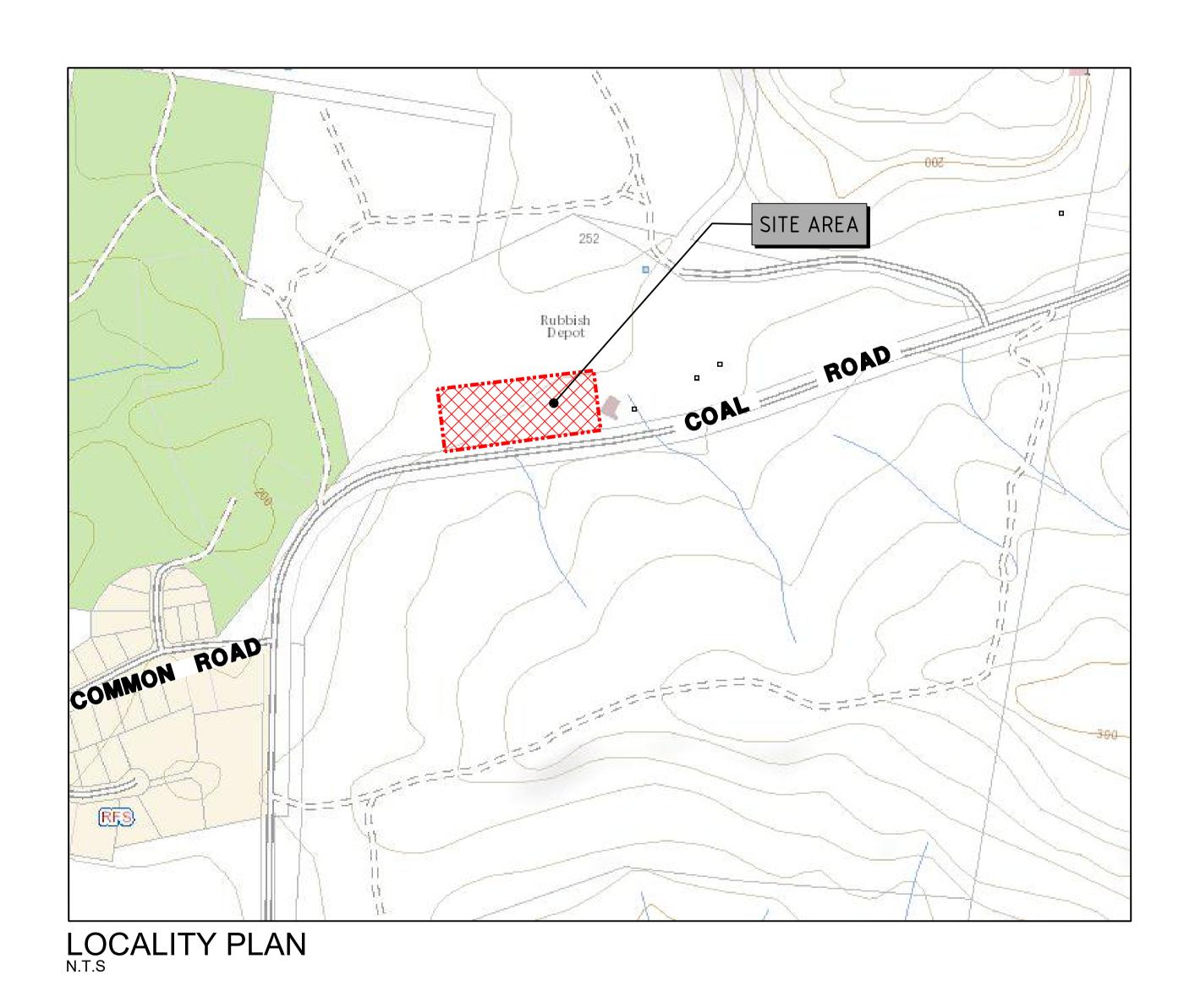
# MSC DEPOT COMMUNITY RECYCLING CENTRE COAL ROAD, MUSWELLBROOK

CIVIL ENGINEERING WORKS DRAWINGS

# **MUSWELLBROOK SHIRE COUNCIL**



NOT TO SCALE

### DRAWING LIST

DRAWING No.	REV.	DRAWING TITLE
23098-DA01	С	COVER SHEET, DRAWING LIST AND LOCALITY PLAN
23098-DA02	С	GENERAL NOTES
23098-DA03	С	GENERAL ARRANGEMENT PLAN
23098-DA04	С	EROSION AND SEDIMENT CONTROL PLAN
23098-DA05	С	EROSION AND SEDIMENT CONTROL DETAILS
23098-DA06	С	SITE REGRADING PLAN
23098-DA07	С	SITE REGRADING SECTIONS SHEET 1 OF 2
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23098-DA12	С	STORMWATER CATCHMENT PLAN
23098-DA13	С	VEHICLE TURNING PATH PLAN SHEET 1 OF 5
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23098-DA17	С	VEHICLE TURNING PATH PLAN SHEET 5 OF 5

07/03/2025 | ISSUE FOR DA APPROVAL JB | JB | JGC | GM ISSUE FOR DA APPROVAL JB | JB | JGC | GM A 6/12/2024 ISSUE FOR DA APPROVAL JB JB JGC GM REV DATE AMENDMENT / DESCRIPTION DRN DES CHK APP

DRAWING DIMENSIONS IN METRES UNLESS NOTED OTHERWISE

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**MUSWELLBROOK DEPOT** CIVIL DESIGN CONCEPT

COVER SHEET, DRAWING LIST AND LOCALITY PLAN

- 1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL, SERVICES AND OTHER CONSULTANT DRAWINGS, THE SPECIFICATION AND OTHER SUCH WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE WORKS.
- 2. IF ANY DISCREPANCY OCCURS ON THE DRAWINGS OR BETWEEN DRAWINGS AND THE SPECIFICATION, THE CONTRACTOR SHALL REFER THE DISCREPANCY TO DIVERSI CONSULTING PTY LTD OR FOR WRITTEN CLARIFICATION BEFORE PROCEEDING WITH THE
- 3. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF CURRENT S.A.A CODES, INCLUDING ALL REVISIONS, AND THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AND SERVICES AUTHORITIES EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION.
- 4. ALL WORKS SHALL BE UNDERTAKEN IN ACCORDANCEWITH CURRENT OCCUPATIONAL HEALTH AND SAFETY STANDARDS. APPROPRIATE SAFETY SIGNS SHALL BE INSTALLED AT ALL TIMES DURING THE PROGRESS OF THE WORKS.
- 5. ALL DIMENSIONS SHOWN SHALL BE VERIFIED ON SITE. DRAWINGS MUST NOT BE SCALED. 6. DIMENSIONS AND REDUCED LEVELS ON PLANS ARE IN METRES. DIMENSIONS ON DETAILS
- ARE SHOWN IN MILLIMETRES. 7. ONLY SUBSTITUTIONS APPROVED IN WRITING BY DIVERSI CONSULTING PTY LTD SHALL BE
- 8. DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL STRUCTURES AND WORKS IN A STABLE CONDITION AND SHALL ENSURE NO PART SHALL BE OVER STRESSED DURING CONSTRUCTION ACTIVITIES.

### EXISTING SERVICES

ACCEPTED.

- .1. THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION ONLY. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE.
- 2. DIVERSI CONSULTING CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOW ON THESE DRAWINGS. ACCURATELY INDICATES THE PRESENCES OR ABSENCES OF SERVICES OF THEIR LOCATION AND WILL EXCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICE INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.
- 3. CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY.
- 4. CONTRACTORS ARE TO CONTRACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING:
- JEMENA AUSGRID
- MUSWELLBROOK SHIRE COUNCIL
- NBN, TELSTRA AND OPTUS
- 5. CONTRACTORS ARE TO UNDERTAKE A SERVICE SEARCH PRIOR TO COMMENCEMENT OF WORKS ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

### EARTHWORKS

- 1. ORIGIN OF LEVELS: REFER SURVEY NOTES
- EARTHWORKS SHALL BE UNDERTAKEN IN ACCORDANCE WITH AS3798.
- 3. STRIP ALL TOPSOIL / ORGANIC MATERIAL FROM CONSTRUCTION AREAS AND STOCKPILE ON SITE TO BE USED LATER SPREAD OR REMOVED FROM SITE AS DIRECTED BY THE SUPERINTENDANT.
- 4. EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE FILL IS +/- 2% OF THE OPTIMUM MOISTURE CONTENT
- 5. COMPACT IMPORTED FILL AREAS AND SUBGRADE TO NOT LESS THAN:
- LOCATION STANDARD MAXIMUM DRY DENSITY (SMDD) (AS1289) UNDER BUILDINGS ON GROUND 100%

UNDER ROADS AND CAR PARKS 100% LANDSCAPED AREAS 95%

- 6. FOR NON-COHESIVE MATERIAL, COMPACT TO EQUIVALENT DENSITY INDEX IN ACCORDANCE WITH AS3798.
- BEFORE PLACING FILL, PROOF ROLL THE SUBGRADE (AND EACH SUBSEQUENT PAVEMENT LAYER) WITH A 10 TONNE MINIMUM ROLLER TO DETECT AND THEN REMOVE ANY SOFT SPOTS (AREAS WITH MORE THAN 2MM INDENT OR MOVEMENT UNDER THE ROLLER). 8. IF ANY SOFT OR UNSUITABLE SUBGRADE MATERIAL IS FOUND, THEN THESE SHOULD BE
- LOCALLY EXCAVATED TO A SOUND BASE AND REPLACED WITH SELECT FILL AND COMPACTED IN LAYERS TO ACHIEVE THE DESIGN SUBGRADE DENSITY.
- 9. SELECT FILL SHALL CONSIST OF WELL GRADED GRANULAR MATERIAL AND HAVING A MAXIMUM PARTICLE SIZE OF 75MM AND A LOW PLASTICITY INDEX LESS THAN 15%.
- 10. DUE TO THE DEPTH OF FILL UNDERTAKE FIELD DENSITY TESTING IN ACCORDANCE WITH AS3798 TYPE 2 OPERATIONS. FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN:
- (A) 1 TEST PER LAYER OR 200mm THICKNESS PER 1000m3.

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B 31/01/2025 ISSUE FOR DA APPROVAL

A 6/12/2024 ISSUE FOR DA APPROVAL

REV DATE AMENDMENT / DESCRIPTION

- (B) 1 TEST PER 200m3 DISTRIBUTED REASONABLY EVENLY THROUGHT FULL DEPTH AND AREA.
- 11. FILLING TO BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING 150MM.
- 12. NO FILLING SHALL TAKE PLACE TO EXPOSED SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF THE DESIGN ENGINEER AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.
- 13. UNDERTAKE GEOTECHNICAL MONITORING DURING AND AFTER CONSTRUCTION TO MEASURE SETTLEMENT AND ENSURE STRUCTURAL STABILITY BY OBTAINING A SHORT STATEMENT OR LETTER FROM A GEOTECHNICAL ENGINEER DETAILING HOW THE FOUNDATIONS WILL BE STABILIZED TO PREVENT ISSUES FROM SIGNIFICANT FILL DEPTHS.

### SITEWORKS

- ORIGIN OF LEVEL REFER TO SURVEY NOTES.
- 2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK ANY DISCREPANCIES TO BE REPORTED TO THE SUPERINTENDENT.
- MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- 4. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND OR AN APPROVED GRANULAR MATERIAL AND COMPACTED TO MINIMUM 98% STANDARD DENSITY IN ACCORDANCE WITH AS1289 5.1.1
- 5. PROVIDE 10MM WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT
- 6. THE CONTRACTORS IS TO ASCERTAIN ALL AFFECTED SERVICES AND ALLOW FOR THE
- 7. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (ADJUSTMENTS OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE
- 8. ALL FOOTWAYS AND LOTS TO BE HYDROSEEDED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION.

### STORMWATER

### DEMOLITION:

- 1. REMOVE EXISTING PIPES WITHIN THE SITE WHICH DO NOT FORM PART OF THE PROPOSED STORMWATER DRAINAGE SYSTEM AND DISPOSE OFF SITE.
- 2. EXCAVATE TRENCHES TO THE LINES, LEVELS AND GRADES SO THAT THEY ARE STRAIGHT AND EVEN BETWEEN PITS AND AS SHOWN ON THE DRAWINGS.
- 4. TRENCH AND PIT EXCAVATIONS DEEPER THAN 1.2M SHALL BE EITHER SUPPORTED WITH SHORING SYSTEMS, BATTERED WITH TEMPORARY BATTERS NOT EXCEEDING 1H:1V OR BENCHED IN ACCORDANCE WITH WORK COVER REQUIREMENTS.
- 5. EXCAVATE TRENCHES AND UNDER PITS TO PROVIDE A FIRM, UNIFORM AND STABLE BASE FREE FROM WATER.

### SUBSOIL:

- 6. PROVIDE FLUSHING POINTS ON SUBSOIL DRAINAGE PIPES AT 30M CENTRES AND AT THE
- 7. AT EACH PIT, INSTALL 3.0M LENGTH OF 100DN SUBSOIL DRAINAGE PIPE WRAPPED IN GEOTEXTILE FABRIC SOCK TO UPSTREAM OF PIT.

- 8. ALL PIPES TO BE LAID STRAIGHT AND EVEN BETWEEN PITS, MANHOLES AND FORMED BENDS TO THE ALIGNMENT SHOWN ON THE DRAWINGS.
- 9. PIPE ALIGNMENTS SHALL NOT DEVIATE BY MORE THAN 25MM IN THE HORIZONTAL POSITION AND NOT MORE THAN 10MM IN THE VERTICAL POSITION UNO.
- 10. ALL PIPES TO BE LAID AT A MINIMUM GRADE OF 1% UNO.
- 11. ALL PIPES >300DN TO BE RCP CLASS 2 RUBBER RING JOINTS UNO.
- 12. ALL PIPES -300DN TO BE UPVC SEWER GRADE (SN4).
- 13. RCP TO BE INSTALLED USING PIPE SUPPORT TYPE HS2 IN ACCORDANCE WITH THE CEMENT AND CONCRETE ASSOCIATION OF AUSTRALIA INSTALLATION MANUAL.

14. UPVC PIPES TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS

- AND AS3500.3. 15. PROVIDE PIPE BEDDING UNDER PIPES FOR THE FULL WIDTH OF THE TRENCH AND COMPACT
- PIPE BEDDING BY TAMPING, ROLLING OR VIBRATING TO A MINIMUM DENSITY INDEX OF 60
- 16. PIPE BEDDING AND HAUNCH ZONE MATERIAL TO BE A COARSE SAND WITH LOW PLASTICITY UNO.
- 17. PLACE AND COMPACT HAUNCH ZONE MATERIAL DEPTH TO 0.3 TIMES THE PIPE OUTSIDE DIAMETER.
- 18. PLACE AND COMPACT SIDE SUPPORT AND OVERLAY MATERIALS TO PROVIDE A COVER OF NOT LESS THAN 150mm UNO ON PIPES WITH <375MM DIAMETER AND 300mm FOR PIPES ≥375mm DIAMETER.
- 19. PIPE SIDE SUPPORT MATERIAL AND OVERLAY TO BE A 10MM GRAVEL UNO AND COMPACTED IN LAYERS NOT EXCEEDING 150MM TO ACHIEVE A MINIMUM DENSITY INDEX OF
- 20. BACKFILL TRENCHES WITH CONTROLLED SELECT GRANULAR FILL (<75MM) OF LOW PLASTICITY (PI<15) TO UNDERSIDE OF PAVEMENTS COMPACTED TO 95% SMDD AND IN THE UPPER 300MM OF THE SUBGRADE TO 100%SMDD.
- 21. BACKFILL TRENCH IN LAYERS NOT EXCEEDING 150MM.
- 22. COMPACTION SHALL BE MONITORED BY FIELD TESTING IN ACCORDANCE WITH AS1289.
- 23. PROVIDE DENSITY TESTS IN EACH TRENCH BETWEEN PITS. PROVIDE 1 TEST PER 2 LAYERS PER 50M2 OF TRENCH.

### PITS AND MANHOLES:

SCALE:

JB | JB | JGC | GM

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- 24. SETOUT POINTS TO ALL PITS TO BE CENTRE OF GRATE AT KERB INVERT FOR KERB INLET PITS AND CENTRE OF OUTLET PIPE FOR ALL OTHER PITS.
- 25. ALL PIT SURFACE LEVELS SHALL NOT DEVIATE BY MORE THAN ±10MM FROM THE DESIGN
- 26. THE CONTRACTOR IS TO ENSURE THE PIT ORIENTATION MATCHES THE ROAD KERB
- ALIGNMENT, SURFACE LEVELS, PAVEMENT JOINTS AND OTHER CIVIL STRUCTURES. 27. CONSTRUCT STORMWATER PITS AND MANHOLES AS SHOWN ON THE DRAWINGS AND IN
- ACCORDANCE WITH THE PIT AND PIPE SCHEDULE. 28. ALL GRATES AND COVERS TO BE CLASS D UNO.
- 29. ALL PIT GRATES OR COVER COMPONENTS AND PARTS TO BE LIFTED TO BE LESS THAN 20KG.
- 30. PROVIDE HINGED GRATES TO ALL PITS UNO.
- 31. ALL KERB INLET PITS TO HAVE A PRECAST CONCRETE PROPRIETARY KERB INLET LINTEL. 32. ALL KERB INLET PITS TO HAVE A GALVANISED EQUAL ANGLE 75X10MM ON THE
- SUPPORTING FACE. 33. CONSTRUCT PIPELINES AT PITS SO THAT DISCHARGE FROM INLET PIPES IS DIRECTED TO
- OUTLET PIPES AND NOT TO WALLS OR OTHER INLET PIPES. 34. PROVIDE 75MM MINIMUM OF CONCRETE BENCHING AT THE BOTTOM OF EVERY STORMWATER

PIT AND CHAMBER TO CREATE A CHANNEL FROM EACH INLET TO THE OUTLET PIPE INVERT.

- 35. FINISH ALL INLET AND OUTLET PIPES FLUSH WITH PIT WALLS.
- 36. ALL STORMWATER PITS GREATER THAN 1.2M DEEP TO HAVE STEP IRONS INSTALLED AT 800MM CENTRES VERTICALLY STAGGERED AND 200MM CENTRES HORIZONTALLY.
- 37. MINIMUM INTERNAL PLAN DIMENSIONS FOR PITS AND GRATES AS FOLLOWS:
- < 450MM DEEP PIT PIT TO BE 300X300MM</p>
- >450MM, < 600MM DEEP PIT PIT TO BE 450X450MM
- >600MM, <900MM DEEP- PIT TO BE 600X600MM,
- >900MM, <1200MM DEEP PIT TO BE 600X900MM</li>
- >1200MM DEEP TO BE 900X900MM. 38. PVC TYPE PITS ARE NOT PERMITTED UNO.
- 39. PRECAST PITS MAY BE USED SUBJECT TO APPROVAL BY DIVERSI CONSULITNG.
- 40. SUBJECT TO APPROVAL OF DIVERSI CONSULTING, PRECAST PITS TO BE LAID ON A 100MM CONCRETE BASE AND BACKFILLED AROUND PITS WITH CONCRETE TO HALF THE PIT HEIGHT.
- RIP-RAP SCOUR PROTECTION:
- 41. THE THICKNESS OF THE RIP-RAP PROTECTION SHALL BE A MINIMUM OF TWICE THE D50 STONE SIZE SPECIFIED ON THE DRAWINGS. Dso=250mm U.N.O.
- 42. THE STONE SHALL BE REASONABLY WELL GRADED THROUGHOUT THE RIP-RAP LAYER. STONE SIZES SHALL BE DEPENDENT ON THE D50 VALUE SPECIFIED ON THE DRAWINGS. D10 SHALL BE 0.5 x D50 AND D90 SHALL BE 1.35 x D50. STONES SMALLER THAN THE SPECIFIED D10 ARE NOT TO EXCEED 20% BY WEIGHT OF EACH LOAD.
- 43. ROCK IS TO BE HARD, DENSE, DURABLE, RESISTANT TO WEATHERING AND ANGULAR IN SHAPE, IT SHALL BE FREE FROM OVERBURDEN, SPOIL, SHALE AND ORGANIC MATTER, ROCK THAT IS LAMINATED, FRACTURED, POROUS OR OTHERWISE PHYSICALLY WEAK WILL BE UNACCEPTABLE.
- 44. AN APPROXIMATE GUIDE TO STONE SHAPE IS THAT THE BREADTH OR THICKNESS OF A SINGLE STONE SHOULD BE NOT LESS THAN ONE-THIRD ITS LENGTH. ROUND MATERIAL CAN
- BE USED AS RIP-RAP PROVIDED IT IS NOT PLACED ON SLOPES GREATER THAN 3H:1V. 45. STONE SHOULD BE DARK IN COLOR EITHER GRAY OR DARK BROWN SIMILAR TO SOIL
- 46. BIDIM A44 GEOTEXTILE SHALL BE USED UNDER RIP-RAP.
- 47. ROCKS AND ROCK BOULDERS HAVE A RELATIVE DENSITY OF 2.2 TO 2.8.

- 1. ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 25 MPA U.N.O.
- 2. ALL KERBS , GUTTERING , DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 150MM GRANULAR BASECOURSE COMPACTED TO 100% MAXIMUM MODIFIED DRY DENSITY (AS1289
- 3. EXPANSION JOINTS (EJ) TO BE FORMED 10MM COMPRESSIBLE CORK FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS , ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 6M CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSIONS JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS,
- 4. WEAKENED PLANE JOINTS TO BE MIN 3MM WIDE AND LOCATED 3M CENTRE EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINTS LOCATIONS IN THE SLABS.
- 5. BROOMED FINISH TO ALL RAMPED AND VEHICULAR CROSSINGS. ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOATED FINISH.
- 6. EXISTING KERB AND GUTTERING IS TO BE COMPLETELY REMOVED WHERE NEW KERB AND GUTTERING IS SHOWN.

### **PAVEMENTS**

- PEDESTRIAN PAVEMENTS
- 1. ALL PEDESTRIAN PAVEMENTS ARE TO BE JOINTED AS FOLLOWS UNO.
- 2. EXPANSION JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENTS TO CURVES AND ELSEWHERE AT MAXIMUM 6M CENTRES. 3. WEAKENED PLANE JOINTS, TOOLED JOINTS OR SAWN JOINTS ARE TO BE LOCATED AT
- MAXIMUM SPACING OF 1.5 TIMES THE WIDTH OF THE PAVEMENT. 4. WHERE POSSIBLE JOINTS SHALL BE LOCATED TO MATCH KERBING AND / OR ADJACENT

PAVEMENTS.

- CONCRETE ROAD PAVEMENTS ALL VEHICULAR PAVEMENTS ARE TO BE JOINTED AS SHOWN ON DRAWINGS.
- 6. CONCRETE SLABS TO BE MINIMUM 3.5M AND MAXIMUM 12M LONG.
- 7. CONCRETE SLABS TO BE MINIMUM 1M AND MAXIMUM 4.3M WIDE.
- 8. TRANSVERSE DOWELLED JOINTS SHALL BE PROVIDED AT MAXIMUM 12M CENTRES UNO.
- 9. TIED LONGITUDINAL JOINTS SHALL BE PROVIDED AT MAXIMUM 4.3M CENTRES UNO.
- 10. THE MAXIMUM WIDTH OF TIED SLABS SHALL NOT EXCEED 15 METRES.
- 11. PROVIDE N250 GRADE DOWELS AS SHOWN ON THE DRAWINGS.
- 12. DOWELS MUST BE LOCATED NOT CLOSER THAN 150MM TO A LONGITUDINAL JOINT. THE TYPICAL OFFSET TO THE FIRST DOWEL MUST NOT EXCEED 250MM. 13. PROVIDE SUPPORTS FOR DOWELS TO ENSURE THAT DOWELS ARE PERPENDICULAR TO THE
- JOINT IN BOTH VERTICAL AND HORIZONTAL ALIGNMENT
- 14. DEBOND END OF DOWEL IN SECOND CAST SLAB ONLY. 15. SAW CUT PAVEMENT AS SOON AS CONCRETE HAS CURED SUFFICIENTLY TO ENABLE
- CUTTING WITHOUT SPALLING OF THE SURFACE AND JOINTS. 16. ALL FORMED JOINTS IN THE BASE SHALL BE DEBONDED IN ACCORDANCE WITH THE
- SPECIFICATION. 17. WHERE SAW CUT JOINTS ARE SHOWN AT FORMED JOINTS, THE SEALANT RESERVOIR MAY BE CREATED BY SAW CUTS OR BY FIXING A TEMPORARY FILLER TO THE FIRST PLACED

- FLEXIBLE PAVEMENTS
- 18. ASPHALTIC CONCRETE SHALL CONFORM TO RMS FORM R116. 19. ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH RMS FORM 3051 (UNBOUND), RMS FORM 3052 (BOUND) COMPACT TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS1289 5.2.1 FREQUENCY OF COMPACTION TEST
- SHALL NOT BE LESS THAN 1 TEST PER 200M3 OF BASECOURSE MATERIAL PLACED. 20. ALL SUB BASE COURSE MATERIAL SHALL BE QUARRIED MATERIAL TO COMPLY WITH RMS

FORM 3051 AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH AS1289 5.2.1

- 21. PRIOR TO PLACING PAVEMENT MATERIALS, PROOF ROLL THE SUBGRADE (AND EACH
- SUBSEQUENT PAVEMENT LAYER) WITH A 10 TONNE MINIMUM ROLLER. 22. BEFORE PLACING PAVEMENT MATERIAL, PROOF ROLL EXPOSED SURFACE WITH A 10 TONNE MINIMUM ROLLER TO DETECT AND THEN REMOVE ANY SOFT SPOTS (AREAS WITH MORE THAN 2MM INDENT OR MOVEMENT UNDER THE ROLLER).
- 23. IF ANY SOFT OR UNSUITABLE SUBGRADE MATERIAL IS FOUND, THEN THESE SHOULD BE LOCALLY EXCAVATED TO A SOUND BASE AND REPLACED WITH SELECT FILL AND

### TRAFFIC LINES & SIGNS

- 1. ALL PAVEMENT MARKING AND SIGNPOSTING TO BE ACCORDANCE WITH 'INTERIM GUIDE TO SIGNS AND MARKINGS' (RMS) AND AS1742.
- 2. ALL LINE MARKING TO BE WHITE U.N.O (DULUX ROAD MASTER OR EQUIVALENT)

COMPACTED IN LAYERS TO ACHIEVE THE DESIGN SUBGRADE DENSITY

- 3. TRANSITION LINE MARKING TO SUIT EXISTING WHERE REQUIRED.
- 4. RELOCATE/REMOVE EXISTING SIGNS AS REQUIRED,
- 5. REMOVE ALL REDUNDANT PAVEMENT MARKING AS REQUIRED.
- PROVIDE ADEQUATE APPROACH WARNING SIGNS DURING AND AFTER CONSTRUCTION. 7. PROVIDE REFLECTORISED PAVEMENT MARKERS TO COUNCIL AND RMS REQUIREMENTS

## CONCRETE

- 1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3600 CURRENT
- EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
- 2. CONCRETE QUALITY ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORM WORK AND CONCRETE UNLESS NOTED OTHERWISE

ELEMENT	AS 3600 F'c MPa AT 28 DAYS	SLUMP	SPECIFIED SIZE NOMINAL AGG.
VEHICULAR BASE AND DRIVEWAYS	32	60	20
KERBS , PATHS , PITS	25	80	20

- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS1379, SECTION 6.3.3.
- 3. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING. 4. CLEAR CONCRETE COVER TO ALL REINFORCEMENTS FOR DURABILITY SHALL BE 70MM TOP
- 5. ALL REINFORCEMENTS SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS , PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1M CENTRE BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
- 6. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE
- COMPACTED AND CURED IN ACCORDANCE WITH RMS SPECIFICATIONS R83. 7. REINFORCEMENT SYMBOLS
  - S DENOTES GRADE 230 S HOT ROLLED DEFORMED BARS TO AS1302

AND 70MM FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.

- N DENOTES GRADE 450 N BARS TO AS1302 GRADE N
- R DENOTES 230 R HOT ROLLED PLAN BARS TO AS1302
- F DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS1304 W DENOTES HARD-DRAWN PLAN WIRE TO AS1303
- EG 17N20-250 17 DENOTES NUMBER OF BARS IN GROUP

• 20 DENOTES SIZE OF REINFORCEMENT BARS

- N DENOTES GRADE OF STEEL REINFORCEMENT
- 250 DENOTES SPACING IN MM THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC
- 8. FABRIC SHALL BE LAPPED BY 225MM MINIMUM. ENSURE 25MM HORIZONTAL DISTANCE

BETWEEN OVERLAPPING REINFORCING BARS.

- SURVEY SETOUT NOTES 1. THE CONRACTOR SHALL SETOUT THE WORKS AS SHOWN ON THE APPROVED CONSTRUCTION CERTIFICATE DRAWINGS OR THE APPROVED FOR CONSTRUCTION
- DRAWINGS. 2. A REGISTERED SURVEYOR IS TO CERTIFY ALL SETOUT POINTS.
- 3. FOR THE "CONVENIENCE OF THE CONTRACTOR", ELECTRONIC SETOUT INFORMATION WILL BE PROVIDED TO THE CONTRACTOR UPON REQUEST. 4. INFORMATION DETAILED ON APPROVED CONSTRUCTION CERTIFICATE PLANS TAKES PRIORITY OVER ALL ELECTRONIC INFORMATION PROVIDED. THE ORDER OF PRIORITY FOR
- ISSUED INFORMATION IS AS FOLLOWS: a. APPROVED CONSTRUCTION CERTIFICATE OR APPROVED FOR CONSTRUCTION
- DRAWINGS b. 2D DRAFTING BASE (CAD ELECTRONIC FILE)
- c. DIGITAL TERRAIN MODEL (DTM) OR SIMILAR ISSUED IN ELECTRONIC FORMAT 5. THE SUPERINTENDENT IS TO BE INFORMED OF ANY DISCREPANCY BETWEEN ISSUED INFORMATION AND THE APPROVED CONSTRUCTION CERTIFICATE PLANS PRIOR TO WORKS BEING UNDERTAKEN. UPON REVIEW, THE SUPERINTENDENT WILL THEN SEEK CLARIFICATION AND PROVIDE INSTRUCTION ON HOW TO PROCEED.

-SITE SURVEY BY CCG ARCHITECTS PTY. LTD. EXISTING SURFACE COMPRISED OF GROUND SURVEY AND LIDAR DATA PROVIDED BY NSW GOVERNMENT SPATIAL SERVICES. -SITE SURVEY TO BE VERIFIED PRIOR TO CONSTRUCTION

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**MUSWELLBROOK DEPOT** 

GENERAL NOTES

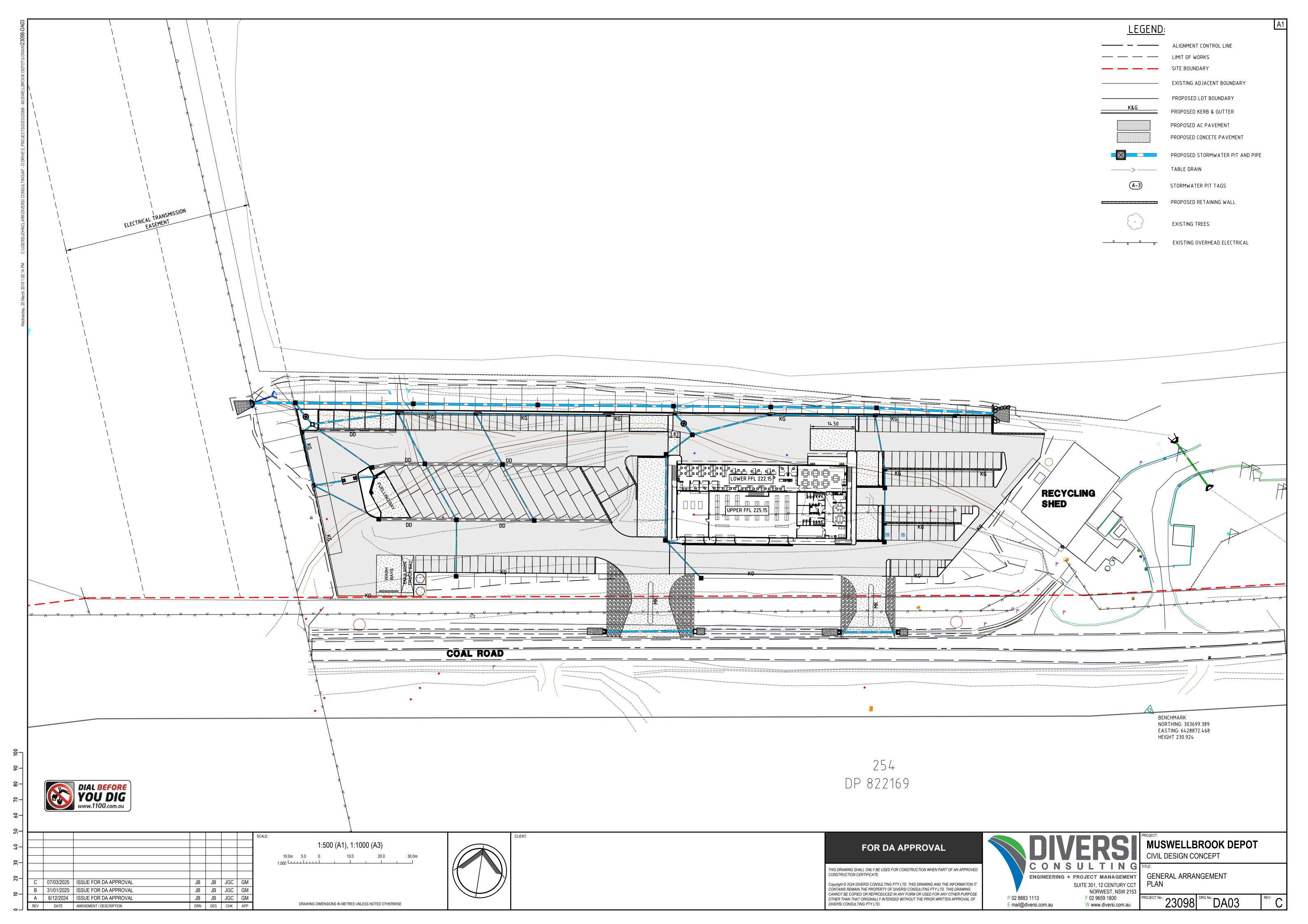
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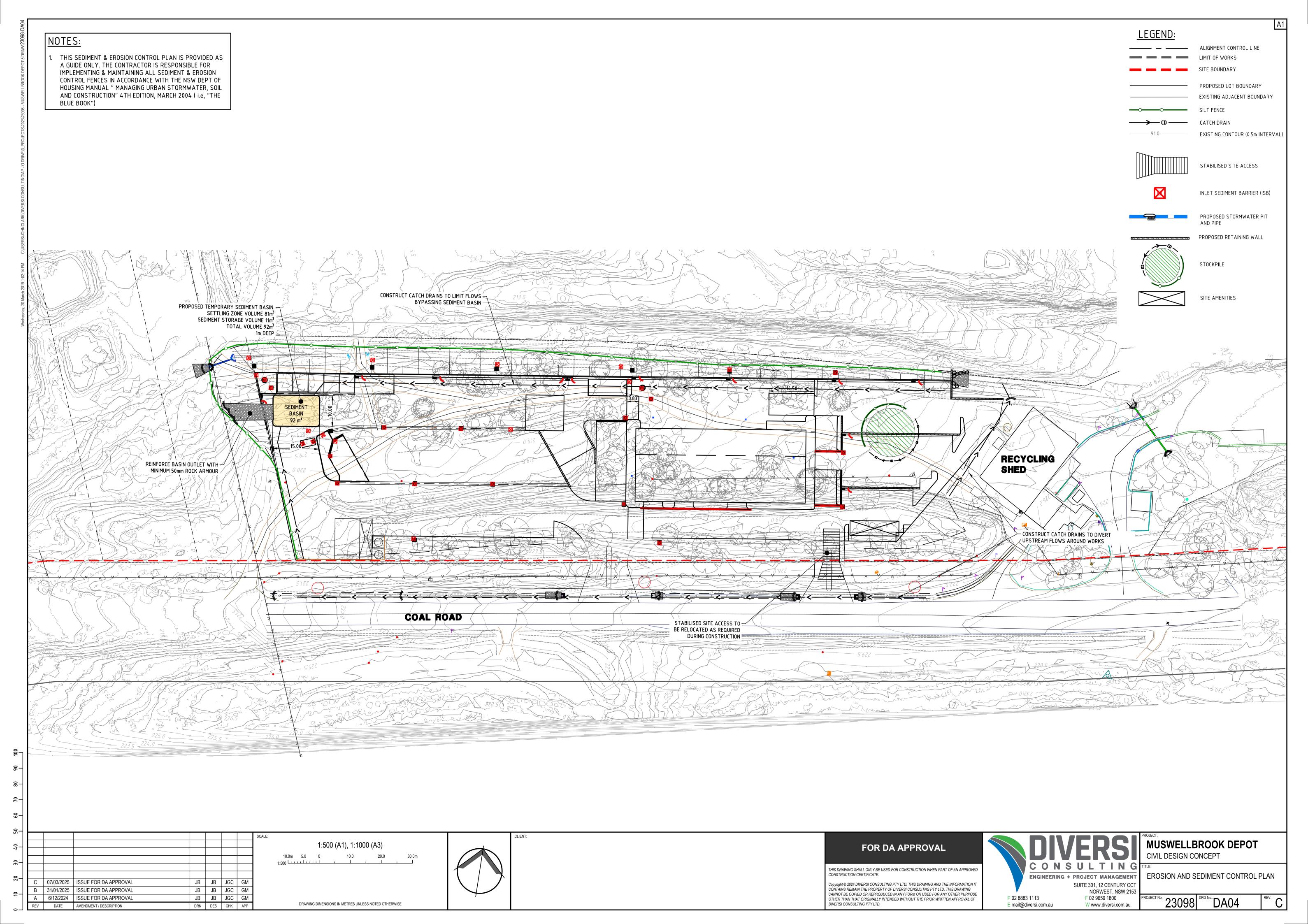
DRAWING DIMENSIONS IN METRES UNLESS NOTED OTHERWISE

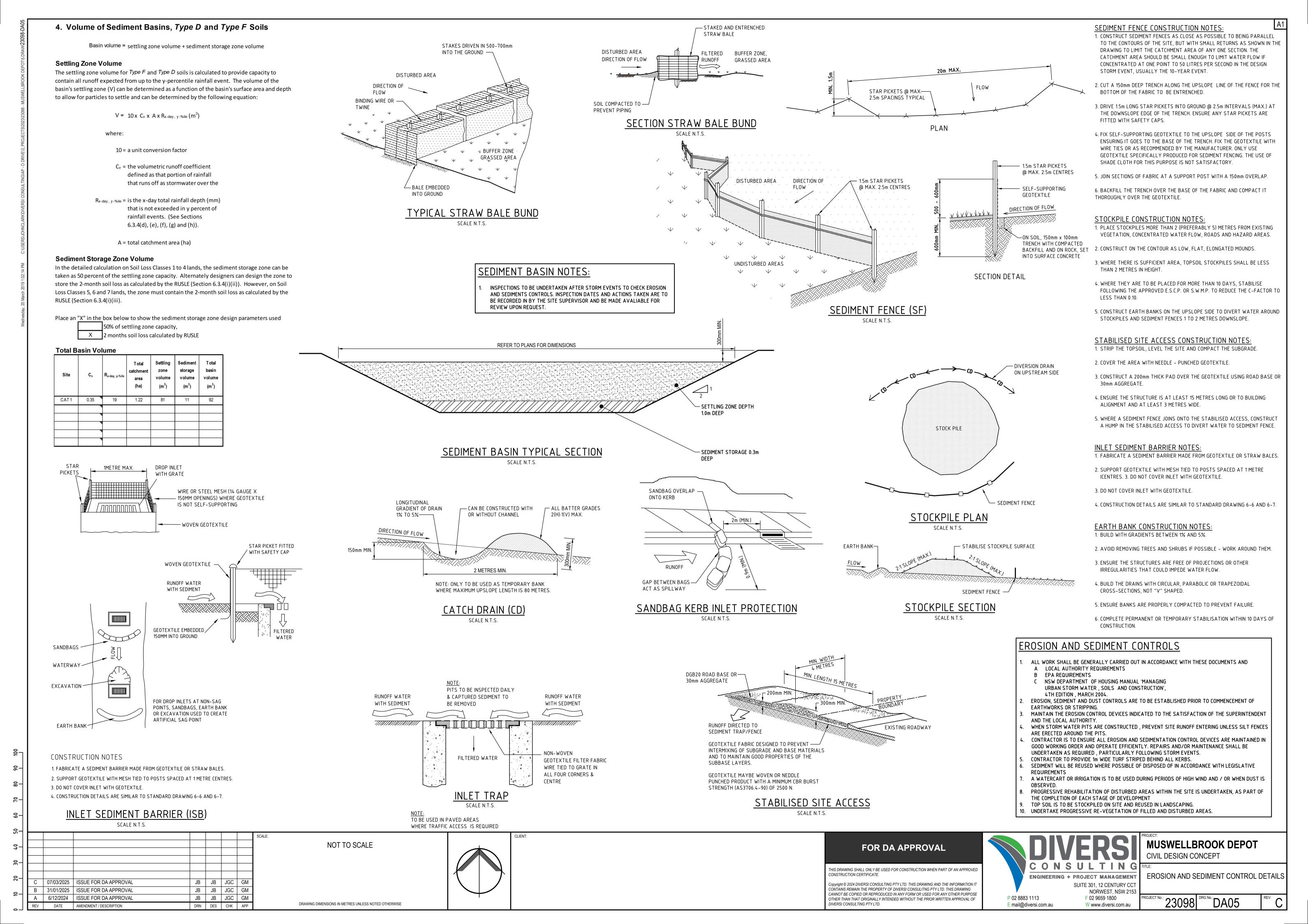
RELOCATION AND OR ADJUSTMENTS INCLUDING PITS , VALVES , PILLARS , POLES ETC.

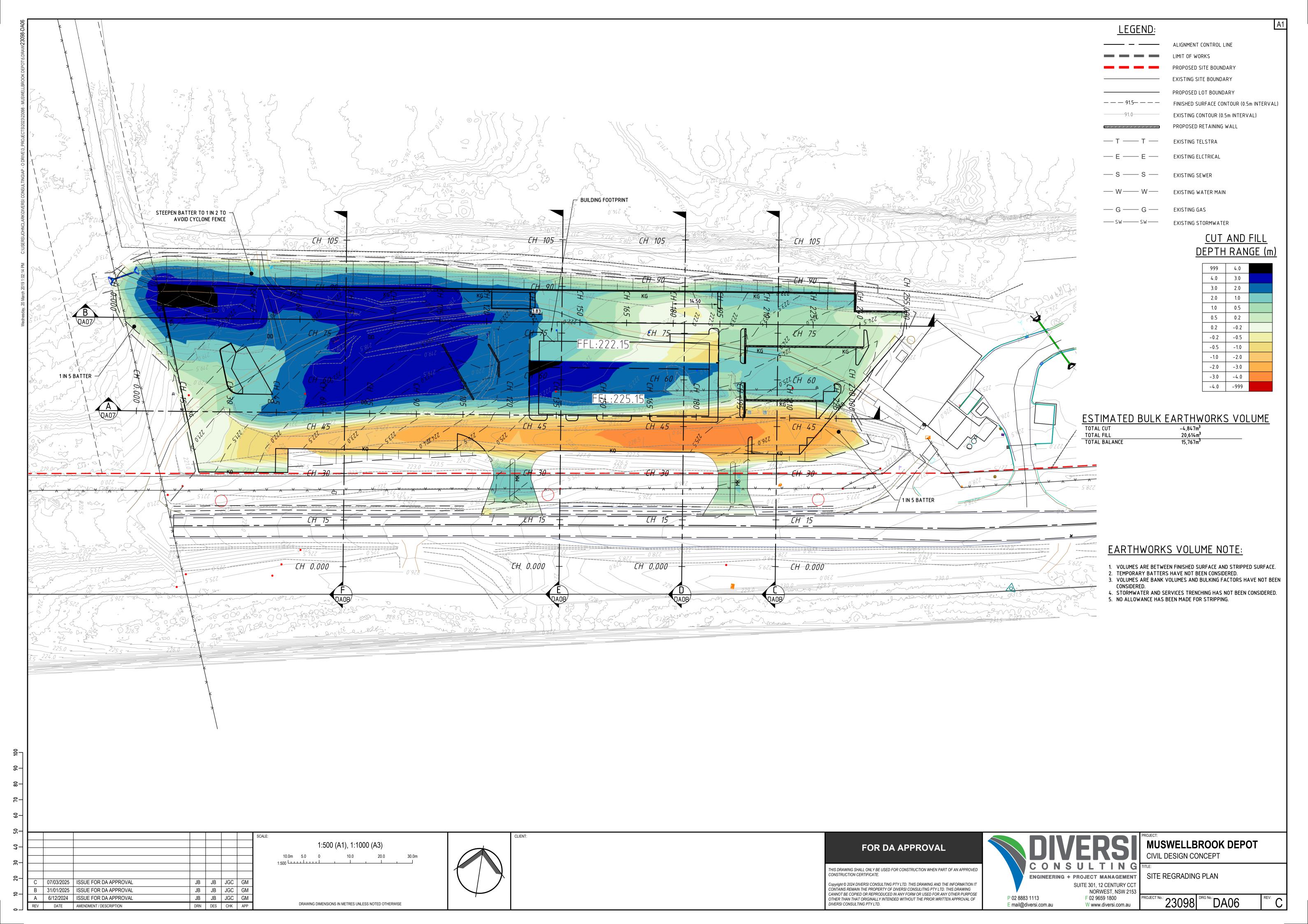
CO-ORDINATION OF THESE WORKS.

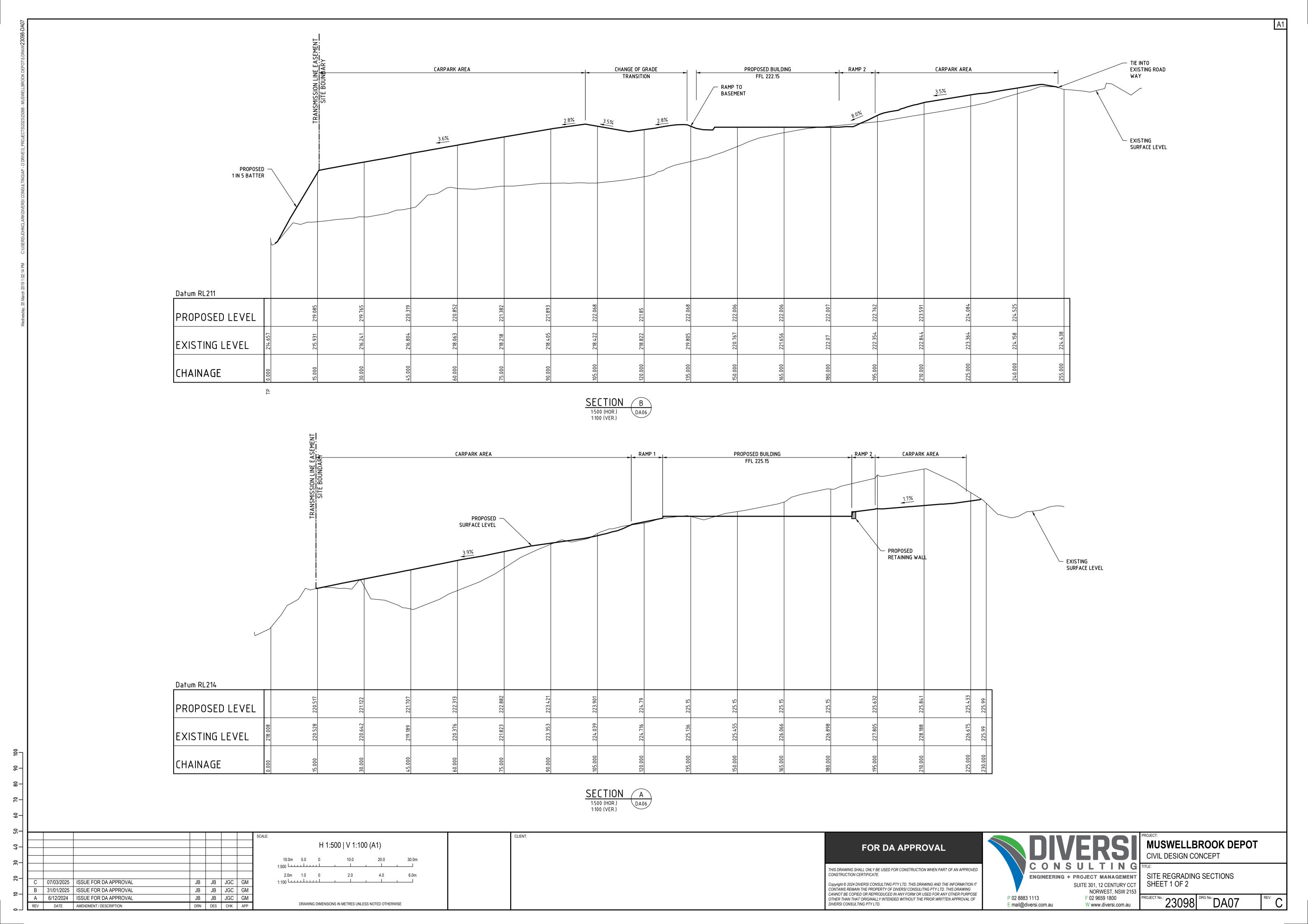
- EXCAVATION AND TRENCHES:
- TRENCH WIDTH SHALL BE 300M WIDER THAN EXTERNAL PIPE DIMENSIONS UNO.

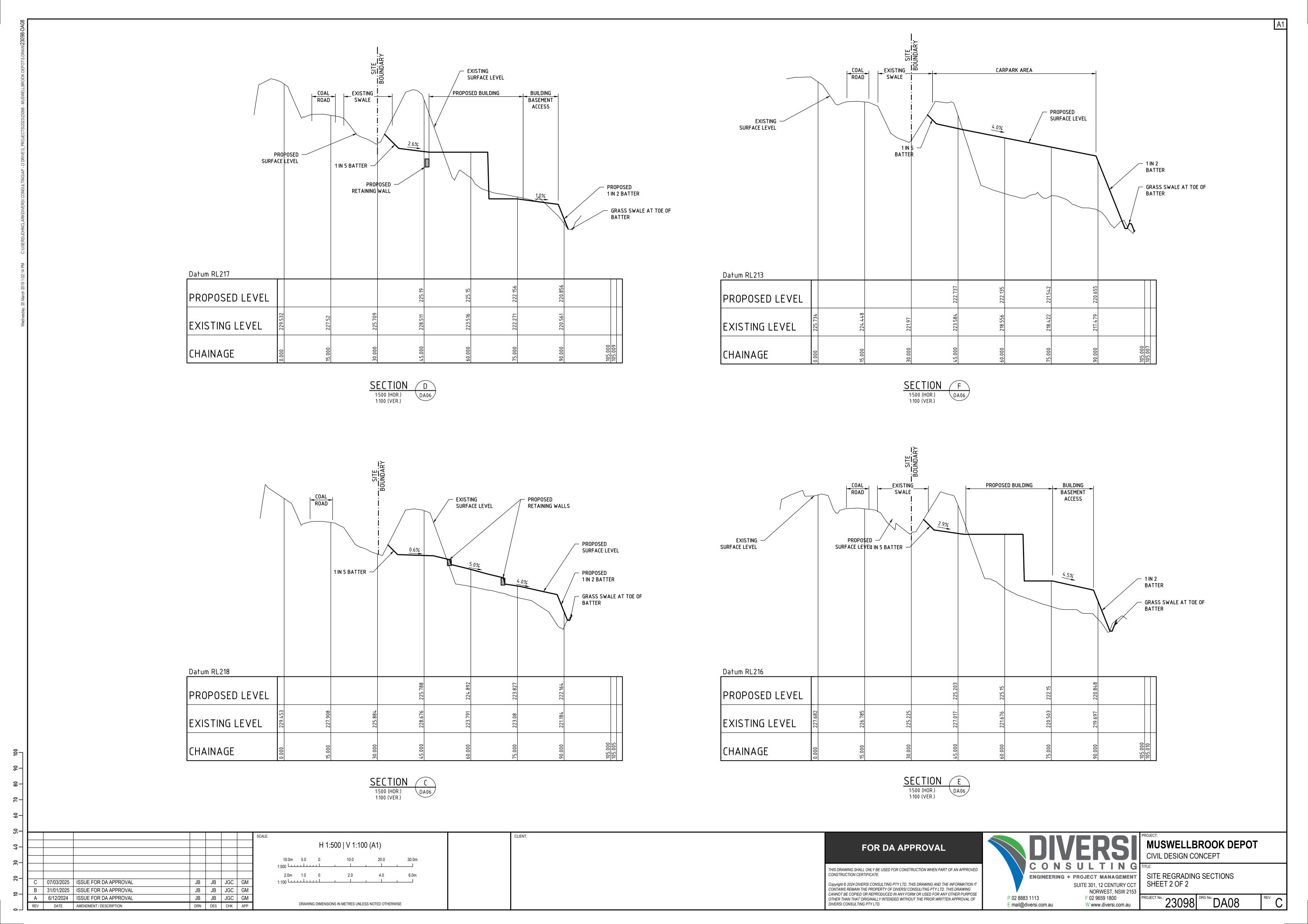


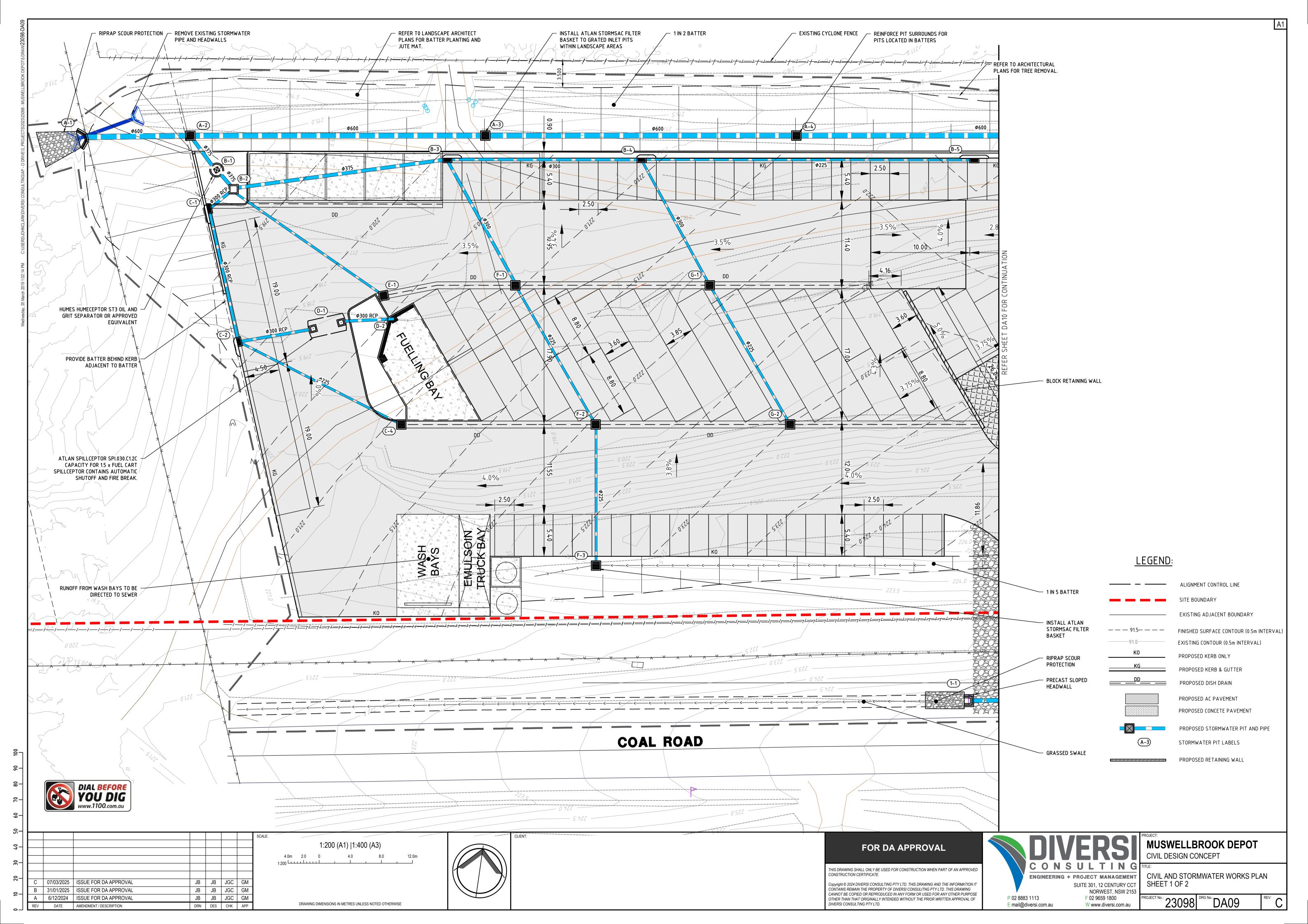


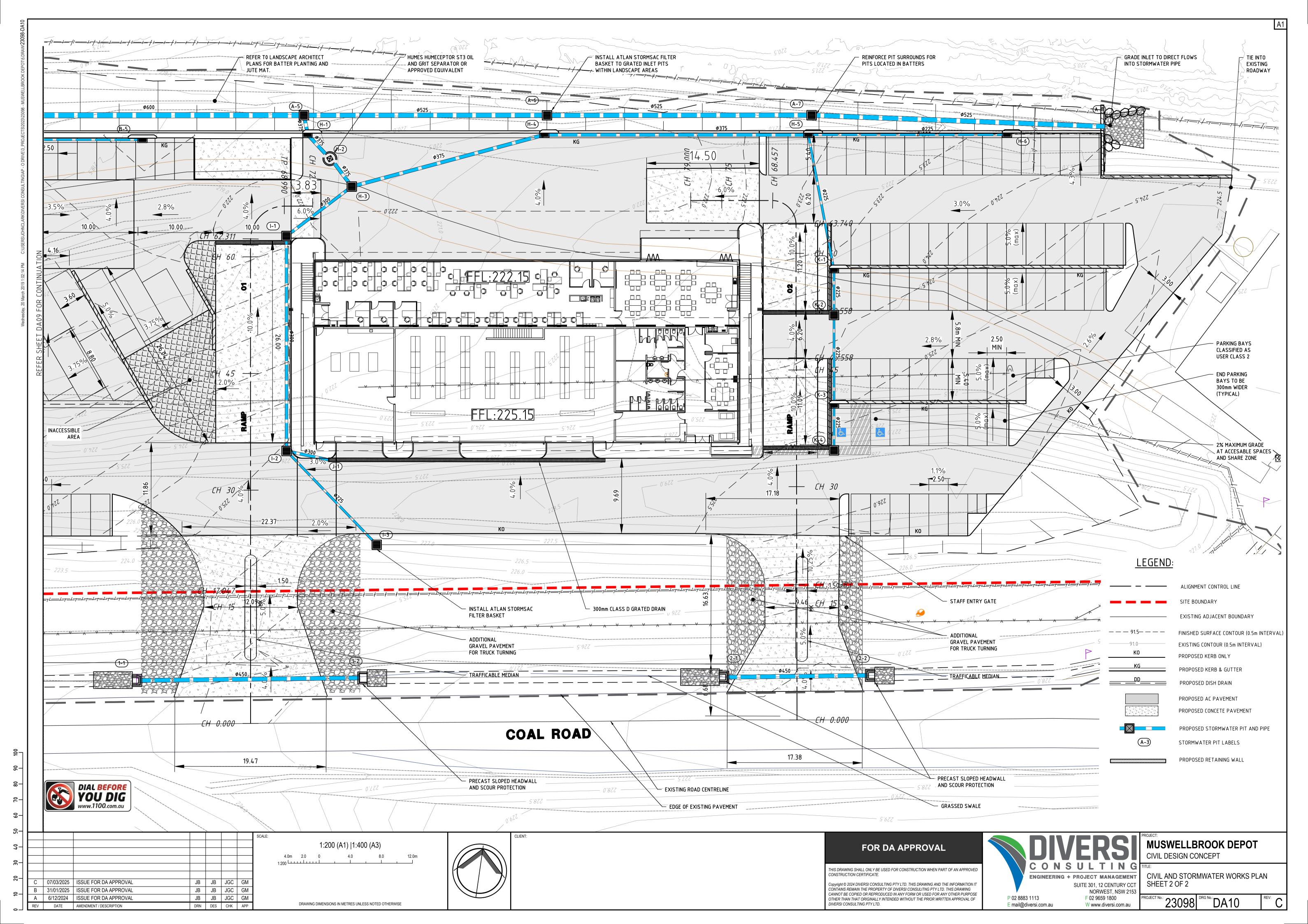


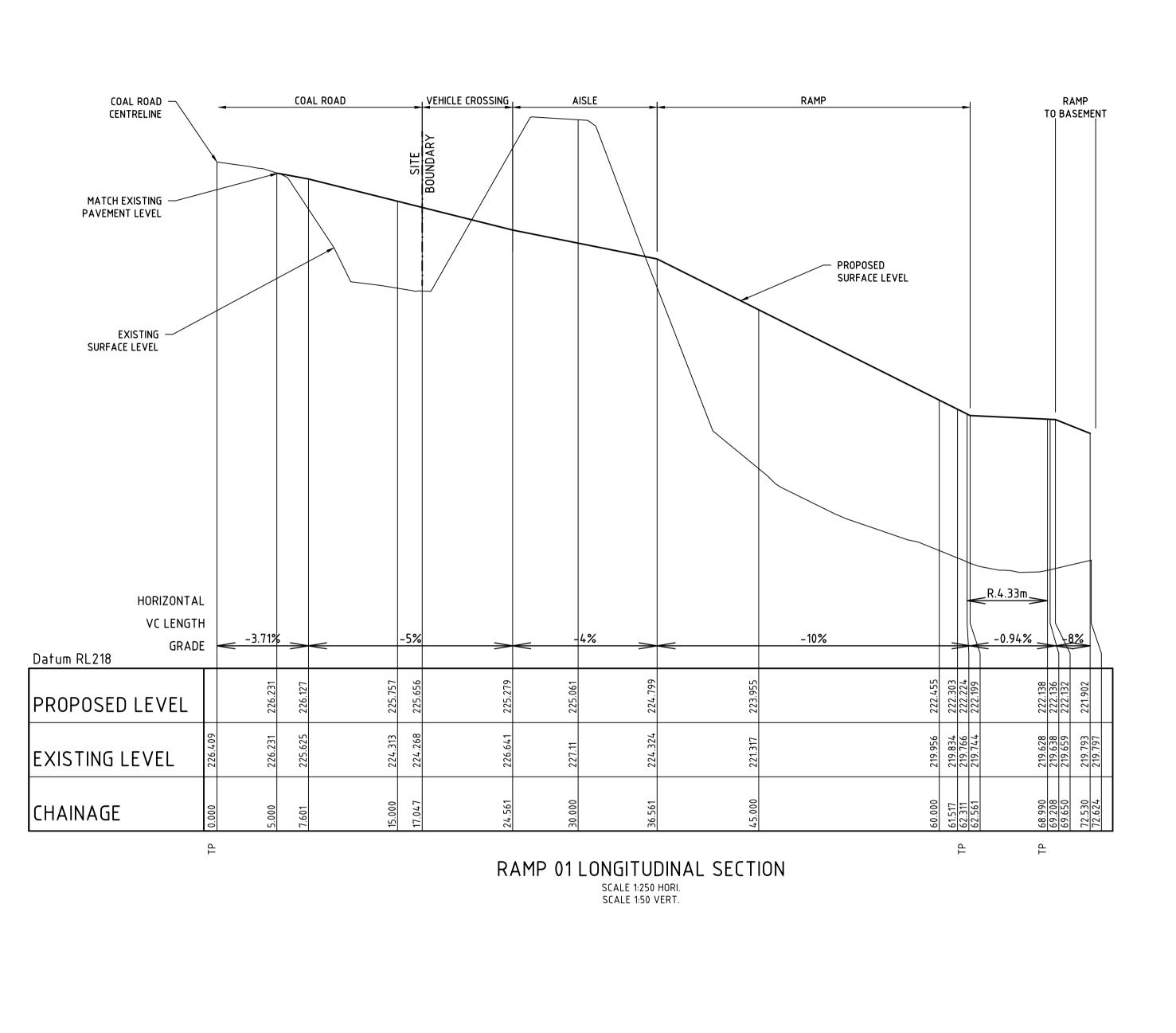


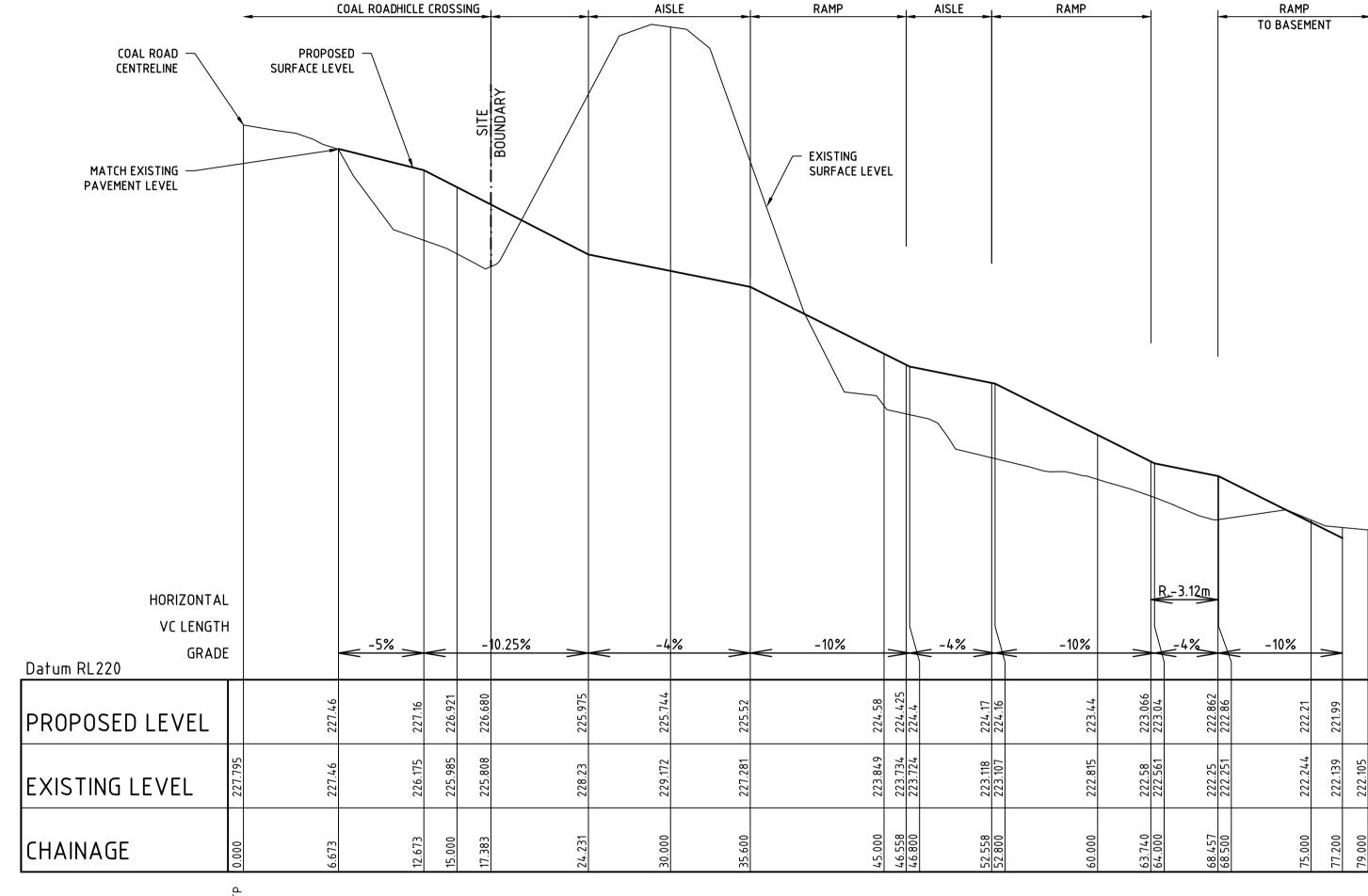












RAMP 02 LONGITUDINAL SECTION

SCALE 1:250 HORI.
SCALE 1:50 VERT.

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B 31/01/2025 ISSUE FOR DA APPROVAL JB JB JGC GM
A 6/12/2024 ISSUE FOR DA APPROVAL JB JB JGC GM

DRN DES CHK APP

REV DATE AMENDMENT / DESCRIPTION

8-

8-

9-

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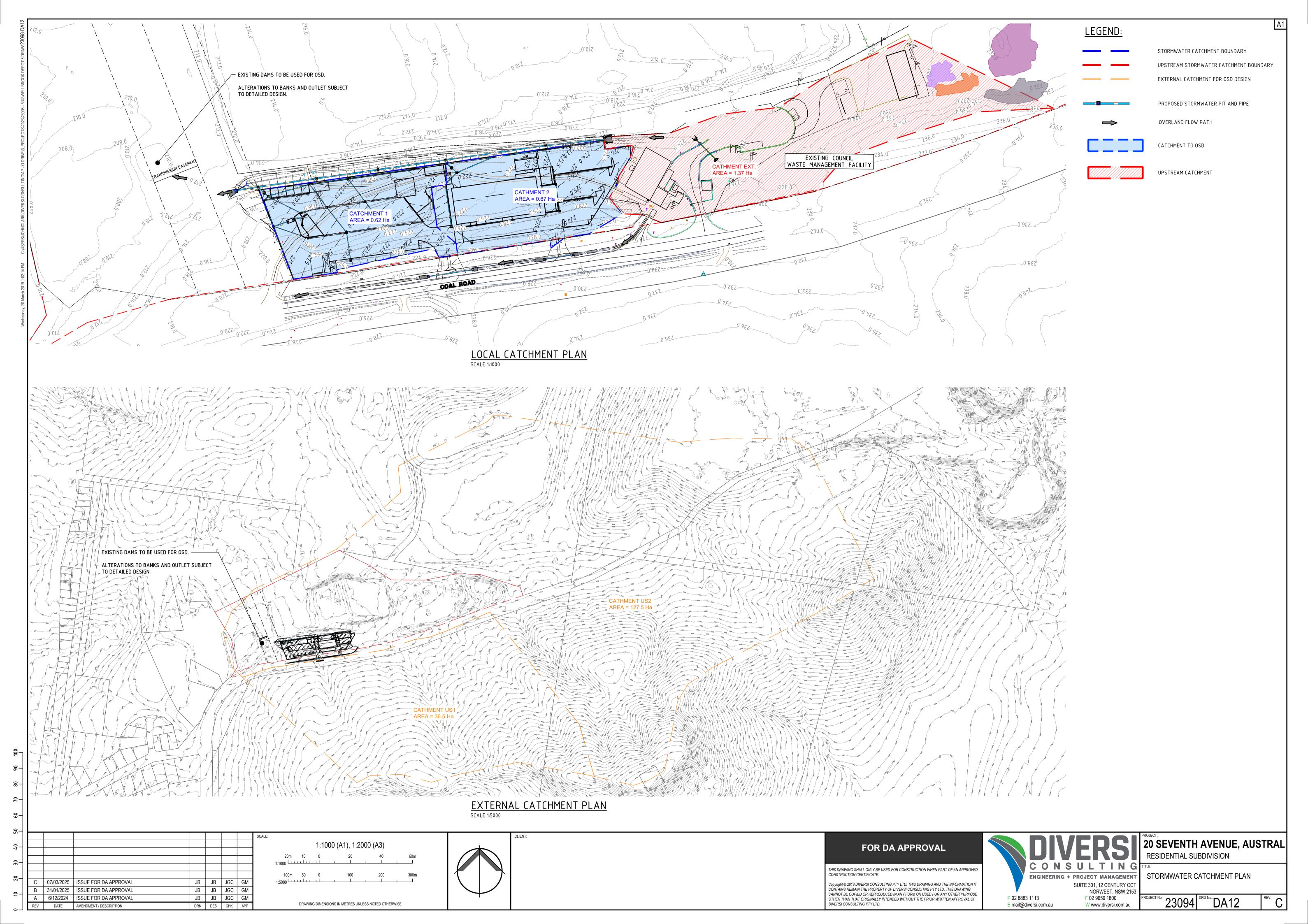
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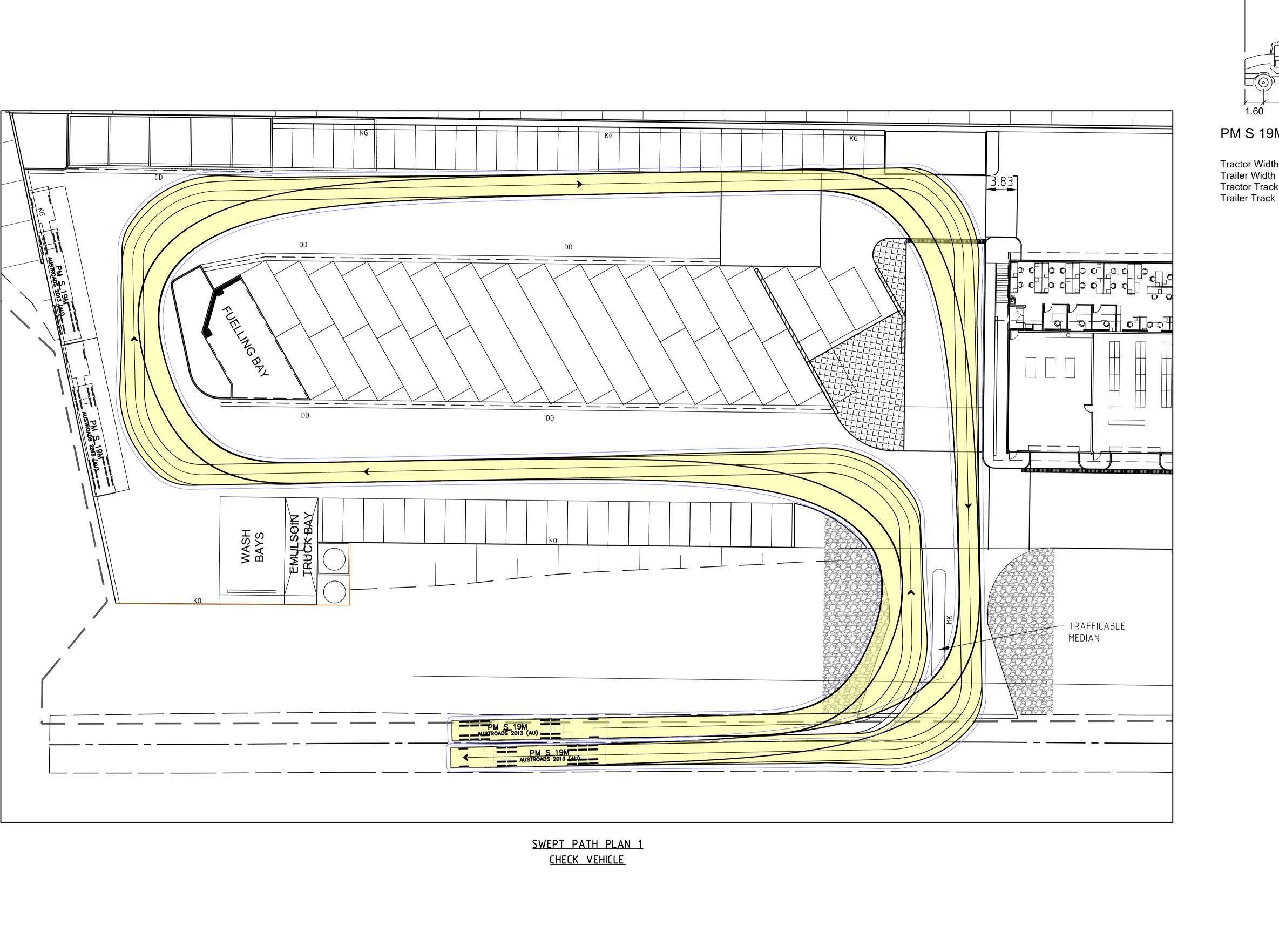
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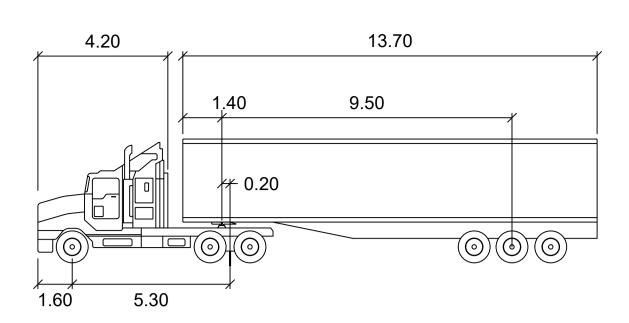
MUSWELLBROOK DEPOT
CIVIL DESIGN CONCEPT

RAMP LONGITUDINAL SECTIONS

23098 DRG No.: DA11 REV: C



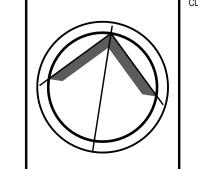




PM S 19M

meters

: 6.0 : 27.8 : 70.0 : 2.50 : 2.50 Tractor Width Lock to Lock Time Steering Angle Articulating Angle Trailer Width : 2.50 : 2.50 Tractor Track



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MUSWELLBROOK DEPOT CIVIL DESIGN CONCEPT

VEHICLE TURNING PATH PLAN SHEET 1 OF 5

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DRAWING DIMENSIONS IN METRES UNLESS NOTED OTHERWISE

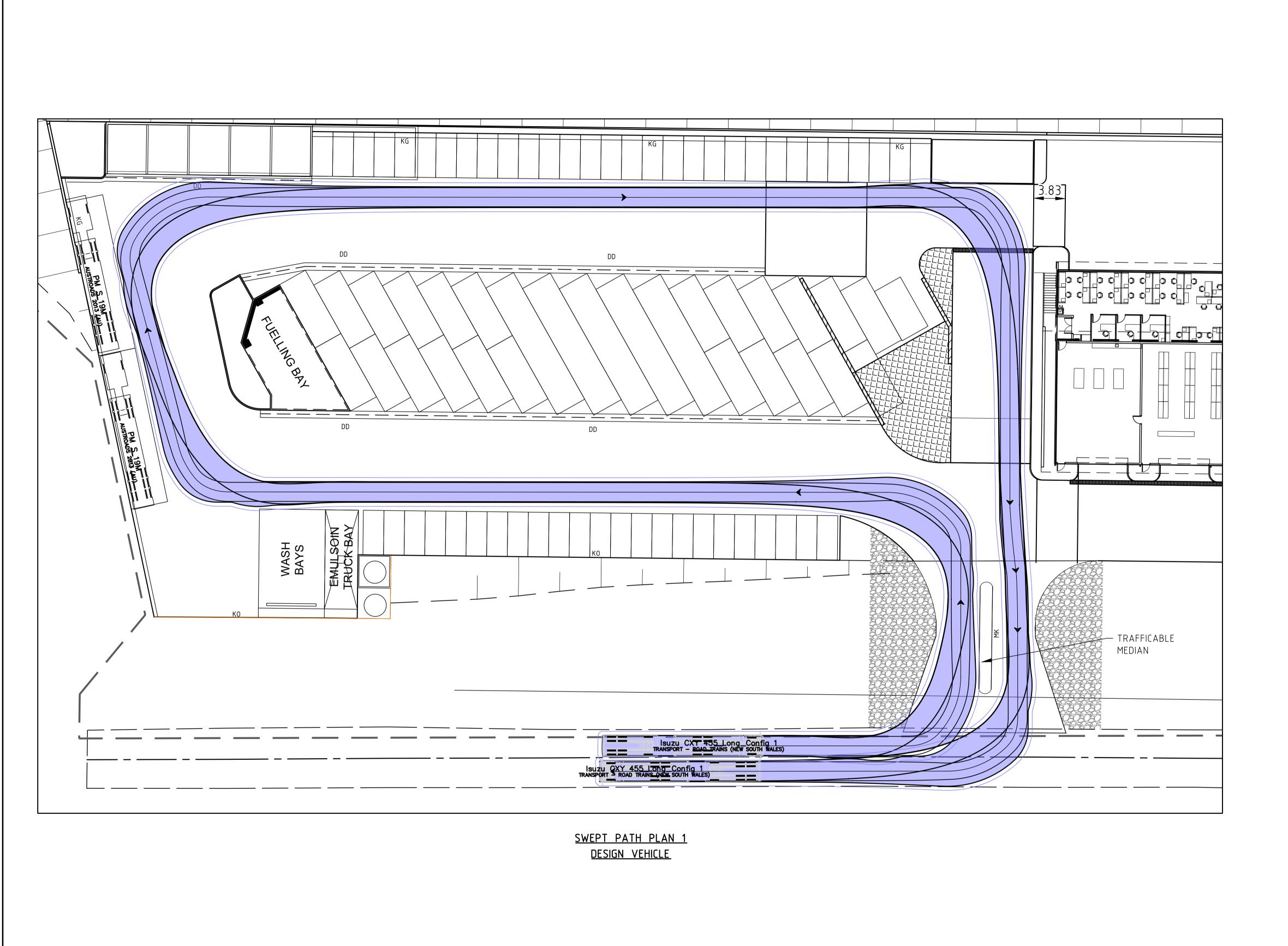
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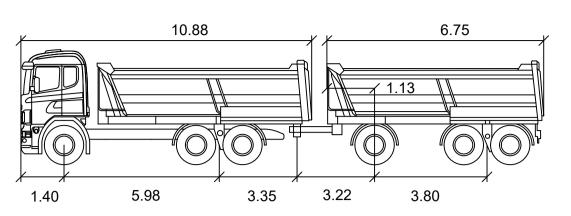
JB JB JGC GM

JB JB JGC GM

JB JB JGC GM

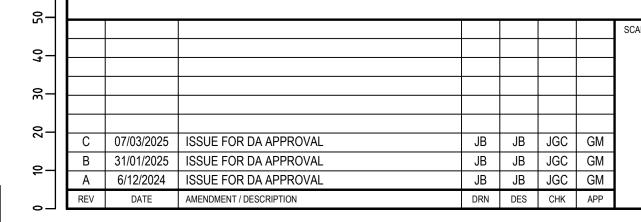
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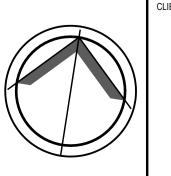


Isuzu CXY 455 Long\_Config 1

First Unit Width	: 2.49	Lock to Lock Time	:	6.0	
railer Width	: 2.49	Steering Angle	:	35.7	
First Unit Track	: 2.44	Articulating Angle	:	70.0	
railer Track	. 211				



1:250 (A1), 1:500 (A3) DRAWING DIMENSIONS IN METRES UNLESS NOTED OTHERWISE



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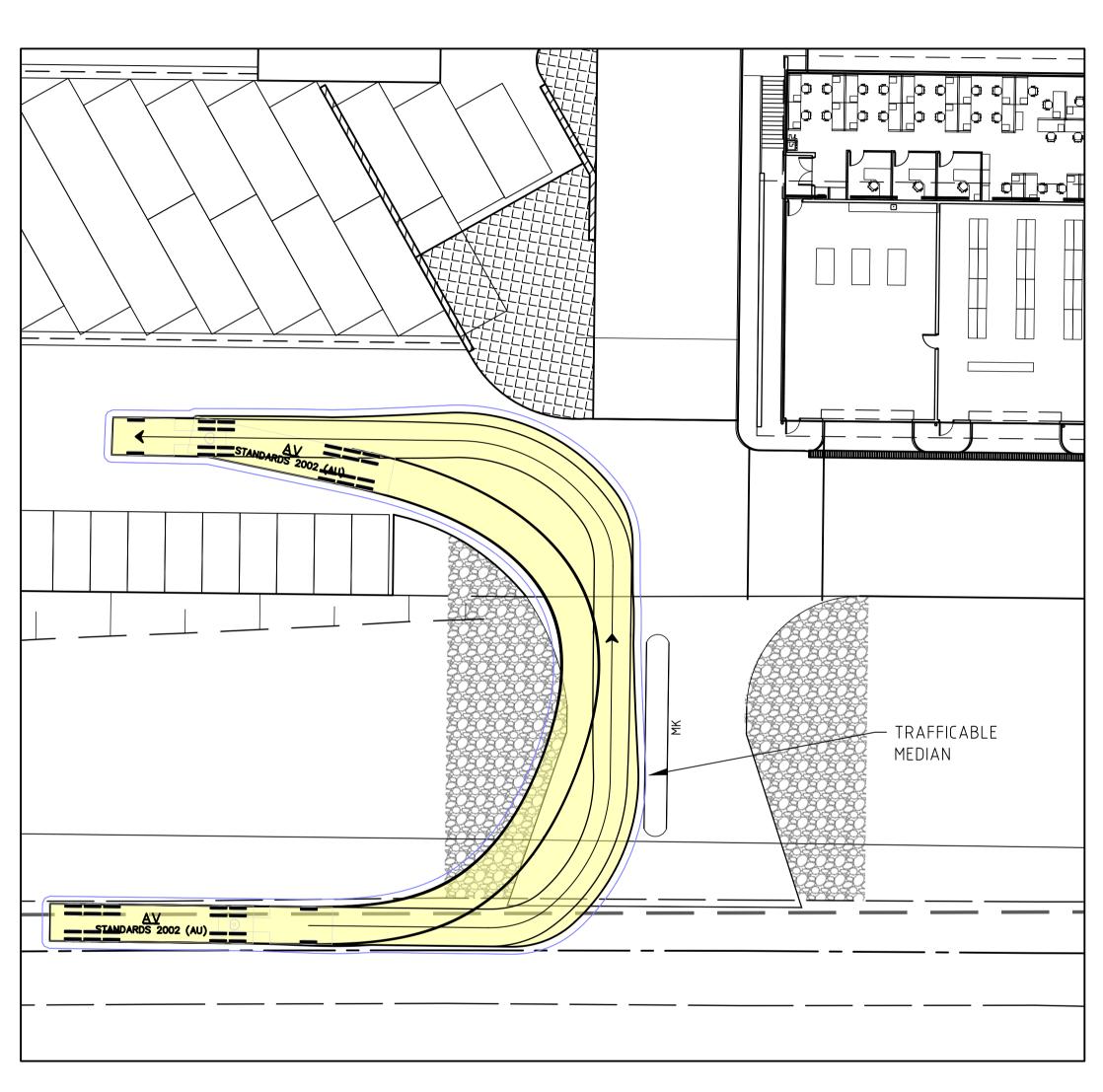


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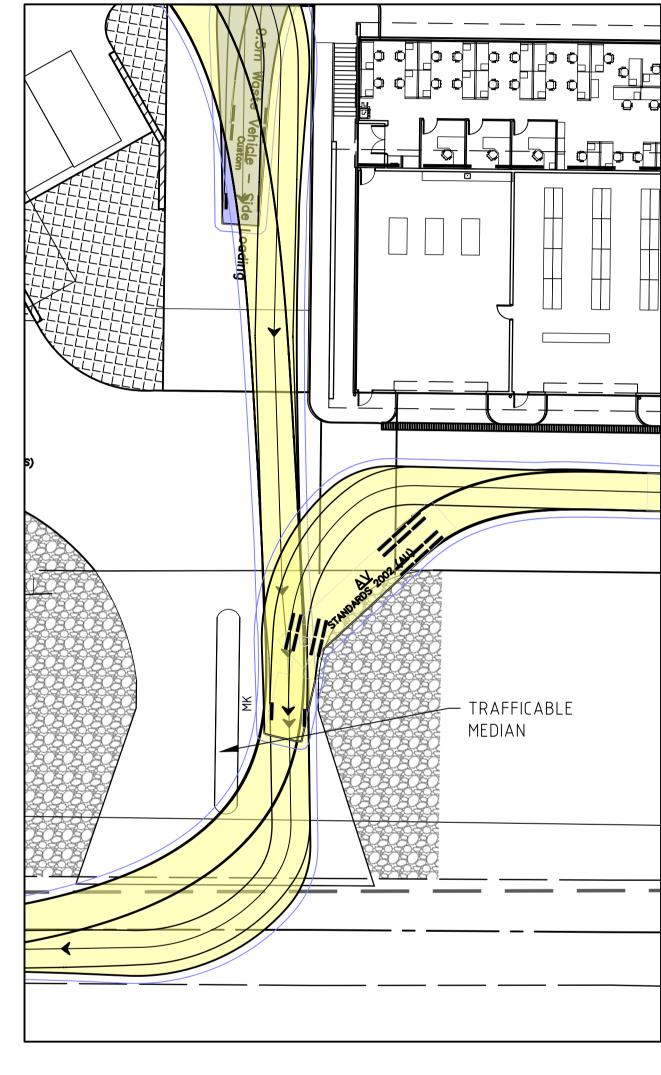
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MUSWELLBROOK DEPOT CIVIL DESIGN CONCEPT

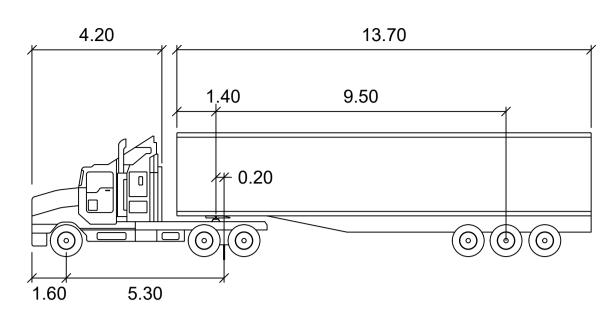
VEHICLE TURNING PATH PLAN SHEET 2 OF 5



SWEPT PATH PLAN 3
CHECK VEHICLE ENTRY



SWEPT PATH PLAN 4
CHECK VEHICLE EXIT



PM S 19M

Tractor Width : 2.50 Lock to Lock Time : 6.0
Trailer Width : 2.50 Steering Angle : 27.8
Tractor Track : 2.50 Articulating Angle : 70.0
Trailer Track : 2.50

<u>IK VEHICLE ENTRY</u>

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MUSWELLBROOK DEPOT
CIVIL DESIGN CONCEPT

VEHICLE TURNING PATH PLAN SHEET 3 OF 5

No.: 23098 DRG No.: DA15

1:250 (A1), 1:500 (A3)

2.5 0 5.0 10.0 15.0m

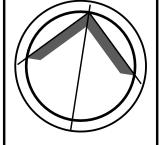
DRAWING DIMENSIONS IN METRES UNLESS NOTED OTHERWISE

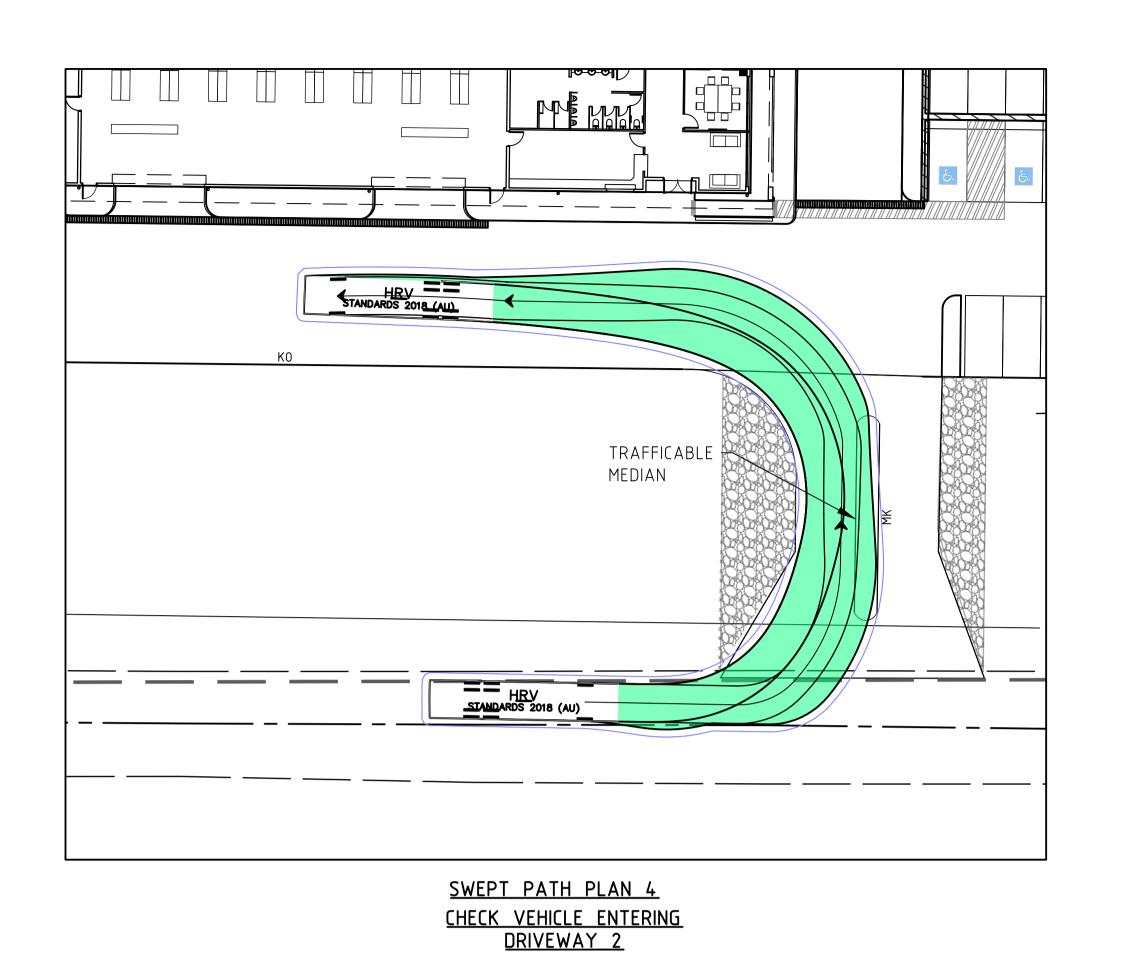
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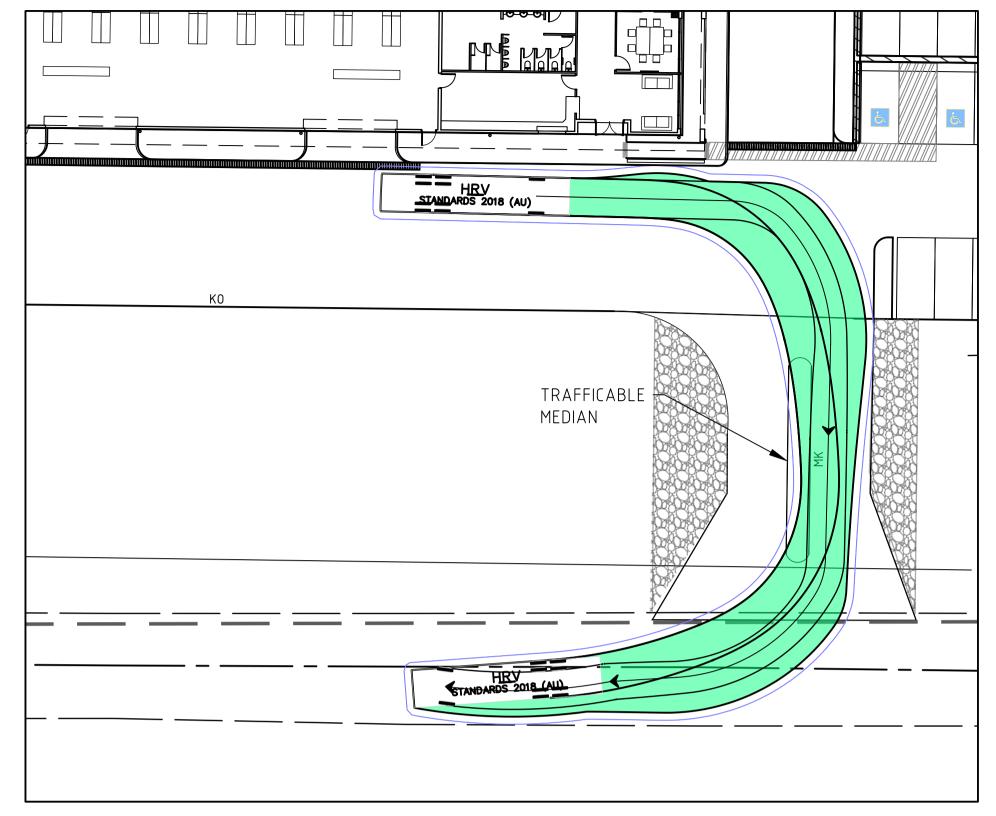
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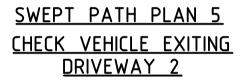
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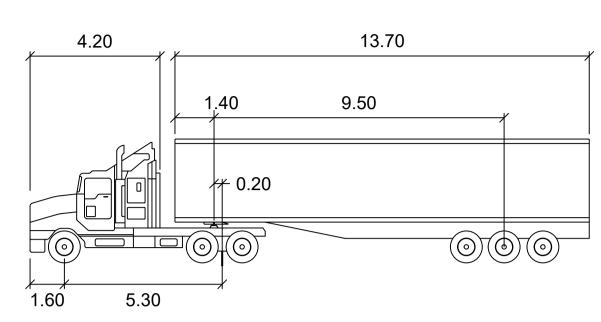
DRN DES CHK APP





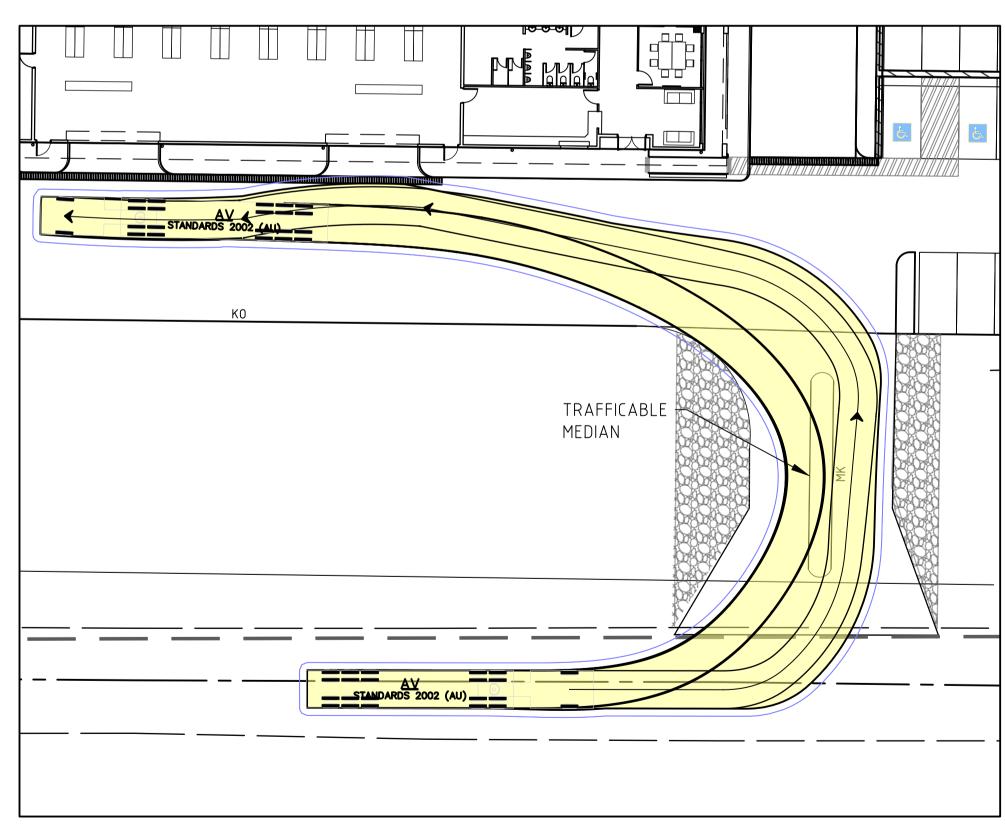




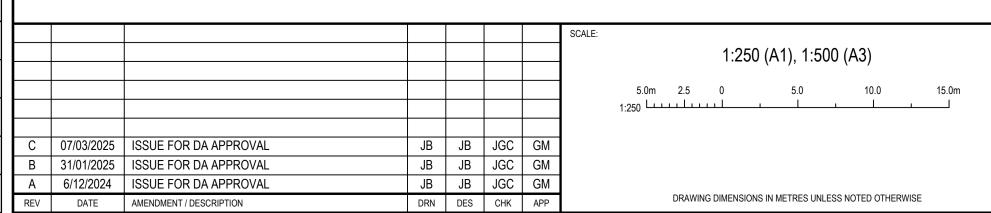


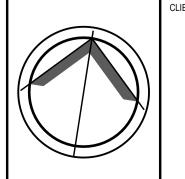
### PM S 19M

	meters		
ractor Width	: 2.50	Lock to Lock Time	: 6.0
railer Width	: 2.50	Steering Angle	: 27.8
ractor Track	: 2.50	Articulating Angle	: 70.0
railer Track	: 2.50		



SWEPT PATH PLAN 6 CHECK VEHICLE ENTERING DRIVEWAY 2





2.20 6.85 HRV meters Width : 2.50

12.50

: 2.50 Track : 6.0 Lock to Lock Time : 36.7 Steering Angle

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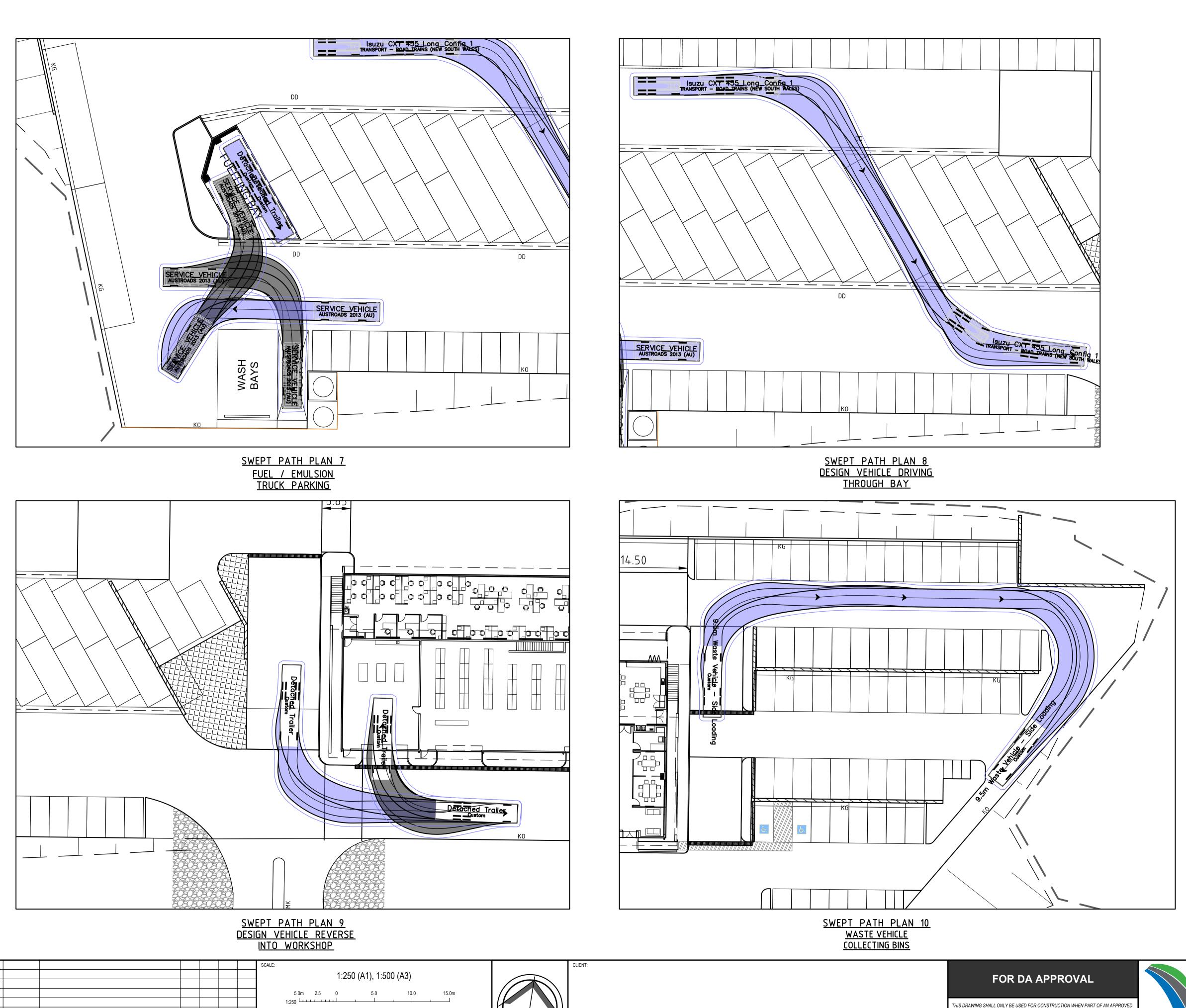
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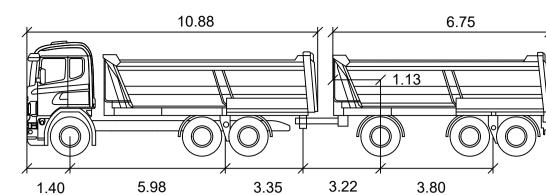
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MUSWELLBROOK DEPOT CIVIL DESIGN CONCEPT

VEHICLE TURNING PATH PLAN SHEET 4 OF 5

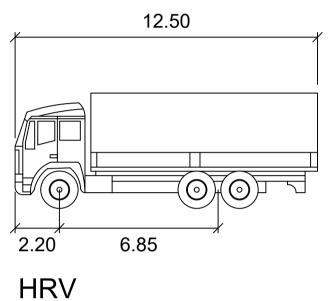




Isuzu CXY 455 Long\_Config 1

meters

First Unit Width : 2.49 Lock to Lock Time Trailer Width Steering Angle : 35.7 : 2.49 Articulating Angle First Unit Track : 2.44 : 70.0 Trailer Track : 2.44



meters Width : 2.50 : 2.50 Track Lock to Lock Time : 6.0 Steering Angle : 36.7

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VEHICLE TURNING PATH PLAN SHEET 5 OF 5

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