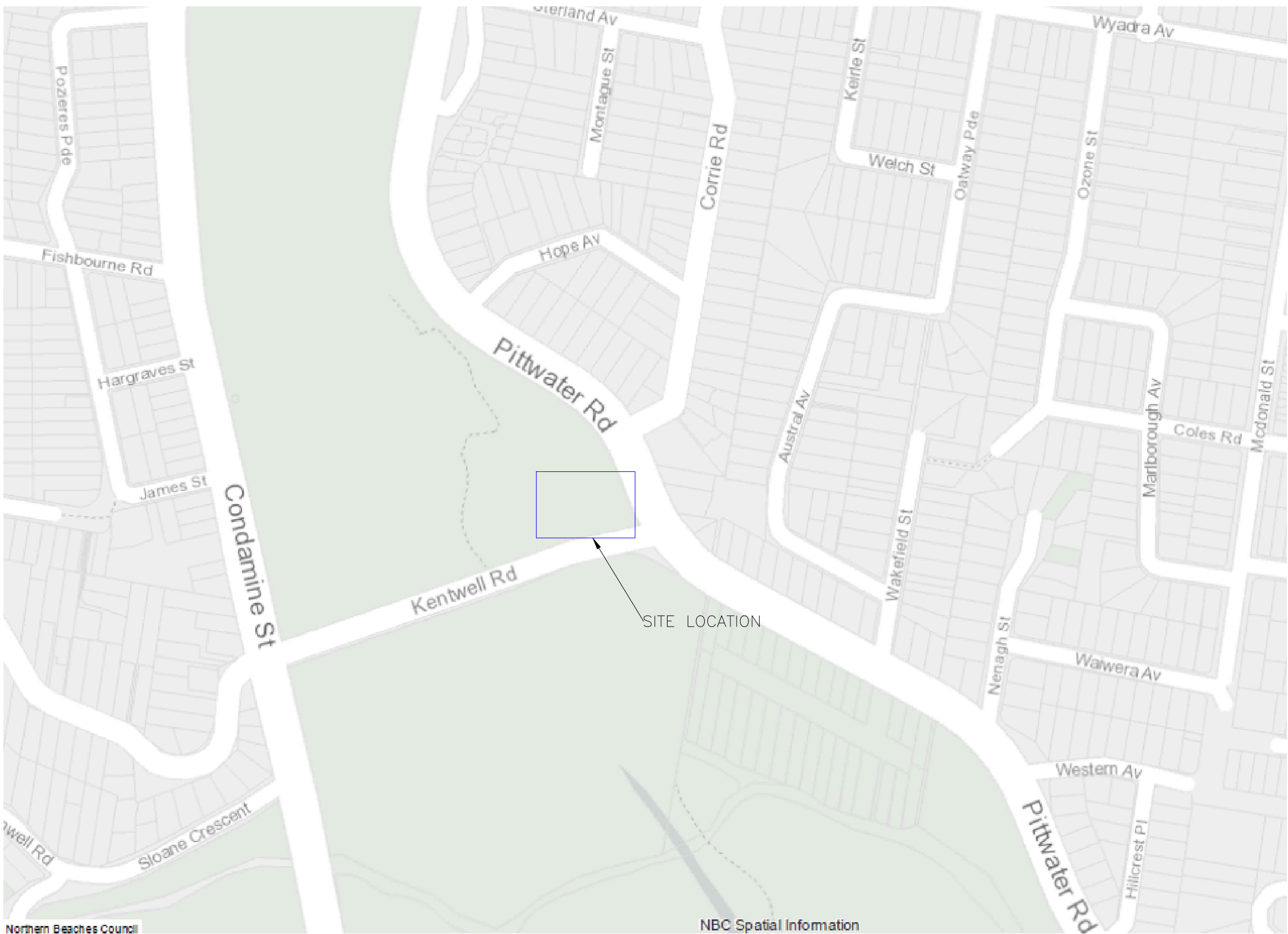


# PROPOSED CARPARK UPGRADE KENTWELL ROAD, NORTH MANLY



LOCALITY PLAN  
NOT TO SCALE

## CAUTION – EXCAVATING NEAR TREES TO BE RETAINED

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- IF IN DOUBT – PLEASE SEEK ADVICE FROM COUNCIL'S TREE SERVICES BEFORE PROCEEDING WITH WORKS.
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## CAUTION – SERVICES!!!!



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## DRAWING INDEX

DRAWING NO.	DESCRIPTION
1000	COVER SHEET, LOCALITY PLAN AND INDEX
2000	GENERAL ARRANGEMENT SHEET 1
3000	CIVIL WORKS & SET-OUT PLAN SHEET 1
3001	CIVIL WORKS & SET-OUT PLAN SHEET 2
3002	CIVIL WORKS & SET-OUT PLAN SHEET 3
3003	CIVIL WORKS & SET-OUT PLAN SHEET 4
4000	LONGITUDINAL SECTIONS
5000 TO 5002	CROSS SECTIONS – ALIGNMENT 1
5003 TO 5006	CROSS SECTIONS – ALIGNMENT 4
6000	STANDARD DETAILS SHEET 1
6001	STANDARD DETAILS SHEET 2
6002	STANDARD DETAILS SHEET 3
6003	STANDARD DETAILS SHEET 4

## SET-OUT SCHEDULE

POINT	EASTING	NORTHING	REMARKS
1	339802.78	6261391.98	ALIGNMENT 1 – EASTERN CARPARK CENTRE-LINE
1A	339802.10	6261394.21	ALIGNMENT 1
1B	339804.87	6261399.22	ALIGNMENT 1
2A	339825.84	6261406.10	ALIGNMENT 1
2B	339829.76	6261414.15	ALIGNMENT 1
2	339827.88	6261418.72	ALIGNMENT 1
3	339802.31	6261481.19	ALIGNMENT 1
4	339709.35	6261362.01	ALIGNMENT 4 – WESTERN CARPARK CENTRE-LINE
5	339704.52	6261371.20	ALIGNMENT 4
6	339702.98	6261374.99	ALIGNMENT 4
7	339693.58	6261398.15	ALIGNMENT 4
8	339687.72	6261412.56	ALIGNMENT 4
9	339687.33	6261414.41	ALIGNMENT 4
10	339686.68	6261433.43	ALIGNMENT 4

				LEVEL DATUM: AHD	PLOT DATE: 24/10/2022	FOLDER: v:\Urban2\DRAWINGS Current\TOM SPECS AND PROJECTS FOLDER 2\PROJECTS 2022 – 23\Warringah Golf Club – kentwell road\TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1 241022.dwg		
				CO-ORD SYSTEM: MGA	PRELIMINARY	DESIGN APPROVED	APPROVED FOR CONSTRUCTION	
				SURVEYED: N.A.	DRAWN BY: THOMAS LAU	DESIGNED BY: THOMAS LAU	PROJ. MGR: N.A.	
				WORK-AS-EXECUTED	DATED: 10/10/22	DATED: 10/10/22	DATE: (**/**/****)	
2	24/10/22	AMENDED FROM COMMENTS REC'D FROM AC/RP	TL	BY: N.A.	INITIATED BY: RICHARD PARRY	APPROVED BY: *****	APPROVED BY: THOMAS LAU	
1	10/10/22	INITIATE DRAWINGS	TL	DATE: **/**/****	(SNR PROJECT MANAGER)	PRINCIPAL ENGINEER	PRINCIPAL ENGINEER	
No	DATE	AMENDMENTS	INITIALS					

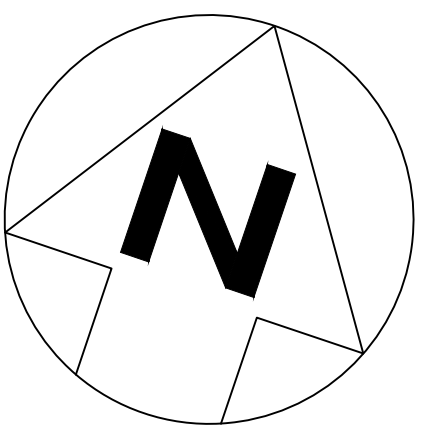


northern  
beaches  
council

CARPARK  
KENTWELL ROAD, NORTH MANLY  
INTERSECTION OF KENTWELL ROAD AND PITWATER ROAD  
INDEX SHEET  
COVER SHEET

DRAWING NO. TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1-1000 | REVISION: 2





SHEET 2

PLAN SHEET 2  
SCALE

PITTWATER ROAD

PITTWATER ROAD

SHEET 1

PLAN SHEET 1  
SCALE

KENTWELL ROAD

KENTWELL ROAD

KENTWELL ROAD

BROOKVALE CREEK

COUNCIL FACILITIES

SHEET 4

PLAN SHEET 4  
SCALE

SHEET 3

PLAN SHEET 3  
SCALE

# GENERAL ARRANGEMENT PLAN

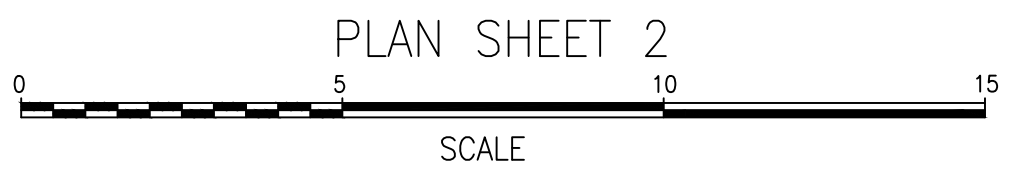
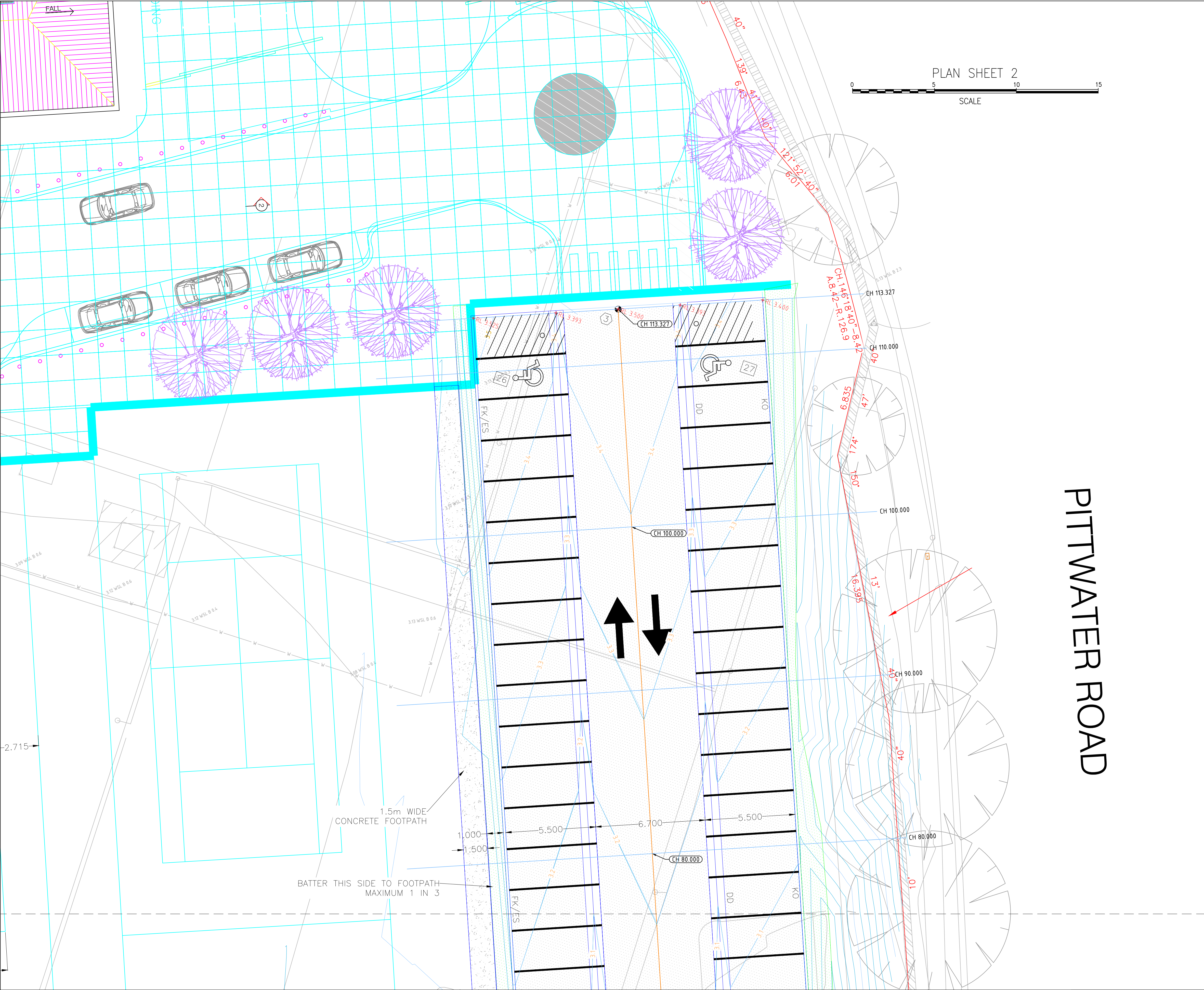


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		DATE: **/**/****		(SNR PROJECT MANAGER)		PRINCIPAL ENGINEER	
						</	









LEGEND	
	ASPHALT (AC14) 50mm MIN. THICK ON 250mm DGB20 (UNLESS OTHERWISE SPECIFIED IN GEOTECHNICAL REPORT)
	CONCRETE 25MPa COMPRESSIVE STRENGTH 130mm MIN. THICK PLAIN CONCRETE COVE FINISH
	ALIGNMENT CHAINAGE (STRAIGHT ALIGNMENT)
	ALIGNMENT CHAINAGE (AT TANGENT POINT)
	ALIGNMENT CHAINAGE (AT INTERSECTION POINT)
	DESIGN CONTOUR AT 0.1m INTERVALS OR AS SPECIFIED
	ALIGNMENT CHAINAGE CORRESPONDING TO A CROSS SECTION
	NODE TO ISG COORDINATES WITH DESIGN FINISHED SURFACE LEVEL. (mAHD)
	SET-OUT POINT WITH NODE IDENTIFIER
	STANDARD 150 HIGH PLAIN CONCRETE KERB AND GUTTER. STEEL TROWEL FINISH
	CONCRETE ROLLED KERB AND TOE. PLAIN CONCRETE. STEEL TROWEL FINISH
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	150 HIGH KERB ONLY. PLAIN CONCRETE. STEEL TROWEL FINISH
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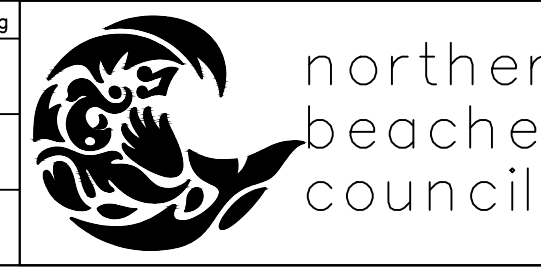
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LEVEL DATUM: AHD		PLOT DATE: 24/10/2022		FOLDER: v:\Urban2\DRAWINGS Current\TOM SPECS AND PROJECTS FOLDER 2\PROJECTS 2022 – 23\Warrigah Golf Club – kentwell road\TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1 241022.dwg	
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SURVEYED: N.A.		DRAWN BY: THOMAS LAU		PROJ. MGR: N.A.	
WORK-AS-EXECUTED		DESIGNED BY: THOMAS LAU		DATE: (**/**/****)	
BY: N.A.		DATED: 10/10/22		APPROVED BY: THOMAS LAU	
DATE: **/**/****		INITIATED BY: RICHARD PARRY		PRINCIPAL ENGINEER	
INITIALS		PRINCIPAL ENGINEER		PRINCIPAL ENGINEER	





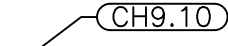






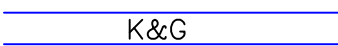
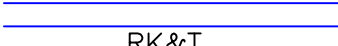
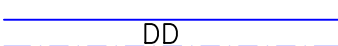


CARPARK  
KENTWELL ROAD, NORTH MANLY  
INTERSECTION OF KENTWELL ROAD AND PITTWATER ROAD  
CIVIL WORKS AND SET-OUT PLAN  
SHEET 2  
DRAWING NO. TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1-3001 | REVISION: 2







## LEGEND

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PLAN SHEET 4



SCALE

12m HIGH GOLF BARRIER,  
DYNEEMA NETTING  
OR EQUIVALENT.  
APPROX. LOCATION ONLY.  
EXACT POSITION TO BE  
SPECIFIED BY OTHERS

CONCRETE FOOTPATH SLAB  
75mm THICK UNREINFORCED

FUTURE PEDESTRIAN FOOTBRIDGE

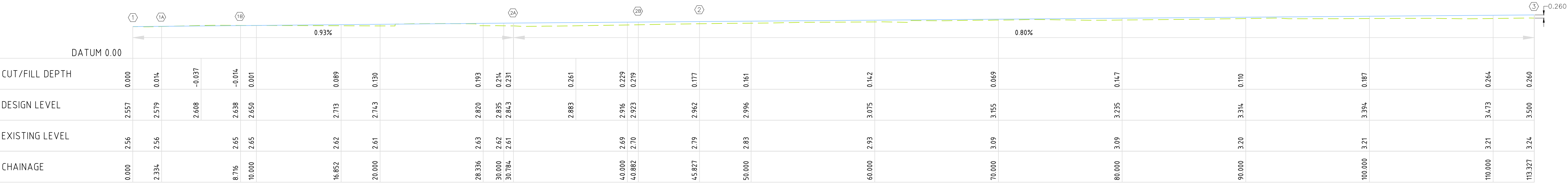
BROOKVALE CREEK

BATTER TO EXISTING  
MAX. 1 IN 3 EITHER  
IN CUT OR FILL

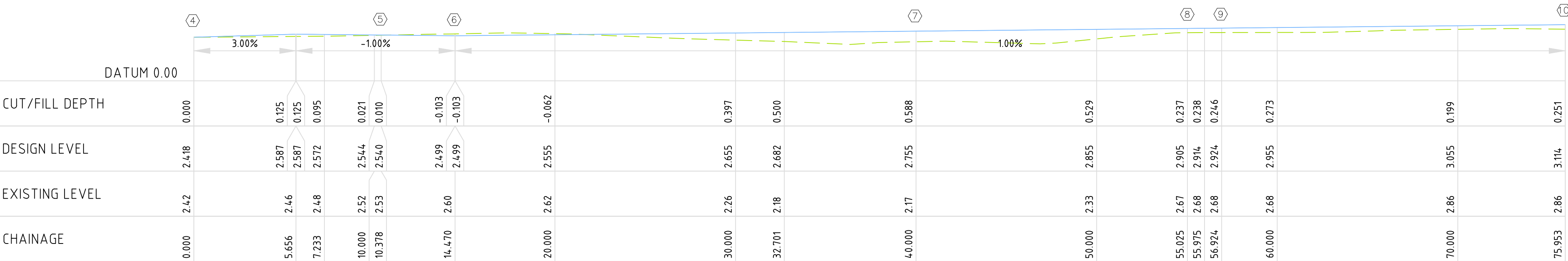
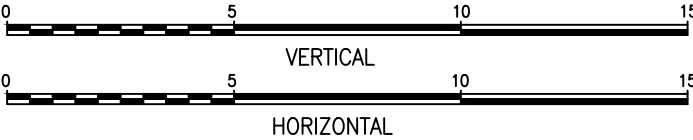
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			BY: N.A.	INITIATED BY: RICHARD PARRY	APPROVED BY: *****	APPROVED BY: THOMAS LAU	
			TL	(SNR PROJECT MANAGER)	PRINCIPAL ENGINEER	PRINCIPAL ENGINEER	
			DATE: **/**/****				
2	24/10/22	AMENDED FROM COMMENTS REC'D FROM AC/RP	TL				
1	10/10/22	INITIATE DRAWINGS	TL				
No	DATE	AMENDMENTS	INITIALS				

CARPARK  
KENTWELL ROAD, NORTH MANLY  
INTERSECTION OF KENTWELL ROAD AND PITTWATER ROAD  
CIVIL WORKS AND SET-OUT PLAN  
SHEET 4  
DRAWING NO. TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1-3003 | REVISION: 2

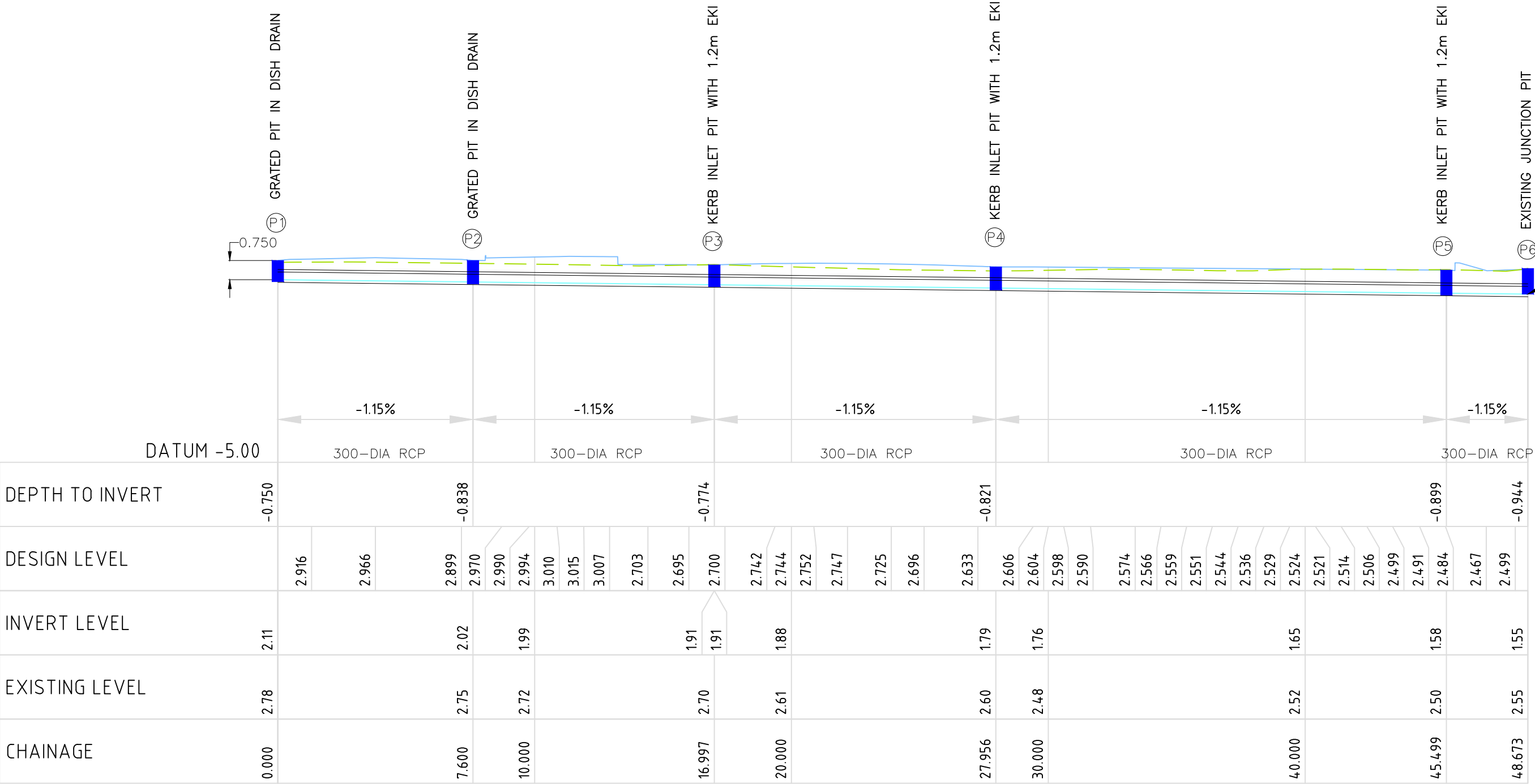
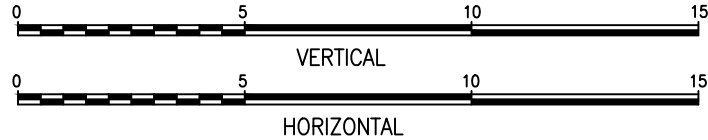




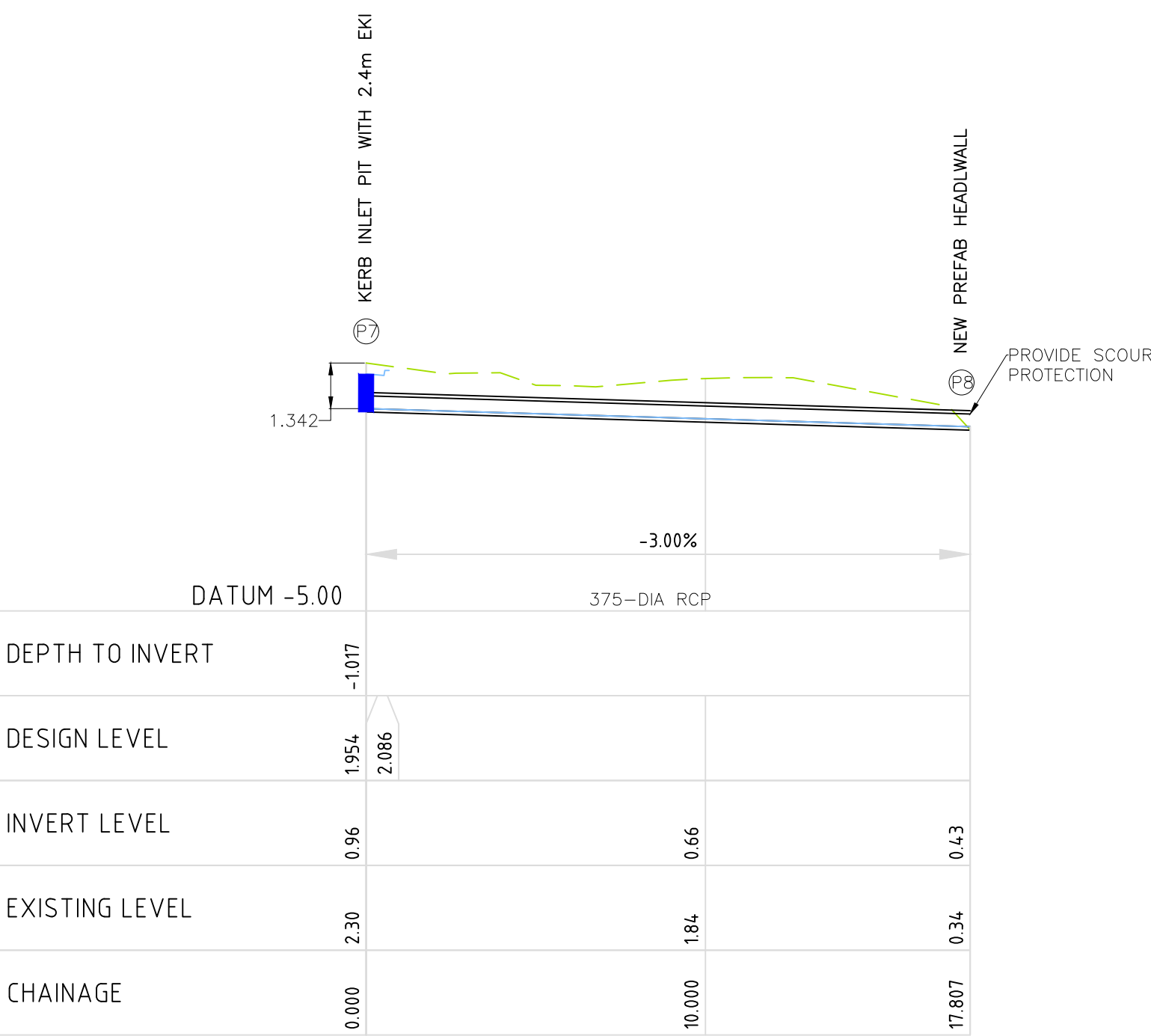
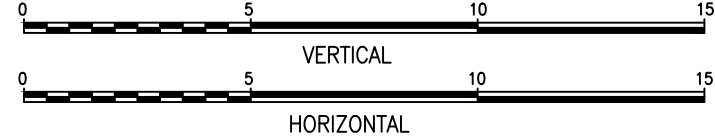
ALIGNMENT 1 - EASTERN CARPARK CENTRE-LINE LONGITUDINAL SECTION



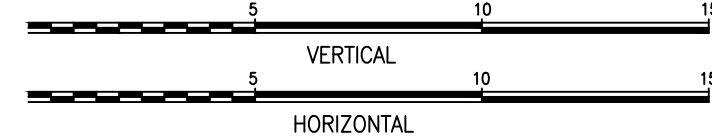
ALIGNMENT 4 - WESTERN CARPARK CENTRE-LINE LONGITUDINAL SECTION



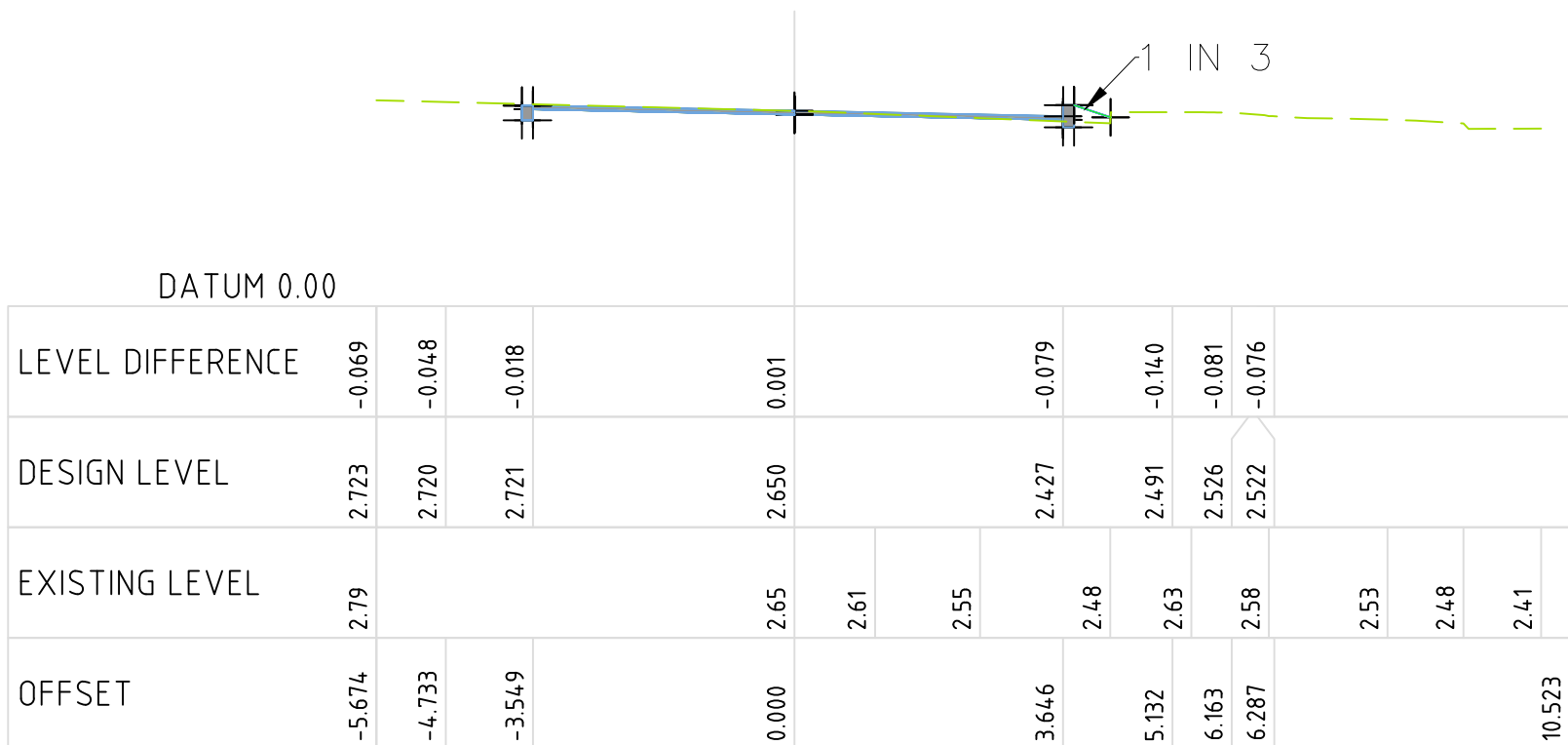
LINE 1 - STORMWATER LONGITUDINAL SECTION



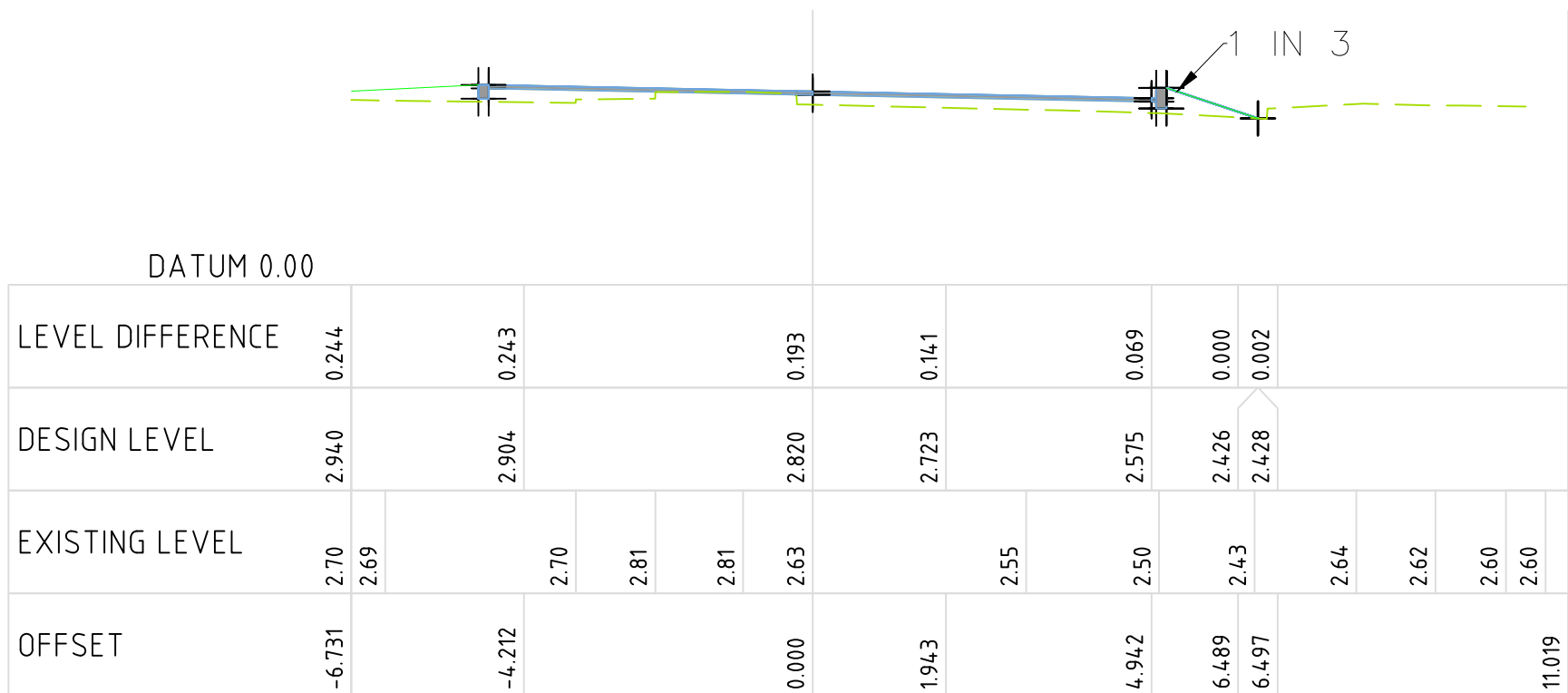
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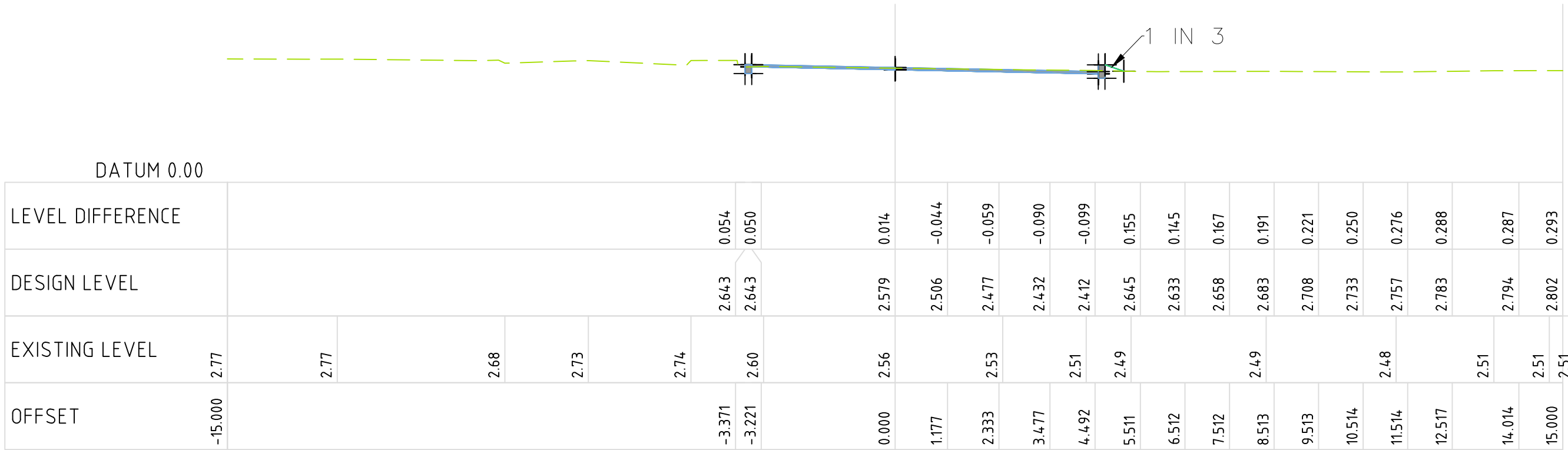




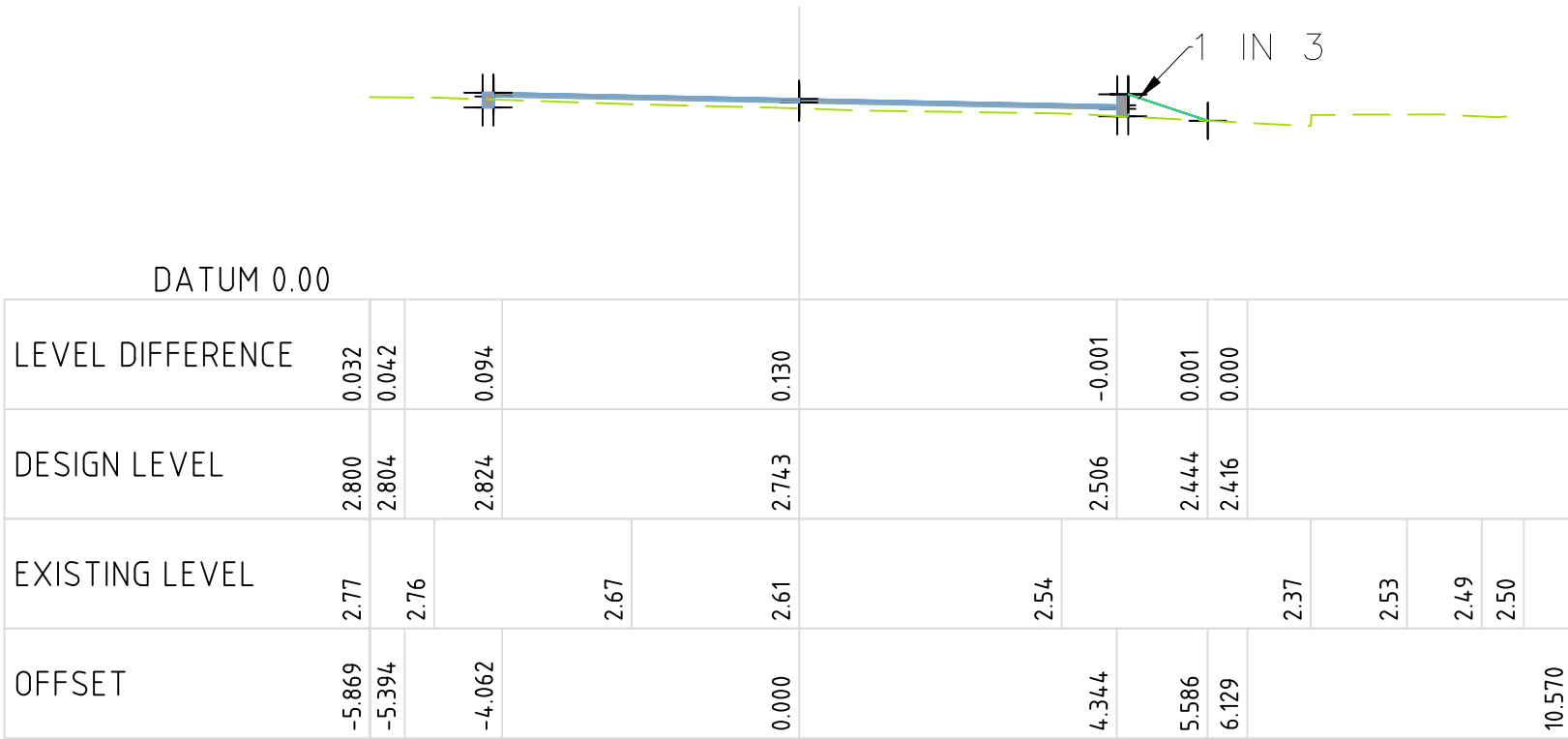
ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 10.000



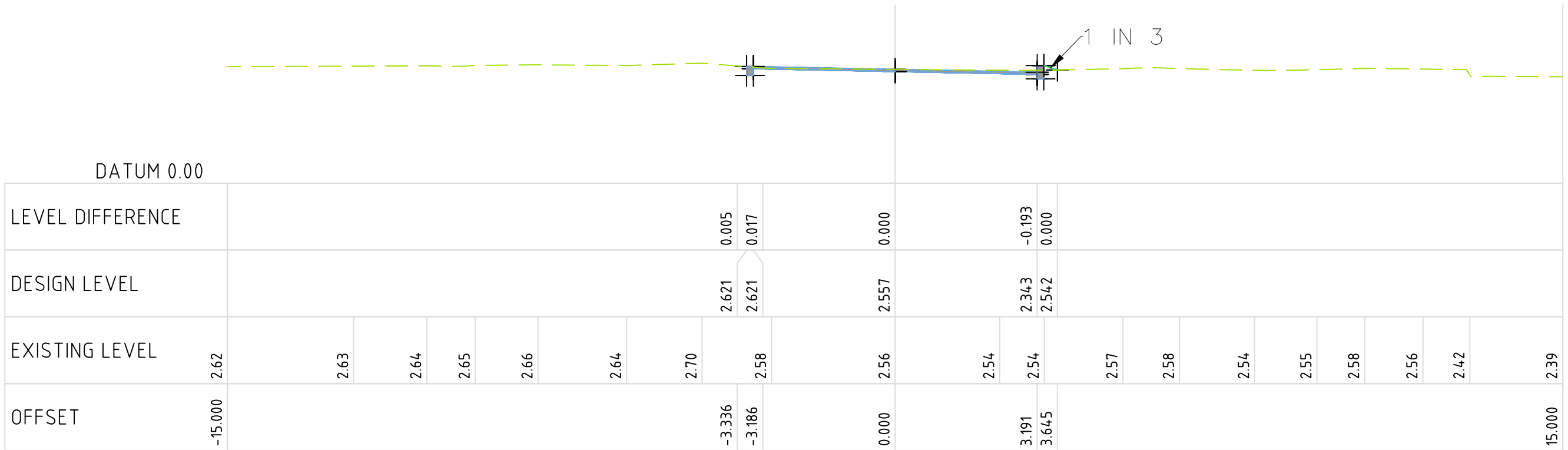
ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 28.336



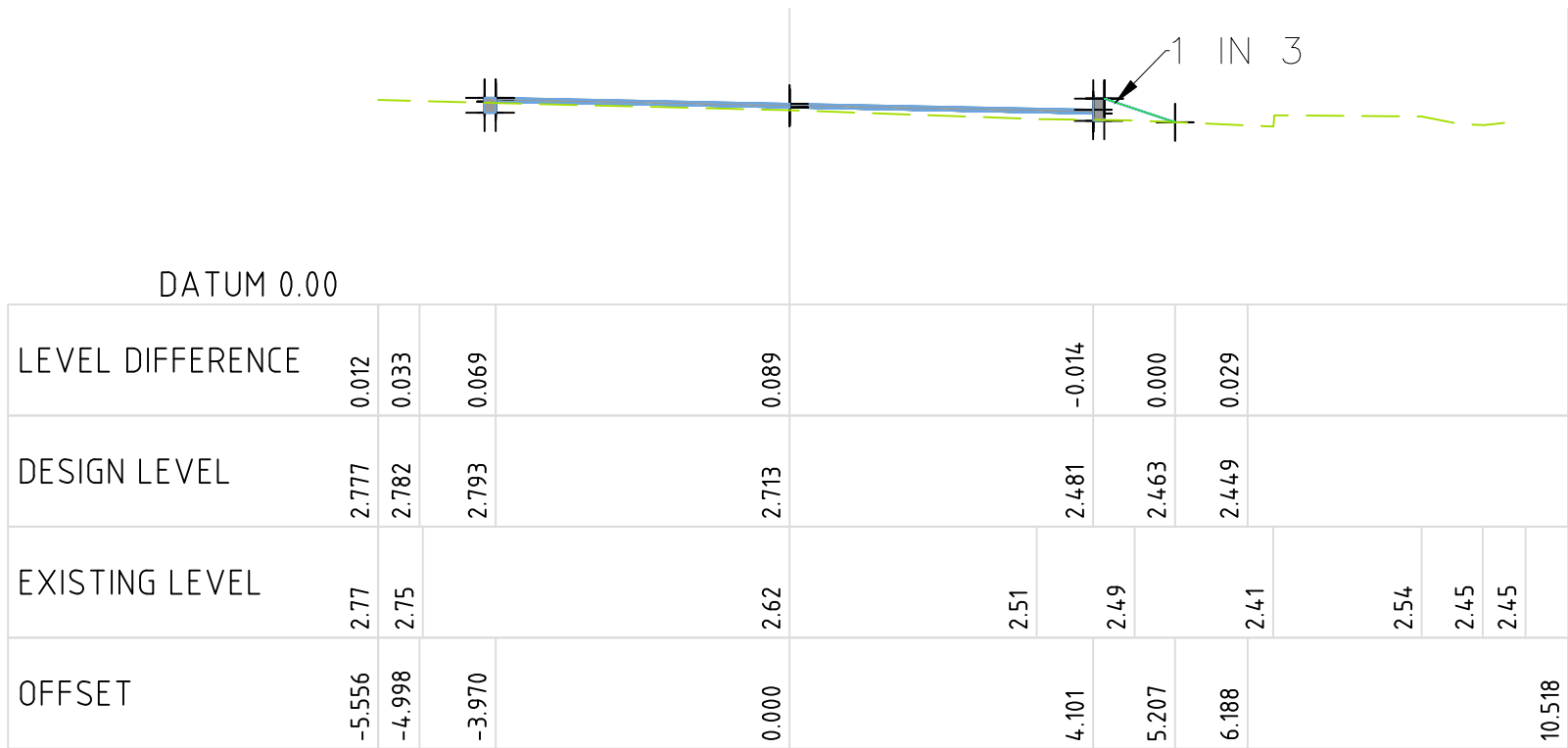
ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 2.334



ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 20.000

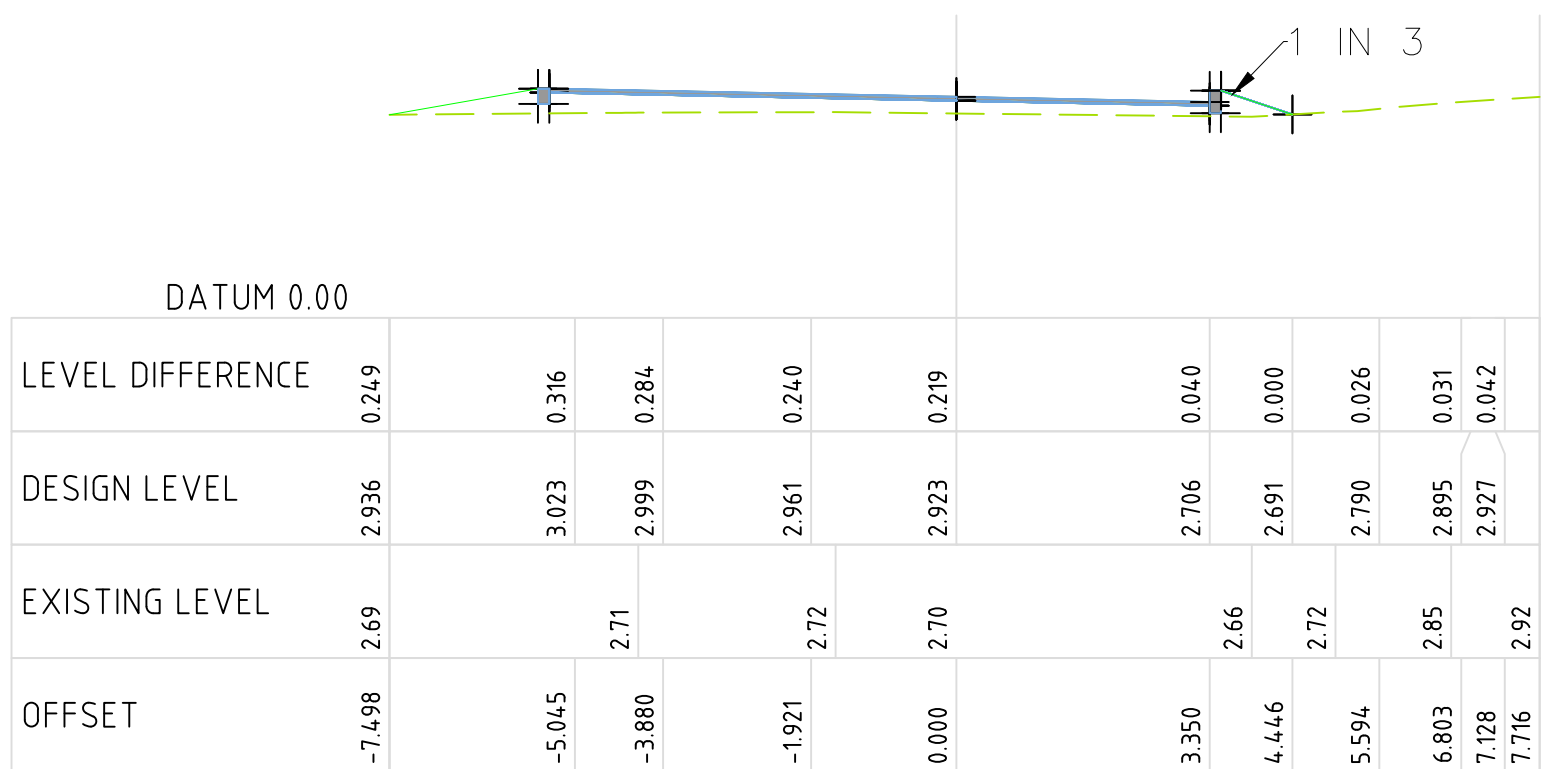


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CH 0.000

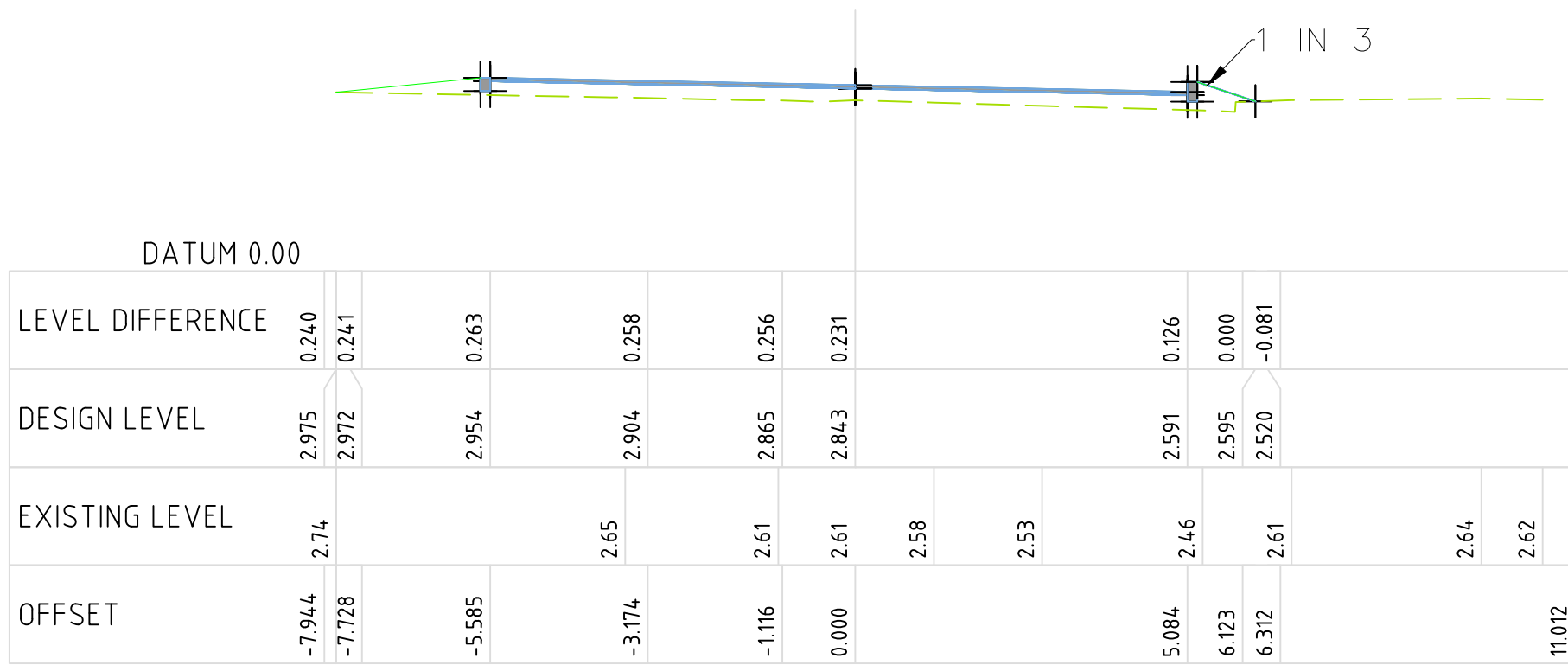


ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 16.852

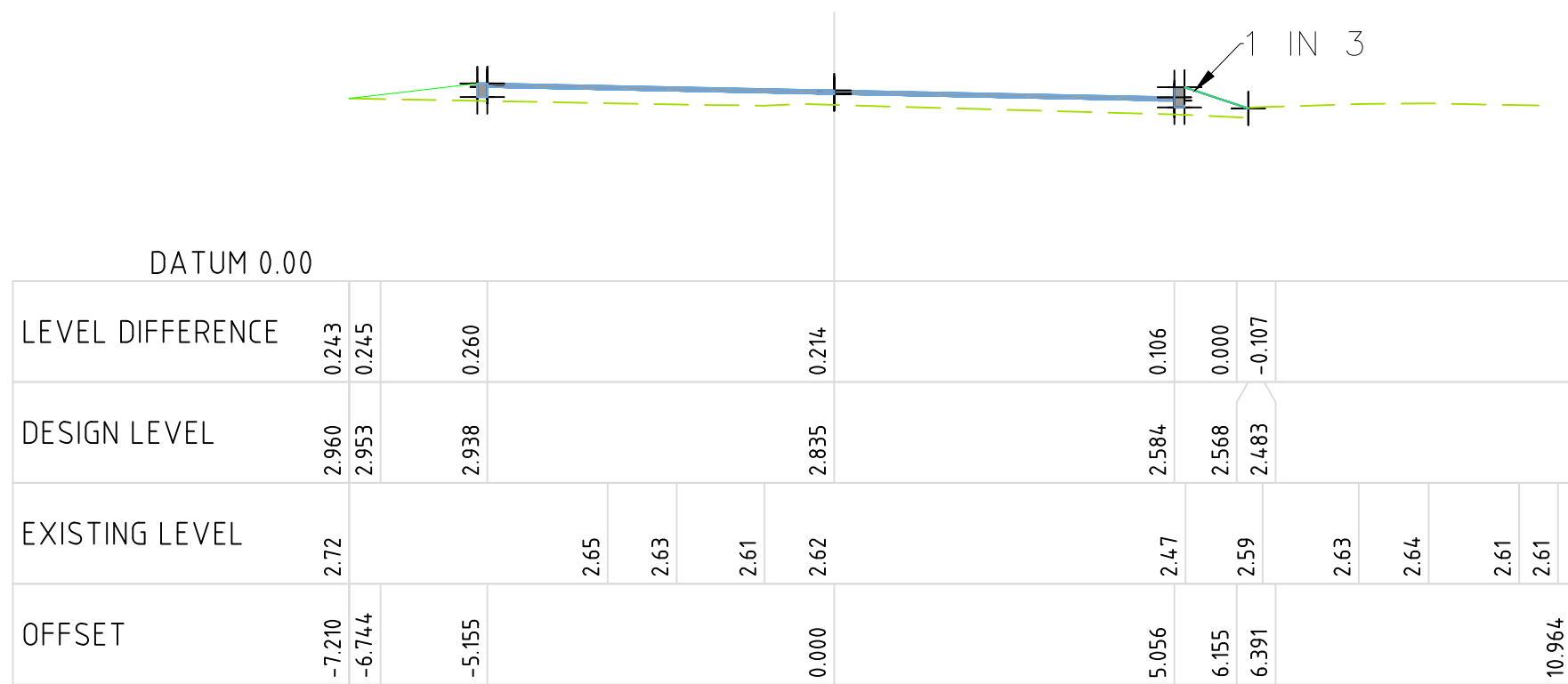




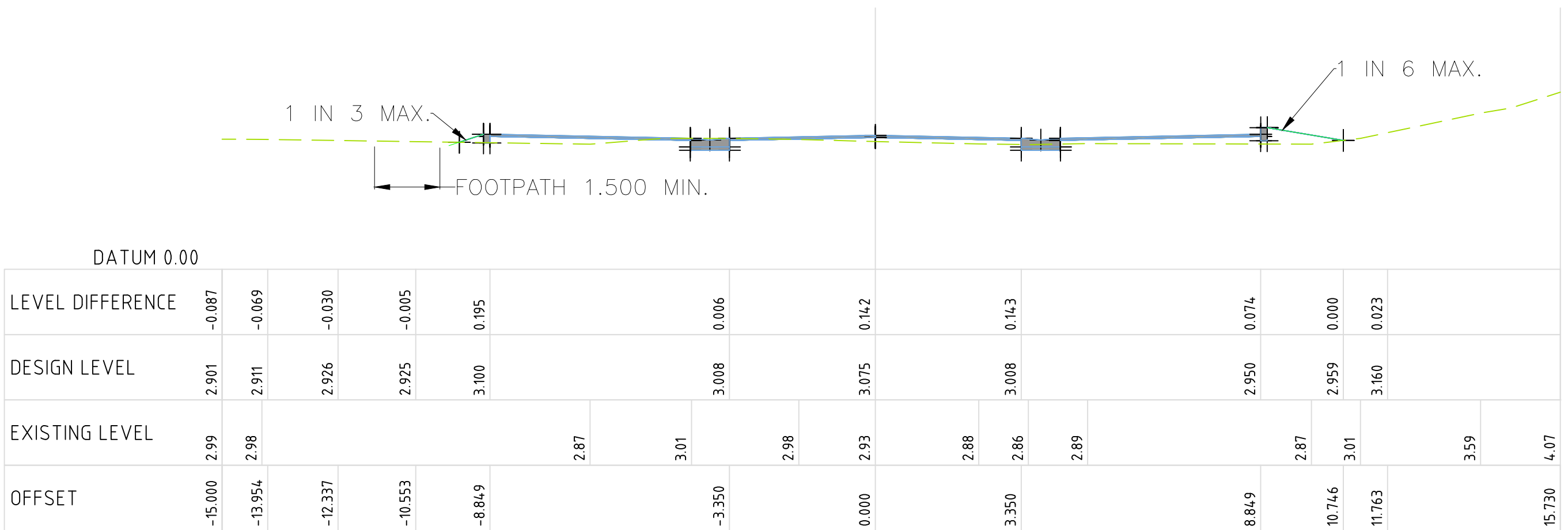
ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 40.882



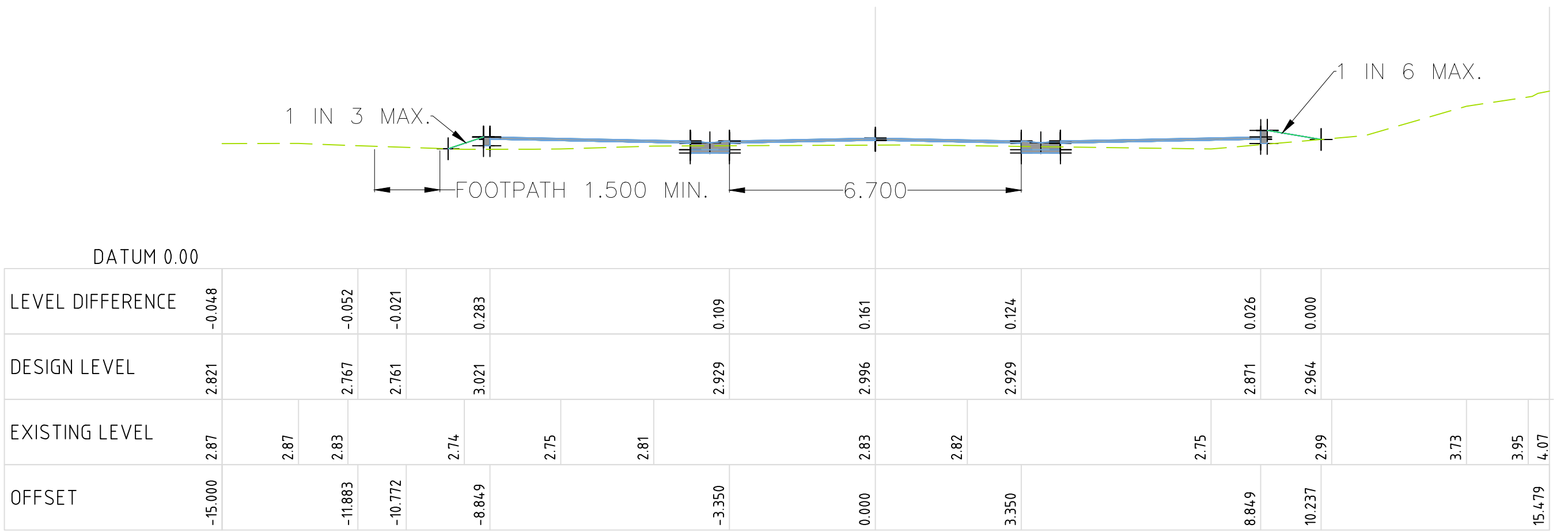
ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 30.784



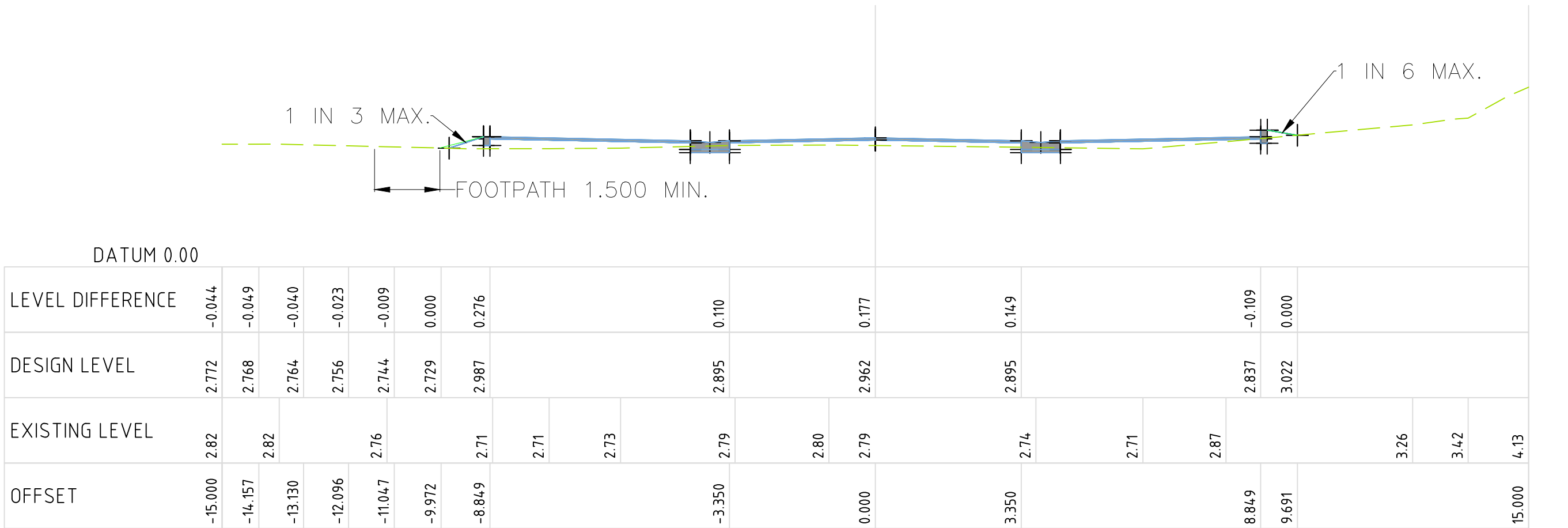
ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 30.000



ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 60.000

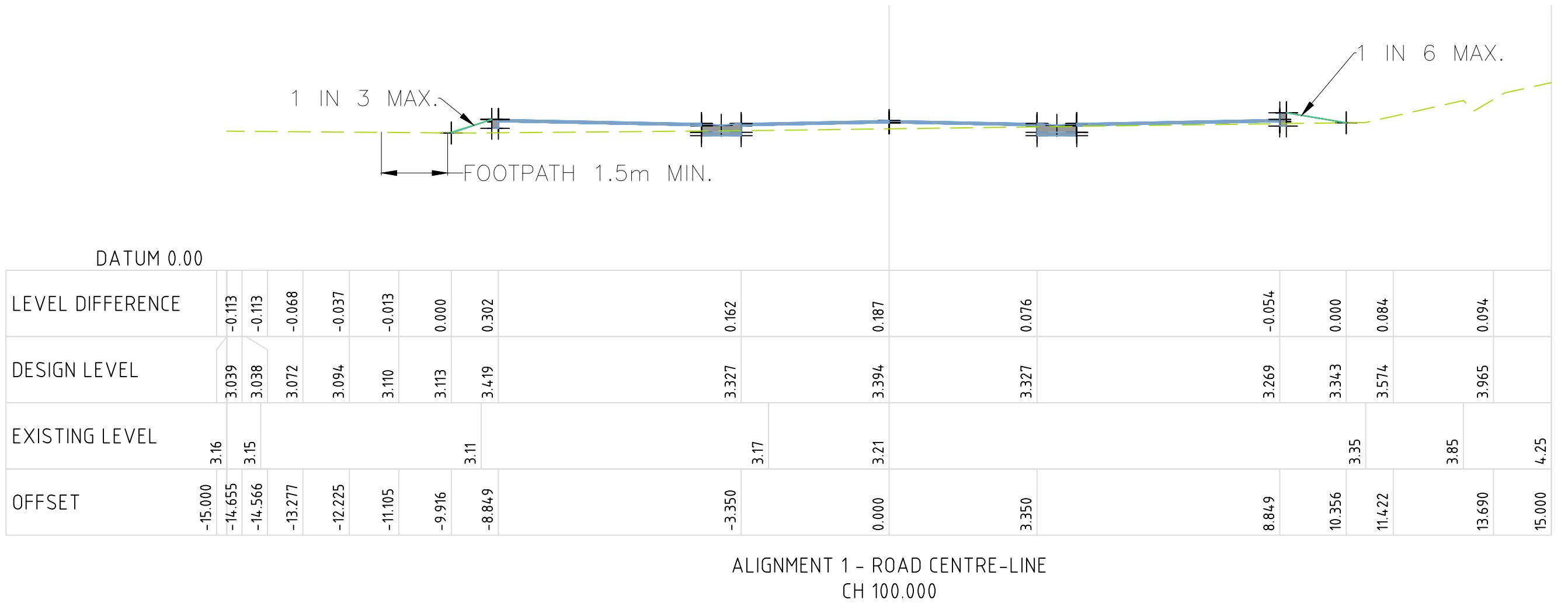
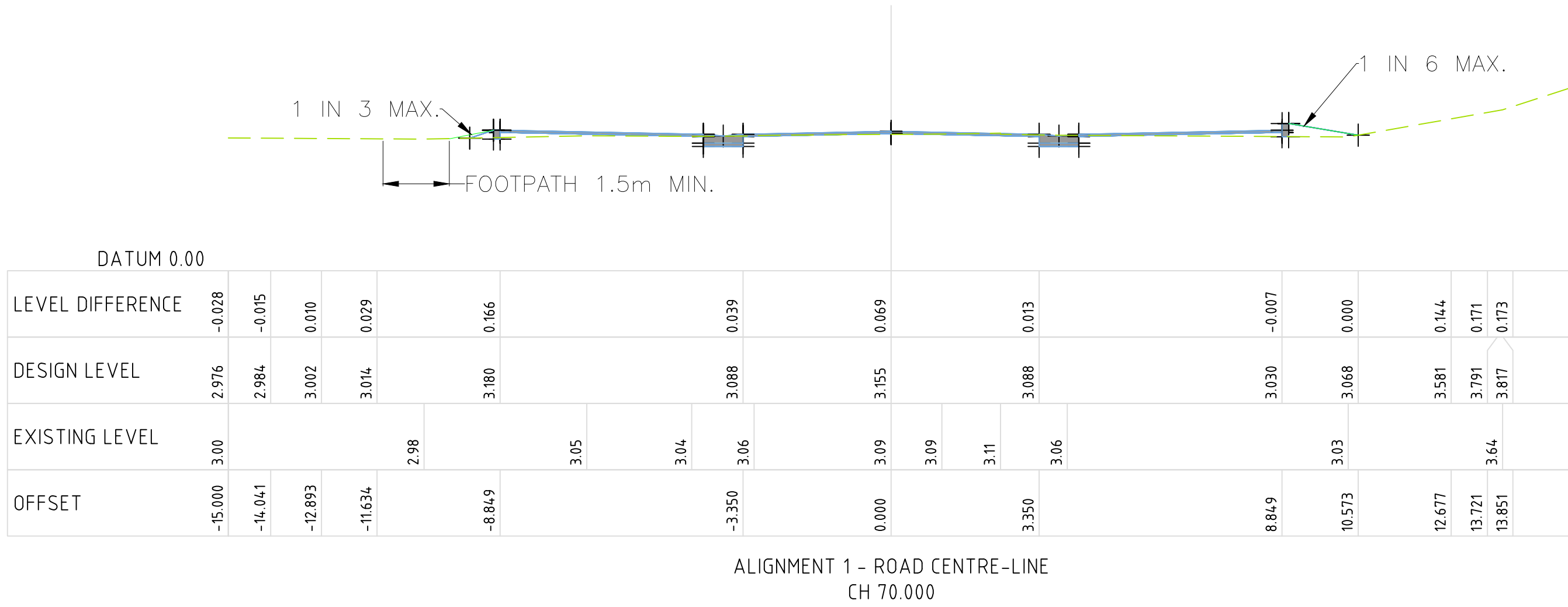
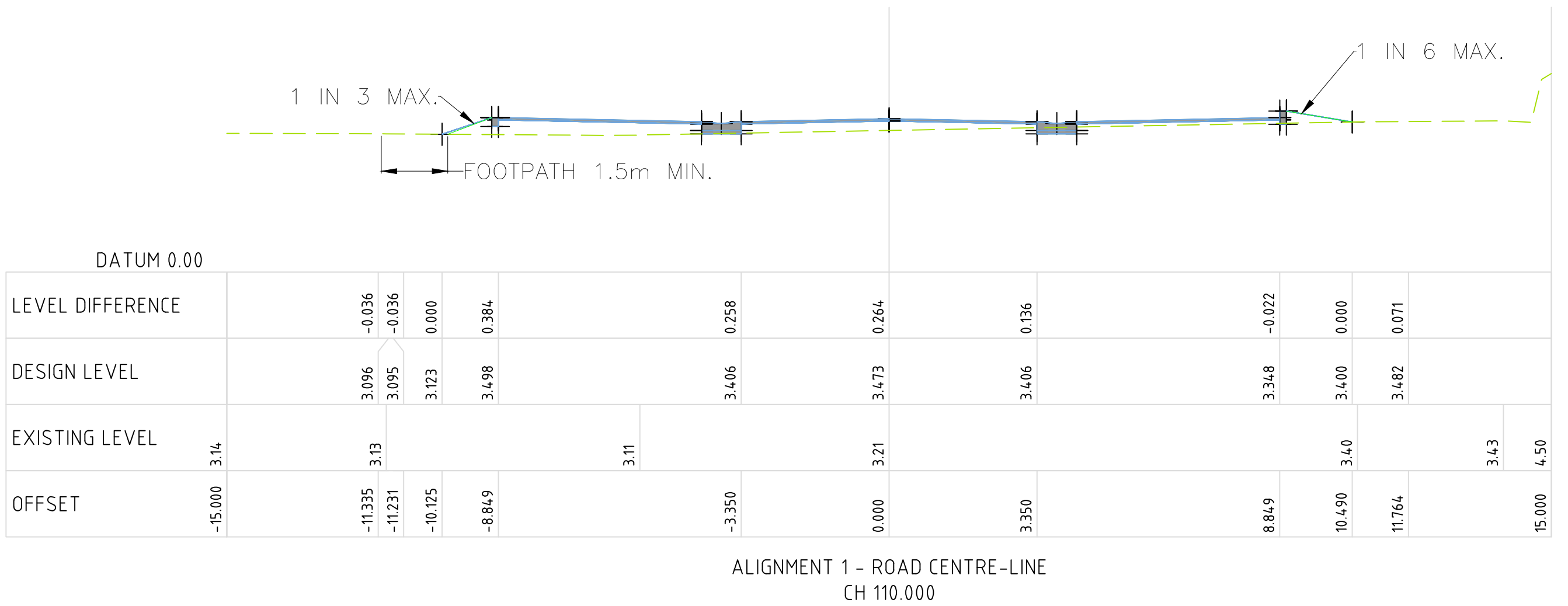
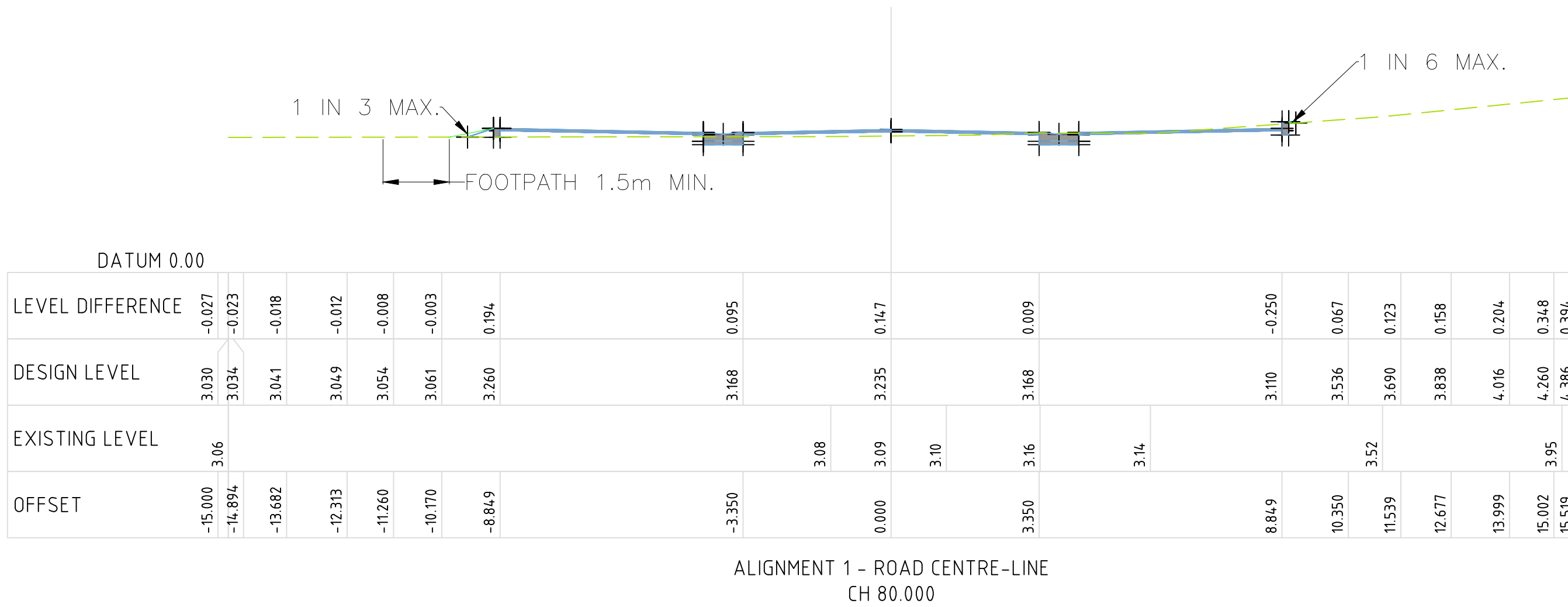
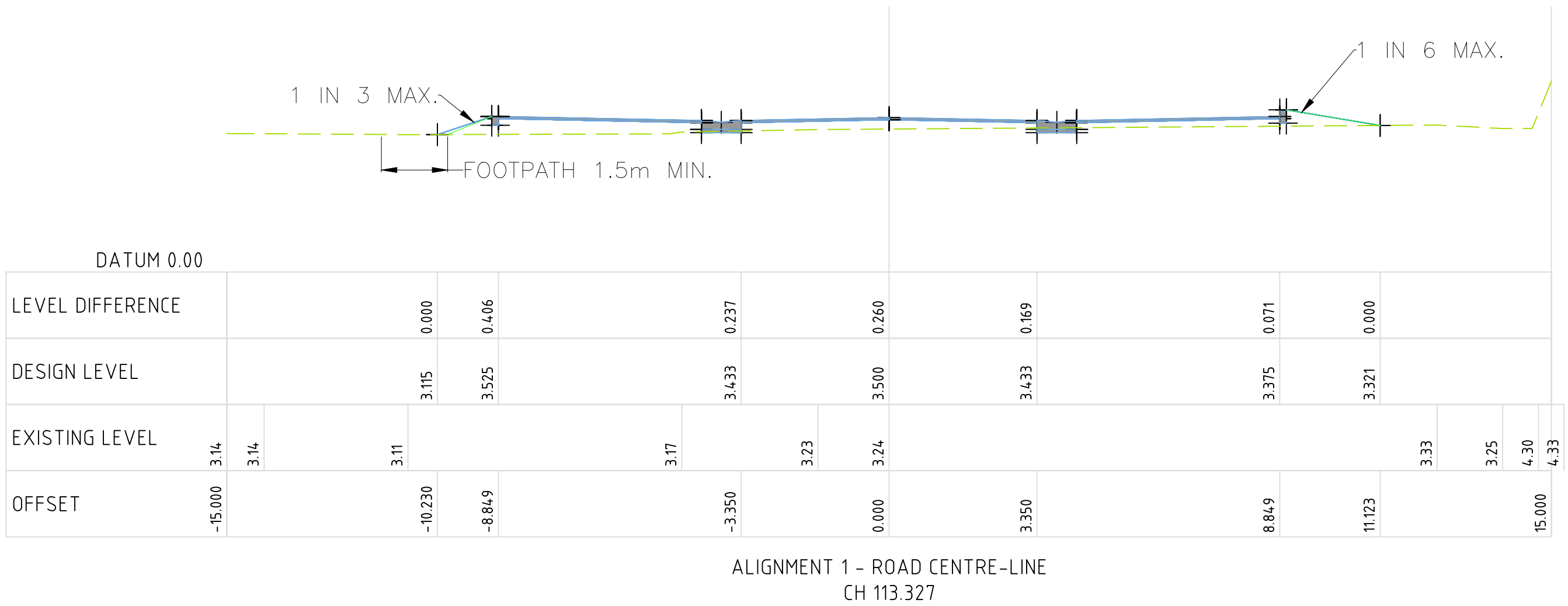
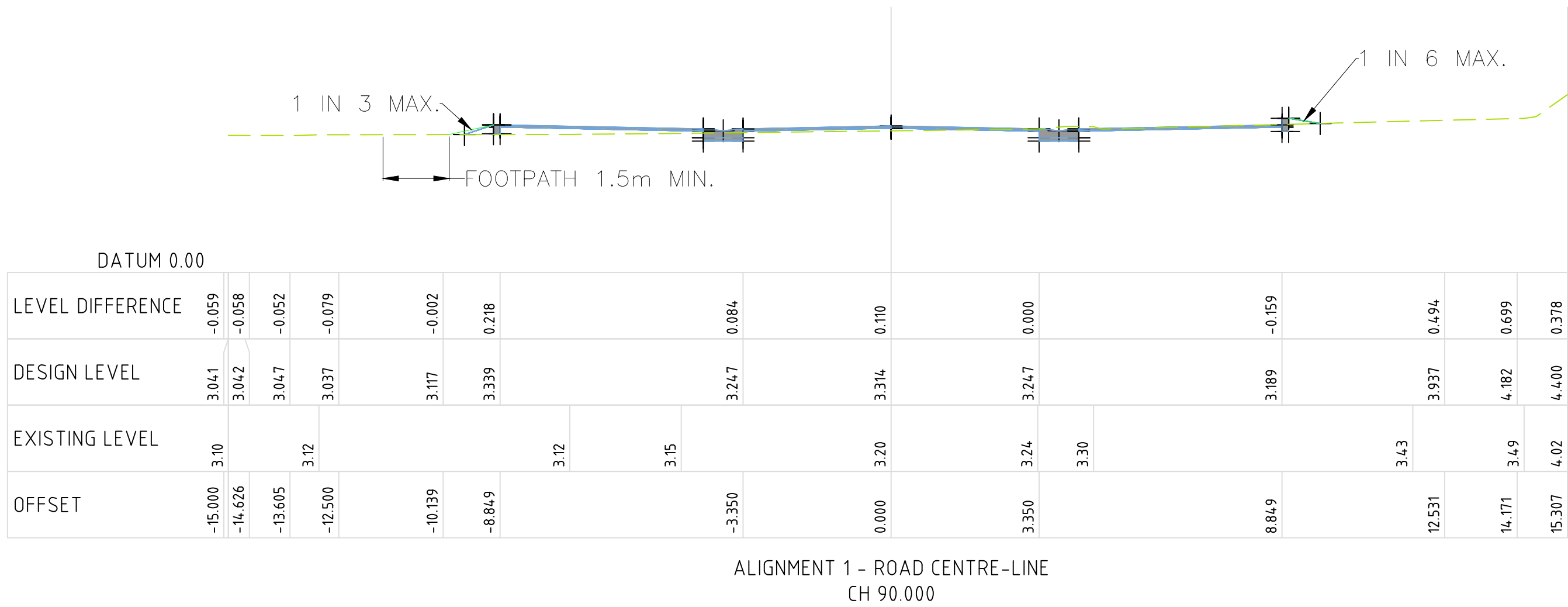


ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 50.000



ALIGNMENT 1 - ROAD CENTRE-LINE  
CH 45.827







KERB ONLY

DATUM -2.00											
LEVEL DIFFERENCE											
DESIGN LEVEL	2.712	2.708			2.598	0.091					
EXISTING LEVEL			2.54		2.51						
OFFSET	-9.826	-8.422	-8.414		-2.914		0.000	2.53	2.55	2.61	2.64

ALIGNMENT 4 - CARPARK 2  
CH 10.378

RK&T

BATTER TO EXISTING 1 IN 3 MAX.  
EITHER IN CUT OR FILL BOTH SIDES (TYP)

DATUM 0.00											
LEVEL DIFFERENCE	0.117	0.137	0.155	0.153		0.125		0.078	0.040	0.011	0.079
DESIGN LEVEL	2.641	2.647	2.644	2.618	0.153	2.587	0.125	2.542	2.511	2.498	2.587
EXISTING LEVEL	2.52	2.51		2.46	2.46			2.46	2.48		2.53
OFFSET	-5.209	-4.240	-2.988	-1.608	0.000	2.46	0.000	1.735	2.914	3.925	5.192

ALIGNMENT 4 - CARPARK 2  
CH 5.656

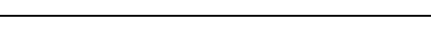



RK&T

DATUM 0.00											
LEVEL DIFFERENCE	0.019	0.015			0.000			-0.101	0.002		
DESIGN LEVEL	2.506	2.487			2.418			2.366	2.476		
EXISTING LEVEL	2.49				2.42			2.47	2.47		
OFFSET	-3.883	-2.796			0.000			2.608	3.208	4.288	

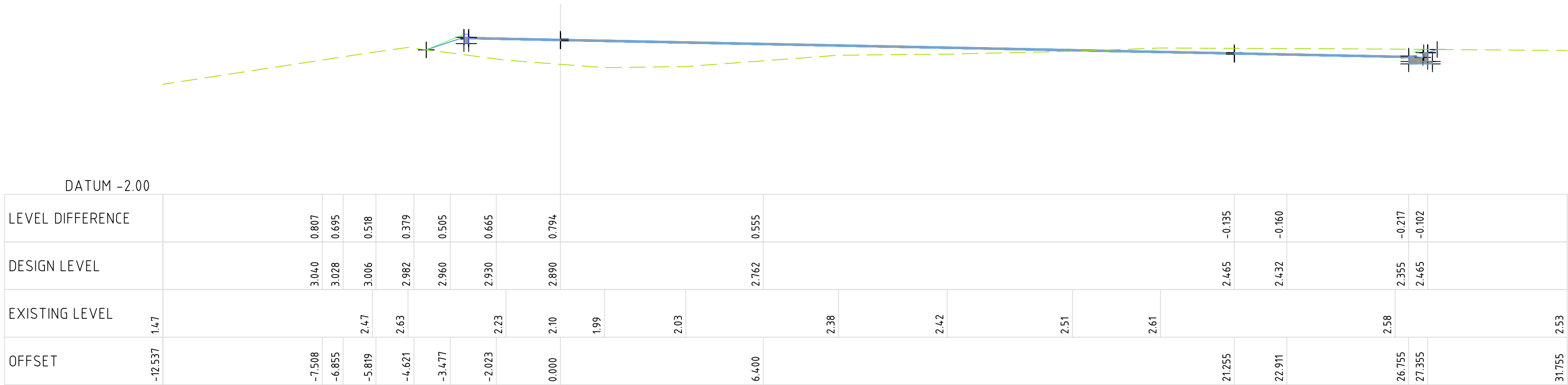
ALIGNMENT 4 - CARPARK 2  
CH 0.000



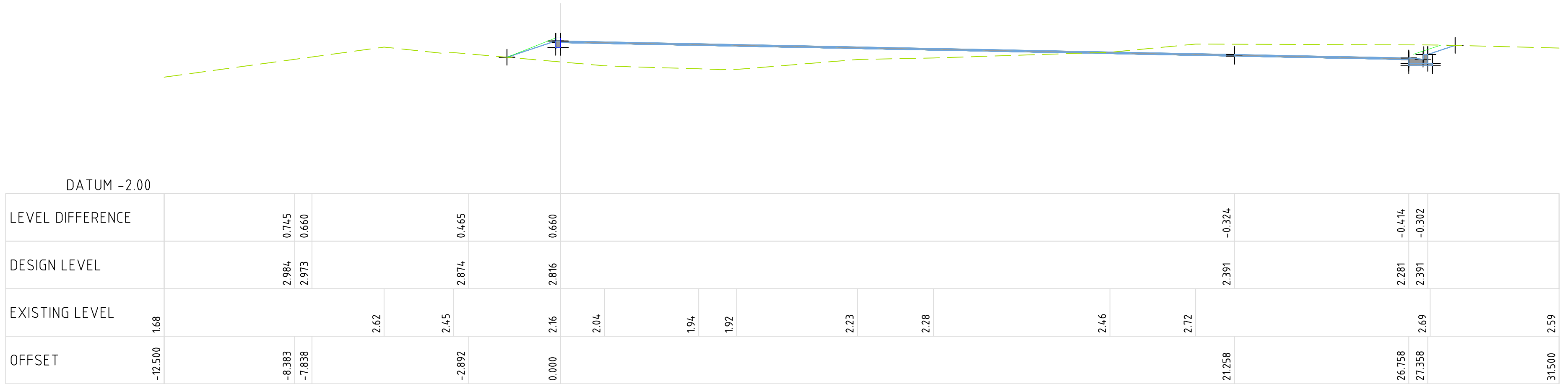


				LEVEL DATUM: AHD	PLOT DATE: 24/10/2022	FOLDER:V:\urban2\DRAWINGS Current\TOM SPECS AND PROJECTS FOLDER 2\PROJECTS 2022 - 23\Warringah Golf Club - kentwell road\TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1 241022.dwg	 <div>northern beaches council</div>	<div>CARPARK KENTWELL ROAD, NORTH MANLY INTERSECTION OF KENTWELL ROAD AND PITTSWATER ROAD CROSS SECTIONS - ALIGNMENT 4 SHEET 2</div>	<div>DRAWING NO. TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1-5004</div>	<div>REVISION: 2</div>		
			CO-ORD SYSTEM: MGA	PRELIMINARY	DESIGN APPROVED	APPROVED FOR CONSTRUCTION					A	 0 0.10 0.20 0.30 0.40 0.50 METRES 1:20 @ A3
			SURVEYED: N.A.	DRAWN BY: THOMAS LAU	DESIGNED BY: THOMAS LAU	PROJ. MGR: N.A.					B	 0 0.2 0.4 0.6 0.8 1 METRES 1:40 @ A3
			WORK-AS-EXECUTED	DATED: 10/10/22	DATED: 10/10/22	DATE: (**/**/****)					C	 0 0.5 1.0 1.5 2.0 2.5 METRES 1:100 @ A3
2	24/10/22	AMENDED FROM COMMENTS REC'D FROM AC/RP	TL	BY: N.A.	INITIATED BY: RICHARD PARRY	APPROVED BY: *****					APPROVED BY: THOMAS LAU	
1	10/10/22	INITIATE DRAWINGS	TL	DATE: **/**/****	(SNR PROJECT MANAGER)	PRINCIPAL ENGINEER	PRINCIPAL ENGINEER					
No	DATE	AMENDMENTS	INITIALS									

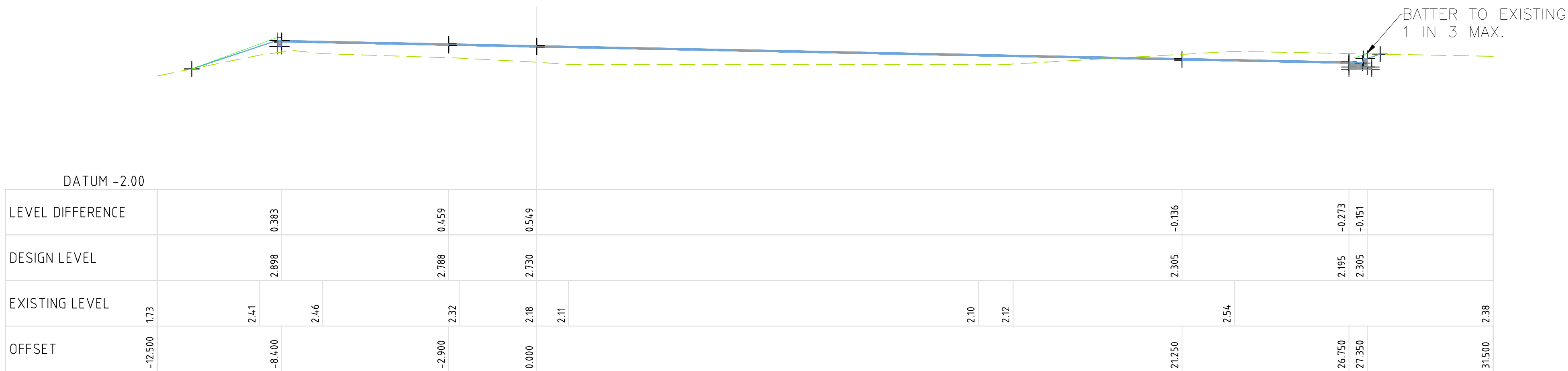




ALIGNMENT 4 - CARPARK 2  
CH 45.301

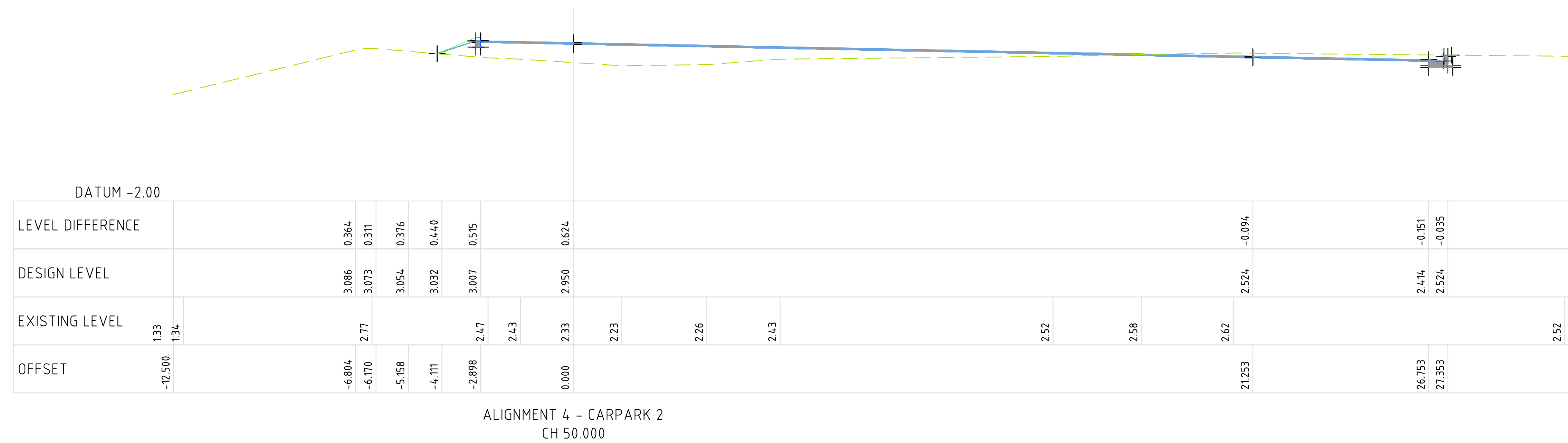


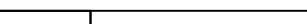
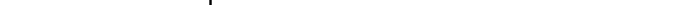


ALIGNMENT 4 - CARPARK 2  
CH 39.471



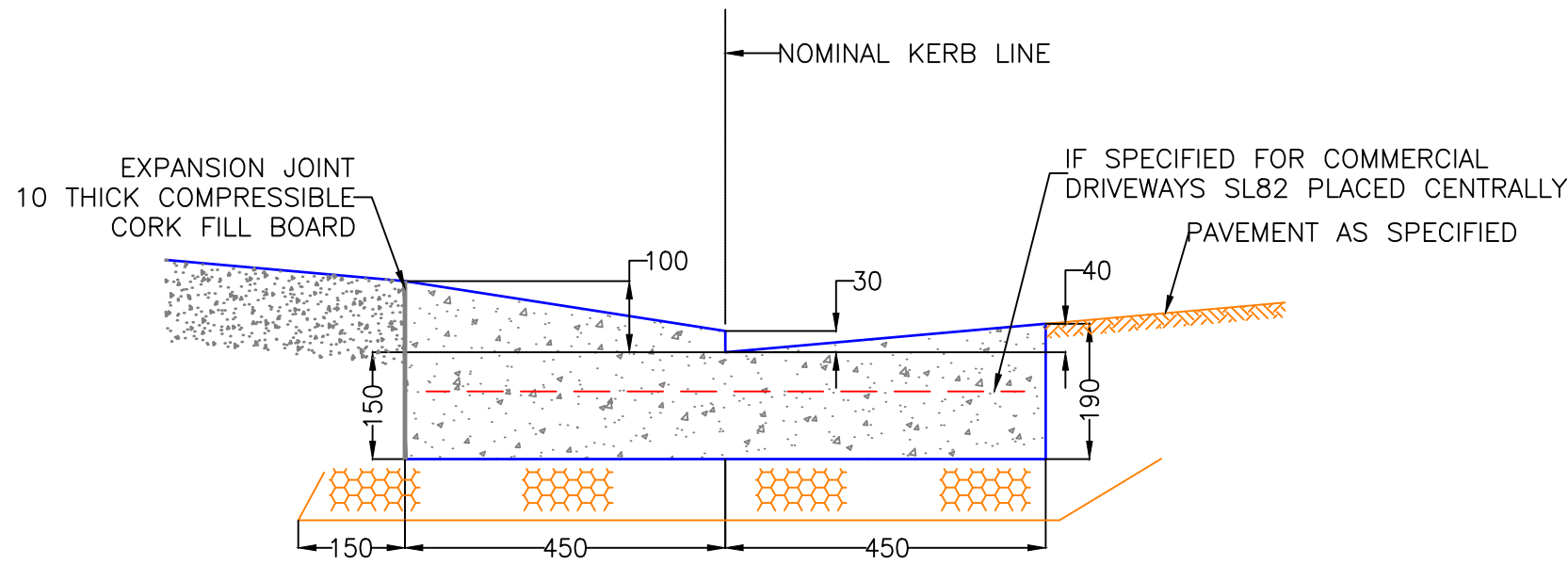
ALIGNMENT 4 - CARPARK 2  
CH 32.702



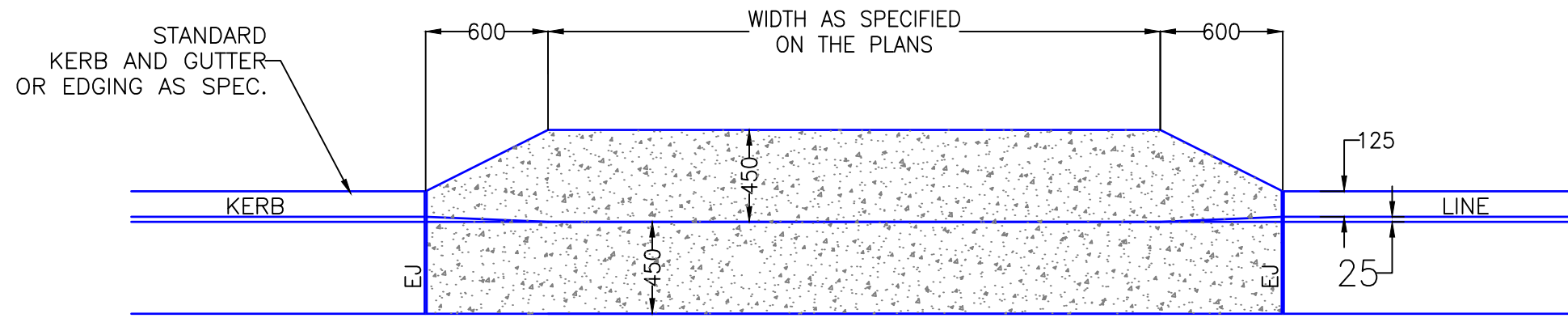


				LEVEL DATUM: AHD	PLOT DATE: 24/10/2022	FOLDER: V:\urban2\DRAWINGS Current\TOM SPECS AND PROJECTS FOLDER 2\PROJECTS 2022 -- 23\Warringah Golf Club -- kentwell road\TCI--KENTWELL RD GOLF COURSE CARPARK CONCEPT1 241022.dwg			 northern beaches council	CARPARK		
				CO-ORD SYSTEM: MGA	PRELIMINARY	DESIGN APPROVED	APPROVED FOR CONSTRUCTION	A		 0 0.10 0.20 0.30 0.40 0.50 METRES 1:20 @ A3	KENTWELL ROAD, NORTH MANLY	
				SURVEYED: N.A.	DRAWN BY: THOMAS LAU	DESIGNED BY: THOMAS LAU	PROJ. MGR: N.A.	B		 0 0.2 0.4 0.6 0.8 1 METRES 1:40 @ A3	INTERSECTION OF KENTWELL ROAD AND PITTSWATER ROAD	
				WORK--AS--EXECUTED	DATED: 10/10/22	DATED: 10/10/22	DATE: (**/**/****)	C		 0 0.5 1.0 1.5 2.0 2.5 METRES 1:100 @ A3	CROSS SECTIONS -- ALIGNMENT 4	
				BY: N.A.	INITIATED BY: RICHARD PARRY	APPROVED BY: THOMAS LAU					SHEET 4	
2	24/10/22	AMENDED FROM COMMENTS REC'D FROM AC/RP	TL	DATE: **/**/****	(SNR PROJECT MANAGER)	PRINCIPAL ENGINEER				DRAWING NO. TCI--KENTWELL RD GOLF COURSE CARPARK CONCEPT1--5006		
1	10/10/22	INITIATE DRAWINGS	TL							REVISION: 2		
No	DATE	AMENDMENTS	INITIALS									

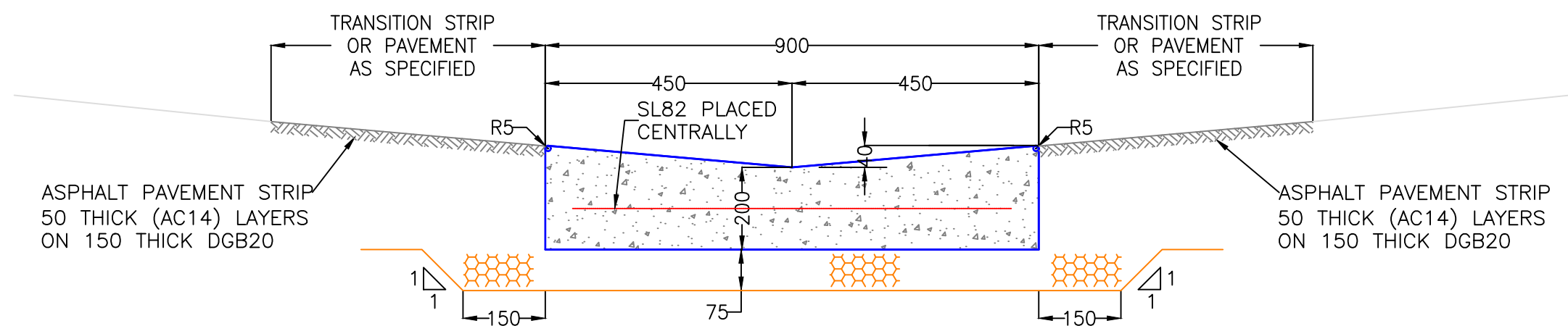




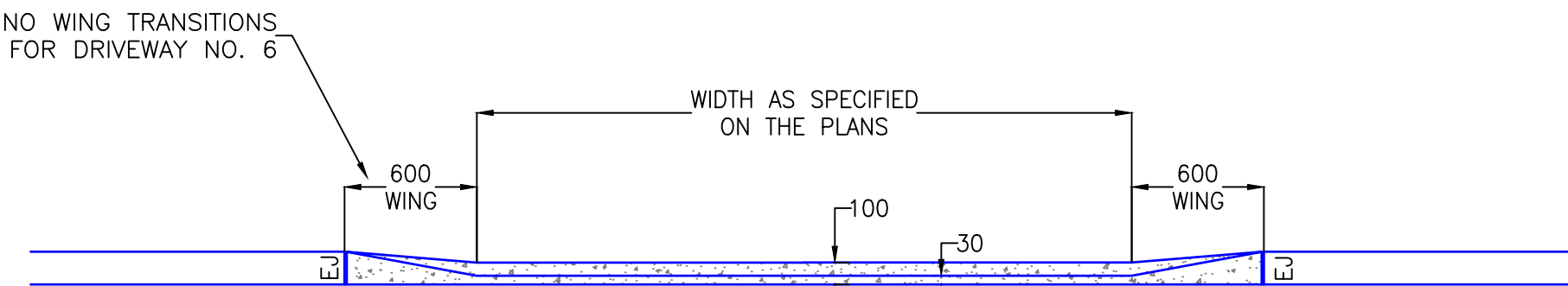
CONCRETE DRIVEWAY LAYBACK DETAIL  
SCALE - NOT TO SCALE (0.173cum/m)



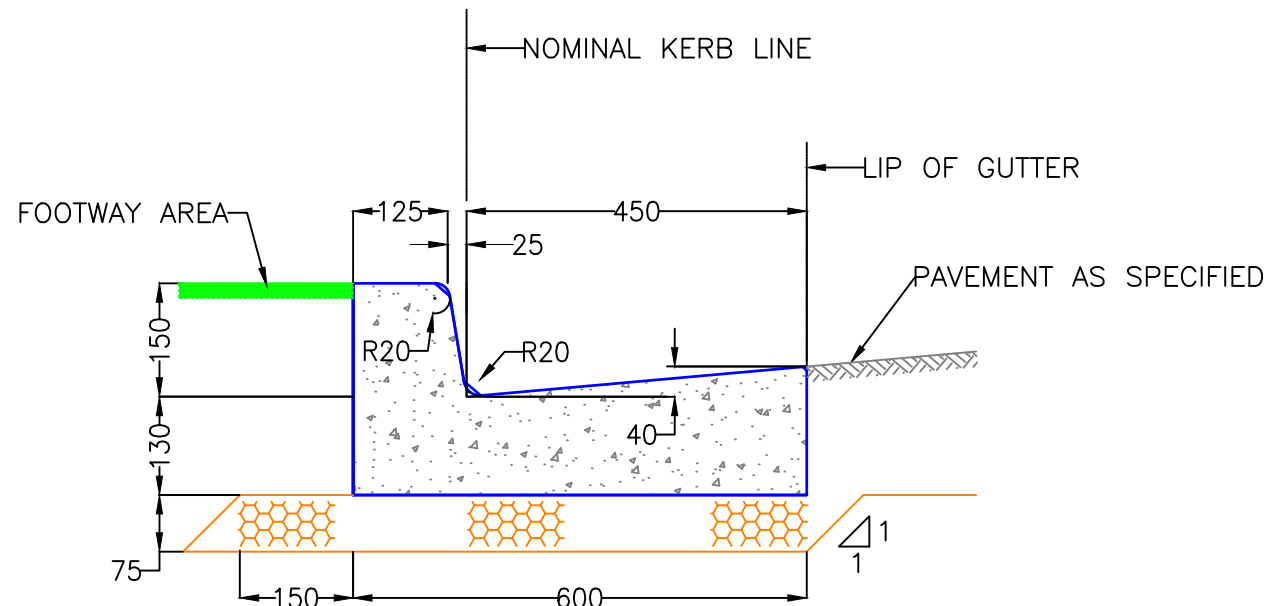
CONCRETE LAYBACK - PLAN  
SCALE - NOT TO SCALE



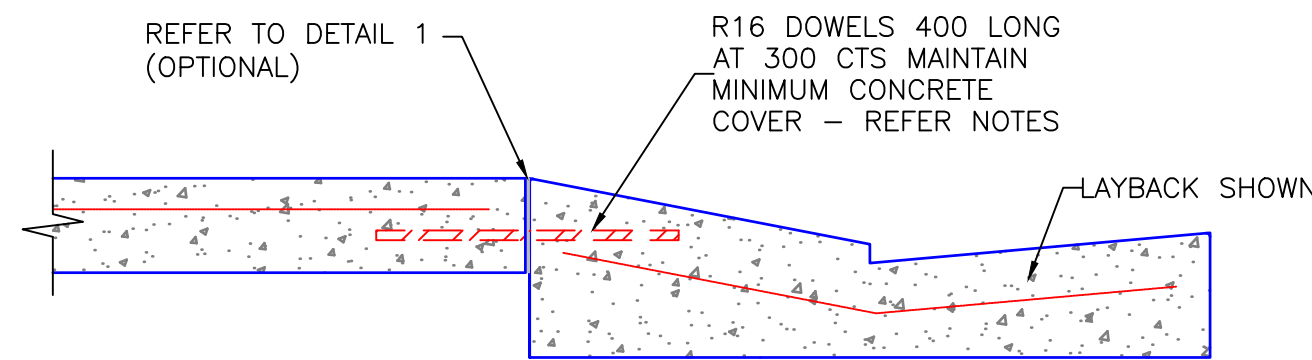
CONCRETE DISH DRAIN DETAIL (DD)  
SCALE - NOT TO SCALE (0.153cum/m)



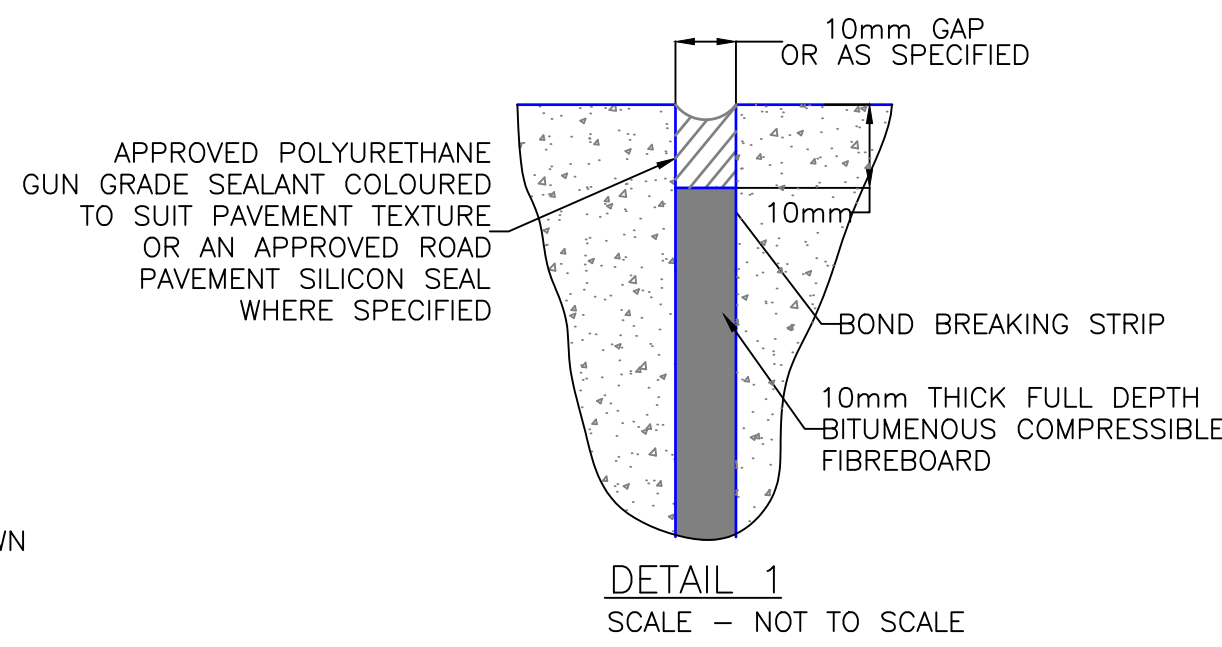
CONCRETE LAYBACK - FRONT ELEVATION  
SCALE - NOT TO SCALE



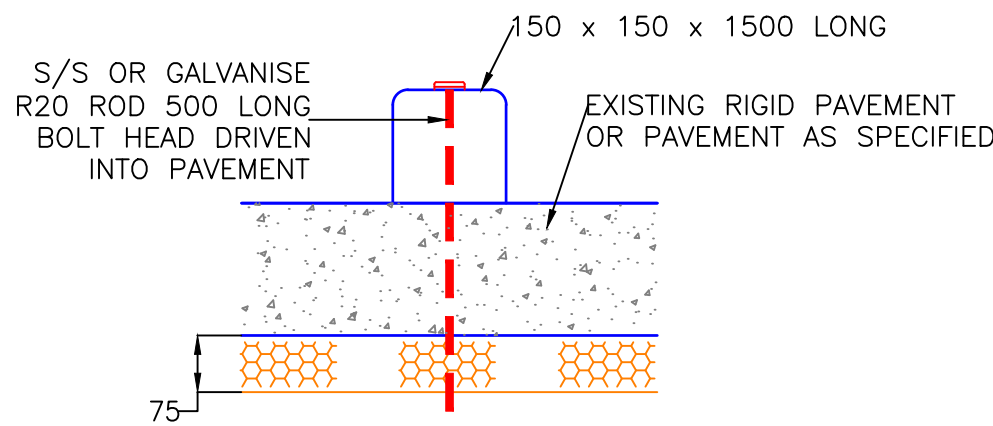
STANDARD 150 HIGH CONCRETE KERB & GUTTER (K&G) DETAIL  
SCALE - NOT TO SCALE (0.108cum/m)



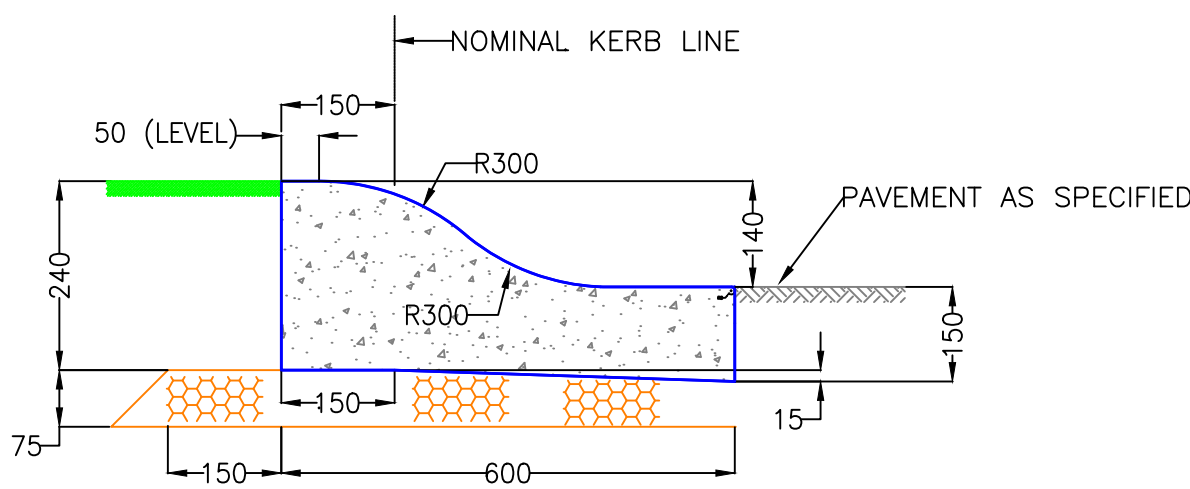
LONGITUDINAL JOINT (LJ) DETAIL  
SCALE - NOT TO SCALE  
NOTE: DOWEL INSTALLATION ONLY REQUIRED WHERE NOTED



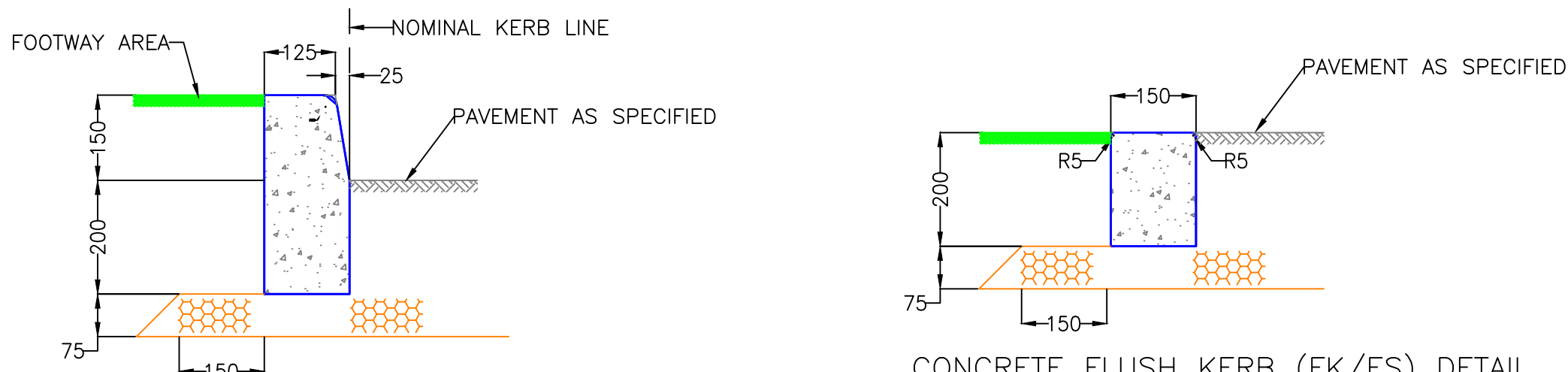
DETAIL 1  
SCALE - NOT TO SCALE



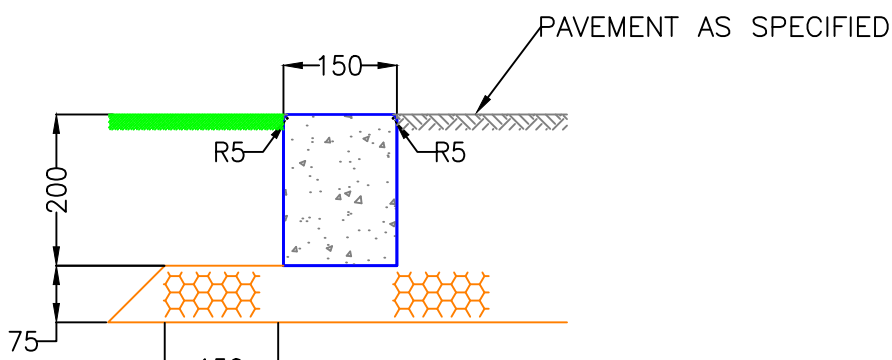
PRE-CAST WHEEL STOP DETAIL  
SCALE - NOT TO SCALE



CONCRETE ROLLED KERB AND TOE (RK&T) DETAIL  
SCALE A (0.052cum/m)



CONCRETE KERB ONLY (KO) DETAIL  
SCALE A (0.05cum/m)



CONCRETE FLUSH KERB (FK/ES) DETAIL  
SCALE A (0.030cum/m)  
NOTE: TO BE USED FOR ROAD EDGING

STANDARD KERB AND GUTTER NOTES

1. KERB AND GUTTER, CONCRETE EDGING, DISH DRAINS AND THE LIKE SHALL BE POURED IN PLAIN CONCRETE AND FINISHED WITH A STEEL TROWEL.
2. THE MINIMUM COMPRESSIVE STRENGTH SHALL BE 25MPa AT 28 DAYS.
3. FOR ELEMENTS CONSTRUCTED USING SLIPFORM, REINFORCEMENT WILL NOT BE REQUIRED PROVIDED THAT THE CONCRETE COMPRESSIVE STRENGTH IS NOT LESS THAN 32MPa AT 28 DAYS.
4. WHERE COUNCIL OR ITS REPRESENTATIVE DIRECTS THAT THE GUTTER IS TO BE RETAINED, THE CONTRACTOR SHALL PLACE A 75mm DEEP SAW CUT IN THE GUTTER INVERT AND REMOVE THE KERB AND OR LAYBACK.
5. WHERE EXISTING KERB AND ASSOCIATED ELEMENT IS TO BE REPLACED SAW CUT IN THE ASPHALT MINIMUM 500mm FROM LIP OF GUTTER, COMPACT SUBGRADE AND INSTALL ASPHALT STRIP TO MAKE SMOOTH TRANSITION.
6. THE CONSTRUCTION OF ALL VEHICLE CROSSINGS AND ASSOCIATED WORKS WITHIN THE ROAD RESERVE MUST BE UNDERTAKEN BY A COUNCIL APPROVED CONTRACTOR.

VEHICLE CROSSING CONSTRUCTION NOTES

1. AT LEAST 48 HOURS' NOTICE OF INTENTION SHALL BE GIVEN TO COUNCIL ENGINEER TO POUR CONCRETE WITHIN THE ROAD RESERVE AND NO CONCRETE SHALL BE PLACED UNTIL THE FORMWORK HAS BEEN APPROVED AND AN INSPECTION NOTICE ISSUED.
2. ALL DISTURBED AREAS OF THE FOOTWAY ADJACENT TO THE VEHICLE CROSSING SHALL BE TURFED AND FINISHED LEVEL WITH THE CONCRETE SURFACE. RAISED EDGES ARE UNACCEPTABLE.
3. THE ROAD ADJOINING THE VEHICLE CROSSING SHALL BE BATTERED AND TURFED AT A MAXIMUM GRADIENT OF 1V:6H OR AS DIRECTED BY COUNCIL.
4. CONCRETE FOOTPATH ADJUSTMENTS SHALL BE IN ACCORDANCE WITH COUNCIL'S SPECIFICATION AND SATISFACTION.
5. THE SUBGRADE MUST BE THOROUGHLY COMPACTED BY THE USE OF VIBRATORY COMPACTION EQUIPMENT UNTIL IT SHOWS NO SIGNS OF MOVEMENT, OR AS DIRECTED BY COUNCIL.
6. VEHICLE CROSSING SLABS MUST BE POURED IN PLAIN CONCRETE. SLAB SURFACE MUST BE COVE FINISHED (OR EQUIVALENT) AND EDGES TO BE FINISHED WITH A 50mm MARGIN.
7. ALL CHANGES IN GRADE SHALL BE SCREEDED TO ENSURE NO RIGID/SHARP TRANSITIONS.
8. THE MINIMUM COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 25MPa AT 28 DAYS.
9. THE MINIMUM THICKNESS OF CONCRETE SHALL BE AS FOLLOWS:
  - (a) SINGLE RESIDENTIAL DWELLING: 130mm THICK REINFORCED WITH SL72 MESH PLACED 30mm BELOW TOP OF CONCRETE SLAB
  - (b) MULTI-UNIT RESIDENTIAL: 150mm THICK REINFORCED WITH SL82 MESH PLACED 30mm BELOW TOP OF CONCRETE SLAB
  - (c) COMMERCIAL OR INDUSTRIAL: 180mm THICK REINFORCED WITH SL82 MESH PLACED 30mm BELOW TOP OF CONCRETE SLAB
10. THE VEHICLE CROSSING UP TO 2400mm FROM THE GUTTER INVERT SHALL BE GRADED PARALLEL WITH THE ROAD CENTRELINE.
11. THE VEHICLE CROSSING SHALL BE CONSTRUCTED PERPENDICULAR TO THE ROAD PAVEMENT UNLESS OTHERWISE INSTRUCTED BY COUNCIL.
12. THE CONSTRUCTION OF ALL VEHICLE CROSSINGS AND ASSOCIATED WORKS ON THE ROAD RESERVE MUST BE COMPLETED BY A COUNCIL APPROVED CONCRETE CONTRACTOR.
13. NO TREE ROOTS GREATER THAN 50mm IN DIAMETER ARE TO BE REMOVED UNLESS AUTHORISED BY A QUALIFIED ARBORIST.
14. ANY ROOTS APPROVED FOR REMOVAL SHALL BE CLEAN CUT WITH SHARP TOOLS SUCH AS SECATEURS, PRUNERS, HANDSAWS, CHAINSAWS OR SPECIALISED ROOT PRUNING EQUIPMENT.

CONCRETE DRIVEWAY NOTES

1. LAYBACK AND GUTTER SHALL BE CONSTRUCTED IN PLAIN CONCRETE AND FINISHED WITH A STEEL TROWEL.
2. THE MINIMUM COMPRESSIVE STRENGTH FOR DRIVEWAYS SHALL BE 25MPa AT 28 DAYS. FOR COMMERCIAL OR INDUSTRIAL DRIVEWAYS THE SLAB DEPTH SHALL BE INCREASED TO MINIMUM OF 180mm WITH SL82 STEEL MESH AND TOP COVER OF 30mm.
3. THE SUBGRADE SHALL BE EVENLY COMPACTED USING A VIBRATORY COMPACTION EQUIPMENT UNTIL IT SHOWS NO SIGNS OF MOVEMENT, OR AS DIRECTED BY COUNCIL.
4. ALL VEHICLE CROSSINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH LEVELS AND SPECIFICATION ISSUED BY COUNCIL AND MUST COMPLY WITH AS/NZS 2890.1:2004 "OFF STREET CAR PARKING" CODE.
5. ALL KERBING SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWINGS AND SPECIFICATION ISSUED BY COUNCIL.
6. WHERE COUNCIL OR ITS REPRESENTATIVE DIRECTS THAT THE GUTTER IS TO BE RETAINED, THE CONTRACTOR IS TO PLACE A 75mm DEEP SAW CUT IN THE GUTTER INVERT AND REMOVE THE KERB AND/OR LAYBACK.
7. WHERE COUNCIL OR ITS REPRESENTATIVE DIRECTS THAT THE GUTTER IS TO BE REMOVED, A ROAD OPENING PERMIT OR APPLICATION IS TO BE OBTAINED PRIOR TO COMMENCEMENT OF WORKS.
8. THE CONSTRUCTION OF ALL VEHICLE CROSSINGS AND ASSOCIATED WORKS MUST BE PERFORMED BY A COUNCIL APPROVED CONTRACTOR.
9. SAWCUT 500mm ASPHALT STRIP AND MATCH IN LAYBACK WITH ROAD SURFACE TO SMOOTH TRANSITION.

				LEVEL DATUM: AHD	PLOT DATE: 24/10/2022	FOLDER: v:\Urban2\DRAWINGS Current\TOM SPECS AND PROJECTS FOLDER 2\PROJECTS 2022 - 23\Warrigah Golf Club - kentwell road\TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1 241022.dwg
				CO-ORD SYSTEM: MGA	DESIGN APPROVED	APPROVED FOR CONSTRUCTION
				SURVEYED: N.A.	DRAWN BY: THOMAS LAU	PROJ. MGR: N.A.
				WORK-AS-EXECUTED	DESIGNED BY: THOMAS LAU	DATE: (**/**/****)
				BY: N.A.	DATED: 10/10/22	
2	24/10/22	AMENDED FROM COMMENTS REC'D FROM AC/RP	TL		INITIATED BY: RICHARD PARRY	APPROVED BY: THOMAS LAU
1	10/10/22	INITIATE DRAWINGS	TL		APPROVED BY: *****	PRINCIPAL ENGINEER
No	DATE	AMENDMENTS	INITIALS			



CARPARK  
KENTWELL ROAD, NORTH MANLY  
INTERSECTION OF KENTWELL ROAD AND PITTWATER ROAD  
STANDARD DETAILS  
SHEET 1

DRAWING NO. TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1-6000 | REVISION: 2



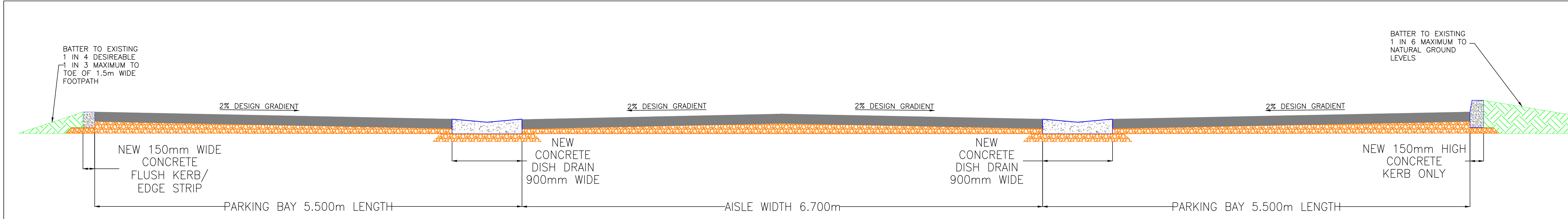


northern  
beaches  
council

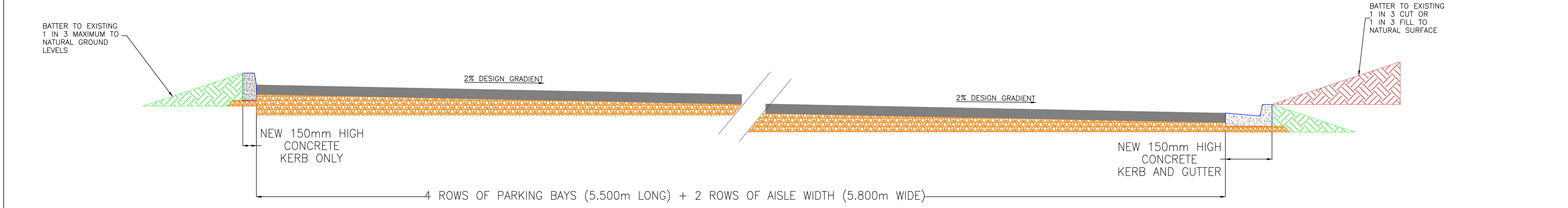
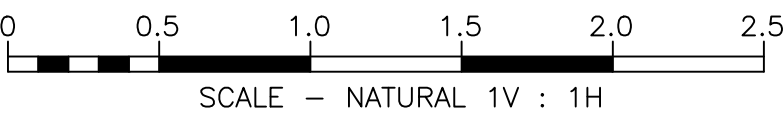
CARPARK  
KENTWELL ROAD, NORTH MANLY  
INTERSECTION OF KENTWELL ROAD AND PITTWATER ROAD  
STANDARD DETAILS  
SHEET 2

DRAWING NO. TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1-6002	REVISION: 2
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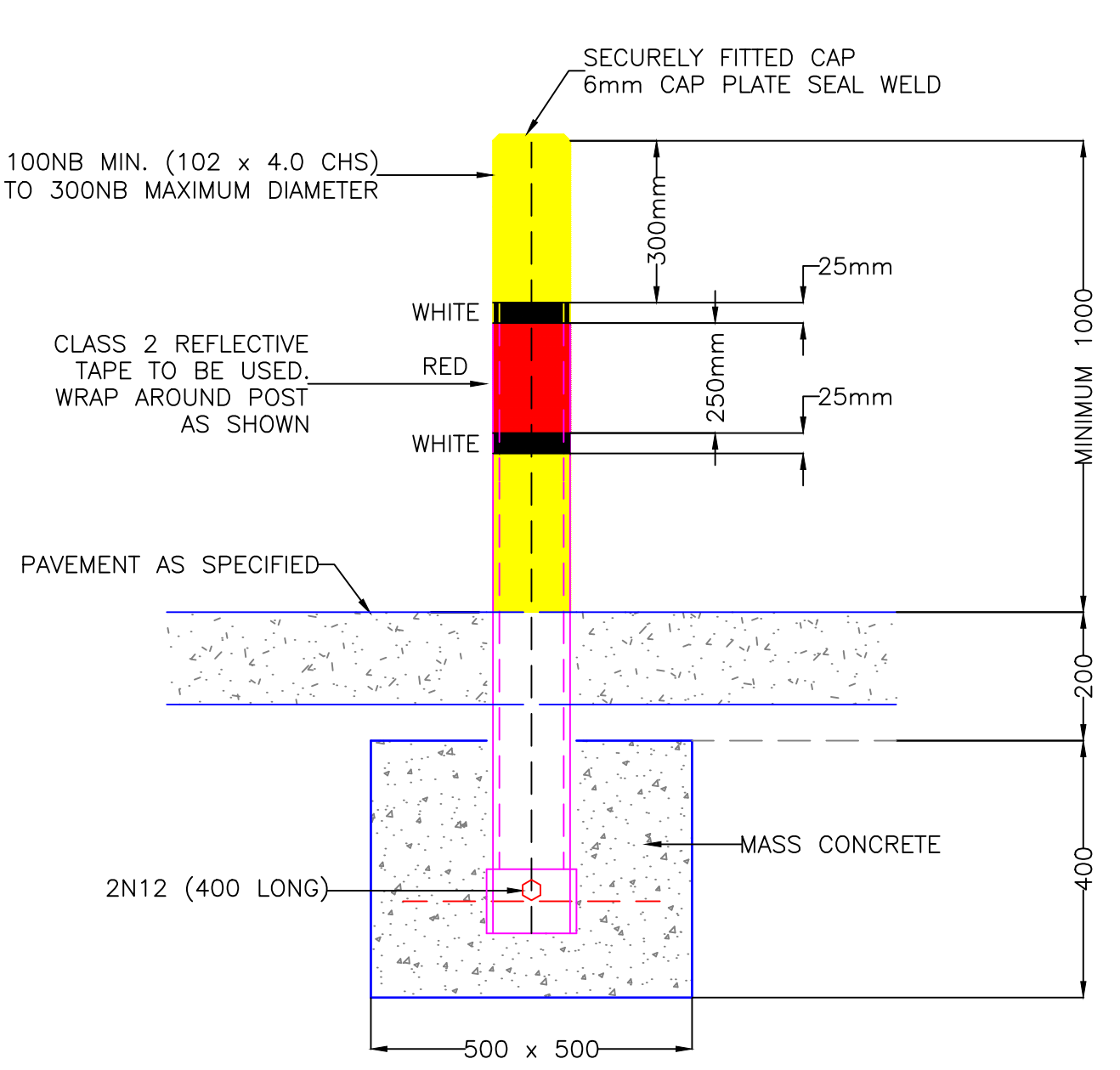
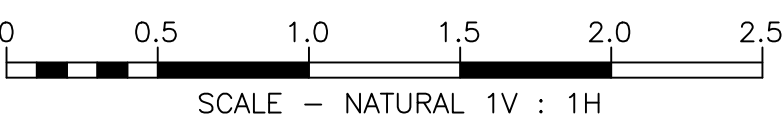




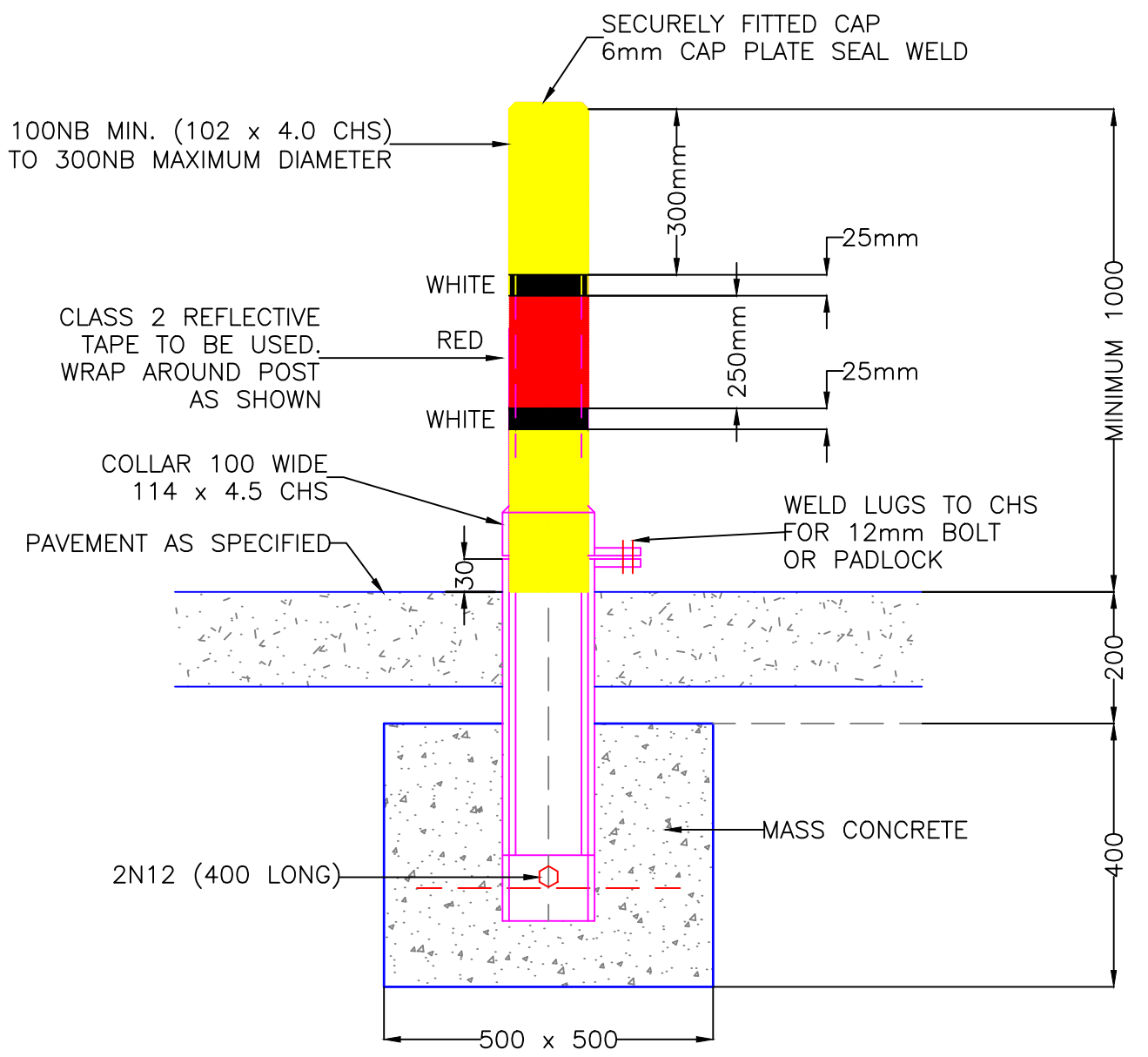
TYPICAL SECTION THROUGH EASTERN CARPARK



TYPICAL SECTION THROUGH WESTERN CARPARK



STEEL BOLLARD (NON-REMOVABLE) DETAIL  
SCALE - NOT TO SCALE  
NOTE 1: ALL POSTS TO BE 316 STAINLESS STEEL  
NOTE 2: BOLLARDS DETAILS MAY CHANGE SUBJECT TO MANUFACTURER'S SPECIFICATIONS

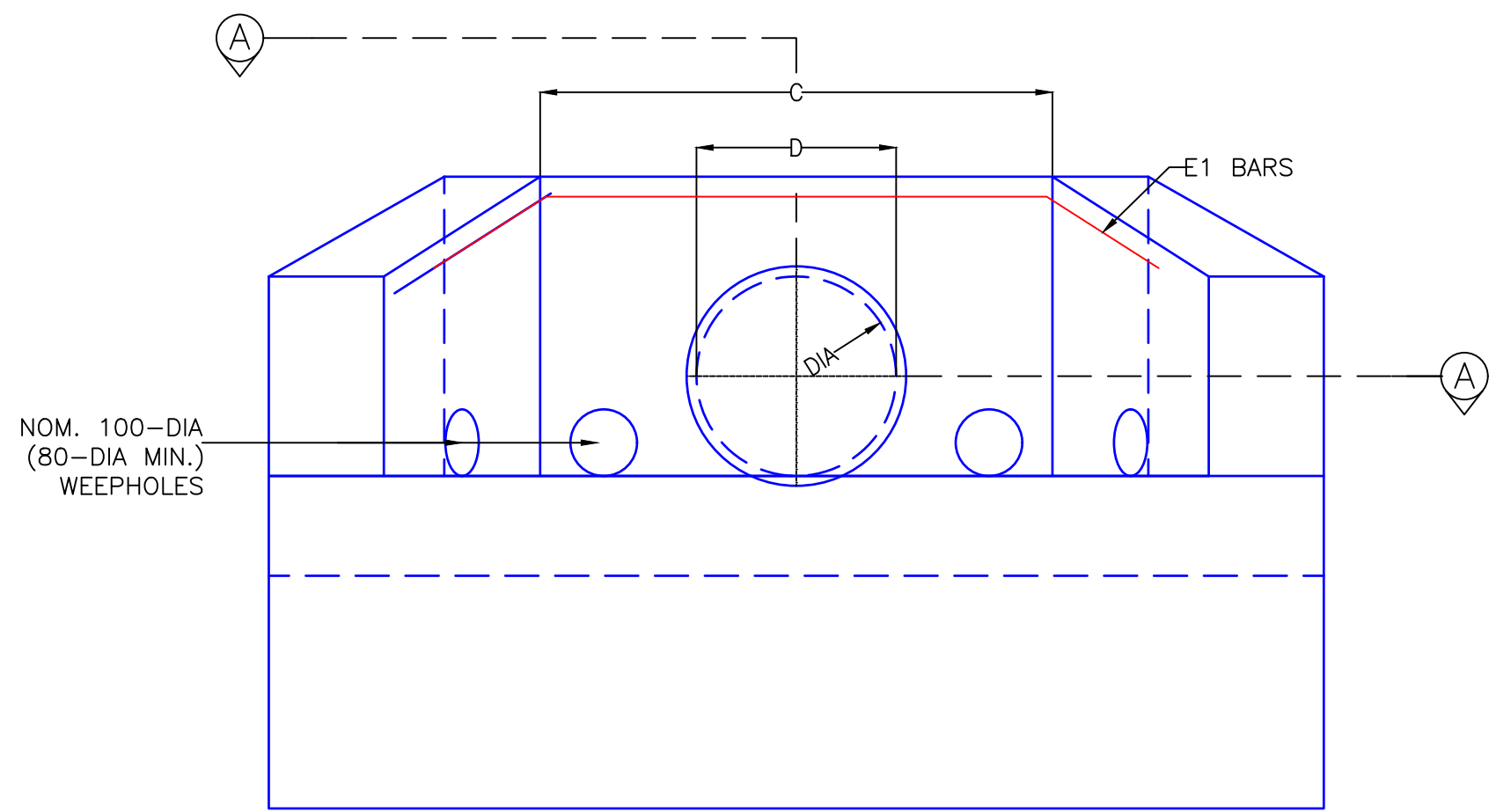
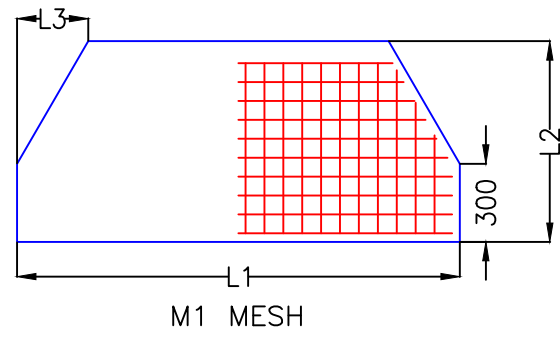
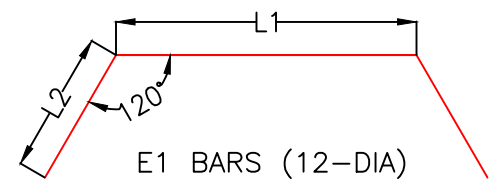


STEEL BOLLARD (REMOVABLE) TYPE DETAIL  
SCALE - NOT TO SCALE  
NOTE 1: ALL POSTS TO BE 316 STAINLESS STEEL  
NOTE 2: BOLLARDS DETAILS MAY CHANGE SUBJECT TO MANUFACTURER'S SPECIFICATIONS

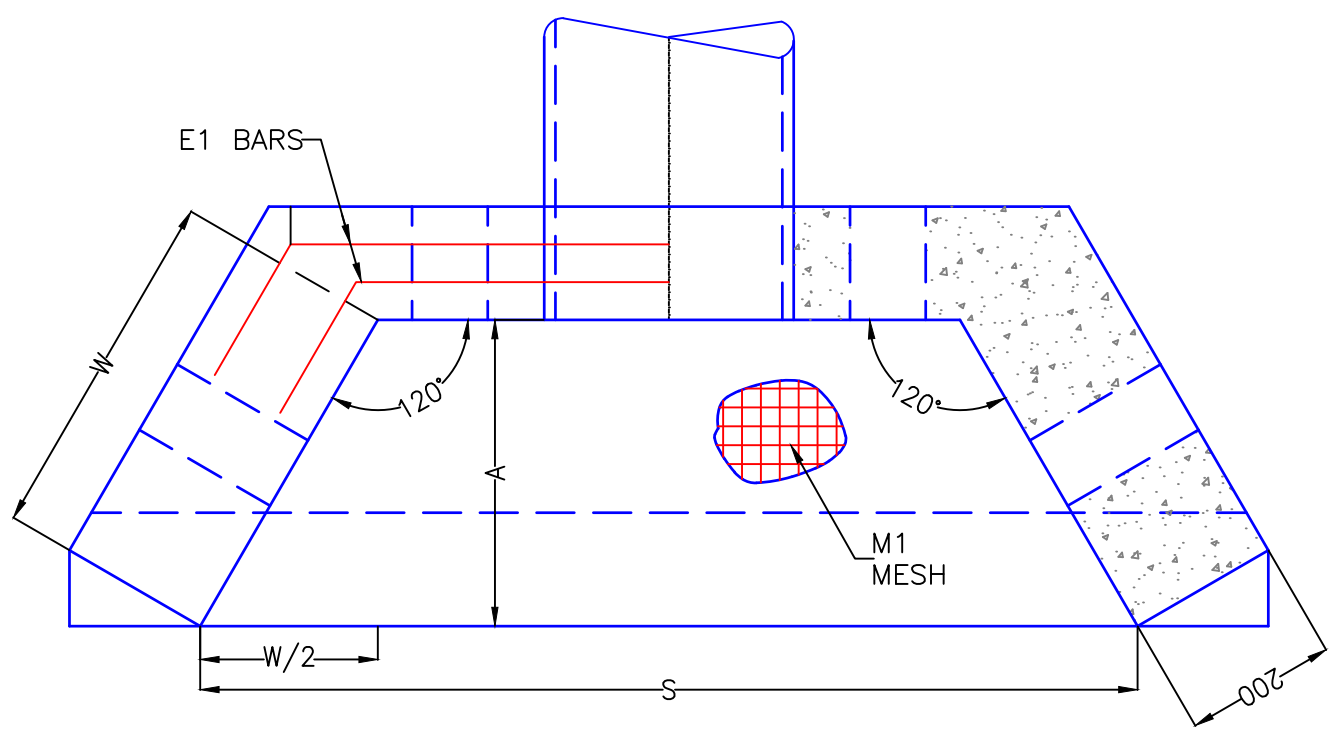


CONCRETE HEADWALL DIMENSIONS AND REINFORCEMENT SCHEDULE

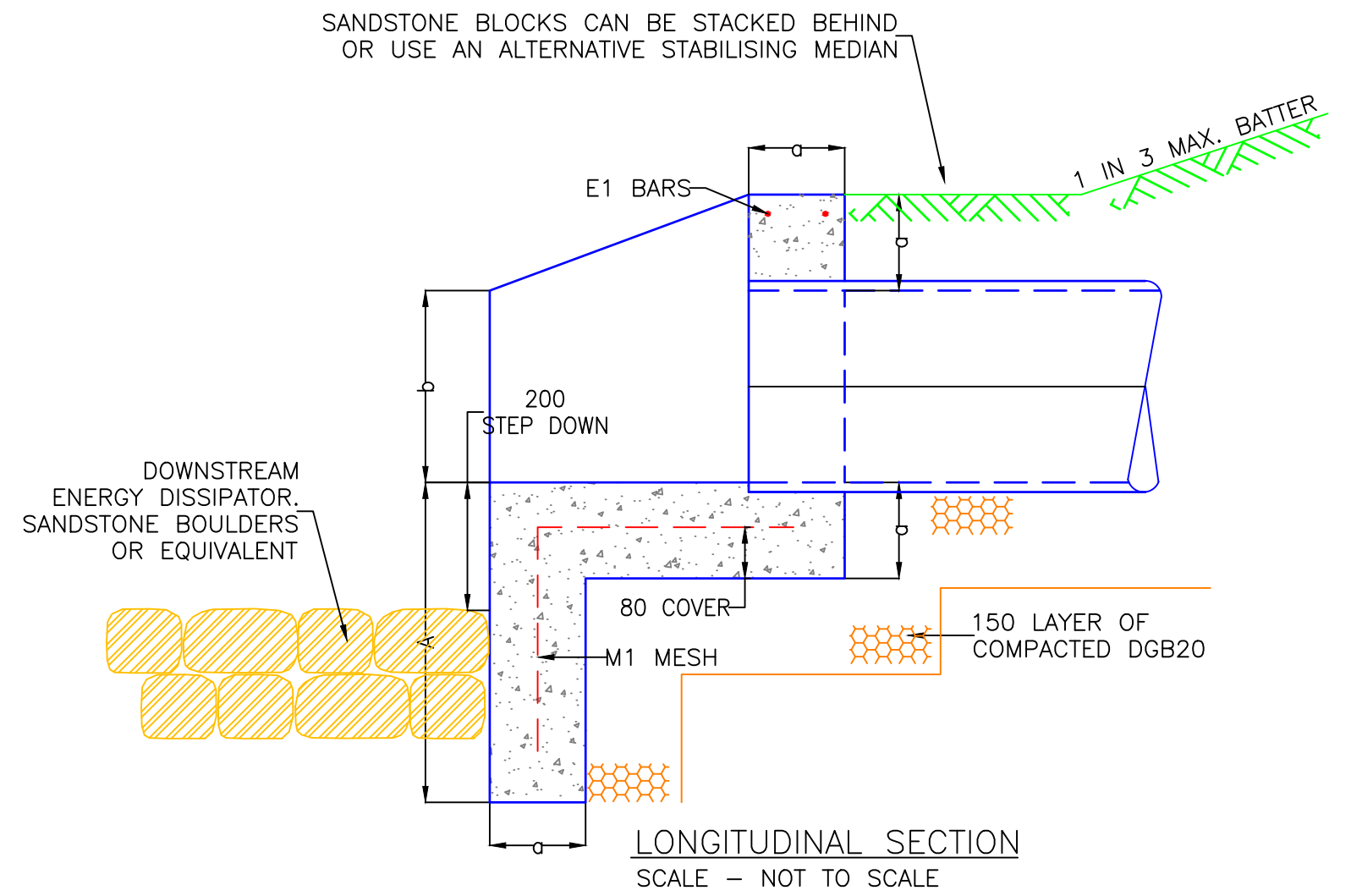
DIMENSIONS	D	NOMINAL PIPE DIA	(mm)	375
	A	APRON DEPTH	(mm)	630
	C	HEADWALL LENGTH	(mm)	850
	S	APRON WIDTH	(mm)	1580
	W	WINGWALL LENGTH	(mm)	730
	a		(mm)	150
	b		(mm)	300
	E1 BARS			
	L1		(mm)	965
	L2		(mm)	200
QUANTITIES IN 2 HEADWALLS	No. REQUIRED	(No.)	4	
	LENGTH	(mm)	5460	
	L1		(mm)	1760
	L2		(mm)	970
	L3		(mm)	385
	No. REQUIRED	(No.)	2	
	STEEL REINFORCEMENT	(Kg)	26.3	
	CONCRETE N25 (REFER NOTE 1)	(m2)	0.91	



ELEVATION  
SCALE - NOT TO SCALE



SECTION A  
SCALE A



LONGITUDINAL SECTION  
SCALE - NOT TO SCALE

CONCRETE HEADWALL NOTES

1. CONCRETE STRENGTH GRADES SHOWN ARE FOR EXPOSURE CLASS A2. REFER TO AS3600 CONCRETE STRUCTURES CODE FOR CONCRETE STRENGTH GRADE AND COVER TO REINFORCEMENT FOR EXPOSURE CLASSIFICATIONS.
2. WEEP HOLES (80-DIA MIN. U.N.O.) ARE TO BE PROVIDED AT 1800 CTS MAXIMUM AT THE OUTLET ONLY.
3. ALL REINFORCEMENT IS TO BE GRADE 400Y OR EQUIV. TO AS1302-1991.
4. REINFORCEMENT MESH IS TO BE LAPPED SO THAT TWO OUTERMOST WIRES OF ONE FABRIC OVERLAP THE TWO OUTERMOST WIRES OF THE SHEET BEING LAPPED.
5. FOR REINFORCEMENT AND HEADWALL DIMENSIONS REFER TO CONCRETE HEADWALL DIMENSIONS AND REINFORCEMENT SCHEDULE.

				LEVEL DATUM: AHD	PLOT DATE: 24/10/2022	FOLDER: v:\Urban2\DRAWINGS Current\TOM SPECS AND PROJECTS FOLDER 2\PROJECTS 2022 - 23\Warringah Golf Club - kentwell road\TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1 241022.dwg
				CO-ORD SYSTEM: MGA	PRELIMINARY	DESIGN APPROVED
				SURVEYED: N.A.	DRAWN BY: THOMAS LAU	DESIGNED BY: THOMAS LAU
				WORK-AS-EXECUTED	DATED: 10/10/22	DATED: 10/10/22
2	24/10/22	AMENDED FROM COMMENTS REC'D FROM AC/RP	TL	BY: N.A.	INITIATED BY: RICHARD PARRY	APPROVED BY: *****
1	10/10/22	INITIATE DRAWINGS	TL	DATE: **/**/****	(SNR PROJECT MANAGER)	APPROVED BY: THOMAS LAU
No	DATE	AMENDMENTS	INITIALS			PRINCIPAL ENGINEER



CARPARK
KENTWELL ROAD, NORTH MANLY
INTERSECTION OF KENTWELL ROAD AND PITTWATER ROAD
STANDARD DETAILS AND TYPICAL SECTIONS
SHEET 4
DRAWING NO. TCI-KENTWELL RD GOLF COURSE CARPARK CONCEPT1-6003
REVISION: 2