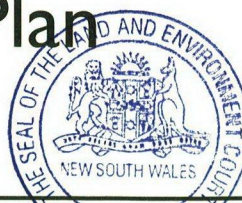


Stormwater Concept Plan Certification



The information requested on this form is required to be submitted to Council with the drainage plans when lodging the Development Application. Please tick and sign the appropriate box and attach the information as requested.

Property and Development Details

No. 339	Street FOREST ROAD	Suburb BEXLEY
Postcode 2207	Type of Development CHILDCARE CENTRE	

Designer Details

Mr	NADER		ZAKI	
No. 98	PINE ROAD	CASULA	2170	
Company Name NY CIVIL ENGINEERING				
Mailing Address (AS ABOVE)				
Tel 0430 046 849		Fax -		
Email Address: admin@nycivilengineering.com.au				

I certify that the drainage design is in accordance with the Technical Specification and DCP and I am practising in my area of competence and have the accreditation required. I acknowledge that where I am not competent Council has the right to recover from me the reasonable costs of the time spent assessing this design.

Design Certifiers Signature: NADER ZAKI	Design Certifiers Name: NADER ZAKI
Professional Qualifications: B. ENGINEERING	Date: 29 April 2019
Accreditation Organisation: ENGINEERINGS AUSTRALIA	Accreditation Reference: MIE. Aust.
Contact Details if Different to Designer Above	

Please note that the information required on this form may be available for public access under various legislation.

Privacy Statement

The personal information provided on this form (including your name and other details) will be handled in accordance with the *Privacy and Personal Information Protection Act 1998* and may be available to the public under various legislation. Refer also to the Privacy Statement on Council's website.



Telephone Interpreter Services - 131 450 Servicio Telefónico de Intérpretes
بخدمة الترجمة الهاتفية 電話傳譯服務處 Servizio telefonico interpreti
Τηλεφωνικές Υπηρεσίες Διερμηνέων Служба за преведување по телефон

Rockdale City Council

Office: 8.30am – 4.30pm (Mon-Fri); 9am – 1pm (Sat)
2 Bryant Street / PO Box 21, Rockdale NSW 2216
rcc@rockdale.nsw.gov.au www.rockdale.nsw.gov.au
Tel 02 9562 1666 Fax 02 9562 1777
ABN 66 169 730 052

Form reference

13/55648 @September2014

STORMWATER CONCEPT PLAN CHECKLIST**Property Address:** 339 FOREST ROAD, BEXLEY

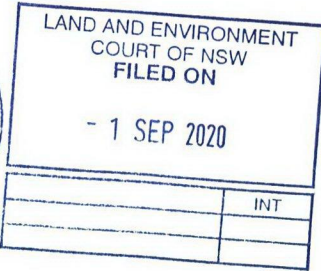
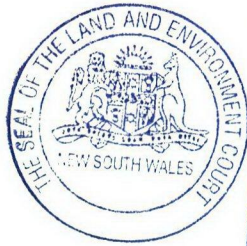
DCP Requirements	Applicable (Yes/No)	Design Complies (Yes/No)	If No, Reason for Variation
Site			
• Contours and Spot Levels	Y	Y	
• Building envelope	Y	Y	
• Floor Levels (Habitable & Garage/parking)	Y	Y	
• Trees/Landscaping	Y	Y	
• Easements/Major Services	Y	Y	
Roof Drainage Systems			
• Downpipe location & spacing	Y	Y	
Surface Drainage Systems			
• Pipe size	Y	Y	
• Pipe grade	Y	Y	
• Kerbs provided along boundary	N	Y	
• Overland flow path location	N	Y	
• Overland flow path flow	N	Y	
• Overland flow path depth	N	Y	
• Overland flow path velocity	N	Y	
• Overland flow path detail/section	N	Y	
• Flow through fence location shown	N	Y	
• Pit location	Y	Y	
• Pit size	Y	Y	
• Pit invert levels	Y	Y	
• Pit surface levels	Y	Y	
• Pit detail/section	Y	Y	
• Driveway trench grates	Y	Y	
Subsoil drainage			
• Subsoil drain location	Y	Y	
On-site Detention (OSD)			
• OSD location	Y	Y	
• OSD volume	Y	Y	
• OSD discharge rate	Y	Y	
• Detention Design Calculation Checklist	Y	Y	
• OSD detail/section	Y	Y	
• OSD discharge control detail	Y	Y	

DCP Requirements	Applicable (Yes/No)	Design Complies (Yes/No)	If No, Reason for Variation
On-site Retention (OSR)			
• OSR location	N	Y	
• Absorption rate from Council	N	Y	
• OSR absorption test and rate	N	Y	
• OSR volume	N	Y	
• Absorption Design Calculation Checklist	N	Y	
• OSR detail/section	N	Y	
• Special requirements for Atlantis Cells called up	N	Y	
Pumped discharge systems			
• Pump storage location	N	Y	
• Pump storage volume	Y	Y	
• Pump discharge	Y	Y	
• Pump storage detail/section	Y	Y	
Ancillary (where applicable)			
• Reflux valves	Y	Y	
• Connection to Council pipes	N	Y	
• BASIX or rainwater tank requirements	N	Y	
• Rainwater tank offset from Council claimed	N	Y	
• Rainwater tank location	N	Y	
• Rainwater tank overflow detail	N	Y	
• Freeboard to habitable floor levels	Y	Y	
• Drainage of Low Level Properties Procedure followed.	N	Y	
• Council advice letter for Drainage of Low Level Properties attached	N	Y	
• Protection of Low Level Driveways procedure followed	N	Y	
• Groundwater Recharge Trench	N	Y	
• Silt/litter arrestor pit provided	Y	Y	
• Stormwater Reuse System	N	Y	
• Car park water treatment provided	Y	Y	
• Car wash areas provided	N	Y	
• Other WSUD Requirements	Y	Y	
• Flood Advice Requirements	N	Y	

STORMWATER MANAGEMENT PLAN (FOR DA)

PROPOSED CHILD CARE CENTRE

No.339 FOREST ROAD, BEXLEY



GENERAL NOTES

1. FINAL LOCATION OF NEW DOWNPIPES TO BE DETERMINED BY BUILDER/ARCHITECT AT TIME OF CONSTRUCTION.
2. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTS AND OTHER CONSULTANTS DRAWINGS. ANY DISCREPANCIES TO BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH WORK.
3. ALL MATERIALS AND WORKMANSHIP TO BE IN ACCORDANCE WITH AS/NZS 3500.3:2003 STORMWATER DRAINAGE, BCA AND LOCAL COUNCIL POLICY/CONSENT/REQUIREMENTS.
4. ALL DIMENSIONS AND LEVELS TO BE VERIFIED BY BUILDER ON-SITE PRIOR TO COMMENCEMENT OF WORKS. THESE DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS NOR TO BE USED FOR SETOUT PURPOSES.
5. ALL SURVEY INFORMATION AND PROPOSED BUILDING AND FINISHED SURFACE LEVELS SHOWN IN THESE DRAWINGS ARE BASED ON LEVELS OBTAINED FROM DRAWINGS BY OTHERS.
6. ALL STORMWATER DRAINAGE PIPES ARE TO BE uPVC AT MINIMUM 1% GRADE UNLESS NOTED OTHERWISE.
7. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND LEVEL ALL EXISTING SERVICES OR OTHER STRUCTURES WHICH MAY AFFECT/BE AFFECTED BY THIS DESIGN PRIOR TO COMMENCEMENT OF WORKS.
8. ALL PITS WITHIN DRIVEWAYS TO BE 150mm THICK CONCRETE OR EQUAL.
9. THIS PLAN IS THE PROPERTY OF NY CIVIL ENGINEERING AND MAY NOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION FROM DONOVAN ASSOCIATES.

PLAN SPECIFIC NOTES

1. **ROOF DRAINAGE NOTE:** AS 3500 ROOF DRAINAGE REQUIRES EAVES GUTTERS TO BE SIZED FOR 20 YEAR 5 MIN. STORM = 205mm/hr. FOR EAVES GUTTERS, AS 3500.3:2003 THEN HAS THE FOLLOWING REQUIREMENTS:
i) FOR TYPICAL STANDARD QUAD GUTTER WITH $A_e = 6000\text{mm}^2$ AND GUTTER SLOPE 1:500 AND STEEPER, THIS REQUIRES ONE DOWNPIPE PER 30m^2 ROOF AREA.
ii) DOWNPIPES TO BE MINIMUM 90mm DIA. OR 100 x 50mm FOR GUTTERS SLOPE 1:500 AND STEEPER.
iii) OVERFLOW METHOD TO FIGURE G1 OF AS 3500.3:2003
IT IS THE RESPONSIBILITY OF THE PLUMBER AND / OR BUILDER TO COMPLY WITH THIS. THIS DRAWING SHOWS PRELIMINARY LOCATIONS / NUMBERS OF DOWNPIPES ONLY WHICH ARE TO BE VERIFIED BY BUILDER / PLUMBER
2. **TREE PRESERVATION:** IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ANY PRIOR APPROVAL REQUIRED FROM COUNCIL WITH RESPECT TO POTENTIAL IMPACT ON TREES FOR ANY WORKS SHOWN ON THIS DRAWING PRIOR TO THE COMMENCEMENT OF THOSE WORKS
3. ALL ROOF GUTTERS TO HAVE OVERFLOW PROVISION IN ACCORDANCE WITH AS 3500.3:2003 AND SECTIONS 3.5.3, 3.7.5 AND APPENDIX G OF AS 3500.3:2003
4. THIS DRAWING IS NOT TO BE USED FOR SET-OUT PURPOSES - REFER TO ARCHITECTURAL DRAWINGS
5. LOCATION OF SURFACE STORMWATER GRATED INLET PITS MAY BE VARIED OR NEW PITS INSTALLED AT THE CONSTRUCTION STAGE PROVIDED DESIGN INTENT OF THIS DRAWING IS MAINTAINED

SURFACE INLET PIT		LEGEND	GRATED TRENCH DRAIN	
SURFACE INLET PIT (WITH ENVIROPOD 200 MICRON)			ABSORPTION TRENCH	
ACCESS GRATE (WITH ENVIROPOD 200 MICRON)			PROPOSED ROOF GUTTER FALL	
450 SQUARE INTERVAL	450 X 450		PROPOSED DOWNPIPE SPREADER	
GRATE LEVEL = 75.50	SL 75.50		STORMWATER PIPE 100mm DIA. MIN. UNO	
INVERT LEVEL = RL 75.20	IL 75.20		SUBSOIL PIPE	
PROPOSED DOWNPIPE 90mm DIA. OR 100mm x 50mm MIN.			EXISTING STORMWATER PIPE	
NATURAL GROUND FINISHED DESIGN LEVEL	10.00		INSPECTION RISER	
			RAINWATER HEAD	

DRAINAGE NOTES

- PIPE SIZE:**
THE MINIMUM PIPE SIZE SHALL BE:
- 90mm DIA WHERE THE LINE ONLY RECEIVES ROOFWATER RUNOFF; OR
 - 100mm DIA WHERE THE LINE RECEIVES RUNOFF FROM PAVED OR UNPAVED AREAS ON THE PROPERTY
- THE MINIMUM PIPE VELOCITY SHOULD BE 0.6 m/s AND A MAXIMUM PIPE VELOCITY OF 6.0 m/s DURING THE DESIGN STORM.
- PIPE GRADE:**
THE MINIMUM PIPE GRADE SHALL BE:
- 1.0% FOR PIPES LESS THAN 225mm DIA (UNO)
 - 0.5% FOR ALL LARGER PIPES (UNO)
- PIPES WITH A GRADIENT GREATER THAN 20% WILL REQUIRE ANCHOR BLOCKS AT THE TOP AND BOTTOM OF THE INCLINED SECTION; AND AT INTERVALS NOT EXCEEDING 3.0m
- ANCHOR BLOCKS ARE DESIGNED ACCORDING TO *CLAUSE 3.5.3 OF AS3500.3-1990*

DEPTH OF COVER FOR PVC PIPES:
MINIMUM PIPE COVER SHALL BE AS FOLLOWS:

LOCATION	MINIMUM COVER
NOT SUBJECT TO VEHICLE LOADING	100mm SINGLE RESIDENTIAL 300mm ALL OTHER DEVELOPMENTS
SUBJECT TO VEHICLE LOADING UNDER A SEALED ROAD	450mm WHERE NOT IN A 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 THEN 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.

CONNECTIONS TO STORMWATER DRAINS UNDER BUILDINGS:
SHALL BE CARRIED OUT IN ACCORDANCE WITH *SECTION 3.10 OF AS3500.3-1990*

CONNECTIONS TO COUNCIL SYSTEM:
IF PROPOSED DRAINAGE SYSTEM IS DESIGNED TO CONNECT TO COUNCIL'S DRAINAGE SYSTEM, IT IS ADVISED THAT A "WORKS PERMIT" IS OBTAINED FROM THE RESPECTIVE COUNCIL PRIOR TO COMMENCEMENT OF WORKS

ABOVE GROUND PIPEWORK:
SHALL BE CARRIED OUT IN ACCORDANCE WITH *SECTION 6 OF AS3500.3-1990*

PIT SIZES AND DESIGN:

DEPTH (mm)	MINIMUM PIT SIZE (mm)
UP TO 450mm	450 x 450
450mm TO 600mm	600 x 600
600mm TO 900mm	600 x 900
900mm TO 1500mm	900 x 900 (WITH STEP IRONS)
1500mm TO 2000mm	1200 x 1200 (WITH STEP IRONS)

ALL PIPES SHOULD BE CUT FLUSH WITH THE WALL OF THE PIT.

PITS GREATER THAN 600mm DEEP SHALL HAVE A MINIMUM ACCESS OPENING OF 600 x 600mm

THE GRATED COVERS OF PITS LARGER THAN 600 x 600mm ARE TO BE HINGED TO PREVENT THE GRATE FROM FALLING INTO THE PIT.

THE BASE OF THE DRAINAGE PITS SHOULD BE AT THE SAME LEVEL AS THE INVERT OF THE OUTLET PIPE. RAINWATER SHOULD NOT BE PERMITTED TO POND WITHIN THE STORMWATER SYSTEM

- **TRENCH DRAINS:**
CONTINUOUS TRENCH DRAINS ARE TO BE OF WIDTH NOT LESS THAN 150mm AND DEPTH NOT LESS THAN 100mm. THE BARS OF THE GRATING ARE TO BE PARALLEL TO THE DIRECTION OF SURFACE FLOW.
- **STEP IRONS:**
PITS BETWEEN 1.2m AND 6m ARE TO HAVE STEP IRONS IN ACCORDANCE WITH AS1657. FOR PITS GREATER THAN 6m OTHER MEANS OF ACCESS MUST BE PROVIDED.
- **PVC PITS:**
PVC PITS WILL ONLY BE PERMITTED IF THEY ARE NOT A GREATER SIZE THAN 450 x 450mm (MAXIMUM DEPTH 450mm) AND ARE HEAVY DUTY
- **IN-SITU PITS:**
IN-SITU PITS ARE TO BE CONSTRUCTED ON A CONCRETE BED OF AT LEAST 150mm THICK. THE WALLS ARE TO BE DESIGNED TO MEET THE MINIMUM REQUIREMENTS OF *CLAUSE 4.6.3 OF AS3500.4-1990*. PITS DEEPER THAN 1.8m SHALL BE CONSTRUCTED WITH REINFORCED CONCRETE.
- **GRATES:**
GRATES ARE TO BE GALVANISED STEEL GRID TYPE. GRATES ARE TO BE OF HEAVY-DUTY TYPE IN AREAS WHERE THEY MAY BE SUBJECT TO VEHICLE LOADING.

REVISION	DRAWN	DESCRIPTION	DATE	PLAN BY	DRAWING TITLE	APPROVED BY	DESIGNED	CHECKED
A	YR	ISSUED FOR DA	29.04.2019		DETAILS, NOTES & LEGEND	NADER ZAKI MIEAUST	YR	NZ
B	YR	ARCHITECTURAL AMENDMENTS	18.02.2020		PROJECT TITLE		SHEET SIZE	SCALE
					PROPOSED CHILD CARE CENTRE		A1	
					No.339 FOREST ROAD		ISSUE	No. IN SET
					BEXLEY		B	5
						JOB REFERENCE	DRAWING No.	
						E190014	D1	



A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE

B) MINIMUM DIMENSIONS OF THE SIGN

- 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS)
- 250mm x 180mm (SMALL ENTRIES SUCH AS GRATES AND MANHOLES)

C) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPELENE.

D) SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN



NOTE:

1. SIGN SHALL BE IN CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT

COLOURS:
WARNING - RED
ALL OTHERS - BLACK

PUMP-OUT CALCULATIONS
AS PER AS3500.3

- DESIGN STORM 10 ARI 2Hr ($I = 38 \text{ mm/hr}$)
- AREA TO PUMP APPROX 92 m^2 - DRIVEWAY
- MAX FLOW $\frac{0.0092 \text{ Ha} \times 266 \text{ mm/hr}}{360} = 6.7 \text{ L/s}$
- DESIGN FLOW $\frac{0.0092 \text{ Ha} \times 38 \text{ mm/hr}}{360} = 1.0 \text{ L/s}$
- DESIGN VOLUME $1.0 \text{ L/s} \times 60 \text{ s} \times 120 \text{ min} = 7.200 \text{ L}$

THEREFORE PROVIDE MINIMUM 7.2m³ HOLDING TANK
PUMP OUT PSD 10 L/s (AS PER AS 3500.3)

PROVIDE DUAL PUMPS WITH MINIMUM
DISCHARGE RATE OF 10 L/s EACH. REFER TO DETAIL.

PUMP-OUT CALCULATIONS
AS PER AS3500.3

PROPOSED RISING MAIN PIPE DIAMETER
65mm DIA uPVC 'PRESSURE PIPE' CLASS '12'

HEAD LOSS

- STATIC = 3.30 m
- PIPE FRICTION = 1.1 m
- FITTINGS = 0.6 m
- TOTAL = 5.0 m

PUMP DUTY

10 l/s AT 5.0 m HEAD

PUMP TYPE

SUBMERSIBLE EQUAL TO DAVEY D150 2 2 KW
240 V, OR EQUIVALENT
USE TWO (2) x PUMPS TO OPERATE

ALTERNATIVELY

AS PER AS3500.3.

PUMP CONTROL

AUTOMATIC WITH FLOAT SWITCHES

STANDARD PUMP OUT DESIGN NOTES:

THE PUMP OUT SYSTEM SHALL BE DESIGNED TO OPERATE IN THE FOLLOWING MANNER:

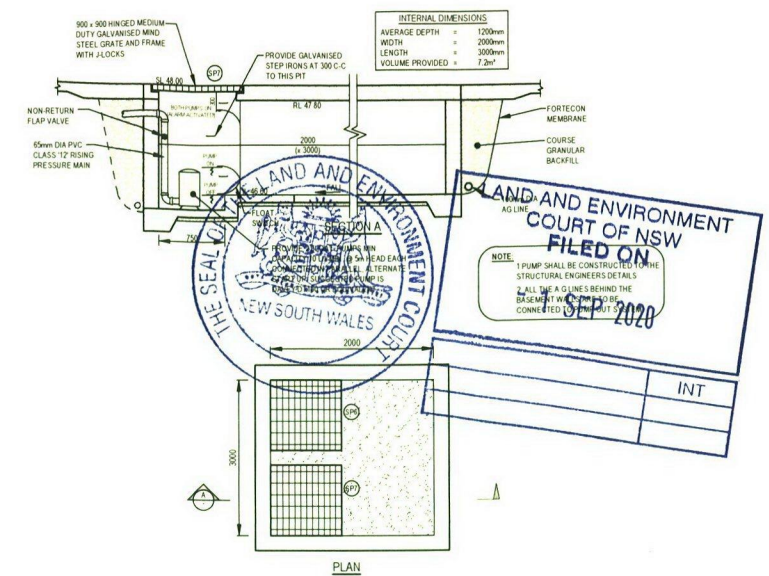
- THE PUMPS SHALL BE PROGRAMMED TO WORK ALTERNATELY SO AS TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.

- A LOW LEVEL FLOAT SHALL BE PROVIDED TO ENSURE THAT THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THE FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS.

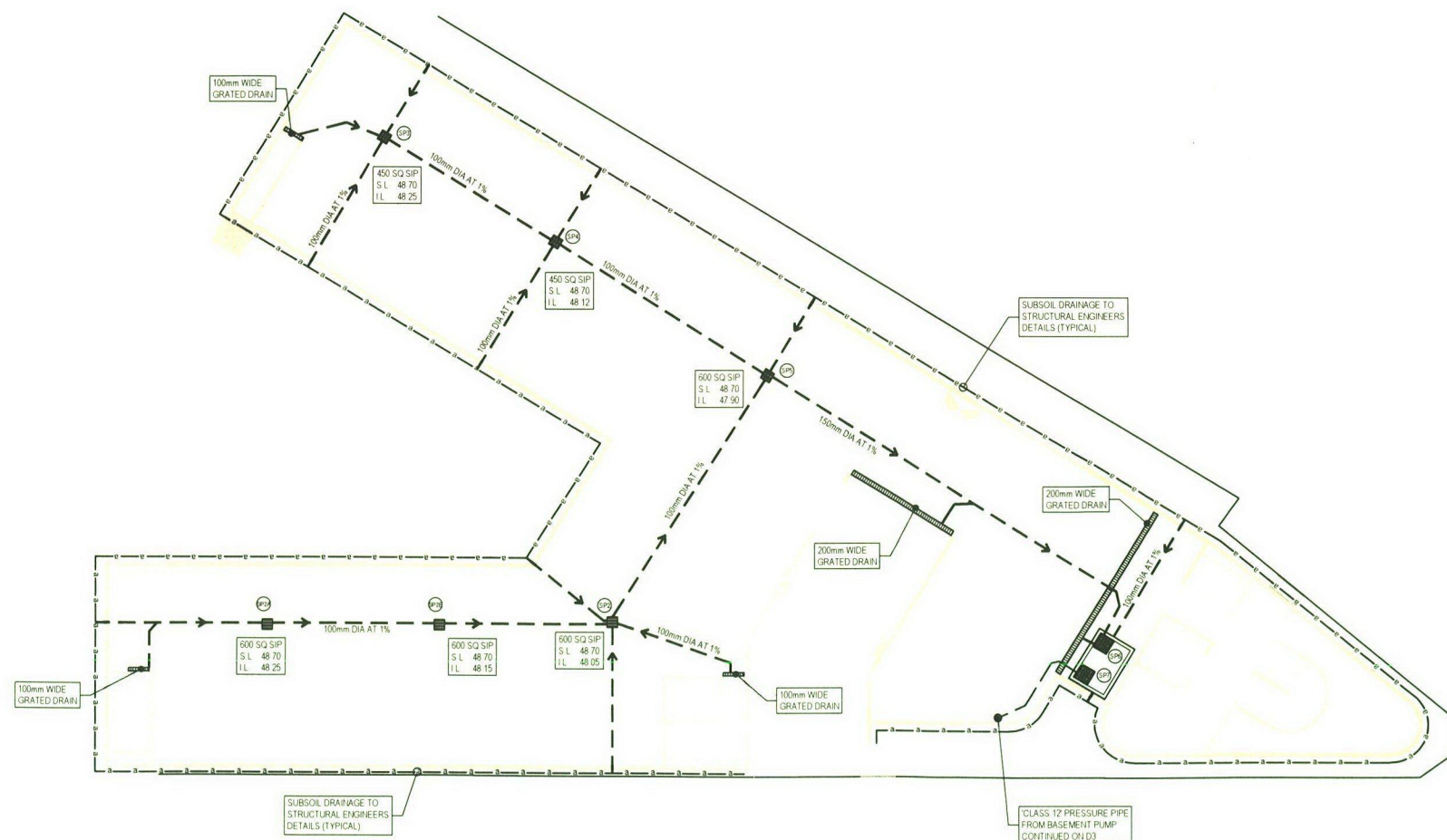
A SECOND FLOAT SHALL BE PROVIDED AT A HIGHER LEVEL, APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL, WHEREBY ONE OF THE PUMPS WILL OPERATE AND DRAIN THE TANK TO THE LEVEL OF THE LOW-LEVEL FLOAT.


- 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 PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.

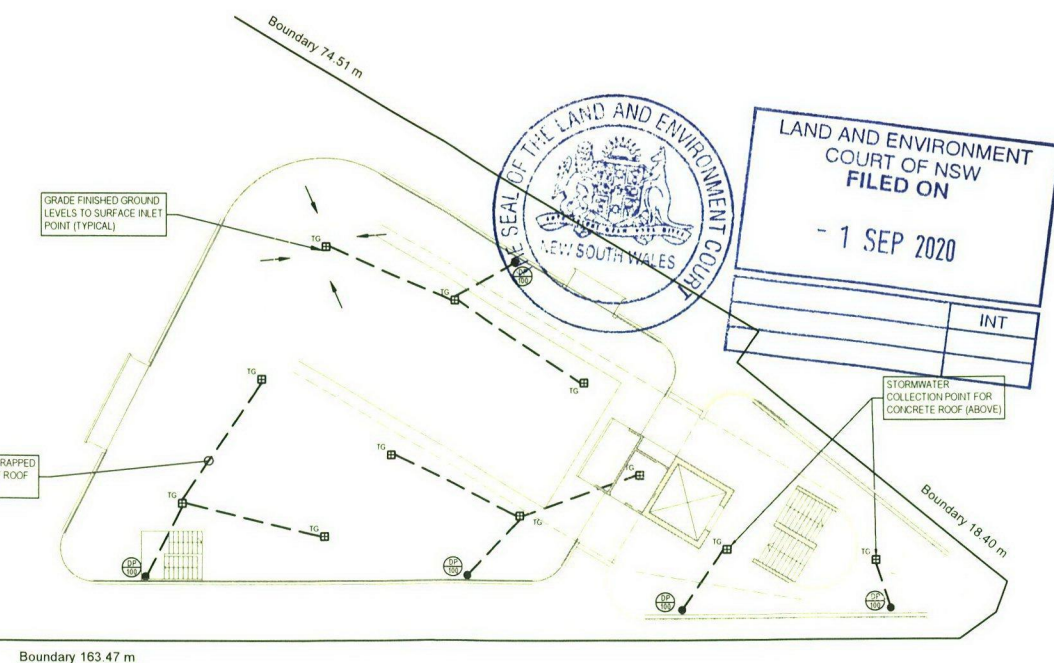
- AN ALARM SYSTEM SHALL BE PROVIDED WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL. THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.



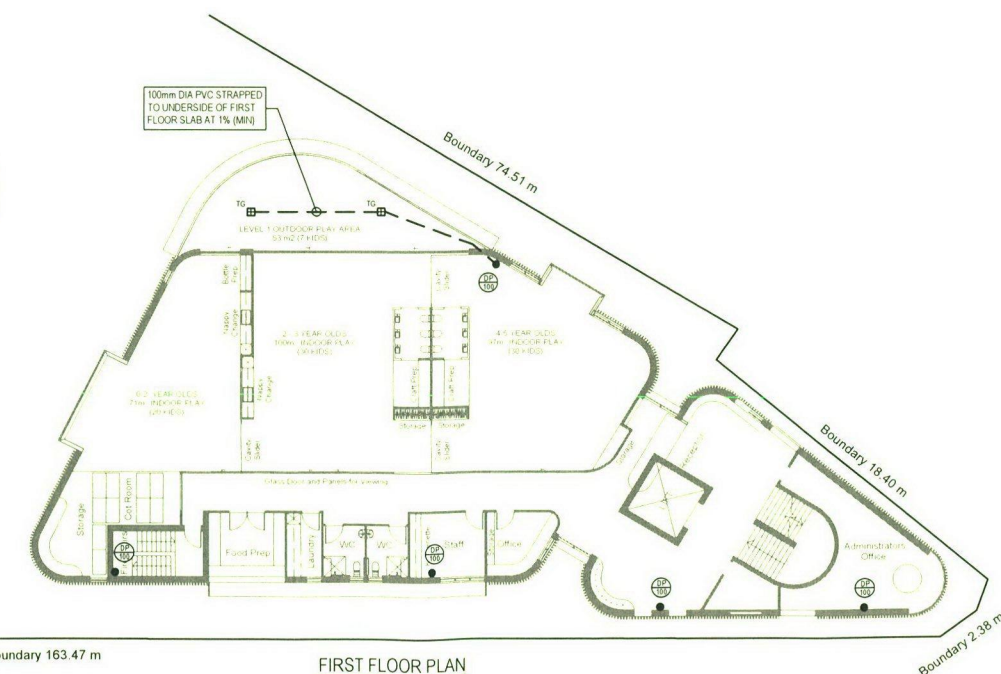
PUMP HOLDING TANK
NTS



REVISION	DRAWN	DESCRIPTION		PLAN BY	DRAWING TITLE	APPROVED BY	DESIGNED	CHECKED
A	YA	ISSUED FOR DA	29.04.2019		STORMWATER MANAGEMENT PLAN	NADER ZAKI MIA/EST.	YR	NZ
B	YR	ARCHITECTURAL AMENDMENTS	18.02.2020			SHEET SIZE	SCALE	
						A1	1:200	
						ISSUE	No. IN SET	
						B	5	
						JOB REFERENCE	DRAWING No.	
				E190014	D2			



ROOF PLAN
1 200





FIRST FLOOR PLAN
1 200

SITE PLAN
1:200

BELOW GROUND OSD TANK		OSD WARRANT	
• SURFACE AREA	32.0m ²	LGA	BAYSIDE COUNCIL (ROCKDALE)
• GRATE LEVEL	RL 50.44	SOURCE	ROCKDALE TECHNICAL SPECIFICATIONS 2011
• TOP WATER LEVEL	RL 50.00		PART 2.4
• CENTRELINE LEVEL	RL 49.20	OSD CATCHMENT 2 BARDWELL CREEK	
• INVERT LEVEL	RL 49.15		
• AVERAGE DEPTH	775mm		
• STORAGE VOLUME	24.8m ³	SSR	= 365 m ³ /ha
• PSD	3.55L/s (2 YEAR ARI)	PSD	= 150 L/s/ha
• PSD	10.14L/s (50 YEAR ARI)	• SITE DEVELOPMENT AREA (CHILDCARE CENTRE ONLY)	676 m ²
		FINAL SSR	365m ³ /ha x 0.0679/ha = 24.7 m ³
		FINAL PSD	150L/s/ha x 0.0679/ha = 10.14L/s
		• 2 YEAR ARI VOLUME	11.1 m ³
		• 50 YEAR ARI VOLUME	24.7 m ³
		• 2 YEAR ARI PSD	3.55 m ³
		• 50 YEAR ARI PSD	10.14 m ³



REVISION	DRAWN	DESCRIPTION	DATE	PLAN BY	DRAWING TITLE	APPROVED BY	DESIGNED	CHECKED
A	YR	ISSUED FOR DA	29.04.2019	 <div>T E W</div> <div>address@naderzakiengineering.com.au www.naderzakiengineering.com.au</div>	STORMWATER MANAGEMENT PLAN	NADER ZAKI MIEAust	YR	NZ
B	YR	ARCHITECTURAL AMENDMENTS	18.02.2020		PROPOSED CHILD CARE CENTRE No.339 FOREST ROAD BEXLEY	 Nader Zaki	SHEET SIZE	SCALE
							A1	1:200
							ISSUE	No. IN SET
							B	5
						JOB REFERENCE	DRAWING No.	
						E190014	D3	

DUST CONTROL:

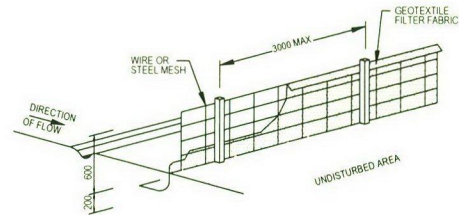
- NOTE: DURING EXCAVATION, DEMOLITION AND CONSTRUCTION, ADEQUATE MEASURES SHALL BE TAKEN TO PREVENT DUST FROM AFFECTING THE AMENITY OF THE NEIGHBOURHOOD.
- THE FOLLOWING MEASURES MUST BE ADOPTED:
1. PHYSICAL BARRIERS SHALL BE ERECTED AT RIGHT ANGLES TO PREVENT WIND DIRECTION OR SHALL BE PLACED AROUND OR OVER DUST SOURCES TO PREVENT WIND OR ACTIVITY FROM GENERATING DUST.
 2. EARTHWORKS AND SCHEDULING ACTIVITIES SHALL BE MANAGED TO COINCIDE WITH THE NEXT STAGE OF DEVELOPMENT TO MINIMISE THE AMOUNT OF TIME THE SITE IS LEFT TO CUT OR EXPOSED.
 3. ALL MATERIALS SHALL BE STORED OR STOCKPILED AT THE BEST LOCATIONS.
 4. THE GROUND SURFACE SHOULD BE DAMPENED SLIGHTLY TO PREVENT DUST FROM BECOMING AIRBORNE BUT SHOULD NOT BE WET TO THE EXTENT THAT RUNOFF OCCURS.
 5. ALL VEHICLES CARRYING SOIL OR RUBBLE TO OR FROM THE SITE SHALL AT ALL TIMES BE COVERED TO PREVENT THE ESCAPE OF DUST.
 6. ALL EQUIPMENT WHEELS SHALL BE WASHED BEFORE EXISTING THE SITE USING MANUAL OR AUTOMATED SPRAYERS AND DRIVE-THROUGH WASHING BAYS.
 7. GATES SHALL BE CLOSED BETWEEN VEHICLE MOVEMENTS SHALL BE FITTED WITH SHADE CLOTH.
 8. CLEANING OF FOOTPATHS AND ROADWAYS SHALL CARRIED OUT DAILY.
 9. ALL BUILDERS REFUSE, SPILL AND/OR MATERIAL UNSUITABLE FOR USE IN LANDSCAPE AREAS SHALL BE REMOVED FROM SITE ON COMPLETION OF THE BUILDING WORKS.

NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES TO BE INSPECTED AND MAINTAINED DAILY BY SITE MANAGER IN ACCORDANCE WITH COUNCIL REQUIREMENTS.
2. ALL STOCKPILES TO BE CLEAR FROM DRAINS, GUTTERS AND FOOTPATHS.
3. DRAINAGE IS TO BE CONNECTED TO STORMWATER SYSTEM AS SOON AS POSSIBLE.
4. ROADS AND FOOTPATHS TO BE SWEEPED DAILY AS REQUIRED BY COUNCIL.
5. IF YOU DO NOT COMPLY WITH COUNCIL REQUIREMENTS & DOCUMENTATION, YOU MAY BE LIABLE TO PROSECUTION FROM GOVERNMENT AUTHORITIES.

LEGEND:

- UNDISTURBED VEGETATION
- SEDIMENT FENCE
- STOCK PILES
- STABILIZED SITE ACCESS
- MESH & GRAVEL INLET FILTER
- WATER DIVERSION
- STORMWATER PIT WITH SEDIMENT BARRIER

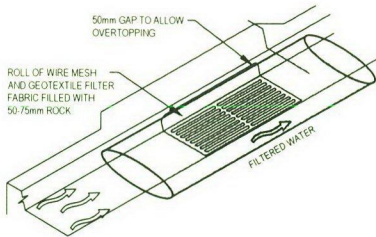


SEDIMENT FENCE DETAIL

NTS

CONSTRUCTION NOTES:

1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWINGS TO LIMIT THE CATCHMENTS AREA OF ANY ONE SECTION. THE CATCHMENTS AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10 YEAR EVENT.
2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
3. DRIVE 1.5m LONG STAR PICKETS INTO GROUND AT 2.5m INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH 150mm OVERLAP.
6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

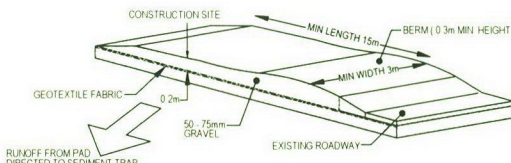


MESH AND GRAVEL INLET FILTER

NTS

CONSTRUCTION NOTES:

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
2. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm (x) 400mm (y).
4. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
5. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
6. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LOADED WATERS CANNOT PASS BETWEEN.

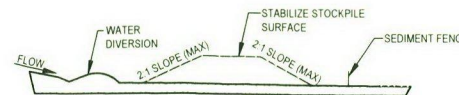


STABILIZED SITE ACCESS

NTS

CONSTRUCTION NOTES:

1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASED OR 30mm AGGREGATE.
4. ENSURE THE STRUCTURE IS AT LEAST 15m LONG OR TO BUILD ALIGNMENT AND AT LEAST 3 METRES WIDE.
5. WHERE A SEDIMENT FENCE JOINS ONTO THE STABILIZED ACCESS, CONSTRUCT A HUMP IN THE STABILIZED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

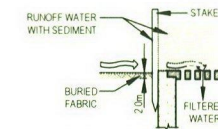


STOCKPILE

NTS

NOTE:

1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
4. WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILIZE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS (LOW FLOW) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METRES ON THE DOWNSLOPE.

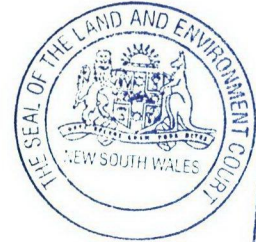


SEDIMENT BARRIER AROUND PIT

NTS

CONSTRUCTION NOTES:

1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
2. FOLLOW STRAW FILTER AND SEDIMENT FENCE FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOTEXTILE. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.



LAND AND ENVIRONMENT
COURT OF NSW
FILED ON

- 1 SEP 2020

INT



REVISION	DRAWN	DESCRIPTION	DATE
A	YR	ISSUED FOR DA	29.04.2019
B	YR	ARCHITECTURAL AMENDMENTS	18.02.2020

PLAN BY
NY

DRAWING TITLE
**SEDIMENT CONTROL PLAN
AND DETAILS**
PROJECT TITLE
**PROPOSED CHILD CARE CENTRE
No.339 FOREST ROAD
BEXLEY**

APPROVED BY	DESIGNED	CHECKED
NADER ZAKI MIEAUST	YR	NZ
	SHEET SIZE A1	SCALE
	ISSUE B	No. IN SET 5
JOB REFERENCE E190014		DRAWING No.