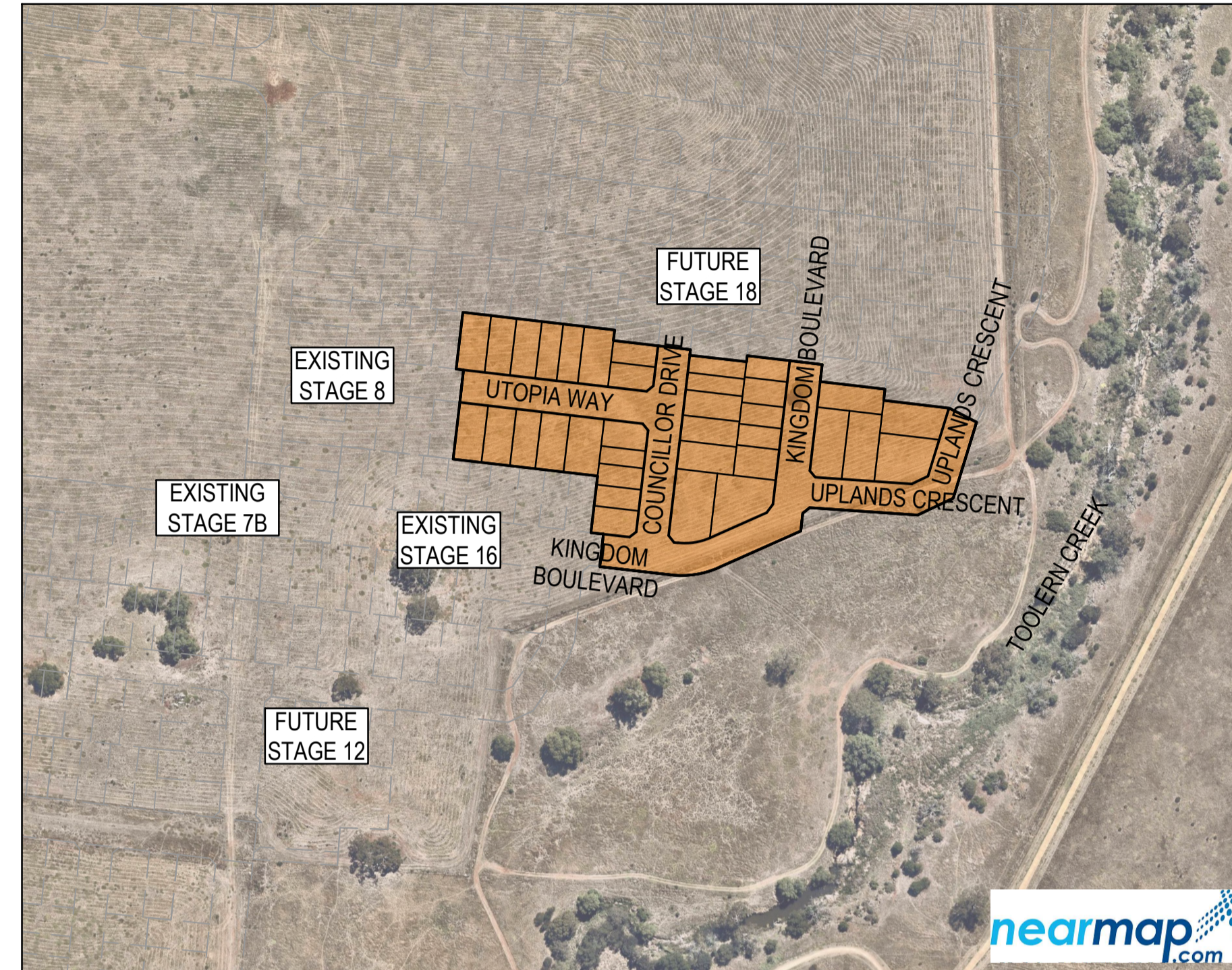


# Seventh Bend Estate, Melton

## Stage 17



### Drawing Index

2250E-017-101	Cover Plan & General Notes
2250E-017-111	Layout Plan
2250E-017-131	Earthworks & Retaining Wall Setout Plan and Longitudinal Section
2250E-017-171	Signage & Linemarking Plan
2250E-017-181	Intersection Detail Plan - 1
2250E-017-182	Intersection Detail Plan - 2
2250E-017-201	Longitudinal Sections - 1
2250E-017-202	Longitudinal Sections - 2
2250E-017-251	Cross Sections: Utopia Way
2250E-017-252	Cross Sections: Councillor Drive
2250E-017-253	Cross Sections: Kingdom Boulevard
2250E-017-254	Cross Sections: Uplands Crescent
2250E-017-301	Drainage Longitudinal Sections - 1
2250E-017-302	Drainage Longitudinal Sections - 2
2250E-017-303	Drainage Longitudinal Sections - 3 & Pit Schedule
2250E-017-351	Outfall Swale Longitudinal & Cross Sections and Details
2250E-017-411	Pavement, Concrete & General Details
2250E-017-412	Passive Irrigation System Plan
2250E-017-413	Passive Irrigation Detail - 1
2250E-017-414	Passive Irrigation Detail - 2
2250E-017-500	Safety In Design

### GENERAL NOTES (MELTON SHIRE COUNCIL)

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH A.S. 4000-1992 GENERAL CONDITIONS OF CONTRACT AND CURRENT MELTON SHIRE COUNCIL SPECIFICATIONS AND EDM ADDENDUM STANDARD DRAWINGS AND TO THE SATISFACTION OF THE SUPERVISING ENGINEER OR THEIR REPRESENTATIVE.
- 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.
- TREES MARKED ON THE APPROVED PLANS FOR REMOVAL MUST BE REMOVED FROM THE SITE PRIOR TO THE COMMENCEMENT OF WORKS. NO EXCAVATION SHALL BE CARRIED OUT WITHIN 5.0m OF ANY EXISTING TREE UNTIL APPROVAL HAS BEEN GIVEN BY COUNCIL'S SUPERVISING OFFICER.
- ALL ROAD CHAINAGES ARE MEASURED ALONG THE ROAD CENTRELINE EXCEPT KERB RETURNS AND COURTHEDS, WHERE LIP OF KERB CHAINAGES ARE SPECIFIED. ALL DIMENSIONS AND RADII ARE GIVEN TO THE LIP OF KERB. DO NOT SCALE OFF THESE DRAWINGS, WRITTEN DIMENSIONS ONLY SHALL BE USED.
- THE CONTRACTOR WHEN ENGAGED IN BLASTING OPERATION, 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 ENGINEER AND MUST OBTAIN ALL RELEVANT PERMITS.
- THE CONTRACTOR IS TO OBTAIN THE NECESSARY ROAD OPENING PERMIT PRIOR TO UNDERTAKING ANY WORKS WITHIN A PREVIOUSLY CONSTRUCTED ROADWAY.
- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
- THE CONTRACTOR SHALL CO-OPERATE WITH OTHER AUTHORITIES AND SHALL ENSURE THAT ALL SERVICES ARE INSTALLED PRIOR TO THE FINAL PAVEMENT COURSE.
- ANY EXISTING PAVEMENT OR DRAINAGE WORKS DAMAGED DURING CONSTRUCTION OR THE MAINTENANCE PERIOD TO BE REINSTATED TO THE SATISFACTION OF THE COUNCIL REPRESENTATIVE.
- TBMS TO BE MAINTAINED AND PROTECTED BY THE CONTRACTOR FOR THE DURATION OF THE WORKS.
- ALL CONCRETE TO BE USED IN THE CONTRACT WORKS SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 25MPa AT 28 DAYS.
- THE CONTRACTOR IS TO ENSURE THAT HIS CONSTRUCTION PROCEDURES AND STANDARDS CONTROL THE VOLUME AND LOCATION FOR COLLECTION OF SEDIMENT DISCHARGE ACCORDING TO CURRENT EPA - ENVIRONMENTAL GUIDELINES FOR MAJOR CONSTRUCTION SITES. THE CONTRACTOR IS TO CONSTRUCT SEDIMENT TRAPS AT THE ENDS OF ALL TEMPORARY CHANNELS AND CATCH DRAINS. THEY ARE TO BE MAINTAINED THROUGH THE DURATION OF WORKS AND MAINTENANCE TO BE TRANSFERRED TO THE PRINCIPAL UPON COMPLETION OF THE WORKS.
- ALL BATTERS TO BE 1 IN 6 UNLESS OTHERWISE INDICATED. FILLING IN PROPERTIES AND ROAD RESERVE IS TO BE CARRIED OUT USING APPROVED CLAY FILL TOPSOIL AND ALL VEGETABLE MATTER TO BE STRIPPED FROM FILL SITE PRIOR TO FILLING. WHERE FILL IS IN EXCESS OF 300mm IN DEPTH, THE FILL IS TO BE LEVEL 1 IN ACCORDANCE WITH AS3798. EARTH FILL IS TO BE COMPACTED TO A RELATIVE COMPACTION COMPARED TO A STANDARD COMPACTION TEST AS SPECIFIED BY VIC ROADS OF:
  - 100% FOR ALL FILL MATERIAL AND MATERIAL UNDER FILL THAT IS LESS THAN 450mm FROM THE SURFACE.
  - 95% FOR ALL FILL GREATER THAN 450mm FROM THE SURFACE.
- ADDITIONAL AND OVEREXCAVATION SHALL BE BACKFILLED IN ACCORDANCE WITH THE PROVISIONS OF THE SPECIFICATION.
- THE NATURE STRIPS AND CUT OR FILLED AREAS ARE TO BE TOPSOILED WITH 100mm OF APPROVED MATERIAL.
- THE SUBGRADE BELOW ALL PAVEMENTS SHALL BE COMPACTED TO A DRY DENSITY NOT LESS THAN 97% OF THE MAX. FOUND IN STANDARD COMPACTION TEST IN AREAS OF CUT TO A DEPTH OF 150mm AND IN AREAS OF FILL TO A DEPTH OF 450mm.
- THE RELATIVE COMPACTION OF CRUSHED ROCK FOR PAVEMENTS SHALL BE COMPLETED AT THE OPTIMUM MOISTURE CONTENT TO A DRY DENSITY (BASED ON THE PERCENTAGE OF THE MAXIMUM DRY DENSITY OBTAINED IN THE MODIFIED COMPACTION TEST) AS BELOW:
  - FOR DEPTH 0-100mm BELOW TOP OF BASE, RELATIVE COMPACTION OF 100%.
  - FOR DEPTH 100-300mm BELOW TOP OF BASE, RELATIVE COMPACTION OF 98%.
  - FOR DEPTH OVER 300mm BELOW TOP OF BASE, RELATIVE COMPACTION OF 97%.
- 100mm NOMINAL DIAMETER SUBSOIL DRAIN SHALL BE PROVIDED BEHIND 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. BOTH KERBS ARE TO BE MARKED WITH THE LETTERS G,W AND T ABOVE CONDUIT LOCATIONS AS SPECIFIED. CONDUITS TO BE PLACED MINIMUM OF 5m FROM BOUNDARIES WHERE POSSIBLE AND TO THE SATISFACTION OF THE SUPERINTENDENT IN ACCORDANCE WITH COUNCIL STANDARD DRAWINGS. NBN CONDUITS WILL BE SUPPLIED BY NBN'S EXPENSE. IN TRENCHES EXCAVATED AND BACKFILLED BY THE CONTRACTOR, NBN SIZES VARIES - WHITE PVC NBN TO BE NOTIFIED 7 DAYS PRIOR TO PLACEMENT OF CONCRETE WORKS. GAS AND WATER CONDUITS TO BE 50mm DIA. HEAVY DUTY PVC LAID AT A MINIMUM DEPTH OF 600mm BELOW ROAD FINISHED SURFACE LEVELS. FOR DUAL WATER SUPPLY CONDUIT SHALL BE 100mm DIA.
- ALL SERVICING TRENCHES UNDER ROADS, FOOTPATHS, DRIVEWAYS, PARKING BAYS ETC. ARE TO BE BACKFILLED WITH CLASS 2 FOR.
- ALL HOUSE DRAIN CONNECTIONS ARE TO BE LOCATED NO CLOSER THAN 6.00m FROM THE SIDE BOUNDARY OR FROM ANY EASEMENT ALONG THE SIDE BOUNDARY.
- ALL PROPERTY INLETS TO BE LOCATED 1.0m FROM THE LOW SIDE BOUNDARY UNLESS OTHERWISE SHOWN. THEY ARE TO BE LAID AT A MINIMUM DEPTH OF 400mm AS SPECIFIED IN THE STANDARD DRAWINGS.
- DRAINAGE PITS SHALL BE CAST MONOLITHICALLY. CEMENT RENDER SHALL ONLY BE USED TO REPAIR DEFECTS.
- ALL RESIDENTIAL FOOTPATHS TO BE MINIMUM 1.50m WIDE UNLESS OTHERWISE INDICATED. FOOTPATH TO BE 125mm DEPTH OF 25MPa CONCRETE CENTRALLY REINFORCED WITH SL72 MESH, AS PER EDM 401 ON 50mm COMPACTED DEPTH 20mm CLASS 3 FOR BASE.
- ALL RESIDENTIAL DRIVEWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH EDM 501 TO 503. SINGLE DRIVEWAYS TO BE OFFSET 0.75m FROM SIDE BOUNDARY OR EASEMENT.
- ALL ALLOTMENTS AND RESERVES SHALL BE SMOOTHED, GRADED AND SHAPED TO AN EVEN SURFACE.
- APPROVAL FOR THE REMOVAL AND DISPOSAL OF ANY EXCAVATED MATERIAL OR TOPSOIL IS REQUIRED FROM COUNCIL.
- THE CONTRACTOR TO ERECT STREET NAME SIGNS & POLE AS DIRECTED BY THE SUPERINTENDENT.
- ALL LINEMARKING, SIGNING & TRAFFIC CONTROL DEVICES FOR THIS PROJECT TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1742. ALL LINEMARKING TO BE LONG LIFE THERMOPLASTIC PAINT.
- CONFIRMATION OF THE ASPHALT WEARING COURSE IS TO BE DEFERRED UNTIL INSTRUCTED BY THE SUPERINTENDENT.
- ALL EXOTIC (NON-NATIVE) TREES AND SHRUBS, INCLUDING DEAD TREES, NOT SHOWN ON THE DRAWINGS BUT LOCATED WITHIN THE WORKS AREA TO BE REMOVED AND DISPOSED OFFSITE.
- ALL EXCAVATED OR FILLED AREAS OUTSIDE THE ROAD RESERVE SHALL BE SURFACED WITH A 100mm LAYER TOPSOIL AS SPECIFIED. ALL FILLING ON ALLOTMENTS TO BE COMPACTED TO 95% STANDARD COMPACTION IN 150mm LAYERS AND AS PER THE SPECIFICATION. WHERE THERE IS FILL IN EXCESS OF 300mm IN DEPTH, THE CONTRACTOR IS TO CARRY OUT SOIL TESTS TO THE REQUIREMENTS OF SECTION 8 AS SPECIFIED IN AS3798-1996 TO SHOW THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED.
- INSTALL BLUE RAISED REFLECTIVE PAVEMENT MARKER (BRPM) ON ROAD CENTRELINE AND "GROUND BALL" MARKER POST TO INDICATE LOCATION OF FIRE PLUG.
- UPON COMPLETION OF CONSTRUCTION, THE WHOLE SITE SHALL BE CLEANED UP AND GRADED OVER. ALL RUBBISH IS TO BE REMOVED AND THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.
- ALL DRAINAGE PIT COVERS AND GRATES IN ACCORDANCE WITH EDM 601 TO 608.
- PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm CL3 CR TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 97% OF THE MAXIMUM FOUND IN THE STANDARD COMPACTION.
  - BENEATH THE ROAD PAVEMENT OR DRIVEWAY CROSSOVER TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER.
  - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45° ANGLE OF REPOSE FROM THE NEAR LOWER EDGE.

### GAS - STANDARD NOTES

- GAS MAINS, FITTINGS AND MARKER TAPE ARE TO BE SUPPLIED BY THE GAS AUTHORITY.
- EXCAVATION, SUPPLY AND PLACEMENT OF REQUIRED BACKFILL TO BE BY OTHERS.
- TWO WEEKS OF NOTIFICATION OF COMMENCEMENT OF EXCAVATION WORKS SHALL BE GIVEN TO THE GAS AUTHORITY.

TBM SETOUT TABLE				
POINT	EAST	NORTHING	ELEVATION	DESCRIPTION
C40SSPL	286.727.1	5,822,163.81	104.8	STEEL STAR PICKET
C4PM250T	286.863.11	5,822,084.49	101.89	PERMANENT MARK
C41SSPL	286.677.72	5,822,026.19	102.87	STEEL STAR PICKET

**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.E6.2250E-017-500

**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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REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

Quality Management ISO 9001  
 OHS Management AS/NZS 4801  
 Environmental Management ISO 14001

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PLAN OF SUB. NO.  
PS841628K

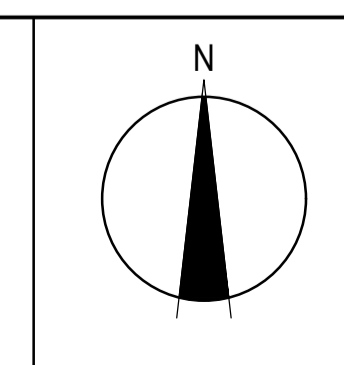
PERMIT REF. NO.  
PA2018/6160

**ISSUED FOR CONSTRUCTION**

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Scale 1:2500

SCALE AS SHOWN AT A1



**SMEC**

Member of the Surlana Jurong Group

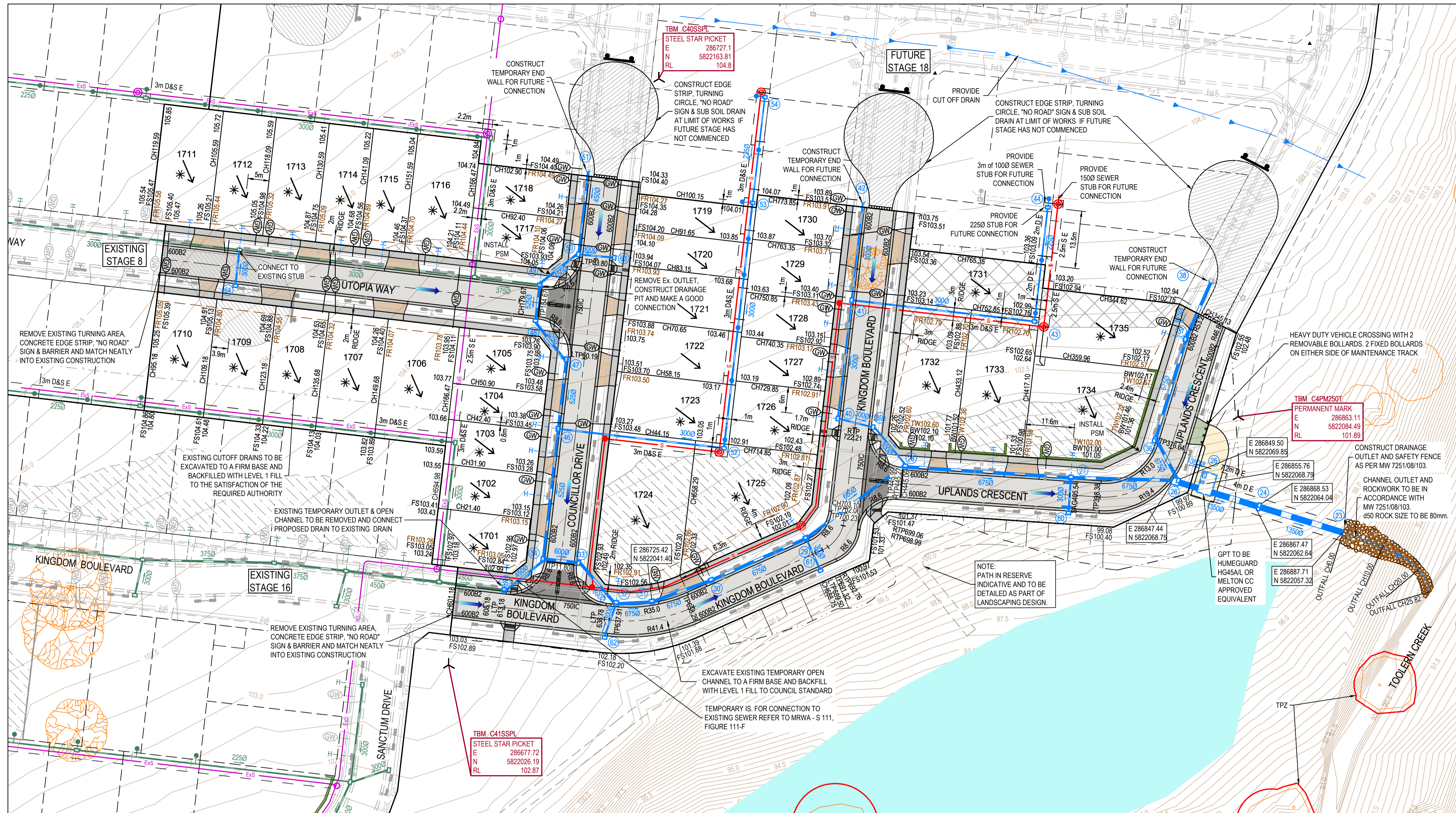
ABN 47 065 475 149

Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

# SEVENTH BEND

Seventh Bend - Stage 17  
Melton City Council  
Road and Drainage  
Cover Plan & General Notes

MELWAYS REF 342 K7	PROJECT / DRAWING No. 2250E-017-101	SHEET No. 01 of 21	REVISION 0
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**LEGEND - LAYOUT PLAN**  
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

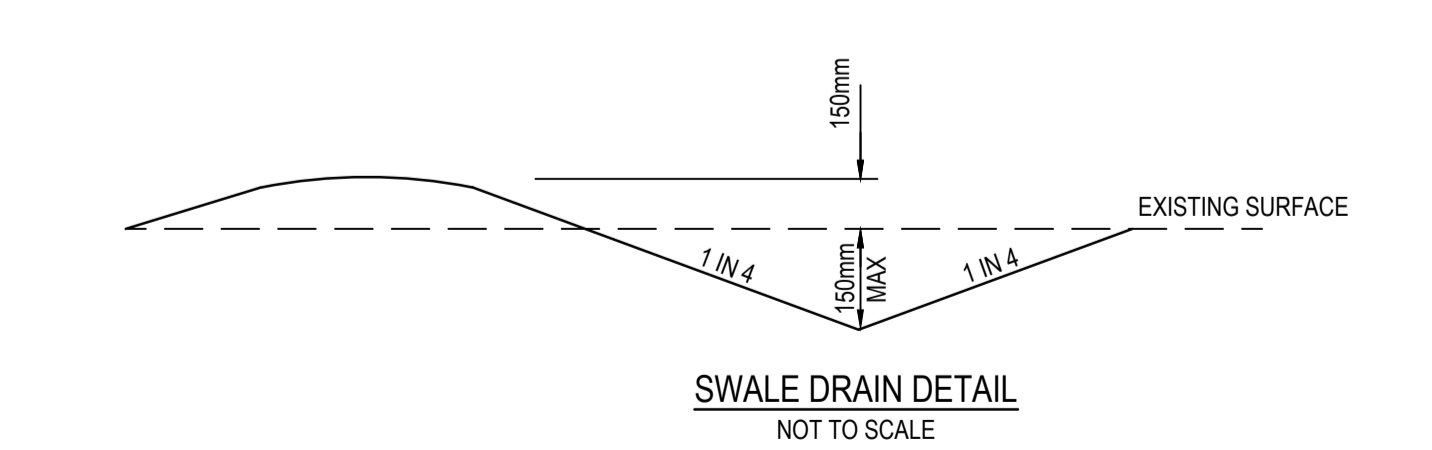
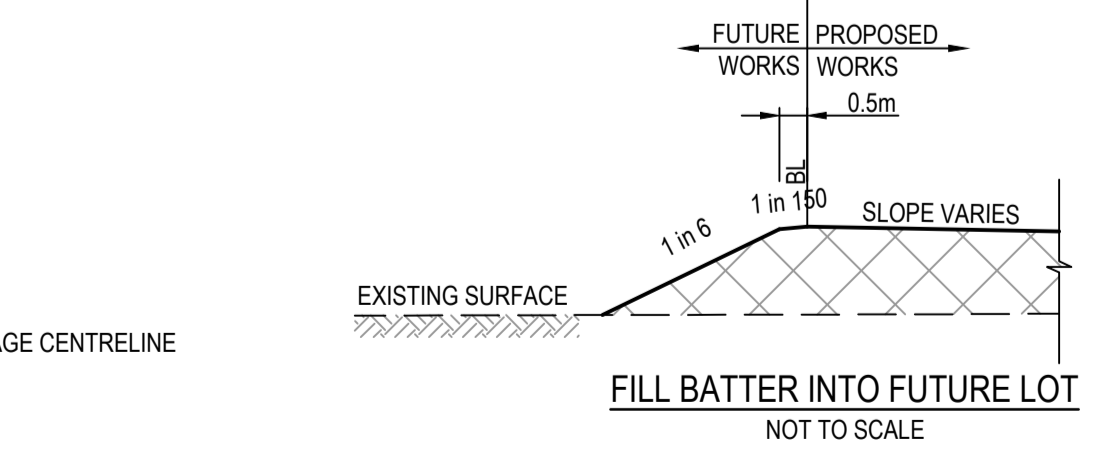
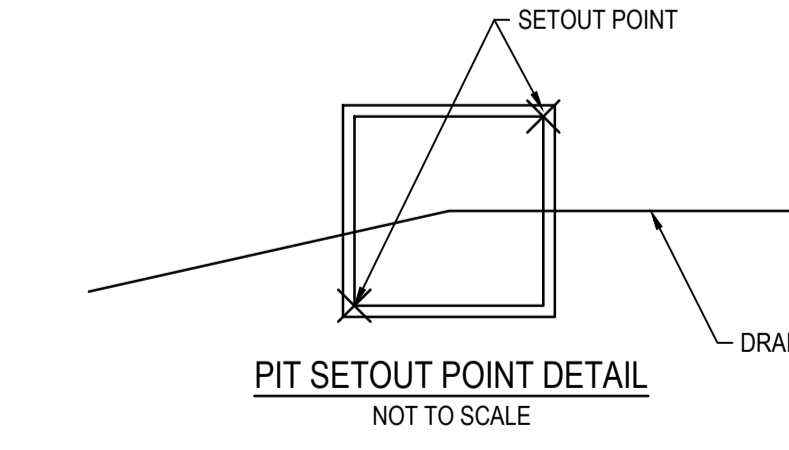
- STORMWATER DRAIN, PIT & PROPERTY INLET
- MAIN DRAIN
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
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- ELECTRICITY (U.GROUND)
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- GAS
- TELSTRA
- OPTIC FIBRE
- WATER
- RECYCLE WATER
- AG. DRAIN
- SERVICE 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 TACTILE PAVERS
- 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 TACTILE PAVERS
- ZERO LOT LINES
- 141.34 EXISTING SURFACE LEVEL
- FS140.35 FINISHED BUILDING LINE LEVEL
- FR157.40 FINISHED RIDGE LINE LEVEL
- CH270.00 CHAINAGE
- TW159.50 TOP OF RETAINING WALL LEVEL
- BW159.00 BOTTOM OF RETAINING WALL LEVEL
- ROCK RETAINING WALL
- SLEEPER 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
- PROPOSED INDUSTRIAL DRIVEWAY
- PROPOSED SHARED FOOTPATH
- PROPOSED ROAD PAVING
- EXISTING ROAD PAVING
- EXISTING CONTOURS
- EXISTING CULTURE HERITAGE
- EXISTING STOCKPILE
- EXISTING TREE TO BE RETAINED
- PROPOSED PASSIVE STREET TREE IRRIGATION

**ROAD LAYOUT TABLE**

ROAD NAME	ROAD CLASSIFICATION	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
KINGDOM BOULEVARD (LOT 1701)	AS1	16.00	6.40	7.30	7.60	600B2	600B2	4.35	4.05
KINGDOM BOULEVARD (LOT 1724-1725)	AS1	15.00	6.40	7.30	7.60	600B2	600B2	4.35	3.05
KINGDOM BOULEVARD (LOT 1726-1731)	AS1	16.00	6.40	7.30	7.60	600B2	600B2	4.20	4.20
UTOPIA WAY	AS1	16.00	6.40	7.30	7.60	600B2	600B2	4.35	4.05
COUNCILLOR DRIVE	AS1	16.00	6.40	7.30	7.60	600B2	600B2	4.20	4.20
UPLANDS CRESCENT	AS1	15.00	6.40	7.30	7.60	600B2	600B2	4.35	3.05

**SERVICES OFFSET TABLE**

ROAD NAME	GAS OFFSET (m)	WATER OFFSET (m)	ELECTRICITY OFFSET (m)	OPTIC FIBRE OFFSET (m)
KINGDOM BOULEVARD (LOT 1701)	1.9 N	2.4 N	1.9 S	1.00 S
KINGDOM BOULEVARD (LOT 1724-1725)	1.9 N	2.4 N	1.55 S	0.65 S
KINGDOM BOULEVARD (LOT 1726-1731)	1.8 W	2.3 W	2.45 E	1.85 E
UTOPIA WAY	1.9 N	2.4 N	2.45 S	1.85 S
COUNCILLOR DRIVE	1.8 W	2.3 W	2.45 E	1.85 E
UPLANDS CRESCENT	1.9 NW	2.4 NW	1.5 S/E	0.65 S/E



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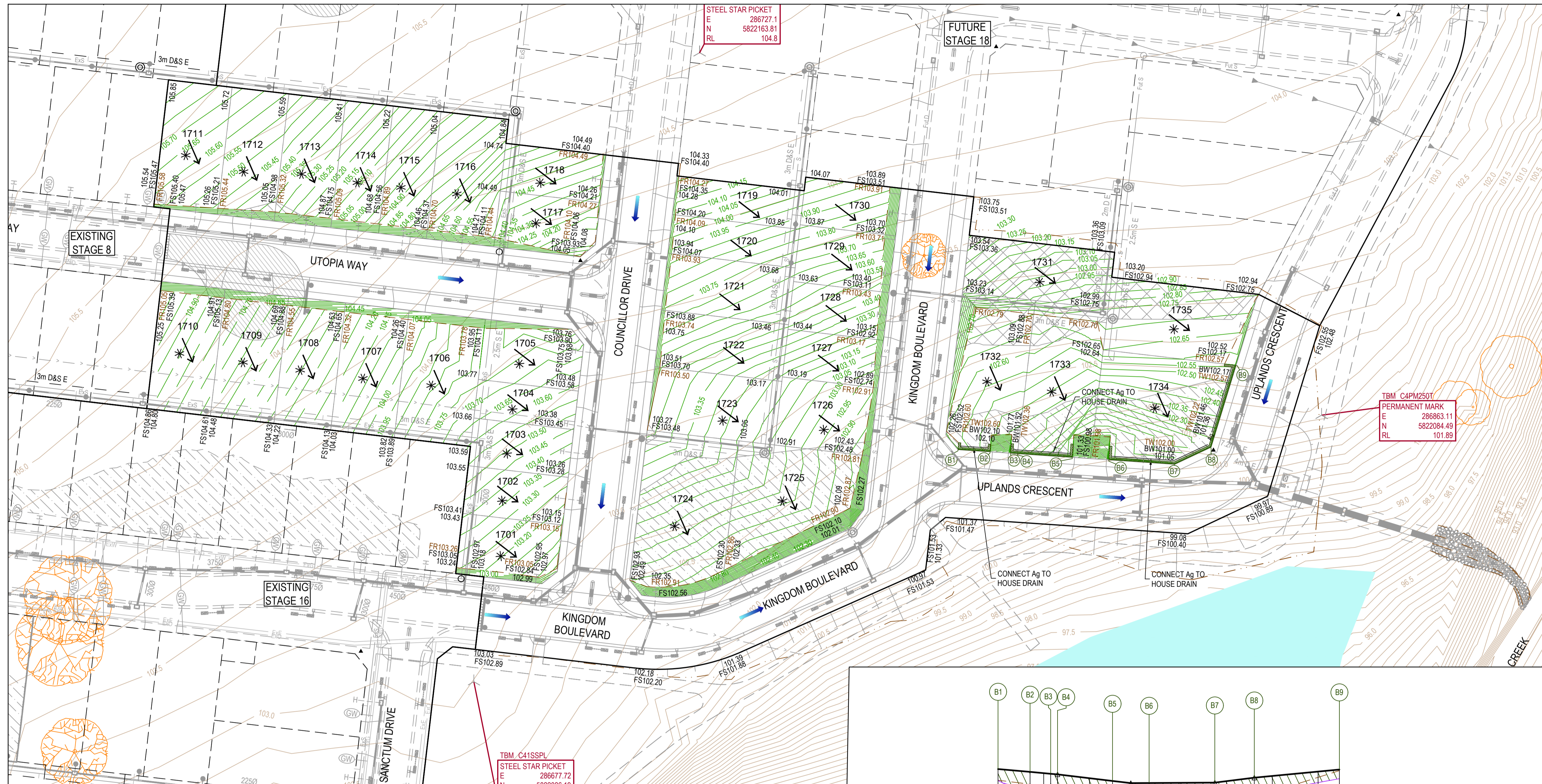
SERVICE LOCATIONS ARE IN ACCORDANCE WITH APPENDIX H OF THE MPA GUIDELINES AND THE DETAIL PLAN. **SHOULD NOT BE RELIED UPON FOR THE ACCURATE POSITIONING OF DRAINAGE LINES GREATER THAN 450mm BEHIND BACK OF KERB.** PIPES GREATER THAN 450mm WILL BE HAUNCHED UNDERNEATH KERB AND CHANNEL WHERE APPLICABLE TO ENSURE THAT PIT WIDTH BEHIND BACK OF KERB DOES NOT EXCEED 0.9m.

REV 0	DATE 07.10.21	AMENDMENT / REVISION DESCRIPTION ISSUED FOR CONSTRUCTION	DRAFTER C.SILVA	DESIGNER M.MANAFI	CHECKER C.CATHCART	APPROVER N.HOLLOW		PLAN OF SUB. NO. PS841628K PERMIT REF. NO. PA2018/6160		<p>Member of the <b>Surbana Jurong Group</b> Collins Square, Tower 4, Level 20, 727 Collins St Melbourne, VIC 3008 Ph 03 9514 1500</p>	<h1>SEVENTH BEND</h1>	Seventh Bend - Stage 17 Melton City Council Road and Drainage Layout Plan	MELWAYS REF 342 K7 PROJECT / DRAWING No 2250E-017-111 SHEET No 02 of 21 REVISION 0
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**ISSUED FOR CONSTRUCTION**

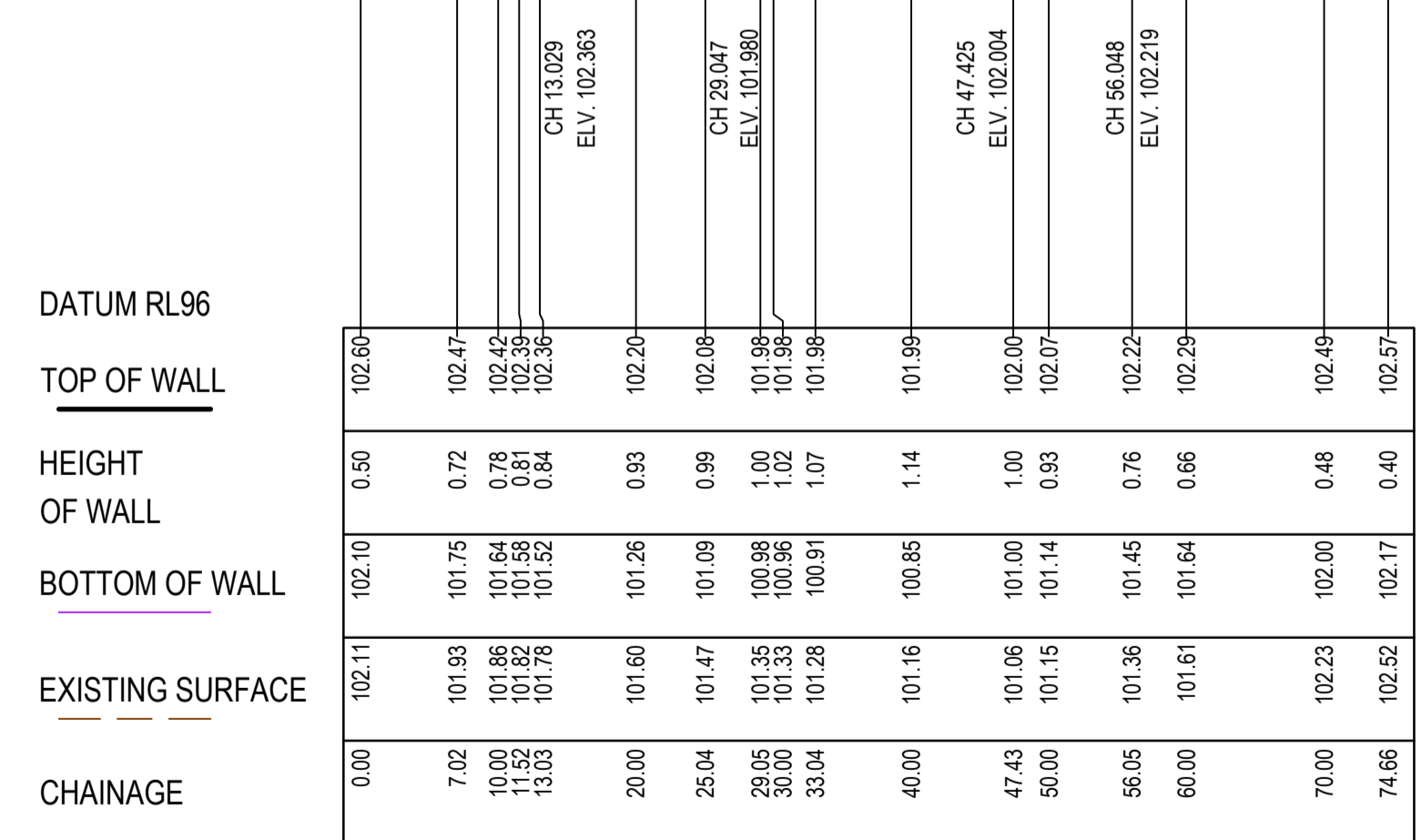
SCALE AS SHOWN AT 1

DISCLAIMER: 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.



**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 TACTILE PAVERS
	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 TACTILE PAVERS
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	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
	PROPOSED INDUSTRIAL DRIVEWAY
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	EXISTING ROAD PAVING
	EXISTING CONTOURS
	EXISTING CULTURE HERITAGE
	EXISTING STOCKPILE
	EXISTING TREE TO BE RETAINED



ROCK RETAINING WALL B - LONGITUDINAL SECTION  
HORIZONTAL SCALE 1:500 @ A1  
VERTICAL SCALE 1:100 @ A1

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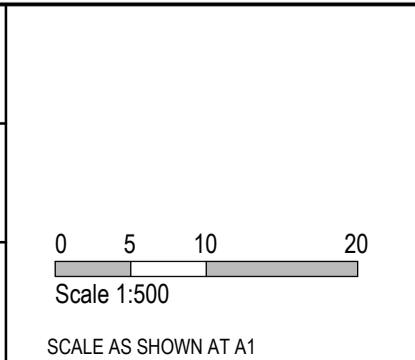
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OH&S Management AS/NZS 3801  
Environmental Management ISO 14001

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PLAN OF SUB. NO. PS841628K  
PERMIT REF. NO. PA2018/6160

**ISSUED FOR CONSTRUCTION**

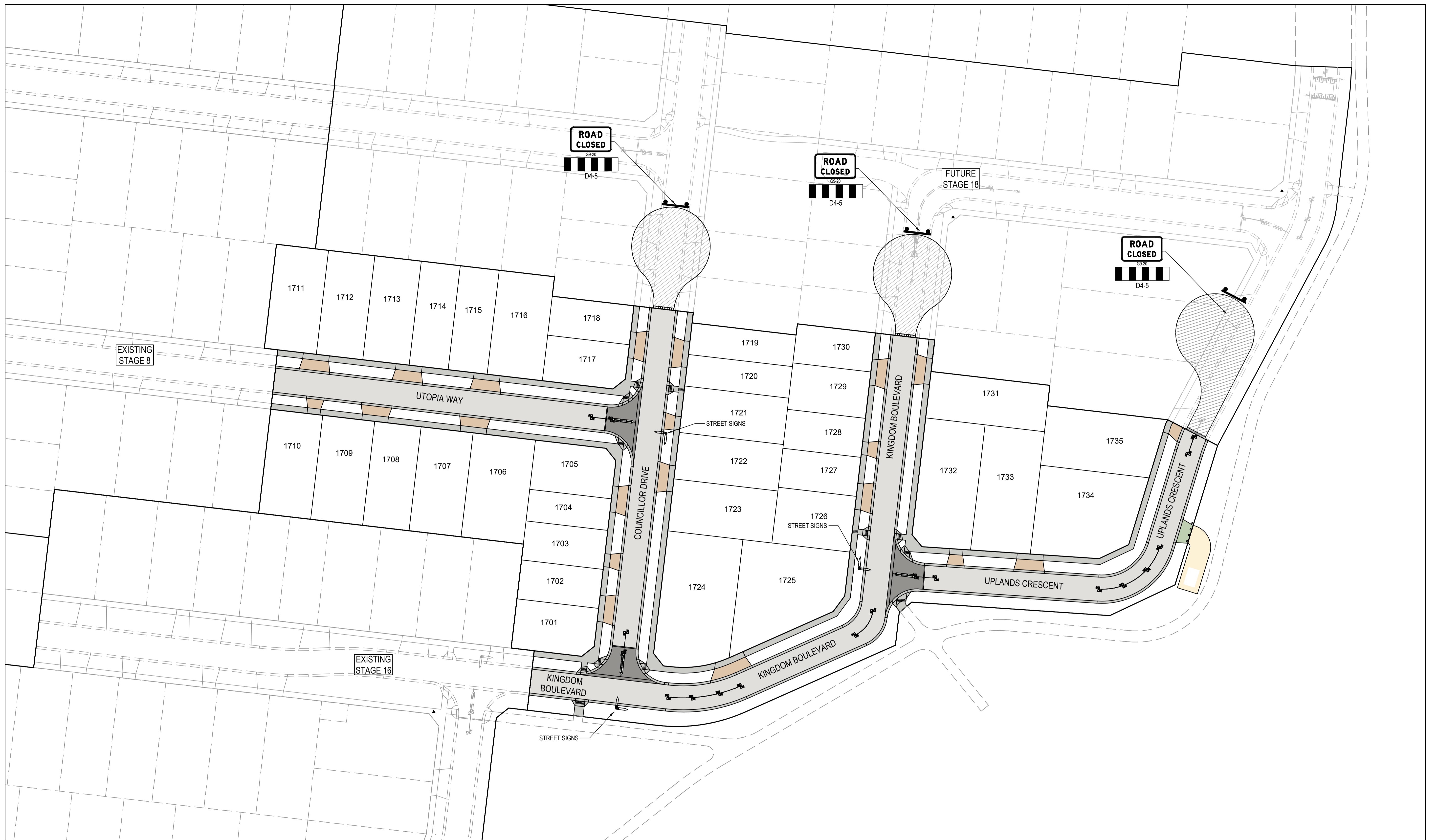


**SMEC**  
Member of the Surlana Jurong Group  
ABN 47 065 475 149  
Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

**SEVENTH BEND**

Seventh Bend - Stage 17  
Melton City Council  
Road and Drainage  
Earthworks & Retaining Wall Setout Plan  
and Longitudinal Section

MELWAYS REF 342 K7	PROJECT / DRAWING No 2250E-017-131	SHEET No 03 of 21	REVISION 0
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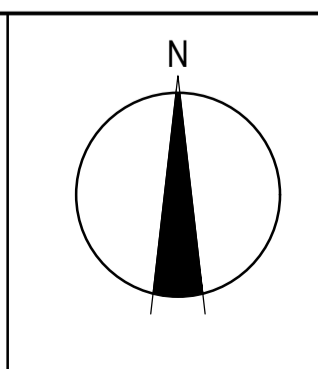
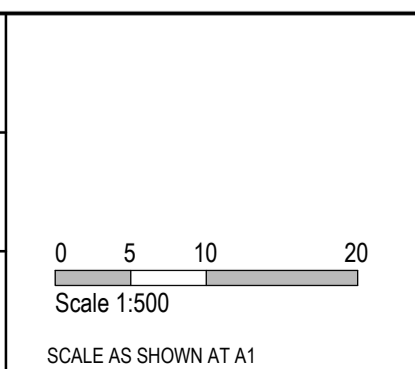
- NOTES**
- 90° BENDS TO HAVE CENTRELINE MARKING WITH RRPMS AT MAX 6m SPACING.
  - RRPMS TO BE IN ACCORDANCE WITH VICROADS TRAFFIC ENGINEERING MANUAL VOL 2.
  - ALL LINEMARKING & SIGNAGE TO BE IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1742.

**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  
**DIAL 1100 BEFORE YOU DIG**  
 www.1100.com.au

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

PLAN OF SUB. NO. PS841628K  
 PERMIT REF. NO. PA2018/6160

**ISSUED FOR CONSTRUCTION**

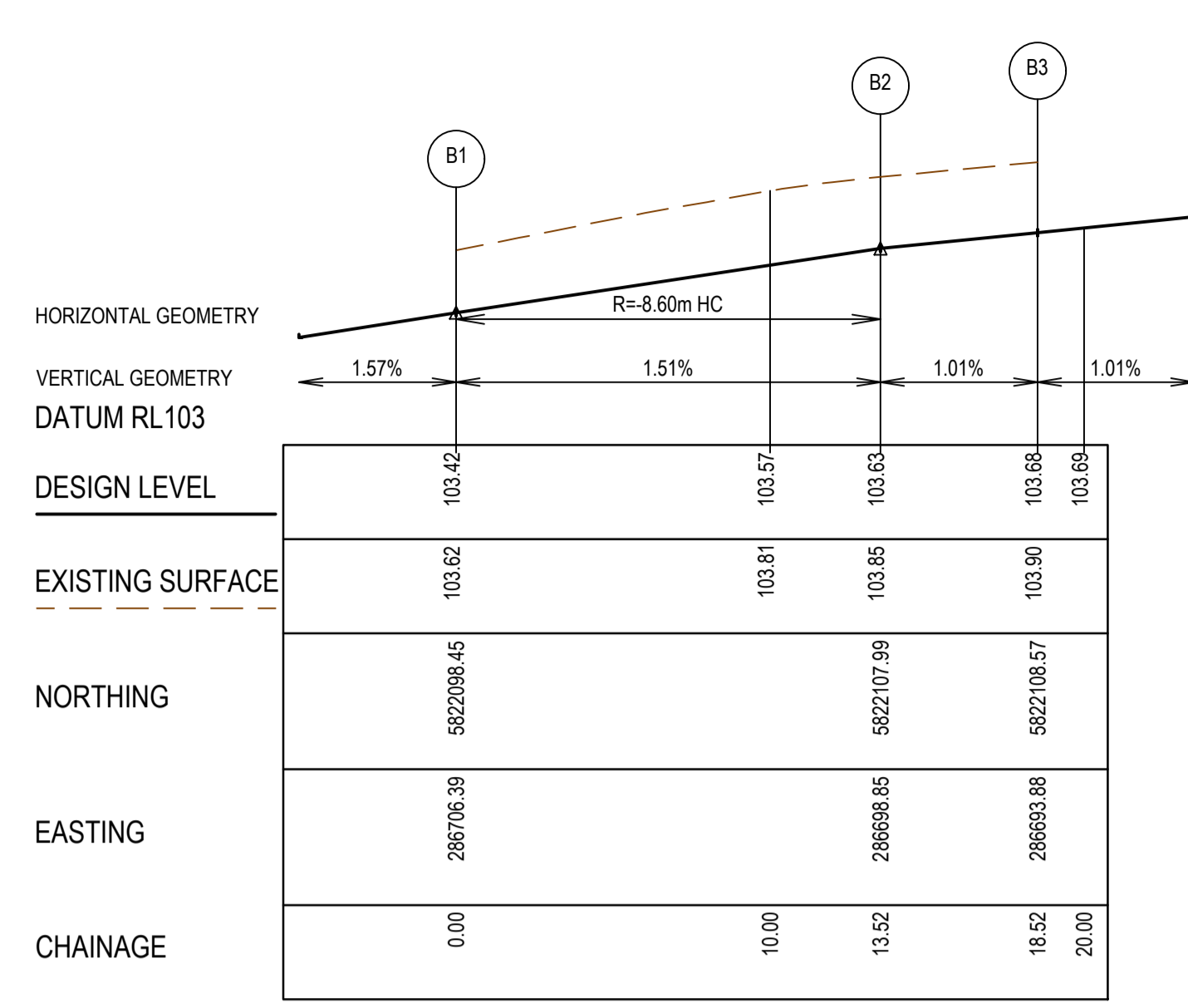
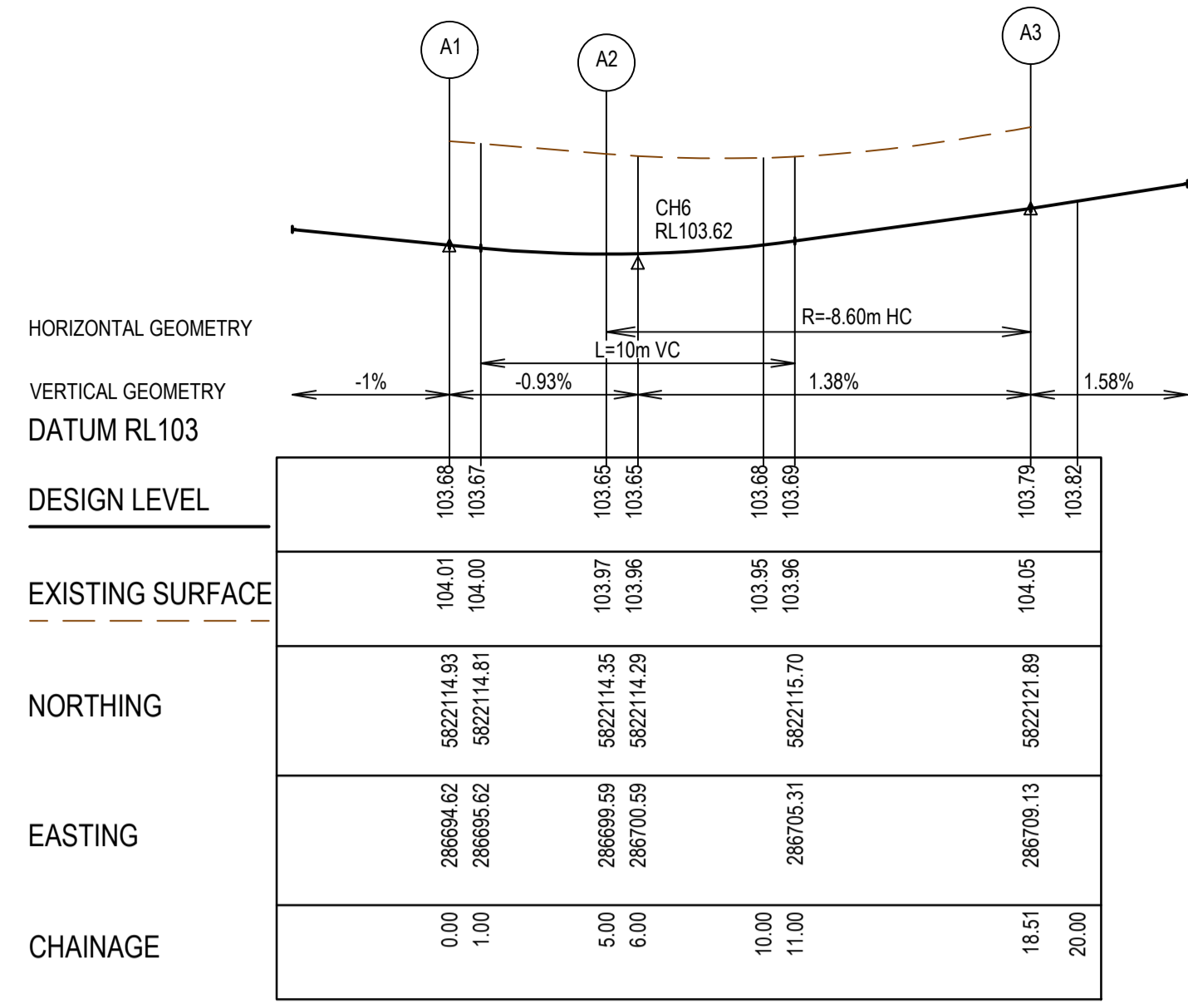
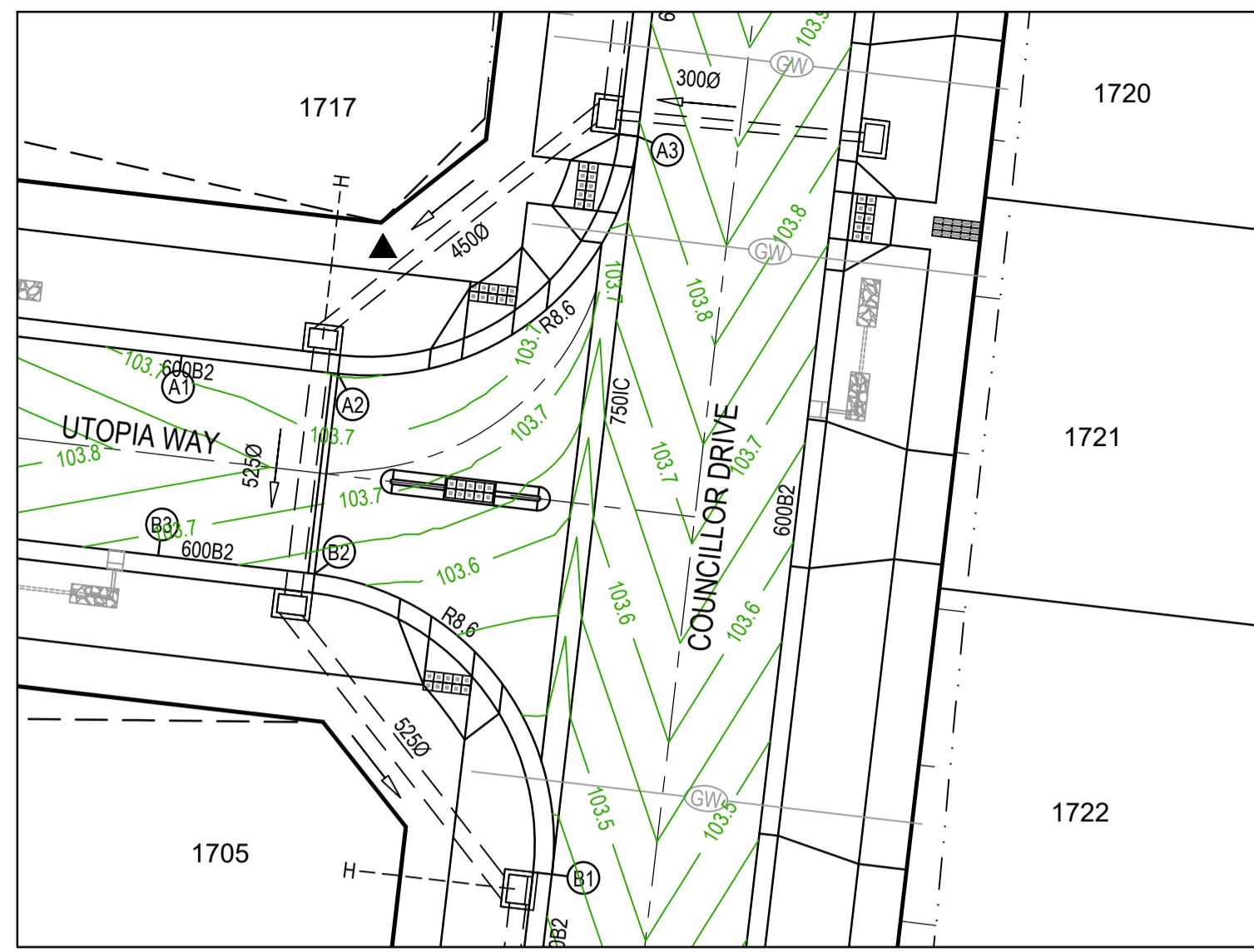


Member of the Surlana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

# SEVENTH BEND

Seventh Bend - Stage 17  
 Melton City Council  
 Road and Drainage  
 Signage & Linemarking Plan

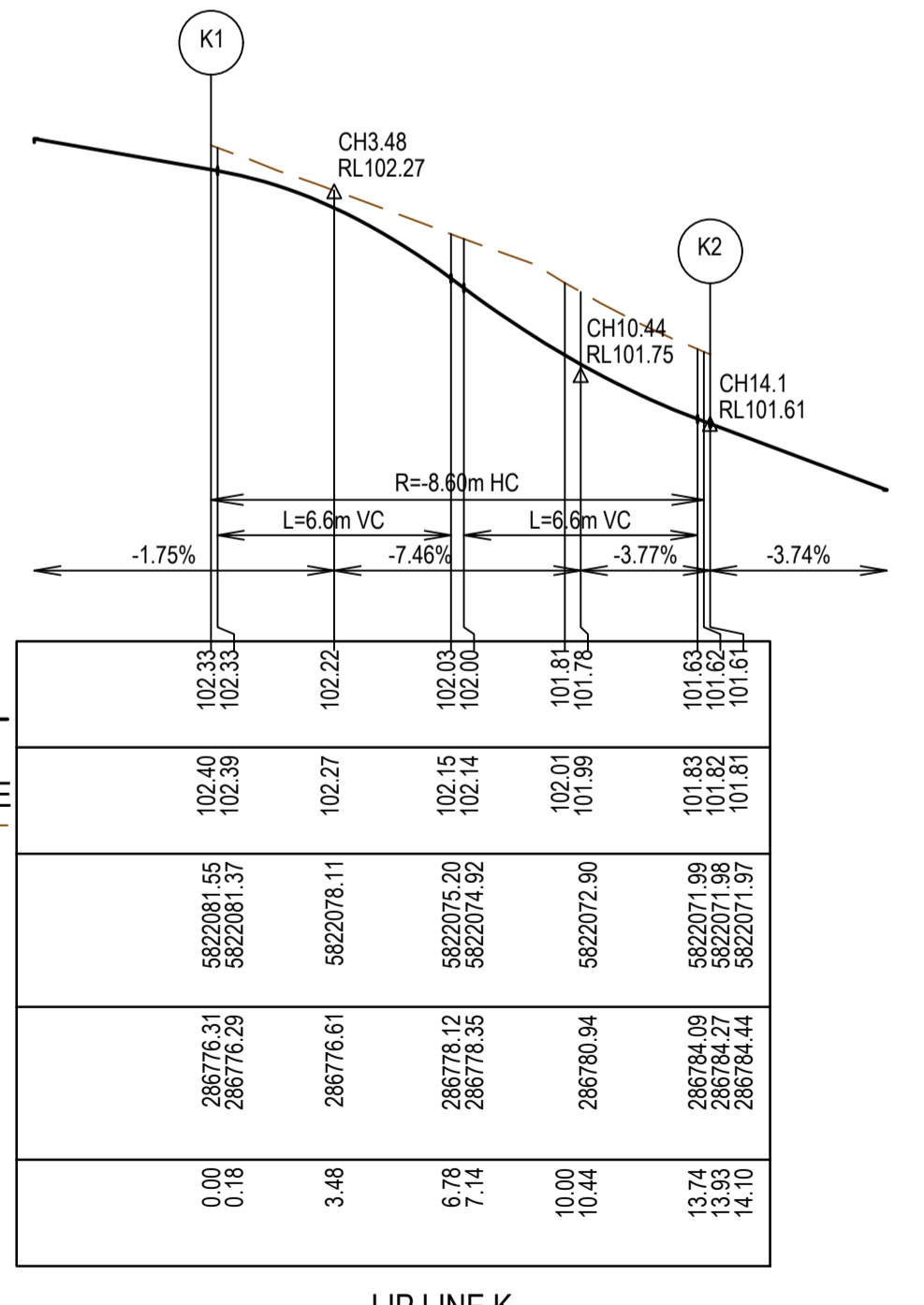
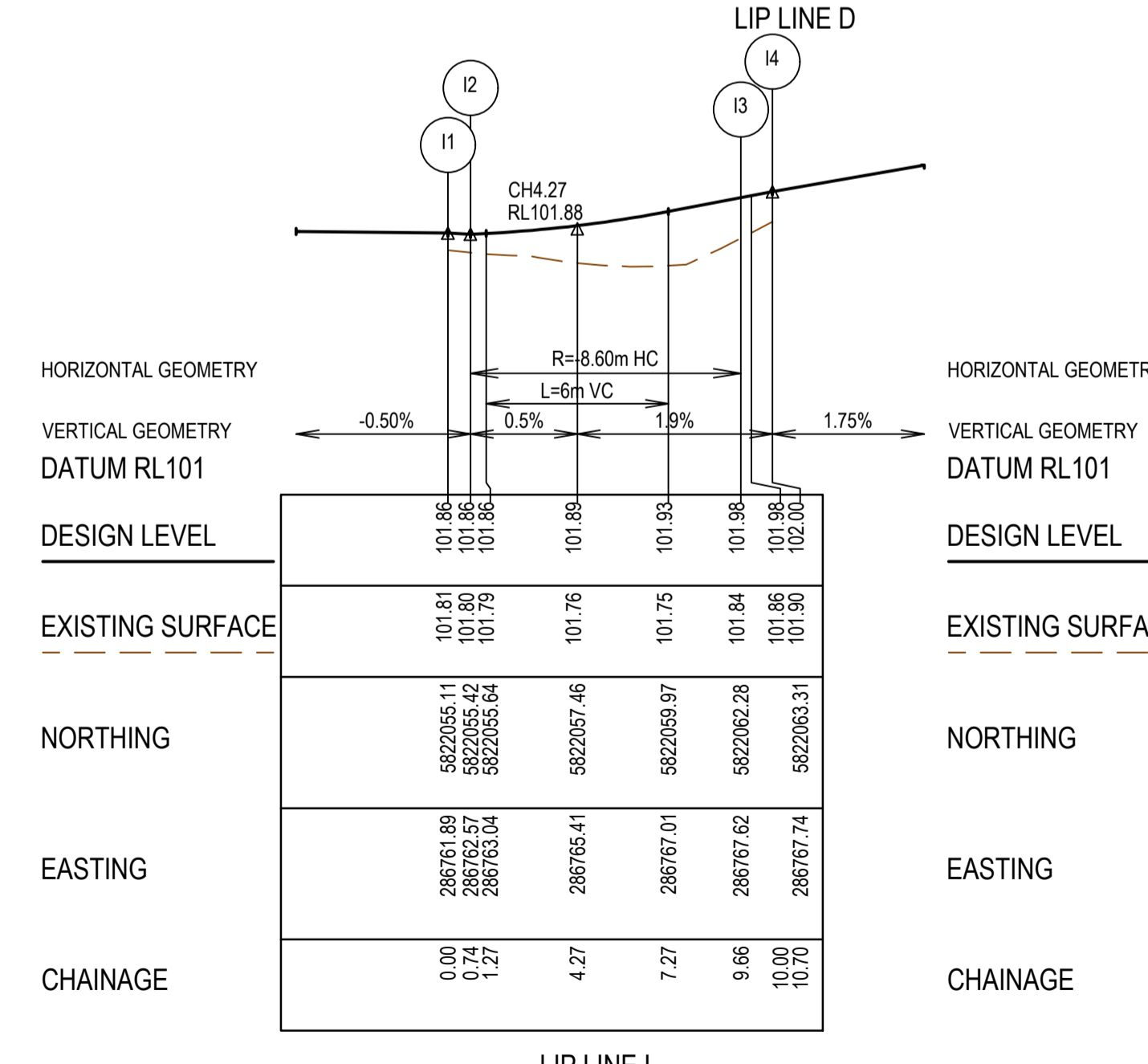
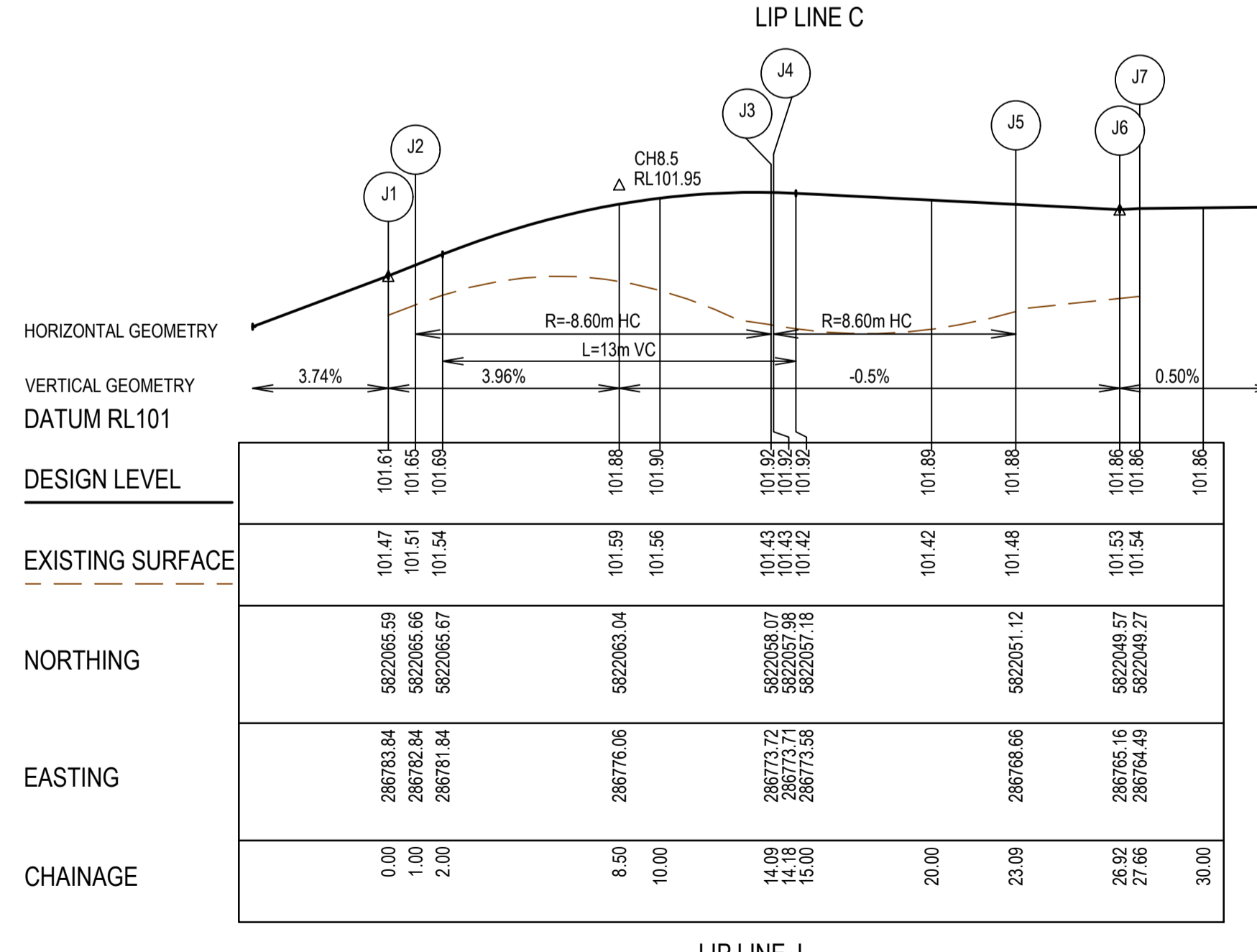
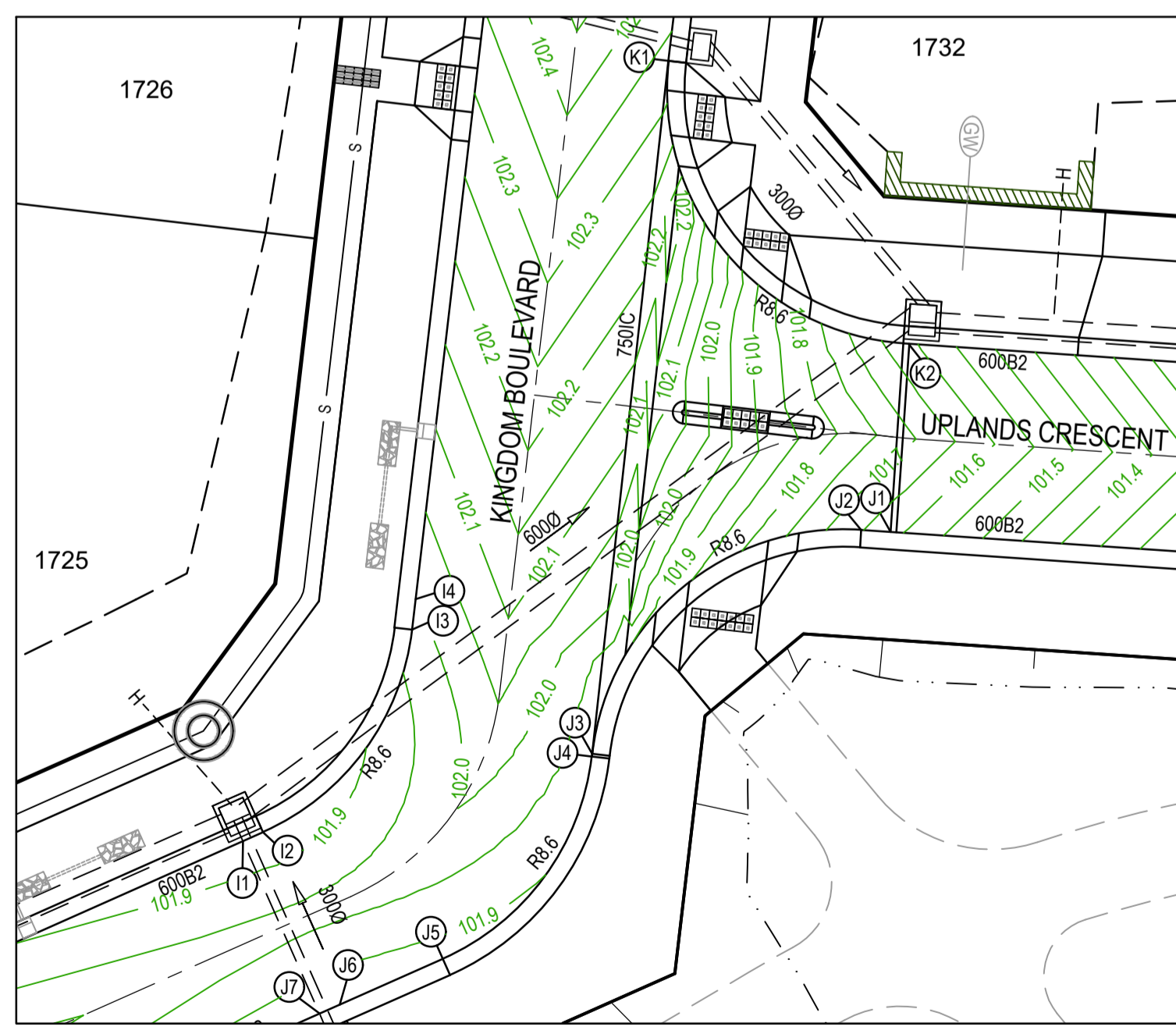
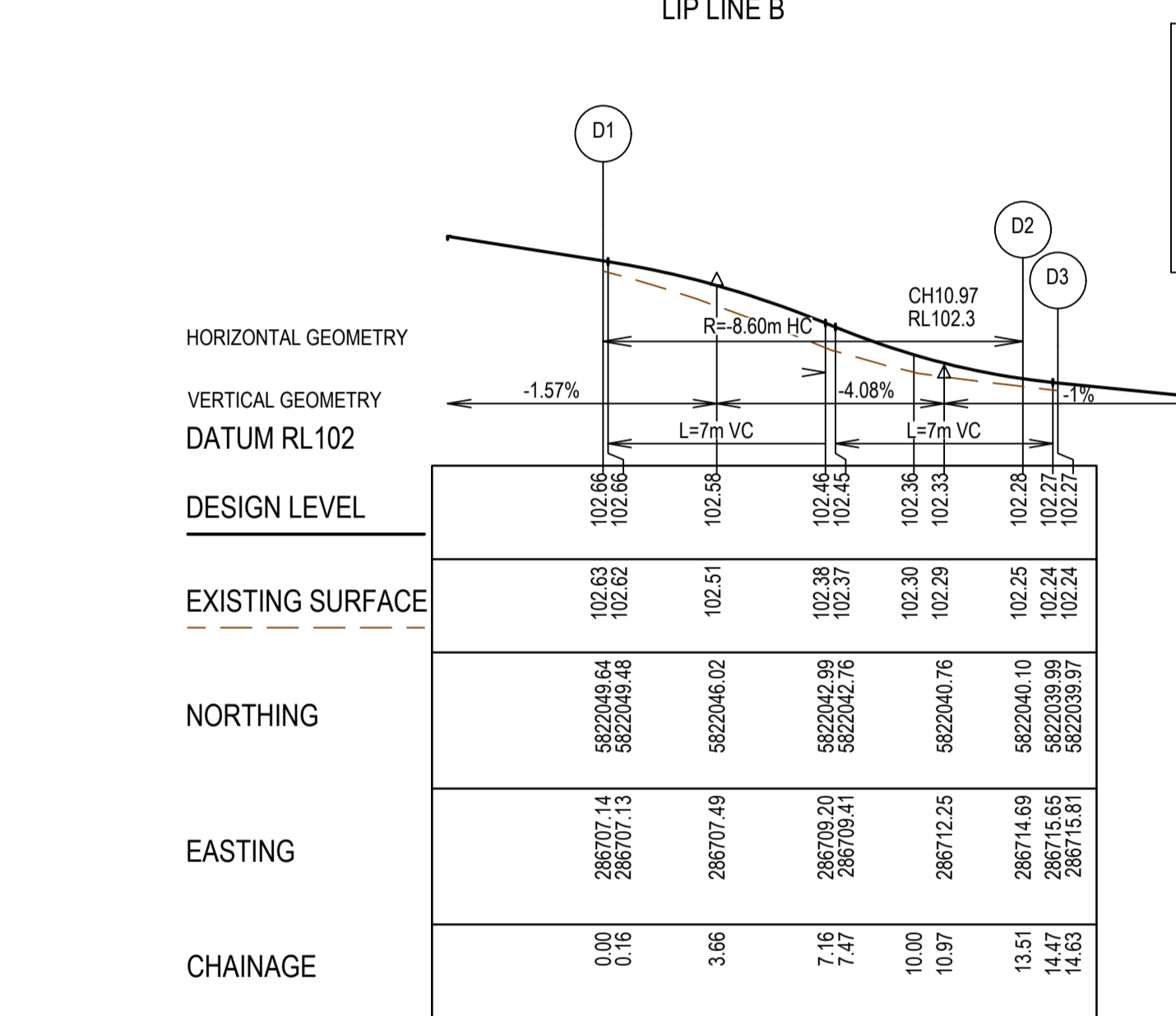
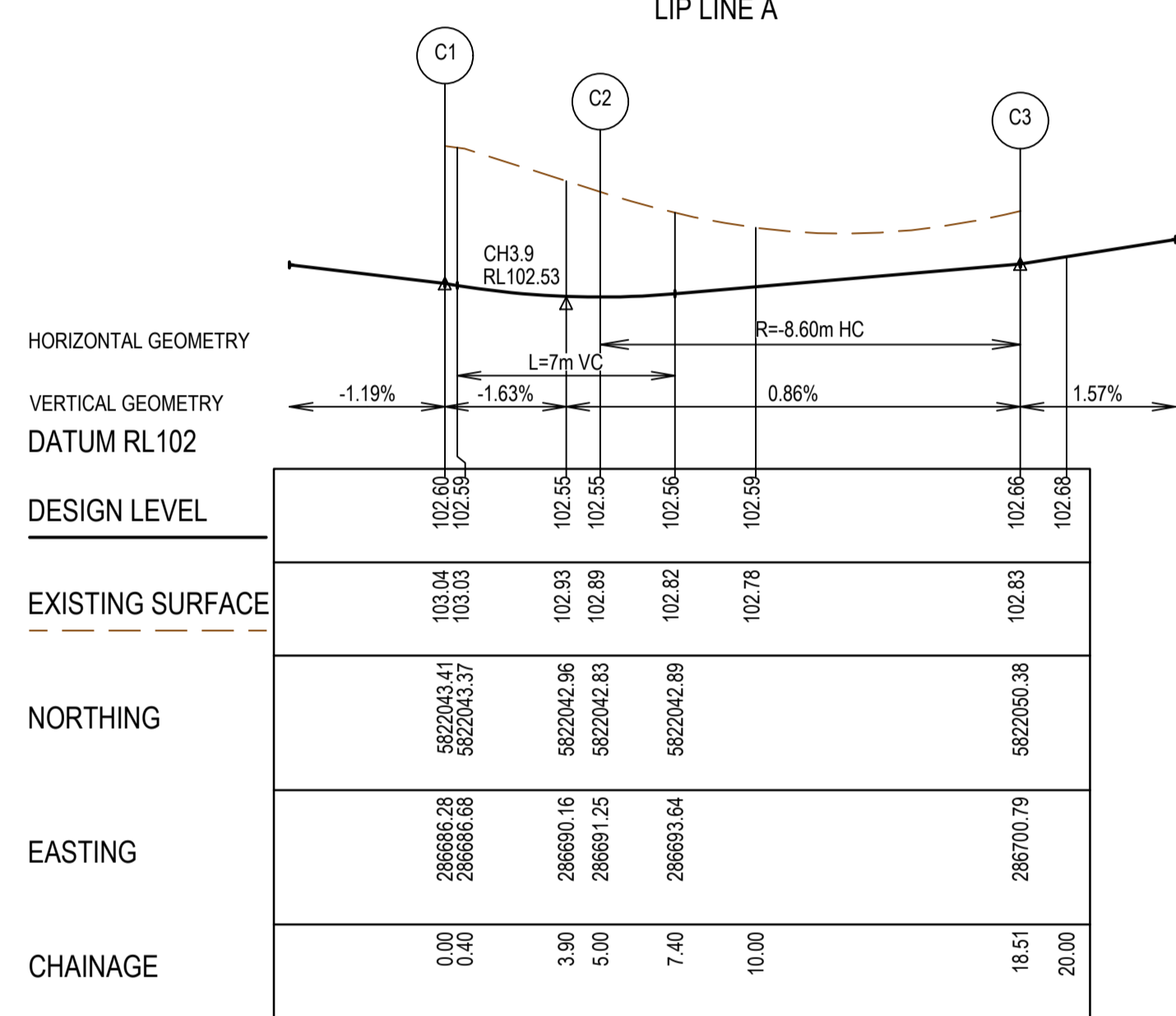
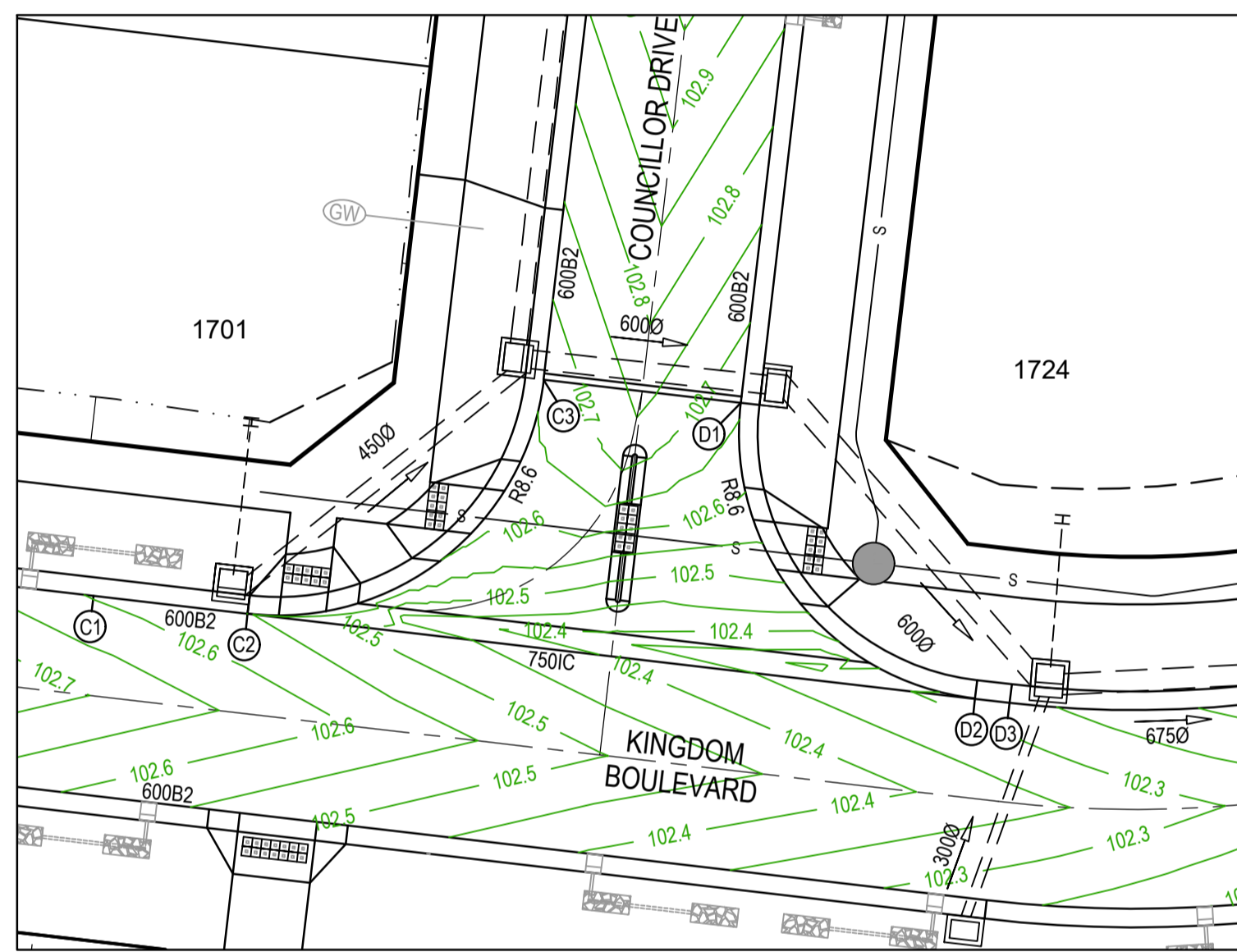
MELWAYS REF 342 K7	PROJECT / DRAWING No. 2250E-017-171	SHEET No. 04 of 21	REVISION 0
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**LEGEND - INTERSECTION DETAIL PLAN**  
 ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MAIN DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- SERVICE CONDUITS
- TACTILE PAVERS
- EXISTING STORMWATER DRAIN
- EXISTING MAIN DRAIN
- EXISTING SEWER & MAINTENANCE STRUCTURES
- EXISTING SERVICE CONDUITS
- EXISTING TACTILE PAVERS
- FUTURE STORMWATER DRAIN
- FUTURE MAIN DRAIN
- FUTURE SEWER & MAINTENANCE STRUCTURES
- FUTURE HOUSE DRAIN
- FUTURE SERVICE CONDUITS
- FUTURE TACTILE PAVERS
- RETAINING WALL
- EDGE STRIP, SUBSOIL DRAIN, 'NO ROAD' SIGN & BARRIER
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY & FOOTPATH

- NOTES**
- ALL VEHICLE CROSSINGS AND PRAM CROSSINGS TO BE MINIMUM OF 0.75m FROM PITS.
  - ALL PRAM CROSSINGS TO BE MINIMUM OF 2.0m FROM VEHICLE CROSSINGS.
  - VEHICLE EXCLUSION MEASURES BETWEEN ROAD RESERVE AND RESERVE TO FORM PART OF THE LANDSCAPE WORKS.
  - INDUSTRIAL DRIVEWAYS TO COUNCIL RESERVES TO BE PROVIDED AS PART OF LANDSCAPE WORKS.
  - SHARE PATH THROUGH CREEK CORRIDOR TO FORM PART OF LANDSCAPE WORKS.



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

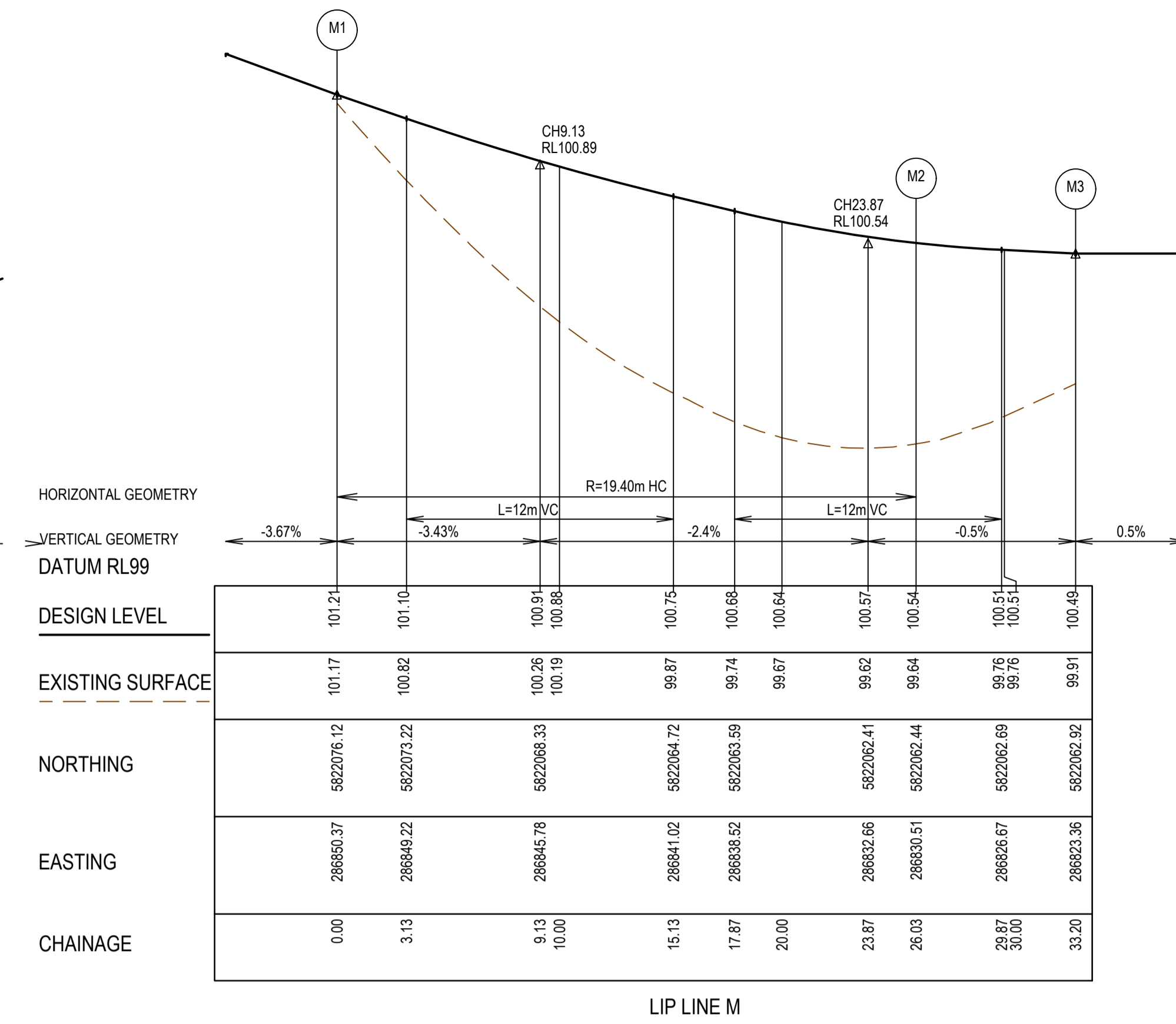
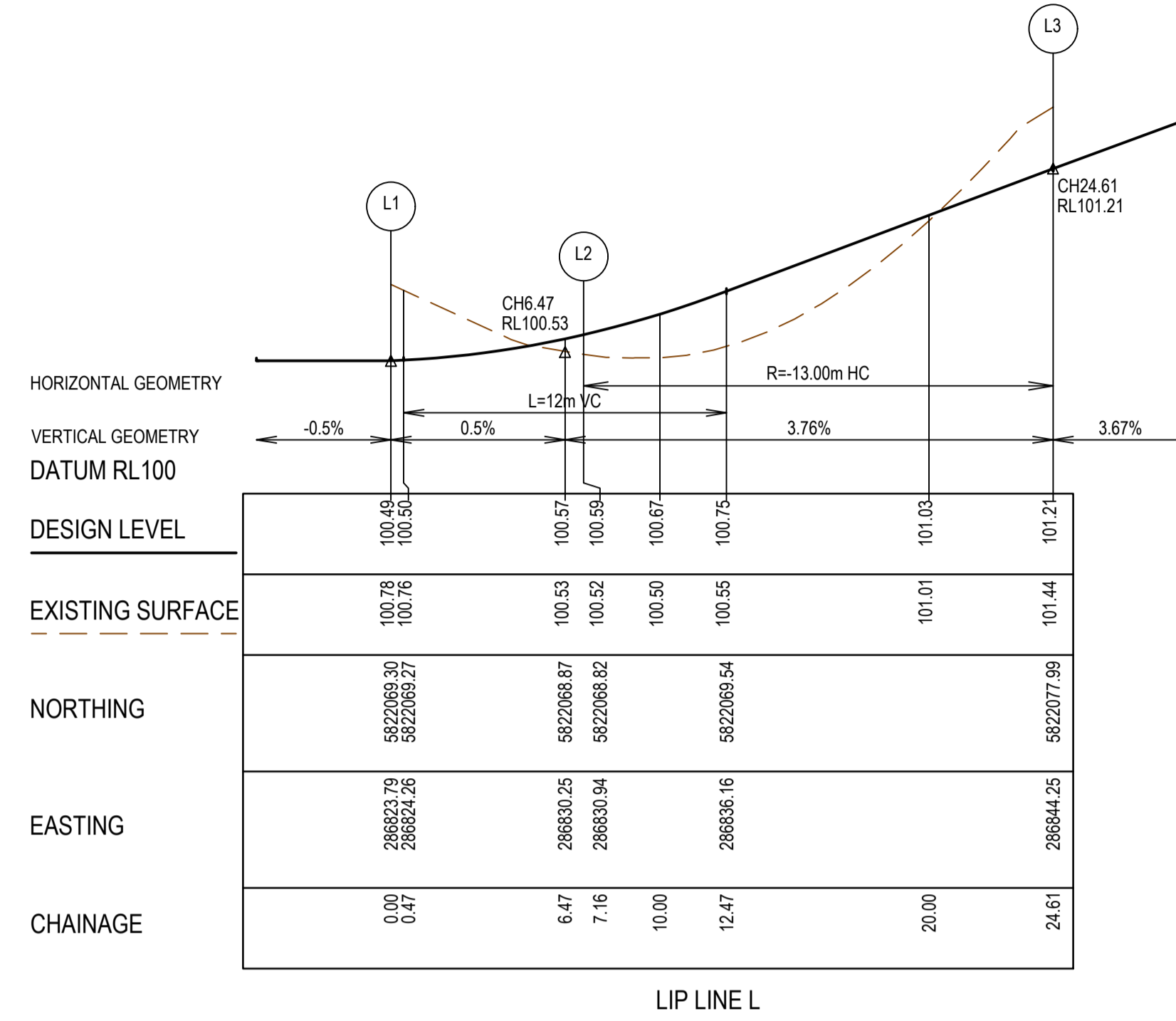
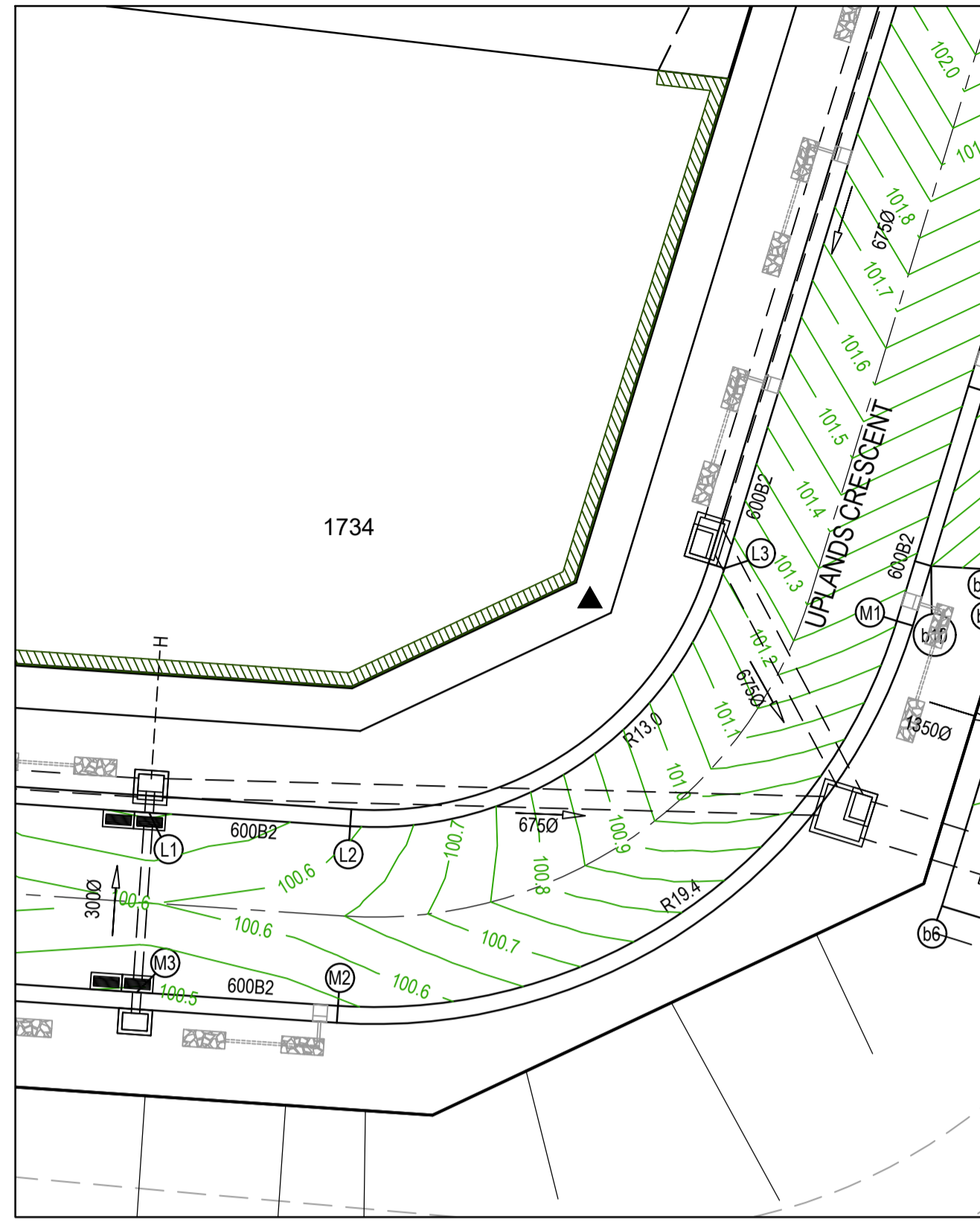
Quality Management ISO 9001  
 OHS Management AS/NZS 4500  
 Environmental Management ISO 14001  
 PLAN OF SUB. NO. PS841628K  
 PERMIT REF. NO. PA2018/6160  
**ISSUED FOR CONSTRUCTION**

**SMEC**  
 Member of the Surlana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

# SEVENTH BEND

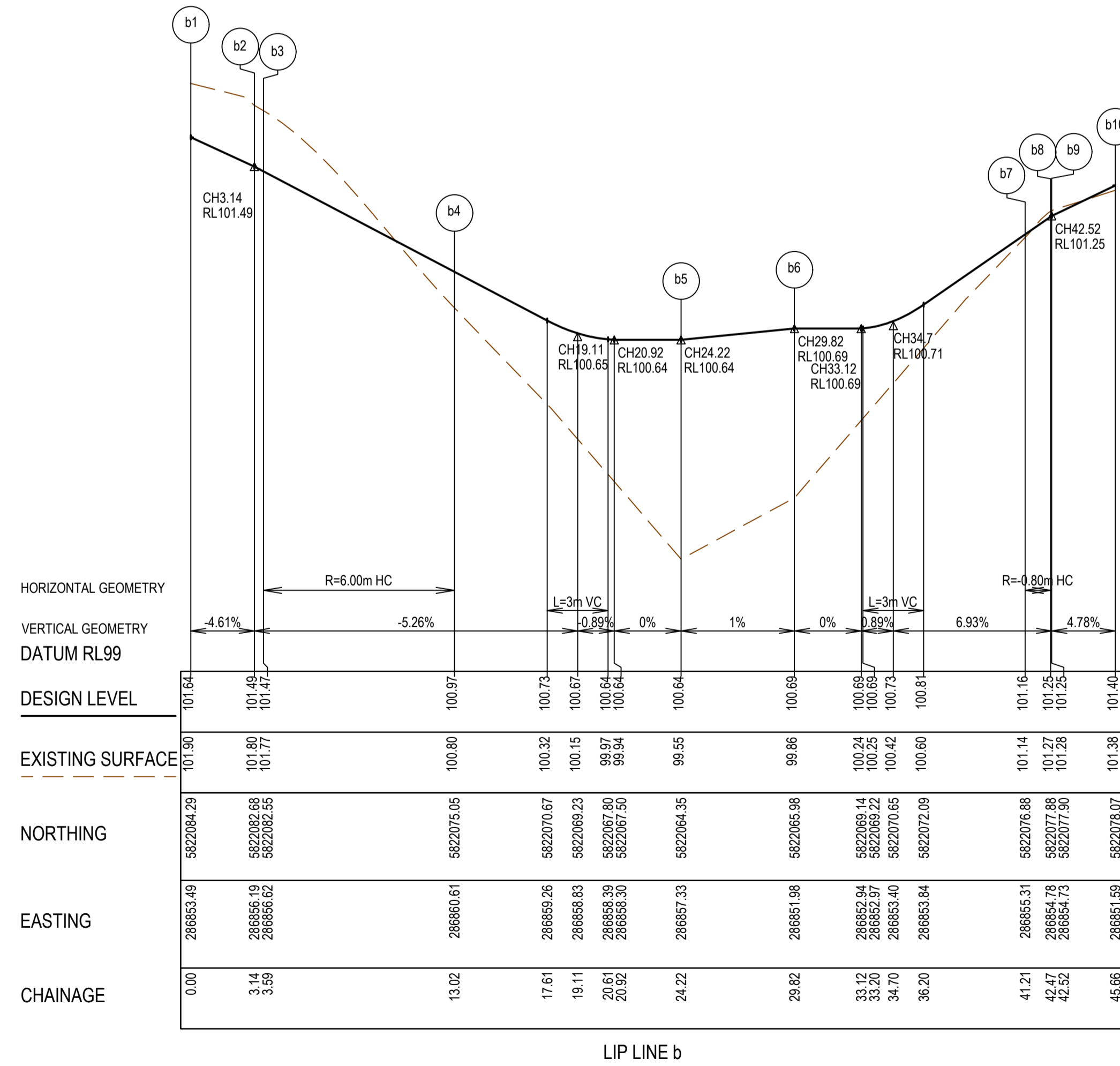
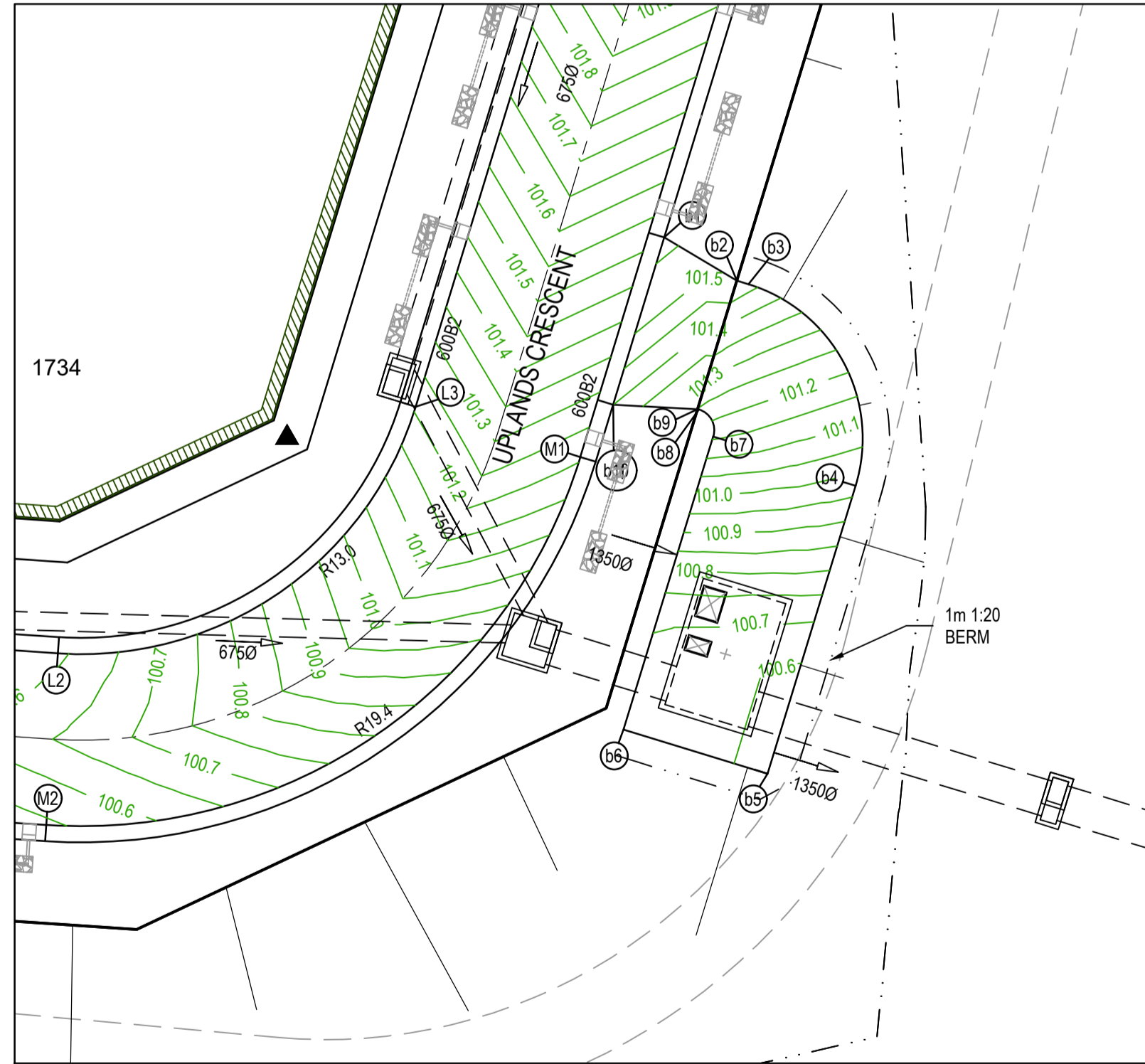
Seventh Bend - Stage 17  
 Melton City Council  
 Road and Drainage  
 Intersection Detail Plan - 1

MELWAYS REF: 342 K7  
 PROJECT / DRAWING No: 2250E-017-181  
 SHEET No: 05 of 21  
 REVISION: 0



**LEGEND - INTERSECTION DETAIL PLAN**  
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING SERVICE CONDUITS
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE MAIN DRAIN
	FUTURE SEWER & MAINTENANCE STRUCTURES
	FUTURE HOUSE DRAIN
	FUTURE SERVICE CONDUITS
	FUTURE TACTILE PAVERS
	RETAINING WALL
	EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH



- NOTES**
- ALL VEHICLE CROSSINGS AND PRAM CROSSINGS TO BE MINIMUM OF 0.75m FROM PIT.
  - ALL PRAM CROSSINGS TO BE MINIMUM OF 2.0m FROM VEHICLE CROSSINGS.
  - VEHICLE EXCLUSION MEASURES BETWEEN ROAD RESERVE AND RESERVE TO FORM PART OF THE LANDSCAPE WORKS.
  - INDUSTRIAL DRIVEWAYS TO COUNCIL RESERVES TO BE PROVIDED AS PART OF LANDSCAPE WORKS.
  - SHARE PATH THROUGH CREEK CORRIDOR TO FORM PART OF LANDSCAPE WORKS.

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

Quality Management ISO 9001  
 OHS Management AS/NZS 4801  
 Environmental Management ISO 14001

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**ISSUED FOR CONSTRUCTION**

PLAN OF SUB. NO.  
PS841628K

PERMIT REF. NO.  
PA2018/6160

SCALE AS SHOWN AT A1

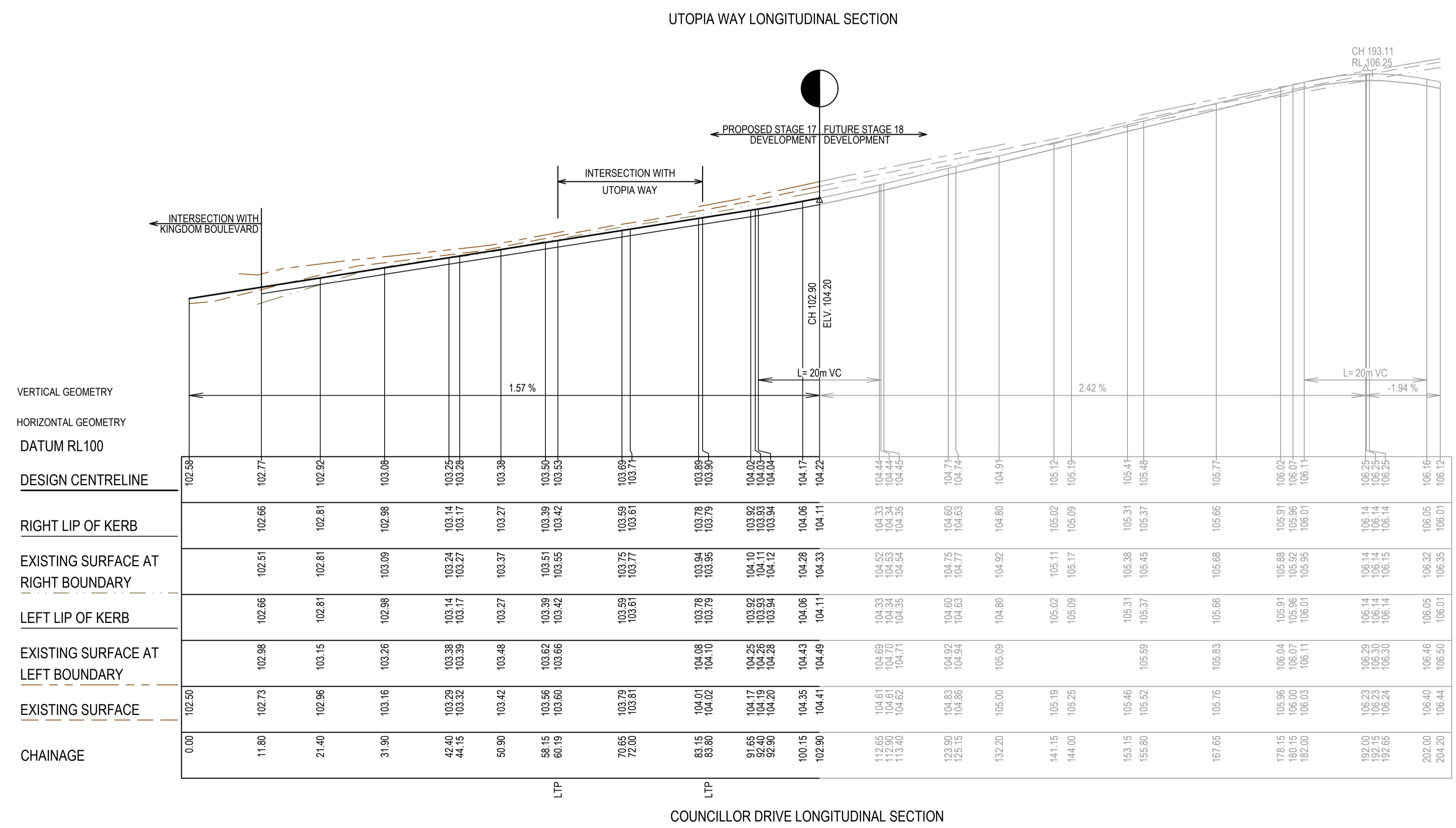
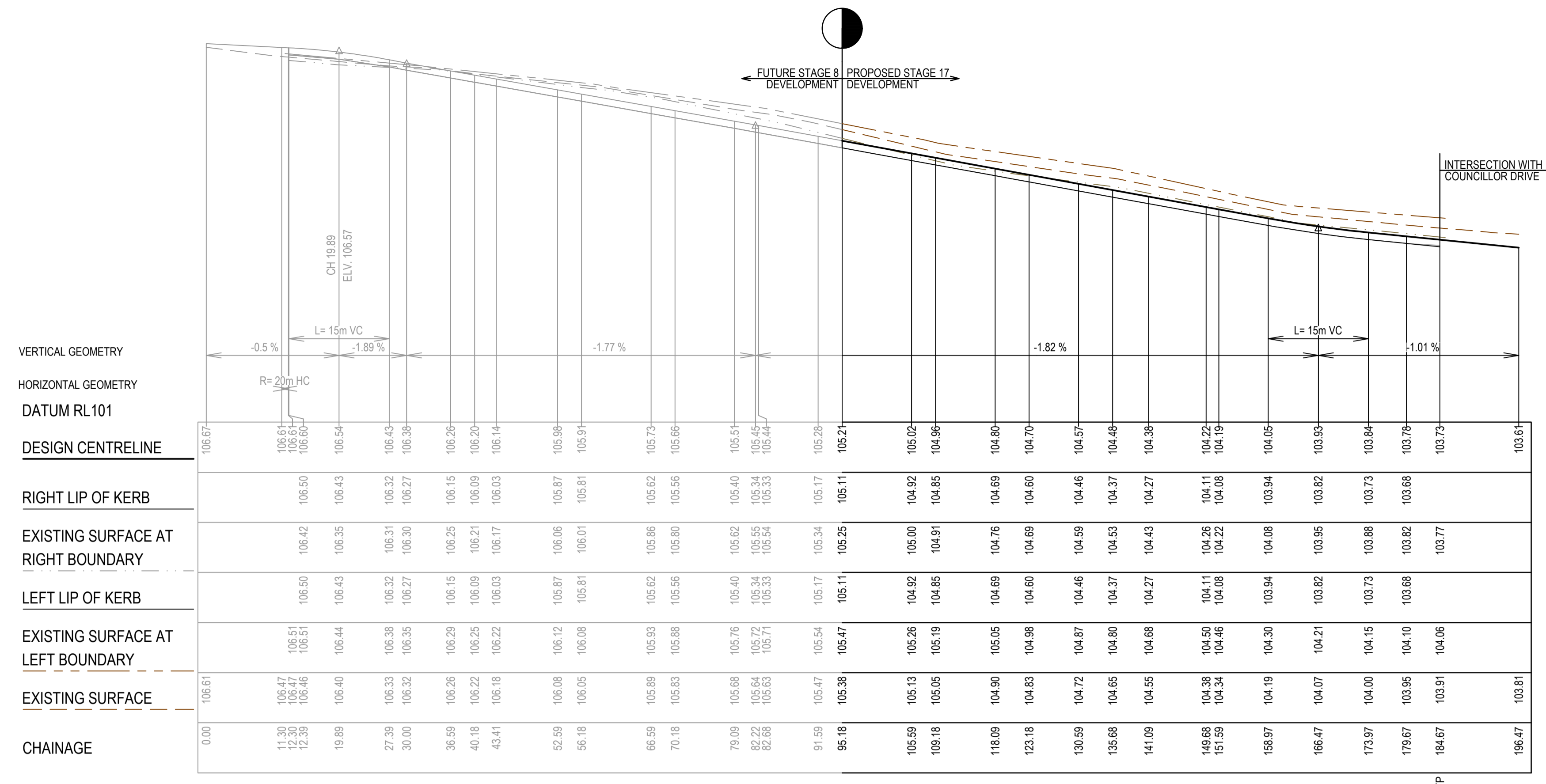
**SMEC**  
Member of the Surlana Jurong Group  
ABN 47 065 475 149

Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

# SEVENTH BEND

Seventh Bend - Stage 17  
Melton City Council  
Road and Drainage  
Intersection Detail Plan - 2

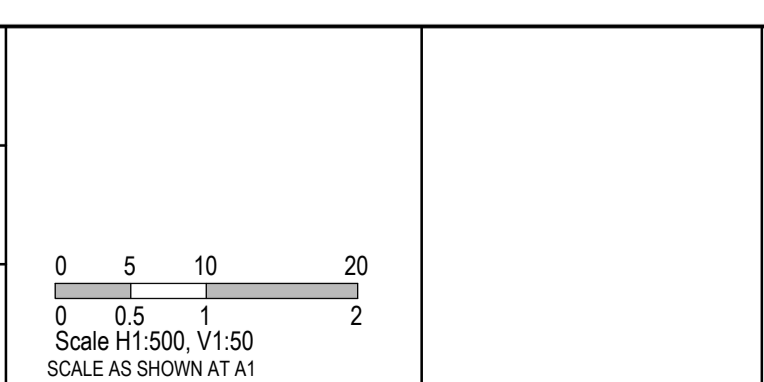
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PROJECT / DRAWING No: 2250E-017-182  
SHEET No: 06 of 21  
REVISION: 0



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

PLAN OF SUB. NO. PS841628K  
 PERMIT REF. NO. PA2018/6160

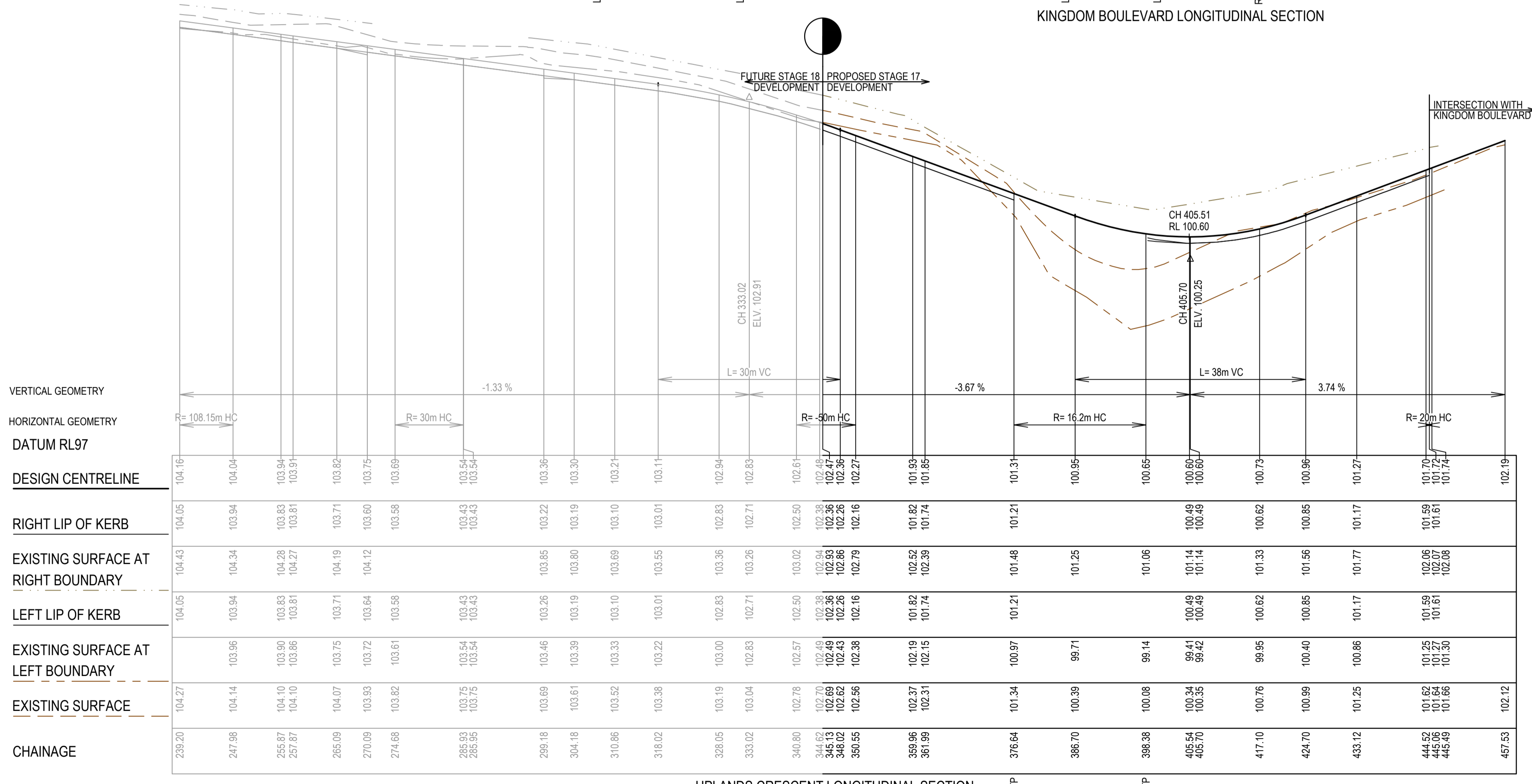
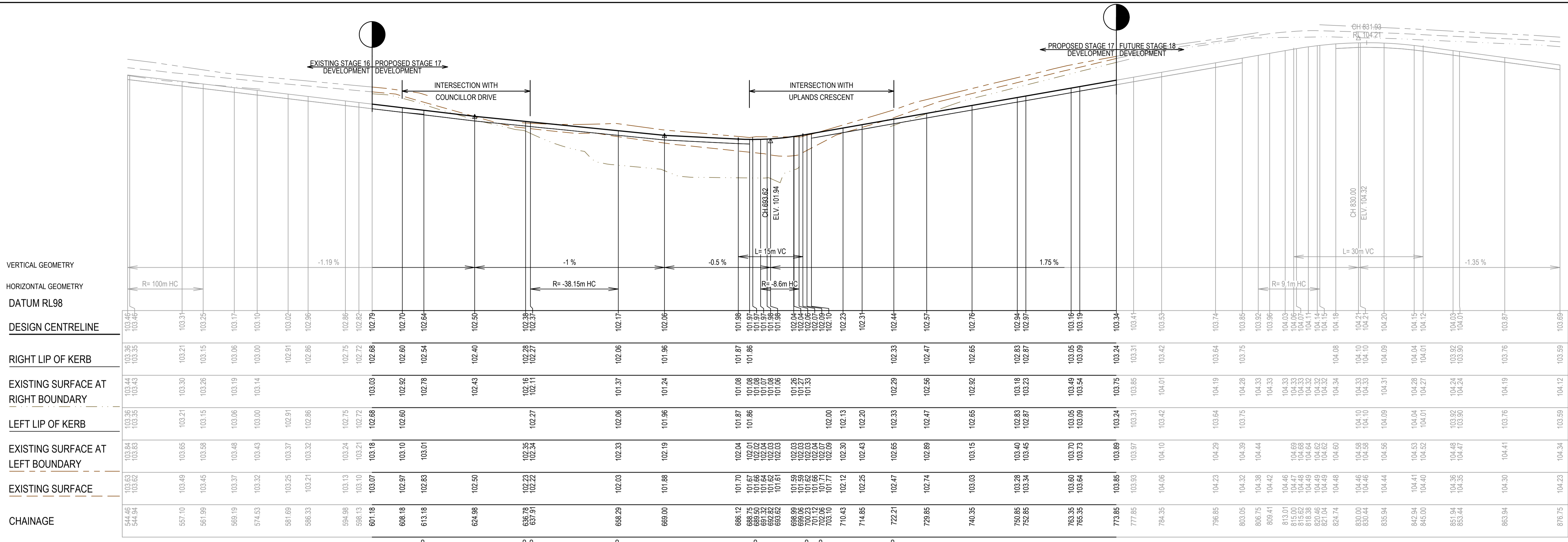
**ISSUED FOR CONSTRUCTION**



Member of the Surlana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1900

**SEVENTH BEND**

Seventh Bend - Stage 17 Melton City Council Road and Drainage Longitudinal Sections - 1		MELWAYS REF <b>342 K7</b>	PROJECT / DRAWING No. <b>2250E-017-201</b>	SHEET No. <b>07 of 21</b>	REVISION <b>0</b>
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REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

PLAN OF SUB. NO. PS841628K  
 PERMIT REF. NO. PA2018/6160

**ISSUED FOR CONSTRUCTION**

Scale 1:1000  
 Scale H1:500, V1:50  
 SCALE AS SHOWN AT 1

Member of the Surbana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

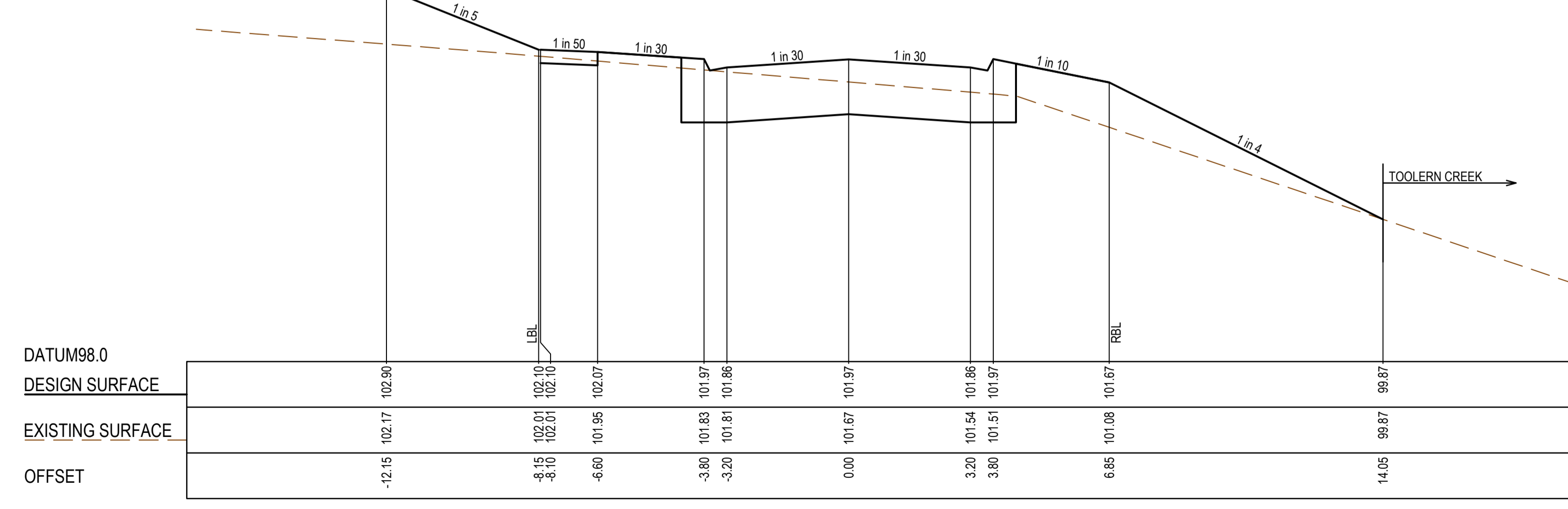
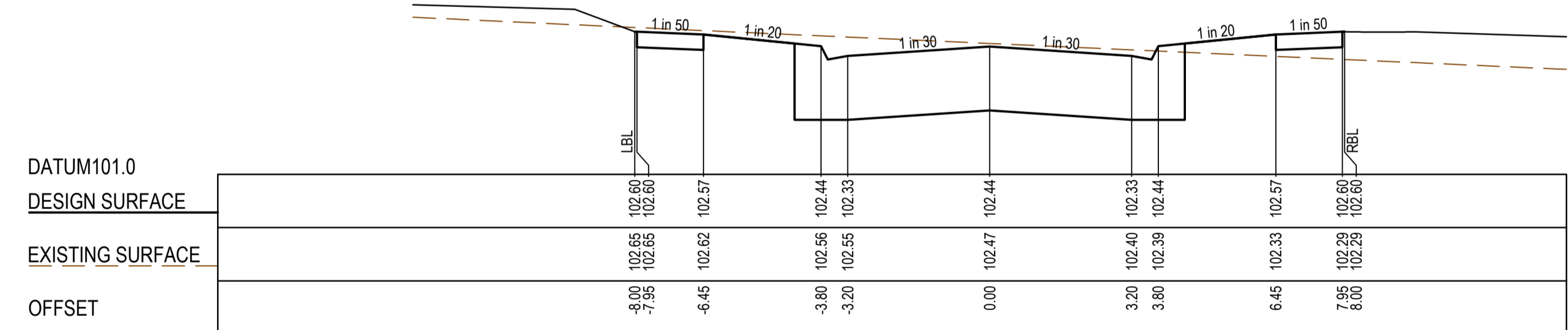
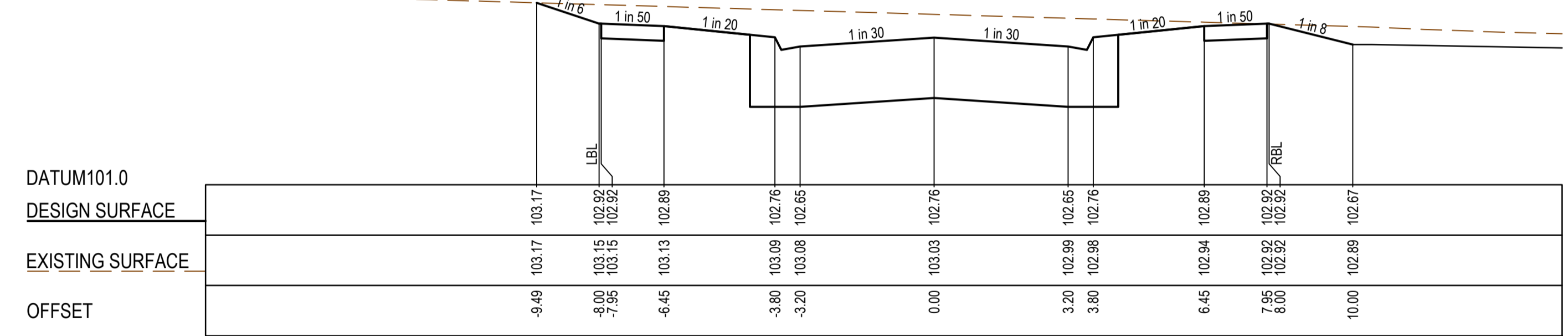
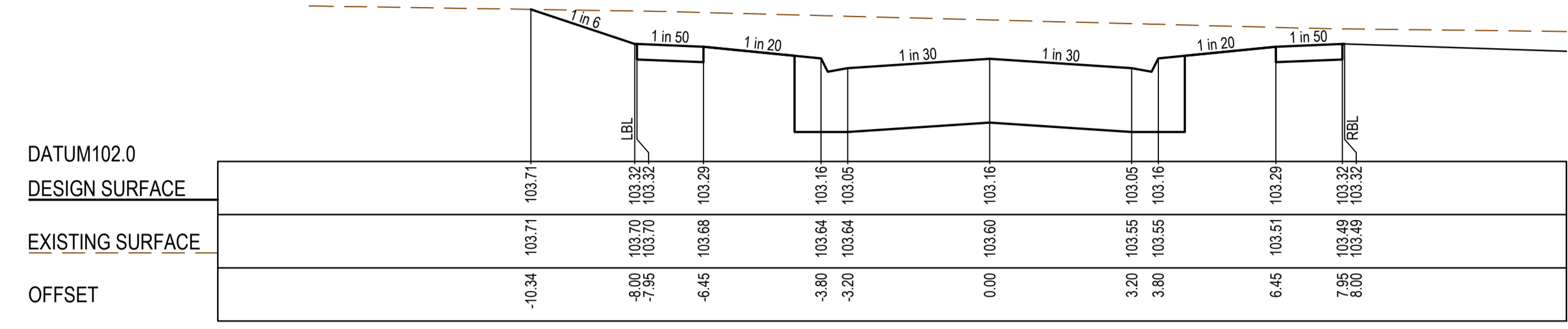
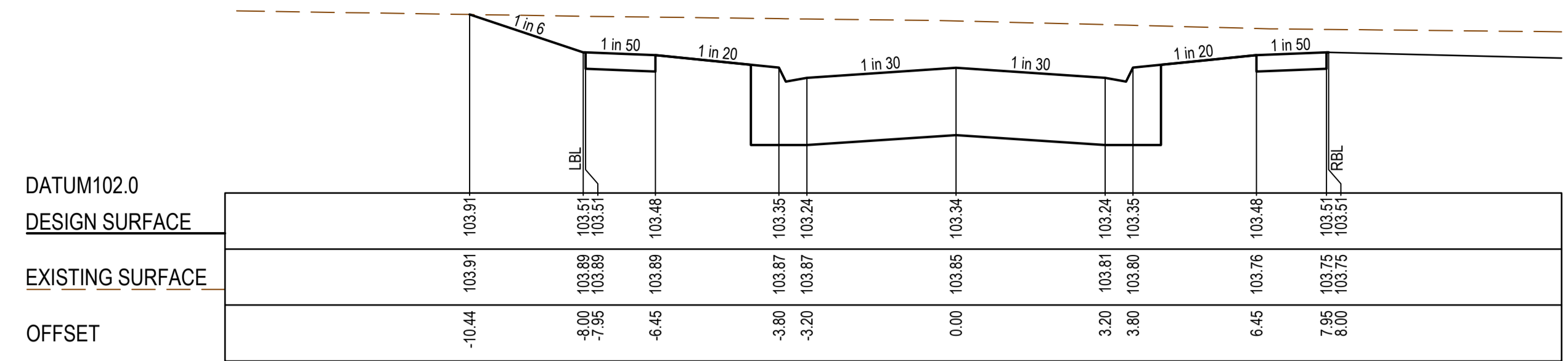
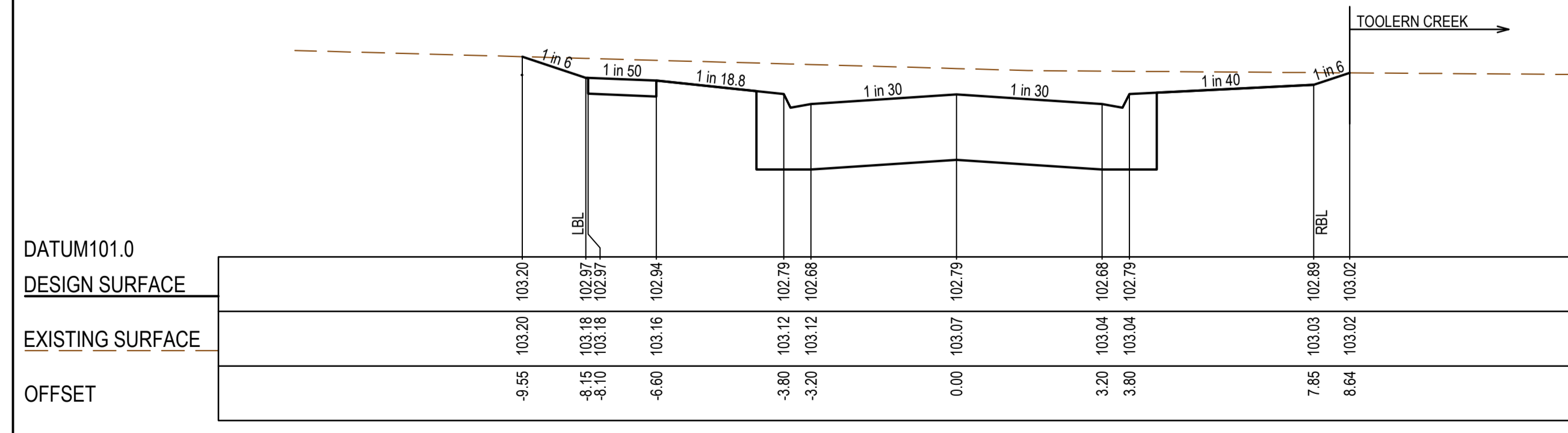
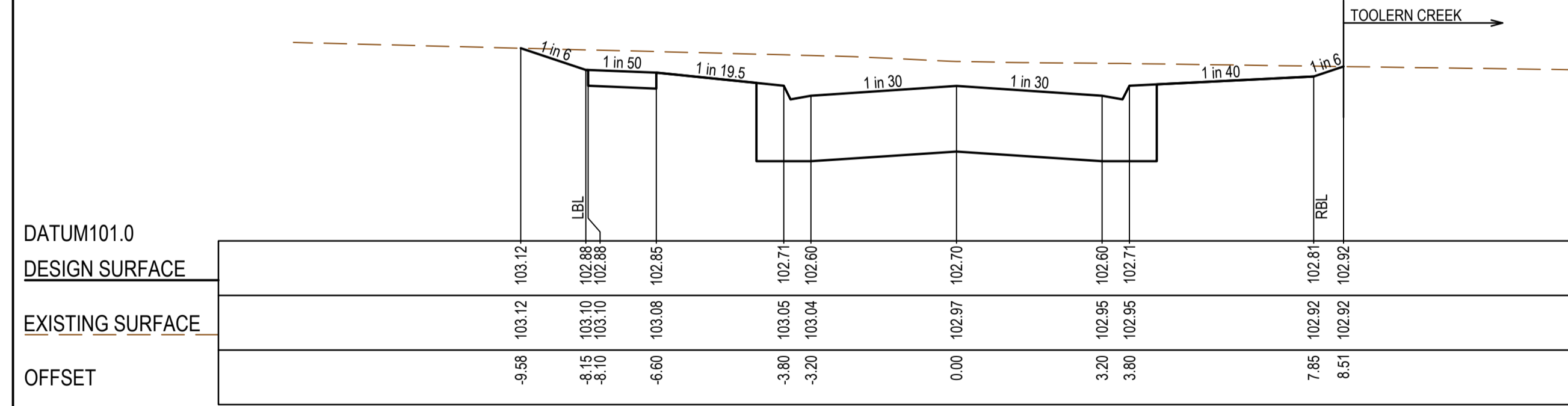
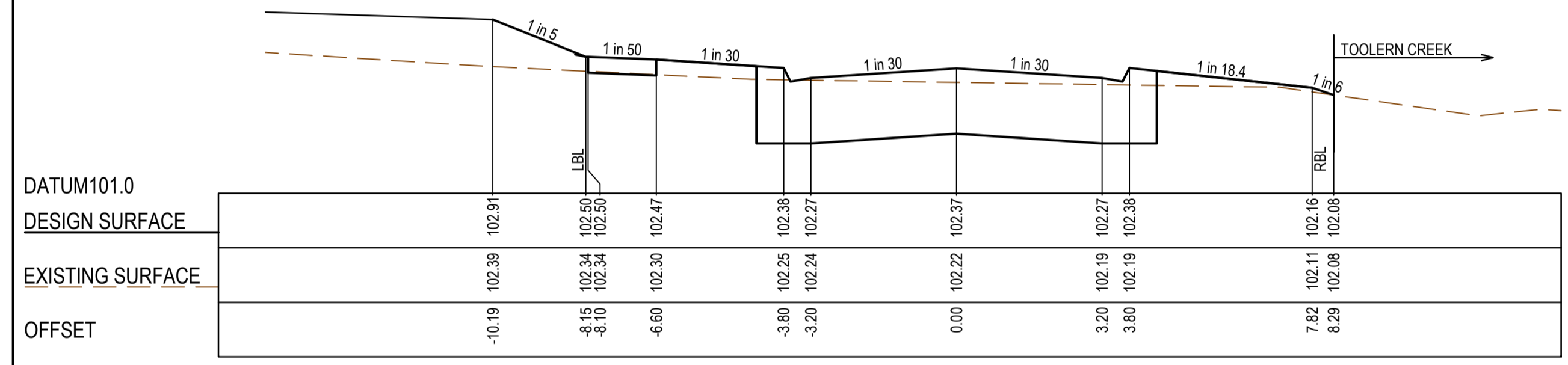
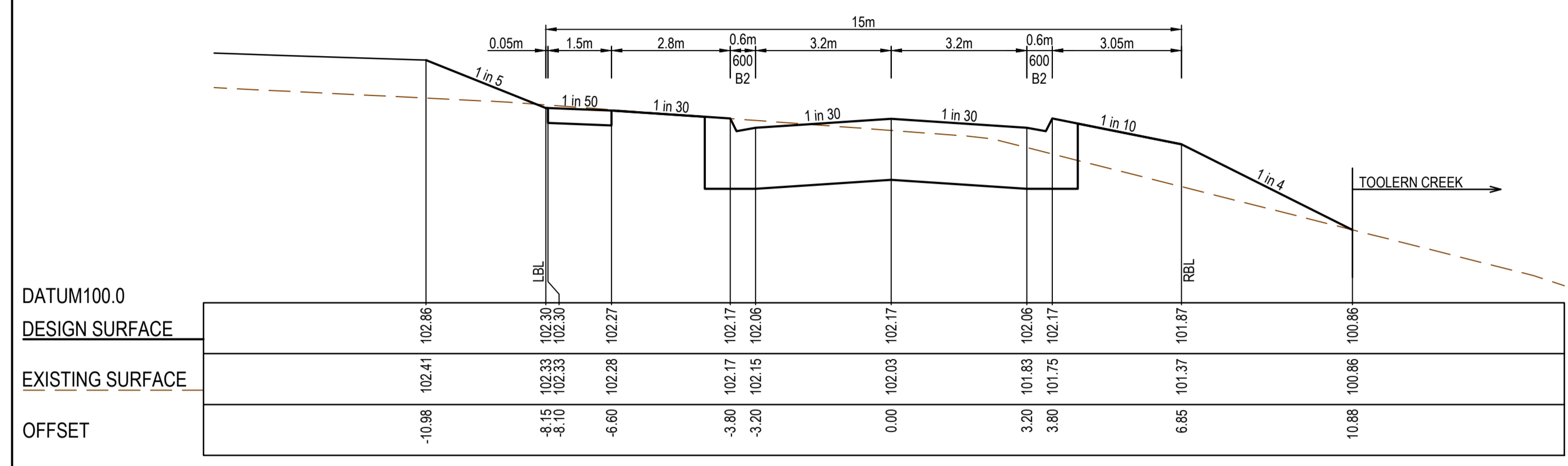
Seventh Bend - Stage 17 Melton City Council Road and Drainage Longitudinal Sections - 2		MELWAYS REF <b>342 K7</b>	PROJECT / DRAWING No. <b>2250E-017-202</b>	SHEET No. <b>08 of 21</b>	REVISION <b>0</b>
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LEGEND	
	EXISTING SURFACE
	DESIGN LINE
	FUTURE DESIGN LINE

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



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

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

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**ISSUED FOR CONSTRUCTION**

PLAN OF SUB. NO.  
PS841628K

PERMIT REF. NO.  
PA2018/6160

0 1 2 4  
0 0.5 1 2  
Scale H1:100, V1:50  
SCALE AS SHOWN AT 1

**SMEC**  
Member of the Surlana Jurong Group  
ABN 47 065 475 149  
Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

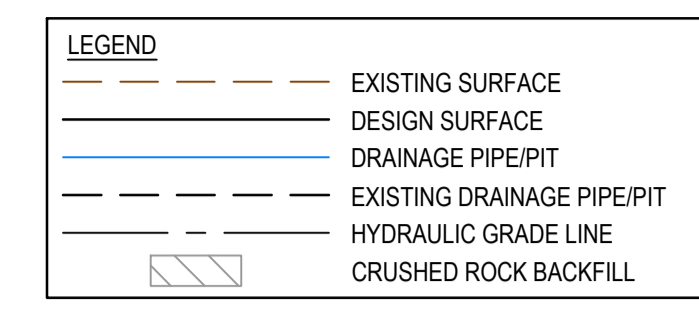
# SEVENTH BEND

Seventh Bend - Stage 17  
Melton City Council  
Road and Drainage  
Cross Sections: Kingdom Boulevard

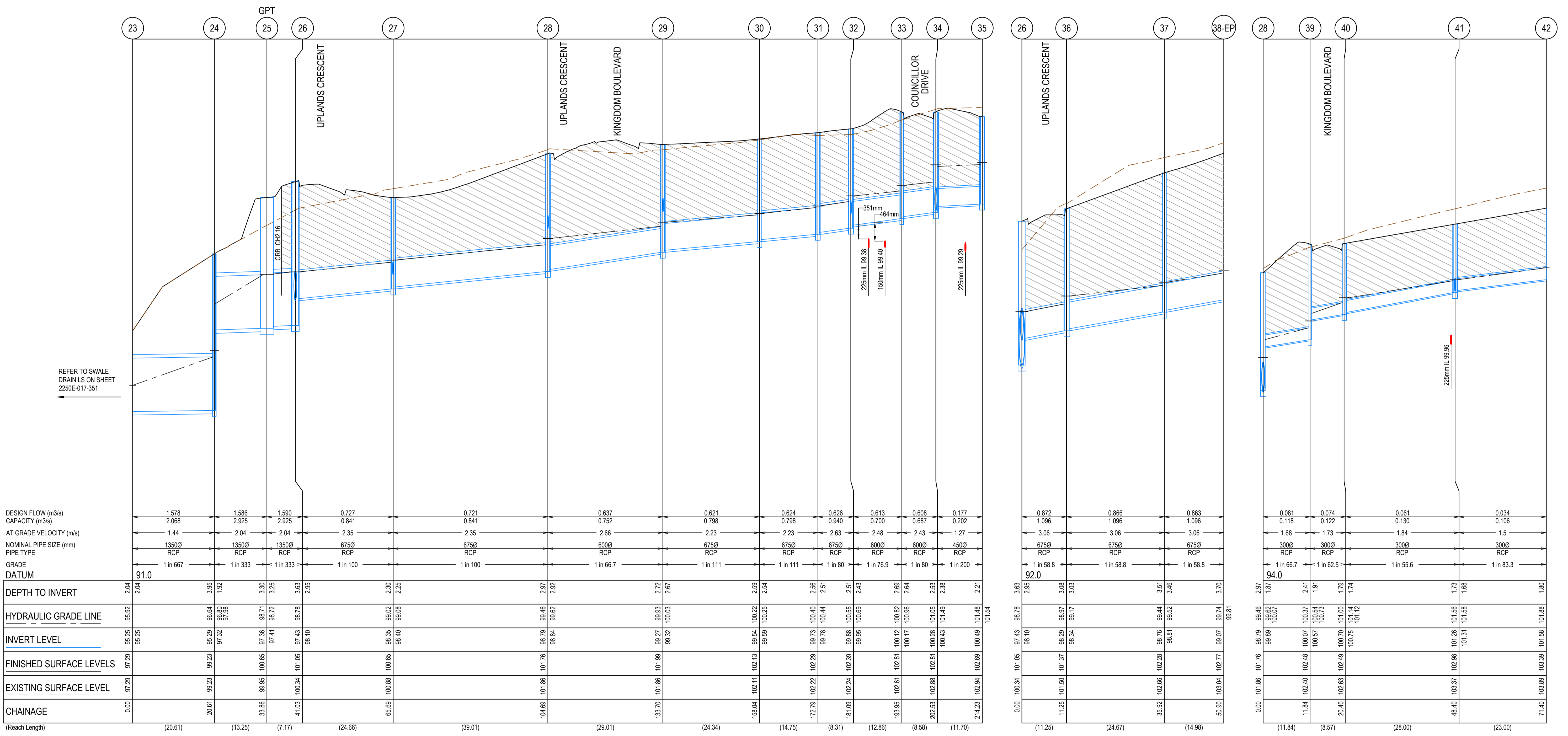
MELWAYS REF 342 K7	PROJECT / DRAWING No. 2250E-017-253	SHEET No. 11 of 21	REVISION 0
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**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE WITH MELTON CITY COUNCIL STANDARDS & SPECIFICATION CLASS 2 UNDER ROAD PAVEMENT & CLASS 3 BEHIND KERB



- NOTES**
- PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 97% OF MAXIMUM FOUND IN THE STANDARD COMPACTION TEST FOR THE FOLLOWING:
    - BENEATH THE ROAD PAVEMENT OR DRIVEWAY CROSSOVER TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER
    - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM NEAR THE LOWER EDGE
  - ALL DRAINAGE PIPES TO BE RUBBER RING BELLED SOCKET JOINT TYPE (RRJ).
  - ALL DRAINAGE PIPES SHALL BE CLASS 2 RCP, UNLESS OTHERWISE NOTED.
  - WHERE PITS DROP LESS THAN 50mm, THE PIT FLOOR MUST BE SHAPED TO MATCH THE LOWER HALF OF THE PIPE.



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

Quality Management ISO 9001  
 OHS Management AS/NZS 1874  
 Environmental Management ISO 14001

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PLAN OF SUB. NO. PS841628K  
 PERMIT REF. NO. PA2018/6160

**ISSUED FOR CONSTRUCTION**

Scale H1:500, V1:50  
 SCALE AS SHOWN AT 1

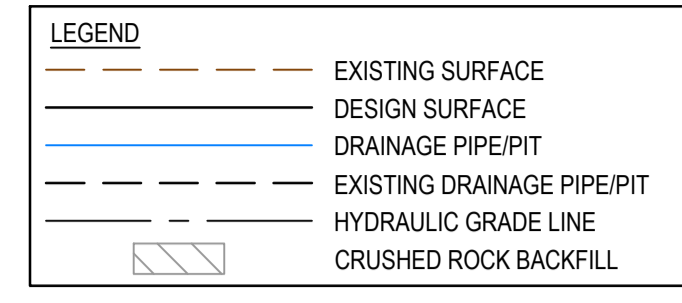
**SMEC**  
 Member of the Surlana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

# SEVENTH BEND

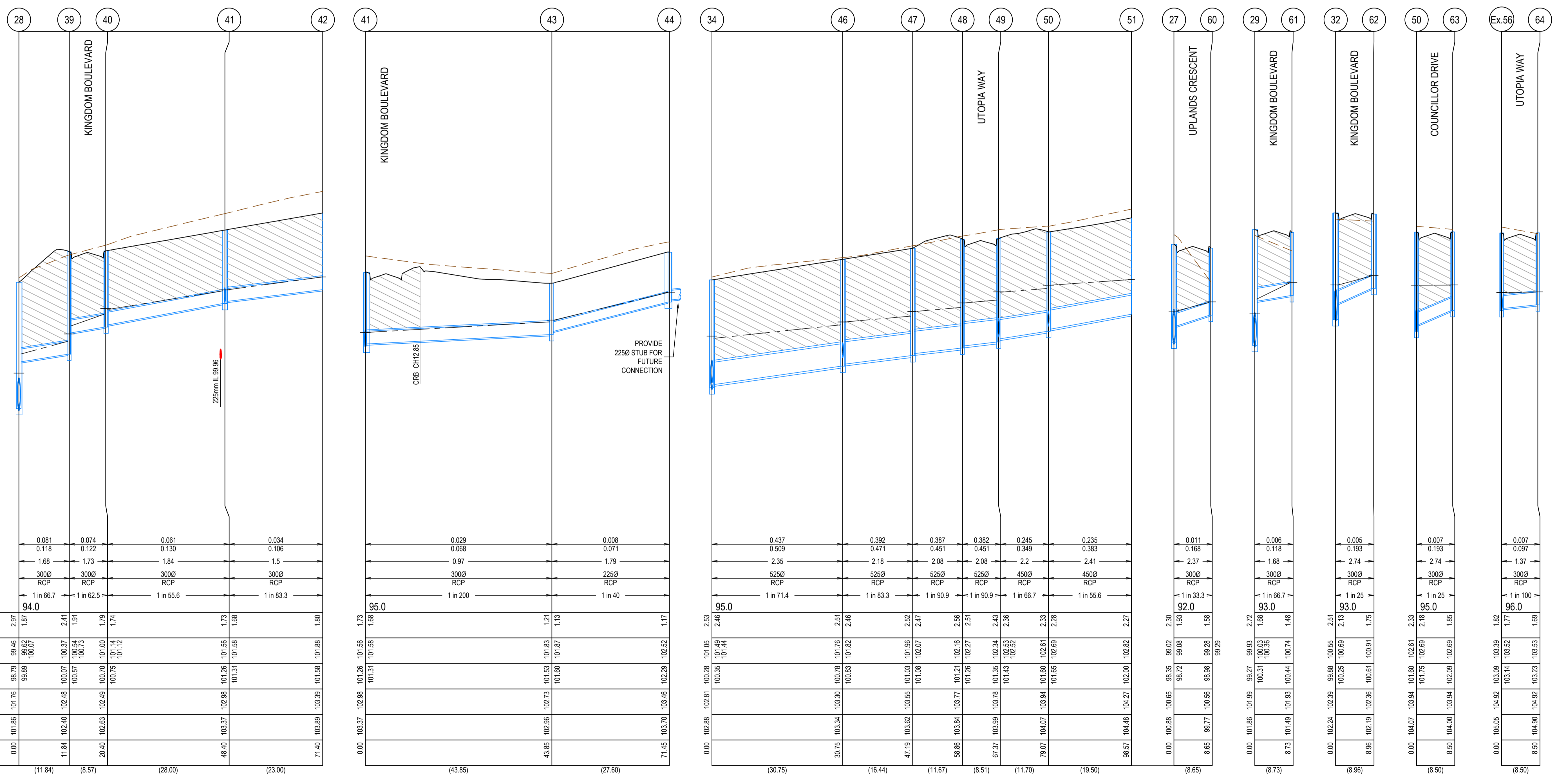
Seventh Bend - Stage 17  
 Melton City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 1

MELWAYS REF: 342 K7  
 PROJECT / DRAWING No: 2250E-017-301  
 SHEET No: 13 of 21  
 REVISION: 0

**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL, COMPACTED IN ACCORDANCE WITH MELTON CITY COUNCIL STANDARDS & SPECIFICATION CLASS 2 UNDER ROAD PAVEMENT & CLASS 3 BEHIND KERB



- NOTES**
- PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 97% OF MAXIMUM FOUND IN THE STANDARD COMPACTION TEST FOR THE FOLLOWING:
    - BENEATH THE ROAD PAVEMENT OR DRIVEWAY CROSSOVER TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER
    - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM NEAR THE LOWER EDGE
  - ALL DRAINAGE PIPES TO BE RUBBER RING BELLED SOCKET JOINT TYPE (RRJ).
  - ALL DRAINAGE PIPES SHALL BE CLASS 2 RCP, UNLESS OTHERWISE NOTED.
  - WHERE PITS DROP LESS THAN 50mm, THE PIT FLOOR MUST BE SHAPED TO MATCH THE LOWER HALF OF THE PIPE.



DESIGN FLOW (m³/s)	0.081	0.074	0.061	0.034
CAPACITY (m³/s)	0.118	0.122	0.130	0.106
AT GRADE VELOCITY (m/s)	1.68	1.73	1.84	1.5
NOMINAL PIPE SIZE (mm)	3000	3000	3000	3000
PIPE TYPE	RCP	RCP	RCP	RCP
GRADE DATUM	1 in 66.7	1 in 62.5	1 in 55.6	1 in 83.3
DATUM	94.0			
DEPTH TO INVERT	2.97	1.87	2.41	1.80
HYDRAULIC GRADE LINE	99.46	100.37	101.56	101.88
INVERT LEVEL	98.79	100.07	101.26	101.58
FINISHED SURFACE LEVELS	101.76	102.48	103.70	103.39
EXISTING SURFACE LEVEL	101.86	102.40	103.37	103.89
CHAINAGE	0.00	11.84	20.40	71.40
(Reach Length)	(11.84)	(8.57)	(28.00)	(23.00)

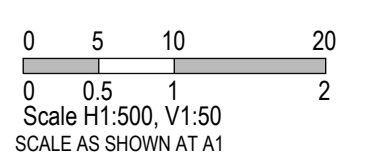
DATUM	95.0
DEPTH TO INVERT	1.73
HYDRAULIC GRADE LINE	101.31
INVERT LEVEL	101.26
FINISHED SURFACE LEVELS	102.98
EXISTING SURFACE LEVEL	103.37
CHAINAGE	0.00
(Reach Length)	(43.85)

DATUM	95.0
DEPTH TO INVERT	2.53
HYDRAULIC GRADE LINE	100.35
INVERT LEVEL	100.28
FINISHED SURFACE LEVELS	102.81
EXISTING SURFACE LEVEL	102.88
CHAINAGE	0.00
(Reach Length)	(30.75)

DATUM	92.0
DEPTH TO INVERT	2.30
HYDRAULIC GRADE LINE	99.02
INVERT LEVEL	98.35
FINISHED SURFACE LEVELS	100.65
EXISTING SURFACE LEVEL	100.88
CHAINAGE	0.00
(Reach Length)	(8.65)

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

PLAN OF SUB. NO. PS841628K  
 PERMIT REF. NO. PA2018/6160  
**ISSUED FOR CONSTRUCTION**



Member of the Surlana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

# SEVENTH BEND

Seventh Bend - Stage 17  
 Melton City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 2

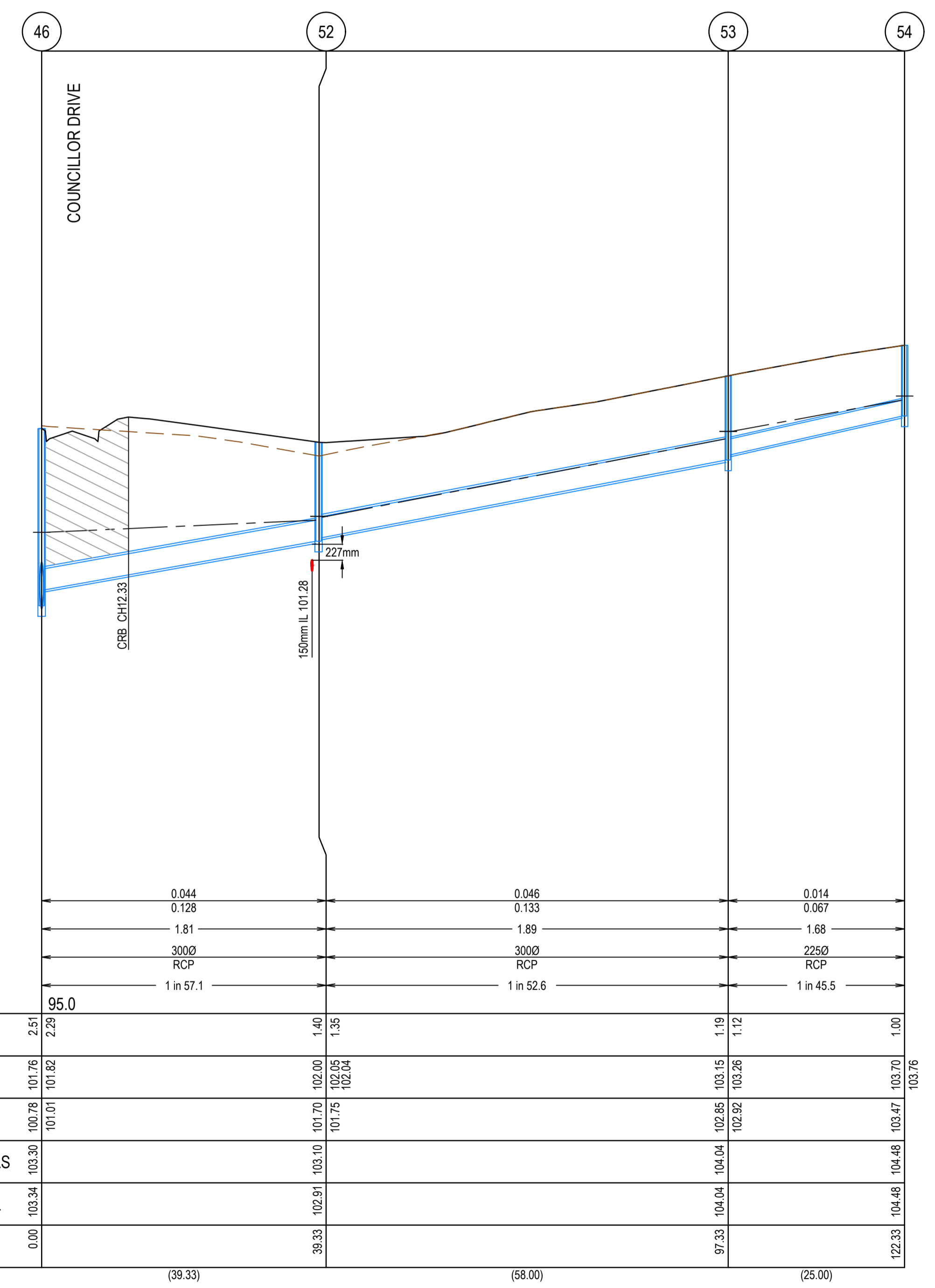
MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
342 K7	2250E-017-302	14 of 21	0

**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL, COMPACTED IN ACCORDANCE WITH MELTON CITY COUNCIL STANDARDS & SPECIFICATION CLASS 2 UNDER ROAD PAVEMENT & CLASS 3 BEHIND KERB

**LEGEND**

	EXISTING SURFACE
	DESIGN SURFACE
	DRAINAGE PIPE/PIT
	EXISTING DRAINAGE PIPE/PIT
	HYDRAULIC GRADE LINE
	CRUSHED ROCK BACKFILL

- NOTES**
- PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 97% OF MAXIMUM FOUND IN THE STANDARD COMPACTION TEST FOR THE FOLLOWING:  
 - BENEATH THE ROAD PAVEMENT OR DRIVEWAY CROSSOVER TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER.  
 - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM NEAR THE LOWER EDGE.
  - ALL DRAINAGE PIPES TO BE RUBBER RING BELLED SOCKET JOINT TYPE (RRJ).
  - ALL DRAINAGE PIPES SHALL BE CLASS 2 RCP, UNLESS OTHERWISE NOTED.
  - WHERE PITS DROP LESS THAN 50mm, THE PIT FLOOR MUST BE SHAPED TO MATCH THE LOWER HALF OF THE PIPE.



PIT NUMBER	TYPE	INTERNAL		INLET		OUTLET		F.S.L.	DEPTH	STANDARD DRAWING	REMARKS
		WIDTH (mm)	LENGTH (mm)	DIAMETER (mm)	INV R.L. (m)	DIAMETER (mm)	INV R.L. (m)				
23	OUTLET			1350	95.25			97.29	2.04	MW 7251/08/103	
24	JUNCTION PIT	1650	600	1350	97.32	1350	95.29	99.23	3.95	EDCM 605 & 607	HAUNCH PIT TO 600 x 900 COVER
25	GRATED PIT	3200	4900	1350	97.41	1350	97.36	100.66	3.30	GPT	HUMEGUARD HG45A/L OR MELTON CC APPROVED EQUIVALENT
26	JUNCTION PIT	1800	1800	675	98.10	1350	97.43	101.06	3.63	EDCM 605 & MWSO 1023	DOUBLE HAUNCH PIT TO 600 x 900 COVER. PIT TO BE HAUNCHED TO MWSO 1023
27	DOUBLE SIDE ENTRY PIT	900	900	675	98.10	675	98.35	100.65	2.30	EDCM 602 & 607	HAUNCH PIT TO 600 x 900 COVER
28	SIDE ENTRY PIT GRATED	1050	900	600	98.84	675	98.79	101.76	2.97	EDCM 601 & 607	HAUNCH PIT TO 600 x 900 COVER
29	DOUBLE GRATED ENTRY PIT	1050	900	675	99.32	600	99.27	101.99	2.72	EDCM 602 & 607	HAUNCH PIT TO 600 x 900 COVER
30	SIDE ENTRY PIT GRATED	900	900	675	99.59	675	99.54	102.13	2.59	EDCM 601 & 607	HAUNCH PIT TO 600 x 900 COVER
31	JUNCTION PIT	900	900	675	99.78	675	99.73	102.29	2.56	EDCM 605 & 607	HAUNCH PIT TO 600 x 900 COVER
32	SIDE ENTRY PIT GRATED	1050	900	600	99.95	675	99.88	102.39	2.51	EDCM 601 & 607	HAUNCH PIT TO 600 x 900 COVER
33	SIDE ENTRY PIT GRATED	600	1050	600	100.17	600	100.12	102.81	2.69	EDCM 601 & 607	HAUNCH PIT TO 600 x 900 COVER
34	SIDE ENTRY PIT GRATED	900	900	450	100.43	600	100.28	102.81	2.53	EDCM 601 & 607	HAUNCH PIT TO 600 x 900 COVER
35	DOUBLE SIDE ENTRY PIT	900	900	450	100.54	450	100.49	102.69	2.21	EDCM 602 & 607	HAUNCH PIT TO 600 x 900 COVER
36	SIDE ENTRY PIT GRATED	900	1350	675	98.35	675	98.30	101.39	3.10	EDCM 601 & 607	HAUNCH PIT TO 600 x 900 COVER
37	JUNCTION PIT	900	900	675	98.82	675	98.77	102.30	3.53	EDCM 605 & 607	HAUNCH PIT TO 600 x 900 COVER
38	ENDPIPE			675	98.95	675	98.95	102.52	3.57		
39	SIDE ENTRY PIT GRATED	600	900	300	100.57	300	100.07	102.48	2.41	EDCM 601	
40	SIDE ENTRY PIT GRATED	600	900	300	100.75	300	100.70	102.49	1.79	EDCM 601	
41	SIDE ENTRY PIT GRATED	600	900	300	101.31	300	101.26	102.98	1.73	EDCM 601	
42	ENDPIPE			300	101.58	300	101.58	103.39	1.80		
43	JUNCTION PIT	600	900	225	101.60	300	101.53	102.73	1.21	EDCM 605	
44	JUNCTION PIT	600	900	225	102.34	225	102.29	103.46	1.17	EDCM 605	
46	JUNCTION PIT	750	900	525	100.83	525	100.78	103.30	2.51	EDCM 605 & 607	HAUNCH PIT TO 600 x 900 COVER
47	SIDE ENTRY PIT GRATED	750	900	525	101.08	525	101.03	103.55	2.52	EDCM 601 & 607	HAUNCH PIT TO 600 x 900 COVER
48	SIDE ENTRY PIT GRATED	600	900	525	101.26	525	101.21	103.77	2.56	EDCM 601	
49	DOUBLE SIDE ENTRY PIT	600	900	450	101.43	525	101.35	103.78	2.43	EDCM 602	
50	SIDE ENTRY PIT GRATED	600	900	375	101.50	450	101.60	103.94	2.33	EDCM 601	
51	ENDPIPE			450	102.01	450	102.01	104.27	2.27		
52	JUNCTION PIT	600	900	300	101.75	300	101.70	103.10	1.40	EDCM 605	
53	JUNCTION PIT	600	900	225	102.92	300	102.85	104.04	1.19	EDCM 605	
54	JUNCTION PIT	600	900			225	103.47	104.48	1.00	EDCM 605	
60	DOUBLE GRATED ENTRY PIT	600	900	300	98.98	300	98.98	100.56	1.58	EDCM 602	
61	DOUBLE GRATED ENTRY PIT	600	900	300	100.44	300	100.44	101.93	1.48	EDCM 602	
62	SIDE ENTRY PIT GRATED	900	600	300	100.61	300	100.61	102.36	1.75	EDCM 601	
63	SIDE ENTRY PIT GRATED	600	900	300	102.09	300	102.09	103.94	1.85	EDCM 601	
64	SIDE ENTRY PIT GRATED	600	900	300	103.23	300	103.23	104.92	1.69	EDCM 601	

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

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

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**ISSUED FOR CONSTRUCTION**

PLAN OF SUB. NO.  
PS841628K

PERMIT REF. NO.  
PA2018/6160

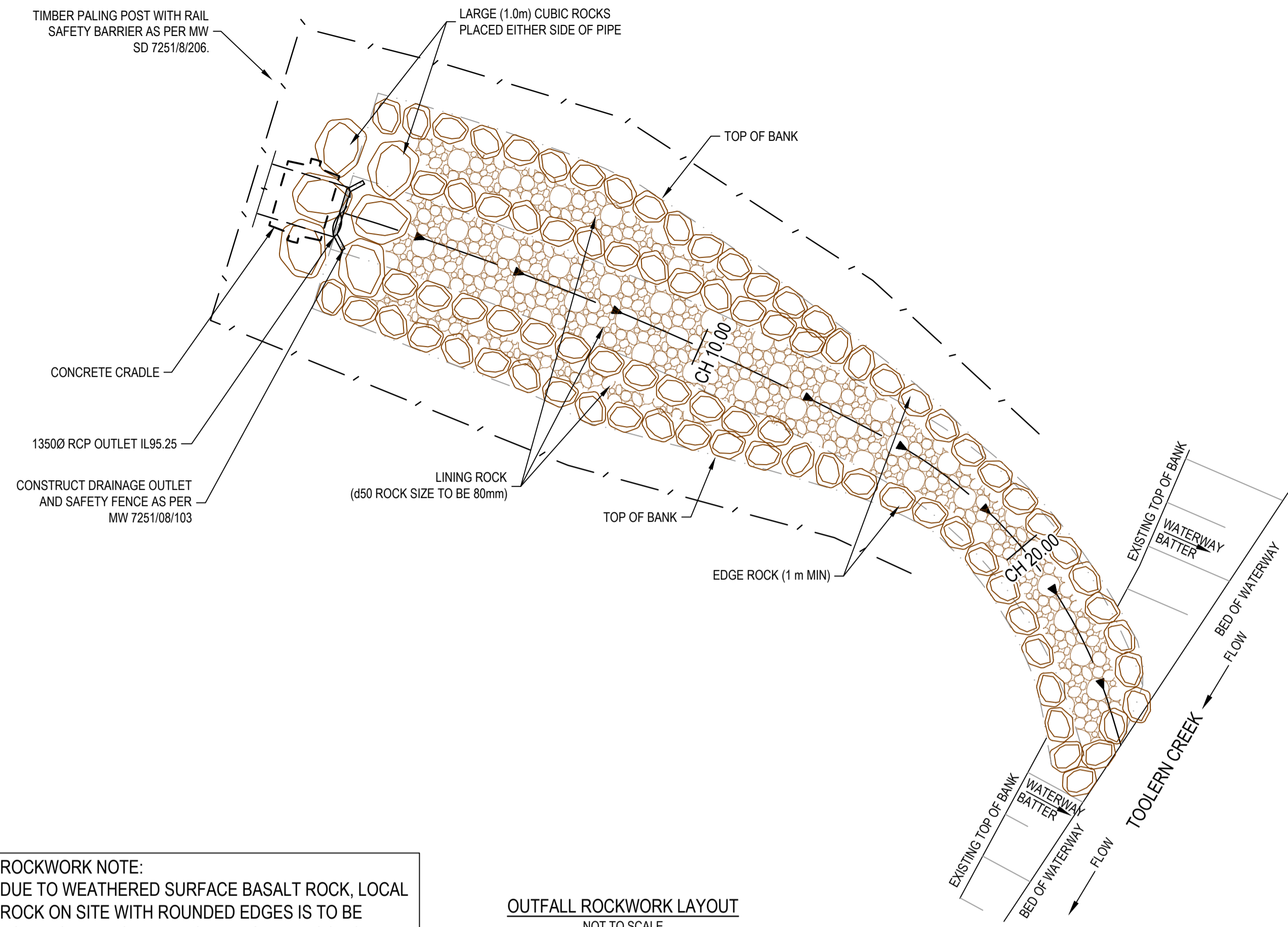
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**SMEC**  
 Member of the Surlana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

**SEVENTH BEND**

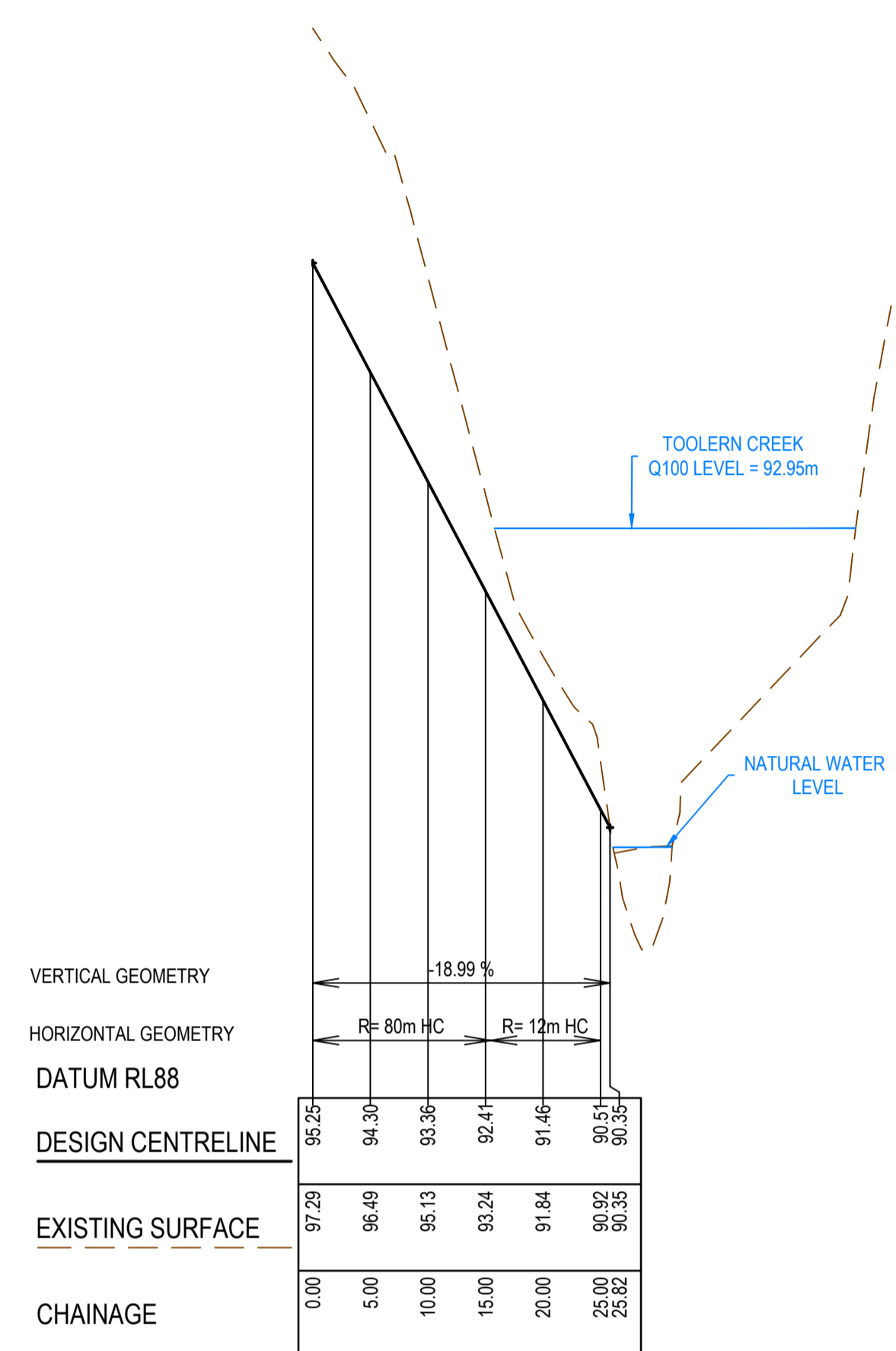
Seventh Bend - Stage 17  
 Melton City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 3  
 & Pit Schedule

MELWAYS REF: 342 K7  
 PROJECT / DRAWING No: 2250E-017-303  
 SHEET No: 15 of 21  
 REVISION: 0

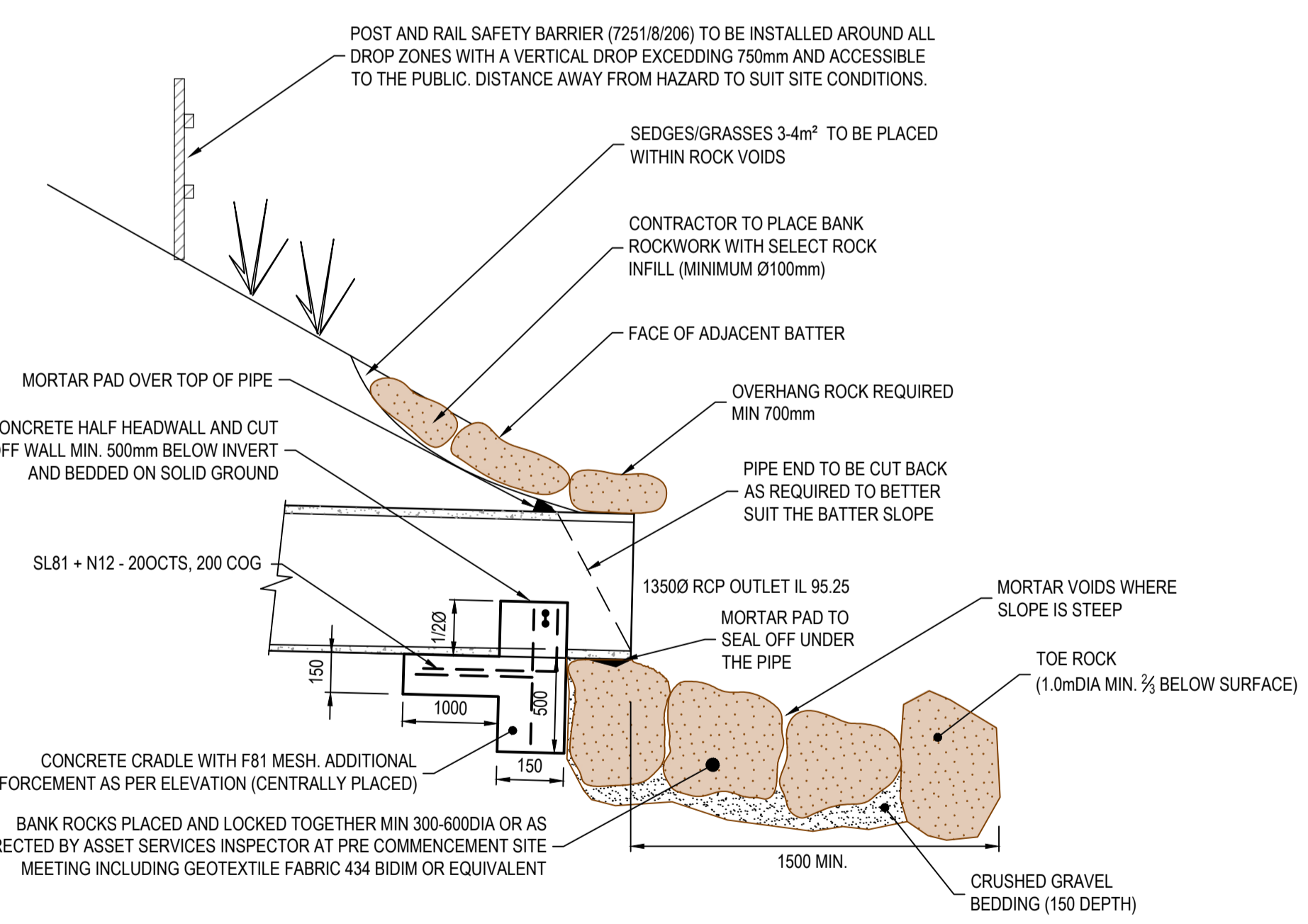
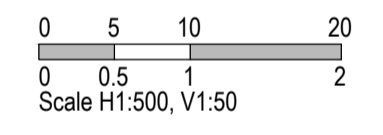


**ROCKWORK NOTE:**  
DUE TO WEATHERED SURFACE BASALT ROCK, LOCAL ROCK ON SITE WITH ROUNDED EDGES IS TO BE USED FOR THE OUTFALL CAPPING AND ROCK CHUTE, NOT QUARRIED OR BROKEN ROCK

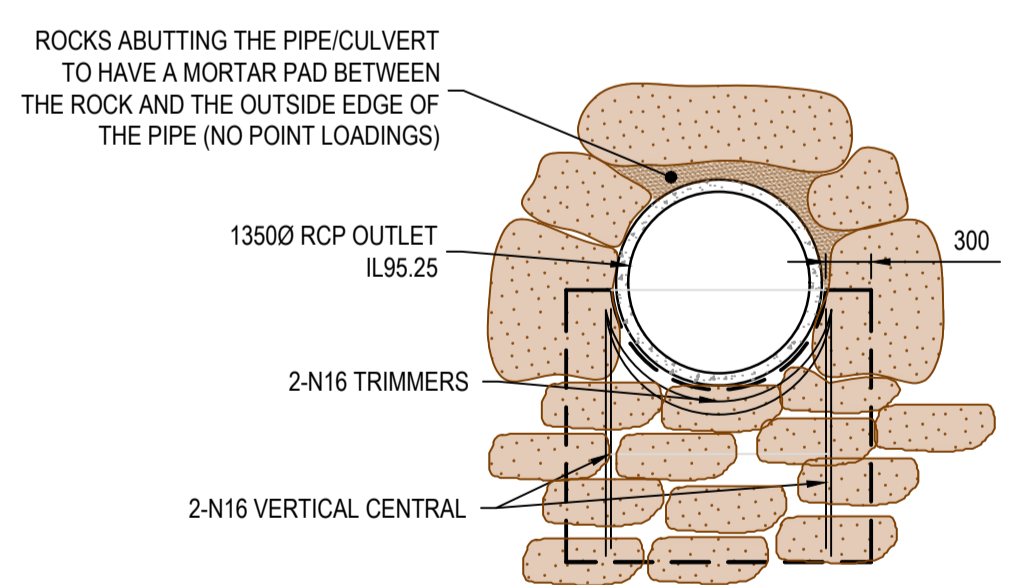
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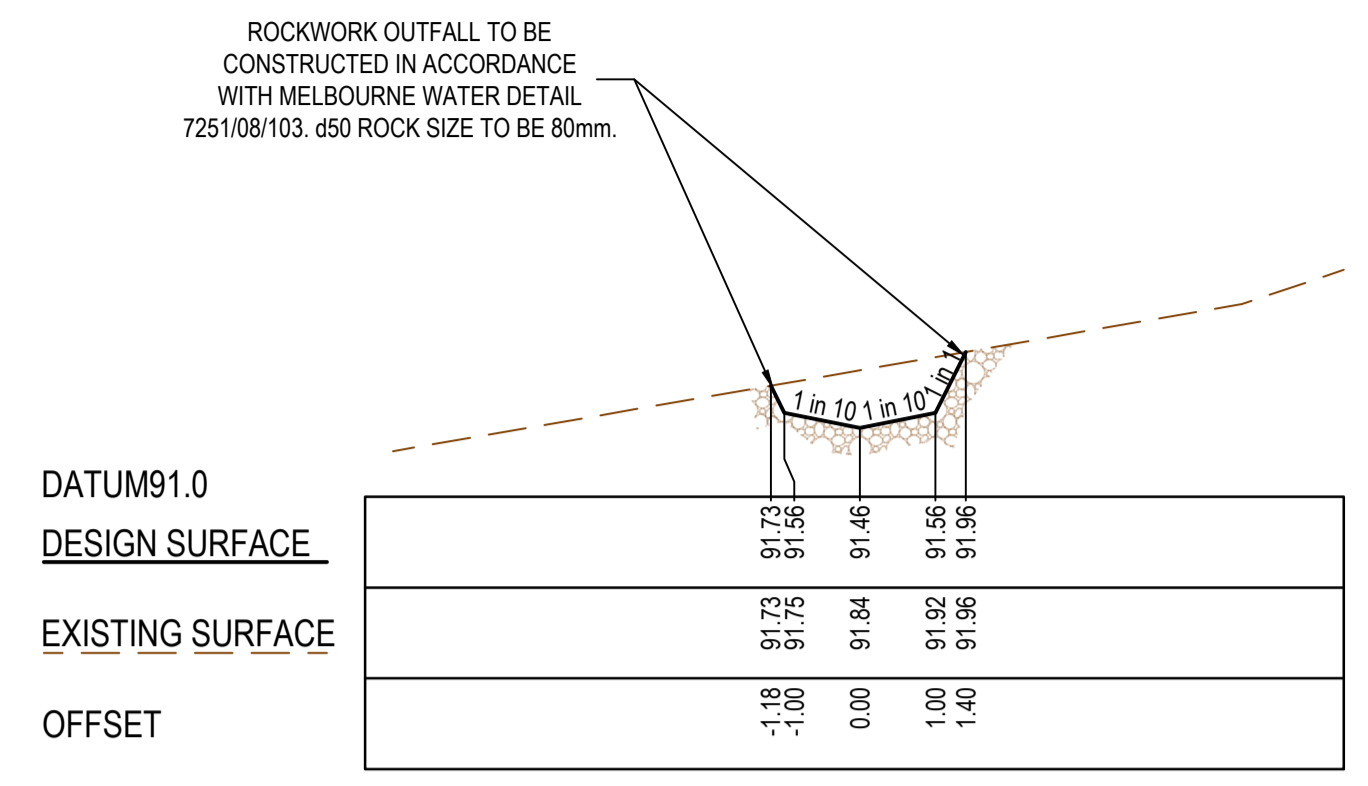
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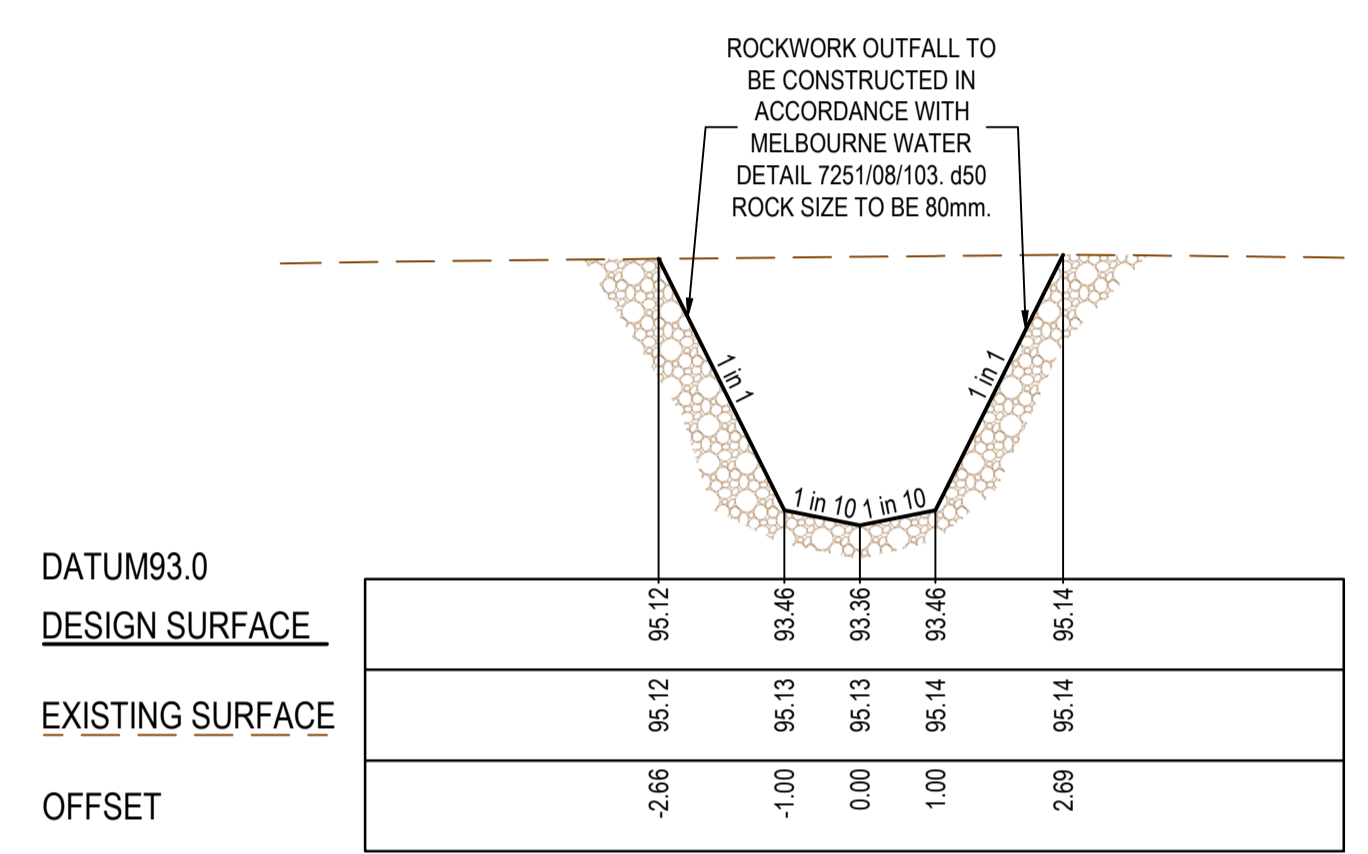
**PIPE OUTLET DETAIL**  
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NOT TO SCALE



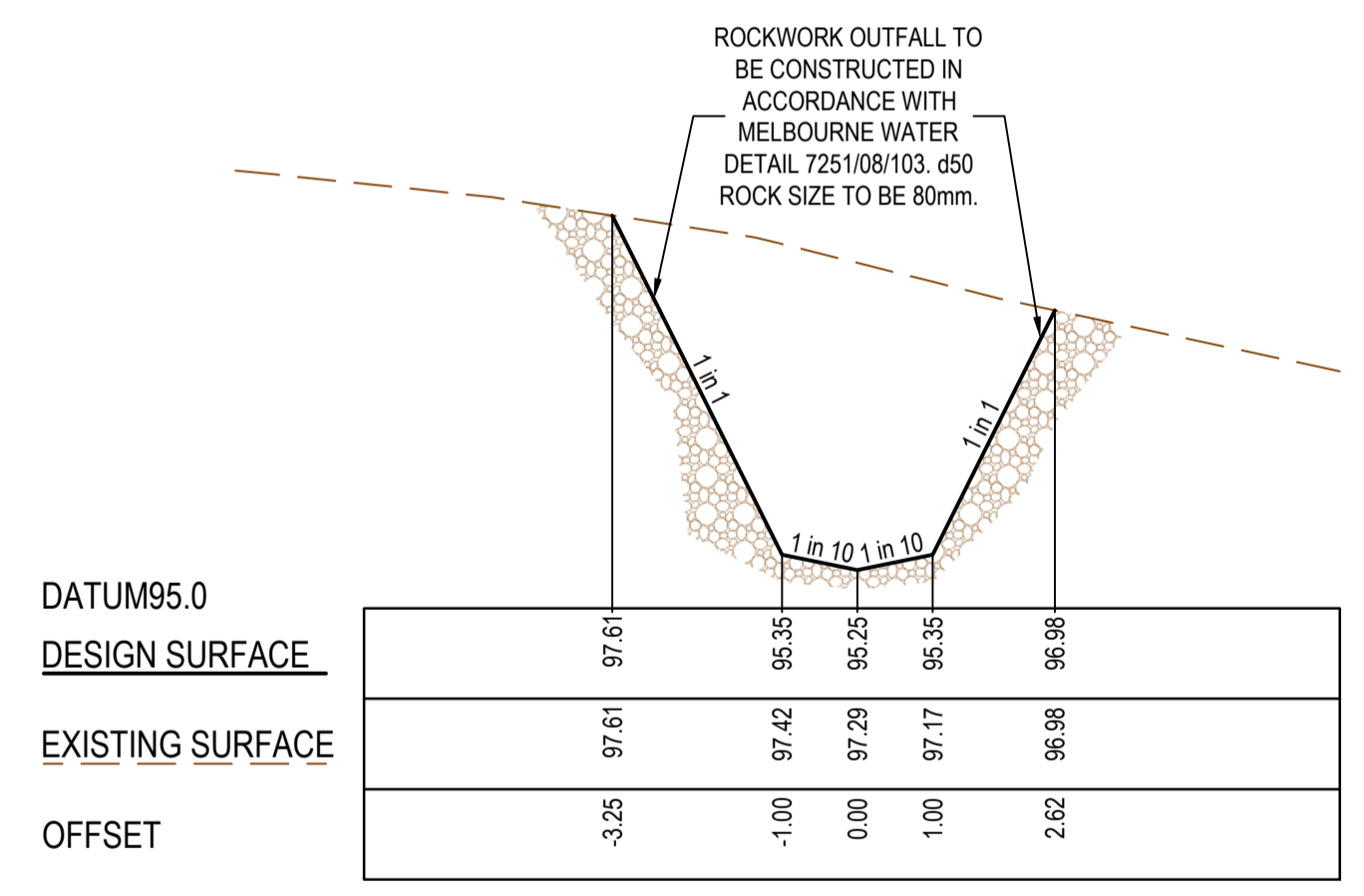
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ELEVATION



CH 20.00

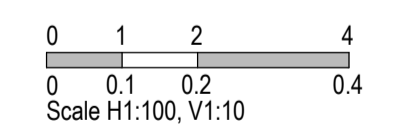


CH 10.00



CH 0.00

**OUTFALL TYPICAL CROSS SECTIONS**



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

Quality Management ISO 9001  
 OHS Management AS/NZS 4501  
 Environmental Management ISO 14001

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**ISSUED FOR CONSTRUCTION**

PLAN OF SUB. NO.  
PS41628K

PERMIT REF. NO.  
PA2018/6160

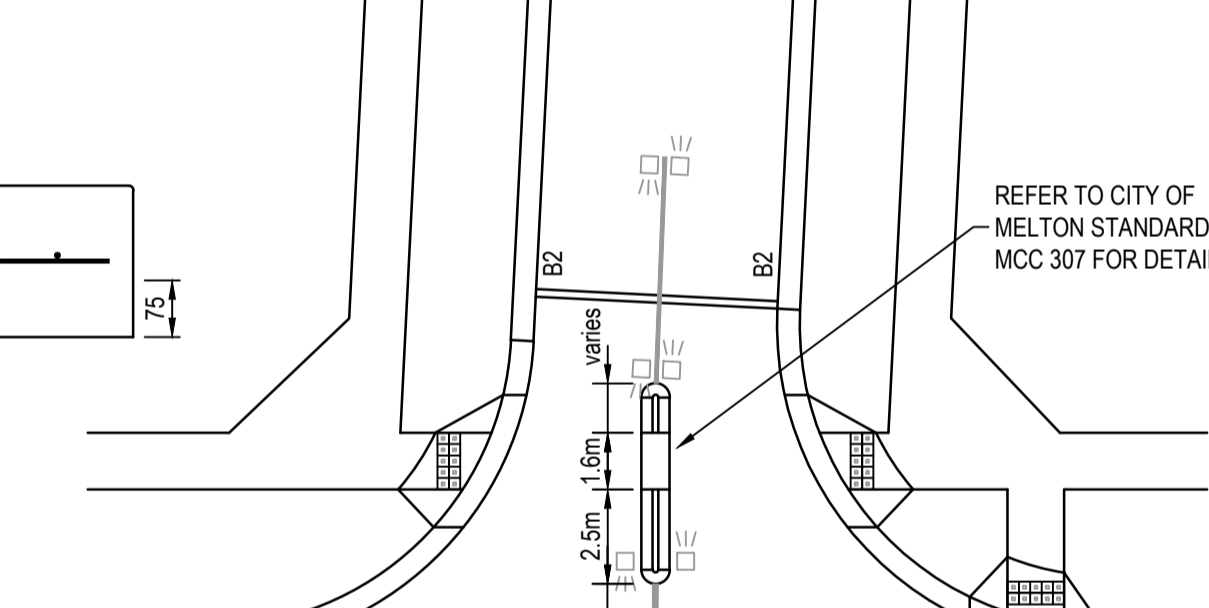
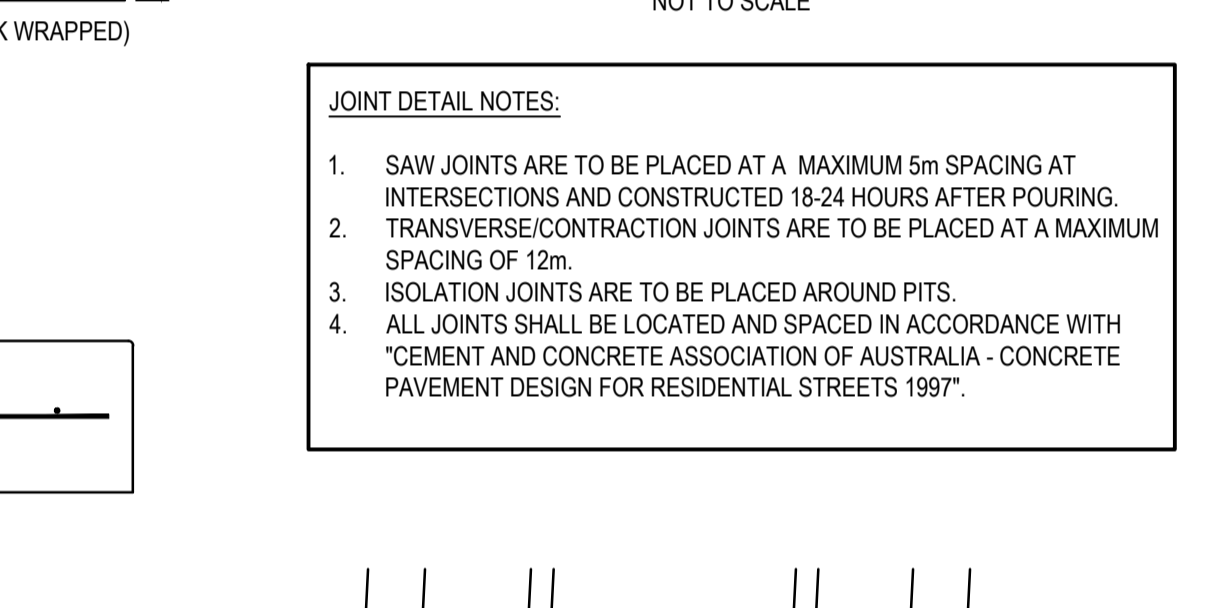
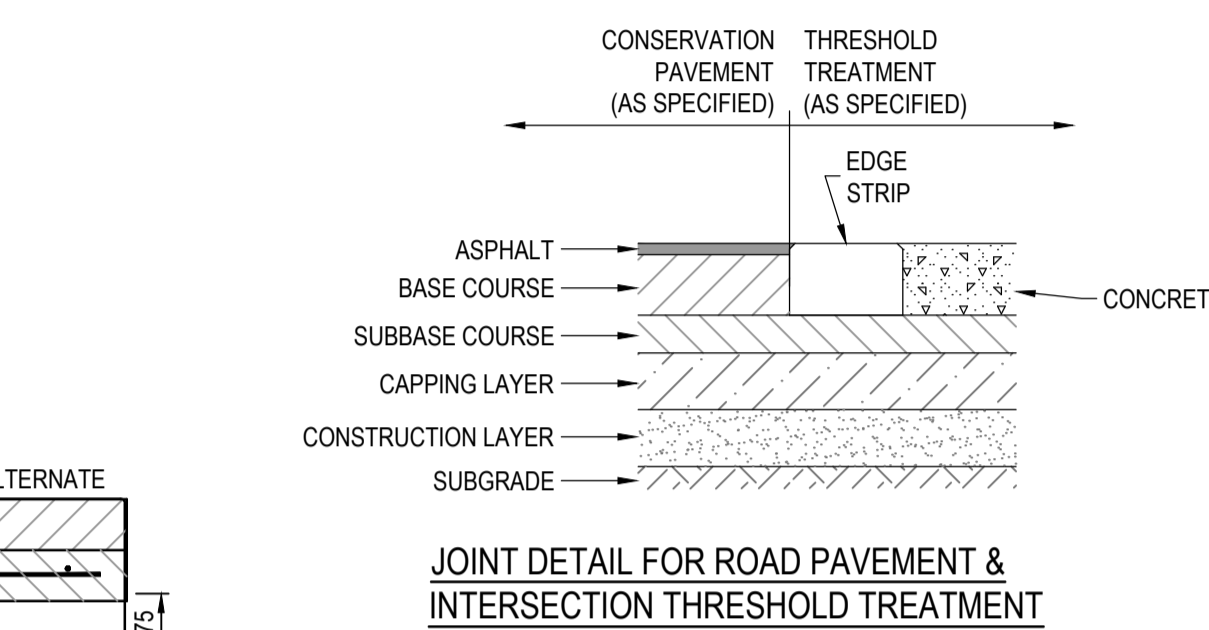
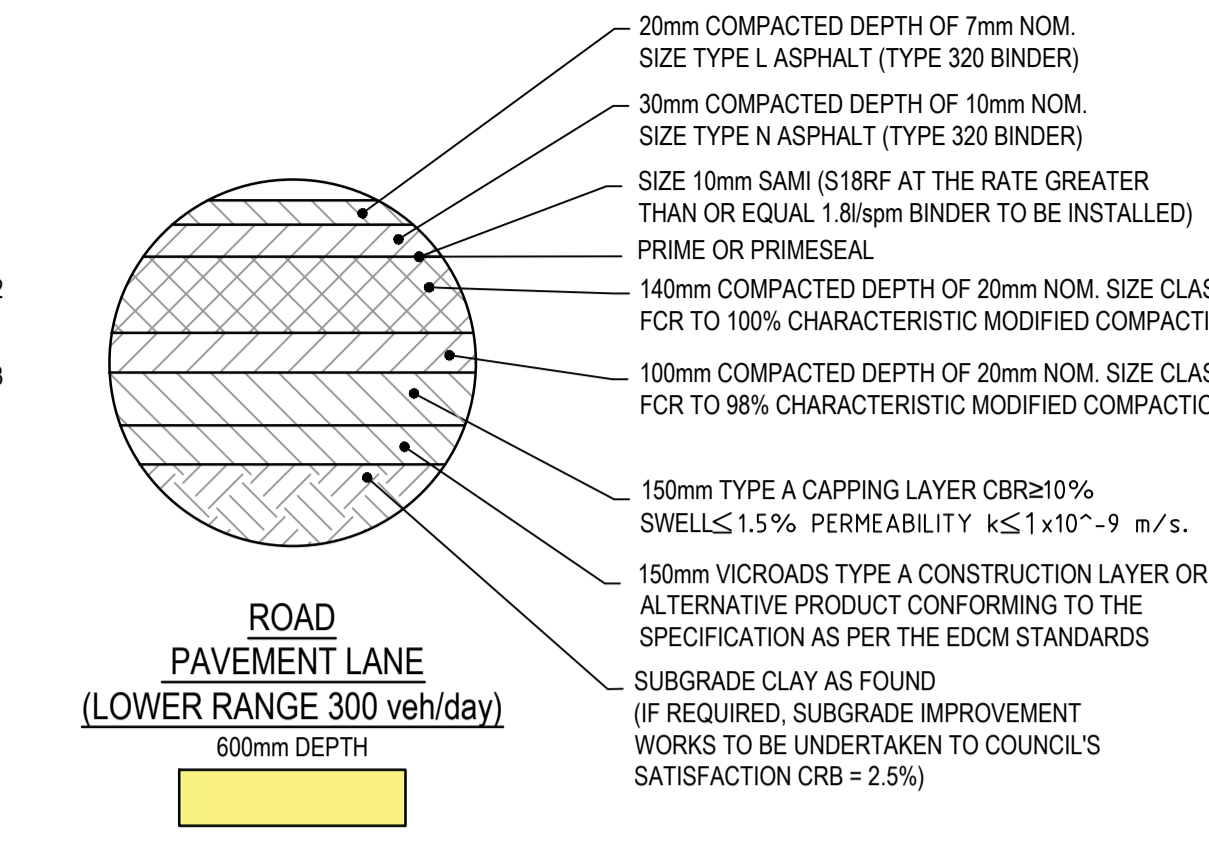
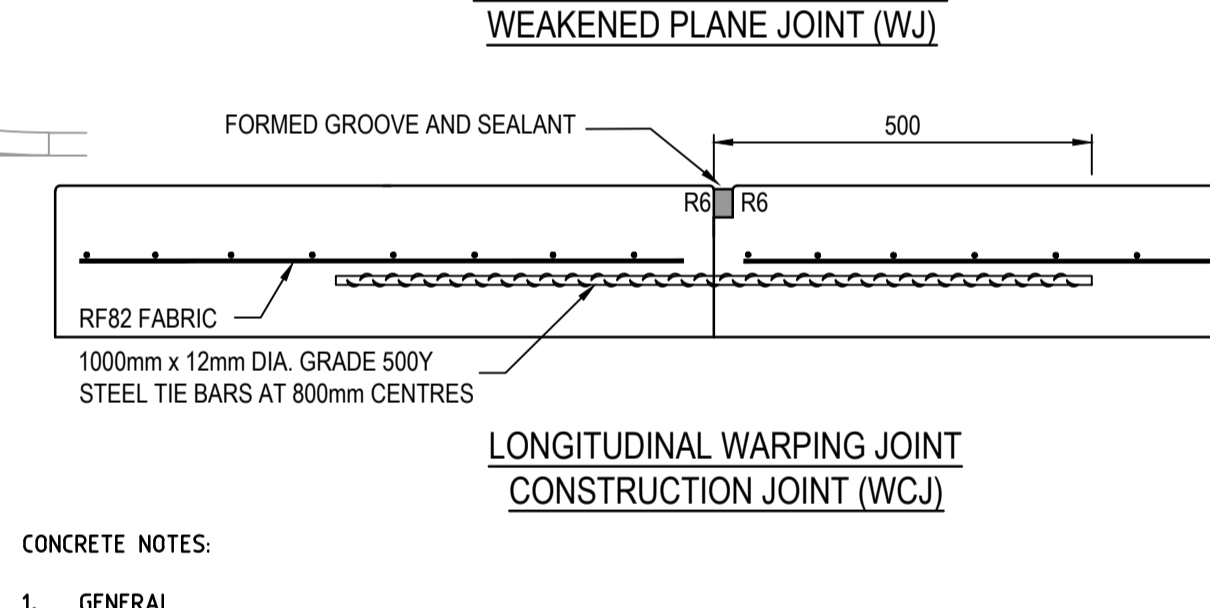
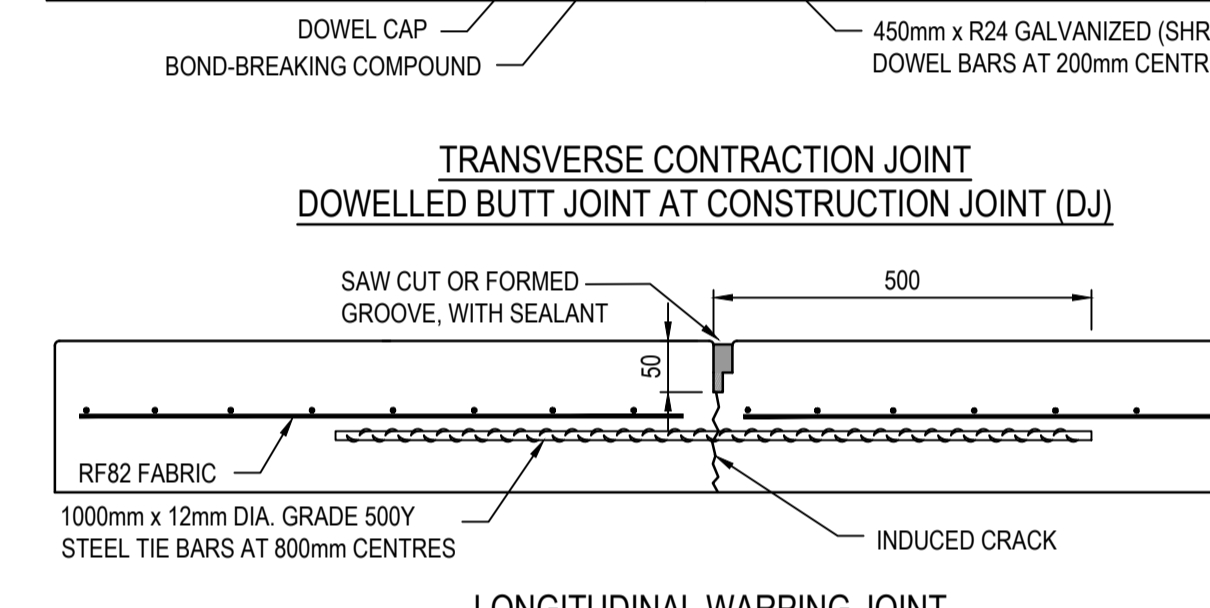
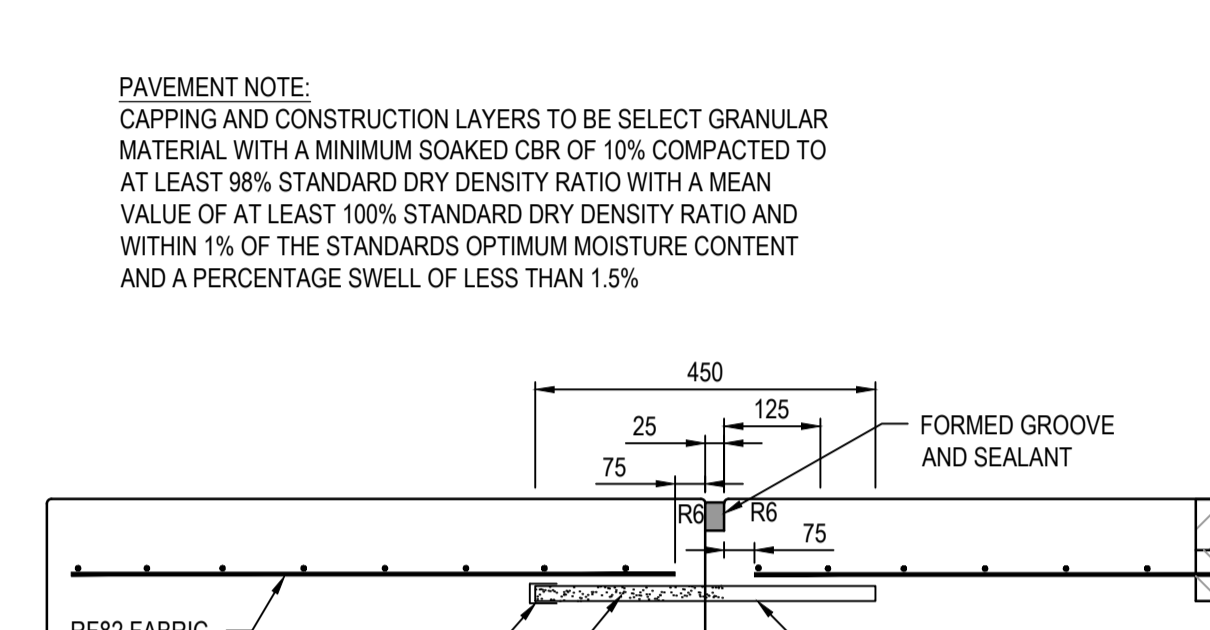
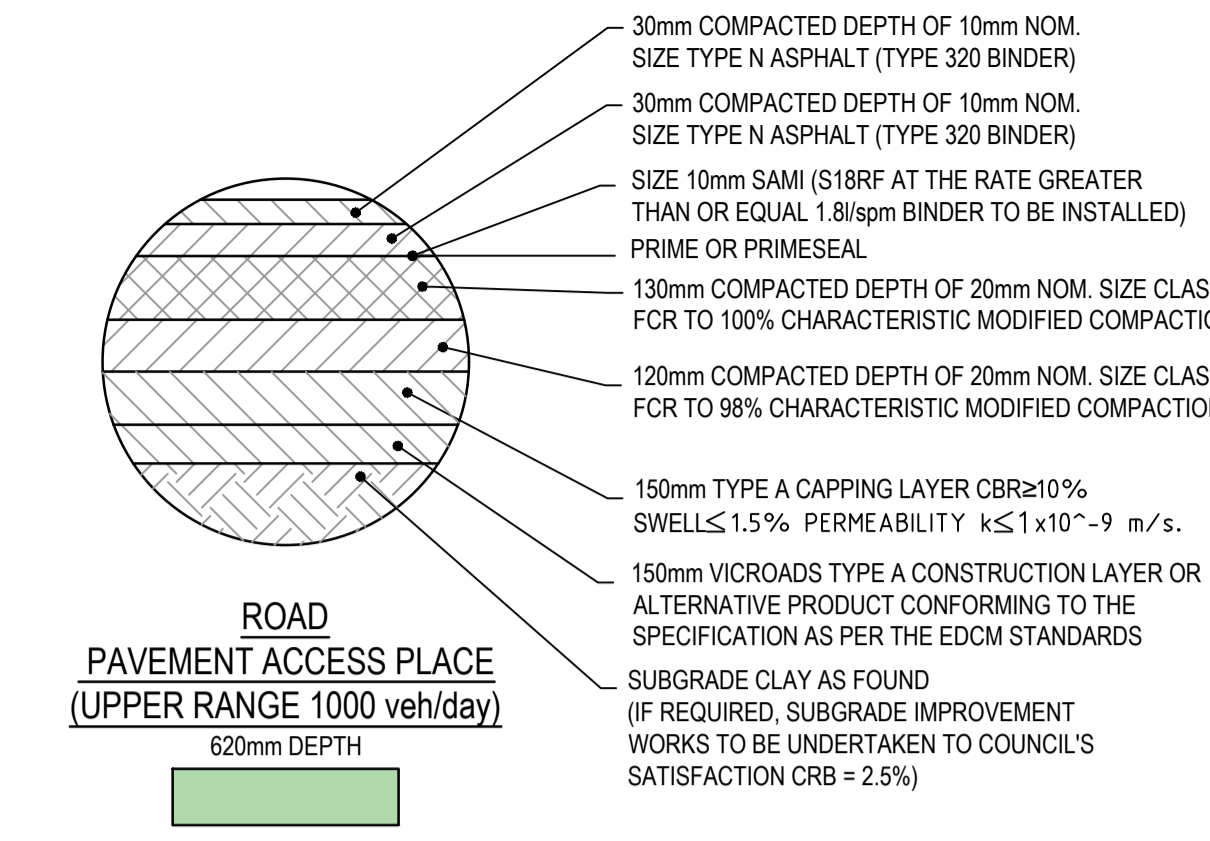
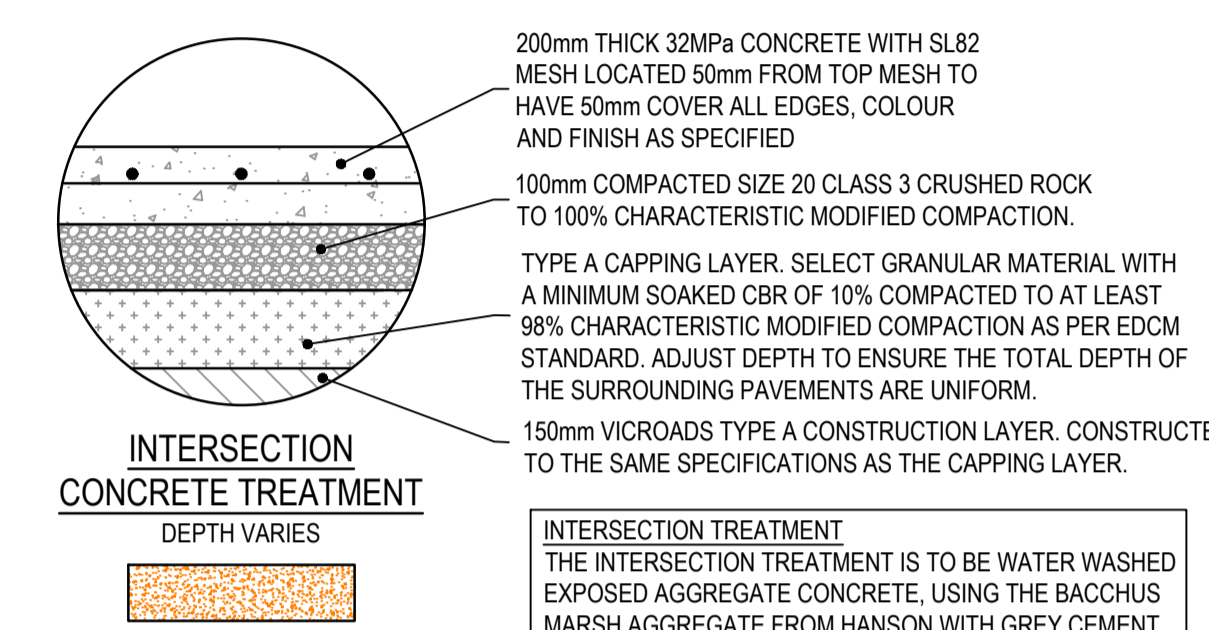
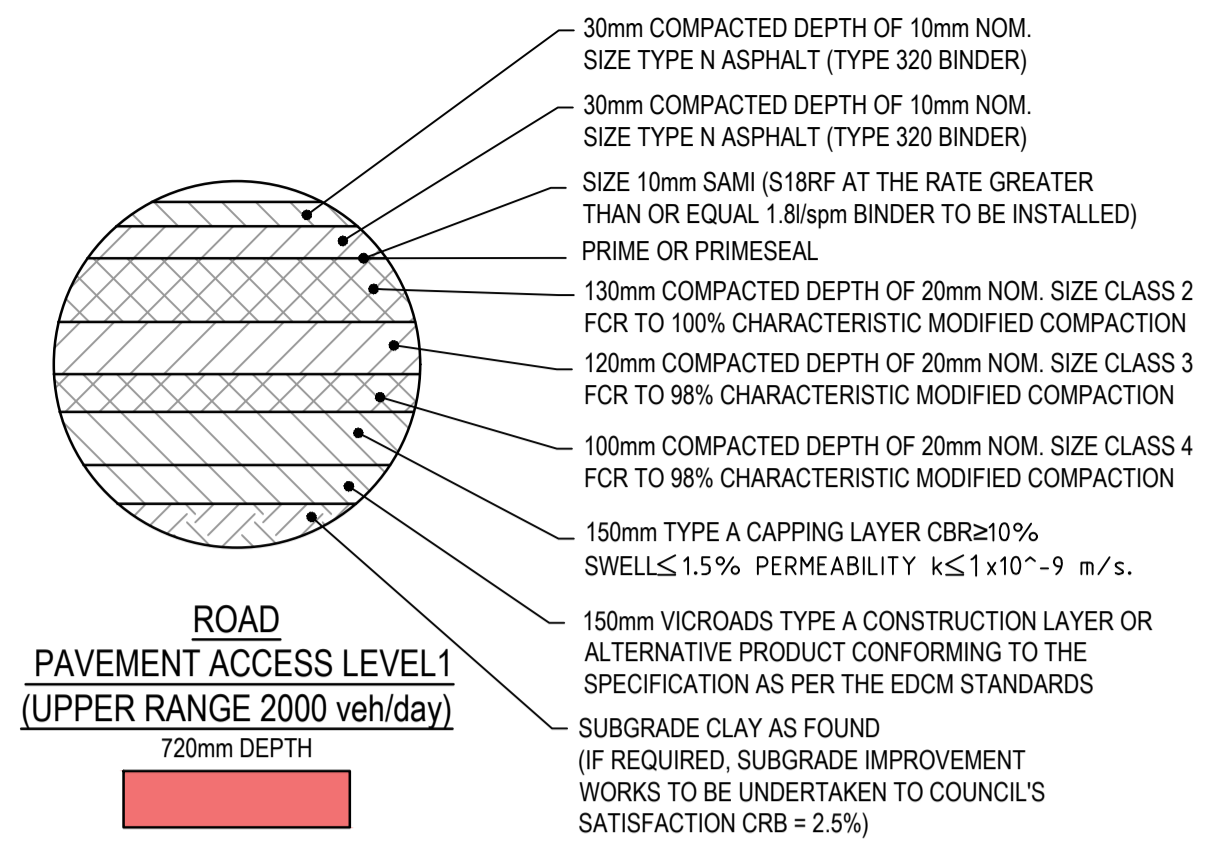
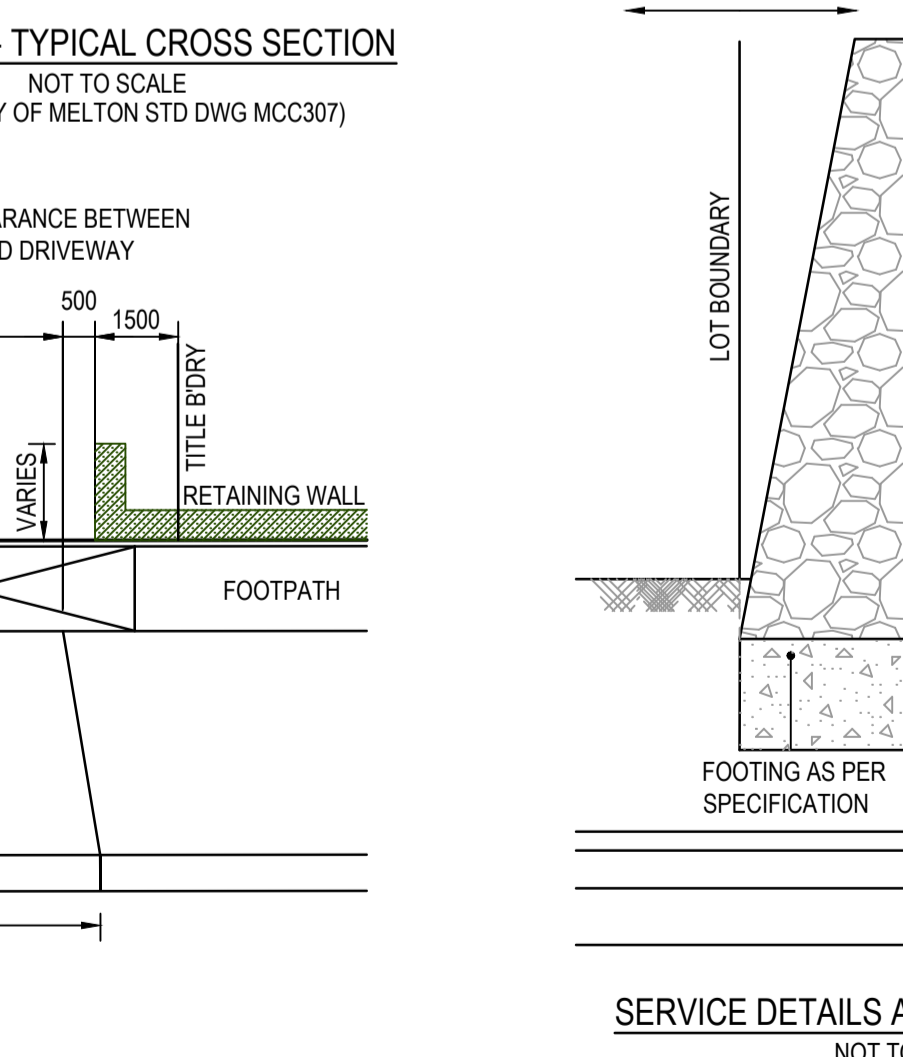
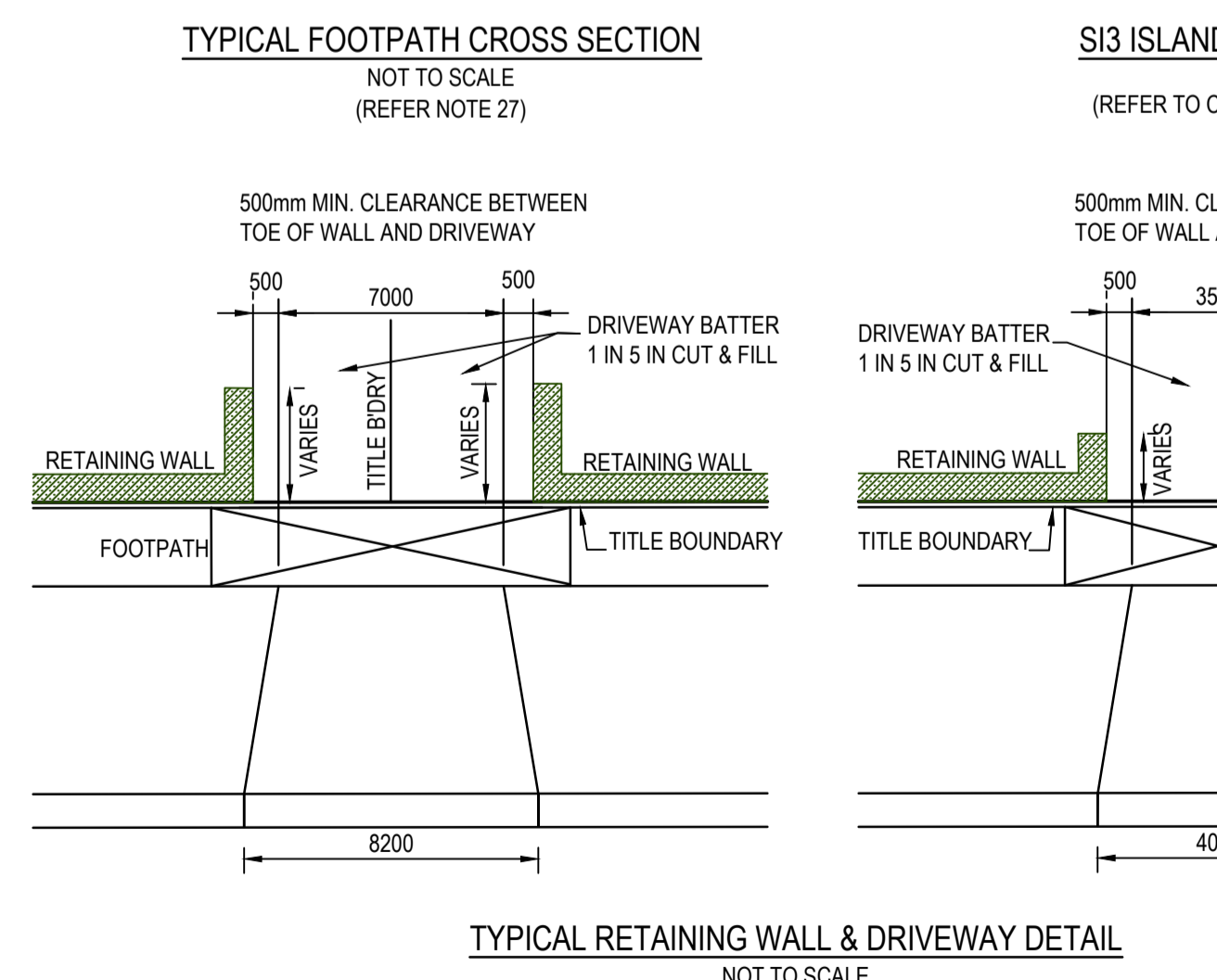
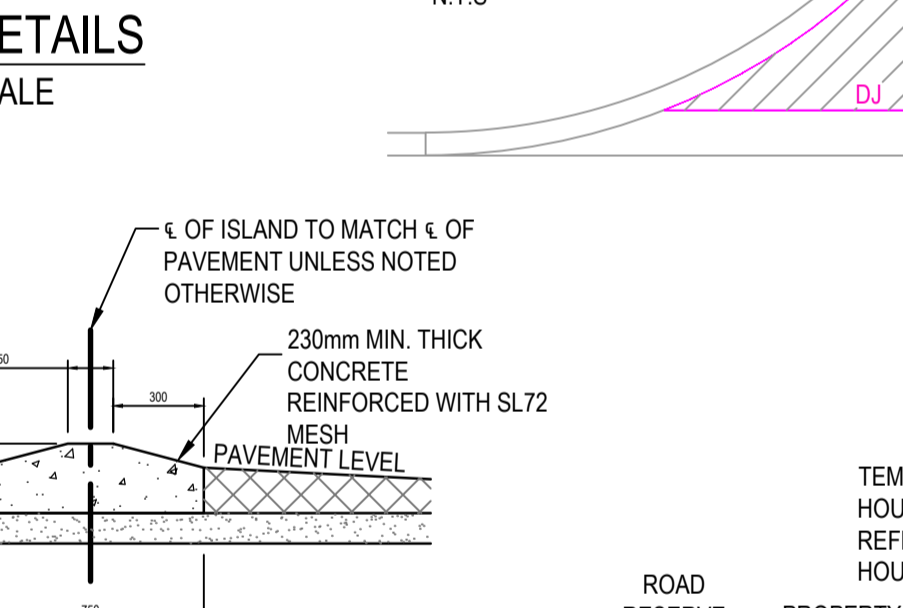
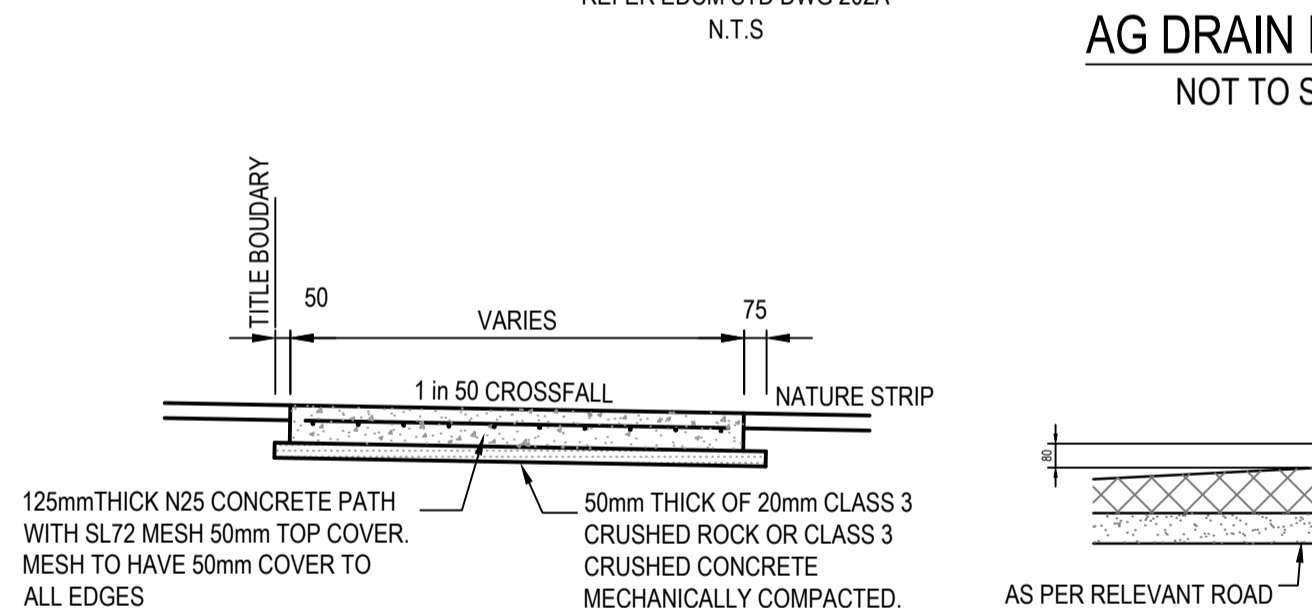
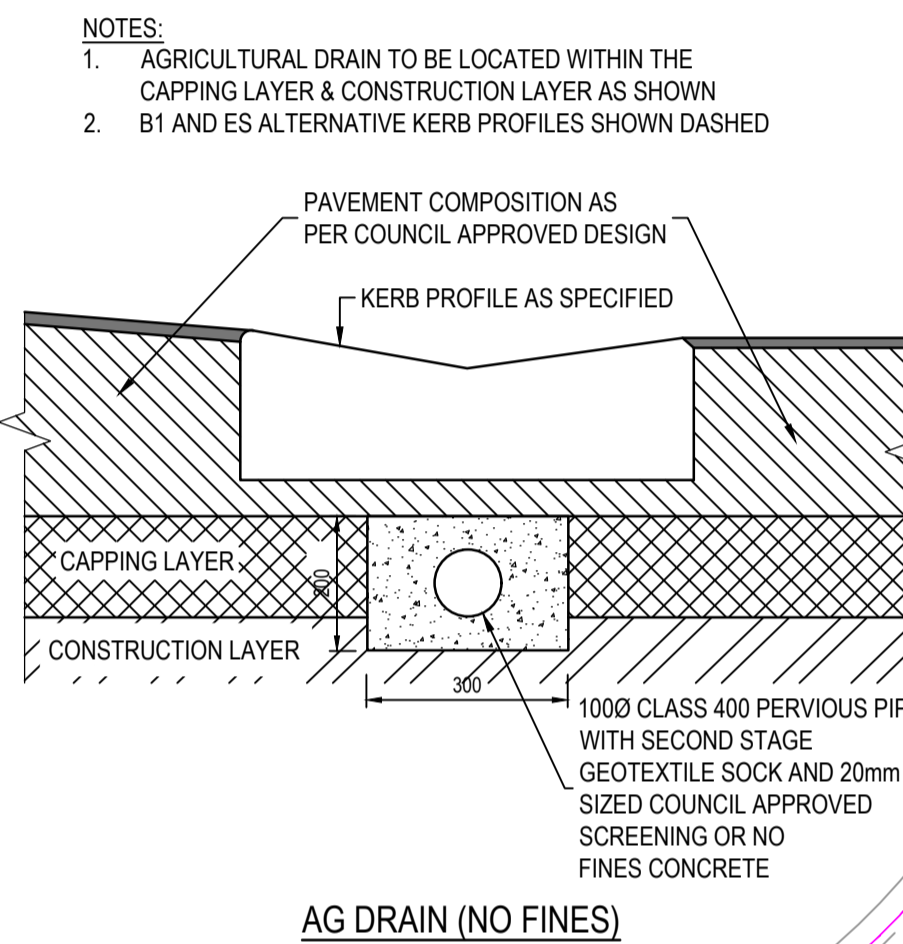
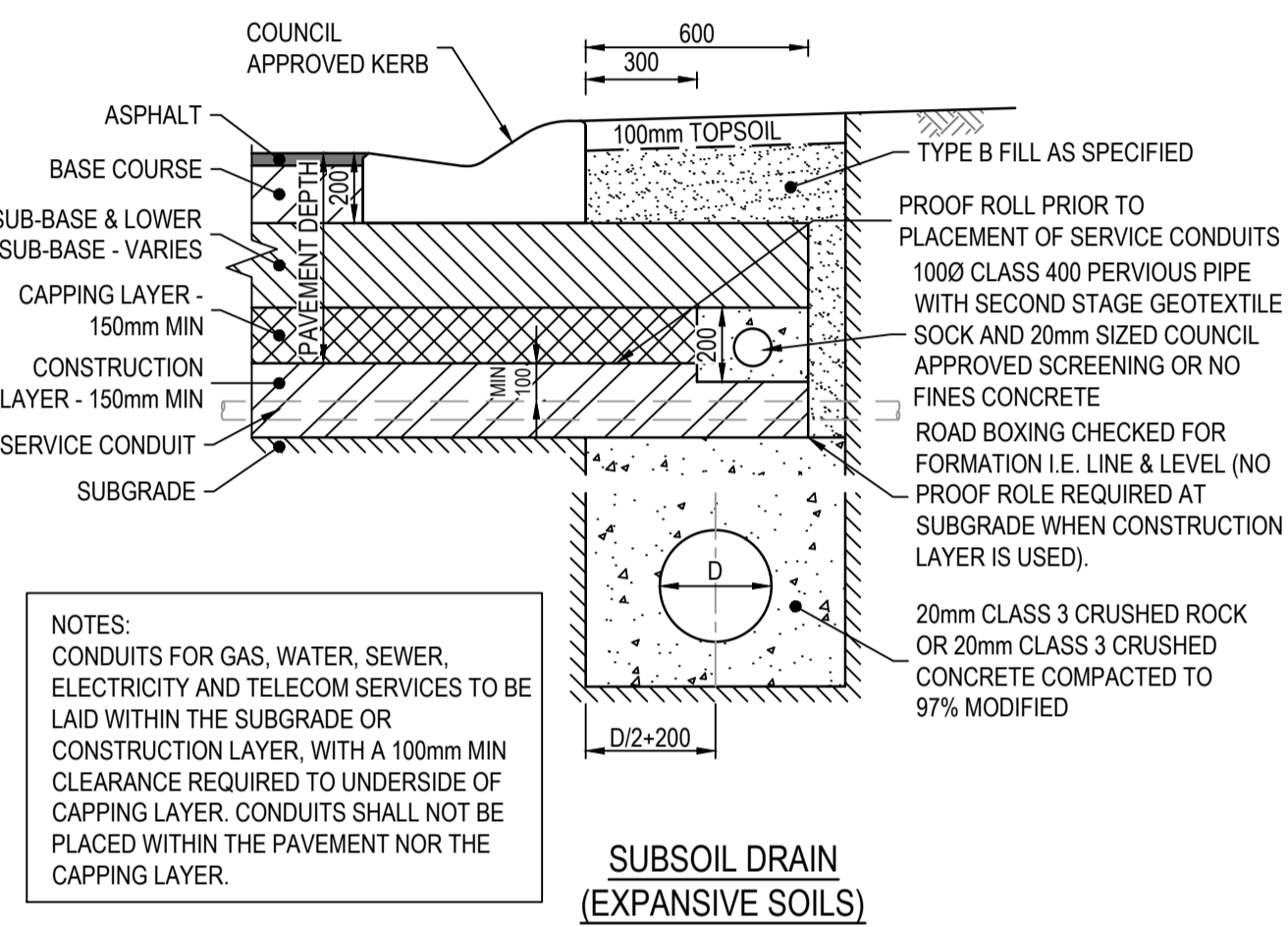
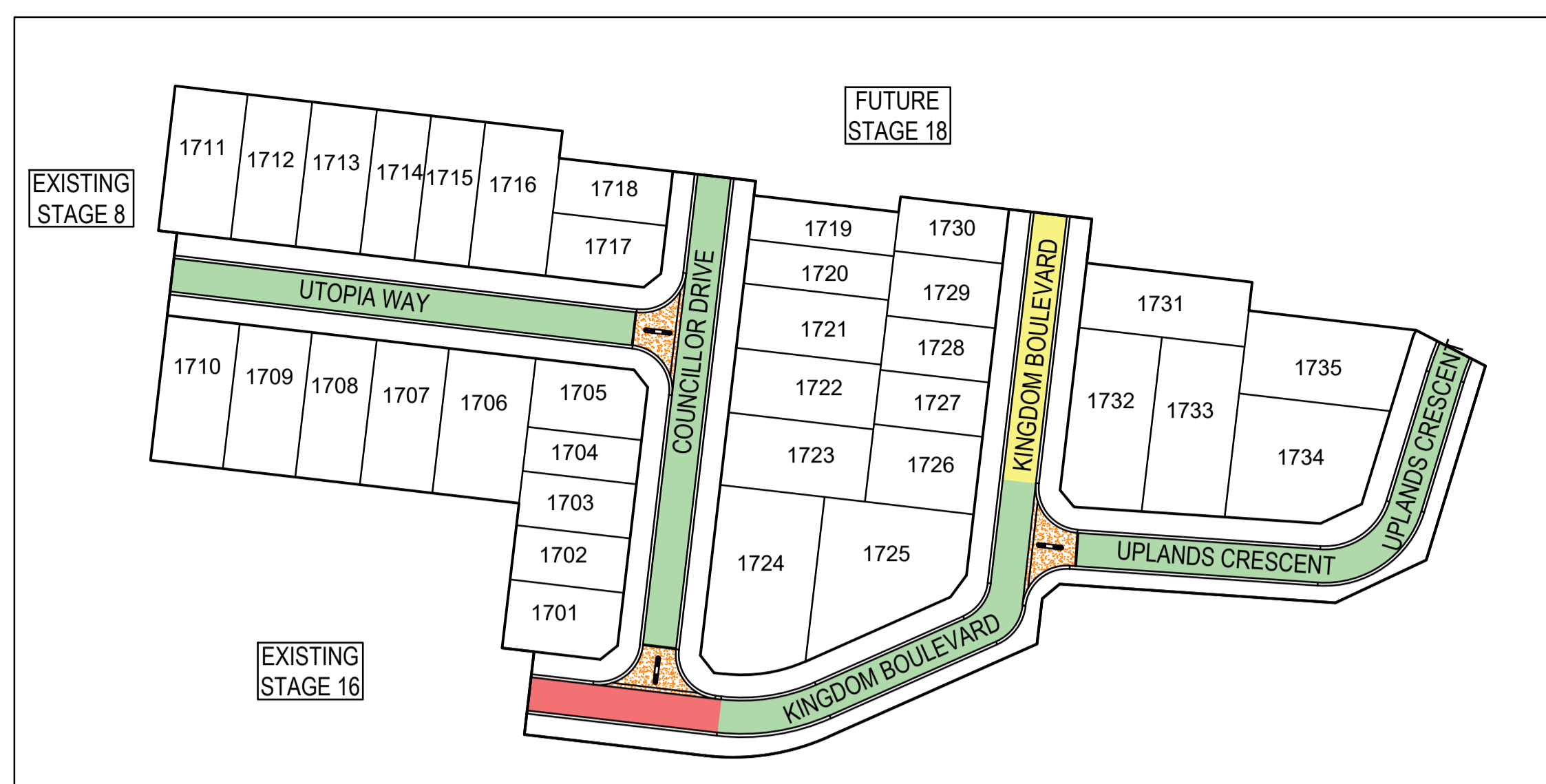
SCALE AS SHOWN AT A1

**SMEC**  
Member of the Surlana Jurong Group  
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**SEVENTH BEND**

Seventh Bend - Stage 17  
Melton City Council  
Road and Drainage  
Outfall Swale Longitudinal & Cross Sections  
and Details

MELWAYS REF 342 K7	PROJECT / DRAWING No. 2250E-017-351	SHEET No. 16 of 21	REVISION 0
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REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW

Quality Management ISO 9001  
 OHS Management AS/NZS 4500  
 Environmental Management ISO 14001  
 PLAN OF SUB. NO. PS841626K  
 PERMIT REF. NO. PA2018/6160  
**ISSUED FOR CONSTRUCTION**

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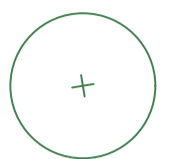
**SMEC**  
 Member of the Surlana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

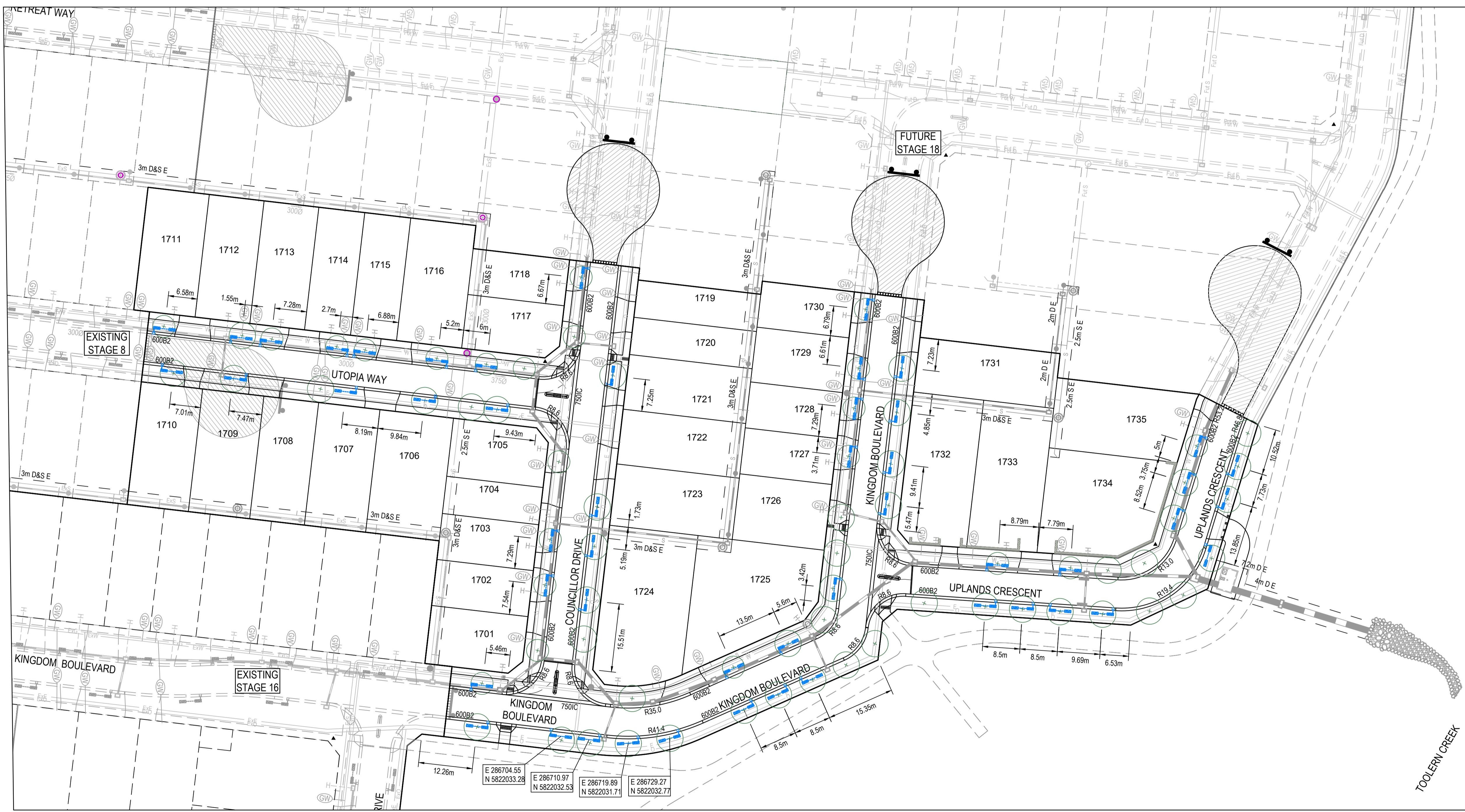
**SEVENTH BEND**

Seventh Bend - Stage 17  
 Melton City Council  
 Road and Drainage  
 Pavement, Concrete & General Details

MELWAYS REF 342 K7	PROJECT / DRAWING No. 2250E-017-411	SHEET No. 17 of 21	REVISION 0
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**LEGEND**

-  KERB INLET DIVERSION PASSIVE STREET TREE IRRIGATION (900mm REDUCED TREE OFFSET) - REFER TO SHEET 414 FOR DETAILS
-  TREE LOCATION - REFER TO LANDSCAPING PLANS FOR DETAIL



**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  
**DIAL 1100 BEFORE YOU DIG**  
[www.1100.com.au](http://www.1100.com.au)

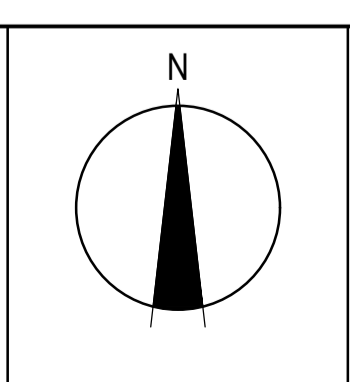

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW





**ISSUED FOR CONSTRUCTION**

PLAN OF SUB. NO.  
PS841628K  
 PERMIT REF. NO.  
PA2018/6160

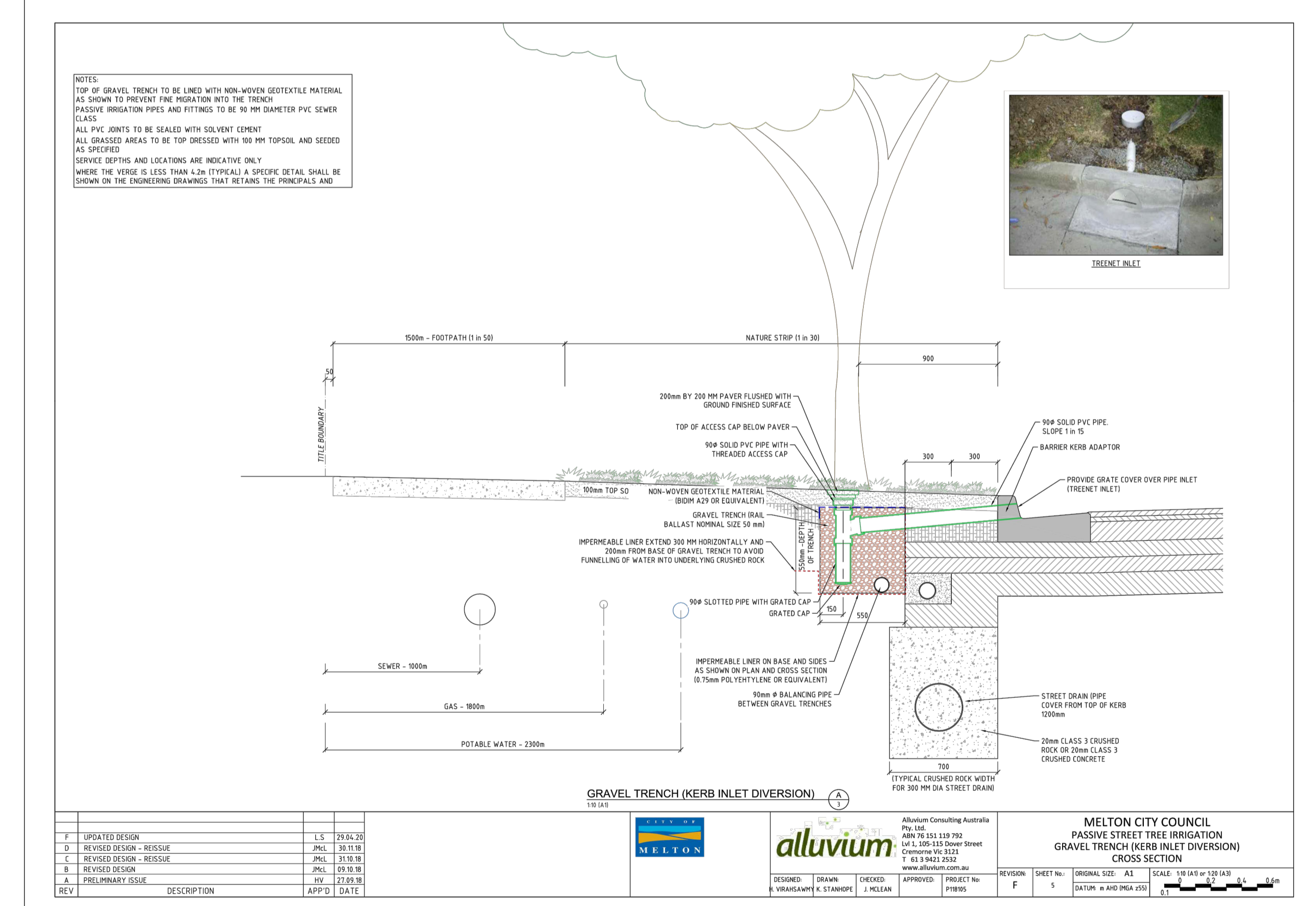
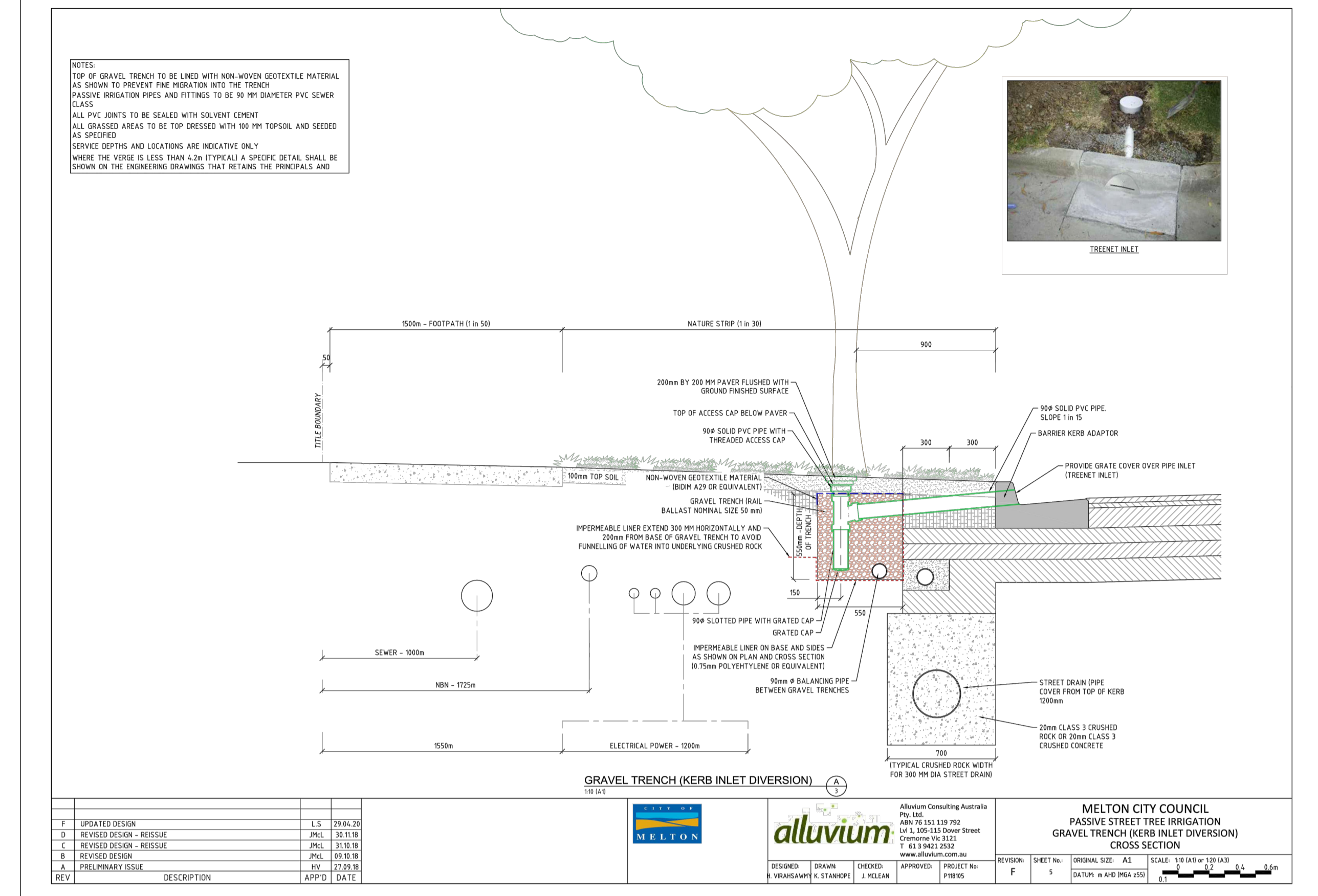
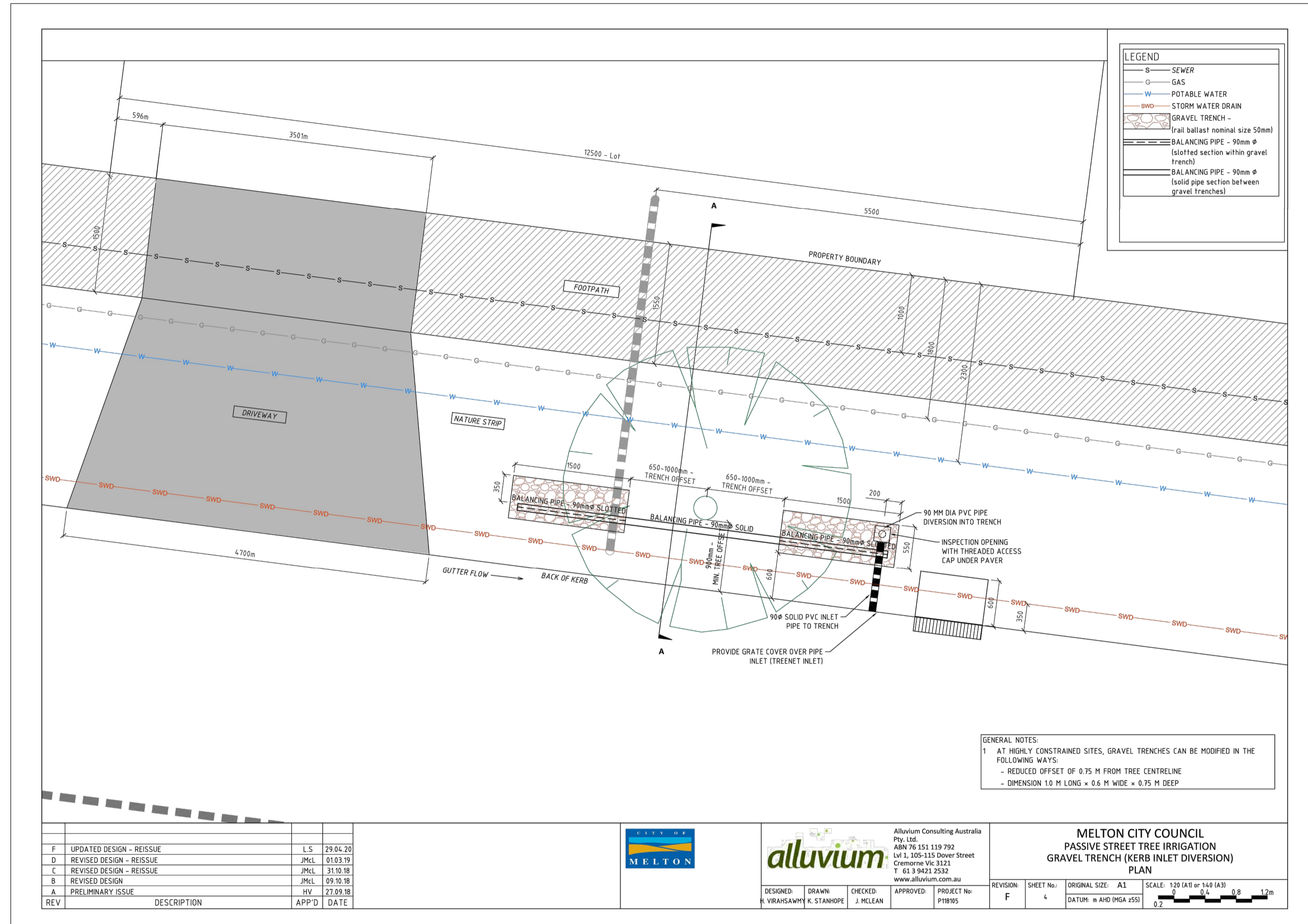



**Member of the Surlana Jurong Group**  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

# SEVENTH BEND

Seventh Bend - Stage 17  
 Melton City Council  
 Road and Drainage  
 Passive Irrigation System Plan

MELWAYS REF <b>342 K7</b>	PROJECT / DRAWING No. <b>2250E-017-412</b>	SHEET No. <b>18 of 21</b>	REVISION <b>0</b>
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REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER		PLAN OF SUB. NO. PS841628K PERMIT REF. NO. PA2018/6160	 Member of the Subana Jurong Group ABN 47 065 475 149 Collins Square, Tower 4, Level 20, 727 Collins St Melbourne, VIC 3008 Ph 03 9514 1500	<h1>SEVENTH BEND</h1>	Seventh Bend - Stage 17 Melton City Council Road and Drainage Passive Irrigation Detail - 2	MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW		ISSUED FOR CONSTRUCTION				342 K7	2250E-017-414	20 of 21	0

DWG PATH: V:\Vault\Projects\_Urban\2250E-Exford Road, Melton\2250E-17D\wg2250E-017-414.dwg PRINTED BY: CP15982 on 07/10/2021 at 10:49:21 AM

DISCLAIMER: 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.

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
Construction	RD	Roads	Construction close to live traffic	New works will be constructed adjacent to live traffic when abutting existing stages.	Contractor	Disruptions to live traffic, construction incident involving live traffic.	Provide safe temporary traffic control (TCP)	TCP provided within contract	N	5	3	15	Constructor
Construction	US	Utilities or Services	Utilities become a hazard within clear zones	Vehicle conflict with utility / pit	Contractor	Personal injury, vehicle damage	Sequence works and protect with temp barrier or traffic control (TCP)	TCP provided within contract	N	1	5	5	Constructor
Operational	RD	Roads	Sight Lines	Inadequate drivers response time.	Road Authority	Increased potential for accidents	Ensure design complies with relevant standard. Undertake thorough Safety Audit	Vis lines checked and discussed with approval authority as part of design approval process	N	1	4	4	Road Authority
Operational	LS	Lines and Signs	Signs and street lights	Potential for drivers / riders to strike signs and street lights	Road Authority	Increased potential for accidents	Ensure design complies with relevant standard. Undertake thorough Safety Audit	Refer to appropriate standard for sign and lighting offsets	N	1	4	4	Road Authority
<b>Retaining Walls</b>													
Construction	RW	Retaining Walls	Retaining Wall Alignment	Falling from height during construction or commissioning of walls and adjacent structures eg. sewer manholes	Contractor	Falling from a height	Provide temporary and permanent fencing at top of wall.	Provide fencing (at heights) during design process	N	1	1	1	Constructor
Operational	RW	Retaining Walls	Retaining Wall Alignment	Lack of safe access/setback from road	Road Authority	Increased potential for accidents	Establish adequate and accessible clear zone provision. Provide guardrail where required	Wall located in suitable position during design process and approved by authority	N	1	1	1	Road Authority
Operational	RW	Retaining Walls	Retaining Wall Height	Potential for falling from height	Road Authority	Personal injury	Provide temporary and permanent fencing at top of wall.	Provide fencing (at heights) during design process	N	1	5	5	Road Authority
Operational	RW	Retaining Walls	Retaining Wall Design	Potential for wall failure	Road Authority	Increased potential for accidents	Structural design in accordance with standards, geotechnical conditions, end use and good practise.	Refer to structural drawings and calculations	N	1	5	5	Road Authority
<b>Drainage</b>													
Operational	DR	Drainage	Grated Pits	Trip/fall hazard with large spaced grate	Relevant Authority	Increased potential for accidents	Provide pedestrian/bicycle friendly grates where applicable. Refer to pit schedule	Design in accordance with authority and manufacturers standards	N	3	2	6	Authority
Operational	DR	Drainage	Non Standard Large Pits	Potential for pit failure	Relevant Authority	Increased risk to maintenance crews/ vehicles	Structural design in accordance with relevant design principles.	Refer to structural drawings and calculations	N	1	4	4	Authority
Operational	DR	Drainage	Culvert Endwall/Headwall Outlets	Children playing in large pipes / watercourses and access for maintenance	Relevant Authority	Increased potential for accidents	Grate provided to authority standards	Design in accordance with authority and manufacturers standards	N	2	5	10	Authority
Maintenance	DR	Drainage	Access to Pits	Lack of safe access for maintenance	Relevant Authority	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Provide safe landing/ access arrangements as per relevant authority standards	Where possible design pit in location for easy access and outside of permanent water bodies	N	2	5	10	Authority
Maintenance	DR	Drainage	Deep Pits	Lack of safe entry for maintenance	Relevant Authority	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	Design in accordance with authority standards	N	1	5	5	Authority
Maintenance	DR	Drainage	Access to drains / culverts	Lack of safe access for maintenance	Relevant Authority	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Access as approved by authority	Design pit in location for easy access as agreed with authority	N	2	3	6	Authority
Construction/Maintenance	DR	Drainage	Outlet / Swale Construction / Maintenance	Drainage outlet and swale drain will be constructed in steep terrain towards Toolern Creek	Contractor	Personal injury / Fall	Provide safe working conditions for maintenance. Access as approved by authority	Design pit in location for easy access as agreed with authority	N	3	4	12	Constructor
<b>Sewer</b>													
Construction	SE	Sewer	Sewer Manhole located adjacent to Retaining Wall Alignment	Falling from height during construction or commissioning of adjacent sewer manholes	Contractor	Falling from a height	Provide temporary fencing until such time that permanent fencing is constructed	Provide fencing (at heights) during design process	N	1	1	1	Constructor
Maintenance	SE	Sewer	Deep Manholes	Lack of safe entry for maintenance	Relevant Authority	Increased potential for accidents	Contractor to be certified for work in confined spaces, landings and step access provided as per authority standards and schedule	Design in accordance with authority standards. Refer pit schedule on drawings	N	1	5	5	Authority
Maintenance	SE	Sewer	Access to Manholes	Lack of safe access for maintenance	Relevant Authority	Increased risk to maintenance crews	Provide safe working conditions for maintenance. Manholes located in compliance with authority standards	Where possible design manhole in location for easy access	N	1	5	5	Authority
<b>Electricity</b>													
Operational	ES	Electrical Services	Electrical Design	Location of assets within clear zones e.g. pits/ substations	Relevant Authority	Increased potential for accidents	Electrical designed by sub consultant with appropriate accreditation and in accordance with authority standards	Pits designed below ground. Where above ground adequate offset from vehicle clear zones has been provided or barrier protection provided	N	2	3	6	Authority
<b>Telstra</b>													
Operational	TE	Telstra	Telstra Design	Location of assets within clear zones e.g. pits	Relevant Authority	Increased potential for accidents	Telecommunications designed by authority consultant with appropriate accreditation and in accordance with authority standards	Pits designed below ground. Where above ground adequate offset from vehicle clear zones has been provided or barrier protection provided	N	2	3	6	Authority
<b>Water</b>													
Operational	WA	Water	Water Design	Location of assets within clear zones e.g. pits/ substations	Relevant Authority	Increased potential for accidents	Water pits designed in accordance with authority standards	Pits designed below ground. Where above ground adequate offset from vehicle clear zones has been provided or barrier protection provided	N	2	3	6	Authority
<b>Gas</b>													
Operational	GA	Gas	Gas Design	Location of assets within clear zones e.g. pits/ substations	Relevant Authority	Increased potential for accidents	Water pits designed in accordance with authority standards	Pits designed below ground. Where above ground adequate offset from vehicle clear zones has been provided or barrier protection provided	N	1	1	1	Authority

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
0	07.10.21	ISSUED FOR CONSTRUCTION	C.SILVA	M.MANAFI	C.CATHCART	N.HOLLOW



Quality Management ISO 9001  
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OHS Management AS/NZS 4501  
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Environmental Management ISO 14001  
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PLAN OF SUB. NO. PS841628K

PERMIT REF. NO. PA2018/6160

**ISSUED FOR CONSTRUCTION**



Scale 1:500  
SCALE AS SHOWN AT 1



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# SEVENTH BEND

Seventh Bend - Stage 17  
Melton City Council  
Road and Drainage  
Safety In Design

MELWAYS REF <b>342 K7</b>	PROJECT / DRAWING No. <b>2250E-017-500</b>	SHEET No. <b>21 of 21</b>	REVISION <b>0</b>
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