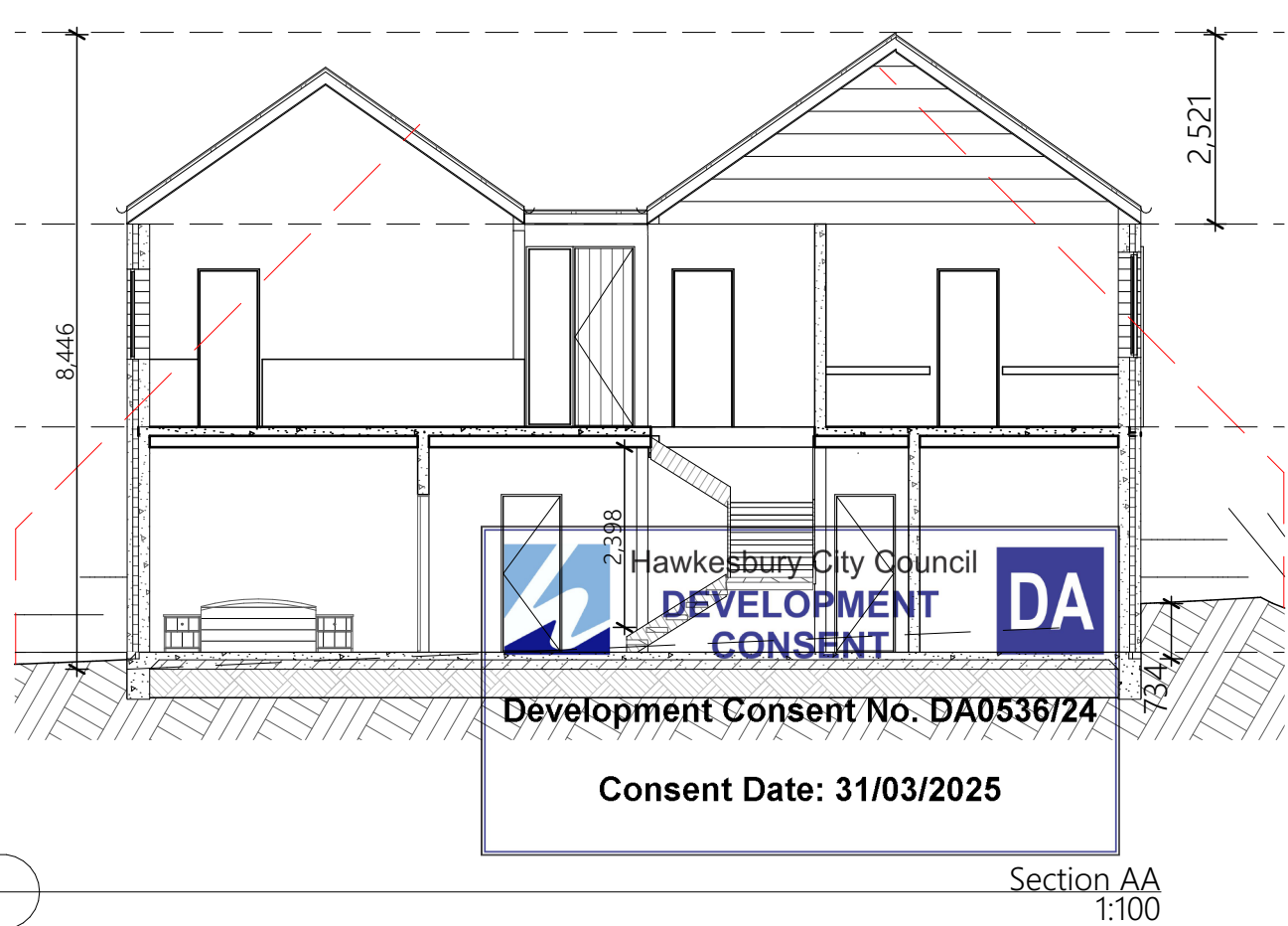
**Barbara Tarnawski** A r c h  
nominated architect Barbara Tarnawski



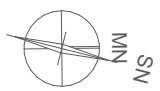


| ISSUE | DESCRIPTION                | DATE       | CHECKED | DEVELOPMENT APPLICATION   |  |  |  | DRAWING TITLE      |  |  |  | ARCHITECT   |  |  |  |
|-------|----------------------------|------------|---------|---|--|--|--|--------------------|--|--|--|---|--|--|--|
| A     | Concept                    | 18/11/2023 | BT      | CHECK ALL DIMENSIONS ON SITE. REFER ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. |  |  |  | ELEVATIONS SHEET 1 |  |  |  | PO Box 32 Kurrajong NSW 2758<br>p 02 4572 2105<br>e barbara@btarchitects.com.au<br><b>Barbara Tarnawski Architects</b><br>nominated architect Barbara Tarnawski |  |  |  |
| B     | Development Application    | 17/09/2024 | BT      |   |  |  |  |                    |  |  |  |   |  |  |  |
|       | Driveway gradients revised | 9/11/2024  | BT      |   |  |  |  |                    |  |  |  |   |  |  |  |
|       |                            |            |         |   |  |  |  |                    |  |  |  |   |  |  |  |
|       |                            |            |         |   |  |  |  |                    |  |  |  |   |  |  |  |

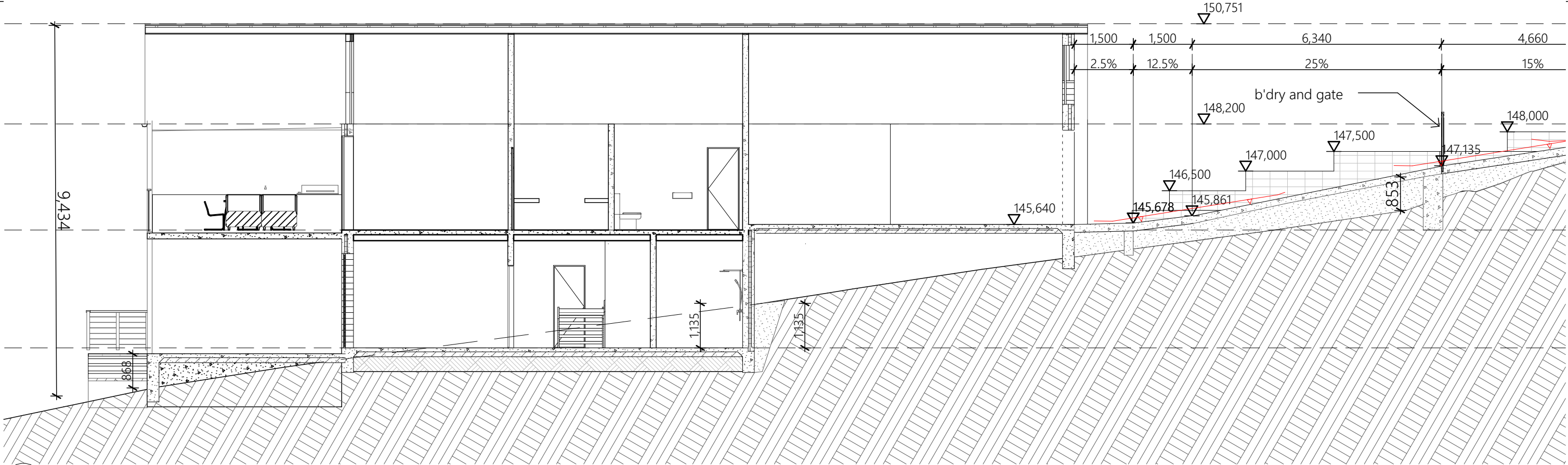




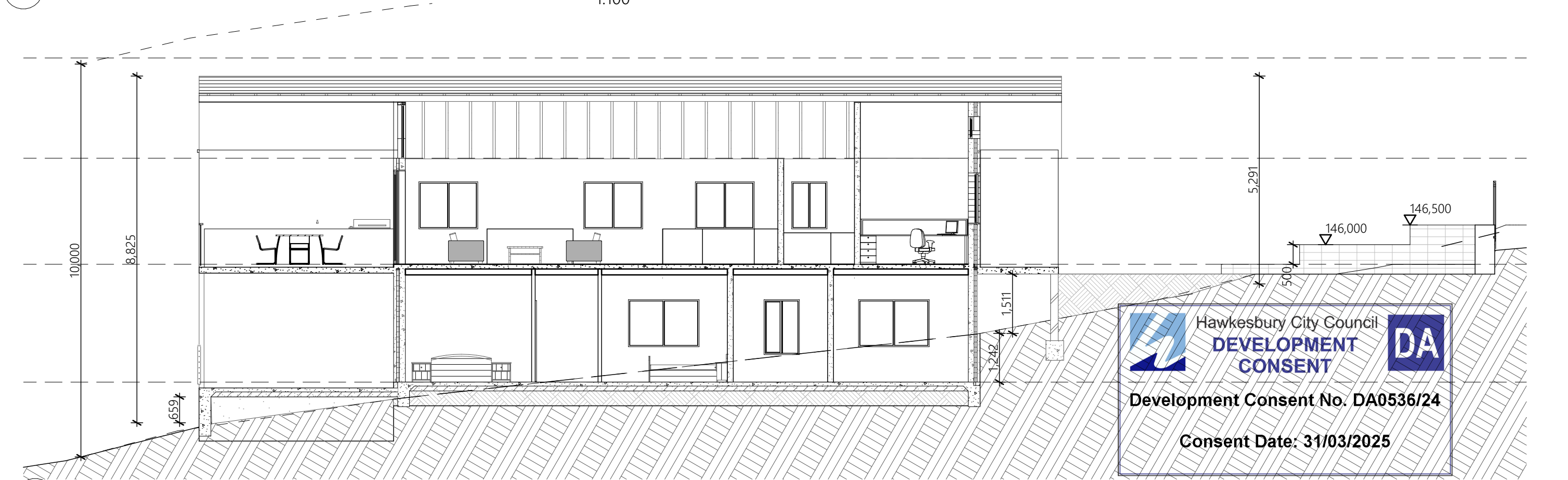
| ISSUE | DESCRIPTION                | DATE       | CHECKED |
|-------|----------------------------|------------|---------|
| A     | Concept                    | 18/11/2023 | BT      |
| B     | Development Application    | 17/09/2024 | BT      |
|       | Driveway gradients revised | 9/11/2024  | BT      |
|       |                            |            |         |
|       |                            |            |         |



| DEVELOPMENT APPLICATION   |  | CLIENT                         |  | DRAWING TITLE        |                    | ARCHITECT   |  |
|---|--|--------------------------------|--|----------------------|--------------------|---|--|
| CHECK ALL DIMENSIONS ON SITE. REFER ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK. |  | RSMB Holdings Pty Ltd          |  | ELEVATIONS SHEET 2   |                    | PO Box 32 Kurrajong NSW 2758<br>p 02 4572 2105<br>e barbara@btarchitects.com.au |  |
| PROJECT   |  | 28 Kurrajong Road<br>Kurrajong |  | PROJECT No<br>221122 | DRAWING No<br>DA05 | ISSUE<br>B  |  |
| SCALE<br>As Shown   |  | SHEET SIZE<br>A3               |  | DRAWN<br>BT          | CHECKED<br>BT      | DATE<br>16/11/2023  |  |



B Section BB  
1:100



C Section CC  
1:100

| ISSUE | DESCRIPTION                | DATE       | CHECKED |
|-------|----------------------------|------------|---------|
| A     | Concept                    | 18/11/2023 | BT      |
| B     | Development Application    | 17/09/2024 | BT      |
|       | Driveway gradients revised | 9/11/2024  | BT      |
|       |                            |            |         |
|       |                            |            |         |



DEVELOPMENT APPLICATION

CHECK ALL DIMENSIONS ON SITE. REFER ANY DISCREPANCIES TO THE ARCHITECT BEFORE PROCEEDING WITH THE WORK.

CLIENT  
RSMB Holdings Pty Ltd

PROJECT  
28 Kurrajong Road  
Kurrajong

DRAWING TITLE  
SECTIONS

|                      |                    |             |
|----------------------|--------------------|-------------|
| PROJECT No<br>221122 | DRAWING No<br>DA06 | ISSUE<br>B  |
| SCALE<br>As Shown    | SHEET SIZE<br>A3   | DRAWN<br>BT |
| CHECKED<br>BT        | DATE<br>16/11/2023 |             |

ARCHITECT

PO Box 32 Kurrajong NSW 2758  
p 02 4572 2105  
e barbara@btarchitects.com.au

Barbara Tarnawski Architects  
nominated architect Barbara Tarnawski











Black powdercoated fence and sliding front gate 1.2 m high



Sandstone walls and paving



Lavandula stoechas  
400 spacing



Buxus microphylla japonica  
400 spacing



Lagerstroemia indica  
"natchex" (H - 6m)

**PLANT SCHEDULE**

Code Latin Name (Common Name - Mature Height)

**Trees**

L Lagerstroemia indica "natchex" (H - 6m)

**Shrubs**

B Buxus microphylla japonica 400 spacing

G Gardenia magnifica

L Lavandula stoechas 400 spacing

**Turf**

Excavate / grade all areas to be turfed to 120mm below required finished levels. Do not excavate within 1500mm of the trunk of any existing tree to be retained. Ensure that all surface water runoff is directed towards the inlet pits, kerbs etc., and away from buildings. Ensure that no pooling or ponding will occur. Rip the subgrade to 150mm. Install 100mm depth of imported topsoil. Just prior to spreading the turf, spread "Shirley's No. 17" fertiliser over the topsoil at the recommended rate. Lay "Kikuyu" turf rolls closely butted. Fill any small gaps with topsoil. Water thoroughly.

**Paved areas (Refer to detail)**

**Planting areas**

Ensure that the areas planting areas have been excavated to 300 below finished levels. Rip to a further depth of 150mm. Supply and install 300mm soil mix. Topsoil shall be either imported topsoil or stockpiled site topsoil (if suitable for: No clay) Install 75mm depth of selected mulch.

**Note:**

**Maintenance:**

All landscape works are to be maintained for a period of three months from the date of practical completion. This includes all watering, weeding, spraying and re-mulching necessary to achieve vigorous growth. Any defects which arise during this period are to be rectified immediately. Any plants or areas of turf which fail during this period are to be replaced at no additional cost.

**Irrigation:**

All common areas on the landscape plan are to be covered by a fully automatic drip irrigation system. The controller is to be equal to a Richbell 646 PFC and is to be housed in a control box adjacent to the electricity meter. All pipework is to be PVC to satisfy AS 1477. All installation is to satisfy the Sydney Water Code and AS 3500. The system is to be installed by a suitable licensed contractor. All equipment and workmanship is to be guaranteed for a minimum period of 12 months.

**Fencing:**

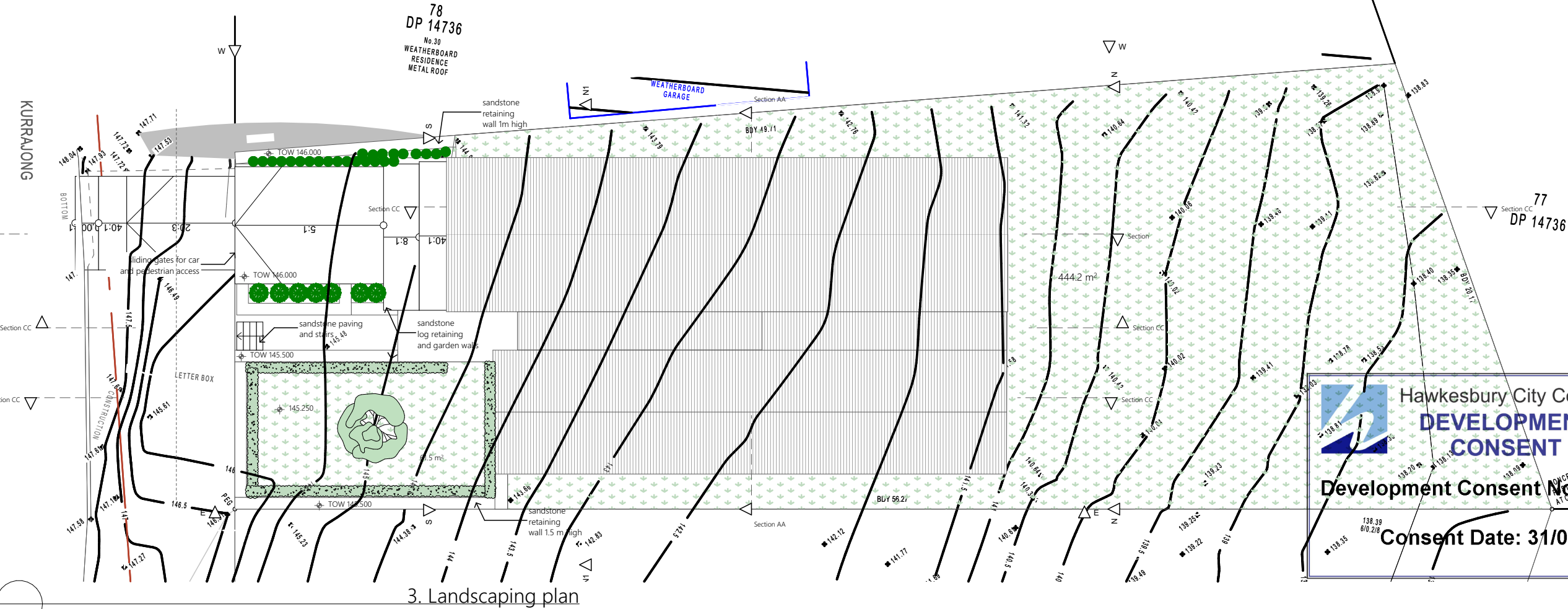
For all fencing types and materials refer to the Architects plans.

15-35 litre Tree planting Detail. Not to scale.

Planting in garden beds Detail. Not to scale.

Ground preparation Grassed area: turf using imported topsoil Detail. Not to scale.

Ground preparation Planting area using imported topsoil Detail. Not to scale.



3. Landscaping plan

Hawkesbury City Council

**DEVELOPMENT CONSENT**

Development Consent No. DA0536/24

Consent Date: 31/03/2025

| ISSUE | DESCRIPTION                | DATE       | CHECKED |
|-------|----------------------------|------------|---------|
| A     | Concept                    | 18/11/2023 | BT      |
| B     | Development Application    | 17/09/2024 | BT      |
|       | Driveway gradients revised | 9/11/2024  | BT      |
|       |                            |            |         |
|       |                            |            |         |



**DEVELOPMENT APPLICATION**

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CLIENT  
RSMB Holdings Pty Ltd

PROJECT  
28 Kurrajong Road  
Kurrajong

| DRAWING TITLE        |                    |                    |               |
|----------------------|--------------------|--------------------|---------------|
| LANDSCAPING          |                    |                    |               |
| PROJECT No<br>221122 | DRAWING No<br>DA09 | ISSUE<br>B         |               |
| SCALE<br>As Shown    | SHEET SIZE<br>A3   | DRAWN<br>BT        | CHECKED<br>BT |
|                      |                    | DATE<br>16/11/2023 |               |

ARCHITECT

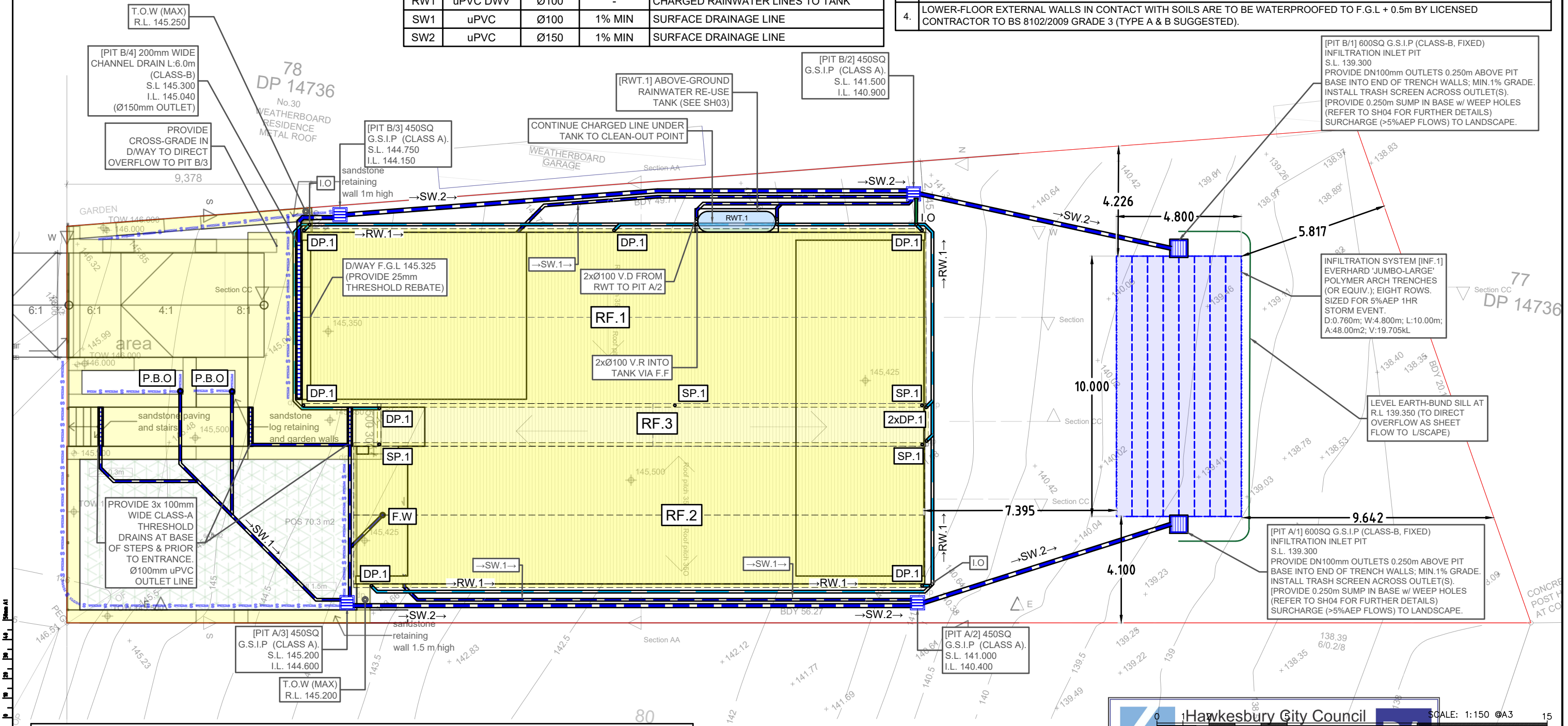
PO Box 32 Kurrajong NSW 2758  
p 02 4572 2105  
e barbara@btarchitects.com.au

**Barbara Tarnawski Architects**  
nominated architect Barbara Tarnawski



| PIPE SCHEDULE (GENERAL) |          |      |               |                                 |
|-------------------------|----------|------|---------------|---------------------------------|
| ID                      | TYPE     | SIZE | PIPE GRADIENT | NOTES                           |
|                         |          | (mm) | (%)           |                                 |
| RW1                     | uPVC DWV | Ø100 | -             | CHARGED RAINWATER LINES TO TANK |
| SW1                     | uPVC     | Ø100 | 1% MIN        | SURFACE DRAINAGE LINE           |
| SW2                     | uPVC     | Ø150 | 1% MIN        | SURFACE DRAINAGE LINE           |

| GENERAL NOTES |   |
|---------------|---|
| 1.            | REAR FALLING LOT WITH CONVERGENT OVERLAND FLOW-PATH AT NORTHERN BOUNDARY. ONSITE ABSORPTION TO 5%AEP w/ SHEET OVERFLOW TO D/SLOPE L/SCAPE.  |
| 2.            | ALL SUBSOIL LINES TO BE INSTALLED AT UPSLOPE BASE OF FOOTINGS AS MARKED. SUBSOIL DRAINAGE ASSEMBLY TO BE GEOTEXTILE WRAPPED GRAVEL BACKFILL CONSISTENT WITH AS3500.3:2018 2.13 & 6.4. |
| 3.            | ALL SUBSOIL LINES TO BE 1:200 MIN GRADE. PROVIDE CAPPED I.O RISERS AT UPSLOPE END TO FACILITATE MAINTENANCE.  |
| 4.            | LOWER-FLOOR EXTERNAL WALLS IN CONTACT WITH SOILS ARE TO BE WATERPROOFED TO F.G.L + 0.5m BY LICENSED CONTRACTOR TO BS 8102/2009 GRADE 3 (TYPE A & B SUGGESTED).                        |



| ROOF & EAVES GUTTER SCHEDULE |                    |           |       |                          |                       |  |              |              |
|------------------------------|--------------------|-----------|-------|--------------------------|-----------------------|--|--------------|--------------|
| ROOF I.D.                    | DESCRIPTION        | MATERIAL  | PITCH | DOWNSPIE / SPREADER I.D. | MIN. NO. OF DPs / SPs | MIN. GUTTER CROSS-SECTIONAL AREA (A <sub>e</sub> )(mm <sup>2</sup> ) | GUTTER GRADE | DESIGN STORM |
| RF.1                         | WEST GABLE ROOF    | COLORBOND | 35°   | DP.1                     | 6                     | 6,700mm <sup>2</sup>   | ≥1:500       | 5%AEP        |
| RF.2                         | EAST GABLE ROOF    | COLORBOND | 35°   | DP.1                     | 4                     | 7,100mm <sup>2</sup>   | ≥1:500       | 5%AEP        |
| RF.3                         | CENTRAL LOWER ROOF | COLORBOND | 5°    | DP.1                     | 3                     | 7,700mm <sup>2</sup>   | ≥1:500       | 5%AEP        |

| DOWNPIPE & SPREADER SCHEDULE |                                    |                      |              |
|------------------------------|------------------------------------|----------------------|--------------|
| I.D.                         | MINIMUM DIMENSIONS (INTERNAL) (mm) |                      | DESIGN STORM |
|                              | CIRCULAR                           | RECTANGULAR / SQUARE |              |
| DP.1                         | Ø100                               | 100x75               | 5%AEP        |

ROOF DRAINAGE LINE

SURFACE DRAINAGE LINE

PROPERTY BOUNDARY

INSEPCION OPENING

SURFACE FLOW DIRECTION

GRATED SURFACE INLET PIT (G.S.I.P)

VERTICAL RISER / VERTICAL DROPPER

DOWNSPIE / SPREADER TYPE 1

|  |            |      |      |      |                   |
|--|------------|------|------|------|-------------------|
| ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE. |            |      |      |      |                   |
|  |            |      |      |      |                   |
|  |            |      |      |      |                   |
|  |            |      |      |      |                   |
| B-01   | 12/08/2024 | LS   | LS   | RS   | ISSUE FOR RELEASE |
| REV  | DATE       | DES. | DRN. | APP. | REVISION DETAILS  |

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ENVIRONMENTAL FLOOD STORMWATER GEOTECHNICAL ACOUSTICS WASTEWATER

BROADCAST CONSULTING PTY LTD | ACN 622 548 197

|                     |                                 |        |                                       |
|---------------------|---------------------------------|--------|---------------------------------------|
| PROJECT DESCRIPTION | PROPOSED SINGLE RESIDENCE       | SHEET  | ROOF & GROUND FLOOR DRAINAGE PLAN     |
| PROJECT SITE        | 28 KURRAJONG ROAD KURRAJONG NSW | PLAN   | STORMWATER CONCEPT PLAN               |
| LGA                 | HAWKESBURY COUNCIL              | CLIENT | RSMB HOLDINGS C/O: B. TARNAWSKI ARCH. |

PROJECT NO.

3825-SW

SCALE

1:150 @ A3

- @ A1

SHEET NO.

2 of 4

Hawkesbury City Council

DEVELOPMENT CONSENT

DA

Development Consent No. DA0526/24

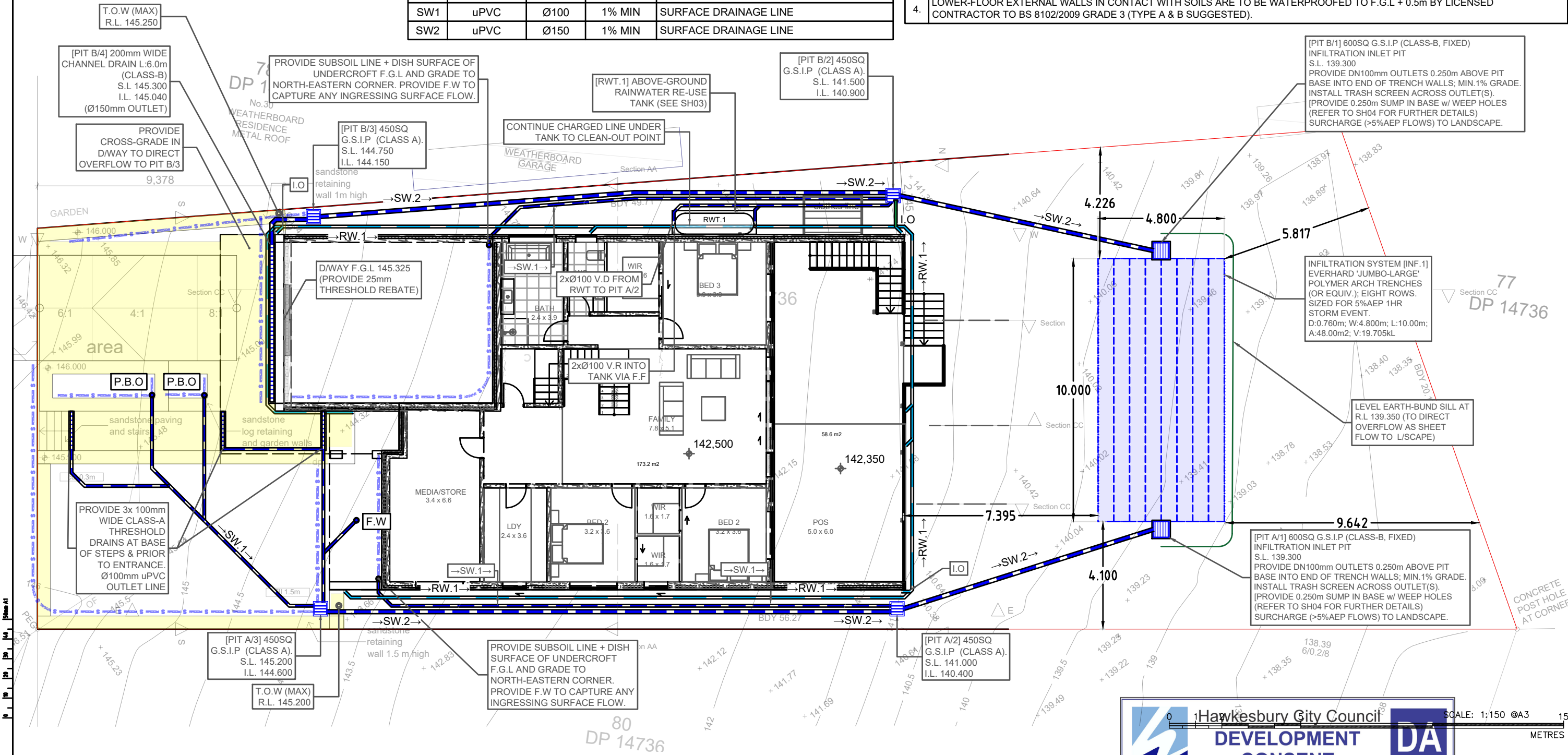
Consent Date: 31/03/2025

SCALE: 1:150 @ A3

15 METRES

| PIPE SCHEDULE (GENERAL) |          |      |               |                                 |
|-------------------------|----------|------|---------------|---------------------------------|
| ID                      | TYPE     | SIZE | PIPE GRADIENT | NOTES                           |
|                         |          | (mm) | (%)           |                                 |
| RW1                     | uPVC DWV | Ø100 | -             | CHARGED RAINWATER LINES TO TANK |
| SW1                     | uPVC     | Ø100 | 1% MIN        | SURFACE DRAINAGE LINE           |
| SW2                     | uPVC     | Ø150 | 1% MIN        | SURFACE DRAINAGE LINE           |

| GENERAL NOTES |   |
|---------------|---|
| 1.            | REAR FALLING LOT WITH CONVERGENT OVERLAND FLOW-PATH AT NORTHERN BOUNDARY. ONSITE ABSORPTION TO 5%AEP w/ SHEET OVERFLOW TO D/SLOPE L/SCAPE.  |
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| 3.            | ALL SUBSOIL LINES TO BE 1:200 MIN GRADE. PROVIDE CAPPED I.O RISERS AT UPSLOPE END TO FACILITATE MAINTENANCE.  |
| 4.            | LOWER-FLOOR EXTERNAL WALLS IN CONTACT WITH SOILS ARE TO BE WATERPROOFED TO F.G.L + 0.5m BY LICENSED CONTRACTOR TO BS 8102/2009 GRADE 3 (TYPE A & B SUGGESTED).                        |





Hawkesbury City Council

DEVELOPMENT

CONSENT

DA

SCALE: 1:150 @A3

METRES

Development Consent No. DA0526/24

Consent Date: 31/03/2025

KEY

Roof Drainage Line

Surface Drainage Line

Property Boundary

Inspection Opening

Surface Flow Direction

Grated Surface Inlet Pit (G.S.I.P)

Vertical Riser / Vertical Dropper

Downpipe / Spreader Type 1

| ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE. |            |      |      |      |                   |
|--|------------|------|------|------|-------------------|
|  |            |      |      |      |                   |
|  |            |      |      |      |                   |
|  |            |      |      |      |                   |
|  |            |      |      |      |                   |
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|                     |                                 |        |                                       |
|---------------------|---------------------------------|--------|---------------------------------------|
| PROJECT DESCRIPTION | PROPOSED SINGLE RESIDENCE       | SHEET  | LOWER-GROUND DRAINAGE PLAN            |
| PROJECT SITE        | 28 KURRAJONG ROAD KURRAJONG NSW | PLAN   | STORMWATER CONCEPT PLAN               |
| LGA                 | HAWKESBURY COUNCIL              | CLIENT | RSMB HOLDINGS C/O: B. TARNAWSKI ARCH. |

PROJECT ID: 3825-SW

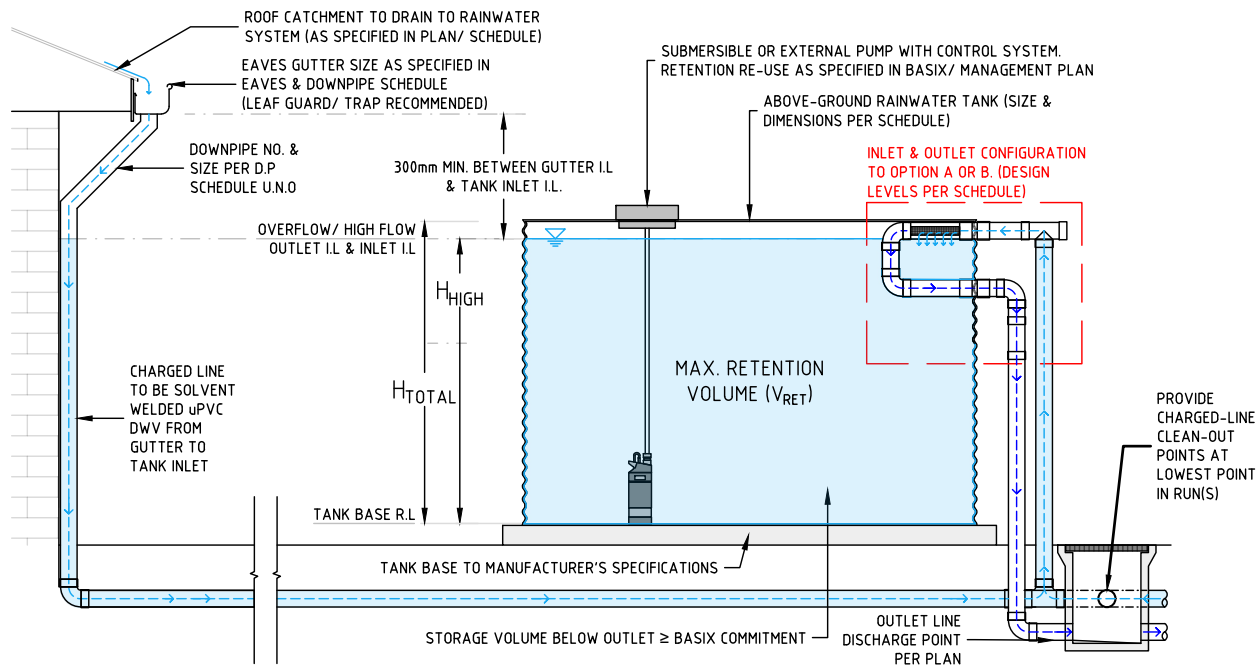
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- @ A1

SHEET NO. 3 of 4





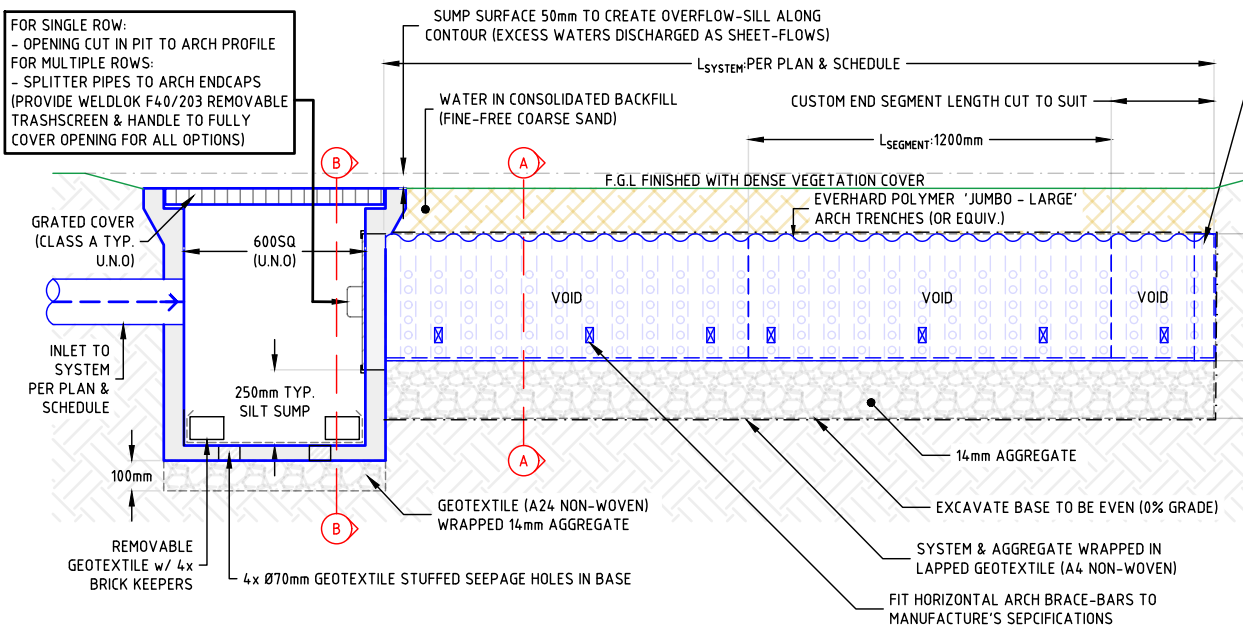


TYPICAL DETAIL - CHARGED LINE TO ABOVE GROUND RAINWATER TANK (RWT)

SCALE: N.T.S.

NOTES FOR CHARGED SYSTEM:

1. PLAN, DETAILS, & DIAGRAM ARE TO BE READ IN CONJUNCTION WITH MANUFACTURER SPECIFICATIONS FOR ALL PRODUCTS.
2. INLET/OUTLET CONFIGURATION CAN BE PROVIDED AT EITHER OR BOTH SIDES OF THE TANK(S).
3. AN OUTLET MUST BE PROVIDED WITH EACH INLET PIPE U.N.O.



POLYMER-ARCH TRENCH ABSORPTION SYSTEM - TYPICAL LONGITUDINAL SECTION

SCALE: 1:25 @ A3

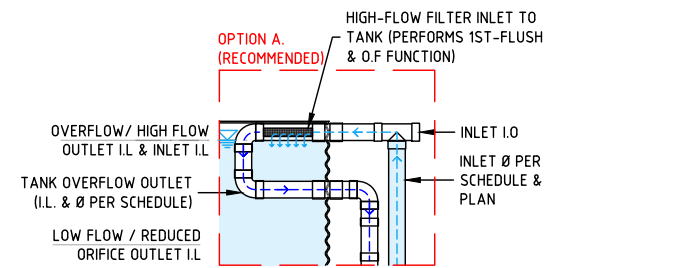
NOTES FOR ABSORPTION SYSTEM:

1. SYSTEM DETAILED IN STANDARD DRAWING IS FOR REPRESENTATIONAL PURPOSES. REFER TO SCHEDULE AND PLAN FOR SITE SPECIFIC SYSTEM DIMENSIONS.
2. SYSTEM TO BE ORIENTATED LEVEL WITH CONTOUR, PERPENDICULAR TO LAND FALL.
3. DETAIL AND SCHEDULE TO BE READ IN CONJUNCTION WITH PRODUCT MANUFACTURE'S SPECIFICATIONS FOR ALL PRODUCTS.

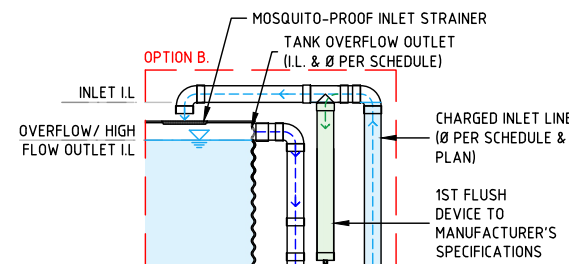
ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

| REV  | DATE       | DES. | DRN. | APP. | REVISION DETAILS  |
|------|------------|------|------|------|-------------------|
| B-01 | 12/08/2024 | LS   | LS   | RS   | ISSUE FOR RELEASE |

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A HIGH FLOW TANK INLET WITH FILTER & INBUILT HIGH FLOW BYPASS



B CONVENTIONAL TANK INLET & OUTLET WITH EXTERNAL 1ST-FLUSH

| RAINWATER TANK SCHEDULE                          |  |
|--|--|
| SYSTEM ID  | R.W.T/1  |
| TYPE   | KINGSPAN SLIMLINE ABOVE-GROUND TANK (OR EQUIV.)  |
| TANK VOLUME (kL)                                 | 3.07   |
| TANK DIMENSIONS (m)                              | H: 1.56m, W:0.85m, L:2.5m  |
| TANK BASE R.L. (m, AHD)                          | 142.350  |
| HIGH FLOW OUTLET HEIGHT 'H <sub>HIGH</sub> ' (m) | 1.450  |
| I.L. (m, AHD)                                    | 143.800  |
| HIGH FLOW OUTLET DIAMETER (mm)                   | 2xØ100mm   |
| RETENTION VOLUME BELOW OUTLET (kL)               | 2.854  |
| OSD AIR VOID VOLUME (kL)                         | NIL  |
| COMMENTS   | CHARGED INLET LINES FROM TOTAL ROOF CATCHMENT TO RWT/1 VIA 2xØ100mm RISERS + FIRST-FLUSH. 2xØ100mm OUTLET LINES TO PIT B/2. RE-USE PER BASIX CERT. |

DESIGN STORM INFILTRATION SYSTEM SIZING TO 5% AEP 1HR CATCHMENT CONTAINMENT

Absorption Trench Sizing [Design Storm Method]

| Desktop Variables |                        |                                      |                                      |                              |            |  |                            | Measured Infiltration Values                            |   |
|-------------------|------------------------|--------------------------------------|--------------------------------------|------------------------------|------------|--|----------------------------|---|---|
| Design AEP/EY     | 1:10yr ARI, Thr [m/hr] | Runoff Coefficient [C <sub>r</sub> ] | Area to Trench [A] [m <sup>2</sup> ] | Percentage Impervious [%IMP] | Soil Type  | Assumed Saturated Hydraulic Conductivity [L/m <sup>2</sup> /s] | Soil Moderation Factor [U] | Field Hydraulic [k <sub>f</sub> ] [L/m <sup>2</sup> /s] | Areal Hydraulic [k <sub>a</sub> ] [L/m <sup>2</sup> /s] |
| 5% AEP            | 42.8                   | 0.945                                | 406.5                                | 100                          | Light Clay | 0.03   | 108                        | 3.41E-03  |   |

| JUMBO 410 Trench            |                              |                             | Gravel Bedding                |                                 |                         |
|-----------------------------|------------------------------|-----------------------------|-------------------------------|---------------------------------|-------------------------|
| Arch Dimensions             | Trench                       | Storage Void                | Base Bed Thickness            | Top Cover Thickness             | Bed Void Ratio          |
| Width [W <sub>t</sub> ] [m] | Height [H <sub>t</sub> ] [m] | Width [W <sub>v</sub> ] [m] | Void [V <sub>v</sub> ] [L/ml] | Thickness [D <sub>t</sub> ] [m] | Ratio [e <sub>g</sub> ] |
| 0.54                        | 0.41                         | 0.6                         | 171.053                       | 0.2                             | 0.15                    |

| Arch Trench - Total Infiltration System |                  |                |               |                |   |                             |                          |                                     |                                    |                               |
|---|------------------|----------------|---------------|----------------|---|-----------------------------|--------------------------|-------------------------------------|------------------------------------|-------------------------------|
| No. of Systems [N]                      | No. Tunnels Wide | Length [L] [m] | Width [W] [m] | Height [H] [m] | Absorption Area [A <sub>abs</sub> ] [m <sup>2</sup> ] | Effective Perimeter [P] [m] | Effective Volume [V] [L] | System Void Ratio [e <sub>v</sub> ] | Emptying time of system [T] [days] | Required emptying time [days] |
| 1                                       | 8                | 10             | 4.8           | 0.76           | 48  | 23.6                        | 19,705                   | 0.540                               | 0.26                               | 2.5                           |

| Arch Trench - System performance under Design Storm events |                            |                                |                                     |  |                                       |                             |                       |                     |            |            |
|--|----------------------------|--------------------------------|-------------------------------------|--|---------------------------------------|-----------------------------|-----------------------|---------------------|------------|------------|
| Storm Duration [D]   | Rainfall Intensity [mm/hr] | Inflow [Q <sub>i</sub> ] [L/s] | Inflow Volume [V <sub>i</sub> ] [L] | Outflow Absorption [Q <sub>o</sub> ] [L/s] | Infiltration [Q <sub>in</sub> ] [L/s] | Inflow - Infiltration [L/s] | Available Storage [L] | Volume Detained [L] | Volume [L] | Rate [L/s] |
| 5 min  | 5                          | 178                            | 18.39                               | 5.698                                      | 81                                    | 0.263                       | 5.618                 | 19,705              | 5,618      | -          |
| 10 min   | 10                         | 147                            | 11.20                               | 13.445                                     | 245                                   | 0.204                       | 9,276                 | 19,705              | 9,276      | -          |
| 20 min   | 20                         | 105                            | 8.7                                 | 15.65                                      | 155                                   | 0.187                       | 15,233                | 19,705              | 15,233     | -          |
| 30 min   | 30                         | 81.5                           | 5.92                                | 15.65                                      | 155                                   | 0.187                       | 15,233                | 19,705              | 15,233     | -          |
| 1 hour   | 60                         | 49.9                           | 5.92                                | 15.65                                      | 155                                   | 0.187                       | 15,233                | 19,705              | 15,233     | -          |
| 2 hour   | 30                         | 3.23                           | 23,233                              | 3.23                                       | 0.186                                 | 21,333                      | 19,705                | 19,705              | 2,232      | 3.05       |
| 3 hour   | 20                         | 2.45                           | 28,590                              | 2.45                                       | 0.185                                 | 24,866                      | 19,705                | 19,705              | 4,800      | 2.27       |
| 6 hour   | 15.2                       | 1.62                           | 35,034                              | 3.975                                      | 0.184                                 | 31,058                      | 19,705                | 19,705              | 11,353     | 1.44       |
| 12 hour  | 10.7                       | 1.14                           | 49,324                              | 7.925                                      | 0.183                                 | 41,399                      | 19,705                | 19,705              | 21,694     | 0.96       |
| 24 hour  | 7.20                       | 0.58                           | 67,946                              | 11,624                                     | 0.183                                 | 56,322                      | 19,705                | 19,705              | 36,013     | 0.64       |
| 48 hour  | 4.32                       | 0.44                           | 114,782                             | 47,422                                     | 0.183                                 | 67,359                      | 19,705                | 19,705              | 48,241     | 0.39       |
| 72 hour  | 4.32                       | 0.44                           | 114,782                             | 47,422                                     | 0.183                                 | 67,359                      | 19,705                | 19,705              | 47,654     | 0.26       |

Consent Date: 31/03/2025

|                     |                                       |
|---------------------|---------------------------------------|
| PROJECT DESCRIPTION | PROPOSED SINGLE RESIDENCE             |
| PROJECT SITE        | 28 KURRAJONG ROAD KURRAJONG NSW       |
| LGA                 | HAWKESBURY COUNCIL                    |
| SHEET               | RAINWATER TANK & INFILTRATION DETAIL  |
| PLAN                | STORMWATER CONCEPT PLAN               |
| CLIENT              | RSMB HOLDINGS C/O: B. TARNAWSKI ARCH. |

|            |          |
|------------|----------|
| PROJECT ID | 3825-SW  |
| SCALE      | NTS @ A3 |
|            | N/A @ A1 |
| SHEET NO.  | 4 of 4   |

