# PROPOSED DEVELOPMENT

# 52-54 POWELL STREET AND 125 PARRAMATTA ROAD, HOMEBUSH

# 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
- 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
- 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 SUBJECTED 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
- 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
- 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
- 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.
- SITE WORKS ARE TO BE BATTERED TO ADJACENT PROPERTY LEVELS. 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
- 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
- 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

ii) USING AN APPROVED CURING COMPOUNDED FOR A MINIMUM OF 7 DAYS COMMENCING

- 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:

## FLEXIBLE PAVEMENT NOTES

IMMEDIATELY AFTER POURING.

- 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
- 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.
- - 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 60 INTERLOCKING PAVERS ON 50 SAND BEDDING (UNO)

#### **EROSION AND SEDIMENT NOTES**

- THIS PLAN TO BE READ IN CONJUNCTION WITH EROSION AND SEDIMENT CONTROL DETAILS
- 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
- 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
- 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. THE CONTRACTOR SHALL GRASS SEED ALL DISTURBED AREAS WITH AN APPROVED MIX AS
- SOON AS PRACTICABLE AFTER COMPLETION OF EARTHWORKS AND REGRADING. VEHICULAR TRAFFIC SHALL BE CONTROLLED DURING CONSTRUCTION CONFINING ACCESS WHERE POSSIBLE TO NOMINATED STABILISED ACCESS POINTS.
- THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL BY REGULAR WETTING DOWN (BUT

WHEN ANY DEVICES ARE TO BE HANDED OVER TO COUNCIL THEY SHALL BE IN CLEAN AND

- NOT SATURATING) DISTURBED AREA. B10. PROVIDE AND MAINTAIN SILT TRAPS AROUND ALL SURFACE INLET PITS UNTIL CATCHMENT
- IS REVEGETATED OR PAVED.
- 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

MINIMUM COVER	
100mm SINGLE RESIDENTAL	
450mm WHERE NOT IN A ROAD	
600mm	
750mm	
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

#### PIT SIZES AND DESIGN

DEPTH (mm)	MINIMUM PIT SIZE (mm)
UP TO 450mm	450 x 450
450mm TO 600mm	600 x 600 U.N.O
600mm TO 900mm	600 x 900 U.N.O
FROM 900mm	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		
<b>o</b> DP	DENOTES DOWNPIPE		
_ Ø100	DENOTES 100mm DIA PVC (SEWER GRADE) AT 1% MIN. GRADE U.N.O		
Ø150	DENOTES 150mm DIA PVC (SEWER GRADE) AT 1% MIN. GRADE U.N.O		
Ø225	DENOTES 225mm DIA PVC (SEWER GRADE) AT 0.5% MIN. GRADE U.N.O		
<b>—</b> G —— G ——	DENOTES AGG LINE		
ss	DENOTES SEDIMENT FENCE		
IP <sub>o</sub>	DENOTES INSPECTION OPENING WITH SCREW DOWN LID AT FINISH SURFACE LEVEL		
Œ	DENOTES CLEANING EYE		
	STORMWATER PIT - GRATED INLET		
	STORMWATER PIT - SOLID COVER		
	MAINTENANCE PIT		
	NON RETURN VALVE		
FD	DENOTE ROUND FLOOR DRAINS		
FD	DENOTE SQUARE FLOOR DRAINS		
РВ	DENOTE PLANTER BOX DRAINS		
	DENOTE GRATED DRAIN		
RL 6.20	PROPOSED FINISH FLOOR LEVEL		
<b>&gt;&gt;&gt;</b>	DENOTE EXISTING OVERLAND FLOW PATH		
6	DENOTE RAINWATER TANK		
O/F	DENOTE WATER OUTLET		
RL	REDUCED LEVEL/SURFACE LEVELL		
IL	INVERT LEVEL		
тк	TOP OF KERB		

#### SCHEDULE OF DRAWINGS

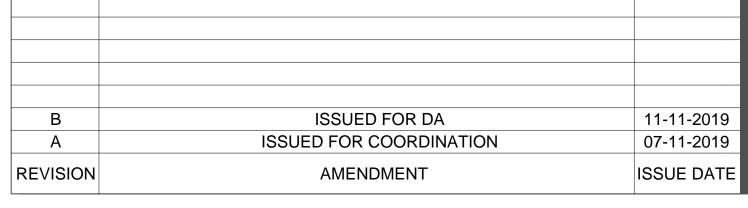
SHEET No	DESCRIPTION
COVER	GENERAL NOTES
SW01	SEDIMENT AND EROSION CONTROL PLAN
SW02	BASEMENT 1 & 2 DRAINAGE PLAN
SW03	GROUND FLOOR DRAINAGE PLAN
SW04	STORMWATER SECTION AND DETAILS
SW05	STORMWATER SECTION AND DETAILS
SW06	STORMWATER SECTION AND DETAILS

STRATHFIELD COUNCIL RECEIVED DA2019/196

**19 November 2019** 



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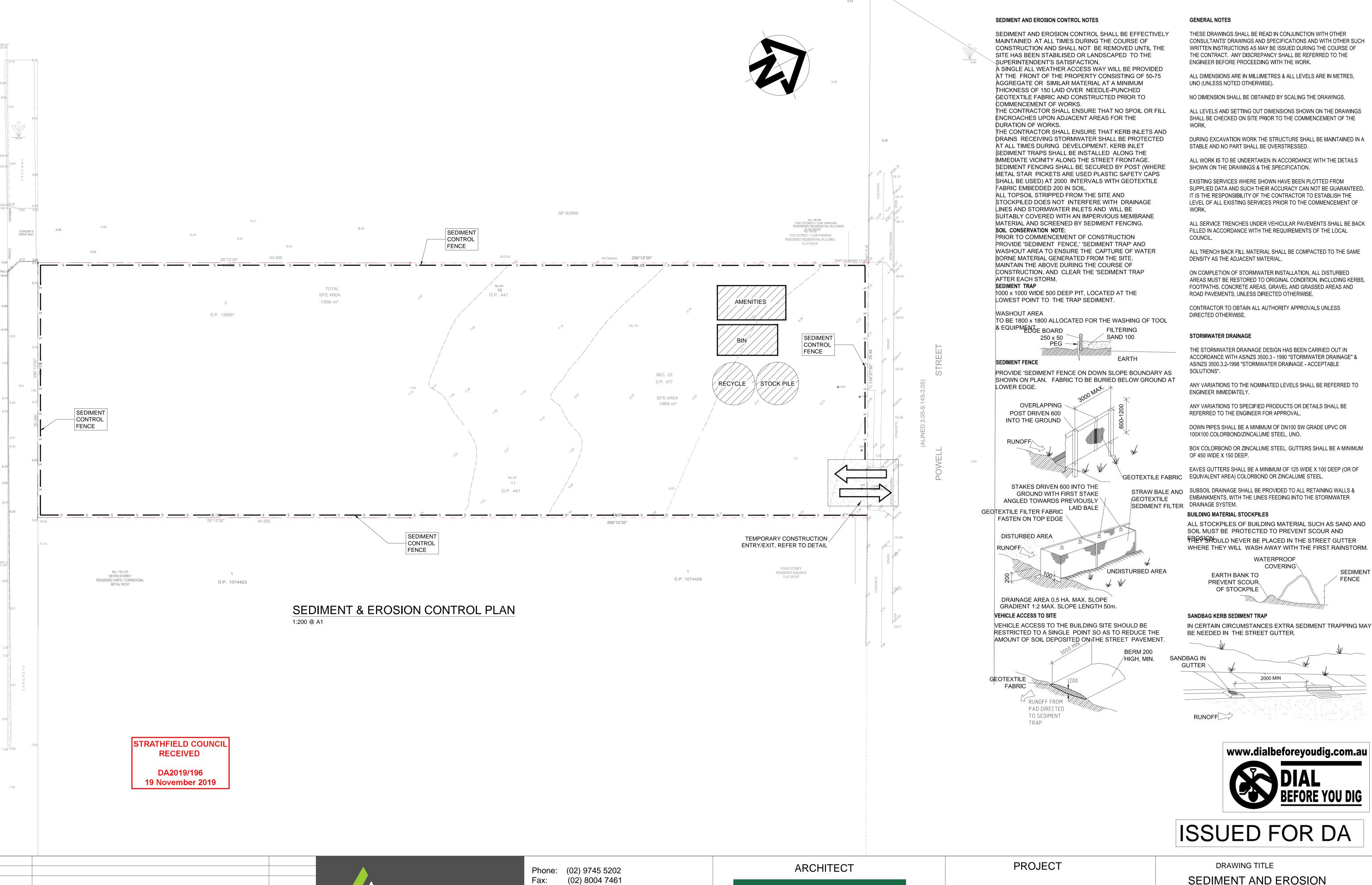
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# **PROJECT**

PROPOSED DEVELOPMENT 52-54 POWELL STREET AND 125 PARRAMATTA ROAD, **HOMEBUSH** 

DRAWING TITLE GENERAL NOTES

SCALES **DESIGNED** DRAFTED **AS SHOWN APPROVED** REVISION DRAWING NO. A9264 - COVER



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**AMENDMENT** 

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REVISION

11-11-2019

07-11-2019

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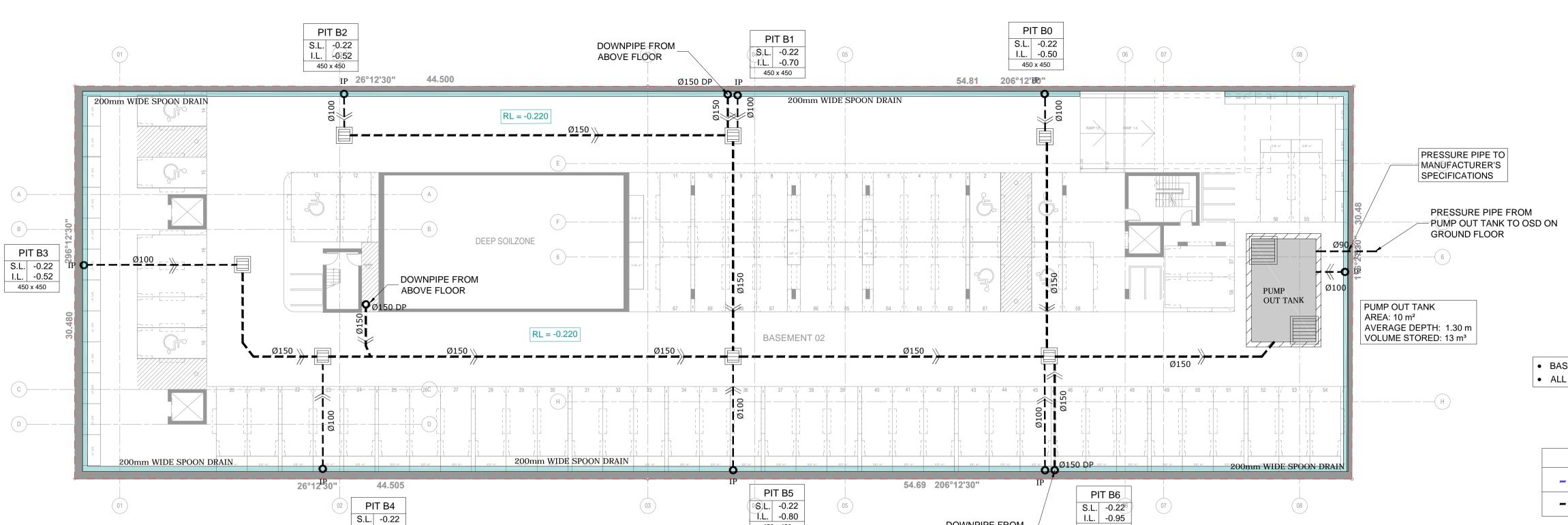
PROPOSED DEVELOPMENT 52-54 POWELL STREET AND 125 PARRAMATTA ROAD, **HOMEBUSH** 

#### SEDIMENT AND EROSION **CONTROL PLAN**

DESIGNED SH	DRAFTED PS
APPROVED	REVISION
JM	В
	SH

SEDIMENT

**FENCE** 



450 x 450

DOWNPIPE FROM

ABOVE FLOOR

450 x 450

## **BASEMENT 2 FLOOR DRAINAGE** PLAN

1:200 @ 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  $SIZE = 6700 \text{ mm}^2$ 

MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500

THE FOLLOWING SYMBOLS & ABBREVIATIONS HAVE BEEN USED:

DP =  $\emptyset$ 150, UNO.

= FLOOR OUTLET , REFER TO DETAIL

SIP = SURFACE INLET PIT (NO LINTEL)

100Ø = Ø100 CHARGED LINE = Ø150 INSPECTION POINT

RWH = RAIN WATER HEAD

RWO = RAIN WATER OUTLET (300 x 300)

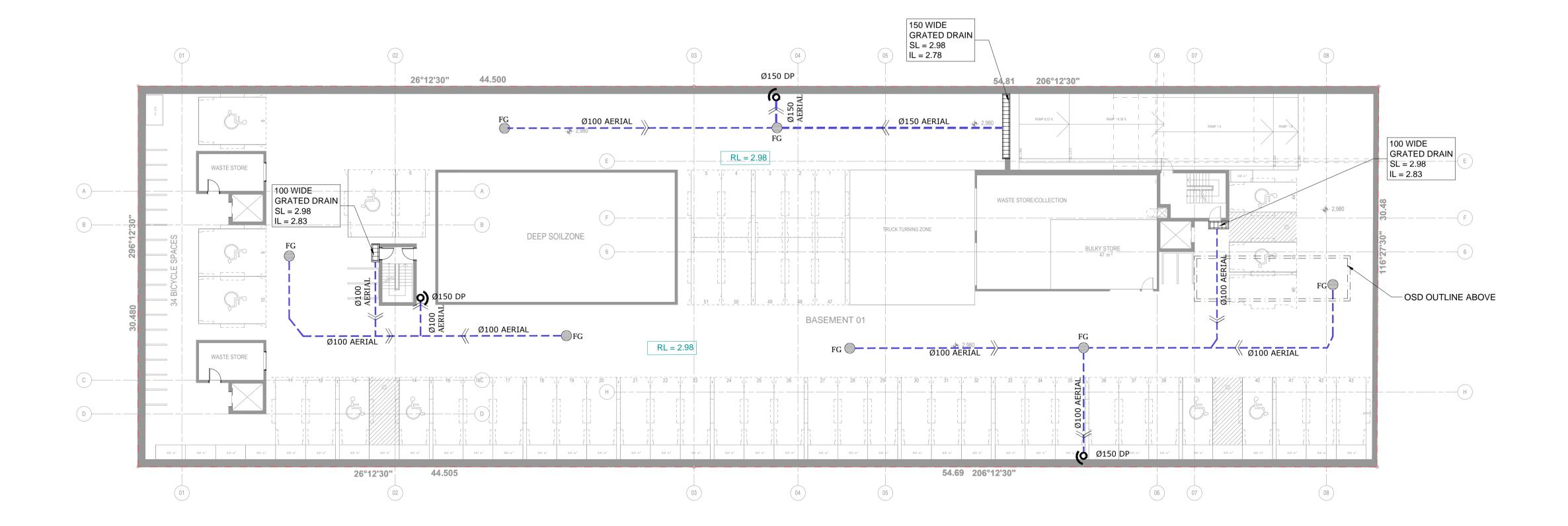
= FLOOR GULLY Ø150 S = RAINWATER SPREADER

RL 6.20 = PROPOSED FINISHED SURFACE LEVEL

 BASEMENT SLAB TO HAVE 1% MIN. FALL TO INLET PIT AS PER AS2890 REQUIREMENT ALL BASEMENT PIT TO BE FITTED WITH HEAVY DUTY CLASS C GRATE & FRAME

#### PIPES DESIGN

DEPTH (mm)	MINIMUM PIT SIZE (mm)	
	AERIAL PIPE	
	UNDERGROUND PIPES	



## BASEMENT 1 FLOOR DRAINAGE

PLAN

1:200 @ 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  $SIZE = 6700 \text{ mm}^2$ 

MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500

THE FOLLOWING SYMBOLS & ABBREVIATIONS HAVE BEEN USED:

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= FLOOR OUTLET , REFER TO DETAIL

= SURFACE INLET PIT (NO LINTEL) 100Ø = Ø100 CHARGED LINE

= Ø150 INSPECTION POINT

= RAIN WATER HEAD RWO = RAIN WATER OUTLET (300 x 300)

FG = FLOOR GULLY Ø150 S = RAINWATER SPREADER RL 6.20 = PROPOSED FINISHED SURFACE LEVEL

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STRATHFIELD COUNCIL **RECEIVED** 

DA2019/196 **19 November 2019**  450 x 450

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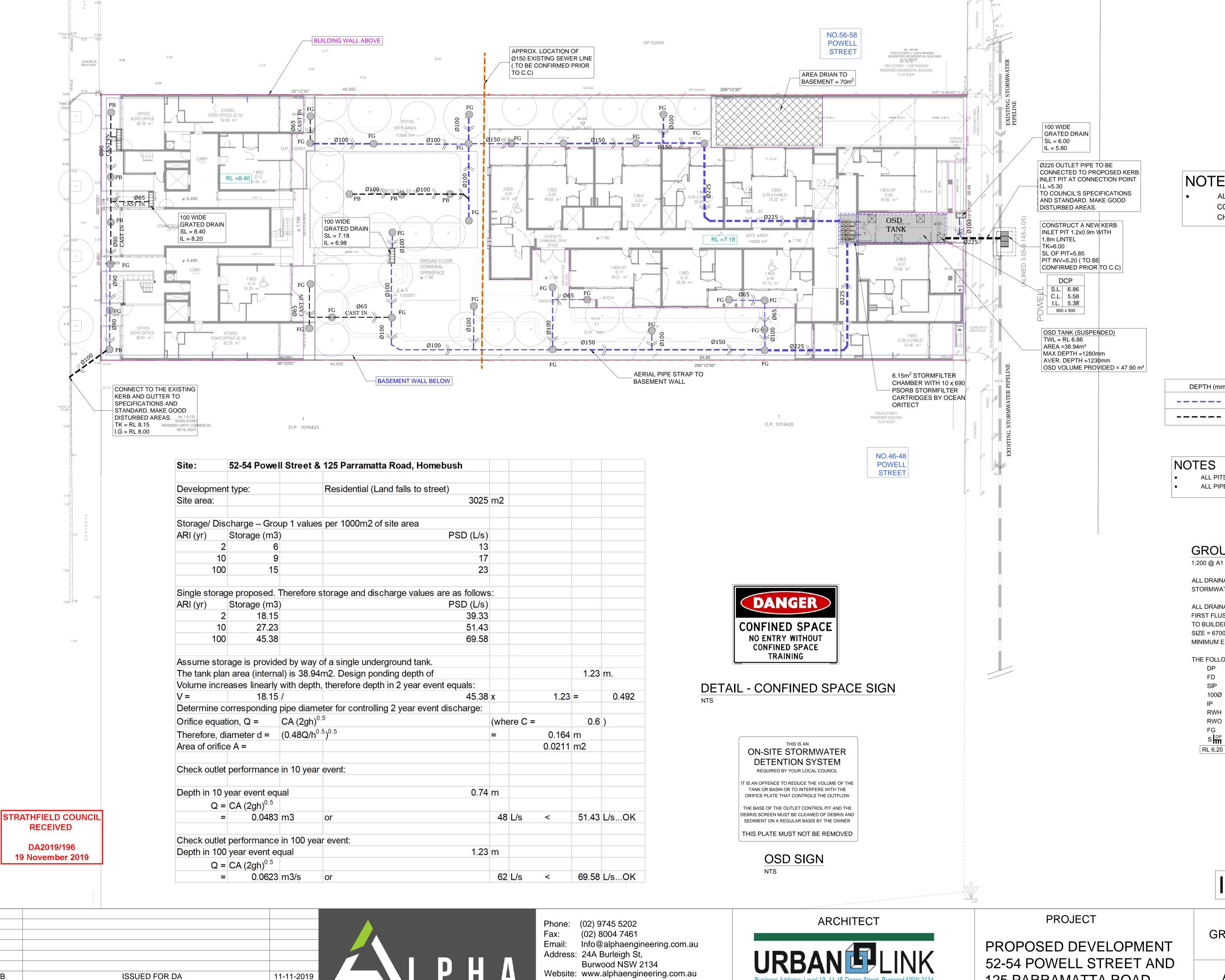


**PROJECT** 

PROPOSED DEVELOPMENT 52-54 POWELL STREET AND 125 PARRAMATTA ROAD, HOMEBUSH

DRAWING TITLE
BASEMENT 1 & 2 FLOOR DRAINAGE
PLAN

SCALES	DESIGNED
AS SHOWN	SH
PRAWING NO.	APPROVED
A9264 - SW02	JM



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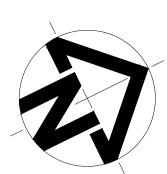
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#### NOTES

ALL ROOF STORMWATER RUNOFF TO BE CONNECTED TO STORMWATER FILTER CHAMBER DIRECTLY WITHIN OSD TANK

#### PIPES DESIGN

DEPTH (mm)	MINIMUM PIT SIZE (mm)	
	AERIAL PIPE	
	UNDERGROUND PIPES	

ALL PITS TO BE MINIMUM CLASS B UNO

ALL PIPES TO BE UPVC LAID AT MIN. 1% SLOPE UNO

# GROUND FLOOR DRAINAGE PLAN

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

 $SIZE = 6700 \text{ mm}^2$ MINIMUM EFFECTIVE EAVES GUTTER SLOPE = 1:500

THE FOLLOWING SYMBOLS & ABBREVIATIONS HAVE BEEN USED:

DP =  $\emptyset$ 150, UNO.

FD = FLOOR OUTLET, REFER TO DETAIL SIP = SURFACE INLET PIT (NO LINTEL)

100Ø = Ø100 CHARGED LINE

= Ø150 INSPECTION POINT

RWH = RAIN WATER HEAD

RWO = RAIN WATER OUTLET (300 x 300) FG = FLOOR GULLY Ø150

s = RAINWATER SPREADER

RL 6.20 = PROPOSED FINISHED SURFACE LEVEL

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# ISSUED FOR DA

125 PARRAMATTA ROAD, **HOMEBUSH** 

DRAWING TITLE

GROUND FLOOR DRAINAGE PLAN

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JM	В
	SH APPROVED

#### 900x900 CLASS C (HEAVY DUTY) HINGED GALVANISED MILD STEEL GRATE & FRAME, PROVIDE NON-RETURN LOCKING DEVICE FLAP VALVE STANDARD PUMP OUT DESIGN NOTES RL = -0.20THE PUMP OUT SYSTEM SHALL BE DESIGNED TO BE OPERATED IN THE FOLLOWING MANNER:-> THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATIVELY SO AS TO ALLOW BOTH T.W.L -0.50 PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE. LEVEL > A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER PROVIDE GALVANISED LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS PRESSURE PIPE TO IRON STEPS @300c/c REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS. MANUFACTURER'S -PUMP OUT TANK > A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm SPECIFICATION AREA: 10 m<sup>2</sup> AVERAGE DEPTH: 1.30 m ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE AND VOLUME STORED: 13 m<sup>3</sup> DRAIN THE TANK TO THE LEVEL OF THE LOW-LEVEL FLOAT. > A THIRD FLOAT SHALL BE PROVIDED AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHOULD START THE OTHER START PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM. 1% FALL MIN. > AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT AND A PUMP RL -1.85 FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO STOP THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE. CONNECT TO STORMWATER SYSTEM 100 DIA. AGG DRAIN-OWNER TO MAINTAIN THIS WITH GEO-SOCK AREA CLEAN REGULARLY FROM SILTATION EVERY 3-6 2 AUTO SUBMERSIBLE PUMPS MONTHES OPERATING SIMULTANEOUSLY. PUMPS TO BE INSTALLED AND -SPECIFIED TO MANUFACTURES SECTION - SUBSOIL DRAINAGE PUMPOUT PIT DETAIL AND CALCULATION SHEET PLACEMENT-PLAN −20Ø galvanised mild steel **PLAN** INSPECTION TOP OF PIT OPENING ر 200 ر **\_\_\_** FRONT-ELEVATION PLAN ACCESS GRATE CLASS B WITH CHILD PROOF "J" BOLT CONTRACTOR TO EXCAVATE OR APPROVED EQUIVALENT. ─ & BACKFILL PIT AS PER DIMENSIONAL DATA REFER TO PLAN FOR PIT SIZE. PIPE LAYING SPECIFICATION N.B. A B C D 75 123 48 220 100 100 148 49 220 100

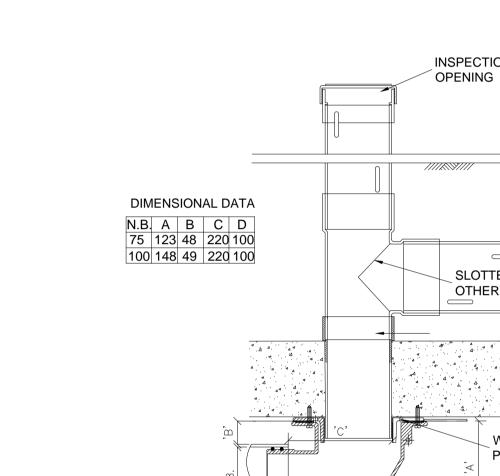
'B'x'D' AS PER PLAN

**SECTION - TYPICAL** 

SURFACE INLET PIT

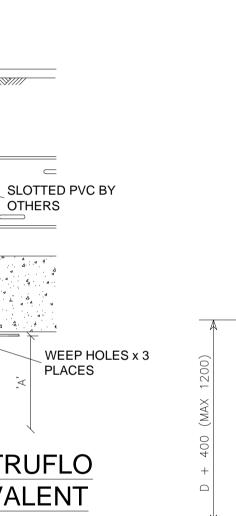
TYPICAL FOR ALL PITS IN NON-TRAFFIC AREAS

1:5 @ A1



SPECIFICATION CODE: C100/90 A 100mm SIDE OUTLET

PLACES **SECTION - SPS TRUFLO** 100SQ OR EQUIVALENT PLANTER BOX DRAIN



#### PUMP DESIGN SUMMARY

SITEA AREA =3025 m<sup>2</sup> CATCHMENT AREA = 70 m<sup>2</sup> (DRIVEWAY RAMP) 1: 100 ARI 4 HOUR STORM =36.20 mm/hr TOTAL WATER =  $0.07 \times 4 \times 36.20 = 10.136 \text{ m}^3$ 

SEEPAGE = 2.5 ML/YEAR/Ha = 6.85 m<sup>3</sup>/Ha SEEPAGE = AREA X 6.85 = 0.3025 X 6.85 = 2.07m<sup>3</sup>

TOTAL STORAGE VOLUME REQUIRED = 2.07+10.136=12.206m3

TOTAL STORAGE PROVIDED =13.00m<sup>3</sup>

PUMP HEAD = 4 m

RAINFALL INTENSITY FOR CALCULATIONS = 100 YEAR ARI STORM DURATION 5 MINUTE =239.3mm/h

PUMP RATE REQUIRED = 239.3 x 70 / 3600 =4.653l/s

BASEMENT PUMP OUT TANK PLAN

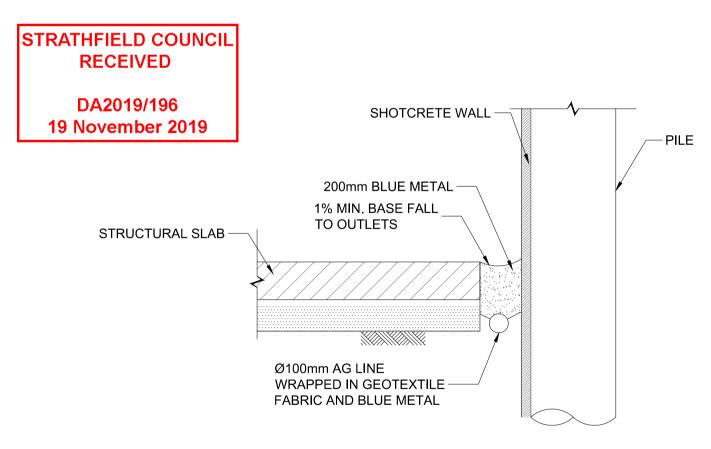
1:50 @ A1

OUT TANK

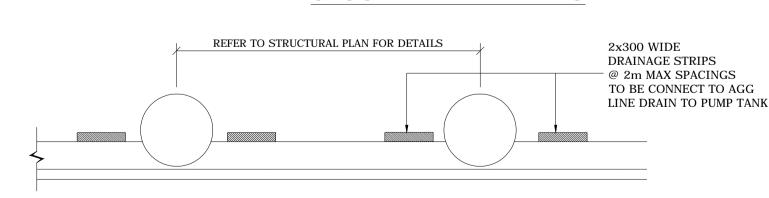
# SIDE-ELEVATION PIT FLOOR

PLACEMENT ELEVATION

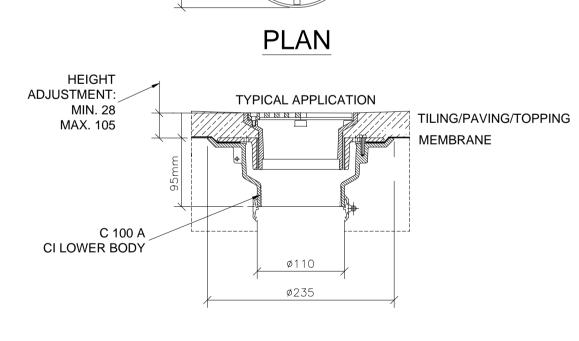
# TYPICAL STEP IRONS



#### SPOON DRAIN DETAILS



SECTION - SHOTCRETE WALL DRAINAGE

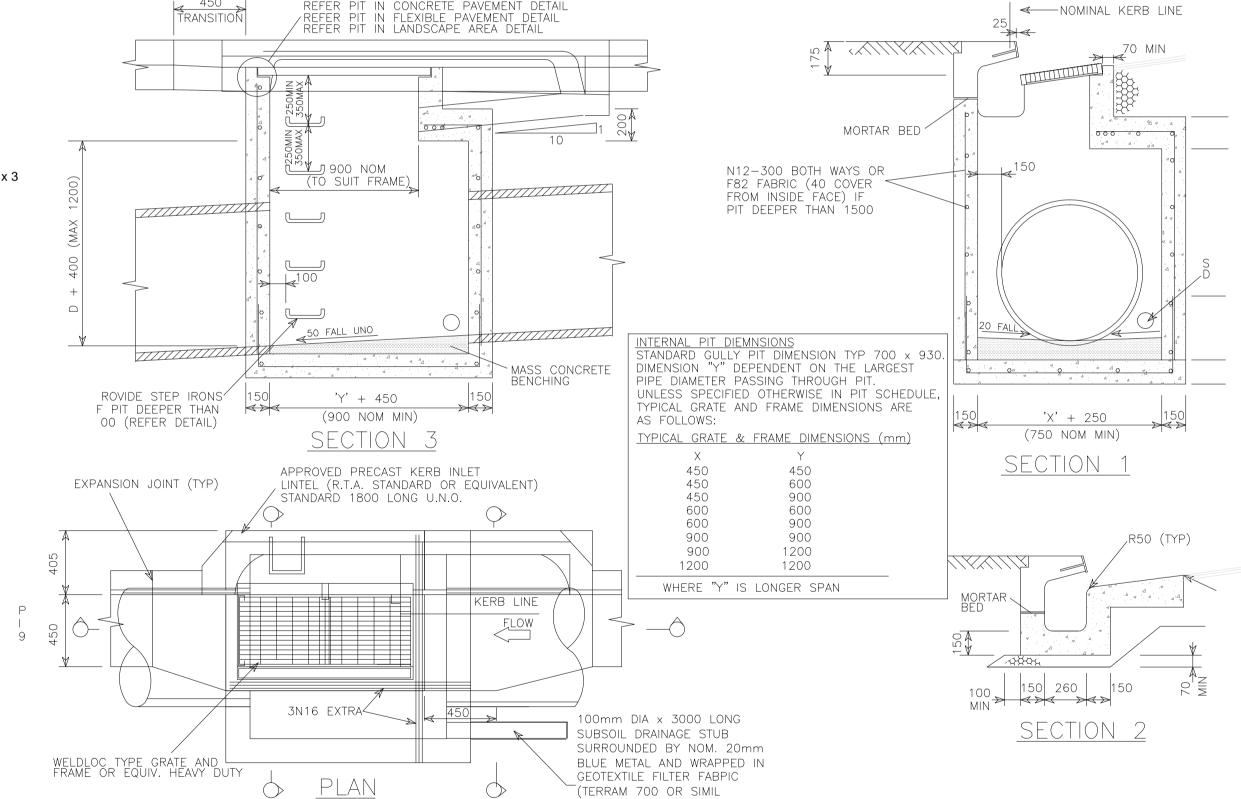


CONCRETE BENCHING/SHAPING

TO BASE OF ALL PITS

SECTION - SPS TRUFLO Ø150 OR EQUIVALENT FLOOR DRAIN (FD) INLET IN SUSPENDED SLAB

1:5 @ A1 SPECIFICATION CODE: R150 G/C (BRONZE GRATE, CI LOWER BODY) R150N/C (NICKEL - BRONZE GRATE, CI LOWER BODY) R150 S/C (316 STAINLESS STEEL GRATE, CI LOWER BODY)



# ISSUED FOR DA

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ISSUED FOR DA 11-11-2019 **ISSUED FOR COORDINATION** 07-11-2019 ISSUE DATE **AMENDMENT** REVISION



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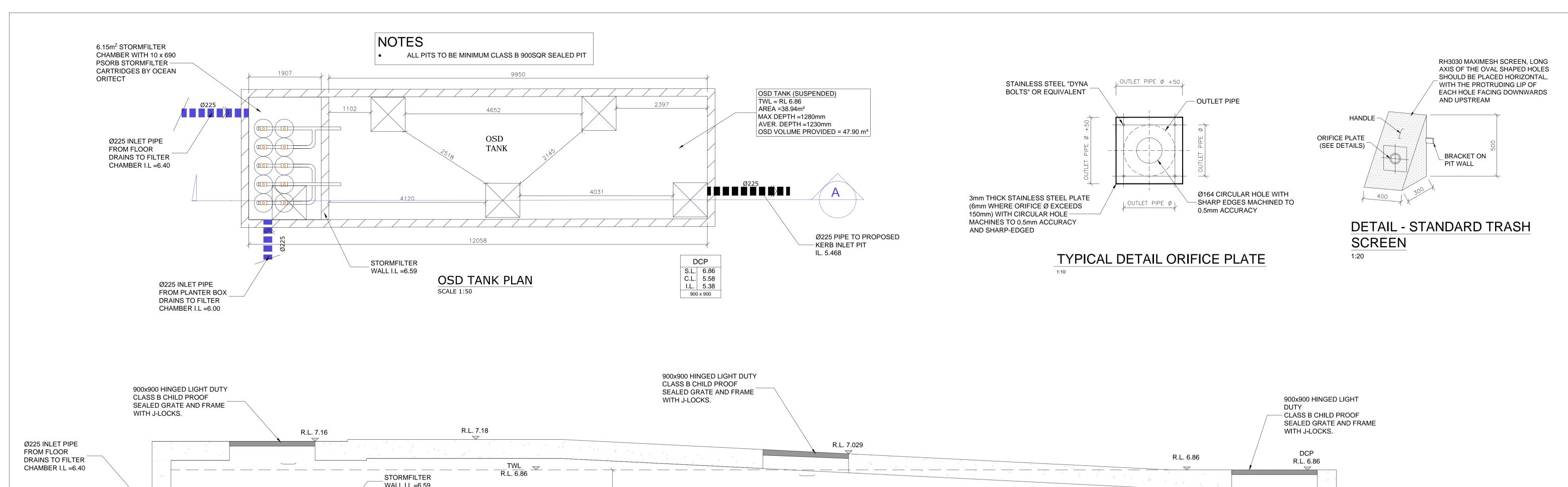
#### **PROJECT**

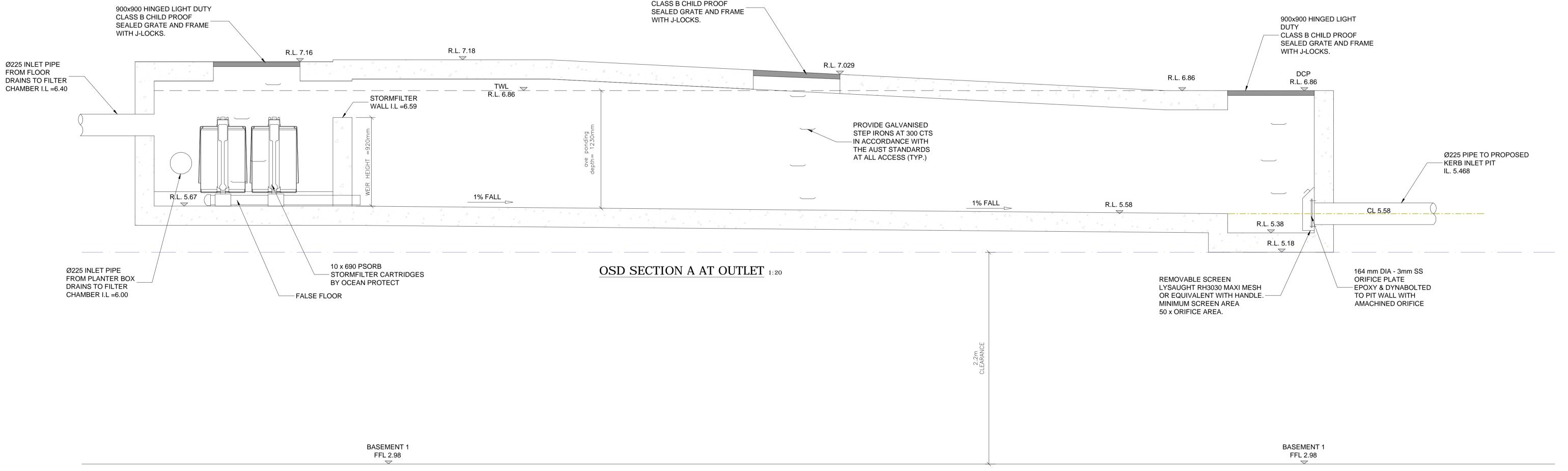
PROPOSED DEVELOPMENT 52-54 POWELL STREET AND 125 PARRAMATTA ROAD, **HOMEBUSH** 

# DRAWING TITLE

STORMWATER SECTION AND

DETIALS		
SCALES	DESIGNED	DRAFTED
AS SHOWN	SH	PS
DRAWING NO.	APPROVED	REVISION
A9264 - SW04	JM	В





STRATHFIELD COUNCIL RECEIVED DA2019/196 **19 November 2019** 



NOTE ON SIGNAGE: SIGNAGE TO BE AFFIXED UNDER EACH ACCESS GRATE AND VISIBLE SPOT ON TANK WALL

**DETAIL - CONFINED SPACE SIGN** 



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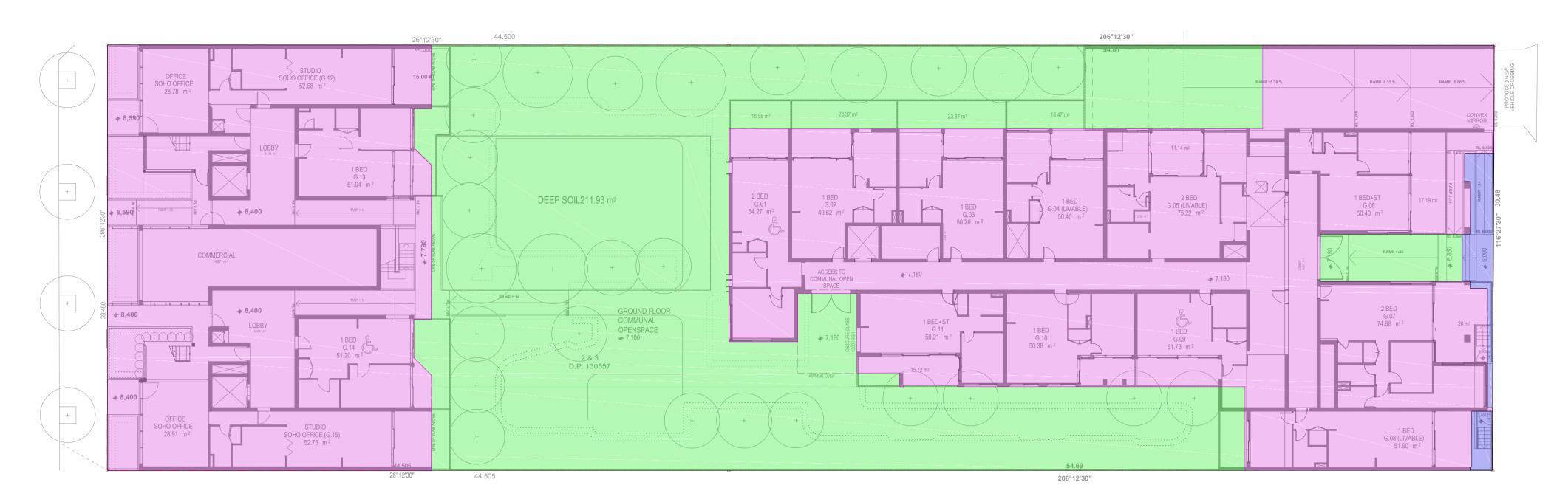
ARCHITECT
URBAN EI INK
Business Address: Level 10, 11-15 Deane Street, Burwood NSW 2134 Postal Address: PO BOX 2223 Burwood North NSW 2134 Phone Number: +61 29745 2014

## **PROJECT**

PROPOSED DEVELOPMENT 52-54 POWELL STREET AND 125 PARRAMATTA ROAD, HOMEBUSH

DRAWING	TITLE	
STORMWATER DETIALS	SECTION AND	)
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A9264 - SW05	JM	В



TOTAL AREA= 3025 m<sup>2</sup>

BYPASS AREA (95% IMPERVIOUS)= 28.5 m<sup>2</sup>

ROOF AREA TO OSD (100% IMPERVIOUS) = 1805 m<sup>2</sup>

AREA TO OSD (46% IMPERVIOUS) =  $1191.5 \text{ m}^2$ 

MUSIC CATCHMENT PLAN

## Requirements

N.T.S

REVISION

For all development types identified in Section 2.1, stormwater quality requirements are:

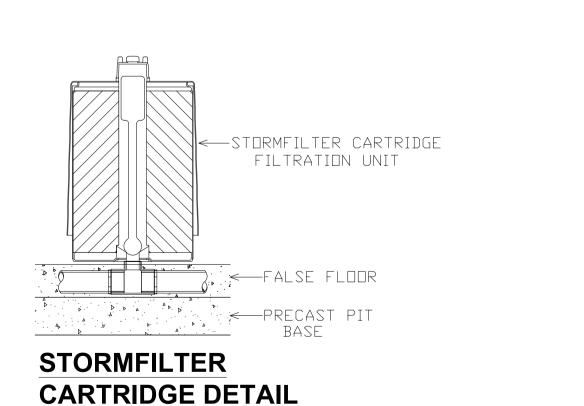
- 90% reduction in the post development mean annual load of total gross pollutant (greater than 5 mm).
- 85% reduction in the post development mean annual load of Total Suspended Solids (TSS).
- 60% reduction in the post development mean annual load of Total Phosphorus (TP).
- 45% reduction in the post development mean annual load of Total Nitrogen (TN).

11-11-2019

07-11-2019

ISSUE DAT

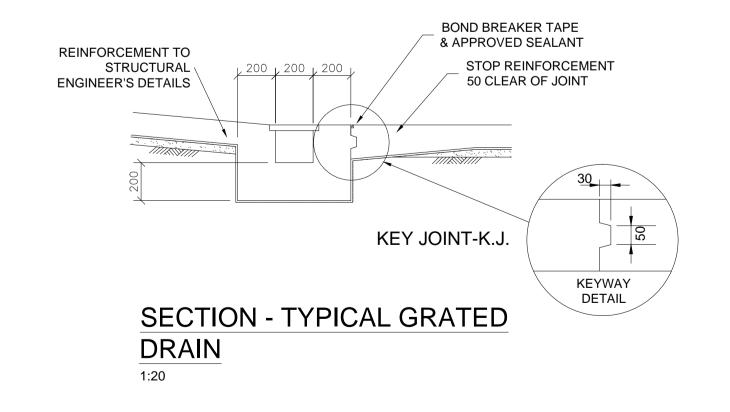
STORMWATER QUALITY REQUIREMENTS AS PER STRATHFIELD COUNCIL

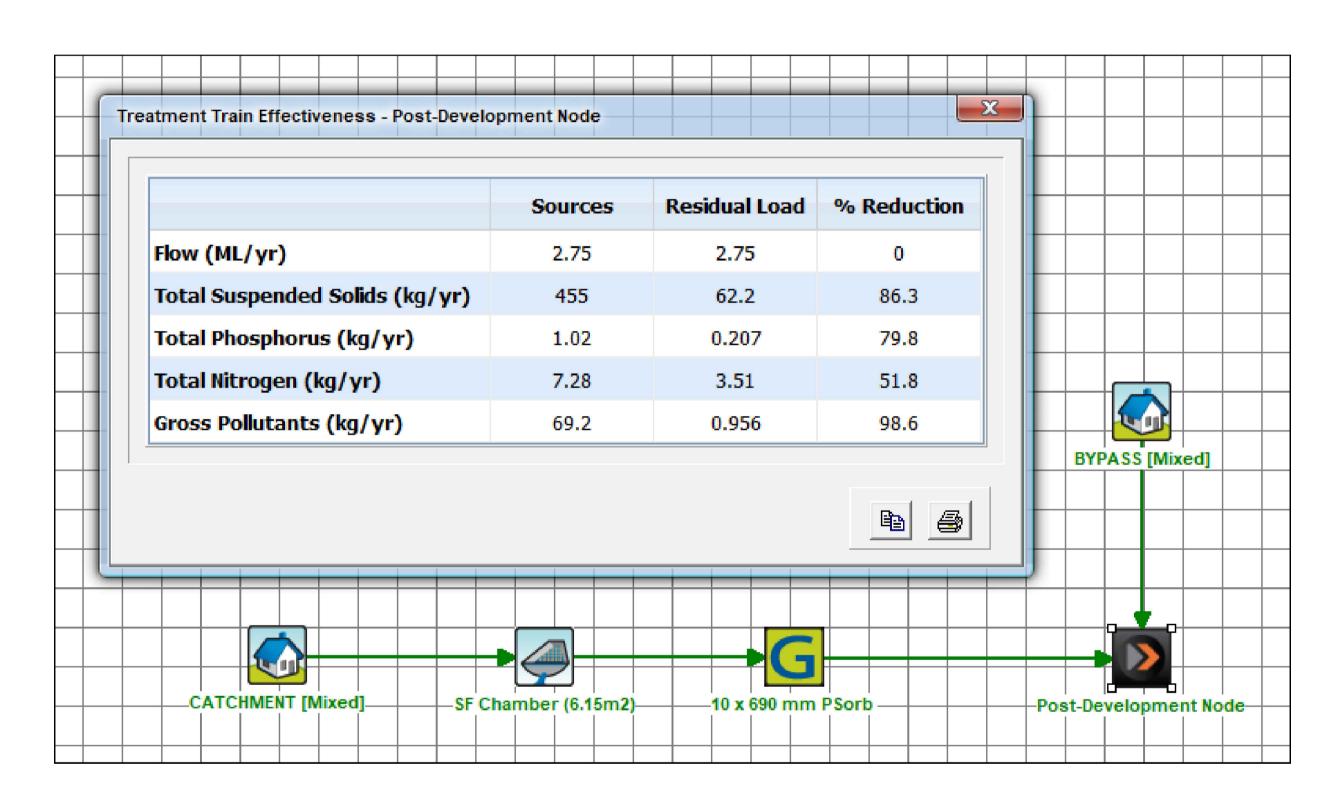


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MUSIC MODELLING RESULTS





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## **PROJECT**

PROPOSED DEVELOPMENT

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STORMWATER SE	CTION ANI	)
SCALES	DESIGNED	DRAF
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Website: www.aipnaengineering.com.au  Business Address: Level 10, 11-15 Deane Street, Burwood NSW 2134  125 PARRAMATTA ROAD,  AS SHOWN  SH  PS	COPYRIGHT THIS DRAWING REMAINS THE PROPERTY OF ALPHA ENGINEERING & DEVELOPMENT AND MAY NOT BE ALTERED IN	Postal Address: PO BOX 2223 Burwood North NSW 2134	,	DRAWING NO.	APPROVED	DRAFTED PS REVISION B
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