

# PROPOSED DEVELOPMENT

## 253 WANGEE ROAD, GREENACRE

### STORMWATER PLANS

#### GENERAL NOTES

- G1. THE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL DRAWINGS AND SPECIFICATIONS AND OTHER WRITTEN INSTRUCTIONS THAT MAY BE ISSUED.
- G2. DIMENSIONS SHALL NOT BE OBTAINED BY SCALING FROM THE DRAWINGS. REFER ARCHITECTS DRAWINGS FOR ALL DIMENSIONS.
- G3. REFER ANY DISCREPANCY TO THE ENGINEER/ARCHITECT.
- G4. MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE APPROPRIATE SAA SPECIFICATIONS OR CODE AND WITH THE REQUIREMENTS OF THE RELEVANT LOCAL AUTHORITY.
- G5. THE ALIGNMENT AND LEVEL OF ALL SERVICES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL CONFIRM THE POSITION AND LEVEL OF ALL SERVICES PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DAMAGE TO SERVICES SHALL BE RECTIFIED AT THE CONTRACTORS EXPENSE.
- G6. NO WORKS ARE TO COMMENCE UNTIL THE REQUIRED TREE REMOVAL PERMITS HAVE BEEN GRANTED BY RELEVANT LOCAL AUTHORITY, AND THE APPROPRIATE NOTICE OF INTENTION TO COMMENCE GIVEN.
- G7. ALL SERVICES, OR CONDUITS FOR SERVICING SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF PAVEMENT CONSTRUCTION.
- G8. SUBSOIL DRAINAGE, COMPRISING 100 AGRICULTURE PIPE IN GEO-STOCKING TO BE PLACED AS SHOWN AND AS MAY BE DIRECTED BY THE SUPERINTENDENT. SUBSOIL DRAINAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.
- G9. NO WORK IS PERMITTED WITHIN ADJOINING PROPERTIES WITHOUT WRITTEN PERMISSION FROM THE OWNERS OR RESPONSIBLE AUTHORITY.

#### DRAINAGE NOTES

- D1. ALL DRAINAGE OUTLET LEVELS SHALL BE CONFIRMED ON SITE, PRIOR TO CONSTRUCTION COMMENCING.
- D2. ALL PIPES WITHIN THE PROPERTY TO BE MIN. 100 DIA UPVC @ 1% MIN. GRADE, UNO.
- D3. ALL PITS WITHIN THE PROPERTY ARE TO BE FITTED WITH "WELDLOK" OR APPROVED EQUIVALENT GRATES:  
- LIGHT DUTY FOR LANDSCAPED AREAS  
- HEAVY DUTY WHERE SUBJECT TO VEHICULAR TRAFFIC
- D4. PITS WITHIN THE PROPERTY MAY BE CONSTRUCTED AS:  
1) PRECAST STORMWATER PITS  
2) CAST INSITU MASS CONCRETE  
3) CEMENT RENDERED 230mm BRICKWORK  
SUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.
- D5. ENSURE ALL GRATES TO PITS ARE SET BELOW FINISHED SURFACE LEVEL WITHIN THE PROPERTY. TOP OF PIT RL'S ARE APPROXIMATE ONLY AND MAY BE VARIED SUBJECT TO APPROVAL OF THE ENGINEER. ALL INVERT LEVELS ARE TO BE ACHIEVED.
- D6. ANY PIPES BENEATH RELEVANT LOCAL AUTHORITY ROAD TO BE RUBBER RING JOINTED RCP, UNO.
- D7. ALL PITS IN ROADWAYS ARE TO BE FITTED WITH HEAVY DUTY GRATES WITH LOCKING BOLTS AND CONTINUOUS HINGE.
- D8. PROVIDE STEP IRONS TO STORMWATER PITS GREATER THAN 1200 IN DEPTH.
- D9. TRENCH BACK FILL IN ROADWAYS SHALL COMPRISE SHARP, CLEAN GRANULAR BACK FILL IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION TO NON-TRAFFICABLE AREAS TO BE COMPACTED BY RODDING AND TAMPING USING A FLAT PLATE VIBRATOR.
- D10. WHERE A HIGH EARLY DISCHARGE (HED) PIT IS PROVIDED ALL PIPES ARE TO BE CONNECTED TO THE HED PIT, UNO.
- D11. DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100X100 COLORBOND/ZINCALUME STEEL, UNO.
- D12. COLORBOND OR ZINCALUME STEEL BOX GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.
- D13. EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL, UNO.
- D14. SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM, UNO.

#### EARTHWORKS NOTES

- E1. THE EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT.
- E2. THE SITE OF THE WORKS SHALL BE PREPARED BY STRIPPING ALL EXISTING TOPSOIL, FILL AND VEGETATION.
- E3. SUBGRADE SHALL BE COMPACTED UNTIL A DRY DENSITY HAS BEEN ACHIEVED OF NOT LESS THAN 100% OF THE STANDARD MAXIMUM DRY DENSITY WHEN TESTED IN ACCORDANCE WITH AS 1289 TESTS E.1.1. OR E.1.2.
- E4. THE EXPOSED SUBGRADE SHOULD BE PROOF ROLLED TO DETECT ANY SOFT OR WET AREAS WHICH SHOULD BE LOCALLY EXCAVATED AND BACK FILLED WITH SELECTED MATERIAL.
- E5. THE BACK FILLING MATERIAL SHALL BE IMPORTED GRANULAR FILL OF LOW PLASTICITY, PREFERABLY CRUSHED SANDSTONE, AND TO BE PLACED IN LAYERS NOT EXCEEDING 150 LOOSE THICKNESS AND COMPACTED TO 98% OF STANDARD DRY DENSITY AT A MOISTURE CONTENT WITHIN 2% OF OPTIMUM.
- E6. SITE WORKS ARE TO BE BATTERED TO ADJACENT PROPERTY LEVELS.
- E7. STORMWATER MUST NOT BE CONCENTRATED ON TO AN ADJACENT PROPERTY.
- E8. AT NO TIME DURING OR AFTER CONSTRUCTION IS STORMWATER TO BE PONDED ON ADJOINING PROPERTIES.
- E9. THE SITE SHALL BE GRADED AND DRAINED SO THAT STORMWATER WILL BE DIRECTED AWAY FROM THE BUILDING PLATFORM.
- E10. STORMWATER DRAINAGE SHALL BE PROVIDED AND MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION. ALL STORMWATER RUNOFF SHALL BE GRADED AWAY FROM THE SITE WORKS AND DISPOSED OF VIA SURFACE CATCHDRAINS AND STORMWATER COLLECTION PITS.
- E11. ALL SURFACE CATCH DRAINS SHALL BE GRADED AT 1% (1 IN 100) MINIMUM. THE GROUND SHALL GRADE AWAY FROM ANY DWELLING AT 5% (1 IN 20) FOR THE FIRST METRE THEN AT 2.5% (1 IN 40).
- E12. WHERE A CUT FILL PLATFORM IS USED THERE SHALL BE A MINIMUM BERM 1000 WIDE TO THE PERIMETER OF THE SITE WORKS WHICH SHALL BE SUPPORTED BY BATTERS OF 3:1 IN FILL.
- E13. ANY VERTICAL OR NEAR VERTICAL PERMANENT EXCAVATION (CUT) DEEPER THAN 600 IN MATERIAL OTHER THAN ROCK SHALL BE ADEQUATELY RETAINED OR BATTERED AT A MINIMUM OF 3:1.
- E14. WHERE BATTERS CANNOT BE PROVIDED TO SUPPORT THE CUT OR FILL, THEY SHALL BE ADEQUATELY RETAINED.
- E15. RETAINING WALLS ARE TO BE CONSTRUCTED WITH ADEQUATE SUBSOIL DRAINAGE.

#### CONCRETE PAVEMENT

- C1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- C2. PROVIDE JOINTING AT MINIMUM 6000 MAX. INTERVALS OR AS OTHERWISE SPECIFIED IN THE DRAWINGS.
- C3. CONCRETE SHALL COMPRISE A MIN. COMPRESSIVE STRENGTH OF 32MPa AT 28 DAYS IN ACCORDANCE WITH THE RELEVANT LOCAL AUTHORITY SPECIFICATION, UNO.
- C4. ANY SUB-BASE MATERIAL SHALL BE COMPACTED AS OUTLINED IN EARTHWORKS.
- C5. CONCRETE KERB AND GUTTER SHALL COMPRISE A MINIMUM COMPRESSIVE STRENGTH OF 25MPa, UNO.
- C6. CONCRETE WORKS ARE TO BE CURED BY ONE OF THE FOLLOWING MEANS:  
i) WETTING TWICE DAILY FOR THE FIRST THREE DAYS;  
ii) USING AN APPROVED CURING COMPOUNDED FOR A MINIMUM OF 7 DAYS COMMENCING IMMEDIATELY AFTER POURING.

#### FLEXIBLE PAVEMENT NOTES

- F1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- F2. PAVEMENT MATERIAL SHALL CONSIST OF APPROVED OR RIPPED SANDSTONE, NATURAL GRAVEL OR FINE CRUSH ROCK AS PER THE RELEVANT COUNCIL AUTHORITY SPECIFICATION.
- F3. PAVEMENT MATERIALS SHALL BE SPREAD IN LAYERS NOT EXCEEDING 150 AND NOT LESS 75 COMPACTED THICKNESS.
- F4. PAVEMENT MATERIALS SHALL BE SIZED AND OF A STANDARD OUTLINED IN AS1141.
- F5. CRUSHED OR RIPPED SANDSTONE SHALL BE MINUS 75 NOMINAL SIZE DERIVED FROM SOUND, CLEAN SANDSTONE FREE FROM OVERBURDEN, CLAY SEAMS, SHALE AND OTHER DELETERIOUS MATERIAL.
- F6. PAVEMENT MATERIALS SHALL BE COMPACTED BY SUITABLE MEANS TO SATISFY THE FOLLOWING MINIMUM SPECIFICATIONS (AS PER AS1289.2)

| DESCRIPTION        | MEDIUM DENSITY RATIO |
|--------------------|----------------------|
| SUB-BASE           | 98% MOD              |
| BASE COURSE        | 98% MOD              |
| ASPHALTIC CONCRETE | 97% MOD              |

AND SUBJECT TO THE RELEVANT LOCAL AUTHORITY CONSTRUCTION SPECIFICATION.

- F7. TESTING FOR EACH LAYER SHALL BE UNDERTAKEN BY A N.A.T.A. REGISTERED LABORATORY IN ACCORDANCE WITH AS1289, AT NOT MORE THAN 50m INTERVALS AND A MINIMUM OF TWO PER LAYER. FURTHER FREQUENCY OF TESTING SHALL BE NO LESS THAN THAT REQUIRED BY AS3978.

#### PAVED AREAS NOTES

- A1. SUBGRADE SHALL BE PREPARED AS OUTLINED IN EARTHWORKS.
- A2. ALL PAVERS ARE TO BE PLACED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATION.
- A3. TRAFFICABLE AREAS:  
SUB-BASE TO BE 150 COMPACTED THICKNESS DGS75.  
SUB-BASE TO BE SUITABLY COMPACTED TO MEDIUM DENSITY 98% MOD.  
SUB-BASE TO EXTEND AT LEAST 200 BEYOND PAVED SURFACE.  
PAVERS TO BE 80 THICK INTERLOCKING PAVERS ON 50 SAND BEDDING.
- A4. NON TRAFFICABLE AREAS:  
SUB BASE AS PER TRAFFICABLE AREAS  
PAVERS TO BE 80 INTERLOCKING PAVERS ON 50 SAND BEDDING (UNO).

#### EROSION AND SEDIMENT NOTES

- B1. THIS PLAN TO BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL DETAILS AS ATTACHED.
- B2. THE CONTRACTOR SHALL IMPLEMENT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS NECESSARY AND TO THE SATISFACTION OF THE RELEVANT LOCAL AUTHORITY PRIOR TO THE COMMENCEMENT OF AND DURING CONSTRUCTION. NO DISTURBANCE TO THE SITE SHALL BE PERMITTED OTHER THAN IN THE IMMEDIATE AREA OF THE WORKS AND NO MATERIAL SHALL BE REMOVED FROM THE SITE WITHOUT THE RELEVANT LOCAL AUTHORITY APPROVAL. ALL EROSION AND SEDIMENT CONTROL DEVICES TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH STANDARDS OUTLINED IN NSW DEPARTMENT OF HOUSING'S "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTIONS".
- B3. TOPSOIL SHALL BE STRIPPED AND STOCKPILED OUTSIDE HAZARD AREAS SUCH AS DRAINAGE LINES. THIS TOPSOIL SHALL BE RESPREAD LATER ON AREAS TO BE REVEGETATED AND STABILISED ONLY, (I.E. ALL FOOTPATHS, BATTERS, SITE REGARDING AREAS, BASINS AND CATCHDRAINS). TOPSOIL SHALL NOT BE RESPREAD ON ANY OTHER AREAS UNLESS SPECIFICALLY INSTRUCTED BY THE SUPERINTENDENT. IF THEY ARE TO REMAIN FOR LONGER THAN ONE MONTH STOCKPILES SHALL BE PROTECTED FROM EROSION BY COVERING THEM WITH A MULCH AND HYDROSEEDING AND, IF NECESSARY, BY LOCATING BANKS OR DRAINS DOWNSTREAM OF A STOCKPILE TO RETARD SILT LADEN RUNOFF.
- B4. THE CONTRACTOR SHALL REGULARLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL DEVICES AND REMOVE ACCUMULATED SILT FROM SUCH DEVICES SUCH THAT MORE THAN 60% OF THEIR CAPACITY IS LOST. ALL THE SILT IS TO BE PLACED OUTSIDE THE LIMIT OF WORKS. THE PERIOD FOR MAINTAINING THESE DEVICES SHALL BE AT LEAST UNTIL ALL DISTURBED AREAS ARE REVEGETATED AND FURTHER AS MAY BE DIRECTED BY THE SUPERINTENDENT OR COUNCIL.
- B5. LAY TURF STRIP (MIN 300 WIDE) ON 100 TOPSOIL BEHIND ALL KERB WITH 1000 LONG. RETURNS EVERY 6000 AND AROUND STRUCTURES IMMEDIATELY AFTER BACKFILLING AS PER THE RELEVANT LOCAL AUTHORITY SPECIFICATION.
- B6. THE CONTRACTOR SHALL GRASS SEED ALL DISTURBED AREAS WITH AN APPROVED MIX AS SOON AS PRACTICABLE AFTER COMPLETION OF EARTHWORKS AND REGRADING.
- B7. VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING CONSTRUCTION CONFINING ACCESS WHERE POSSIBLE TO NOMINATED STABILISED ACCESS POINTS.
- B8. WHEN ANY DEVICES ARE TO BE HANDED OVER TO COUNCIL THEY SHALL BE IN CLEAN AND STABLE CONDITION.
- B9. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL BY REGULAR WETTING DOWN (BUT NOT SATURATING) DISTURBED AREA.
- B10. PROVIDE AND MAINTAIN SILT TRAPS AROUND ALL SURFACE INLET PITS UNTIL CATCHMENT IS REVEGETATED OR PAVED.
- B11. REVEGETATE ALL TRENCHES IMMEDIATELY UPON COMPLETION OF BACKFILLING.
- B12. ALL DRAINAGE PIPE INLETS TO BE CAPPED UNTIL:  
- DOWNPIPES CONNECTED  
- PITS CONSTRUCTED AND PROTECTED WITH SILT BARRIER

| MINIMUM PIPE COVER SHALL BE AS FOLLOWS |                              |
|--|------------------------------|
| LOCATION                               | MINIMUM COVER                |
| NO SUBJECT TO VEHICLE LOADING          | 100mm SINGLE RESIDENTAL      |
| SUBJECT TO VEHICLE LOADING             | 450mm WHERE NOT IN A ROAD    |
| UNDER A SEALED ROAD                    | 600mm                        |
| UNSEALED ROAD                          | 750mm                        |
| PAVED DRIVEWAY                         | 100mm PLUS DEPTH OF CONCRETE |

SEE AS2032 INSTALLATION OF UPVC PIPES FOR FURTHER INFORMATION.

CONCRETE PIPE COVER SHALL BE IN ACCORDANCE WITH AS3725-1989 LOADS ON BURIED CONCRETE PIPES, HOWEVER A MINIMUM COVER OF 450mm WILL APPLY.

WHERE INSUFFICIENT COVER IS PROVIDED, THE PIPE SHALL BE COVERED AT LEAST 50mm THICK OVERLAY AND SHALL BE PAVED WITH AT LEAST:

- 150mm REINFORCED CONCRETE WHERE SUBJECT TO HEAVY VEHICLE TRAFFIC
- 75mm THICKNESS OF BRICK OR 100mm OF CONCRETE PAVING WHERE SUBJECT TO LIGHT VEHICLE TRAFFIC; OR
- 50mm THICK BRICK OR CONCRETE PAVING WHERE NOT SUBJECT TO VEHICLE TRAFFIC.

#### PIT SIZES AND DESIGN

| DEPTH (mm)      | MINIMUM PIT SIZE (mm)      |
|-----------------|----------------------------|
| UP TO 600mm     | 450 x 450                  |
| 600mm TO 900mm  | 600 x 600 U.N.O            |
| 900mm TO 1200mm | 900 x 900                  |
| 1200mm +        | 900 x 900 (WITH STEP IRON) |

#### SYMBOLS

| DESCRIPTION |  |
|-------------|--|
|             | DENOTE ON-SITE DETENTION TANK OR PUMP OUT TANK                         |
|             | DENOTE ON-SITE DETENTION BASIN   |
|             | DENOTE ABSORPTION TRENCH   |
|             | DENOTES DOWNPIPE   |
|             | DENOTES 100mm DIA PVC (SEWER GRADE) AT 1% MIN. GRADE U.N.O             |
|             | DENOTES 100mm DIA PVC TO BE CONNECTED DIRECTLY TO RAINWATER TANK       |
|             | DENOTES 225mm DIA PVC (SEWER GRADE) AT 0.5% MIN. GRADE U.N.O           |
|             | DENOTES AGG LINE   |
|             | DENOTES SEDIMENT FENCE   |
|             | DENOTES INSPECTION OPENING WITH SCREW DOWN LID AT FINISH SURFACE LEVEL |
|             | DENOTES CLEANING EYE   |
|             | STORMWATER PIT - GRATED INLET  |
|             | STORMWATER PIT - SOLID COVER   |
|             | MAINTENANCE PIT  |
|             | NON RETURN VALVE   |
|             | DENOTE ROUND FLOOR DRAINS  |
|             | DENOTE SQUARE FLOOR DRAINS   |
|             | DENOTE PLANTER BOX DRAINS  |
|             | DENOTE GRATED DRAIN  |
|             | PROPOSED FINISH FLOOR LEVEL  |
|             | DENOTE EXISTING OVERLAND FLOW PATH                                     |
|             | DENOTE RAINWATER TANK  |
|             | DENOTE WATER OUTLET  |
|             | REDUCED LEVEL/SURFACE LEVELL   |
|             | INVERT LEVEL   |
|             | TOP OF KERB  |

#### SCHEDULE OF DRAWINGS

| SHEET No | DESCRIPTION                        |
|----------|------------------------------------|
| COVER    | GENERAL NOTES                      |
| SW01     | SEDIMENT AND EROSION CONTROL PLAN  |
| SW02     | GROUND FLOOR DRAINAGE PLAN         |
| SW03     | FIRST FLOOR AND ROOF DRAINAGE PLAN |
| SW04     | STORMWATER SECTIONS AND DETAILS    |



ISSUED FOR DA

|          |                         |            |
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|          |                         |            |
|          |                         |            |
|          |                         |            |
| B        | ISSUED FOR DA           | 25-03-2022 |
| A        | ISSUED FOR COORDINATION | 24-03-2022 |
| REVISION | AMENDMENT               | ISSUE DATE |



Phone: (02) 9745 5202  
Fax: (02) 8004 7461  
Email: [Info@alphaengineering.com.au](mailto:Info@alphaengineering.com.au)  
Address: 4.03, 16 Railway Parade,  
Burwood NSW 2134  
Website: [www.alphaengineering.com.au](http://www.alphaengineering.com.au)

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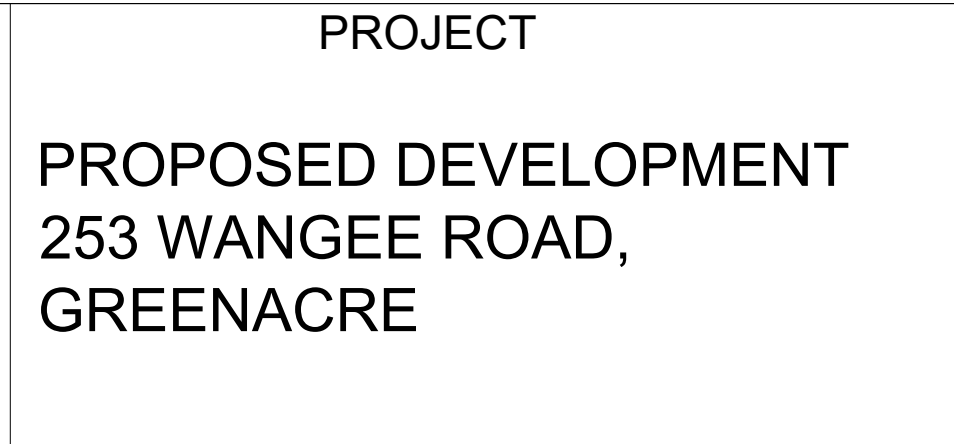
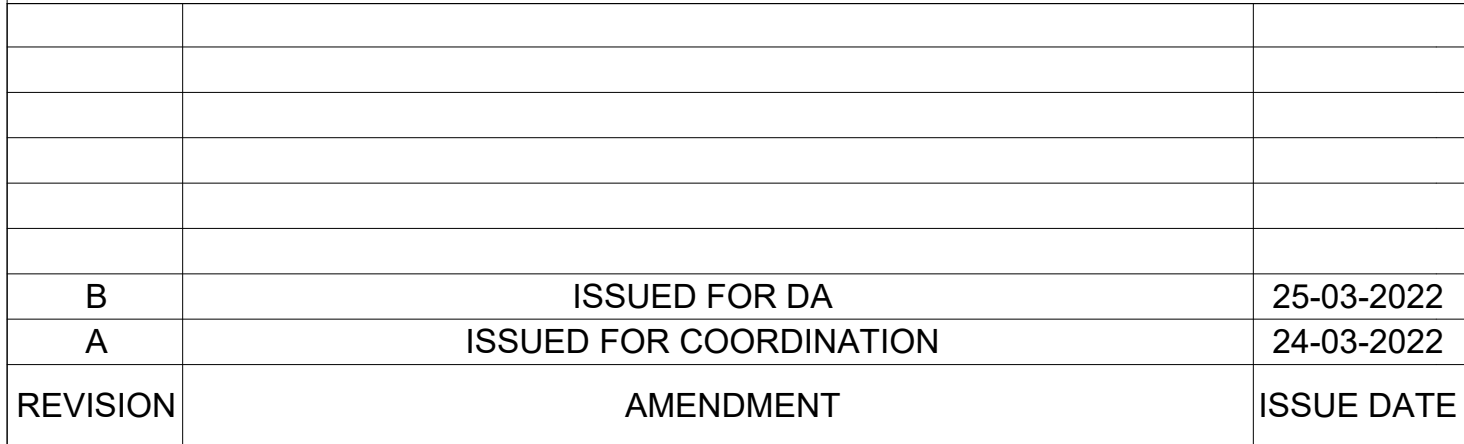


PROJECT  
**PROPOSED DEVELOPMENT  
253 WANGEE ROAD,  
GREENACRE**

DRAWING TITLE  
**GENERAL NOTES**

| SCALES<br>AS SHOWN            | DESIGNED<br>TA | DRAFTED<br>TA |
|-------------------------------|----------------|---------------|
| DRAWING NO.<br>A22021 - COVER | APPROVED<br>JM | REVISION<br>B |





## GENERAL NOTES

THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.

ALL DIMENSIONS ARE IN MILLIMETRES & ALL LEVELS ARE IN METRES, UNLESS NOTED OTHERWISE).

NO DIMENSION SHALL BE OBTAINED BY SCALING THE DRAWINGS.

ALL LEVELS AND SETTING OUT DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF THE WORK.

DURING EXCAVATION WORK THE STRUCTURE SHALL BE MAINTAINED IN A STABLE AND NO PART SHALL BE OVERSTRESSED.

ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE SPECIFICATION.

EXISTING SERVICES WHERE SHOWN HAVE BEEN PLOTTED FROM SUPPLIED DATA AND SUCH THEIR ACCURACY CAN NOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORK.

ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACK FILLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE LOCAL COUNCIL.

ALL TRENCH BACK FILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.

ON COMPLETION OF STORMWATER INSTALLATION, ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS, UNLESS DIRECTED OTHERWISE.

CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS UNLESS  
DIRECTED OTHERWISE.

THE STORMWATER DRAINAGE DESIGN HAS BEEN CARRIED OUT IN ACCORDANCE WITH AS/NZS 3500.3 - 1990 "STORMWATER DRAINAGE" & AS/NZS 3500.3.2-1998 "STORMWATER DRAINAGE - ACCEPTABLE SOLUTIONS".

ANY VARIATIONS TO THE NOMINATED LEVELS SHALL BE REFERRED TO  
ENGINEER IMMEDIATELY.

ANY VARIATIONS TO SPECIFIED PRODUCTS OR DETAILS SHALL BE  
REFERRED TO THE ENGINEER FOR APPROVAL

DOWN PIPES SHALL BE A MINIMUM OF DN100 SW GRADE UPVC OR 100X100 COLORBOND/ZINCALUME STEEL, UNO.

BOX COLORBOND OR ZINCALUME STEEL. GUTTERS SHALL BE A MINIMUM OF 450 WIDE X 150 DEEP.

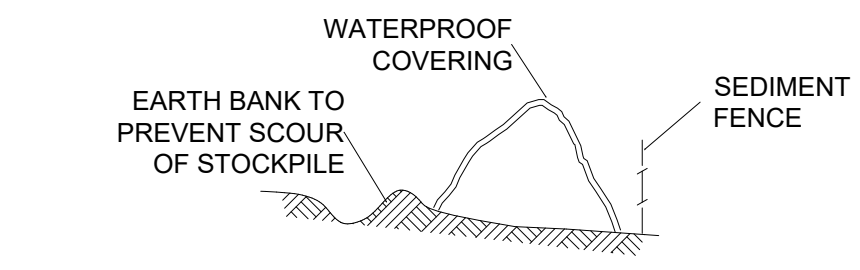
EAVES GUTTERS SHALL BE A MINIMUM OF 125 WIDE X 100 DEEP (OR OF EQUIVALENT AREA) COLORBOND OR ZINCALUME STEEL.

SUBSOIL DRAINAGE SHALL BE PROVIDED TO ALL RETAINING WALLS & EMBANKMENTS, WITH THE LINES FEEDING INTO THE STORMWATER DRAINAGE SYSTEM.

## BUILDING MATERIAL STOCKPILES

ALL STOCKPILES OF BUILDING MATERIAL SUCH AS SAND AND SOIL MUST BE PROTECTED TO PREVENT SCOUR AND

THEY SHOULD NEVER BE PLACED IN THE STREET GUTTER  
WHERE THEY WILL WASH AWAY WITH THE FIRST RAINSTORM



STAKES DRIVEN 600 INTO THE  
GROUND WITH FIRST STAKE  
ANGLED TOWARDS PREVIOUSLY  
LAI BALE

STRAW BALE AND  
GEOTEXTILE  
SEDIMENT FILTER

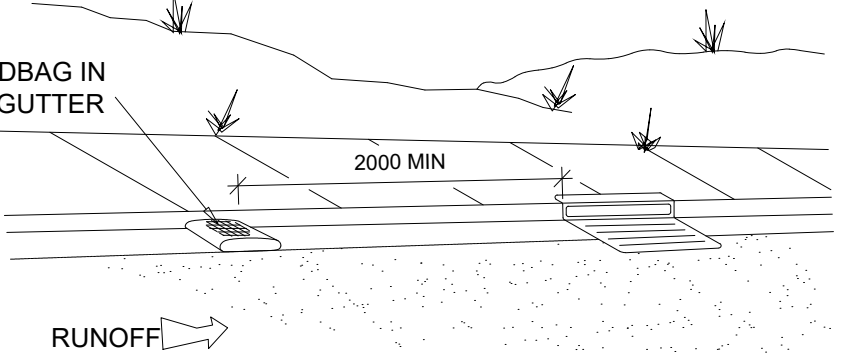
GEOTEXTILE FILTER FABRIC  
FASTEN ON TOP EDGE

A diagram of a raised garden bed. An arrow labeled "RUNOFF" points to the left side of the bed. The area where the runoff is occurring is labeled "DISTURBED AREA". The bed itself is filled with soil and has several small plants growing in it. The bed is bordered by a wooden frame.

DRAINAGE AREA 0.5 HA. MAX. SLOPE  
GRADIENT 1:2 MAX. SLOPE LENGTH 50m

VEHICLE ACCESS TO SITE

VEHICLE ACCESS TO THE BUILDING SITE SHOULD BE RESTRICTED TO A SINGLE POINT SO AS TO REDUCE THE AMOUNT OF SOIL DEPOSITED ON THE STREET PAVEMENT.



**SANDBAG KERB SEDIMENT TRAP**  
 IN CERTAIN CIRCUMSTANCES EXTRA SEDIMENT TRAPPING MAY  
 BE NEEDED IN THE STREET GUTTER.

Diagram illustrating a grassed waterway cross-section. The top layer is labeled "GRASS IN TRAP". Below it, a horizontal line indicates a travel time of "2000 MIN". The bottom layer is labeled "RUNOFF" with an arrow pointing right.

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ISSUED FOR DATA

DRAWING TITLE

# SEDIMENT AND EROSION CONTROL PLAN

|                                      |                        |                       |
|--------------------------------------|------------------------|-----------------------|
| <p>SCALES<br/>AS SHOWN</p>           | <p>DESIGNED<br/>TA</p> | <p>DRAFTED<br/>TA</p> |
| <p>DRAWING NO.<br/>A22021 - SW01</p> | <p>APPROVED<br/>JM</p> | <p>REVISION<br/>B</p> |

Phone: (02) 9745 5202  
Fax: (02) 8004 7461  
Email: [Info@alphaengineering.com.au](mailto:Info@alphaengineering.com.au)  
Address: 4.03, 16 Railway Parade,  
Burwood NSW 2134  
Website: [www.alphaengineering.com.au](http://www.alphaengineering.com.au)

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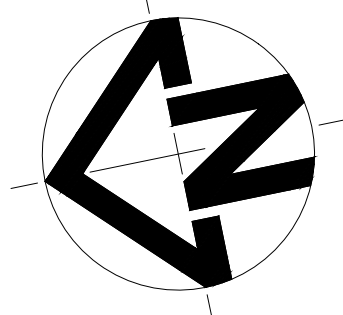
ARCHITECT



PROJECT  
PROPOSED DEVELOPMENT  
253 WANGEE ROAD,  
GREENACRE

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GROUND FLOOR DRAINAGE PLAN

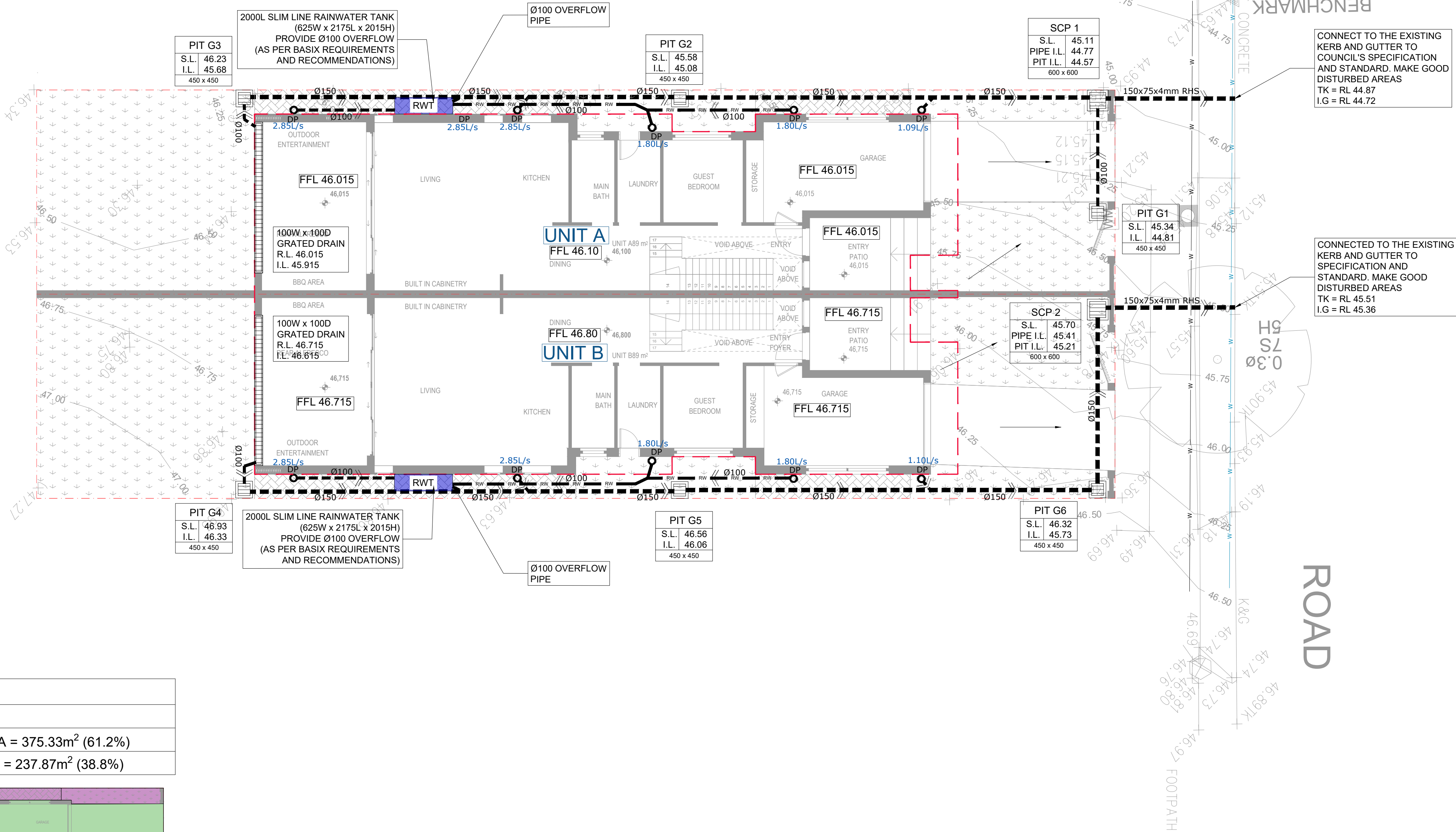
1:100 @ A1

ALL DRAINAGE LINES SHALL BE UPVC (CLASS SH)  
STORMWATER DRAINAGE PIPE, UNO.

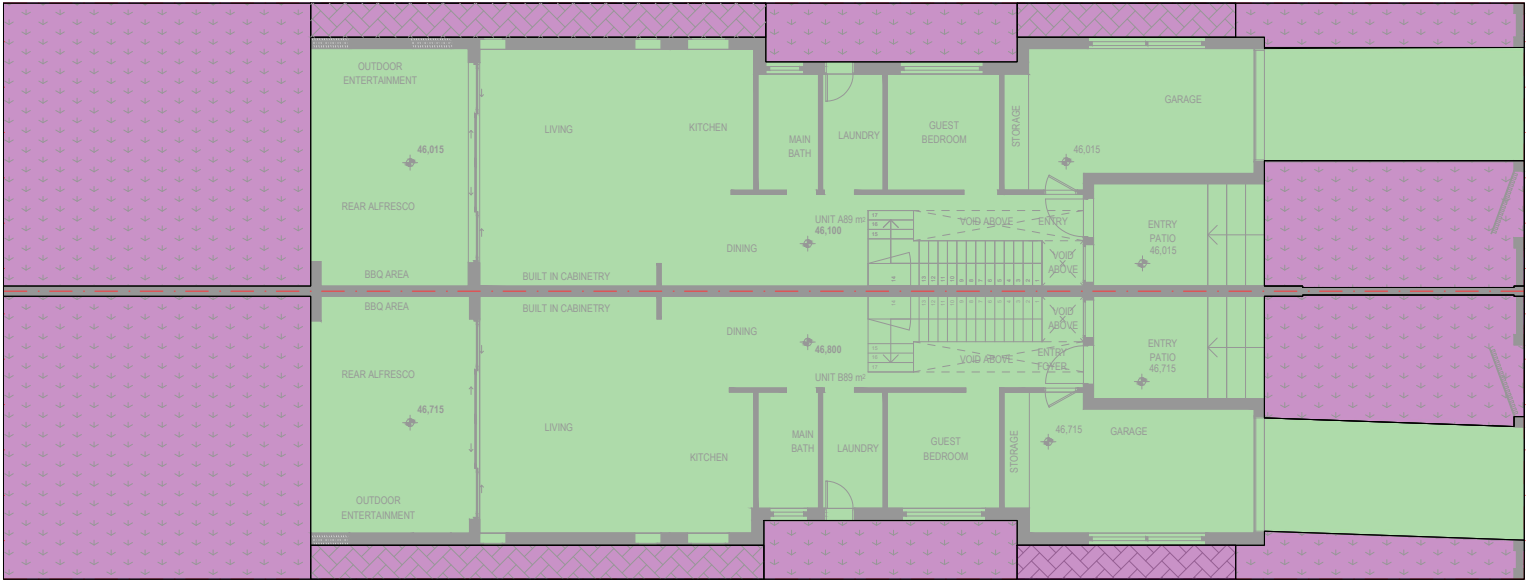
ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN. UNO.  
FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES  
TO BUILDER'S DETAIL, TYPICAL MINIMUM EFFECTIVE EAVES GUTTER  
SIZE = 6700 mm<sup>2</sup>  
MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500

THE FOLLOWING SYMBOLS & ABBREVIATIONS HAVE BEEN USED:

- DP = Ø100, UNO.
- FD = FLOOR OUTLET, REFER TO DETAIL
- SIP = SURFACE INLET PIT (NO LINTEL)
- 100Ø = Ø100 CHARGED LINE
- IP = Ø150 INSPECTION POINT
- RWH = RAIN WATER HEAD
- RWO = RAIN WATER OUTLET (300 x 300)
- FG = FLOOR GULLY Ø150
- S<sup>DP</sup><sub>Im</sub> = RAINWATER SPREADER
- RL 6.20 = PROPOSED FINISHED SURFACE LEVEL



| LEGEND |  |
|--------|--|
|        | TOTAL SITE AREA = 613.20m <sup>2</sup>                               |
|        | POST-DEVELOPMENT IMPERVIOUS SITE AREA = 375.33m <sup>2</sup> (61.2%) |
|        | POST-DEVELOPMENT PERVIOUS SITE AREA = 237.87m <sup>2</sup> (38.8%)   |



PROPOSED SITE IMPERVIOUS RATIO

1:200 @ A1

OSD REQUIREMENT CHECK

AS PER BANKSTOWN CITY COUNCIL'S ENGINEERING AND DRAINAGE  
STANDARDS 2009, CLAUSE 10.1.2 : EXEMPTION TO OSD, OSD WILL NOT BE  
REQUIRED FOR DUAL OCCUPANCIES WITH AN IMPERVIOUS AREA OF NO  
MORE THAN 66% OF THE SITE AREA  
THUS, OSD IS NOT REQUIRED FOR THE SUBJECT SITE AS IT IS A DUAL  
OCCUPANCY WITH AN IMPERVIOUS OF AREA OF 61.2% (375.33m<sup>2</sup>)

NOTES:

- ALL PITS TO BE MIN. CLASS B UNO
- ALL PIPES TO BE UPVC LAID AT MIN. 1% SLOPE
- HAND DIGGING REQUIRED FOR STORMWATER PIPES NEAR TREES

www.dialbeforeyoudig.com.au



ISSUED FOR DA

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| B        | ISSUED FOR DA           | 25-03-2022 |
| A        | ISSUED FOR COORDINATION | 24-03-2022 |
| REVISION | AMENDMENT               | ISSUE DATE |



Phone: (02) 9745 5202  
Fax: (02) 8004 7461  
Email: [info@alphaengineering.com.au](mailto:info@alphaengineering.com.au)  
Address: 4.03, 16 Railway Parade,  
Burwood NSW 2134  
Website: [www.alphaengineering.com.au](http://www.alphaengineering.com.au)

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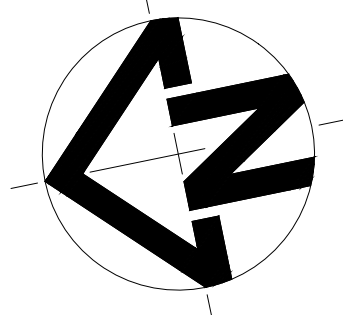
PROJECT

PROPOSED DEVELOPMENT  
253 WANGEE ROAD,  
GREENACRE

DRAWING TITLE

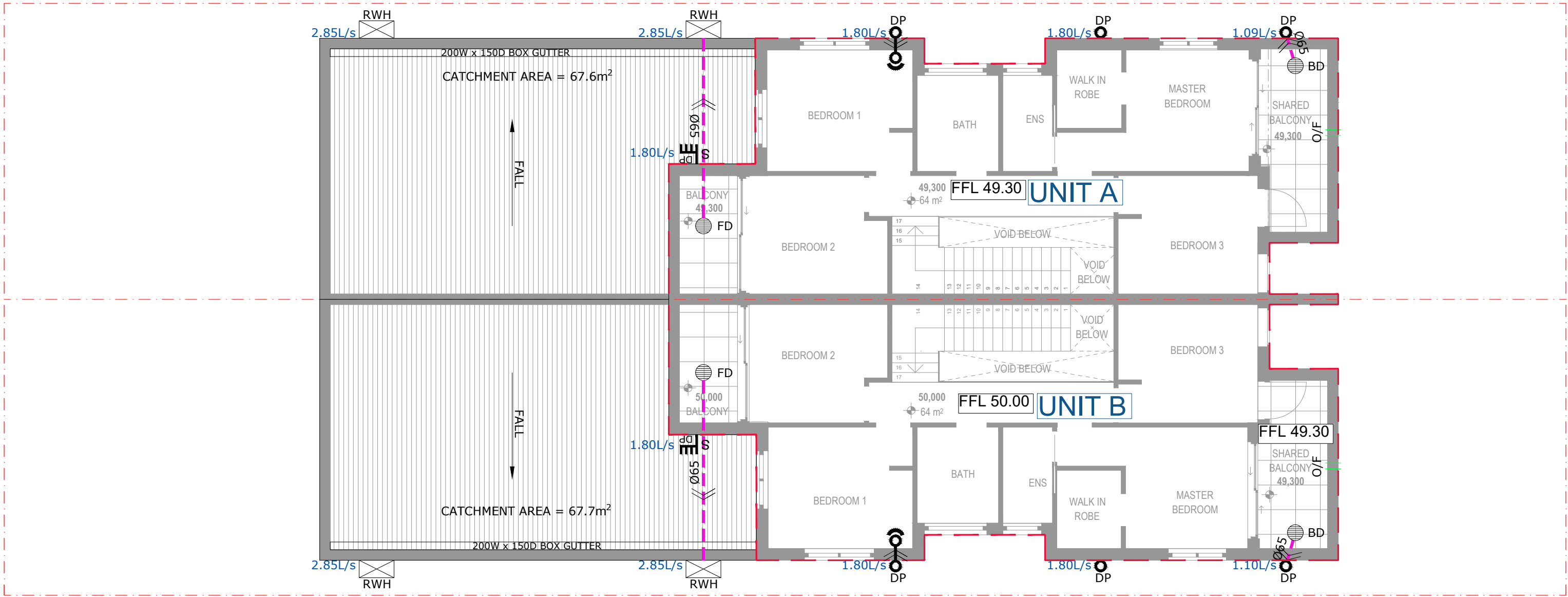
GROUND FLOOR DRAINAGE  
PLAN

| SCALES        | DESIGNED | DRAFTED  |
|---------------|----------|----------|
| AS SHOWN      | TA       | TA       |
| DRAWING NO.   | APPROVED | REVISION |
| A22021 - SW02 | JM       | B        |



LEGEND

|  |                                  |
|--|----------------------------------|
|  | Ø65 uPVC AERIAL PIPE UNO         |
|  | OUTLINE OF ROOF AND FLOORS ABOVE |
|  | OVERFLOW OUTLET                  |



FIRST FLOOR DRAINAGE PLAN

1:100 @ A1

ALL DRAINAGE LINES SHALL BE UPVC (CLASS SH)  
STORMWATER DRAINAGE PIPE, UNO.

ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN. UNO.  
FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES  
TO BUILDER'S DETAIL, TYPICAL MINIMUM EFFECTIVE EAVES GUTTER  
SIZE = 6700 mm²  
MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500

THE FOLLOWING SYMBOLS & ABBREVIATIONS HAVE BEEN USED:

- DP = Ø100, UNO.
- FD = FLOOR OUTLET , REFER TO DETAIL
- SIP = SURFACE INLET PIT (NO LINTEL)
- 100Ø = Ø100 CHARGED LINE
- IP = Ø150 INSPECTION POINT
- RWH = RAIN WATER HEAD
- RWO = RAIN WATER OUTLET (300 x 300)
- FG = FLOOR GULLY Ø150
- S<sup>DP</sup> = RAINWATER SPREADER
- RL 6.20 = PROPOSED FINISHED SURFACE LEVEL

ROOF DRAINAGE PLAN

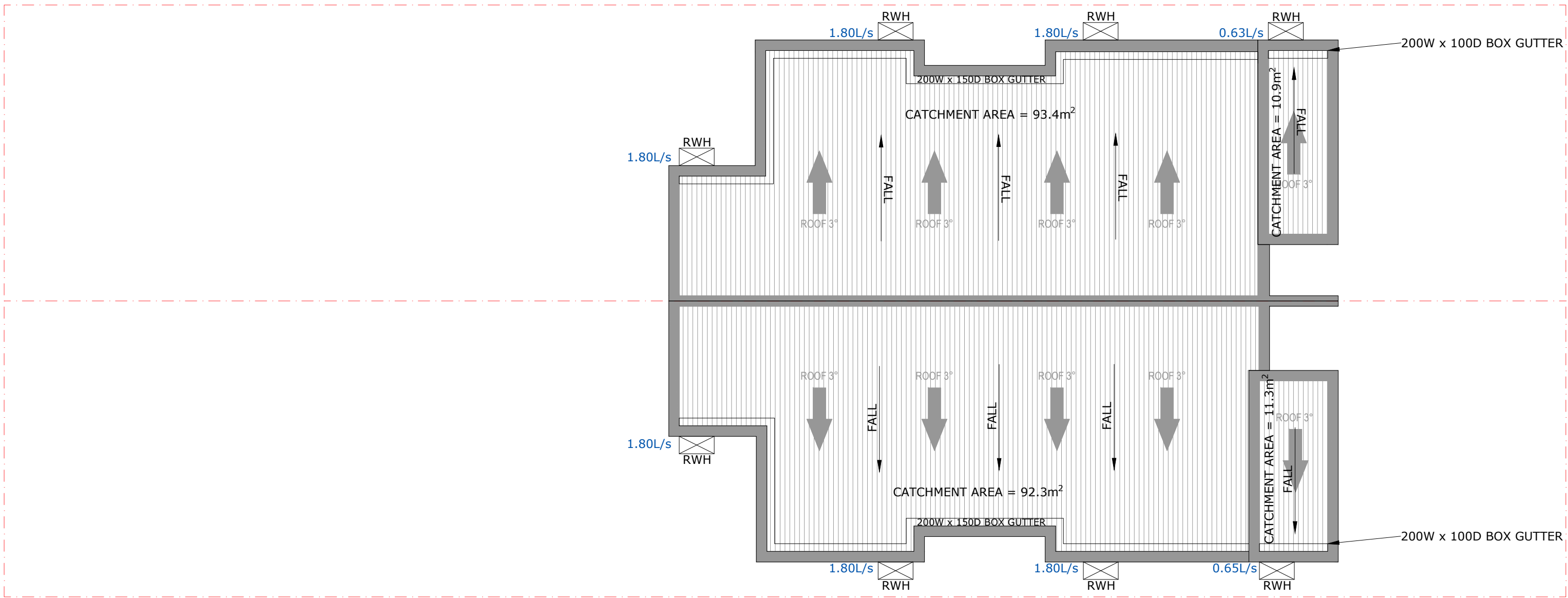
1:100 @ A1

ALL DRAINAGE LINES SHALL BE UPVC (CLASS SH)  
STORMWATER DRAINAGE PIPE, UNO.

ALL DRAINAGE LINES SHALL BE LAID @ 1% FALL MIN. UNO.  
FIRST FLUSH RAINWATER DEVICES TO BE FITTED TO DRAINAGE LINES  
TO BUILDER'S DETAIL, TYPICAL MINIMUM EFFECTIVE EAVES GUTTER  
SIZE = 6700 mm²  
MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500

THE FOLLOWING SYMBOLS & ABBREVIATIONS HAVE BEEN USED:

- DP = Ø100, UNO.
- FD = FLOOR OUTLET , REFER TO DETAIL
- SIP = SURFACE INLET PIT (NO LINTEL)
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- RWH = RAIN WATER HEAD
- RWO = RAIN WATER OUTLET (300 x 300)
- FG = FLOOR GULLY Ø150
- S<sup>DP</sup> = RAINWATER SPREADER
- RL 6.20 = PROPOSED FINISHED SURFACE LEVEL



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| DRAWING TITLE                      |                |               |
|------------------------------------|----------------|---------------|
| FIRST FLOOR AND ROOF DRAINAGE PLAN |                |               |
| SCALES<br>AS SHOWN                 | DESIGNED<br>TA | DRAFTED<br>TA |
| DRAWING NO.<br>A22021 - SW03       | APPROVED<br>JM | REVISION<br>B |

PROJECT

PROPOSED DEVELOPMENT  
253 WANGEE ROAD,  
GREENACRE

ARCHITECT



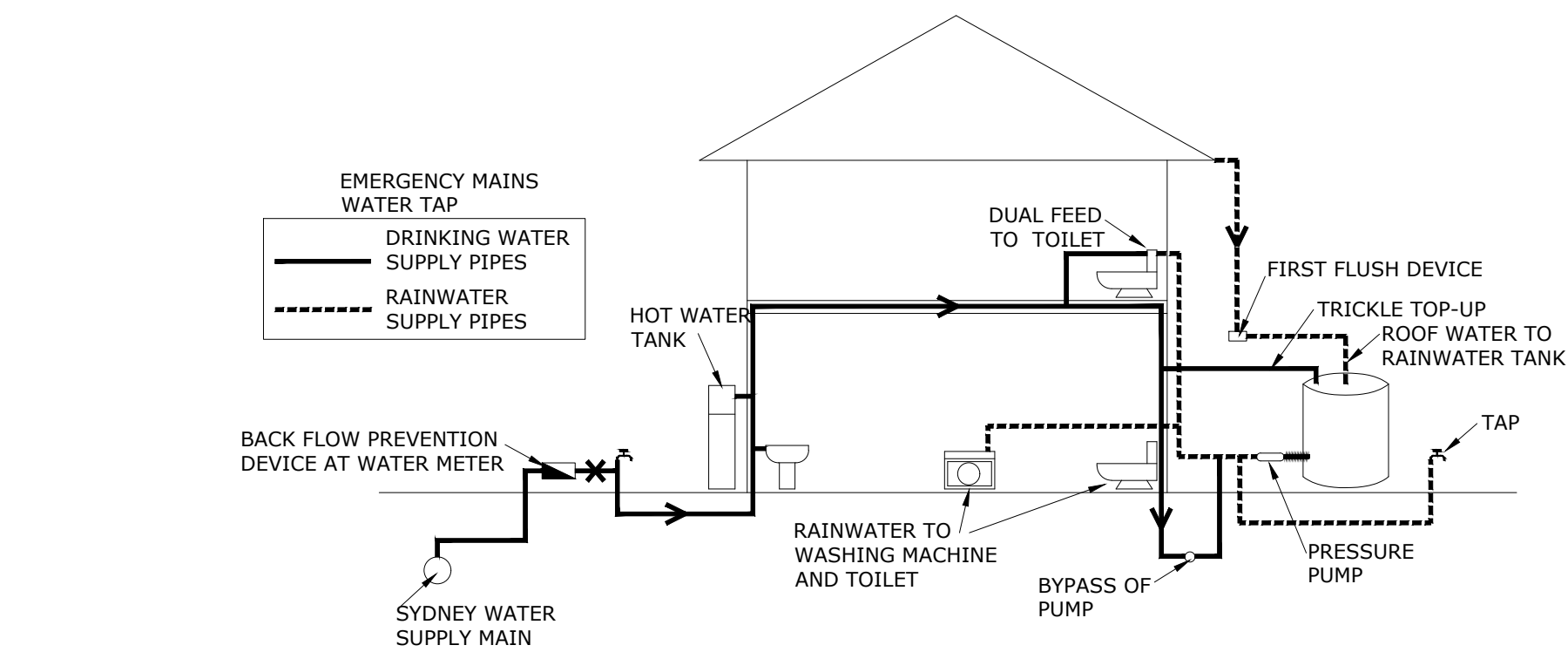
Phone: (02) 9745 5202  
Fax: (02) 8004 7461  
Email: [Info@alphaengineering.com.au](mailto:Info@alphaengineering.com.au)  
Address: 4.03, 16 Railway Parade,  
Burwood NSW 2134  
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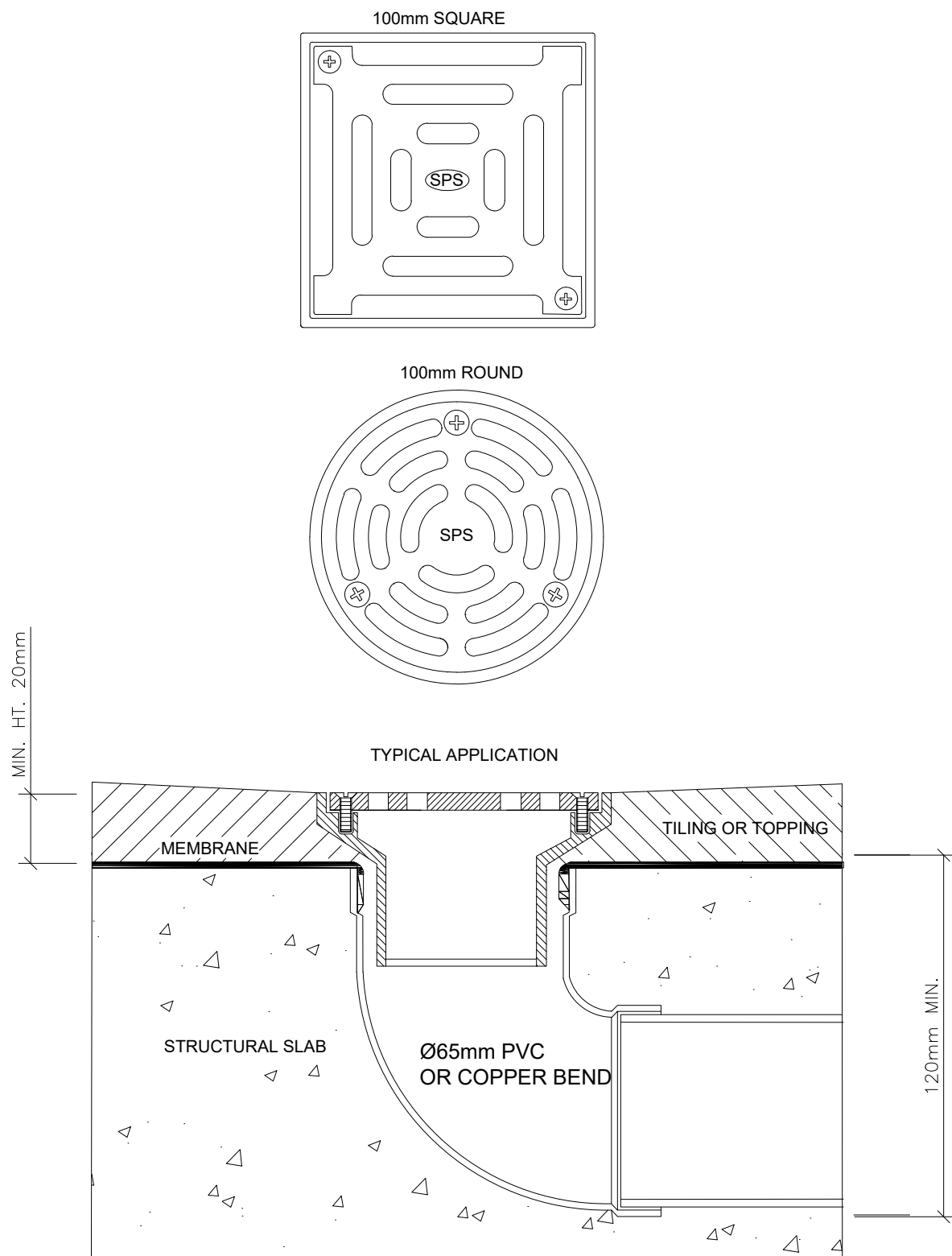
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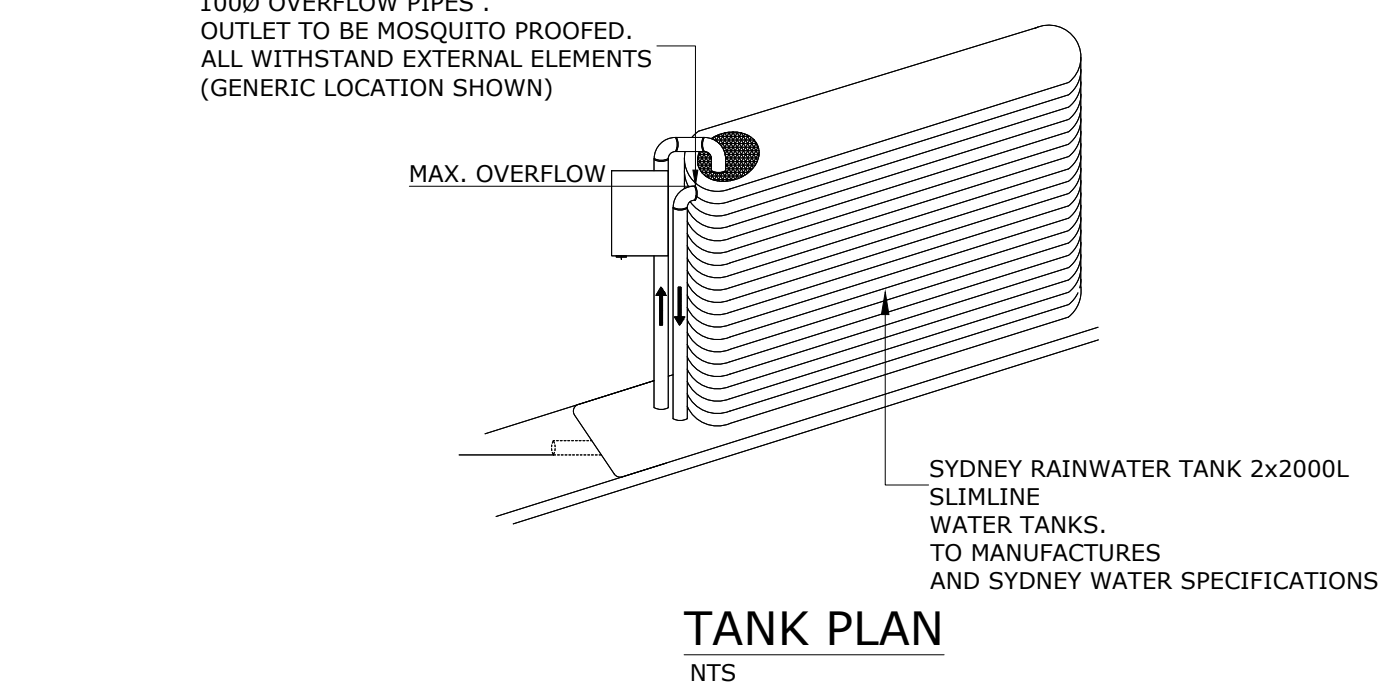
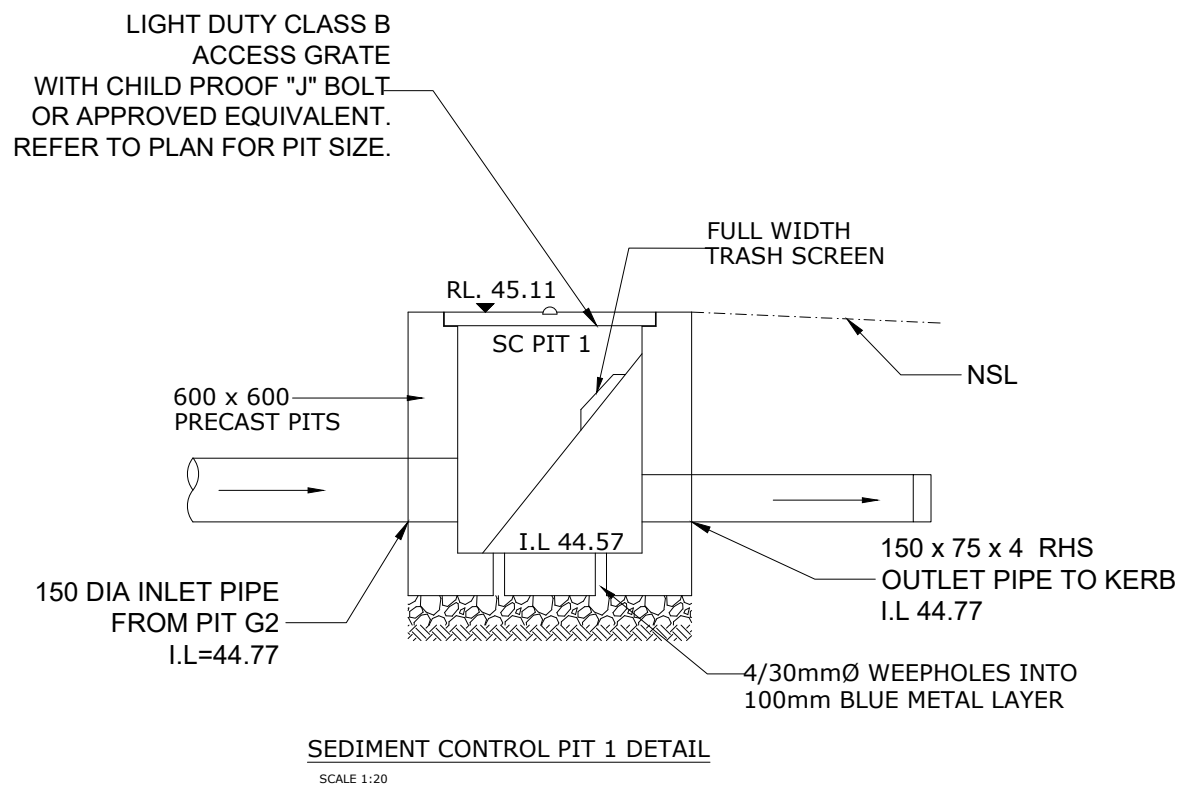
SECTION - RAINWATER TANK EXPLANATORY DIAGRAM

1:5 @ A1



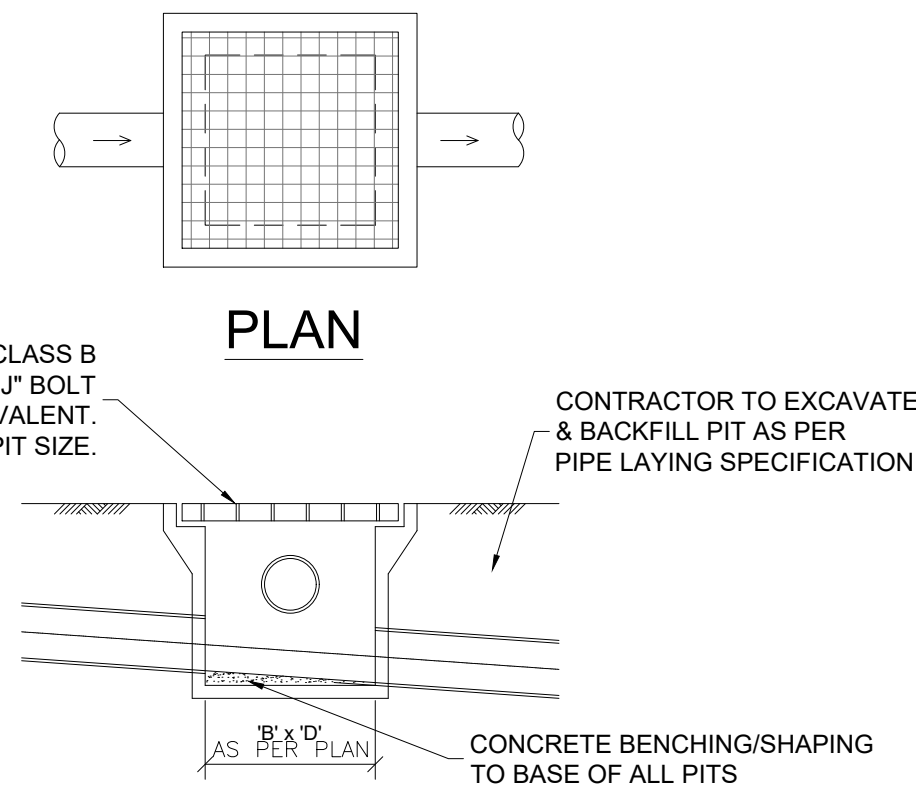
SPS 100x50mm SPECIAL DROP-IN BALCONY DRAIN (BD)

NTS @ A1  
SPECIFICATION CODE:  
R100S2(ROUND 316 STAINLESS STEEL GRATE)  
Q100S2(SQUARE 316 STAINLESS STEEL GRATE)



TANK PLAN

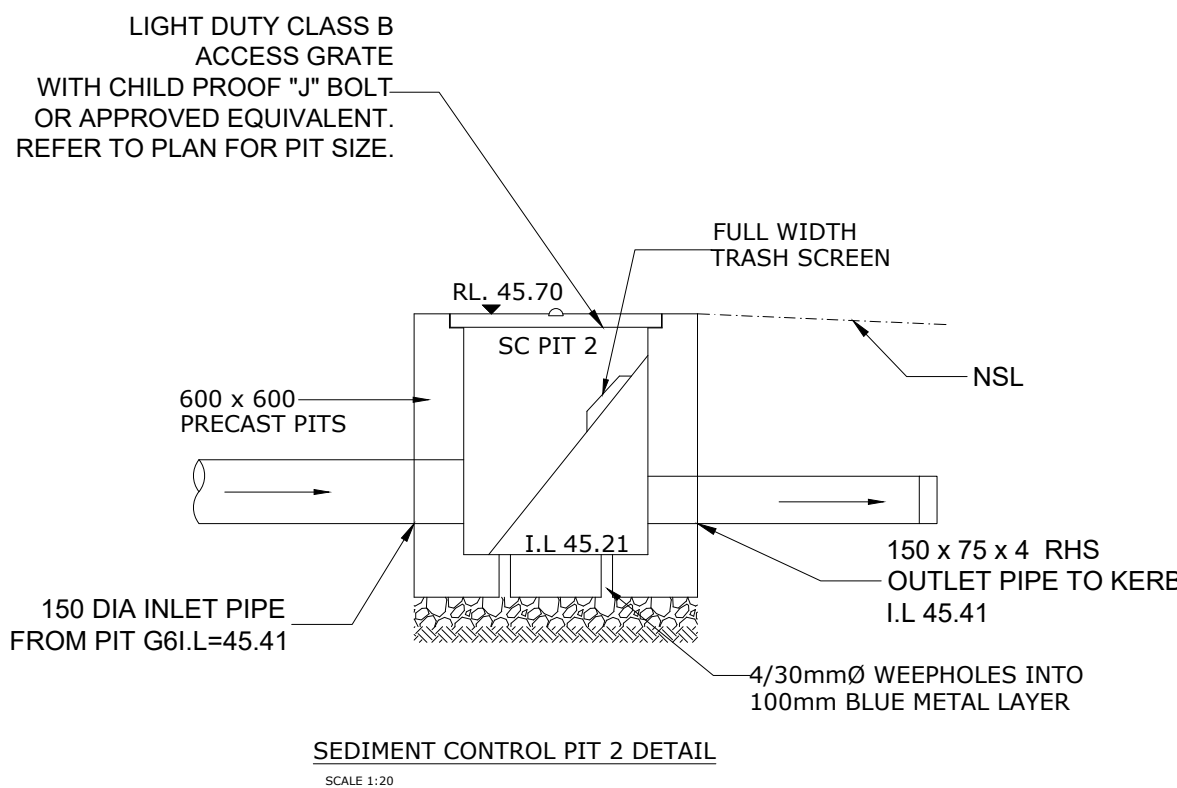
NTS



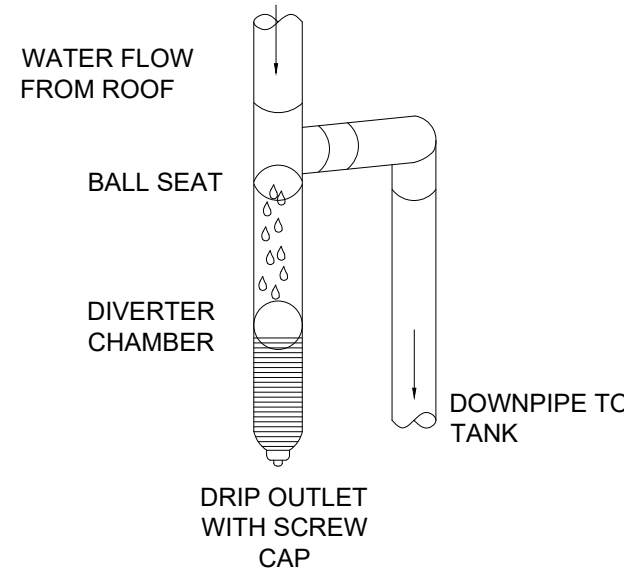
PLAN

SECTION - TYPICAL SURFACE INLET PIT

1:5 @ A1  
TYPICAL FOR ALL PITS IN NON-TRAFFIC AREAS

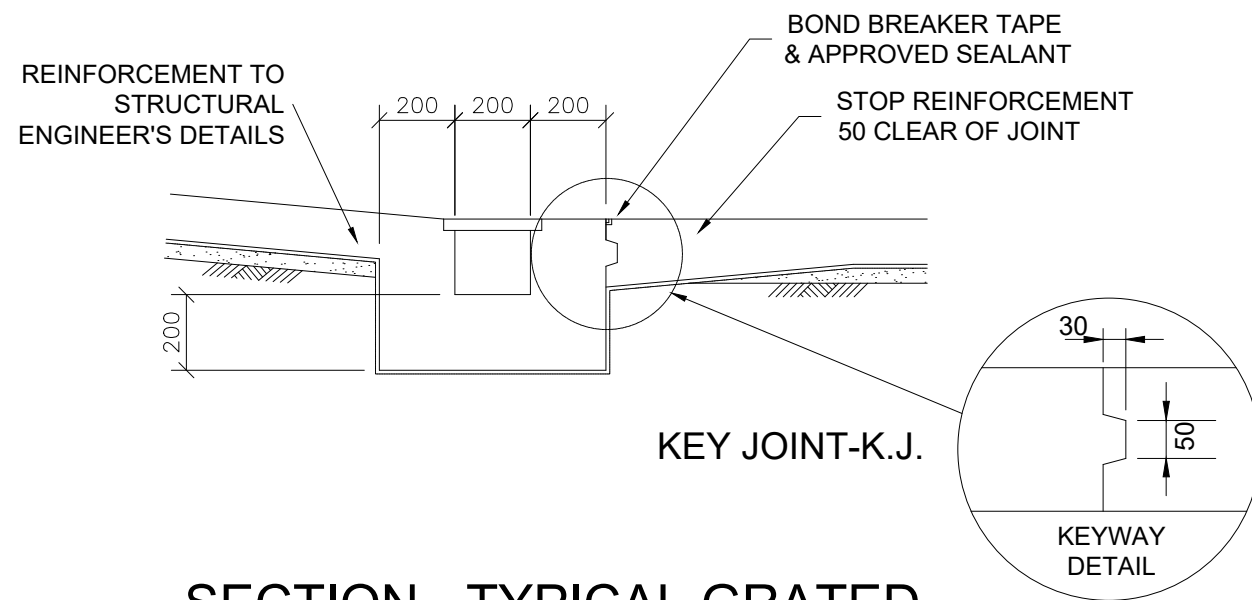


FIRST FLUSH OF CONTAMINATED WATER IS DIVERTED INTO CHAMBER. DIVERTER DESIGNED TO CAUSE MINIMUM OF 1mm OF INITIAL RUNOFF FROM ROOF AREA TO BYPASS RAINWATER TANK(S)



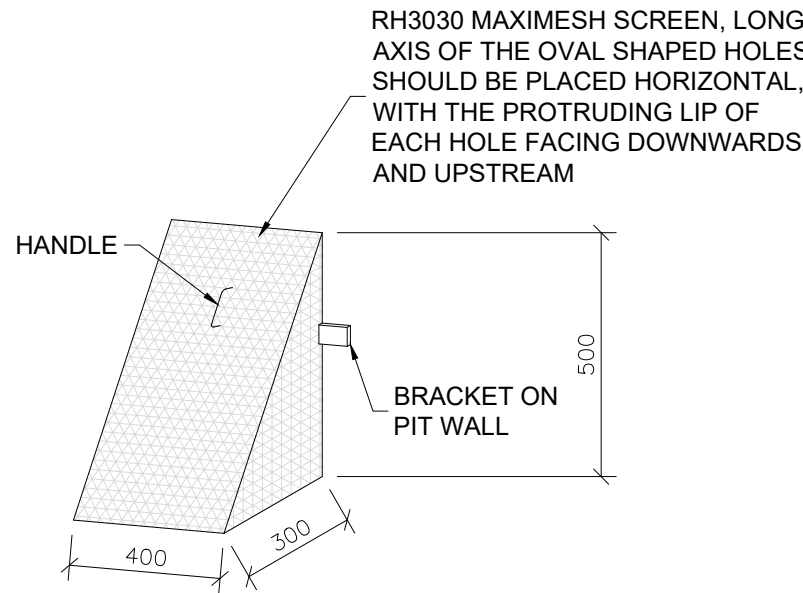
PROPRIETARY FIRST FLUSH DIVERTER

SCALE N.T.S.



SECTION - TYPICAL GRATED DRAIN

1:20



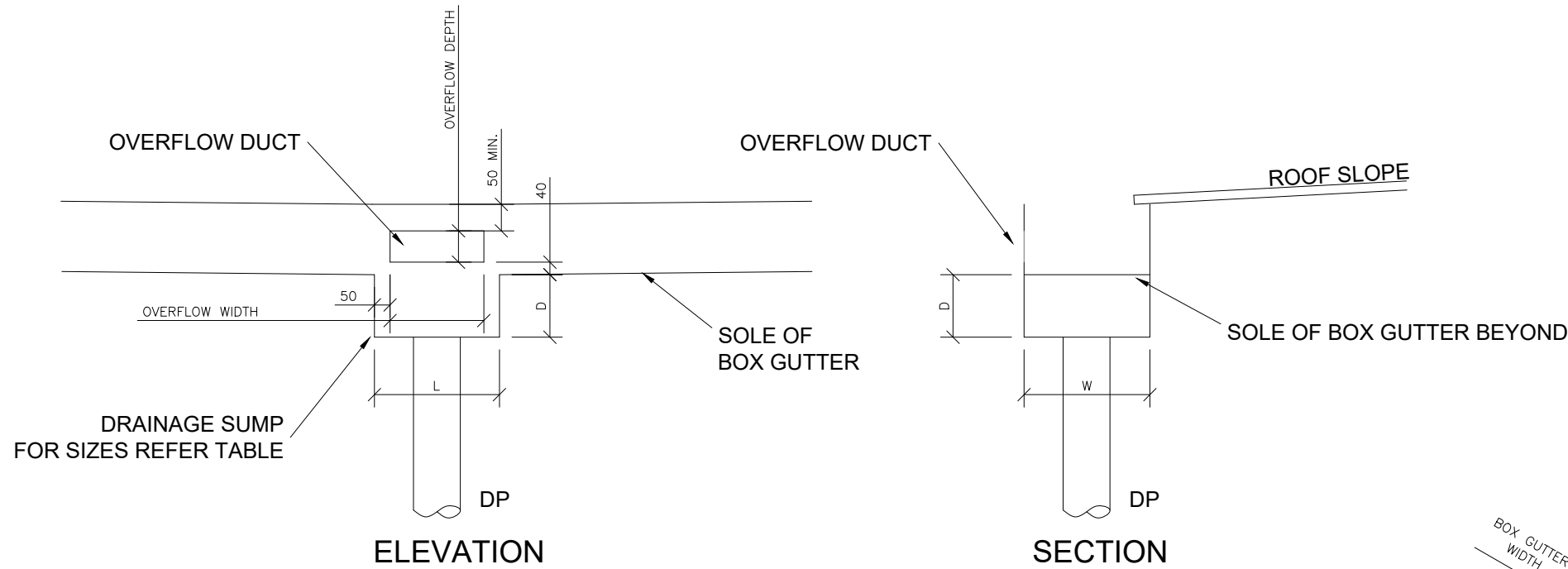
DETAIL - STANDARD TRASH SCREEN

1:20



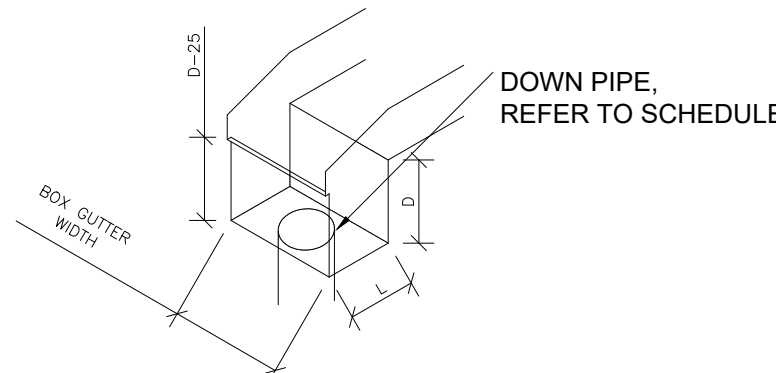
RAINWATER SIGN

NTS



TYPICAL BOX GUTTER DETAIL WITH SUMP OVERFLOW

1:20



RAINWATER HEAD SECTION



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|          |                         |            |
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ARCHITECT



PROJECT

PROPOSED DEVELOPMENT  
253 WANGEE ROAD,  
GREENACRE

DRAWING TITLE  
STORMWATER SECTIONS  
AND DETAILS

|                              |                |               |
|------------------------------|----------------|---------------|
| SCALES<br>AS SHOWN           | DESIGNED<br>TA | DRAFTED<br>TA |
| DRAWING NO.<br>A22021 - SW04 | APPROVED<br>JM | REVISION<br>B |