

Appendix C

Bulk Earthworks Plans

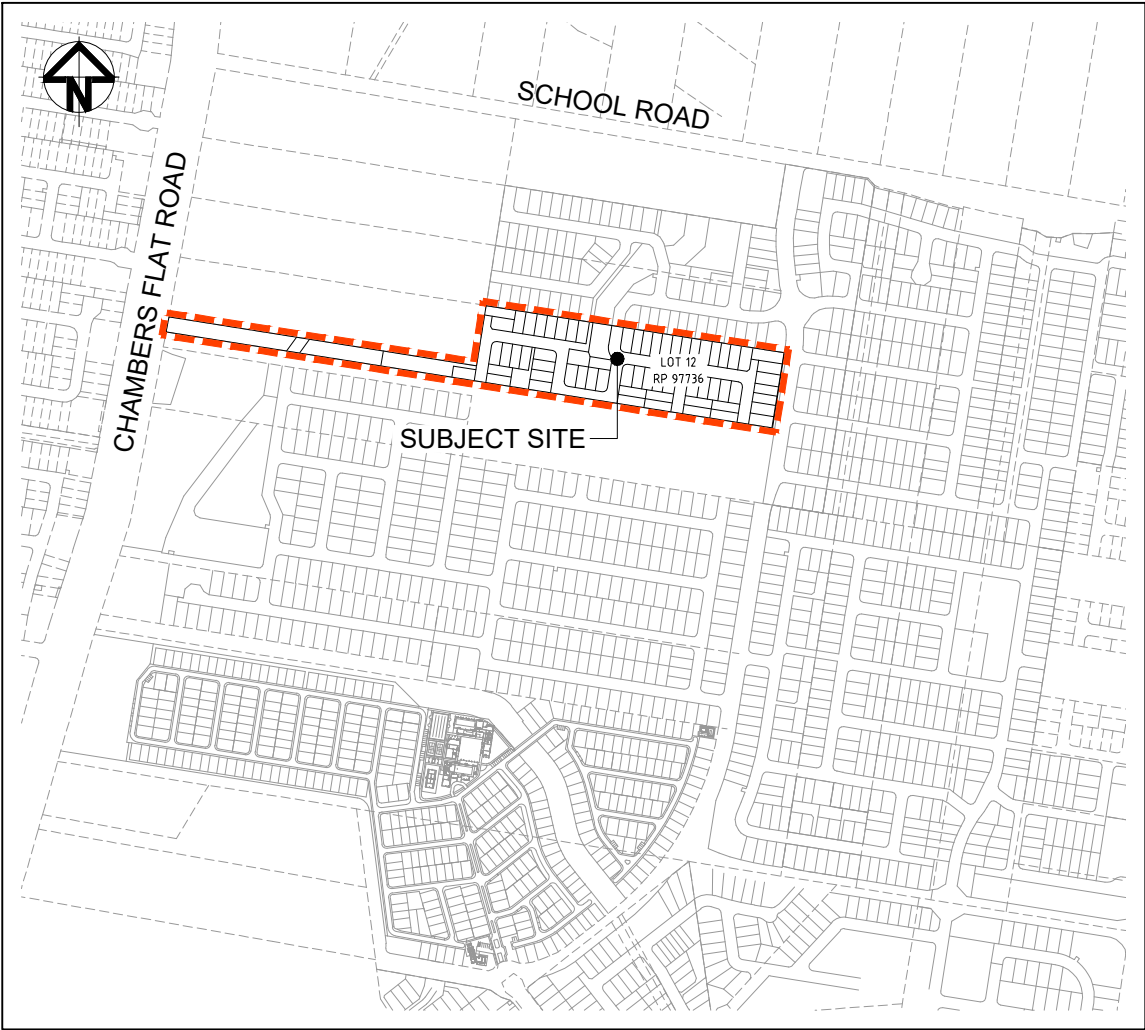
PROPOSED RESIDENTIAL DEVELOPMENT

520 CHAMBERS FLAT RD, LOGAN RESERVE

CIVIL ENGINEERING - BULK EARTHWORKS

FOR : LPG No.17 PTY LTD

DRAWING INDEX	
Sheet Number	Sheet Title
L26003-BE-000	COVER SHEET LOCALITY PLAN & DRAWING INDEX
L26003-BE-001	GENERAL NOTES
L24003-BE-100	TYPICAL DETAILS
L26003-BE-200	SEDIMENT & EROSION CONTROL PLAN
L26003-BE-201	SEDIMENT & EROSION CONTROL NOTES & DETAILS
L26003-BE-202	BULK EARTHWORKS PLAN



SITE PLAN
SCALE N.T.S

LEVELS & GRID
LEVELS TO AHD
(AUSTRALIAN HEIGHT DATUM)
GRID ASSUMED LOCAL

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						SCALE @ A1 SIZE (double for A3):						TASK		INITIAL		DATE		APPROVED		RPEQ No.	
														REVIEW		B.T.		07.09.26			
														DESIGN		K.O.		07.09.26		DRAWING NUMBER	
														DRAWN		R.A.		07.09.26		L26003-BE-000	
																				REVISION	
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GENERAL

1. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE FOLLOWING DOCUMENTS:
 - OTHER PROVIDED ENGINEERING DRAWINGS
 - TECHNICAL SPECIFICATIONS
 - SUPPLEMENTARY SPECIFICATIONS
 - WRITTEN INSTRUCTIONS
2. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT SPECIFICATION FOR THE WORKS TOGETHER WITH THE REQUIREMENTS OF ALL THE RELEVANT CODES OF PRACTICE REFERRED TO THEREIN AND THE REQUIREMENTS OF L.C.C. STANDARDS AND SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PROVISION OF ANY TEMPORARY BRACING, PROPPING ETC. TO DRAINAGE PIPES DURING CONSTRUCTION. STRUCTURES SHALL BE MAINTAINED IN A STABLE POSITION AND NO PART SHALL BE OVERSTRESSED.
4. ALL LOCATIONS, ORIENTATION AND LEVELS SHALL BE VERIFIED ON SITE BEFORE COMMENCING ANY WORK. DISCREPANCIES SHALL BE REFERRED TO THE SITE SUPERINTENDENT.
5. DO NOT OBTAIN DIMENSIONS FROM SCALING.
6. NATURAL SURFACE LEVELS ON THE DRAWINGS ARE INDICATIVE ONLY.
7. ANY PERMITS AND APPROVALS REQUIRED FOR CONSTRUCTION OF PERMANENT OR TEMPORARY WORKS SHALL BE OBTAINED BY THE CONTRACTOR.
8. L.C.C. STANDARD DETAILS ARE TO BE ADOPTED UNLESS STATED OTHERWISE.

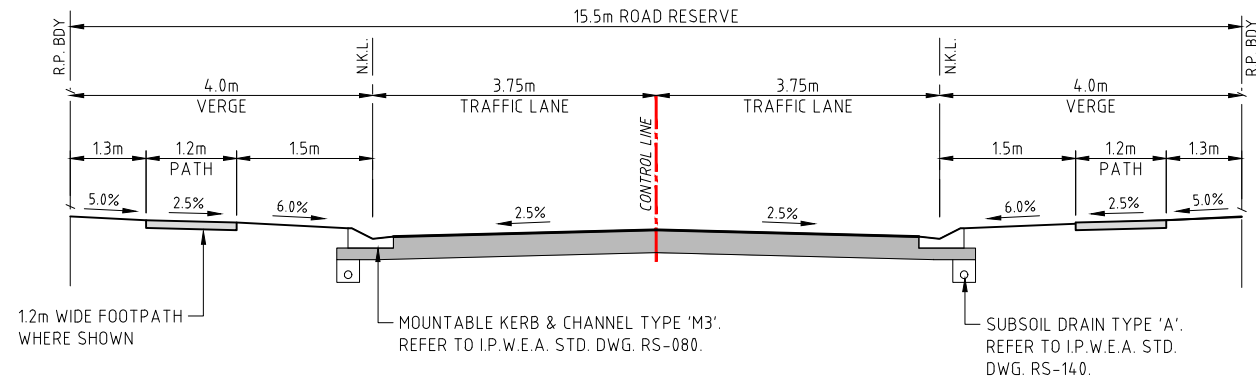
BULK EARTHWORKS

1. ALL EARTHWORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH L.C.C. STANDARD SPECIFICATIONS AND AS3798, UNDER LEVEL 1 SUPERVISION.
2. ALL NEW WORKS TO MATCH NEATLY WITH EXISTING.
3. REFER TO SECTIONS FOR BATTER GRADES WHERE GRADE ARE NOT SPECIFIED:-
FILL - 1:4
CUT - 1:4
4. UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT ALL FILL SHALL BE PLACED AT BETWEEN +2% AND -2% OF OPTIMUM MOISTURE CONTENT.
5. AN RPEQ CERTIFIED ENGINEER SHALL INSPECT THE SUBGRADE DURING COMPACTION AND ANY WEAK SPOTS SHALL BE REMOVED AND REPLACED WITH MINIMUM CBR15 MATERIAL.
6. ALL OF THE SITE SHALL BE KEPT FREE DRAINING DURING ALL PHASES OF THE PROJECT.
7. ALL DISTURBED AREAS SHALL BE TOPSOILED (MINIMUM THICKNESS 100mm) AND BE GRASS SEEDDED UNLESS NOTED OTHERWISE.
8. THE CONTRACTOR SHALL CONFIRM LOCATION OF ALL EXISTING SERVICES AND PROTECT THESE SERVICES DURING CONSTRUCTION. DAMAGED SERVICES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
9. NOTWITHSTANDING THE LIMITS AND FILLING SHOWN ON THE CROSS SECTIONS THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION AND SIMILARLY THE FINISHED SURFACE CONTOURS MAY BE ADJUSTED BY WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION.

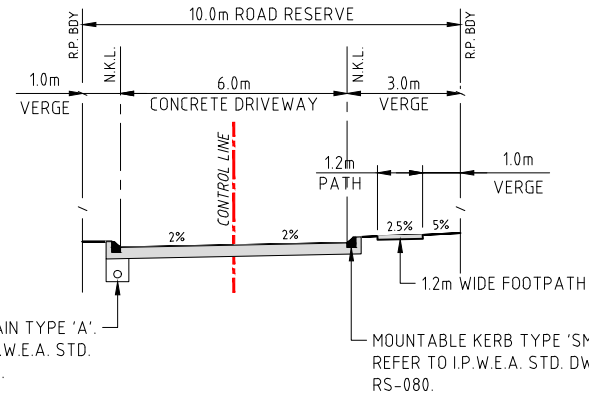
ENVIRONMENTAL

1. WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHOULD BE CONSTRUCTED WITH 1.8m BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES MUST BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
2. WHERE POSSIBLE, TREE ROOTS SHALL BE TUNNELED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGE AREA SHOULD BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT COUNCILS ARBORIST FOR FURTHER ADVICE.
3. TOPSOIL AND SUBSOIL SHOULD BE STOCKPILED SEPARATELY.
4. CARE SHOULD BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY INVOLVE PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.
5. SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
6. APPROPRIATE SEDIMENT CONTROLS SHALL BE UTILISED TO PREVENT SEDIMENT ENTERING ANY NATURAL WATERCOURSE.
7. NO SOILS SHALL BE STOCKPILED WITHIN 5m OF A NATURAL WATERCOURSE.
8. ALL ENVIRONMENTAL PROTECTION MEASURES SHOULD BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK, INCLUDING CLEARING, COMMENCING.

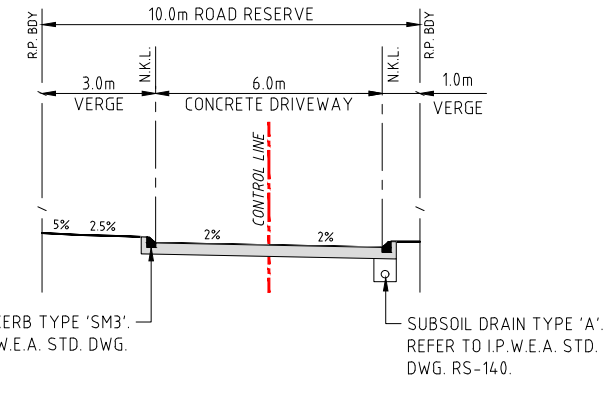
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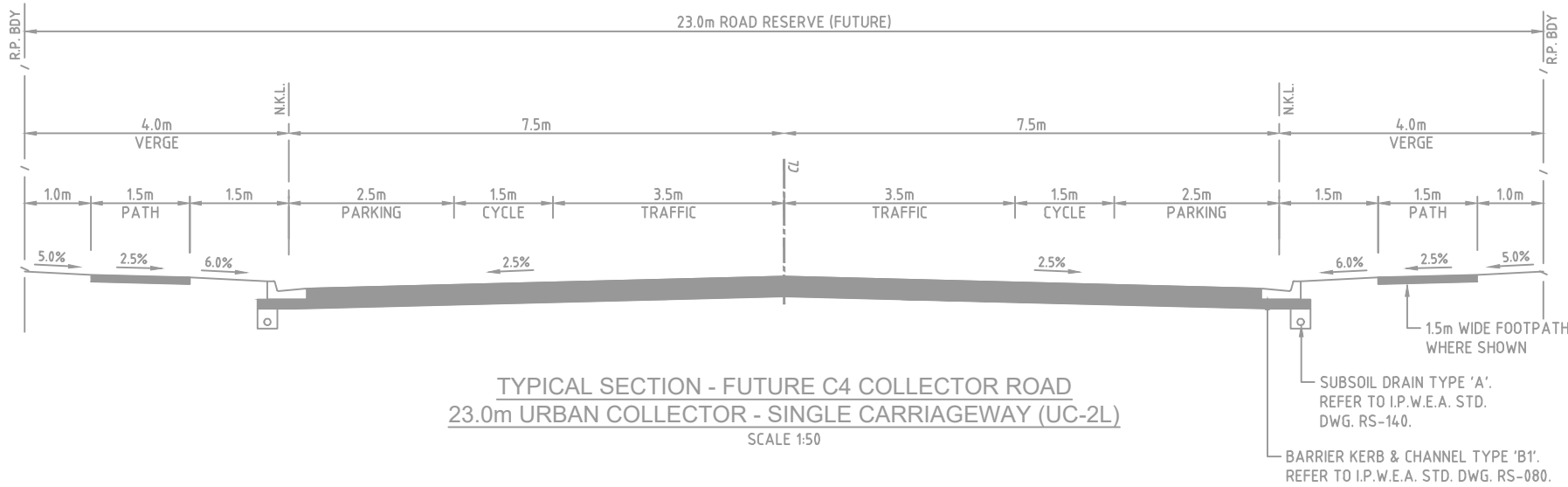
TYPICAL SECTION - ROADS 200, 201, 202, 203, 204 & 205
15.5m URBAN ACCESS ROAD
SCALE 1:50



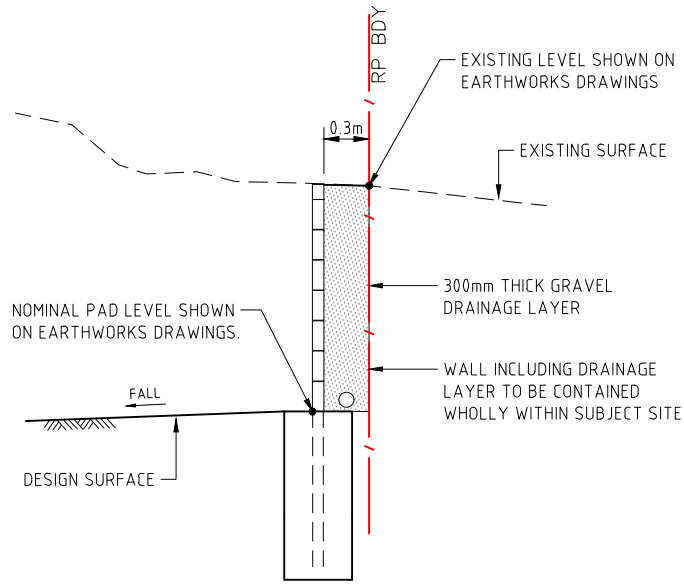
TYPICAL SECTION - LANEWAY (with footpath)
10.0m ACCESS LANE
SCALE 1:100



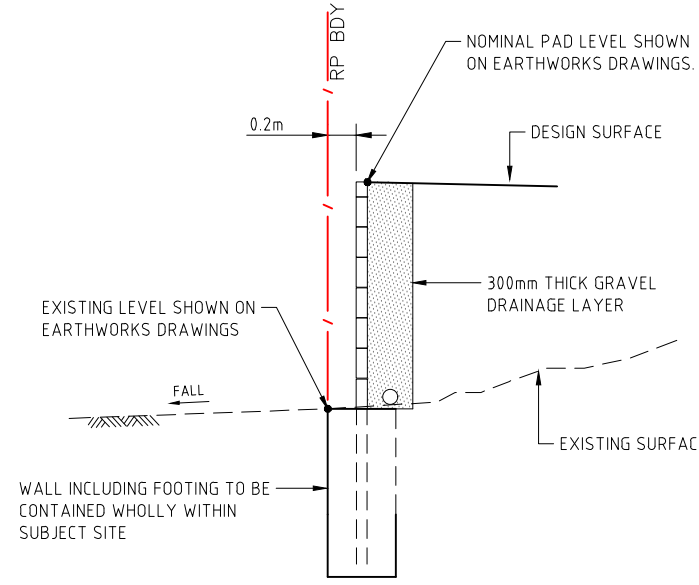
TYPICAL SECTION - LANEWAY
10.0m ACCESS LANE
SCALE 1:100



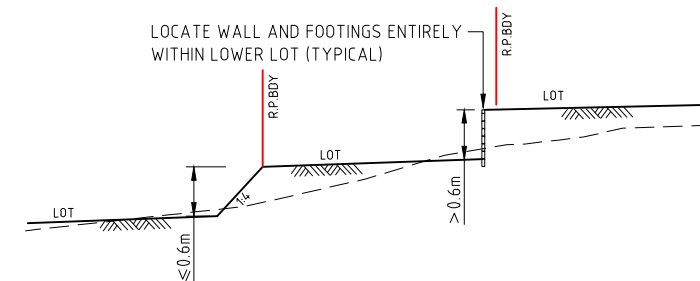
TYPICAL SECTION - FUTURE C4 COLLECTOR ROAD
23.0m URBAN COLLECTOR - SINGLE CARRIAGEWAY (UC-2L)
SCALE 1:50



TYPICAL SECTION
RETAINING WALL IN CUT
SCALE 1:20



TYPICAL SECTION
RETAINING WALL IN FILL
SCALE 1:20



BATTER/RETAINING WALL TREATMENT TO LOTS
SCALE 1:100
• LESS THAN OR EQUAL TO 600mm LEVEL DIFFERENCE, PROVIDE 1:4 BATTER IN LOWER LOT
• GREATER THAN 600mm LEVEL DIFFERENCE, PROVIDE RETAINING WALL IN LOWER LOT

REV	DESCRIPTION	DRAWN	DATE
A	ORIGINAL ISSUE	R.A.	14.09.26

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AS SHOWN

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PROJECT: 520 CHAMBERS FLAT ROAD LOGAN RESERVE QLD 4133 LOT 12 RP 97736 PROPOSED RESIDENTIAL SUBDIVISION OPW APPLICATION (BULK EARTHWORKS)
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TITLE: TYPICAL DETAILS				
TASK	INITIAL	DATE	APPROVED	RPEQ No.
REVIEW	B.T.	07.09.26		
DESIGN	K.O.	07.09.26		
DRAWN	R.A.	07.09.26		
DRAWING NUMBER L24003-BE-100				REVISION A



LEGEND

34.5

32.0

DESIGN CONTOURS (0.25m INTERVAL)

EXISTING CONTOURS (1m INTERVAL)

CHECK

SB1

VEHICLE SHAKEDOWN

SILT FENCE

SAND BAG CHECK DAM

SEDIMENT BASIN

DIRECTION OF OVERLAND FLOW

1.0m WIDE TURF STRIP BEHIND FUTURE ROAD KERB

EXISTING PROPERTY BOUNDARY

ALLOTMENTS TOPSOILED & SEEDED

NOTES

1. FOR SEDIMENT & EROSION CONTROL NOTES & DETAILS REFER TO DRG. No. L26003-BE-201.

REV	A	ORIGINAL ISSUE	R.A.	14.09.26
		DESCRIPTION	DRAWN	DATE

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PROJECT:

520 CHAMBERS FLAT ROAD
LOGAN RESERVE QLD 4133
LOT 12 RP 97736
PROPOSED RESIDENTIAL SUBDIVISION
OPW APPLICATION (BULK EARTHWORKS)

TITLE:

SEDIMENT & EROSION CONTROL PLAN

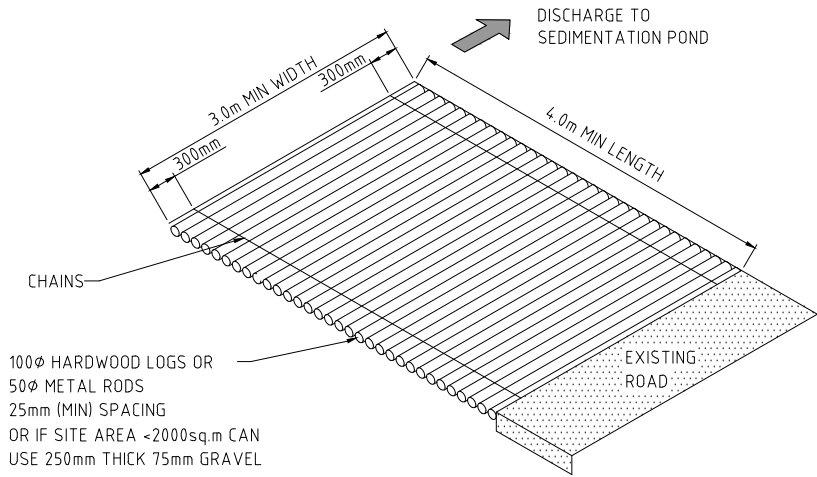
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DRAWN	R.A.	07.09.26	L26003-BE-200	A

SILT MANAGEMENT PROGRAM

PHASE	DESCRIPTION
ALL WORKS	SILT FENCES TO BE ERECTED ALONG THE TOE OF FILL BATTERS OR AS DIRECTED BY THE SUPERINTENDENT
SEWER/WATER STOMRWATER	EXCAVATED MATERIAL TO BE PLACED ON HIGH SIDE OF TRENCH IN ORDER TO PROTECT PIPE WORK AND DIRECT SURFACE FLOW AWAY FROM EXCAVATIONS.
ROADWORKS	MEASURES ARE TO BE TAKEN TO PREVENT SILT INGRESS TO STORMWATER SYSTEM.
MAINTENANCE PERIOD	EROSION CONTROL MEASURES ARE TO BE INSPECTED AFTER MAJOR EVENTS (> 25mm). ANY REPAIRS REQUIRED ARE TO BE EFFECTED IMMEDIATELY.

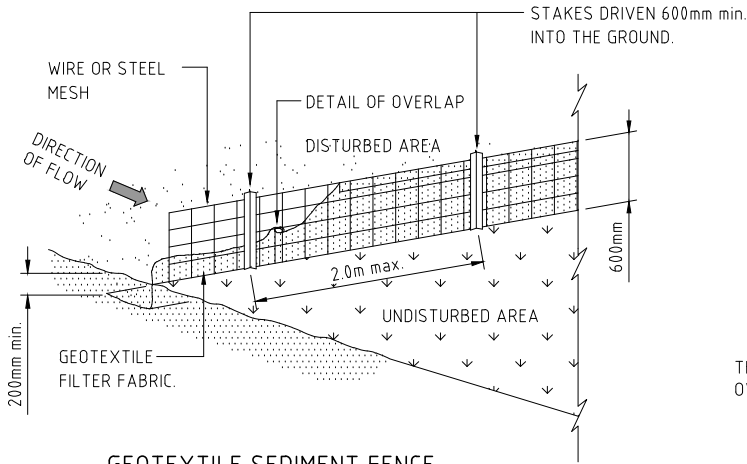
GENERAL NOTES

- THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN A SEDIMENT AND EROSION CONTROL SYSTEM IN ACCORDANCE WITH THE IECA GUIDELINE 'BEST PRACTICE EROSION AND AND SEDIMENT CONTROL' AND RELEVANT COUNCIL POLICIES.
- THE DESIGN SHOWN ON THESE DRAWINGS IS CONCEPT ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ADDITIONAL MEASURES OR MODIFICATIONS WHERE REQUIRED DEPENDANT ON CONSTRUCTION STAGING AND TECHNIQUES.
- THE CONTRACTOR IS TO TAKE ALL NECESSARY PRECAUTIONS TO CONTROL EROSION AND DOWNSTREAM SEDIMENTATION DURING ALL STAGES OF CONSTRUCTION INCLUDING THE MAINTENANCE PERIOD.
- ALL SEDIMENT CONTROL DEVICES SHALL BE MONITORED, CLEANED AND/OR REPAIRED AS REQUIRED BY THE IECA GUIDELINE 'BEST PRACTICE EROSION AND AND SEDIMENT CONTROL' AND RELEVANT COUNCIL POLICIES.
- ALL PERIMETER BANK/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- THE EXTENT OF GRASSING SHALL BE DETERMINED BY THE SUPERINTENDENT AND SHALL BE SEEDED, AS SPECIFIED, WITHIN SEVEN DAYS OF FINAL TRIMMING.
- EXTENT AND POSITION OF SILT FENCE CONTROL MEASURES TO BE DETERMINED ON SITE BY SUPERINTENDENT. MEASURES SHOWN ON THIS DRAWING ARE MINIMUM REQUIREMENTS ONLY.
- SCOUR PROTECTION AND SILT MANAGEMENT MEASURES TO BE PROVIDED AT STORMWATER OUTLET HEADWALLS.
- PROVISION TO BE MADE FOR DIRT/SAND REMOVAL FROM CONSTRUCTION VEHICLES PRIOR TO TRAVEL ON PUBLIC ROADS. METHOD TO BE APPROVED BY SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORK. ANY SILT OR SEDIMENT CAUSED BY THE MOVEMENT OF CONSTRUCTION TRAFFIC ON EXISTING ROADS IS TO BE REMOVED DAILY.
- THE CONTRACTOR IS TO BE RESPONSIBLE FOR THE CONTROL OF DUST EMANATING FROM THE SITE AT ALL TIMES, INCLUDING ON WEEKENDS AND PUBLIC HOLIDAYS, FOR THE DURATION OF THE CONSTRUCTION AND MAINTENANCE PERIOD.
- ALL RUBBISH, WASTE MATERIALS, OILS AND FUELS ARE TO BE CONTAINED APPROPRIATELY. OIL AND FUEL SPILLS ARE NOT TO ENTER ANY DRAINAGE SYSTEM OR WATERCOURSE.
- WHERE TOPSOIL STOCKPILES ARE TO REMAIN IN PLACE FOR A PERIOD OF MORE THAN 14 DAYS, THE STOCKPILE SHALL BE GRASSED WITH A SUITABLE QUICK STRIKING CEREAL GRASS.
- PROVIDE A DIVERSION DRAIN OR BUND ON THE UPHILL SIDE AND A SEDIMENT FENCE ON THE DOWNHILL SIDE OF ALL STOCKPILES.

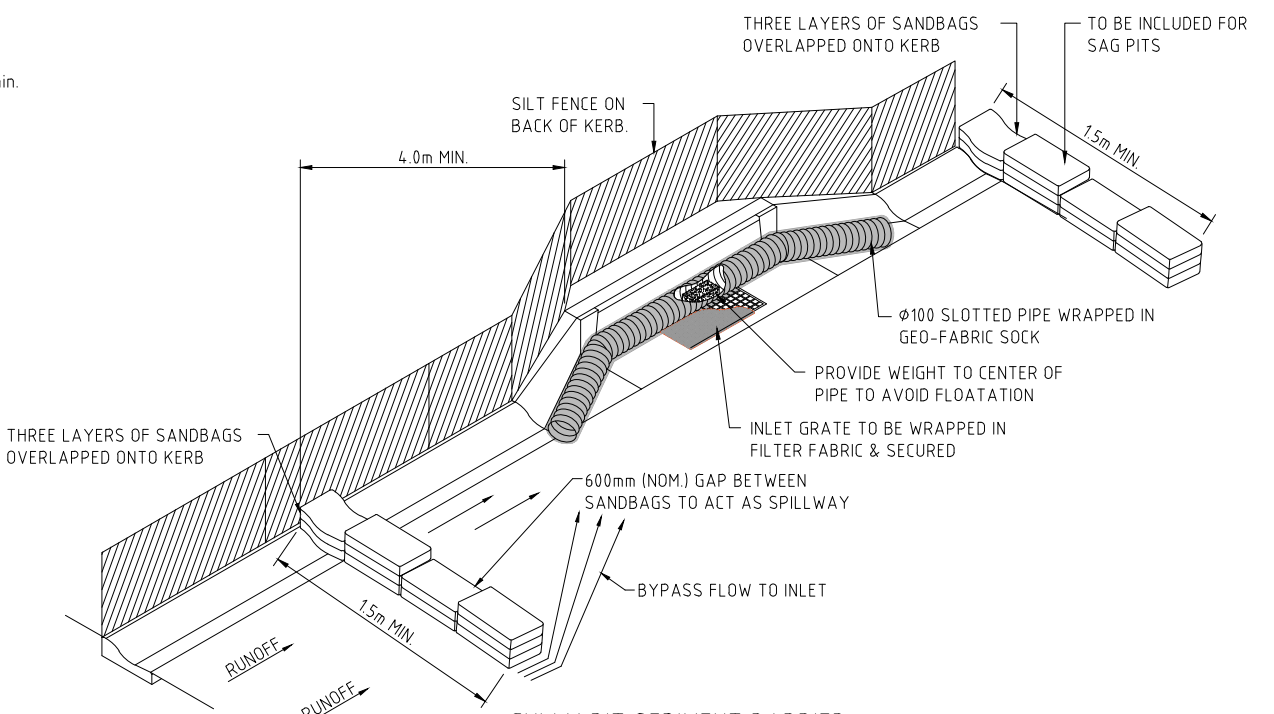


METAL GRID SHAKE DOWN (OR APPROVED EQUIVALENT)
SCALE N.T.S.

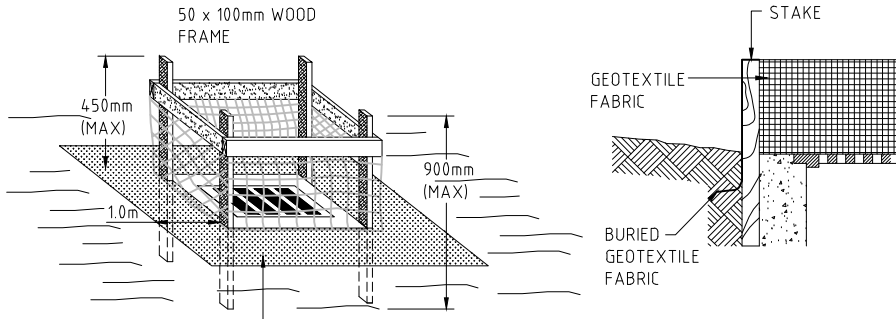
DRAINAGE AREA 0.6ha. MAX. SLOPE GRADIENT 1 : 2 MAX.
SLOPE LENGTH 60m MAX.



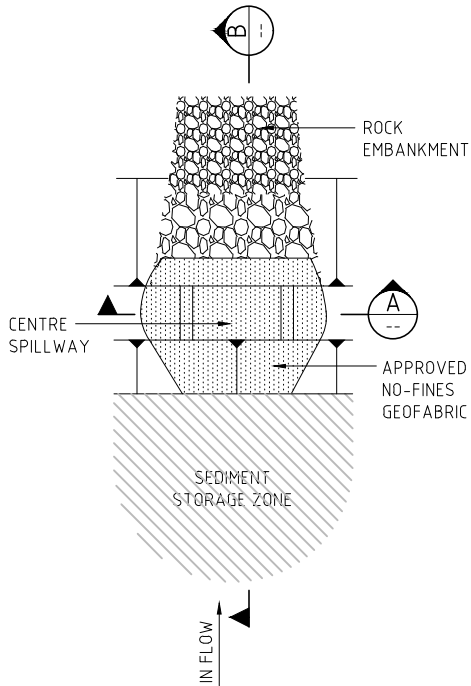
GEOTEXTILE SEDIMENT FENCE
SCALE N.T.S.



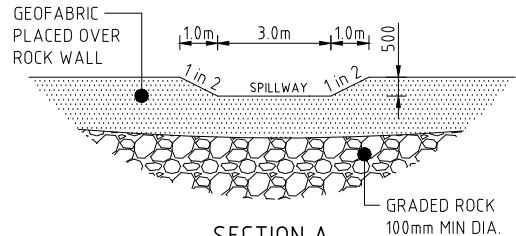
GULLY PIT SEDIMENT BARRIER
SCALE N.T.S.



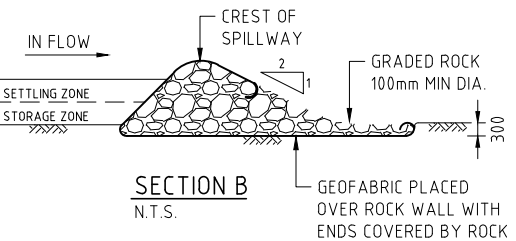
FIELD INLET PROTECTION
SCALE N.T.S.



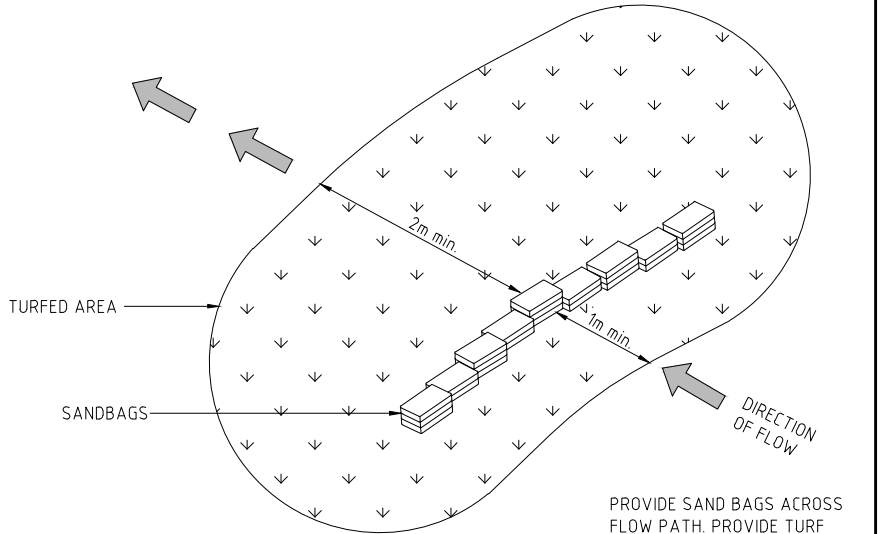
SEDIMENT BASIN DETAILS
N.T.S.



SECTION A
N.T.S.



SECTION B
N.T.S.



SAND BAG CHECK DAM
SCALE N.T.S.

PROVIDE SAND BAGS ACROSS FLOW PATH. PROVIDE TURF AROUND SAND BAGS, TO A MINIMUM OF 1m IN FRONT AND 2m BEHIND. EXTENT TO BE DETERMINED ON SITE BY SUPERINTENDENT.

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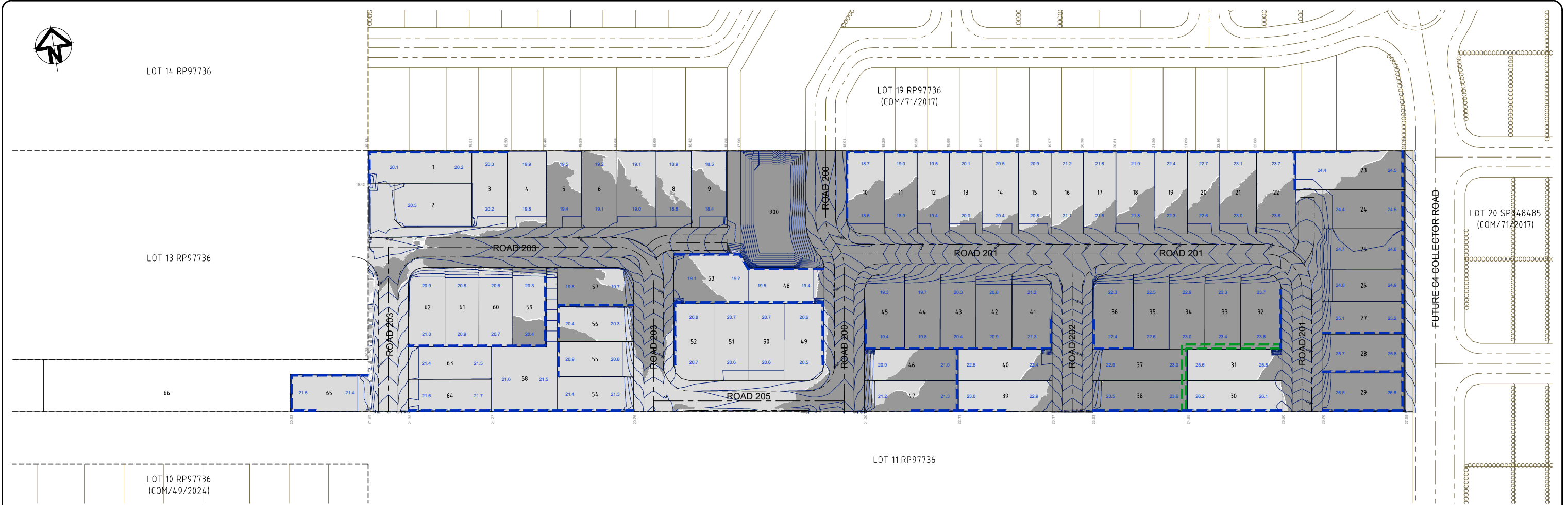


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LOT 12 RP 97736
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OPW APPLICATION (BULK EARTHWORKS)

TITLE: SEDIMENT & EROSION CONTROL NOTES & DETAILS				
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REVIEW	B.T.	07.09.26	RPEQ No.	
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DRAWN	R.A.	07.09.26	L26003-BE-201	
				REVISION
				A



LEGEND

CUT

FILL

65.5

LOT DESIGN HEIGHT

65.900

ROAD VERGE SPOT HEIGHT

65.50

ADJACENT LOT DESIGN HEIGHT

65.5

DESIGN CONTOURS (0.2m INTERVAL)

TOP OF BATTER

SINGLE TIER RETAINING WALL

DOUBLE TIER RETAINING WALL

EXISTING / FUTURE RETAINING WALL

EXISTING PROPERTY BOUNDARY

IMPORTANT NOTE

RETAINING WALLS ARE TO BE DOUBLE-TIERED WHERE:

- THE WALL EXCEEDS 1.5M IN HEIGHT AND FRONTS A ROAD RESERVE; OR
- THE WALL EXCEEDS 2.0M IN HEIGHT AND DOES NOT FRONT A ROAD RESERVE.

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