

PROPOSED GENERATOR HALL (SQE2) AND BESS COMPOUND

30 DOUGLAS ROAD, MOSS VALE

DRAWING LIST

Drg No.	Description
DA- 001	GENERAL NOTES AND DRAWING LIST
DA- 002	GENERAL ARRANGEMENT PLAN
DA- 003	SITE PLAN – SQE2
DA- 004	SITE PLAN – BESS PLATFORM
DA- 005	ROAD LONGSECTIONS & TYPICAL DETAILS
DA- 006	ROAD LONGSECTIONS BESS PLATFORM
DA- 007	CROSS SECTIONS Ch.1000.00 – Ch.1102.68
DA- 008	CROSS SECTIONS ACCES RD Ch.10 – Ch.80
DA- 009	CROSS SECTIONS ACCES RD Ch.90 – Ch.160
DA- 010	CROSS SECTIONS BESS RD Ch.00 – Ch.240
DA- 011	CROSS SECTIONS BESS RD Ch.260 – Ch.560
DA- 012	CROSS SECTIONS BESS RD Ch.580 – Ch.660
DA- 013	EARTHWORKS CUT FILL PLAN
DA- 014	SEDIMENT EROSION CONTROL PLAN – SHT 1
DA- 015	SEDIMENT EROSION CONTROL PLAN – SHT 2
DA- 016	SEDIMENT EROSION CONTROL PLAN – NOTES
DA- 017	TRUCK TURNING SWEEP PATHS

LOCALITY PLAN



LOCALITY SKETCH
COURTESY GOOGLE MAPS
(NOT TO SCALE)

GENERAL NOTES

GENERAL

- G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED
- G2 ANY DISCREPANCIES OR OMISSIONS SHALL BE REFERRED TO THE ENGINEER FOR A DECISION BEFORE PROCEEDING WITH THE WORK.
- G3 ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL'S ENGINEERING DESIGN AND CONSTRUCTION SPECIFICATIONS.
- G4 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
- G5 DIMENSIONS SHALL NOT BE OBTAINED BY SCALING THE CIVIL DRAWINGS.
- G6 ALL DIMENSIONS SHOWN ON THE DRAWINGS SHALL BE VERIFIED ON SITE BY THE CONTRACTOR PRIOR TO CONSTRUCTION OR FABRICATION.
- G7 ALL WORKS TO BE CARRIED OUT BY RTA PRE-QUALIFIED CONTRACTOR.
- G8 TRAFFIC CONTROL TO BE CARRIED OUT BY RTA REGISTERED CONTRACTOR.
- G9 PROVISION FOR TRAFFIC DURING CONSTRUCTION TO BE IN ACCORDANCE WITH AS 1742.3
- G10 WORKING HOURS TO BE FROM 7.00am TO 5.00pm MONDAY TO SATURDAY. NO WORK TO BE CARRIED OUT ON SUNDAYS OR PUBLIC HOLIDAYS WITHOUT THE WRITTEN APPROVAL OF COUNCIL.

SITeworks NOTES

- SW1 ORIGIN OF LEVEL: AGLA (Map Grid Australia)
DATUM OF LEVEL: AHD (Australian Height Datum)
- SW2 CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORKS. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER/SUPERINTENDENT.
- SW3 MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.
- SW4 COMPACT SUBGRADE UNDER PAVEMENTS TO MINIMUM 100% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1.
- SW5 COMPACT GRANULAR BASECOURSE UNDER PAVEMENT TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1.
- SW6 ALL BASECOURSE MATERIAL TO COMPLY WITH THE SPECIFICATION AND COMPACTED TO MINIMUM 98% MODIFIED DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1.
- SW7 ASPHALTIC CONCRETE SHALL CONFORM TO THE SPECIFICATION AND RELEVANT AUSTRALIAN & RTA STANDARDS.
- SW8 ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- SW9 ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH SAND OR AN APPROVED GRANULAR MATERIAL AND COMPACTED TO MINIMUM 98% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1.
- SW10 PROVIDE 10MM WIDE EXPANSION JOINTS BETWEEN ALL CONCRETE & UNIT PAVEMENTS.

BULK EARTHWORKS

- E4 ALL BULK EARTHWORKS SETOUT FROM CO-ORDINATES U.N.O
- E7 COMPACT IMPORTED FILL AREAS AND SUBGRADE TO NOT LESS THAN:

LOCATION	STANDARD DRY DENSITY (AS 1289 5.1.1.)
UNDER BUILDING SLABS ON GROUND:	98%
UNDER ROADS AND CARPARKS:	98%
LANDSCAPED AREAS:	95%

- E8 PROOF ROLLING SHALL BE IN ACCORDANCE WITH AS3798 CLAUSE 5.4. PROOF ROLLING SHALL BE BY A SMOOTH STEEL DRUM ROLLER WITHOUT VIBRATION HAVING A MINIMUM APPLIED LOAD INTENSITY OF 4 TONNES PER M.WIDTH OF THE DRUM BEING CONSIDERED OR OTHER ROLLING DEVICE AS APPROVED BY THE SUPERINTENDENT.

SERVICES

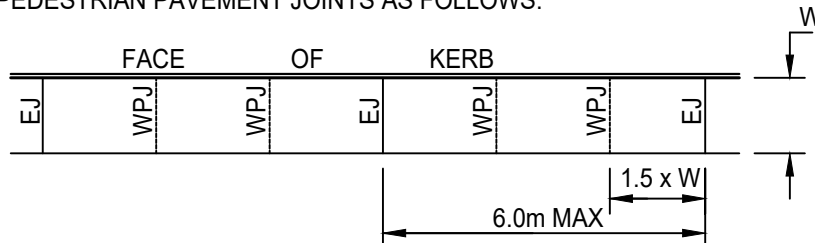
- SV1 THE LOCATIONS OF SERVICES SHOWN ON THESE DRAWINGS HAVE BEEN PLOTTED FROM DIAGRAMMS PROVIDED BY SERVICE AUTHORITIES. THIS INFORMATION HAS BEEN PREPARED SOLELY FOR THE AUTHORITY'S OWN USE AND MAY NOT NECESSARILY BE BE UPDATED OR ACCURATE.
- SV2 THE POSITION OF SERVICES AS RECORDED BY THE AUTHORITY AT THE TIME OF INSTALLATION MAY NOT REFLECT CHANGES IN THE PHYSICAL ENVIRONMENT SUBSEQUENT TO INSTALLATION.
- SV3 LUCAS CONSULTING ENGINEERS PTY LTD DOES NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS SHOW MORE THAN THE PRESENCE OR ABSENCE OF SERVICES, AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER.
- SV4 THE CONTRACTOR SHALL:
(A) CONDUCT A SERVICES SEARCH WITH ALL UTILITY SERVICES AUTHORITIES TO DETERMINE PLAN LOCATIONS OF ANY SERVICES IN THE VICINITY OF THE WORK.
(B) UNDERTAKE HAND EXCAVATION TO DETERMINE THE EXACT POSITION OF SERVICE WITHIN THE LIMIT OF THE WORKS SHOWN ON PLAN.
(C) ARRANGE RELOCATION OR ADJUSTMENT OF SERVICE TO THE APPROVAL OF THE RELEVANT AUTHORITY.

STORMWATER DRAINAGE NOTES

- DR1 STORMWATER DESIGN CRITERIA:
(A) AVERAGE RECURRENCE INTERVAL:
1:100 YEARS FOR ROOF DRAINAGE TO FIRST EXTERNAL PIT
1:20 YEARS FOR PAVED AND LANDSCAPED AREAS
(B) RAINFALL INTENSITIES:
TIME OF CONCENTRATION: 5 MINUTES
1:100 YEARS= 241 mm/hr
1:20 YEARS= 187 mm/hr
(C) RUNOFF COEFFICIENTS:
ROOF AREAS: C₁₀₀ = 1.0
ROADS AND PAVED AREAS: C₂₀ = 0.9
LANDSCAPED AREAS: C₂₀ = 0.48
- DR2 PIPES 300-600 DIA TO BE REINFORCED CONCRETE CLASS "3"
PIPES 675 AND LARGER TO BE REINFORCED CONCRETE CLASS "2"
APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS U.N.O.
- DR3 PIPES UP TO 300 DIA INSIDE LOTS SHALL BE SEWER GRADE UPVC WITH SOLVENT WELDED JOINTS U.N.O.
- DR4 EQUIVALENT STRENGTH VCP OR FRC PIPES MAY BE USED SUBJECT TO RTA APPROVAL.
- DR5 CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL OF THE ENGINEER.
- DR6 ALL DRAINAGE LINES SHALL BE LAID IN A HS2 TYPE TRENCH.
- DR7 INSTALL SUBSOIL DRAINAGE PIPES TO ALL INLET STORMWATER PIPES AT EACH PIT FOR A DISTANCE OF 3m UPSTREAM OR AS SHOWN ON THESE DRAWINGS.

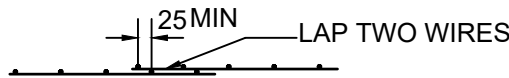
JOINTING NOTES

- PEDESTRIAN PAVEMENT JOINTING
- J1 ALL PEDESTRIAN PAVEMENTS ARE TO BE JOINTED AS FOLLOWS (U.N.O):
- J2 BUTT JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 6.0m CENTRES.
- J3 WEAKENED PLANE JOINTS ARE TO BE LOCATED AT A MAX 1.5 x WIDTH OF THE PAVEMENT.
- J4 WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND / OR ADJACENT PAVEMENT JOINTS
- J5 PEDESTRIAN PAVEMENT JOINTS AS FOLLOWS:



CONCRETE NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS AND COUNCIL SPECIFICATIONS
2. CONCRETE QUALITY
ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.
- | LOCATION | AS 3600 FC
MPA AT 28 DAYS | SPECIFIED
SLUMP |
|---------------------------------------|------------------------------|--------------------|
| SERVICE PITS,
FOOTPATHS &
KERBS | 32 | 80 |
| MEDIAN INFILLS | 20 | 80 |
| STORMWATER PITS | 40 | 80 |
3. 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 R.T.A. SPECIFICATION R53.
4. REINFORCEMENT SYMBOLS:
N DENOTES GRADE 450 N BARS TO AS 1302 GRADE N
R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS 1302
SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS 1304
- NUMBER OF BARS IN GROUP BAR GRADE AND TYPE
- 17 N 20 250
- NOMINAL BAR SIZE IN mm SPACING IN mm
- THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC TO AS 1304.
5. FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:



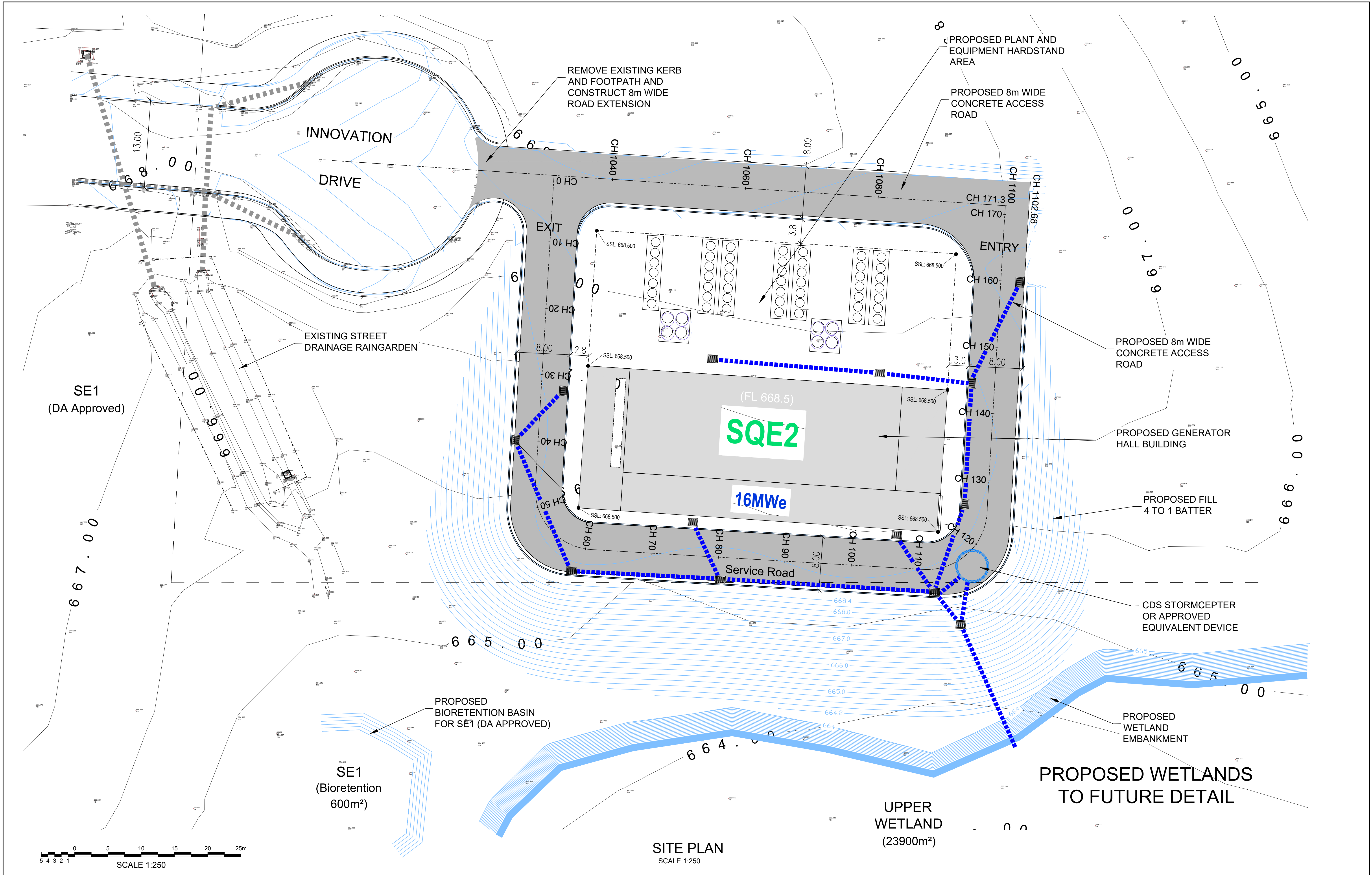
NOTE:
THESE NOTES ARE TO BE READ IN CONJUNCTION WITH THE COUNCIL SPECIFICATIONS.
IN ALL CASES, THE COUNCIL SPECIFICATION WILL TAKE PRECEDENCE OVER THESE NOTES.

KERBING NOTES

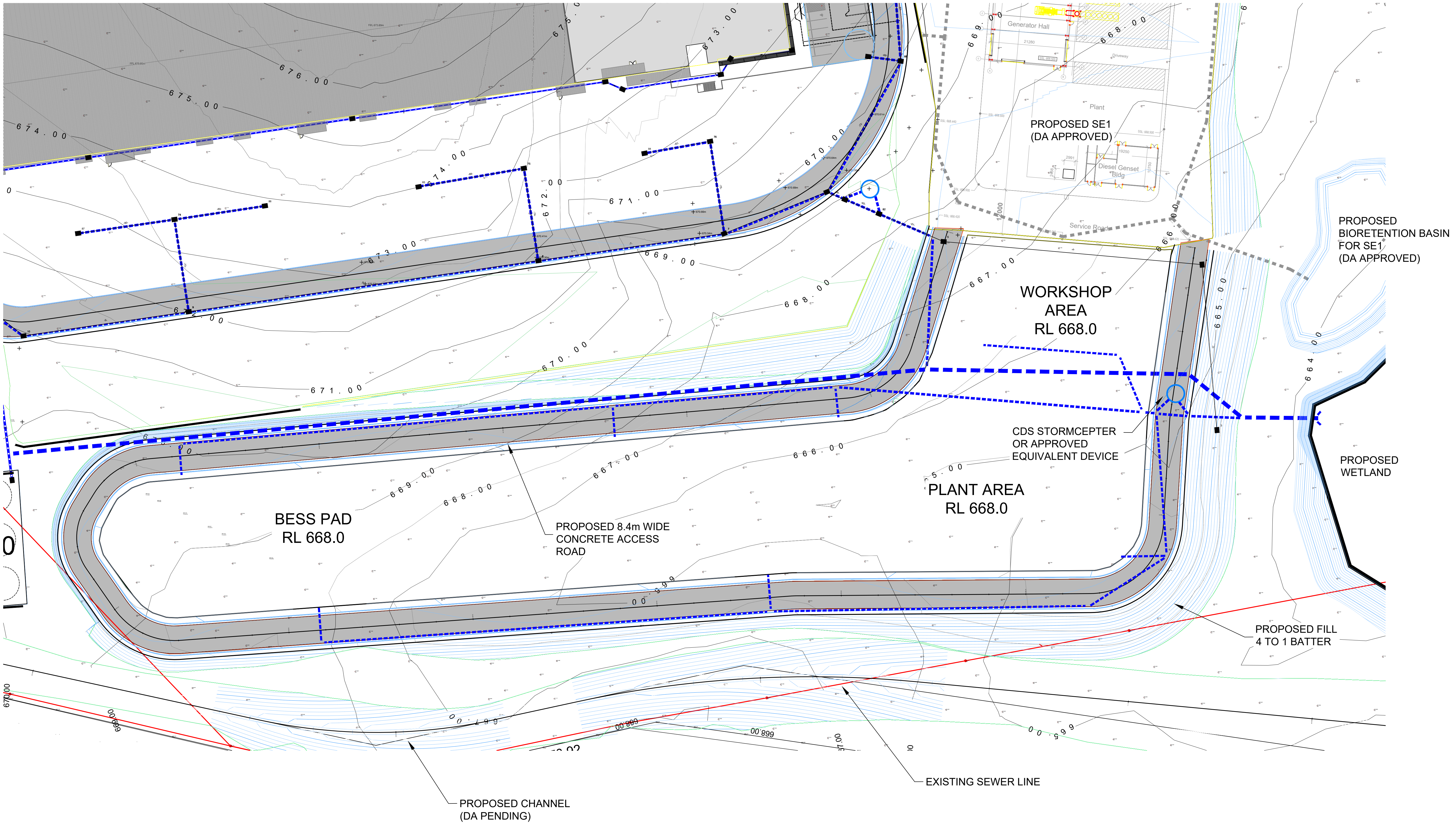
- K1 ALL CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 20MPa.
- K2 ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 75mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 98% MODIFIED DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1.
- K3 EXPANSION JOINTS (EJ) TO BE FORMED FROM 10MM COMPRESSIBLE 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 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN SLABS.
- K4 WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN SLABS.
- K5 BROOMED FINISHED TO ALL RAMPED AND VEHICULAR CROSSINGS, ALL OTHER KERBING OR DISH DRAINS TO BE STEEL FLOAT FINISHED, U.N.O
- K6 IN THE REPLACEMENT OF KERBS:
EXISTING ROAD PAVEMENT IS TO BE SAWCUT 900mm FROM LIP OF GUTTER. UPON COMPLETION OF NEW KERBS, NEW BASECOURSE AND SURFACE IS TO BE LAID 900mm WIDE.
EXISTING KERBS ARE TO BE COMPLETELY REMOVED WHERE NEW KERBS ARE SHOWN.

LEGEND

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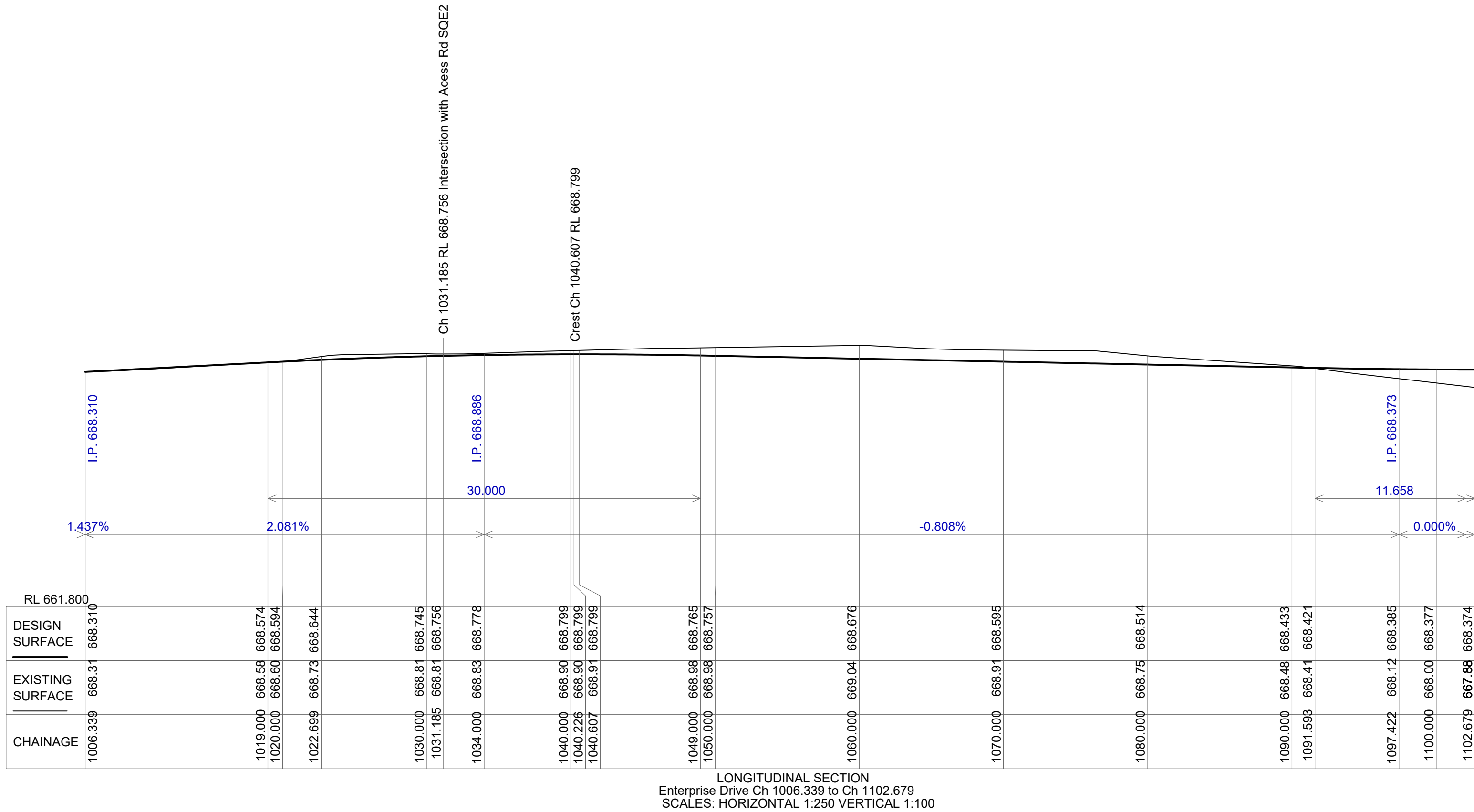
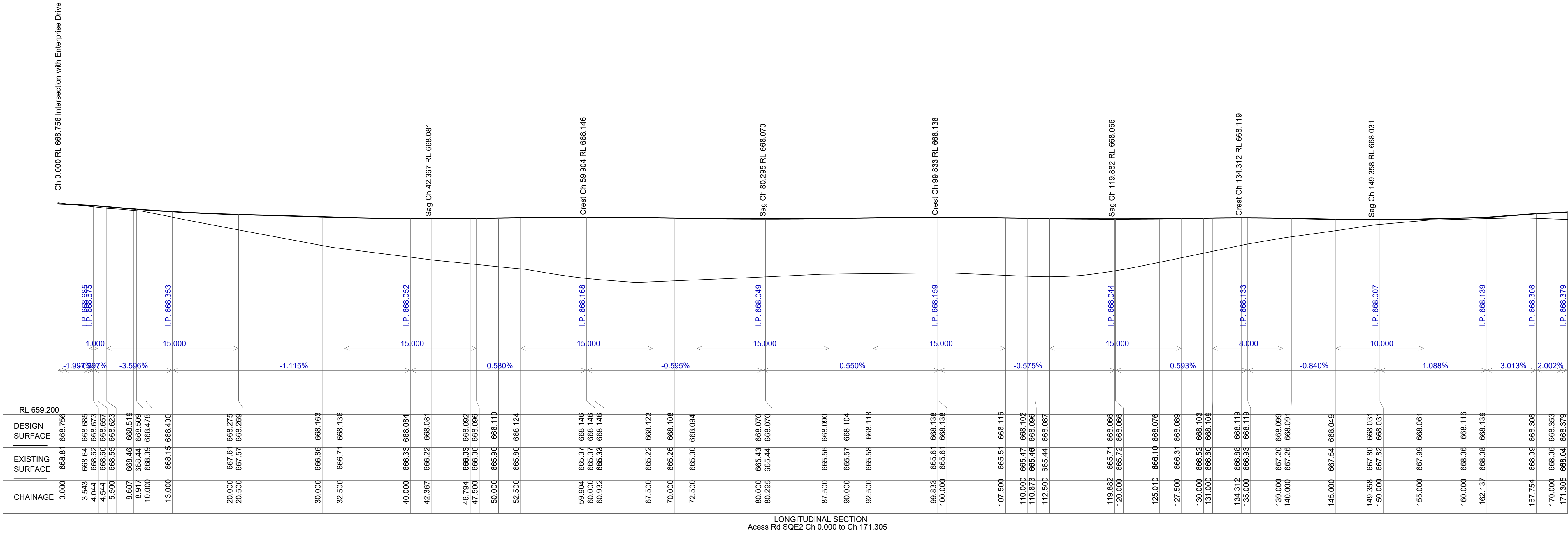
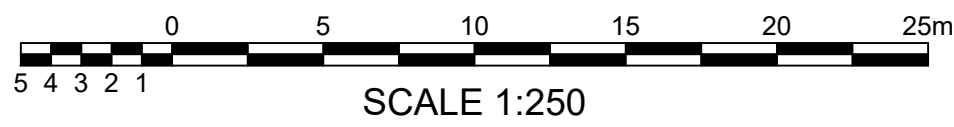


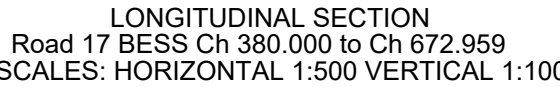
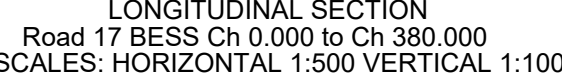
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5182		5182-Civil-SQE2-DA Concept																							
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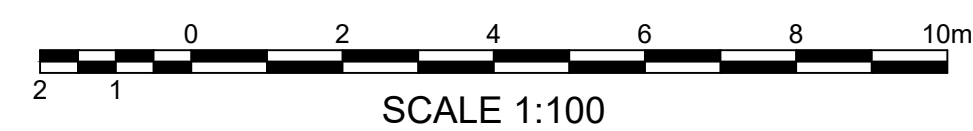
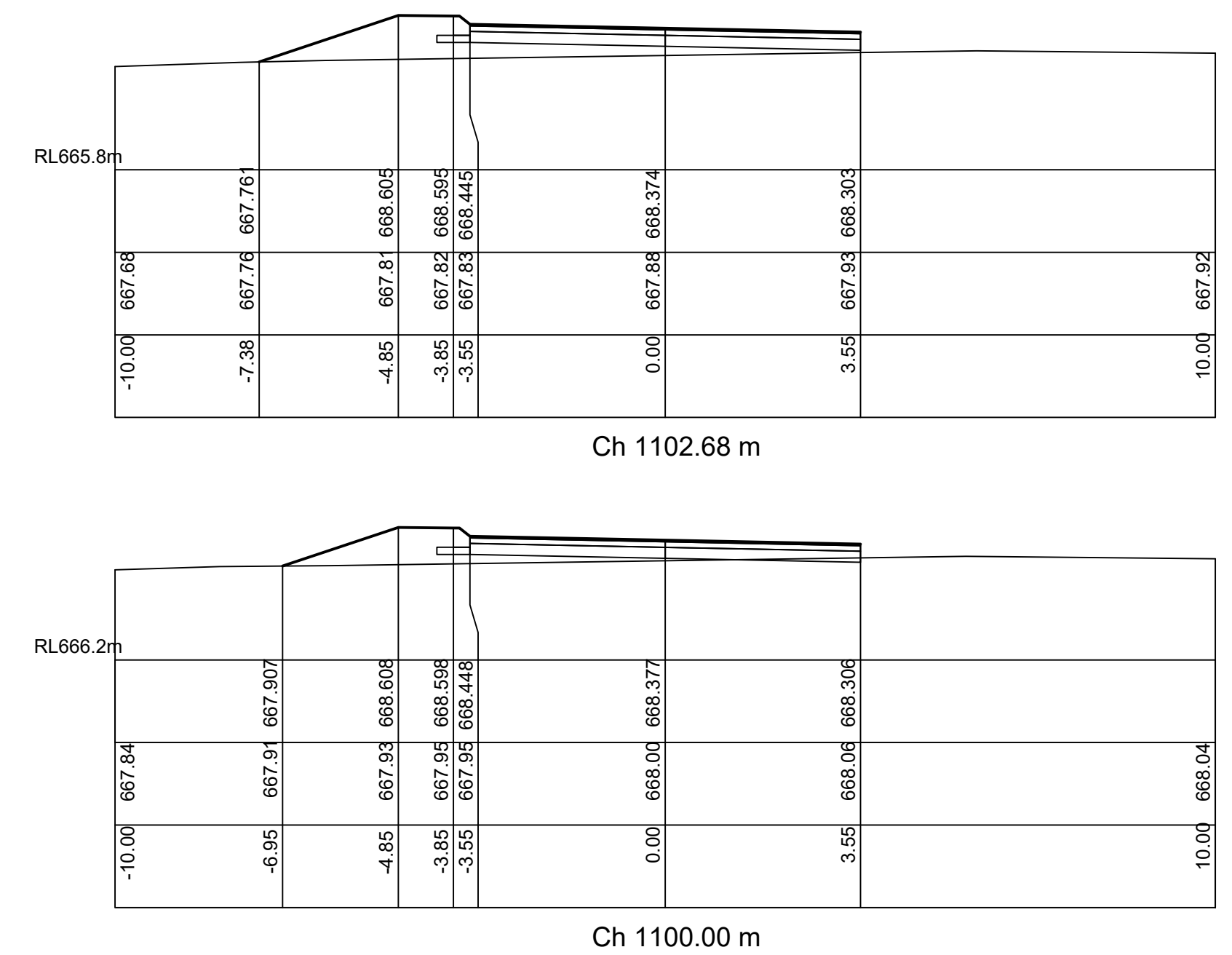
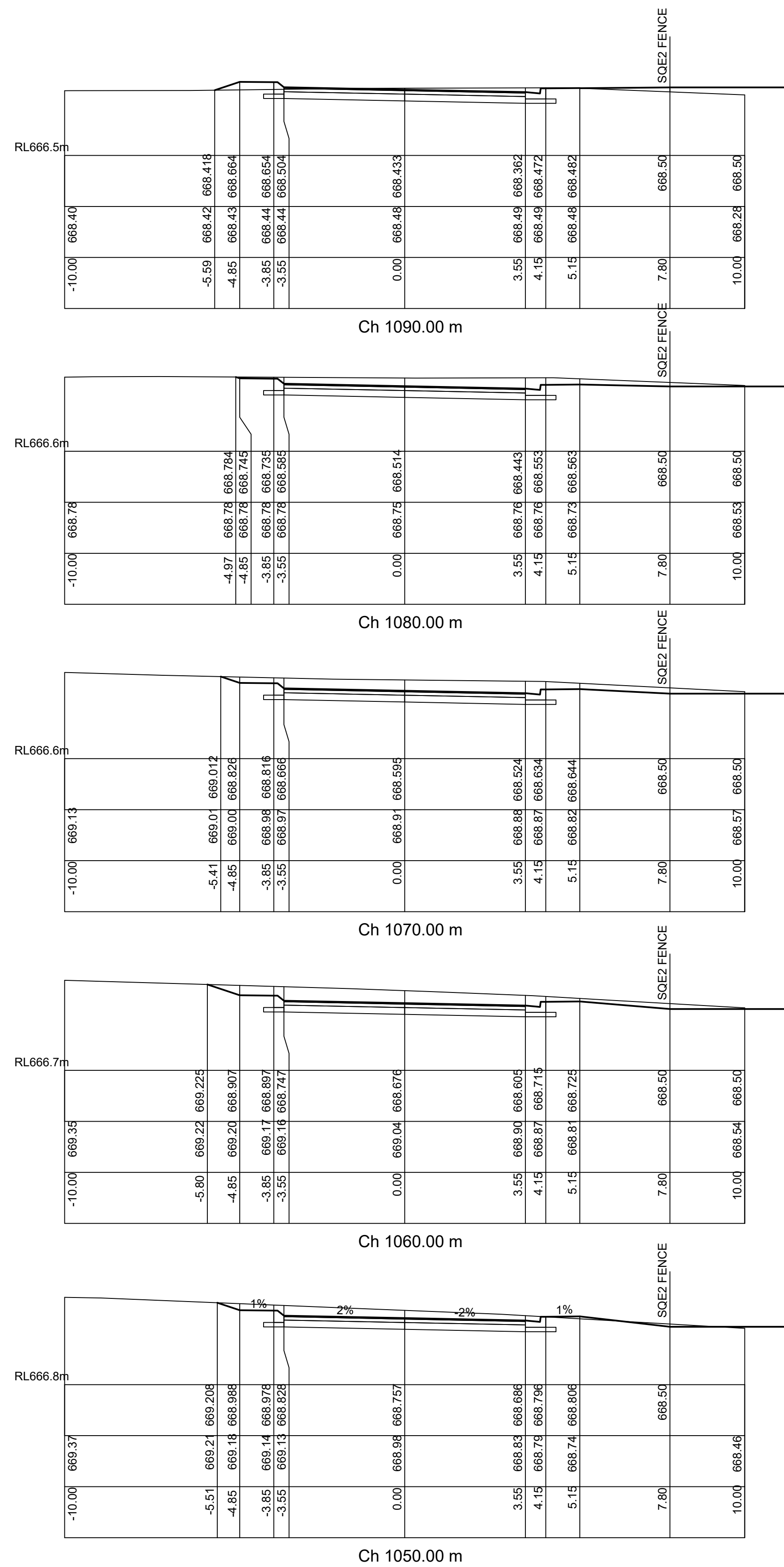
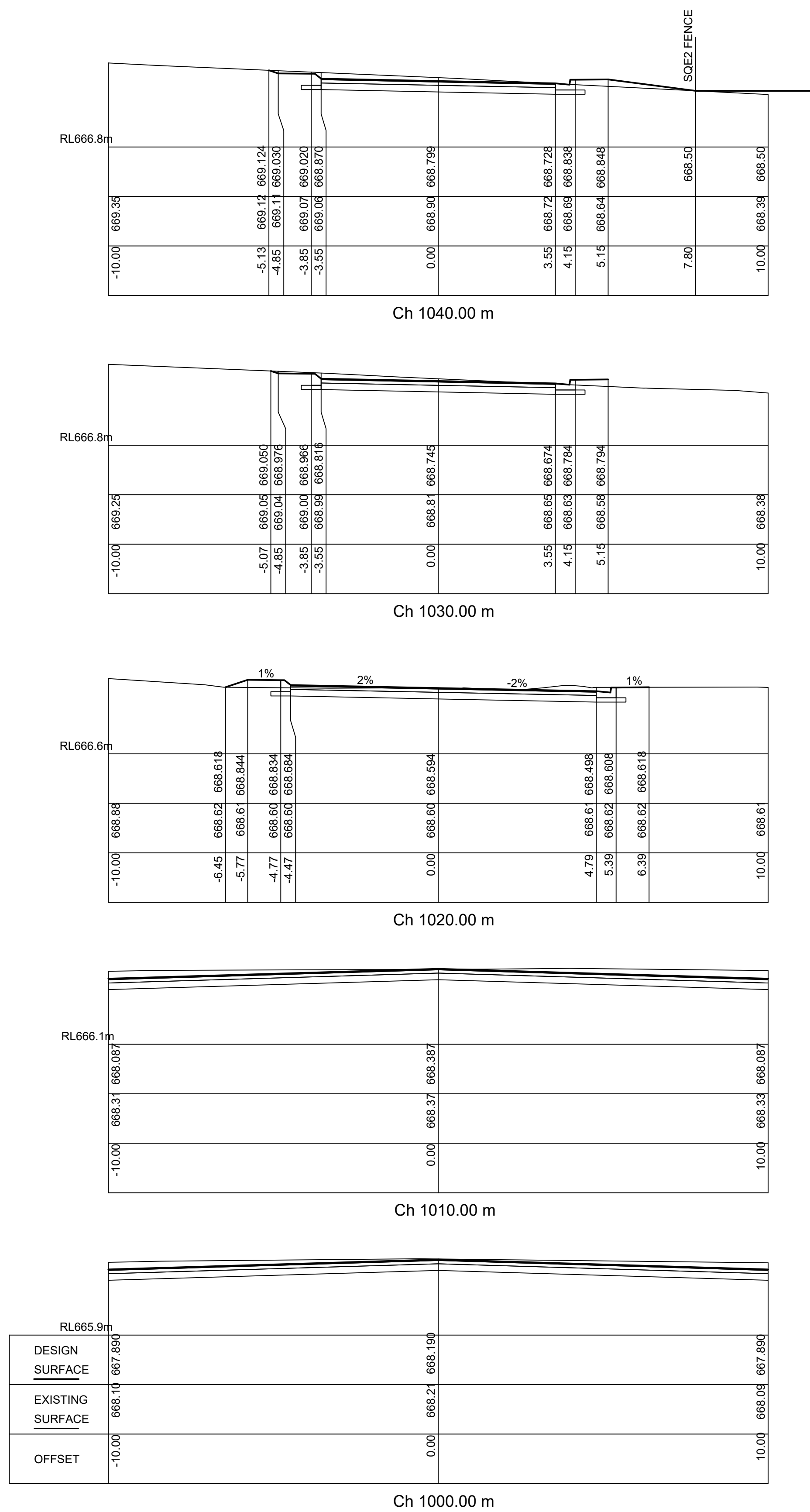
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SCALE 1:250

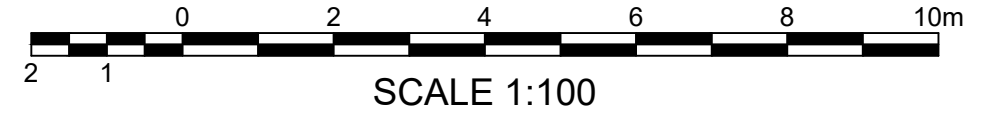
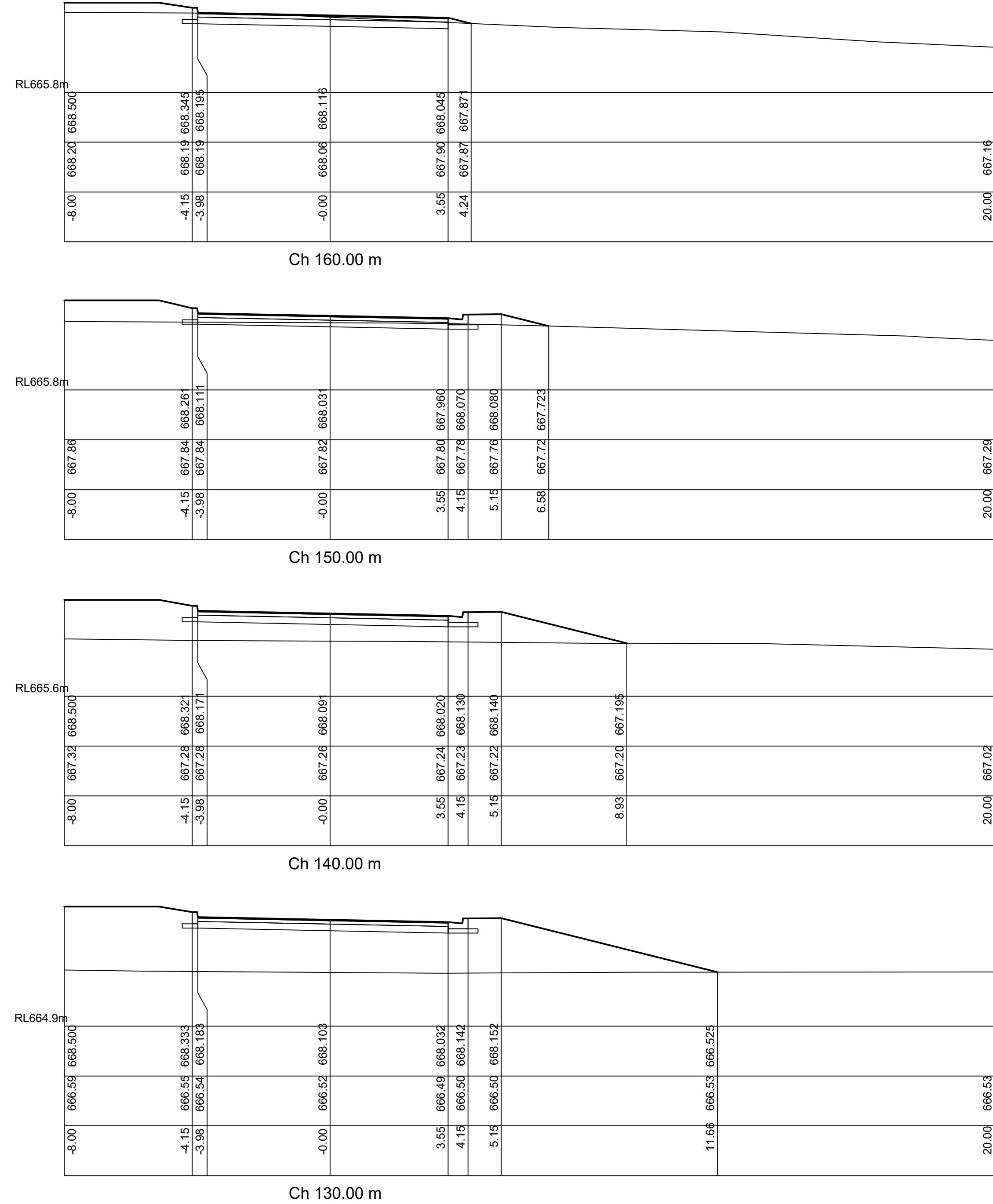
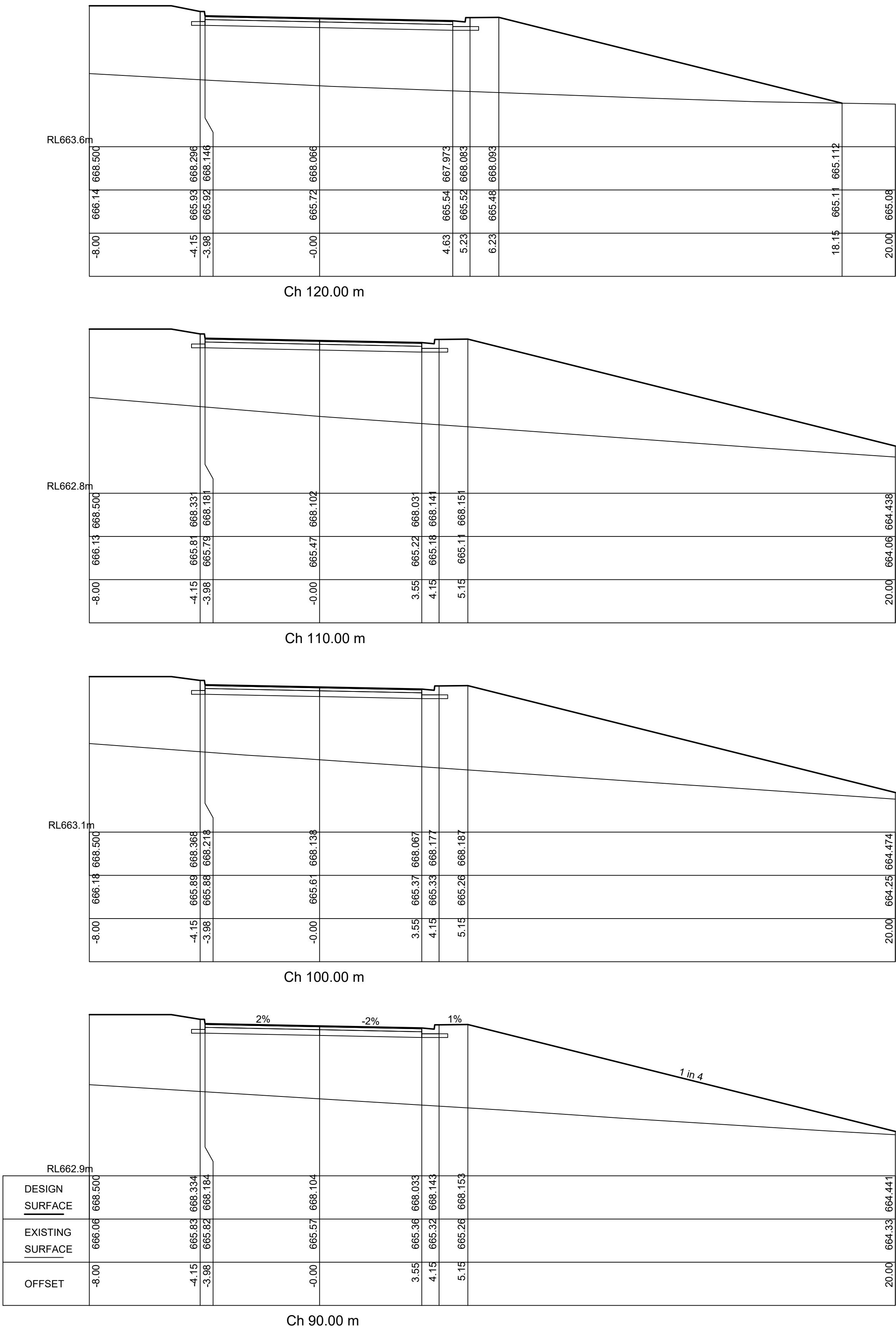
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DATE 24/8/24				LOCAL GOVT. AREA WINGECARIBEE SHIRE COUNCIL				Southern Highlands Data Campus (SHDC) 30 DOUGLAS ROAD MOSS VALE NSW 2577			
DRAWING TITLE SITE PLAN - BESS PLATFORM				FILE NO. 5182				COMPUTER REF. 5182-Civil-SQE2-DA Concept			
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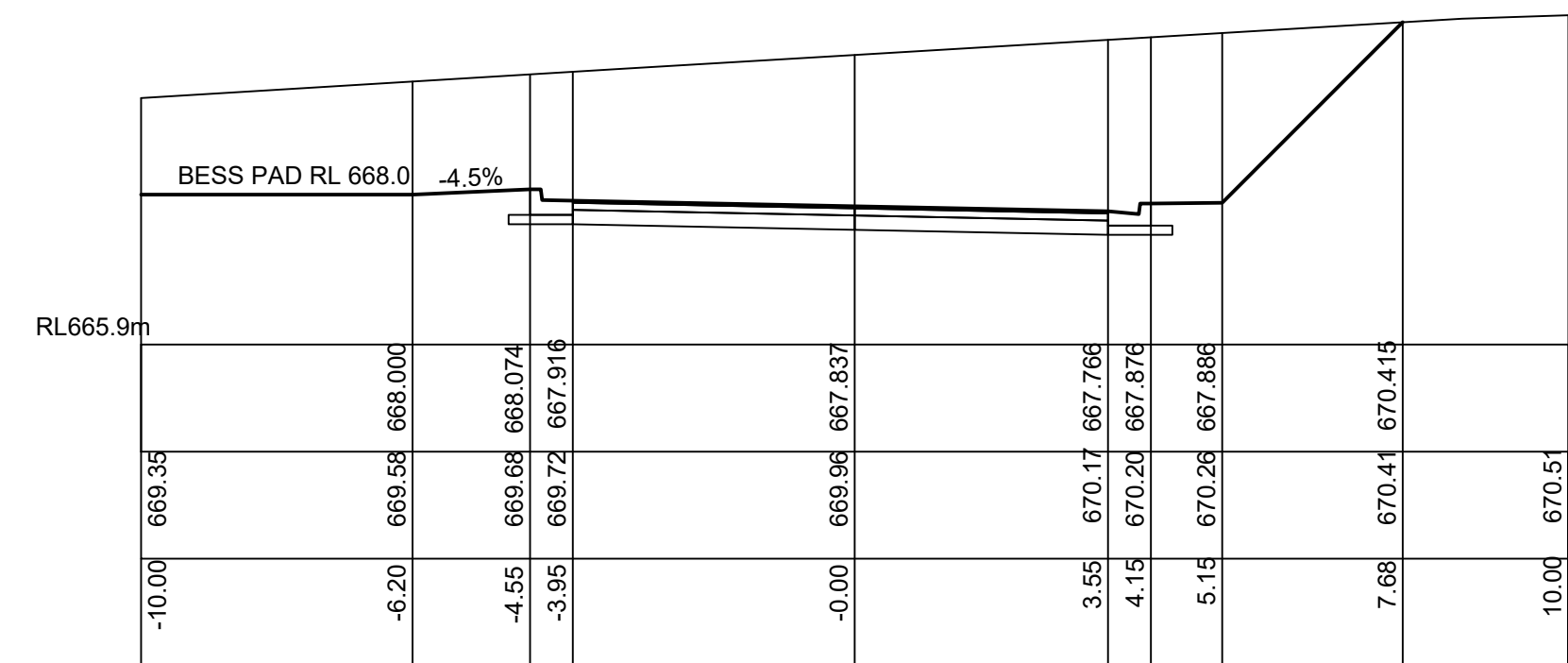
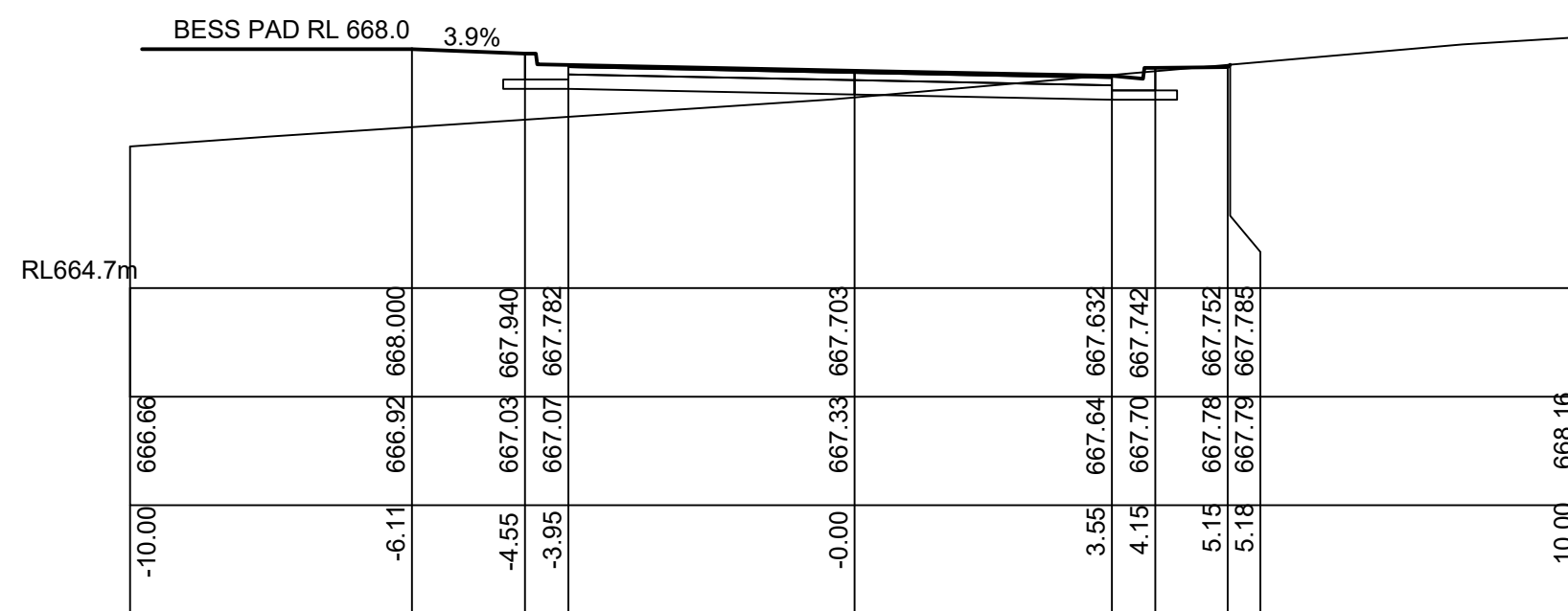


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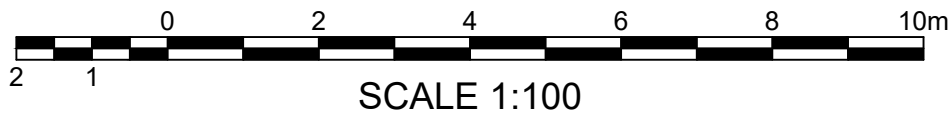
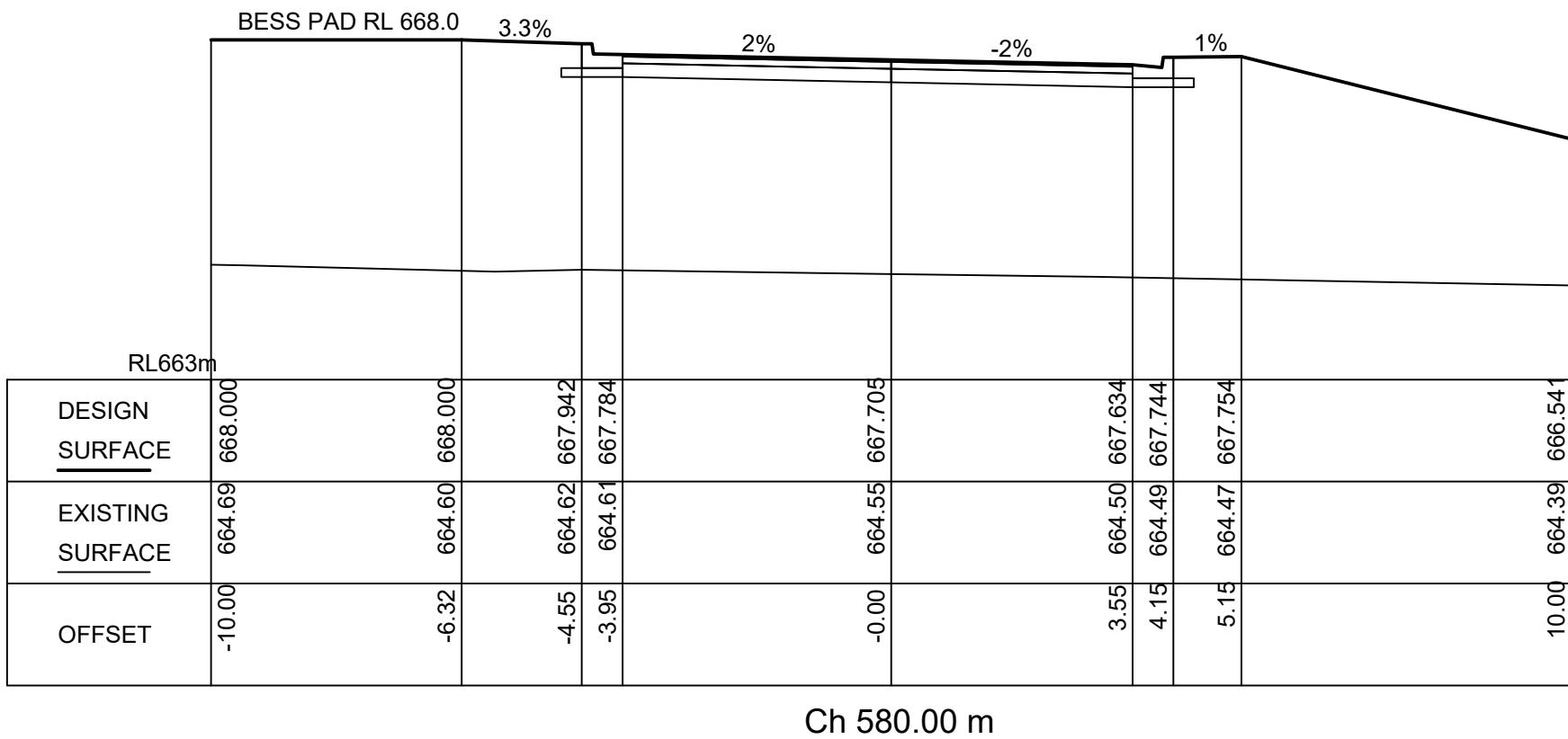
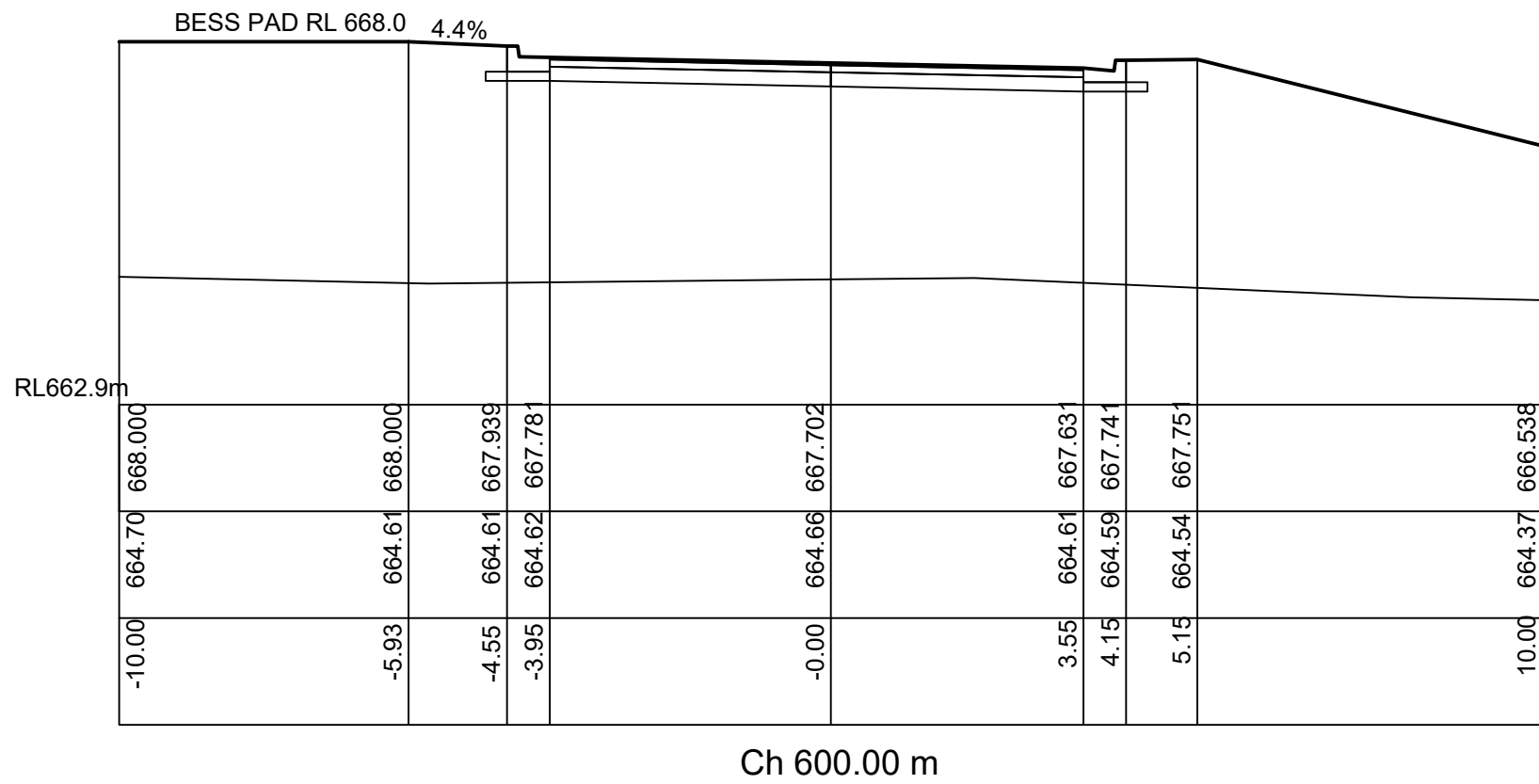
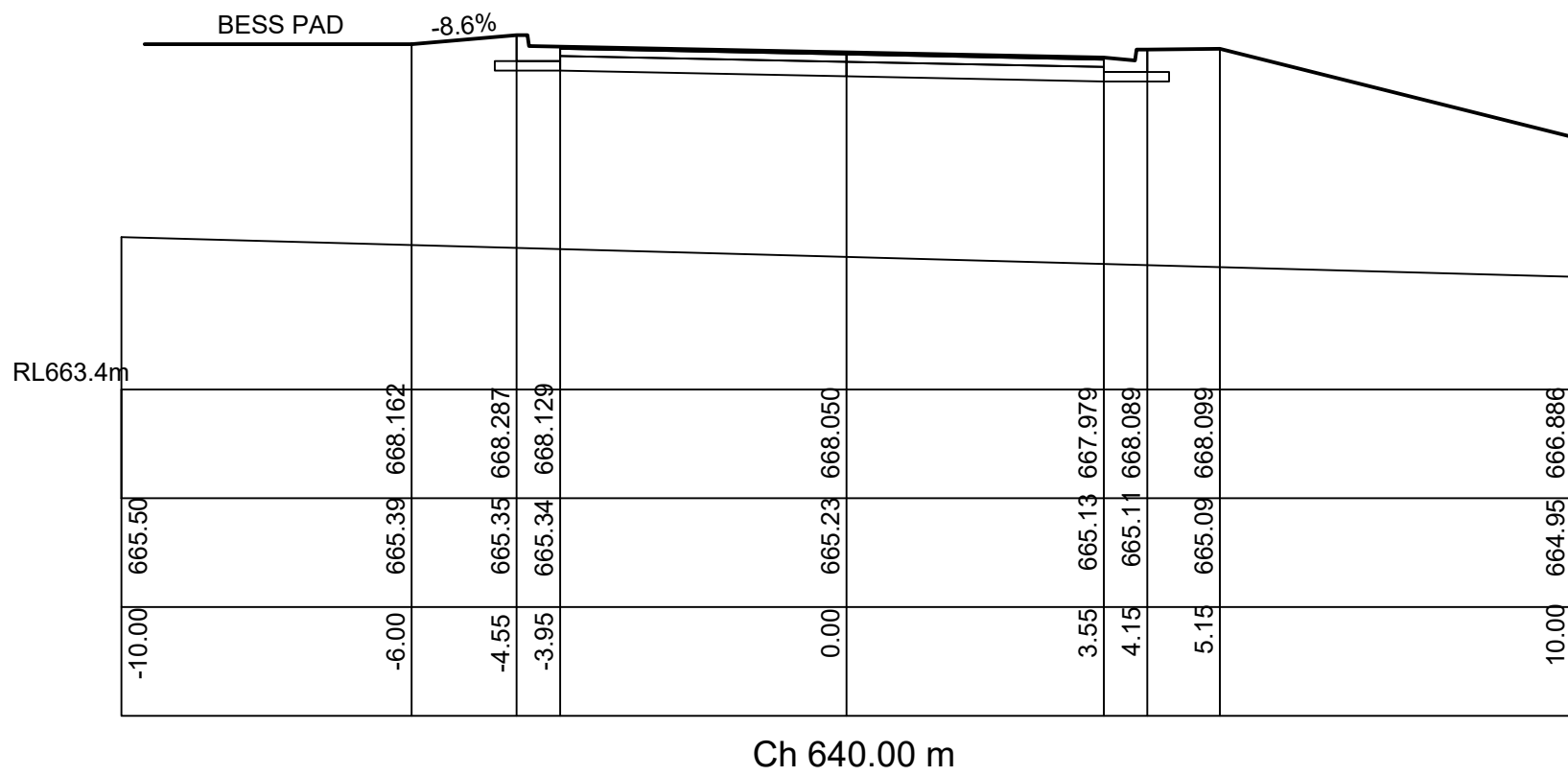
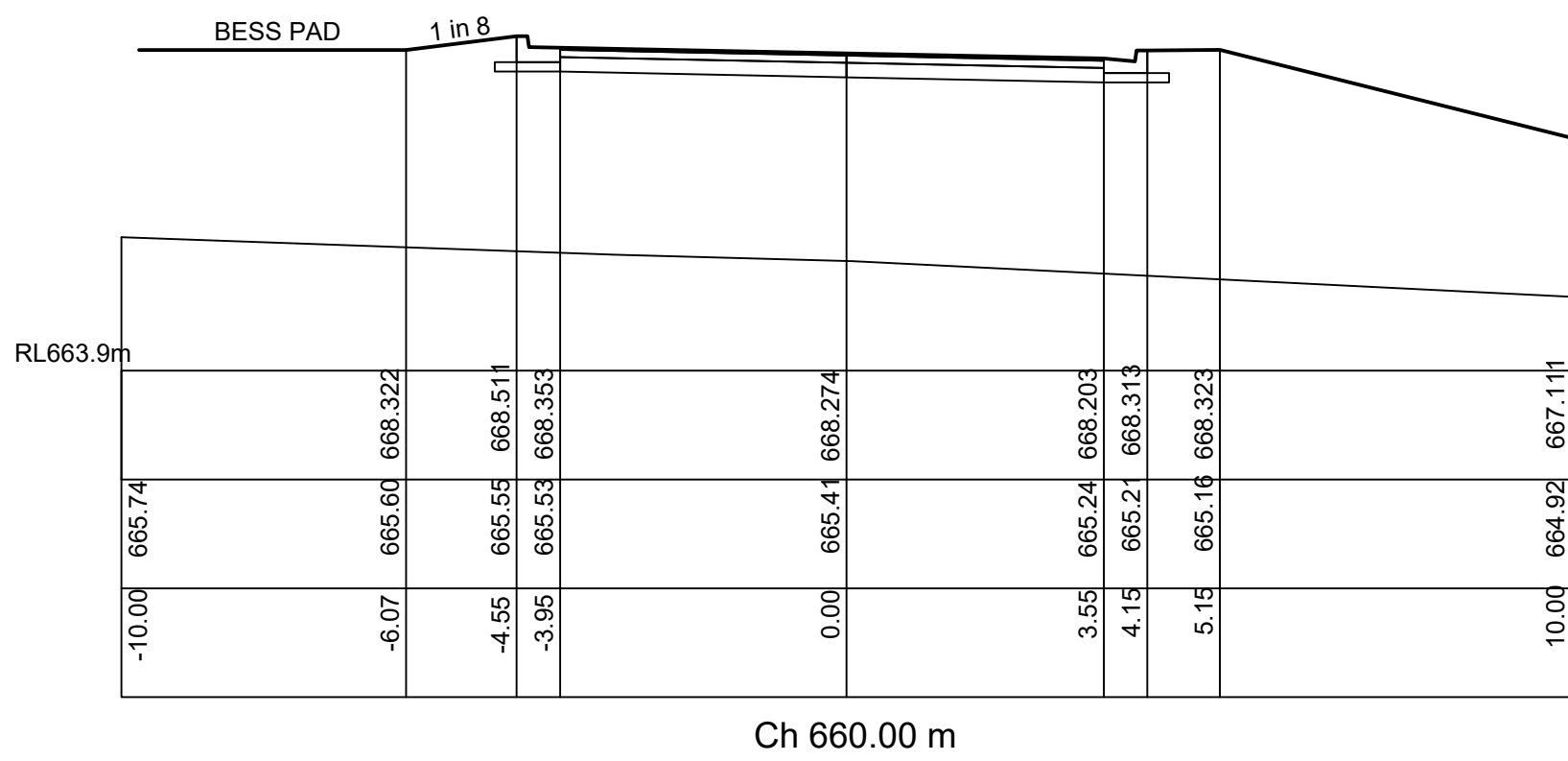
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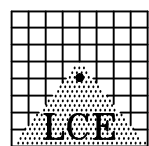
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SHEET NO. 10 of 17	REVISION A
DRAWING NO. 5182-CIV-DA-SQE2-10	



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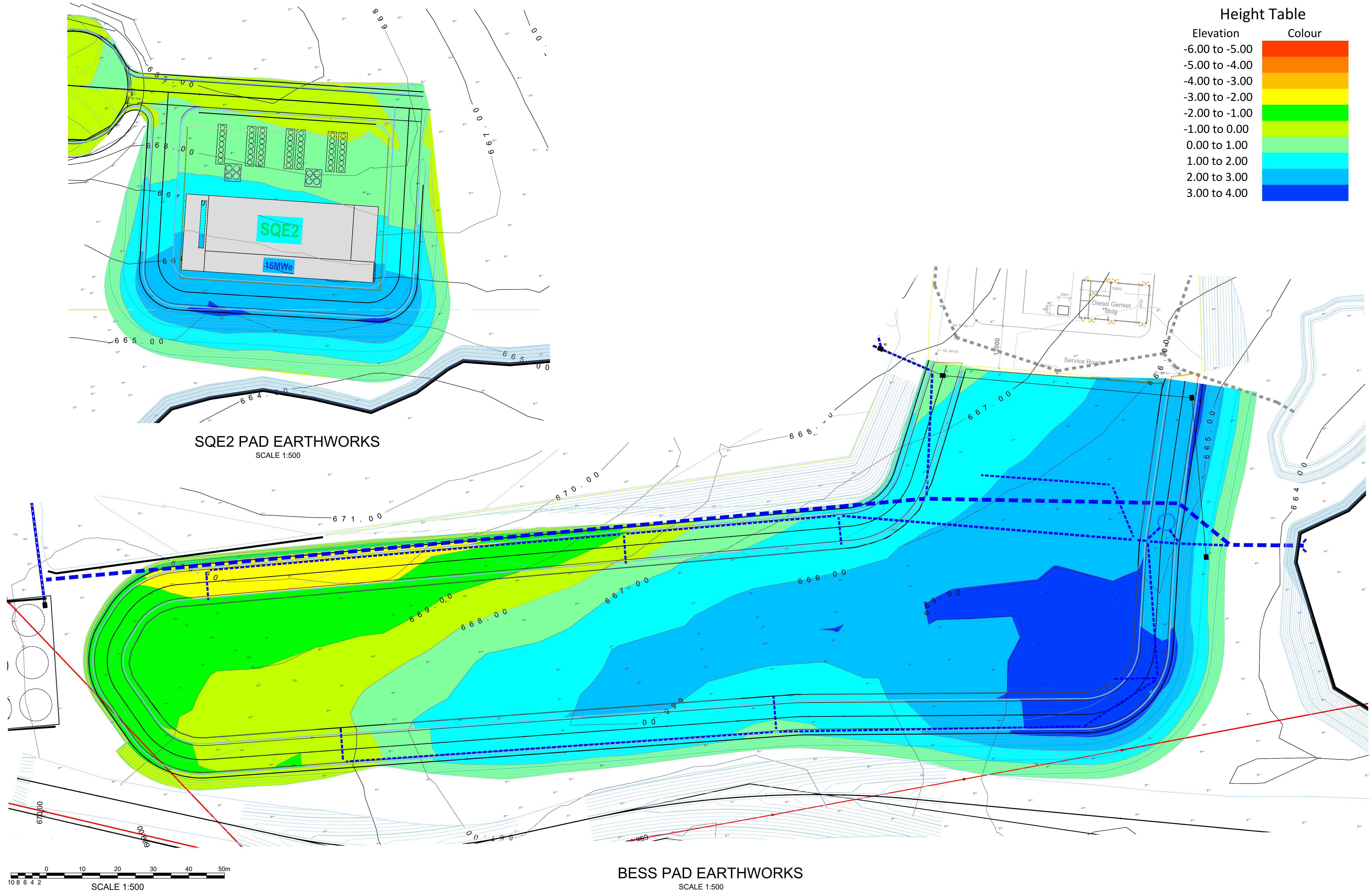
P.O. BOX 7725, BAULKHAM HILLS B.C., N.S.W. 2153
TEL 0411 078 394
FAX (02) 8878 6995

ABN 82 081 237 890

CLIENT	CLOUD CARRIER PTY LTD LEXINGTON DRIVE BELLA VISTA NSW 2153
LOCAL GOVT. AREA	WINGECARIBEE SHIRE COUNCIL

Southern Highlands Data Campus (SHDC) 30 DOUGLAS ROAD MOSS VALE NSW 2577	
DRAWING TITLE CROSS SECTIONS BESS RD Ch. 580 - Ch. 660	

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SHEET NO. 12 of 17	REVISION A
DRAWING NO. 5182-CIV-DA-SQE2-12	

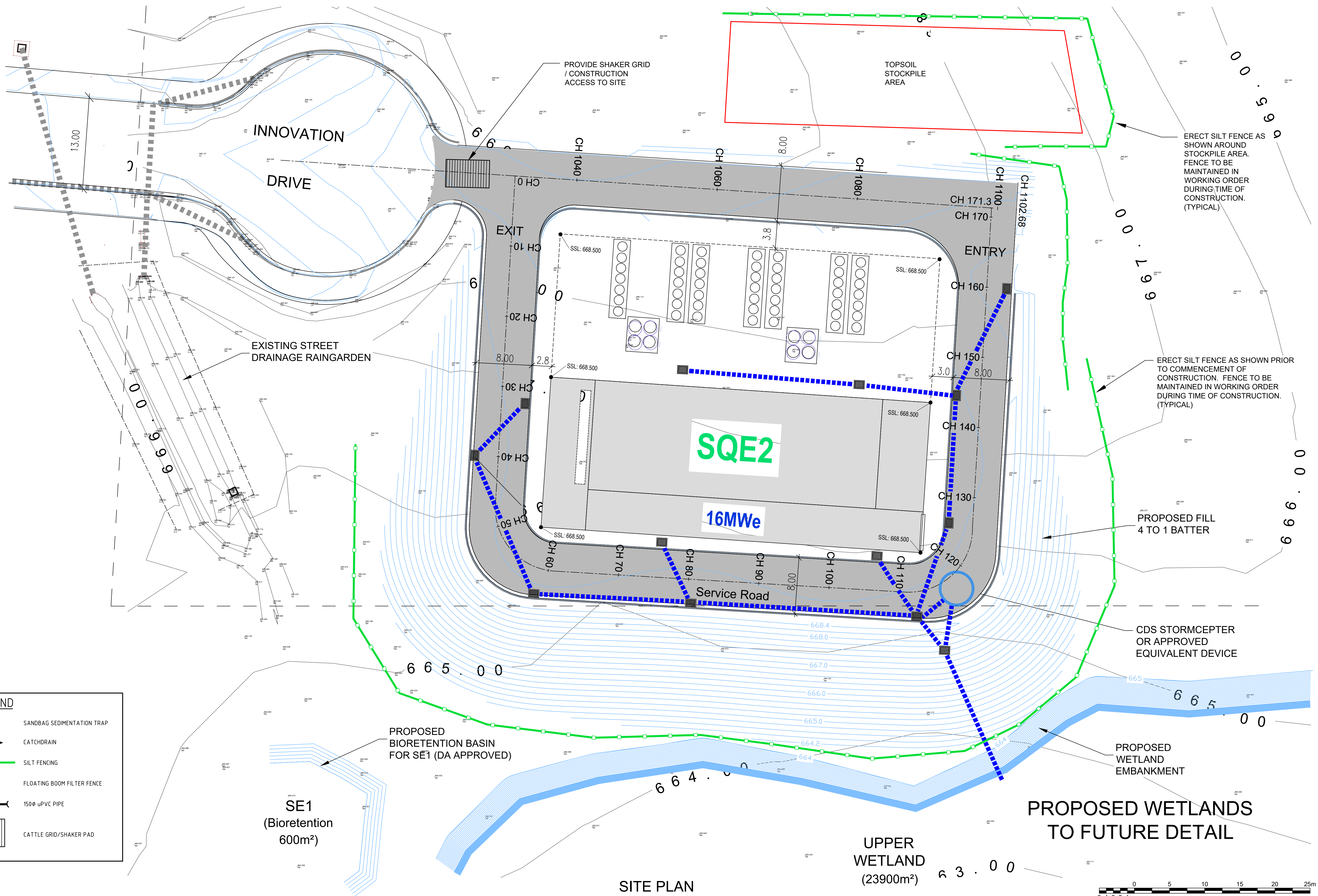


Height Table	
Elevation	Colour
-6.00 to -5.00	
-5.00 to -4.00	
-4.00 to -3.00	
-3.00 to -2.00	
-2.00 to -1.00	
-1.00 to 0.00	
0.00 to 1.00	
1.00 to 2.00	
2.00 to 3.00	
3.00 to 4.00	

SQE2 PAD EARTHWORKS
SCALE 1:500

BESS PAD EARTHWORKS
SCALE 1:500

				SCALE AS SHOWN		DATUM AHD - GDA2020		DRAWN LN DATE 12/9/24		 LUCAS CONSULTING ENGINEERS PTY. LIMITED CIVIL & STRUCTURAL ENGINEERS CONSTRUCTION & PROJECT MANAGEMENT P.O. BOX 7725, BAULKHAM HILLS B.C., N.S.W. 2153 TEL. 0411 078 394 FAX (02) 8878 6995 ABN 82 081 237 890	CLIENT CLOUD CARRIER PTY LTD LEXINGTON DRIVE BELLA VISTA NSW 2153		Southern Highlands Data Campus (SHDC) 30 DOUGLAS ROAD MOSS VALE NSW 2577				FILE NO. 5182		COMPUTER REF. 5182-Civil-SQE2-DA Concept	
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LEGEND

- SANDBAG SEDIMENTATION TRAP
- CATCHDRAIN
- SILT FENCING
- FLOATING BOOM FILTER FENCE
- 150mm uPVC PIPE
- CATTLE GRID/SHAKER PAD

SE1
(Bioretention
600m²)

SITE PLAN
SCALE 1:250

UPPER
WETLAND
(23900m²)

**PROPOSED WETLANDS
TO FUTURE DETAIL**



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LOCAL GOVT. AREA	WINGECARIBEE SHIRE COUNCIL

Southern Highlands Data Campus (SHDC) 30 DOUGLAS ROAD MOSS VALE NSW 2577	
DRAWING TITLE SEDIMENT EROSION CONTROL PLAN - SHT 1	

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DRAWING NO.	5182-CIV-DA-SQE2-13		

EROSION CONTROL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, INCLUDING REVEGETATION AND STORAGE OF SOIL AND TOPSOIL, SHALL BE IMPLEMENTED IN ACCORDANCE WITH MANAGING URBAN STORMWATER SOILD AND CONSTRUCTION, VOLUME 1 (4th EDITION 2004), DURING THE CONSTRUCTION PHASE.
2. DISTURBANCE OF VEGETATION SHALL BE KEPT TO A MINIMUM BY STAGING THE DEVELOPMENT.
3. ALL DISTURBED AREAS SHALL BE REVEGETATED AS SOON AS THE RELEVANT WORKS ARE COMPLETED.
4. TOPSOIL FROM ALL AREAS TO BE DISTURBED SHALL BE STOCKPILED AND LATER RESPREAD TO AID REVEGETATION. TOPSOIL STOCKPILES ARE TO BE NO HIGHER THAN 1.5 METRES. THE TOP 50–75mm (CONTAINING THE BULK OF THE ORGANIC MATERIAL SHOULD BE STORED SEPARATELY FROM UNDERLYING SOIL & RESPREAD LAST. MINIMUM DEPTH 100–125mm. TOPSOIL IS NOT TO BE REMOVED FROM SITE WITHOUT COUNCIL'S CONCURRENCE. WHERE APPROPRIATE, INSTEAD OF STOCKPILING TOPSOIL IT CAN BE PUSHED UPSLOPE OF EXCAVATED AREAS SO AS TO FORM A BANK ABOVE DISTURBED AREAS. THESE BANKS SHOULD BE DIRECTED TO DISCHARGE WATER TO A STABLE POINT. ALL STOCKPILES & BANKS NEED TO BE SEEDED & FERTILISED WITH THE RECOMMENDED SEED MIX.
- GRASS VARIETIES & QUANTITIES

Currie Cocksfoot	4
Victorian Ryegrass	5
Kangaroo Ryegrass	5
Karridale Sub Clover	2
Cajon Fescue	6
White Clover	3
Japanese Millet (if planted November to March)	8–10
Cereal Rye (if planted April to October)	10
- Bitumen & Straw mulch or equivalent mulch should be applied on areas with a slope greater than 1V:3H. Straw should be applied at 5,000 kg/ha.

* Fertiliser

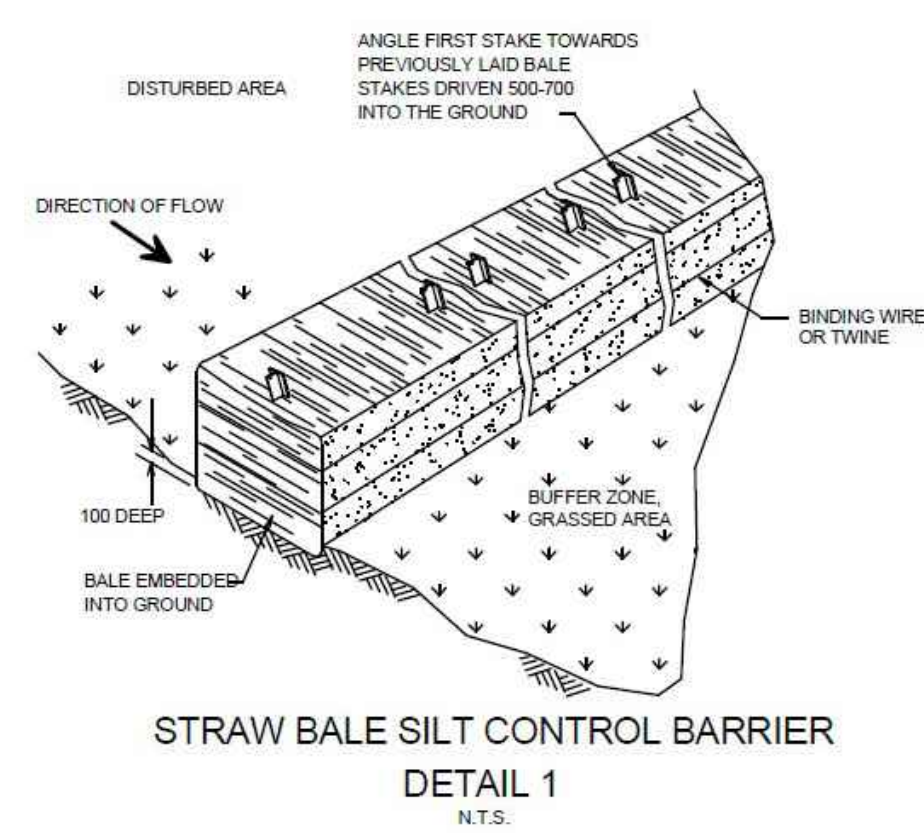
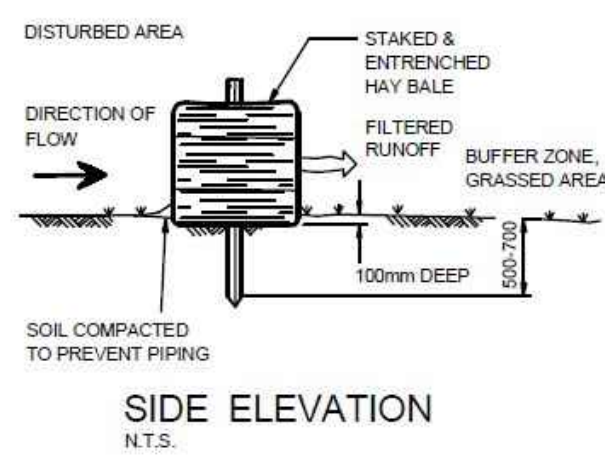
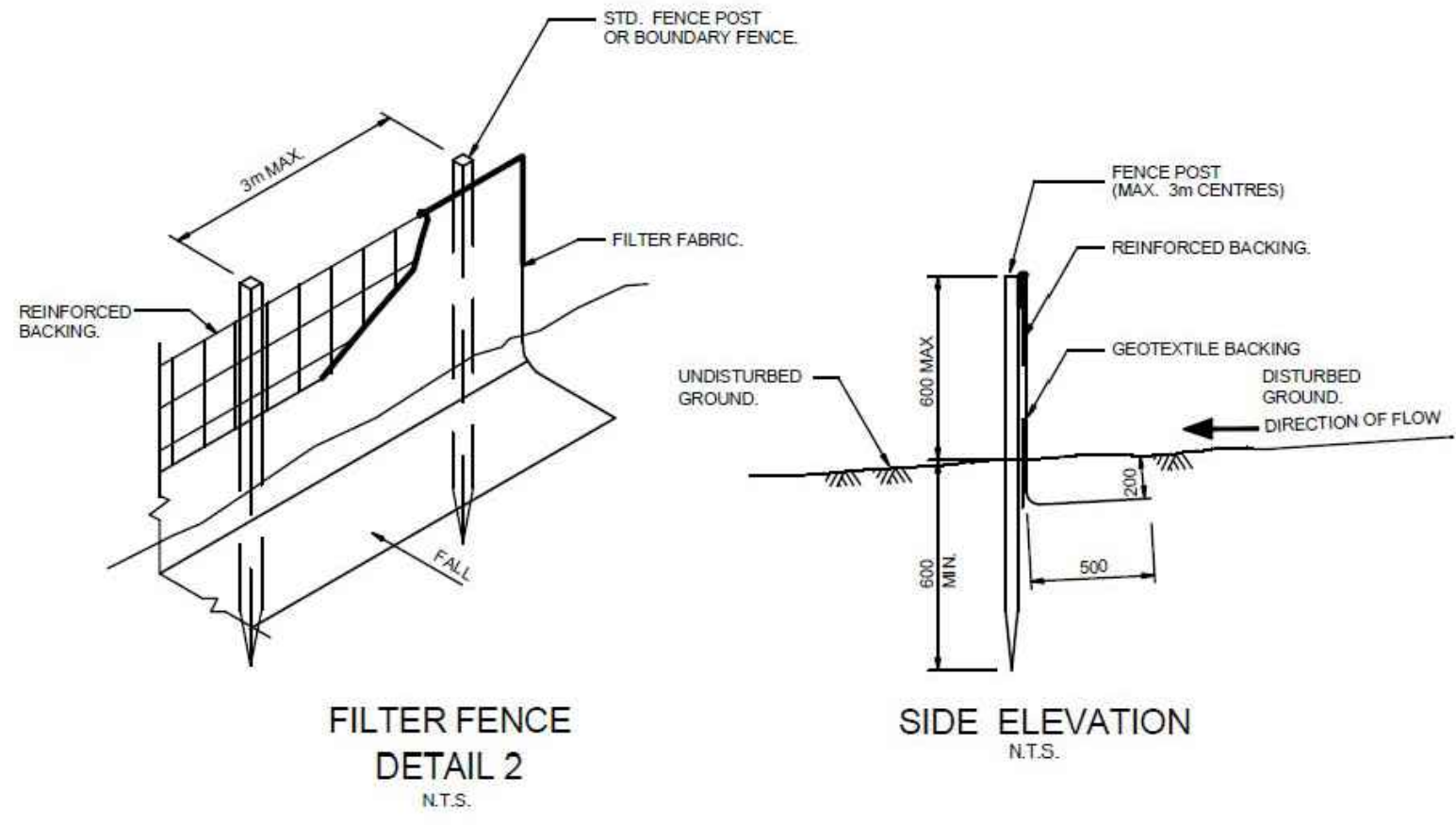
Grower 11, Starter 13 or 18, or equivalent
* Fertiliser not to be used along or in watercourses,

250–300kg/ha
5. TURF STRIPS TO BE PLACED BEHIND ALL NEWLY CONSTRUCTED KERB & GUTTER WITHIN 7 DAYS OF COMPLETION OF CONCRETING. MINIMUM WIDTH 0.9m. IN ADDITION, EXTENSIONS OF TURF AT AN ANGLE OF APPROX. 70° TO KERB AT INTERVALS OF 20M PERPENDICULAR TO THE KERB FOR A DISTANCE OF 2M ON STEEPER SECTIONS OF ROAD WHERE THERE IS A POTENTIAL FOR WATER TO CONCENTRATE ALONG THE END OF THE TURF. IF THERE IS INSUFFICIENT RAIN, SUPPLEMENTARY WATER SHOULD BE UNDERTAKEN.
6. ALL STRAW BALES TO BE BOUND WITH WIRE. STRAW BALES TO BE PLACED END TO END IN A SINGLE ROW AND EMBEDDED INTO THE SOIL TO A DEPTH OF 100mm. EACH BALE TO BE SECURELY ANCHORED WITH TWO STEEL STAKES DRIVEN 500 – 750mm INTO THE GROUND AND LOCATED ON THE BALE CENTRELINE. (REFER DETAIL 1)
7. FILTER FENCE TO BE CONSTRUCTED BY STRETCHING A FILTER FABRIC (PROPEX OR SIMILAR) BETWEEN POSTS AT 2.0m CENTRES. FABRIC TO BE BURIED 200mm ALONG IT'S LOWER EDGE. FILTER FENCE TO BE PLACED AS NEAR TO THE CONTOUR AS POSSIBLE. (REFER DETAIL 2)
8. WIREMESH & GRAVEL INLET FILTERS TO BE PROVIDED AT ALL KERB INLET PITS (REFER DETAIL 3)
9. THE CAPACITY & EFFECTIVENESS OF RUNOFF & SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED AT NO LESS THAN 70% CAPACITY AT ALL TIMES TO THE SATISFACTION OF W.S. COUNCIL.
10. ALL CONTROLS SHOULD BE INSPECTED AT THE END OF EACH DAY & PARTICULARLY BEFORE WEEKENDS &/OR WHEN THE SITE IS TO BE LEFT FOR EXTENDED PERIODS.
11. TO MINIMISE SOIL EROSION AND SEDIMENT MOVEMENT DURING CONSTRUCTION, THE FOLLOWING MEASURES SHALL BE IMPLEMENTED:

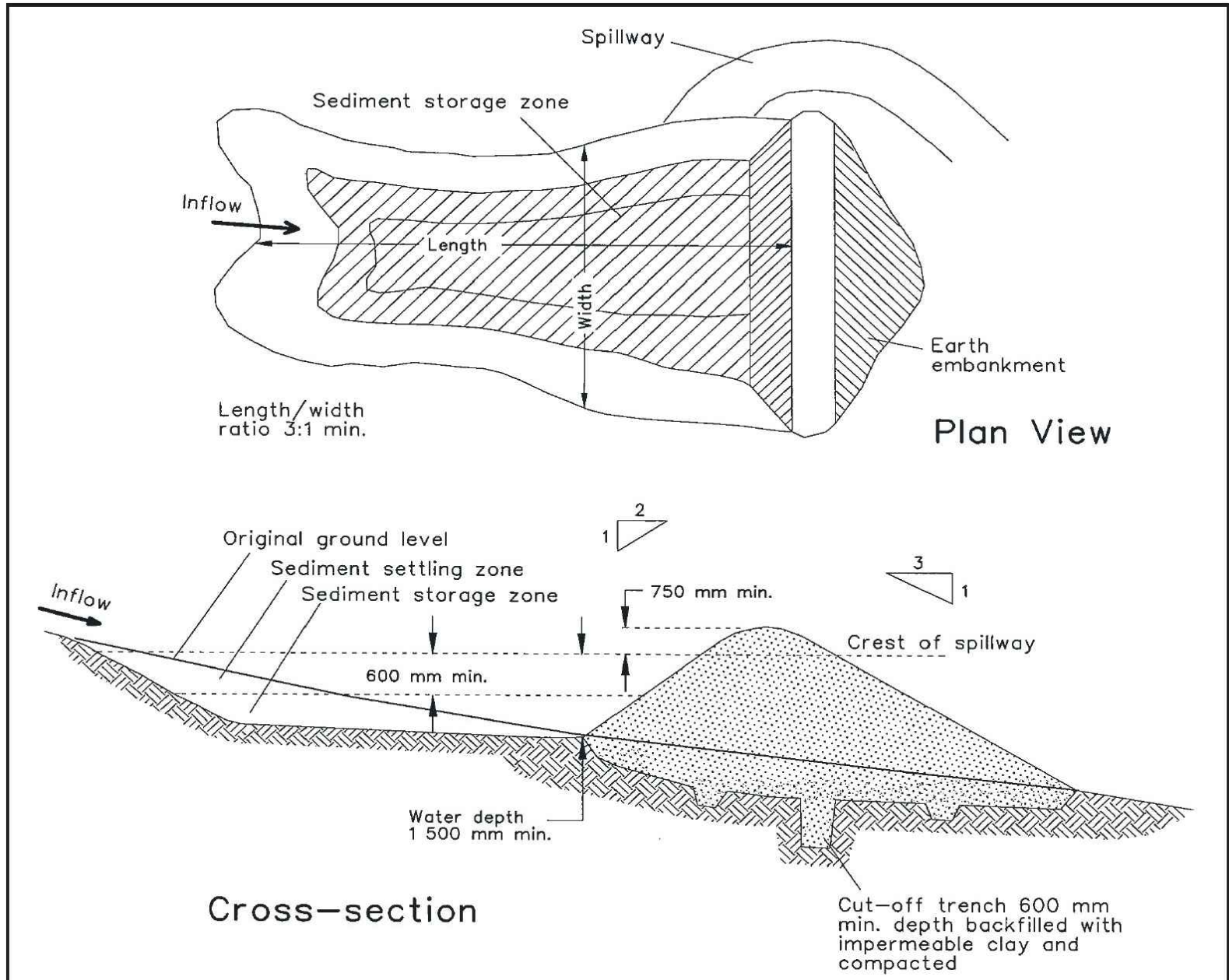
(a) REMOVAL AND/OR DISTURBANCE OF VEGETATION SHALL BE CONFINED TO WITHIN TWO (2) METRES OF THE REQUIRED WORKS.

(b) STOCKPILES OF CONSTRUCTION AND LANDSCAPING MATERIALS, AND OF SITE DEBRIS SHALL BE LOCATED CLEAR OF DRAINAGE LINES AND IN SUCH A POSITION THAT THEY ARE PROTECTED FROM EROSION AND DO NOT ENDOURCH UPON ANY FOOTPATH, NATURE STRIP OR ROADWAY.

(c) VEHICULAR ACCESS SHALL BE CONTROLLED SO AS TO PREVENT TRACKING OF SEDIMENT ONTO ADJOINING ROADWAYS, PARTICULARLY DURING WET WEATHER OR WHEN THE SITE IS MUDDY. SEDIMENT DEPOSITED ON ADJOINING ROADWAYS SHALL BE REMOVED BY MEANS OTHER THAN WASHING. ALL MATERIAL SHALL BE REMOVED AS SOON AS POSSIBLE AND THE COLLECTED MATERIAL SHALL BE DISPOSED OF IN A MANNER WHICH WILL PREVENT ITS MOBILISATION.
12. ALL EROSION AND SEDIMENT CONTROL DEVICES ARE TO REMAIN IN POSITION AND BE MAINTAINED UNTIL ADVISED BY COUNCIL'S DEVELOPMENT ENGINEER THAT THEY MAY BE REMOVED OR UNTIL THE 12 MONTH MAINTENANCE PERIOD HAS LAPSED.



MAXIMUM C-FACTORS @ NOMINATED TIMES DURING WORKS		
LANDS	MAXIMUM C-FACTOR	REMARKS
Waterways & other areas subjected to concentrated flows, post construction	0.05	Applies after 10 working days from completion of formation & before they are allowed to carry any concentrated flows. Flows will be limited to those shown in table 5.1 of Landcom (2004). Foot and vehicular traffic will be prohibited in these areas (70% ground cover).
Stockpiles post construction	0.1	Applies after 10 working days from completion of formation. Maximum C-factor of 0.10 equals 90% ground cover.
All lands, including waterways & stockpiles during construction	0.15	Applies after 20 working days in inactivity, even though works might continue later. Maximum C-factor of 0.15 equals 90% ground cover.



Construction Notes

1. Remove all vegetation and topsoil from under the dam wall and from within the storage area.
2. Construct a cut-off trench 500 mm deep and 1,200 mm wide along the centreline of the embankment extending to a point on the gully wall level with the riser crest.
3. Maintain the trench free of water and recompact the materials with equipment as specified in the SWMP to 95 per cent Standard Proctor Density.
4. Select fill following the SWMP that is free of roots, wood, rock, large stone or foreign material.
5. Prepare the site under the embankment by ripping to at least 100 mm to help bond compacted fill to the existing substrate.
6. Spread the fill in 100 mm to 150 mm layers and compact it at optimum moisture content following the SWMP.
7. Construct the emergency spillway.
8. Rehabilitate the structure following the SWMP.

EARTH BASIN - WET
(APPLIES TO 'TYPE D' AND 'TYPE F' SOILS ONLY)

SD 6-4

SEDIMENT BASIN NOTES:

MANAGEMENT OF SEDIMENT BASINS IS THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE MAINTAINED IN ACCORDANCE WITH SECTION 6.3 AND APPENDIX F OF MANAGING URBAN STORMWATER (BLUE BOOK).

SEDIMENT BASINS WILL:

1. BE CONSTRUCTED IN ACCORDANCE WITH FUTURE DETAILED DESIGN PLANS. THEY HAVE BEEN DESIGNED TO A FORMULA BASED ON A DESIGN STORM EVENT OF 5 DAY 75th PERCENTILE.

2. BE FLOCCULATED (APPENDIX E, LANDCOM 2004) BEFORE DISCHARGE OCCURS (UNLESS DESIGN STORM EVENT IS EXCEEDED); AND

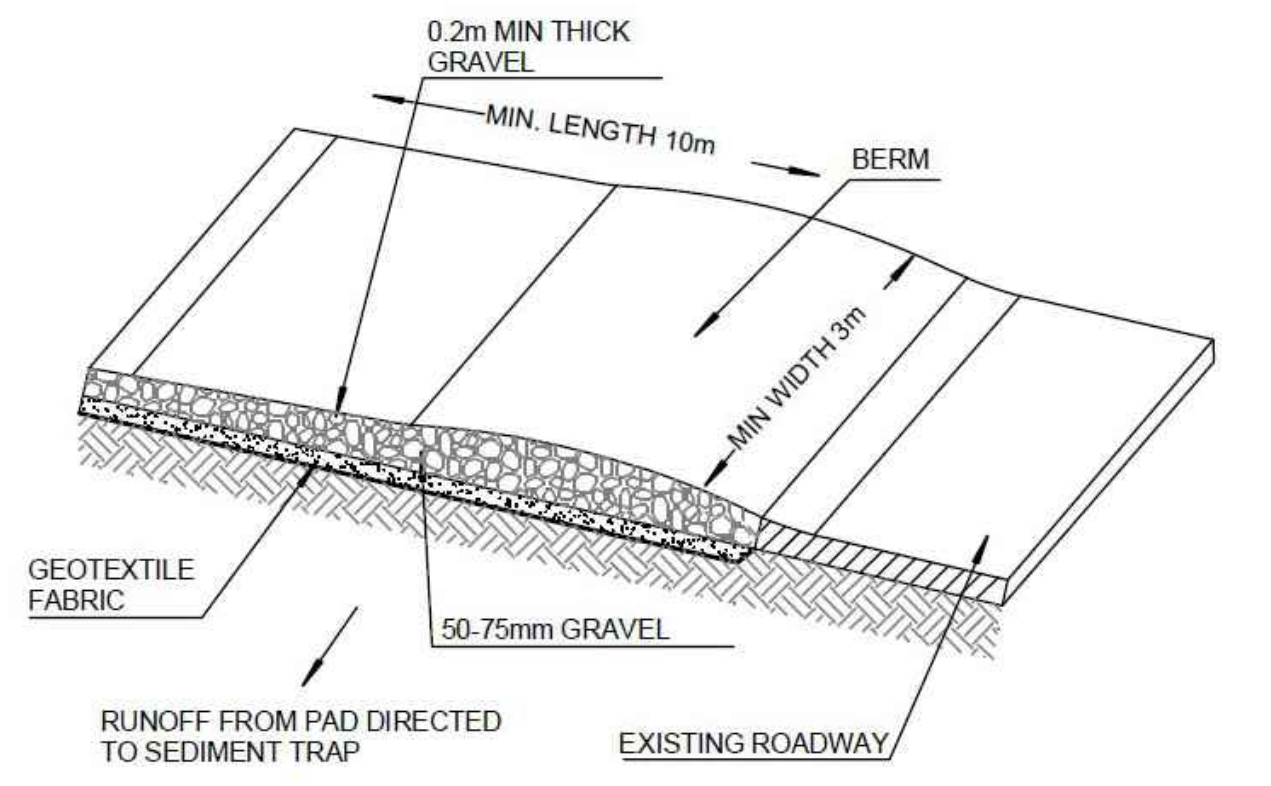
3. HAVE ONE OR MORE PEGS PLACED ON THE FLOOR TO INDICATE CLEARLY THE LEVEL AT WHICH DESIGN SEDIMENT CAPACITY OCCURS AND WHEN SEDIMENT IS REQUIRED TO BE REMOVED.

STORED CONTENTS OF THE BASINS WILL BE TREATED WITH GYPSUM (APPENDIX E, LANDCOM 2004) OR OTHER FLOCCULATING AGENTS WHERE THEY CONTAIN MORE THAN 50 mg/L OF SUSPENDED SOLIDS. TREATMENT WILL BE AS FOLLOWS:

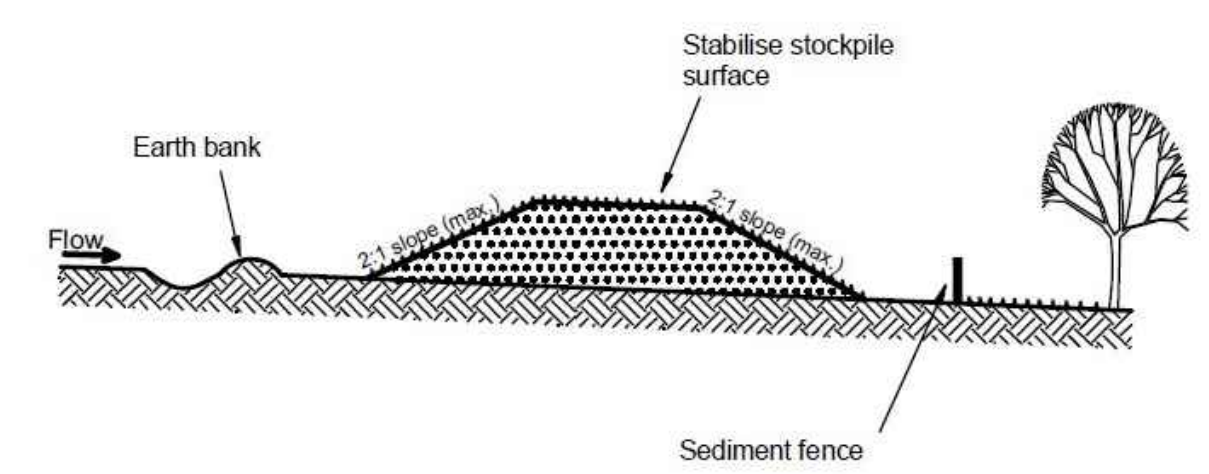
1. TREAT THE WATERS AND ALLOW AT LEAST 24 HOURS TO SETTLE WITHIN 4 DAYS FROM THE CONCLUSION OF THE RAINFALL EVENT.

2. DRAIN THE BASIN SO THAT FULL STORAGE CAPACITY IS REGAINED WITHOUT DISCHARGING THE SEDIMENT FROM THE SITE WITHIN 5 DAYS FROM THE CONCLUSION OF THE RAINFALL EVENT.

SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE DISPOSED OF IN LOCATIONS WHERE FURTHER EROSION AND CONSEQUENT POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS WILL NOT OCCUR.



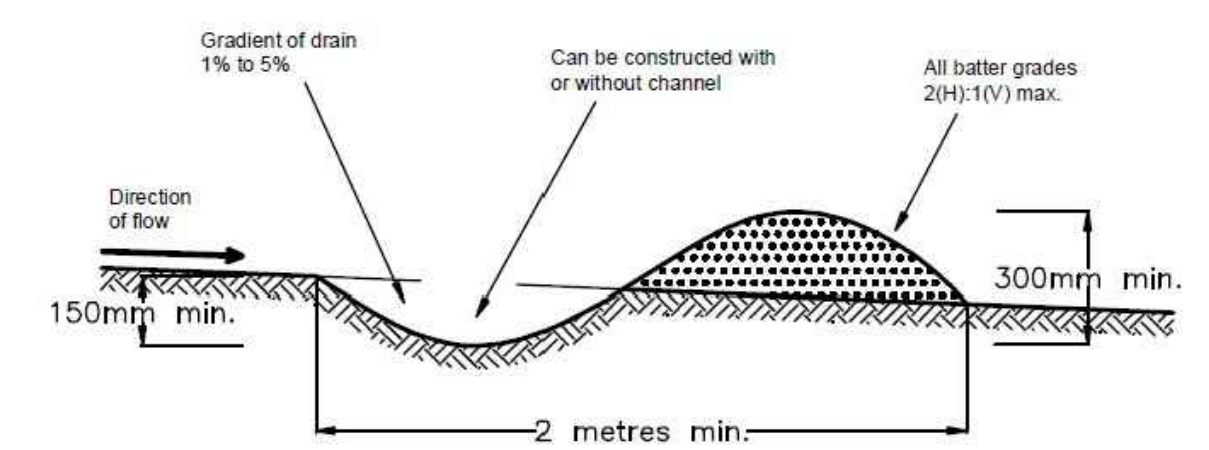
STABILISED SITE ACCESS
(NOT TO SCALE)



Construction Notes

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, stabilise following the approved ESCP or SWMP to reduce the C-factor to less than 0.10.
5. Construct earth banks (Standard Drawing 5-5) on the upslope side to divert water around stockpiles and sediment fences (Standard Drawing 6-8) 1 to 2 metres downslope.

STOCKPILE DETAIL SD 4-1

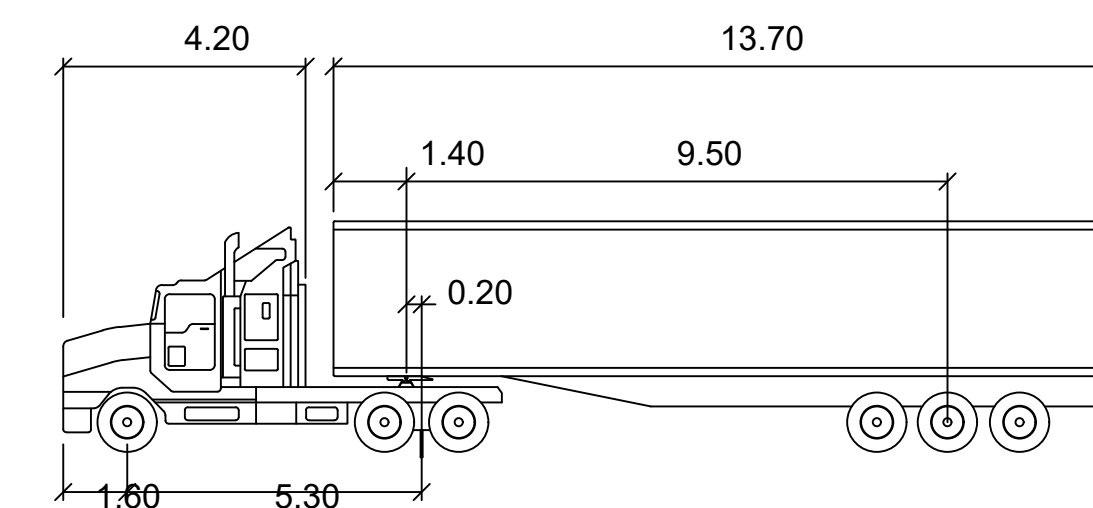


Construction Notes

1. Build with gradients between 1 percent and 5 percent.
2. Avoid removing trees and shrubs if possible - work around them.
3. Ensure the structures are free of projections or other irregularities then could impede water flow.
4. Build the drains with circular, parabolic or trapezoidal cross sections, not V shaped.
5. Ensure the banks are properly compacted to prevent failure.
6. Complete permanent or temporary stabilisation within 10 days of construction.

EARTH BANK (LOW FLOW) SD 5-5

				SCALE		DATUM		DRAWN		LN		DATE		12/9/24		 LUCAS CONSULTING ENGINEERS PTY. LIMITED CIVIL & STRUCTURAL ENGINEERS CONSTRUCTION & PROJECT MANAGEMENT P.O. BOX 7725, BAULKHAM HILLS B.C., N.S.W. 2153 TEL. 0411 078 394 FAX (02) 8878 6995 ABN 82 081 237 890	CLIENT				CLOUD CARRIER PTY LTD LEXINGTON DRIVE BELLA VISTA NSW 2153				Southern Highlands Data Campus (SHDC) 30 DOUGLAS ROAD MOSS VALE NSW 2577				FILE NO. 5182		COMPUTER REF. 5182-Civil-SQE2-DA Concept	
				AS SHOWN		AHD - GDA2020		DESIGNED		EL		DATE		24/8/24			APPROVED		DATE						SHEET NO. 16 of 17		REVISION A					
				COPYRIGHT																												
A ISSUED FOR DA APPROVAL				LN		EL		12/12/24																								
REV				DESCRIPTION		BY		APPROVED		DATE																						
				ISSUE / REVISION																												



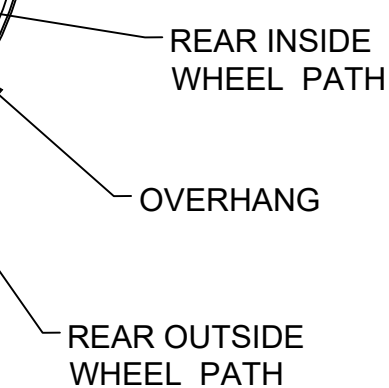
Tractor Width
Trailer Width
Tractor Track
Trailer Track

Lock to Lock Time : 6.00 s
Steering Angle : 27.76 deg
Articulating Angle : 70.00 deg

REAR INSIDE
WHEEL PATH

OVERHANG

REAR OUTSIDE
WHEEL PATH



FRONT INSIDE
WHEEL PATH

FRONT OUTSIDE
WHEEL PATH

				SCALE		DATUM		DRAWN LN DATE 12/9/24		 LUCAS CONSULTING ENGINEERS PTY. LIMITED CIVIL & STRUCTURAL ENGINEERS CONSTRUCTION & PROJECT MANAGEMENT P.O. BOX 7725, BAULKHAM HILLS B.C., N.S.W. 2153 TEL. 0411 078 394 FAX.(02) 8878 6995 ABN 82 081 237 890		CLIENT				Southern Highlands Data Campus (SHDC) 30 DOUGLAS ROAD MOSS VALE NSW 2577				FILE NO.		COMPUTER REF.	
				AS SHOWN		AHD - GDA2020		DESIGNED EL DATE 24/8/24				CLOUD CARRIER PTY LTD LEXINGTON DRIVE BELLA VISTA NSW 2153		5182						5182-Civil-SQE2-DA Concept			
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A ISSUED FOR DA APPROVAL				LN		EL		12/12/24		ALL DIMENSIONS IN MM UNLESS OTHERWISE STATED						DRAWING NO.		5182-CIV-DA-SQE2-17					
REV				BY		APPROVED		DATE								LOCAL GOV'T. AREA				DRAWING TITLE			
ISSUE / REVISION																WINGECARIBEE SHIRE COUNCIL				TRUCK TURNING SWEEP PATHS			