# PROPOSED ANIMAL SHELTER & SES BUILDING

# Bowman Road, Moss Vale NSW 2577

# STORMWATER SERVICES

STORMWATER PIPE
STORMWATER RISING MAIN PIPE
EXISTING STORMWATER PIPE
RAINWATER PIPE
SUB-SOIL DRAINAGE LINE
CAST IN SLAB PIPE

# STORMWATER LEGEND

PROPOSED SEALED JUNCTION PROPOSED GRATED SUFACE INLET PIT. PIT DIMENSIONS ARE GOVERNED BY DEPTH REFER TO DETAIL **EXISTING PIT** 

- PIT TO BE REMOVED
- PROPOSED KERB INLET PIT PROPOSED GRATED DRAIN PROPOSED RAINWATER TANK DOWNPIPE, RISER OR VERTICAL DROP RWO - RAINWATER OUTLET FOR BALCONIES, ROOF, CARPARK ETC GS1 - DOWNPIPE WITH RAIN

HEAD OVERFLOW GS2 - DOWNPIPE WITH SUMP SIDE OVERFLOW GS3 - DOWNPIPE WITH SUMP HIGH CAPACITY OVERFLOW

SWALE DRAIN OVERLAND FLOW PATH ROOF FALL DIRECTION PROPOSED PAVEMENT SURFACE LEVEL PROPOSED PIT SURFACE LEVEL PROPOSED PIT INVERT LEVEL

PROPOSED FINISHED FLOOR LEVEL EXISTING SURFACE LEVEL

EXISTING SURVEY CONTOUR

# GENERAL PIPEWORK LEGEND

SERVICE ----SIZE —— SERVICE ---SIZE ————— L 

0

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 $\rightarrow$ 

P 35.05

GL 35.05

IL 34.75

FFL 23.56

- 36.00

PIPE FROM ABOVE

FLOW DIRECTION

 $\longrightarrow$ STW Ø225 @ 1.0%min

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END CAP **KEYNOTE TAG** 

### **PROJECT INFORMATION TABLE** THE TABLES BELOW ARE TO BE READ IN CONJUNCTION WITH THE ADJACENT NOTES

SURVEY INFORMATION

THE SURVEY INFORMATION ON THESE DRAWINGS HAS BEEN PROVIDED BY

OMPANY DATED RICHARD COX SURVEYORS PTY. LTD. 02.2022

# SAFETY IN DESIGN

THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING THIS DESIGN THAT ARE TYPICAL OF SIMILAR DESIGNS. AS FAR AS IS REASONABLY PRACTICABLE RISKS HAVE BEEN ELIMINATED OR MINIMISED THROUGH THE DESIGN PROCESS. HAZARD CONTROLS MUST STILL BE IMPLEMENTED BY THE CONTRACTOR, OWNER OR OPERATOR TO ENSURE THE SAFETY OF WORKERS.

• JN DO NOT CONSIDER THAT THERE ARE ANY UNIQUE RISKS ASSOCIATED WITH THE DESIGN OF THIS PROJECT.

### GENERAL

- 1. ALL EXISTING LEVELS TO BE CONFIRMED ON SITE PRIOR TO
- COMMENCEMENT OF WORKS 2. ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE NOMINATED OR APPLICABLE COUNCIL SPECIFICATION. WHERE A SPECIFICATION HAS NOT BEEN NOMINATED THEN THE CURRENT NSW DEPARTMENT OF HOUSING CONSTRUCTION SPECIFICATION IS TO BE USED. THE NOMINATED SPECIFICATION SHALL TAKE PRECEDENCE TO THESE NOTES
- . THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW THE GENERAL ARRANGEMENT. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE CONTRACTOR ON SITE. ENGINEERS DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS
- 4. ALL DRAWINGS SHOULD BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS & DRAWINGS FROM OTHER CONSULTANTS
- 5. THE CONTRACTOR SHOULD REPORT ANY DISCREPANCIES ON THE DRAWINGS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN.
- 6. THE CONTRACTOR SHOULD LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND PROTECT AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE AND/OR ADJUST IF NECESSARY. INFORMATION GIVEN ON THE DRAWINGS IN RESPECT TO SERVICES IS FOR GUIDANCE ONLY AND IS NOT GUARANTEED COMPLETE NOR CORRECT.
- 7. CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER.
- 8. SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.
- 9. ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING 10. ALL DRAINAGE LINES THROUGH ADJACENT LOTS SHALL BE CONTAINED WITHIN EASEMENTS CONFORMING TO COUNCIL'S
- standards. 11. THE CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL
- RUBBISH, FENCES AND DEBRIS FTC. TO THE EXTENT SPECIFIED. 12. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR SHALL PROVIDE A TRAFFIC MANAGEMENT PLAN PREPARED BY AN ACCREDITED PERSON IN ACCORDANCE WITH RMS REQUIREMENTS, FOR ANY WORK ON OR ADJACENT TO PUBLIC ROADS, PLAN TO BE SUBMITTED TO COUNCIL & RMS.

### **SURVEY**

- 1. JONES NICHOLSON IS NOT RESPONSIBLE FOR THE ACCURACY OF
- ANY 3RD PARTY INFORMATION PROVIDED ON THIS DRAWING. 2. ALL LEVELS ARE TO A.H.D
- 3. ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES. 4. SET OUT COORDINATES ARE BASED ON SURVEY DRAWINGS
- PROVIDED FOR THE PURPOSE OF CARRYING OUT THE ENGINEERING DESIGN 5. CONTRACTOR SHALL VERIFY ALL SET OUT COORDINATES SHOWN
- ON THE PLANS BY A REGISTERED SURVEYOR 6. CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT
- BY A REGISTERED SURVEYOR 7. ANY DISCREPANCIES SHOULD BE CLARIFIED IN WRITING WITH THE ENGINEER PRIOR TO COMMENCEMENT OF THE WORK FOR CONFIRMATION OF THE SURVEY.

# EARTHWORKS

- 1. PROVIDE PROTECTION BARRIERS TO PROTECTED/SENSITIVE AREAS PRIOR TO ANY BULK EXCAVATION. 2. OVER FULL AREA OF EARTHWORKS, CLEAR VEGETATION, RUBBISH, SLABS ETC. AND STRIP TOP SOIL. AVERAGE 200mm THICK.
- REMOVE FROM SITE, EXCEPT TOP SOIL FOR RE-USE. CUT AND FILL OVER THE SITE TO LEVELS REQUIRE 4. PRIOR TO ANY FILLING IN AREAS OF CUT OR IN EXISTING
- GROUND, PROOF ROLL THE EXPOSED SURFACE. REFER TO PROJECT INFORMATION TABLES FOR MINIMUM ROLLER WEIGHT AND THE MINIMUM NUMBER OF PASSES. 5. EXCAVATE AND REMOVE ANY SOFT SPOTS ENCOUNTERED
- DURING PROOF ROLLING AND REPLACE WITH APPROVED FILL COMPACTED IN LAYERS. THE WHOLE OF THE EXPOSED SUBGRADE AND FILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2%.
- 6. FOR ON SITE FILLING AREAS, THE CONTRACTOR SHALL TAKE LEVELS OF EXISTING SURFACE AFTER STRIPPING TOPSOIL AND PRIOR TO COMMENCING FILL OPERATIONS.
- 7. WHERE HARD ROCK IS EXPOSED IN THE EXCAVATED SUB-GRADE, THIS WILL BE INSPECTED AND A DECISION MADE ON THE LEVEL TO WHICH EXCAVATION IS TAKEN. 8. FILL IN 200mm MAXIMUM (LOOSE THICKNESS) LAYERS TO
- UNDERSIDE OF BASECOURSE USING THE EXCAVATED MATERIAL AND COMPACTED TO 98% STANDARD (AS 1289 5.1.1), MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2% SHOULD THERE BE INSUFFICIENT MATERIAL FROM SITE EXCAVATIONS, IMPORT AS NECESSARY CLEAN GRANULAR FILL TO THE DESIGN ENGINEERS APPROVAL.
- 9. COMPACTION TESTING TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT INFORMATION TABLE. THE COSTS OF TESTING AND RE-TESTING ARE TO BE ALLOWED FOR BY THE BUILDER. 10. BATTERS TO BE AS SHOWN, OR MAXIMUM 1 VERT : 4 HORIZ. ALL CONDUITS AND MAINS SHALL BE LAID PRIOR TO LAYING FINAL
- PAVEMENT. 11. ALL BATTERS AND FOOTPATHS ADJACENT TO ROADS SHALL BE TOP soiled with 150mm approved loam and seeded unless OTHERWISE SPECIFIED.
- STORMWATER DRAINAGE INSTALLATION 1. SUPPLY & INSTALLATION OF DRAINAGE WORKS TO BE IN
- ACCORDANCEWITH THESE DRAWINGS, THE COUNCIL SPECIFICATION AND THE CURRENT APPLICABLE AUSTRALIAN standards.
- 2. BEDDING OF THE PIPELINES IS TO BE TYPE 'HS2' IN ACCORDANCE WITH THE STANDARDS AND AS FOLLOWS: a. COMPACTED GRANULAR MATERIAL IS TO COMPLY WITH THE FOLLOWING GRADINGS:

SIEVE SIZE (mm)	19	2.36	0.60	0.30	0.15	0.075
% MASS PASSING	100	50-100	20-90	10-60	0-25	0-10

- AND THE MATERIAL PASSING THE 0.075 SIEVE HAVING LOW PLASTICITY AS DESCRIBED IN APPENDIX D OF AS1726. b. BEDDING DEPTH UNDER THE PIPE TO BE 100mm. c. BEDDING MATERIAL TO BE EXTENDED FROM THE TOP OF THE BEDDING ZONE UP TO 0.3 TIMES PIPE OUTSIDE DIAMETER.

- THIS REPRESENTS THE 'HAUNCH ZONE.' d. THE BEDDING & HAUNCH ZONE MATERIAL IS TO BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 98% WITHIN ROAD RESERVES AND TRAFFICABLE AREAS AND 95% ELSEWHERE FOR COHESIVE MATERIAL OR A MINIMUM
- DENSITY INDEX OF 70% IN ACCORDANCE WITH THE STANDARDS FOR COHESIONLESS MATERIAL. e. COMPACTION TESTING SHALL BE CARRIED OUT BY AN APPROVED ORGANISATION WITH A NATA CERTIFIED
- LABORATORY FOR ALL DRAINAGE LINES LAID WHOLLY OR IN PART UNDER THE KERB & GUTTER OR PAVEMENT. 3. BACKFILL SHALL BE PLACED & COMPACTED IN ACCORDANCE WITH THE SPECIFICATION. A GRANULAR GRAVEL AGGREGATE
- MATERIAL (<10mm) BACKFILL IS RECOMMENDED FOR THE BEDDING, HAUNCH SUPPORT AND SIDE ZONE DUE TO IT'S SELF COMPACTING ABILITY.
- 4. A MINIMUM OF 150mm CLEARANCE IS TO BE PROVIDED BETWEEN THE OUTSIDE OF THE PIPE BARREL AND THE TRENCH WALL FOR PIPES < 600 DIA. 200mm CLEARANCE FOR PIPES 600 TO 1200 DIA AND D/6 CLEARANCE FOR PIPES > 1200 DIA.

# PIPE TO BELOW FALL DIRECTION PIPE TYPE, SIZE AND GRADE CONNECTION

# CONTINUATION

# Job No. N0211564

### STORMWATER DRAINAGE

- 1. STORMWATER DRAINAGE SHALL BE GENERALLY IN ACCORDANCE WITH CURRENT AUSTRALIAN STANDARDS AND COUNCIL'S
- SPECIFICATION. PIPES OF 225mm DIA. AND UNDER SHALL BE UPVC.
- . PIPES OF 300mm DIA. AND LARGER SHALL BE FRC OR CONCRETE CLASS 2 RUBBER RING JOINTED UNO.
- 4. ALL FRC OR RCP STORMWATER PIPES WITHIN ROAD RESERVE AREAS TO BE CLASS 3 U.N.O.
- MINIMUM COVER TO PIPES 300mm DIA. AND OVER GENERALLY SHALL BE 600mm IN CARPARK & ROADWAY AREAS UNO.
- 6. PIPES SHALL GENERALLY BE LAID AT THE GRADES INDICATED ON THE DRAWINGS
- . PIPES UP TO 150mm DIA SHALL BE LAID AT 1.0% MIN. GRADE U.N.O. 8. PIPES 225mm DIA AND OVER SHALL BE LAID AT 0.5% MIN. GRADE
- 9. BACKFILL TRENCHES WITH APPROVED FILL COMPACTED IN 200mm LAYERS TO 98% OF STANDARD DENSITY. 10. ANY PIPES OVER 16% GRADE SHALL HAVE CONCRETE BULKHEADS AT
- ALL JOINTS.
- 11. PITS SHALL BE AS DETAILED WITH METAL GRATES AT LEVELS INDICATED, ALL PITS DEEPER THAN 1200mm TO HAVE CLIMB IRONS.
- 12. BUILD INTO UPSTREAM FACE OF ALL PITS A 3.0m SUBSOIL LINE FALLING TO PITS TO MATCH PIT INVERTS.
- 13. ALL COURTYARD & LANDSCAPED PITS TO BE 450 SQUARE LOAD CLASS A UNLESS NOTED OTHERWISE.
- 14. ALL DRIVEWAY & OSD PITS TO BE 600 SQUARE LOAD CLASS D UNLESS
- NOTED OTHERWISE. 15. INSTALL TEMPORARY SEDIMENT BARRIERS TO INLET PITS, TO COUNCIL'S STANDARDS UNTIL SURROUNDING AREAS ARE PAVED OR GRASSED
- 16. PITS & DOWNPIPE LOCATIONS AND LEVELS MAY BE VARIED TO SUIT SITE CONDITIONS AFTER CONSULTING THE ENGINEER. 17. DOWNPIPES SHOWN ARE INDICATIVE ONLY, ALL ROOF GUTTERING
- AND DOWNPIPES TO THE CURRENT AUSTRALIAN STANDARDS. 18. ALL PLANTER BOXES AND BALCONIES TO BE CONNECTED TO THE PROPOSED STORMWATER DRAINAGE LINE.
- 19. HAND-EXCAVATE STORMWATER PIPES IN VICINITY OF TREE ROOTS. 20. FOOTPATH CROSSING LEVELS SHOWN ARE TO BE ADJUSTED TO FINAL COUNCIL'S ISSUED LEVELS.
- 21. GEOTEXTILE FABRIC TO BE PLACED UNDER RIP RAP SCOUR
- PROTECTION. 22. ALL BASES OF PITS TO BE BENCHED TO HALF PIPE DEPTH AND
- PROVIDE GALVANISED ANGLE SURROUNDINGS TO GRATE. 23. SUBSOIL LINE PIPES AND FITTINGS SHALL BE PERFORATED PLASTIC TO CURRENT AUSTRALIAN STANDARDS, LAY PIPES ON FLOOR OF TRENCH GRADED AT 1% MIN. AND OVERLAY WITH FILTER MATERIAL EXTENDING TO WITHIN 200mm OF SURFACE. PROVIDE FILTER FABRIC OF PERMEABLE POLYPROPYLENE BETWEEN FILTER MATERIAL AND
- TOPSOIL 24. SHOULD THE CONTRACTOR ELECT TO INSTALL PRECAST STORMWATER PITS AND THEY ARE PERMITTED BY COUNCIL AND THE CLIENT, THE PRECAST PITS ARE TO BE CONSTRUCTED IN
- ACCORDANCE WITH RMS STANDARDS INCLUDING: 1. SEAL THE SEGMENTS TOGETHER USING A SITE-APPROVED NON-SHRINK GROUT OR MASTIC-TYPE PRODUCT. APPLY THE SEALANT IN ACCORDANCE WITH THE PRODUCT MANUFACTURER'S
- REQUIREMENTS. 2. ENSURE THAT NO GAPS REMAIN AND THAT A SMOOTH FACE EXISTS BETWEEN MULTIPLE UNITS.
- LEAVE THE SEGMENTS UNDISTURBED UNTIL THE PERIOD OF CURING IS COMPLETED IN ACCORDANCE WITH THE GROUT OR SEALANT PRODUCT MANUFACTURER'S REQUIREMENTS.



NTS

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CIVIL DRAWING LIST				
No.	SHEET NAME			
C001	NOTES & LEGEND			
C050	TYPICAL DETAILS - SHEET 1			
C051	TYPICAL DETAILS - SHEET 2			
C052	TYPICAL DETAILS - SHEET 3			
C200	SITE STORMWATER PLAN			
C210	ROOF STORMWATER PLAN			
C400	GRADING PLAN			
C450	CUT AND FILL PLAN			

SUBJECT SITE

LOCALITY PLAN





PROJECT **PROPOSED ANIMAL SHELTER &** SES BUILDING

1 Bowman Road, Moss Vale NSW 2577

ADDRESS





SCALE 1:20

SCALE 1:20



![](_page_1_Figure_4.jpeg)

- 1. CLIMB IRONS SHALL BE PROVIDED UNDER LID AT 300 CTS TO COUNCIL STANDARDS WHERE PIT DEPTH IS DEEPER THAN 1000.
- 2. PROVIDE 90Dia x 3000 LONG SUBSOIL DRAINAGE STUB PIPE SURROUNDED WITH 100mm THICKNESS OF NOMINAL 20mm COARSE FILTER MATERIAL WRAPPED IN GEOTEXTILE FILTER FABRIC.(BIDUM A24
- OR APPROVED SIMILAR). TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE. 3. ALTERNATIVE PIT CONSTRUCTION MAY BE USED SUBJECT TO THE ENGINEERS APPROVAL
- 4. CONCRETE STRENGTH F'c = 32 MPa

# **TYPICAL CONCRETE INLET PIT - CONCRETE SURFACE** SCALE 1 : 20

	HOT-DIP GALVANIZED GRATE, REFER AS 3966	
	REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR REINFORCEMENT	
	OUTLET PIPE	
	——— MASS CONCRETE BENCHING AS	

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MINIMUM INTERNAL DIMENSIONS FOR STORMWATER PITS

150

DEPTH OF INVERT	OF OUTLET
WIDTH	LENGTH
450	450
600	600
600	900
900	900

REQUIRED

\*STEP IRONS SHALL BE PROVIDED FOR PITS WITH DEPTHS EXCEEDING 1000mm

1. CLIMB IRONS SHALL BE PROVIDED UNDER LID AT 300 CTS TO COUNCIL STANDARDS WHERE PIT

(BIDUM A24 OR APPROVED SIMILAR). TO BE PARALLEL TO UPSTREAM SIDE OF EACH INLET PIPE.

# TYPICAL CONCRETE INLET PIT - NATURAL SURFACE

DEPTH OF INVERT OF OUTLET				
WIDTH	LENGTH			
450	450			
600	600			
600	900			
900	900			
PITS WITH DEPTHS EXCEEDING 1000mm				

![](_page_1_Picture_25.jpeg)

![](_page_1_Picture_26.jpeg)

**CIVIL DESIGN** DRAWING TITLE

TYPICAL DETAILS - SHEET

PROJECT PROPOSED ANIMAL SHELTER & SES BUILDING

1 Bowman Road, Moss Vale NSW 2577

ADDRESS

![](_page_1_Picture_31.jpeg)

![](_page_2_Figure_0.jpeg)

![](_page_2_Figure_1.jpeg)

![](_page_2_Figure_3.jpeg)

TYPICAL HEADWALL DETAIL SCALE 1:20

No	DATE	DESCRIPTION	BY
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	1	1	

25	600	675	750	825	900
0	175	175	200	200	225
0	450	450	450	450	450
0	350	350	350	350	350
5	530	530	530	530	530
0	175	175	200	200	225
	100	100	100	100	100
)	50	50	50	50	50
	75	75	100	100	125
0	300	300	300	300	300
0	150	150	150	150	150
00	1100	1300	1450	1600	1750
00	1100	1200	1250	1350	1400

![](_page_2_Picture_9.jpeg)

# Figgis + Jefferson Tepa STATUS PRELIMINARY TO THE RELEVANT CONTRACT BETWEEN JONES NICHOLSON Pty. Ltd. AND ITS CLIENT. THE CONCEPTS AND INFORMATION CONTAINED IN THE DOCUMENT ARE THE COPYRIGHT OF JONES NICHOLSON Pty. Ltd. USE OR COPYING OF THE DOCUMENT WITHOUT WRITTEN PERMISSION OF DISCIPLINE **CIVIL DESIGN**

DRAWING TITLE TYPICAL DETAILS - SHEET 2

PROJECT PROPOSED ANIMAL SHELTER & SES BUILDING ADDRESS

![](_page_2_Picture_14.jpeg)

![](_page_3_Figure_0.jpeg)

![](_page_3_Figure_1.jpeg)

SITE CATCHMENT AREA BREAK-DOWN SCALE 1:500

![](_page_3_Figure_3.jpeg)

![](_page_3_Figure_4.jpeg)

![](_page_3_Figure_5.jpeg)

GRATED STRIP DRAIN CONFIGURATION

# OCEANGUARD PROTECT FILTER SCALE 1 : 20

138° 40' 20°

EXISTING SEWER

MUSIC MODEL - TREATMENT TRAIN EFFECTIVENESS

![](_page_3_Picture_10.jpeg)

CAR PARK : 1675m<sup>2</sup> ROOF : 1356m<sup>2</sup> PEDESTRIAN: 123m<sup>2</sup> LANDSCAPE : 5269m<sup>2</sup>

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![](_page_3_Picture_14.jpeg)

![](_page_3_Picture_15.jpeg)

PROJECT PROPOSED ANIMAL SHELTER & SES BUILDING ADDRESS

![](_page_3_Picture_18.jpeg)

![](_page_4_Figure_1.jpeg)

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![](_page_5_Figure_0.jpeg)

![](_page_5_Figure_1.jpeg)

![](_page_5_Picture_3.jpeg)

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![](_page_5_Picture_6.jpeg)

![](_page_5_Picture_7.jpeg)

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DISCIPLINE

DRAWING TITLE ROOF STORMWATER PLAN

PROJECT PROPOSED ANIMAL SHELTER & SES BUILDING ADDRESS

![](_page_5_Picture_13.jpeg)

![](_page_6_Figure_1.jpeg)

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# PROPOSED ANIMAL SHELTER & SES BUILDING

Job No. N0211564

# ENVIRONMENTAL SITE MANAGEMENT LEGEND

----- PROPOSED BUILDING LINE

BOUNDARY.

KERB INLET PITS.

TRANSPORTATION.

TO

PROVIDE TEMPORARY CHAIN WIRE

ENTRY/EXIT. (SHAKER PAD)

FENCING (HOARDING) ALONG THE SITE

TEMPORARY STABALISED CONSTRUCTION

UNDISTURBED NON-TRAFFICABLE AREA

TEMPORARY FILTER TUBE WITH SAFETY BARRICADE

NOMINATED DISPOSAL ROUTE FOR TRUCK MATERIAL

TEMPORARY MASS CONCRETE FOOTPATH CROSSING.

- - - - - PROPRIETARY SILT FENCE

![](_page_7_Picture_5.jpeg)

![](_page_7_Picture_7.jpeg)

**DIVERSION BANK** 

SURFACE INLET DRAINAGE PIT WITH SURROUNDING FILTER FABRIC INLET SEDIMENT TRAP OR FILTER TUBES (SANDBAGS)

TEMPORARY GEOTEXTILE WRAPPED HAY BALES/SAND BAGS

## STOCK MATERIALS

SITE EQUIPMENT LOCATIONS

### SAFETY IN DESIGN

THERE ARE INHERENT RISKS WITH CONSTRUCTING, MAINTAINING, OPERATING, DEMOLISHING, DISMANTLING AND DISPOSING THIS design that are typical of similar designs. As far as is REASONABLY PRACTICABLE RISKS HAVE BEEN ELIMINATED OR MINIMISED THROUGH THE DESIGN PROCESS. HAZARD CONTROLS MUST STILL BE IMPLEMENTED BY THE CONTRACTOR, OWNER OR OPERATOR TO ENSURE THE SAFETY OF WORKERS.

• JN DO NOT CONSIDER THAT THERE ARE ANY UNIQUE RISKS ASSOCIATED WITH THE DESIGN OF THIS PROJECT.

# ENVIRONMENTAL SITE MANAGEMENT

- 1. EROSION & SEDIMENT CONTROLS TO BE INSTALLED IN ACCORDANCE WITH COUNCIL'S SPECIFICATION & THE NSW DEPARTMENT OF HOUSING "BLUE BOOK" -SOILS AND CONSTRUCTION - MANAGING URBAN STORMWATER, 2004, REFER TO THE BLUE BOOK FOR STANDARD DRAWINGS "SD"
- 2. SEDIMENT & EROSION CONTROLS MUST BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS OR DEMOLITION ACTIVITY. THE LOCATION OF SUCH DEVICES IS INDICATIVE ONLY AND FINAL POSITION SHOULD BE DETERMINED ON SITE.
- 3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MEASURES ARE TAKEN DURING THE COURSE OF CONSTRUCTION TO PREVENT SEDIMENT EROSION AND POLLUTION OF THE DOWNSTREAM SYSTEM, SUPERVISING ENGINEER SHOULD BE CONTACTED IF IN DOUBT. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE AND ALL TRAPPED SEDIMENT TO BE REMOVED TO A NOMINATED SOIL STOCKPILE SITE.
- 4. RETAIN ALL EXISTING GRASS COVER WHEREVER POSSIBLE. TOPSOIL FROM ALL AREAS THAT WILL BE DISTURBED TO BE STRIPPED AND STOCKPILED AT THE NOMINATED SITE. A SEDIMENT FENCE TO BE PLACED DOWNHILL OF STOCKPILE.
- 5. AREAS OF SITE REGRADING ARE TO BE COMPLETED PROGRESSIVELY DURING THE WORKS AND STABILISED AS EARLY AS POSSIBLE. THE SUPERVISING ENGINEER MAY DIRECT THE CONTRACTOR TO HAVE AREAS OF DISTURBANCE COMPLETED AND STABILISED DURING THE COURSE OF THE WORKS. ALL DISTURBED AREAS ARE TO BE SEEDED & FERTILISED WITHIN 14 DAYS OF EXPOSURE.
- 7. ALL EXISTING TREES TO BE RETAINED UNLESS SHOWN OTHERWISE ON APPROVED DRAWINGS. TREES RETAINED ARE TO BE PROTECTED WITH A HIGH VISIBILITY FENCE, PLUS FLAGGING TO INDIVIDUAL TREES AS NECESSARY.
- 8. INSTALL TEMPORARY SEDIMENT BARRIERS TO ALL INLET PITS LIKELY TO COLLECT SILT LADEN WATER, UNTIL SURROUNDING AREAS ARE PAVED OR REGRASSED. GRAVEL OR GEOTEXTILE INLET FILTERS TO SD6-11 & SD6-12.
- 9. ALL SILT FENCES & BARRIERS ARE TO BE MAINTAINED IN GOOD ORDER & REGULARLY DESILTED DURING THE CONSTRUCTION PERIOD. SILT FENCES TO SD6-8 OR SD6-9. 10. STOCKPILES OF LOOSE MATERIALS SUCH AS SAND, SOIL, GRAVEL MUST BE COVERED WITH GEOTEXTILE SILT FENCE MATERIAL. PLASTIC SHEETING OR MEMBRANE MUST NOT BE USED. SAFETY BARRICADING SHOULD BE USED TO ISOLATE STOCKPILES OF SOLID MATERIALS SUCH AS STEEL REINFORCING, FORMWORK AND SCAFFOLDING.
- 11. WASTE MATERIALS ARE TO BE STOCKPILED OR LOADED INTO SKIP-BINS LOCATED ON SITE AS SHOWN ON PLAN. 12. NO MORE THAN 150m OF TRENCHING TO BE OPEN AT ANY ONE TIME. IMMEDIATELY
- AFTER TRENCH BACKFILLING, PROVIDE SANDBAGS OR SAUSAGE FILTERS ACROSS EACH TRENCH AT MAXIMUM 20m SPACINGS. FILTERS TO REMAIN IN PLACE UNTIL REVEGETATION HAS OCCURRED.
- 13. ALL VEHICLES LEAVING THE SITE MUST PASS OVER THE STABILISED SITE ACCESS BALLAST AREA (SIMILAR TO SD6-14) TO SHAKE OFF SITE CLAY AND SOIL. IF NECESSARY WHEELS AND AXLES ARE TO BE HOSED DOWN. BALLAST IS TO BE MAINTAINED & REPLACED AS NECESSARY DURING THE CONSTRUCTION PERIOD. 14. THE HEAD CONTRACTOR IS TO INFORM ALL SITE STAFF AND SUB-CONTRACTORS OF
- THEIR OBLIGATIONS UNDER THE EROSION AND SEDIMENT CONTROL PLAN. 15. ANY SEDIMENT DEPOSITED ON THE PUBLIC WAY, INCLUDING FOOTPATH RESERVE
- AND ROAD SURFACE, IS TO BE REMOVED IMMEDIATELY. 16. PROVIDE BARRIERS AROUND ALL CONSTRUCTION WORKS WITHIN THE FOOTPATH
- AREA TO PROVIDE SAFE ACCESS FOR PEDESTRIANS. 17. CONCRETE PUMPS AND CRANES ARE TO OPERATE FROM WITHIN THE BALLAST ENTRY DRIVEWAY AREA AND ARE NOT TO OPERATE FROM THE PUBLIC ROADWAY UNLESS SPECIFIC COUNCIL PERMISSION IS OBTAINED.
- 18. TRUCKS REMOVING EXCAVATED / DEMOLISHED MATERIAL SHOULD TRAVEL ON STABILISED CONSTRUCTION PATHS. MATERIAL TO BE TAKEN TO THE TRUCK TO REDUCE TRUCK MOVEMENT ON SITE. TRUCKS TO BE LIMITED TO SINGLE UNIT HEAVY RIGID VEHICLES. (NO SEMITRAILERS)
- 19. ANY EXCAVATION WORK ADJACENT TO ADJOINING PROPERTIES OR THE PUBLIC ROADWAY IS NOT TO BE COMMENCED UNTIL THE STRUCTURAL ENGINEER IS CONSULTED AND SPECIFIC INSTRUCTIONS RECEIVED FROM THE ENGINEER.
- 20. TOILET FACILITIES MUST BE EITHER A FLUSHING TYPE OR APPROVED PORTABLE CHEMICAL CLOSET. CHEMICAL CLOSETS ARE TO BE MAINTAINED & SERVICED ON A REGULAR BASIS SO THAT OFFENSIVE ODOUR IS NOT EMITTED.
- 21. DURING TRENCH EXCAVATION ALL SPOIL SHALL BE MOUNDED ON THE UPHILL SIDE OF TRENCHES AND PLACEMENT IS TO COMPLY WITH THE SUPERINTENDENTS REQUIREMENT.
- 22. DIVERSION BANKS SHOULD BE CONSTRUCTED BY MOUNDING STRIPPED TOPSOIL (MIN HEIGHT 600mm) WHERE DIRECTED. MATERIAL TO BE RESPREAD ON FOOTWAYS AFTER FINAL TRIMMING.
- 23. UNDISTURBED BUFFER ZONE AREAS ARE CLOSED TO ALL TRAFFIC MOVEMENTS UNLESS OTHERWISE NOTED BY THE SUPERINTENDENT AND ACCESS TO THE SEWER OR
- C.D.L. TRENCHING WILL BE AS SHOWN, OR HEAVY PENALTIES MAY BE IMPOSED. 24. TRAFFIC MANAGEMENT MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH 'R.T.A. TRAFFIC CONTROL AT WORK SITES - CURRENT EDITION' AND AS 1742 'MANUAL OF UNIFORM
- TRAFFIC CONTROL DEVICES.' 25. PEDESTRIAN CONTROL MEASURES ARE REQUIRED TO BE IMPLEMENTED AND MAINTAINED DURING CONSTRUCTION. IN ACCORDANCE WITH AS 1742 'MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

Bowman Road, Moss Vale NSW 2577

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ESM DRAWING LIST
SHEET NAME
NOTES & LEGEND
EROSION AND SEDIMENT CONTROL DETAILS
erosion and sediment control plan

No	DATE	DESCRIPTION	BY
1	20.05.22	ISSUED FOR APPROVAL	LTR

![](_page_7_Picture_61.jpeg)

![](_page_7_Picture_62.jpeg)

PROJECT PROPOSED ANIMAL SHELTER & SES BUILDING ADDRESS

![](_page_7_Picture_65.jpeg)

![](_page_8_Figure_0.jpeg)

# GEOTEXTILE FILTER FABRIC DROP INLET SEDIMENT TRAP DETAIL

![](_page_8_Figure_2.jpeg)

![](_page_8_Figure_3.jpeg)

![](_page_8_Figure_4.jpeg)

SEDIMENTATION BASIN DETAIL SCALE 1:20

![](_page_8_Figure_6.jpeg)

![](_page_8_Figure_7.jpeg)

# SEDIMENT SILT FENCE DETAIL SCALE 1 : 20

![](_page_8_Figure_9.jpeg)

## ANCHORING

- GENERAL CONSTRUCTION NOTES:
- 1. CONSTRUCT SEDIMENT FENCE AS CLOSE AS POSSIBLE TO PARALLEL TO THE
- CONTOURS OF THE SITE.
- 2. FIX SELF-SUPPORTING GEOTEXTILE TO UPSLOPE SIDE OF POSTS WITH WIRE TIES OR AS RECOMMENDED BY GEOTEXTILE MANUFACTURER.
- 3. JOIN SECTIONS OF FABRIC AT A SUPPORT WITH A 150mm OVERLAP. 4. REFER TO DETAIL SD 6-9 "BLUE BOOK"

# SCALE 1 : 20

DATE	DESCRIPTION	BY
20.05.22	ISSUED FOR APPROVAL	LTR
	DATE 20.05.22	DATE DESCRIPTION 20.05.22 ISSUED FOR APPROVAL

- TRENCHMESH SUPPORTS AT 2 METRE CENTRES

SEDIMENT FENCE - ALTERNATIVE

![](_page_8_Picture_22.jpeg)

![](_page_8_Picture_23.jpeg)

![](_page_9_Figure_1.jpeg)

No	DATE	DESCRIPTION	BY
1	20.05.22	ISSUED FOR APPROVAL	LTR