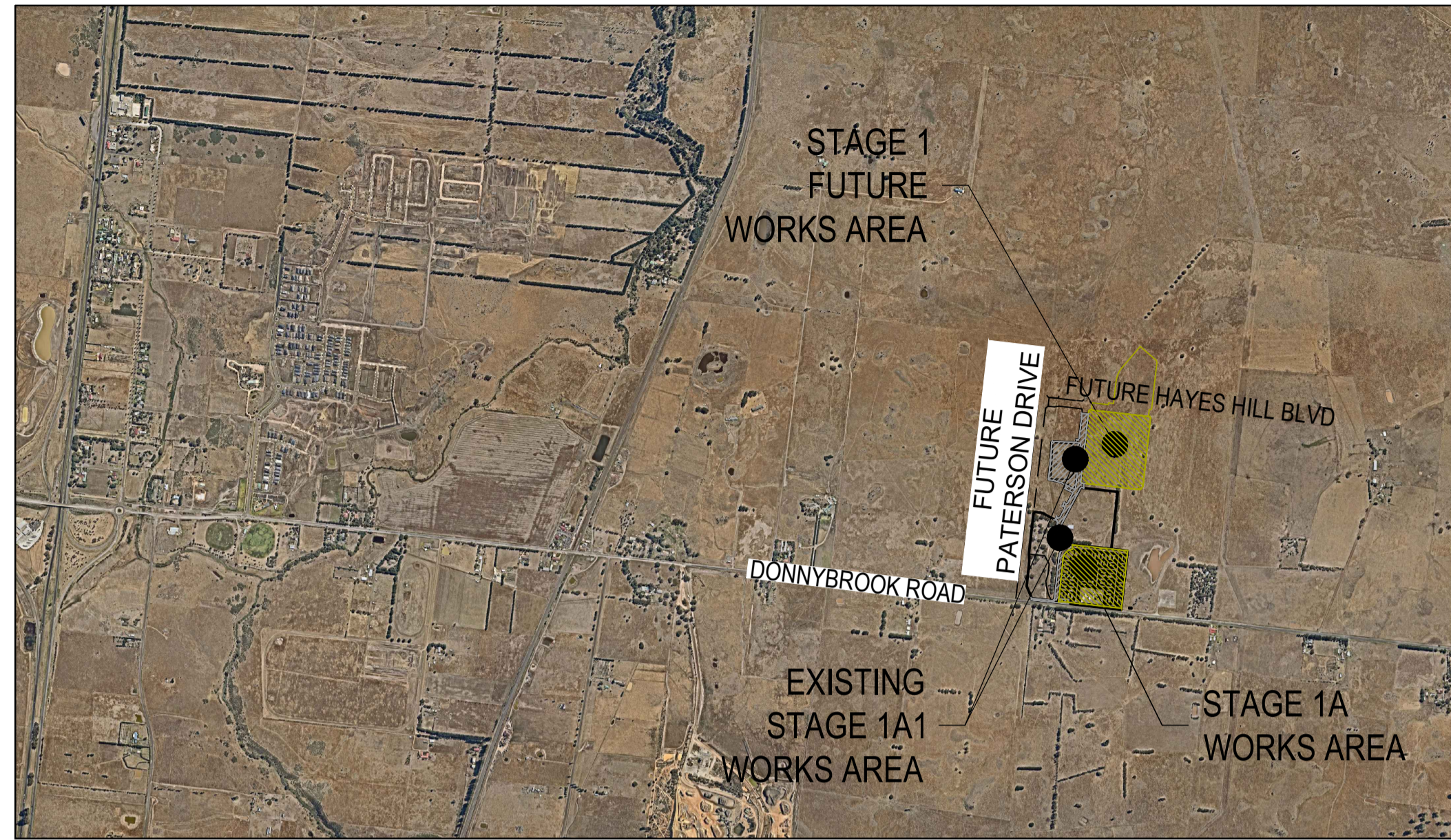


Olivine Estate

Stage 1A



WARNING
SAFETY MEASURES REQUIRED
 Please note there are risks attached to the construction of this project, and any ongoing maintenance of structures. Consider the safety of all. For potential risks, consequences and controls refer to Safety In Design Risk Register SID P4.EG.1700E-01A-01
ASSESS THE RISK - STAY SAFE

WARNING
BEWARE OF UNDERGROUND SERVICES
 The locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown. Locate all underground services before commencement of works
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ROAD NAME	RESERVE WIDTH (m)	ROAD WIDTH (m)				KERB TYPE		VERGE WIDTH (m)	
		LIP to LIP	INV to INV	BACK to BACK	NTH/WEST	STH/EAST	NTH/WEST	STH/EAST	
OLIVINE BOULEVARD (RESERVE No.1 LOS & LOTS)	18.50	5.10/9.70	6.00/10.60	6.30/10.90	B2	B2	5.50/3.20	7.00/4.70	
OLIVINE BOULEVARD (RESERVE No.1 AOS & LOTS)	18.50	5.10/9.70	6.00/10.60	6.30/10.90	B2	B2	5.50/3.20	7.00/4.70	
BEAGEL COURT	12.00	4.00/6.10	-	-	-	-	4.90	3.10/1.00	
GROVEDON CIRCUIT (WEST OF BRUSHTAIL STREET)	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35	
GROVEDON CIRCUIT (EAST OF BRUSHTAIL STREET)	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35	
GROVEDON CIRCUIT (ADJACENT DONNYBROOK ROAD)	13.50	4.60	5.50	5.80	B2	B2	4.75	3.25	
BRUSHTAIL STREET	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35	
WOODLET WAY	16.00	6.40	7.30	7.60	B2	B2	4.35	4.35	
WETHERS ROAD	11.50	4.00/6.10	-	-	-	-	4.40	3.10/1.00	
FELICITY ROAD	11.50	4.00/6.10	-	-	-	-	4.40	3.10/1.00	
STONY STREET	12.00	4.00/6.10	-	-	-	-	4.90	3.10/1.00	

ROAD NAME	SERVICES OFFSET SCHEDULE											
	GAS DISTRIBUTION		GAS		NON DRINKING WATER		DRINKING WATER		ELECTRICITY		NBN	
	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)	SIDE	OFFSET (m)
OLIVINE BOULEVARD (RESERVE No.1 LOS & LOTS)	EAST	2.10	EAST	2.50	EAST	3.00	EAST	3.50	WEST	1.30	WEST	0.50
OLIVINE BOULEVARD (RESERVE No.1 AOS & LOTS)			SOUTH	2.10	SOUTH	2.50	SOUTH	3.00	NORTH	1.40	NORTH	0.40
BEAGEL COURT			NORTH	1.80	NORTH	2.20	NORTH	2.70	NORTH	3.70	NORTH	3.20
GROVEDON CIRCUIT (WEST OF BRUSHTAIL STREET)			WEST	2.10	WEST	2.50	WEST	3.00	EAST	2.55	EAST	1.85
GROVEDON CIRCUIT (EAST OF BRUSHTAIL STREET)			EAST	2.10	EAST	2.50	EAST	3.00	WEST	2.55	WEST	1.85
GROVEDON CIRCUIT (ADJACENT DONNYBROOK ROAD)			NORTH	2.10	NORTH	2.50	NORTH	3.00	SOUTH	1.50	SOUTH	0.70
BRUSHTAIL STREET			NORTH	2.10	NORTH	2.50	NORTH	3.00	SOUTH	2.45	SOUTH	1.80
WOODLET WAY			EAST	2.10	EAST	2.50	EAST	3.00	WEST	2.60	WEST	1.85
WETHERS ROAD			NORTH	1.80	NORTH	2.30	NORTH	2.80	NORTH	3.85	NORTH	3.30
FELICITY ROAD			NORTH	1.80	NORTH	2.30	NORTH	2.80	NORTH	3.85	NORTH	3.30
STONY STREET			NORTH	1.80	NORTH	2.20	NORTH	2.70	NORTH	3.85	NORTH	3.20
DONNYBROOK ROAD			NORTH	~8.30			NORTH	~9.30	NORTH	6.10/EX.~7.20	SOUTH	EX.VARIES

*STREET TREES TO BE INSTALLED IN THE CENTRE OF NATURE STRIPS

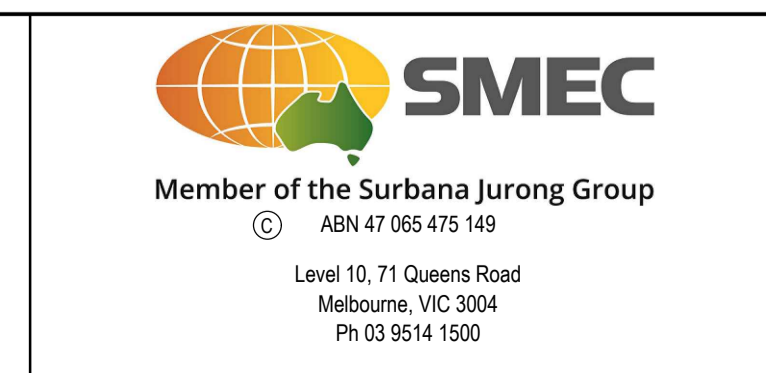
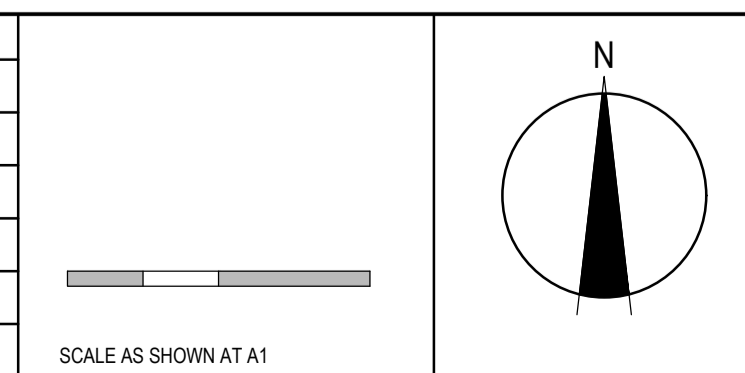
- GENERAL NOTES (WHITTLESEA CITY COUNCIL)
- THE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MPA MANUAL AND SPECIFICATIONS. WORKS TO BE CARRIED OUT TO THE SATISFACTION OF COUNCIL'S SUPERVISING OFFICER.
 - THE CONTRACTOR IS RESPONSIBLE FOR SAFETY OF WORK ON SITE IN ACCORDANCE WITH APPROPRIATE LEGISLATION. THEY SHALL ERECT AND MAINTAIN ALL SHORING, PLANKING AND STRUTTING, DEWATERING DEVICES, BARRICADES, SIGNS, LIGHTS, ETC. NECESSARY TO KEEP WORKS IN A SAFE AND STABLE CONDITION, AND TO PROTECT THE PUBLIC FROM HAZARDS ASSOCIATED WITH THE WORKS.
 - THE CONTRACTOR SHALL:
 - COMPLY WITH THE SAFETY REQUIREMENTS OF THE MINES ACT, GENERAL REGULATIONS AND STATUTORY RULES, AND THE MINES (TRENCHES) REGULATIONS 1982.
 - NOTIFY THE OCCUPATIONAL HEALTH AND SAFETY AUTHORITY OF HIS INTENTION TO COMMENCE TRENCHING OPERATIONS WHERE TRENCHES ARE 1.5 METRES OR DEEPER.
 - ENSURE THAT THE MINE MANAGER OR HIS DEPUTY AS REQUIRED BY THE REGULATIONS IS IN ATTENDANCE WHEN TRENCHING OPERATIONS ARE IN PROGRESS.
 - THE CONTRACTOR IS TO NOTIFY COUNCIL AND ALL SERVICE AUTHORITIES SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL RELEVANT SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.
 - REDGUM TREES MARKED ON THE APPROVED PLANS FOR REMOVAL MUST BE REMOVED IN ACCORDANCE WITH COUNCIL'S PLANNING PERMIT. NO EXCAVATION SHALL BE CARRIED OUT WITHIN 5.0m OF ANY EXISTING TREE WITHOUT WRITTEN APPROVAL FROM COUNCIL'S SUPERVISING OFFICER.
 - ALL ROAD CHAINAGES ARE MEASURED ALONG THE ROAD CENTRELINE EXCEPT KERB RETURNS AND COURTHEADS, WHERE LIP OF KERB CHAINAGES ARE SPECIFIED. ALL DIMENSIONS AND RADI ARE GIVEN TO THE LIP OF KERB. DO NOT SCALE OFF THESE DRAWINGS, WRITTEN DIMENSIONS ONLY SHALL BE USED.
 - ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
 - WHEN ENGAGED IN BLASTING OPERATIONS THE CONTRACTOR SHALL NOT BLAST WITHIN 4.5m OF AN EXISTING LINE OF WATER, GAS OR SEWER PIPES OR WITHIN 15m OF ANY COMPLETED PART OF THE WORKS WITHOUT THE CONSENT OF THE SUPERINTENDENT. BLASTING REQUIRES A BLASTING PERMIT FROM COUNCIL.
 - ALL EXCAVATED OR FILLED AREAS OUTSIDE THE ROAD RESERVE TO BE STRIPPED OF TOPSOIL AND STOCKPILED PRIOR TO EARTHWORKS COMMENCING. THESE AREAS SHALL BE SURFACED WITH A 100mm MINIMUM TO 200mm MAXIMUM LAYER OF TOPSOIL AS SPECIFIED.
 - NO TOPSOIL TO BE REMOVED FROM SITE.
 - NO FILL OR STOCKPILING OF MATERIAL IS TO BE PLACED ON ANY RESERVE UNLESS DIRECTED BY THE SUPERINTENDENT.
 - FILLING ON ALLOTMENTS AND UNDER ROAD PAVEMENTS TO HAVE LEVEL 1 SUPERVISION IN ACCORDANCE WITH AS3798-1996. INDIVIDUAL LOT CERTIFICATES ARE TO BE PROVIDED TO THE SUPERINTENDENT.
 - FILLING UNDER DRIVEWAYS AND FOOTPATH IS TO BE APPROVED BY THE SUPERINTENDENT AND CONSTRUCTED IN LAYERS 150mm DEPTH. COMPACTION ACHIEVING 98% AUSTRALIAN STANDARD DENSITY.
 - CUT AND FILL BATTERS ARE NOT TO EXCEED 1 in 6 UNLESS SHOWN OTHERWISE.
 - ALLOTMENTS TO BE GRADED TO ENSURE A MINIMUM GRADE OF 1 in 150.
 - ALL DRAINAGE PIPES UP TO AND INCLUDING 750mm IN DIAMETER SHALL BE RUBBER RING JOINTED. PIPES ABOVE THIS SIZE MUST BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS.
 - ALL DRAINAGE TRENCHES UNDER ROAD PAVEMENTS, KERB & CHANNEL, PARKING BAYS, DRIVEWAYS, FOOTPATHS AND BEHIND KERBS & CHANNEL SHALL BE BACKFILLED WITH CRUSHED ROCK AS SPECIFIED.
 - ALL PITS GREATER THAN 1000mm DEPTH TO BE PROVIDED WITH STEP IRONS IN ACCORDANCE WITH EDM 609.
 - PROPERTY INLETS AS PER WHITTLESEA CITY COUNCIL STANDARD DRAWING EDM 701-704 AND ARE TO BE LOCATED 1.0m FROM LOW SIDE BOUNDARY UNLESS SHOWN OTHERWISE.
 - ALL HOUSE DRAIN CONNECTIONS ARE TO BE LOCATED NO CLOSER THAN 7.0m FROM THE SIDE BOUNDARY OR FROM EASEMENT ALONG THE SIDE BOUNDARY UNLESS NOTED OTHERWISE AND CONNECTED DIRECTLY TO UNDERGROUND DRAIN OR PIT. HOUSE DRAIN LOCATION TO BE MARKED (50mm STAMPED IMPRESSION) ON THE TOP OF THE KERB. SUBSOIL DRAINS SHALL BE INSTALLED BEHIND OR BELOW ALL KERB AND CHANNEL AS PER STANDARD DRAWING EDM 202.
 - CONDUIT LOCATIONS ARE SUBJECT TO AMENDMENT AND CONDUITS SHALL NOT BE LAID UNTIL WRITTEN APPROVAL IS GIVEN BY THE SUPERINTENDENT. CONDUITS TO BE EXTENDED TO PROPERTY LINE AND ARE REQUIRED WHEN CONNECTIONS EXTEND UNDER ROAD PAVEMENT, FOOTPATH OR OTHER INFRASTRUCTURE. BOTH KERBS ARE TO BE MARKED WITH THE LETTERS H (PROPERTY STORMWATER CONNECTION), E (ELECTRICAL), G (GAS), T (TELEPHONE), W (WATER) AND C (COUNCIL COMMUNICATION) AS PER STANDARD DRAWING EDM 303.
 - ALL SERVING TRENCHES UNDER ROADS, DRIVEWAYS, FOOTPATHS ETC. ARE TO BE BACKFILLED & COMPACTED WITH F.C.R. IN THE CASE OF TRENCHES UNDER ROADS WHERE BACKFILLING HAS NOT ACHIEVED THE SPECIFIED COMPACTION OR SHOWS EXCESSIVE MOVEMENT UNDER PROOF ROLLING, THE BACKFILLING SHALL BE REMOVED AND REPLACED WITH 2% STABILISED COMPACTED F.C.R. ALL SERVICES ARE TO BE PLACED PRIOR TO THE CAPPING LAYER.
 - NO TELCONBN PITS ARE TO BE LOCATED IN THE FOOTPATH.
 - VEHICULAR CROSSINGS TO BE LOCATED CLEAR OF DRAINAGE PITS, SEWER MAINTENANCE HOLES AND EXISTING TREES. VEHICLE CROSSINGS TO BE 1.5m FROM PROPERTY BOUNDARY OR EASEMENT UNLESS OTHERWISE SHOWN. VEHICULAR CROSSINGS TO BE CONSTRUCTED AS PER WHITTLESEA CITY COUNCIL'S SPECIFICATIONS AND EDM 501 TO 503.
 - ALL PEDESTRIAN CROSSING THROUGH SPLITTER ISLANDS TO BE IN ACCORDANCE WITH SD606.
 - ALL STREET SIGNS TO BE IN ACCORDANCE WITH SD812. STREET SIGNS TO BE ATTACHED TO LIGHT POLES USING 'SINGLE DIRECTION COLLAR' OR '90° RIGHT ANGLE COLLAR' UNLESS SHOWN OTHERWISE.
 - ALL PAVEMENT MARKINGS AND TRAFFIC SIGNS SHOULD BE TO AS1742.2 AND AS1742.1 STANDARD RESPECTIVELY. TEMPORARY LINEMARKING TO BE PLACED DURING MAINTENANCE PERIOD PRIOR TO PLACEMENT OF WEARING COURSE. FINAL LINEMARKING TO BE LONG LIFE ROAD MARKING WITH LONGITUDINAL LINES IN THERMOPLASTIC AND TRANSVERSE MARKINGS IN COLD APPLIED.
 - THE CAPPING LAYER MUST BE DEMONSTRATED THROUGH TESTING THAT ITS PROPERTIES (C.B.R. PERMEABILITY, ETC.) SATISFY LIMITS AS OUTLINED IN THE TECHNICAL SPECIFICATION TABLE 20.3.5B WITH A MINIMUM MODULUS OF 100MPa. UPON COMPLETION OF CONSTRUCTION THE WHOLE SITE SHALL BE CLEANED UP, GRADED, ALL RUBBISH REMOVED AND LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.

TABLE 6: TBM SETOUT TABLE				
POINT	EAST	NORTHING	ELEVATION	DESCRIPTION
C34SSPL	323383.546	5842934.15	238.735	STEEL STAR PICKET
C68PM7L	323210.099	5842698.35	237.616	PERMANENT MARK PM77
C75PM50L	322900.181	5842750.808	240.178	PERMANENT MARK PM50
C76SSPL	323252.295	5842715.378	236.886	STEEL STAR PICKET
C77RVTRG	323038.436	5842738.371	243.696	RIVET IN ROCK
C78SSPG	322835.256	5842759.893	239.488	STEEL STAR PICKET
C79SSPL	322666.202	5842778.237	238.207	STEEL STAR PICKET
C80SPKBG	322654.654	5842776.01	238.428	SPIKE IN BITUMEN
C81SSPL	322549.258	5842791.748	235.563	STEEL STAR PICKET
C82SSPL	322570.163	5842989.303	236.275	STEEL STAR PICKET
C83SSPL	322595.579	5843198.908	239.115	STEEL STAR PICKET
C84RVTRL	322617.683	5843412.157	242.457	RIVET IN ROCK
C85SSPL	322640.995	5843611.461	239.572	STEEL STAR PICKET
C93SSPL	323276.817	5842944.336	237.989	STEEL STAR PICKET
C104RVTRL	322946.48	5843298.043	243.686	RIVET IN ROCK
C106SSPL	322762.605	5842991.952	238.464	STEEL STAR PICKET
C107SSPL	322900.731	5843023.612	240.323	STEEL STAR PICKET
C108SSPL	323208.79	5843072.045	241.058	STEEL STAR PICKET
C109SSPL	322932.732	5843474.686	243.559	STEEL STAR PICKET

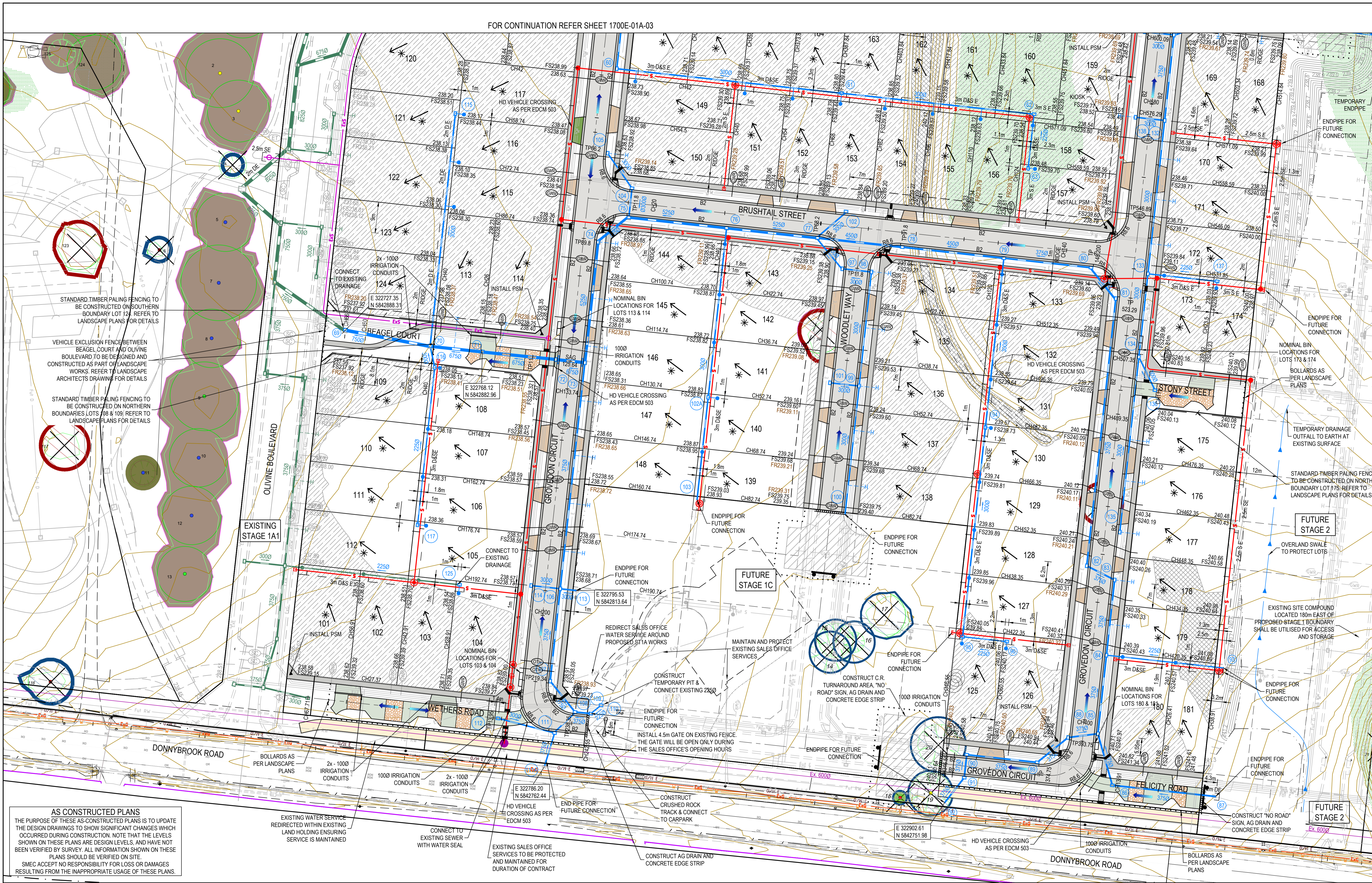
AS CONSTRUCTED PLANS
 THE PURPOSE OF THESE AS-CONSTRUCTED PLANS IS TO UPDATE THE DESIGN DRAWINGS TO SHOW SIGNIFICANT CHANGES WHICH OCCURRED DURING CONSTRUCTION. NOTE THAT THE LEVELS SHOWN ON THESE PLANS ARE DESIGN LEVELS, AND HAVE NOT BEEN VERIFIED BY SURVEY. ALL INFORMATION SHOWN ON THESE PLANS SHOULD BE VERIFIED ON SITE.
 SMEC ACCEPTS NO RESPONSIBILITY FOR LOSS OR DAMAGES RESULTING FROM THE INAPPROPRIATE USAGE OF THESE PLANS.

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUNS	AB
1	26.06.19	AS CONSTRUCTED	JKUK	AB

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Cover Plan			
MELBAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-01	SHEET No. 01 of 42	REVISION 1



STANDARD TIMBER PALING FENCING TO BE CONSTRUCTED ON SOUTHERN BOUNDARY LOT 124. REFER TO LANDSCAPE PLANS FOR DETAILS

VEHICLE EXCLUSION FENCE BETWEEN BEAGEL COURT AND OLIVINE BOULEVARD TO BE DESIGNED AND CONSTRUCTED AS PART OF LANDSCAPE WORKS. REFER TO LANDSCAPE ARCHITECTS DRAWING FOR DETAILS

STANDARD TIMBER PALING FENCING TO BE CONSTRUCTED ON NORTHERN BOUNDARIES LOTS 108 & 109. REFER TO LANDSCAPE PLANS FOR DETAILS

ENDPIPE FOR FUTURE CONNECTION

NOMINAL BIN LOCATIONS FOR LOTS 173 & 174

TEMPORARY DRAINAGE OUTFALL TO EARTH AT EXISTING SURFACE

STANDARD TIMBER PALING FENCING TO BE CONSTRUCTED ON NORTHERN BOUNDARY LOT 175. REFER TO LANDSCAPE PLANS FOR DETAILS

FUTURE STAGE 2

OVERLAND SWALE TO PROTECT LOTS

EXISTING SITE COMPOUND LOCATED 180m EAST OF PROPOSED STAGE 1 BOUNDARY SHALL BE UTILISED FOR ACCESS AND STORAGE

ENDPIPE FOR FUTURE CONNECTION

ENDPIPE FOR FUTURE CONNECTION

ENDPIPE FOR FUTURE CONNECTION

CONSTRUCT 'NO ROAD' SIGN, AS DRAIN AND CONCRETE EDGE STRIP

FUTURE STAGE 2

AS CONSTRUCTED PLANS
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EXISTING WATER SERVICE REDIRECTED WITHIN EXISTING LAND HOLDING ENSURING SERVICE IS MAINTAINED

CONNECT TO EXISTING SEWER WITH WATER SEAL

EXISTING SALES OFFICE SERVICES TO BE PROTECTED AND MAINTAINED FOR DURATION OF CONTRACT

CONSTRUCT CRUSHED ROCK TRACK & CONNECT TO CARPARK

CONSTRUCT AG DRAIN AND CONCRETE EDGE STRIP

CONSTRUCT 'NO ROAD' SIGN, AS DRAIN AND CONCRETE EDGE STRIP

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
1	26.06.22	AS CONSTRUCTED	JUKU	AB
5	17.10.18	IRRIGATION CONDUITS ADDED	KIMRB	AB
2	18.02.19	IRRIGATION CONDUIT LOCATION & DRIVEWAY (116&117) TYPE AMENDED	MA/MA	AB
3	19.02.19	PSM ADDED	MA/MA	AB
4	20.03.19	EXPOSED AGGREGATE ON MEWS	MA/MA	AB

All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

Member of the Surlana Jurong Group

 © ABN 47 065 475 149

 Level 10, 71 Queens Road

 Melbourne, VIC 3004

 Ph 03 9514 1500

Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Layout Plan - 1

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-02	SHEET No. 02 of 42	REVISION 5
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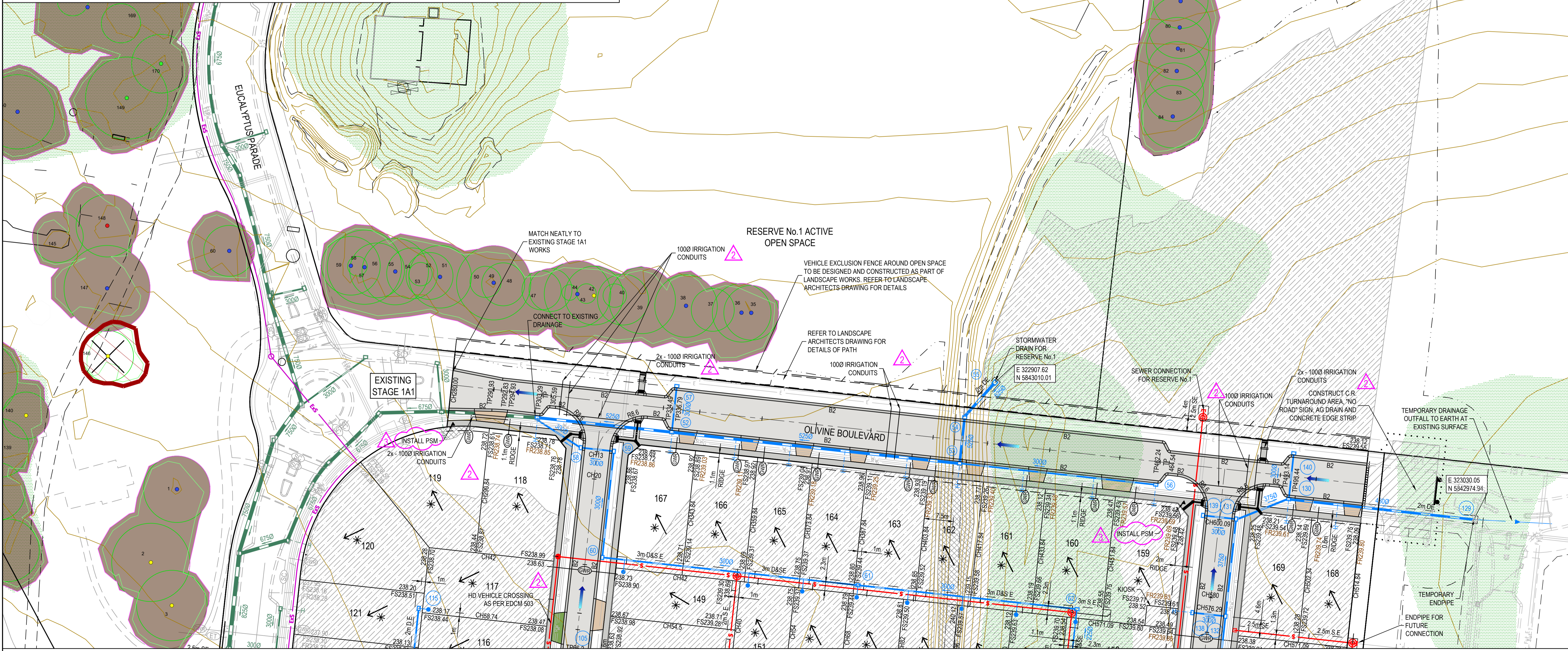
LEGEND - LAYOUT PLAN
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SWALE DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	ELECTRICITY (U.GROUND)
	ELECTRICITY (O.HEAD)
	GAS
	TELSTRA
	OPTIC FIBRE
	WATER
	RECYCLE WATER
	AG. DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SWALE DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING HOUSE DRAIN
	EXISTING ELECTRICITY (UNDER GROUND)
	EXISTING ELECTRICITY OVERHEAD
	EXISTING GAS
	EXISTING TELSTRA
	EXISTING OPTIC FIBRE
	EXISTING WATER

	EXISTING RECYCLED WATER
	EXISTING AG. DRAIN
	EXISTING SERVICE CONDUITS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SWALE DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING HOUSE DRAIN
	EXISTING ELECTRICITY (UNDER GROUND)
	EXISTING ELECTRICITY OVERHEAD
	EXISTING GAS
	EXISTING TELSTRA
	EXISTING OPTIC FIBRE
	EXISTING WATER
	FUTURE RECYCLED WATER
	FUTURE AG. DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SWALE DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE ELECTRICITY (UNDER GROUND)
	FUTURE ELECTRICITY OVERHEAD
	FUTURE GAS
	FUTURE TELSTRA
	FUTURE OPTIC FIBRE
	FUTURE WATER
	FUTURE RECYCLED WATER
	FUTURE AG. DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SWALE DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE ELECTRICITY (UNDER GROUND)
	FUTURE ELECTRICITY OVERHEAD
	FUTURE GAS
	FUTURE TELSTRA
	FUTURE OPTIC FIBRE
	FUTURE WATER

	FUTURE RETAINING WALL
	STRUCTURAL FILL > 200mm DEEP
	EXISTING STRUCTURAL FILL > 200mm DEEP
	CUT > 200mm DEEP
	DIRECTION OF FALL
	OVERLAND FLOW
	GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
	EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
	EXISTING TREE TO BE RETAINED
	EXISTING TREE TO BE REMOVED
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	ZERO LOT LINES
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	EXISTING ROAD PAVING
	EXISTING RED GUM TO BE RETAINED
	EXISTING OTHER SPECIES TO BE RETAINED
	BOLLARDS
	TEMPORARY FENCE

AS CONSTRUCTED PLANS
THE PURPOSE OF THESE AS-CONSTRUCTED PLANS IS TO UPDATE THE DESIGN DRAWINGS TO SHOW SIGNIFICANT CHANGES WHICH OCCURRED DURING CONSTRUCTION. NOTE THAT THE LEVELS SHOWN ON THESE PLANS ARE DESIGN LEVELS, AND HAVE NOT BEEN VERIFIED BY SURVEY. ALL INFORMATION SHOWN ON THESE PLANS SHOULD BE VERIFIED ON SITE.
SMEC ACCEPTS NO RESPONSIBILITY FOR LOSS OR DAMAGES RESULTING FROM THE INAPPROPRIATE USAGE OF THESE PLANS.



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUN/S	AB
1	17.10.18	IRRIGATION CONDUITS ADDED	KIM/RB	AB
2	18.02.19	IRRIGATION CONDUIT LOCATION & DRIVEWAY (116&117) TYPE AMENDED	MA/MA	AB
3	19.02.19	PSM ADDED	MA/MA	AB
4	26.06.22	AS CONSTRUCTED	JU/KU	AB

AS CONSTRUCTED

<p>All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.</p> <p>Quality Management ISO 9001 OHS Management AS/NZS 4801 Environmental Management ISO 14001</p>	<p>TITLE DRAFTER: N.Shrestha DESIGNER: J.Jones CHECKED: Z.Gosev AUTHORISED: A.Burrows</p> <p>NAME N.Shrestha J.Jones Z.Gosev A.Burrows</p>
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FOR CONTINUATION REFER SHEET 1700E-01A-02

Scale 1:500
Scale AS SHOWN AT 1

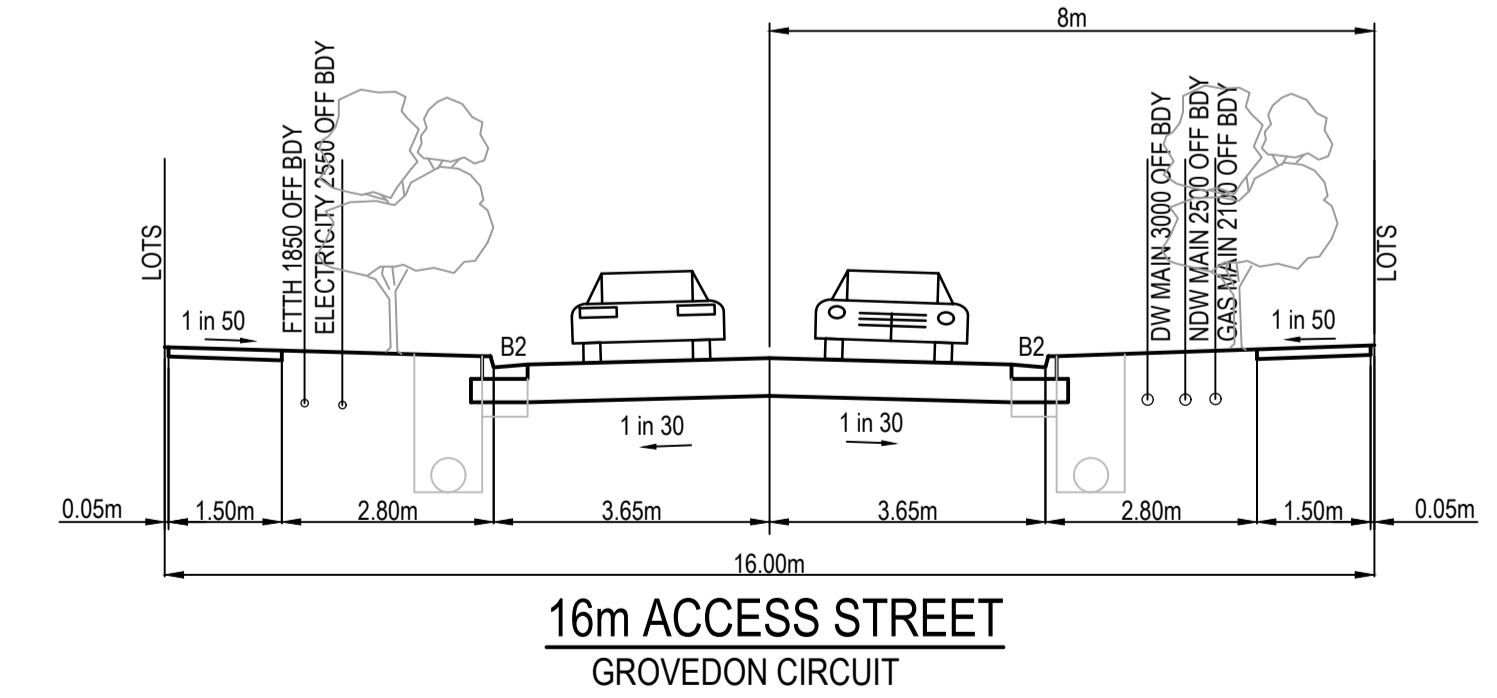
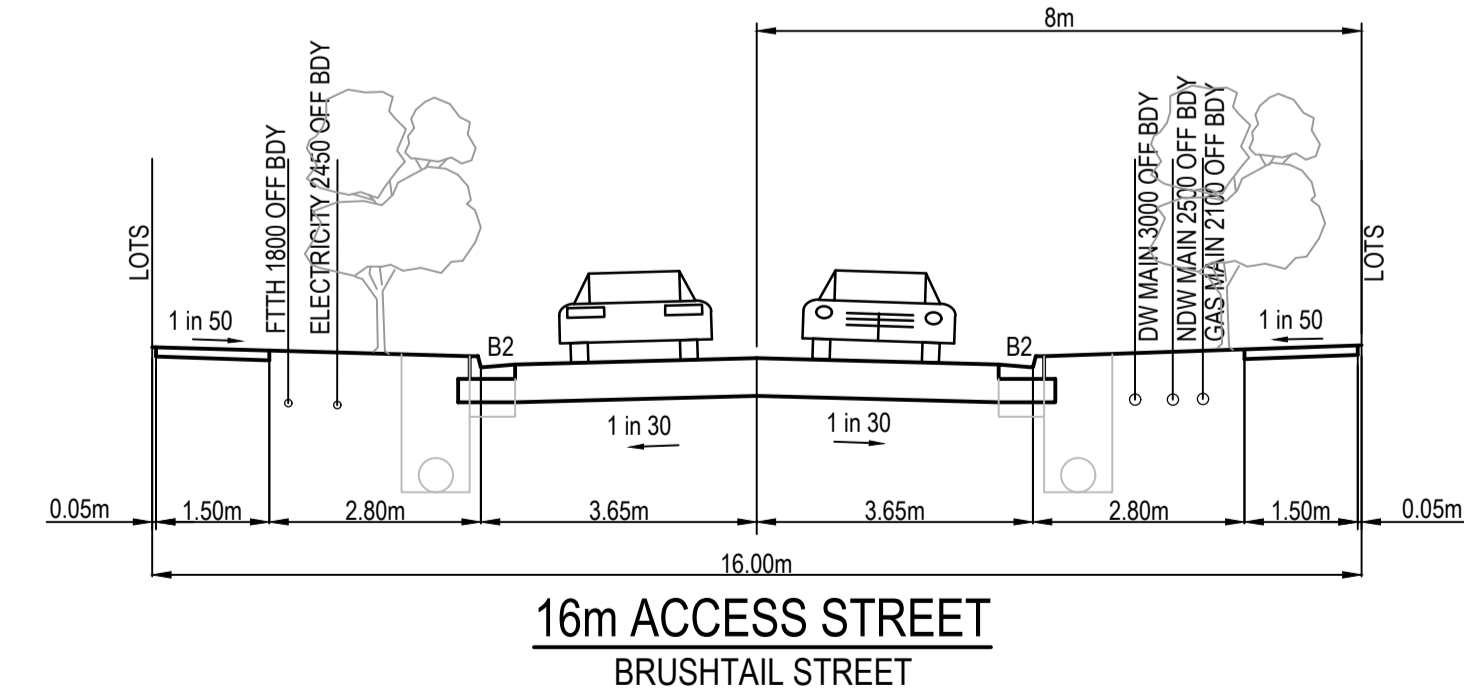
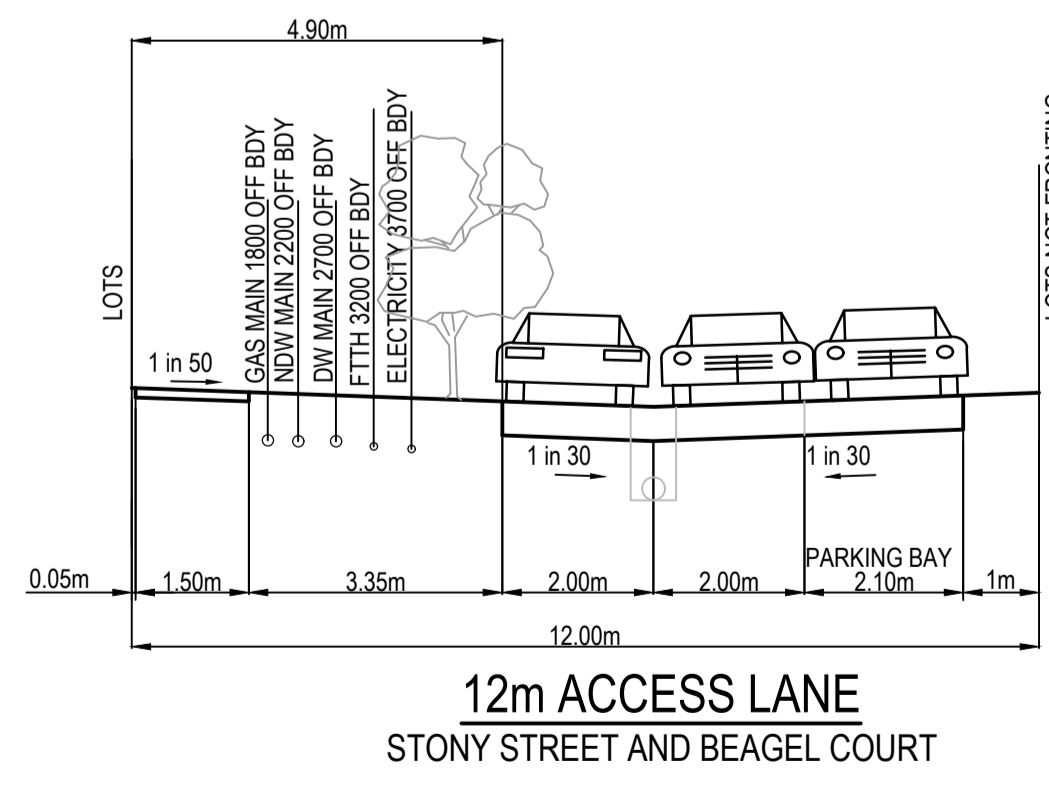
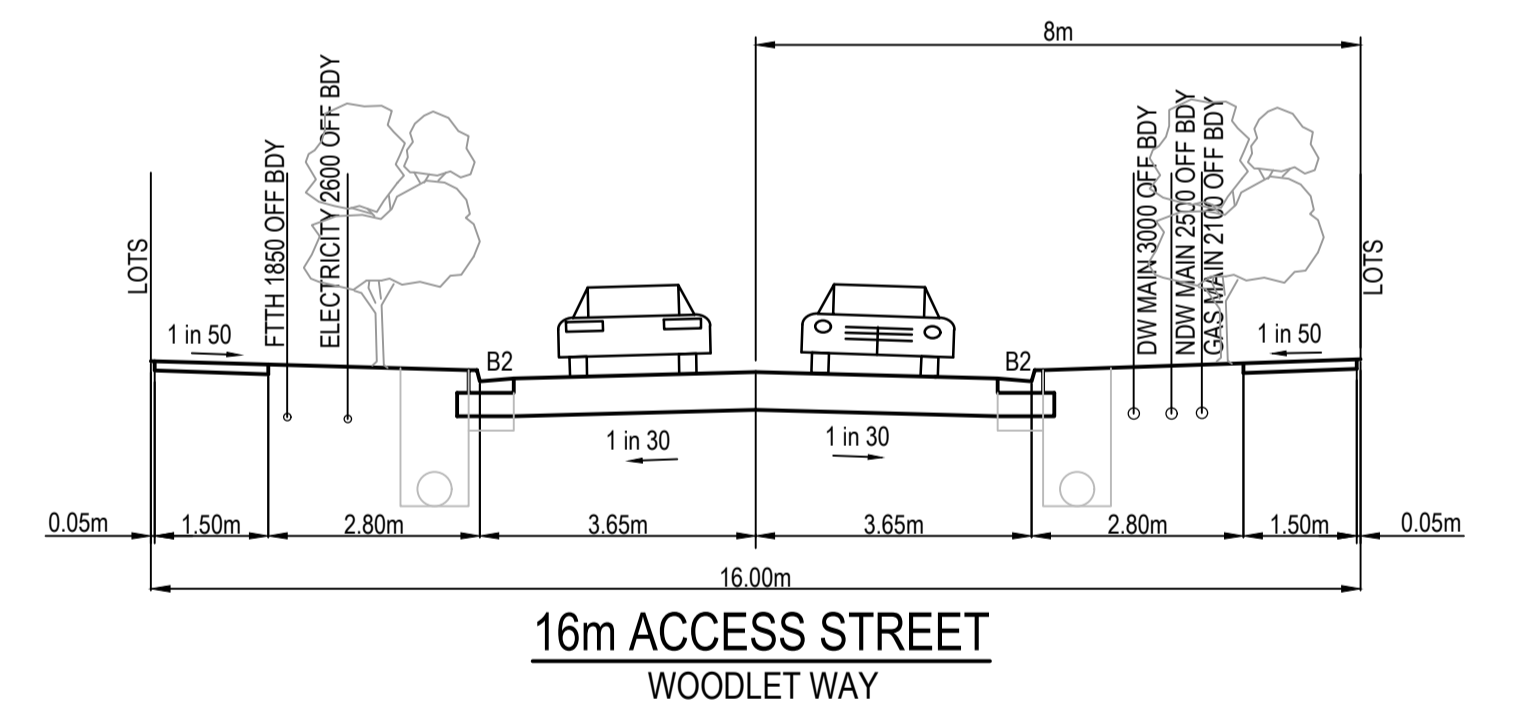
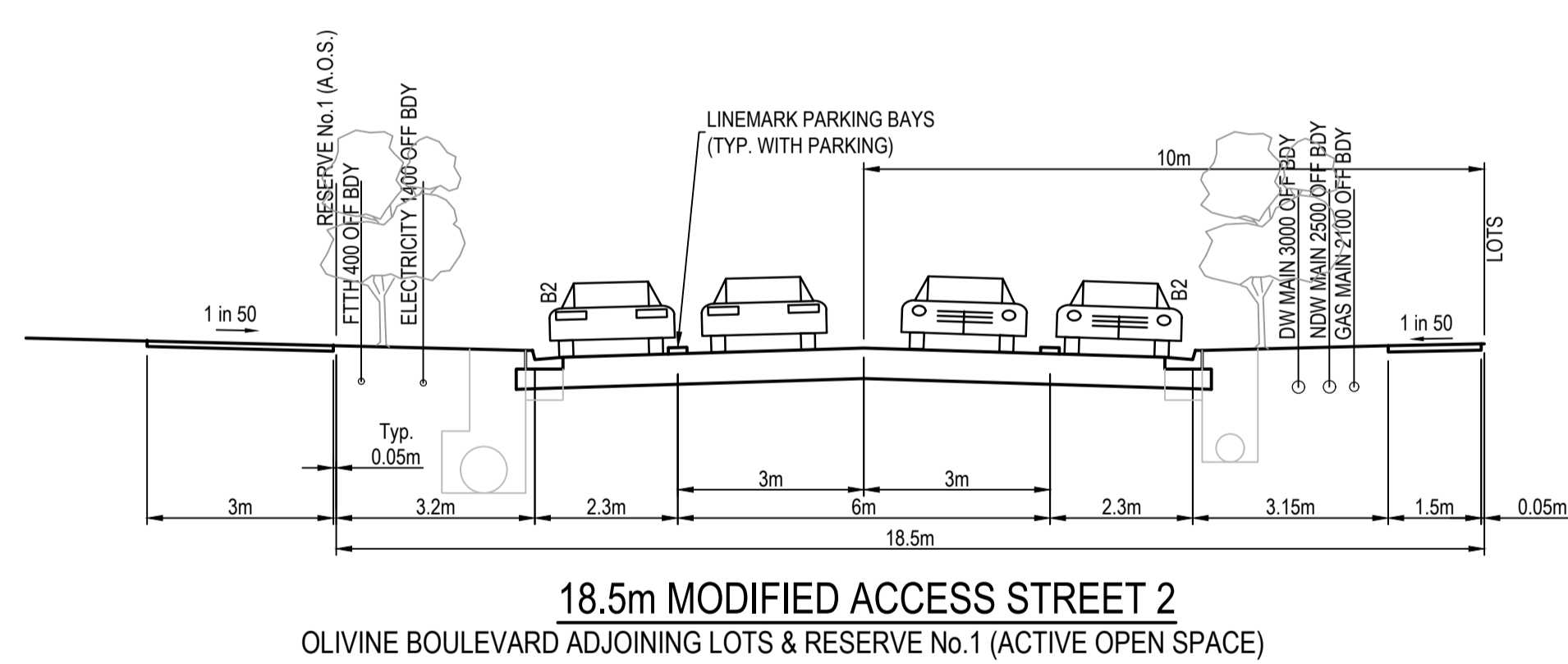
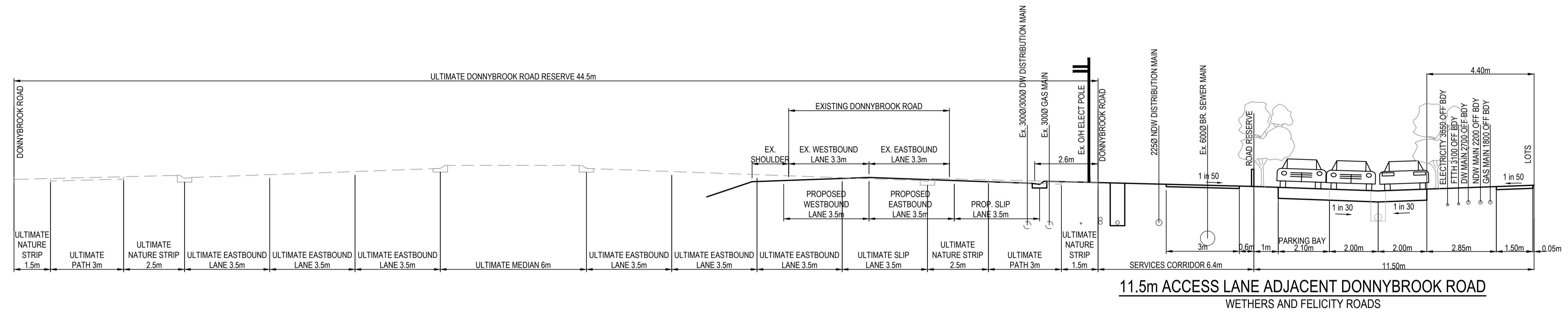
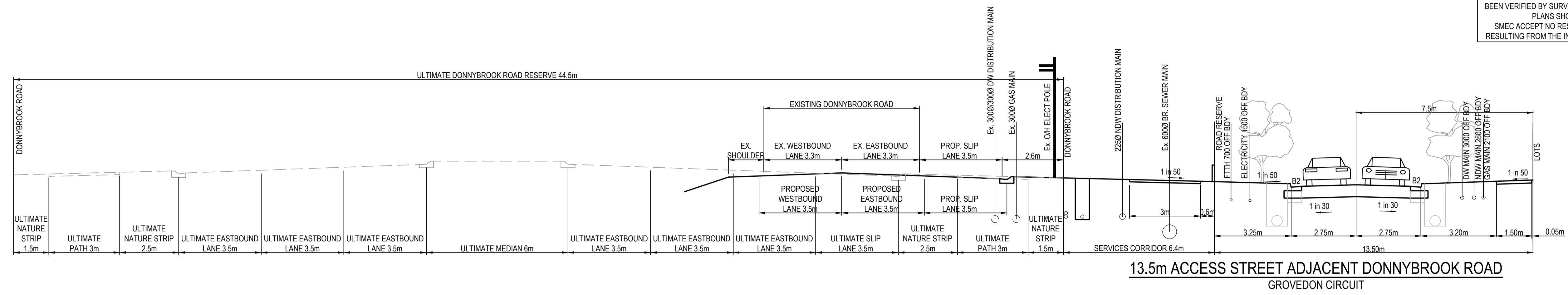
SMEC
Member of the Surlana Jurong Group
ABN 47 065 475 149
Level 10, 71 Queens Road
Melbourne, VIC 3004
Ph 03 9514 1500

mirvac

Olive Estate - Stage 1A
Whittlesea City Council
Road and Drainage
Layout Plan - 2

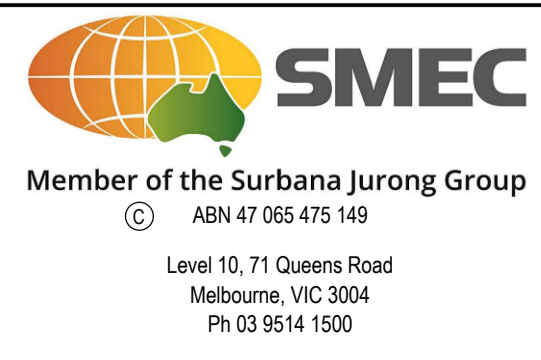
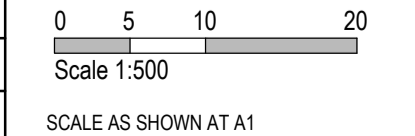
MELBOURNE REF: 9 J2
PROJECT / DRAWING No: 1700E-01A-03
SHEET No: 03 of 42
REVISION: 4

AS CONSTRUCTED PLANS
 THE PURPOSE OF THESE AS-CONSTRUCTED PLANS IS TO UPDATE THE DESIGN DRAWINGS TO SHOW SIGNIFICANT CHANGES WHICH OCCURRED DURING CONSTRUCTION. NOTE THAT THE LEVELS SHOWN ON THESE PLANS ARE DESIGN LEVELS, AND HAVE NOT BEEN VERIFIED BY SURVEY. ALL INFORMATION SHOWN ON THESE PLANS SHOULD BE VERIFIED ON SITE.
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REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.19	AS CONSTRUCTED	JJ/KU	AB

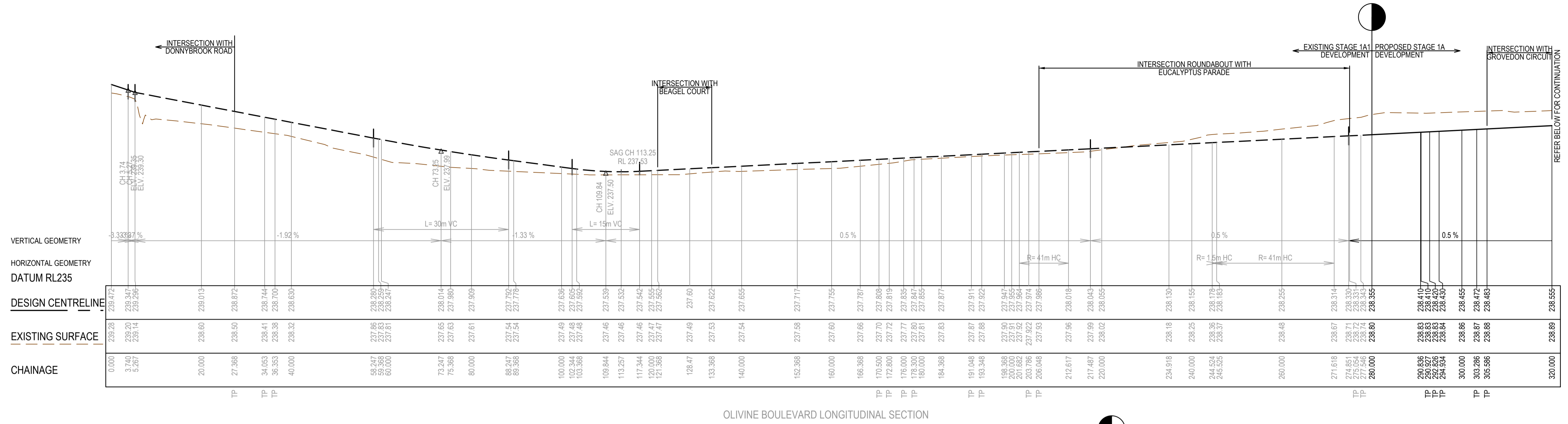
TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



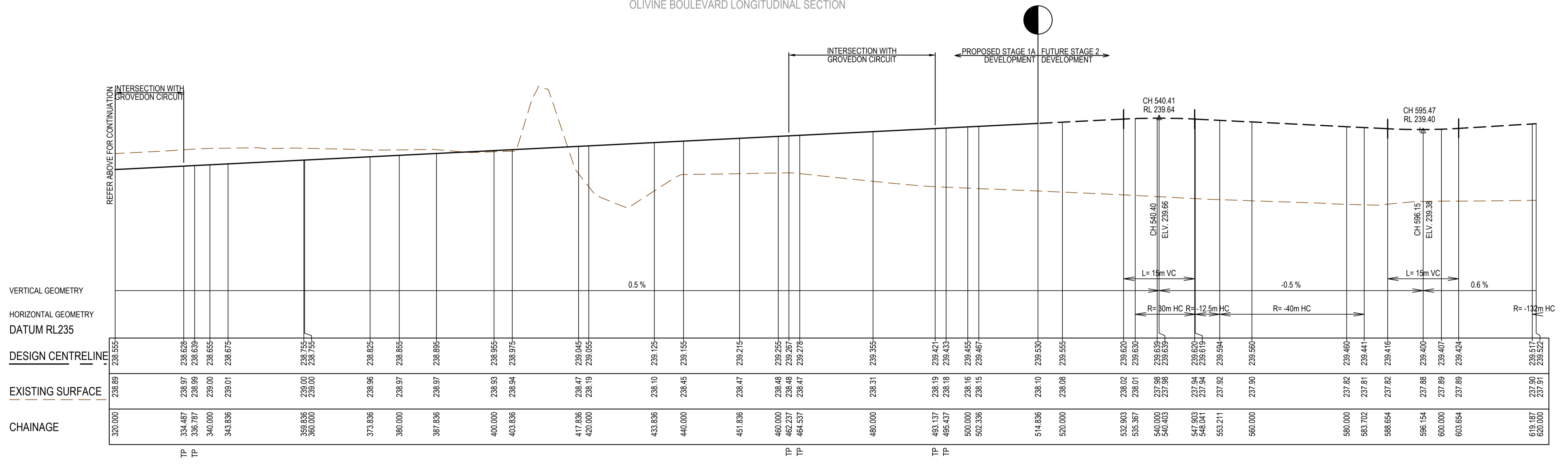
Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Typical Cross Sections

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-04	SHEET No. 04 of 42	REVISION 1
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AS CONSTRUCTED PLANS
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OLIVINE BOULEVARD LONGITUDINAL SECTION

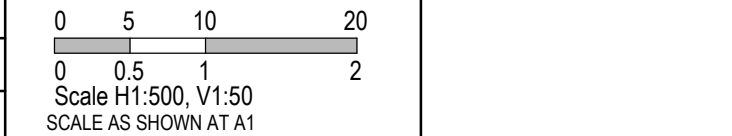


OLIVINE BOULEVARD LONGITUDINAL SECTION

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUNS	AB
1	26.06.20	AS CONSTRUCTED	JK/KU	AB

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

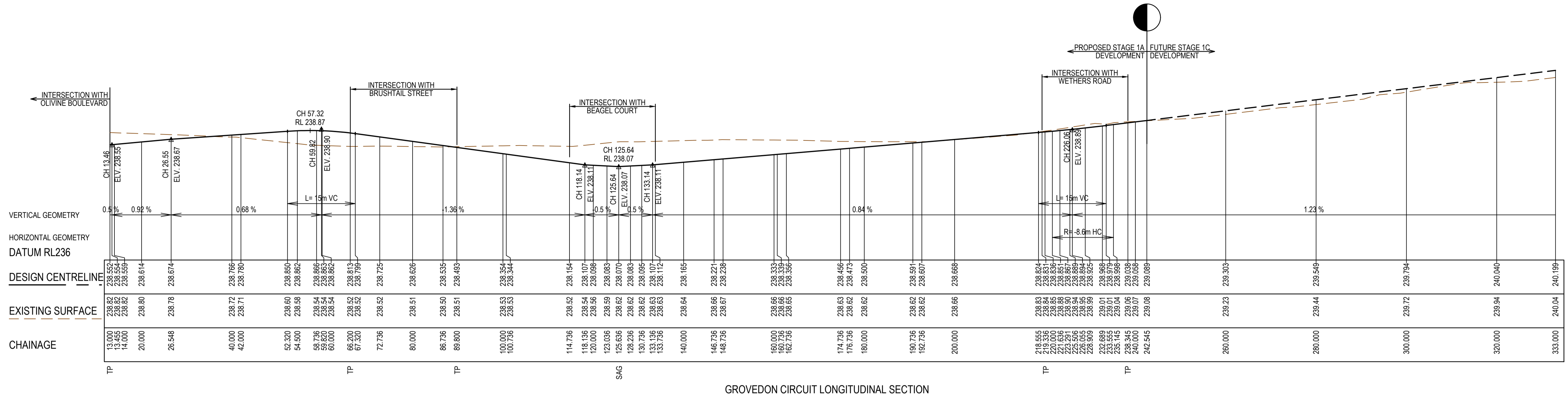


Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Longitudinal Sections - 1

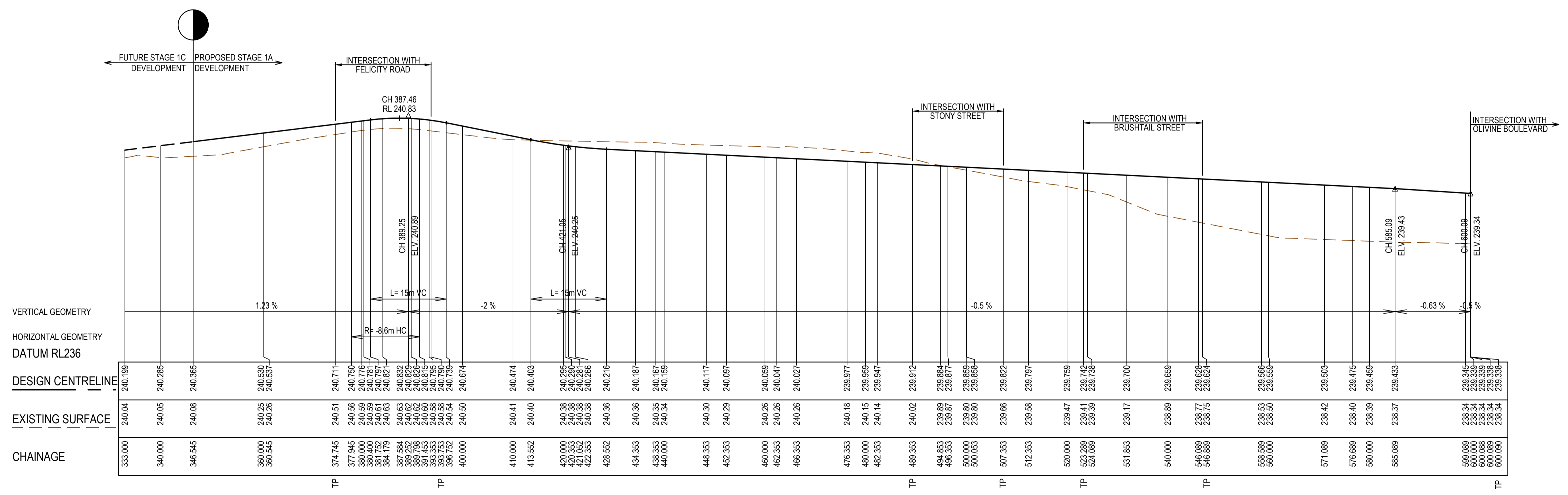
AS CONSTRUCTED



MELBOURNE REF	PROJECT / DRAWING No.	SHEET No.	REVISION
9 J2	1700E-01A-05	05 of 42	1



GROVEDON CIRCUIT LONGITUDINAL SECTION

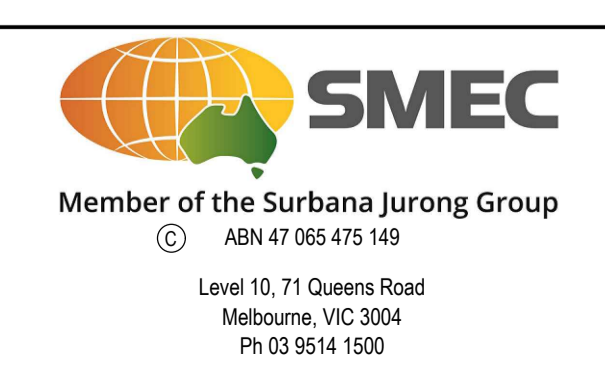
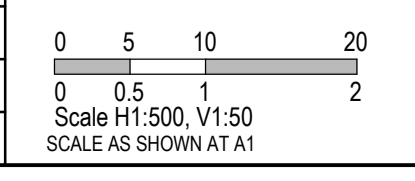


GROVEDON CIRCUIT LONGITUDINAL SECTION

AS CONSTRUCTED PLANS
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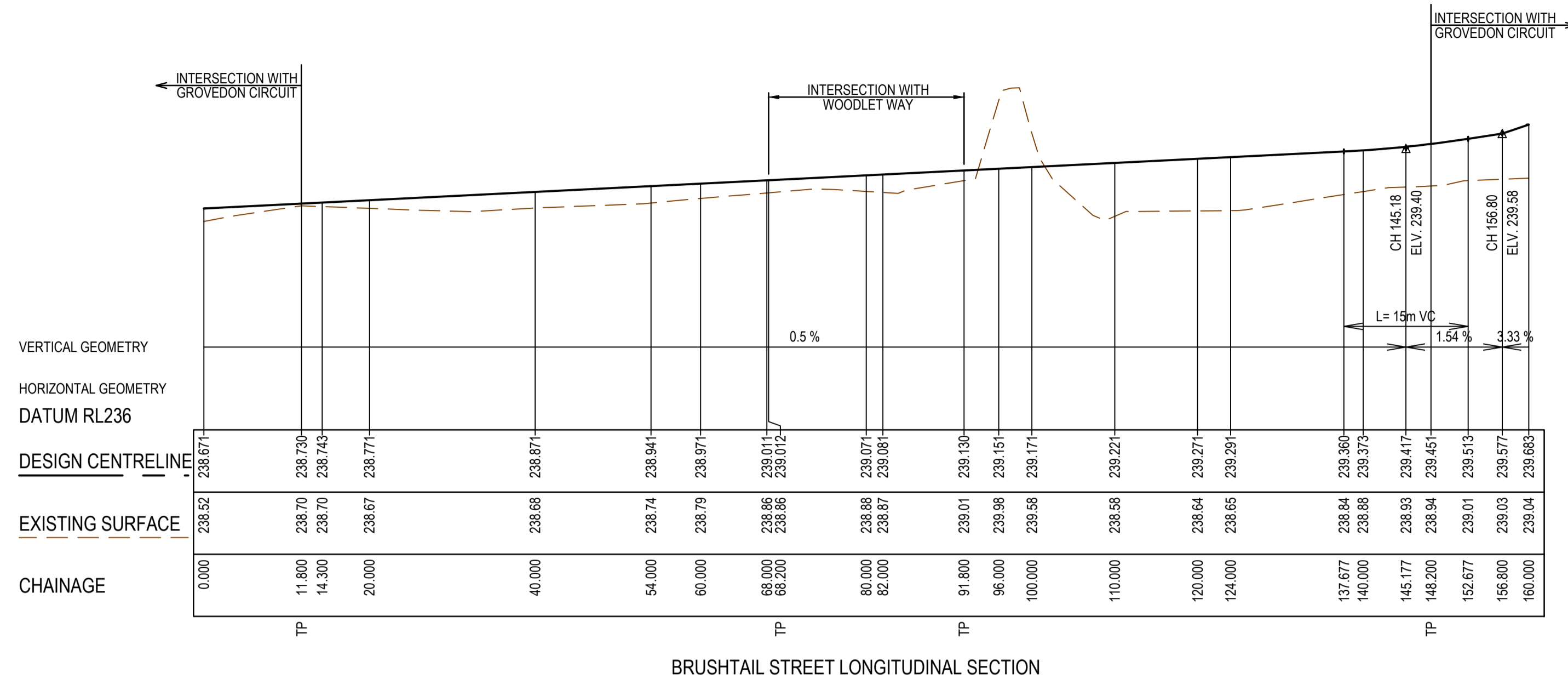
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0	26.07.18	ISSUED FOR CONSTRUCTION	JUNS	AB
1	26.06.21	AS CONSTRUCTED	JK/KU	AB

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

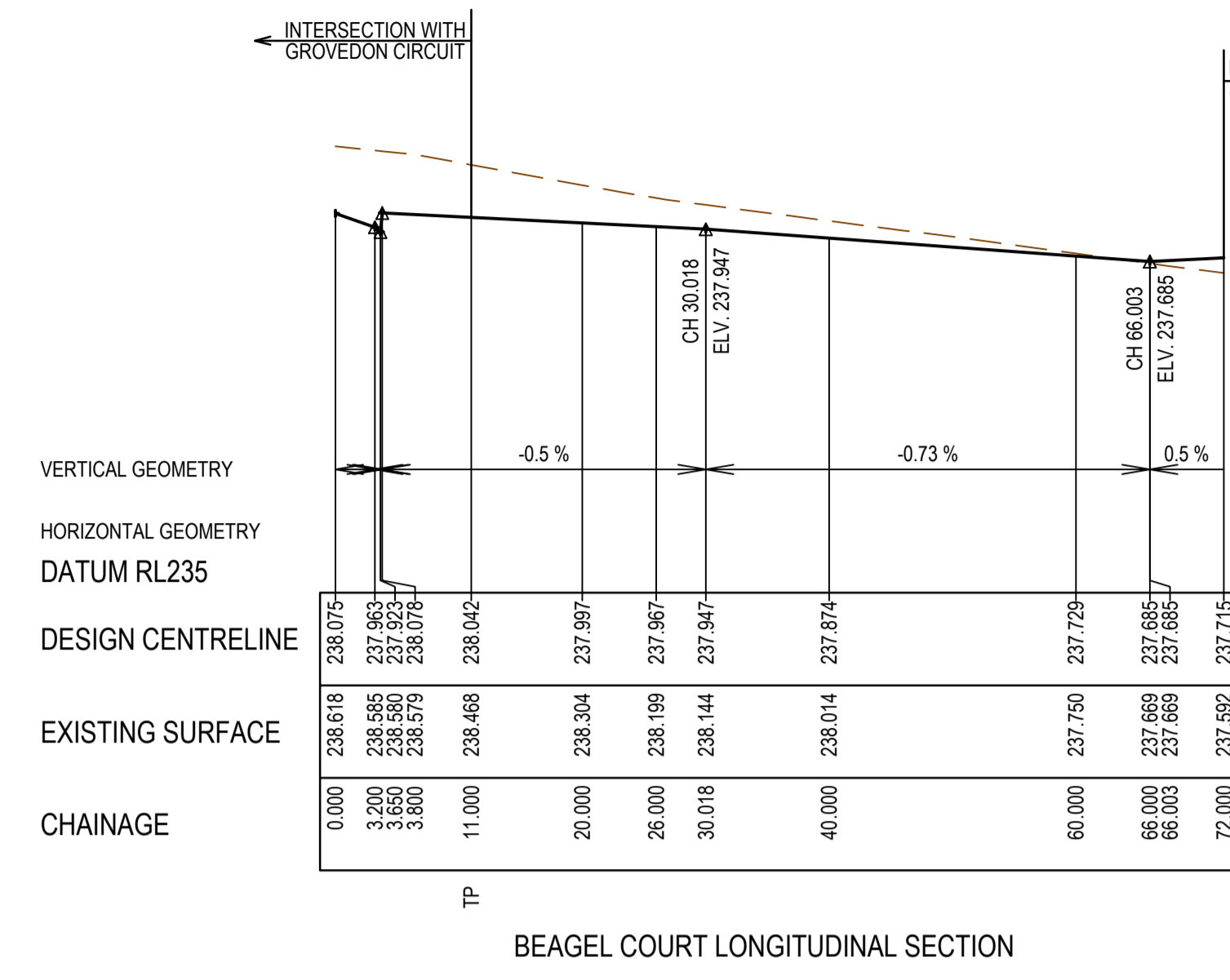


Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Longitudinal Sections - 2

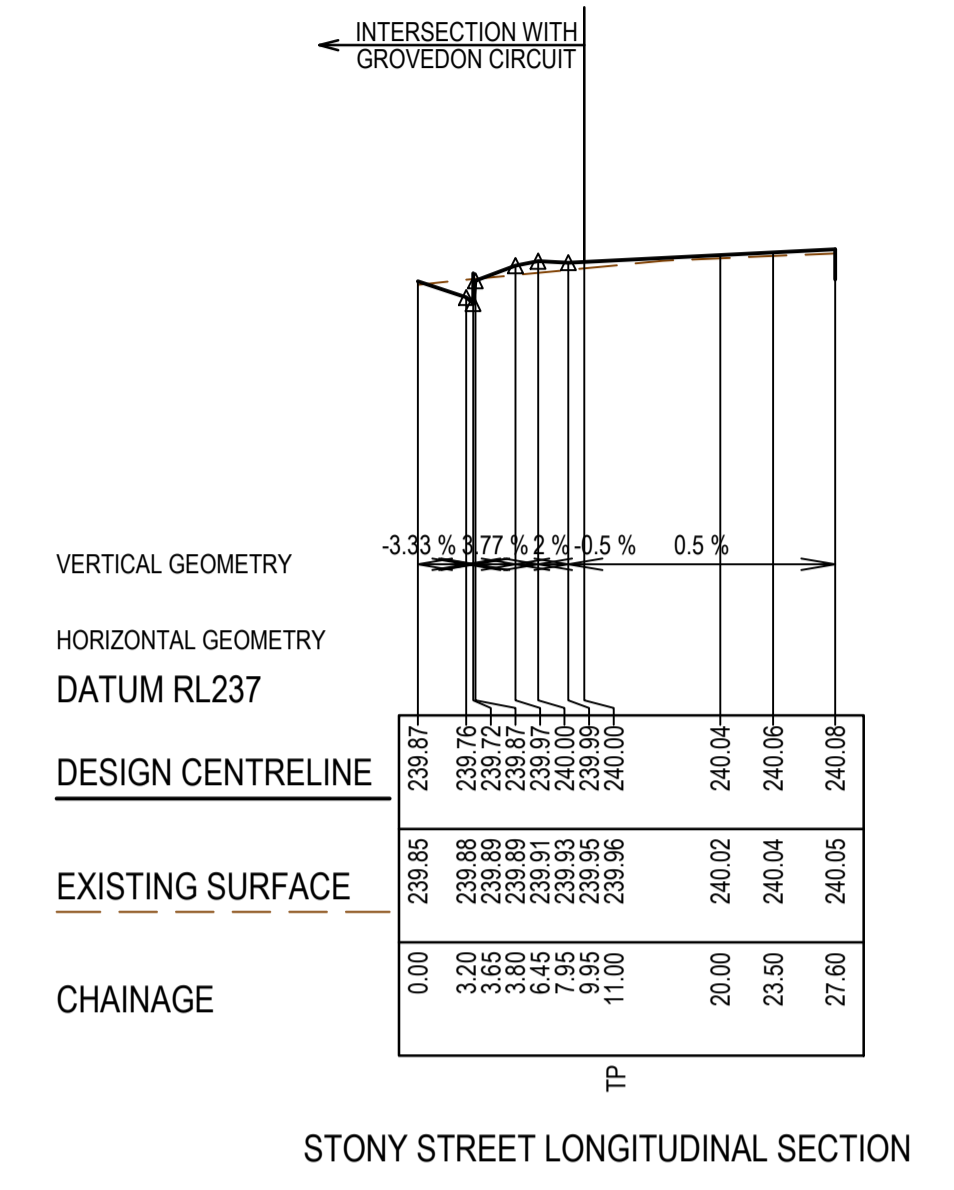
MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-06	SHEET No. 06 of 42	REVISION 1
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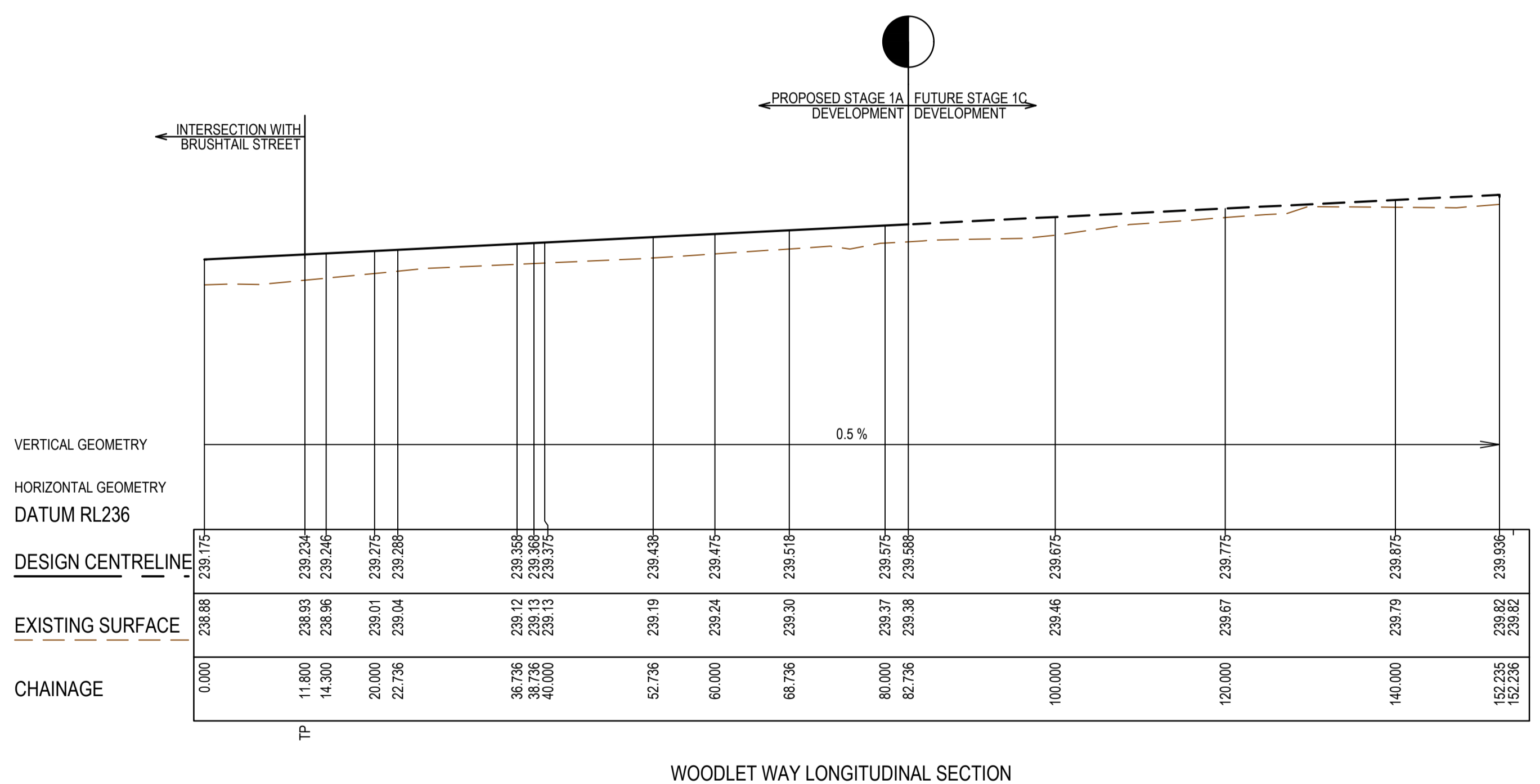
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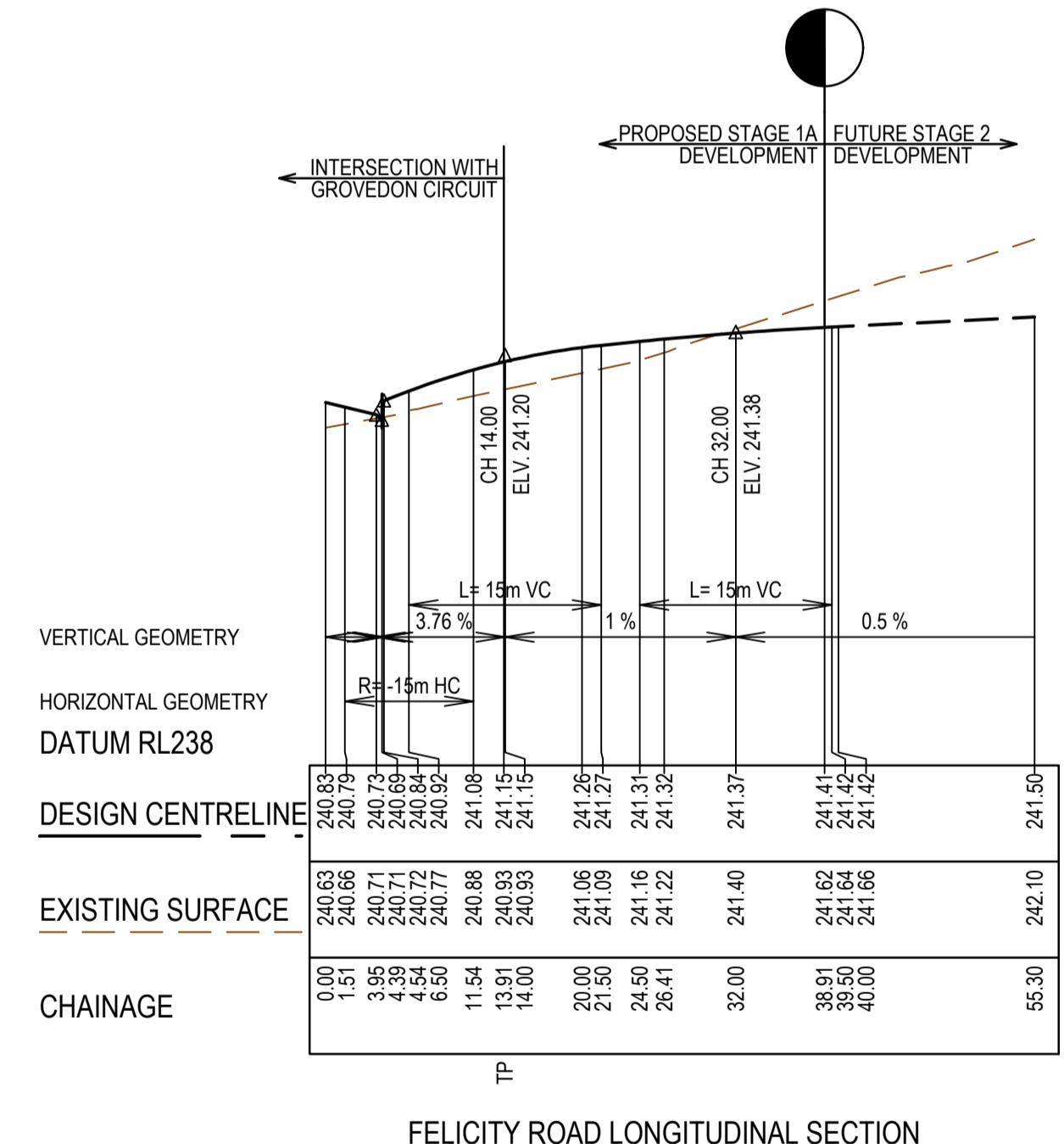
BEAGEL COURT LONGITUDINAL SECTION



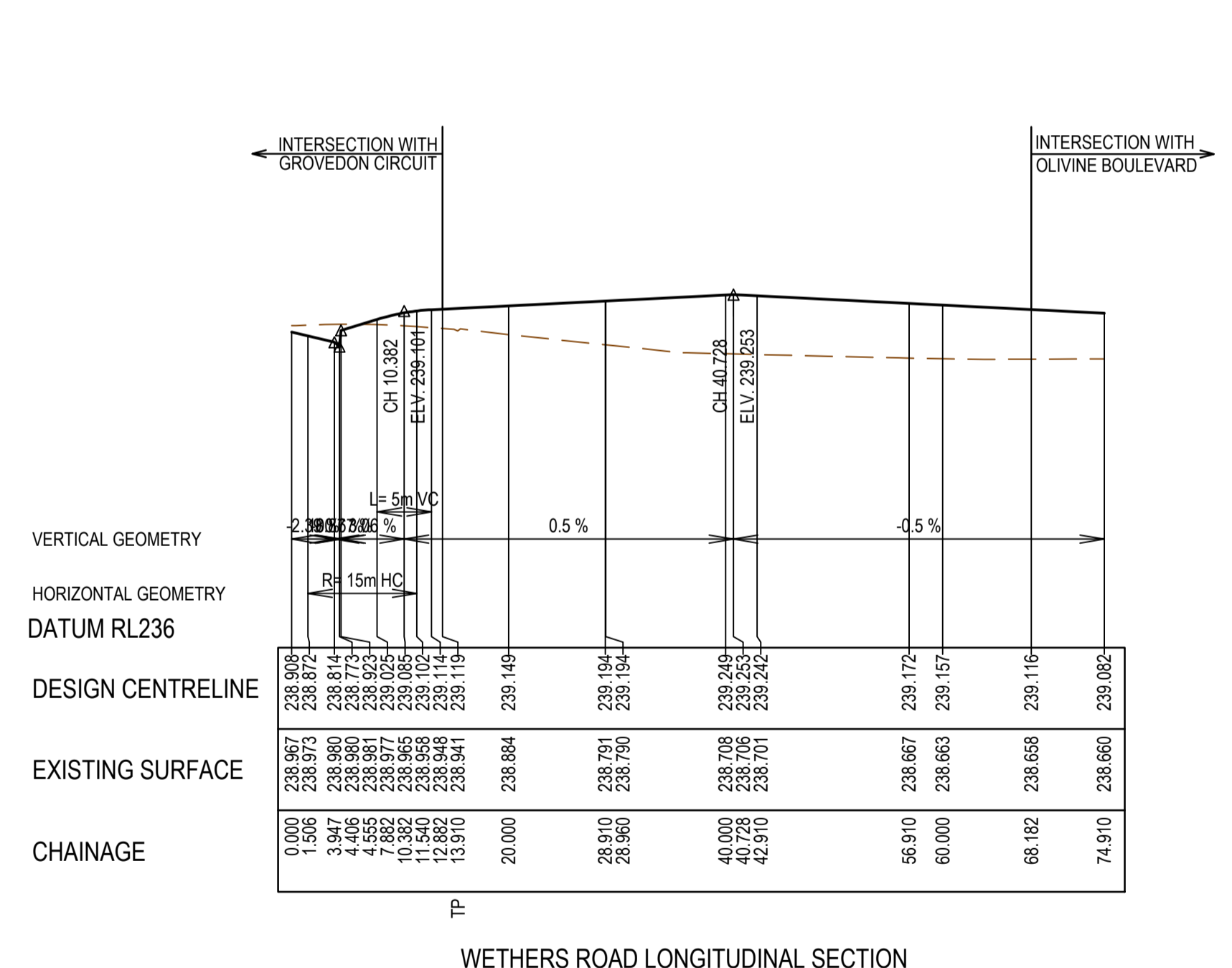
STONY STREET LONGITUDINAL SECTION



WOODLET WAY LONGITUDINAL SECTION



FELICITY ROAD LONGITUDINAL SECTION



WETHERS ROAD LONGITUDINAL SECTION

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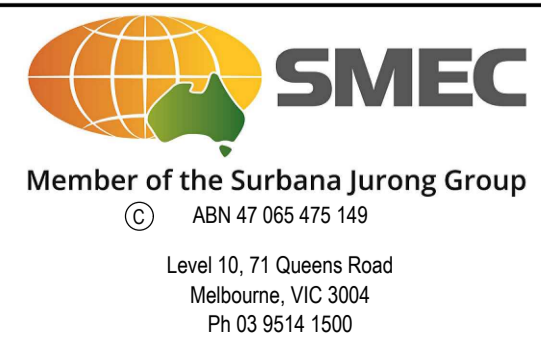
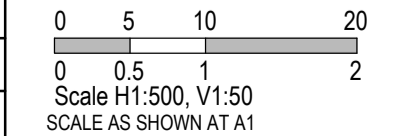
REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUNS	AB
1	26.06.22	AS CONSTRUCTED	JJKU	AB

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AS CONSTRUCTED



TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

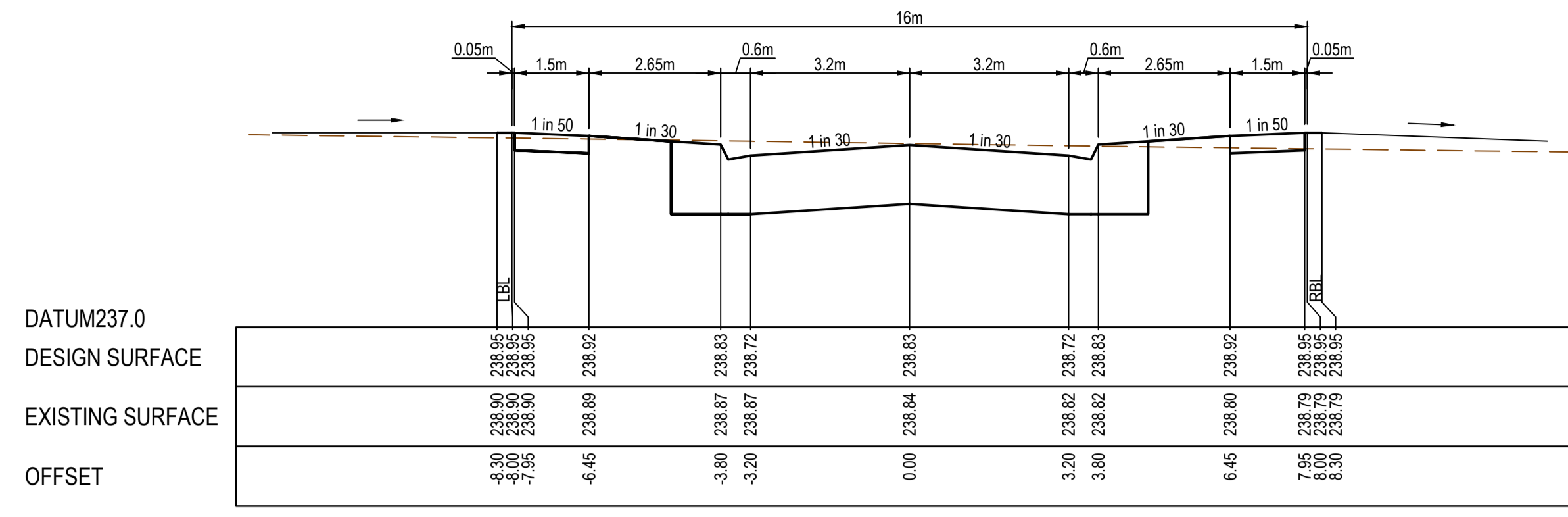


Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Longitudinal Sections - 3

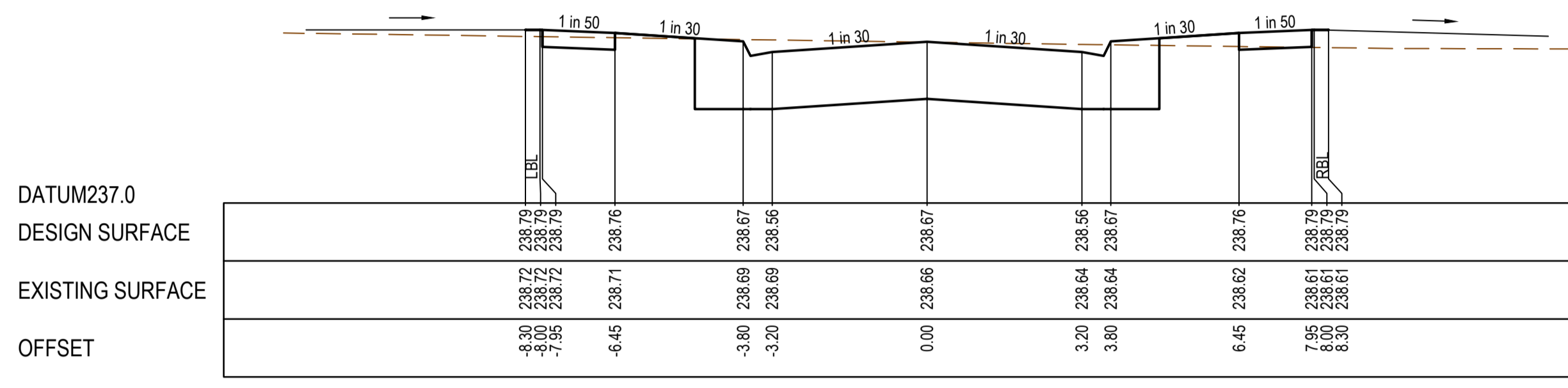
MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
9 J2	1700E-01A-07	07 of 42	1

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE

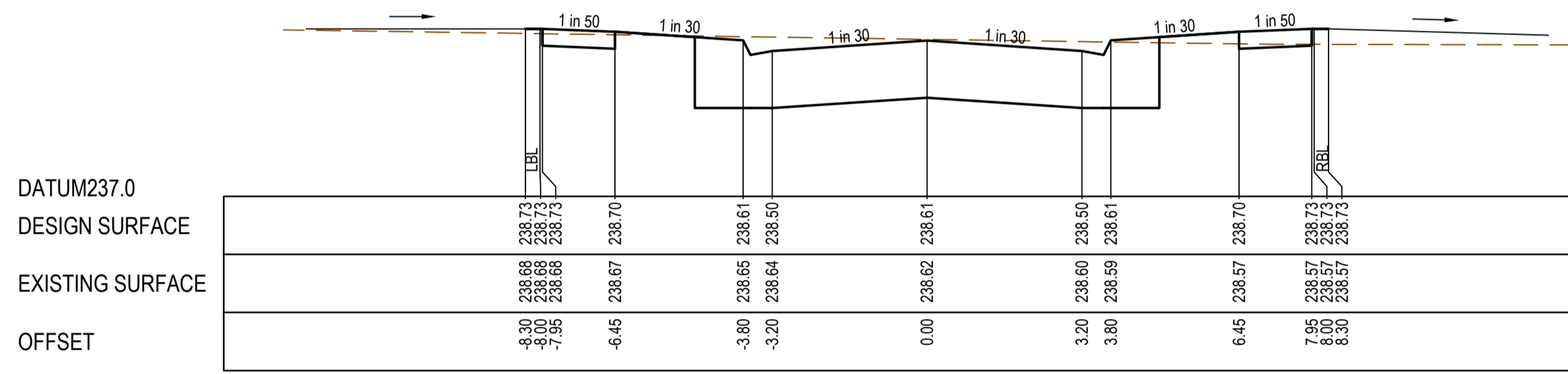
AS CONSTRUCTED PLANS
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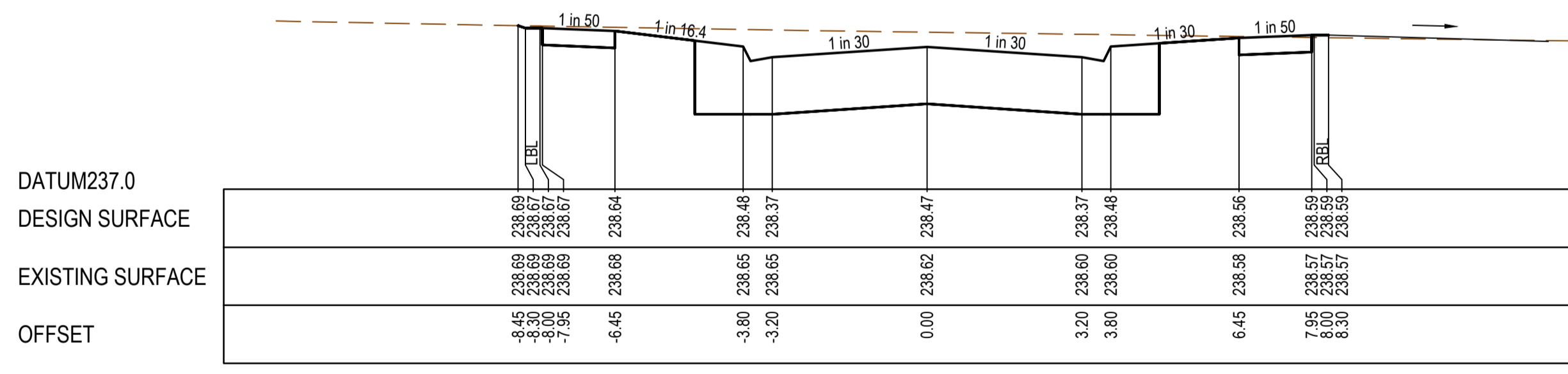
TPCH 219.34



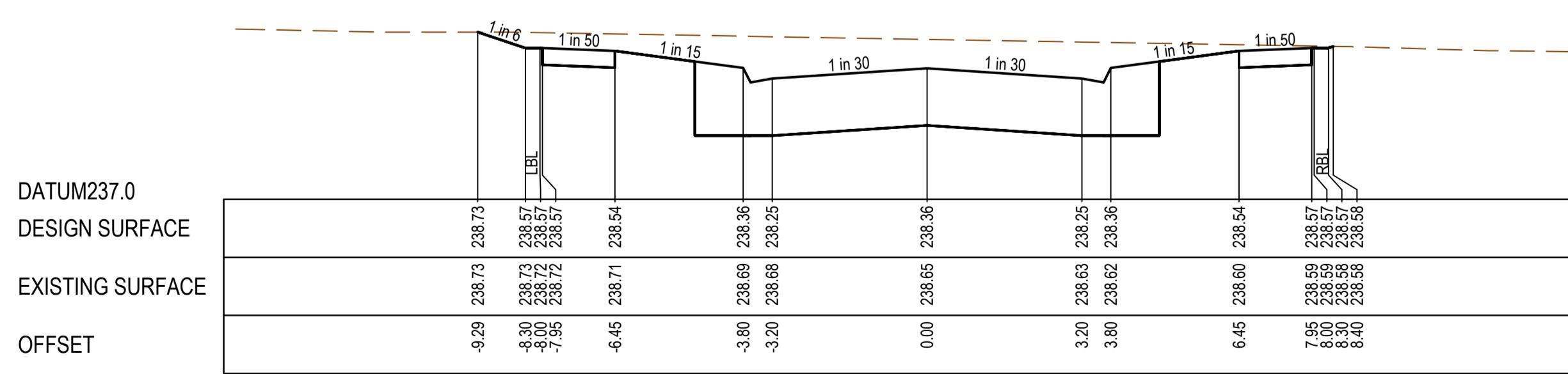
CH 200.00



CH 192.74



CH 176.74

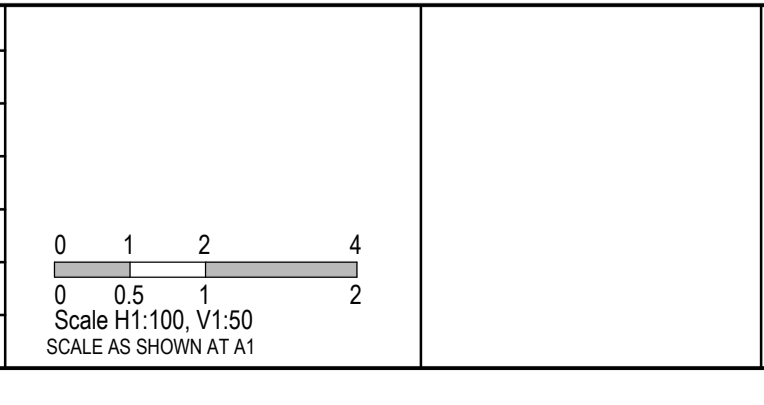


CH 162.74

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.27	AS CONSTRUCTED	JJ/KU	AB

AS CONSTRUCTED

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Quality Management ISO 9001	Site Management AS/NZS 1881	DRAFTER	N.Shrestha
Environmental Management ISO 14001	Global-Mark.com.au®	DESIGNER	J.Jones
		CHECKED	Z.Gosev
		AUTHORISED	A.Burrows
		REFERENCE No. 1	
		REFERENCE No. 2	



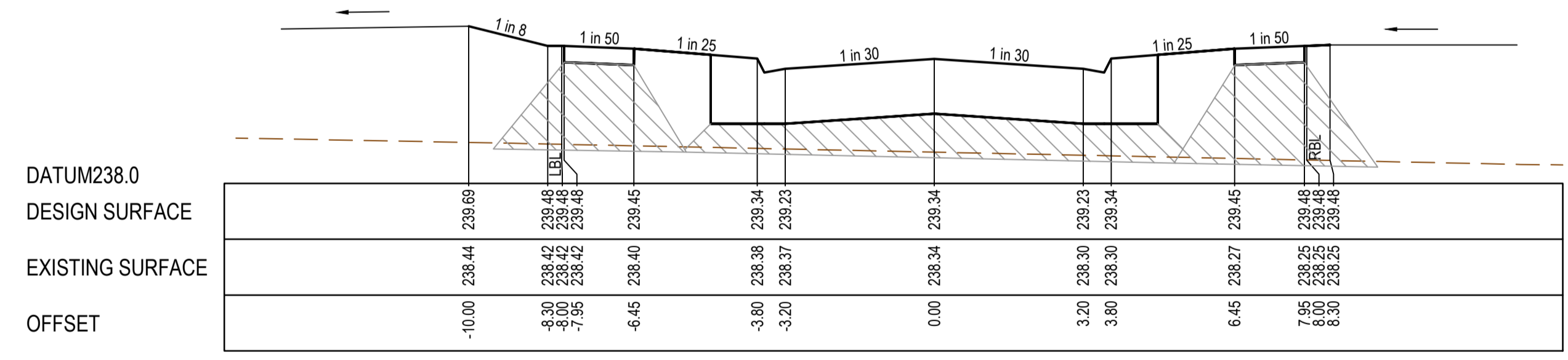
SMEC
 Member of the Surbana Jurong Group
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500

mirvac

Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Cross Sections: Grovedon Circuit Ch 162.74 - Ch 219.34		MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-12	SHEET No. 12 of 42	REVISION 1
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STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE

AS CONSTRUCTED PLANS
 THE PURPOSE OF THESE AS-CONSTRUCTED PLANS IS TO UPDATE THE DESIGN DRAWING TO SHOW SIGNIFICANT CHANGES WHICH OCCURRED DURING CONSTRUCTION. NOTE THAT THE LEVELS SHOWN ON THESE PLANS ARE DESIGN LEVELS, AND HAVE NOT BEEN VERIFIED BY SURVEY. ALL INFORMATION SHOWN ON THESE PLANS SHOULD BE VERIFIED ON SITE.
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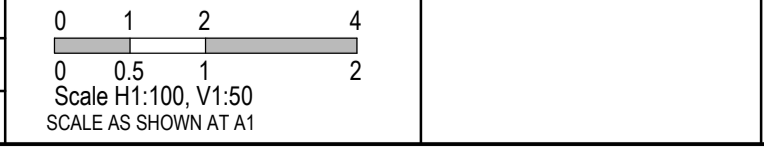
CH 600.09

GROVEDON CIRCUIT

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
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1	26.06.31	AS CONSTRUCTED	JJ/KU	AB

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



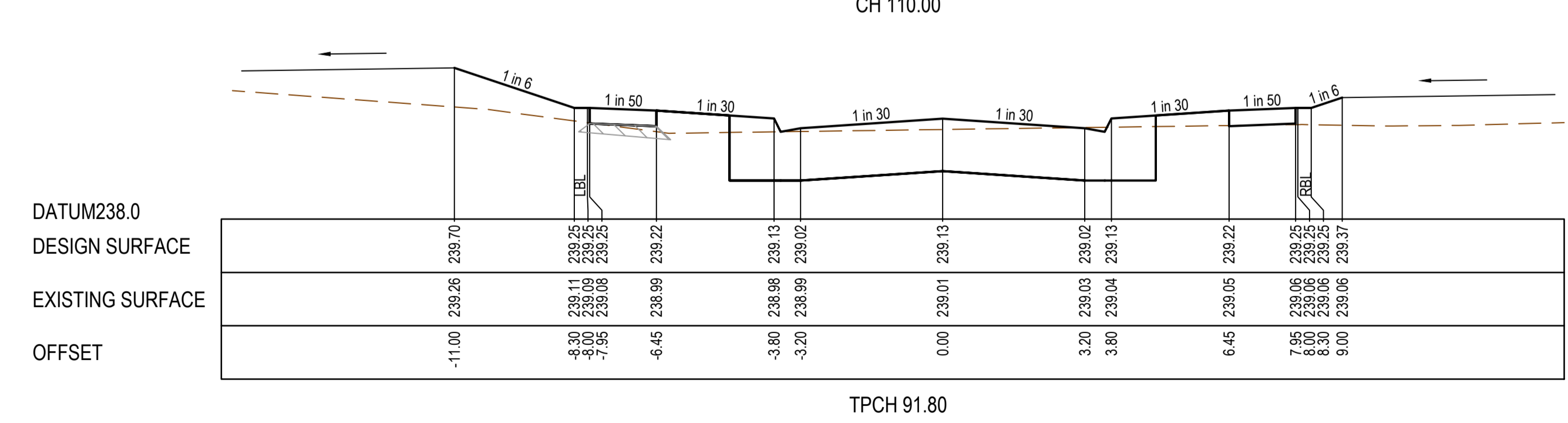
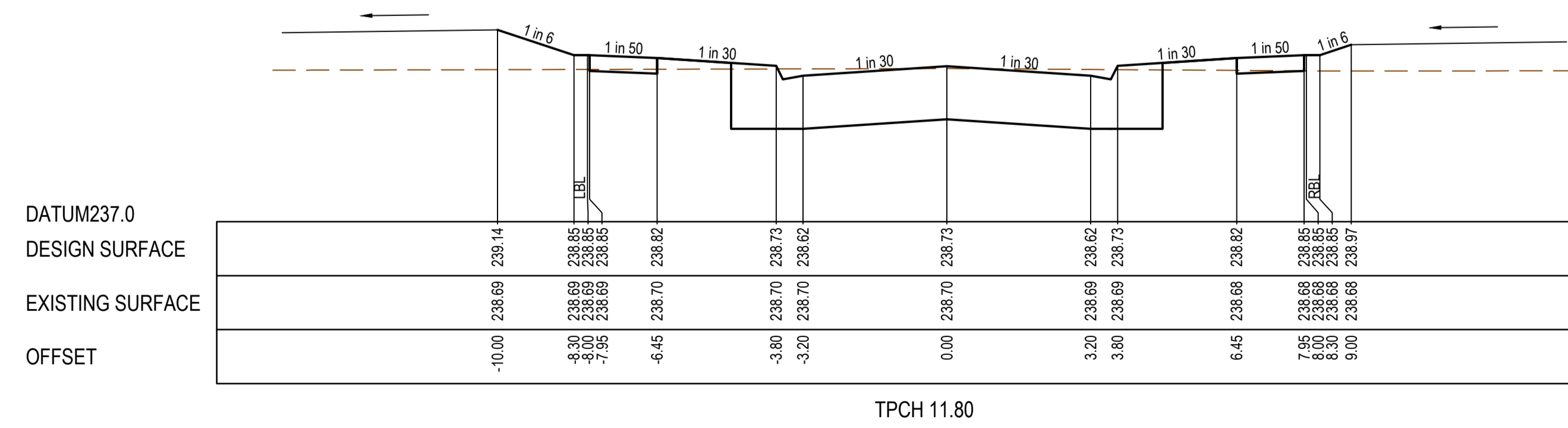
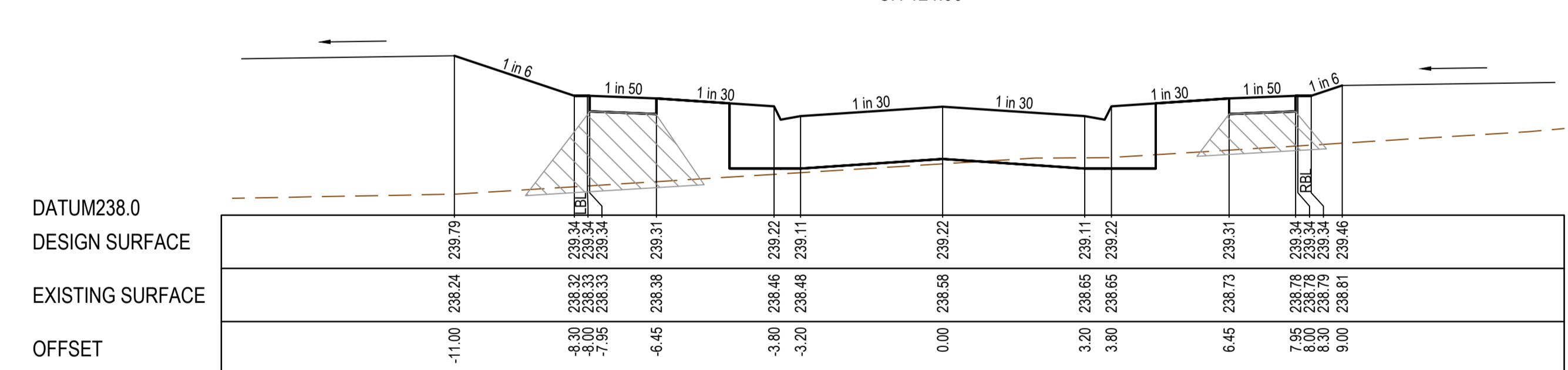
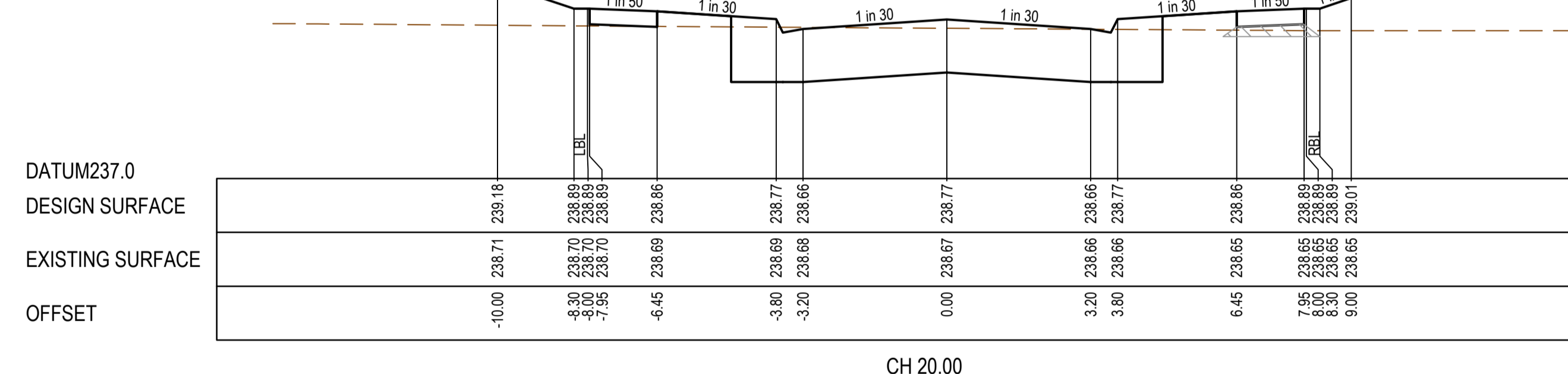
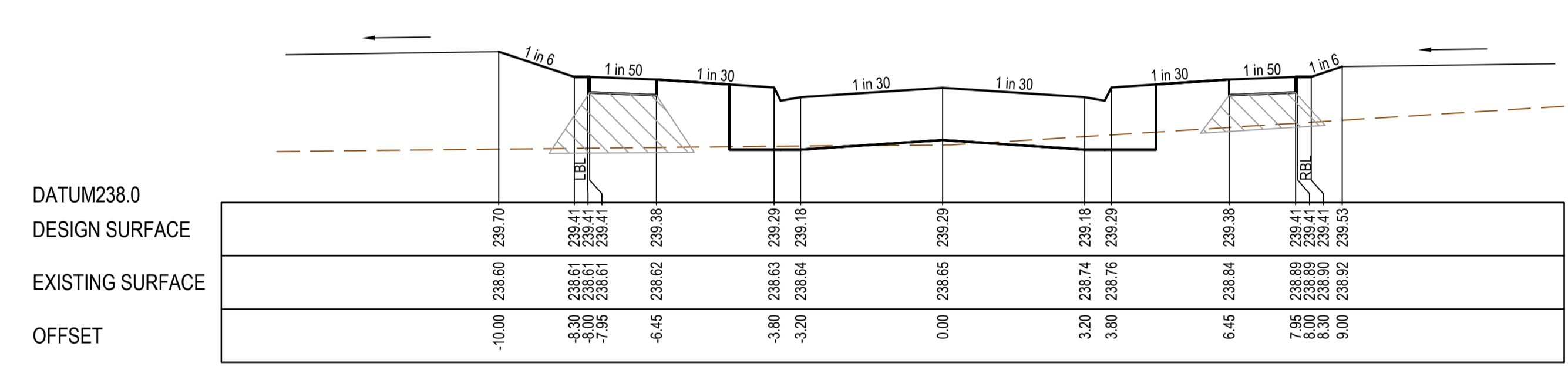
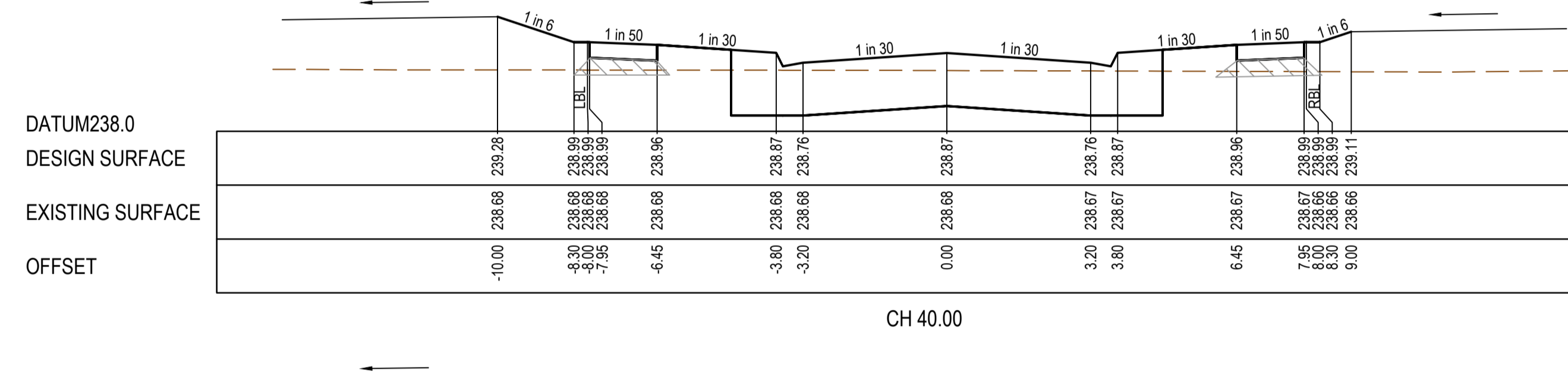
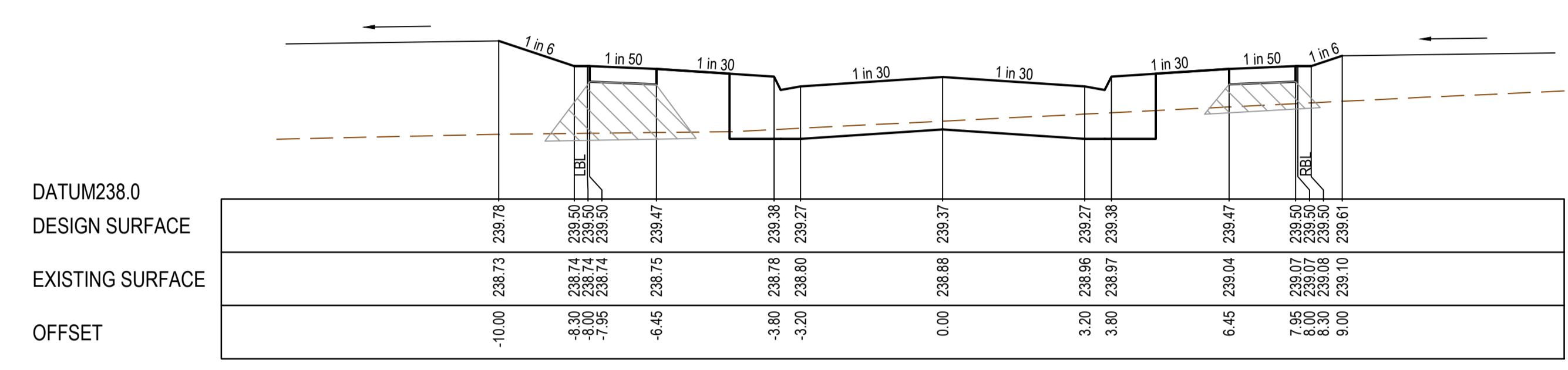
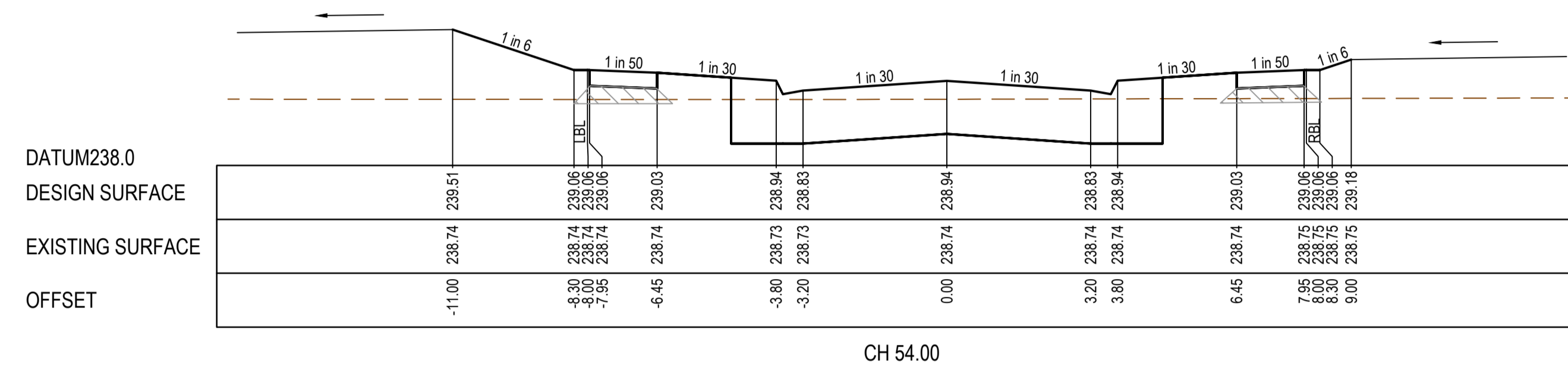
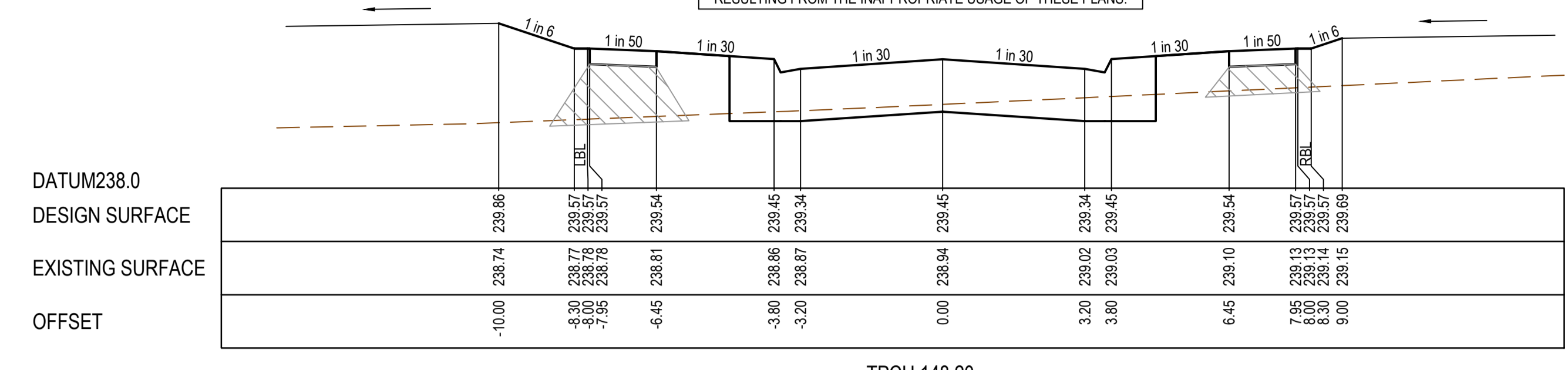
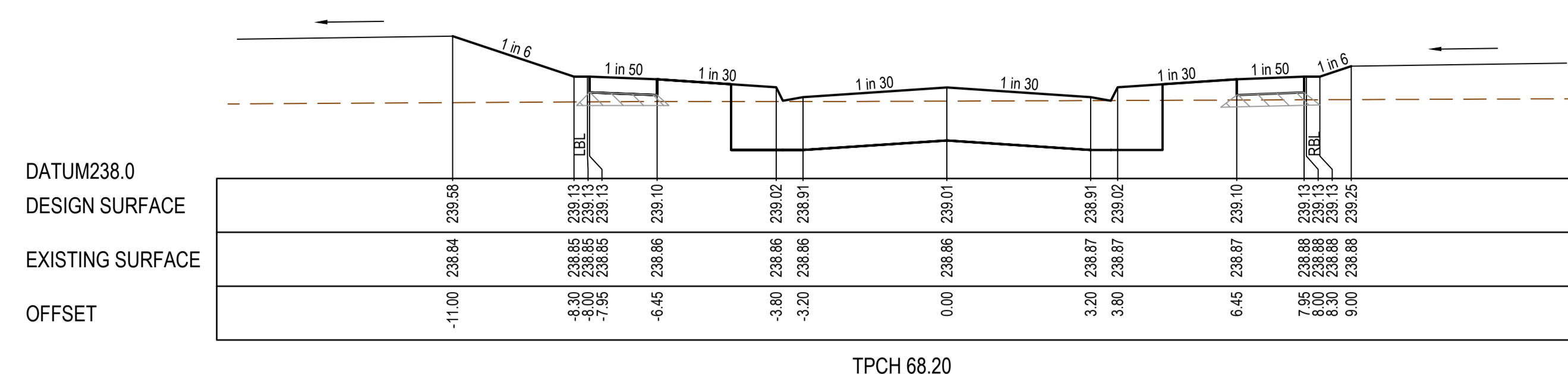
Member of the **Surbana Jurong Group**
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500

Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Cross Sections: Grovedon Circuit
 Ch 600.09

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-16	SHEET No. 16 of 42	REVISION 1
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AS CONSTRUCTED PLANS
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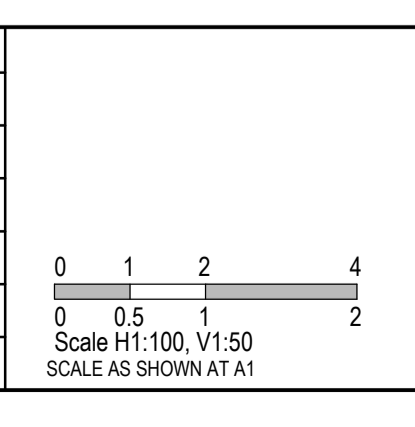
STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
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1	26.06.32	AS CONSTRUCTED	JJKU	AB

AS CONSTRUCTED

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Quality Management - ISO 9001	Site Management - AS/NZS 1880	DRAFTER	N.Shrestha
Environmental Management - ISO 14001		DESIGNER	J.Jones
		CHECKED	Z.Gosev
		AUTHORISED	A.Burrows
		REFERENCE No. 1	
		REFERENCE No. 2	



SMEC
 Member of the **Surbana Jurong Group**
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500

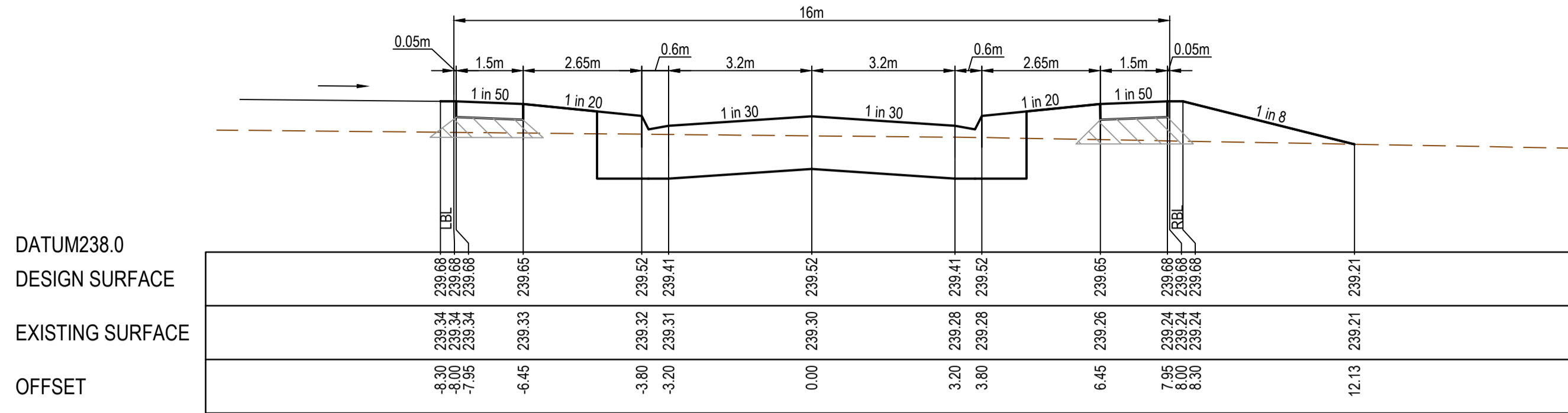
mirvac

Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Cross Sections: Brushtail Street

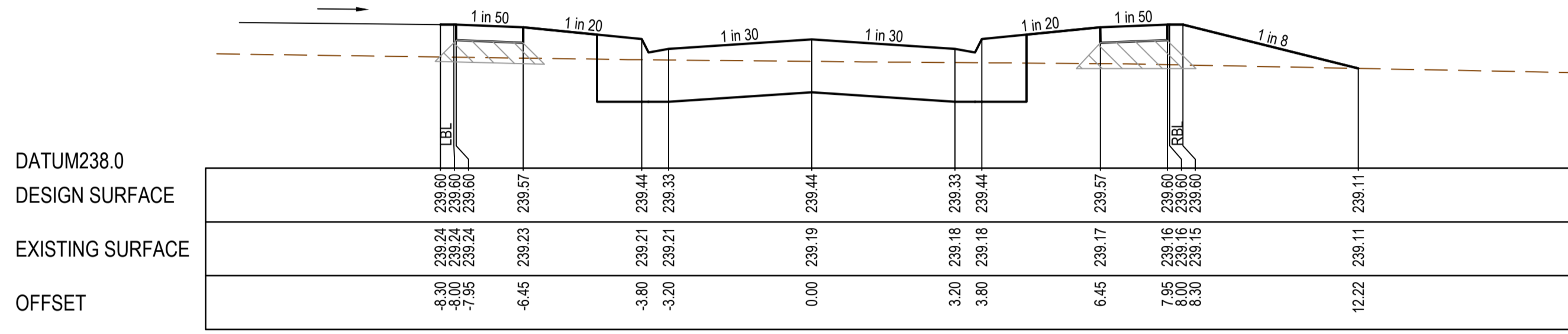
MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
9 J2	1700E-01A-17	17 of 42	1

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE

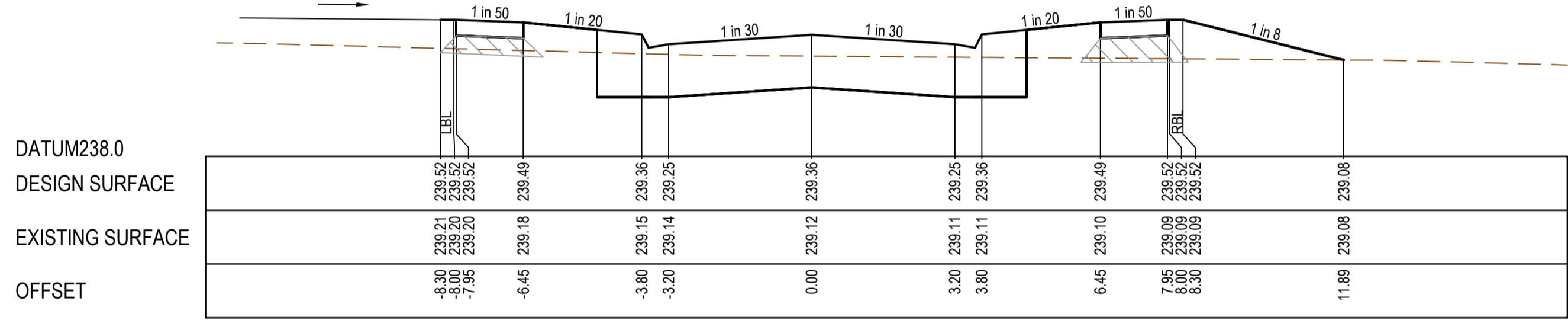
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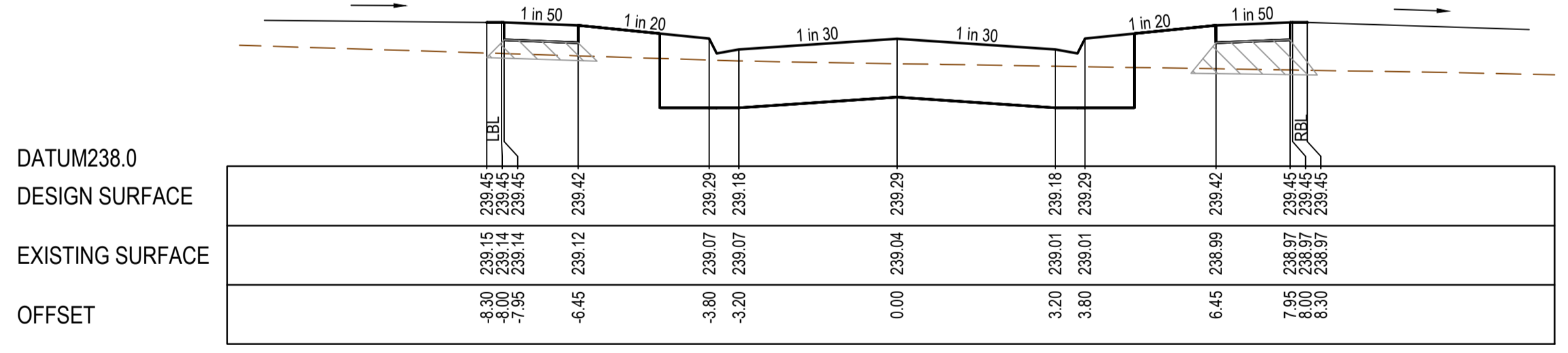
CH 68.74



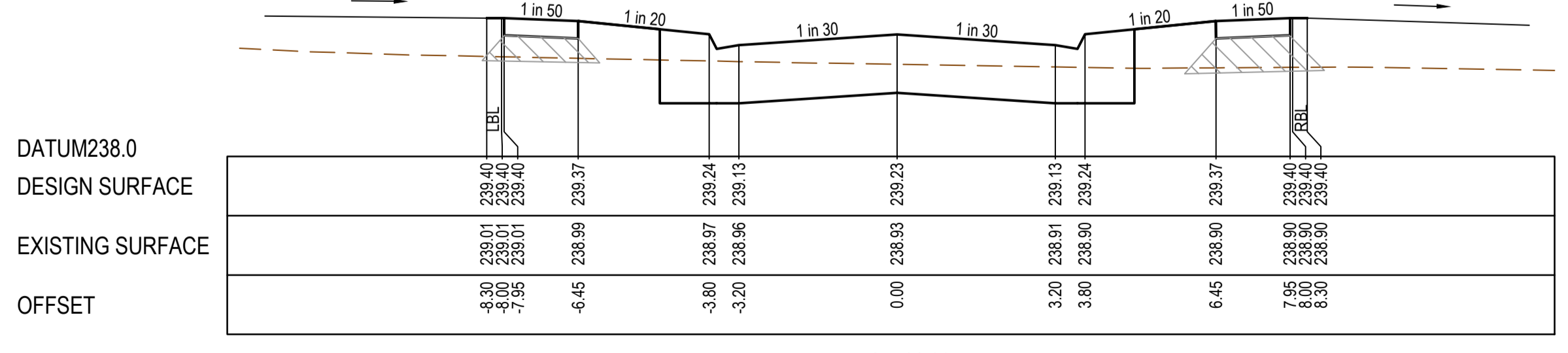
CH 52.74



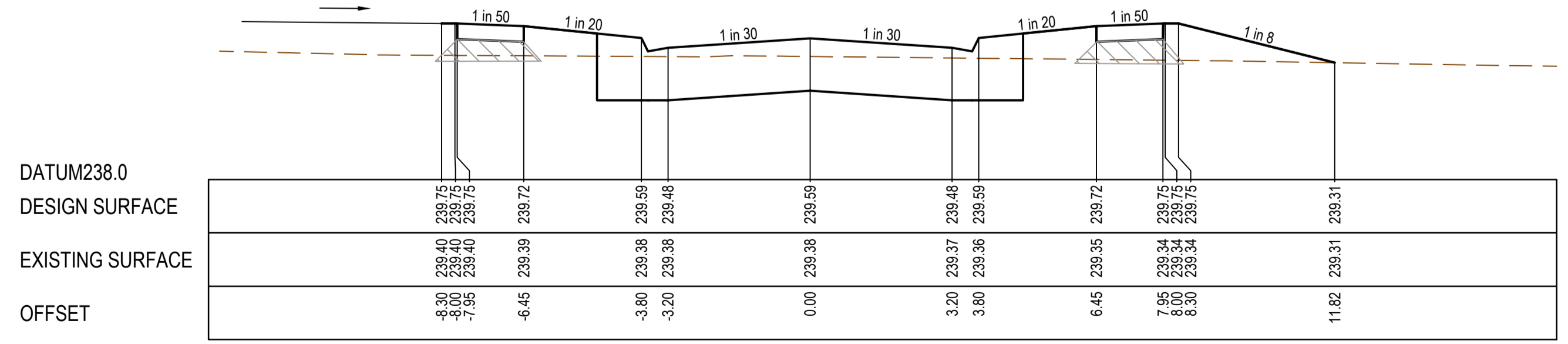
CH 36.74



CH 22.74



TPCH 11.80



CH 82.74

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
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1	26.06.33	AS CONSTRUCTED	JUN/JKU	AB

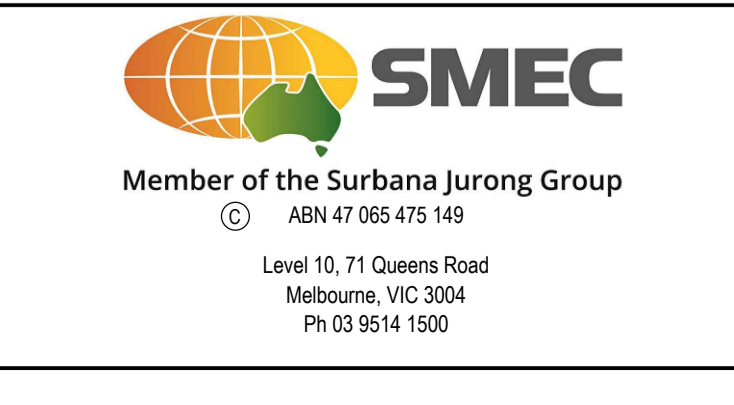
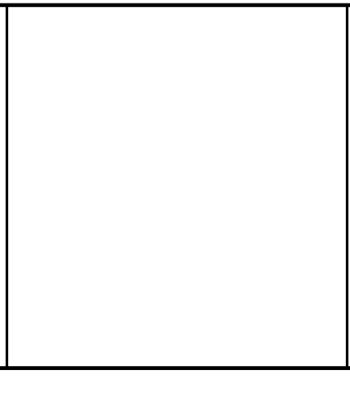
AS CONSTRUCTED

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Quality Management ISO 9001
 OHS Management AS/NZS 4500
 Environmental Management ISO 14001

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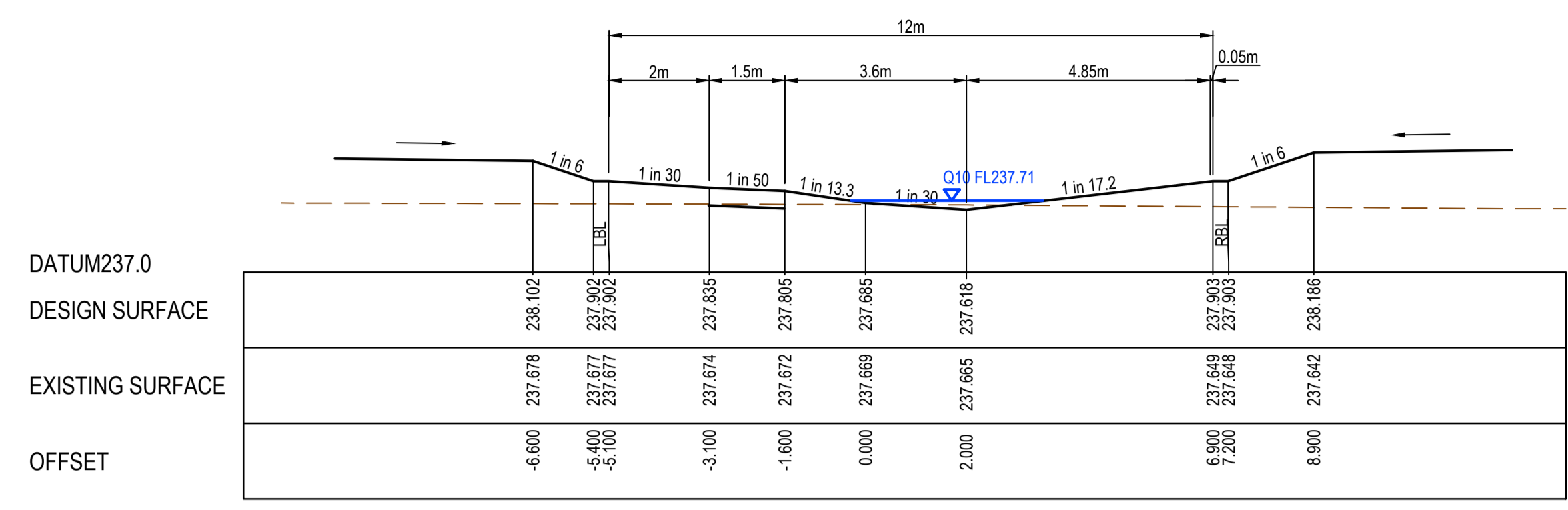
TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



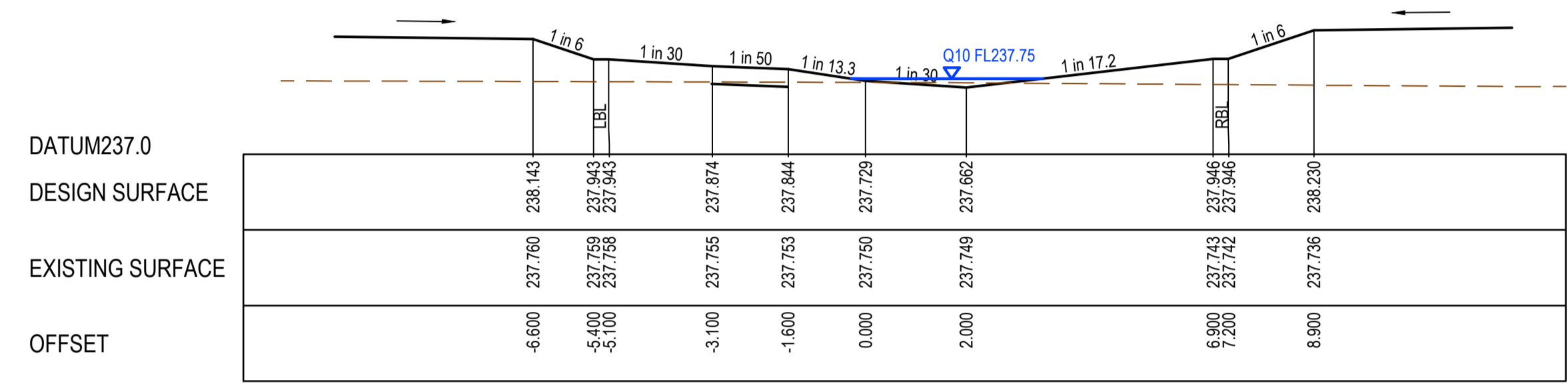
Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Cross Sections: Woodlet Way	
MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-18
SHEET No. 18 of 42	REVISION 1

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE

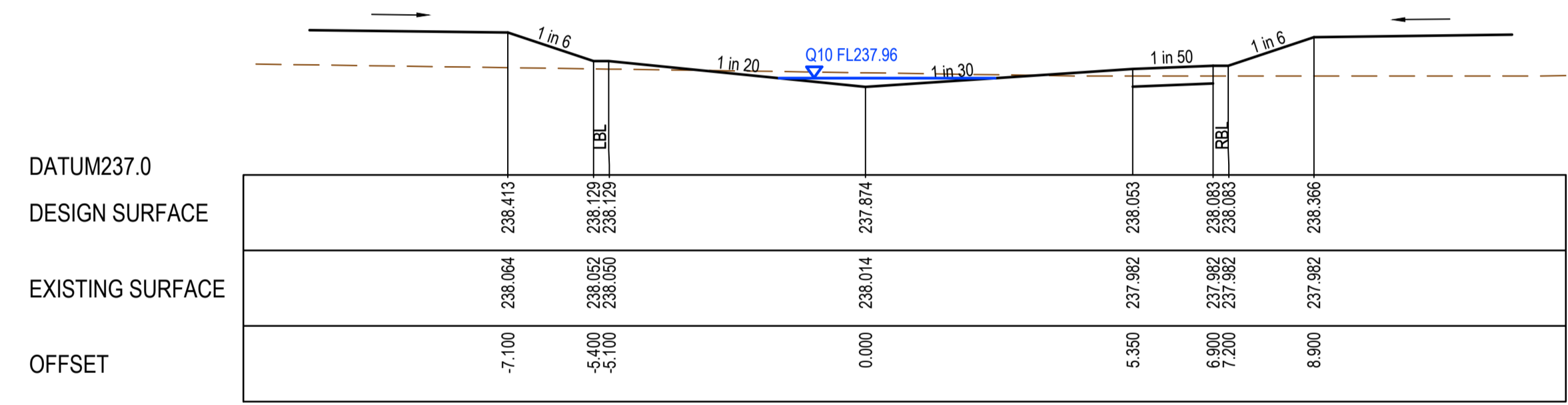
AS CONSTRUCTED PLANS
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 SMEC ACCEPT NO RESPONSIBILITY FOR LOSS OR DAMAGES RESULTING FROM THE INAPPROPRIATE USAGE OF THESE PLANS.



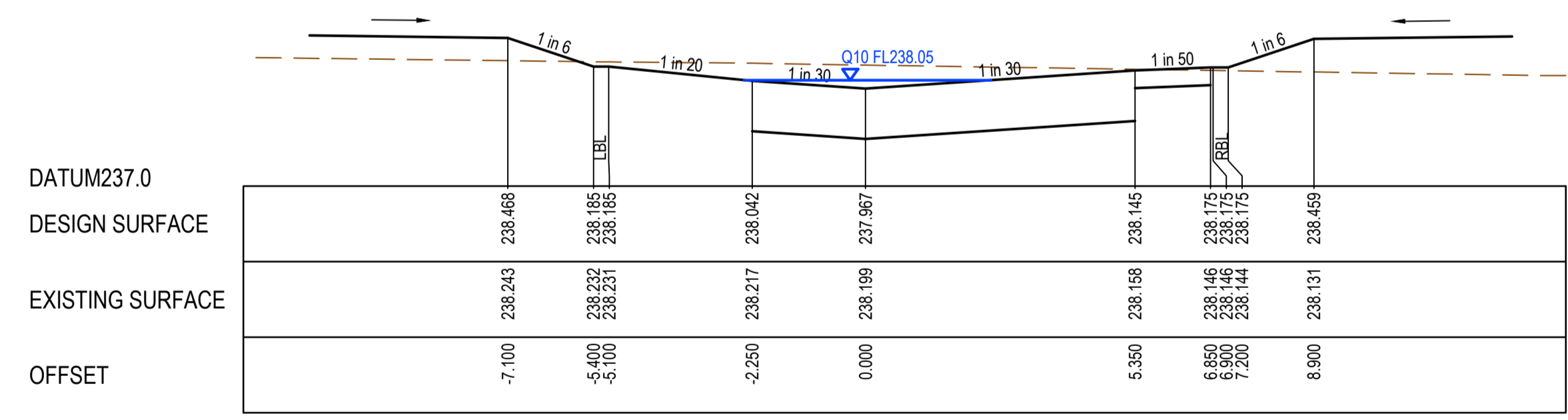
CH 66.000



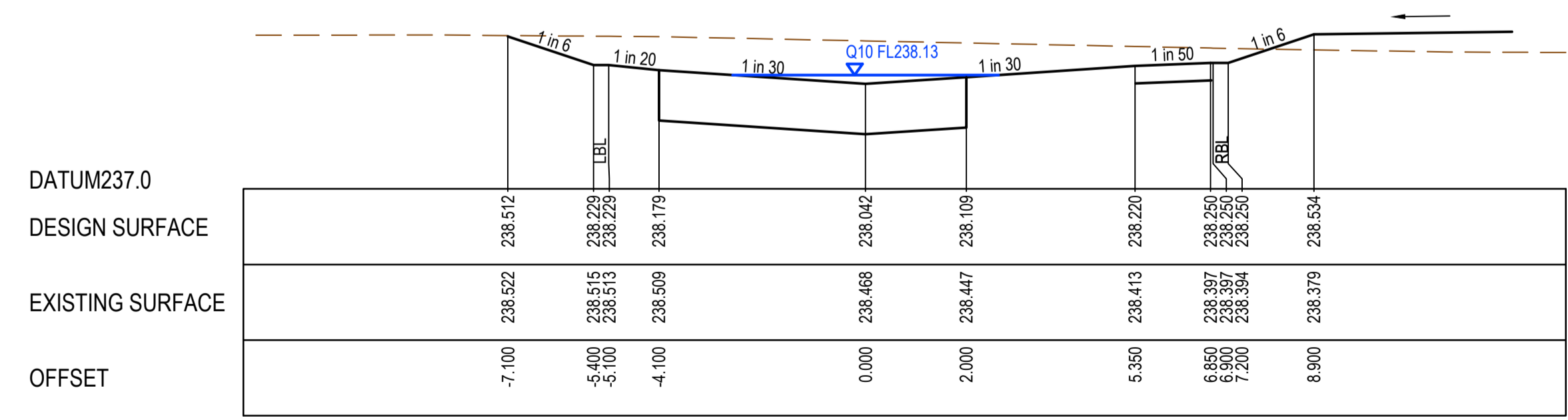
CH 60.000



CH 40.000



CH 26.000



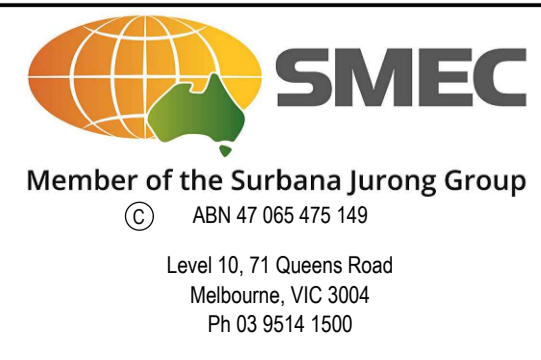
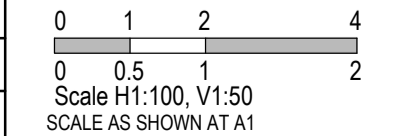
TPCH 11.000

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.34	AS CONSTRUCTED	JJ/KU	AB

All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.



TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

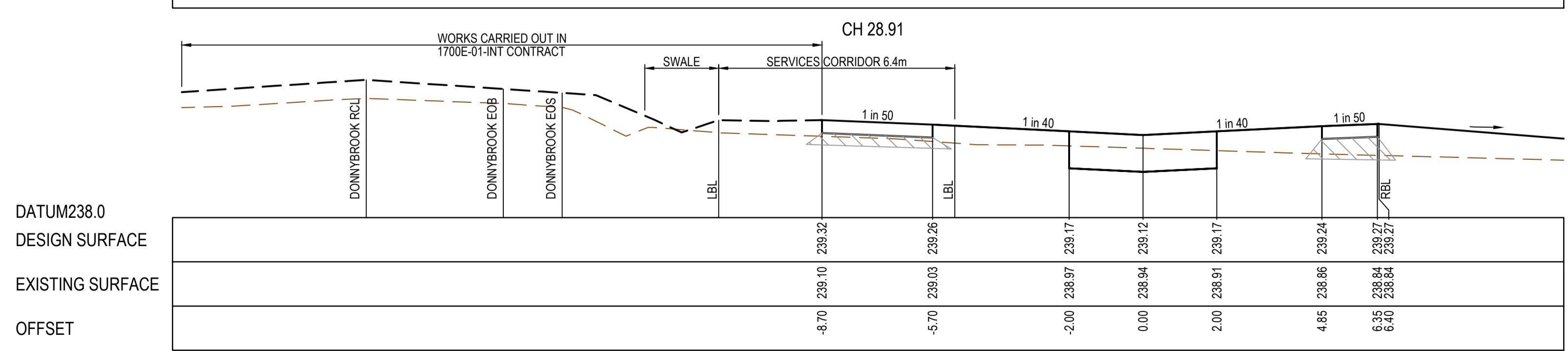
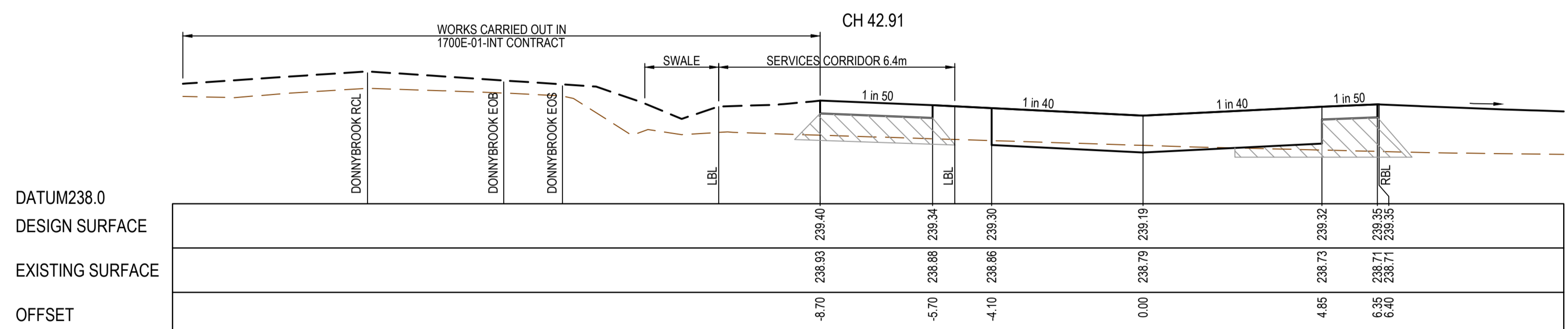
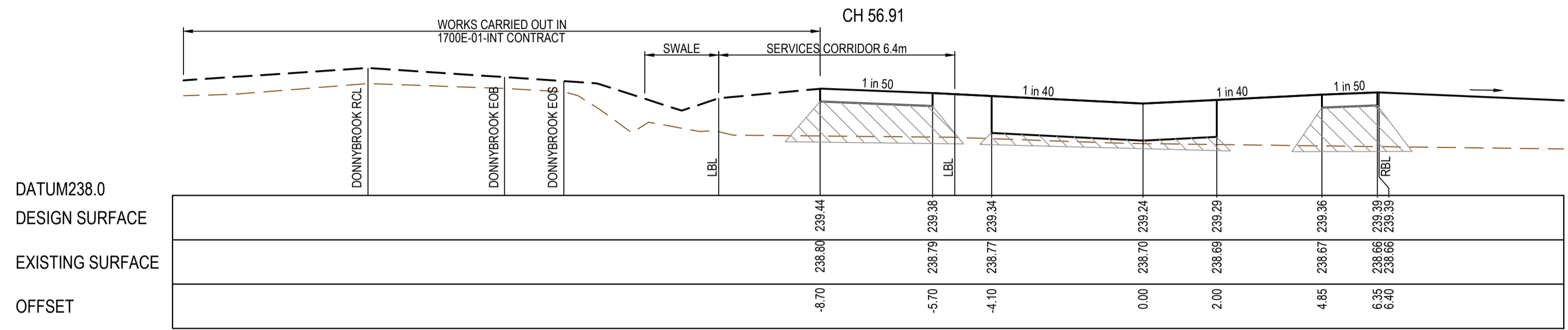
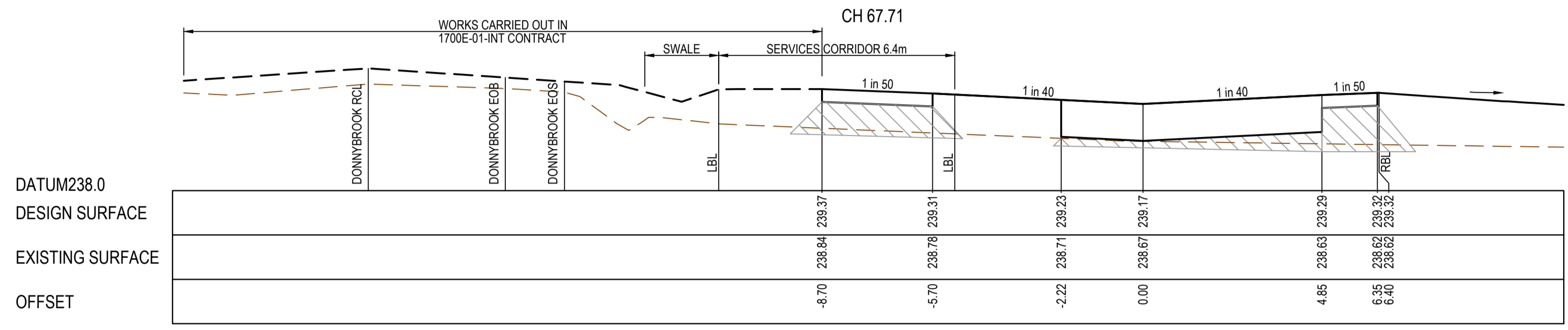
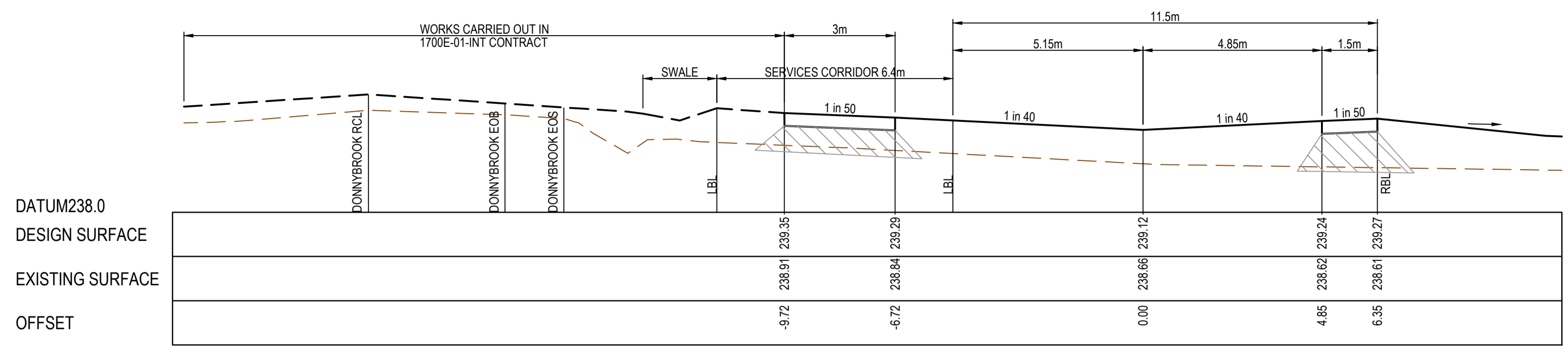


Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Cross Sections: Beagel Court

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-19	SHEET No. 19 of 42	REVISION 1
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STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE

AS CONSTRUCTED PLANS
 THE PURPOSE OF THESE AS-CONSTRUCTED PLANS IS TO UPDATE THE DESIGN DRAWINGS TO SHOW SIGNIFICANT CHANGES WHICH OCCURRED DURING CONSTRUCTION. NOTE THAT THE LEVELS SHOWN ON THESE PLANS ARE DESIGN LEVELS, AND HAVE NOT BEEN VERIFIED BY SURVEY. ALL INFORMATION SHOWN ON THESE PLANS SHOULD BE VERIFIED ON SITE.
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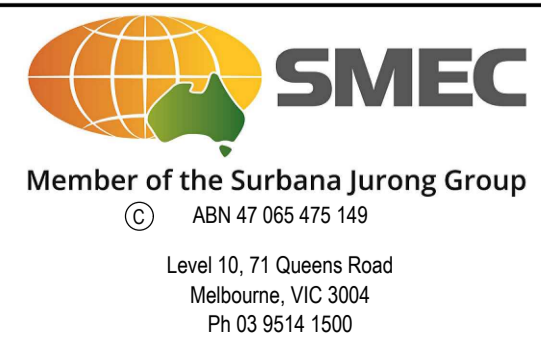
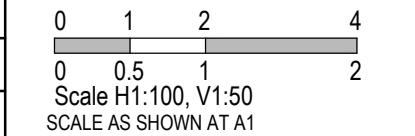


REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUN/JKU	AB
1	26.06.35	AS CONSTRUCTED		AB

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

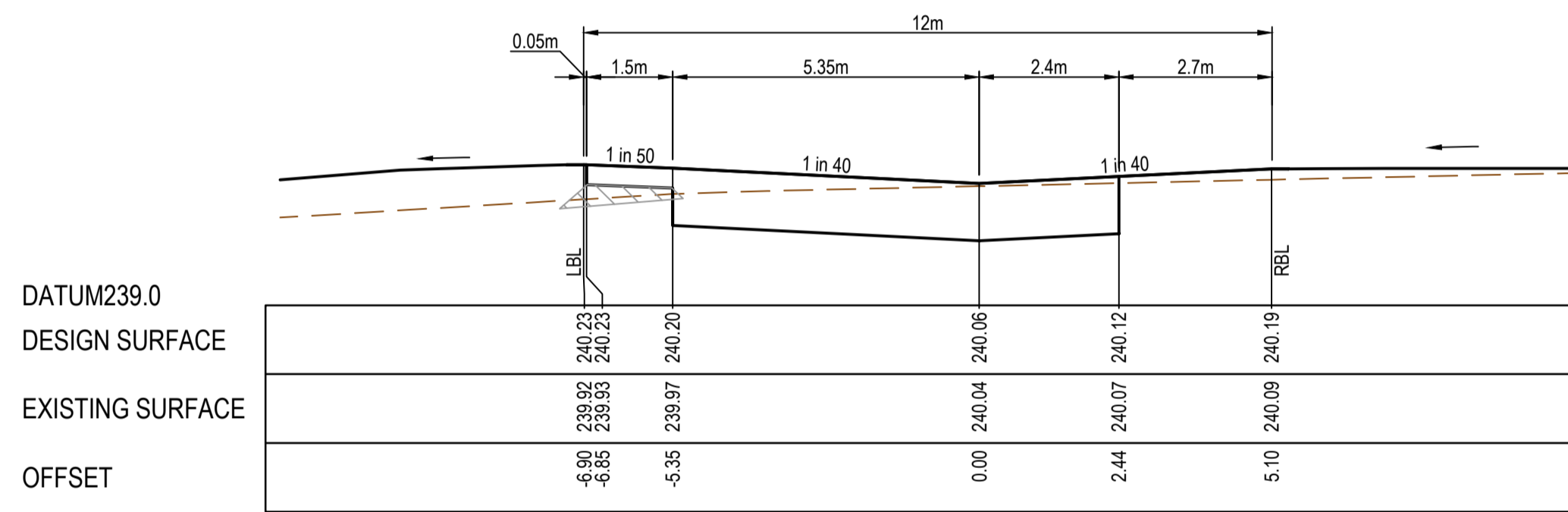


Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Cross Sections: Wethers Road

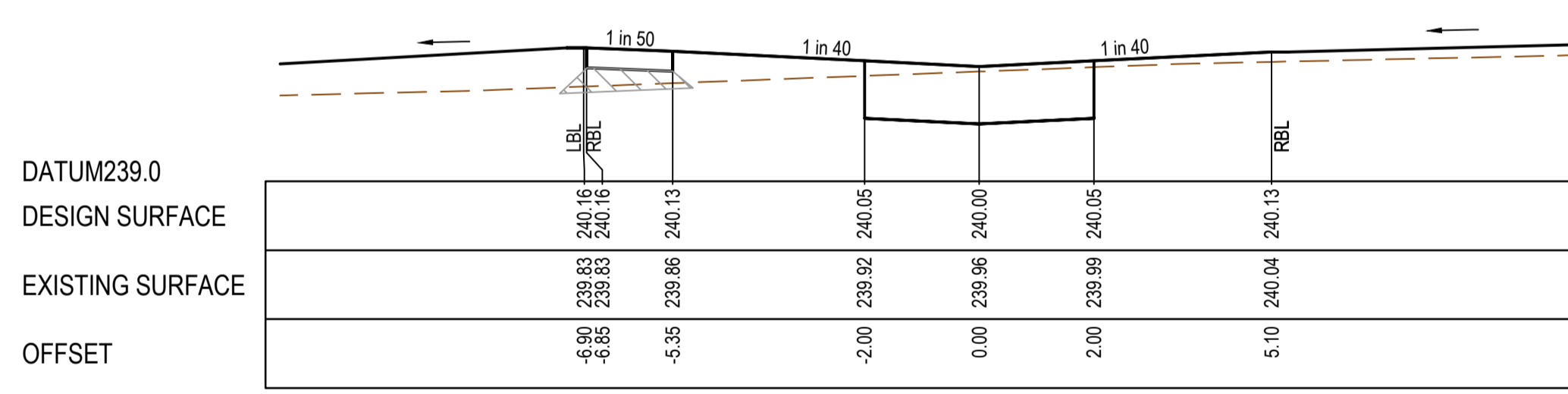
MELBOURNE REF	PROJECT / DRAWING No.	SHEET No.	REVISION
9 J2	1700E-01A-20	20 of 42	1

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE

AS CONSTRUCTED PLANS
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 SMEC ACCEPTS NO RESPONSIBILITY FOR LOSS OR DAMAGES RESULTING FROM THE INAPPROPRIATE USAGE OF THESE PLANS.



CH 23.50



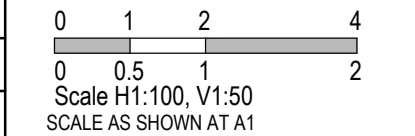
TPCH 11.00

STONY STREET

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.36	AS CONSTRUCTED	JJ/KU	AB

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



Member of the **Surbana Jurong Group**
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500

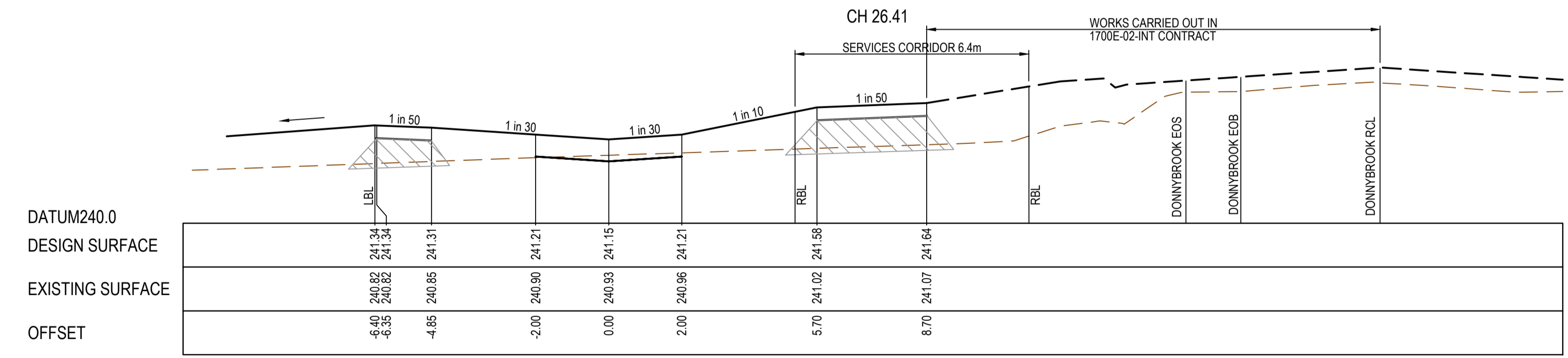
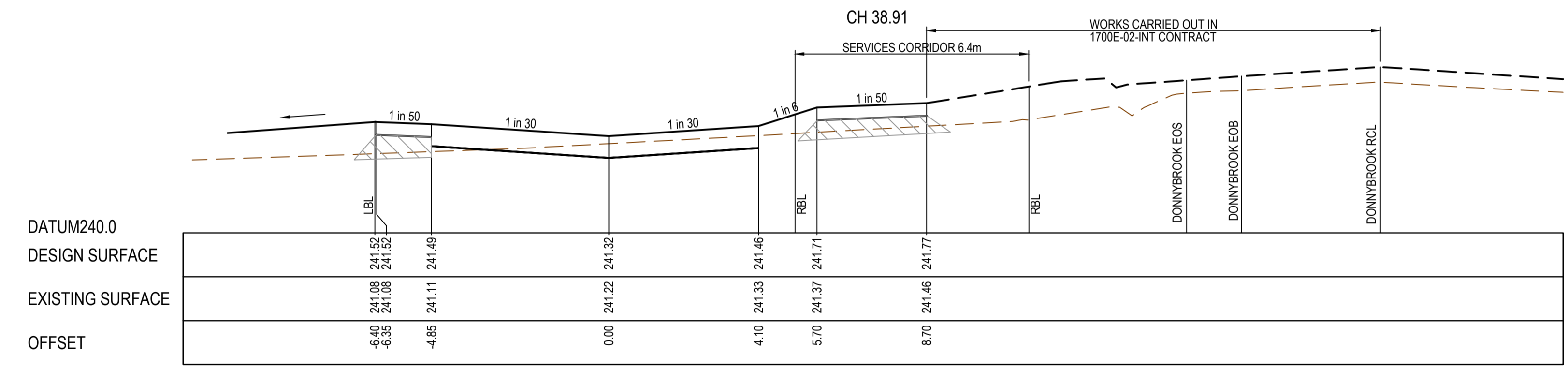
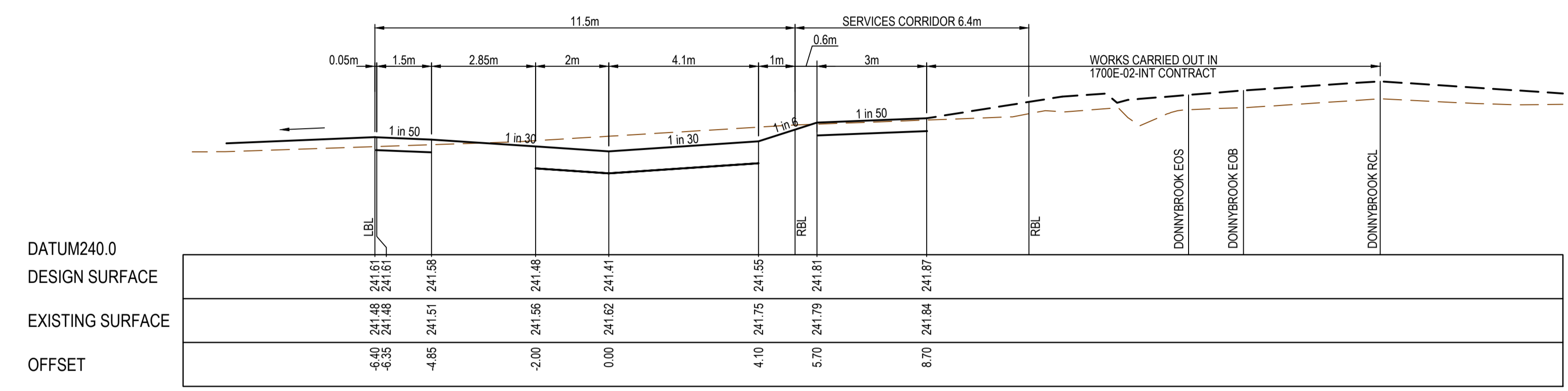
Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Cross Sections: Stony Street

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-21	SHEET No. 21 of 42	REVISION 1
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AS CONSTRUCTED

STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE

AS CONSTRUCTED PLANS
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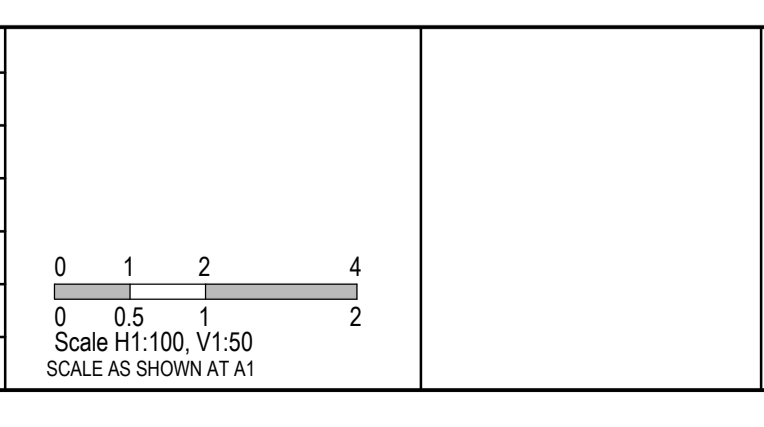


CH 13.91

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJNS	AB
1	26.06.37	AS CONSTRUCTED	JJKU	AB

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

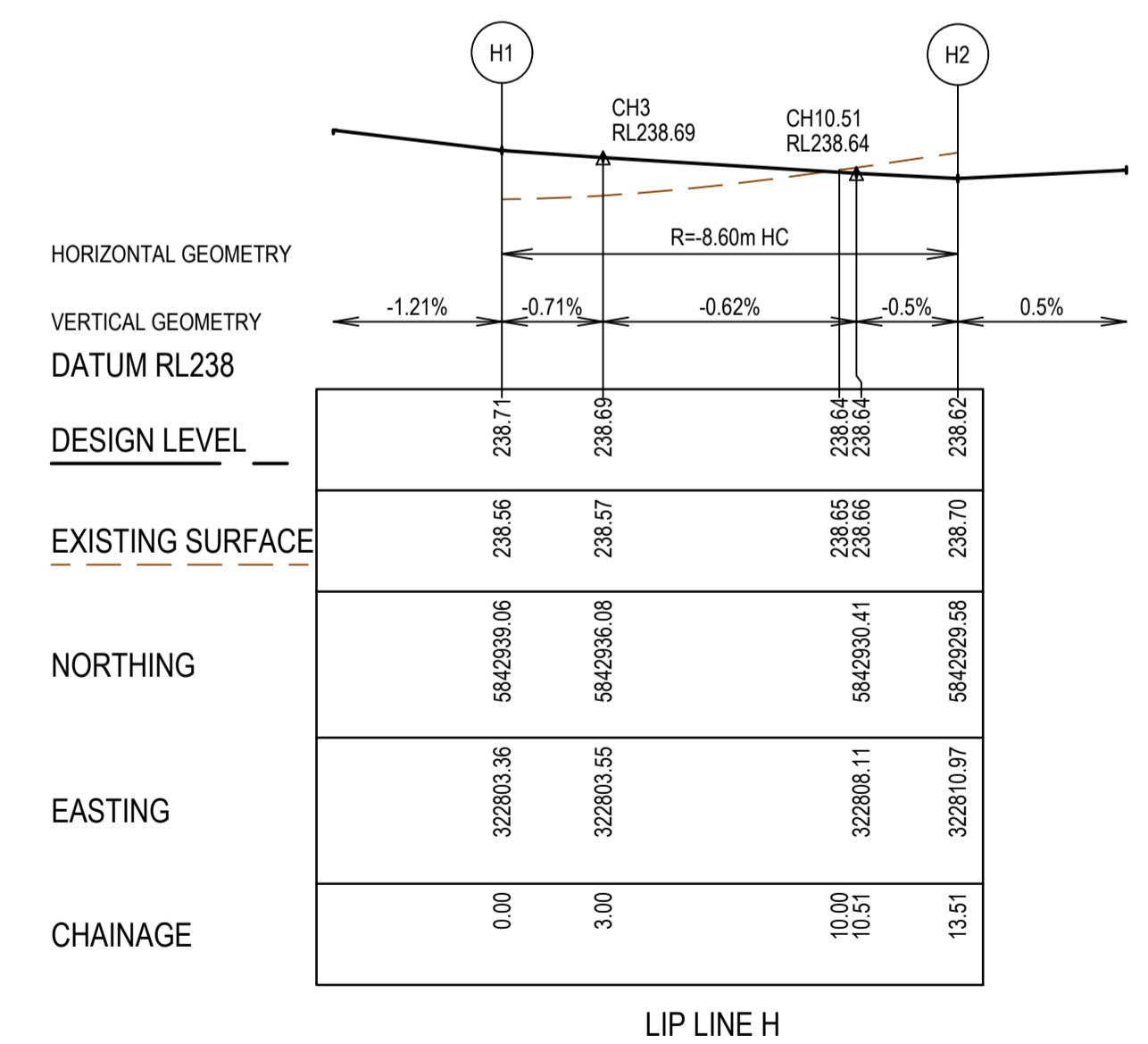
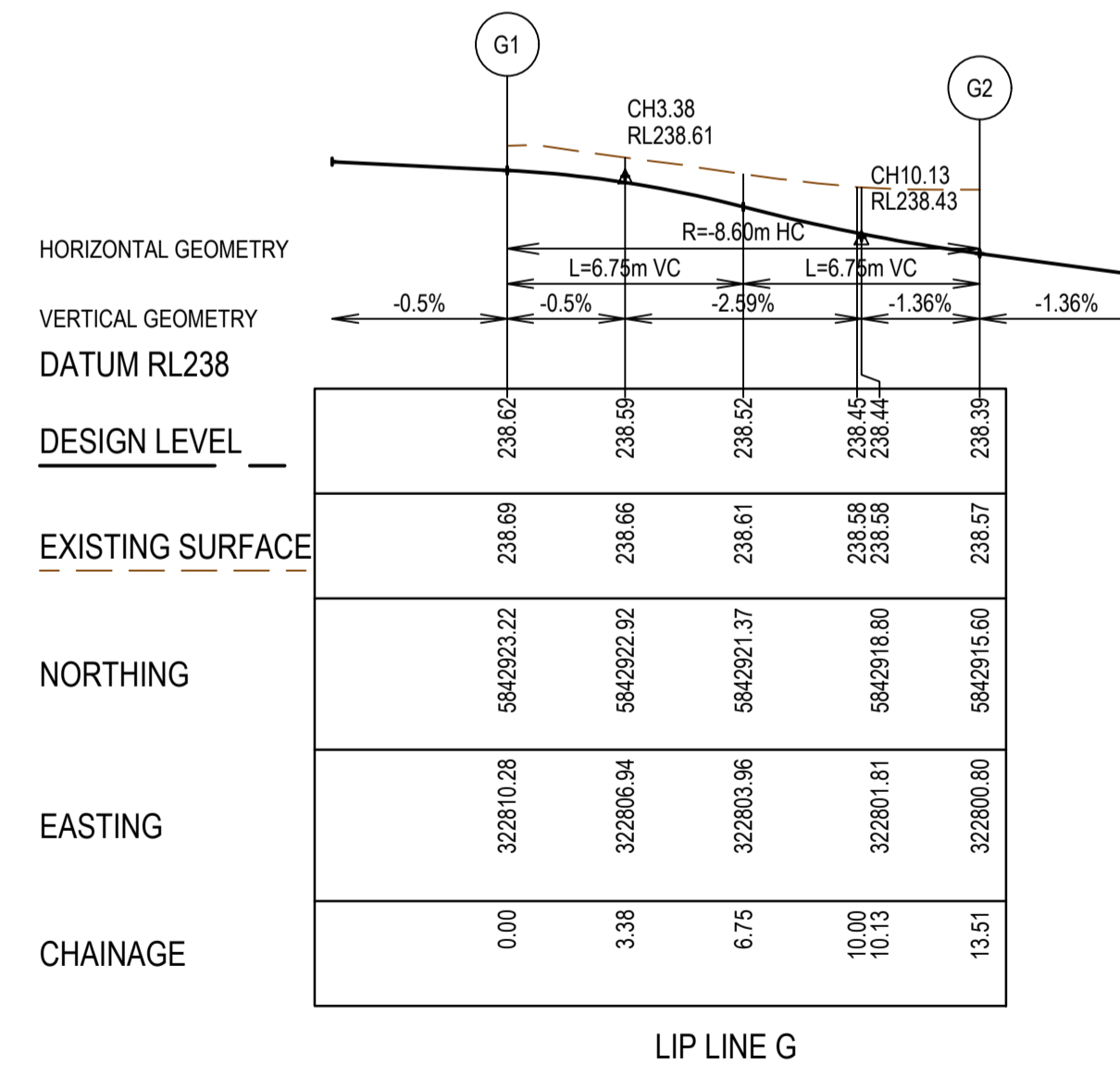
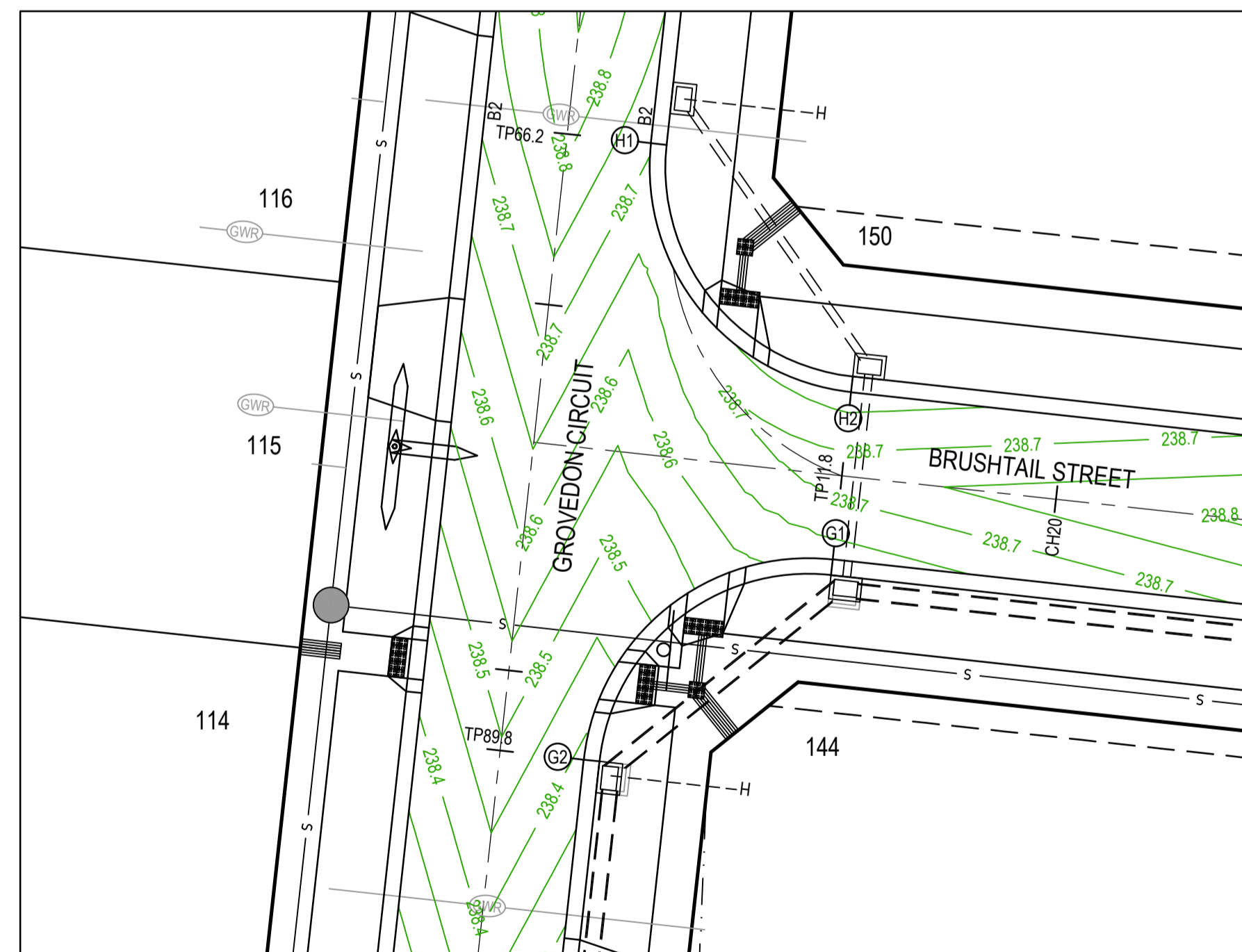
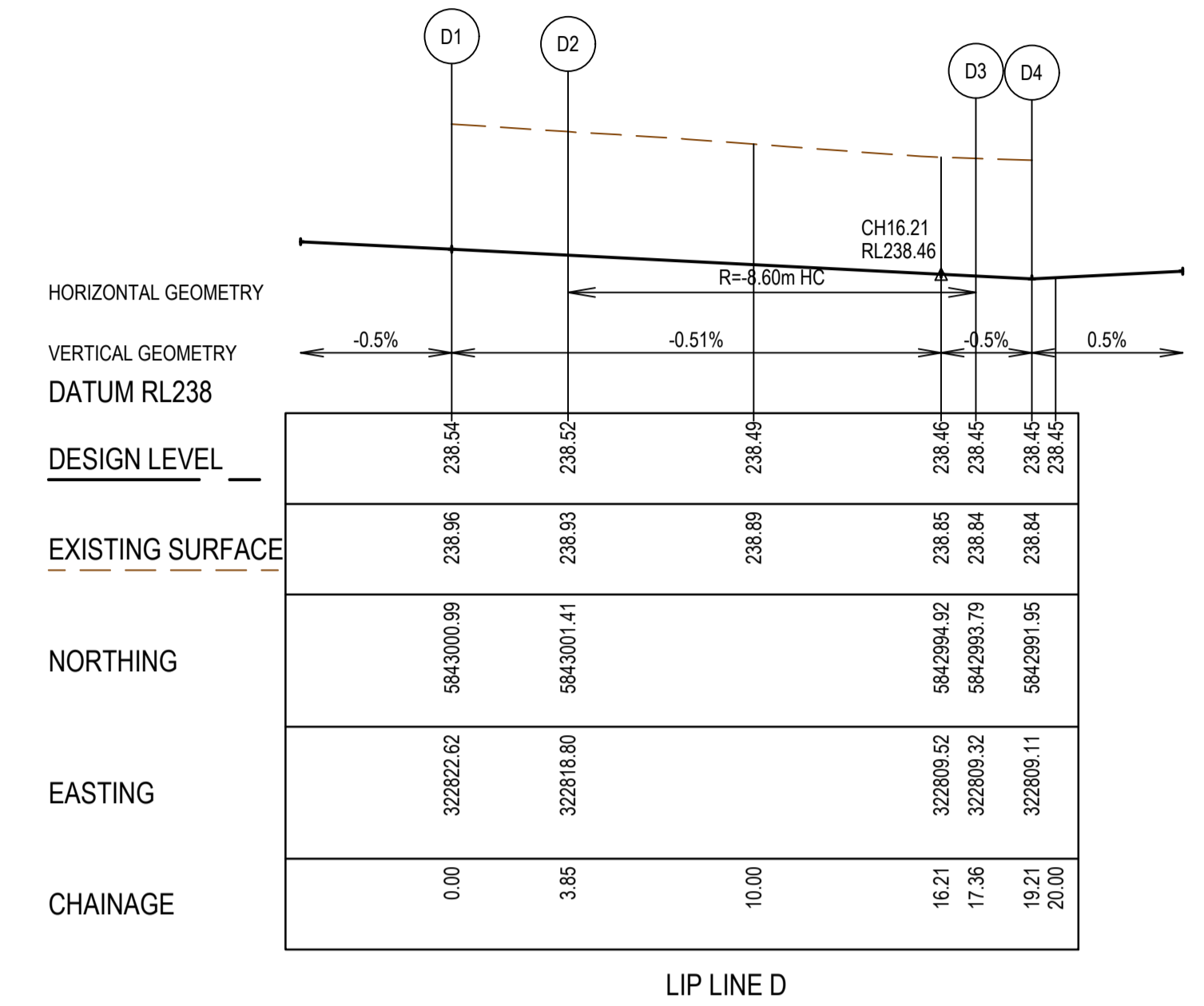
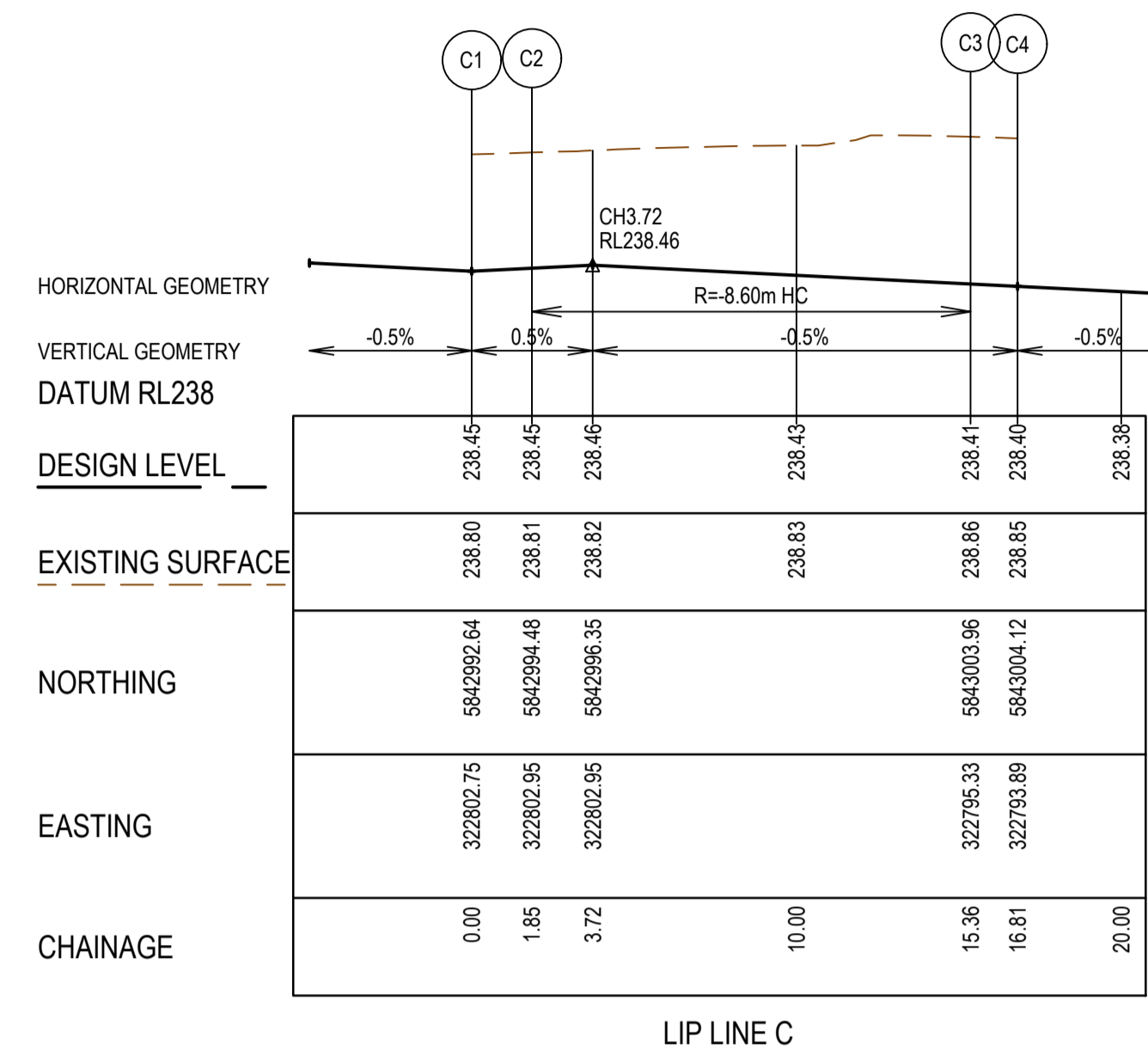
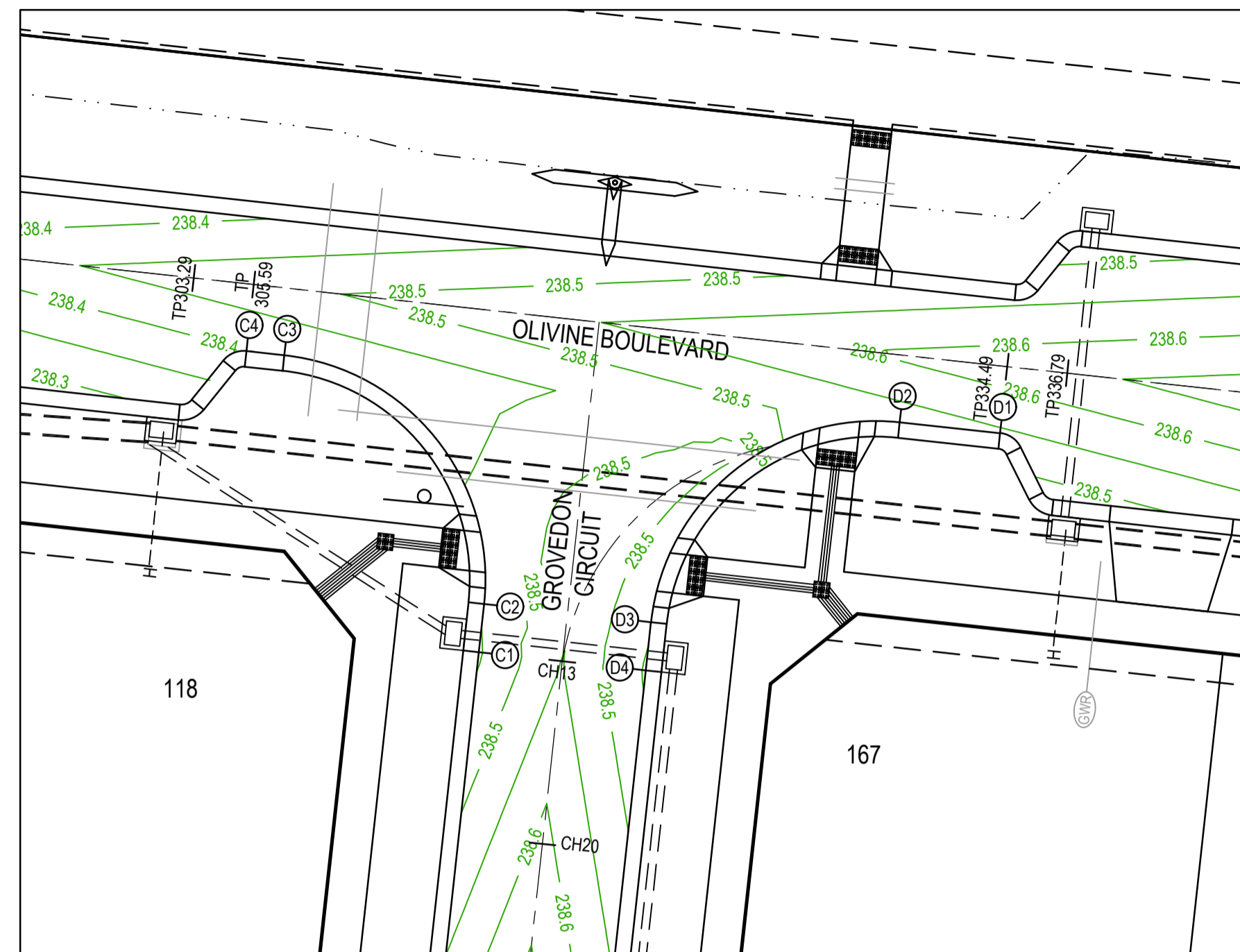


Member of the Surbana Jurong Group
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500

Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Cross Sections: Felicity Road

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-22	SHEET No. 22 of 42	REVISION 1
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AS CONSTRUCTED PLANS
 THE PURPOSE OF THESE AS-CONSTRUCTED PLANS IS TO UPDATE THE DESIGN DRAWINGS TO SHOW SIGNIFICANT CHANGES WHICH OCCURRED DURING CONSTRUCTION. NOTE THAT THE LEVELS SHOWN ON THESE PLANS ARE DESIGN LEVELS, AND HAVE NOT BEEN VERIFIED BY SURVEY. ALL INFORMATION SHOWN ON THESE PLANS SHOULD BE VERIFIED ON SITE.
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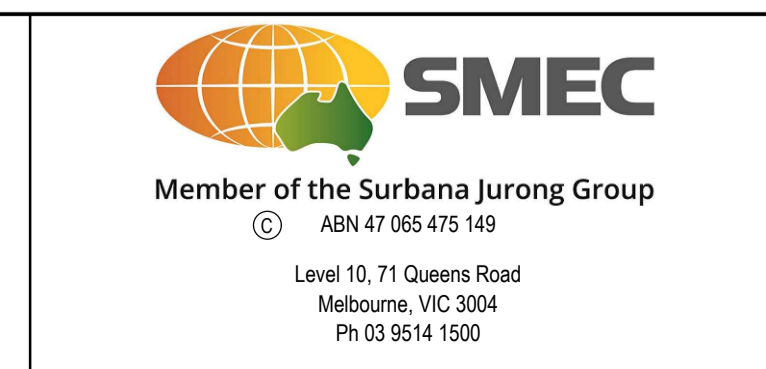
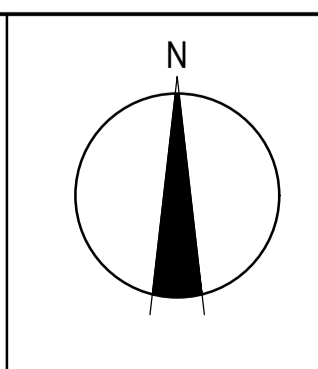
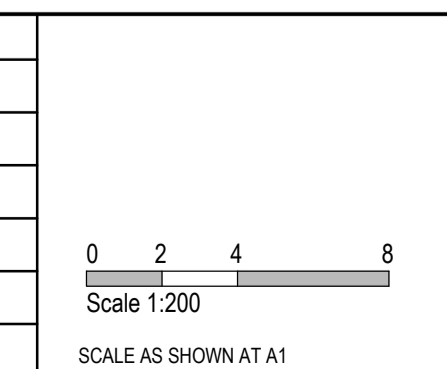


* CONTRACTOR TO TRANSITION KERB PROFILES ACROSS ALL PRAM CROSSINGS

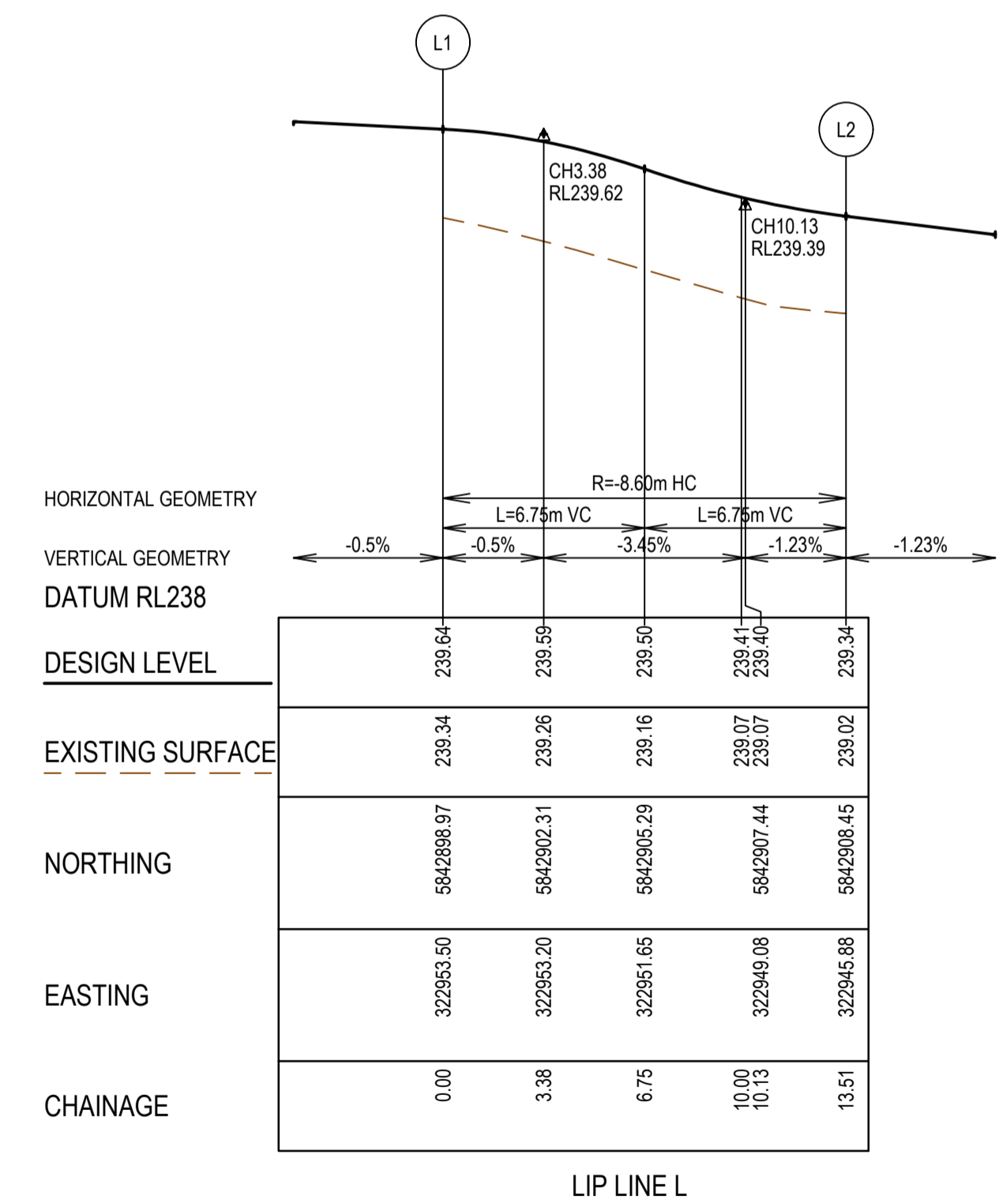
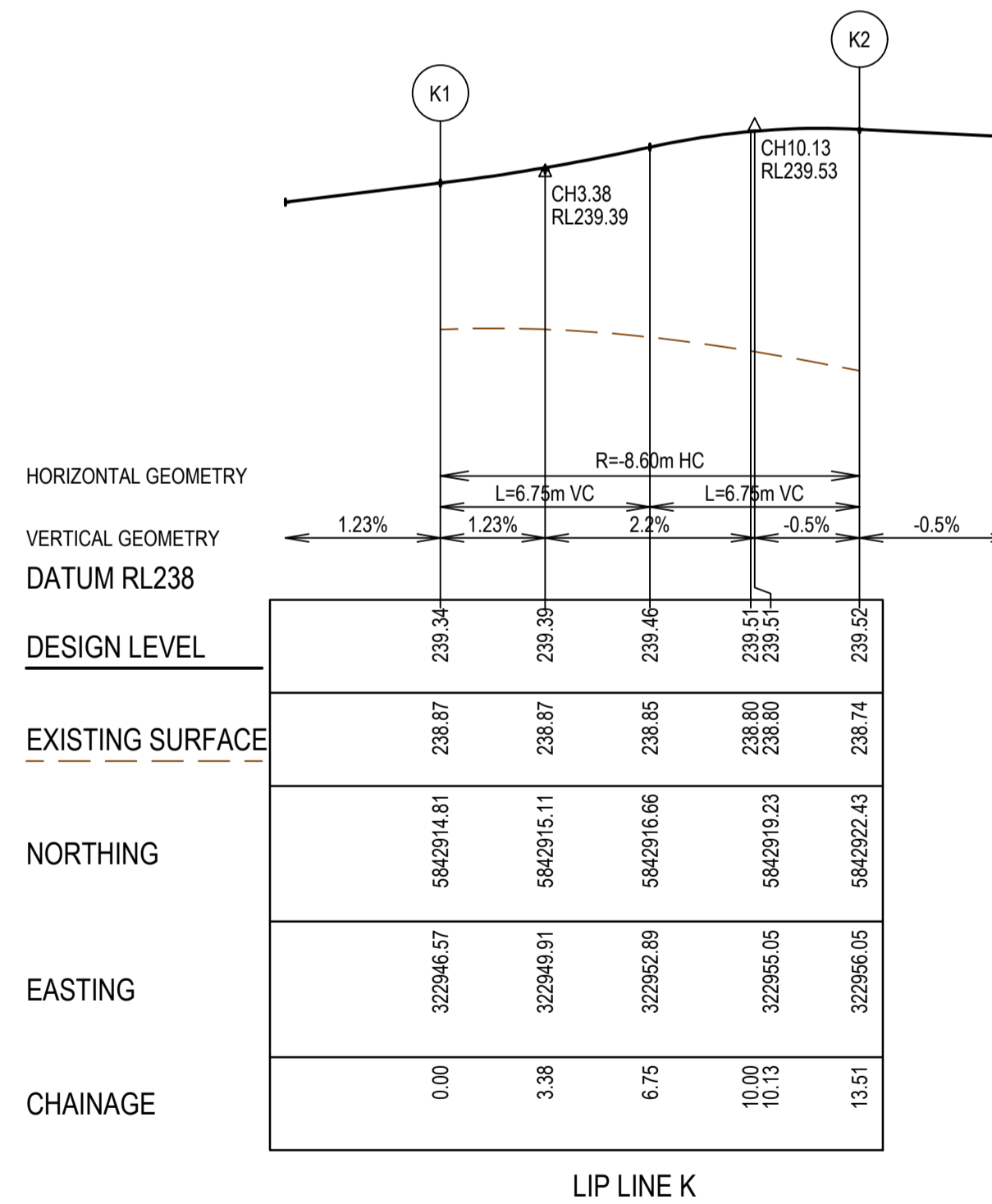
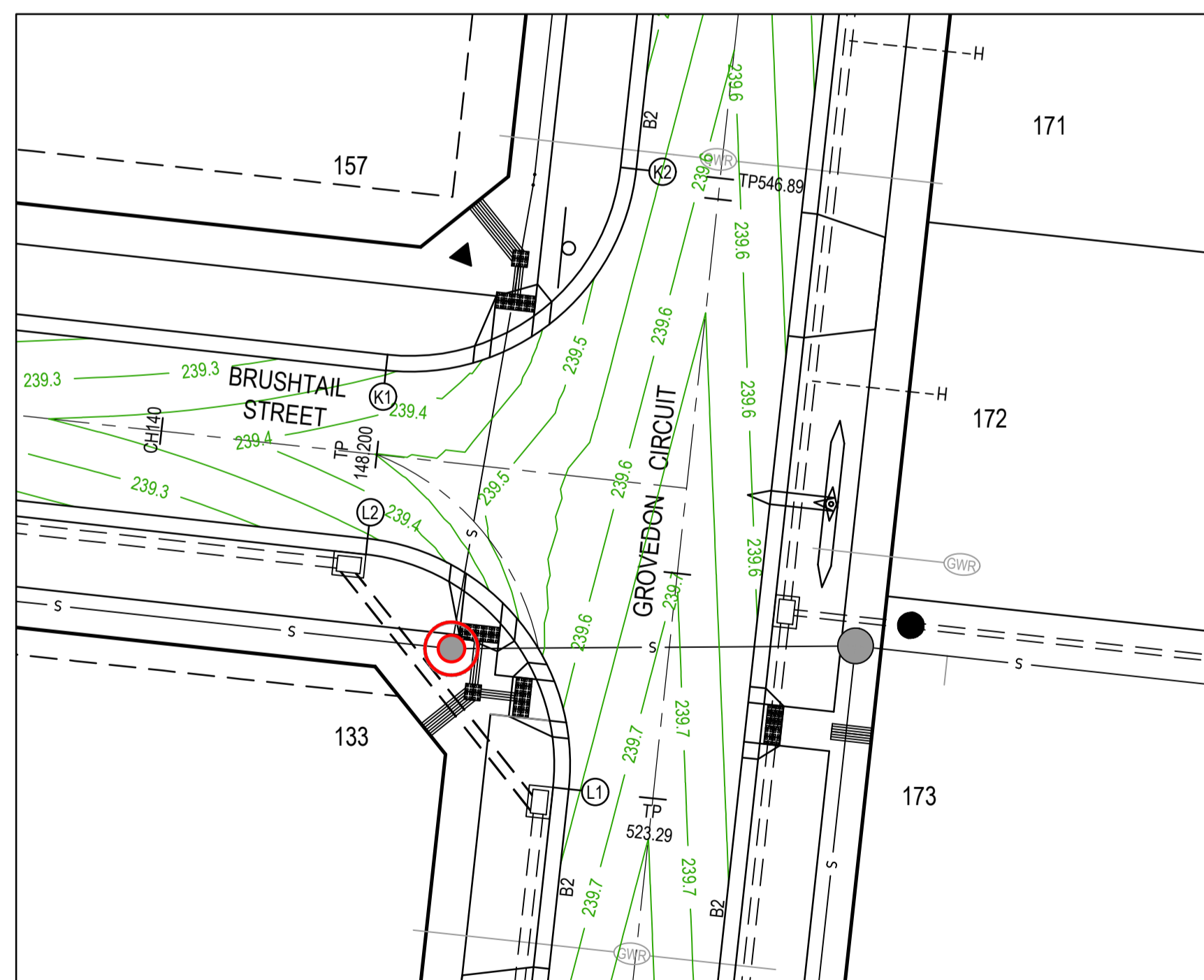
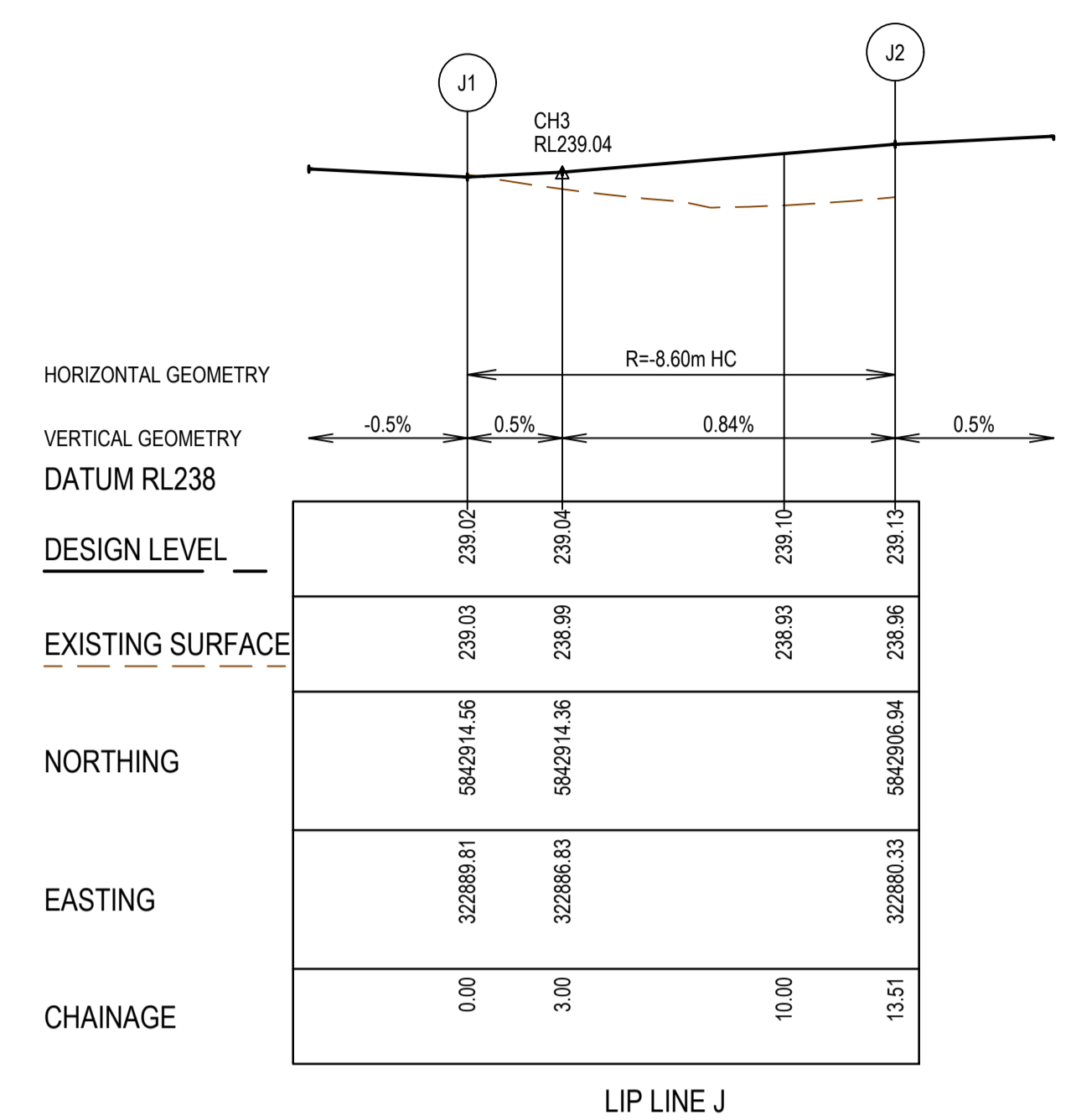
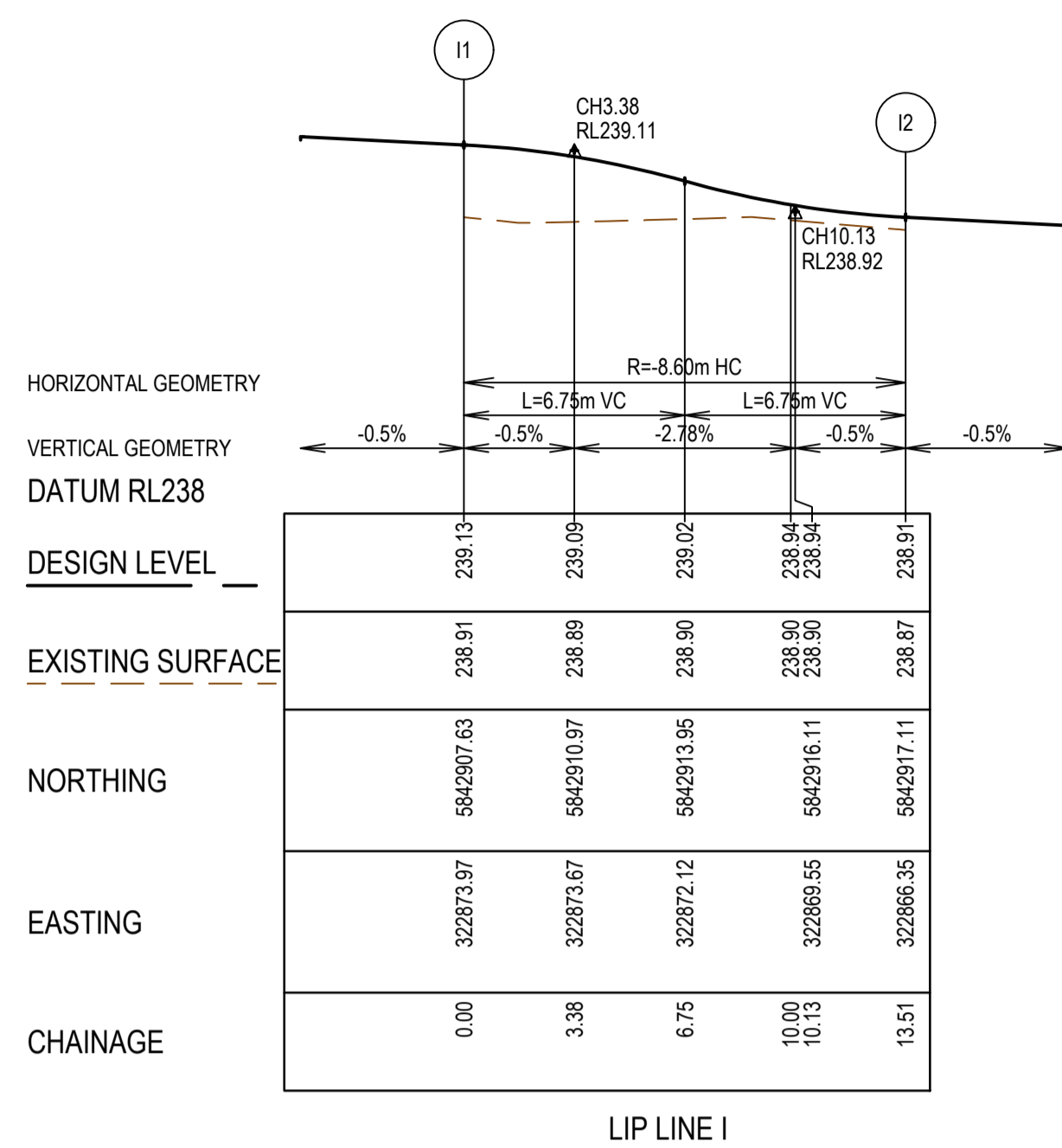
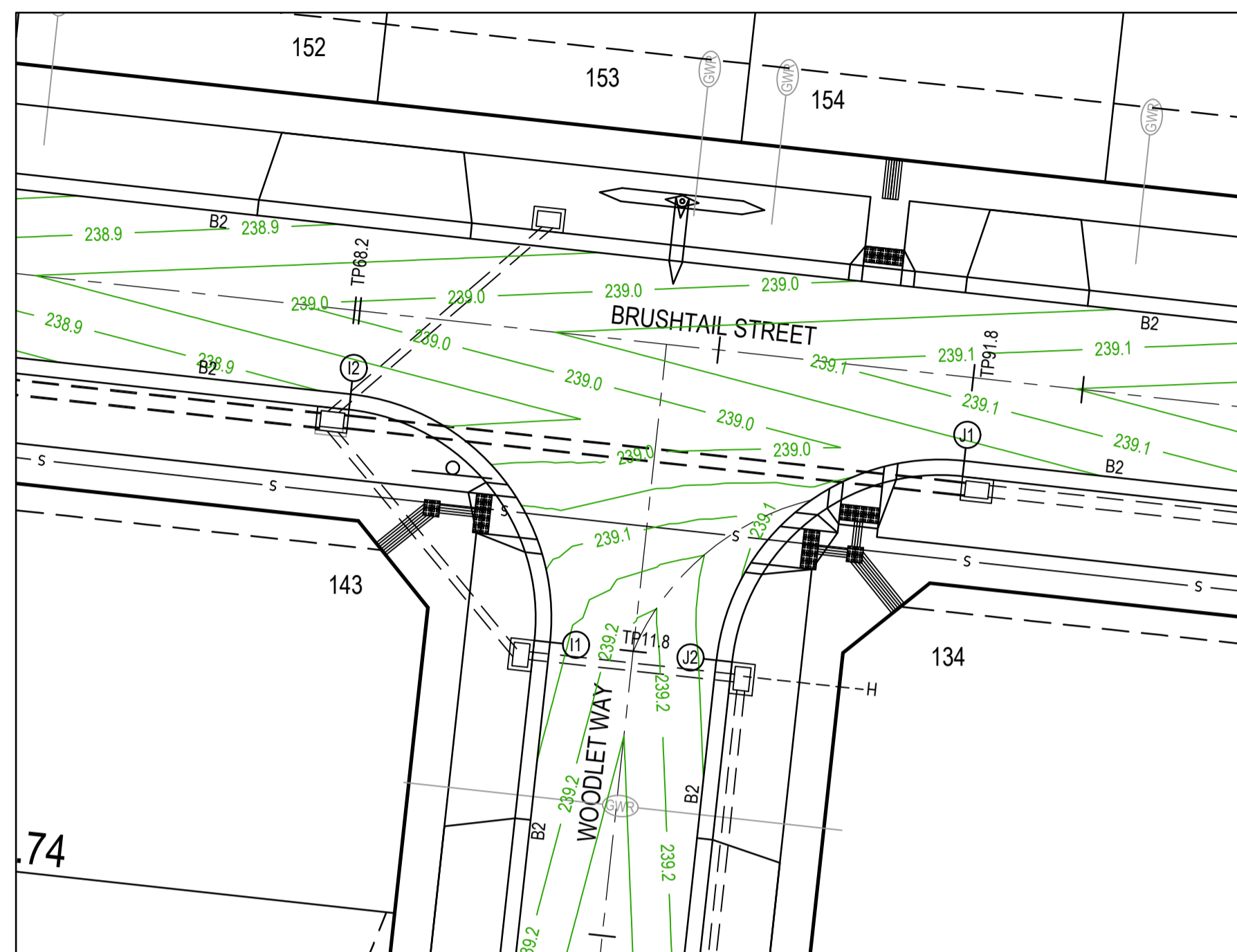
REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUNS	AB
1	26.06.38	AS CONSTRUCTED	JJKU	AB

AS CONSTRUCTED

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Intersection Detail Plan & Lip Profiles - 1		MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-23	SHEET No. 23 of 42	REVISION 1
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* CONTRACTOR TO TRANSITION KERB PROFILES ACROSS ALL PRAM CROSSINGS

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUNS	AB
1	26.06.39	AS CONSTRUCTED	JJKU	AB

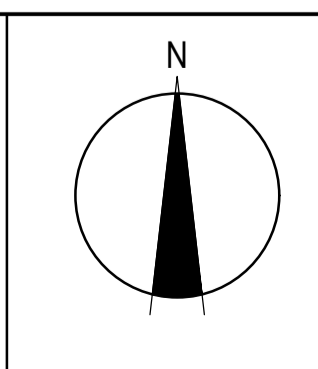
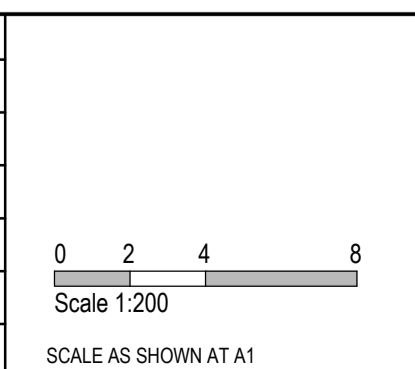
AS CONSTRUCTED

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 OHS Management - AS/NZS 4801
 Environmental Management - ISO 14001

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

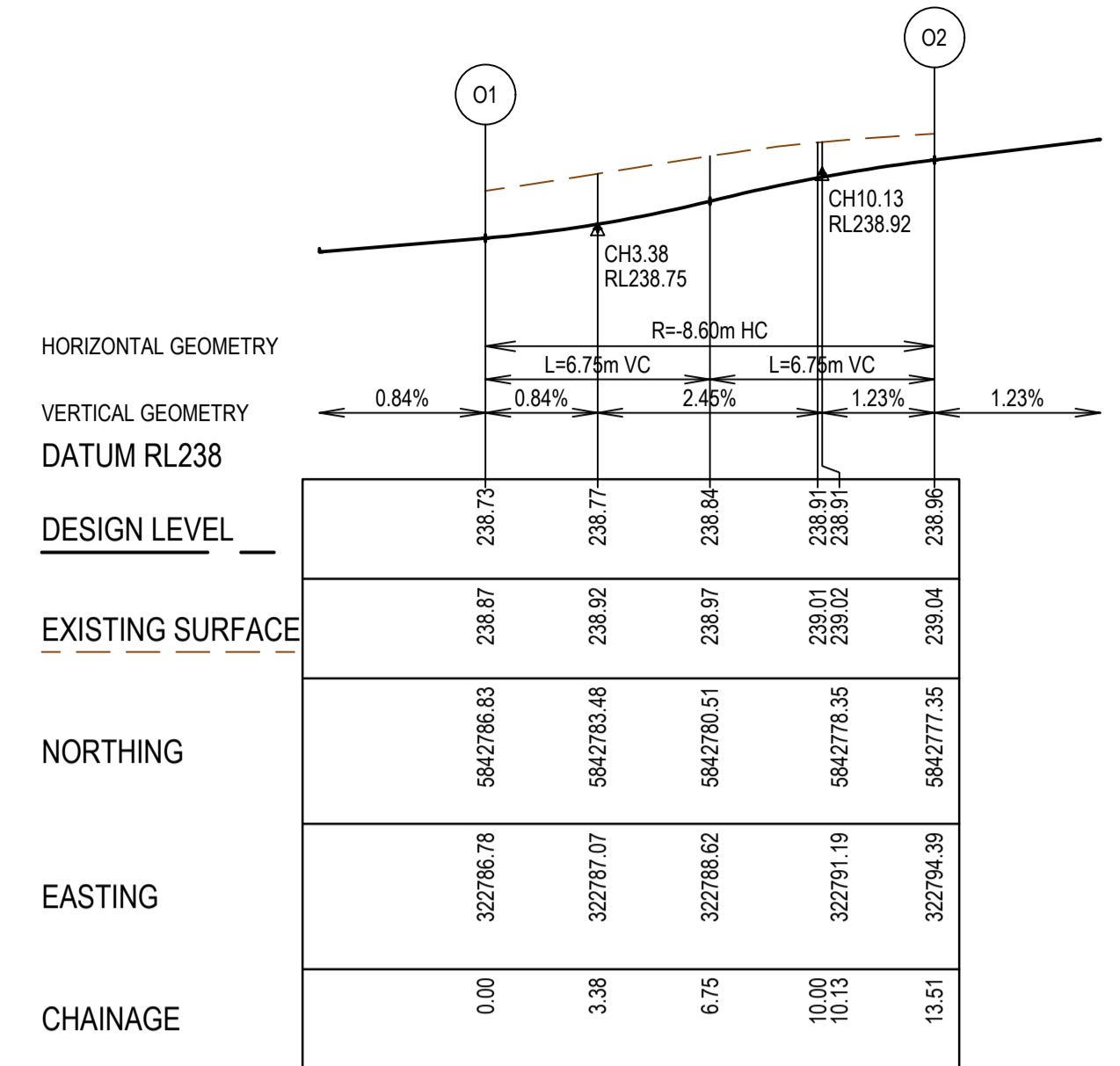
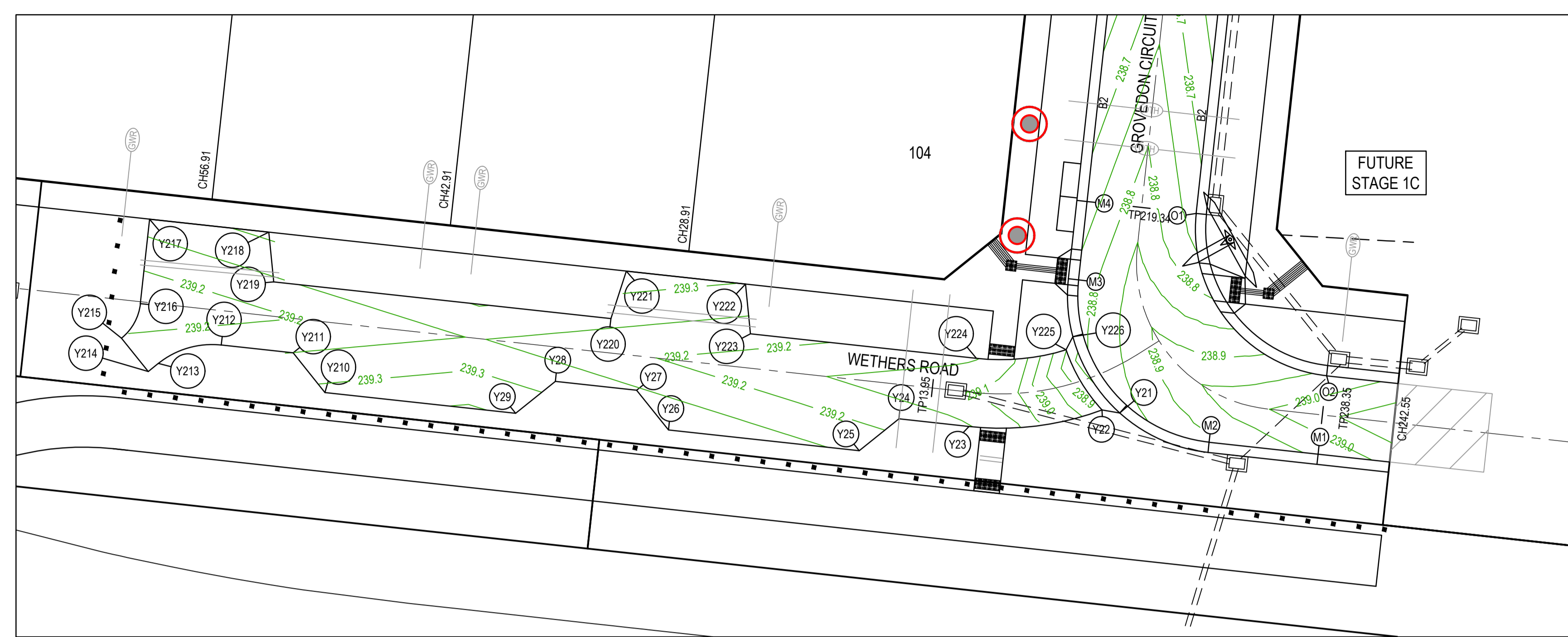


SMEC
 Member of the Surlana Jurong Group
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500



Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Intersection Detail Plan &
 Lip Profiles - 2

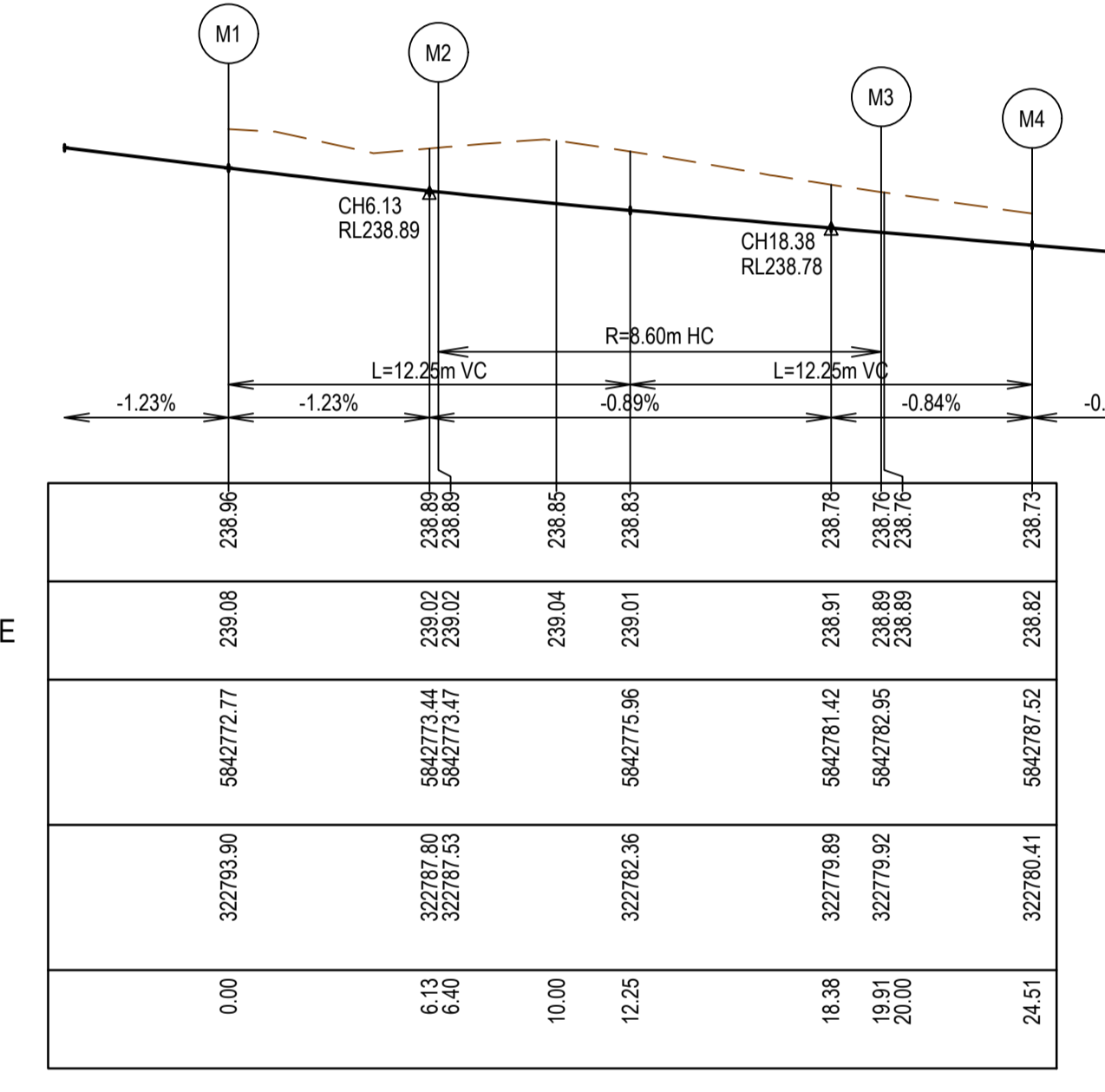
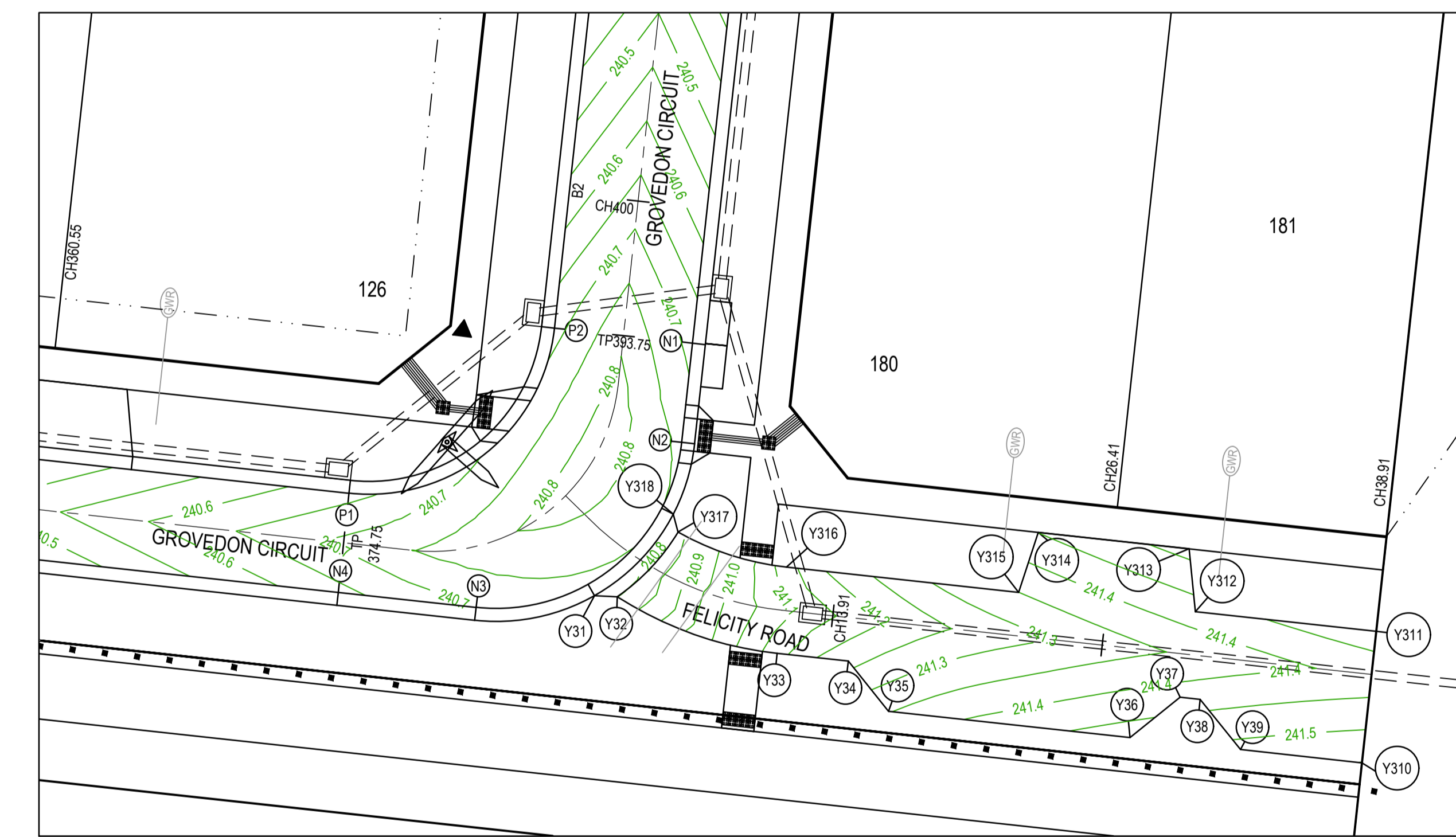
MELWAYS REF: 9 J2
 PROJECT / DRAWING No: 1700E-01A-24
 SHEET No: 24 of 42
 REVISION: 1



Alignment Y2

Point no	Easting	Northing	RL
Y21	322782.314	5842775.173	238.900
Y22	322781.279	5842775.351	238.910
Y23	322773.521	5842774.388	239.152
Y24	322769.425	5842774.834	239.178
Y25	322767.110	5842772.974	239.241
Y26	322755.976	5842774.186	239.297
Y27	322754.116	5842776.502	239.255
Y28	322749.371	5842777.018	239.278
Y29	322747.056	5842775.158	239.341
Y210	322735.922	5842776.371	239.313
Y211	322734.062	5842778.686	239.250
Y212	322729.866	5842779.142	239.229
Y213	322726.193	5842778.069	239.248
Y214	322725.006	5842777.597	239.259
Y215	322724.040	5842779.546	239.206
Y216	322725.143	5842781.580	239.157
Y217	322725.680	5842786.489	239.276
Y218	322732.639	5842785.731	239.311
Y219	322732.926	5842782.833	239.243
Y220	322752.610	5842789.689	239.264
Y221	322753.515	5842783.457	239.333
Y222	322760.474	5842782.700	239.298
Y223	322760.762	5842779.801	239.223
Y224	322773.954	5842778.365	239.152
Y225	322779.185	5842778.863	238.886
Y226	322779.580	5842779.627	238.836

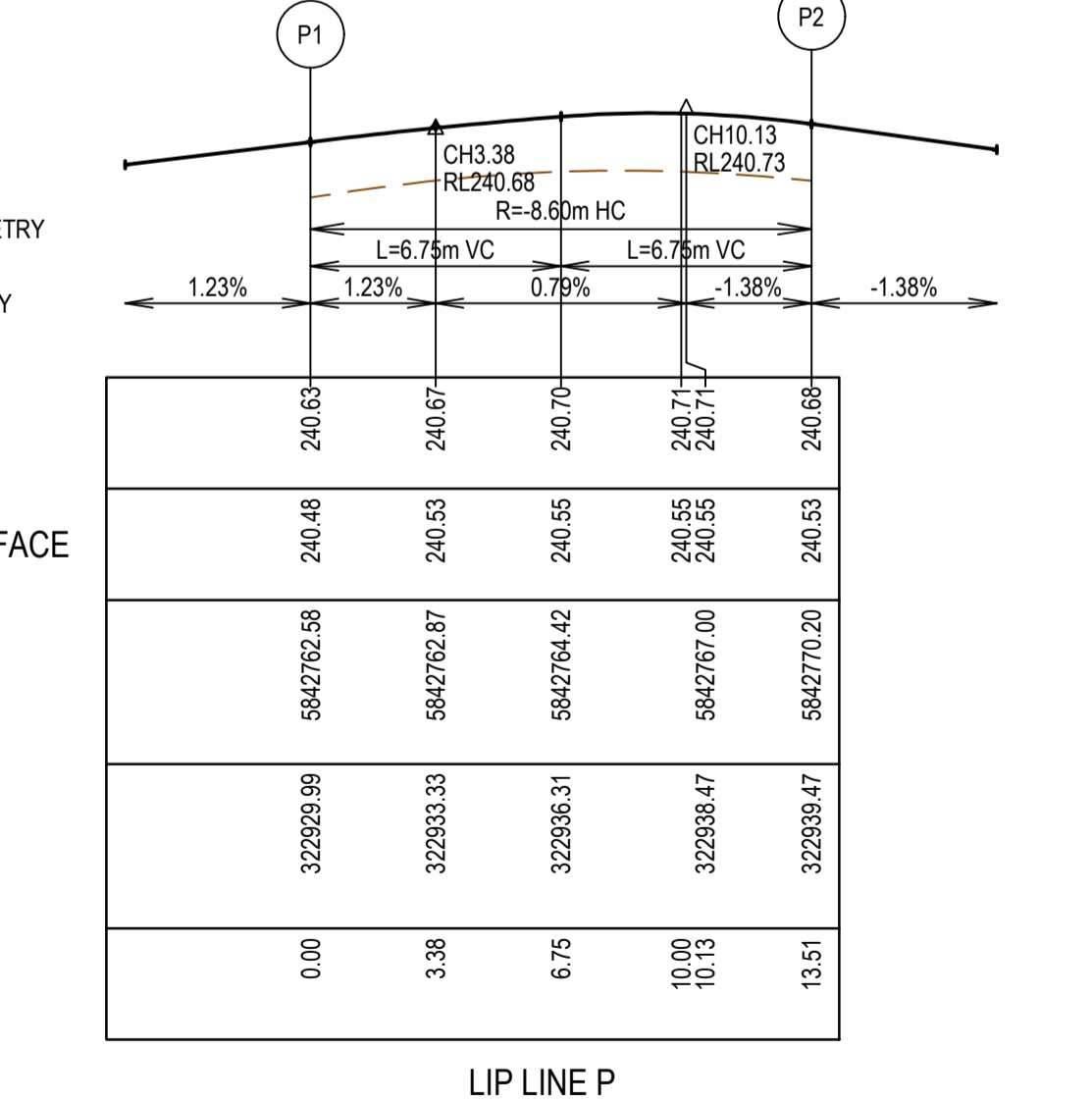
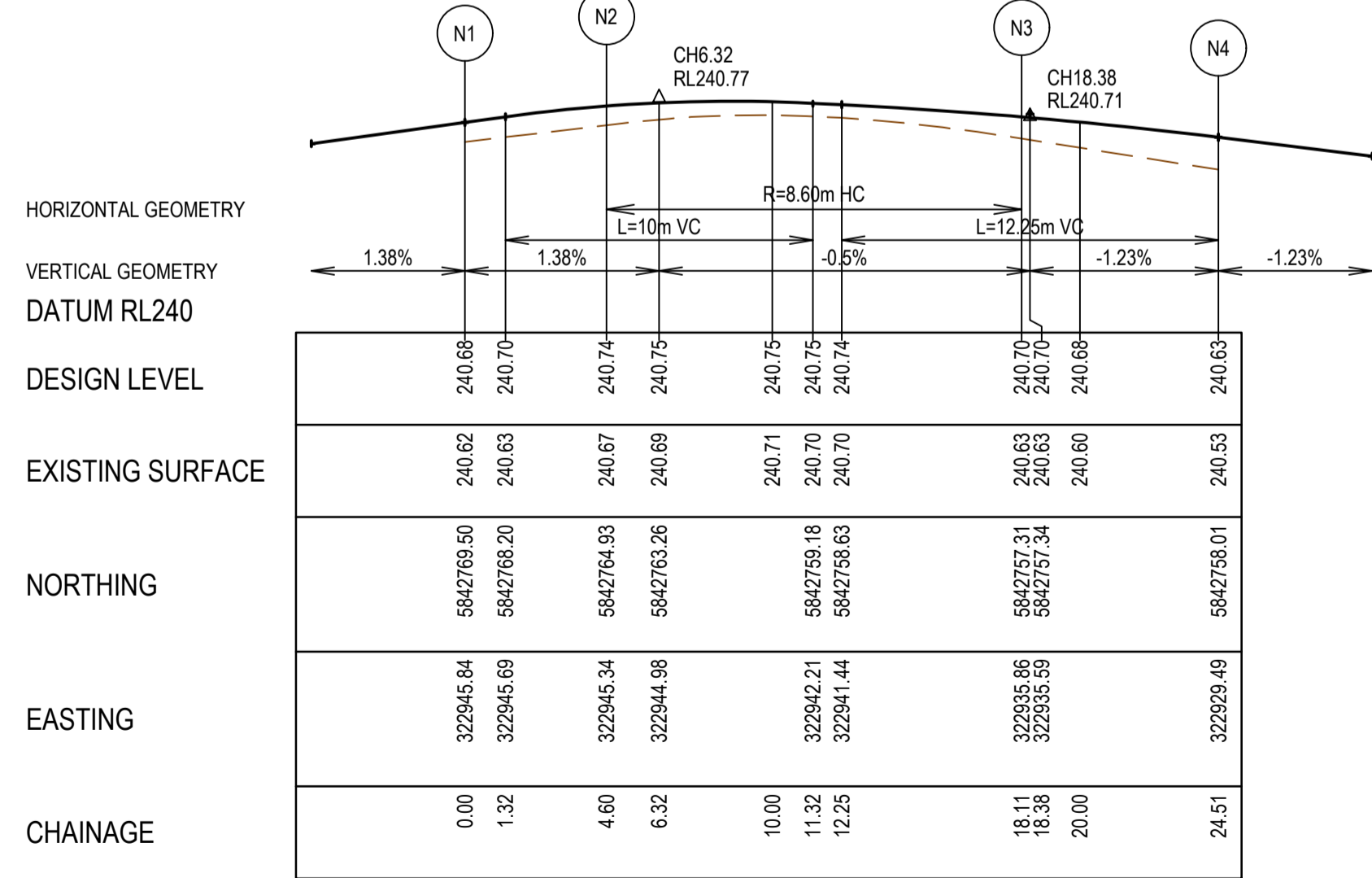
Curve no	L	Radius	Arc	A	B	X	Y	I	Mid point RL
Y22 - Y23	26.587	17.000	7.888	0.456	0.341	1.968	1.941	1.972	239.075
Y212 - Y213	45.000	5.000	3.927	0.361	0.285	0.975	0.938	0.962	239.230
Y215 - Y216	45.000	3.000	2.356	0.228	0.171	0.585	0.563	0.589	239.185
Y224 - Y225	23.321	13.000	5.291	0.268	0.201	1.321	1.307	1.323	239.067



Alignment Y3

Point no	Easting	Northing	RL
Y31	322941.319	5842757.855	240.848
Y32	322942.369	5842757.806	240.863
Y33	322949.739	5842755.197	241.127
Y34	322953.021	5842754.839	241.234
Y35	322954.881	5842752.524	241.347
Y36	322956.015	5842751.312	241.476
Y37	322958.330	5842753.172	241.424
Y38	322959.253	5842753.071	241.431
Y39	322971.114	5842750.756	241.517
Y310	322976.721	5842750.146	241.551
Y311	322977.381	5842756.210	241.481
Y312	322969.031	5842757.119	241.426
Y313	322968.743	5842760.018	241.516
Y314	322961.784	5842760.775	241.451
Y315	322960.879	5842758.007	241.350
Y316	322950.172	5842759.173	241.127
Y317	322945.172	5842760.788	240.889
Y318	322944.951	5842761.618	240.861

Curve no	L	Radius	Arc	A	B	X	Y	I	Mid point RL
Y32 - Y33	26.636	16.970	7.889	0.456	0.342	1.968	1.941	1.972	240.971
Y316 - Y317	23.247	13.039	5.291	0.267	0.200	1.320	1.307	1.323	240.982



LIP LINE N

HORIZONTAL GEOMETRY	VERTICAL GEOMETRY	DATUM RL240	DESIGN LEVEL	EXISTING SURFACE	NORTHING	EASTING	CHAINAGE
			240.68	240.62	5842769.50	322945.84	0.00
			240.70	240.63	5842768.20	322945.69	1.32
			240.74	240.67	5842764.93	322945.24	4.60
			240.75	240.69	5842763.26	322944.98	6.32
			240.75	240.71	5842759.18	322942.21	10.00
			240.75	240.70	5842758.63	322941.44	11.32
			240.74	240.70	5842758.63	322941.44	12.25
			240.68	240.63	5842757.31	322935.86	18.11
			240.68	240.63	5842757.34	322935.59	18.38
			240.68	240.60	5842758.01	322939.49	20.00
			240.63	240.53	5842758.01	322939.49	24.51

LIP LINE P

HORIZONTAL GEOMETRY	VERTICAL GEOMETRY	DATUM RL240	DESIGN LEVEL	EXISTING SURFACE	NORTHING	EASTING	CHAINAGE
			240.63	240.48	5842759.58	322939.99	0.00
			240.67	240.53	5842762.87	322933.33	3.38
			240.70	240.55	5842764.42	322936.31	6.75
			240.71	240.55	5842767.00	322938.47	10.00
			240.71	240.53	5842770.20	322939.47	10.13
			240.68	240.53	5842770.20	322939.47	13.51

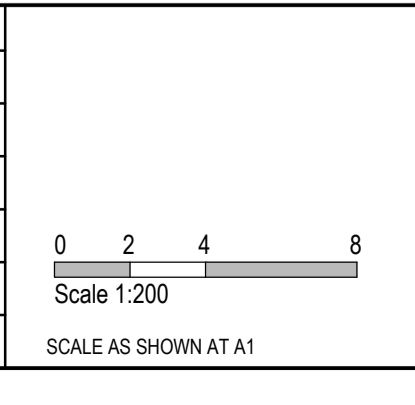
* CONTRACTOR TO TRANSITION KERB PROFILES ACROSS ALL PRAM CROSSINGS

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
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1	26.06.40	AS CONSTRUCTED	JUN/J	AB

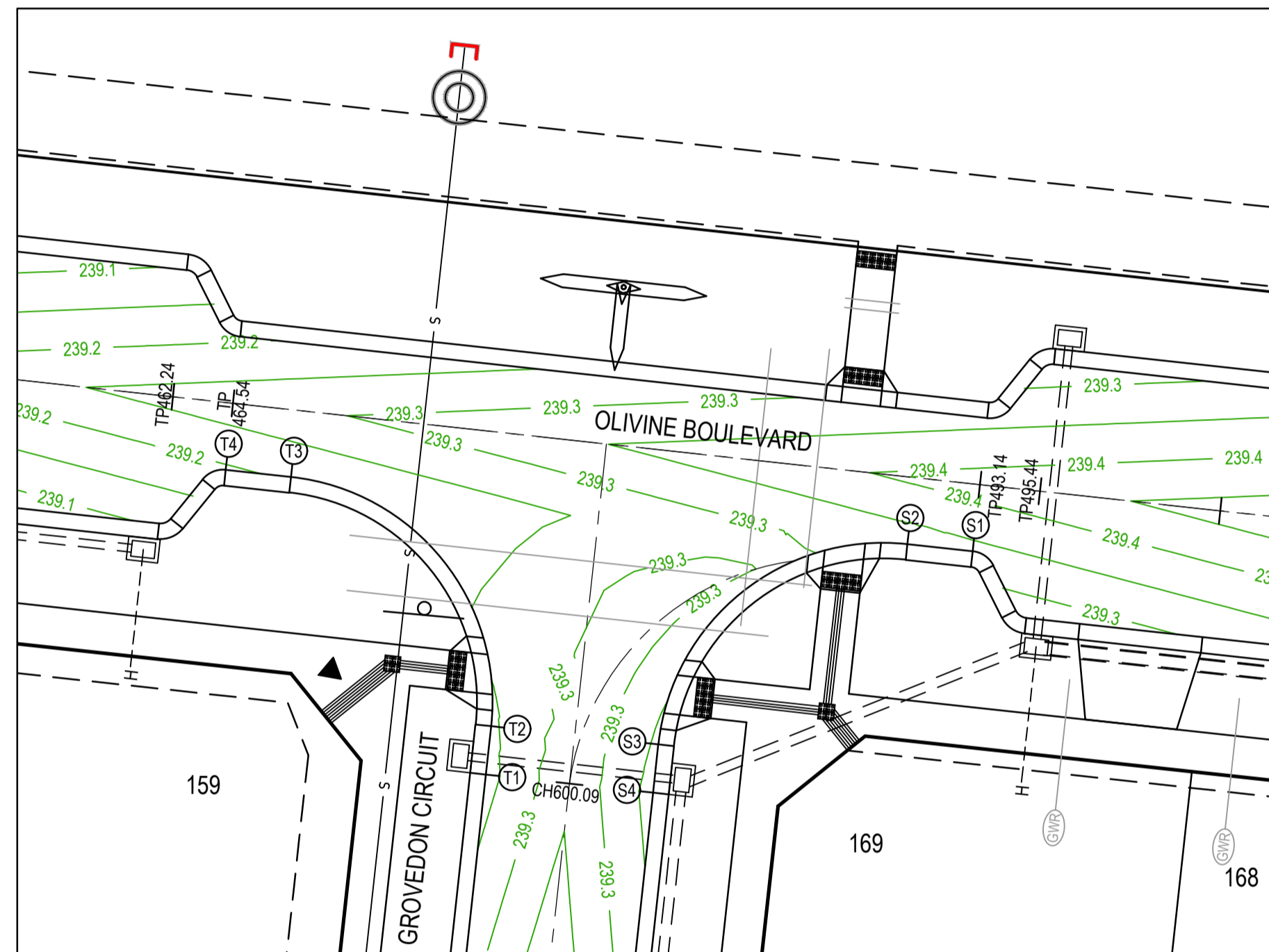
AS CONSTRUCTED	
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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

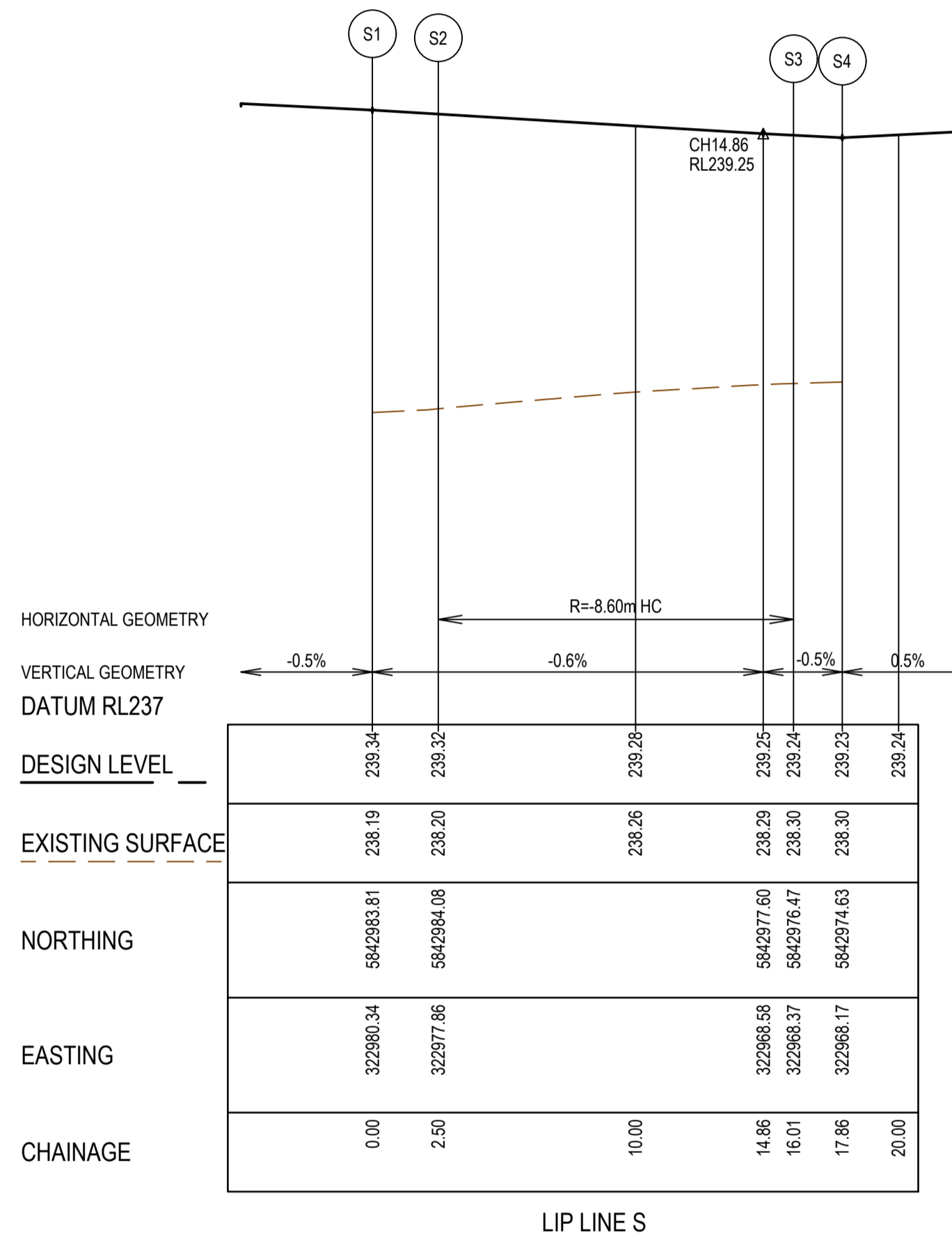
Quality Management ISO 9001	Site Management AS/NZS 1801	Environmental Management ISO 14001
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Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Intersection Detail Plan & Lip Profiles - 3		MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-25	SHEET No. 25 of 42	REVISION 1
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* CONTRACTOR TO TRANSITION KERB PROFILES ACROSS ALL PRAM CROSSINGS



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.41	AS CONSTRUCTED	JJ/KU	AB

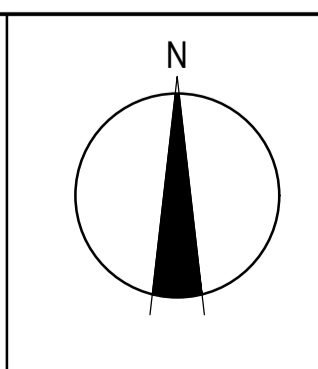
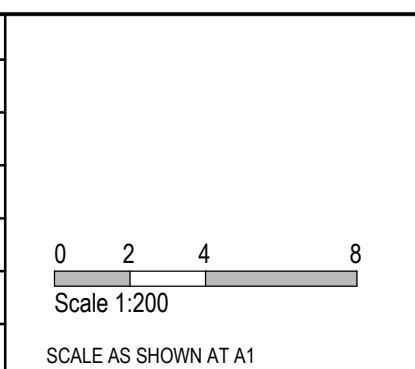
AS CONSTRUCTED

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Quality Management - ISO 9001
 OHS Management - AS/NZS 1881
 Environmental Management - ISO 14001

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

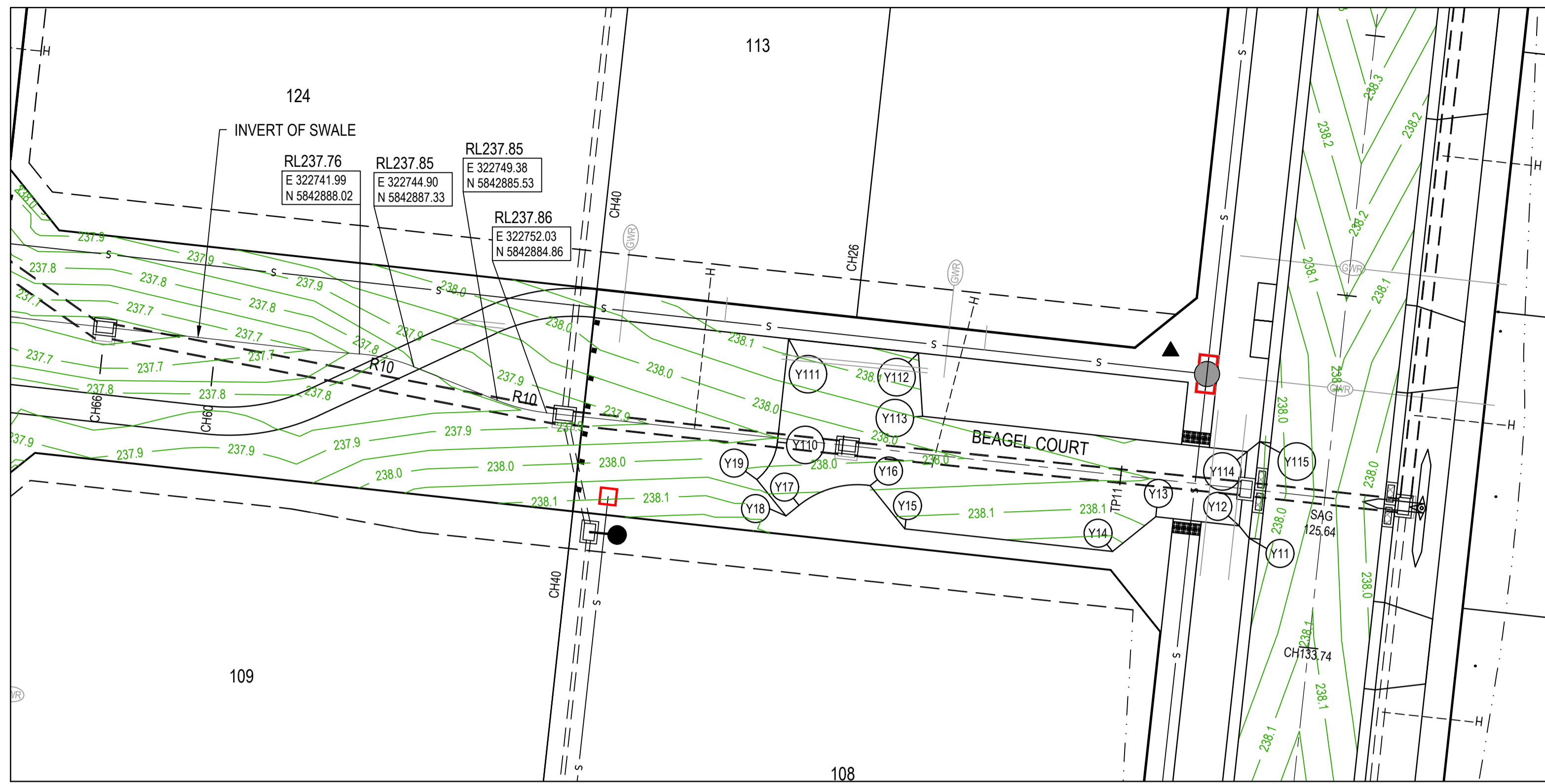


SMEC
 Member of the **Surbana Jurong Group**
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500



Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Intersection Detail Plan &
 Lip Profiles - 4

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-26	SHEET No. 26 of 42	REVISION 1
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Alignment Y1

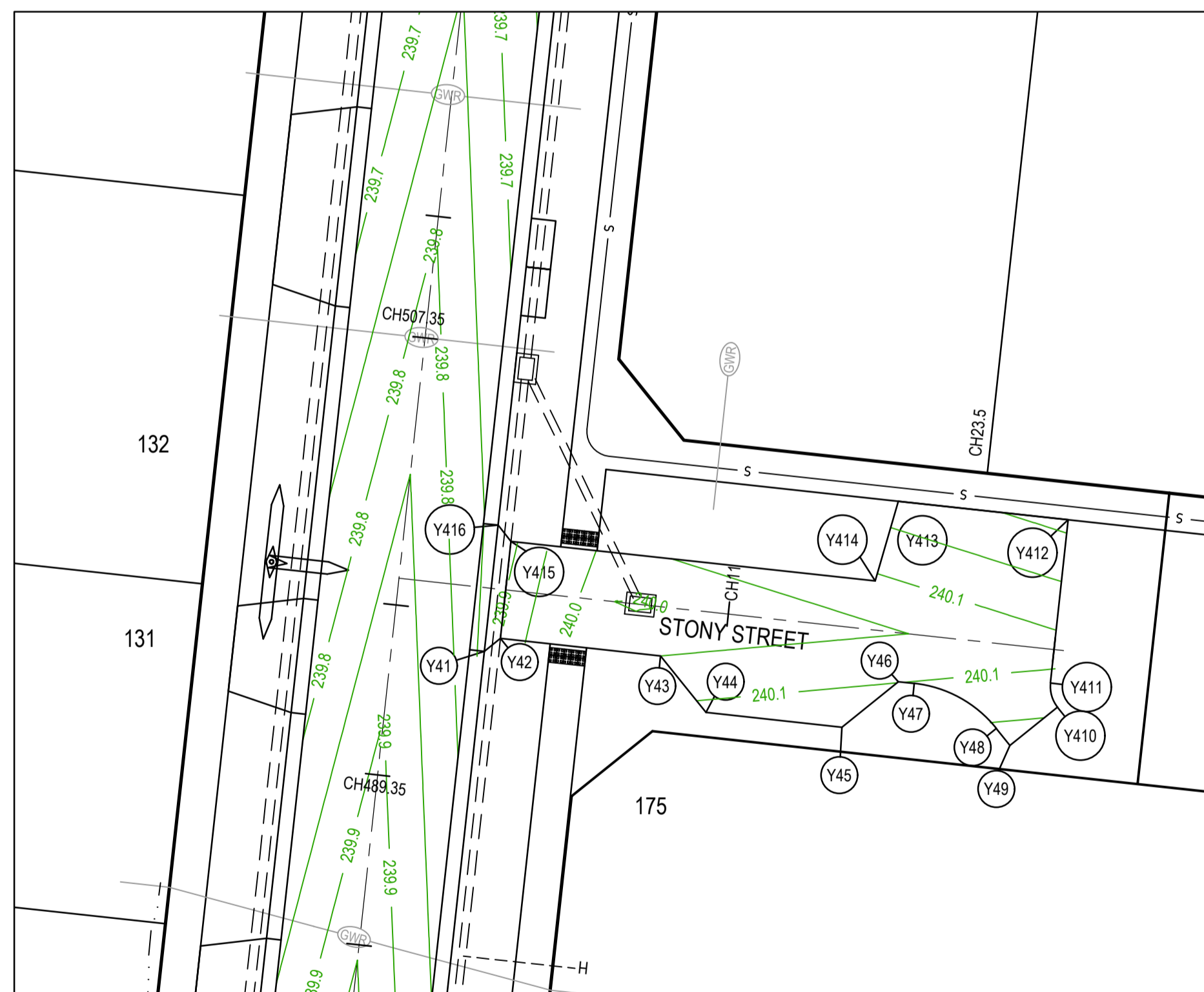
Point no	Easting	Northing	RL
Y11	322789.680	5842878.149	238.086
Y12	322789.148	5842878.810	238.085
Y13	322784.675	5842879.297	238.080
Y14	322782.360	5842877.437	238.179
Y15	322771.226	5842878.650	238.125
Y16	322769.365	5842880.965	238.042
Y17	322765.553	5842879.907	238.073
Y18	322764.852	5842879.344	238.099
Y19	322763.286	5842881.292	238.022
Y110	322764.390	5842883.306	237.957
Y111	322764.992	5842888.834	238.128
Y112	322771.950	5842888.076	238.163
Y113	322772.175	5842884.682	238.054
Y114	322789.581	5842882.786	238.085
Y115	322790.243	5842883.318	238.086

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
Y16 - Y17	46.497	5.012	4.067	0.407	0.304	1.010	0.968	1.017	238.045
Y19 - Y110	45.000	3.000	2.356	0.228	0.171	0.585	0.563	0.589	237.994

Alignment Y4

Point no	Easting	Northing	RL
Y41	322957.377	5842869.944	239.888
Y42	322958.039	5842870.476	239.907
Y43	322964.600	5842869.761	240.050
Y44	322966.460	5842867.446	240.113
Y45	322972.027	5842866.840	240.141
Y46	322974.342	5842868.700	240.099
Y47	322974.994	5842868.629	240.102
Y48	322978.351	5842866.791	240.157
Y49	322978.914	5842866.090	240.176
Y410	322980.862	5842867.656	240.140
Y411	322980.573	5842868.646	240.114
Y412	322981.302	5842875.336	240.214
Y413	322974.343	5842876.094	240.179
Y414	322973.393	5842872.827	240.092
Y415	322958.472	5842874.452	239.887
Y416	322957.940	5842875.114	239.862

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
Y47 - Y48	45.000	5.000	3.927	0.381	0.285	0.975	0.938	0.982	240.122
Y410 - Y411	45.000	1.348	1.059	0.103	0.077	0.263	0.253	0.265	240.127



Alignment Z7

Point no	Easting	Northing	RL
Z71	322796.584	5843264.763	241.627
Z72	322794.195	5843259.412	241.507
Z73	322794.377	5843258.581	241.502
Z74	322795.207	5843258.768	241.502
Z75	322797.741	5843264.445	241.626
Z76	322797.322	5843265.182	241.649

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
Z71 - Z72	17.373	19.400	5.883	0.223	0.167	1.469	1.461	1.471	241.567
Z72 - Z73	90.262	0.600	0.945	0.177	0.131	0.230	0.195	0.236	241.500
Z73 - Z74	90.262	0.600	0.945	0.177	0.131	0.230	0.195	0.236	241.498
Z74 - Z75	17.358	20.600	6.241	0.236	0.177	1.559	1.550	1.560	241.563
Z75 - Z76	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.637
Z76 - Z71	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.638

Alignment Z8

Point no	Easting	Northing	RL
Z81	322802.646	5843268.021	241.678
Z82	322801.981	5843268.494	241.667
Z83	322802.509	5843267.829	241.663
Z84	322804.595	5843267.589	241.698
Z85	322804.732	5843268.781	241.713

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
Z81 - Z82	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.673
Z82 - Z83	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.665

Alignment Z9

Point no	Easting	Northing	RL
Z91	322807.708	5843268.439	241.763
Z92	322808.602	5843268.337	241.778
Z93	322809.129	5843267.672	241.787
Z94	322808.465	5843267.145	241.763
Z95	322807.571	5843267.247	241.748

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
Z92 - Z93	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.783
Z93 - Z94	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.775

Alignment Z10

Point no	Easting	Northing	RL
Z101	322796.401	5843275.674	241.850
Z102	322796.904	5843273.701	241.809
Z103	322797.609	5843273.230	241.812
Z104	322798.080	5843273.935	241.819
Z105	322797.549	5843276.023	241.863

Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
Z101 - Z102	6.015	19.400	2.037	0.027	0.020	0.509	0.509	0.509	241.830
Z102 - Z103	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.810
Z103 - Z104	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.816
Z104 - Z105	5.994	20.600	2.155	0.028	0.021	0.539	0.538	0.539	241.841

Alignment Z11

Point no	Easting	Northing	RL
Z111	322795.333	5843278.483	241.909
Z112	322795.019	5843279.335	241.927
Z113	322795.387	5843280.099	241.958
Z114	322796.152	5843279.732	241.940
Z115	322796.484	5843278.833	241.921

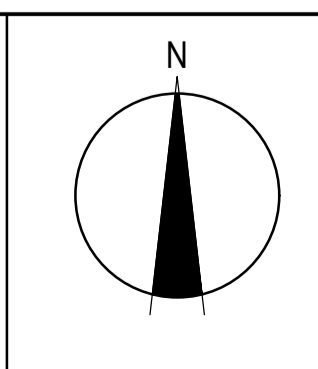
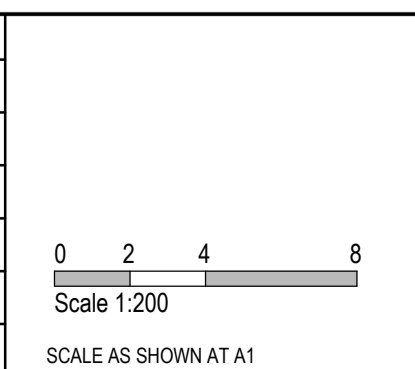
Curve no	I	Radius	Arc	A	B	X	Y	I	Mid point RL
Z111 - Z112	1.699	30.600	0.907	0.003	0.003	0.227	0.227	0.227	241.918
Z112 - Z113	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.942
Z113 - Z114	90.000	0.600	0.942	0.176	0.130	0.230	0.195	0.236	241.949
Z114 - Z115	1.868	29.400	0.959	0.004	0.003	0.240	0.240	0.240	241.930

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JU/NS	AB
1	26.06.42	AS CONSTRUCTED	JU/KU	AB

AS CONSTRUCTED

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



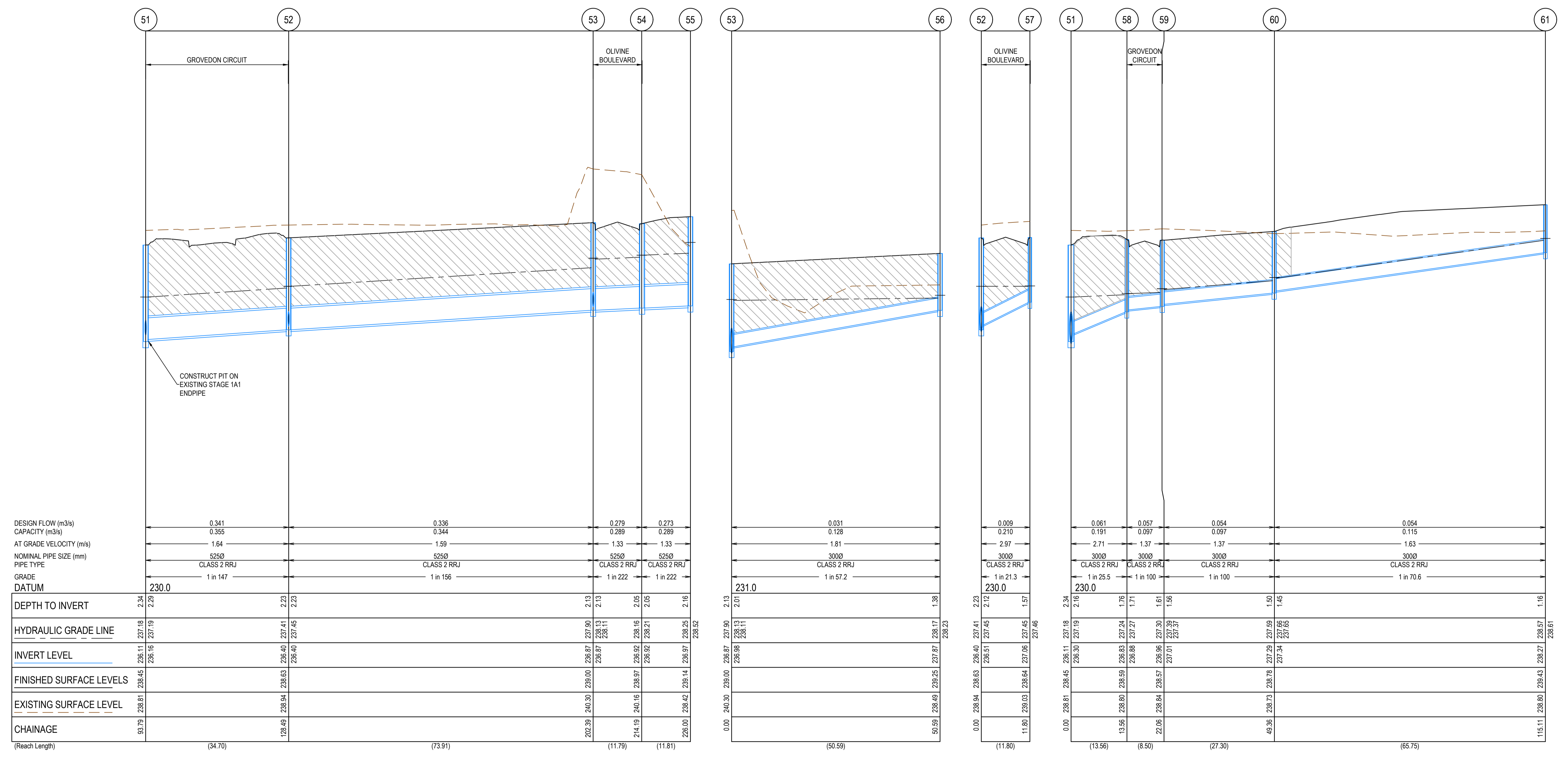
Member of the Surbana Jurong Group
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500

Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Intersection Detail Plan &
 Lip Profiles - 5

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-27	SHEET No. 27 of 42	REVISION 1
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NOTE
 1. ALL DRAINS TO BE BACKFILLED IN ACCORDANCE WITH CLAUSE 35.1.7 OF COUNCIL'S SPECIFICATION.
 2. WHERE DRAINS ARE UNDER ANY PAVED AREA OR BEHIND THE KERB AND CHANNEL THE DRAINS IS TO BE BACKFILLED AS FOLLOWS
 2.1. 30mm NOM. SIZE CLASS 3 FCR TO 100mm ABOVE THE TOP OF PIPE.
 2.2. LOW PERMEABILITY CLASS 4 FCR FROM 100mm ABOVE THE TOP OF PIPE TO UNDERSIDE OF PAVEMENT

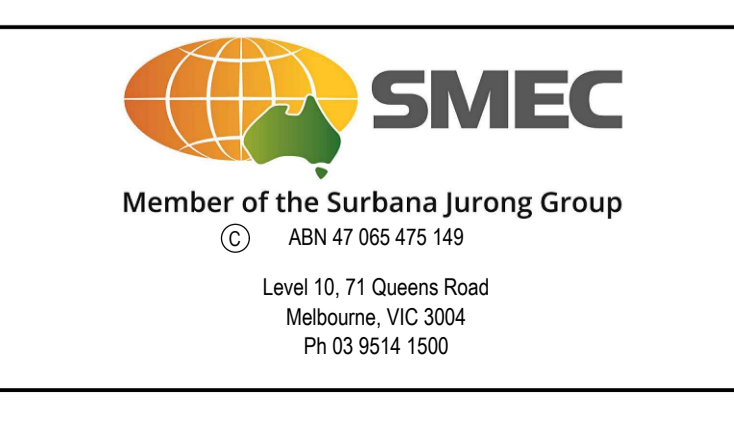
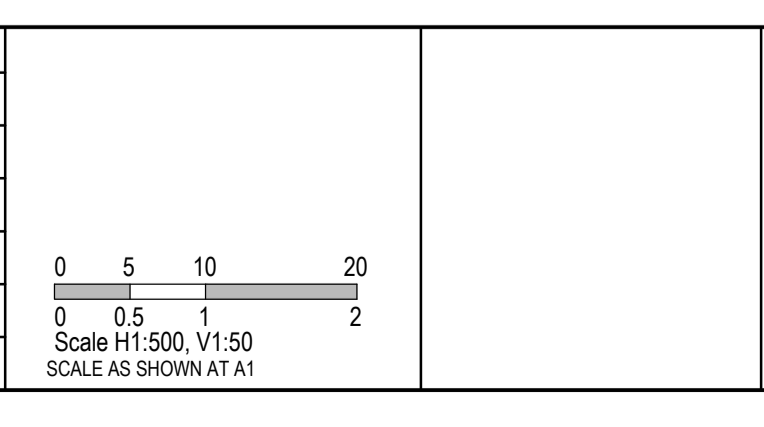
NOTE:
 ALL DRAINAGE PIPES UP TO AND INCLUDING 750mm DIAMETER SHALL BE RUBBER RING JOINTED. PIPES ABOVE THIS SIZE MUST BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.43	AS CONSTRUCTED	JJ/KU	AB

AS CONSTRUCTED

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

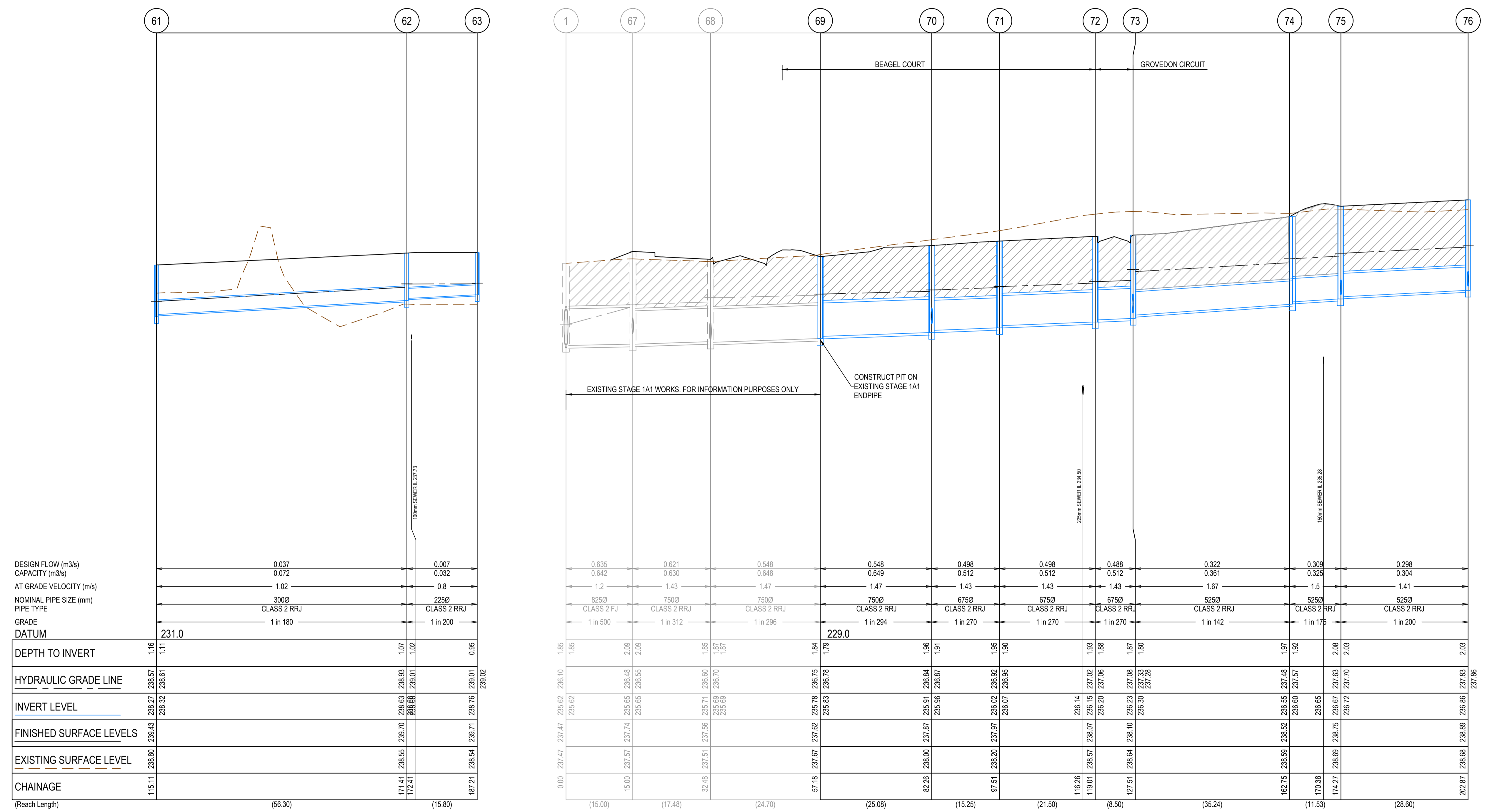


Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Drainage Longitudinal Sections - 1		MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-28	SHEET No. 28 of 42	REVISION 1
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NOTE

- ALL DRAINS TO BE BACKFILLED IN ACCORDANCE WITH CLAUSE 35.1.7 OF COUNCIL'S SPECIFICATION.
- WHERE DRAINS ARE UNDER ANY PAVED AREA OR BEHIND THE KERB AND CHANNEL THE DRAINS IS TO BE BACKFILLED AS FOLLOWS
 - 30mm NOM. SIZE CLASS 3 FCR TO 100mm ABOVE THE TOP OF PIPE.
 - LOW PERMEABILITY CLASS 4 FCR FROM 100mm ABOVE THE TOP OF PIPE TO UNDERSIDE OF PAVEMENT

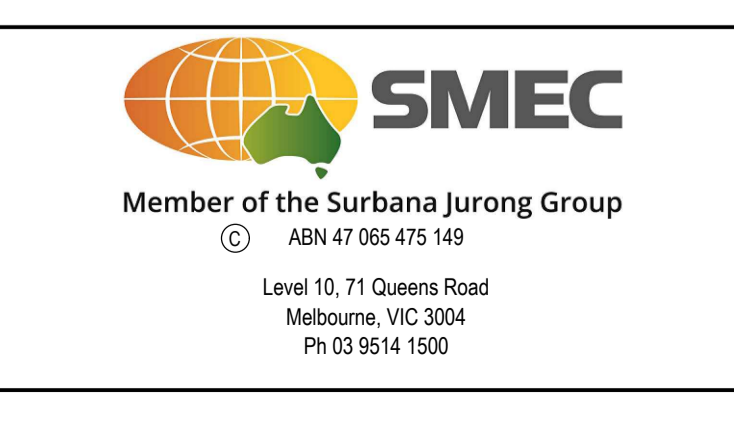
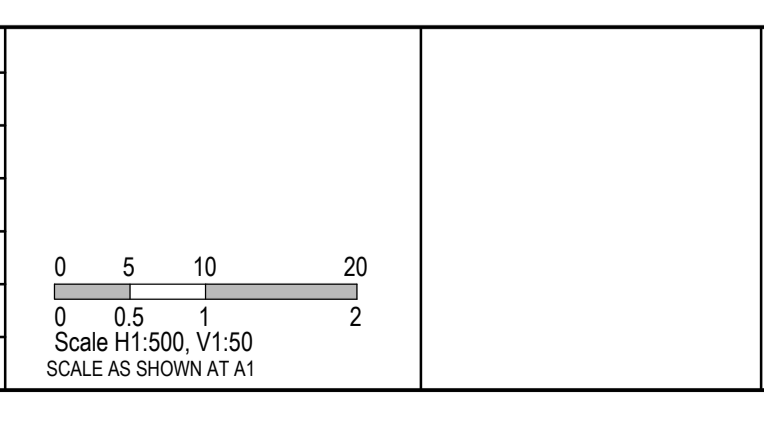
NOTE:
ALL DRAINAGE PIPES UP TO AND INCLUDING 750mm DIAMETER SHALL BE RUBBER RING JOINTED. PIPES ABOVE THIS SIZE MUST BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/JS	AB
1	26.06.44	AS CONSTRUCTED	JJ/KU	AB

AS CONSTRUCTED

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



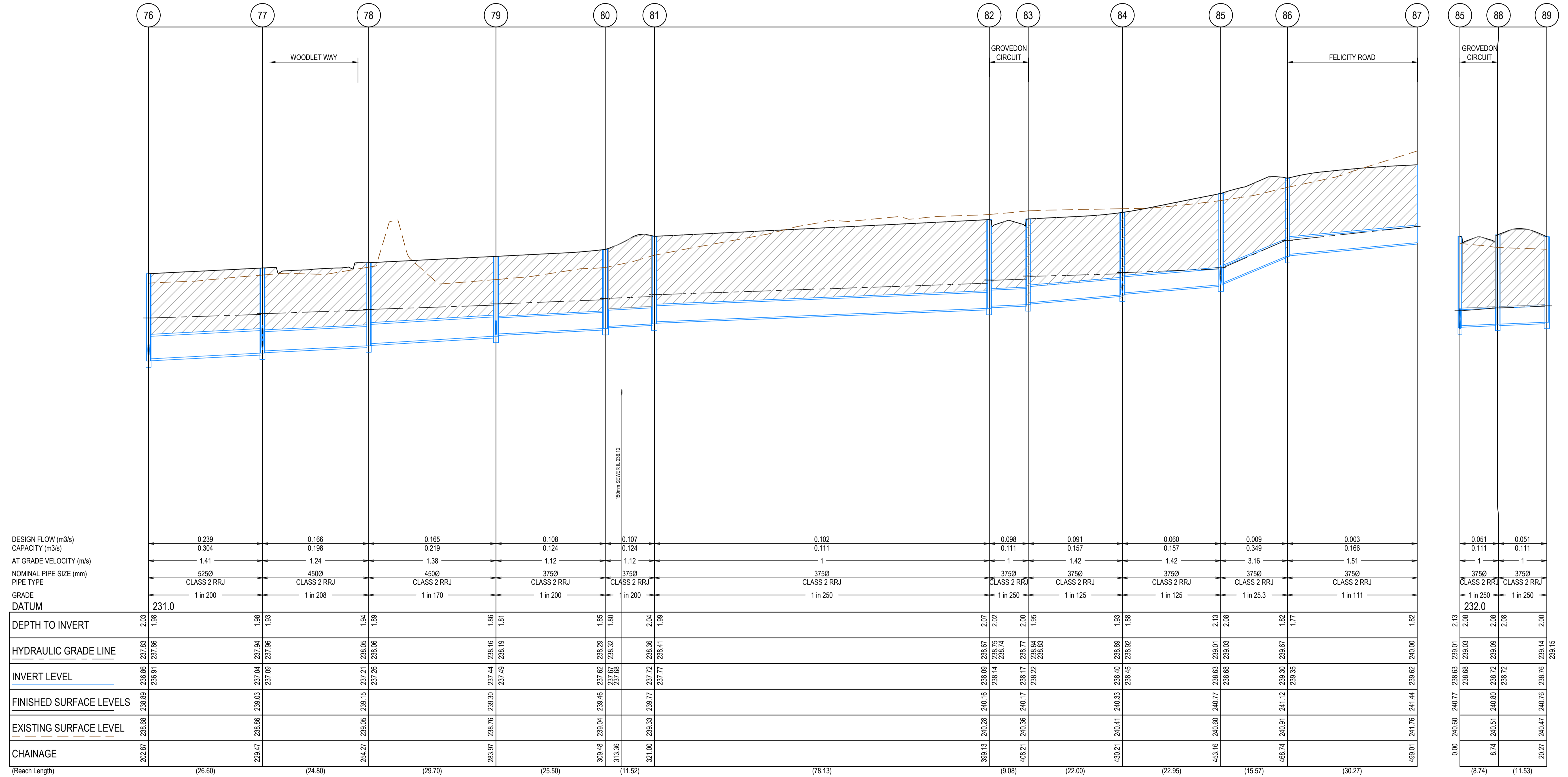
Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Drainage Longitudinal Sections - 2		MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-29	SHEET No. 29 of 42	REVISION 1
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NOTE

- ALL DRAINS TO BE BACKFILLED IN ACCORDANCE WITH CLAUSE 35.1.7 OF COUNCIL'S SPECIFICATION.
- WHERE DRAINS ARE UNDER ANY PAVED AREA OR BEHIND THE KERB AND CHANNEL THE DRAINS IS TO BE BACKFILLED AS FOLLOWS
 - 30mm NOM. SIZE CLASS 3 FCR TO 100mm ABOVE THE TOP OF PIPE.
 - LOW PERMEABILITY CLASS 4 FCR FROM 100mm ABOVE THE TOP OF PIPE TO UNDERSIDE OF PAVEMENT

NOTE:

ALL DRAINAGE PIPES UP TO AND INCLUDING 750mm DIAMETER SHALL BE RUBBER RING JOINTED. PIPES ABOVE THIS SIZE MUST BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.45	AS CONSTRUCTED	JJ/KU	AB

AS CONSTRUCTED

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

0 5 10 20
0 0.5 1 1.50 2
SCALE H1:500, V1:50
SCALE AS SHOWN AT 1

SMEC
Member of the Surlana Jurong Group
ABN 47 065 475 149
Level 10, 71 Queens Road
Melbourne, VIC 3004
Ph 03 9514 1500

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Olivine Estate - Stage 1A
Whittlesea City Council
Road and Drainage
Drainage Longitudinal Sections - 3

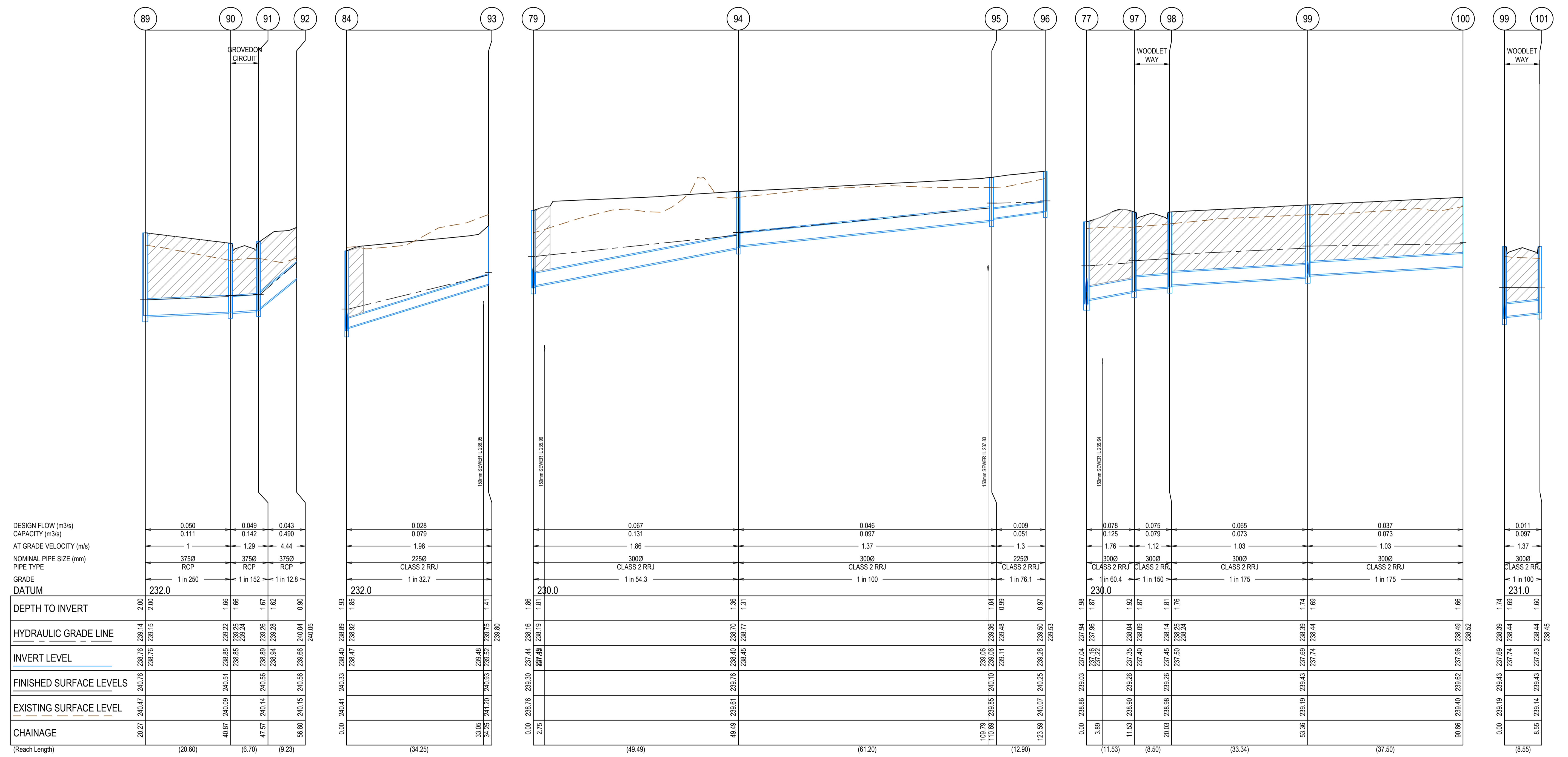
MELWAYS REF: 9 J2
PROJECT / DRAWING No: 1700E-01A-30
SHEET No: 30 of 42
REVISION: 1

NOTE

- ALL DRAINS TO BE BACKFILLED IN ACCORDANCE WITH CLAUSE 35.1.7 OF COUNCIL'S SPECIFICATION.
- WHERE DRAINS ARE UNDER ANY PAVED AREA OR BEHIND THE KERB AND CHANNEL THE DRAINS IS TO BE BACKFILLED AS FOLLOWS
 - 30mm NOM. SIZE CLASS 3 FCR TO 100mm ABOVE THE TOP OF PIPE.
 - LOW PERMEABILITY CLASS 4 FCR FROM 100mm ABOVE THE TOP OF PIPE TO UNDERSIDE OF PAVEMENT

NOTE:

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REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUN/J	AB
1	26.06.46	AS CONSTRUCTED	JUN/J	AB

AS CONSTRUCTED

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

SMEC
Member of the Surbana Jurong Group
ABN 47 065 475 149
Level 10, 71 Queens Road
Melbourne, VIC 3004
Ph 03 9514 1500

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Olivine Estate - Stage 1A
Whittlesea City Council
Road and Drainage
Drainage Longitudinal Sections - 4

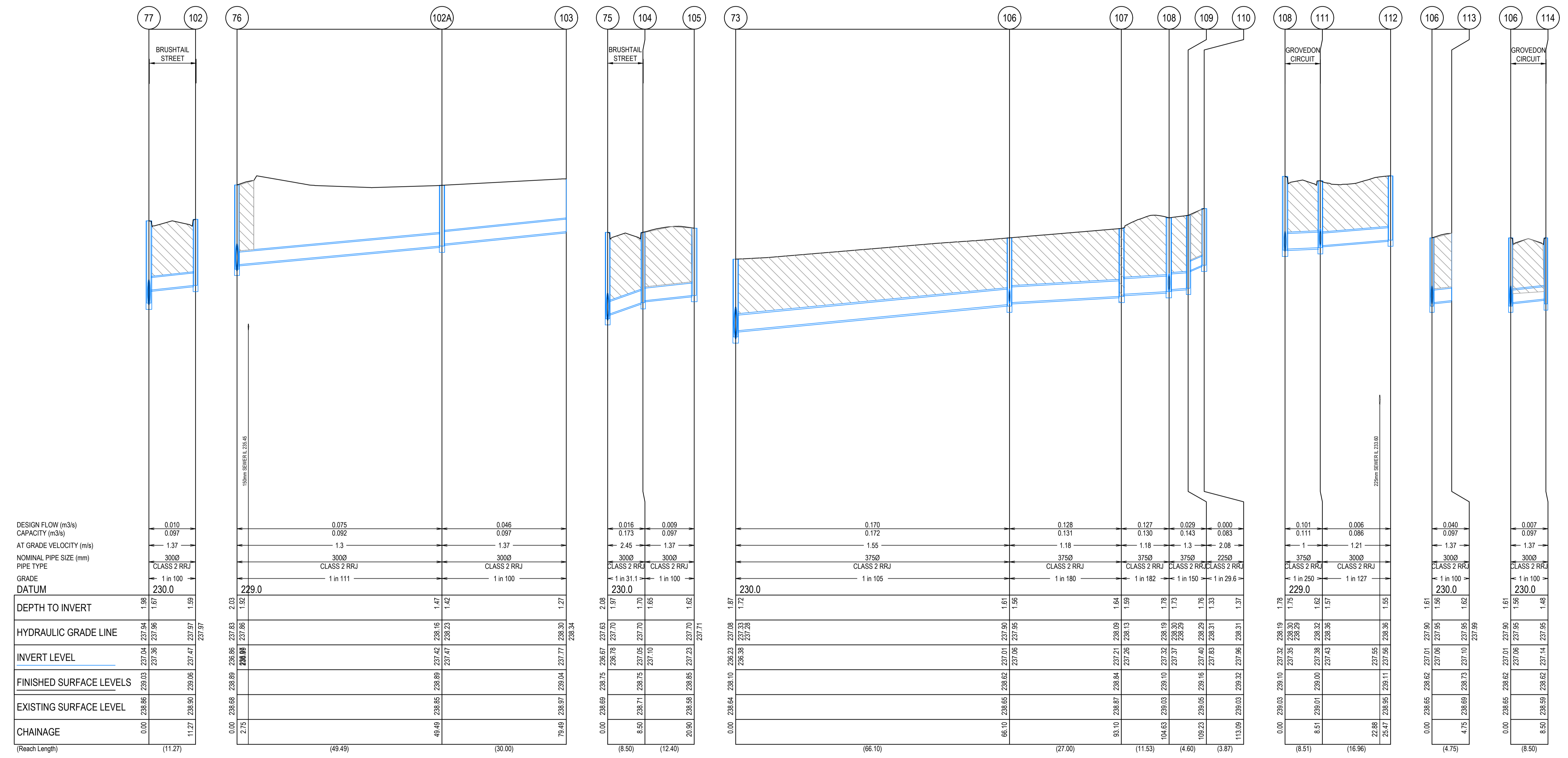
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NOTE

- ALL DRAINS TO BE BACKFILLED IN ACCORDANCE WITH CLAUSE 35.1.7 OF COUNCIL'S SPECIFICATION.
- WHERE DRAINS ARE UNDER ANY PAVED AREA OR BEHIND THE KERB AND CHANNEL THE DRAINS IS TO BE BACKFILLED AS FOLLOWS
 - 30mm NOM. SIZE CLASS 3 FCR TO 100mm ABOVE THE TOP OF PIPE.
 - LOW PERMEABILITY CLASS 4 FCR FROM 100mm ABOVE THE TOP OF PIPE TO UNDERSIDE OF PAVEMENT

NOTE:

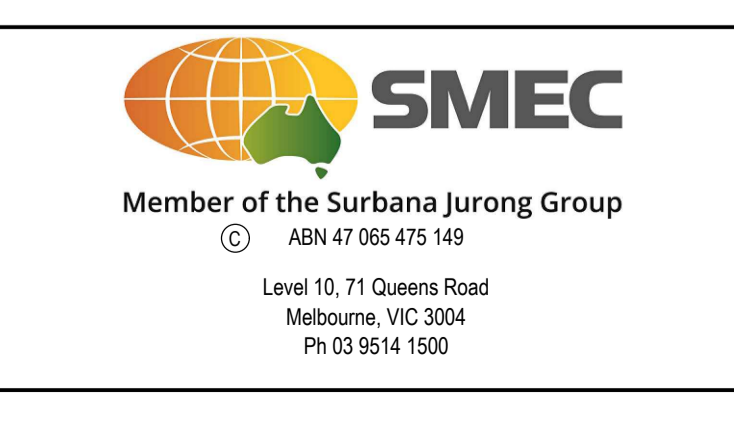
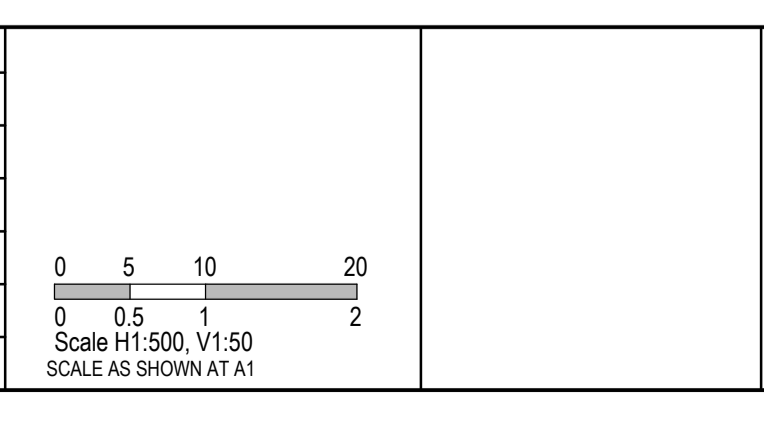
ALL DRAINAGE PIPES UP TO AND INCLUDING 750mm DIAMETER SHALL BE RUBBER RING JOINTED. PIPES ABOVE THIS SIZE MUST BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUNS	AB
1	26.06.47	AS CONSTRUCTED	JU/KU	AB

AS CONSTRUCTED

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

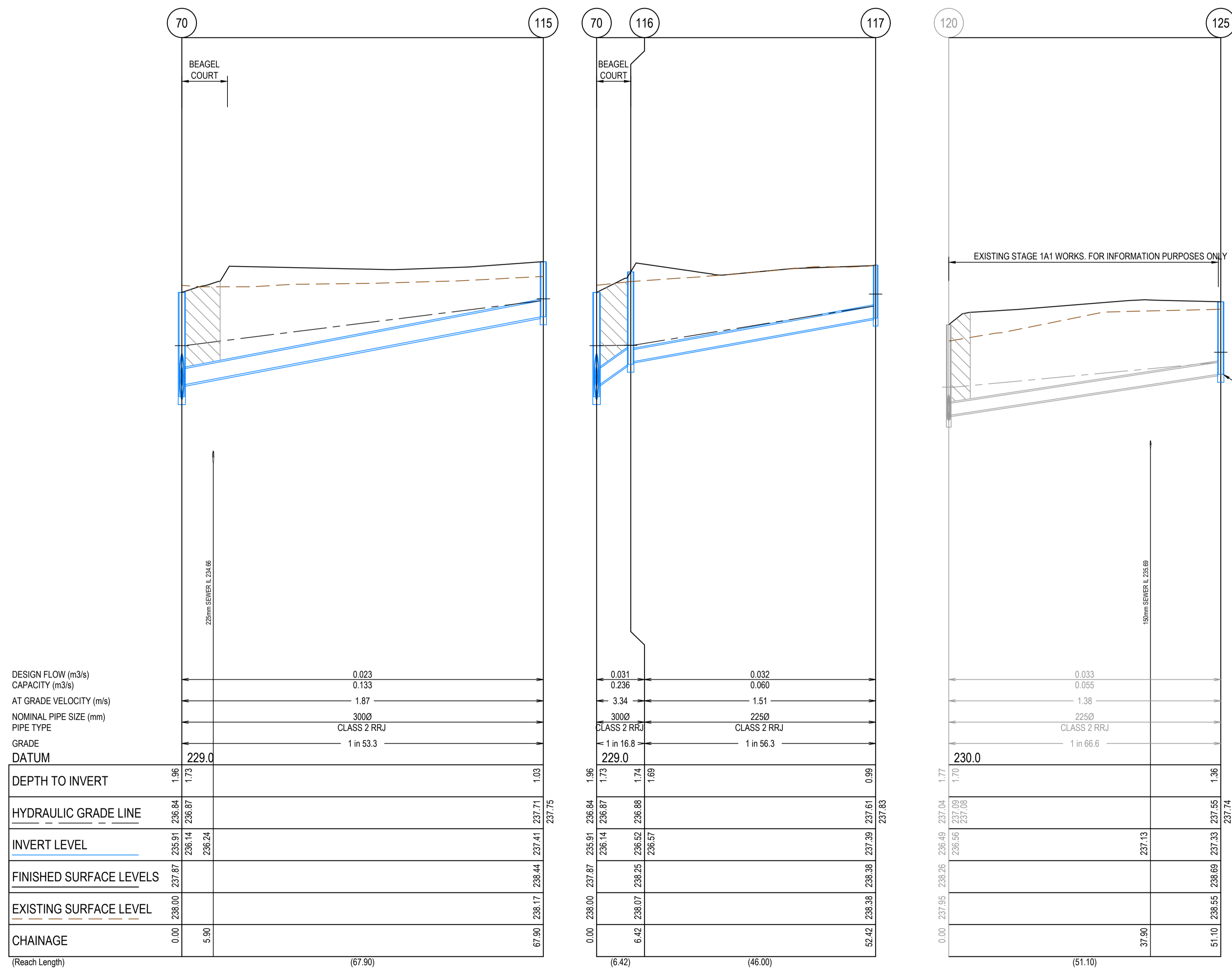


Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Drainage Longitudinal Sections - 5		MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-32	SHEET No. 32 of 42	REVISION 1
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NOTE

- ALL DRAINS TO BE BACKFILLED IN ACCORDANCE WITH CLAUSE 35.1.7 OF COUNCIL'S SPECIFICATION.
- WHERE DRAINS ARE UNDER ANY PAVED AREA OR BEHIND THE KERB AND CHANNEL THE DRAINS IS TO BE BACKFILLED AS FOLLOWS
 - 30mm NOM. SIZE CLASS 3 FCR TO 100mm ABOVE THE TOP OF PIPE.
 - LOW PERMEABILITY CLASS 4 FCR FROM 100mm ABOVE THE TOP OF PIPE TO UNDERSIDE OF PAVEMENT

NOTE:
 ALL DRAINAGE PIPES UP TO AND INCLUDING 750mm DIAMETER SHALL BE RUBBER RING JOINTED. PIPES ABOVE THIS SIZE MUST BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS



CONSTRUCT PIT ON EXISTING STAGE 1A1 ENDS

DESIGN FLOW (m3/s)	0.023	
CAPACITY (m3/s)	0.133	
AT GRADE VELOCITY (m/s)	1.87	
NOMINAL PIPE SIZE (mm)	3000	
PIPE TYPE	CLASS 2 RRJ	
GRADE	1 in 53.3	
DATUM	229.0	
DEPTH TO INVERT	1.96	1.03
HYDRAULIC GRADE LINE	235.91 236.84	237.41 237.75
INVERT LEVEL	236.14 236.87	237.41 237.75
FINISHED SURFACE LEVELS	237.87	238.44
EXISTING SURFACE LEVEL	238.00	238.17
CHAINAGE	0.00	5.90

(Reach Length) (67.90)

DESIGN FLOW (m3/s)	0.031	
CAPACITY (m3/s)	0.236	
AT GRADE VELOCITY (m/s)	3.34	
NOMINAL PIPE SIZE (mm)	3000	
PIPE TYPE	CLASS 2 RRJ	
GRADE	1 in 56.3	
DATUM	229.0	
DEPTH TO INVERT	1.96	0.99
HYDRAULIC GRADE LINE	235.91 236.84	237.61 237.83
INVERT LEVEL	236.14 236.87	237.39 237.61
FINISHED SURFACE LEVELS	237.87	238.38
EXISTING SURFACE LEVEL	238.00	238.38
CHAINAGE	6.42	52.42

(6.42) (46.00)

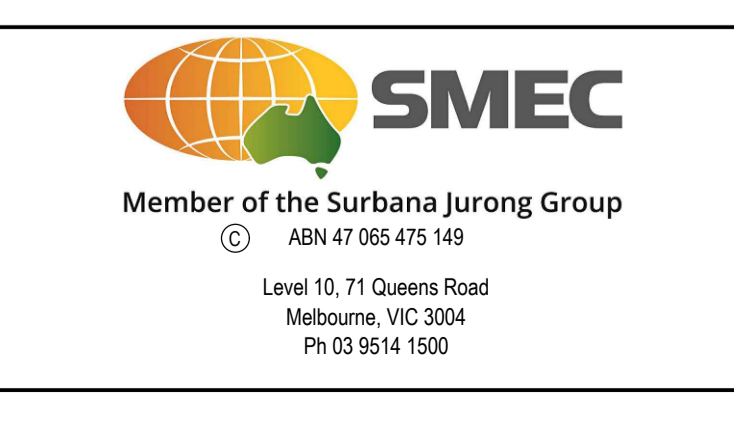
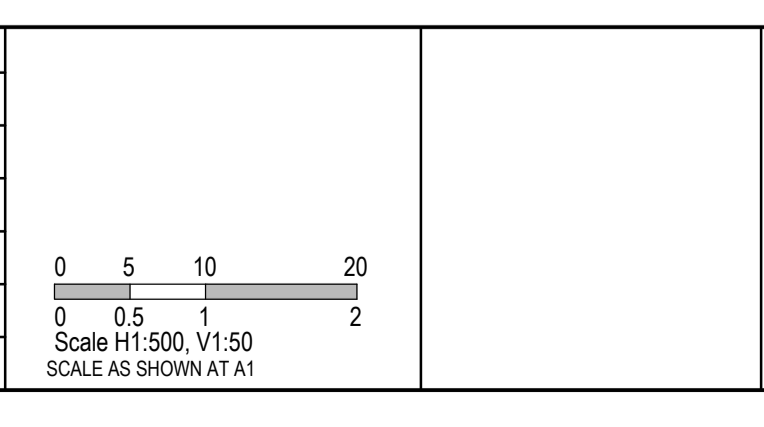
DESIGN FLOW (m3/s)	0.033	
CAPACITY (m3/s)	0.055	
AT GRADE VELOCITY (m/s)	1.38	
NOMINAL PIPE SIZE (mm)	2250	
PIPE TYPE	CLASS 2 RRJ	
GRADE	1 in 66.6	
DATUM	230.0	
DEPTH TO INVERT	1.77	1.36
HYDRAULIC GRADE LINE	237.04 237.08	237.55 237.74
INVERT LEVEL	236.56 236.87	237.33 237.55
FINISHED SURFACE LEVELS	237.26	238.69
EXISTING SURFACE LEVEL	237.95	238.55
CHAINAGE	37.90	51.10

(51.10)

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.48	AS CONSTRUCTED	JJ/KU	AB

AS CONSTRUCTED

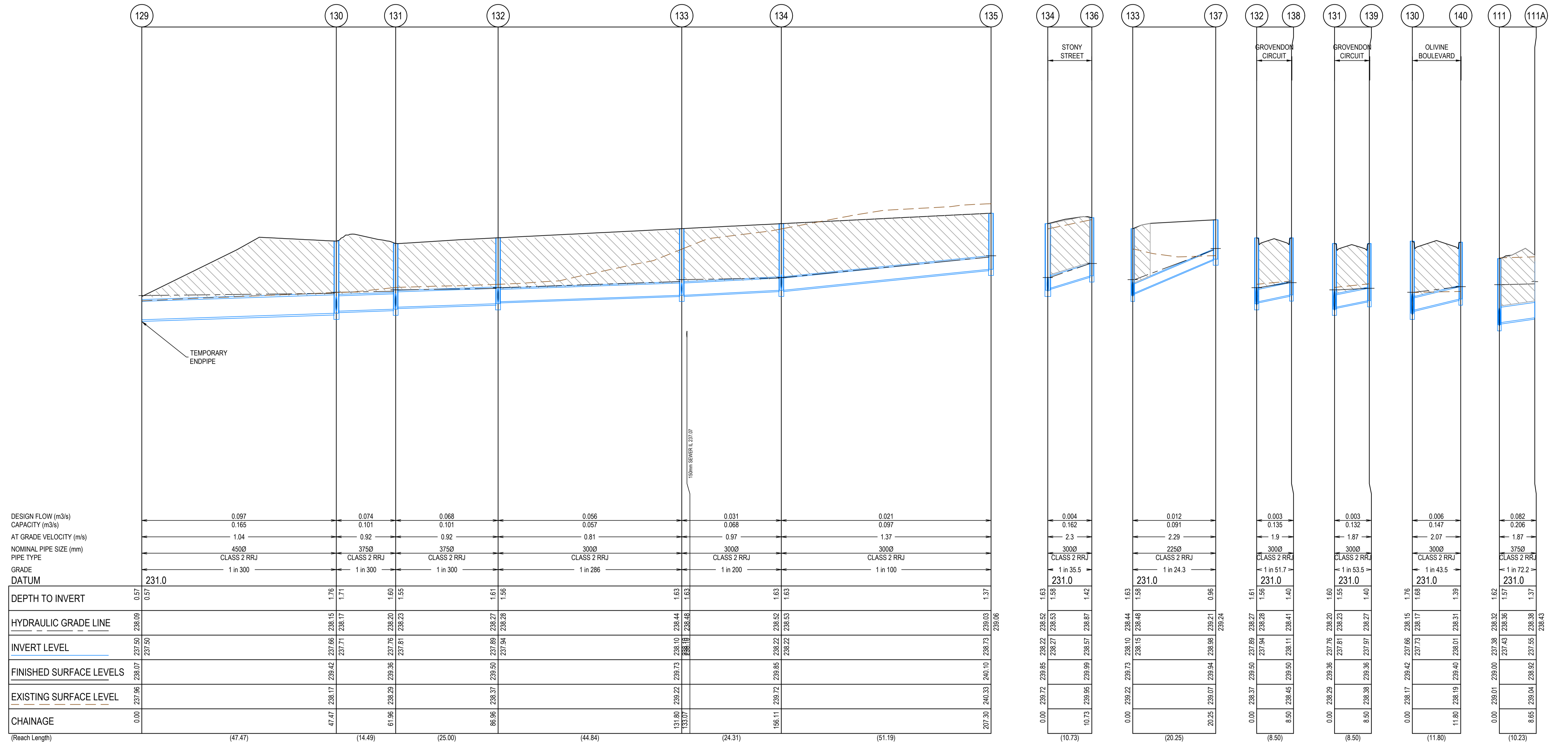
All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.	
TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Drainage Longitudinal Sections - 6	
MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-33
SHEET No. 33 of 42	REVISION 1

NOTE
 1. ALL DRAINS TO BE BACKFILLED IN ACCORDANCE WITH CLAUSE 35.1.7 OF COUNCIL'S SPECIFICATION.
 2. WHERE DRAINS ARE UNDER ANY PAVED AREA OR BEHIND THE KERB AND CHANNEL THE DRAINS IS TO BE BACKFILLED AS FOLLOWS
 2.1. 30mm NOM. SIZE CLASS 3 FCR TO 100mm ABOVE THE TOP OF PIPE.
 2.2. LOW PERMEABILITY CLASS 4 FCR FROM 100mm ABOVE THE TOP OF PIPE TO UNDERSIDE OF PAVEMENT

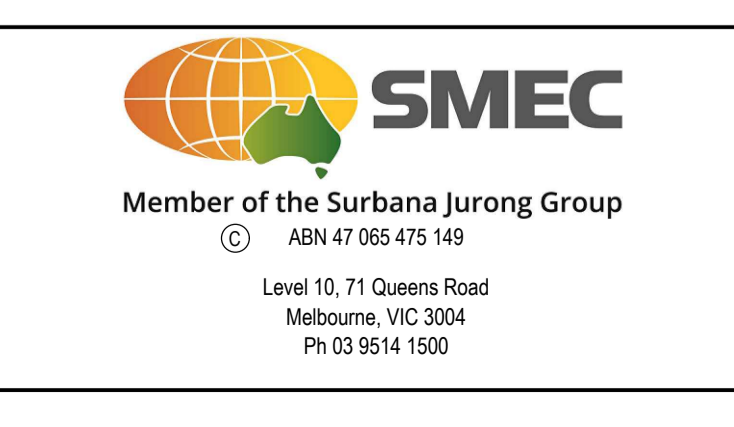
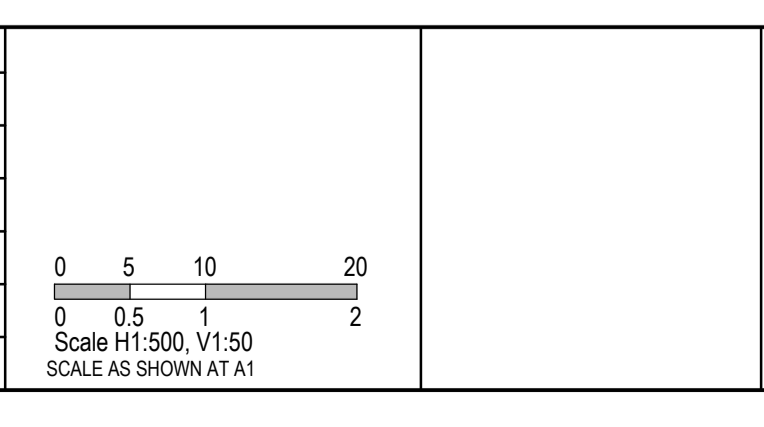
NOTE:
 ALL DRAINAGE PIPES UP TO AND INCLUDING 750mm DIAMETER SHALL BE RUBBER RING JOINTED. PIPES ABOVE THIS SIZE MUST BE FLUSH JOINTED WITH EXTERNAL SEALING BANDS



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.49	AS CONSTRUCTED	JJ/KU	AB

AS CONSTRUCTED

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



Olivine Estate - Stage 1A Whittlesea City Council Road and Drainage Drainage Longitudinal Sections - 7	
MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-34
SHEET No. 34 of 42	REVISION 1

	PIT	INTERNAL		INLET		OUTLET		PIT				REMARKS
NAME	TYPE	WD	LEN	DIA	INV LEV	DIA	INV LEV	SETOUT RL	DEPTH	STD DWG		
51	SIDE ENTRY PIT GRATED	900	900	525	236.160	675	236.110	238.453	2.344	EDCM601 & 607		CONSTRUCT PIT ON EX.ENDPIPE. HAUNCH PIT TO 600X900 COVER
					300		236.297					
52	SIDE ENTRY PIT GRATED	750	900	525	236.396	525	236.396	238.627	2.231	EDCM601 & 607		HAUNCH PIT TO 600X900 COVER
					300		236.508					
53	SIDE ENTRY PIT GRATED	750	900	525	236.869	525	236.869	238.996	2.127	EDCM601 & 607		HAUNCH PIT TO 600X900 COVER
					300		236.981					
54	SIDE ENTRY PIT GRATED	600	900	525	236.922	525	236.922	238.971	2.050	EDCM601 & 605		
55	GRATED JUNCTION PIT	900	900			525	236.975	239.139	2.165	EDCM605		HD COVER. 900x900 GATIC GULLY GRATE (ROAD V TYPE) 33IV964 OR SIMILAR
56	SIDE ENTRY PIT GRATED	600	900			300	237.866	239.249	1.383	EDCM601 & 605		
57	SIDE ENTRY PIT GRATED	600	900			300	237.063	238.636	1.573	EDCM601 & 605		
58	SIDE ENTRY PIT GRATED	600	900	300	236.878	300	236.828	238.588	1.760	EDCM601 & 605		
59	SIDE ENTRY PIT GRATED	600	900	300	237.013	300	236.963	238.573	1.610	EDCM601 & 605		
60	SIDE ENTRY PIT GRATED	600	900	300	237.336	300	237.286	238.782	1.496	EDCM601 & 605		
61	JUNCTION PIT	600	900	300	238.317	300	238.267	239.431	1.164	EDCM605		
62	JUNCTION PIT	600	900	225	238.680	300	238.630	239.700	1.071	EDCM605		
63	JUNCTION PIT	600	900			225	238.759	239.710	0.952	EDCM605		
69	GRATED JUNCTION PIT	1050	900	750	235.826	750	235.776	237.618	1.843	EDCM607		CONSTRUCT PIT ON EX.ENDPIPE. HD COVER. GATIC GULLY GRATE (ROAD V TYPE) 33IV964 OR SIMILAR. HAUNCH PIT TO 600X900 COVER
70	GRATED JUNCTION PIT	900	900	675	235.961	750	235.911	237.867	1.956	EDCM607		HD COVER. GATIC GULLY GRATE (ROAD V TYPE) 33IV964 OR SIMILAR. HAUNCH PIT TO 600X900 COVER
					300		236.136					
					300		236.136					
71	GRATED JUNCTION PIT	900	900	675	236.067	675	236.017	237.968	1.951	EDCM607		HD COVER. GATIC GULLY GRATE (ROAD V TYPE) 33IV964 OR SIMILAR. HAUNCH PIT TO 600X900 COVER
72	DOUBLE GRATED ENTRY PIT	600	900	675	236.197	675	236.147	238.075	1.928	EDCM602 & 605		HD COVER
73	DOUBLE GRATED ENTRY PIT	750	900	525	236.303	675	236.228	238.103	1.875	EDCM602 & 607		HAUNCH PIT TO 600X900 COVER
					375		236.378					
74	SIDE ENTRY PIT GRATED	900	900	525	236.601	525	236.551	238.518	1.967	EDCM601 & 607		HAUNCH PIT TO 600X900 COVER
75	SIDE ENTRY PIT GRATED	900	900	525	236.717	525	236.667	238.752	2.085	EDCM601 & 607		HAUNCH PIT TO 600X900 COVER
					300		236.779					
76	SIDE ENTRY PIT GRATED	750	900	525	236.910	525	236.860	238.895	2.035	EDCM601 & 607		HAUNCH PIT TO 600X900 COVER
					300		236.972					
77	SIDE ENTRY PIT GRATED	750	900	450	237.093	525	237.043	239.028	1.985	EDCM601 & 607		HAUNCH PIT TO 600X900 COVER
					300		237.155					
					300		237.358					
78	SIDE ENTRY PIT GRATED	600	900	450	237.262	450	237.212	239.152	1.939	EDCM601 & 605		
79	SIDE ENTRY PIT GRATED	600	900	375	237.489	450	237.437	239.300	1.863	EDCM601 & 605		
					300		237.487					
80	SIDE ENTRY PIT GRATED	600	900	375	237.666	375	237.616	239.462	1.846	EDCM601 & 605		
81	SIDE ENTRY PIT GRATED	600	900	375	237.774	375	237.724	239.767	2.043	EDCM601 & 605		
82	SIDE ENTRY PIT GRATED	600	900	375	238.136	375	238.086	240.157	2.071	EDCM601 & 605		
83	SIDE ENTRY PIT GRATED	600	900	375	238.223	375	238.173	240.173	2.000	EDCM601 & 605		
84	SIDE ENTRY PIT GRATED	600	900	375	238.449	375	238.399	240.325	1.927	EDCM601 & 605		
					225		238.474					
85	SIDE ENTRY PIT GRATED	600	900	375	238.682	375	238.632	240.767	2.135	EDCM601 & 605		
					375		238.682					
86	GRATED JUNCTION PIT	600	900	375	239.348	375	239.298	241.123	1.825	EDCM605		HD COVER. PROVIDE GATIC GULLY GRATE (ROAD V-TYPE) 33IV964 OR SIMILAR
87	ENDPIPE					375	239.620	241.436	1.816			BLANK OFF ENDPIPE
88	SIDE ENTRY PIT GRATED	600	900	375	238.717	375	238.717	240.802	2.085	EDCM601 & 605		
89	SIDE ENTRY PIT GRATED	600	900	375	238.763	375	238.763	240.760	1.996	EDCM601 & 605		
90	SIDE ENTRY PIT GRATED	600	900	375	238.846	375	238.846	240.507	1.661	EDCM601 & 605		
91	SIDE ENTRY PIT GRATED	600	900	375	238.940	375	238.890	240.560	1.670	EDCM601 & 605		
92	ENDPIPE					375	239.660	240.560	0.900			BLANK OFF ENDPIPE
93	ENDPIPE					225	239.522	240.934	1.412			BLANK OFF ENDPIPE
94	JUNCTION PIT	600	900	300	238.448	300	238.398	239.759	1.360	EDCM605		
95	JUNCTION PIT	600	900	225	239.110	300	239.060	240.099	1.038	EDCM605		
96	JUNCTION PIT	600	900			225	239.280	240.248	0.968	EDCM605		
97	SIDE ENTRY PIT GRATED	600	900	300	237.396	300	237.346	239.263	1.916	EDCM601 & 605		
98	SIDE ENTRY PIT GRATED	600	900	300	237.503	300	237.453	239.263	1.810	EDCM601 & 605		
99	SIDE ENTRY PIT GRATED	600	900	300	237.744	300	237.694	239.432	1.738	EDCM601 & 605		
					300		237.744					
100	ENDPIPE					300	237.958	239.617	1.659			BLANK OFF ENDPIPE
101	SIDE ENTRY PIT GRATED	600	900			300	237.829	239.429	1.600	EDCM601 & 605		
102	SIDE ENTRY PIT GRATED	600	900			300	237.471	239.065	1.594	EDCM601 & 605		

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JUNS	AB
1	26.06.50	AS CONSTRUCTED	JJKU	AB

AS CONSTRUCTED


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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

SCALE AS SHOWN AT A1



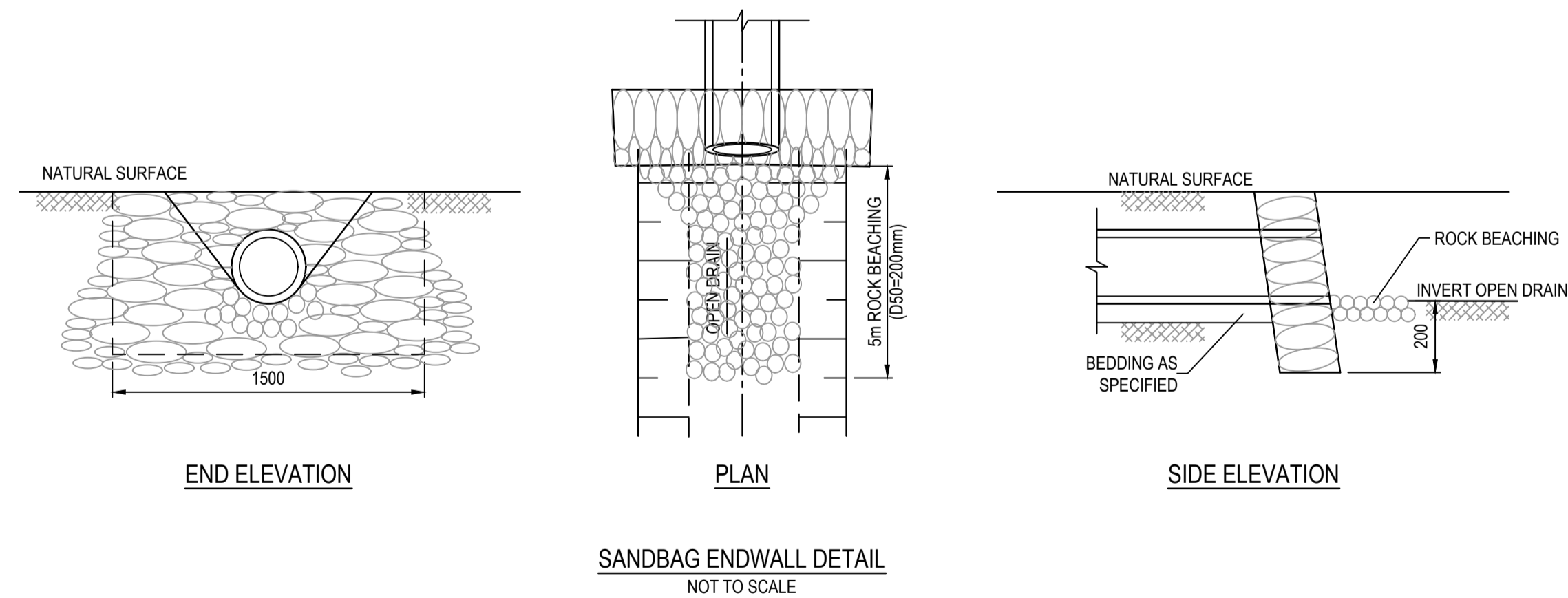
Member of the Surbana Jurong Group
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500



Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Pit Schedule - 1

MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
9 J2	1700E-01A-35	35 of 42	1

NAME	PIT TYPE	INTERNAL		INLET		OUTLET		PIT SETOUT RL	DEPTH	STD DWG	REMARKS
		WD	LEN	DIA	INV LEV	DIA	INV LEV				
102A	JUNCTION PIT	600	900	300	237.468	300	237.418	238.885	1.467	EDCM605	
103	ENDPIPE					300	237.768	239.041	1.273		BLANK OFF ENDPIPE
104	SIDE ENTRY PIT GRATED	600	900	300	237.103	300	237.053	238.752	1.699	EDCM601 & 605	
105	SIDE ENTRY PIT GRATED	600	900			300	237.227	238.851	1.624	EDCM601 & 605	
106	SIDE ENTRY PIT GRATED	600	900	375	237.056	375	237.006	238.617	1.611	EDCM601 & 605	
				300	237.056						
				300	237.056						
107	SIDE ENTRY PIT GRATED	600	900	375	237.256	375	237.206	238.844	1.637	EDCM601 & 605	
108	SIDE ENTRY PIT GRATED	600	900	375	237.370	375	237.320	239.101	1.781	EDCM601 & 605	
				375	237.346						
109	JUNCTION PIT	600	900	225	237.827	375	237.401	239.160	1.759	EDCM605	
110	JUNCTION PIT	600	900			225	237.957	239.325	1.367	EDCM605	CONNECT EXISTING 225DIA
111	SIDE ENTRY PIT GRATED	600	900	300	237.430	375	237.380	238.995	1.615	EDCM601 & 605	
				375	237.430						
112	GRATED JUNCTION PIT	600	900			300	237.564	239.111	1.548	EDCM605	HD COVER. PROVIDE GATIC GULLY GRATE (ROAD V-TYPE) 33IV964 OR SIMILAR COVER
113	ENDPIPE					300	237.104	238.728	1.624		BLANK OFF ENDPIPE
114	SIDE ENTRY PIT GRATED	600	900			300	237.141	238.617	1.476	EDCM601 & 605	
115	JUNCTION PIT	600	900			300	237.410	238.444	1.034	EDCM605	
116	JUNCTION PIT	600	900	225	236.568	300	236.518	238.253	1.735	EDCM605	
117	JUNCTION PIT	600	900			225	237.385	238.379	0.994	EDCM605	
125	JUNCTION PIT	600	900			225	237.330	238.693	1.363	EDCM605	CONSTRUCT PIT ON EX.ENDPIPE
129	ENDWALL			450	237.502			238.068	1.490	SD820	TEMPORARY ENDWALL. EARTH OUTFALL
130	SIDE ENTRY PIT GRATED	600	900	375	237.710	450	237.660	239.420	1.760	EDCM601 & 605	
				300	237.735						
131	SIDE ENTRY PIT GRATED	600	900	375	237.808	375	237.758	239.363	1.605	EDCM601 & 605	
				300	237.808						
132	SIDE ENTRY PIT GRATED	600	900	300	237.942	375	237.892	239.502	1.610	EDCM601 & 605	
				300	237.942						
133	SIDE ENTRY PIT GRATED	600	900	300	238.098	300	238.098	239.726	1.627	EDCM601 & 605	
				225	238.148						
134	SIDE ENTRY PIT GRATED	600	900	300	238.220	300	238.220	239.847	1.627	EDCM601 & 605	
				300	238.270						
135	SIDE ENTRY PIT GRATED	600	900			300	238.732	240.103	1.371	EDCM601 & 605	
136	GRATED JUNCTION PIT	600	900			300	238.572	239.995	1.423	EDCM605	HD COVER. PROVIDE GATIC GULLY GRATE (ROAD V-TYPE) 33IV964 OR SIMILAR
137	JUNCTION PIT	600	900			225	238.981	239.942	0.960	EDCM605	
138	SIDE ENTRY PIT GRATED	600	900			300	238.106	239.502	1.396	EDCM601 & 605	
139	SIDE ENTRY PIT GRATED	600	900			300	237.967	239.363	1.396	EDCM601 & 605	
140	SIDE ENTRY PIT GRATED	600	900			300	238.006	239.395	1.389	EDCM601 & 605	
111A	ENDPIPE					375	237.550	238.920	1.370		BLANK OFF ENDPIPE



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.51	AS CONSTRUCTED	JJ/KU	AB

AS CONSTRUCTED

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

SCALE AS SHOWN AT A1

Member of the Surbana Jurong Group

 ABN 47 065 475 149

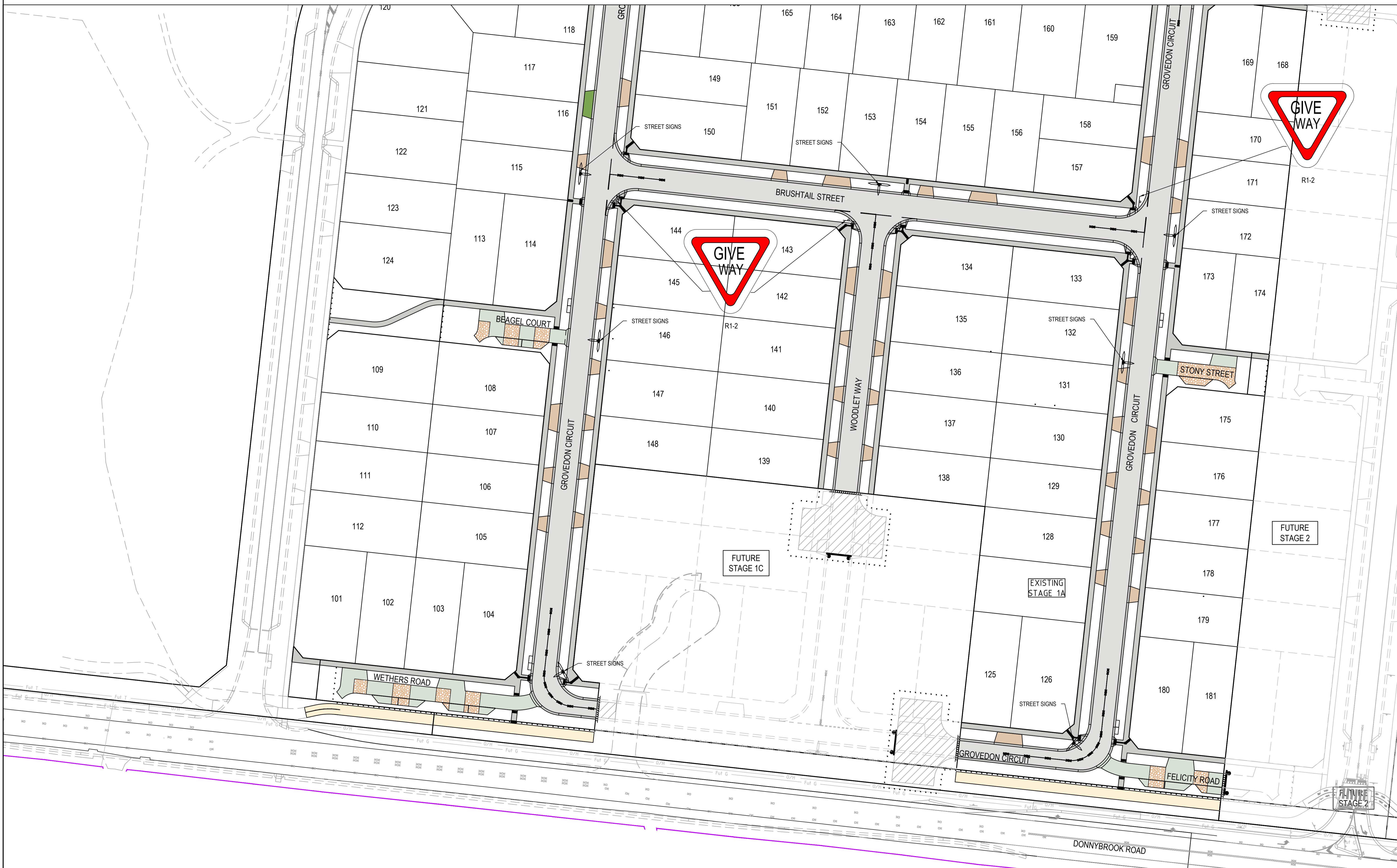
 Level 10, 71 Queens Road

 Melbourne, VIC 3004

 Ph 03 9514 1500

Olivine Estate - Stage 1A
Whittlesea City Council
Road and Drainage
Pit Schedule -2

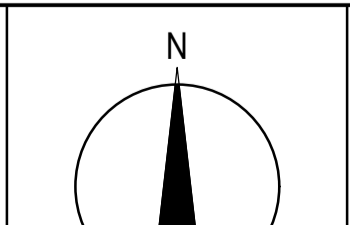
MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-36	SHEET No. 36 of 42	REVISION 1
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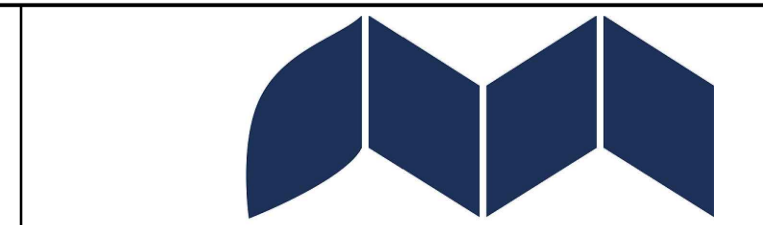
REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJNS	AB
1	18.02.19	DRIVEWAY (116&117) TYPE AMENDED	MA/MA	AB
2	20.03.19	EXPOSED AGGREGATE ON MEWS	MA/MA	AB
3	26.06.22	AS CONSTRUCTED	JJKU	AB

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



SMEC
Member of the Surbana Jurong Group
© ABN 47 065 475 149
Level 10, 71 Queens Road
Melbourne, VIC 3004
Ph 03 9514 1500



Olivine Estate - Stage 1A
Whittlesea City Council
Road and Drainage
Signs & Linemarking Plan - 1

AS CONSTRUCTED



MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-37	SHEET No. 37 of 42	REVISION 3
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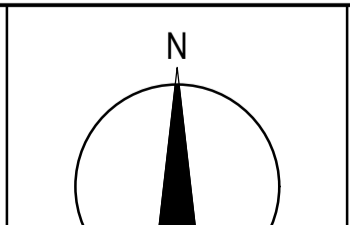
- NOTES**
- 90° BENDS TO HAVE CENTRELINE MARKING WITH RRPM'S AT MAX 6m SPACING.
 - RRPMs TO BE IN ACCORDANCE WITH VICROADS TRAFFIC ENGINEERING MANUAL VOL 2.
 - ALL LINEMARKING & SIGNAGE TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1742.



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DRFT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJNS	AB
1	18.02.19	DRIVEWAY (116&117) TYPE AMENDED	MA/MA	AB
2	20.03.19	EXPOSED AGGREGATE ON MEWS	MA/MA	AB
3	26.06.22	AS CONSTRUCTED	JJ/KU	AB

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TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



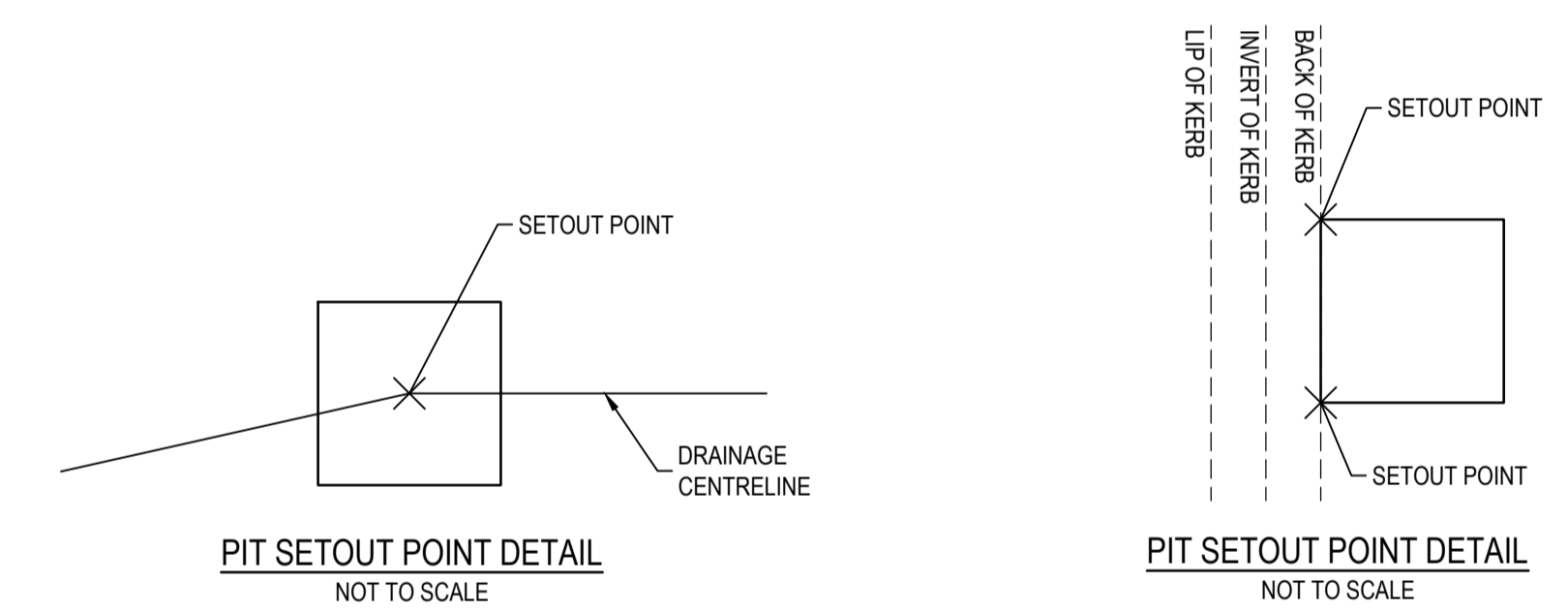
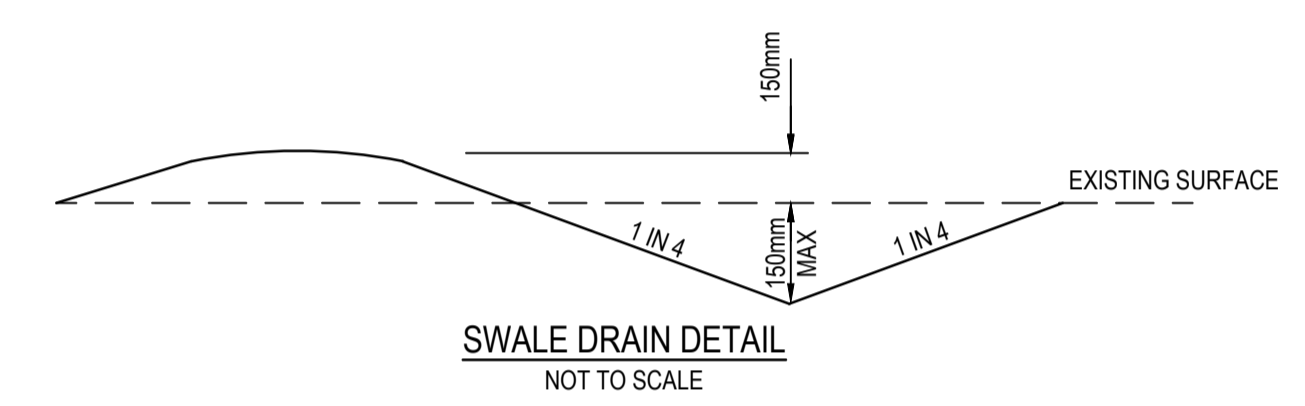
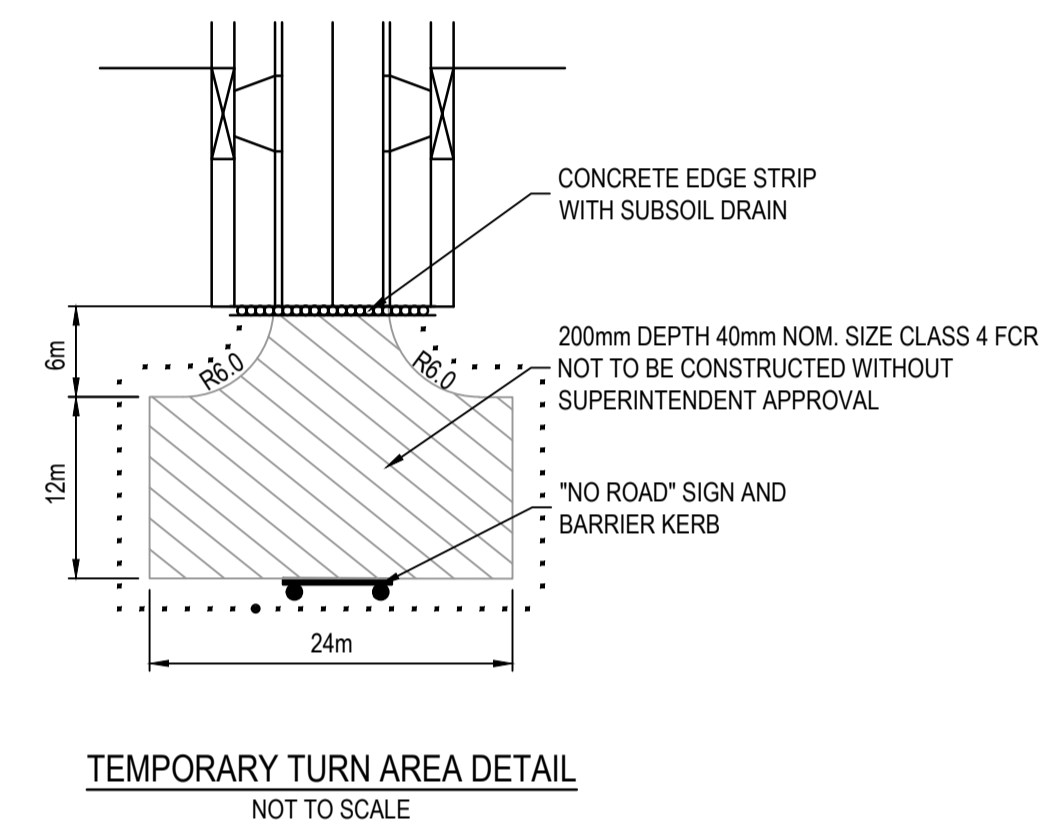
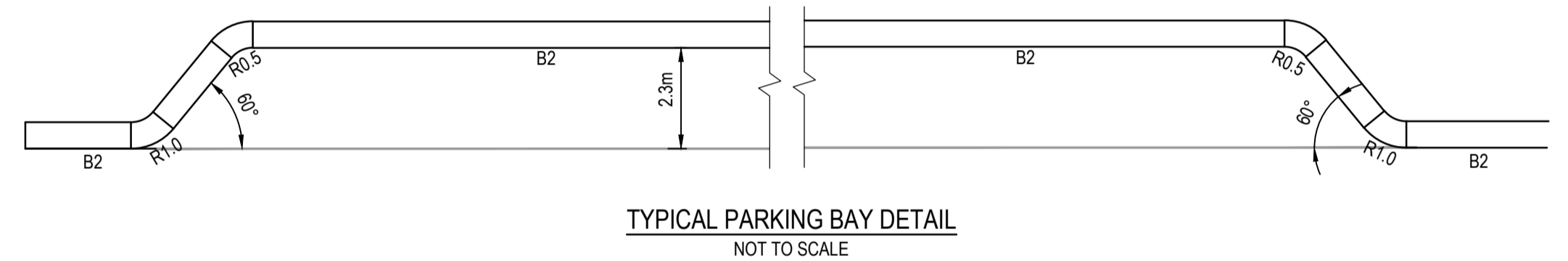
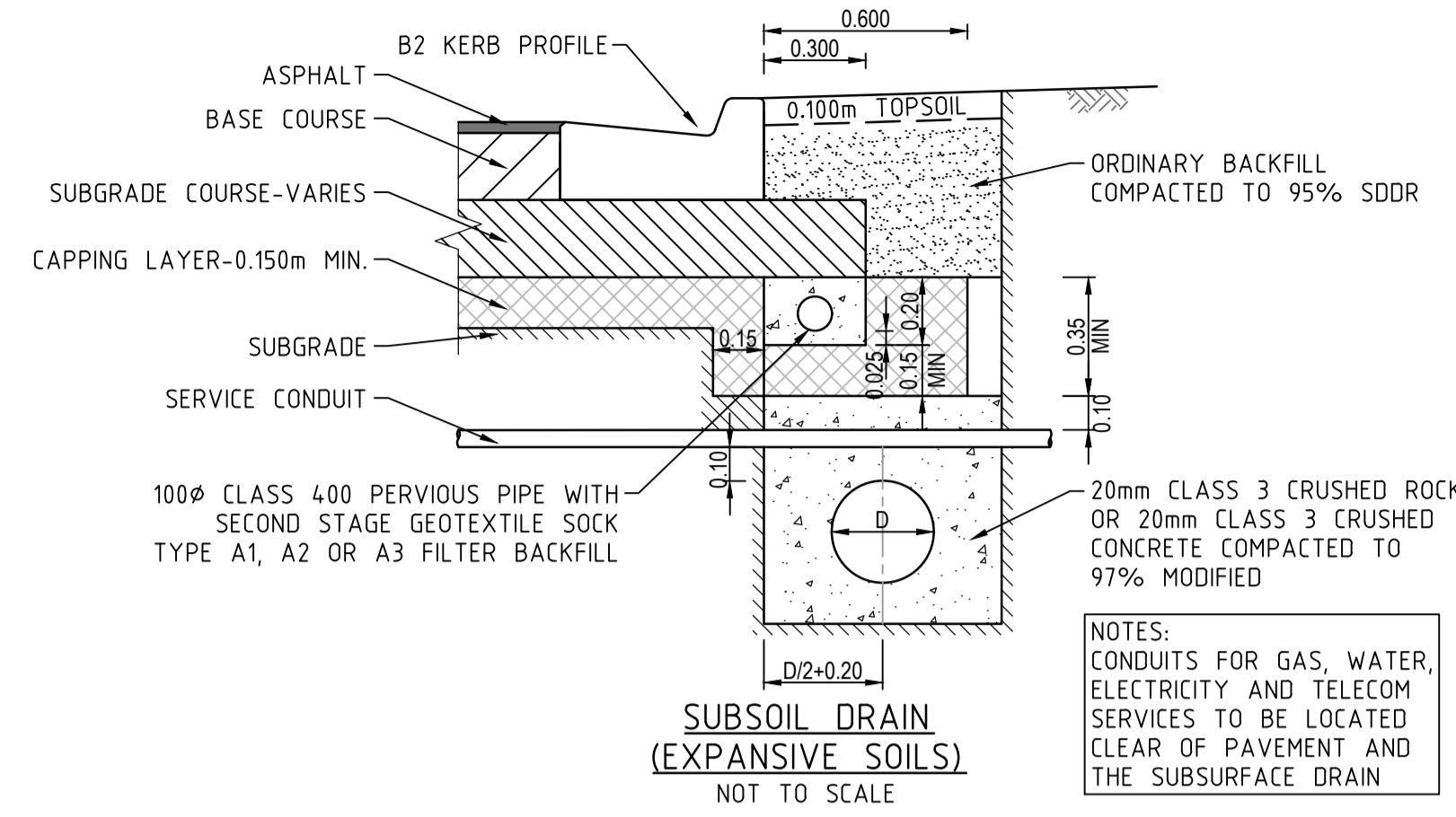
SMEC
Member of the Surbana Jurong Group
ABN 47 065 475 149
Level 10, 71 Queens Road
Melbourne, VIC 3004
Ph 03 9514 1500

mirvac

Olivine Estate - Stage 1A
Whittlesea City Council
Road and Drainage
Signs & Linemarking Plan - 2

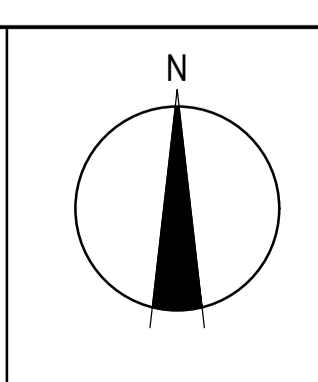
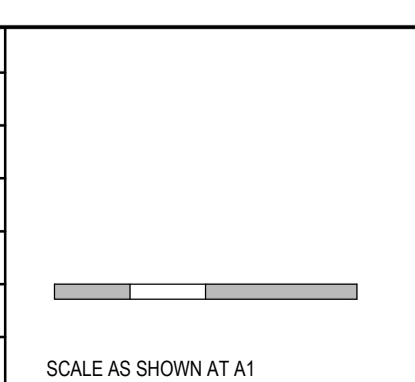
AS CONSTRUCTED

MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
9 J2	1700E-01A-38	38 of 42	3



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	26.06.51	AS CONSTRUCTED	JJ/KU	AB
2	26.06.51	AS CONSTRUCTED	JJ/KU	AB

TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	

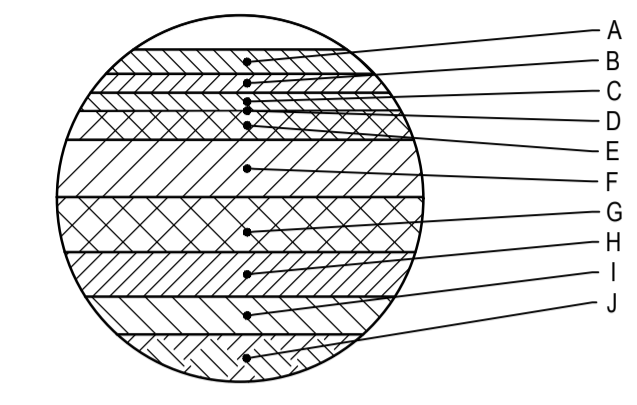
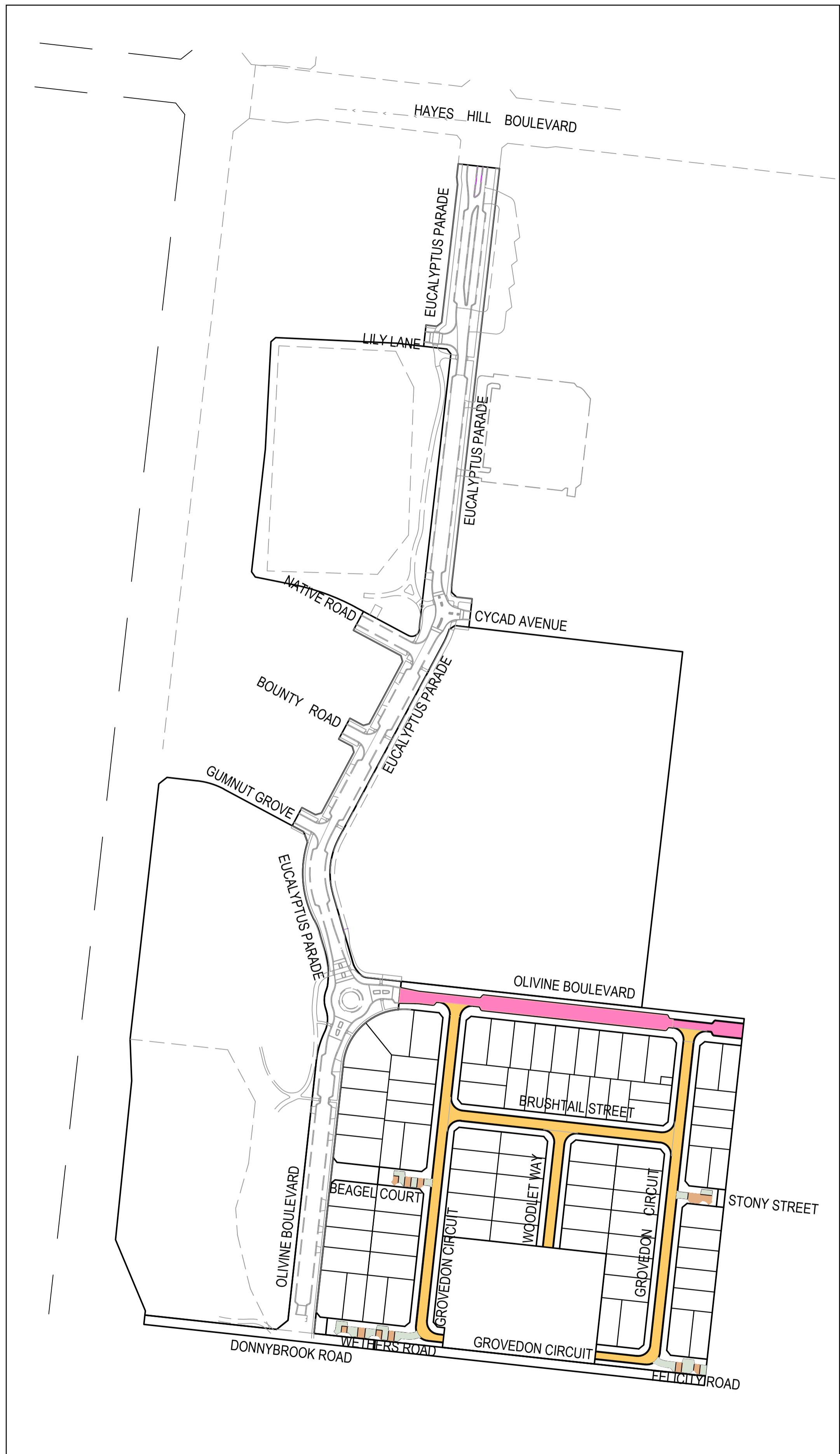


SMEC
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ABN 47 065 475 149
Level 10, 71 Queens Road
Melbourne, VIC 3004
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mirvac

Olivine Estate - Stage 1A
Whittlesea City Council
Road and Drainage
General Notes & Details

MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-39	SHEET No. 39 of 42	REVISION 1
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PAVEMENT COMPOSITION KEY DIAGRAM

OLVINE BOULEVARD PAVEMENT COMPOSITION

670mm DEPTH PAVEMENT COMPOSITION		
PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
A WEARING COURSE	40	SIZE 10 TYPE N ASPHALT
B INTERMEDIATE COURSE 1	40	SIZE 14 TYPE HP (CLASS A10E BINDER) ASPHALT
C INTERMEDIATE COURSE 2	-	-
D SAMI SEAL	10	SIZE 10 S18RF
E PRIME	YES	
F BASE COURSE	110	SIZE 20 CLASS 2 CRUSHED ROCK COMPACTED TO A MINIMUM DENSITY OF 98% MODIFIED AS1289.5.2.1
G UPPER BASE COURSE	70	CLASS CC3 CRUSHED CONCRETE (OR HIGHER QUALITY MATERIAL) COMPACTED TO A MINIMUM DENSITY OF 98% (MODIFIED) AS1289.5.2.1
H LOWER SUB BASE	100	CLASS 3 CRUSHED ROCK (OR HIGHER QUALITY MATERIAL) COMPACTED TO A MINIMUM DENSITY OF 98% (MODIFIED) AS1289.5.2.1 THE LOWER SUB BASE MAY BE ELIMINATED AND REPLACED WITH A SINGLE UPPER SUB BASE LAYER 170mm IN THICKNESS
I CAPPING LAYER	300	CBR≥15% SWELL≤1.5% PERMEABILITY k≤5x10.m/s
J SUBGRADE		SUBGRADE CLAY AS FOUND (C.B.R = 2%) (IF REQUIRED, SUBGRADE IMPROVEMENT WORKS TO BE UNDERTAKEN TO COUNCIL'S SATISFACTION)

GROVEDON CIRCUIT, WOODLET WAY & BRUSHTAIL STREET PAVEMENT COMPOSITION

595mm DEPTH PAVEMENT COMPOSITION		
PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
A WEARING COURSE	30	SIZE 10 TYPE N (CLASS 170 BINDER) ASPHALT
B INTERMEDIATE COURSE 1	30	SIZE 10 TYPE N (CLASS 170 BINDER) ASPHALT
C INTERMEDIATE COURSE 2	-	-
D SAMI SEAL	10	SIZE 10 S18RF
E PRIME	YES	
F BASE COURSE	130	SIZE 20 CLASS 2 CRUSHED ROCK COMPACTED TO A MINIMUM DENSITY OF 98% MODIFIED AS1289.5.2.1
G UPPER BASE COURSE	110	SIZE 20 CLASS CC3 CRUSHED CONCRETE, COMPACTED TO A MINIMUM DRY DENSITY RATIO OF 98% (MODIFIED) AS1289.5.2.1
H LOWER BASE	-	
I CAPPING LAYER	285	IMPORTED TYPE A FILL WITH CBR≥8% SWELL≤1.5% PERMEABILITY k≤5x10.m/s OR LIME STABILISED SITE WON CLAY WHICH CONFORMS TO THE PARAMETERS ABOVE
J SUBGRADE		C.B.R 1.5% , EXPANSIVE

MEWS COMPOSITION - EDCM503

300mm DEPTH PAVEMENT COMPOSITION		
PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
CONCRETE	200	N25 CONCRETE WITH S1.82 MESH TOP 50 COVER. MESH TO HAVE 50 COVER TO ALL EDGES
SUB BASE	100	CLASS 3 CRUSHED ROCK OR CLASS 3 CRUSHED CONCRETE MECHANICALLY COMPACTED

MEWS COMPOSITION - EXPOSED AGGREGATE

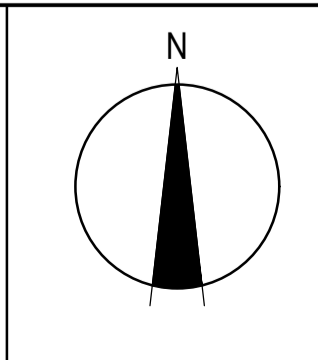
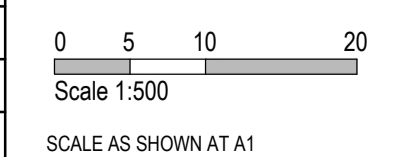
300mm DEPTH PAVEMENT COMPOSITION		
PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
CONCRETE	200	200mm HANSON WAGGA (5-7mm) WITH COLOUR ADDITIVE ABILOX "RIVERBLEND BEIGE" 4.15% EXPOSED AGGREGATE 32MPa CONCRETE WITH S1.82 MESH TOP 50 COVER. MESH TO HAVE 50 COVER TO ALL EDGES
SUB BASE	100	CLASS 3 CRUSHED ROCK OR CLASS 3 CRUSHED CONCRETE MECHANICALLY COMPACTED

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/NS	AB
1	20.03.19	EXPOSED AGGREGATE ON MEWS	MA/MA	AB
2	26.06.51	AS CONSTRUCTED	JJ/KU	AB

AS CONSTRUCTED

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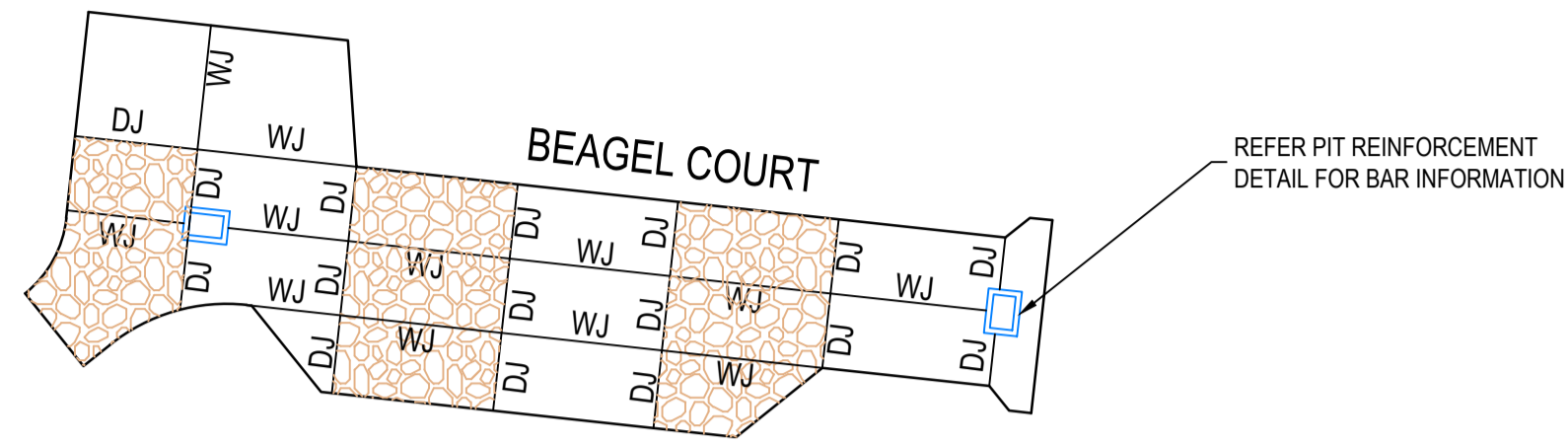
TITLE	NAME
DRAFTER	N.Shrestha
DESIGNER	J.Jones
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



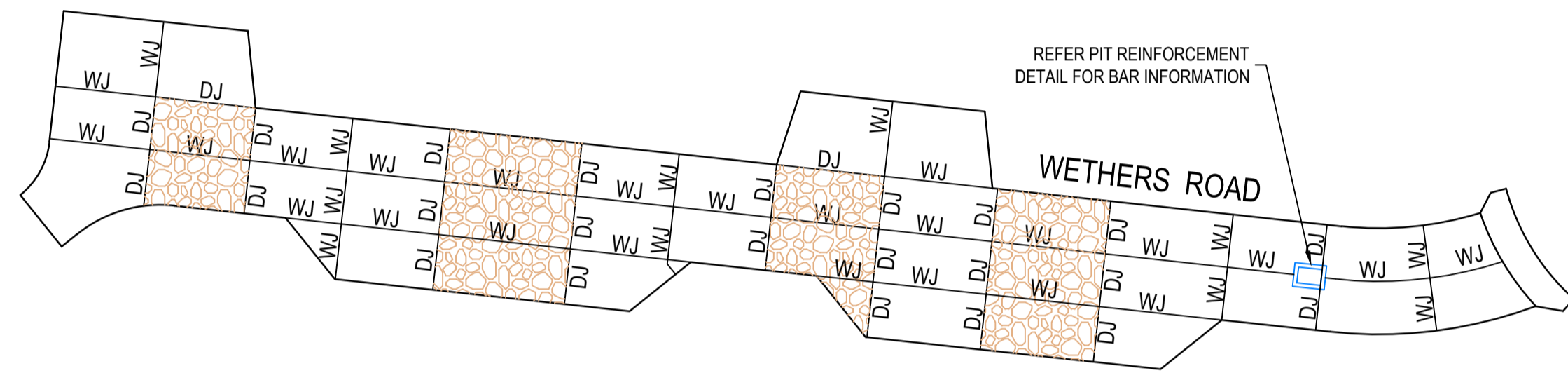
Member of the **Surbana Jurong Group**
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500

Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Pavement Details

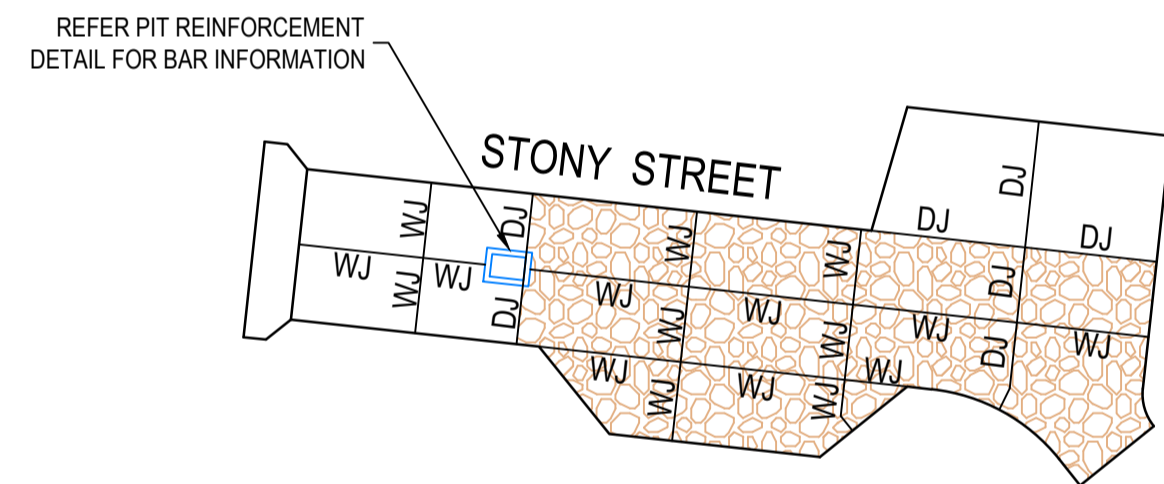
MELWAYS REF 9 J2	PROJECT / DRAWING No. 1700E-01A-40	SHEET No. 40 of 42	REVISION 2
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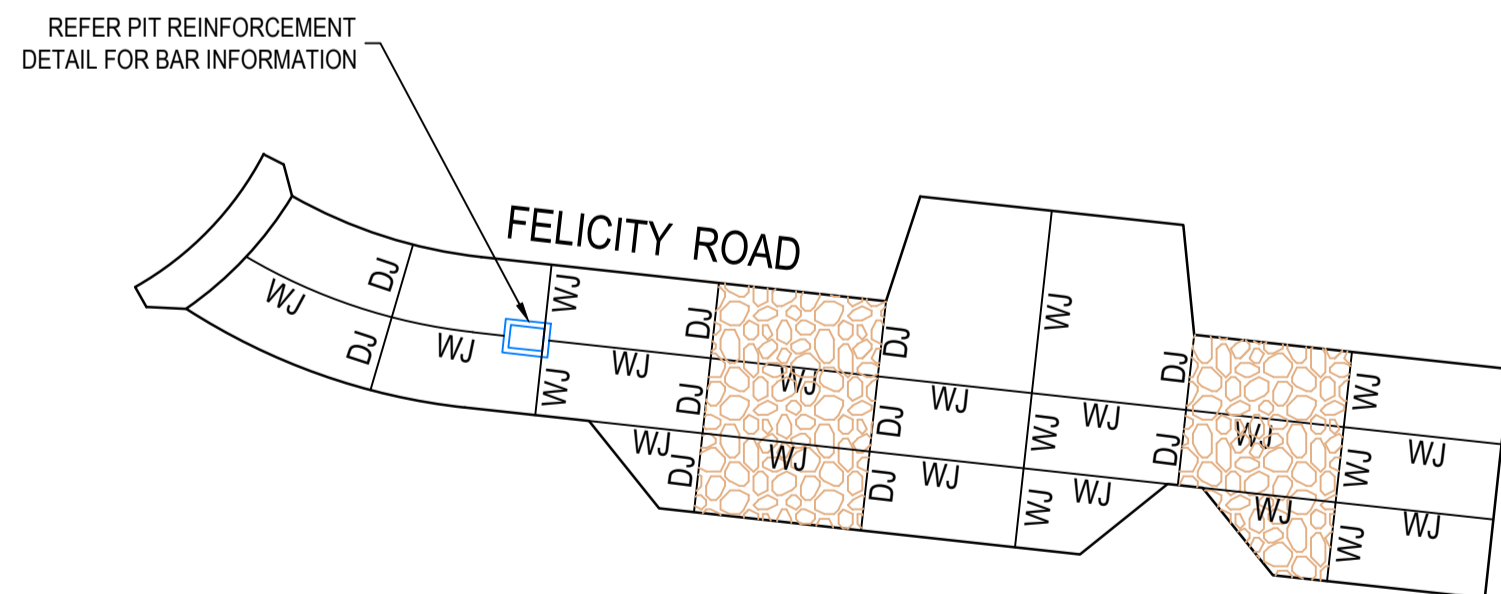
REFER PIT REINFORCEMENT
DETAIL FOR BAR INFORMATION



REFER PIT REINFORCEMENT
DETAIL FOR BAR INFORMATION



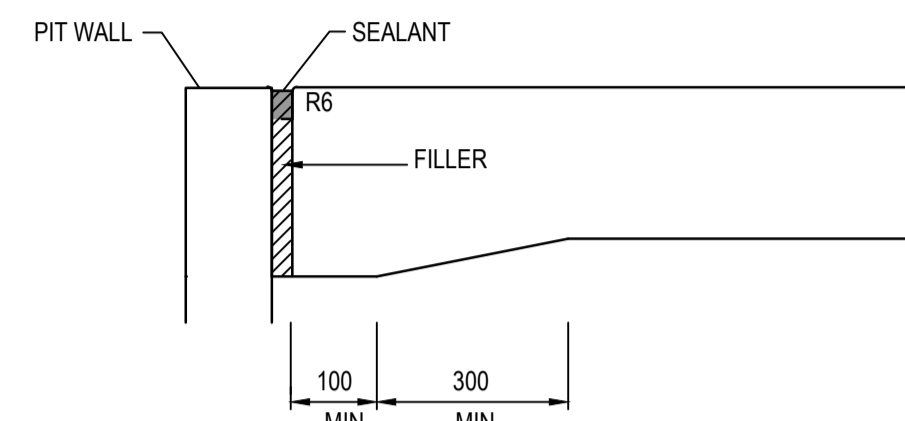
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DETAIL FOR BAR INFORMATION



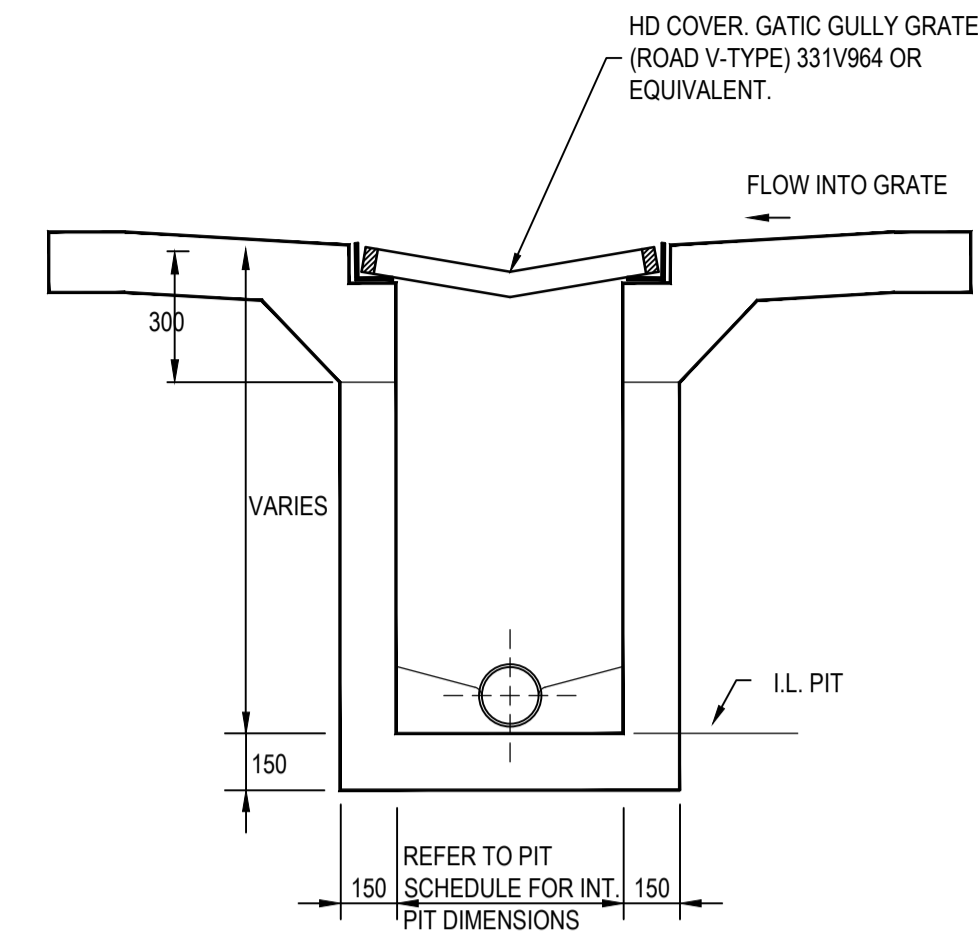
REFER PIT REINFORCEMENT
DETAIL FOR BAR INFORMATION

EXPOSED AGGREGATE

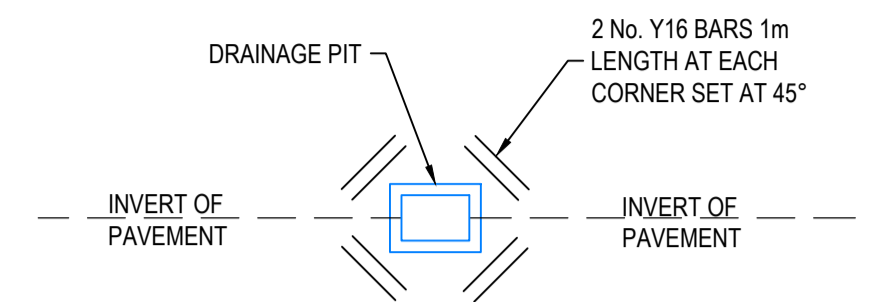
- JOINT DETAIL NOTES:**
1. SAW JOINTS ARE TO BE PLACED AT A MAXIMUM 5m SPACING AT INTERSECTIONS AND CONSTRUCTED 18-24 HOURS AFTER POURING.
 2. TRANSVERSE/CONTRACTION JOINTS ARE TO BE PLACED AT A MAXIMUM SPACING OF 12m.
 3. ISOLATION JOINTS ARE TO BE PLACED AROUND PITS.
 4. ALL JOINTS SHALL BE LOCATED AND SPACED IN ACCORDANCE WITH "CEMENT AND CONCRETE ASSOCIATION OF AUSTRALIA - CONCRETE PAVEMENT DESIGN FOR RESIDENTIAL STREETS 1997".



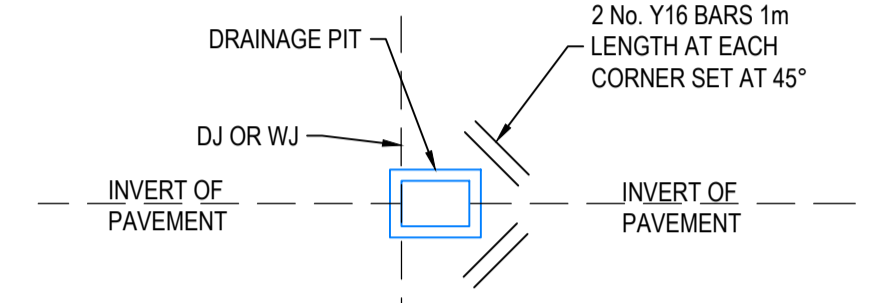
ISOLATION JOINT (IJ)



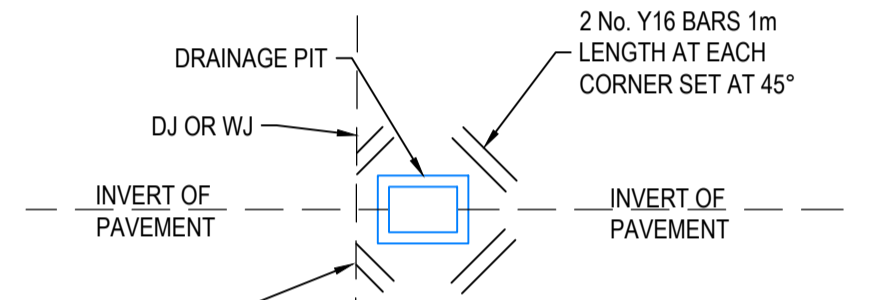
GRADED INLET PIT DETAILS
(IN CONCRETE PAVEMENT)
NOT TO SCALE



PIT REINFORCEMENT DETAIL
(NO PAVEMENT JOINT AT EITHER SIDE OF PIT)
NOT TO SCALE

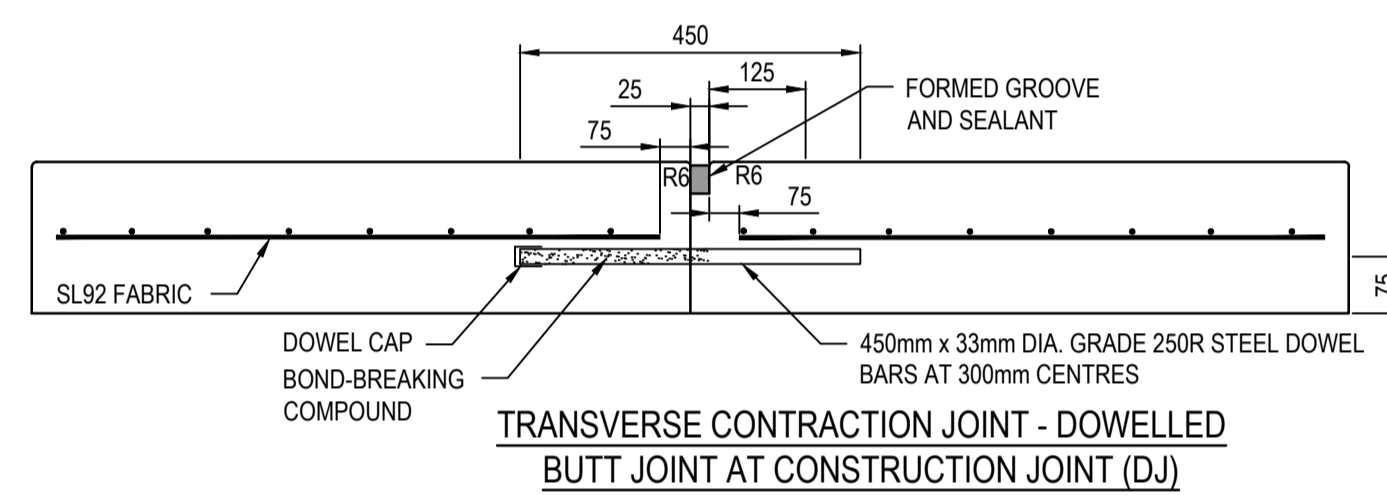


PIT REINFORCEMENT DETAIL
(PAVEMENT JOINT LOCATED AT ONE SIDE OF PIT)
NOT TO SCALE

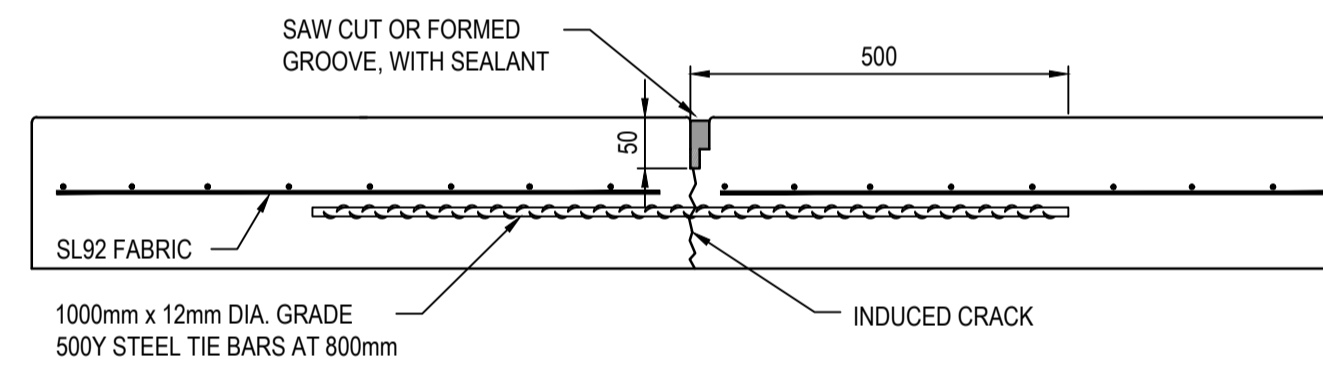


PIT REINFORCEMENT DETAIL
(PAVEMENT JOINT CLOSE TO PIT)
NOT TO SCALE

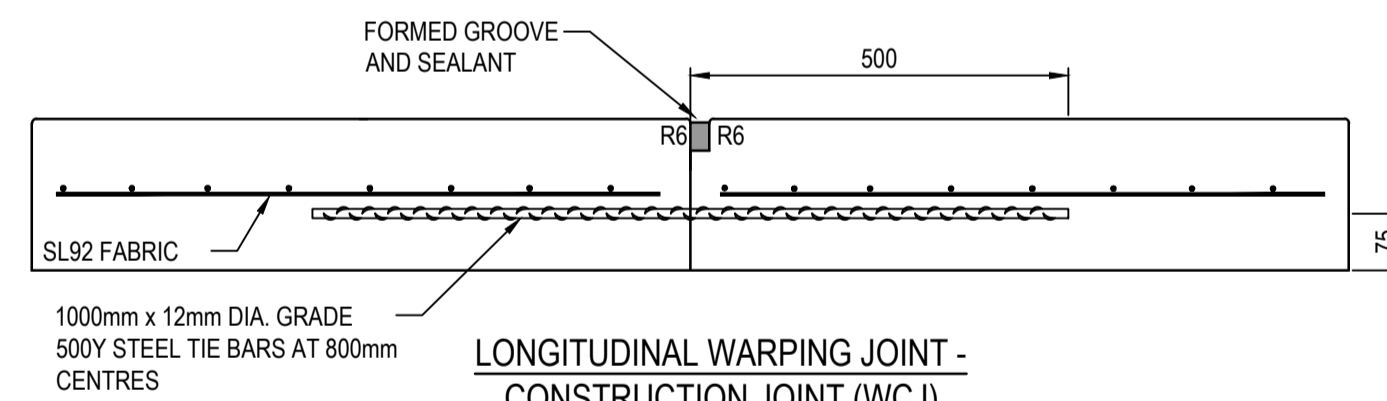
WHERE A JOINT IS CLOSE TO
PIT, TRIM BARS BEFORE
JOINT TO AVOID CRACKING



TRANSVERSE CONTRACTION JOINT - DOWELLED
BUTT JOINT AT CONSTRUCTION JOINT (DJ)



LONGITUDINAL WARPING JOINT - WEAKENED
PLANE JOINT (WJ)



LONGITUDINAL WARPING JOINT -
CONSTRUCTION JOINT (WCJ)

CONCRETE JOINTING DETAILS
NOT TO SCALE

NOTE:
CONCRETE SHALL BE CURED IN ACCORDANCE WITH
AS3600 AND NOT TO BE TRAFFICKED UNTIL AT LEAST
SEVEN DAYS AFTER POURING.

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJNS	AB
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2	26.06.51	AS CONSTRUCTED	JJ/KU	AB

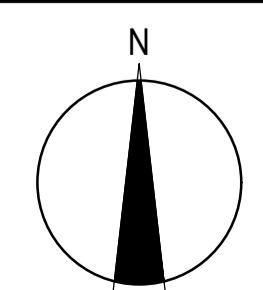
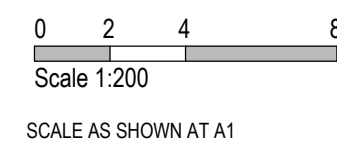
AS CONSTRUCTED

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Quality Management - ISO 9001
 OHS Management - AS/NZS 1881
 Environmental Management - ISO 14001

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TITLE	NAME
DRAFTER	A.Perkins
DESIGNER	A.Perkins
CHECKED	Z.Gosev
AUTHORISED	A.Burrows
REFERENCE No. 1	
REFERENCE No. 2	



SMEC
 Member of the Surbana Jurong Group
 ABN 47 065 475 149
 Level 10, 71 Queens Road
 Melbourne, VIC 3004
 Ph 03 9514 1500






Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Concrete Jointing Details

MELBAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
9 J2	1700E-01A-41	41 of 42	2

PHASE	DISCIPLINE CODE	RISK REGISTER -Construction- Operations- Maintenance	POTENTIAL RISK	RISK OWNER	POTENTIAL CONSEQUENCES	POTENTIAL ELIMINATION MEASURE, DESIGN INITIATIVE or CONTROL (Identify any Standard or Code of practice used)	HOW ISSUE ADDRESSED IN DESIGN AND/OR CONSTRUCTION OF THE WORKS	IS THE RISK ELIMINATED YES/NO	Residual Risk Likelihood (0-5)	Residual Risk Consequence (0-5)	Residual Risk Rating	RESIDUAL RISK OWNER
			Road Furniture / Roadside features									
Construction	RD	#N/A	Construction close to live traffic	Contractor	Disruptions to live traffic, construction incident involving live traffic.	Provide safe temporary traffic control (TCP)	TCP provided within contract	N	5	3	15	Contractor
Construction	RD	#N/A	Culverts	Contractor	Potential risk from culverts under construction and height / fall hazards	Falling from a height	Temporary barriers to be provided	N	2	5	10	Contractor
Construction	US	#N/A	Utilities become a hazard within clear zones	Contractor	Vehicle conflict with utility / pit	Personal injury, vehicle damage	Sequence works and protect with temp barrier or traffic control (TCP)	N	1	5	5	Contractor
Operational	RD	#N/A	Sight Lines	Road Authority	Inadequate drivers response time.	Increased potential for accidents	Ensure design complies with relevant standard. Undertake thorough Safety Audit	N	1	4	4	Road Authority
Operational	LS	#N/A	Signs and street lights	Road Authority	Potential for drivers / riders to strike signs and street lights	Increased potential for accidents	Ensure design complies with relevant standard. Undertake thorough Safety Audit	N	1	4	4	Road Authority
Operational	RF	#N/A	Headwalls	Road Authority	Potential vehicle conflict within clear zone	Increased potential for accidents	Establish adequate clear zone provision	N	2	4	8	Road Authority
Operational	RD	#N/A	Culverts	Relevant Authority	Potential fall hazard during maintenance, by vehicles and pedestrians	Falling from a height	Barriers to be provided in accordance with road standards	N	2	5	10	Contractor
			Retaining Walls									
Construction	RW	#N/A	Retaining Wall Alignment	Contractor	Falling from height during construction or commissioning of walls and adjacent structures eg. sewer manholes	Falling from a height	Provide temporary and permanent fencing at top of wall.	N	1	1	1	Contractor
Operational	RW	#N/A	Retaining Wall Alignment	Road/ Local Authority	Lack of safe access/setback from road	Increased potential for accidents	Establish adequate and accessible clear zone provision. Provide guardrail where required	N	1	1	1	Authority
Operational	RW	#N/A	Retaining Wall Height	Road/ Local Authority	Potential for falling from height	Personal injury	Provide temporary and permanent fencing at top of wall.	N	1	5	5	Authority
Operational	RW	#N/A	Retaining Wall Design	Road/ Local Authority	Potential for wall failure	Increased potential for accidents	Structural design in accordance with standards, geotechnical conditions, end use and good practise.	N	1	5	5	Authority
			Drainage									
Operational	DR	#N/A	Grated Pits	Relevant Authority	Trip/fall hazard with large spaced grate	Increased potential for accidents	Provide pedestrian/bicycle friendly grates where applicable. Refer to pit schedule	N	3	2	6	Authority
Operational	DR	#N/A	Non Standard Large Pits	Relevant Authority	Potential for pit failure	Increased risk to maintenance crews/ vehicles	Structural design in accordance with relevant design principles.	N	1	4	4	Authority
Operational	DR	#N/A	Culvert Endwalls/Headwalls	Relevant Authority	Potential for falling from height	Increased potential for accidents	Fencing to be provided where culverts/headwalls are at height in accordance with relevant authority standards	N	1	4	4	Authority
Operational	DR	#N/A	Culvert Endwall/Headwall Outlets	Relevant Authority	Children playing in large pipes / watercourses and access for maintenance	Increased potential for accidents	Grate provided to authority standards	N	2	5	10	Authority
Maintenance	DR	#N/A	Access to Pits	Relevant Authority	Lack of safe access for maintenance	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Provide safe landing/ access arrangements as per relevant authority standards	N	2	5	10	Authority
Maintenance	DR	#N/A	Deep Pits	Relevant Authority	Lack of safe entry for maintenance	Increased potential for accidents	Contractor to be certified for work in confined spaces, step irons to be provided to appropriate authority standards. Refer to pit schedule	N	1	5	5	Authority
Maintenance	DR	#N/A	Access to drains / culverts	Relevant Authority	Lack of safe access for maintenance	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Access as approved by authority	N	2	3	6	Authority
			Sewer									
Construction	SE	#N/A	Sewer Manhole located adjacent to Retaining Wall Alignment	Contractor	Falling from height during construction or commissioning of adjacent sewer manholes	Falling from a height	Provide temporary fencing until such time that permanent fencing is constructed	N	1	1	1	Contractor
Maintenance	SE	#N/A	Deep Manholes	Relevant Authority	Lack of safe entry for maintenance	Increased potential for accidents	Contractor to be certified for work in confined spaces, landings and step access provided as per authority standards and schedule	N	1	5	5	Authority
Maintenance	SE	#N/A	Access to Manholes	Relevant Authority	Lack of safe access for maintenance	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Manholes located in compliance with authority standards	N	1	5	5	Authority
Maintenance	SE	#N/A	Pump Station Access	Relevant Authority	Lack of safe access for maintenance	Increased risk to maintenance crews	Provide safe working conditions for maintenance	N	2	4	8	Authority
			Electricity									
Operational	ES	#N/A	Electrical Design	Relevant Authority	Location of assets within clear zones e.g. pits/ substations	Increased potential for accidents	Electrical designed by sub consultant with appropriate accreditation and in accordance with authority standards	N	2	3	6	Authority
			Telstra									
Operational	TE	#N/A	Telstra Design	Relevant Authority	Location of assets within clear zones e.g. pits	Increased potential for accidents	Telecommunications designed by authority consultant with appropriate accreditation and in accordance with authority standards	N	2	3	6	Authority
			Water									
Operational	WA	#N/A	Water Design	Relevant Authority	Location of assets within clear zones e.g. pits/ substations	Increased potential for accidents	Water pits designed in accordance with authority standards	N	2	3	6	Authority
			Gas									
Operational	GA	#N/A	Gas Design	Relevant Authority	Location of assets within clear zones e.g. pits/ substations	Increased potential for accidents	Water pits designed in accordance with authority standards	N	1	1	1	Authority
											0	

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
0	26.07.18	ISSUED FOR CONSTRUCTION	JJ/JS	AB
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DRAFTER	N.Shrestha	DESIGNER	J.Jones
CHECKED	Z.Gosev	AUTHORISED	A.Burrows
REFERENCE No. 1		REFERENCE No. 2	

  		SCALE AS SHOWN AT A1
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 Member of the **Surbana Jurong Group**

 ABN 47 065 475 149



Olivine Estate - Stage 1A
 Whittlesea City Council
 Road and Drainage
 Safety In Design

MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
9 J2	1700E-01A-85	42 of 42	1