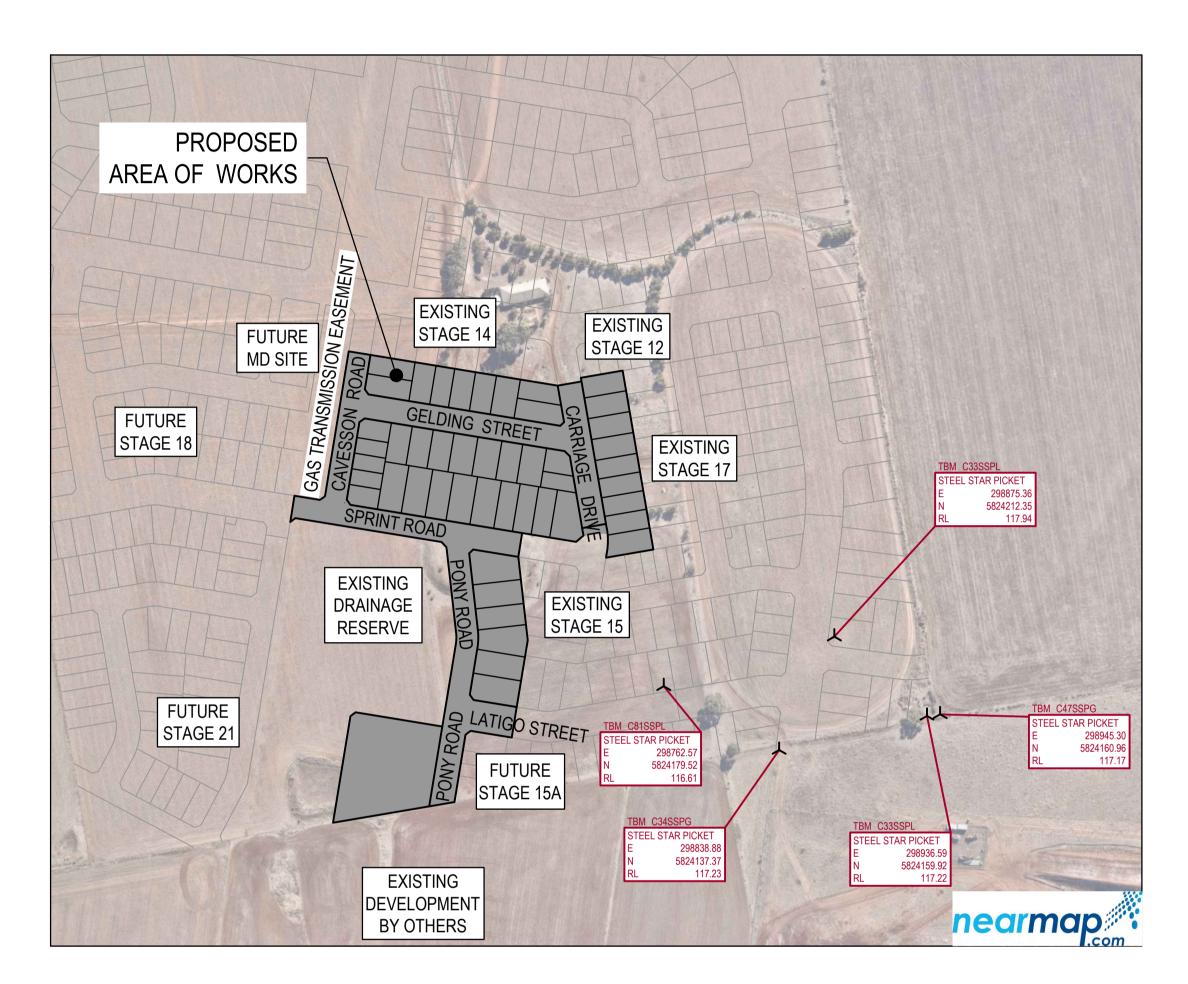
# Westwood Stage 13



DESIGNER

A.PERKINS

N.SHRESTHA

CHECKER

A.PERKINS

C.WILKINSON

# Drawing Index

Drawing index	
	Cover Plan & General Notes
2152E-013-111	Layout Plan - 1
2152E-013-112	
2152E-013-131	
2152E-013-171	Signage & Linemarking Plan
2152E-013-181	Intersection Detail Plan - 1
	Intersection Detail Plan - 2
	Intersection Detail Plan - 3
2152E-013-201	
	Longitudinal Sections - 2
	Longitudinal Sections - 3
2152E-013-251	
2152E-013-252	
2152E-013-253	
2152E-013-254 2152E-013-255	
2152E-013-255 2152E-013-256	
2152E-013-250 2152E-013-257	
	Cross Sections: Sprint Road Ch 320.58 - Ch 327.13 & Latigo Stree
2152E-013-301 2152E-013-302	Drainage Longitudinal Sections - 1
2152E-013-351	Drainage Longitudinal Sections - 2
2152E-013-351 2152E-013-352	Drainage Longitudinal Sections - 3 Pit Schedule
2152E-013-361 2152E-013-362	Passive Irrigation Plan
2152E-013-302 2152E-013-411	
2152E-013-412	
2152E-013-500	Safety In Design

# APA CONDITIONS FOR WORKS NEAR TRANSMISSION PIPELINES

MINIMUM CLEARANCES FOR DESIGN PURPOSES AND/OR CONSTRUCTION

- ALL WORKS SHALL COMPLY TO APA DOCUMENT "580-POL-L-0001 REV.4 STANDARD CONDITIONS FOR WORKS NEAR APA GAS TRANSMISSION PIPELINES"
- NO VIBRATION INDUCING WORKS IS ALLOWED WITHIN 3m OF THE GAS TRANSMISSION PIPE LINES.
- EXCAVATION ABOVE THE GAS PIPELINE SHALL BE CONDUCTED PER APA PROCEDURE 320-PR-OM-0067 REV.3

SURVEY CONTROL POINTS										
POINT	EASTING	NORTHING	RL (AHD)	DESCRIPTION						
C81SSPL	298762.57	5824179.52	116.61	STEEL STAR PICKET						
C83SSPL	298875.36	5824212.35	117.94	STEEL STAR PICKET						
C33SSPL	298936.59	5824159.92	117.22	STEEL STAR PICKET						
C34SSPG	298838.88	5824137.37	117.23	STEEL STAR PICKET						
C47SSPG	298945.3	5824160.96	117.17	STEEL STAR PICKET						

These designs and drawings are the copyright of SMEC Australia Pty Ltd. The drawing shall not be reproduced or copied, in whole or part, without the written permission of SMEC Australia Pty Ltd. The contents of this drawing are electronically generated, are confidential and may only be used for the purpose for which they are intended.

SUBJECT TO APPROVAL

PLAN OF SUB. NO

SCALE AS SHOWN AT A1

# 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. 2152E-13-500 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. ocate all underground services before commencement of works DIAL 1100 BEFORE YOU DIG www.1100.com.au



(C) ABN 47 065 475 149 Collins Square, Tower 4, Level 20, 727 Collins St Melbourne, VIC 3008



Westwood - Stage 13 Melton City Council Road and Drainage Cover Plan & General Notes

REVISION

DWG PATH: V:\\_Vault\Projects\_Urban\2152E-Westwood\2152E-13\Dwgs\2152E-013-101.dwg PRINTED BY: NS20148 on 10/05/2022 at 10:03:28 AM

AMENDMENT / REVISION DESCRIPTION

10.05.22 ISSUED TO COUNCIL FOR APPROVAL

AND TO PROTECT THE PUBLIC FROM HAZARDS ASSOCIATED WITH THE WORKS. 3. THE CONTRACTOR SHALL:

2. 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.

. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH THE CONDITIONS OF CONTRACT AND CURRENT

MELTON CITY COUNCIL SPECIFICATIONS AND GAA STANDARD DRAWINGS TO THE SATISFACTION OF THE

3.1. 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.

4. THE CONTRACTOR IS TO NOTIFY COUNCIL AND ALL SERVICE AUTHORITIES SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. 5. THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO

COMMENCING ANY EXCAVATION BY CONTACTING ALL RELEVENT SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS

6. 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. 7. ALL ROAD CHAINAGES ARE MEASURED ALONG THE ROAD CENTRELINE EXCEPT KERB RETURNS AND

COURTHEADS, 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.

8. 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.

9. THE CONTRACTOR IS TO OBTAIN THE NECESSARY ROAD OPENING PERMIT PRIOR TO UNDERTAKING ANY WORKS WITHIN A PREVIOUSLY CONSTRUCTED ROADWAY.

10. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.

SUPERVISING ENGINEER OR HIS REPRESENTATIVE.

11. THE CONTRACTOR SHALL CO-OPERATE WITH OTHER AUTHORITIES AND SHALL ENSURE THAT ALL SERVICES ARE INSTALLED PRIOR TO THE FINAL PAVEMENT COURSE.

12. ANY EXISTING PAVEMENT OR DRAINAGE WORKS DAMAGED DURING CONSTRUCTION OR THE MAINTENANCE PERIOD TO BE REINSTATED TO THE SATISFACTION OF THE COUNCIL REPRESENTATIVE

13. TBM'S 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 15. 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 DELFIN ON COMPLETION OF THE WORKS. 16. 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.

17. ADDITIONAL AND OVEREXCAVATION SHALL BE BACKFILLED IN ACCORDANCE WITH THE PROVISIONS OF THE SPECIFICATION. 18. THE NATURE STRIPS AND CUT OR FILLED AREAS ARE TO BE TOPSOILED WITH 100MM OF APPROVED MATERIAL

19. 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.

20. 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%. 21. 100MM NOMINAL DIAMETER SUBSOIL DRAIN SHALL BE PROVIDED BEHIND ALL KERB AND CHANNEL AS PER

STANDARD DRAWING MCC 202. 22. CONDUIT LOCATIONS ARE SUBJECT TO AMENDMENT AND CONDUITS SHALL NOT BE LAID UNTIL WRITTEN APPROVAL IS GIVEN BY THE SUPERINTENDENT. CONDUITS TO BE PLACED A MINIMUM OF 5M FROM BOUNDARIES/EASEMENTS AND TO THE SATISFACTION OF THE SUPERINTENDENT. BOTH KERBS ARE TO BE MARKED WITH THE LETTERS G,W,E AND T ABOVE CONDUIT LOCATIONS AS PER STANDARD DRAWING MSC 104.

DW & NDW CONDUITS TO BE INSTALLED IN SEPARATE DUCTS TO WESTERN WATER REQUIREMENT 23. ALL SERVICING TRENCHES UNDER ROADS, FOOTPATHS, DRIVEWAYS, PARKING BAYS ETC. ARE TO BE BACKFILLED WITH CLASS 3 FCR.

24. ALL HOUSE DRAIN CONNECTIONS ARE TO BE LOCATED NO CLOSER THAT 6.00M FROM THE SIDE BOUNDARY OR FROM ANY EASEMENT ALONG THE SIDE BOUNDARY.

25. 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. 26. DRAINAGE PITS SHALL BE CAST MONOLITHICALLY. CEMENT RENDER SHALL ONLY BE USED TO REPAIR

27. ALL RESIDENTIAL FOOTPATHS TO BE MINIMUM 1.50M WIDE UNLESS OTHERWISE INDICATED. FOOTPATH TO BE 125MM THICK CONCRETE CENTRALLY REINFORCED WITH SL72 MESH ON 50MM COMPACTED DEPTH 20MM

CLASS 3 FCR BASE AS PER STANDARD DRAWING EDCM 401. 28. ALL RESIDENTIAL DRIVEWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH EDCM 501 & EDCM 502. SINGLE

DRIVEWAYS TO BE OFFSET 0.75M FROM SIDE BOUNDARY OR EASEMENT 29. ALL ALLOTMENTS AND RESERVES SHALL BE SMOOTHED, GRADED AND SHAPED TO AN EVEN SURFACE. 30. APPROVAL FOR THE REMOVAL AND DISPOSAL OF ANY EXCAVATED MATERIAL OR TOPSOIL IS REQUIRED FROM

31. THE CONTRACTOR TO ERECT STREET NAME SIGNS & POLE AS DIRECTED BY THE SUPERINTENDENT

32. 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.

33. CONFIRMATION OF THE ASPHALT WEARING COURSE IS TO BE DEFFERED UNTIL INSTRUCTED BY THE SUPERINTENDENT.

34. 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.

35. 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. 36. INSTALL BLUE RAISED REFLECTIVE PAVEMENT MARKER (BRRPM) ON ROAD CENTRELINE AND "GROUND BALL"

MARKER POST TO INDICATE LOCATION OF FIRE PLUG. 37. 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.

38. ALL DRAINAGE PIT COVERS AND GRATES IN ACCORDANCE WITH AS3996. FIBRE GLASS LIDS TO BE CLASS B OR ABOVE. NOT GREATER THAN 25KG IN WEIGHT FOR 600X900 PIT IMPRINTED WITH 'AS3996 CLASS B' AND WEIGHT

IN KILOGRAMS, IN 25MM LETTERING. 39. BATTERS STEEPER THAN 1IN6 SHALL BE HYDRO MULCHED.

40. THE CONTRACTOR MUST:

40.1. OBTAIN A "WATER CARTER PERMIT" FROM WESTERN WATER'S PROPERTY SERVICES TEAM ON 9218 5560 TO TAKE AND USE ANY WATER FROM WESTERN WATER'S SYSTEM FOR CONSTRUCTION PURPOSES;

40.2. COMPLY WITH THAT WATER CARTER PERMIT AT ALL TIMES INCLUDING COMPLYING WITH CURRENT PERMANENT WATER SAVING RULES AND APPLYING FOR AND COMPLYING WITH ANY EXCEPTIONS TO THOSE RULES.

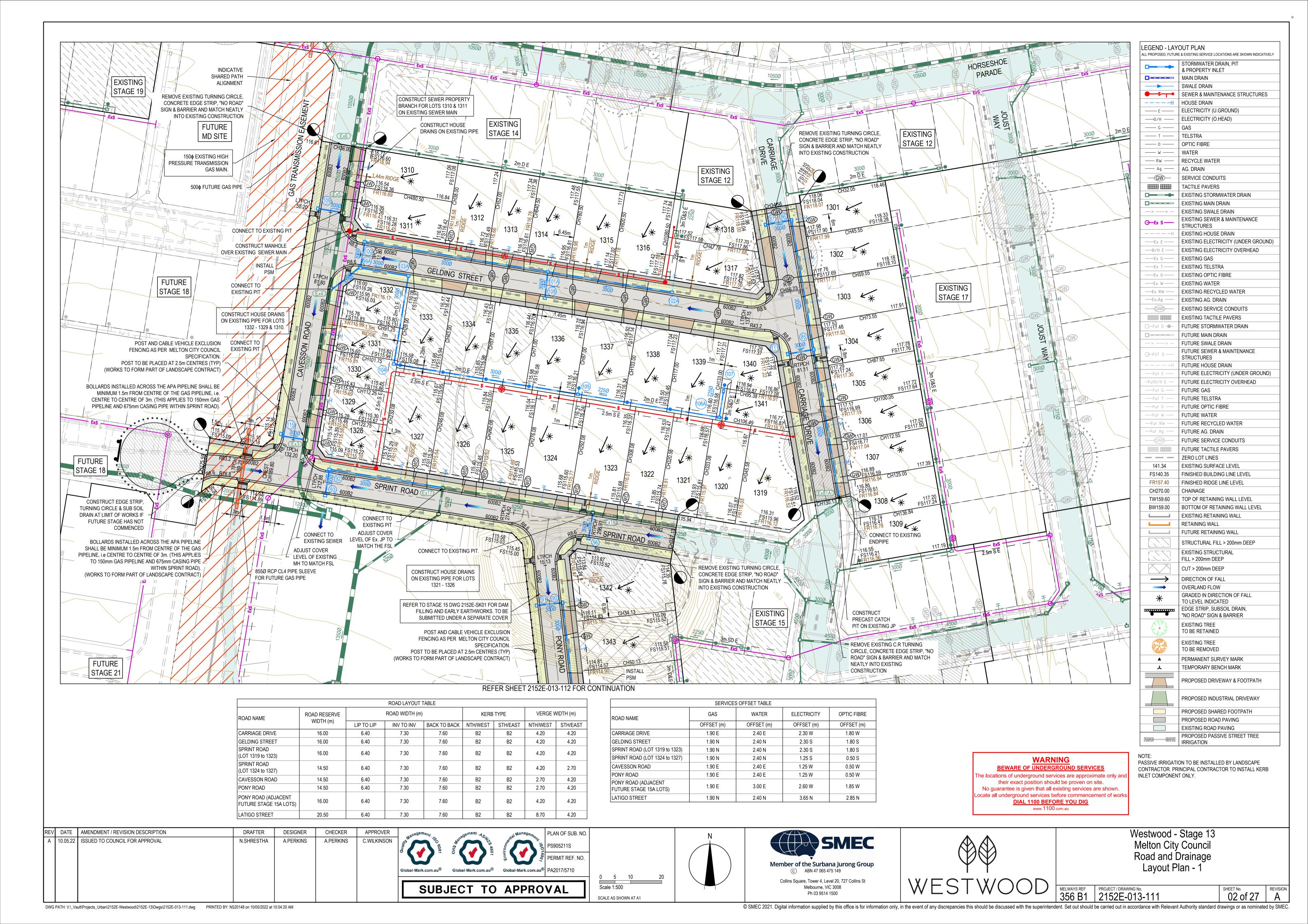
41. ALL PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20MM CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 97% OF THE MAXIMUM FOUND IN THE STANDARD

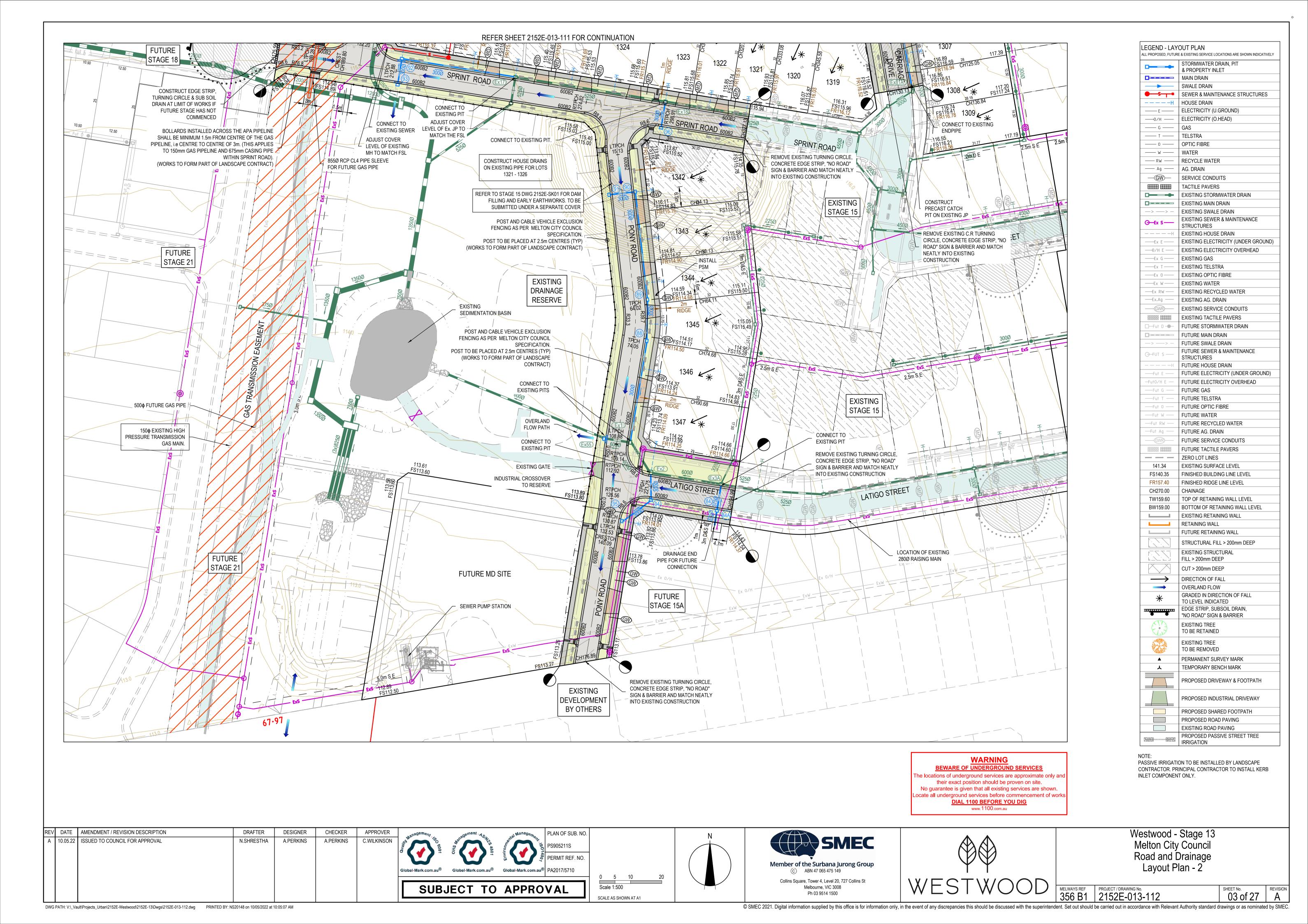
COMPACTION TEST FOR THE FOLLOWING: 41.1. BENEATH THE ROAD PAVEMENT OR DRIVEWAY CROSSOVER TO THE UNDERSIDE OF THE PAVEMENT OR

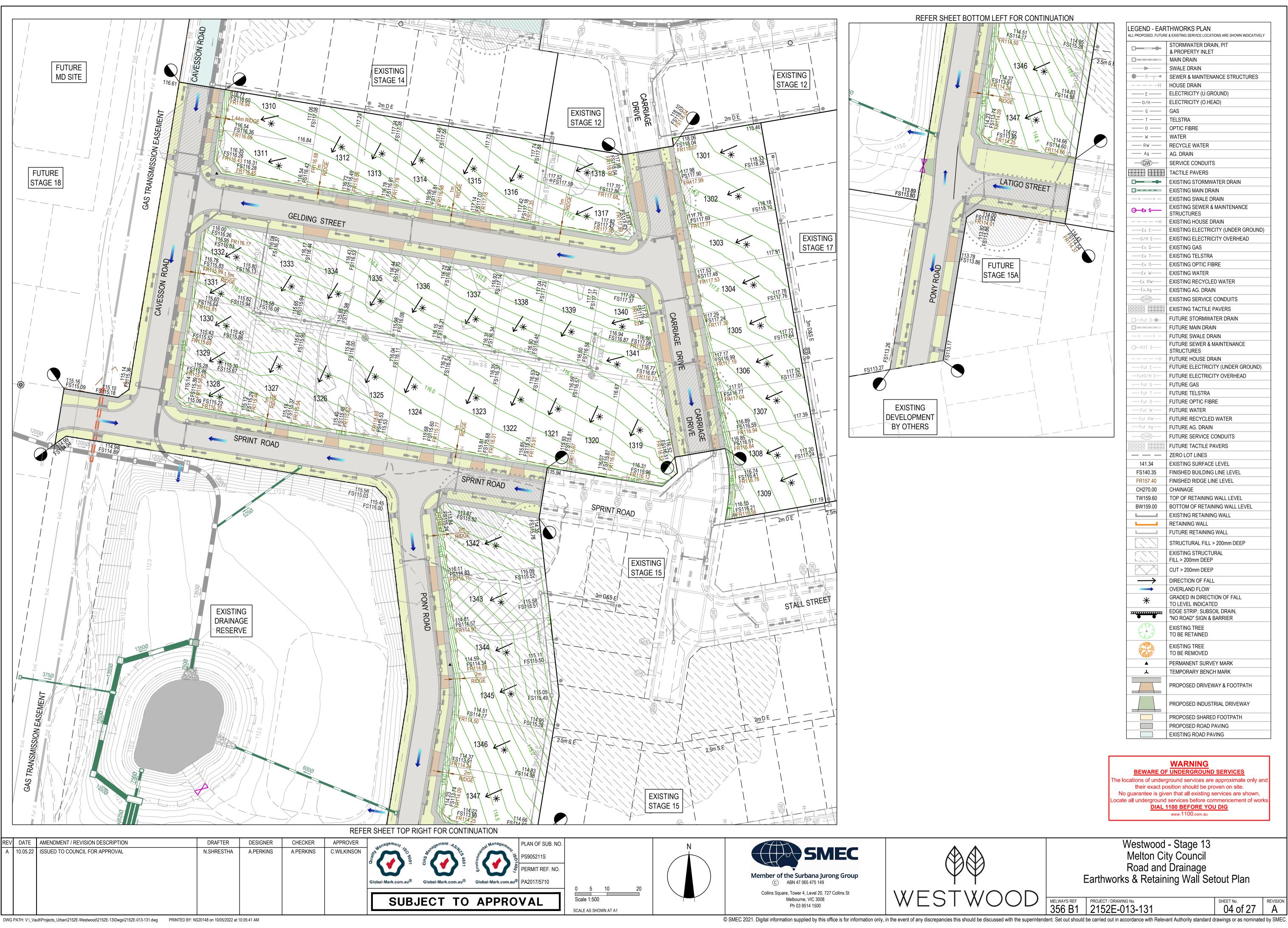
41.2. ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE

ANGLE OF REPOSE FROM THE NEAR LOWER EDGE.

PROJECT / DRAWING No. 2152E-013-101 Ph 03 9514 1500







LEGEND - EARTHWORKS PLAN ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY STORMWATER DRAIN, PIT & PROPERTY INLET MAIN DRAIN SWALE DRAIN SEWER & MAINTENANCE STRUCTURES ELECTRICITY (U.GROUND) ELECTRICITY (O.HEAD) —— 0/H —— OPTIC FIBRE — w — WATER RECYCLE WATER —— RW — AG. DRAIN —(GW)— SERVICE CONDUITS **TACTILE PAVERS** EXISTING STORMWATER DRAIN EXISTING MAIN DRAIN EXISTING SWALE DRAIN **EXISTING SEWER & MAINTENANCE** STRUCTURES EXISTING HOUSE DRAIN EXISTING ELECTRICITY (UNDER GROUND) ——0/H E— EXISTING ELECTRICITY OVERHEAD **EXISTING GAS** ——Ех G— **EXISTING TELSTRA** ——Ex T— ——Ex О— **EXISTING OPTIC FIBRE EXISTING WATER** ——Ex W— EXISTING RECYCLED WATER ——Ex RW— EXISTING AG. DRAIN —— Ex.Aa — 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** ----Fut W-**FUTURE WATER** FUTURE RECYCLED WATER FUTURE AG. DRAIN FUTURE SERVICE CONDUITS FUTURE TACTILE PAVERS ZERO LOT LINES \_\_\_\_ EXISTING SURFACE LEVEL FS140.35 FINISHED BUILDING LINE LEVEL FR157.40 FINISHED RIDGE LINE LEVEL CH270.00 TOP OF RETAINING WALL LEVEL BOTTOM OF RETAINING WALL LEVEL BW159.00 **EXISTING RETAINING WALL** RETAINING WALL 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 PROPOSED INDUSTRIAL DRIVEWAY PROPOSED SHARED FOOTPATH

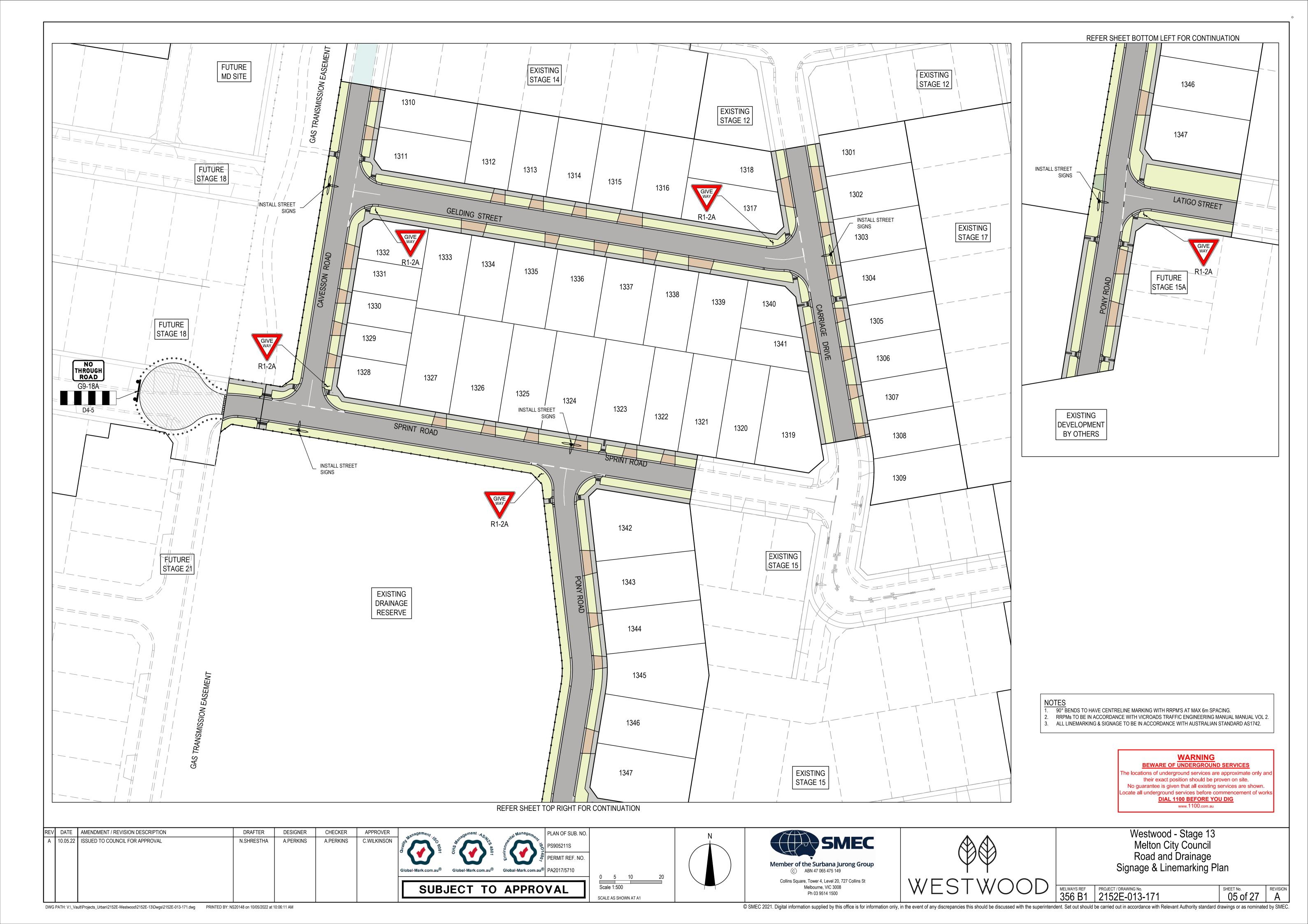
WARNING
BEWARE OF UNDERGROUND SERVICES

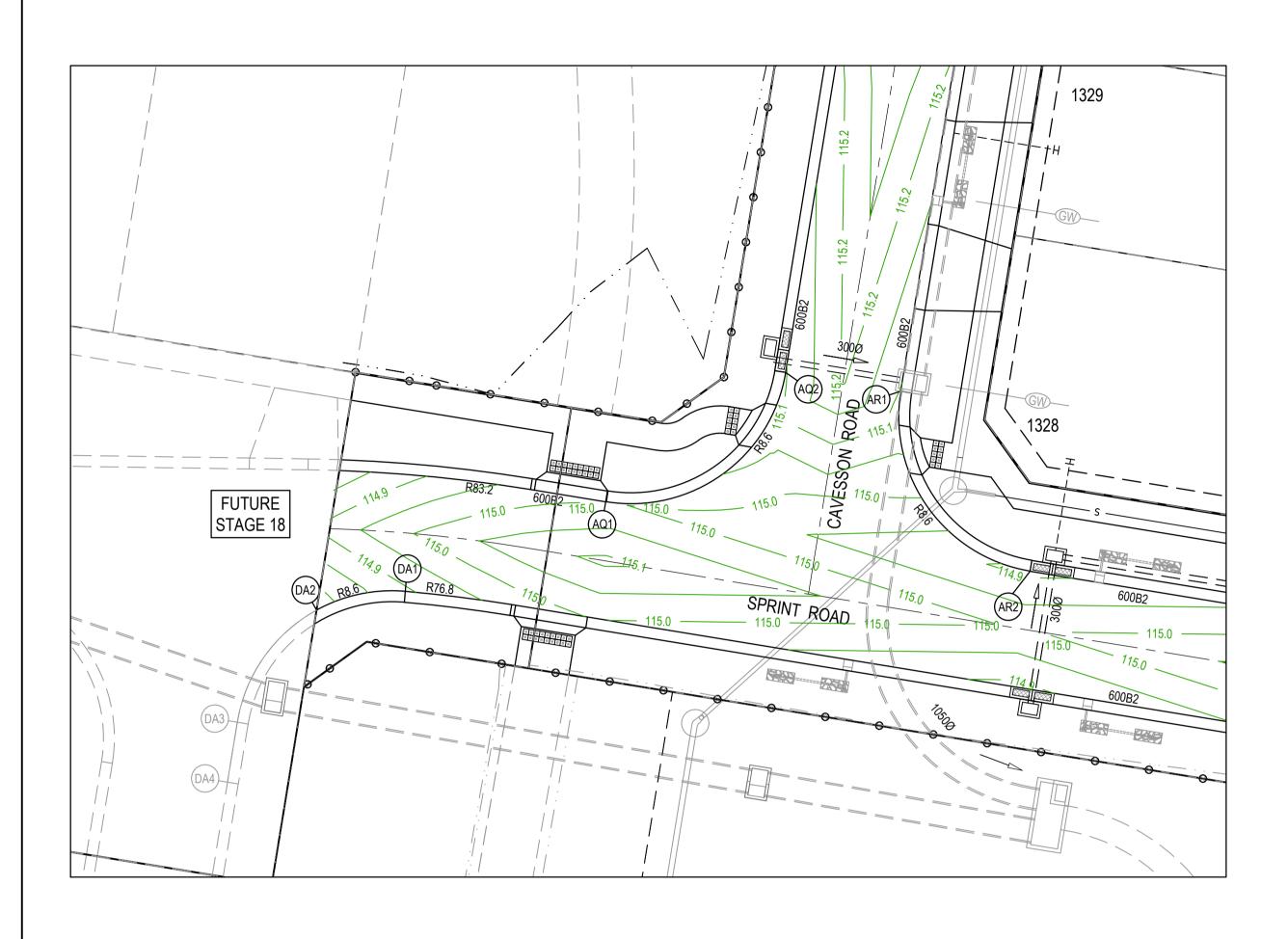
PROPOSED ROAD PAVING EXISTING ROAD PAVING

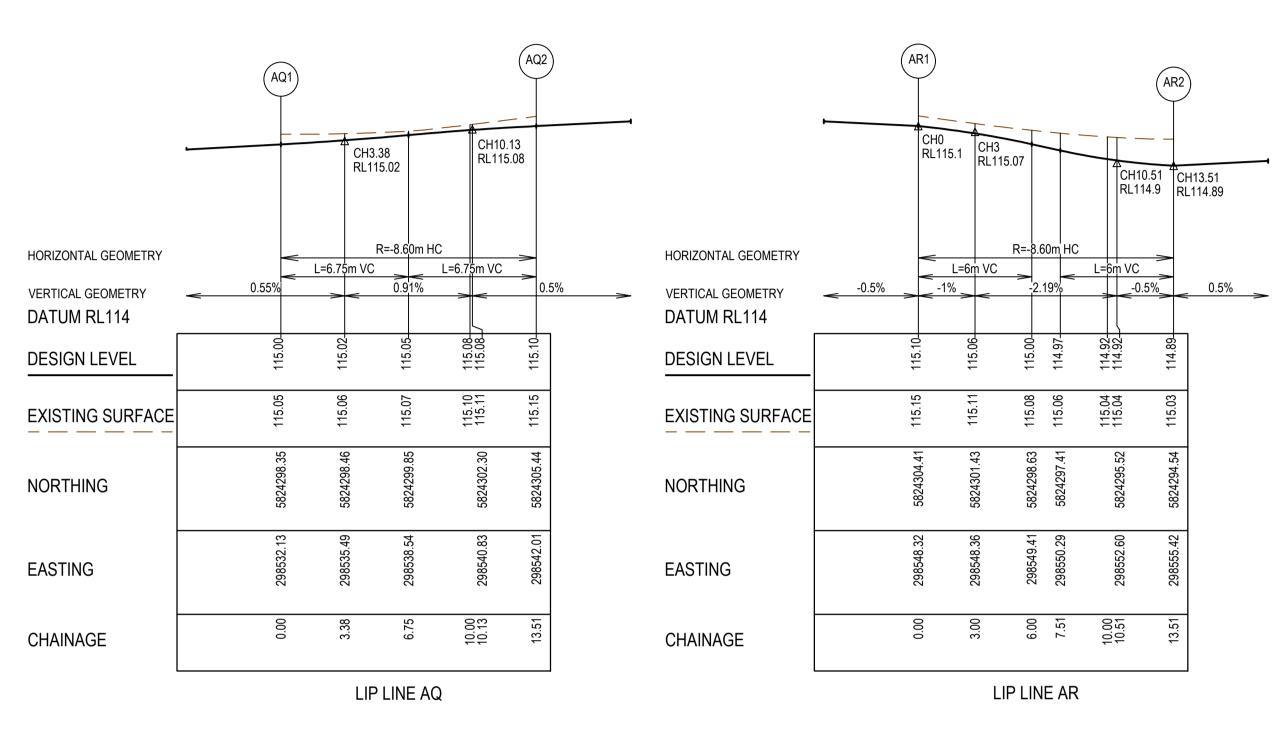
he locations of underground services are approximate only and their exact position should be proven on site. No guarantee is given that all existing services are shown. ocate all underground services before commencement of works **DIAL 1100 BEFORE YOU DIG** 

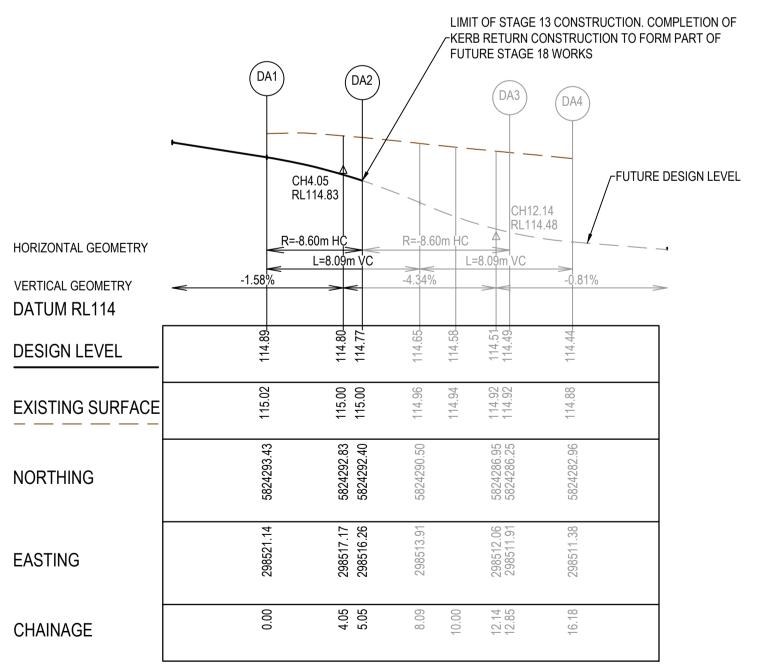
www.1100.com.au

Westwood - Stage 13
Melton City Council
Road and Drainage
Earthworks & Retaining Wall Setout Plan









LIP LINE DA

ALL VEHICLE CROSSINGS AND PRAM CROSSINGS TO BE MINIMUM OF 0.75m FROM PITS. 2. ALL PRAM CROSSINGS TO BE MINIMUM OF 2.0m FROM VEHICLE CROSSINGS.

LEGEND - INTERSECTION DETAIL PLAN

□= = = = STORMWATER DRAIN, PIT

 $\Box = = = = = |$  MAIN DRAIN

----H HOUSE DRAIN

□= = = = | EXISTING MAIN DRAIN

---GWR)--

O—Ех S—

0 0 0 0 0

O—FUT S—

ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

& PROPERTY INLET

SEWER & MAINTENANCE STRUCTURES

SERVICE CONDUITS

EXISTING SEWER & MAINTENANCE

FUTURE SEWER & MAINTENANCE

EXISTING SERVICE CONDUITS

TACTILE PAVERS □= = = ■ EXISTING STORMWATER DRAIN

STRUCTURES

EXISTING TACTILE PAVERS Fut D- FUTURE STORMWATER DRAIN FUTURE MAIN DRAIN

STRUCTURES

RETAINING WALL

FUTURE HOUSE DRAIN

FUTURE SERVICE CONDUITS FUTURE TACTILE PAVERS

**EXISTING RETAINING WALL** 

FUTURE RETAINING WALL EDGE STRIP, SUBSOIL DRAIN,

"NO ROAD" SIGN & BARRIER

PERMANENT SURVEY MARK

TEMPORARY BENCH MARK

PROPOSED DRIVEWAY & FOOTPATH

- 3. 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.

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
Α	10.05.22	ISSUED TO COUNCIL FOR APPROVAL	N.SHRESTHA	A.PERKINS	A.PERKINS	C.WILKINSON

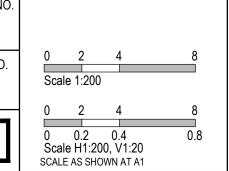


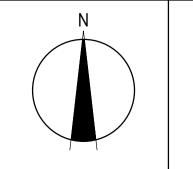




SUBJECT TO APPROVAL







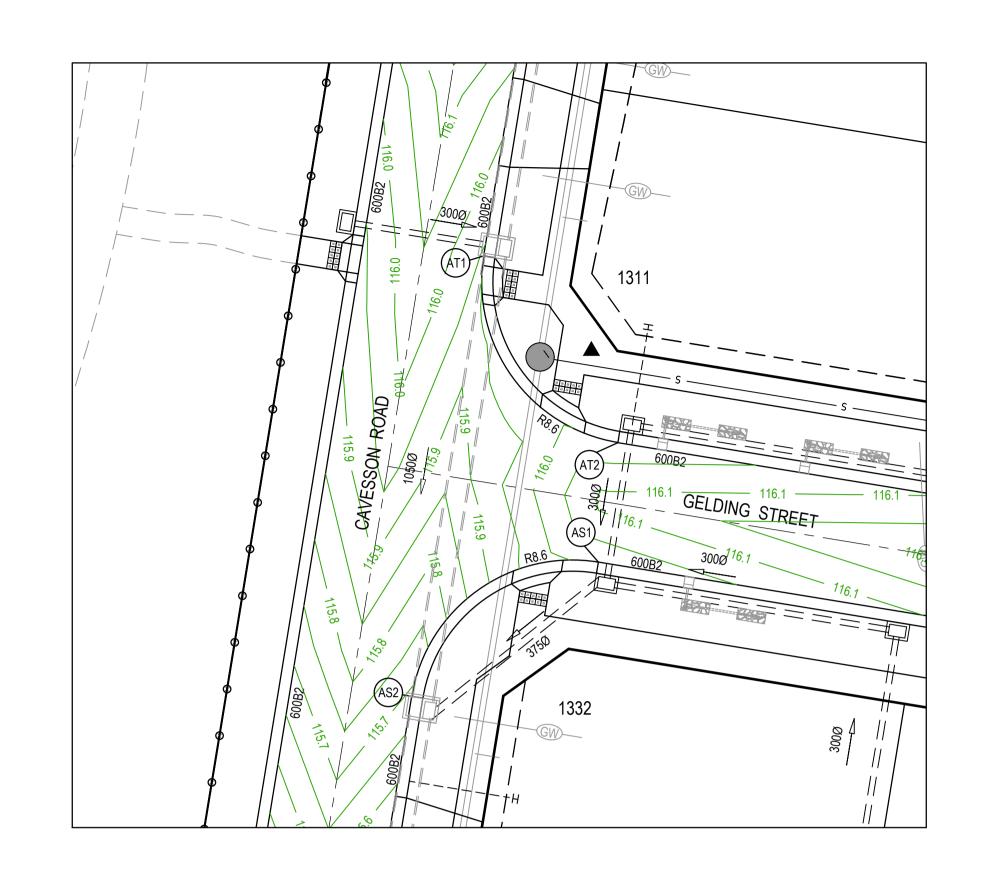


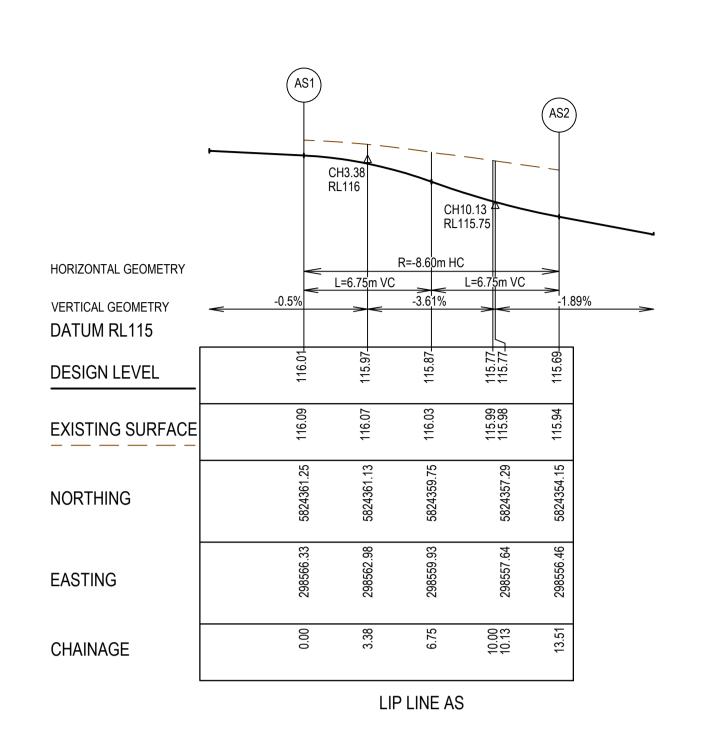


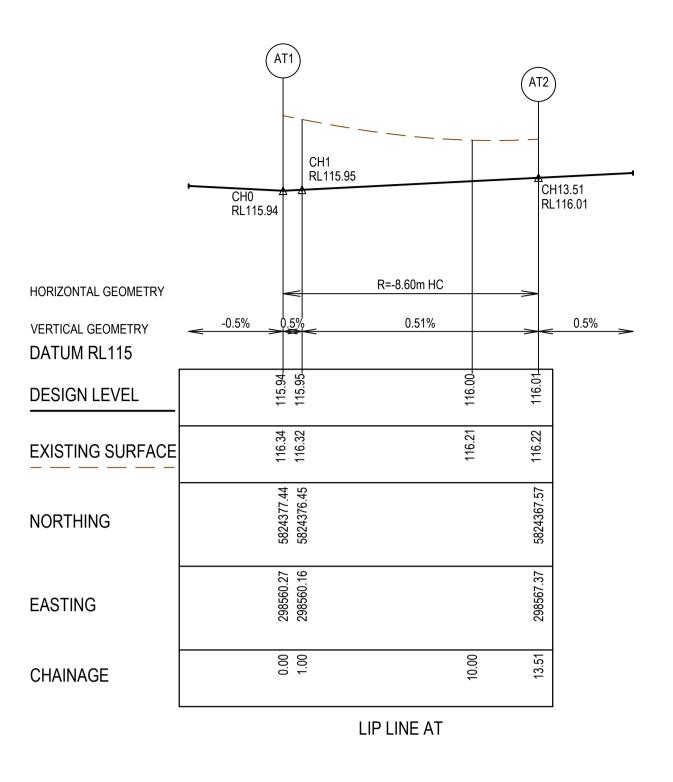
Westwood - Stage 13
Melton City Council
Road and Drainage
Intersection Detail Plan - 1

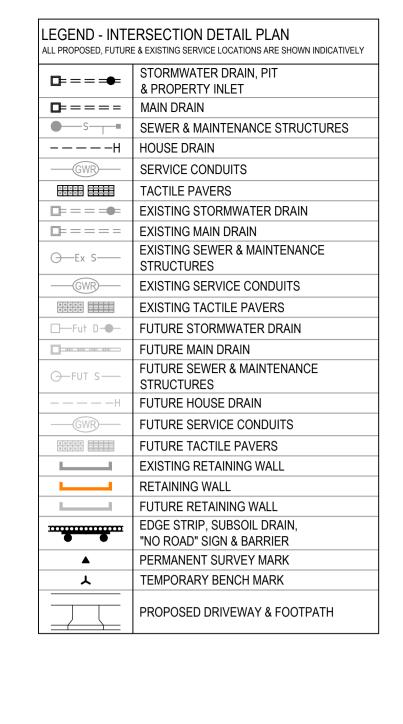
PROJECT / DRAWING No. 2152E-013-181 MELWAYS REF

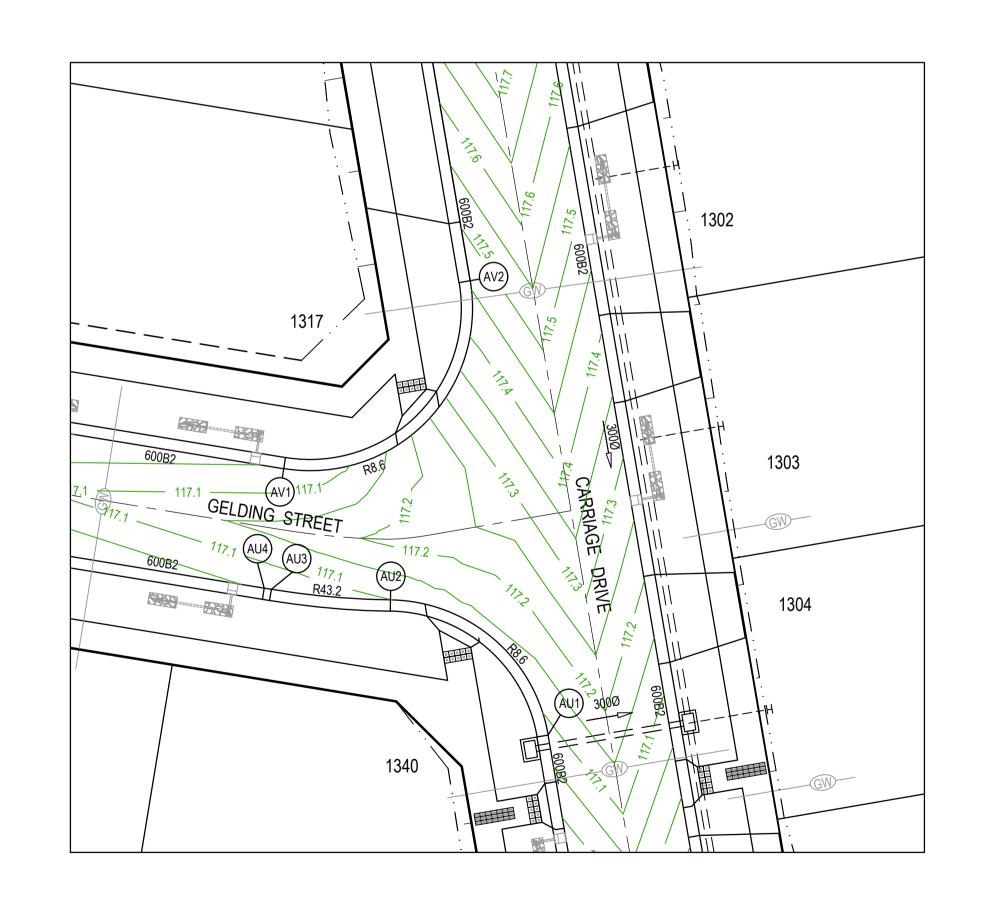
REVISION

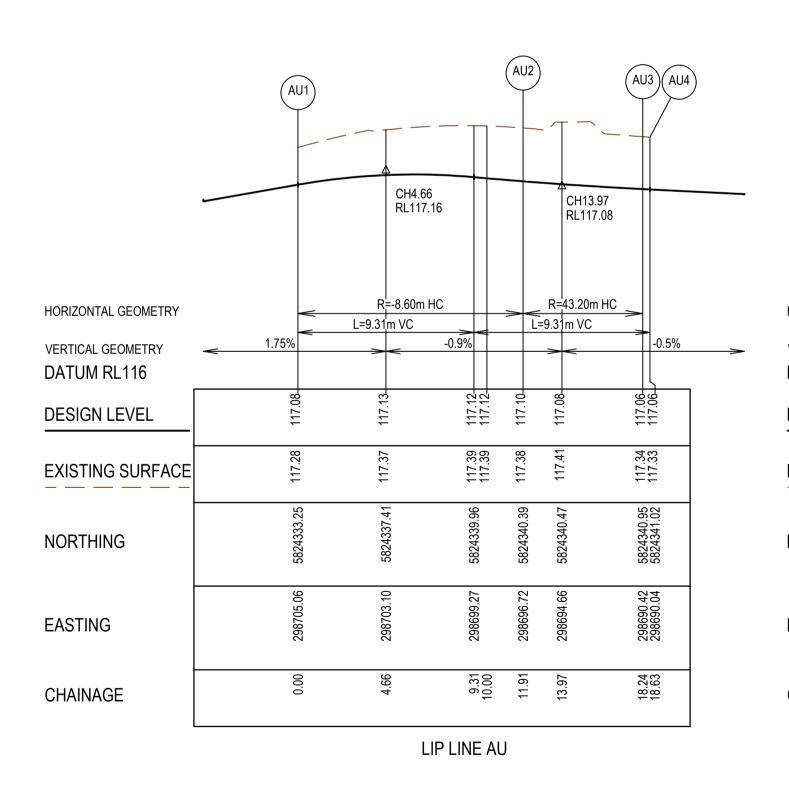


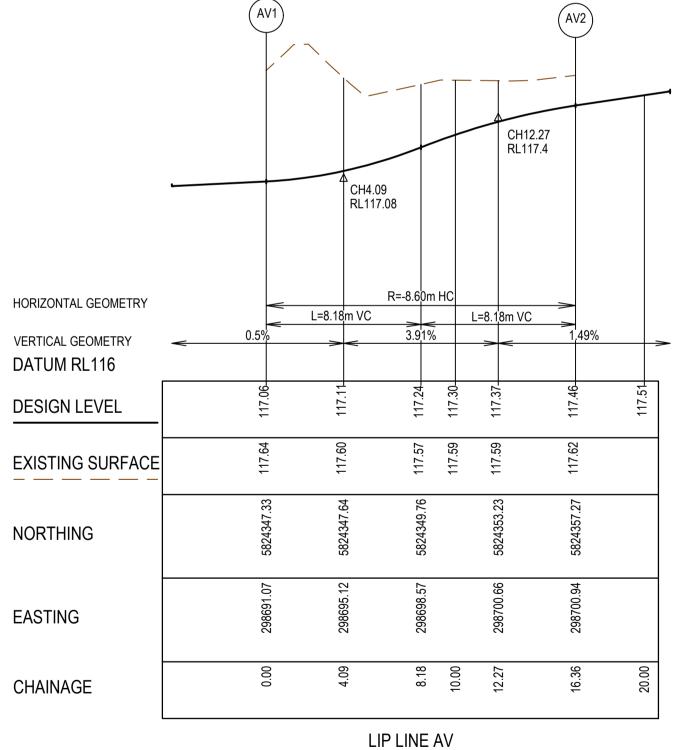












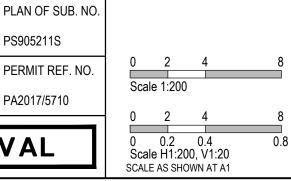
- ALL VEHICLE CROSSINGS AND PRAM CROSSINGS TO BE MINIMUM OF 0.75m FROM PITS.
- . ALL PRAM CROSSINGS TO BE MINIMUM OF 2.0m FROM VEHICLE CROSSINGS. VEHICLE EXCLUSION MEASURES BETWEEN ROAD RESERVE AND RESERVE TO FORM PART OF THE LANDSCAPE WORKS.
- INDUSTRIAL DRIVEWAYS TO COUNCIL RESERVES TO BE PROVIDED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

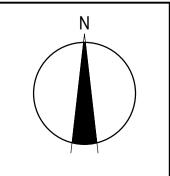
ΕV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
Α	10.05.22	ISSUED TO COUNCIL FOR APPROVAL	N.SHRESTHA	A.PERKINS	A.PERKINS	C.WILKINSON
					1	l







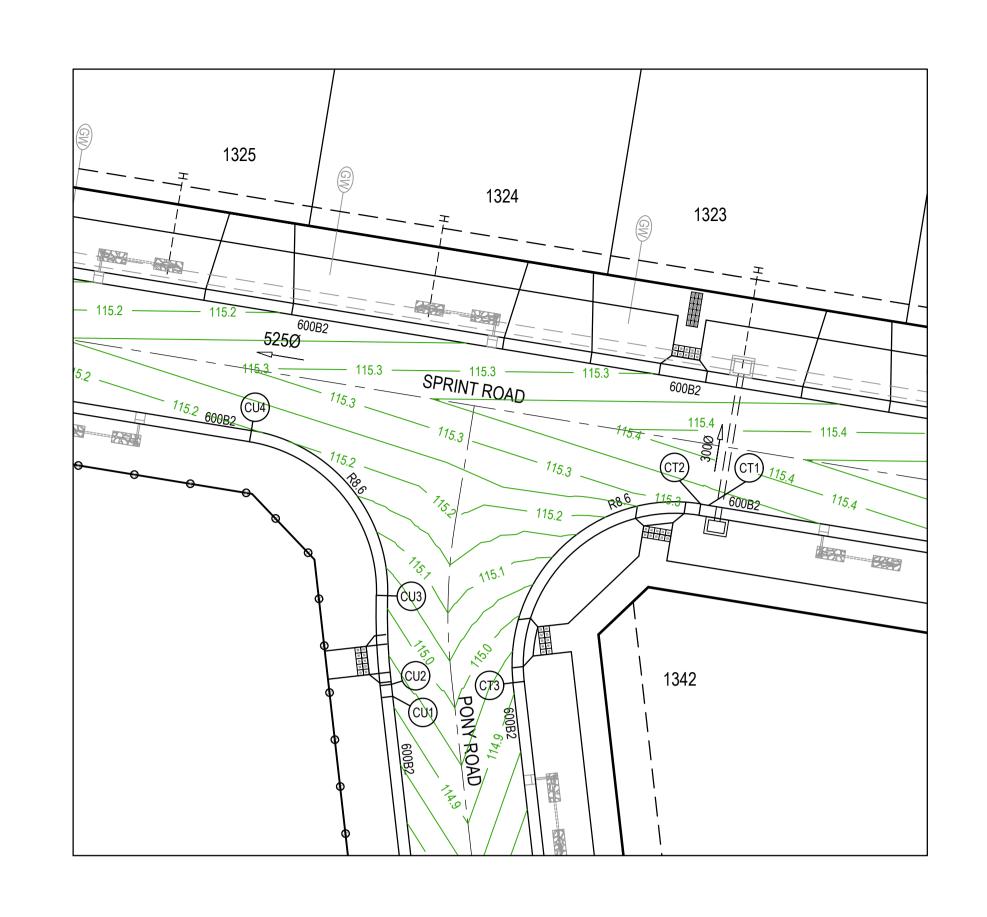


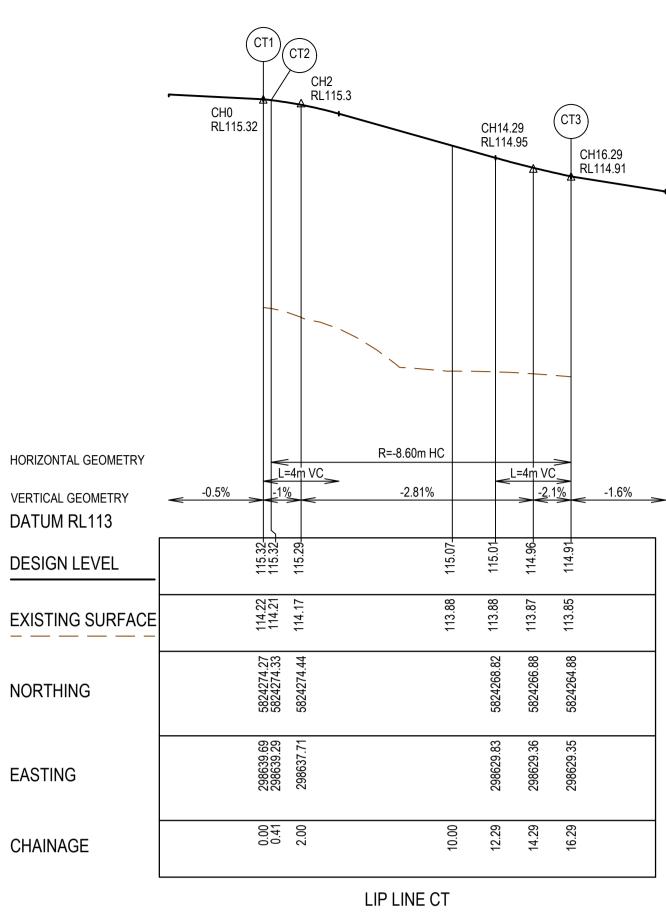


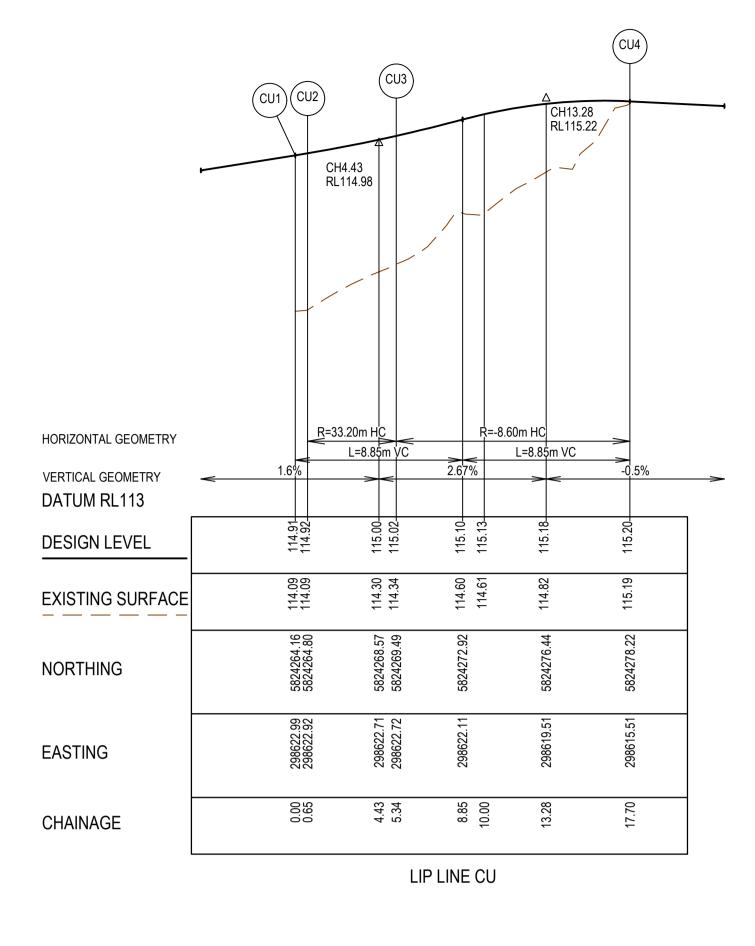


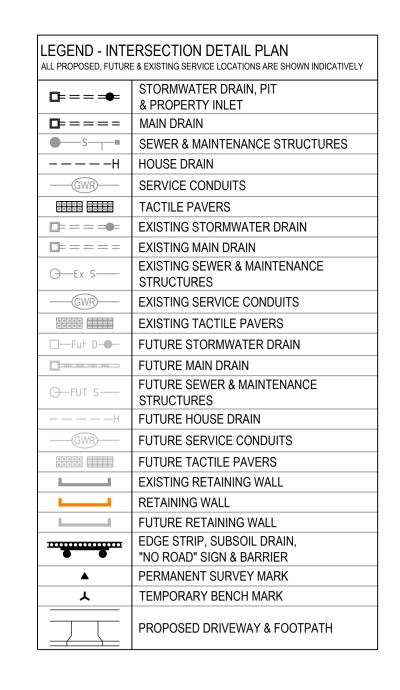


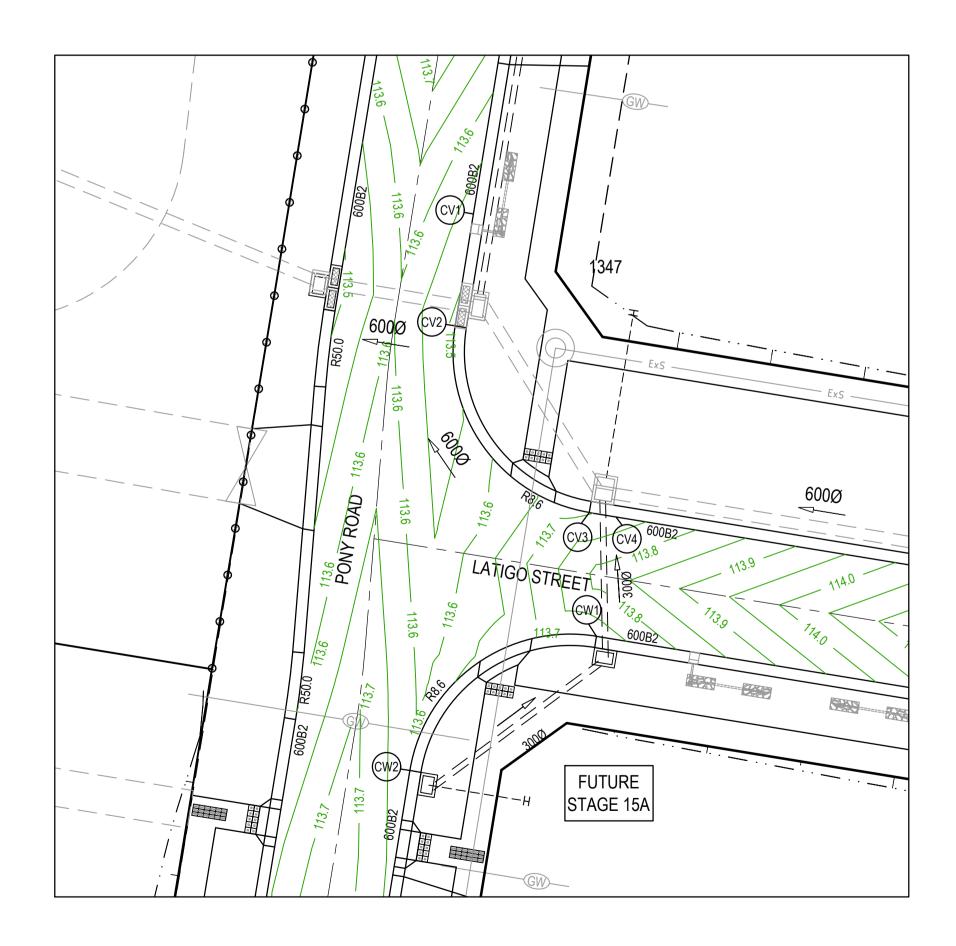
Westwood - Stage 13
Melton City Council
Road and Drainage
Intersection Detail Plan - 2

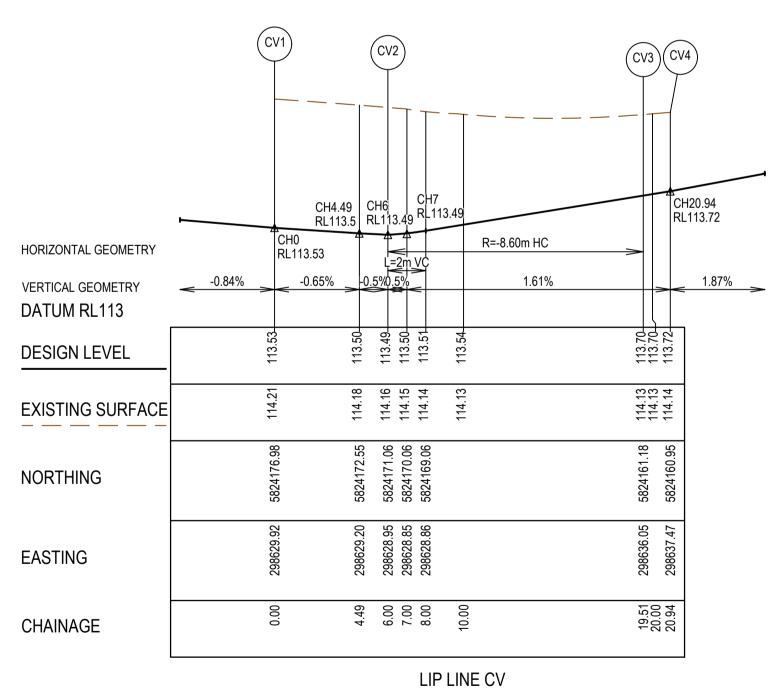


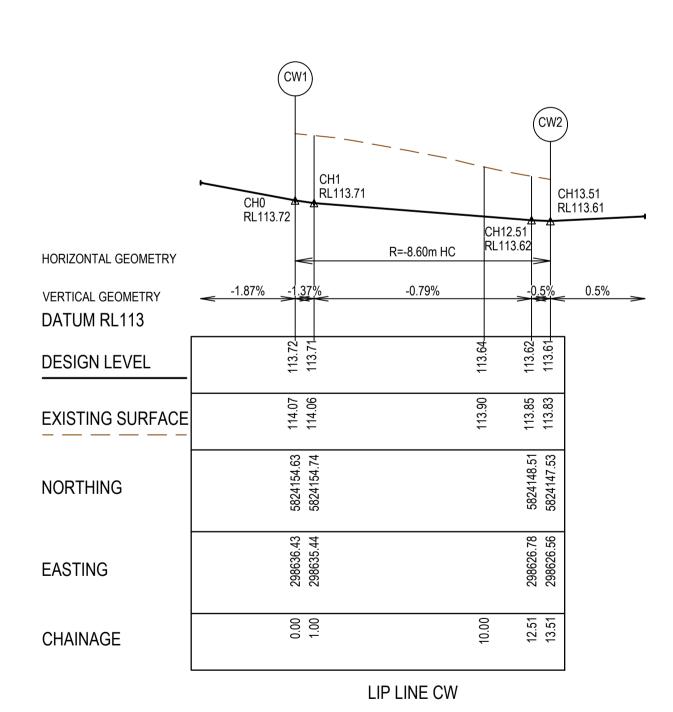












- ALL VEHICLE CROSSINGS AND PRAM CROSSINGS TO BE MINIMUM OF 0.75m FROM PITS.
- ALL PRAM CROSSINGS TO BE MINIMUM OF 2.0m FROM VEHICLE CROSSINGS. VEHICLE EXCLUSION MEASURES BETWEEN ROAD RESERVE AND RESERVE TO FORM
- PART OF THE LANDSCAPE WORKS.
- INDUSTRIAL DRIVEWAYS TO COUNCIL RESERVES TO BE PROVIDED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

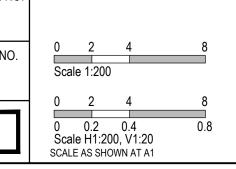
REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER
Α	10.05.22	ISSUED TO COUNCIL FOR APPROVAL	N.SHRESTHA	A.PERKINS	A.PERKINS

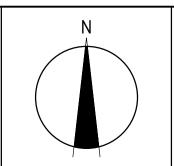
	SUB	JECT TO	APPRO	VAL
	Global-Mark.com.au®	Global-Mark.com.au <sup>®</sup>	Global-Mark.com.au <sup>®</sup>	PA2017/571
			Envil	
C.WILKINSON	Wanagement GO 9001	Walter Ad William SHO	ontal Management, 1501	PS905211S
APPROVER	hanagement.	agement . Ag.	Manageme	PLAN OF S







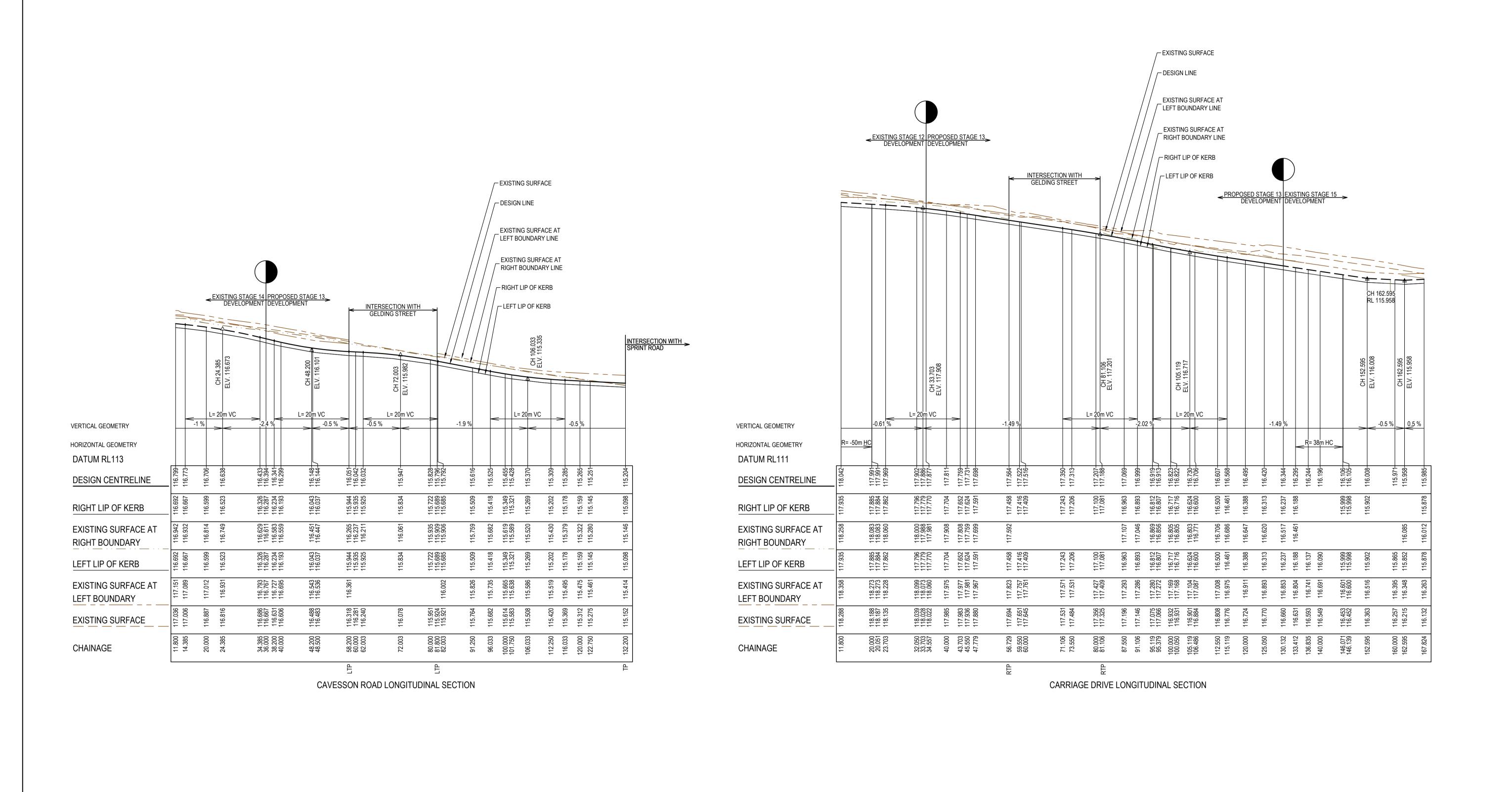




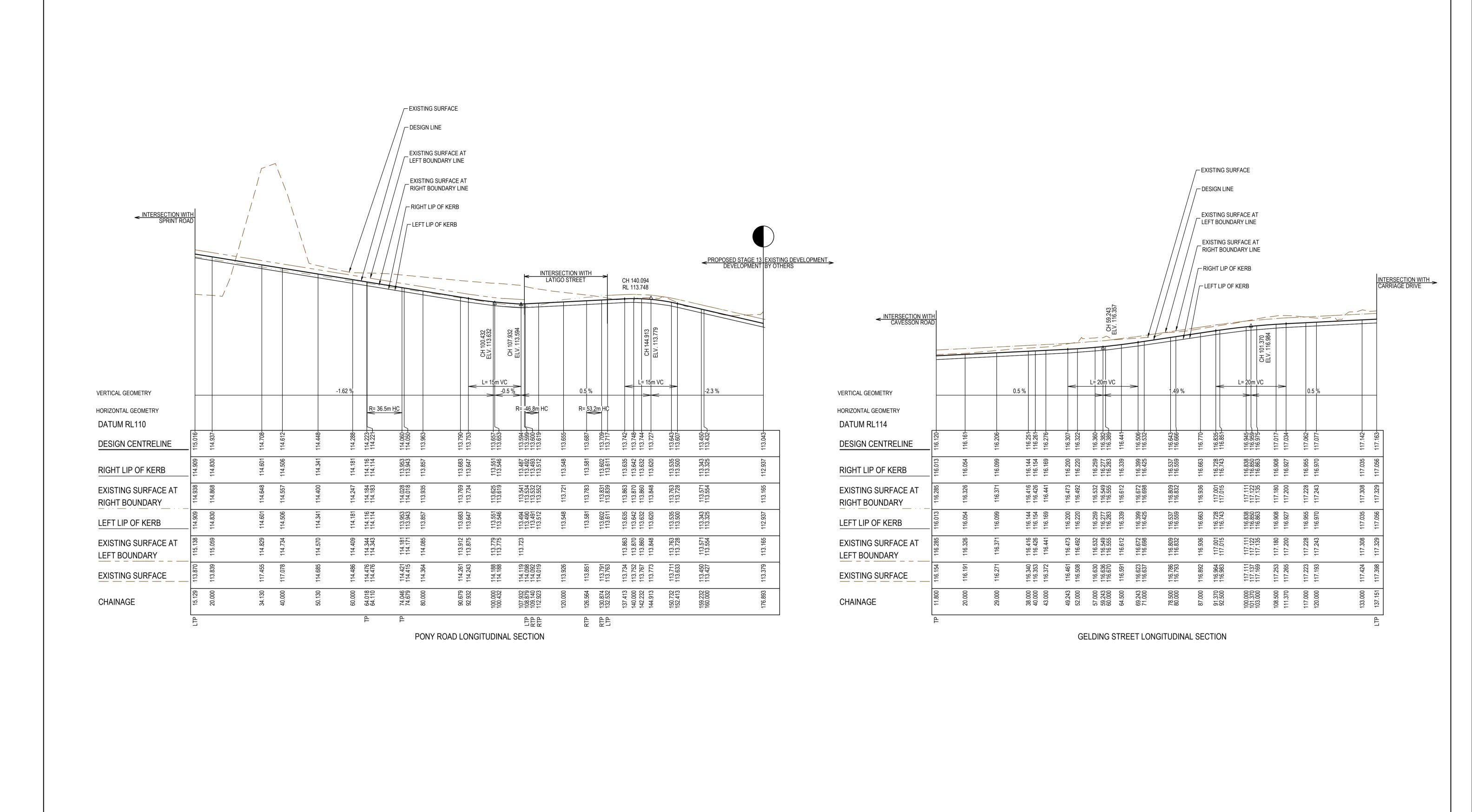




Westwood - Stage 13
Melton City Council
Road and Drainage
Intersection Detail Plan - 3



Westwood - Stage 13
Melton City Council
Road and Drainage
Longitudinal Sections - 1 REV DATE AMENDMENT / REVISION DESCRIPTION CHECKER DESIGNER PLAN OF SUB. NO. **SMEC** A 10.05.22 ISSUED TO COUNCIL FOR APPROVAL N.SHRESTHA A.PERKINS A.PERKINS C.WILKINSON Member of the Surbana Jurong Group Global-Mark.com.au® PA2017/5710 © ABN 47 065 475 149 Collins Square, Tower 4, Level 20, 727 Collins St SUBJECT TO APPROVAL Melbourne, VIC 3008 MELWAYS REF PROJECT / DRAWING No. 2152E-013-201 REVISION Ph 03 9514 1500 SCALE AS SHOWN AT A1 © SMEC 2021. Digital information supplied by this office is for information only, in the event of any discrepancies this should be discussed with the superintendent. Set out should be carried out in accordance with Relevant Authority standard drawings or as nominated by SMEC. DWG PATH: V:\\_Vault\Projects\_Urban\2152E-Westwood\2152E-13\Dwgs\2152E-013-201.dwg PRINTED BY: NS20148 on 10/05/2022 at 10:07:47 AM



PLAN OF SUB. NO.

PERMIT REF. NO.

Scale H1:500, V1:50 SCALE AS SHOWN AT A1

Global-Mark.com.au® PA2017/5710

SUBJECT TO APPROVAL

DRAFTER

N.SHRESTHA

CHECKER

A.PERKINS

C.WILKINSON

DESIGNER

A.PERKINS

REV DATE AMENDMENT / REVISION DESCRIPTION

A 10.05.22 ISSUED TO COUNCIL FOR APPROVAL

SMEC

Member of the Surbana Jurong Group

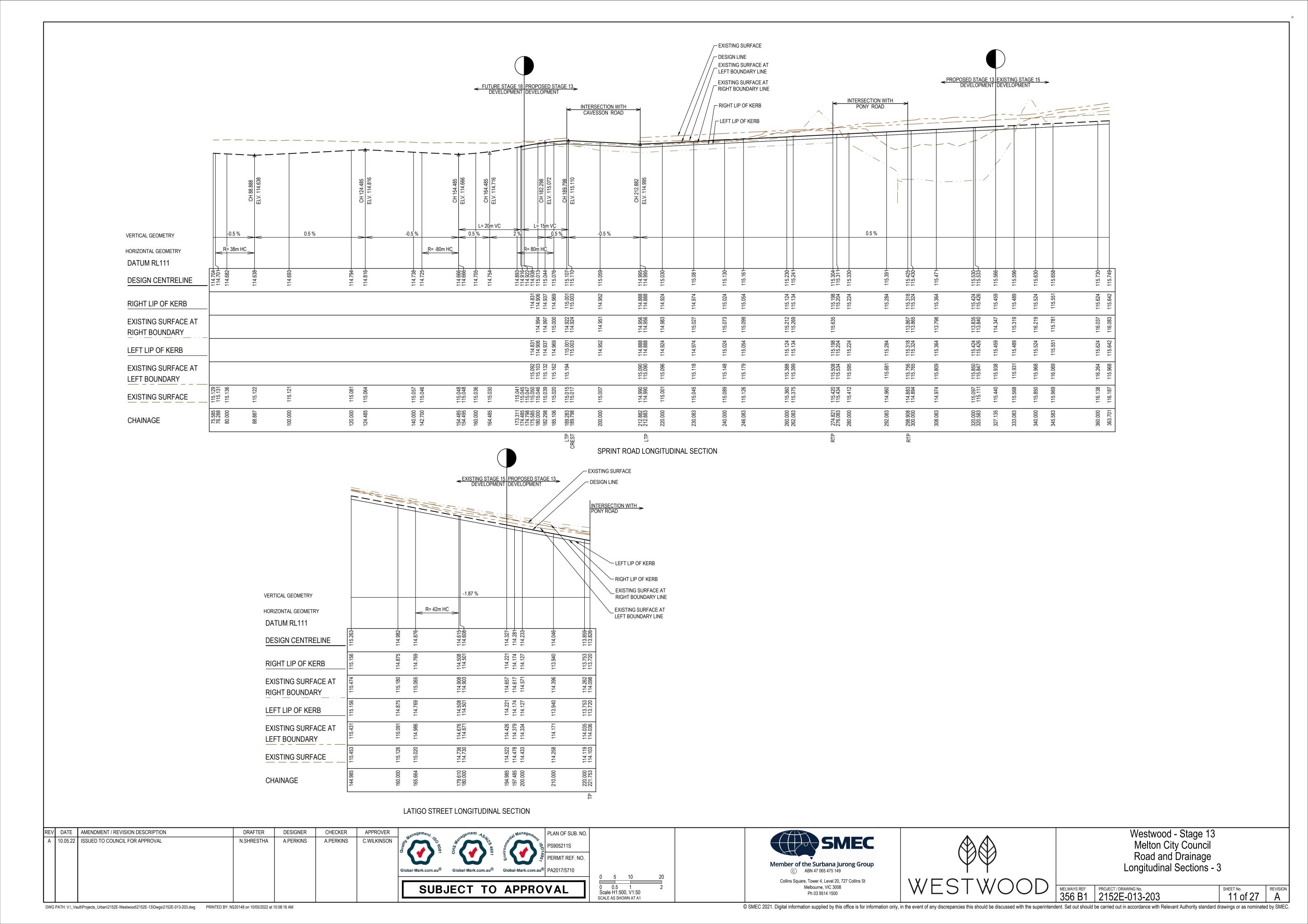
Collins Square, Tower 4, Level 20, 727 Collins St

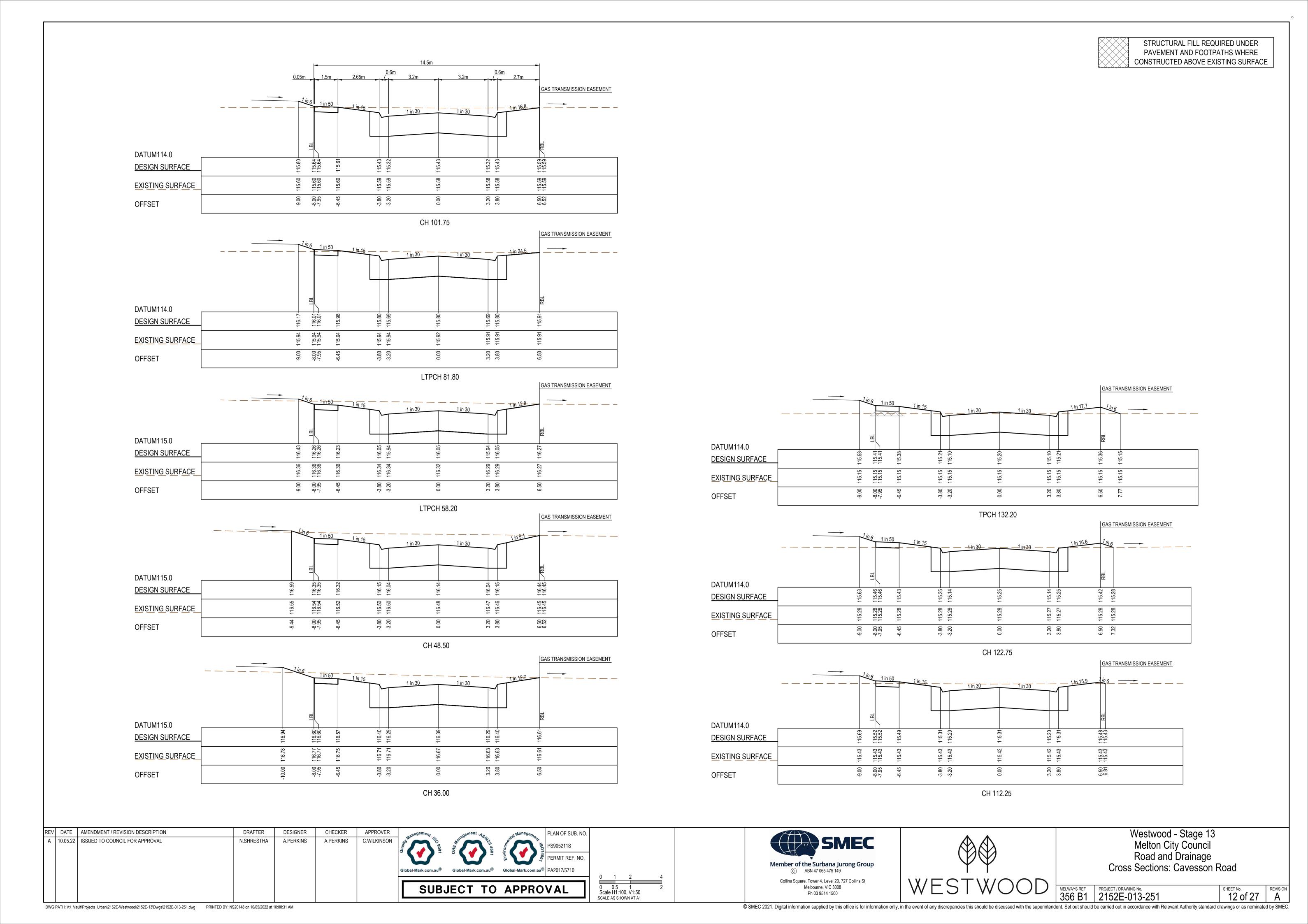
Melbourne, VIC 3008

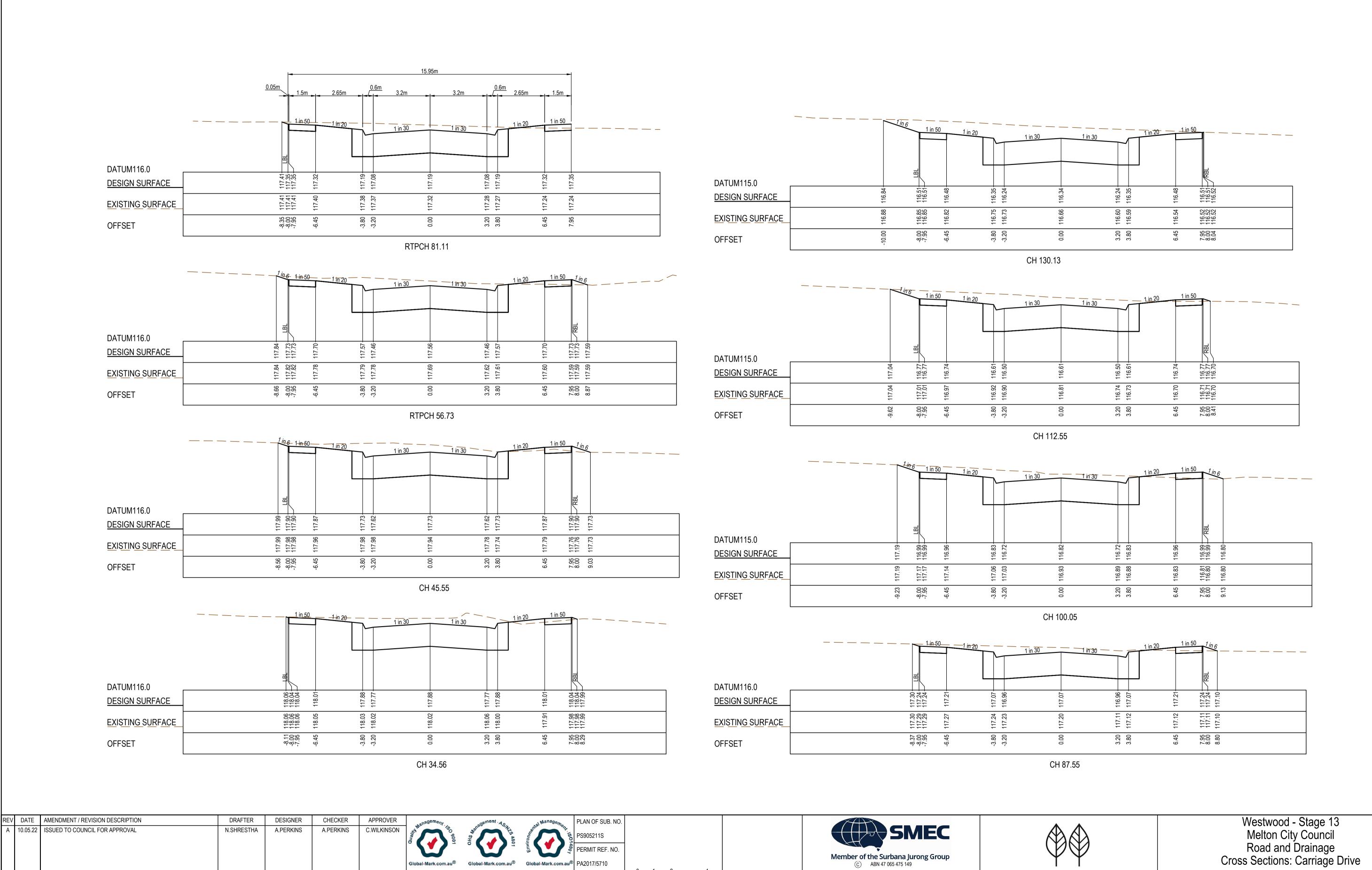
Ph 03 9514 1500

© ABN 47 065 475 149

Westwood - Stage 13
Melton City Council
Road and Drainage
Longitudinal Sections - 2







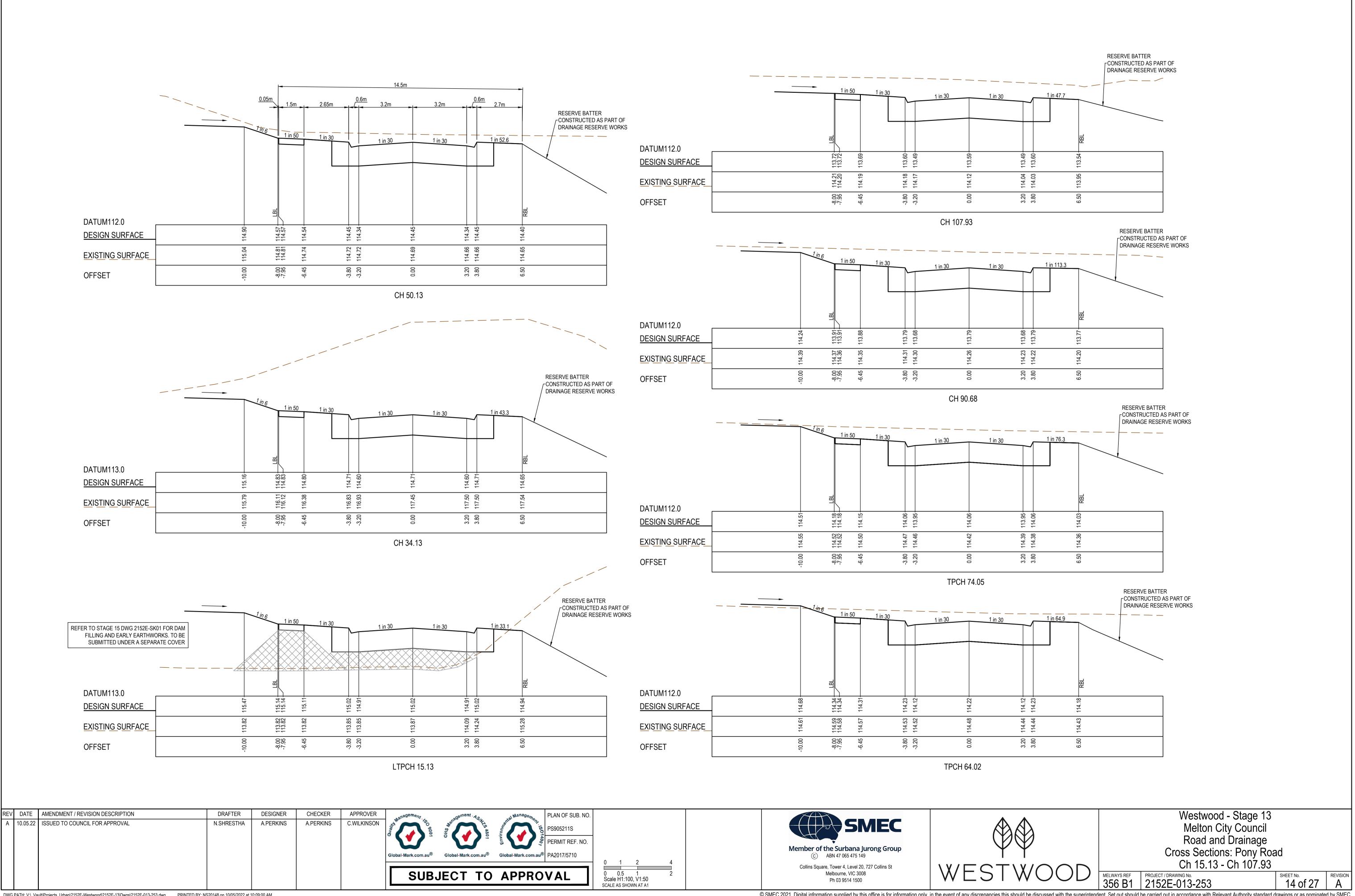
0 0.5 1 Scale H1:100, V1:50 SCALE AS SHOWN AT A1

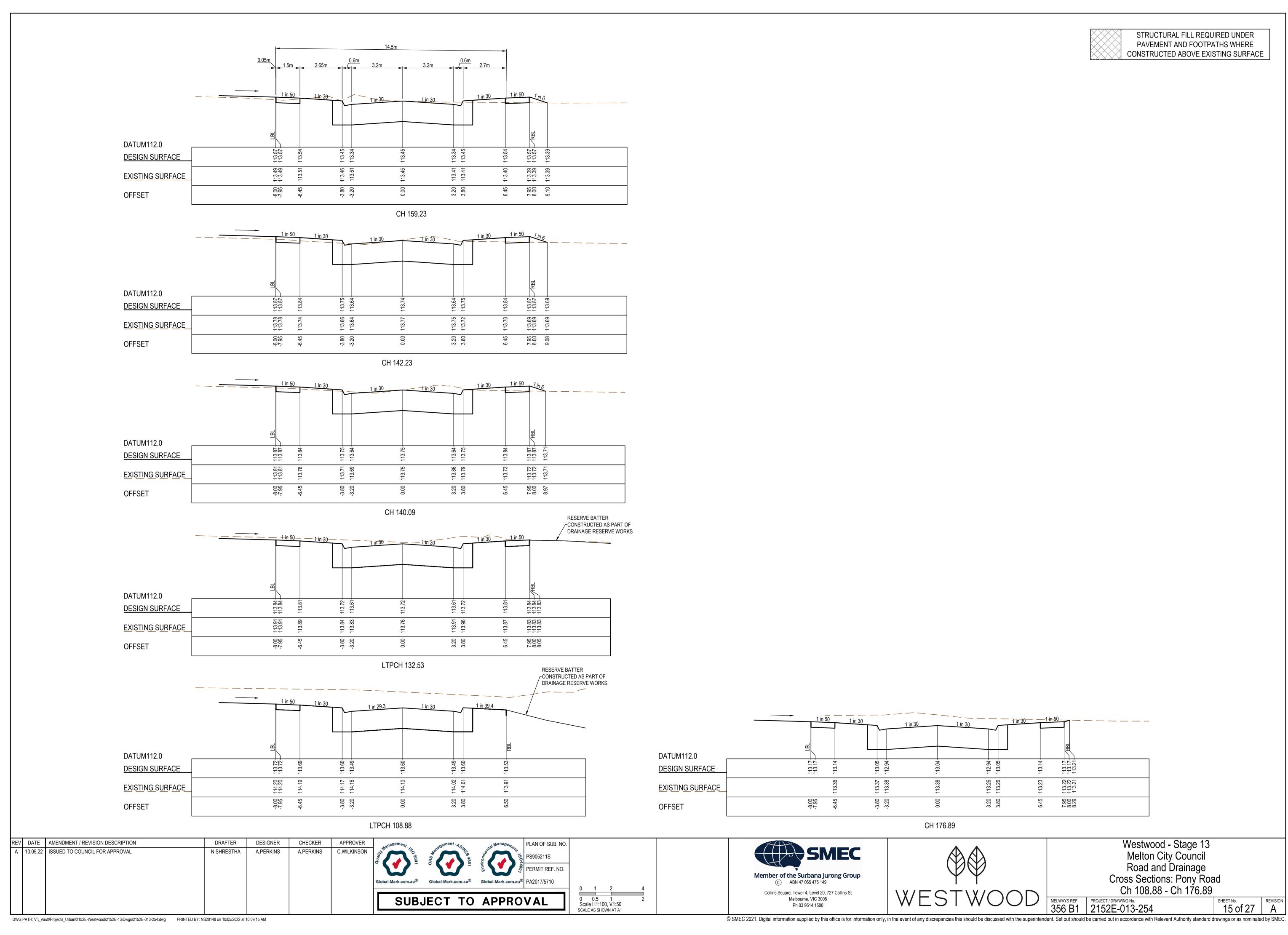
SUBJECT TO APPROVAL

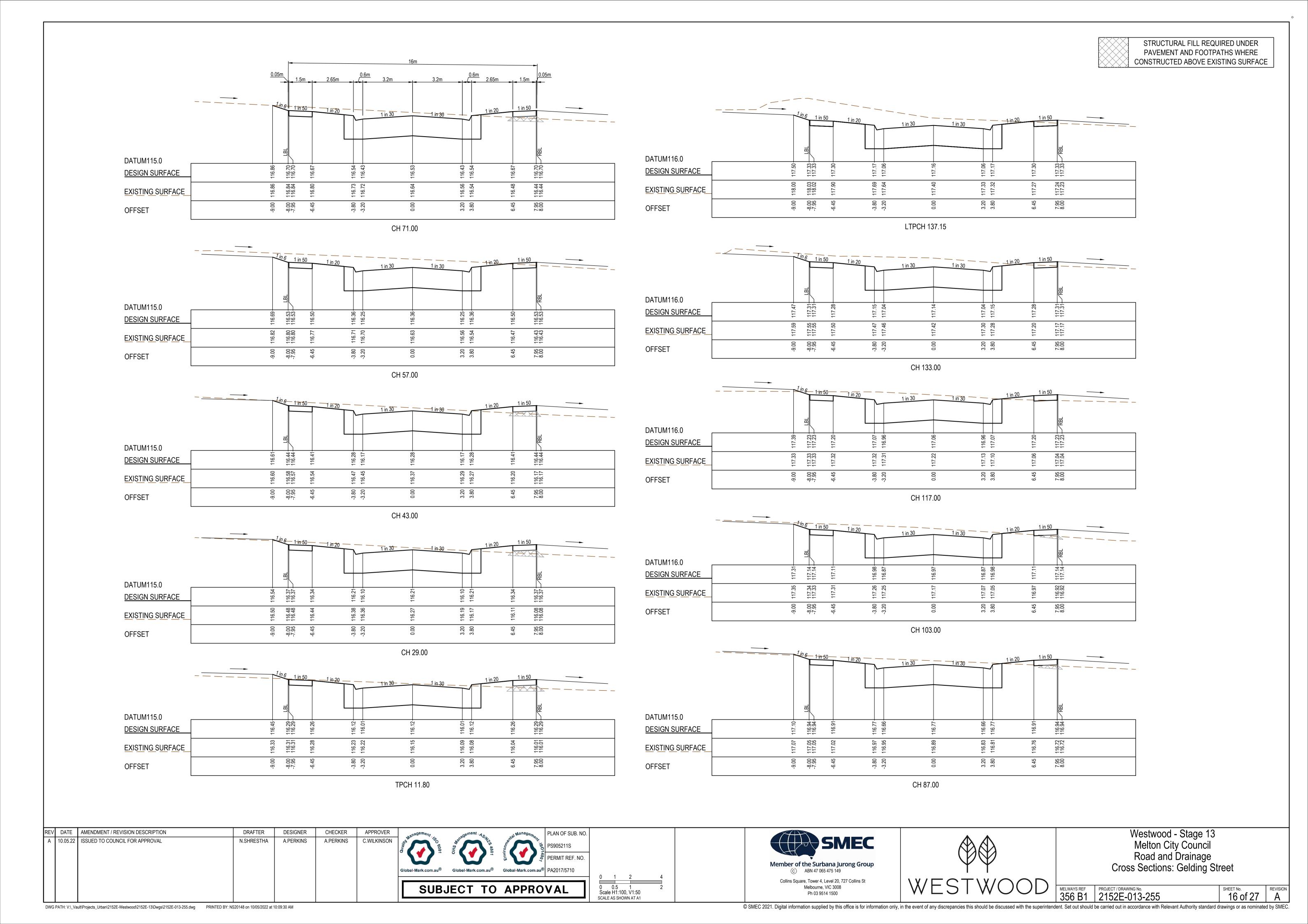
Collins Square, Tower 4, Level 20, 727 Collins St

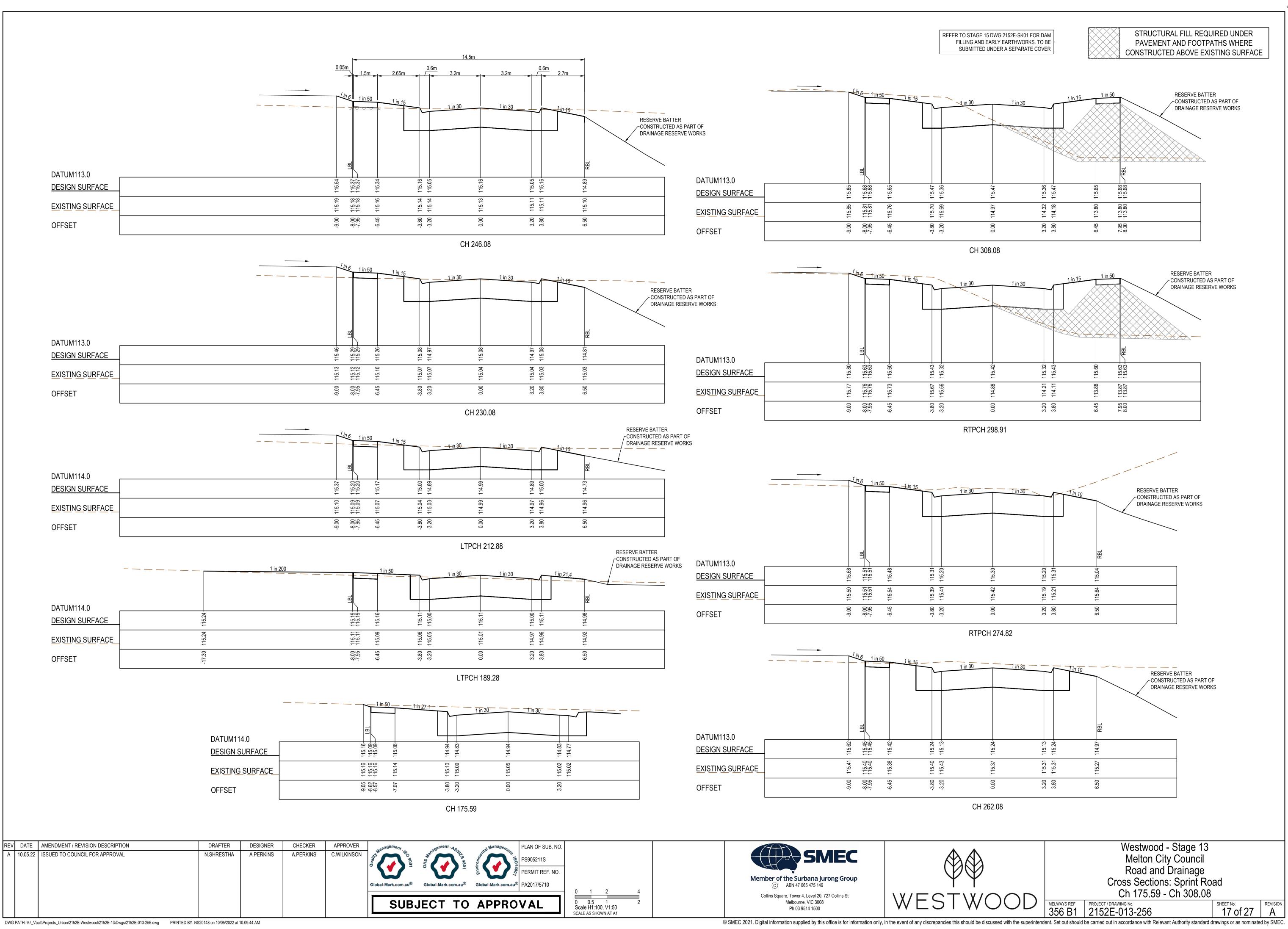
Melbourne, VIC 3008

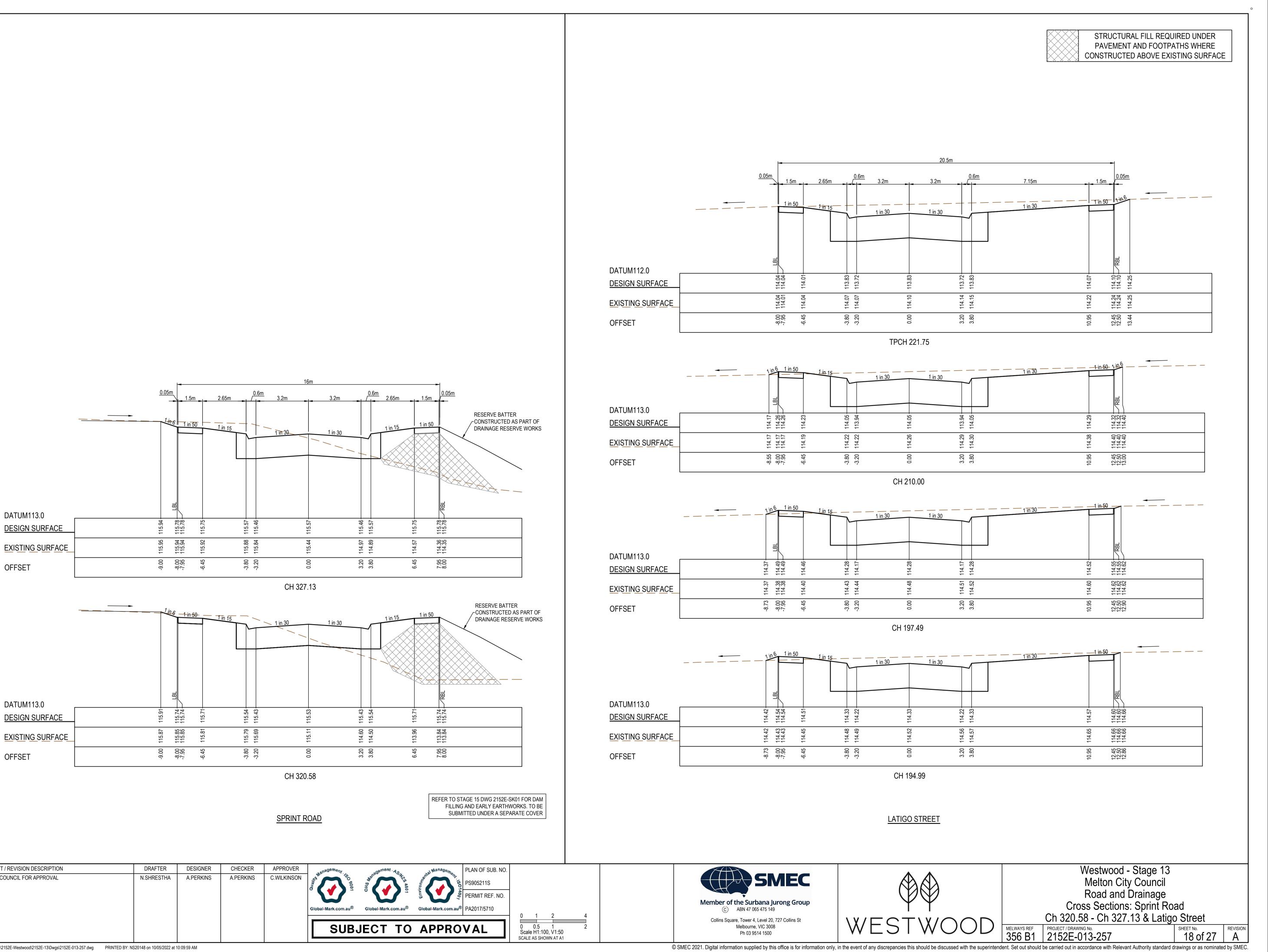
Ph 03 9514 1500











DATUM113.0

OFFSET

DATUM113.0

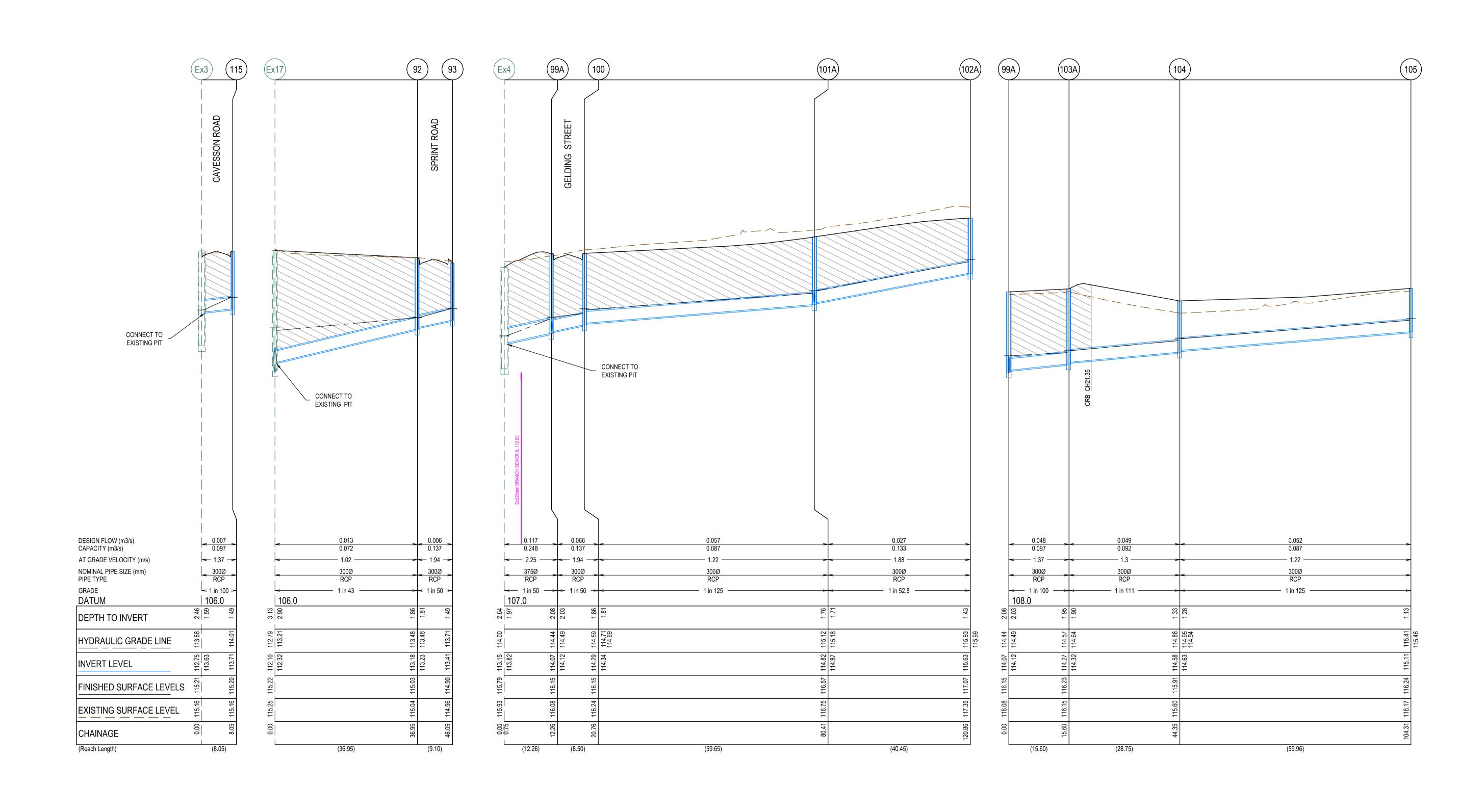
OFFSET

REV DATE AMENDMENT / REVISION DESCRIPTION

A 10.05.22 ISSUED TO COUNCIL FOR APPROVAL

**DESIGN SURFACE** 

DESIGN SURFACE



PLAN OF SUB. NO.

SUBJECT TO APPROVAL

0 0.5 1 Scale H1:500, V1:50 SCALE AS SHOWN AT A1

DRAFTER

N.SHRESTHA

DESIGNER

A.PERKINS

CHECKER

A.PERKINS

C.WILKINSON

REV DATE AMENDMENT / REVISION DESCRIPTION

A 10.05.22 ISSUED TO COUNCIL FOR APPROVAL

SMEC

Member of the Surbana Jurong Group © ABN 47 065 475 149

Collins Square, Tower 4, Level 20, 727 Collins St

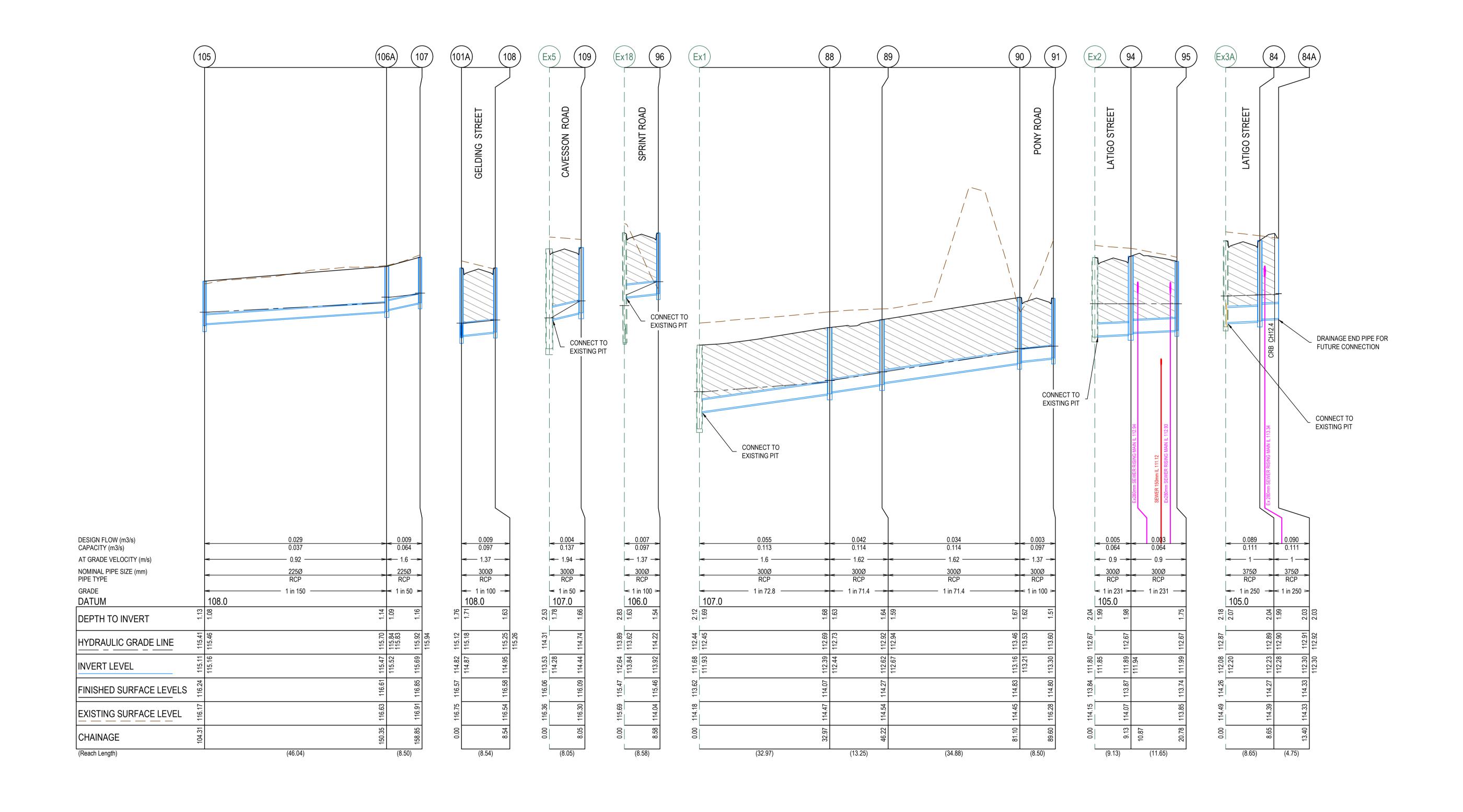
Melbourne, VIC 3008

Westwood - Stage 13

Melton City Council

Road and Drainage

Drainage Longitudinal Sections - 1



PLAN OF SUB. NO.

SUBJECT TO APPROVAL

0 0.5 1 Scale H1:500, V1:50 SCALE AS SHOWN AT A1

CHECKER

A.PERKINS

C.WILKINSON

DESIGNER

A.PERKINS

N.SHRESTHA

REV DATE AMENDMENT / REVISION DESCRIPTION

A 10.05.22 ISSUED TO COUNCIL FOR APPROVAL

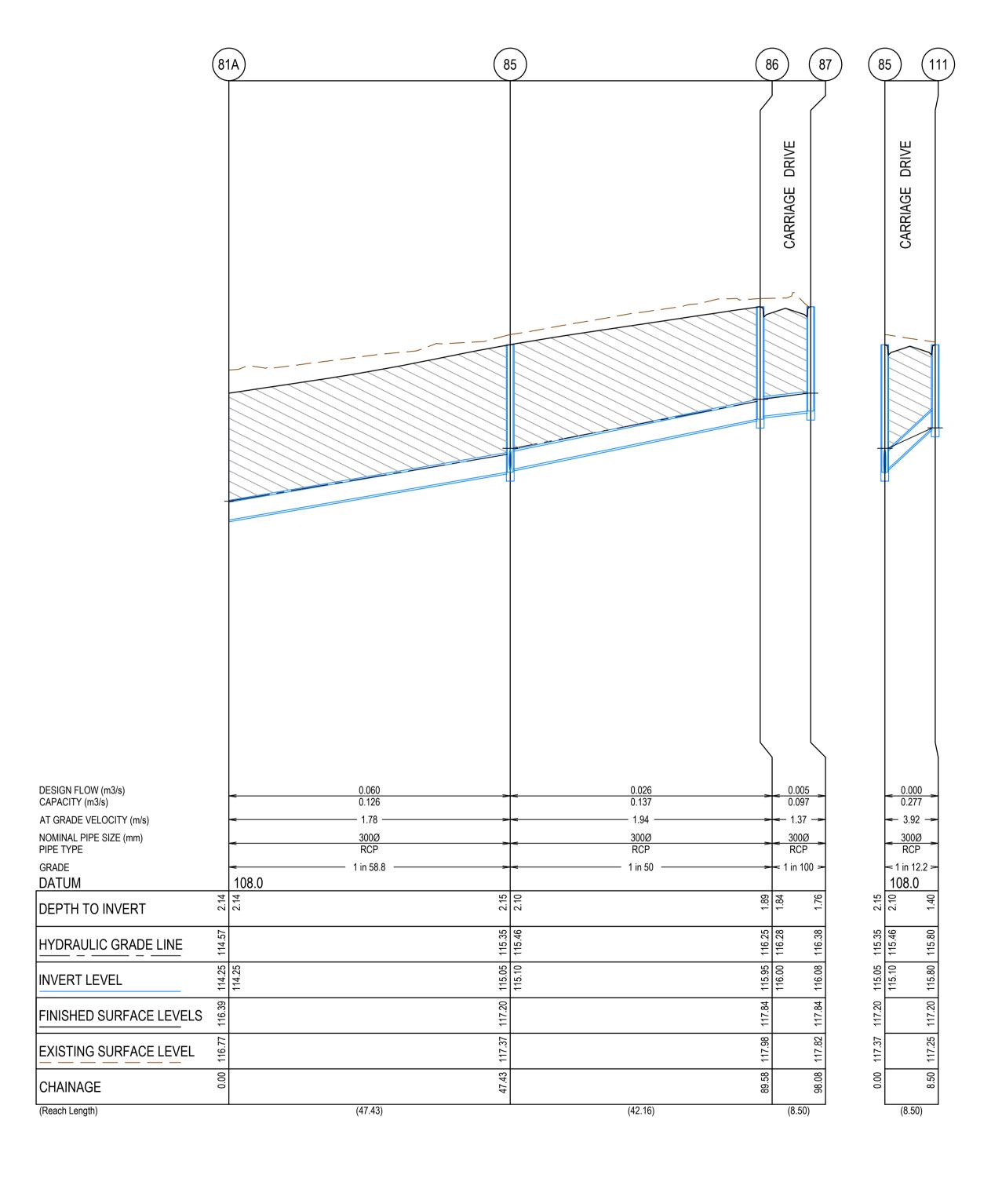
SMEC

Member of the Surbana Jurong Group
© ABN 47 065 475 149

Collins Square, Tower 4, Level 20, 727 Collins St

Westwood - Stage 13
Melton City Council
Road and Drainage
Drainage Longitudinal Sections - 2

CRUSHED ROCK BACKFILL CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE WITH COUNCIL STANDARDS & SPECIFICATIONS, CLASS 3 UNLESS SPECIFIED OTHERWISE

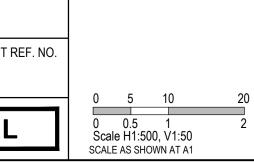


REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER
Α	NI	ISSUED TO COUNCIL FOR APPROVAL	N.SHRESTHA	A.PERKINS	A.PERKINS	C.WILKINSON













Westwood - Stage 13

Melton City Council

Road and Drainage

Drainage Longitudinal Sections - 1

MELWAYS REF PROJECT / DRAWING No. 2152E-013-301 sheet No. Revision A

DRAFTER

N.SHRESTHA

DESIGNER

A.PERKINS

CHECKER

A.PERKINS

REV DATE AMENDMENT / REVISION DESCRIPTION
A 10.05.22 ISSUED TO COUNCIL FOR APPROVAL

SUBJECT TO APPROVAL

SCALE AS SHOWN AT A1

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



Westwood - Stage 13
Melton City Council
Road and Drainage
Drainage Longitudinal Sections - 3

MELWAYS REF PROJECT / DRAWING No. 21 of 27 A

REVISION A

⊏XO	EX.JP	EX 1300	EX900	300	113.023			115.211	2.437	EDCINI OUT & EDCINI OUT	CONSTRUCT PRECAST CATCH FIT ON EXISTING JF. HAUNCH FIT TO 000X900 COVER
				Ex1050	112.804	Ex1050	112.754				
115	GRATED ENTRY PIT	600	900			300	113.705	115.2	1.495	EDCM 601 & EDCM 605	
Ex17	Ex.JP	750	900	300	112.32			115.224	3.125	EDCM 601 & EDCM 607	CONSTRUCT PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600X900 COVER
				Ex525	112.149	Ex525	112.099				
92	DOUBLE GRATED ENTRY PIT	600	900	300	113.229	300	113.179	115.034	1.855	EDCM 602 & EDCM 605	
93	DOUBLE GRATED ENTRY PIT	600	900			300	113.411	114.899	1.488	EDCM 602 & EDCM 605	
Ex4	Ex.JP	Ex1500	Ex1050	375	113.823			115.789	2.641	EDCM 601 & EDCM 607	CONSTRUCT PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600X900 COVER
				Ex1050	113.198	Ex1050	113.148				
99A	GRATED ENTRY PIT	600	900	300	114.119	375	114.069	116.148	2.08	EDCM 601 & EDCM 605	
100	GRATED ENTRY PIT	600	900	300	114.339	300	114.289	116.148	1.86	EDCM 601 & EDCM 605	
101A	GRATED ENTRY PIT	600	900	300	114.866	300	114.816	116.575	1.759	EDCM 601 & EDCM 605	
102A	GRATED ENTRY PIT	600	900			300	115.632	117.065	1.433	EDCM 601 & EDCM 605	
103A	JUNCTION PIT	600	900	300	114.325	300	114.275	116.226	1.952	EDCM 605	
104	JUNCTION PIT	600	900	300	114.633	300	114.583	115.912	1.328	EDCM 605	
105	JUNCTION PIT	600	900	225	115.163	300	115.113	116.24	1.127	EDCM 605	
106A	JUNCTION PIT	600	900	225	115.52	225	115.47	116.613	1.143	EDCM 605	
107	JUNCTION PIT	600	900	220	110.02	225	115.69	116.848	1.158	EDCM 605	
108	GRATED ENTRY PIT	600	900			300	114.951	116.58	1.629	EDCM 601 & EDCM 605	
Ex5	Ex.JP	Ex1500	Ex900	300	114.278	300	114.951	116.059	2.531	EDCM 601 & EDCM 607	CONSTRUCT PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600X900 COVER
LXJ	EX.SF	EX1300	EX300	Ex1050	113.578	Ex1050	113.528	110.039	2.551	EDOW OUT & EDOW OUT	CONSTRUCT FREGAST CATCHTFIT ON EXISTING OF THAONOTTFIT TO 000X900 COVER
100	GRATED ENTRY PIT	600	900	EX1030	113.576		114.439	116.095	1.656	EDCM 601 & EDCM 605	
109 Ex18	Ex.JP	Ex750	Ex900	300		300	114.439	115.468	2.831		CONSTRUCT PRECAST CATCULATE ON EVICTING ID HALINGH BIT TO SOOYOOD COVER
	EX.JP	EX750	EX900		112.69	F., F0F	112.64	115.400	2.031	EDCM 601 & EDCM 607	CONSTRUCT PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600X900 COVER
00	ODATED ENTRY RIT	000	000	Ex525	112.69	Ex525	_	445.400	4.54	EDOM COA O EDOM COE	
96	GRATED ENTRY PIT	600	900			300	113.923	115.463	1.54	EDCM 601 & EDCM 605	CONOTRUOT DOUBLE DREGACT CATCULBIT ON EVICTING ID HAUNOUBIT TO COA COA COA
Ex55	Ex.JP	Ex1050	Ex1050		444.00	600	111.2	113.631	2.43	EDCM 602 &VR SD1023	CONSTRUCT DOUBLE PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600x900 COVER
Ex1	Ex.JP	Ex600	Ex1200	300	111.93			113.622	2.119	EDCM 602 & EDCM 607	CONSTRUCT DOUBLE PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600X900 COVER
				Ex600	111.684	Ex600	111.5	113.619			
88	GRATED ENTRY PIT	600	900	300	112.437	300	112.387	114.068	1.682	EDCM 601 & EDCM 605	
89	JUNCTION PIT	600	900	300	112.672	300	112.622	114.265	1.643		
90	GRATED ENTRY PIT	600	900	300	113.211	300	113.161	114.831	1.671	EDCM 601 & EDCM 605	
91	GRATED ENTRY PIT	600	900			300	113.296	114.804	1.509	EDCM 601 & EDCM 605	
Ex2	Ex.JP	Ex1200	Ex900	300	111.854			113.841	2.037	EDCM 601 & EDCM 607	CONSTRUCT PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600X900 COVER
				Ex600	111.854	Ex600	111.804				
94	GRATED ENTRY PIT	600	900	300	111.944	300	111.894	113.873	1.979	EDCM 601 & EDCM 605	
95	GRATED ENTRY PIT	600	900			300	111.994	113.741	1.747	EDCM 601 & EDCM 605	
Ex3A	Ex.JP	Ex900	Ex900	375	112.2			114.263	2.179	EDCM 601 & EDCM 607	CONSTRUCT PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600X900 COVER
				Ex525	112.158	Ex600	112.083				
84	GRATED ENTRY PIT	600	900	375	112.28	375	112.23	114.273	2.042	EDCM 601 & EDCM 605	
84A	ENDPIPE			375	112.299	375	112.299	114.327	2.027		ENDPIPE FOR FUTURE CONNECTION
81A	ExENDPIPE			300				116.385	2.137		CONNECT TO EXISTING ENDPIPE
85	GRATED ENTRY PIT	600	900	300	115.104	300	115.054	117.203	2.149	EDCM 601 & EDCM 605	
86	GRATED ENTRY PIT	600	900	300	115.998	300	115.948	117.842	1.894	EDCM 601 & EDCM 605	
87	GRATED ENTRY PIT	600	900			300	116.083	117.842	1.759	EDCM 601 & EDCM 605	
	GRATED ENTRY PIT		900	<del> </del>		300	115.8	117.203	1.403	EDCM 601 & EDCM 605	

PIT SCHEDULE

F.S.L.

115.211

2.457

STANDARD DRAWING

EDCM 601 & EDCM 607

REMARKS

CONSTRUCT PRECAST CATCH PIT ON EXISTING JP. HAUNCH PIT TO 600X900 COVER

OUTLET

INLET

WIDTH (mm) LENGTH (mm) DIAMETER (mm) INV R.L. (m) DIAMETER (mm) INV R.L. (m)

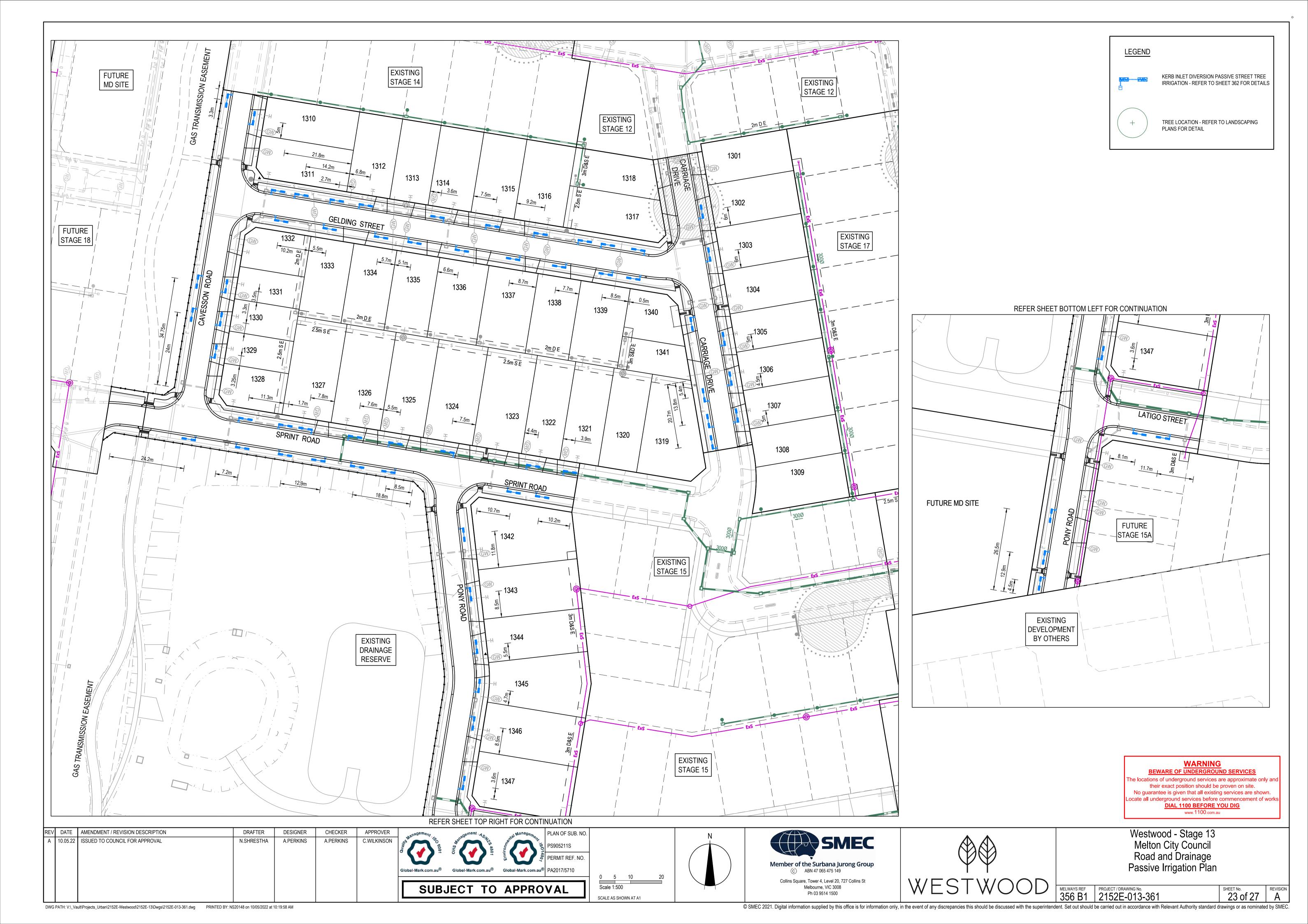
300

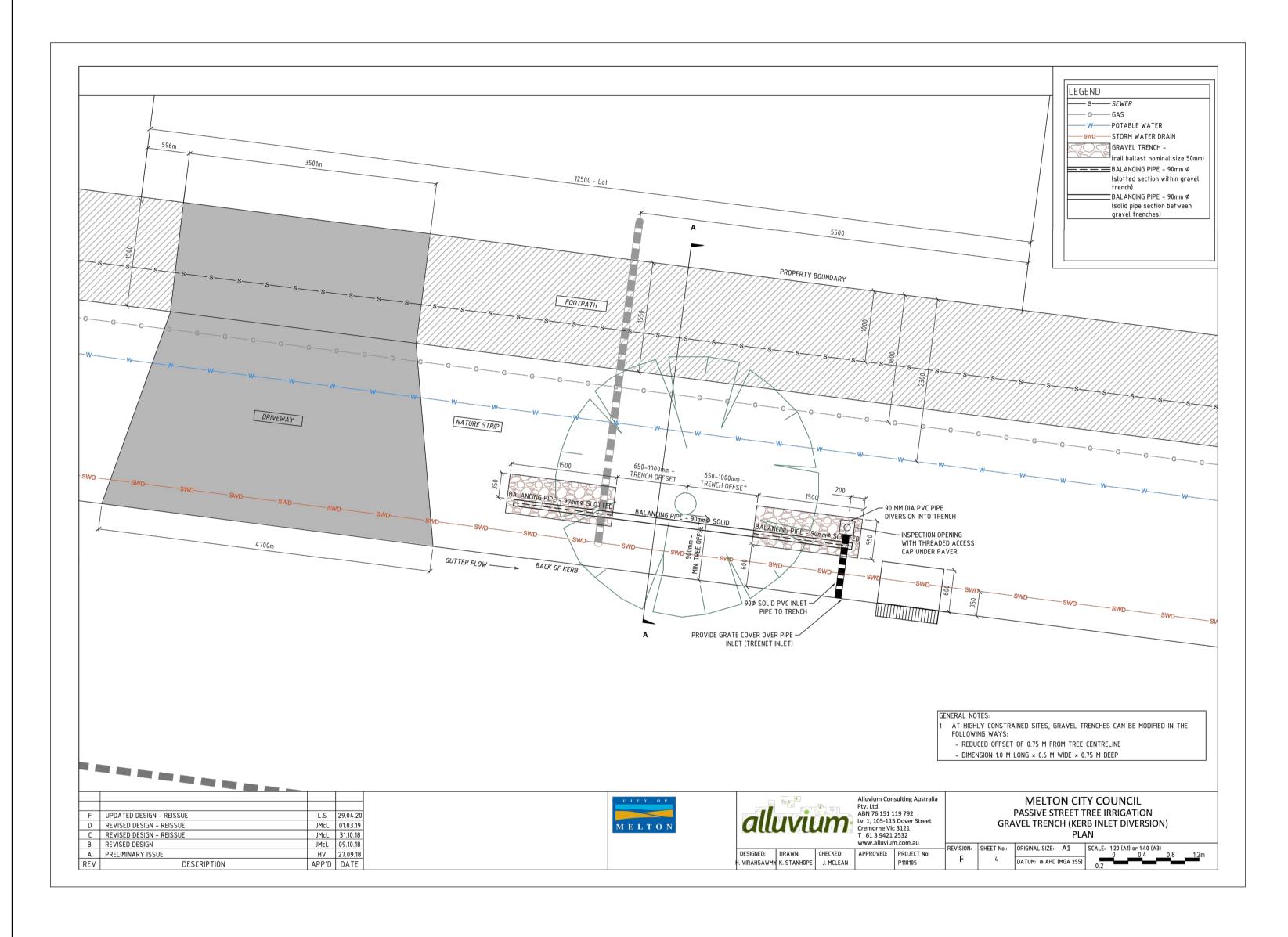
INTERNAL

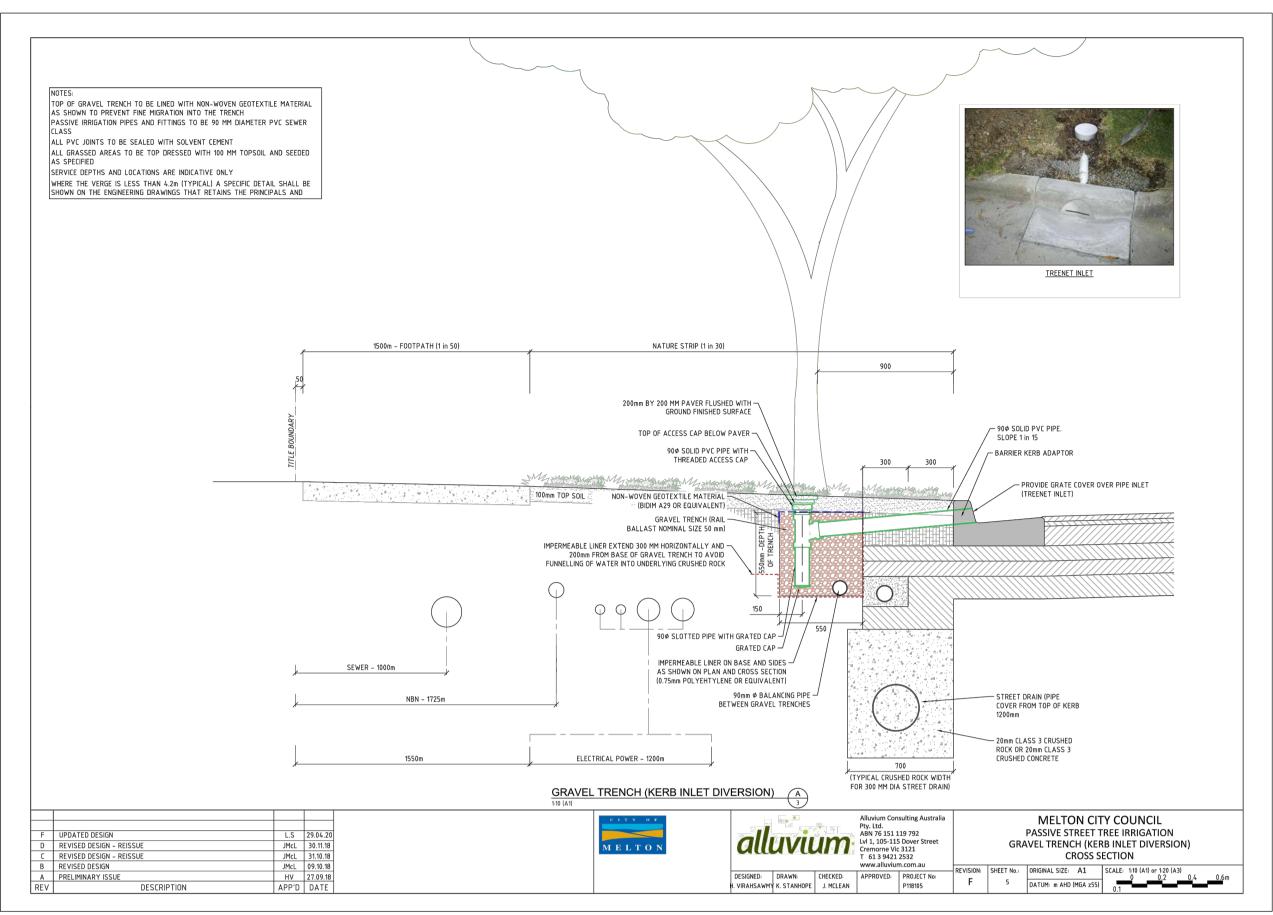
PIT NUMBER

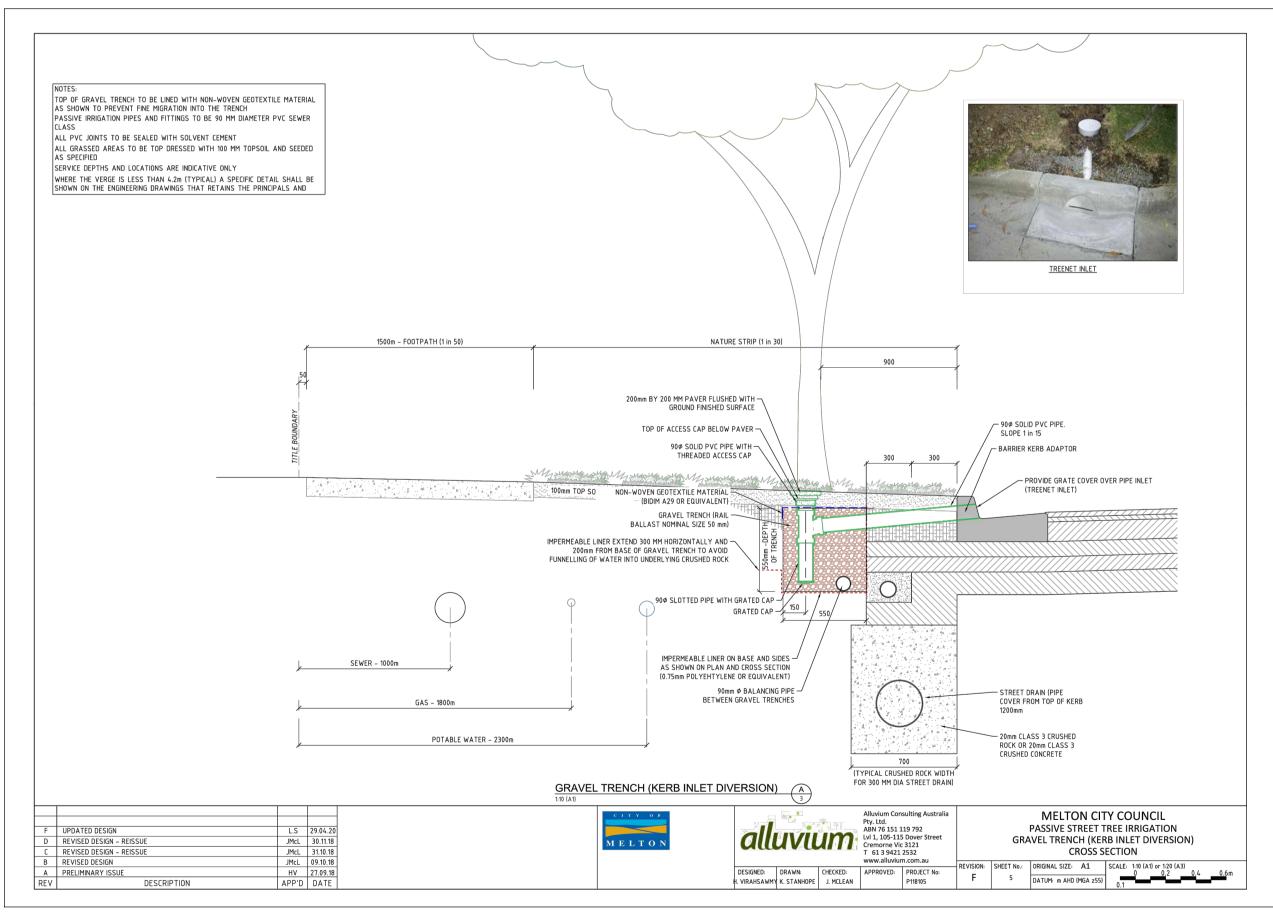
Ex3

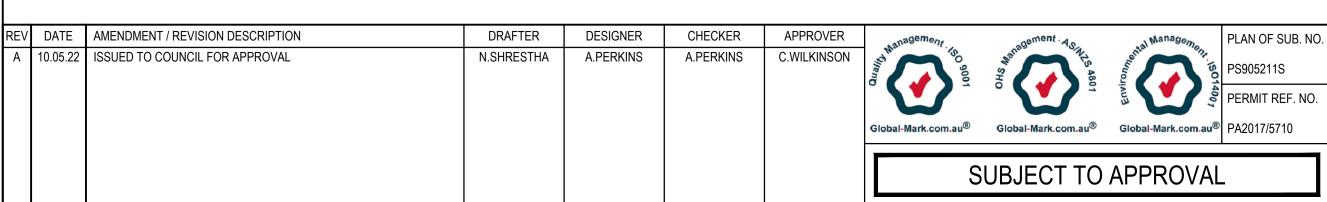
Ex.JP











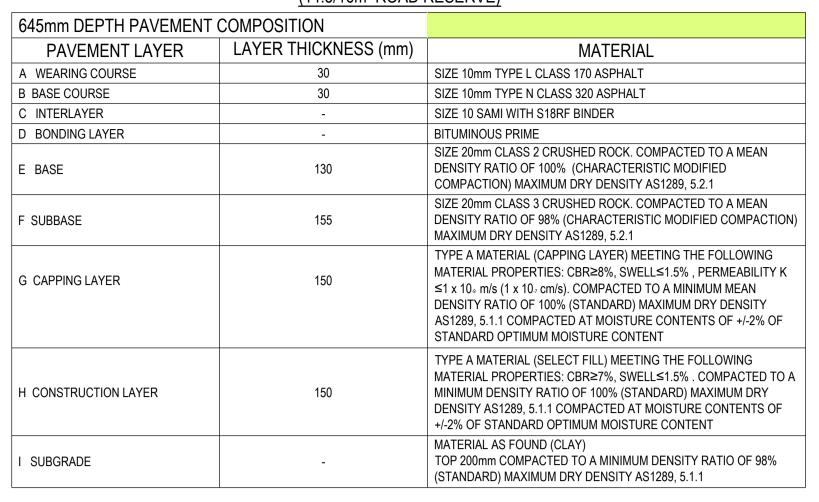


SCALE AS SHOWN AT A1



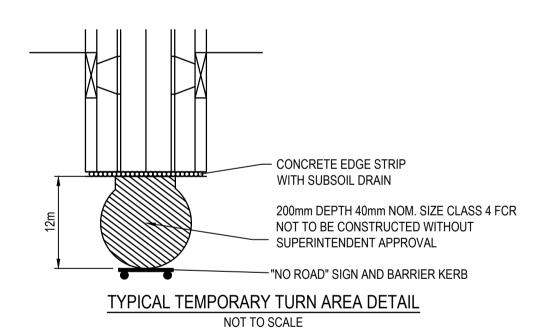
Westwood - Stage 13
Melton City Council
Road and Drainage
Passive Irrigation Details

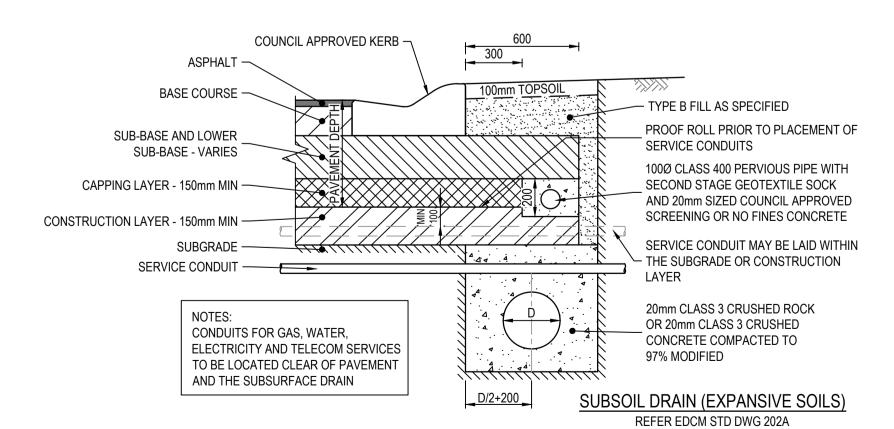
#### CAVESSON ROAD, CARRIAGE DRIVE, PONY ROAD, GELDING STREET, SPRINT ROAD (14.5/16m ROAD RESERVE)

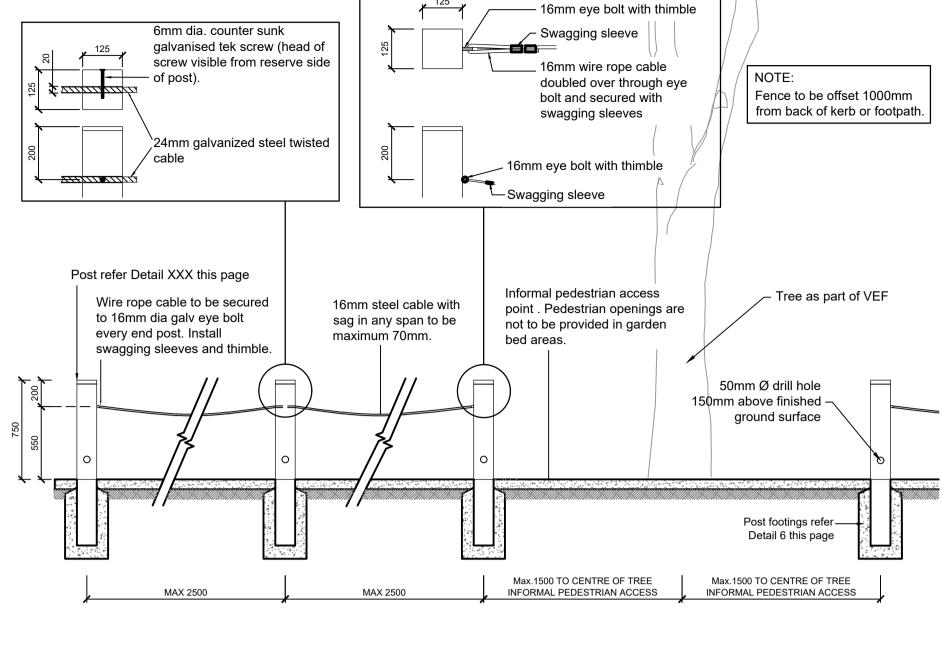


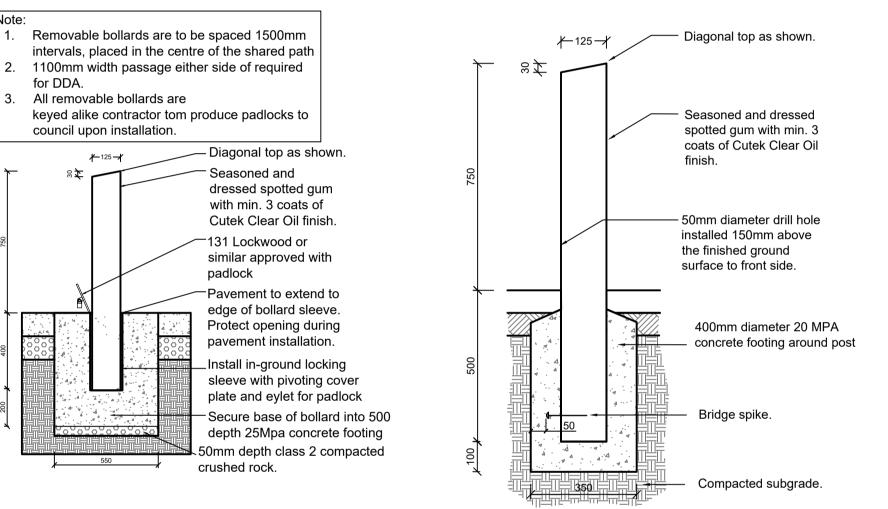
# LATIGO STREET (20.5m ROAD RESERVE)

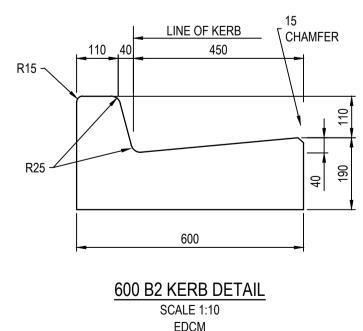
700mm DEPTH PAVEMENT	COMPOSITION	
PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
A WEARING COURSE	40	SIZE 14mm TYPE N CLASS 320 ASPHALT
B BASE COURSE	75	SIZE 20mm TYPE SI CLASS 320 ASPHALT
C BASE COURSE	75	SIZE 20mm TYPE SI CLASS 320 ASPHALT
D BONDING LAYER	-	BITUMINOUS PRIME
E SUBBASE	110	SIZE 20mm CLASS 3 CEMENT TREATED (3% BY WEIGHT) CRUSHED ROCK. COMPACTED TO A MEAN DENSITY RATIO OF 98% (MODIFIED) MAXIMUM DRY DENSITY AS1289, 5.2.1
F CAPPING LAYER	250	TYPE A MATERIAL (SELECT FILL) MEETING THE FOLLOWING MATERIAL PROPERTIES: CBR≥7%, SWELL≤1.5% PERMEABILITY K ≤1 x 10₃ m/s (1 x 10₃ cm/s). COMPACTED TO A MINIMUM DENSITY RATIO OF 100% (STANDARD) MAXIMUM DRY DENSITY AS1289, 5.1.1 COMPACTED AT MOISTURE CONTENTS OF +/-2% OF STANDARD OPTIMUM MOISTURE CONTENT
G CONSTRUCTION LAYER	150	TYPE A MATERIAL (SELECT FILL) MEETING THE FOLLOWING MATERIAL PROPERTIES: CBR≥7%, SWELL≤1.5%. COMPACTED TO A MINIMUM DENSITY RATIO OF 100% (STANDARD) MAXIMUM DRY DENSITY AS1289, 5.1.1 COMPACTED AT MOISTURE CONTENTS OF +/-2% OF STANDARD OPTIMUM MOISTURE CONTENT
H SUBGRADE	-	MATERIAL AS FOUND (CLAY). TOP 200mm COMPACTED TO A MINIMUM DENSITY RATIO OF 98% (STANDARD) MAXIMUM DRY DENSITY AS1289, 5.1.1











**EDCM** 

WARNING BEWARE OF UNDERGROUND SERVICES

he 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. ocate all underground services before commencement of works DIAL 1100 BEFORE YOU DIG www.1100.com.au

- 1	1 \L V	D/ (1 L	/ IIII ENDINERT / TREVIOIOTY BEGOTAIN
	Α	10.05.22	ISSUED TO COUNCIL FOR APPROV
- 1			

reviewed by the contractor to ensure design has been interpreted correctly. A copy of this document will be made available on request REV DATE AMENDMENT / REVISION DESCRIPTION N.SHRESTHA

PAVEMENT COMPOSITION

SMEC Urban is not responsible for geotechnical or pavement related designs and

is not responsible for the accuracy, adequacy or appropriateness of these designs.

The pavement compositions shown on this drawing have been reproduced from

the pavement report for this development stage. This document should be

KEY DIAGRAM





€ OF ISLAND TO MATCH € OF PAVEMENT

- 230mm MIN. THICK

WITH SL72 MESH

CONCRETE REINFORCED

UNLESS NOTED OTHERWISE

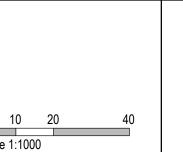
SI3 ISLAND - TYPICAL CROSS SECTION

NOT TO SCALE
REFER TO CITY OF MELTON STD DWG MCC305 & 307

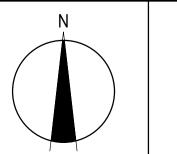








SCALE AS SHOWN AT A1



NOT TO SCALE



Ph 03 9514 1500



Westwood - Stage 13 Melton City Council Road and Drainage Pavement & General Details

PROJECT / DRAWING No. REVISION 2152E-013-411

GELDING STREET

LATIGO STREET

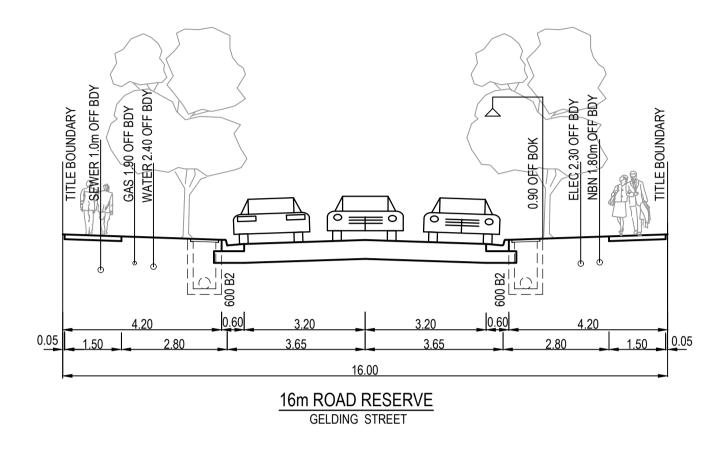
AS PER RELEVANT ROAD

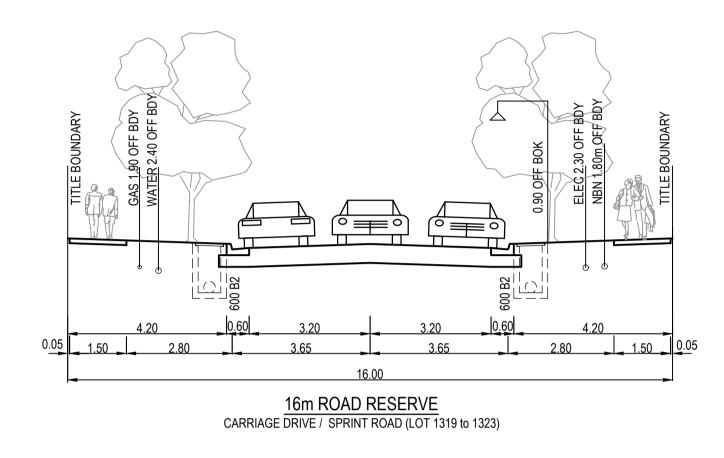
DESIGNER

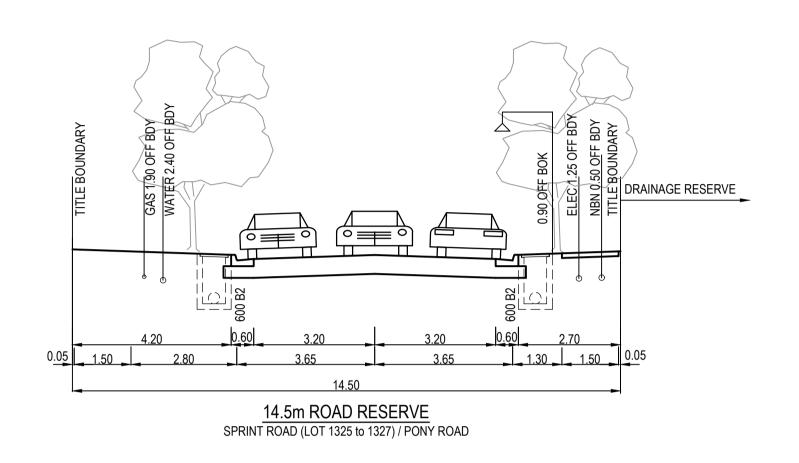
A.PERKINS

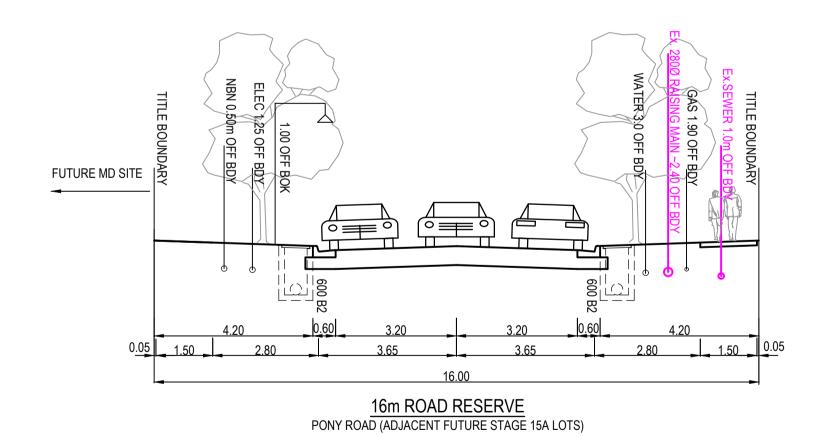
CHECKER

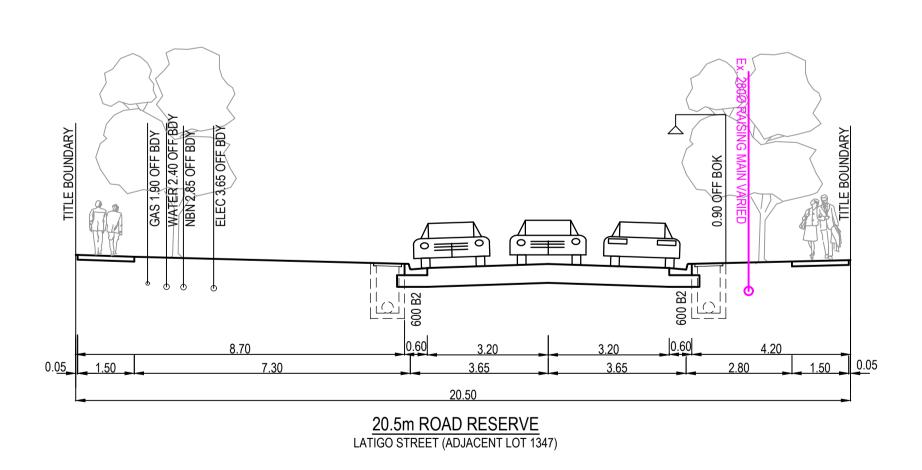
A.PERKINS

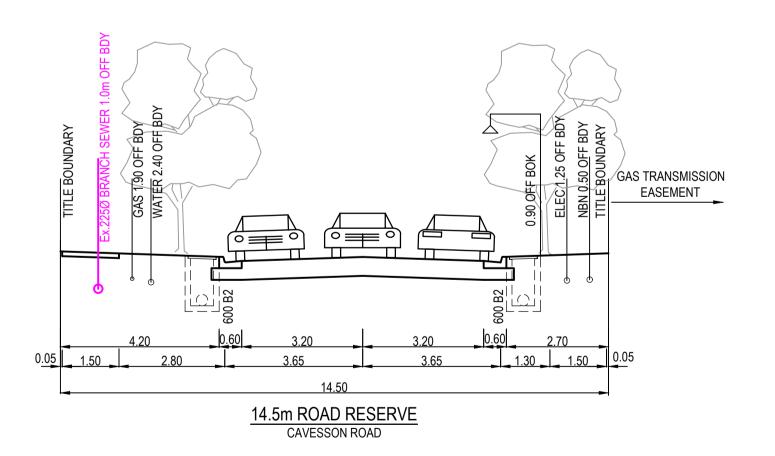










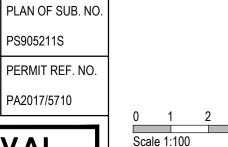


REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVE
Α	10.05.22	ISSUED TO COUNCIL FOR APPROVAL	N.SHRESTHA	A.PERKINS	A.PERKINS	C.WILKINS













Westwood - Stage 13
Melton City Council
Road and Drainage
Typical Cross Sections

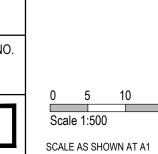
						POTENTIAL PIOK POTENTIAL ELIMINATION MEASURE, DESIGN LIGHTING			IS THE RISK	RISK RESIDUAL RISK RESIDUAL			DECIDITAL
PHASE	DIS	CIPLINE CODE	POTENTIAL RISK		POTENTIAL RISK  PISK OWNER   POTENTIAL   INITIATIVE or CONTROL		HOW ISSUE ADDRESED IN DESIGN AND/OR	ELIMINATED?	RISK	CONSEQUENCE		RESIDUAL	
					CONSTRUCTION OF THE WORKS	YES / NO	LIKELIHOOD (0-5)	(0-5)	RATING	RISK OWNER			
Road Furniture /	Roadside	Features								(0 0)			
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	RD	Roads	Culverts	Potential risk from culverts under construction and height / fall hazards	Contractor	Falling from a height	Temporary barriers to be provided	Temporary barrier provided in contract	N	2	5	10	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
Operational	RF	Road Furniture	Headwalls	Potential vehicle conflict within clear zone	Road Authority	Increased potential for accidents	Establish adequate clear zone provision	Adequate barrier provided as per appropriate standard where within clear zone. Culvert headwall selection in accordance with authority standard	N	2	4	8	Road Authority
Operational	RD	Roads	Culverts	Potential fall hazard during maintenance, by vechicles and pedestrians	Relevant Authority	Falling from a height	Barriers to be provided in accordance with road standards	Barriers to be provided and safe batter slopes (>1:3)	N	2	5	10	Constructor
Retaining Walls													
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/ Local 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	Authority
Operational	RW	Retaining Walls	Retaining Wall Height	Potential for falling from height	Road/ Local Authority	Personal injury	Provide temporary and permanent fencing at top of wall.  Structural design in accordance with standards, geotechnical conditions, end	Provide fencing (at heights) during design process	N	1	5	5	Authority
Operational	RW	Retaining Walls	Retaining Wall Design	Potential for wall failure	Road/ Local Authority	Increased potential for accidents	use and good practise.	Refer to structural drawings and calculations	N	1	5	5	Authority
Drainage													
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 Endwalls/Headwalls	Potential for falling from height	Relevant Authority	Increased potential for accidents	Fencing to be provided where culverts/headwalls are at height in accordance with relevant authority standards	Allow for fencing in Design Process	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	
Sewer													
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
Maintenance	SE	Sewer	Pump Station Access	Lack of safe access for maintenance	Relevant Authority	Increased risk to maintenance crews	Provide safe working conditions for maintenance	Design pump station in location for easy access	N	2	4	8	Authority
Electricity					I			Dite designed below ground Where above ground adequate offset			T		
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
Telstra				•							•		
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
Water				'		•					•		
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
Gas								,		1			
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

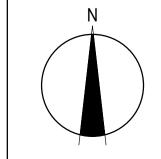
REV	DATE	AMENDMENT / REVISION DESCRIPTION	DRAFTER	DESIGNER	CHECKER	APPROVER	anagement	agement . A.o.	Managem	PLAN OF SUB
Α	10.05.22	ISSUED TO COUNCIL FOR APPROVAL	N.SHRESTHA	A.PERKINS	A.PERKINS	C.WILKINSON	SO 9001	AS ASO	vironme de la companya de la company	PS905211S
							Global-Mark.com.au <sup>®</sup>	Global-Mark.com.au®	Global-Mark.com.au®	PERMIT REF. I
							SUB	JECT TO	APPRO	VAL















Westwood - Stage 13
Melton City Council
Road and Drainage
Safety In Design

MELWAYS REF PROJECT / DRAWING No. 2152E-013-500

SHEET No. REVISION A