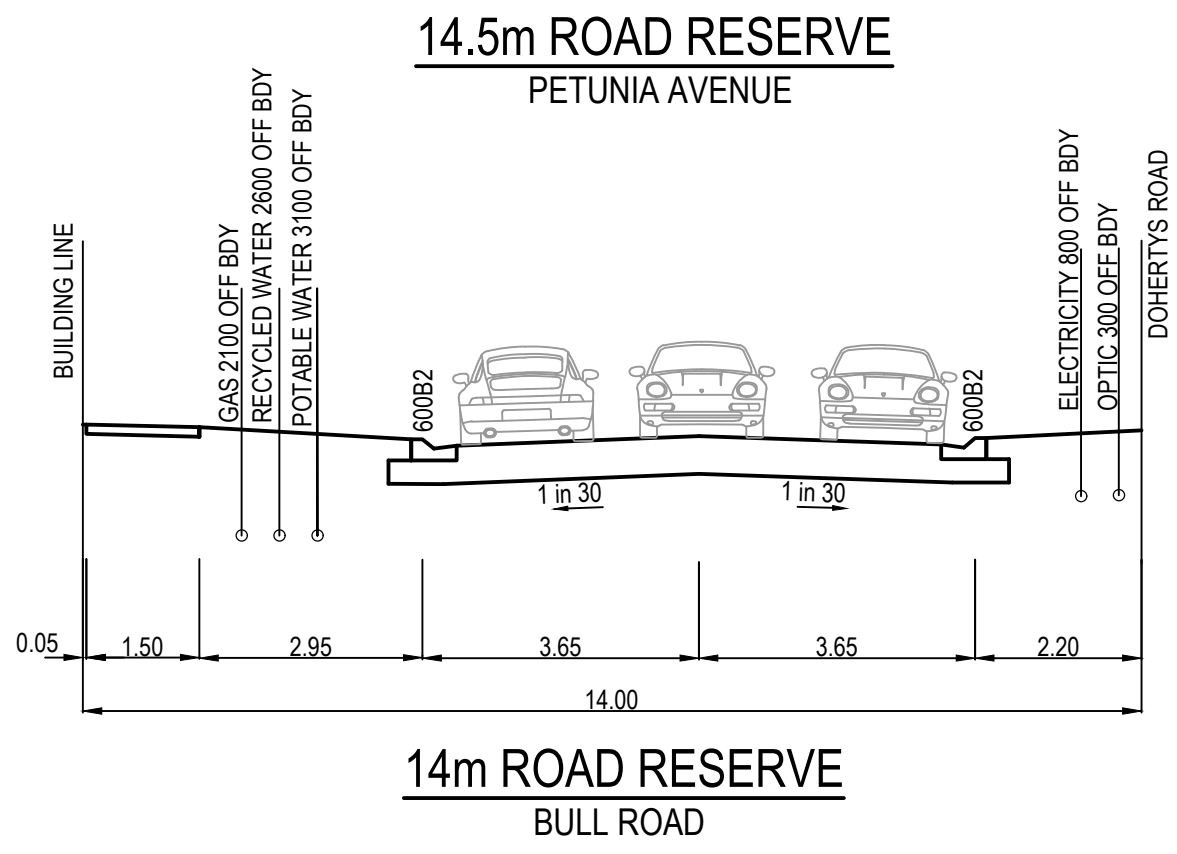
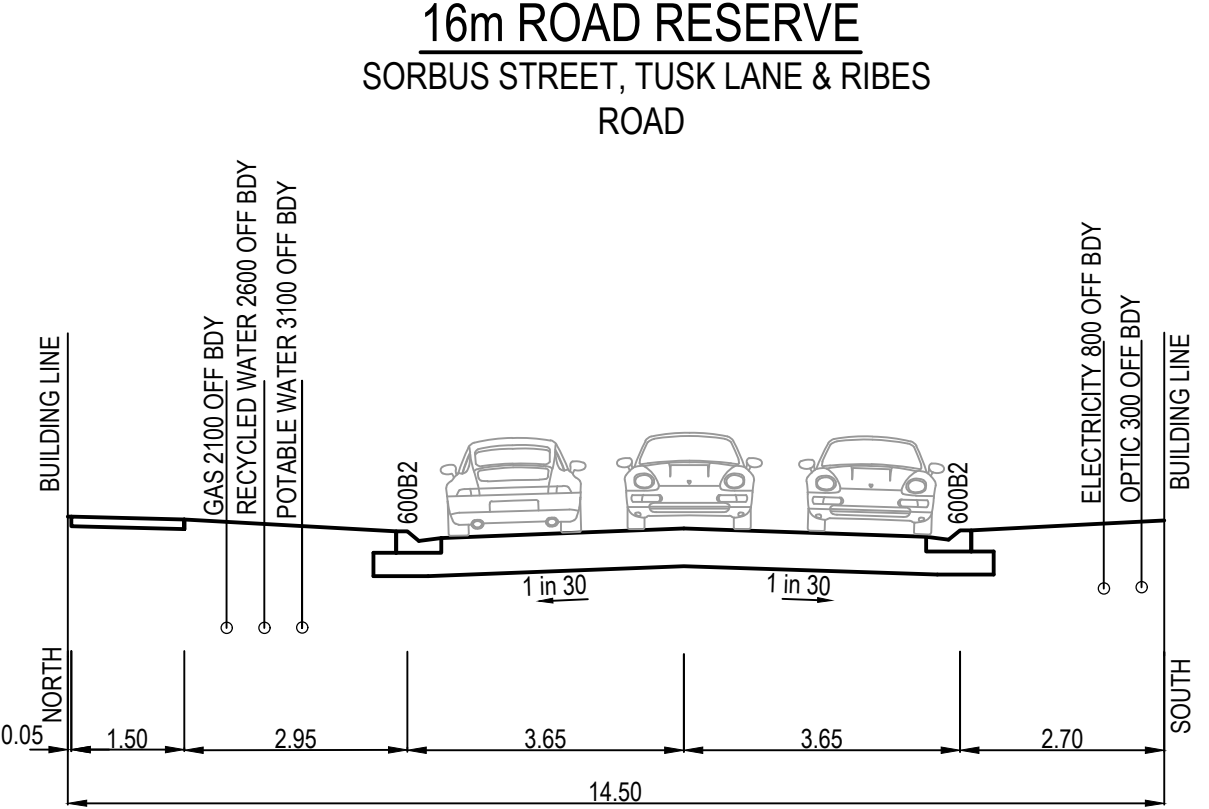
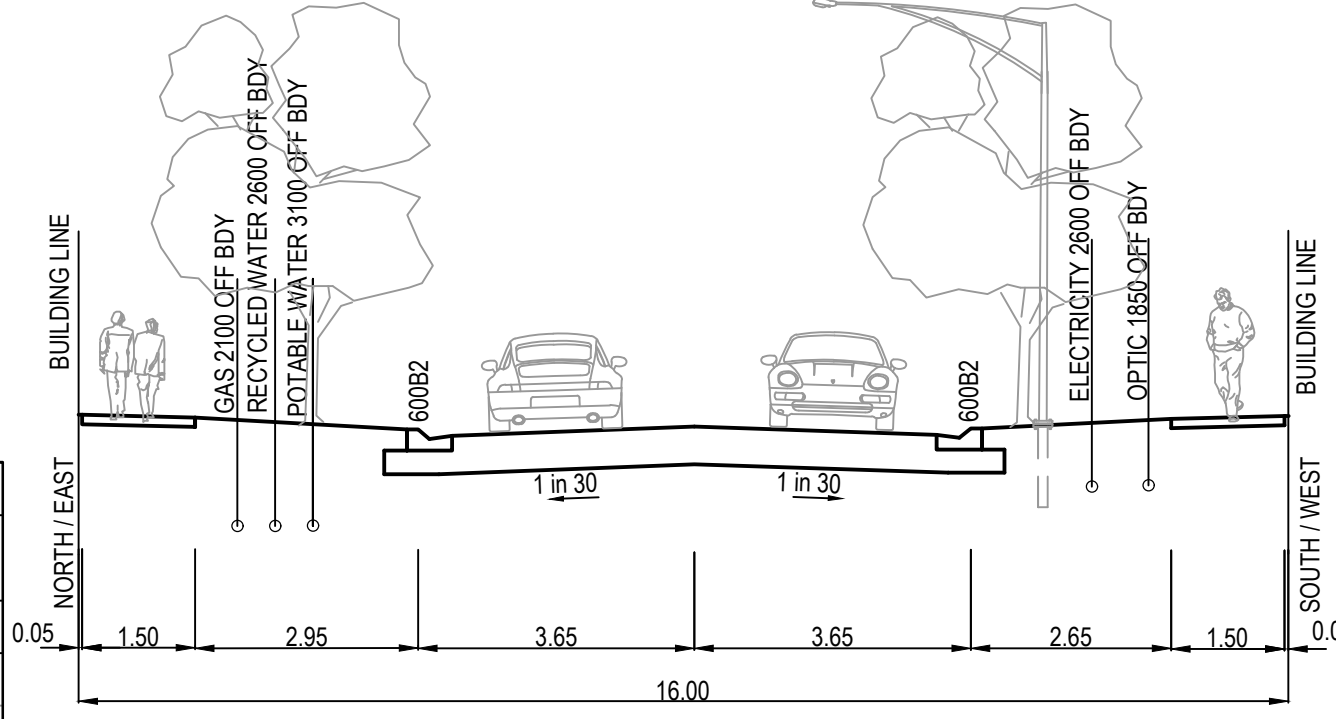
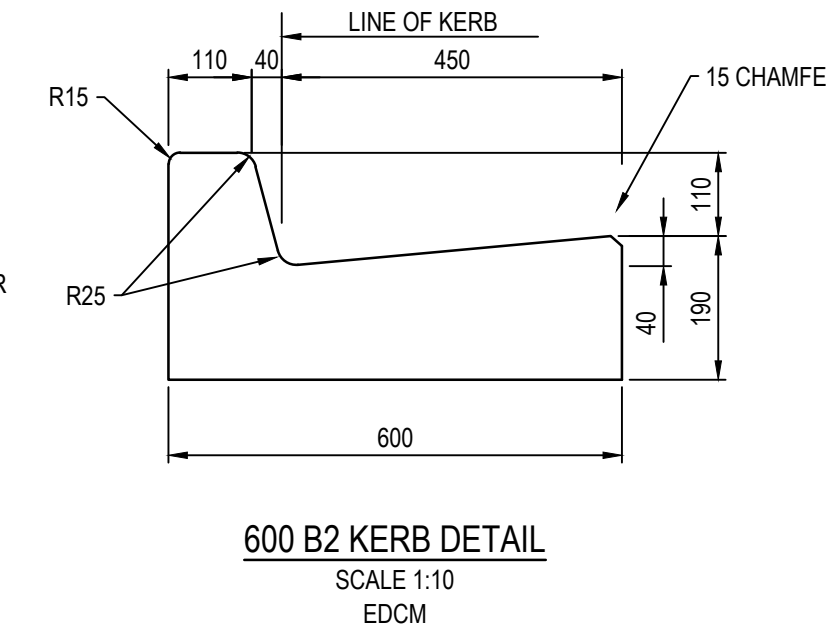
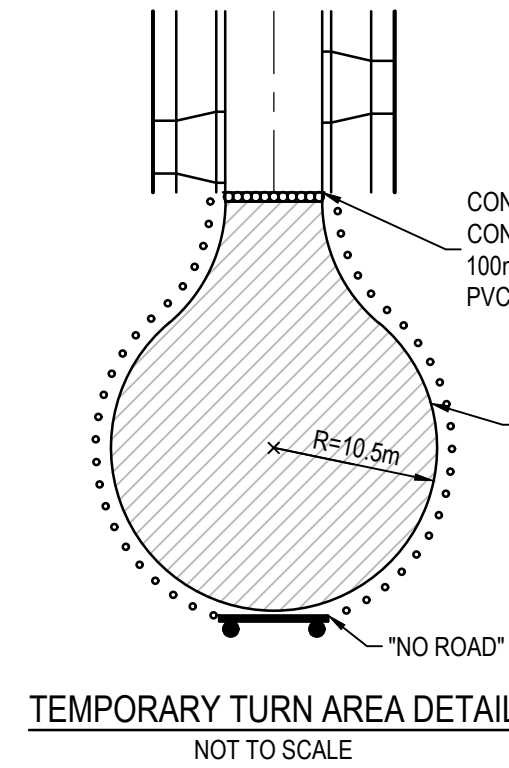


# Marigold Stage 9



- GENERAL NOTES (WYNDHAM CITY COUNCIL)**
- THE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDM ADDENDUM STANDARD DRAWINGS AND SPECIFICATIONS. WORKS TO BE CARRIED OUT TO THE SATISFACTION OF COUNCIL'S SUPERVISING OFFICER.
  - THE CONTRACTOR IS RESPONSIBLE FOR SAFETY OF WORK ON SITE IN ACCORDANCE WITH APPROPRIATE LEGISLATION. THE CONTRACTOR 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 THEIR INTENTION TO COMMENCE TRENCHING OPERATIONS WHERE TRENCHES ARE 1.5 METRES OR DEEPER.
    - ENSURE THAT THE MINE MANAGER OR THEIR 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 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.
  - 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 E.G.H.R.T&W ABOVE CONDUIT LOCATIONS AS SPECIFIED. RESPECTIVE LETTERS TO BE INDICATED ABOVE RELEVANT CONDUITS AS PER STANDARD DRAWING EDMC 303. CONDUITS TO BE PLACED MINIMUM OF 5m FROM BOUNDARIES WHERE POSSIBLE AND TO THE SATISFACTION OF THE SUPERINTENDENT IN ACCORDANCE WITH COUNCIL STANDARD DRAWINGS.
  - SUBSOIL DRAINS SHALL BE INSTALLED BEHIND OR BELOW ALL KERB AND CHANNEL AS PER STANDARD DRAWINGS EDMC 202 (EXPANSIVE SUBGRADE).
  - ALL LINEMARKING, SIGNING AND TRAFFIC CONTROL DEVICES TO BE IN ACCORDANCE WITH VICROADS REQUIREMENTS WITH LATERAL WORKS AND ARROWS BEING COLD APPLIED PLASTIC TROWELLED INTO PLACE (MATERIAL DEGAOUR OR PLASTELINE) AND LONGITUDINAL LINES BEING EXTRUDED THERMOPLASTIC MATERIAL (VICROADS SPECIFICATION SEE SECTION 710&722).
  - ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
  - 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.
  - ALL EXCAVATED OR FILLED AREAS OUTSIDE THE ROAD RESERVES SHALL BE SURFACED WITH A 100mm MINIMUM TO 200mm MAXIMUM LAYER OF 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 APPENDIX B AS SPECIFIED IN THE AUSTRALIAN STANDARD AS 3788 TO SHOW THAT LEVEL 1 COMPACTION STANDARDS HAVE BEEN ACHIEVED. TEST RESULTS AND LOCATION OF TESTS FOR EACH ALLOTMENT SHALL BE APPROVED BY THE CONTRACTOR AND FORWARDED TO COUNCIL.
  - FILL MATERIAL USED UNDER PAVEMENTS AND FOOTPATHS MUST BE AN APPROVED MATERIAL TO THE STANDARD OF WYNDHAM CITY COUNCIL. ALL SUCH MATERIAL IS TO BE COMPACTED AS PER THE REQUIREMENTS OF THE SPECIFICATION APPROVED WITH THESE DRAWINGS PRIOR TO FORMWORK BEING PLACED. COMPACTION TESTS TO BE COMPLETED AND PROVIDED TO SUPERINTENDENT.
  - FILL & CUT BATTERS ARE NOT TO EXCEED 1 IN 6 SLOPE, UNLESS SHOWN OTHERWISE.
  - ALL ALLOTMENTS SHALL BE SMOOTHED, GRADED AND SHAPED TO AN EVEN SURFACE WITH A MINIMUM FALL OF 1 IN 150 TO THE DRAINAGE OUTLET SHOWN.
  - ALL DRAINAGE PIPES ARE CLASS 2 RCP PIPES, RUBBER RING JOINTED UNLESS OTHERWISE SPECIFIED.
  - DRAINAGE PITS SHALL BE CAST MONOLITHICALLY.
  - BACKFILLING OF TRENCHES WHERE DRAINAGE AND SEWERAGE ARE IN CLOSE PROXIMITY ARE TO BE BACKFILLED AS PER WYNDHAM CITY COUNCIL STANDARD DRAWING SD6-10.
  - ALL SERVICING TRENCHES UNDER ROADS, FOOTPATHS, DRIVEWAYS, PARKING BAYS ETC. ARE TO BE BACKFILLED WITH CLASS 2 F.C.R.
  - ALL HOUSE DRAIN CONNECTIONS ARE TO BE LOCATED NO CLOSER THAN 5.00m FROM THE SIDE BOUNDARY.
  - INVERT OF PROPERTY INLETS TO BE 500mm MINIMUM BELOW FINISHED SURFACE UNLESS NOTED OTHERWISE.
  - VEHICLE CROSSINGS TO BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWINGS EDMC 501 TO 503. DRIVEWAYS TO BE LOCATED MIN 0.75m FROM BUILDING LINE UNLESS SPECIFIED OTHERWISE AND CLEAR OF DRAINAGE PITS, SEWER MAINTENANCE HOLES AND EXISTING TREES. DOUBLE DRIVEWAY WIDTH TO BE 0.2m AT FRONT OF PATH/BUILDING LINE.
  - ADDITIONAL AND OVER-EXCAVATION SHALL BE BACKFILLED IN ACCORDANCE WITH THE PROVISIONS OF THE SPECIFICATION.
  - FOOTPATH CROSSFALL TO BE 1:50
  - ALL FOOTPATHS AND SHARED PEDESTRIAN/BICYCLE PATHS ARE TO BE CONSTRUCTED AS PER CITY OF WYNDHAM SPECIFICATIONS AND MPA STANDARD DRAWINGS EDMC 401 TO 403.
  - ALL EXOTIC (NON NATIVE) TREES AND SHRUBS, INCLUDING DEAD TREES, NOT SHOWN ON THE DRAWINGS BUT LOCATED WITHIN THE WORKS ARE TO BE REMOVED AND DISPOSED OFF SITE.
  - INSTALL BLUE RAISED REFLECTIVE PAVEMENT MARKER (BRPM) ON ROAD CENTRELINE AND "GROUND BALL" MARKER POST TO INDICATE LOCATION OF FIREPLUG.
  - THE CONTRACTOR IS TO ENSURE THAT THEIR CONSTRUCTION PROCEDURES AND STANDARDS CONTROL THE VOLUME AND LOCATION FOR COLLECTION OF SEDIMENT RUNOFF ACCORDING TO CURRENT EPA - ENVIRONMENTAL GUIDELINES FOR MAJOR CONSTRUCTION SITES.
  - UPON COMPLETION OF CONSTRUCTION THE WHOLE SITE SHALL BE CLEANED UP, GRADED AND ALL RUBBISH REMOVED. THE SITE IS TO BE LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.
  - EXISTING PAVEMENT OR DRAINAGE WORKS DAMAGED DURING CONSTRUCTION OR THE MAINTENANCE PERIOD TO BE REINSTATED TO THE SATISFACTION OF THE COUNCIL ENGINEER.
  - THE LOWER SUB-BASE MATERIAL SHALL BE N.C.R. FOR PAVEMENT MAKE UPS AS PER THE STANDARD DRAWINGS OF WYNDHAM CITY COUNCIL.
  - TOTAL LENGTH OF ROADS CONSTRUCTED IS 791M
  - TOTAL LENGTH OF DRAINS CONSTRUCTED IS 1422M

- 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 UNDERTAKEN BY OTHERS.
  - NOTIFICATION MUST BE GIVEN TO THE GAS AUTHORITY TWO WEEKS PRIOR TO THE COMMENCEMENT OF EXCAVATION WORKS.

- REINFORCED CONCRETE PIPE**
- ALL STORMWATER DRAINAGE PIPES SHALL NOT BE SUBJECT TO CONSTRUCTION TRAFFIC LOADING DURING CONSTRUCTION UNLESS THE PIPE STRENGTH CHARACTERISTICS HAVE BEEN COMPILED AND APPROVED BY THE CONTRACTOR'S ENGINEER. COMPUTATIONS ARE TO ACCORD WITH AS 3725-2007, LOADS ON BURIED PIPES.
  - CONCRETE PIPES DAMAGED DUE TO CONSTRUCTION LOADS SHALL BE REPLACED & RELAID AT THE CONTRACTOR'S COST.

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.

**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. 2360E-09-85  
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  
DIAL 1100 BEFORE YOU DIG  
www.1100.com.au

**Drawing Index**

- 2360E-09-01 Cover Plan
- 2360E-09-02 Layout Plan
- 2360E-09-03 Earthworks Plan
- 2360E-09-04 Intersection Detail Plan - 1
- 2360E-09-05 Intersection Detail Plan - 2
- 2360E-09-06 Intersection Detail Plan - 3
- 2360E-09-07 Longitudinal Sections - 1
- 2360E-09-08 Longitudinal Sections - 2
- 2360E-09-09 Cross Sections: Petunia Street Ch 50.00 - Ch 143.86
- 2360E-09-10 Cross Sections: Petunia Street Ch 158.25 - Ch 250.29
- 2360E-09-11 Cross Sections: Petunia Street Ch 270.14 - Ch 388.29
- 2360E-09-12 Cross Sections: Sorbus Street Ch 11.80 - Ch 142.11
- 2360E-09-13 Cross Sections: Sorbus Street Ch 144.54 - Ch 266.71
- 2360E-09-14 Cross Sections: Ribes Road, Tusk Lane & Bull Road
- 2360E-09-15 Drainage Longitudinal Sections - 1
- 2360E-09-16 Drainage Longitudinal Sections - 2
- 2360E-09-17 Drainage Longitudinal Sections - 3
- 2360E-09-18 Drainage Longitudinal Sections - 4
- 2360E-09-19 Drainage Longitudinal Sections - 5
- 2360E-09-20 Drainage Longitudinal Sections - 6 & General Details
- 2360E-09-21 Pit Schedule & Pit Setout Table
- 2360E-09-22 Pit Details
- 2360E-09-23 Signage & Linemarking Plan
- 2360E-09-24 Pavement Details
- 2360E-09-85 Safety In Design

ROAD NAME	RESERVE WIDTH	ROAD WIDTH (m)			KERB TYPE	
		LIP TO LIP	INV TO INV	BACK TO BACK	NTH/WEST	STH/EAST
		PETUNIA AVENUE	14.5	6.40	7.30	7.60
SORBUS STREET	16.0	6.40	7.30	7.60	600B2	600B2
RIBES ROAD	16.0	6.40	7.30	7.60	600B2	600B2
TUSK LANE	16.0	6.40	7.30	7.60	600B2	600B2
BULL ROAD	14.0	6.40	7.30	7.60	600B2	600B2

ROAD NAME	SERVICES OFFSET TABLE				
	GAS	WATER	RECYCLED WATER	ELECTRICITY	OPTIC FIBRE
	OFFSET (m)	OFFSET (m)	OFFSET (m)	OFFSET (m)	OFFSET (m)
PETUNIA AVENUE	2.10 S	3.15 S	2.57 S	0.80 N	0.30 N
SORBUS STREET	2.10 N	3.10 N	2.60 N	2.60 S	1.85 S
RIBES ROAD	2.10 E	3.10 E	2.60 E	2.60 W	1.85 W
TUSK LANE	2.10 W	3.10 W	2.60 W	2.60 E	1.85 E
BULL ROAD	2.10 W	3.10 W	2.60 W	0.80 N	0.30 N

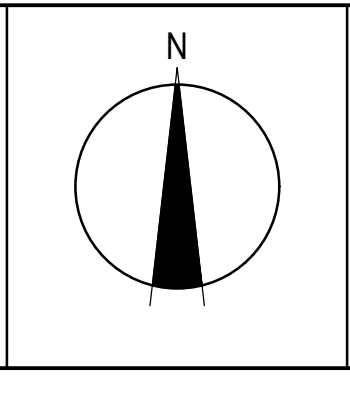
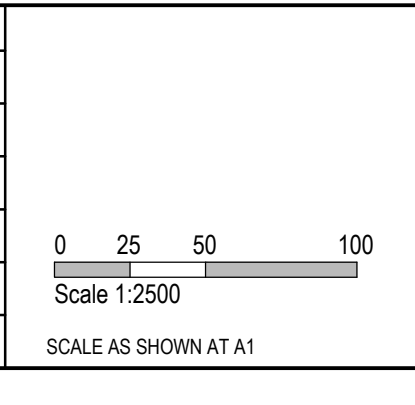
TEMPORARY BENCH MARK TABLE				
NAME	EASTING (M)	NORTHING (M)	REDUCED LEVEL (M)	DESCRIPTION
T.B.M 1	296268.96	5812551.29	50.83	STAR PICKET
T.B.M 2	297060.94	5812470.05	50.25	STAR PICKET
T.B.M 3	296997.71	5811695.27	46.67	NAIL IN ROUNDABOUT
T.B.M 4	296178.66	5811787.24	43.74	STAR PICKET

**SUBJECT TO APPROVAL**

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	10.12.19	COUNCIL COMMENTS	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



**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

**GROWLAND**

Marigold - Stage 9  
Wyndham City Council  
Road and Drainage  
Cover Plan

MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
359 F9	2360E-09-01	01 of 25	B



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 4500a BEHIND BACK OF KERB. PIPES GREATER THAN 4500a WILL BE HAUNCHED UNDERNEATH KERB AND CHANNEL WHERE APPLICABLE TO ENSURE THAT PIT WIDTH BEHIND BACK OF KERB DOES NOT EXCEED 0.9m.

**WARNING**  
**BWARE 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

PIPE CENTRELINE OFFSET TO BACK OF KERB & PIT HAUNCHING CRITERIA			
PIPE DIAMETER	PIPE OUTER DIAMETER	PIPE CENTRELINE OFFSET TO BACK OF KERB (m)	PIT HAUNCHING
225	287	0.5	*
300	363	0.5	*
375	445	0.5	*
450	538	0.5	*
525	621	0.5	*
600	789	0.6	✓
750	870	0.6	✓
825	946	0.7	✓
900	1043	0.7	✓
1050	1194	0.8	✓
1200	1365	0.9	✓
1350	1524	1.0	✓
1500	1689	1.0	✓
1650	1854	1.1	✓
1800	2019	1.2	✓
1950	2210	1.3	✓
2100	2400	1.4	✓

PIPE CENTRELINE TO BE DIAMETER OF PIPE + 200mm BEHIND BACK OF KERB AS PER ECOM 005 TO 008

SEE ADVISE FROM COUNCIL WHETHER SERVICES CAN BE HAUNCHED WITHIN PAVEMENT RATHER THAN BEHIND BACK OF KERB

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
	ZERO LOT LINES

141.34	EXISTING SURFACE LEVEL
FS140.35	FINISHED BUILDING LINE LEVEL
FR157.40	FINISHED RIDGE LINE LEVEL
CH270.00	CHAINAGE
	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
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	EXISTING ROAD PAVING

CONSTRUCT EDGE STRIP, TURNING CIRCLE & SUB SOIL DRAIN AT LIMIT OF WORKS IF FUTURE STAGE HAS NOT COMMENCED

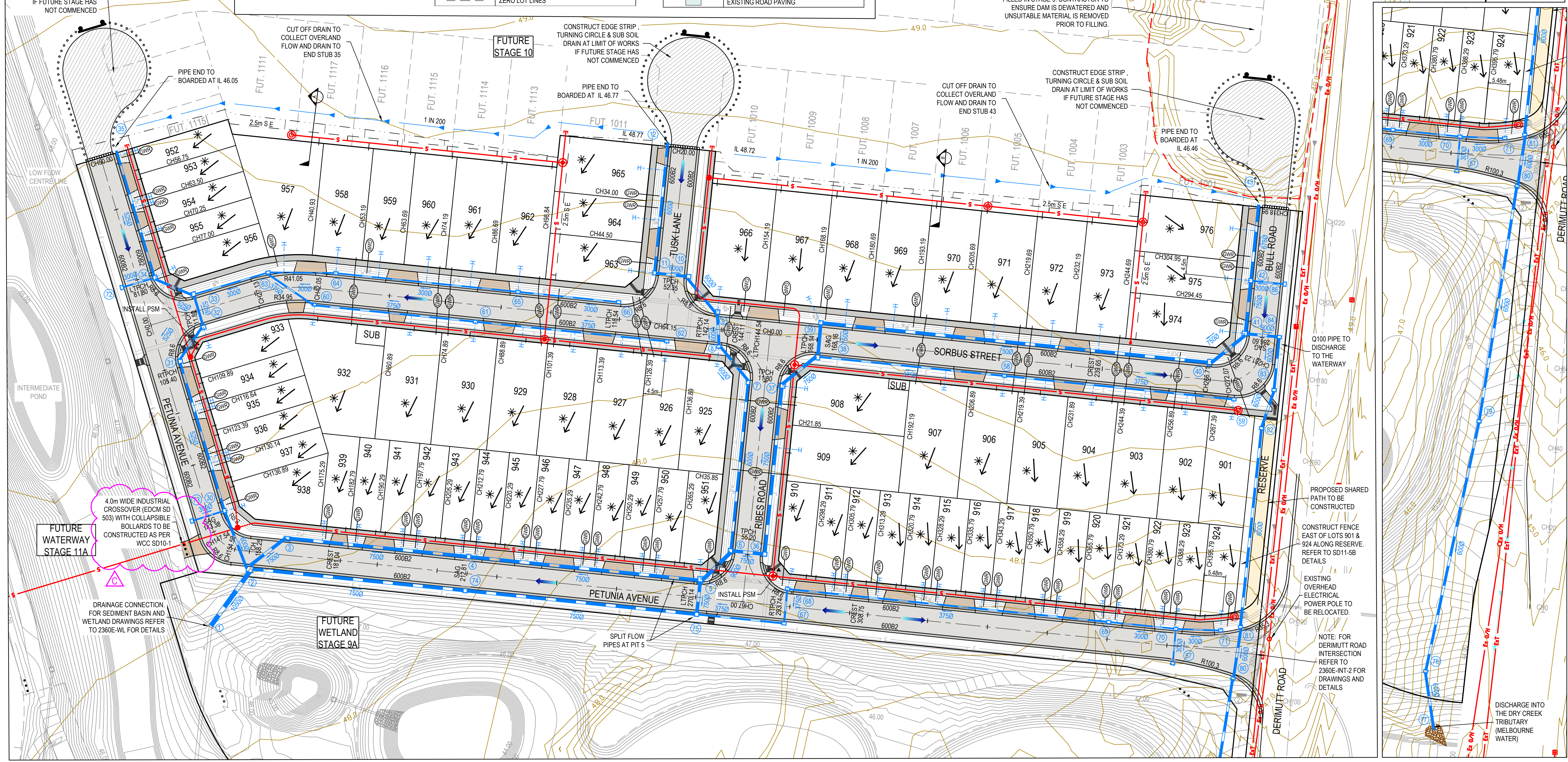
CUT OFF DRAIN TO COLLECT OVERLAND FLOW AND DRAIN TO END STUB 35

CONSTRUCT EDGE STRIP, TURNING CIRCLE & SUB SOIL DRAIN AT LIMIT OF WORKS IF FUTURE STAGE HAS NOT COMMENCED

CUT OFF DRAIN TO COLLECT OVERLAND FLOW AND DRAIN TO END STUB 43

CONSTRUCT EDGE STRIP, TURNING CIRCLE & SUB SOIL DRAIN AT LIMIT OF WORKS IF FUTURE STAGE HAS NOT COMMENCED

PIPE END TO BEARDED AT IL 46.46



Q100 PIPE TO DISCHARGE TO THE WATERWAY

PROPOSED SHARED PATH TO BE CONSTRUCTED

CONSTRUCT FENCE EAST OF LOTS 901 & 924 ALONG RESERVE. REFER TO SD11-5B DETAILS

EXISTING OVERHEAD ELECTRICAL POWER POLE TO BE RELOCATED.

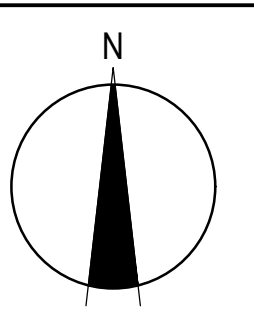
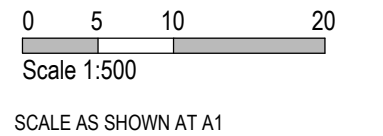
NOTE: FOR DERIMUTT ROAD INTERSECTION REFER TO 2360E-INT-2 FOR DRAWINGS AND DETAILS

DISCHARGE INTO THE DRY CREEK TRIBUTARY (MELBOURNE WATER)

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS
C	10.12.19	COUNCIL COMMENTS	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



**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

**GROWLAND**

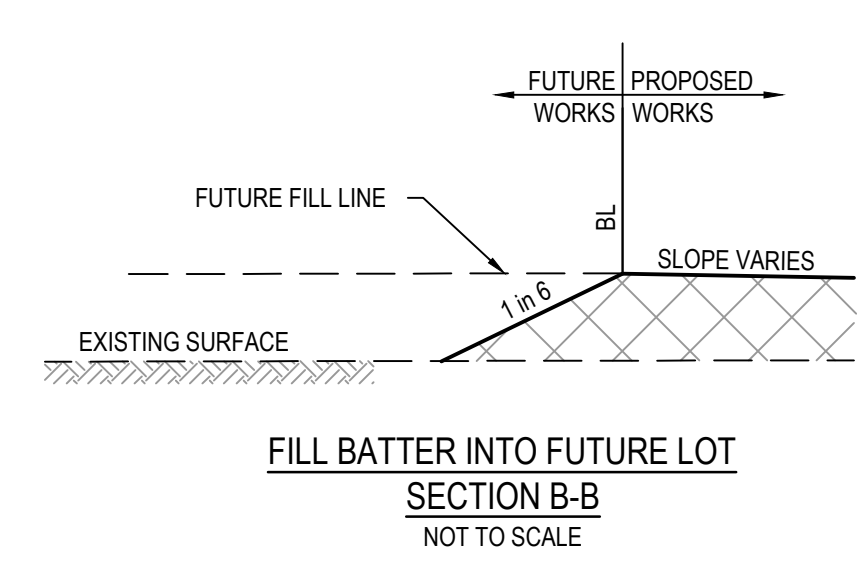
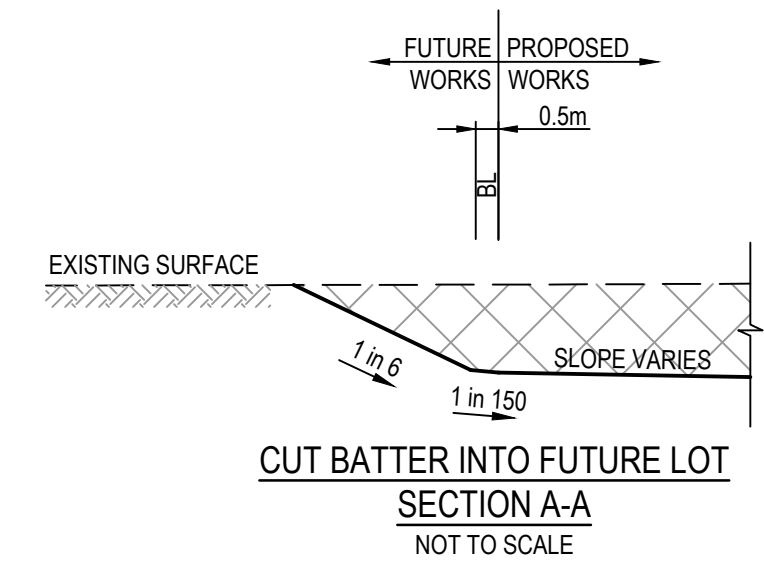
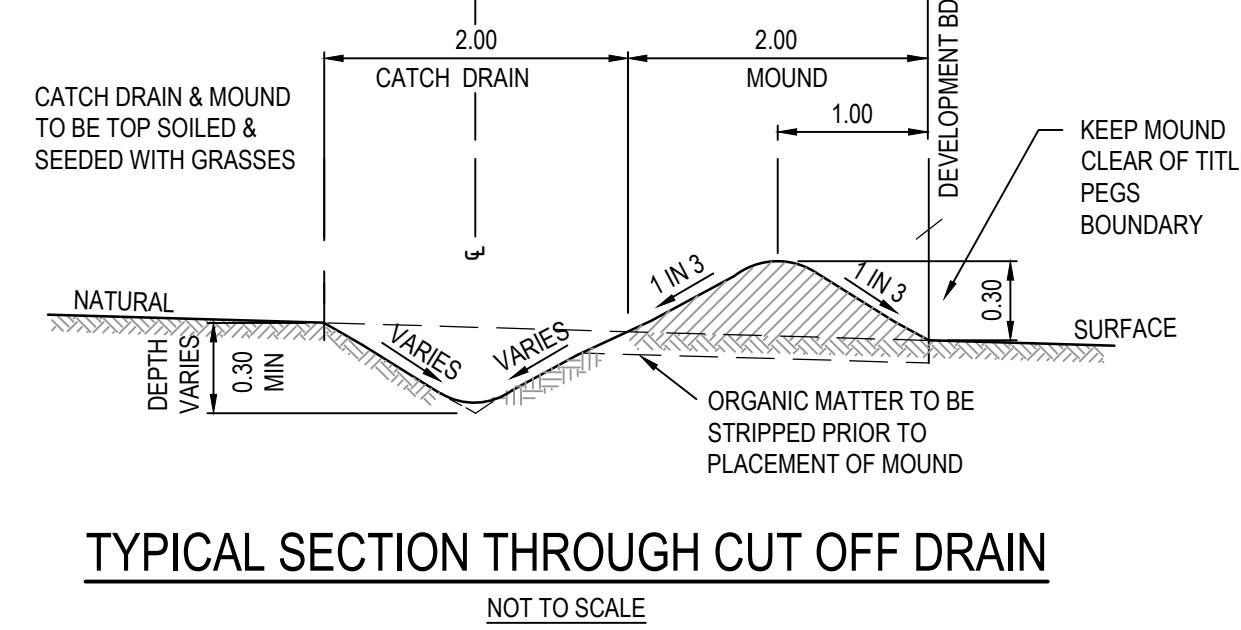
Marigold - Stage 9  
Wyndham City Council  
Road and Drainage  
Layout Plan

MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
359 F9	2360E-09-02	02 of 25	C



**WARNING**  
**BWARE 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

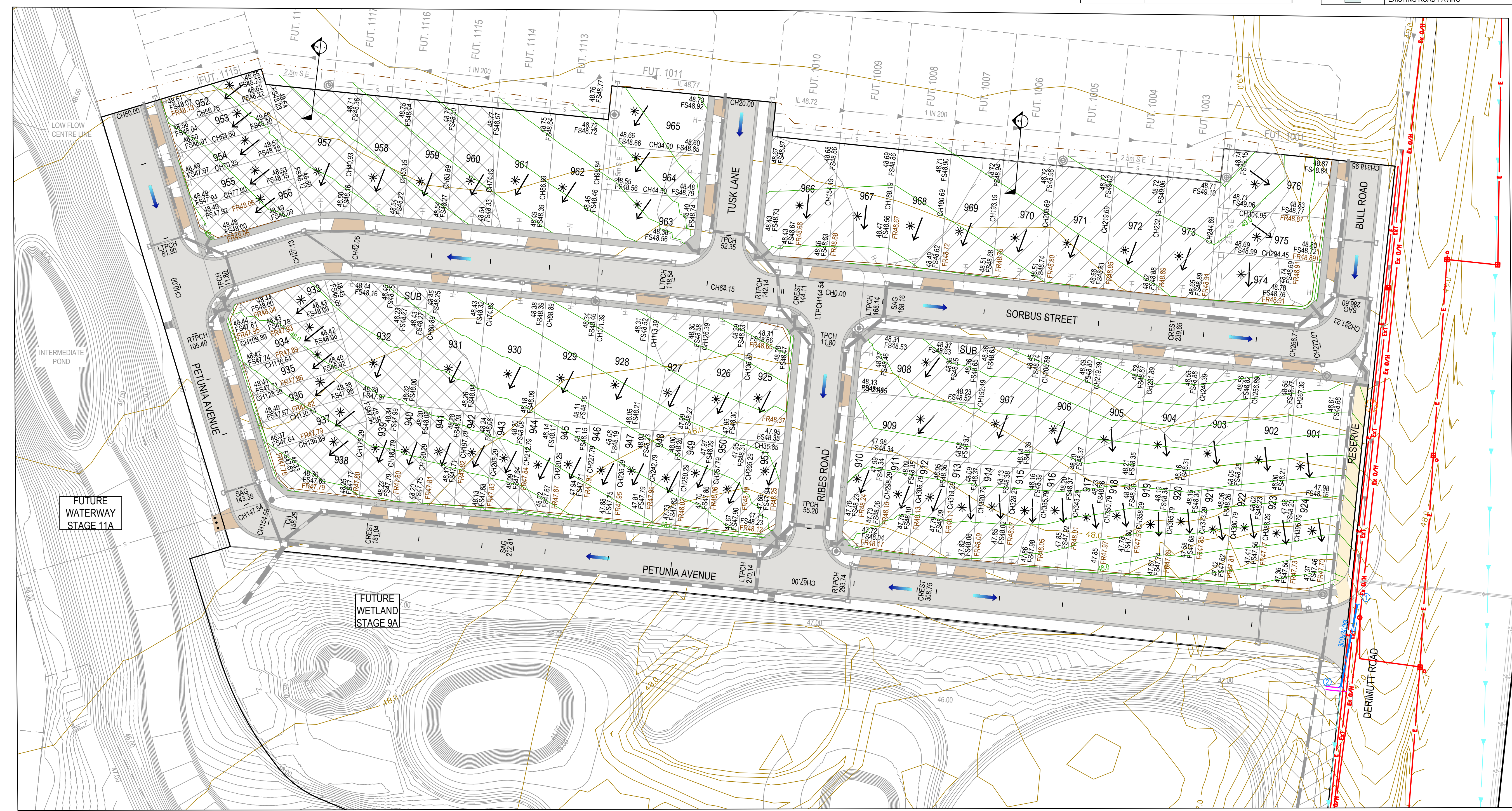
NO EXCAVATION BEYOND 5m FROM BOUNDARY



**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
	ZERO LOT LINES

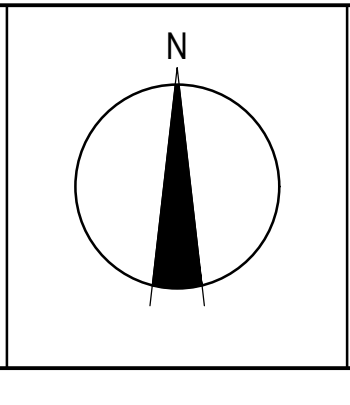
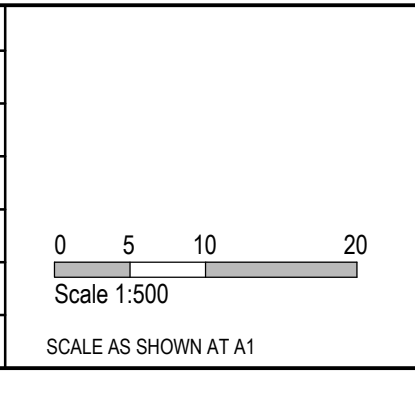
141.34	EXISTING SURFACE LEVEL
FS140.35	FINISHED BUILDING LINE LEVEL
FR157.40	FINISHED RIDGE LINE LEVEL
CH270.00	CHAINAGE
	STRUCTURAL FILL > 200mm DEEP
	EXISTING STRUCTURAL FILL > 200mm DEEP
	CUT > 200mm DEEP
	DIRECTION OF FALL
	OVERLAND FLOW
	GRADED IN DIRECTION OF FALL TO LEVEL INDICATED
	EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH
	PROPOSED INDUSTRIAL DRIVEWAY
	PROPOSED SHARED FOOTPATH
	PROPOSED ROAD PAVING
	EXISTING ROAD PAVING



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

**SUBJECT TO APPROVAL**

All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.	
TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	

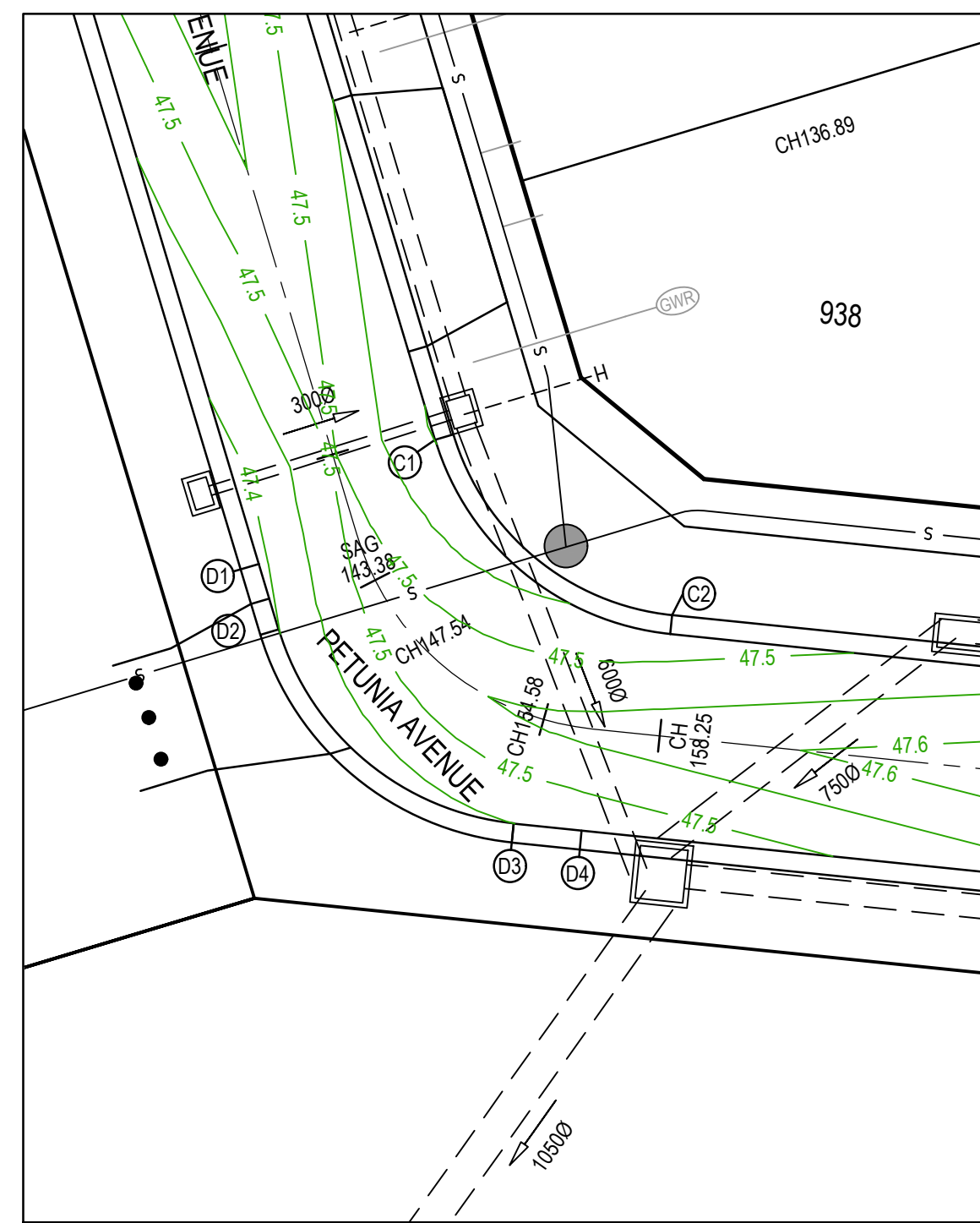
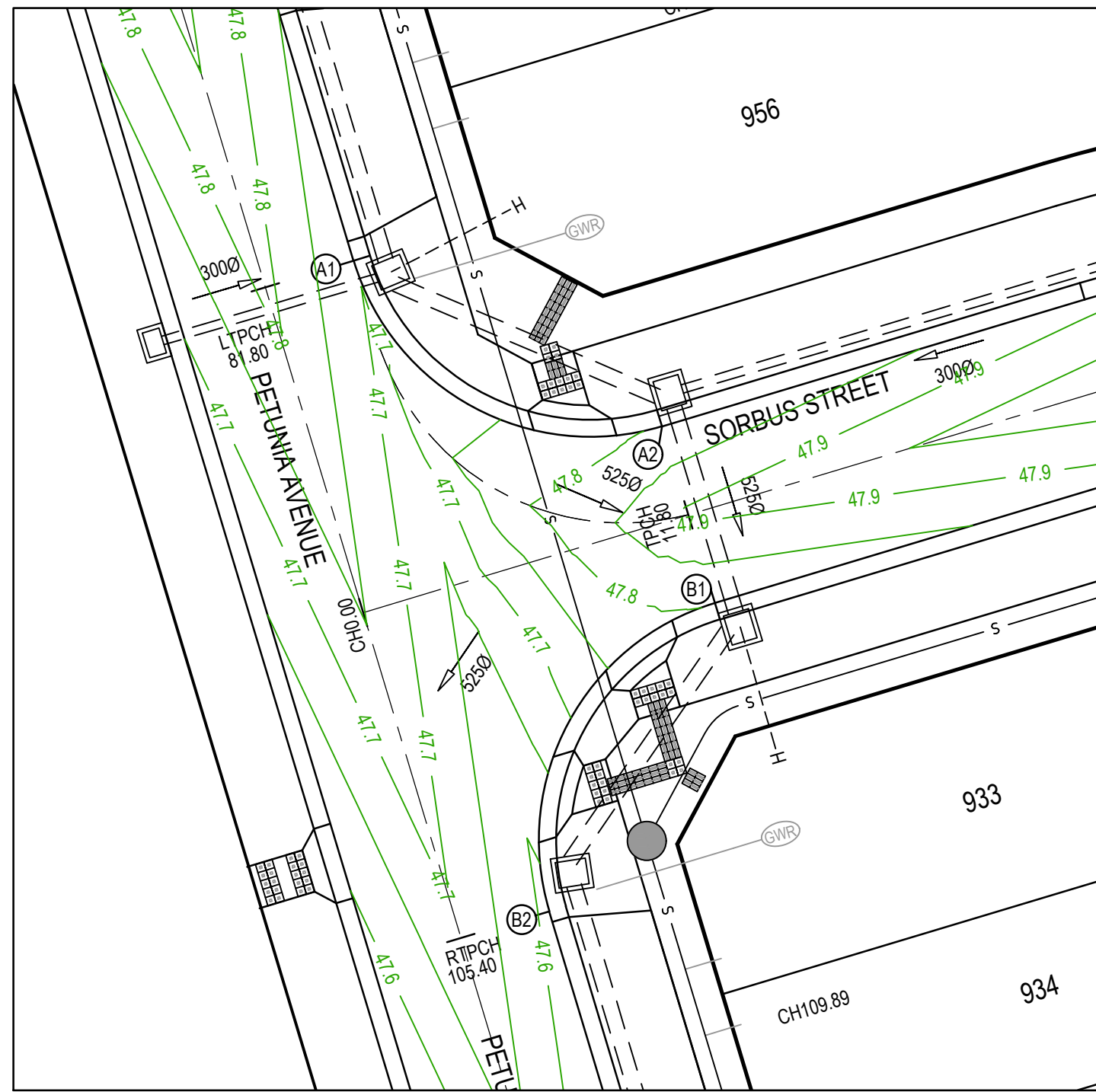


**SMEC**  
 Member of the Surlana Jurong Group  
 © ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

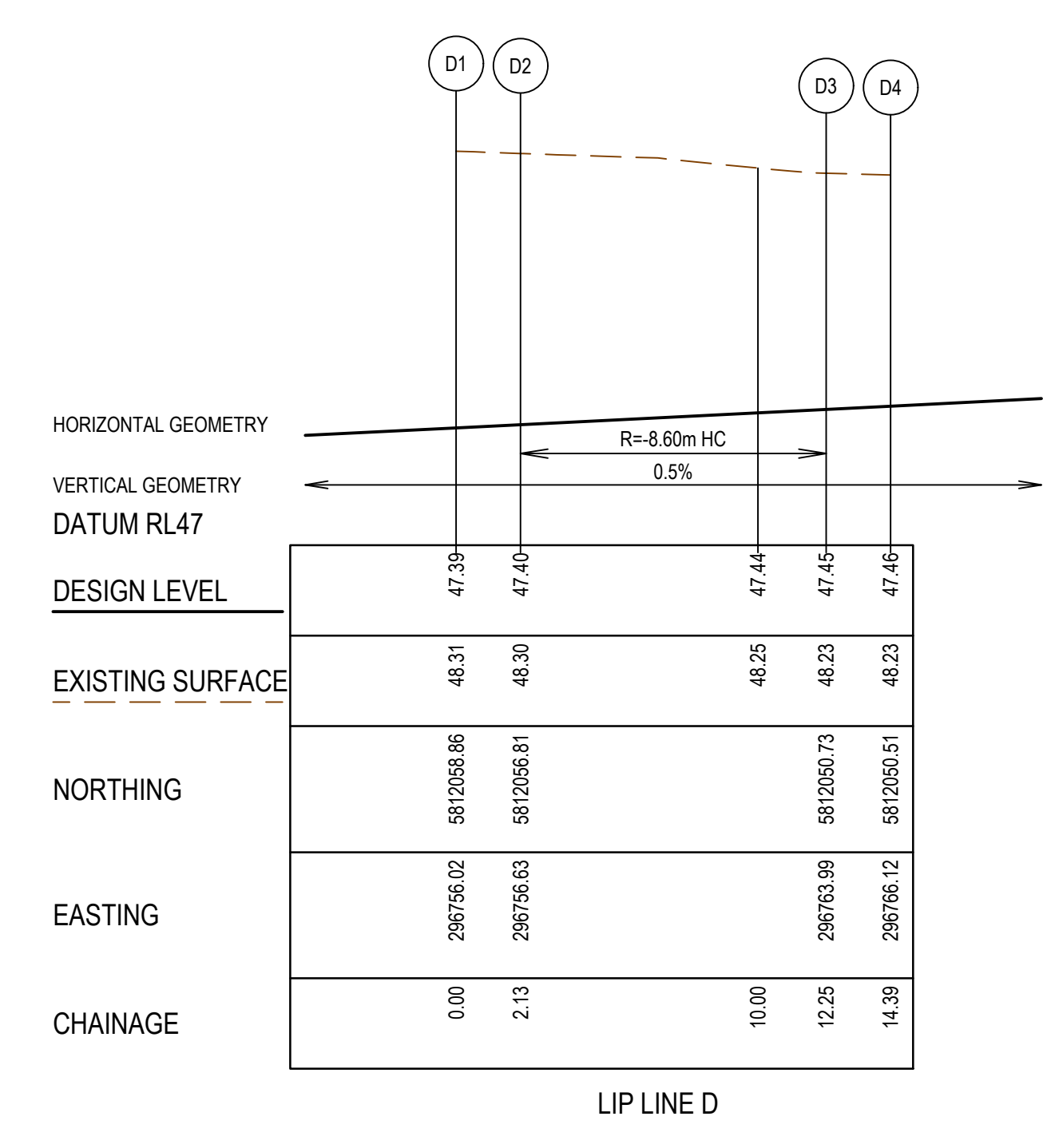
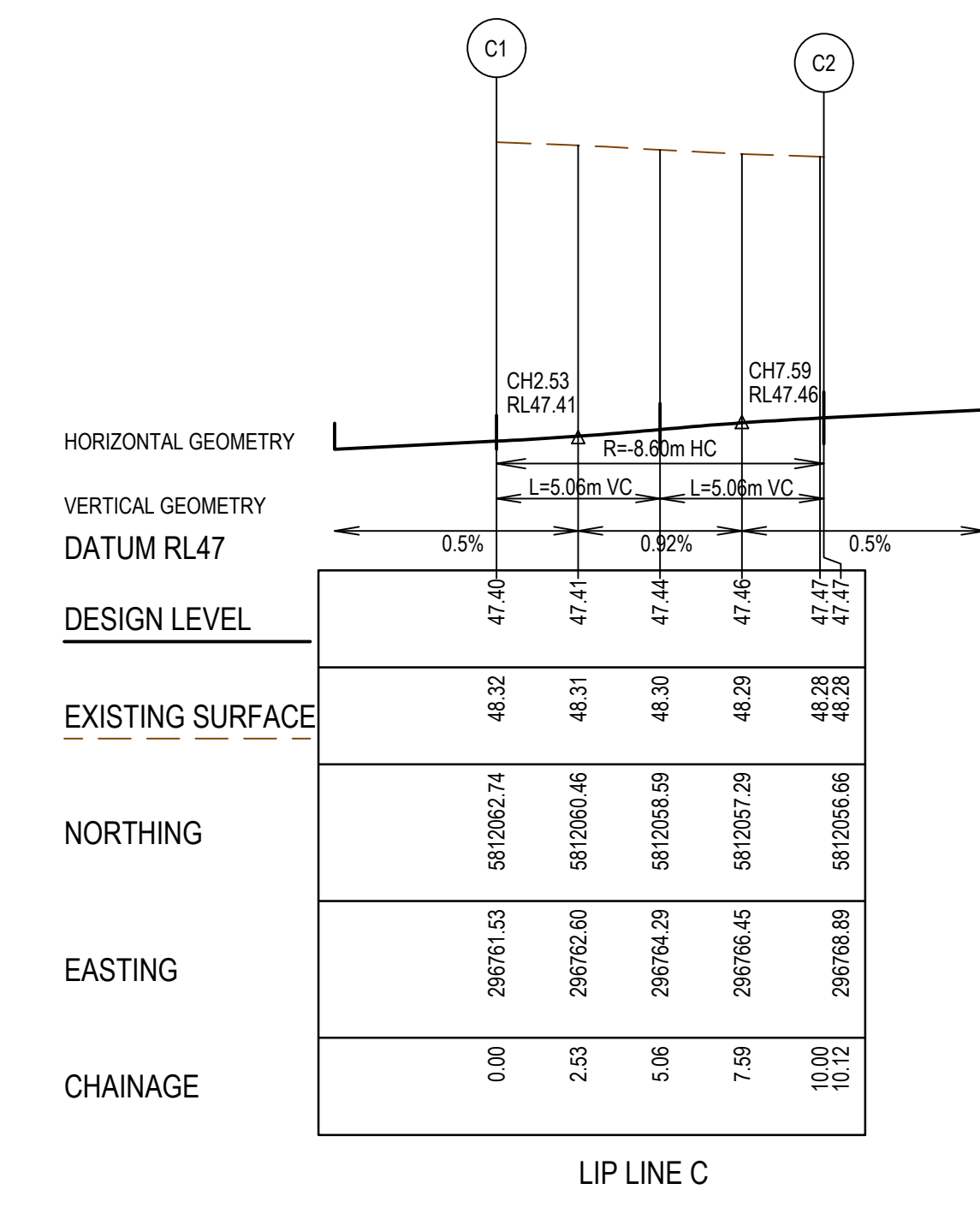
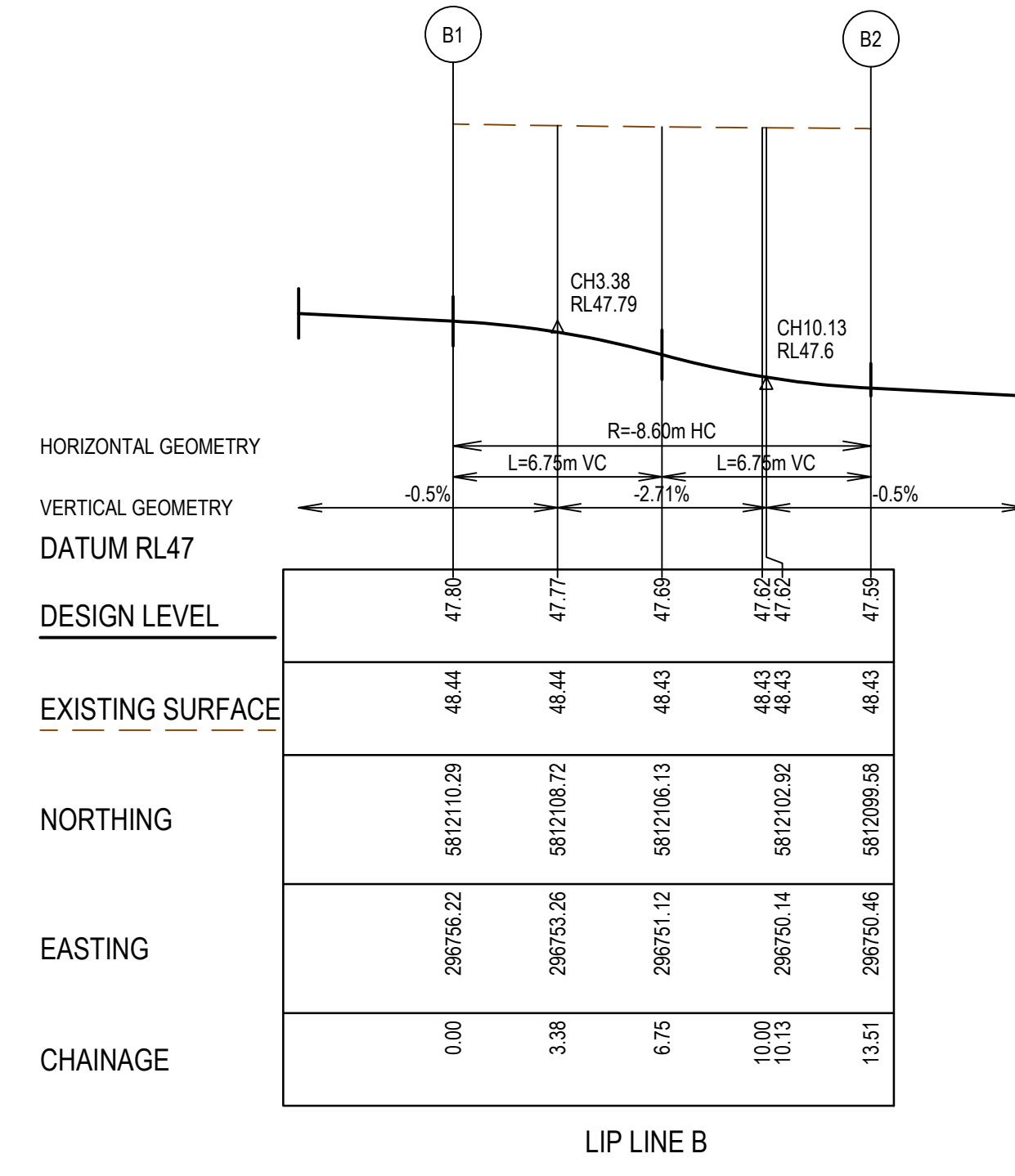
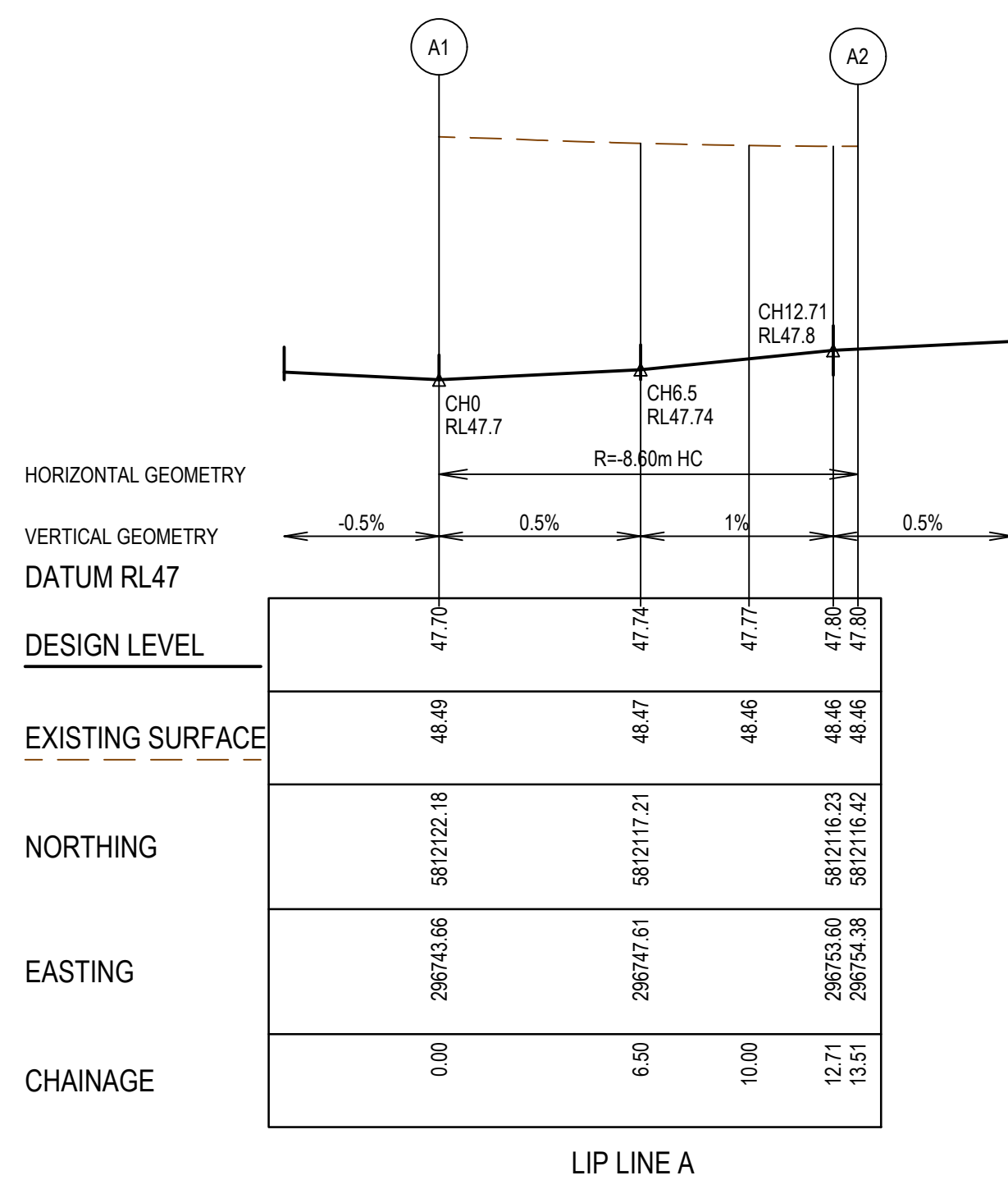
**GROWLAND**

Marigold - Stage 9 Wyndham City Council Road and Drainage Earthworks Plan			
MELWAYS REF 359 F9	PROJECT / DRAWING No. 2360E-09-03	SHEET No. 03 of 25	REVISION A





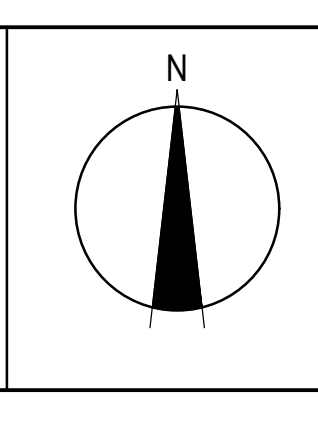
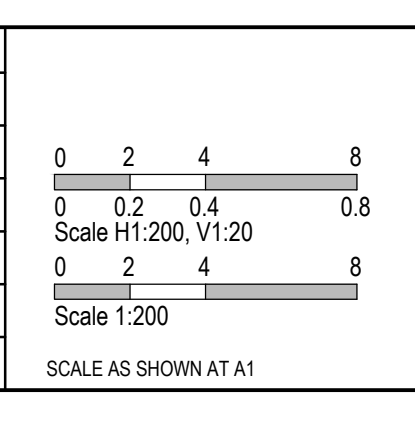
LEGEND - INTERSECTION DETAIL PLAN	
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY	
	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SEWER & 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
	EXISTING RETAINING WALL
	RETAINING WALL
	FUTURE RETAINING WALL
	EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

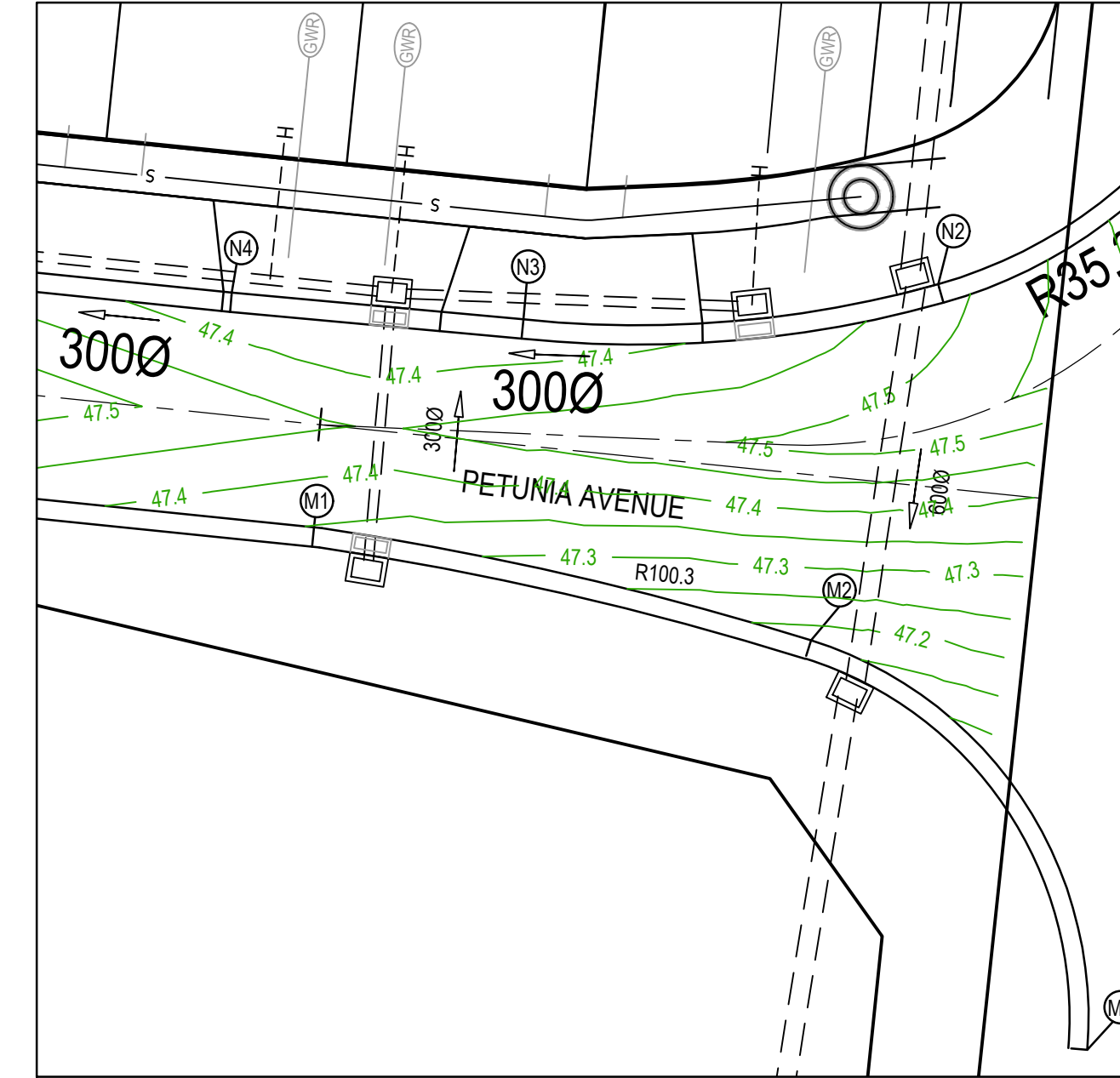
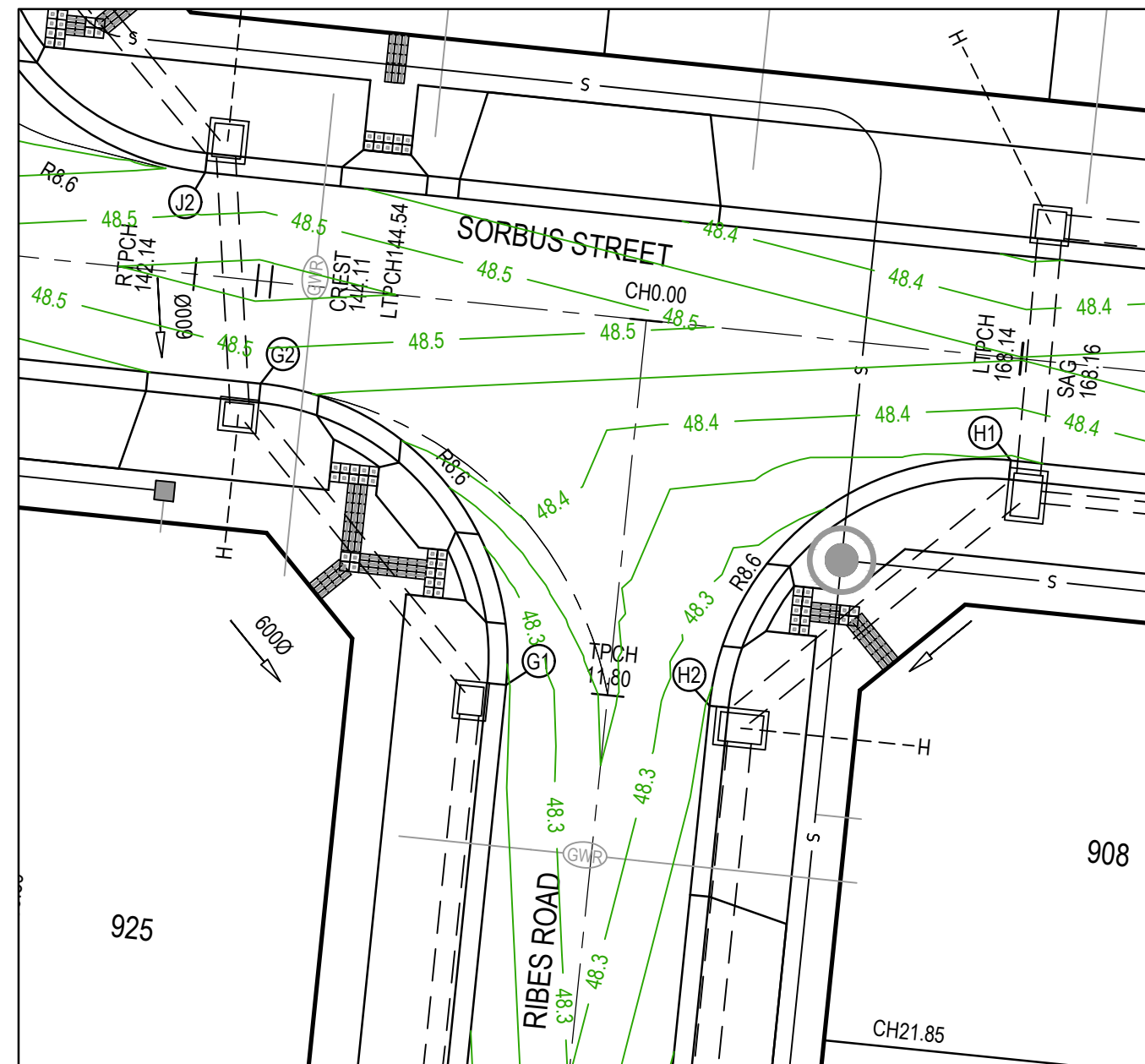
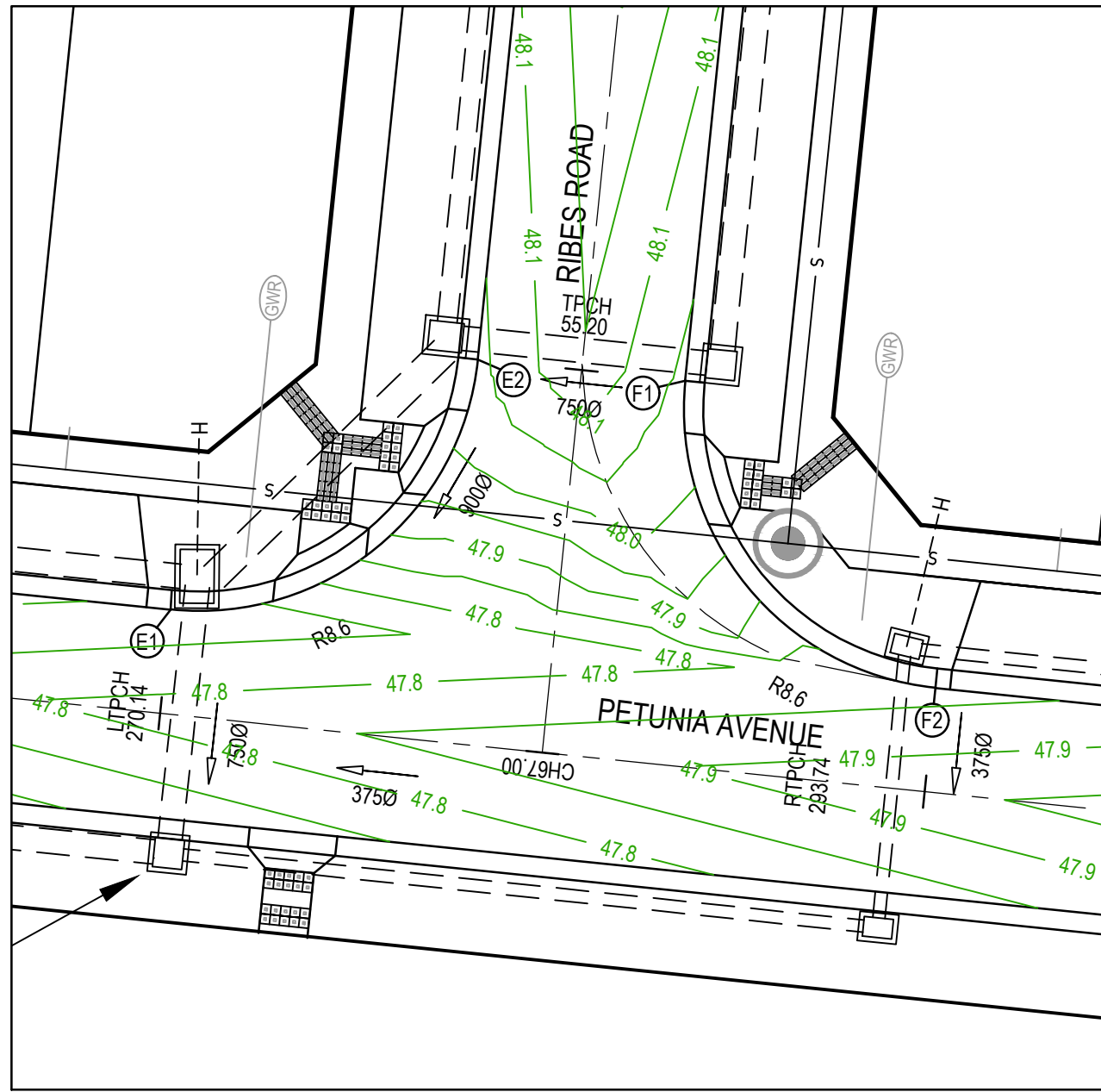
**SUBJECT TO APPROVAL**

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



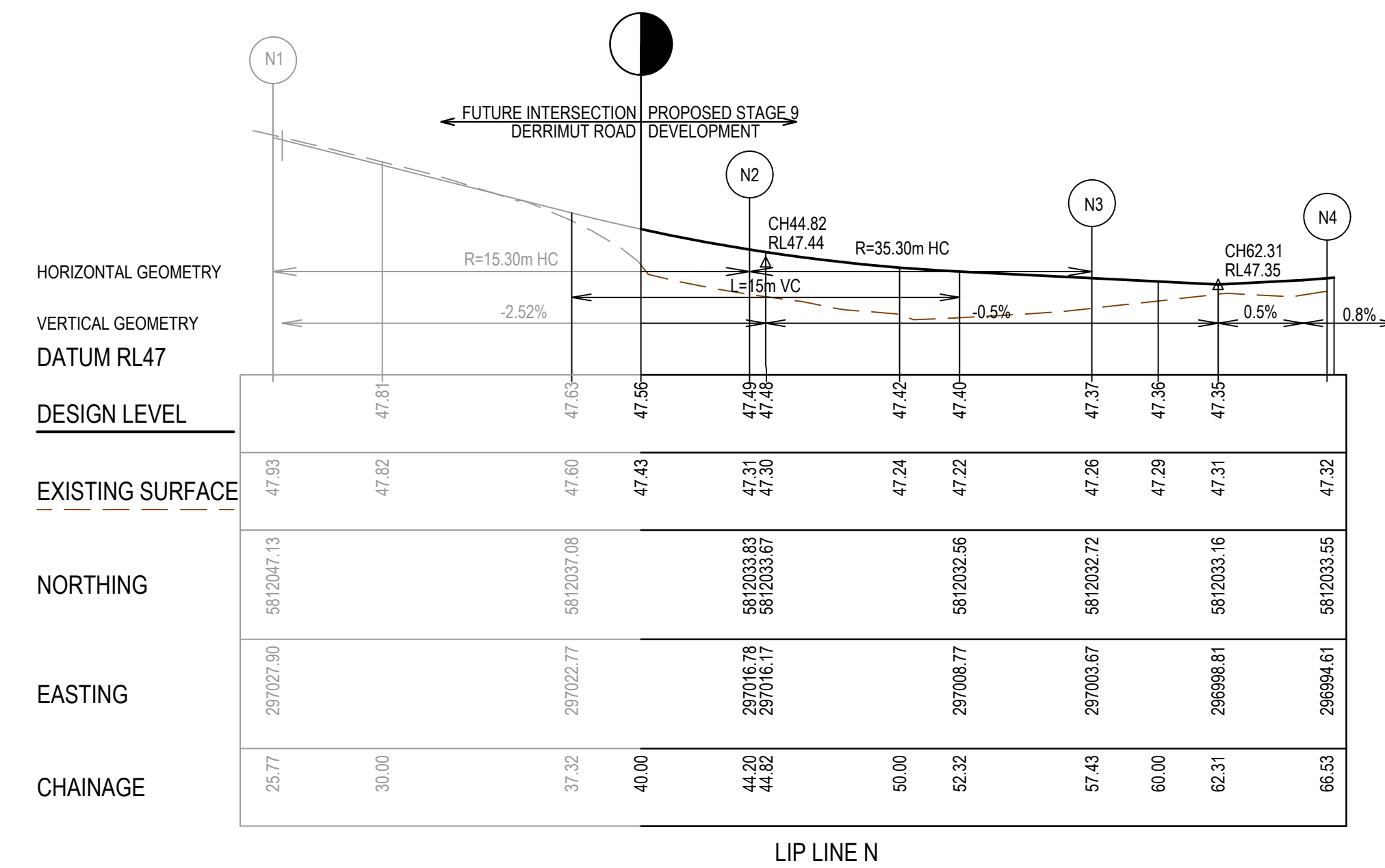
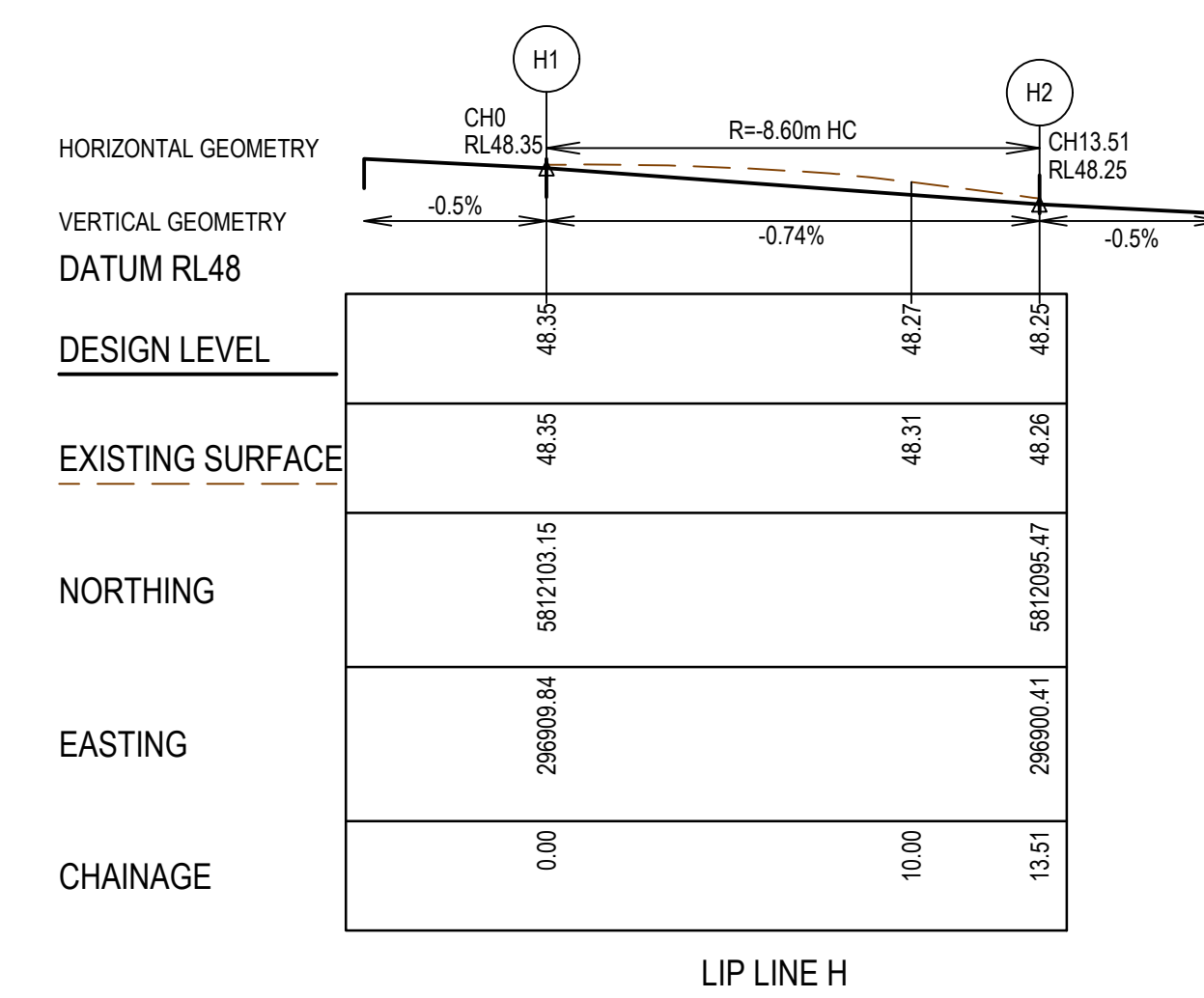
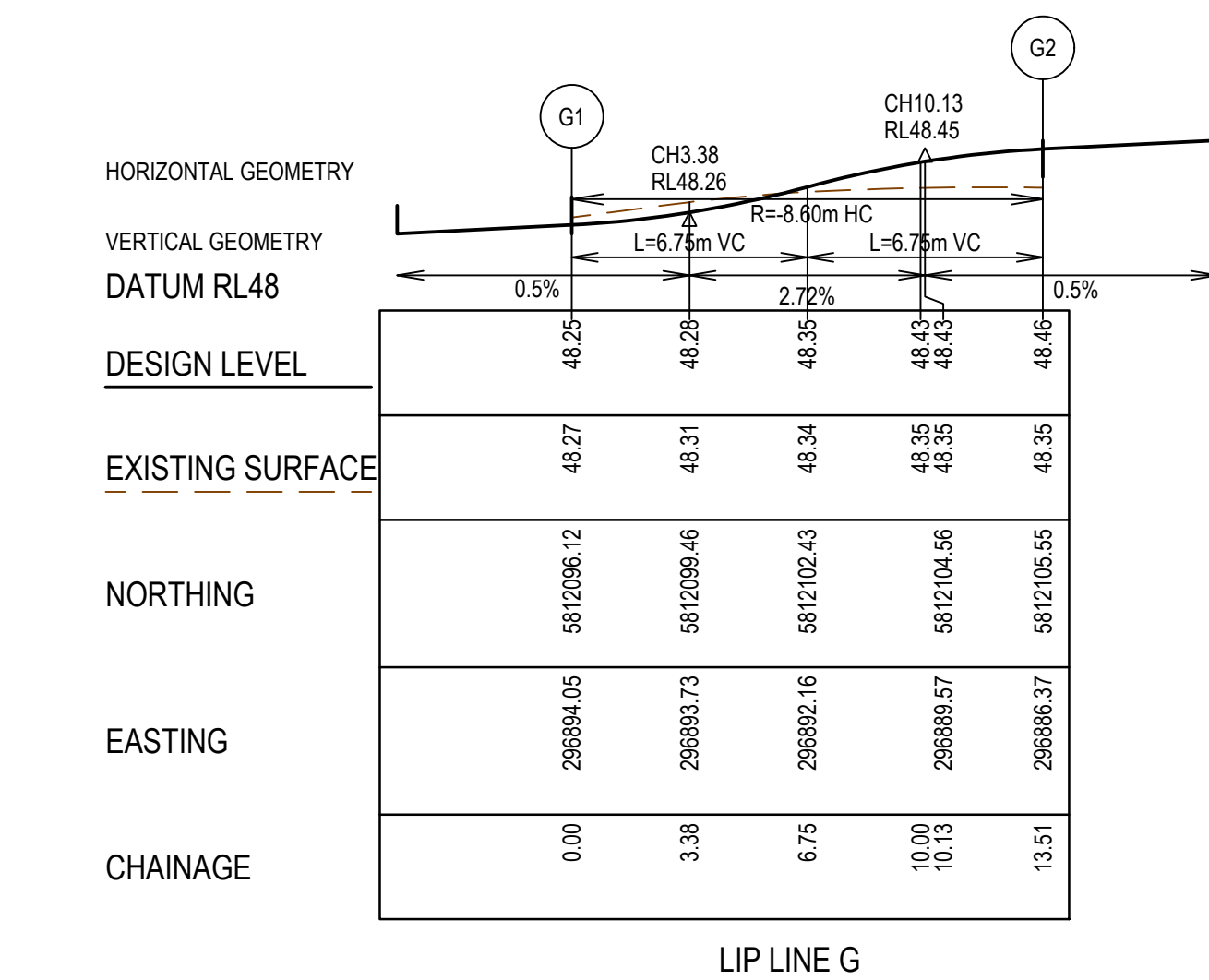
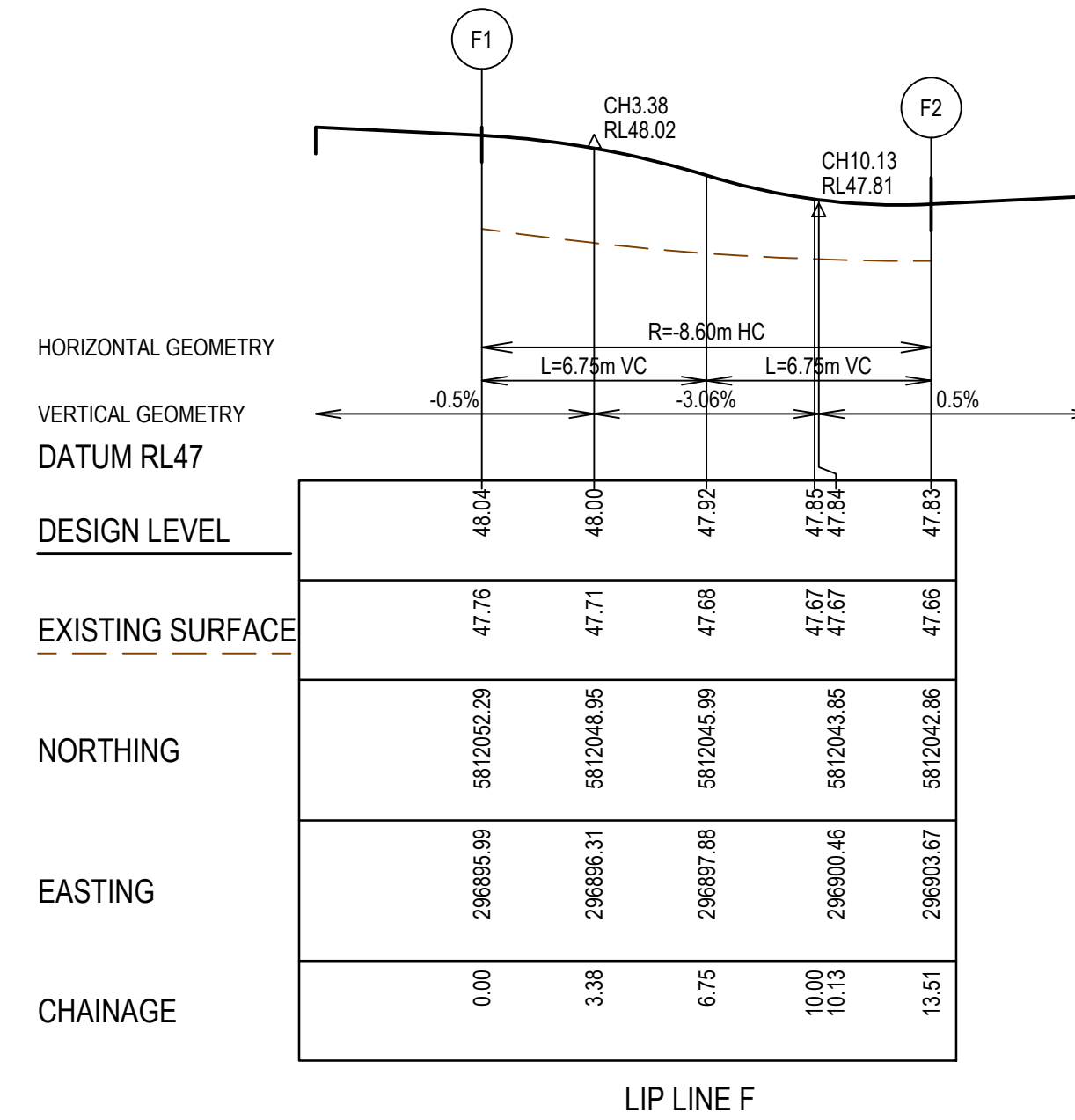
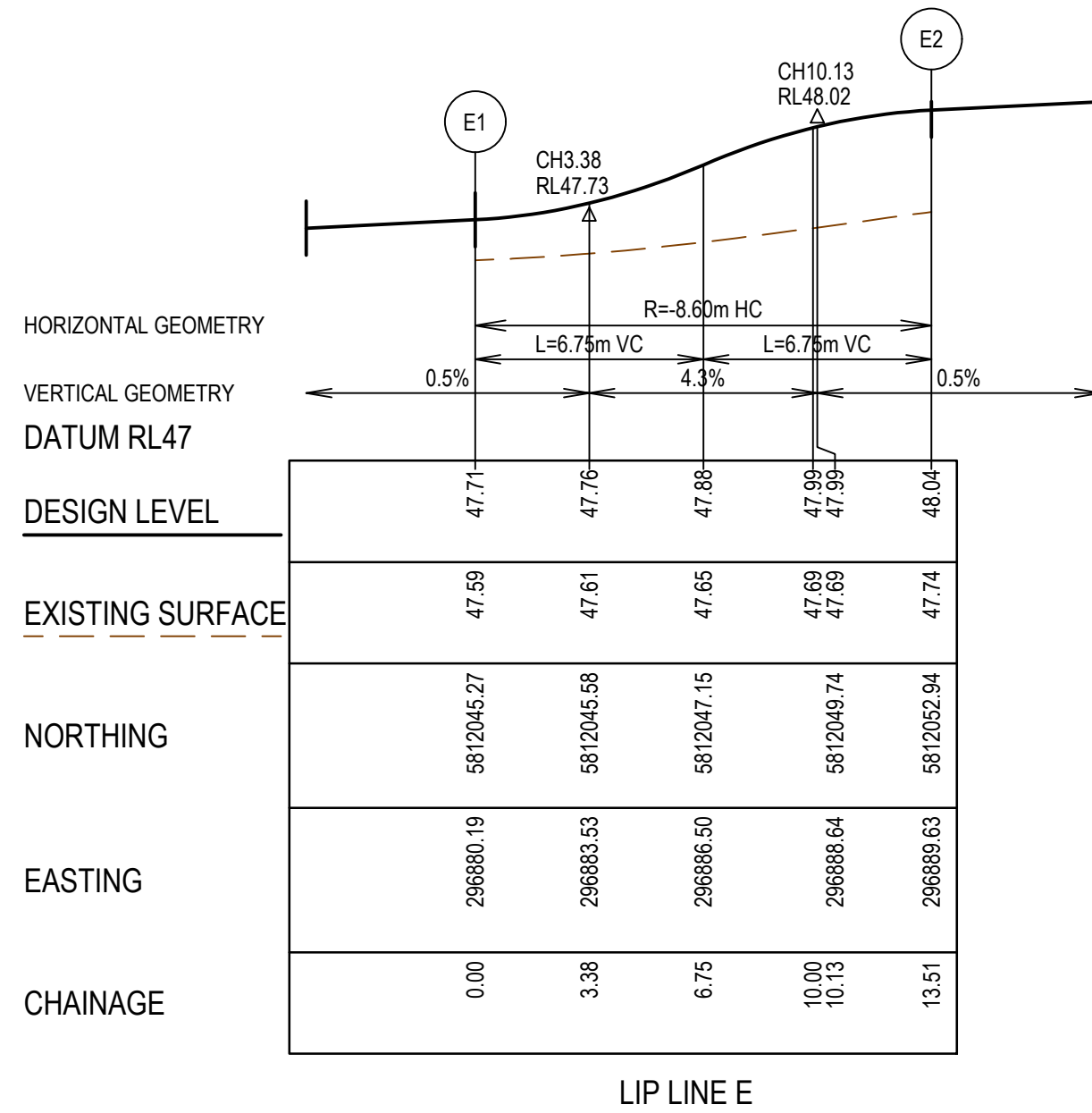
Marigold - Stage 9 Wyndham City Council Road and Drainage Intersection Detail Plan - 1	
MELWAYS REF <b>359 F9</b>	PROJECT / DRAWING No. <b>2360E-09-04</b>
SHEET No. <b>04 of 25</b>	REVISION <b>A</b>





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

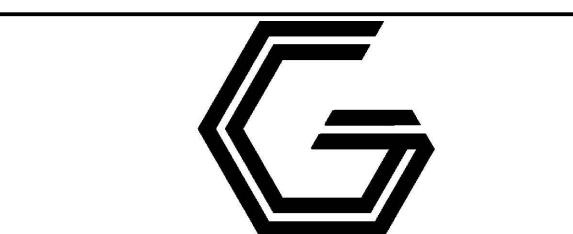
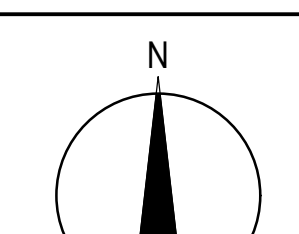
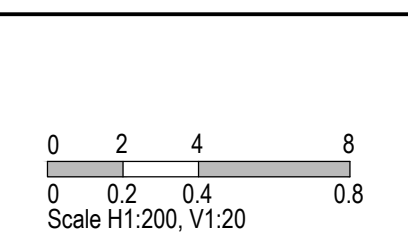
	STORMWATER DRAIN, PIT & PROPERTY INLET
	MAIN DRAIN
	SEWER & MAINTENANCE STRUCTURES
	HOUSE DRAIN
	SERVICE CONDUITS
	TACTILE PAVERS
	EXISTING STORMWATER DRAIN
	EXISTING MAIN DRAIN
	EXISTING SEWER & MAINTENANCE STRUCTURES
	EXISTING SERVICE CONDUITS
	EXISTING TACTILE PAVERS
	FUTURE STORMWATER DRAIN
	FUTURE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



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

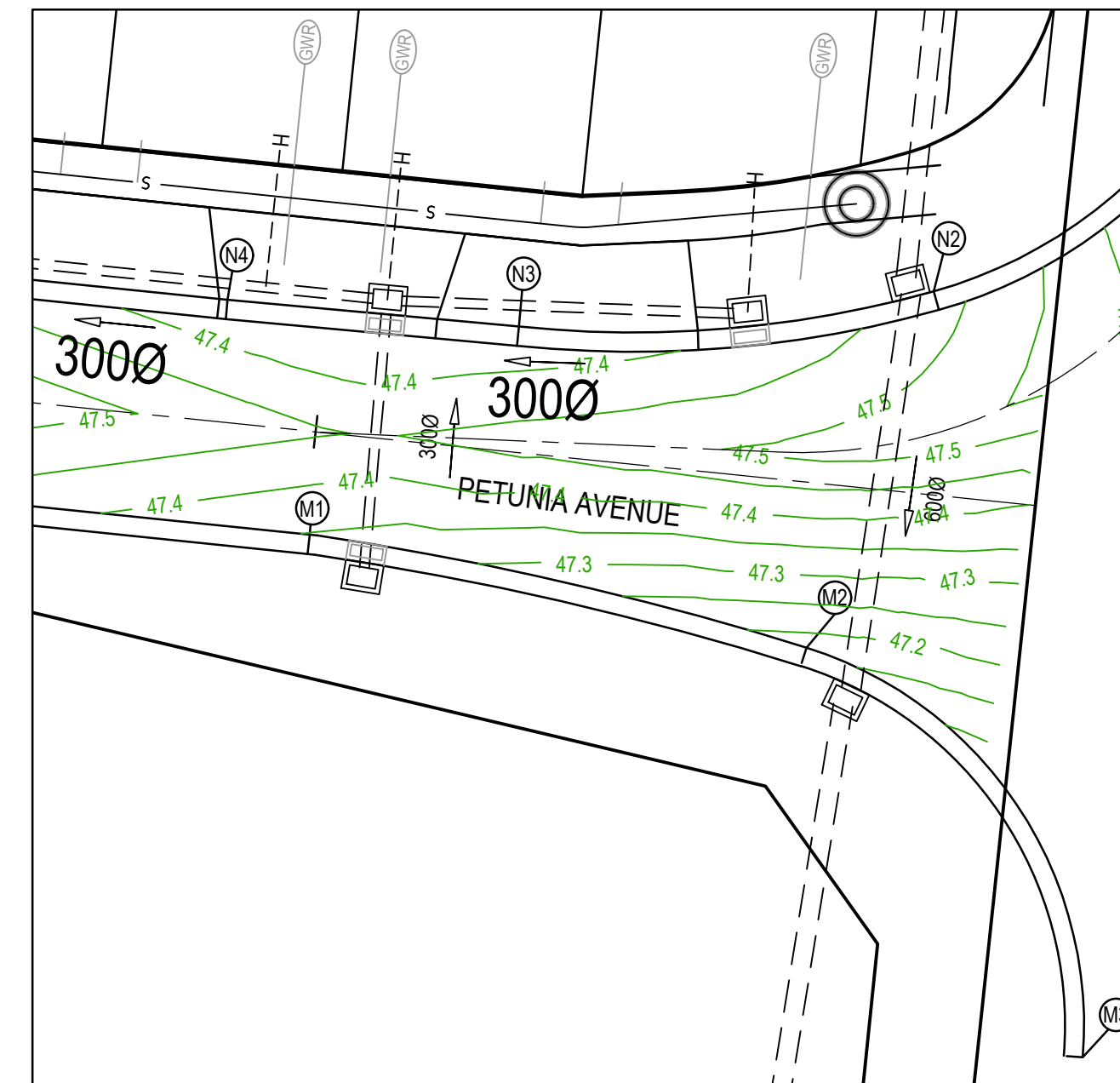
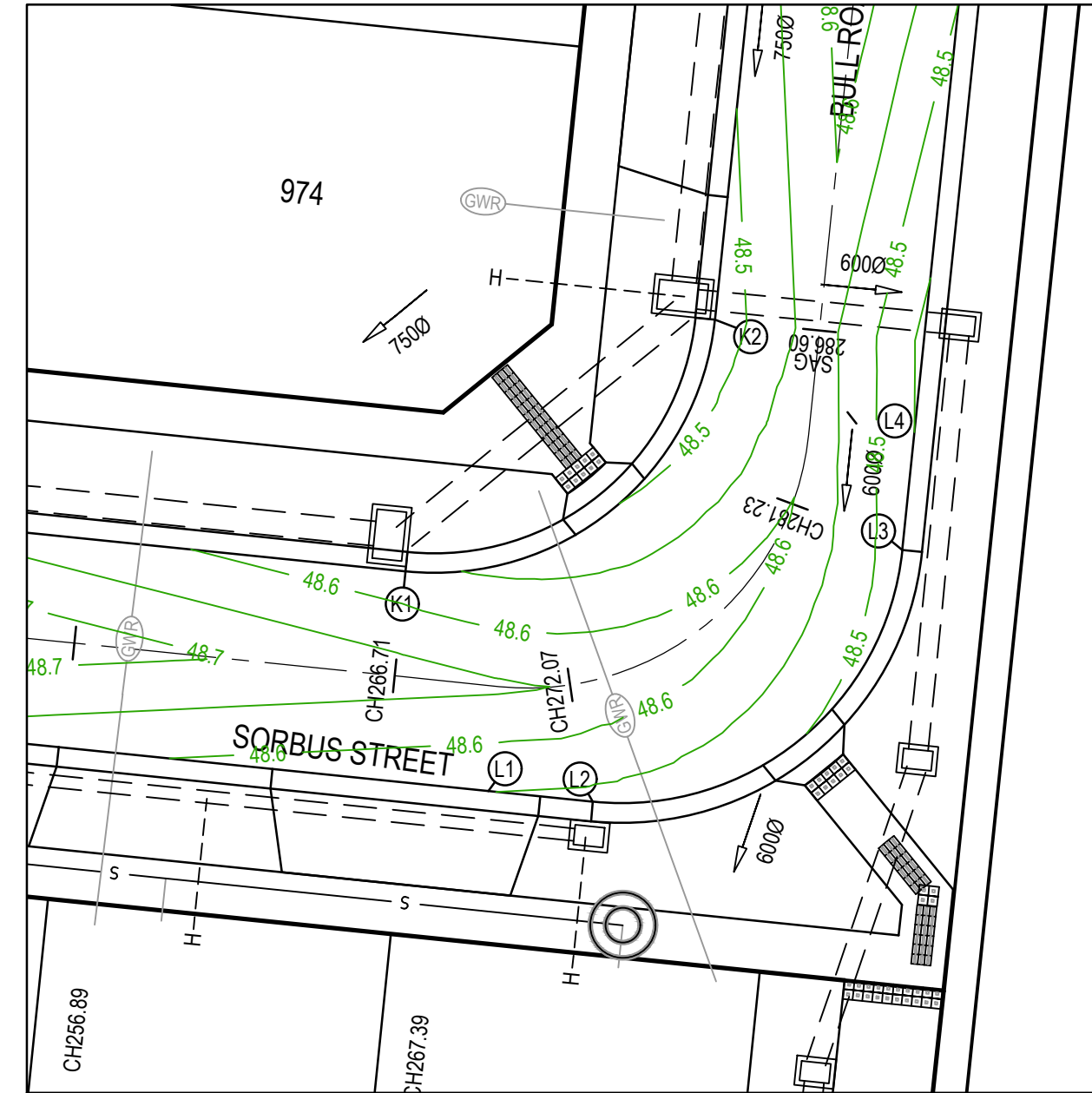
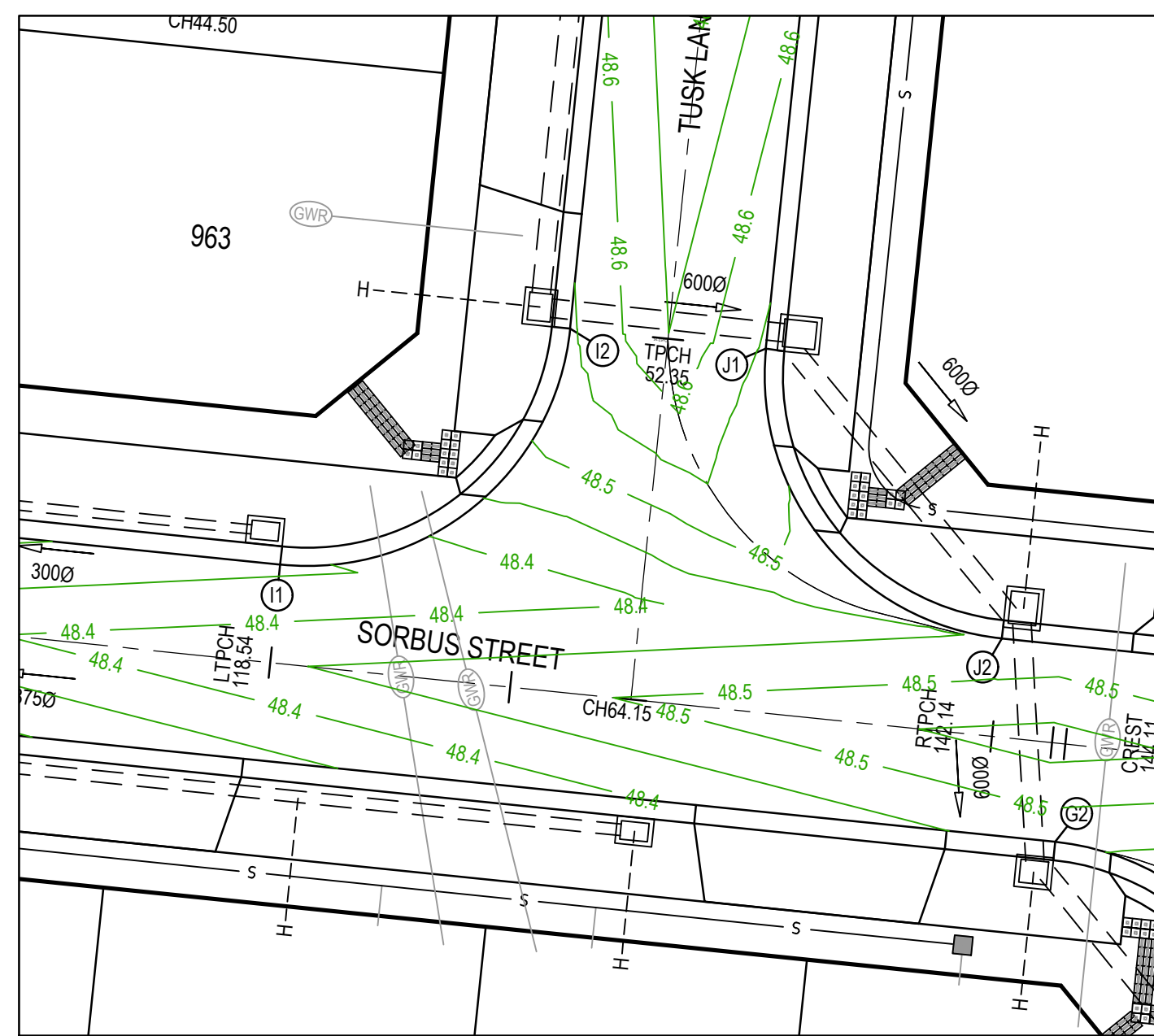
All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



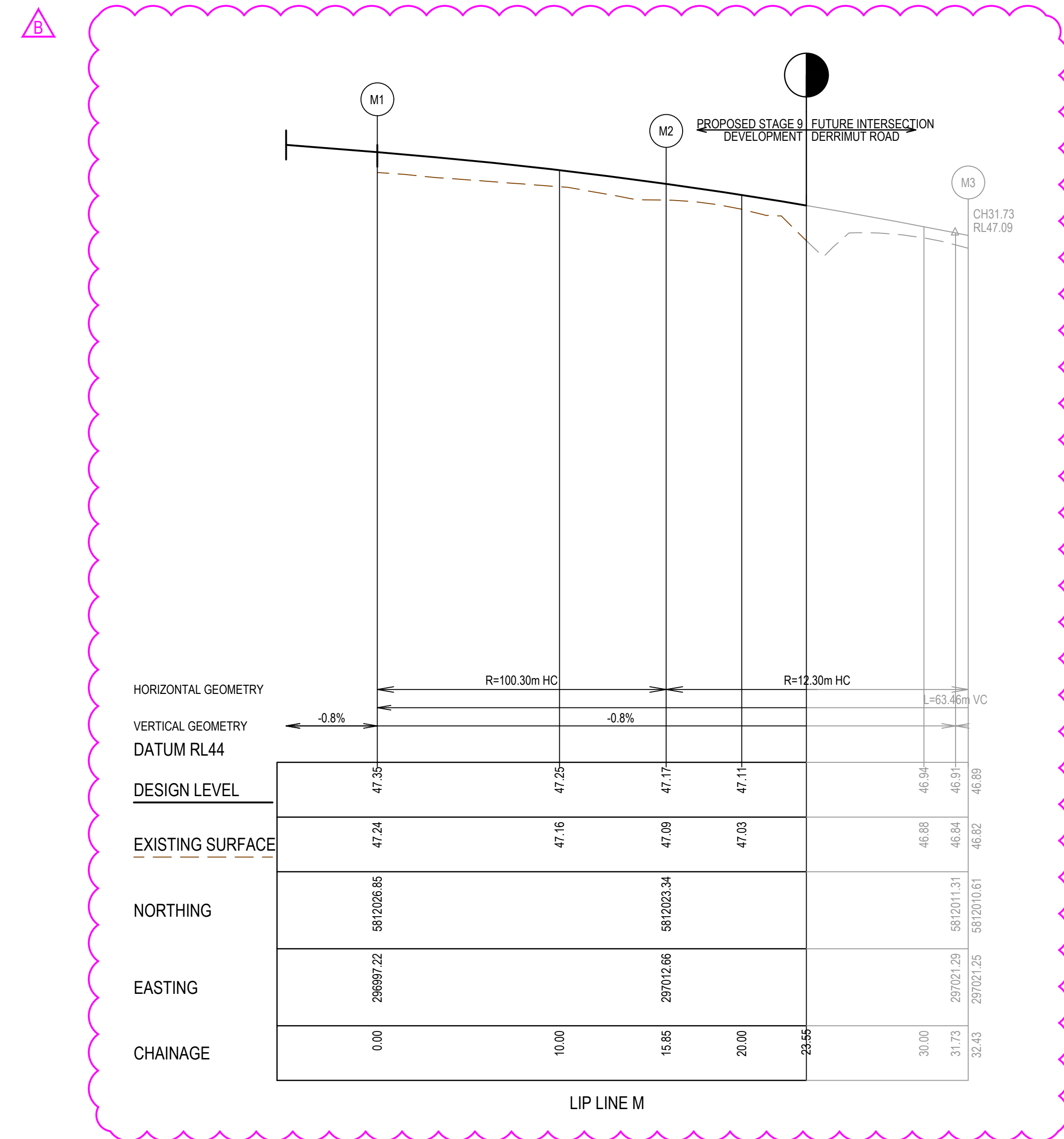
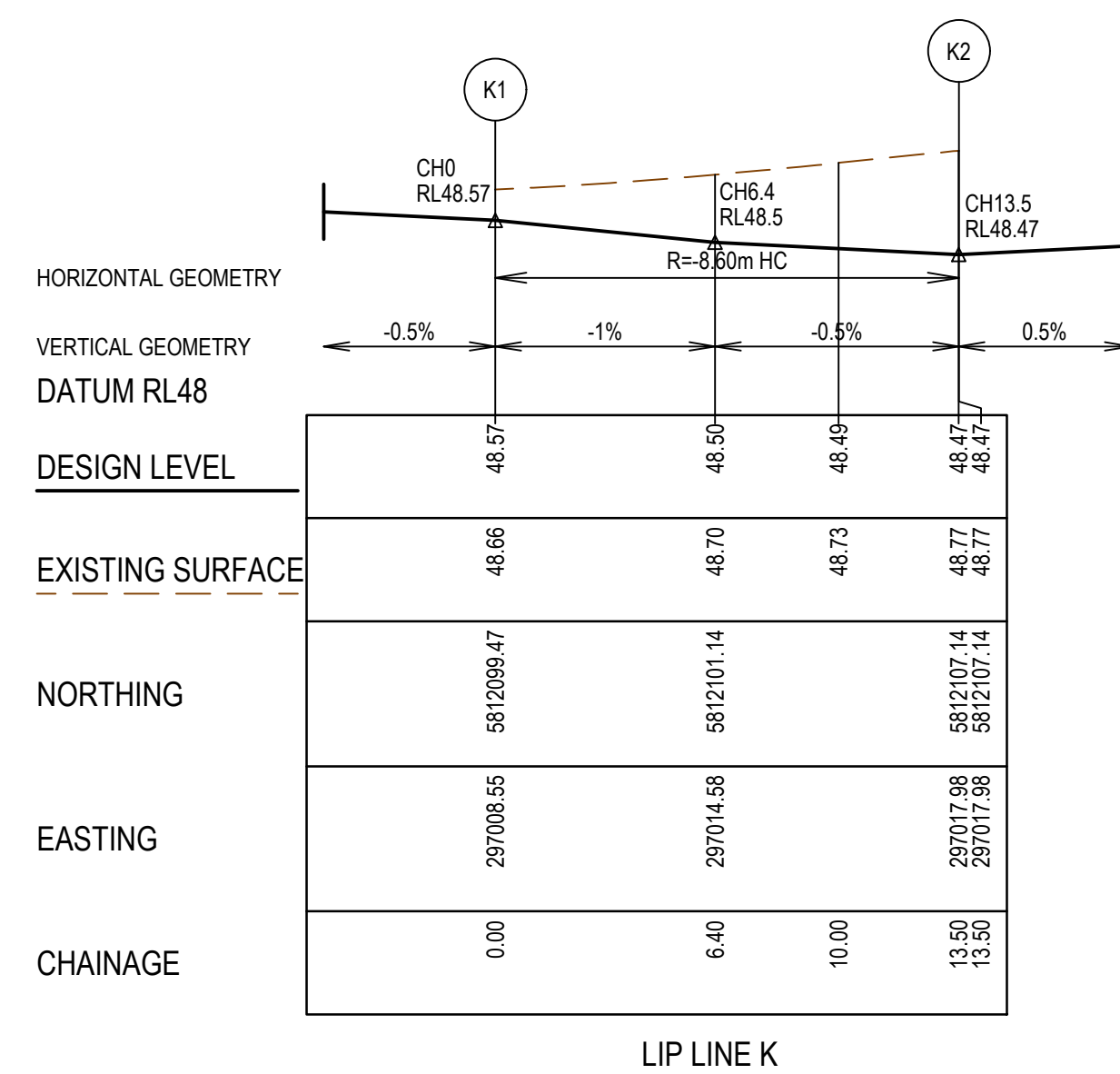
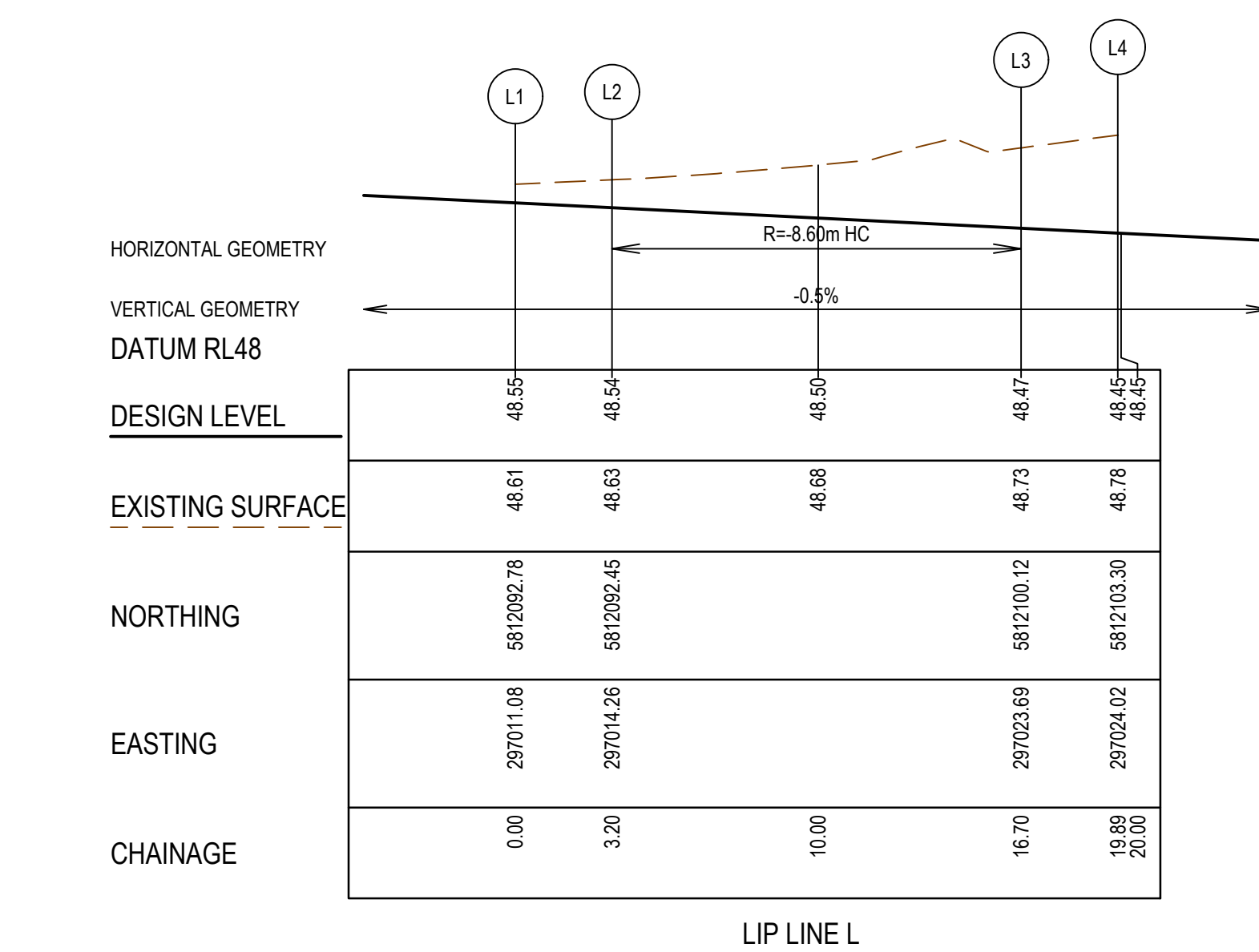
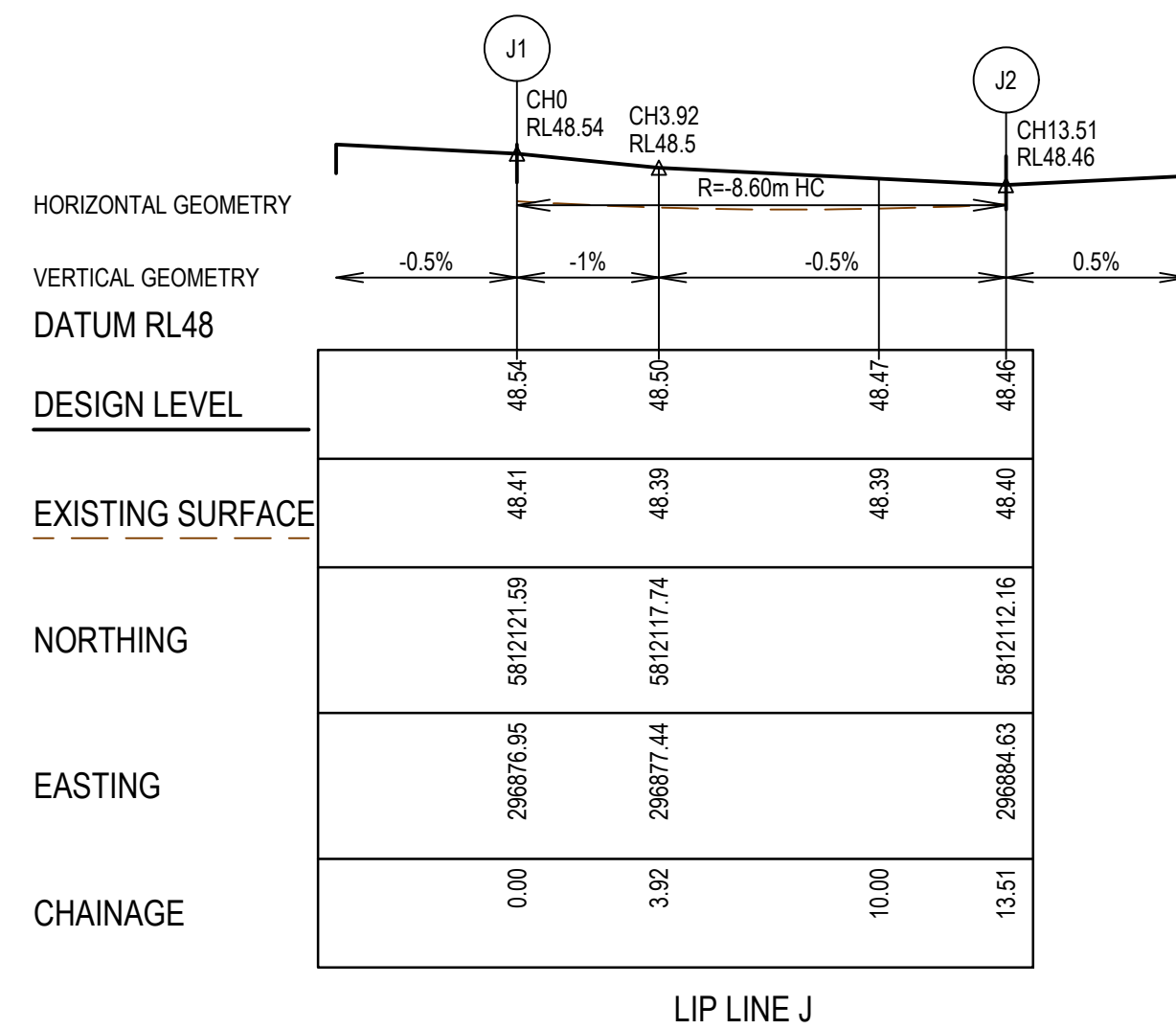
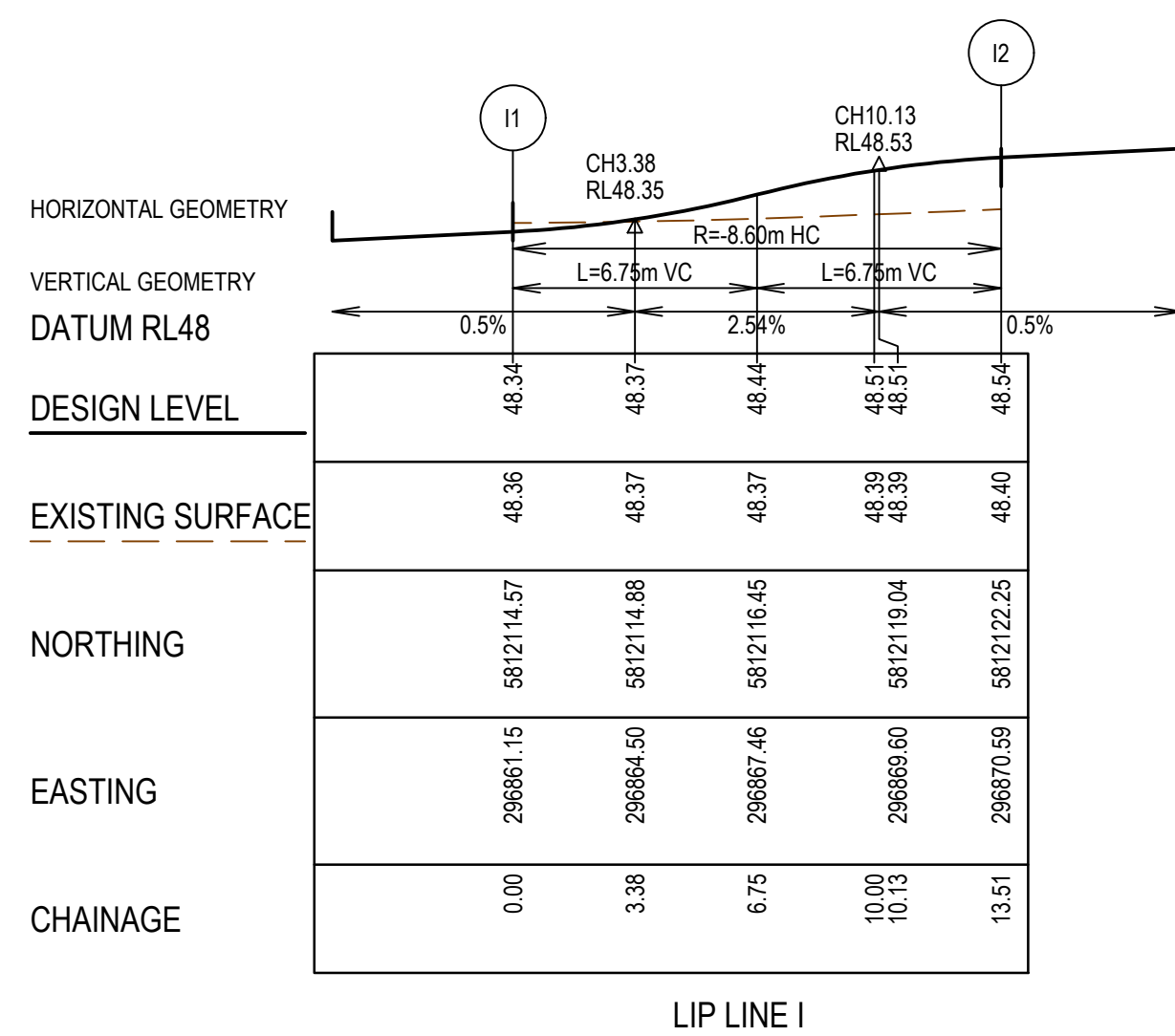
Marigold - Stage 9  
Wyndham City Council  
Road and Drainage  
Intersection Detail Plan - 2





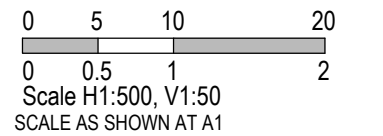
**LEGEND - INTERSECTION DETAIL PLAN**  
ALL PROPOSED, FUTURE & EXISTING SERVICE LOCATIONS ARE SHOWN INDICATIVELY

	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
	EXISTING RETAINING WALL
	RETAINING WALL
	FUTURE RETAINING WALL
	EDGE STRIP, SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
	PERMANENT SURVEY MARK
	TEMPORARY BENCH MARK
	PROPOSED DRIVEWAY & FOOTPATH



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



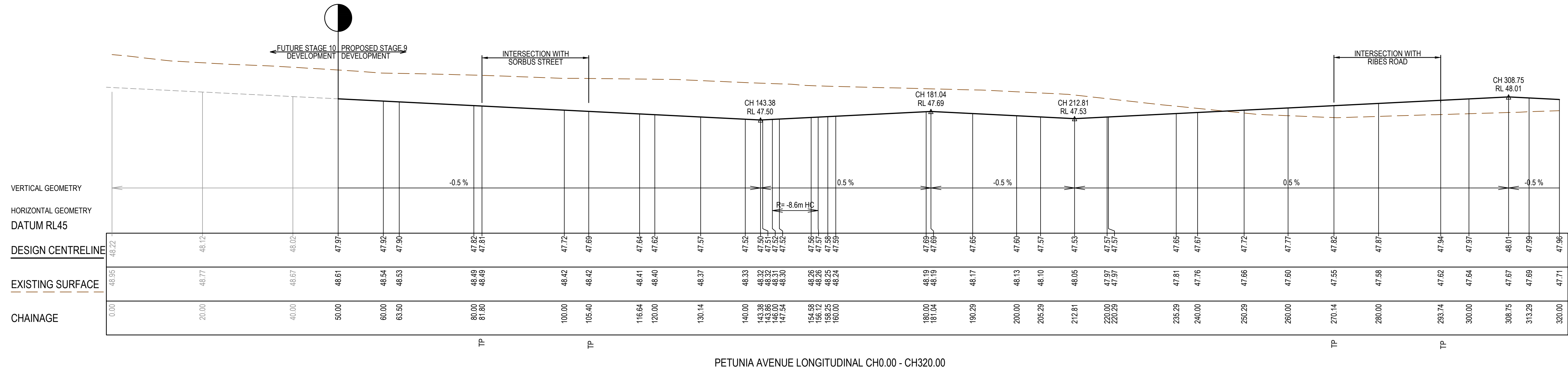
**SMEC**  
Member of the Surbana Jurong Group  
ABN 47 065 475 149  
Collins Square, Tower 4, Level 20, 727 Collins St  
Melbourne, VIC 3008  
Ph 03 9514 1500

**GROWLAND**

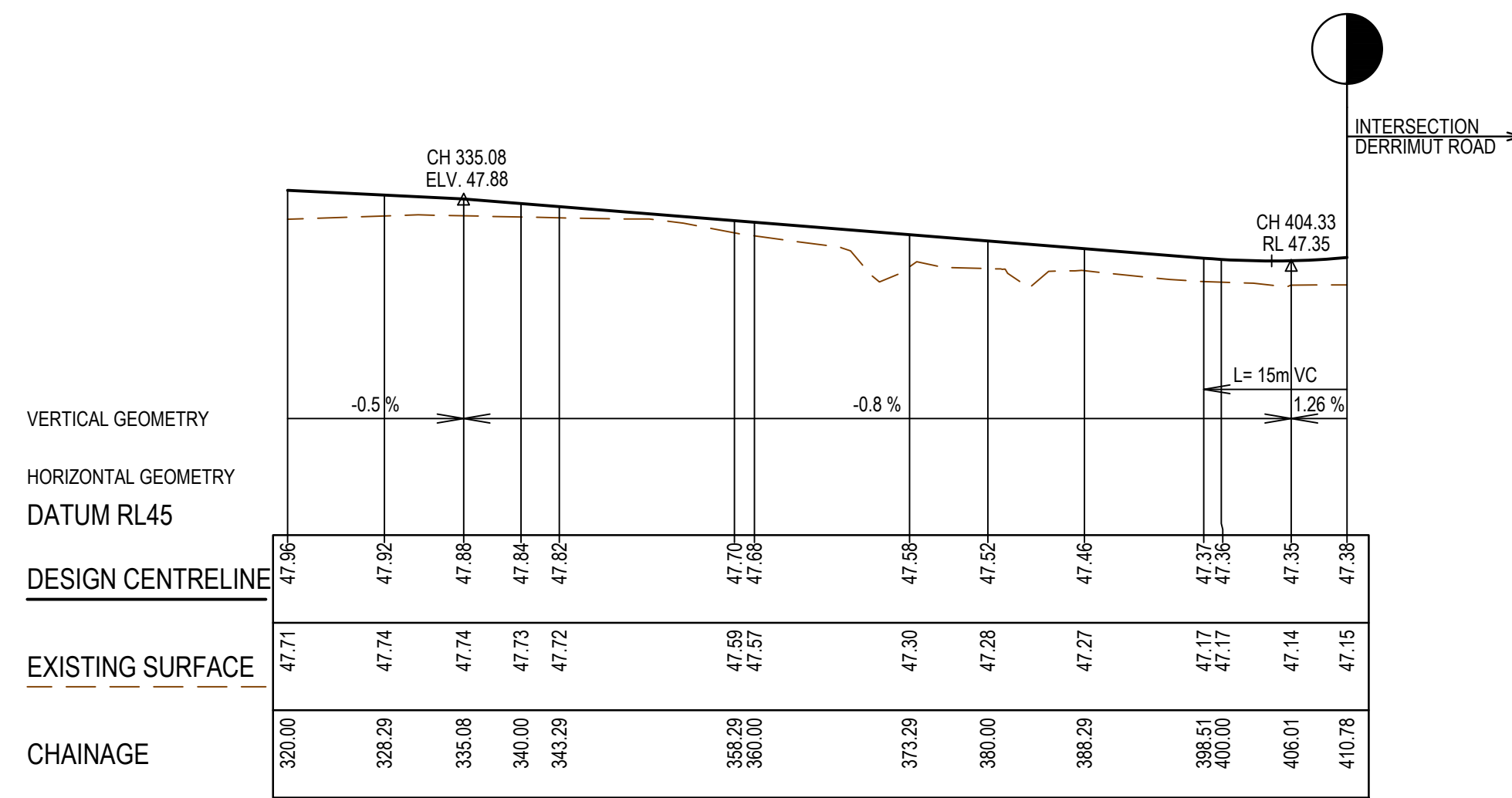
Marigold - Stage 9  
Wyndham City Council  
Road and Drainage  
Intersection Detail Plan - 3

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
359 F9	2360E-09-06	06 of 25	B

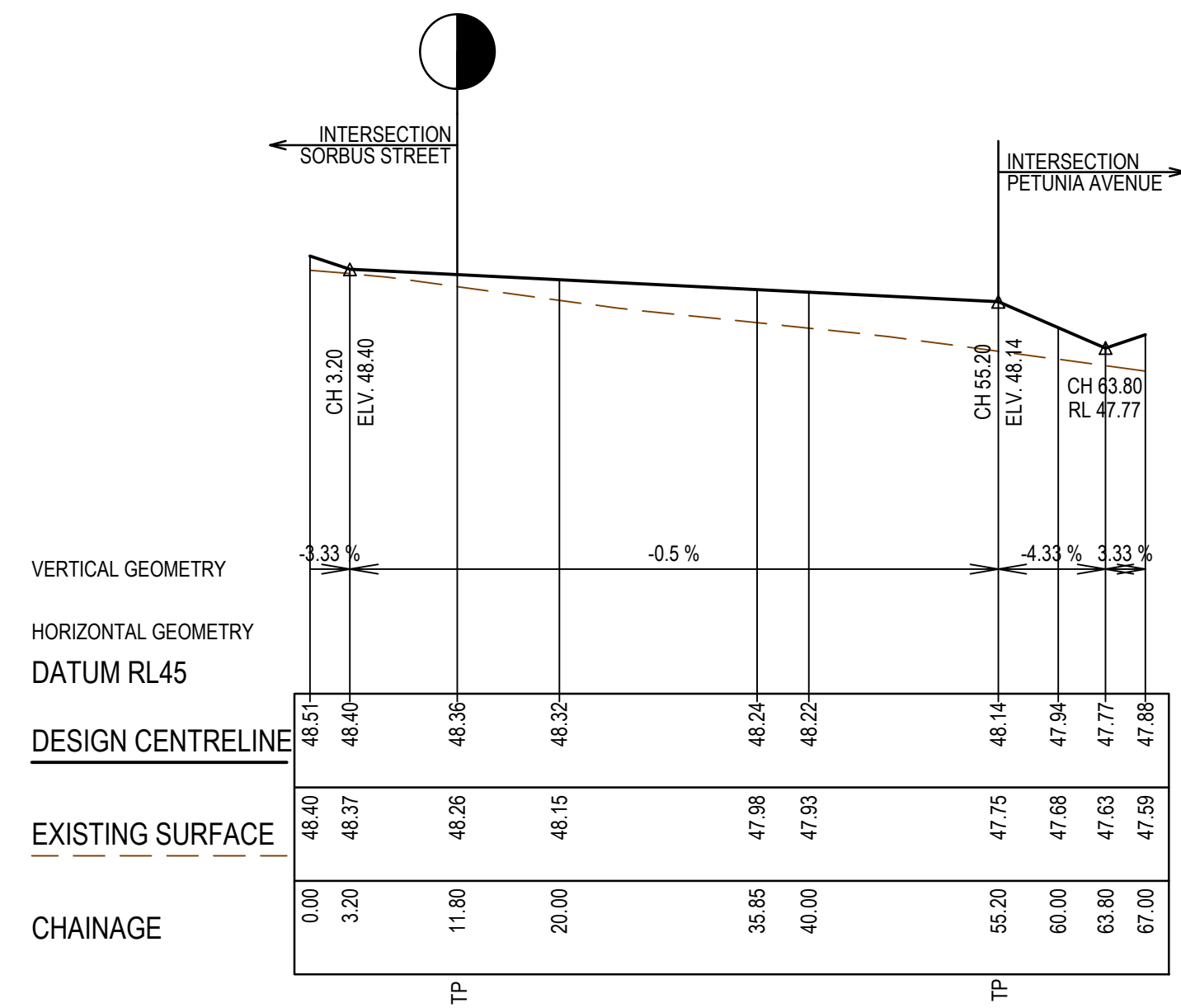




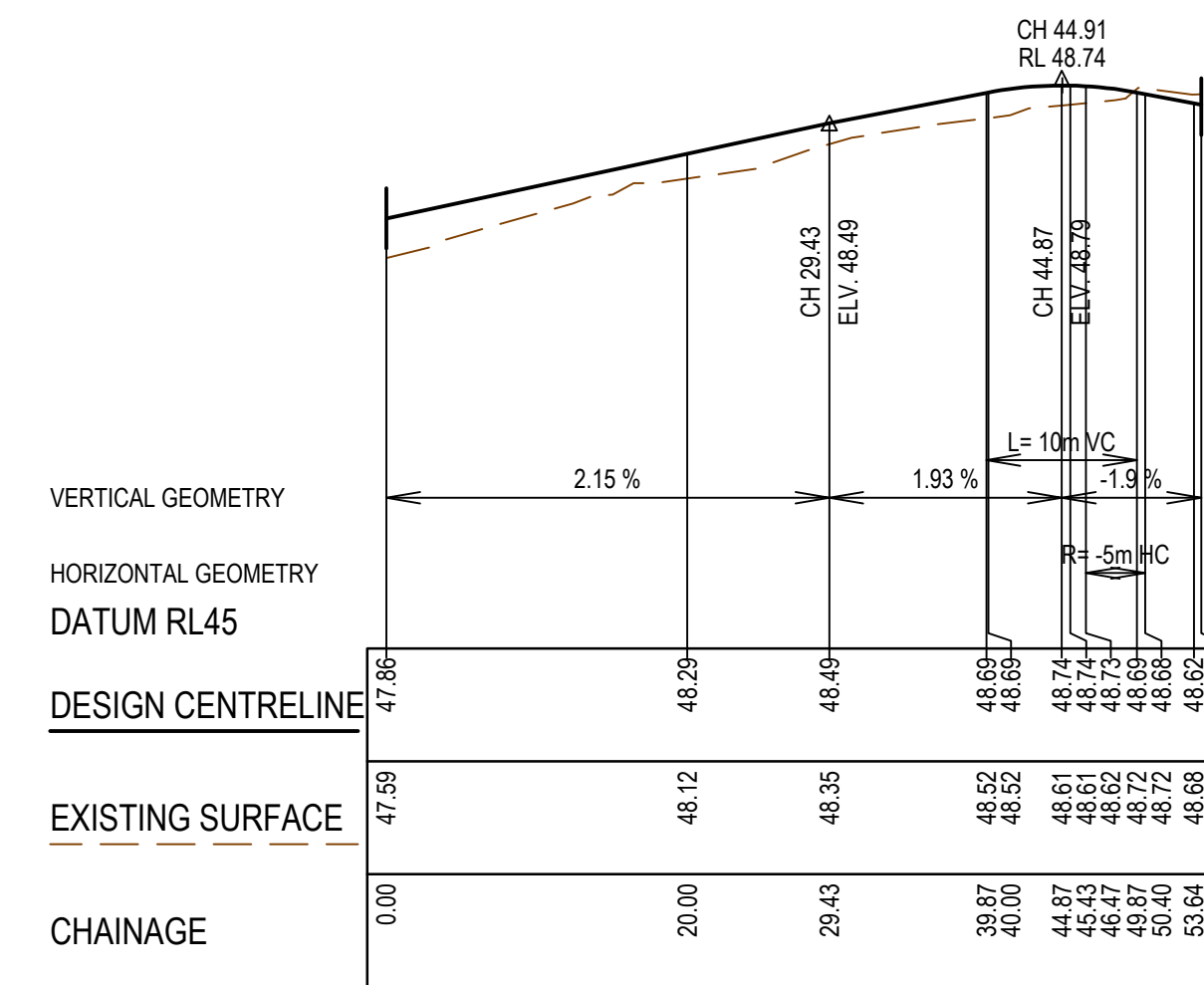
PETUNIA AVENUE LONGITUDINAL CH0.00 - CH320.00



PETUNIA AVENUE LONGITUDINAL CH320.00 - 410.78



RIBES ROAD LONGITUDINAL SECTION

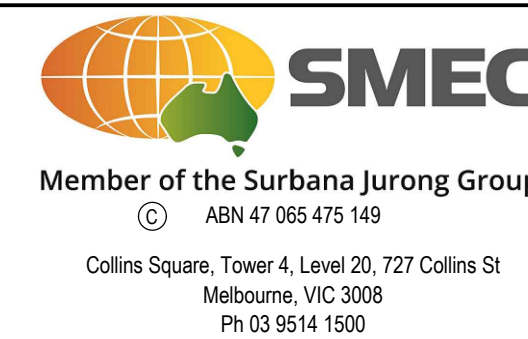
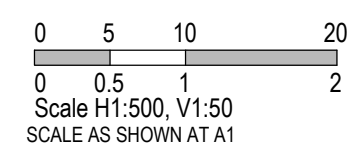


SHARED FOOTPATH LONGITUDINAL SECTION

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

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

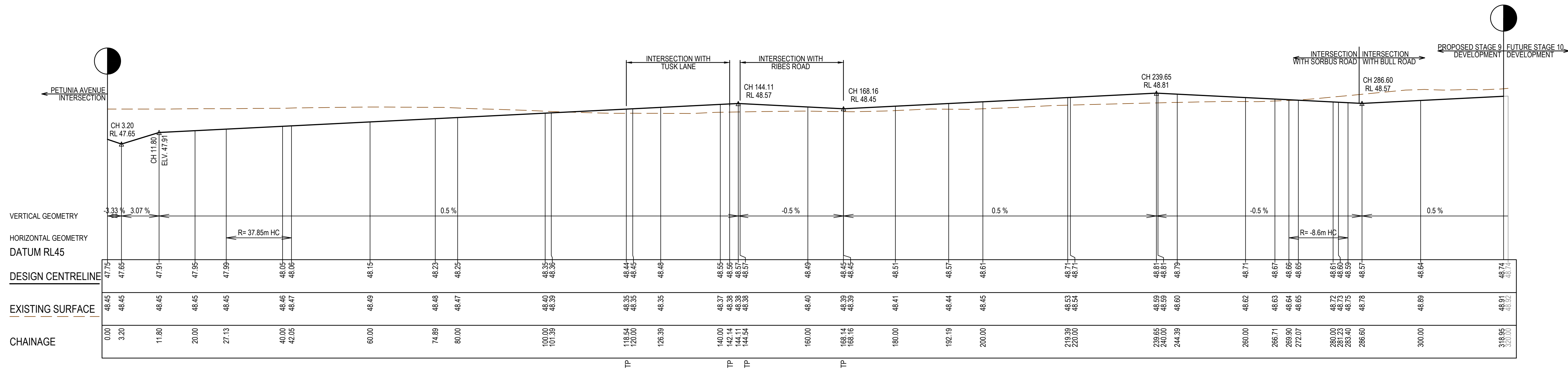
TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



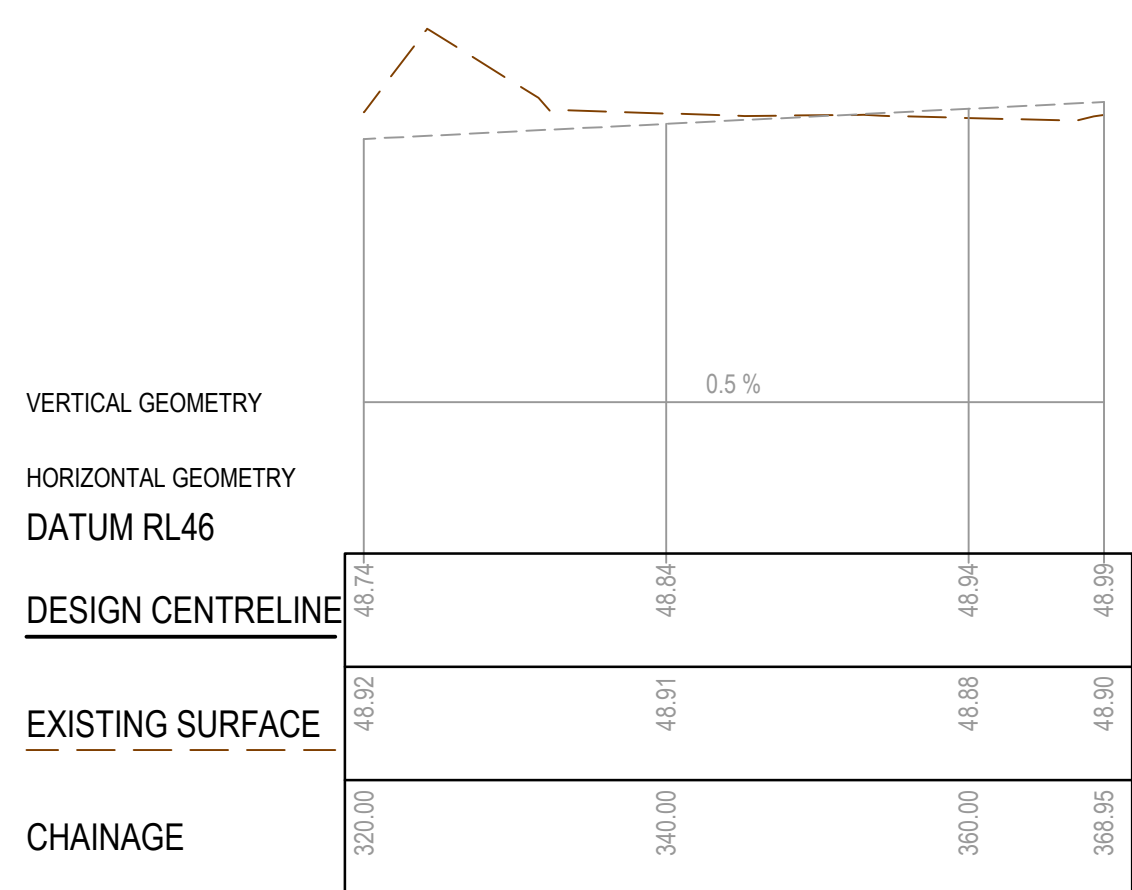
Marigold - Stage 9  
Wynham City Council  
Road and Drainage  
Longitudinal Sections - 1

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
359 F9	2360E-09-07	07 of 25	A

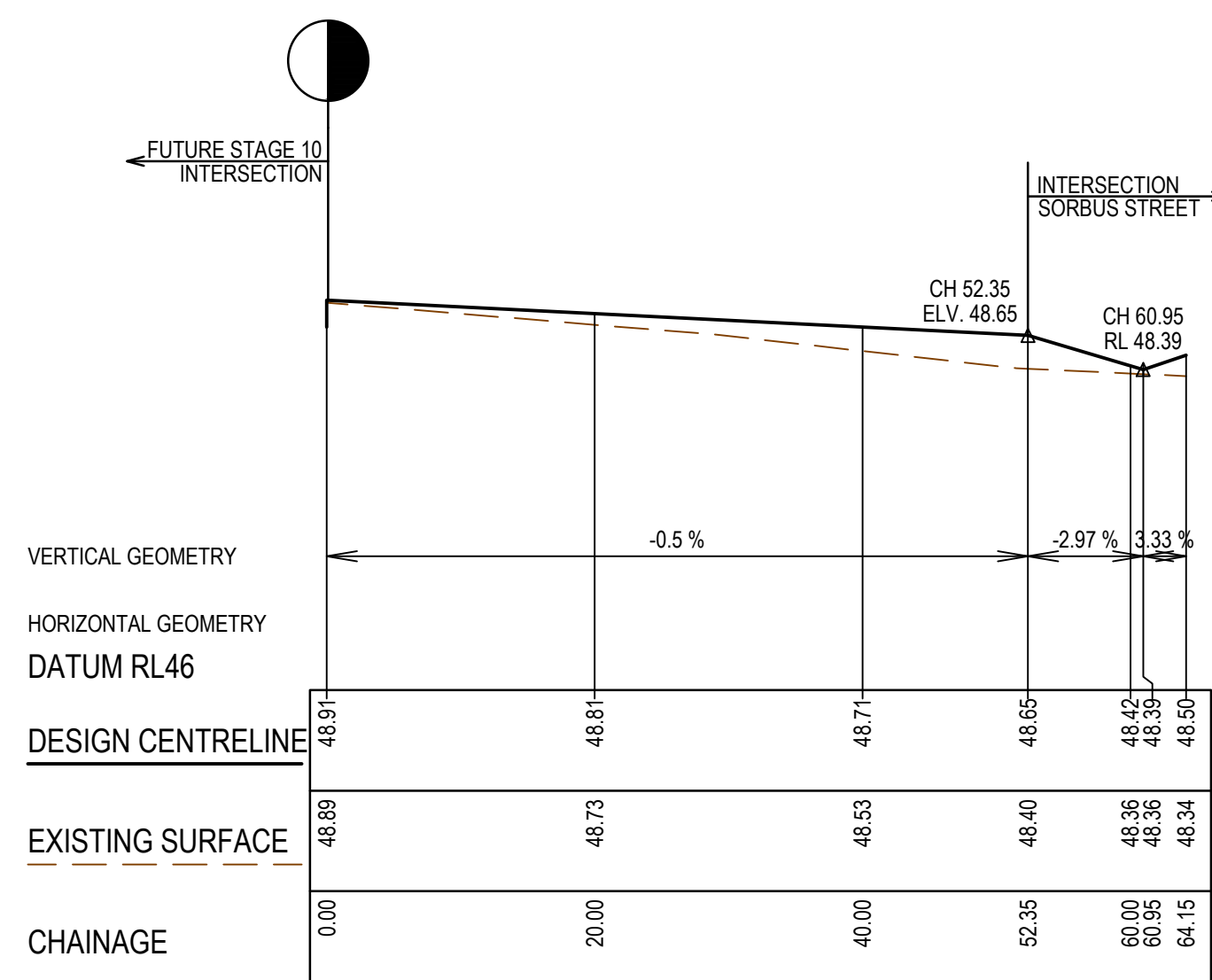




SORBUS STREET & BULL ROAD LONGITUDINAL CH0.00 - CH320.00



SORBUS STREET & BULL ROAD LONGITUDINAL CH320.00 - CH368.95

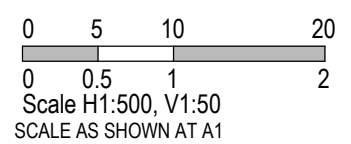


TUSK LANE LONGITUDINAL SECTION

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



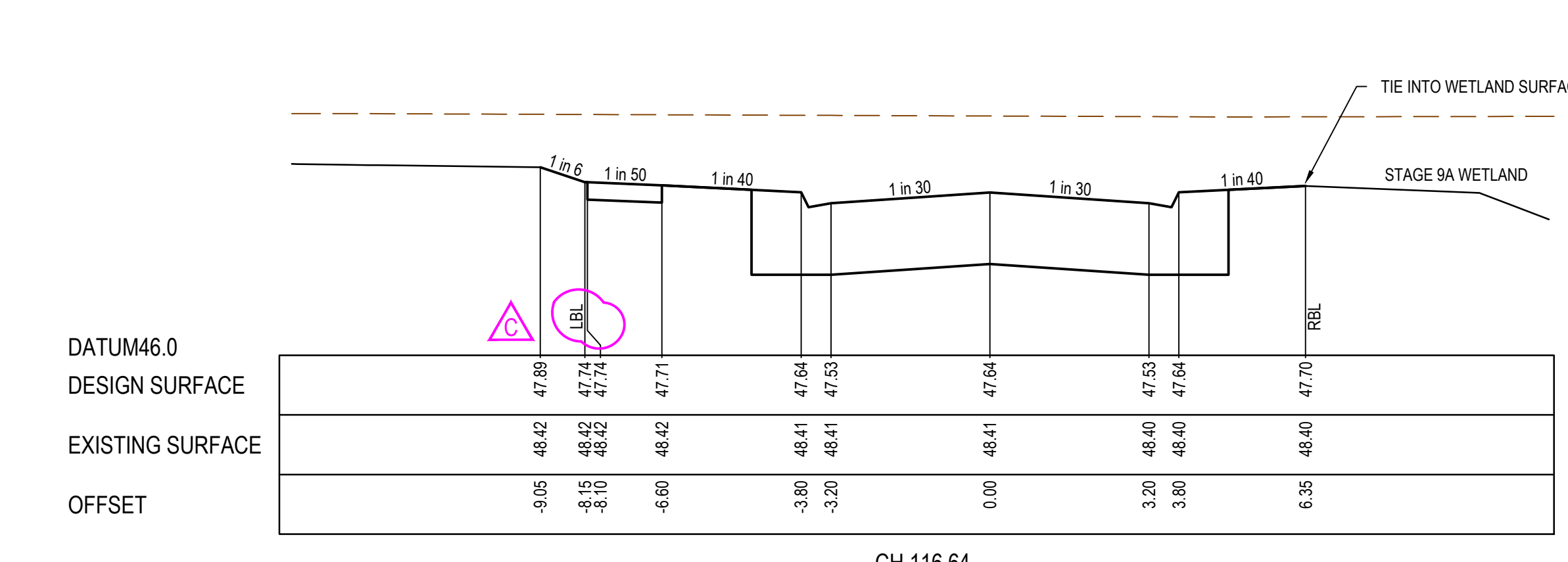
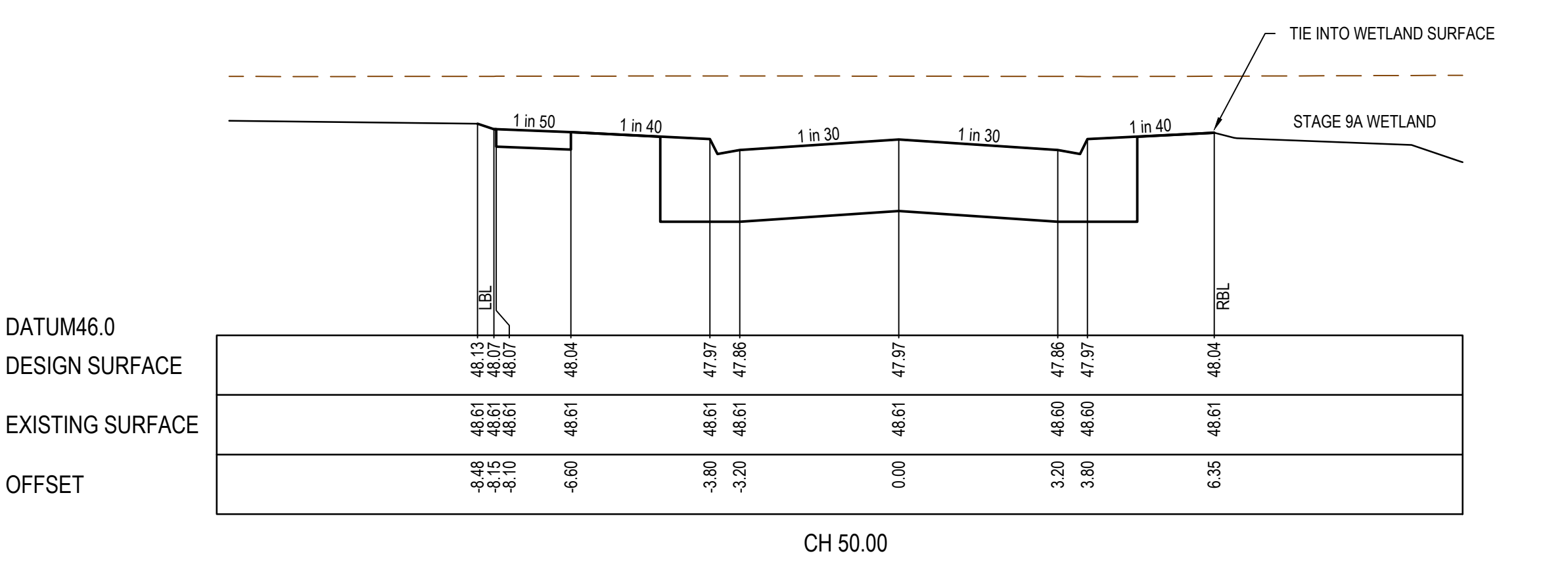
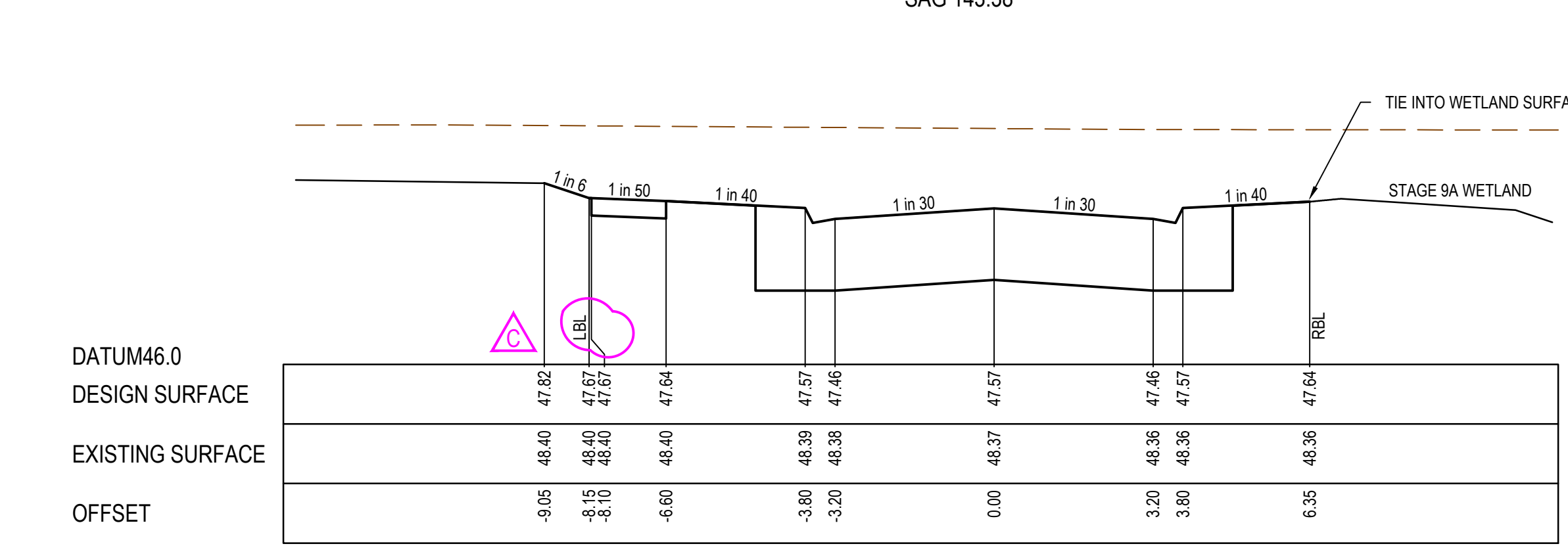
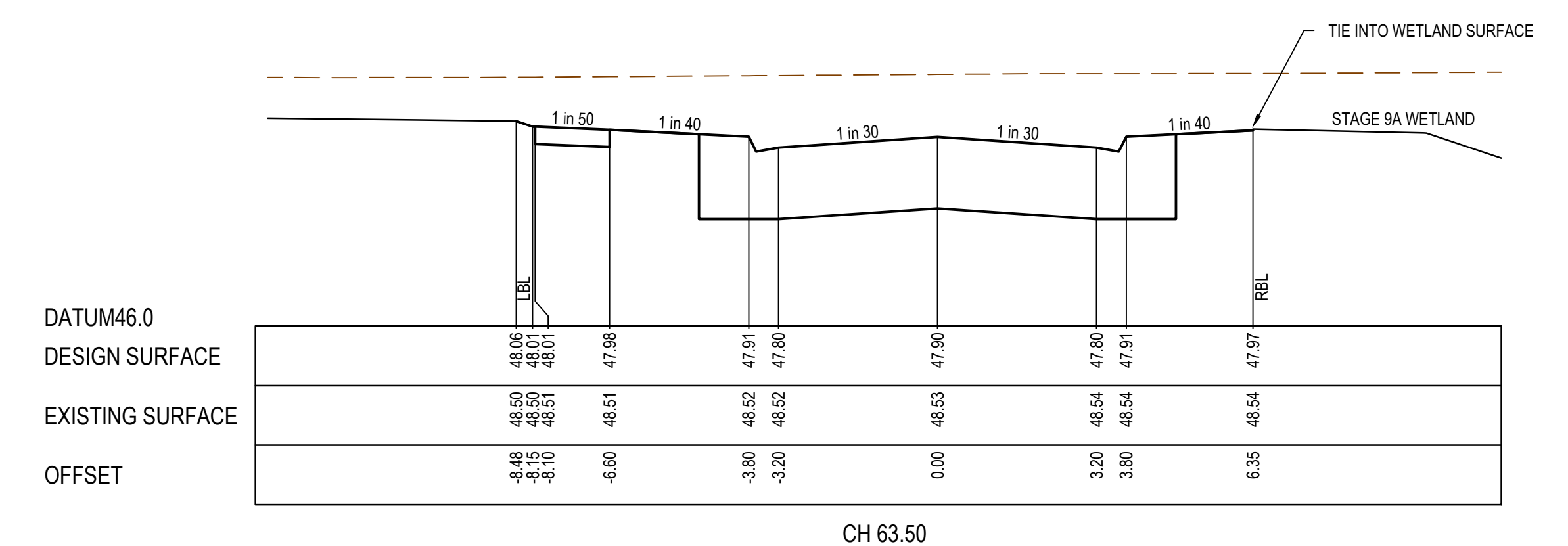
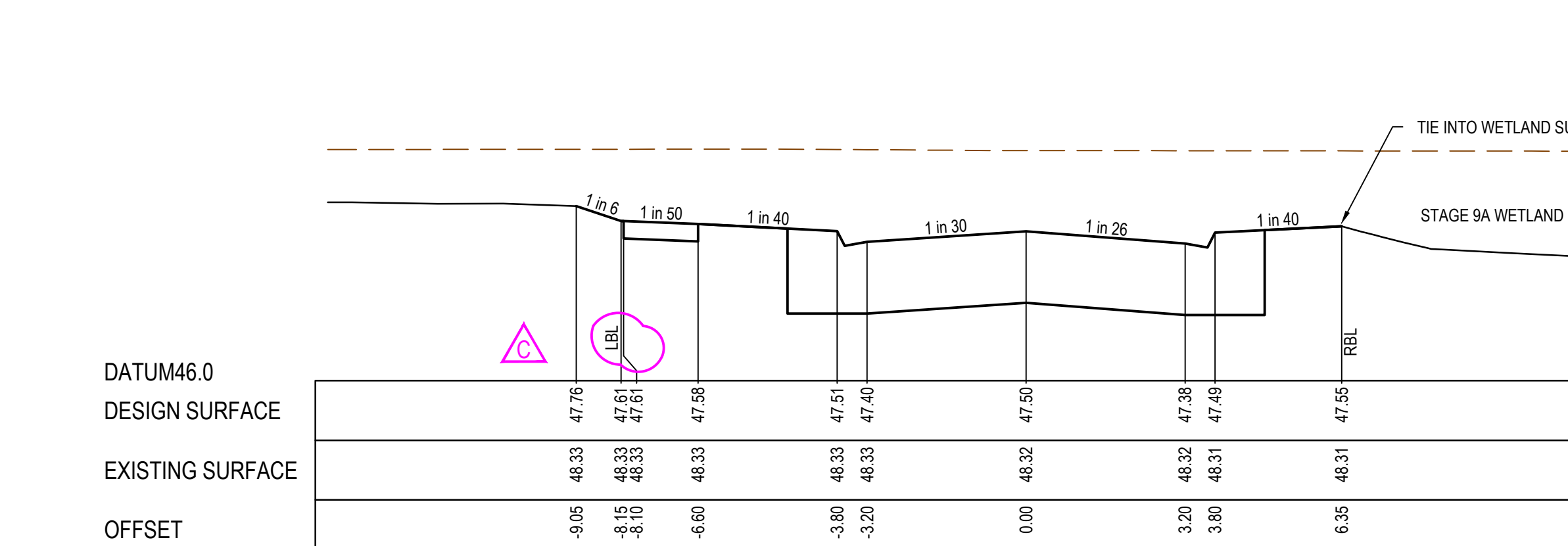
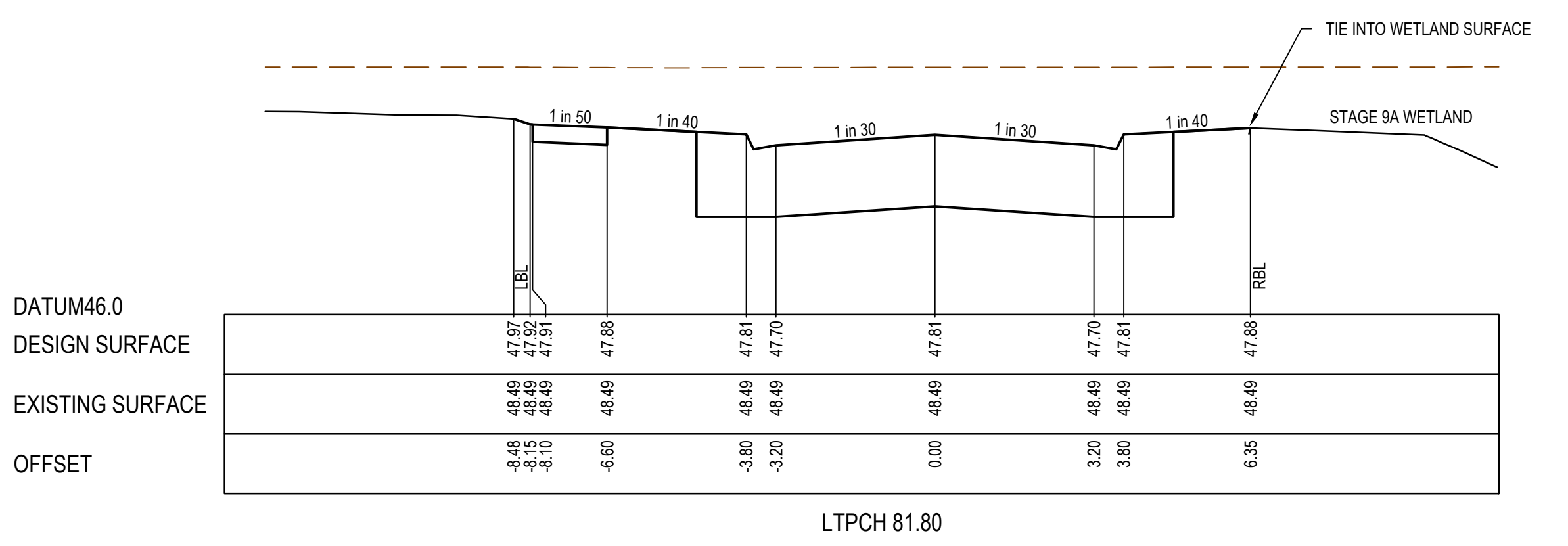
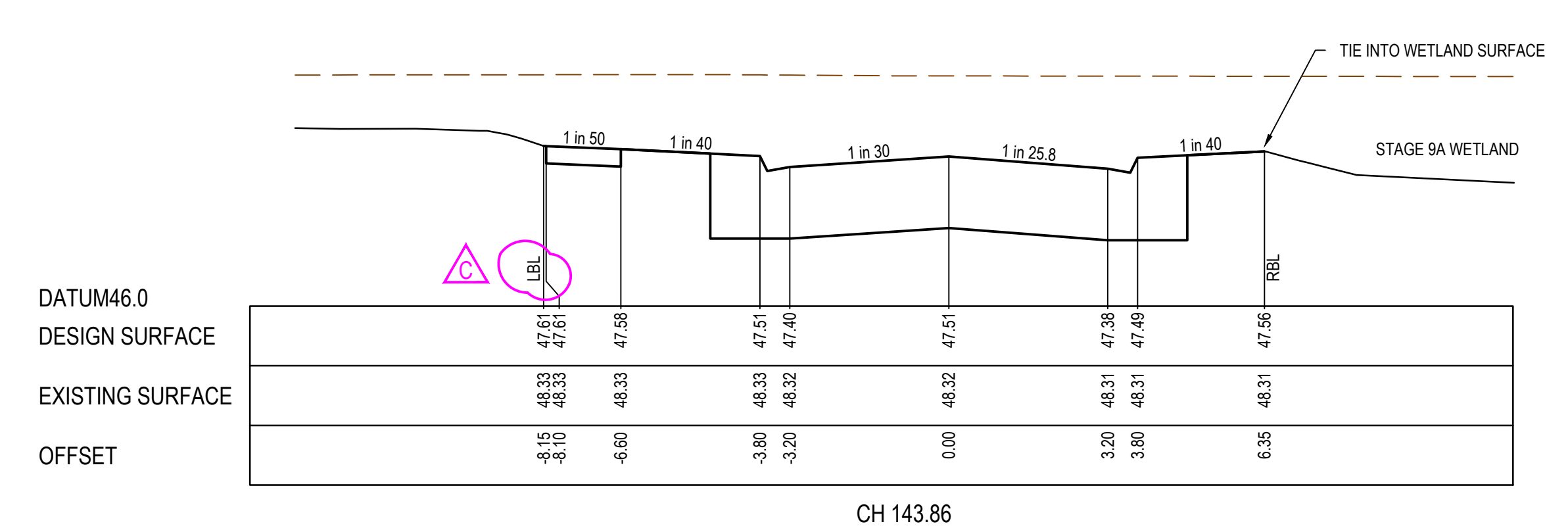
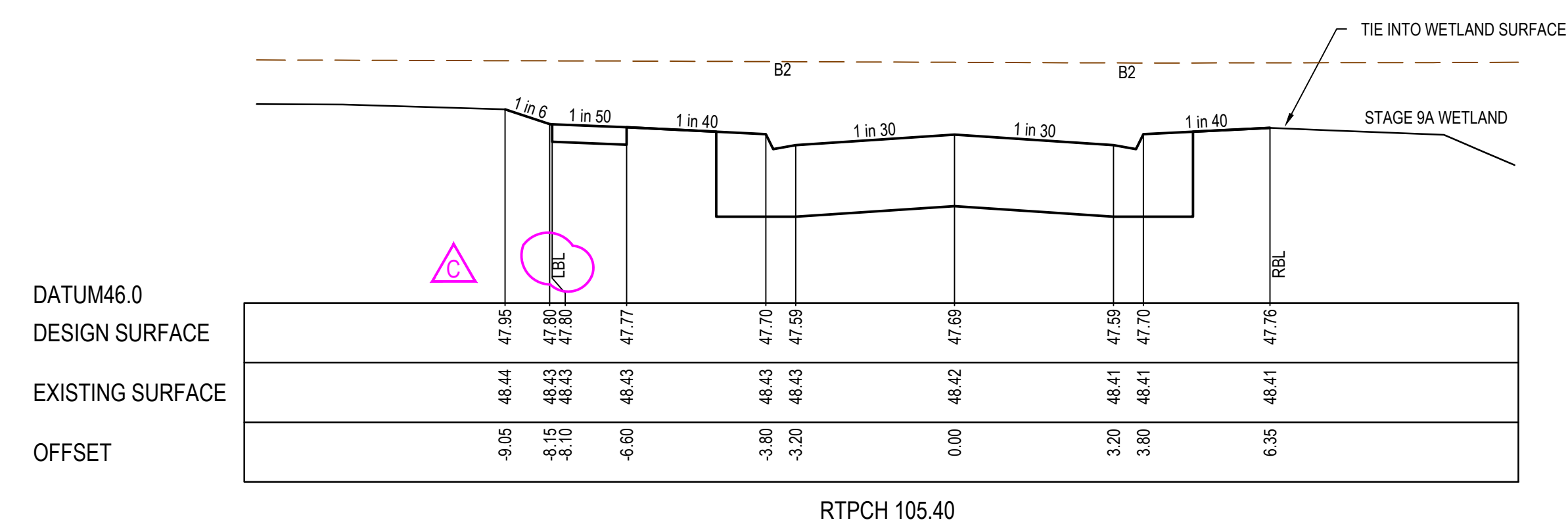
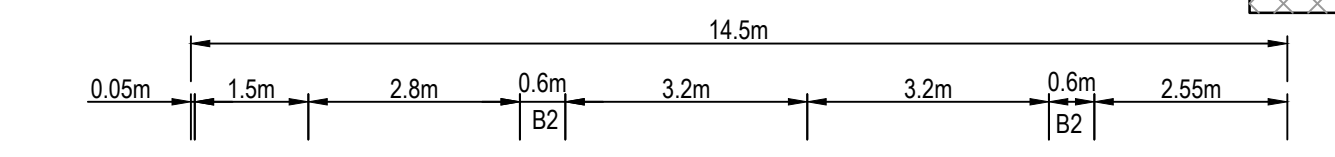
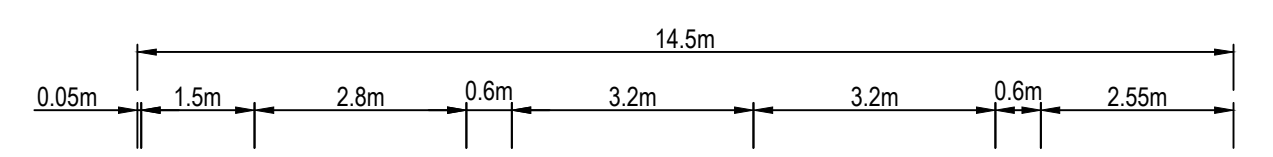
Member of the Surbana Jurong Group  
 ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

Marigold - Stage 9  
 Wyndham City Council  
 Road and Drainage  
 Longitudinal Sections - 2

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
359 F9	2360E-09-08	08 of 25	A



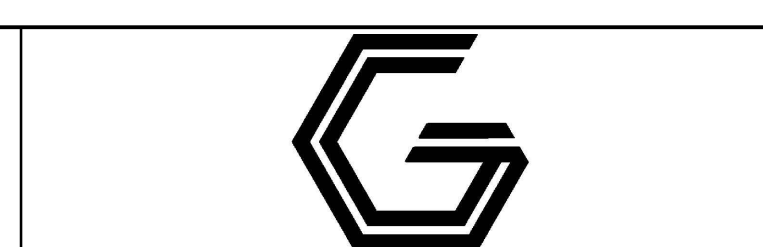
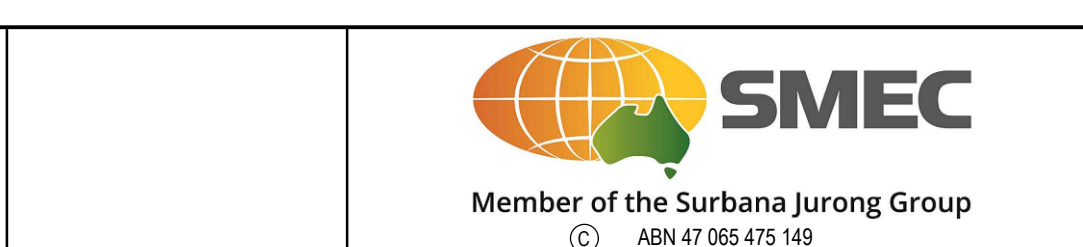
STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS
C	10.12.19	COUNCIL COMMENTS	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



Marigold - Stage 9  
Wynham City Council  
Road and Drainage  
Cross Sections: Petunia Street  
Ch 50.00 - Ch 143.86

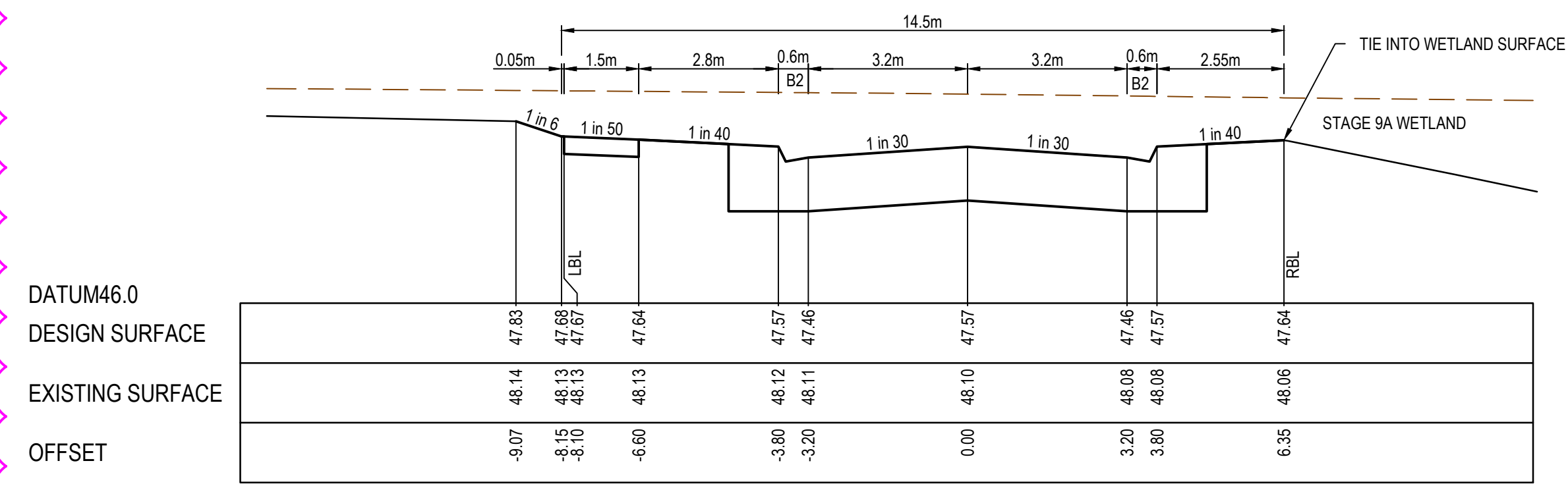
**SUBJECT TO APPROVAL**



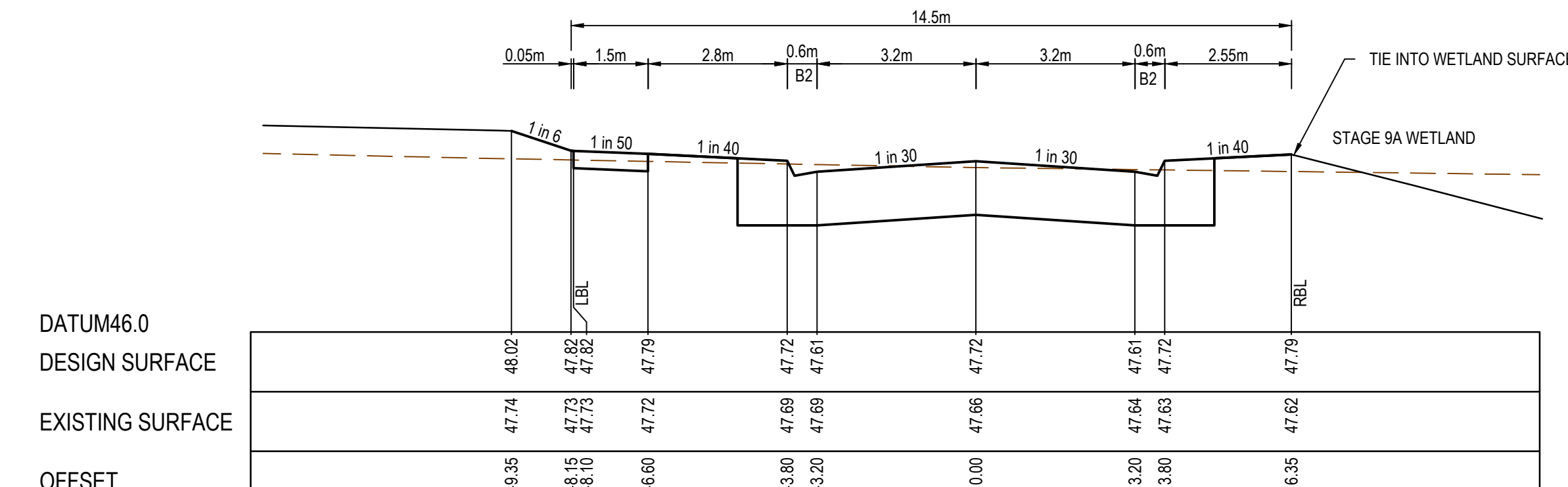
MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
359 F9	2360E-09-09	09 of 25	C



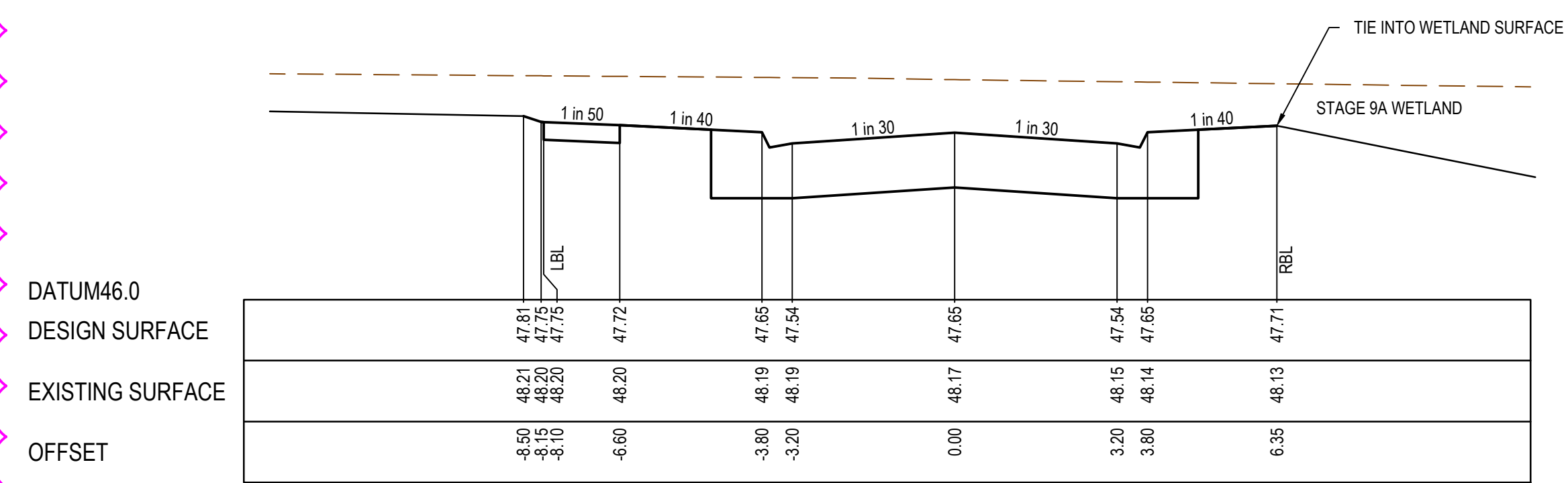
STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE



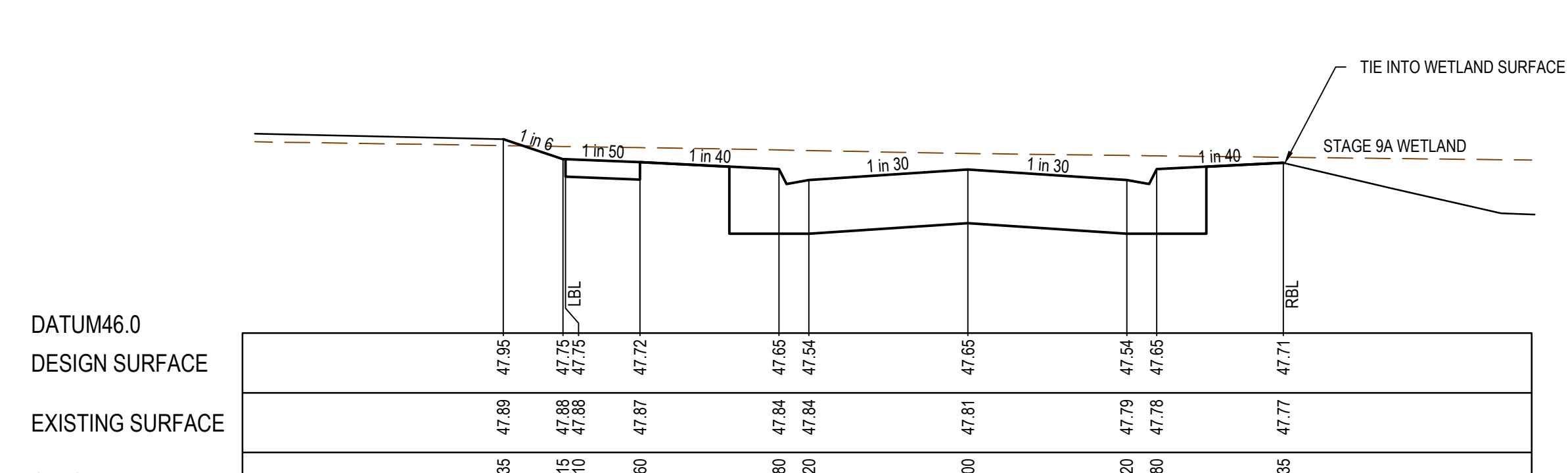
CH 205.29



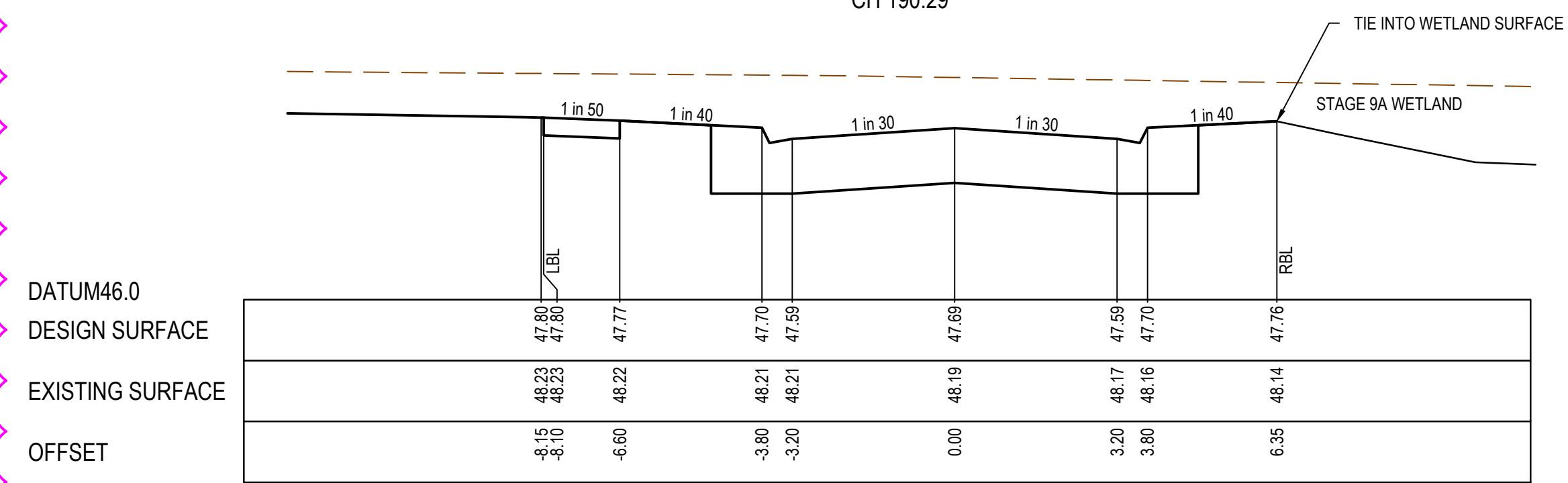
CH 250.29



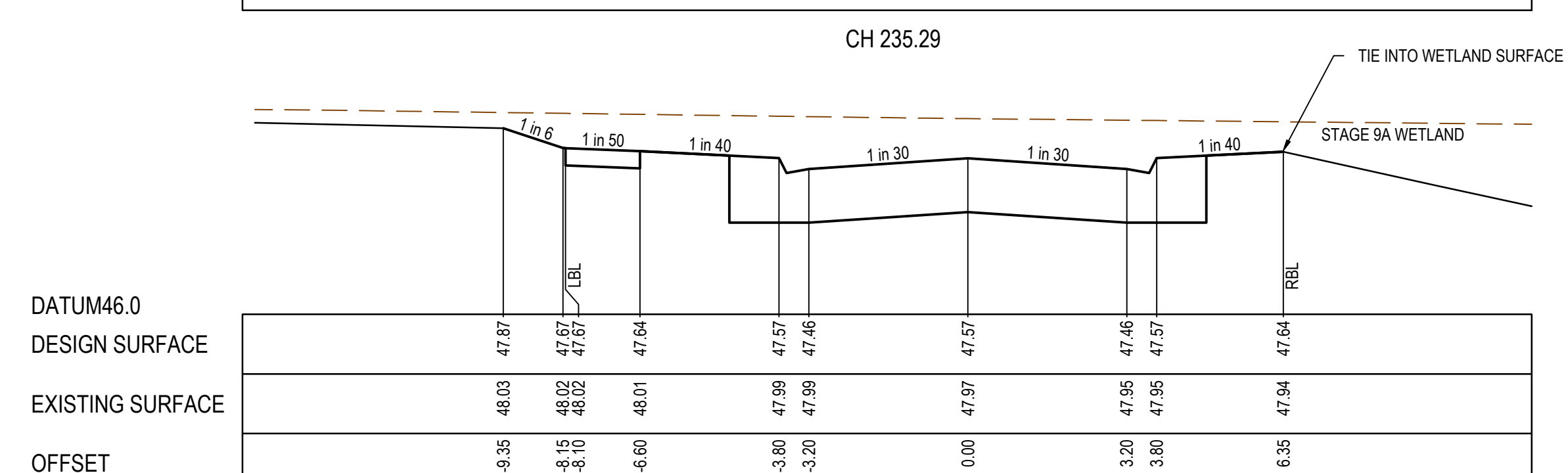
CH 190.29



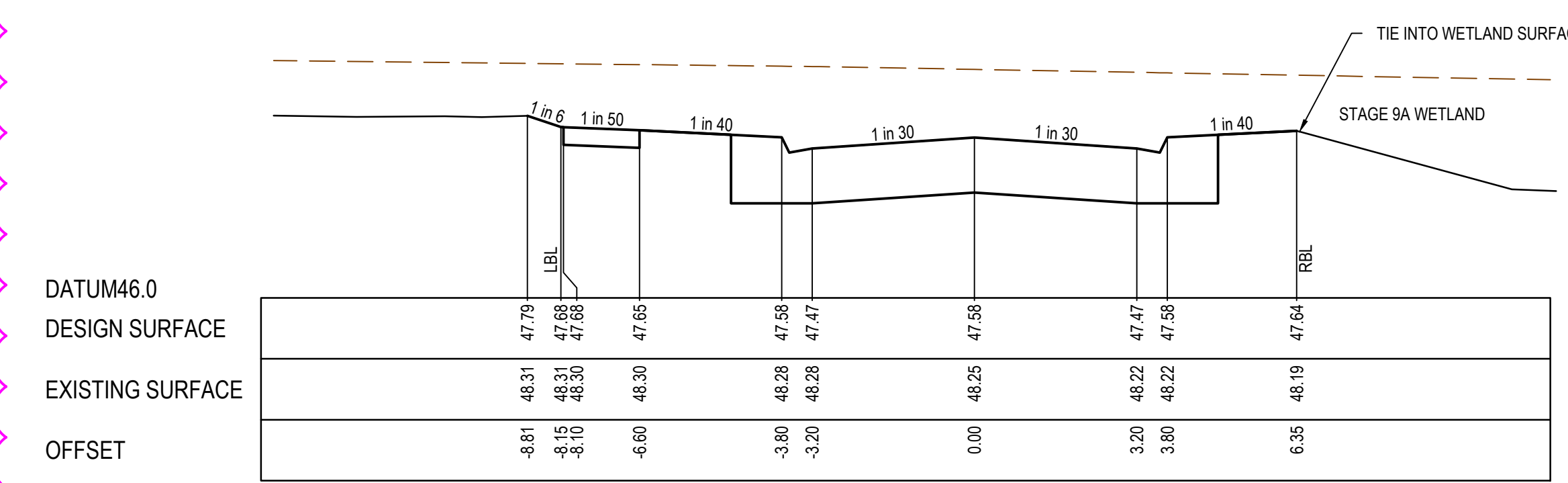
CH 235.29



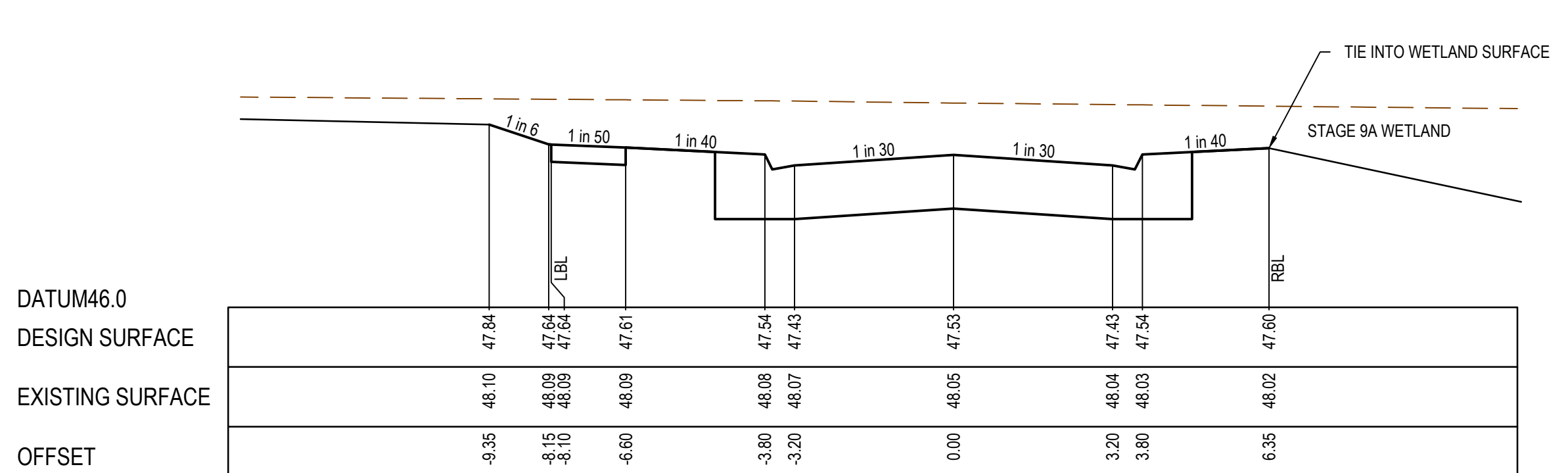
CREST 181.04



CH 220.29



CH 158.25

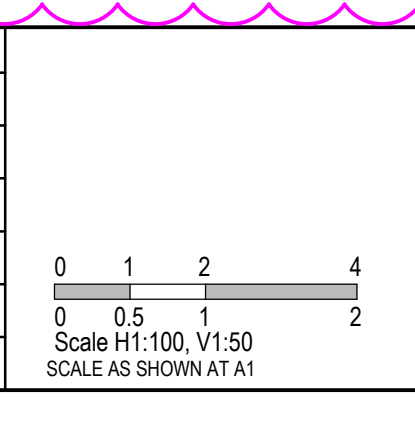


CREST 212.81

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

**SUBJECT TO APPROVAL**

All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.		TITLE	NAME
DESIGNER	M.Holmquist	DRAFTER	M.Holmquist
CHECKED	S.Pellew	AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09	REFERENCE No. 2	

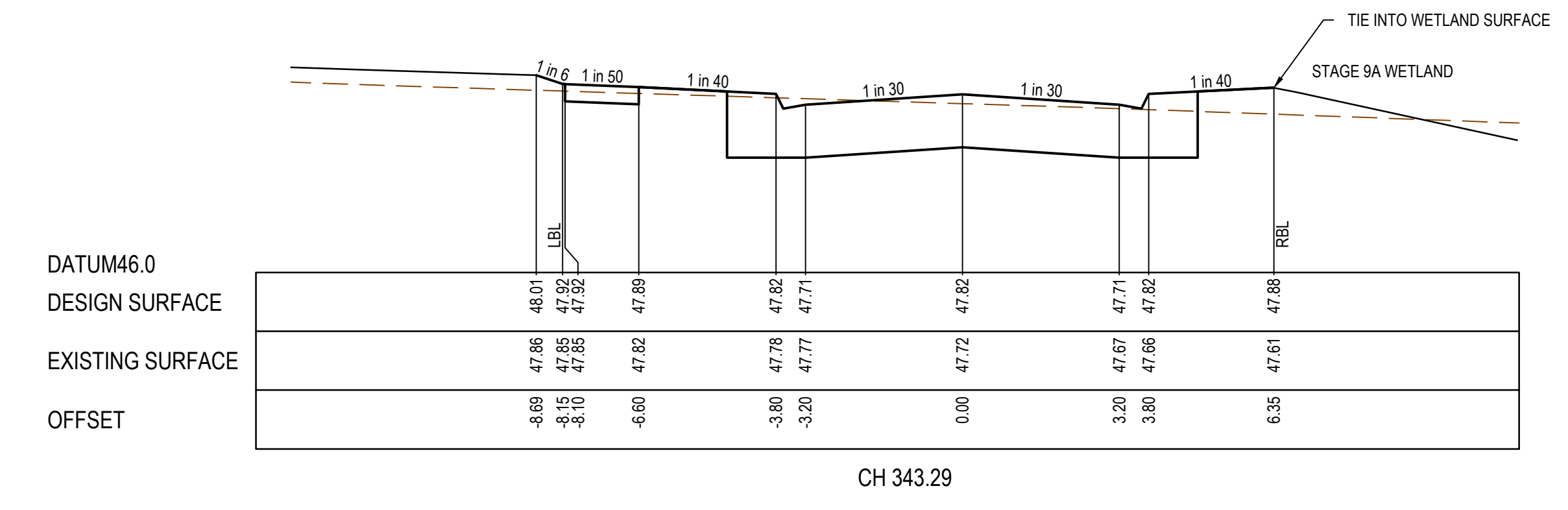
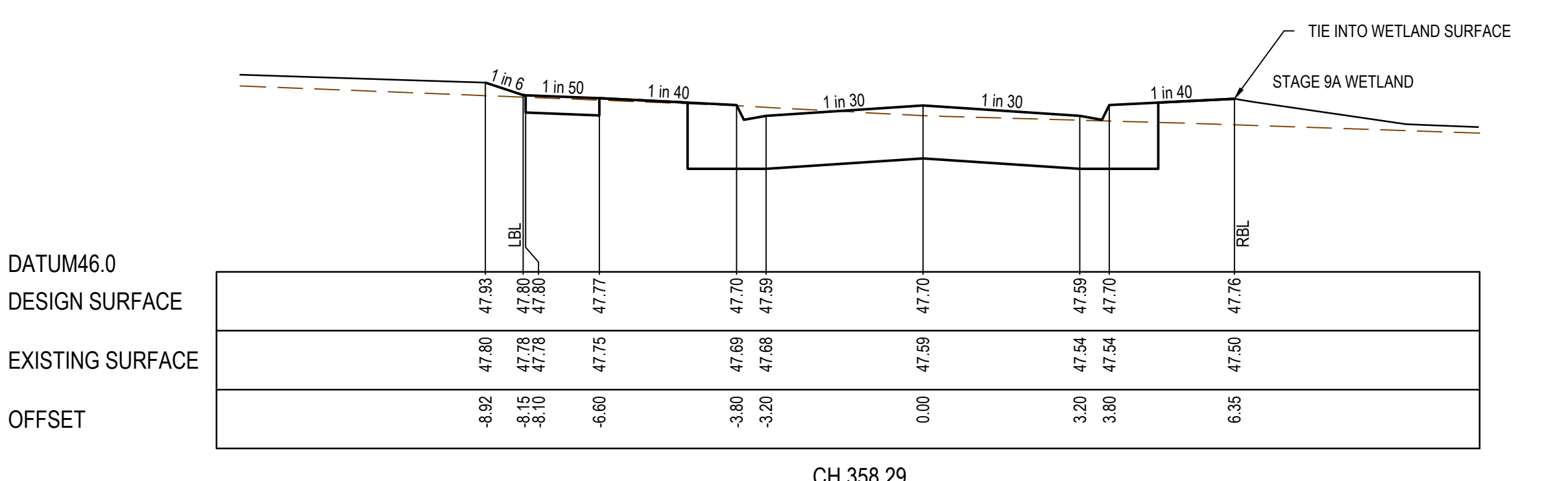
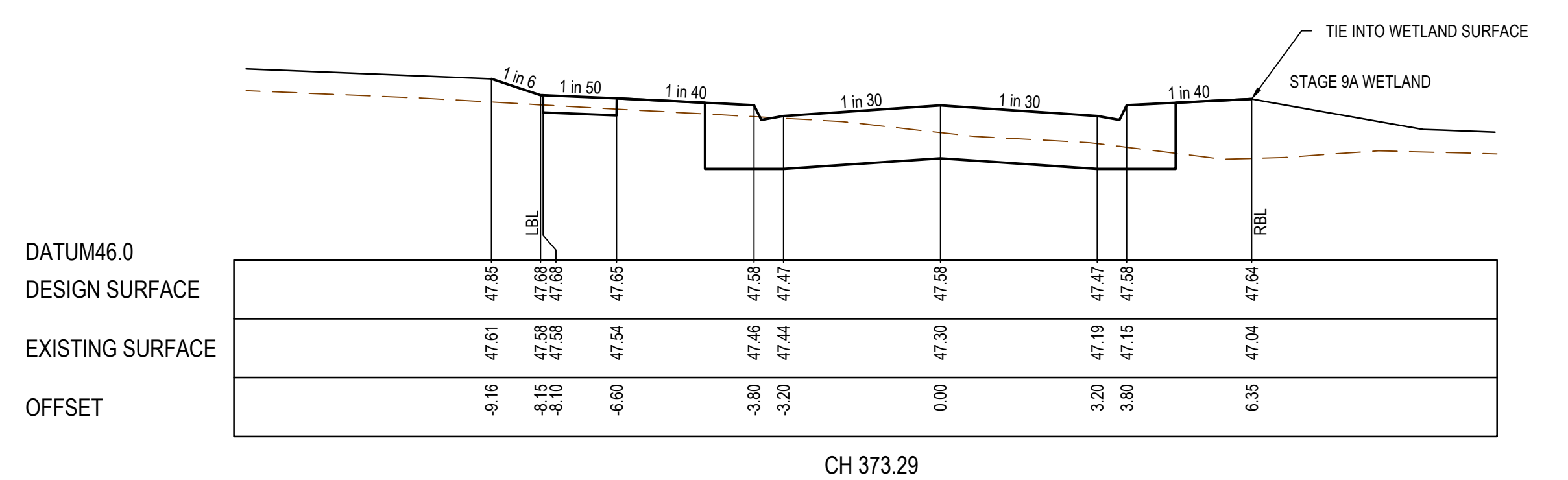
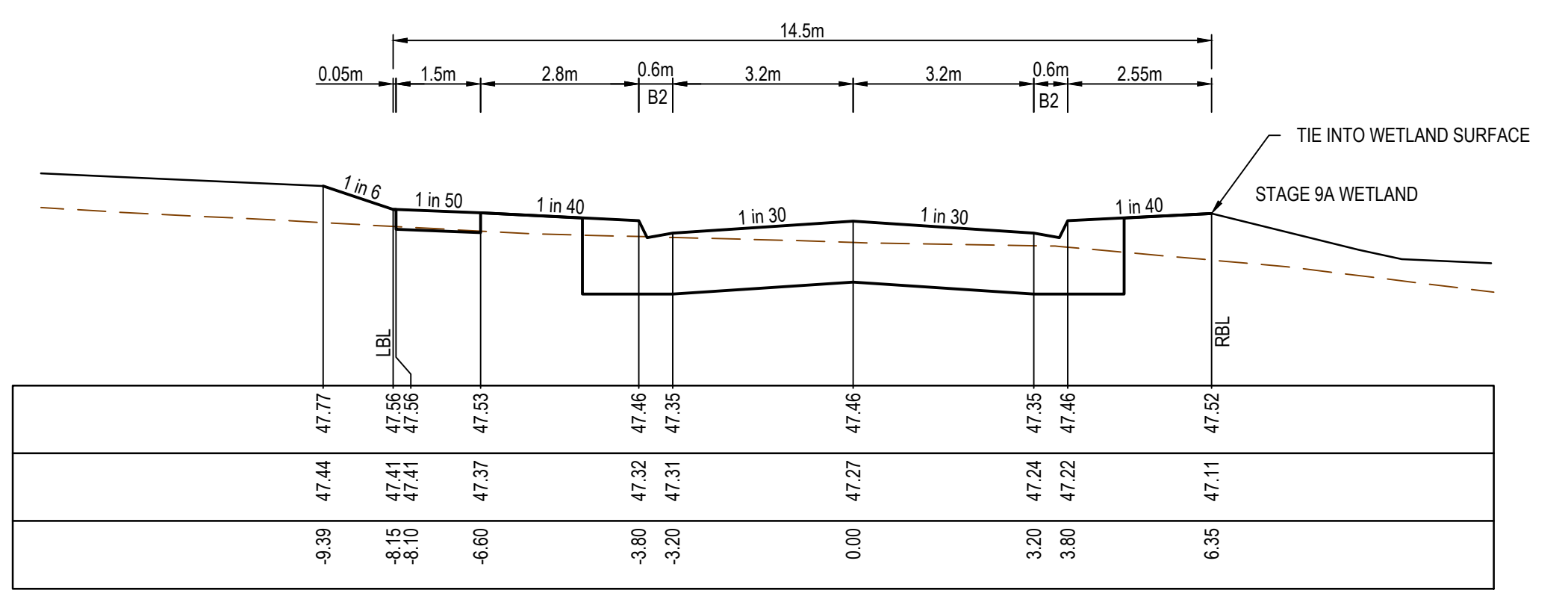
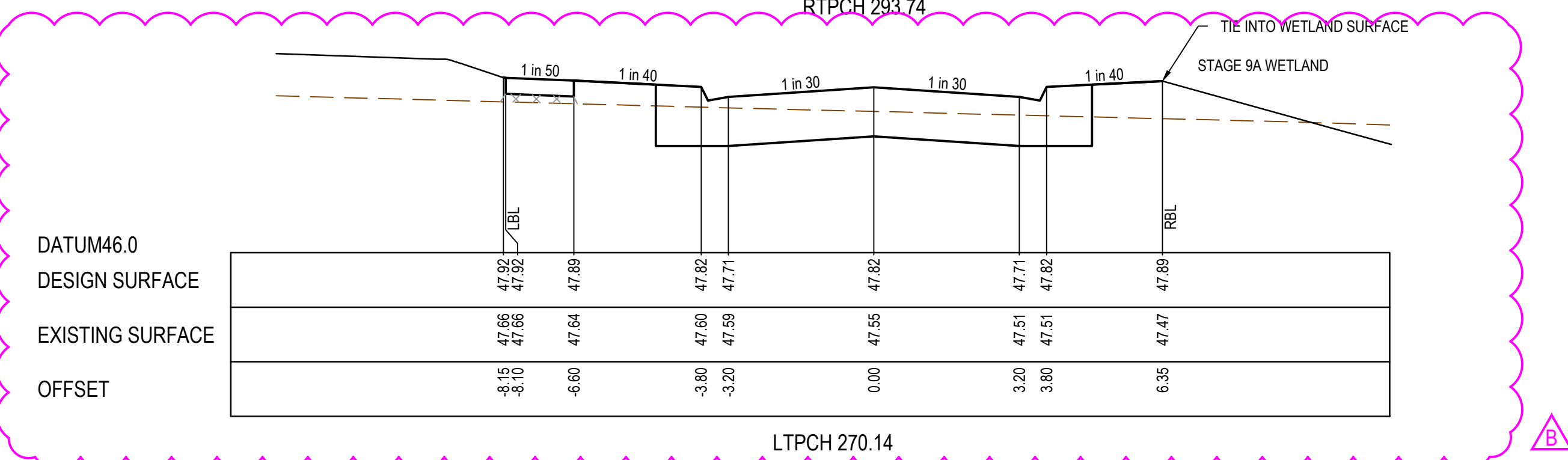
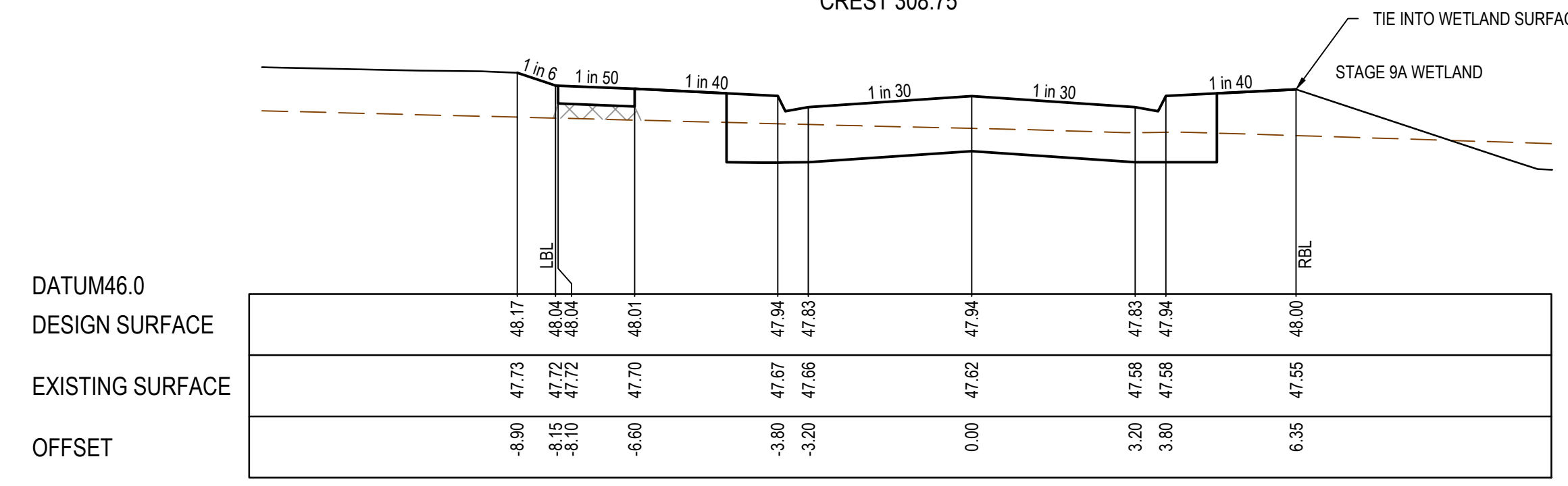
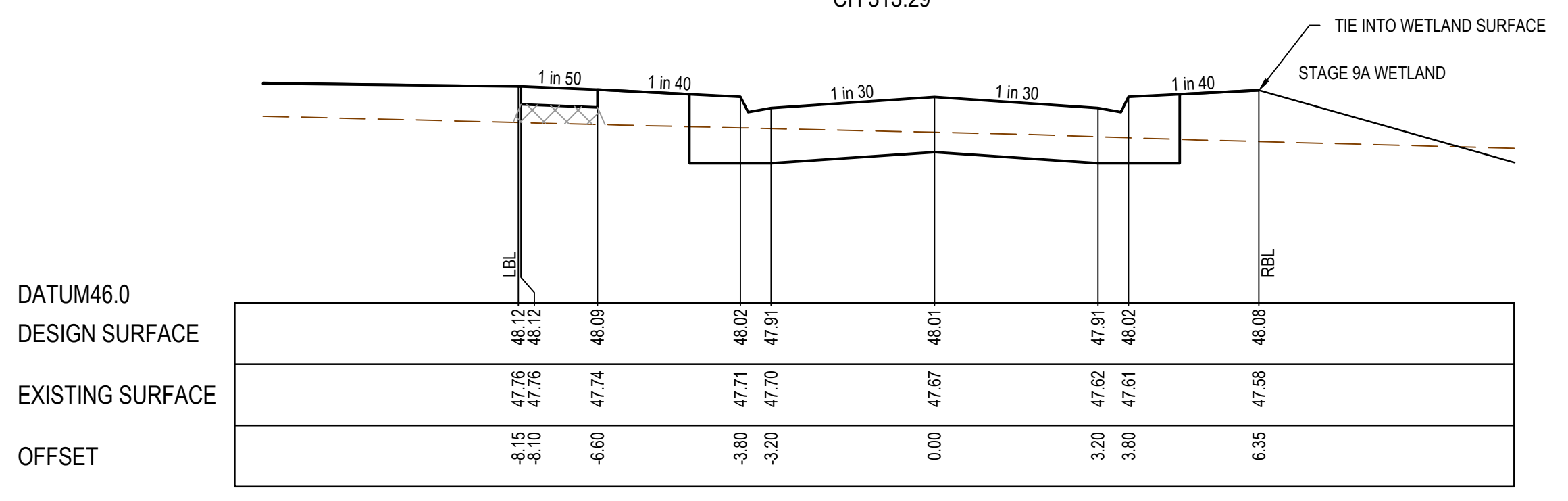
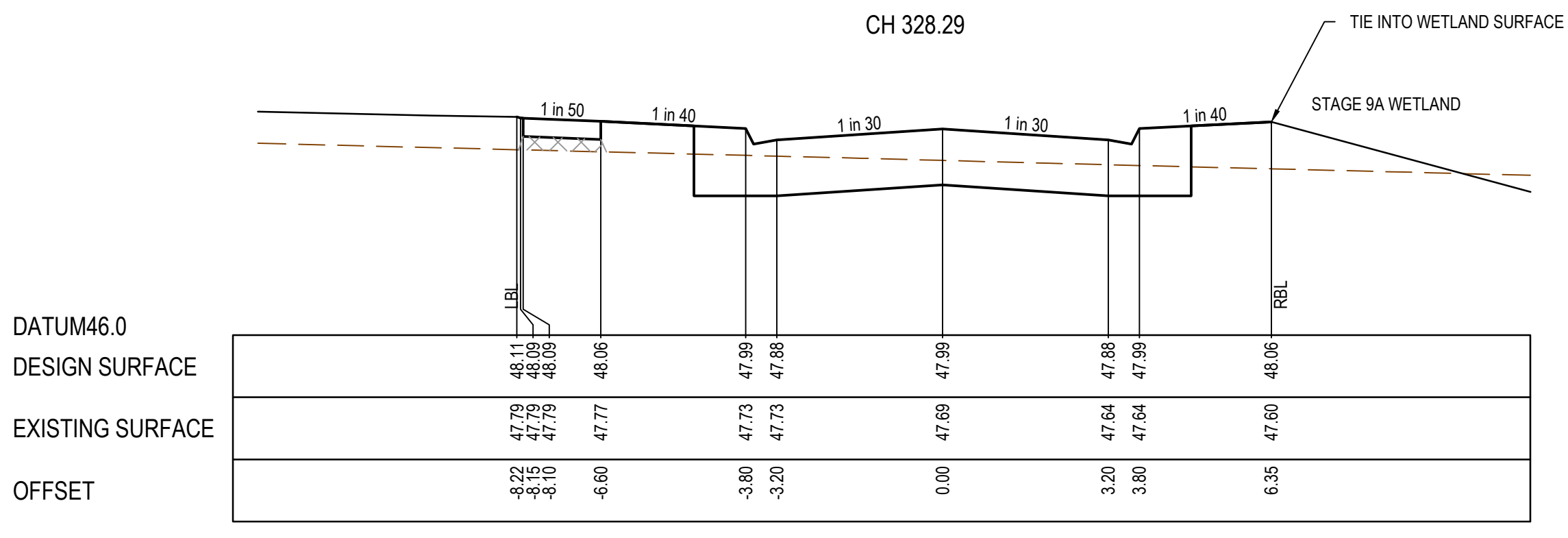
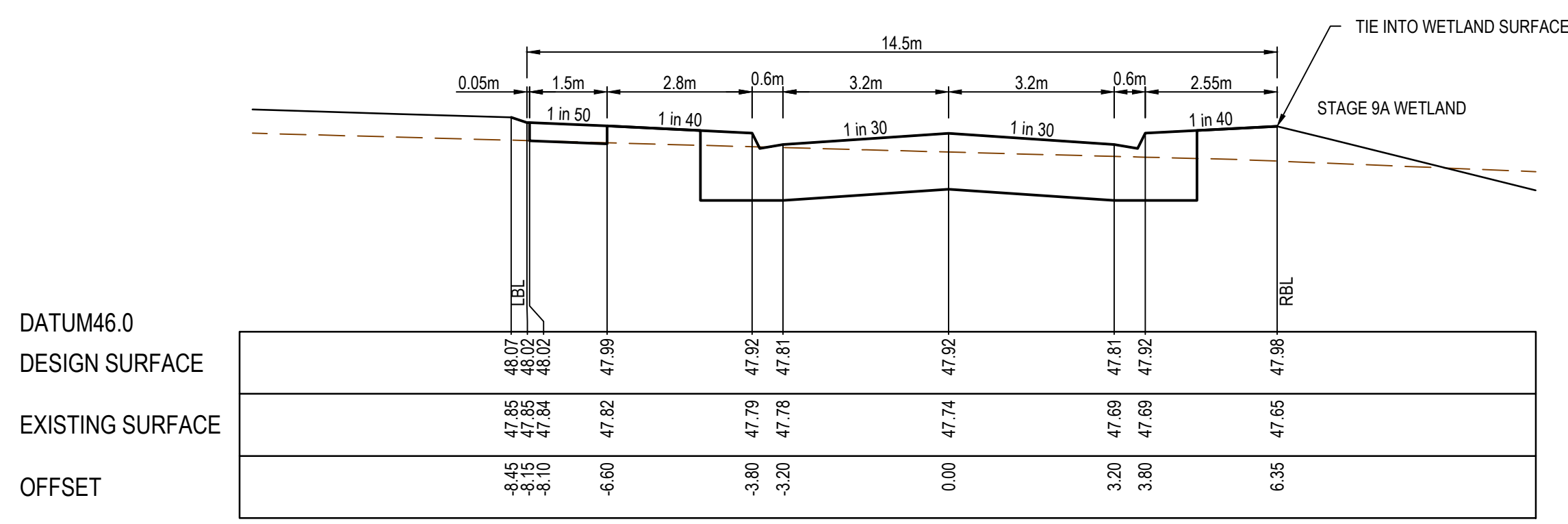


Marigold - Stage 9  
Wynham City Council  
Road and Drainage  
Cross Sections: Petunia Street  
Ch 158.25 - Ch 250.29

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
359 F9	2360E-09-10	10 of 25	B



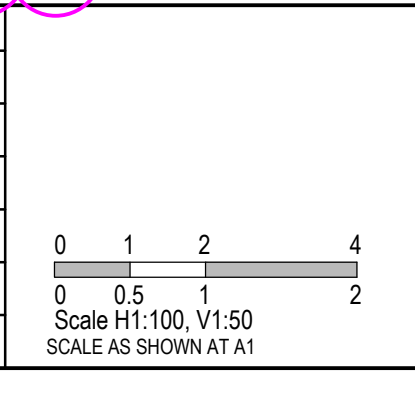
STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

**SUBJECT TO APPROVAL**

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



**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

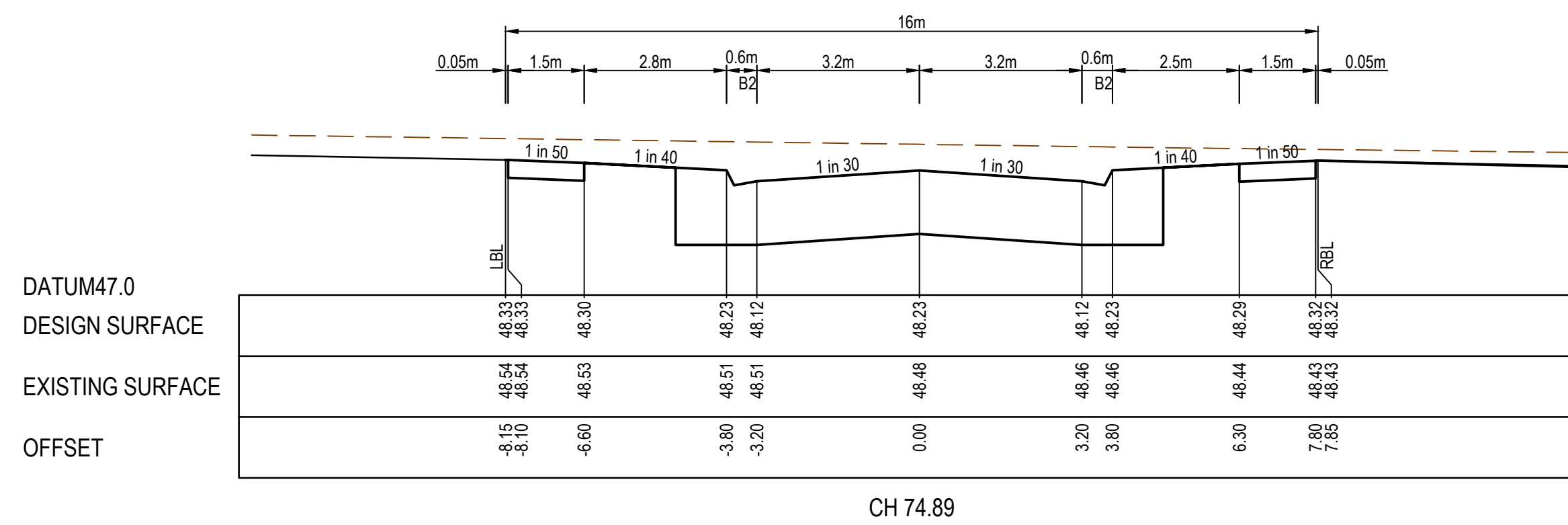
**GROWLAND**

Marigold - Stage 9  
Wyndham City Council  
Road and Drainage  
Cross Sections: Petunia Street  
Ch 270.14 - Ch 388.29

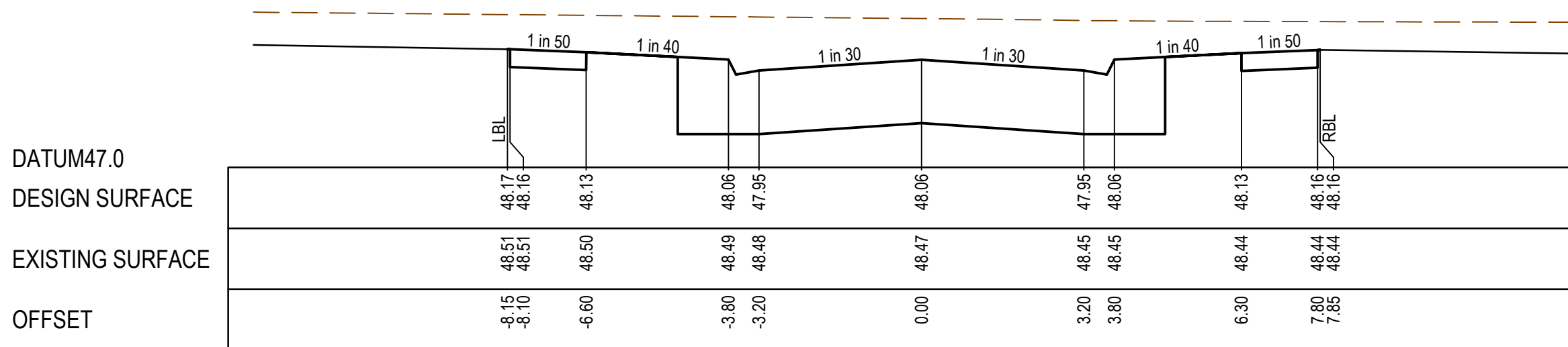
MELWAYS REF	359 F9	PROJECT / DRAWING No	2360E-09-11	SHEET No	11 of 25	REVISION	B
-------------	--------	----------------------	-------------	----------	----------	----------	---



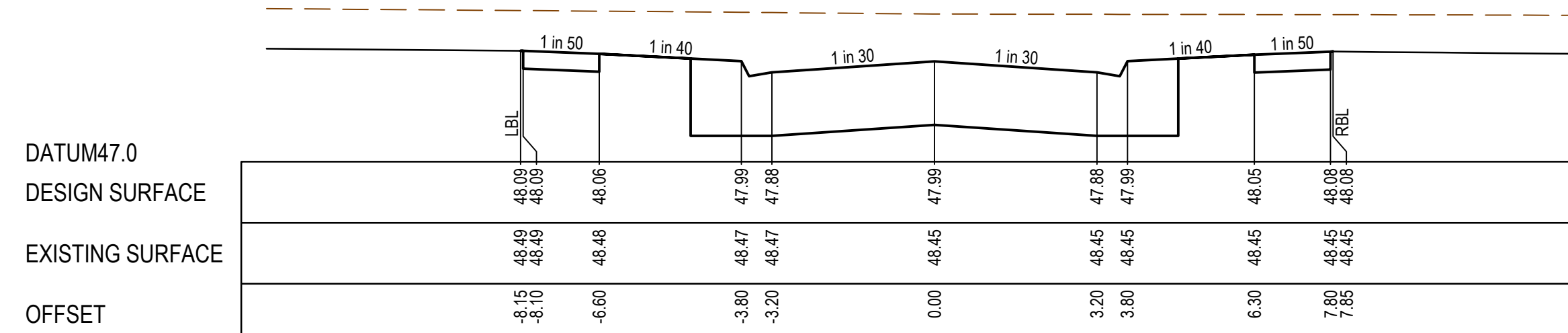
STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS WHERE CONSTRUCTED ABOVE EXISTING SURFACE



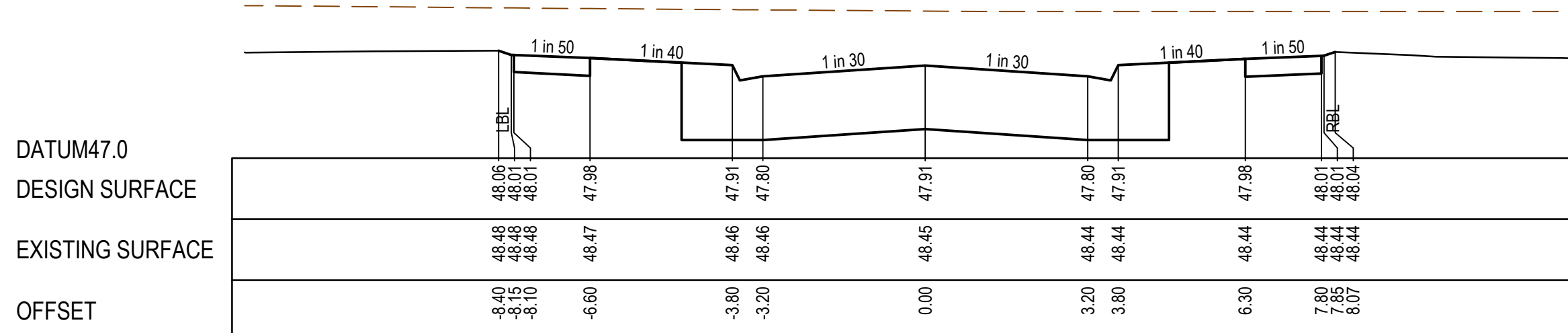
CH 74.89



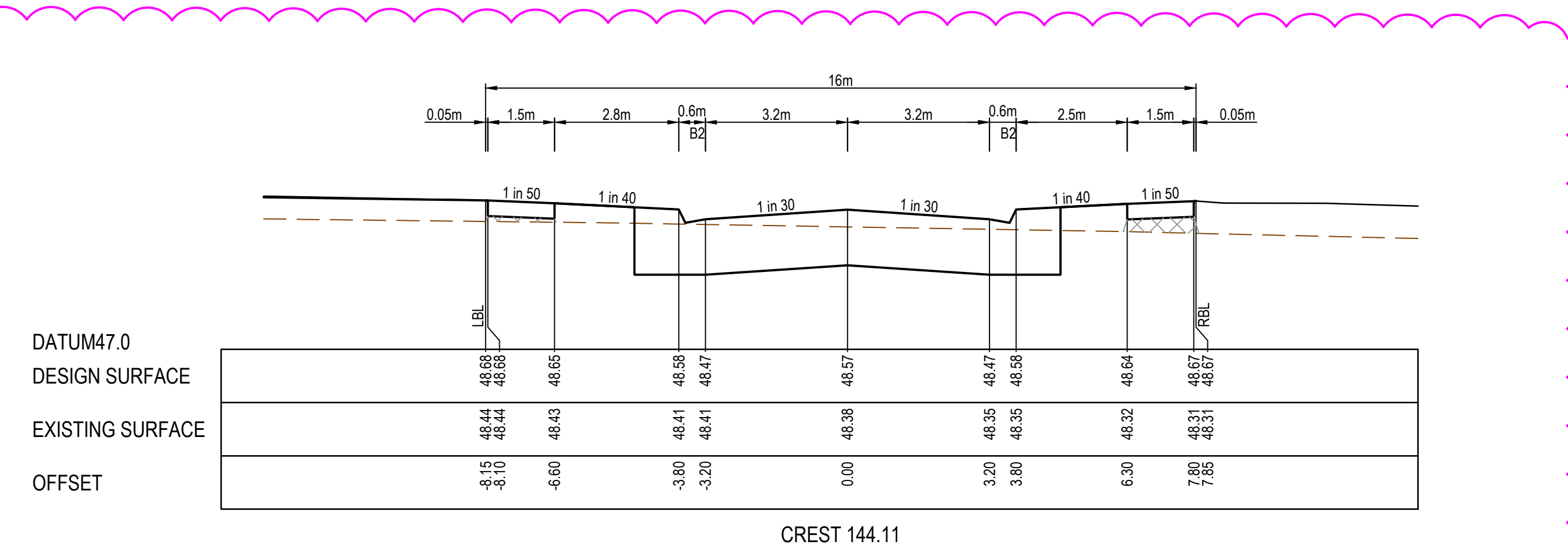
CH 42.05



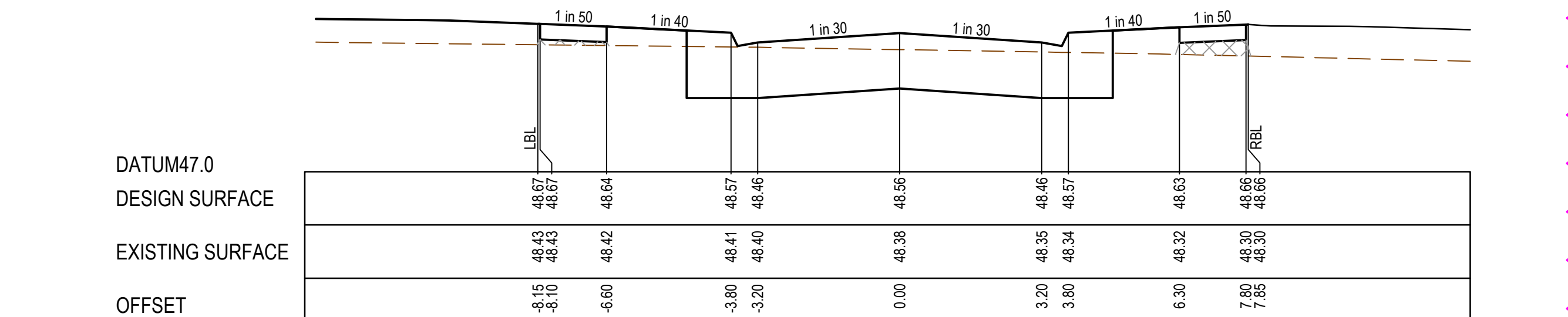
CH 27.13



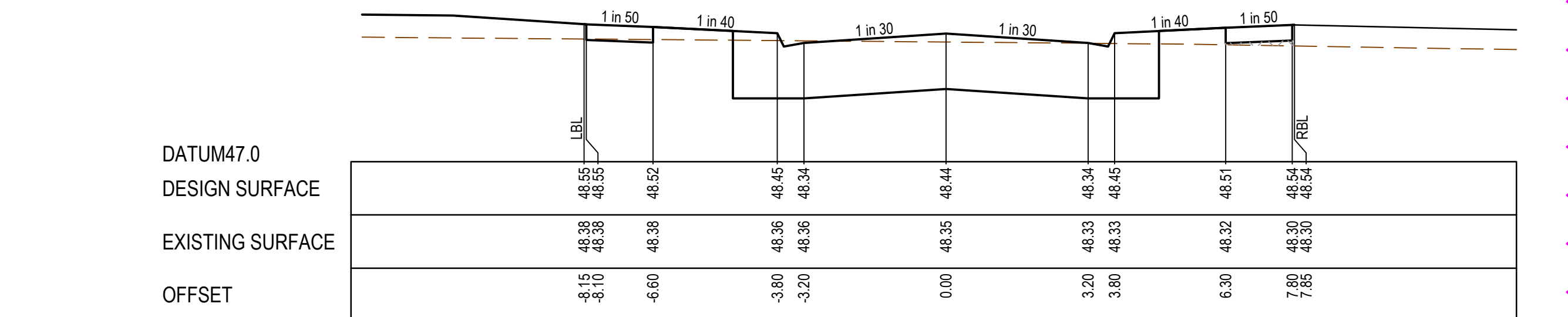
TPCH 11.80



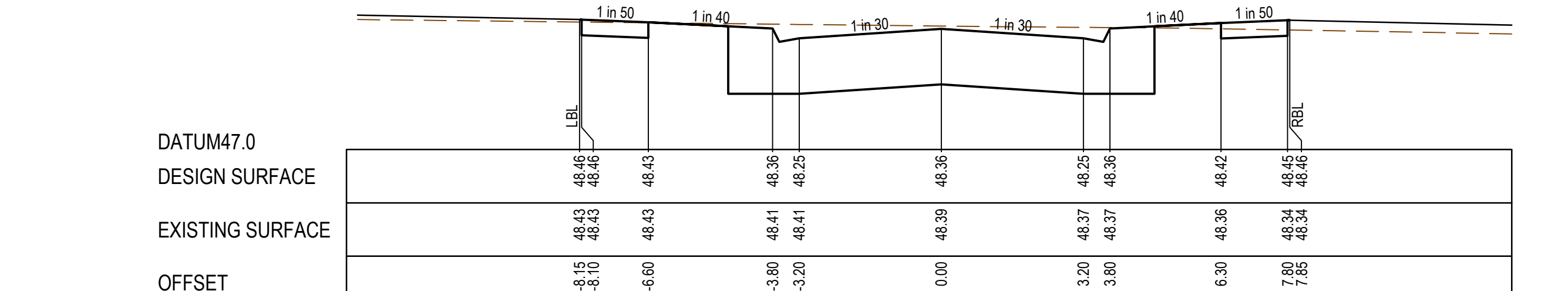
CREST 144.11



RTPCH 142.14



LTPCH 118.54

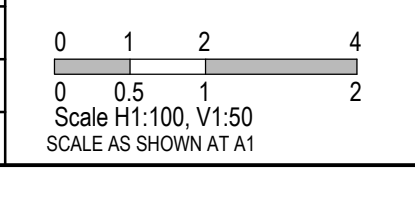


CH 101.39

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

**SUBJECT TO APPROVAL**

All setting out should be carried out in accordance with MPA/Council's standard drawings or as nominated on hard copy plans provided by SMEC. Any digital information supplied by this office is for information only. Any discrepancies should be discussed with the superintendent.		TITLE	NAME
DESIGNER	M.Holmquist	DRAFTER	M.Holmquist
CHECKED	S.Pellew	AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09	REFERENCE No. 2	



**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

**GROWLAND**

Marigold - Stage 9  
Wyndham City Council  
Road and Drainage  
Cross Sections: Sorbus Street  
Ch 11.80 - Ch 142.11

MELWAYS REF 359 F9	PROJECT / DRAWING No. 2360E-09-12	SHEET No. 12 of 25	REVISION B
-----------------------	--------------------------------------	-----------------------	---------------



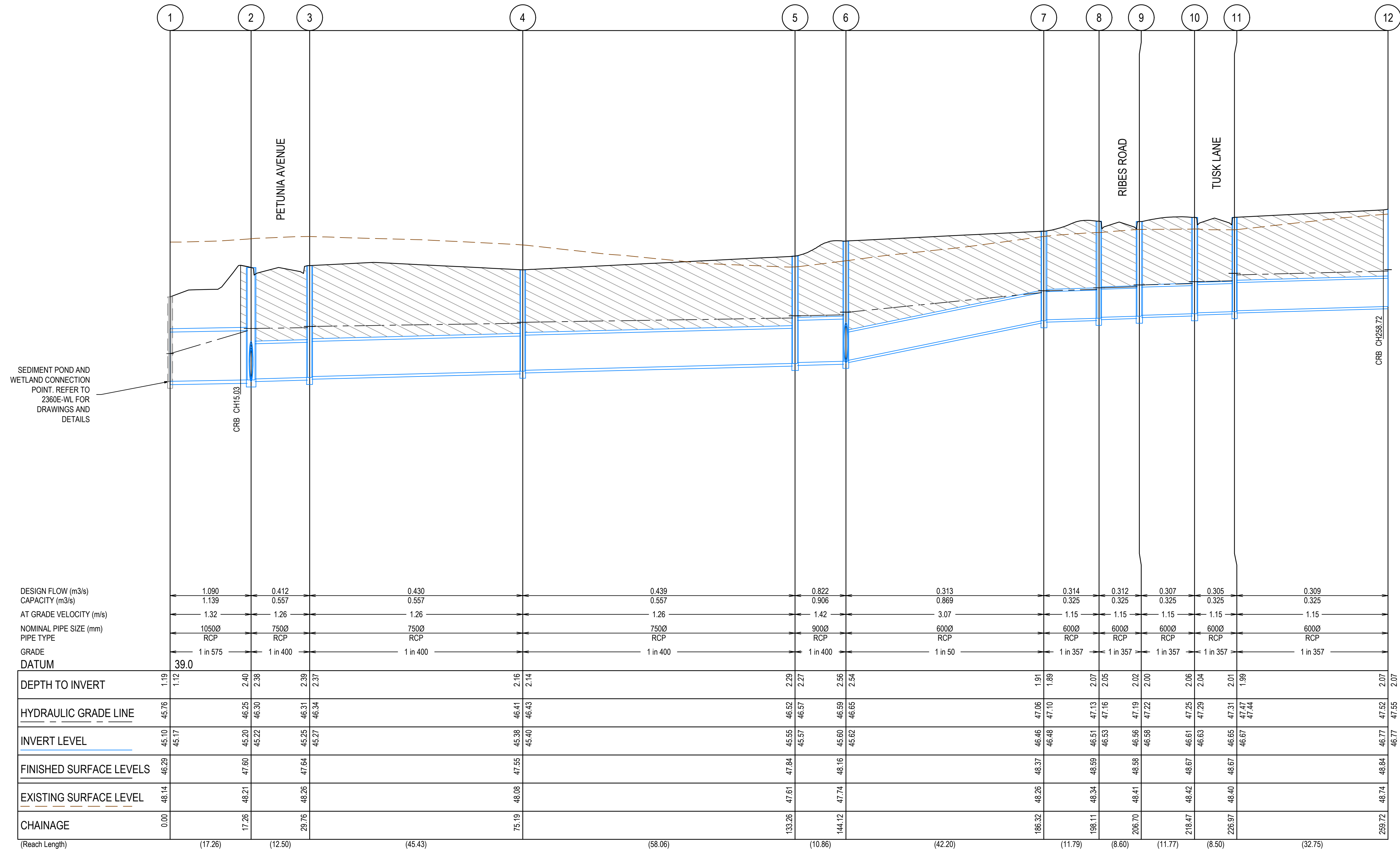








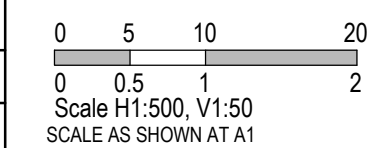
**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE WITH WYNDHAM CITY COUNCIL STANDARDS & SPECIFICATION CLASS 2 UNDER ROAD PAVEMENT & CLASS 3 BEHIND KERB



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



**SMEC**  
 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

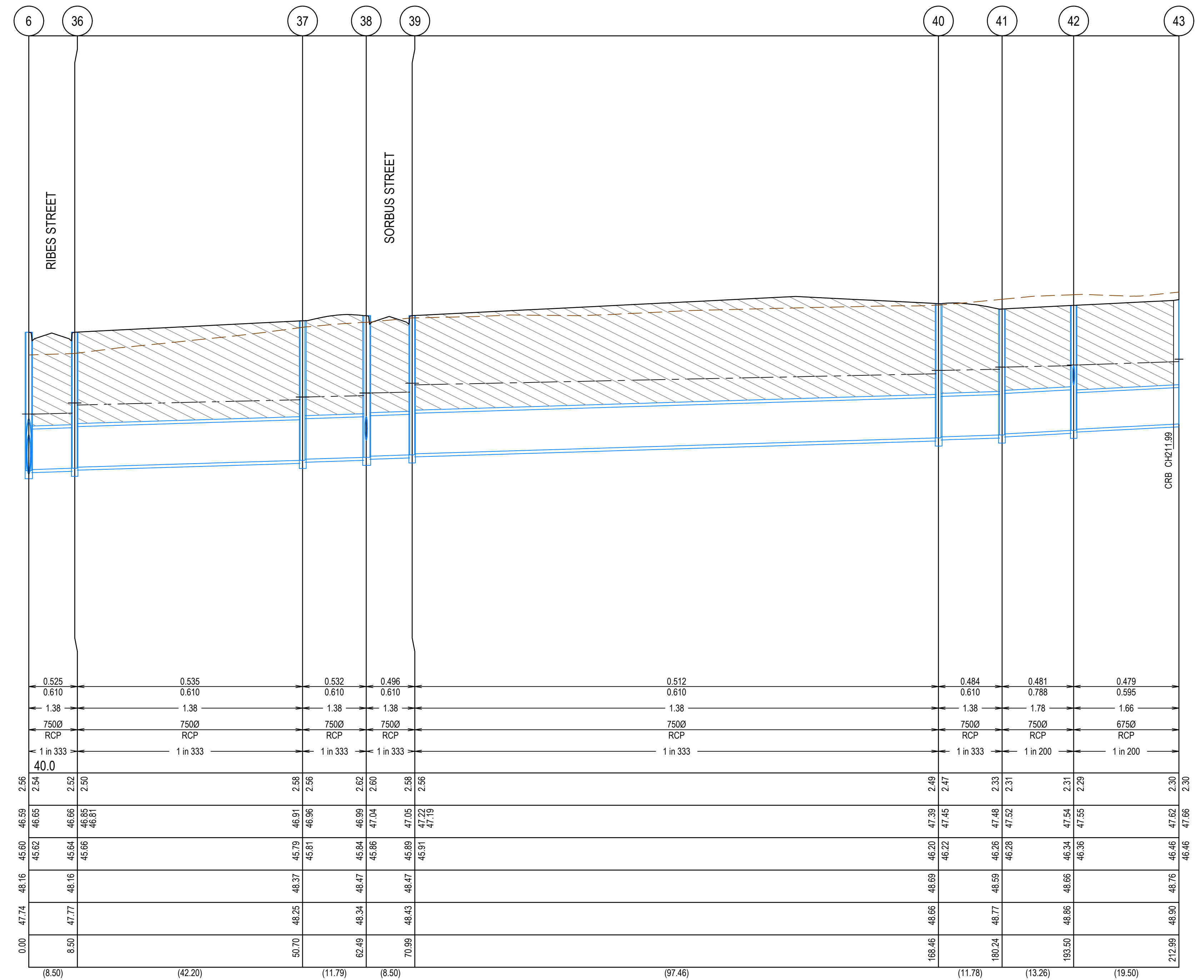
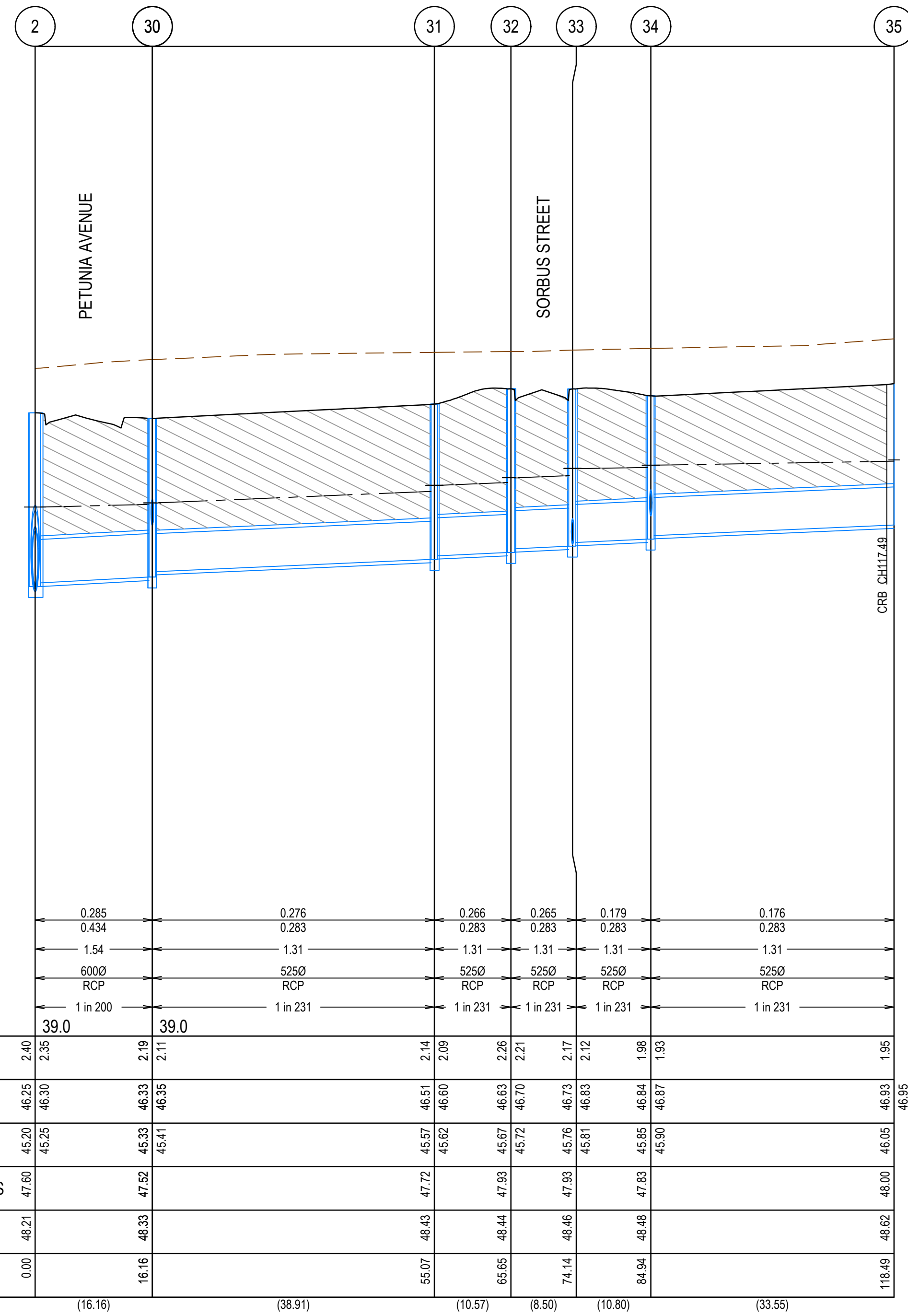
**GROWLAND**

Marigold - Stage 9  
 Wyndham City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 1

MELWAYS REF	PROJECT / DRAWING No	SHEET No	REVISION
359 F9	2360E-09-15	15 of 25	A



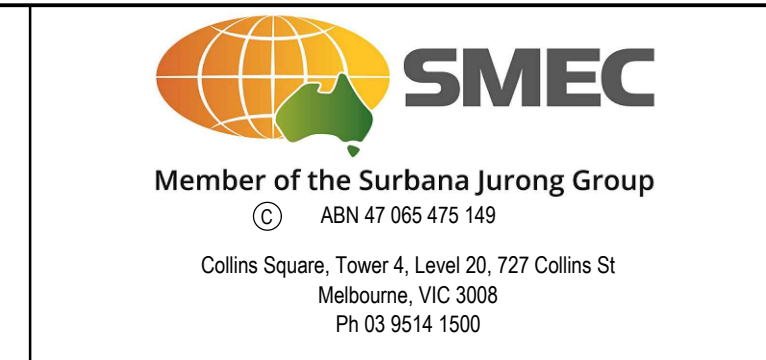
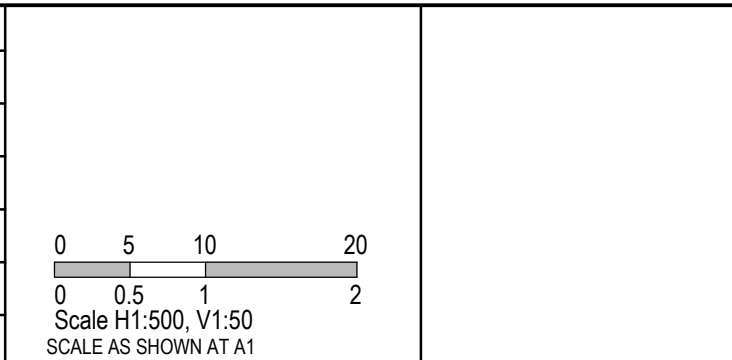
**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE WITH WYNDHAM CITY COUNCIL STANDARDS & SPECIFICATION CLASS 2 UNDER ROAD PAVEMENT & CLASS 3 BEHIND KERB



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

**SUBJECT TO APPROVAL**

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



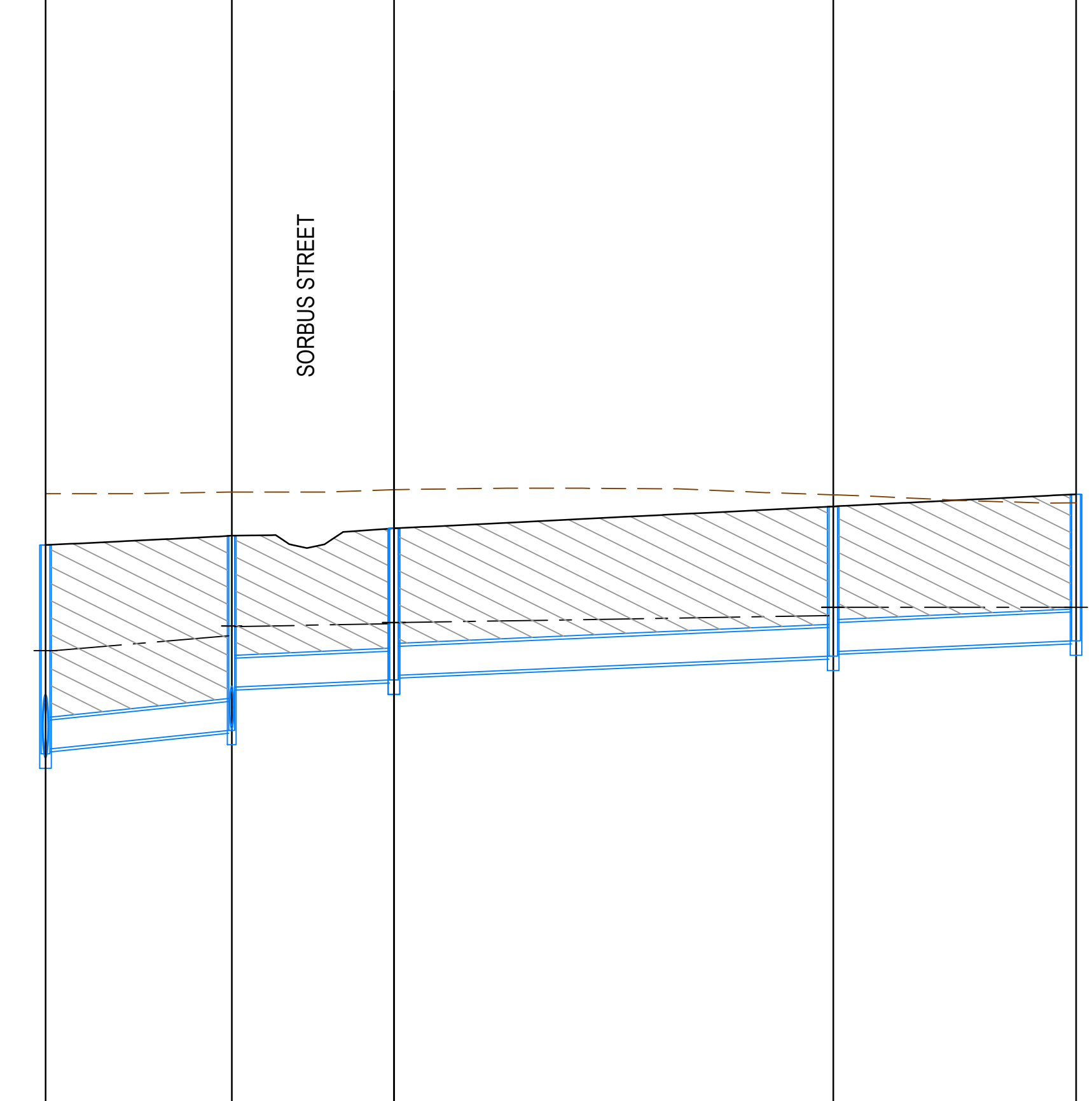
MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
359 F9	2360E-09-16	16 of 25	A

Marigold - Stage 9  
 Wyndham City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 2



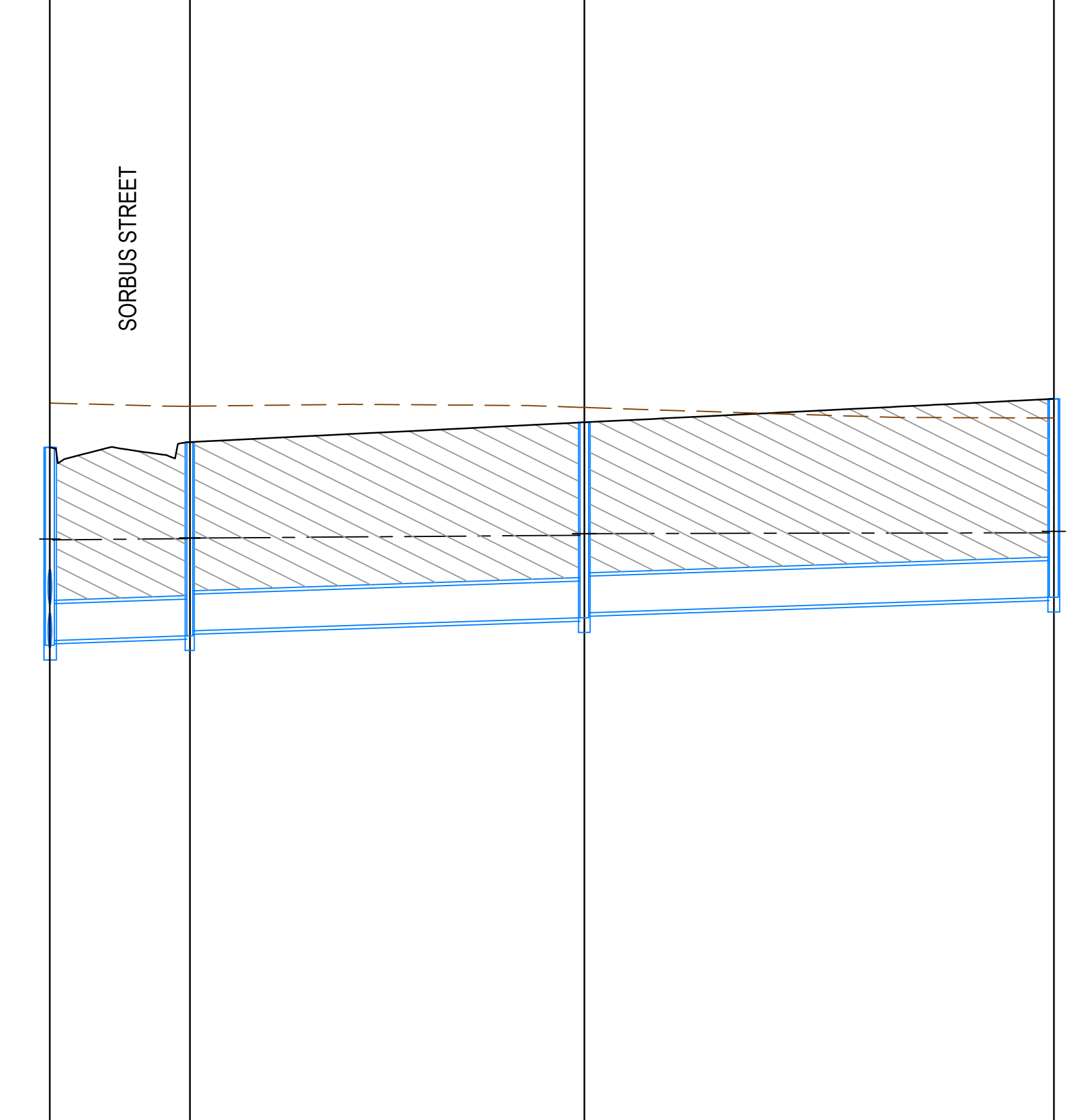
**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE WITH WYNDHAM CITY COUNCIL STANDARDS & SPECIFICATION CLASS 2 UNDER ROAD PAVEMENT & CLASS 3 BEHIND KERB

33 63 64 65 66



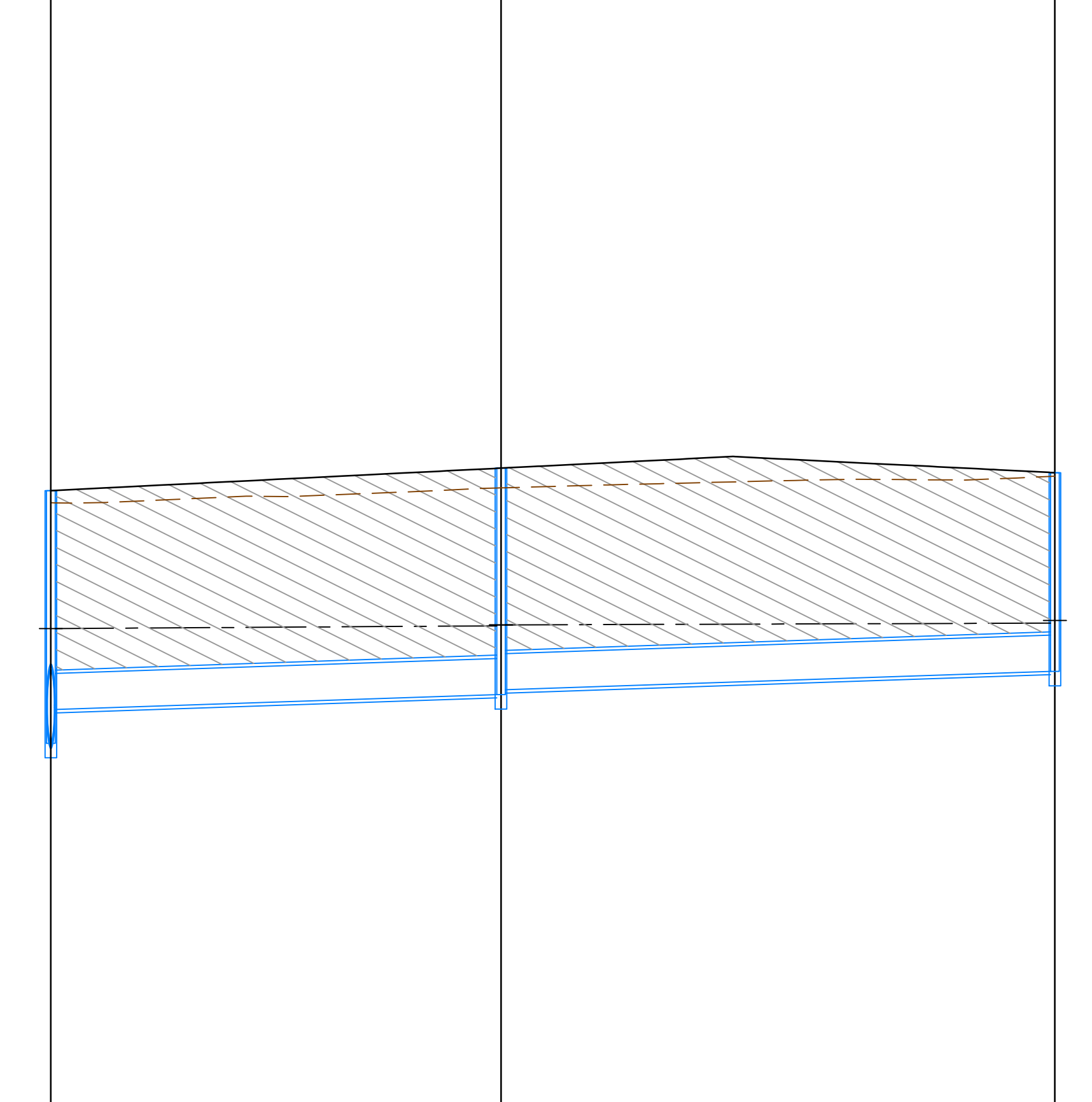
DESIGN FLOW (m3/s)	0.088	0.041	0.039	0.002
CAPACITY (m3/s)	0.097	0.064	0.064	0.064
AT GRADE VELOCITY (m/s)	1.37	0.9	0.9	0.9
NOMINAL PIPE SIZE (mm)	3000	3000	3000	3000
PIPE TYPE	RCP	RCP	RCP Class 3	RCP Class 3
GRADE	1 in 100	1 in 231	1 in 231	1 in 231
DATUM	40.0			
DEPTH TO INVERT	46.73 2.17	46.98 2.02	47.11 1.98	47.28 1.52
HYDRAULIC GRADE LINE	46.73 46.83	46.98 47.08	47.11 47.12	47.28 47.28
INVERT LEVEL	45.76 45.81	46.00 46.45	46.52 46.57	46.82 46.93
FINISHED SURFACE LEVELS	48.46 47.93	48.03 48.48	48.10 48.50	48.28 48.46
EXISTING SURFACE LEVEL	48.46	48.48	48.45	48.37
CHAINAGE	0.00	19.37	36.24	107.17
(Reach Length)		(19.37)	(16.87)	(25.25)

63 60 61 62



DESIGN FLOW (m3/s)	0.049	0.047	0.024
CAPACITY (m3/s)	0.101	0.101	0.101
AT GRADE VELOCITY (m/s)	0.92	0.92	0.92
NOMINAL PIPE SIZE (mm)	3750	3750	3750
PIPE TYPE	RCP	RCP	RCP
GRADE	1 in 300	1 in 300	1 in 300
DATUM	39.0		
DEPTH TO INVERT	46.00 2.02	46.28 1.97	46.33 2.00
HYDRAULIC GRADE LINE	46.05 47.09	46.10 47.09	46.28 47.13
INVERT LEVEL	46.05 47.08	46.10 47.10	46.33 47.14
FINISHED SURFACE LEVELS	48.43 48.03	48.43 48.28	48.32 48.52
EXISTING SURFACE LEVEL	48.43	48.43	48.32
CHAINAGE	14.31	40.33	102.65
(Reach Length)		(40.33)	(48.00)

38 58 59

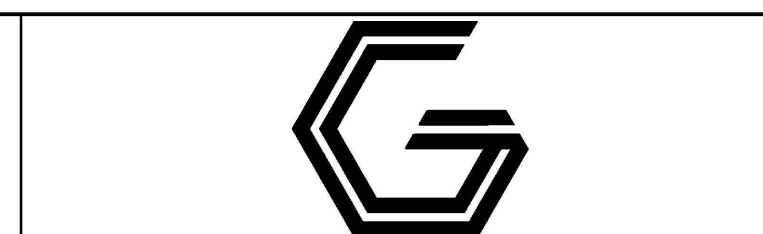


DESIGN FLOW (m3/s)	0.043	0.031
CAPACITY (m3/s)	0.101	0.101
AT GRADE VELOCITY (m/s)	0.92	0.92
NOMINAL PIPE SIZE (mm)	3750	3750
PIPE TYPE	RCP	RCP
GRADE	1 in 300	1 in 300
DATUM	40.0	
DEPTH TO INVERT	46.35 2.62	46.40 2.30
HYDRAULIC GRADE LINE	46.19 47.04	46.35 47.06
INVERT LEVEL	46.19 47.04	46.40 47.07
FINISHED SURFACE LEVELS	48.34 48.47	48.70 48.66
EXISTING SURFACE LEVEL	48.34	48.66
CHAINAGE	104.35	104.35
(Reach Length)		(57.56)

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



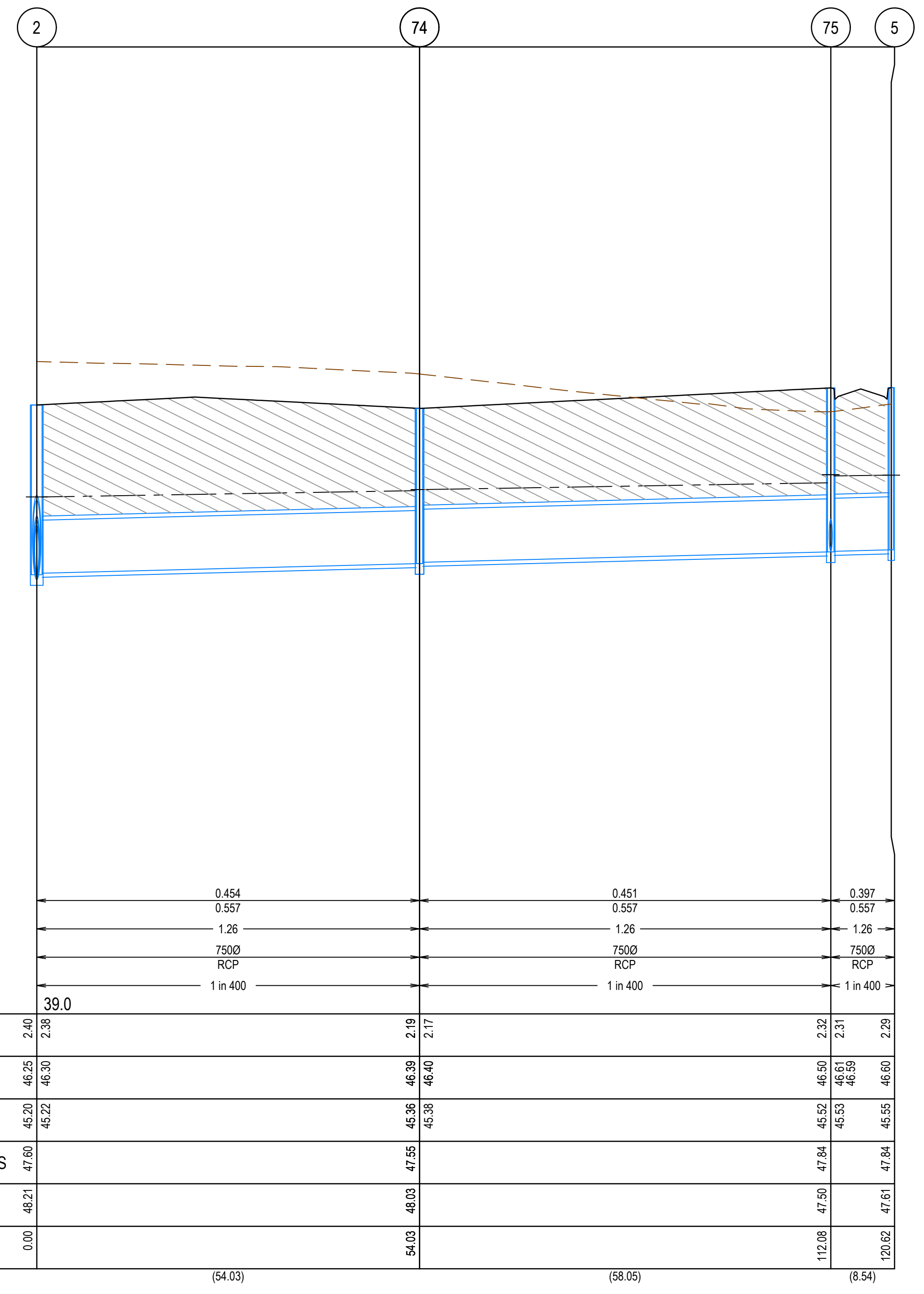
Marigold - Stage 9  
 Wyndham City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 3

**SUBJECT TO APPROVAL**

MELWAYS REF 359 F9	PROJECT / DRAWING No. 2360E-09-17	SHEET No. 17 of 25	REVISION B
-----------------------	--------------------------------------	-----------------------	---------------



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

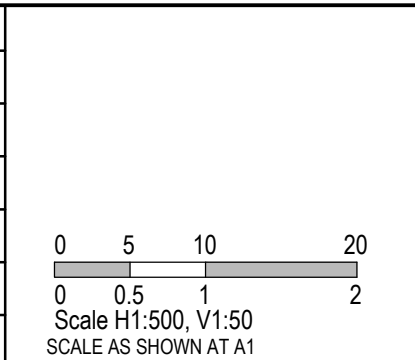


REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

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.

Global-Mark.com.au®

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



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

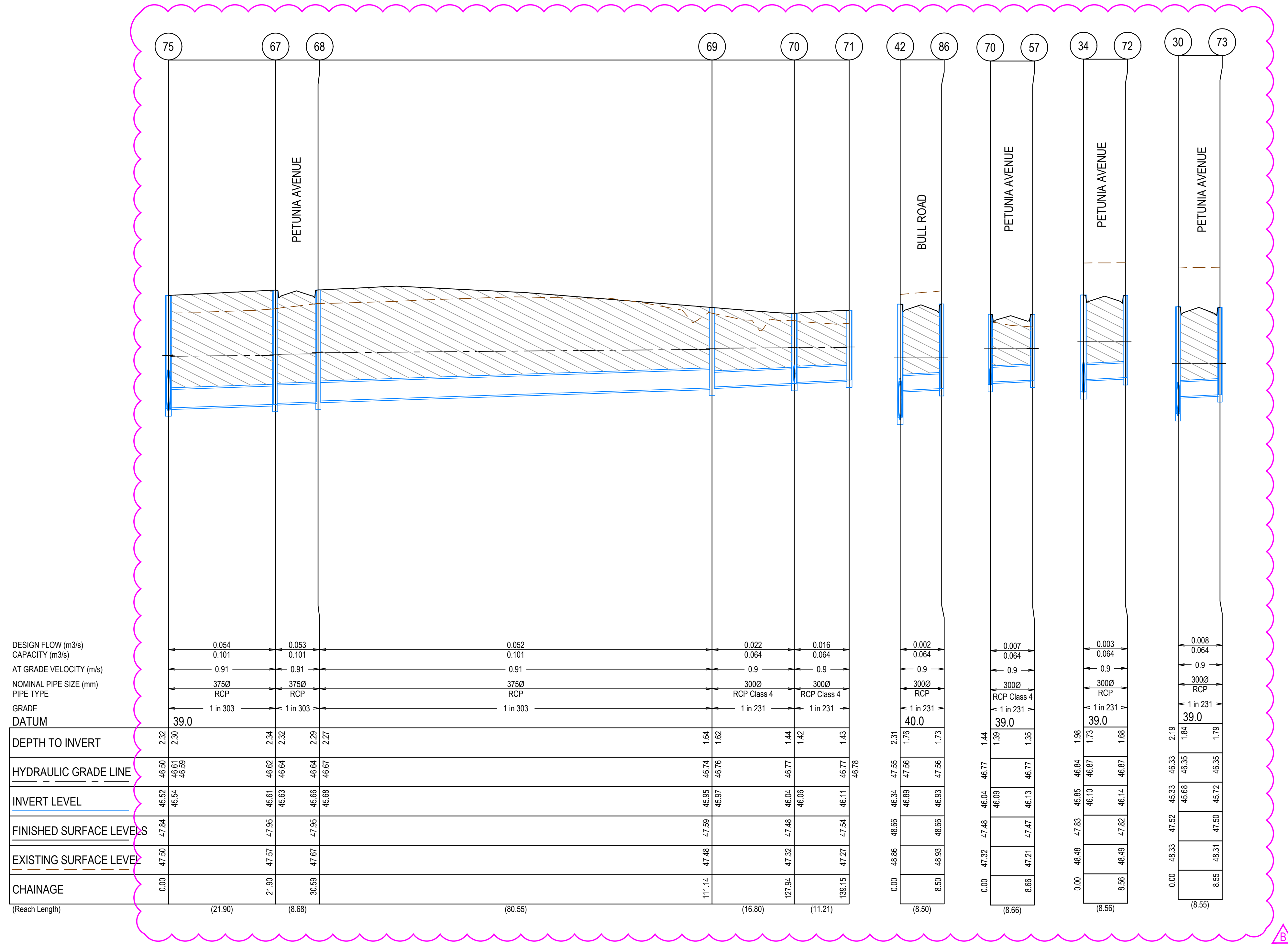
Marigold - Stage 9  
 Wyndham City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 4

MELWAYS REF 359 F9	PROJECT / DRAWING No. 2360E-09-18	SHEET No. 18 of 25	REVISION A
-----------------------	--------------------------------------	-----------------------	---------------

**SUBJECT TO APPROVAL**

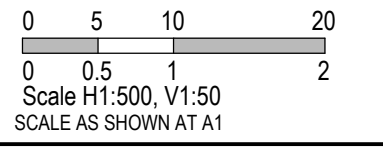


**CRUSHED ROCK BACKFILL**  
 CRB INDICATES CRUSHED ROCK BACKFILL COMPACTED IN ACCORDANCE  
 WITH WYNDHAM CITY COUNCIL STANDARDS & SPECIFICATION CLASS 2  
 UNDER ROAD PAVEMENT & CLASS 3 BEHIND KERB



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



**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

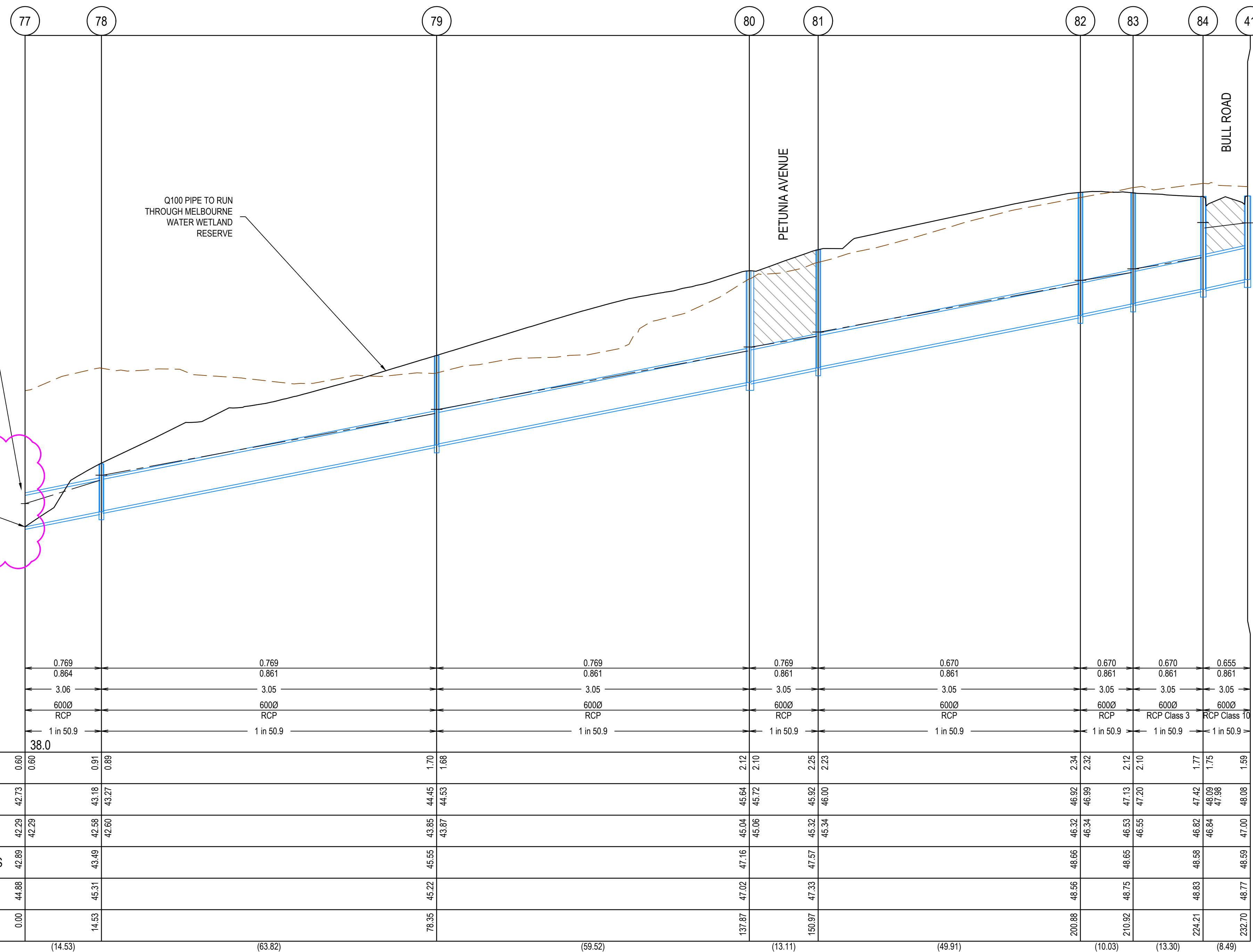
**GROWLAND**

Marigold - Stage 9  
 Wyndham City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 5

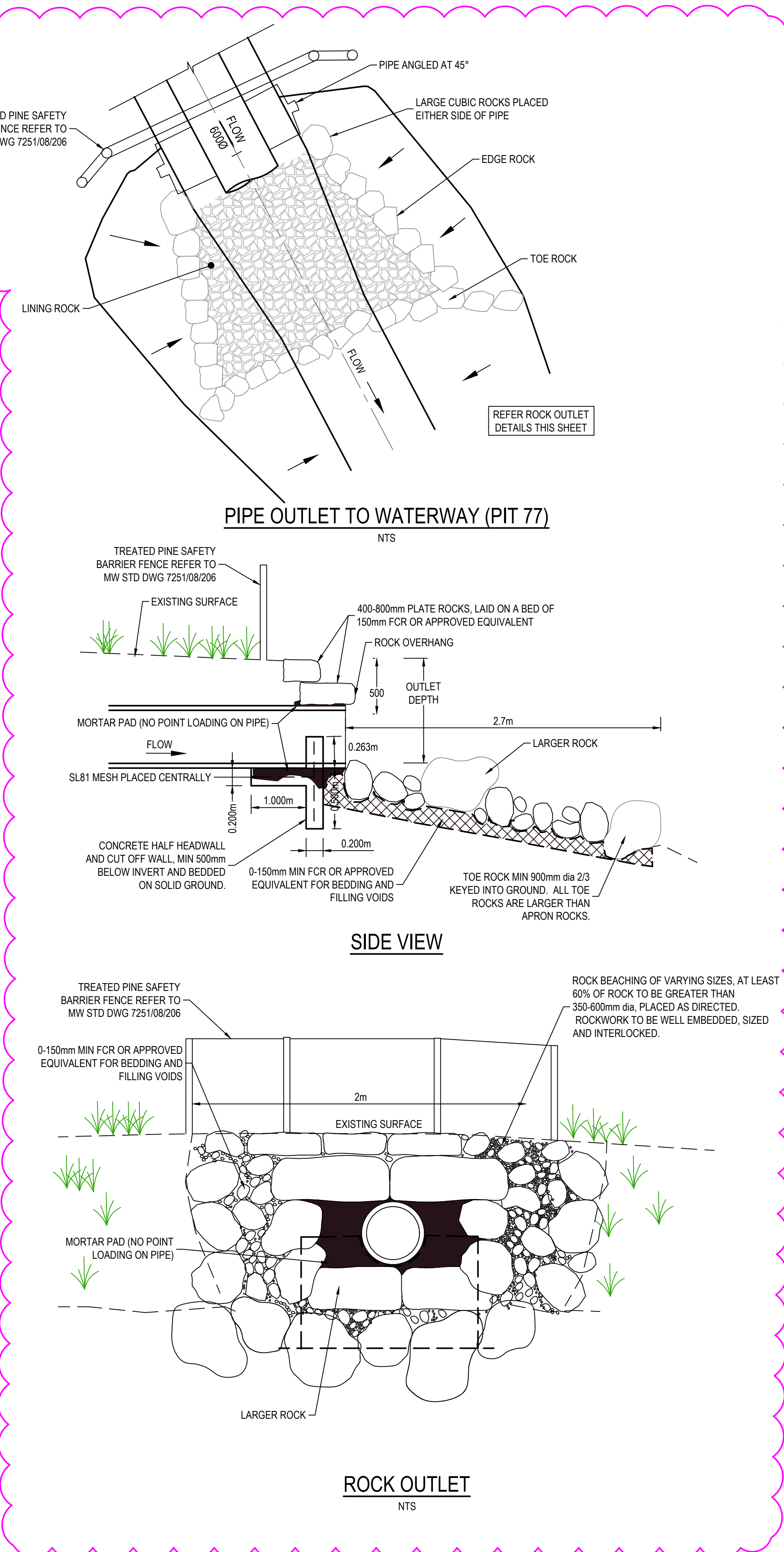
MELWAYS REF 359 F9	PROJECT / DRAWING No. 2360E-09-19	SHEET No. 19 of 25	REVISION B
-----------------------	--------------------------------------	-----------------------	---------------



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



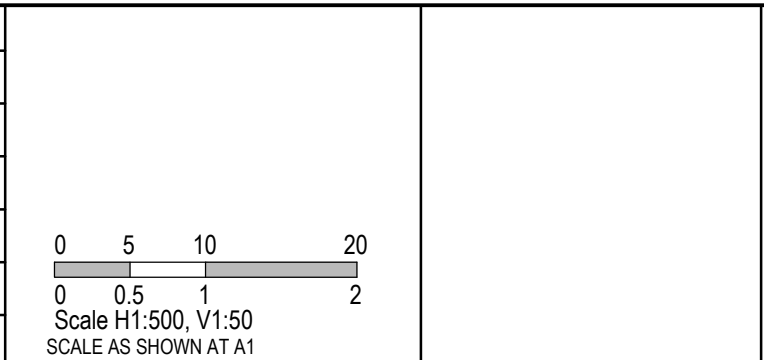
DESIGN FLOW Q100 (m3/s)	0.769	0.769	0.769	0.769	0.670	0.670	0.670	0.655
CAPACITY (m3/s)	0.864	0.861	0.861	0.861	0.861	0.861	0.861	0.861
AT GRADE VELOCITY (m/s)	3.06	3.05	3.05	3.05	3.05	3.05	3.05	3.05
NOMINAL PIPE SIZE (mm)	6000	6000	6000	6000	6000	6000	6000	6000
PIPE TYPE	RCP	RCP	RCP	RCP	RCP	RCP Class 3	RCP Class 10	RCP Class 10
GRADE	1 in 50.9	1 in 50.9	1 in 50.9	1 in 50.9	1 in 50.9	1 in 50.9	1 in 50.9	1 in 50.9
DATUM	38.0							
DEPTH TO INVERT	0.60	0.91	0.89	1.70	1.68	2.12	2.10	2.25
HYDRAULIC GRADE LINE	42.73	43.18	43.27	44.45	44.53	45.64	45.72	46.00
INVERT LEVEL	42.29	42.56	42.60	43.85	43.87	45.04	45.06	45.34
FINISHED SURFACE LEVELS	42.89	43.49	43.49	45.55	45.55	47.16	47.16	47.57
EXISTING SURFACE LEVEL	44.88	45.31	45.31	45.22	45.22	47.02	47.02	47.33
CHAINAGE	0.00	14.53		78.35		137.87		150.97
(Reach Length)		(14.53)		(63.82)		(59.52)		(13.11)
								(49.91)
								(10.03)
								(13.30)
								(8.49)



REV	DATE	AMENDMENT / REVISION DESCRIPTION	DES/DT	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS
C	10.12.19	COUNCIL COMMENTS	MH/MH	BS

**SUBJECT TO APPROVAL**

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



**SMEC**  
 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

**GROWLAND**

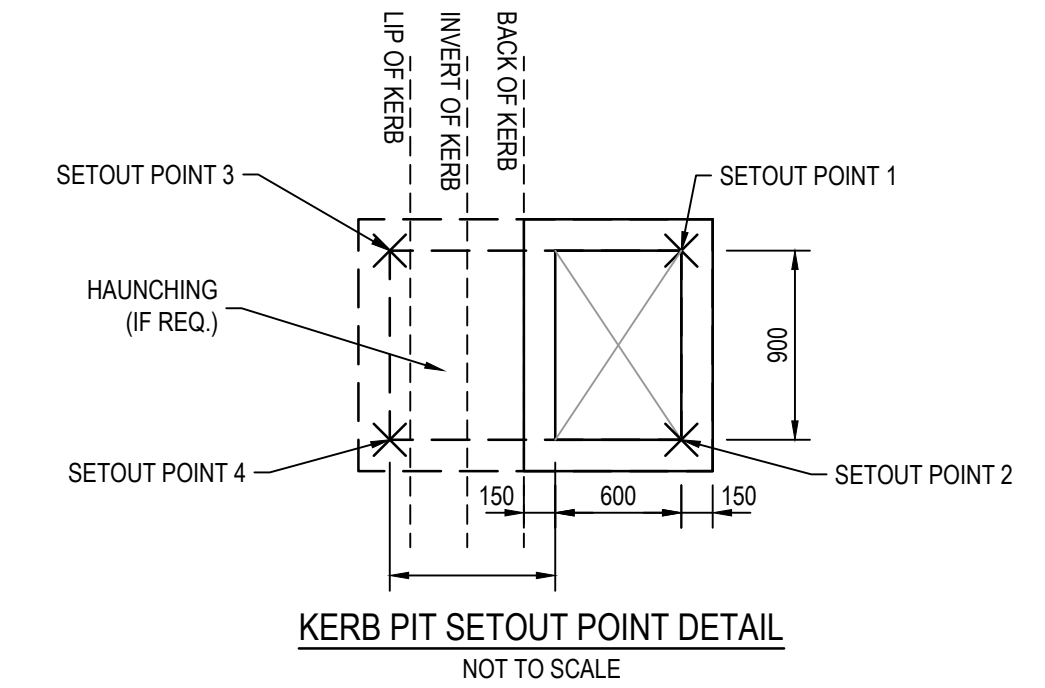
Marigold - Stage 9  
 Wyndham City Council  
 Road and Drainage  
 Drainage Longitudinal Sections - 6  
 & General Details

MELBOURNE REF 359 F9	PROJECT / DRAWING No. 2360E-09-20	SHEET No. 20 of 25	REVISION C
-------------------------	--------------------------------------	-----------------------	---------------



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)				
		1	ENDWALL			1050	45.17				
2	SIDE ENTRY PIT	1650	1650	750	45.22	1050	45.2	47.596	2.396		PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
				600	45.25						
				750	45.22						
3	SIDE ENTRY PIT	1500	900	750	45.271	750	45.251	47.638	2.387	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
4	DOUBLE SIDE ENTRY PIT	900	900	750	45.405	750	45.385	47.548	2.163	EDCM 602	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
5	SIDE ENTRY PIT	1650	1050	900	45.57	750	45.55	47.84	2.29		PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
6	SIDE ENTRY PIT	1050	900	600	45.617	900	45.597	48.162	2.565	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
				750	45.617						
7	SIDE ENTRY PIT	1200	900	600	46.481	600	46.461	48.373	1.912	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
8	SIDE ENTRY PIT	1200	900	600	46.534	600	46.514	48.586	2.071	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
9	SIDE ENTRY PIT	1050	900	600	46.578	600	46.558	48.58	2.021	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
10	SIDE ENTRY PIT	1050	900	600	46.631	600	46.611	48.667	2.055	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
11	SIDE ENTRY PIT	750	900	600	46.675	600	46.655	48.667	2.012	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
12	END STUB			600	46.767	600	46.767	48.84	2.073		
30	DOUBLE SIDE ENTRY PIT	750	900	525	45.406	600	45.331	47.519	2.188	EDCM 602	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
				300	45.681						
31	SIDE ENTRY PIT	1050	900	525	45.624	525	45.574	47.717	2.143	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
32	SIDE ENTRY PIT	1050	900	525	45.72	525	45.67	47.928	2.257	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
33	SIDE ENTRY PIT	1050	900	525	45.807	525	45.757	47.927	2.171	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
				300	45.807						
34	SIDE ENTRY PIT	1050	900	525	45.904	525	45.854	47.831	1.977	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
				300	46.104						
35	TANGENT POINT					525	46.049	48	1.951	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
36	SIDE ENTRY PIT	900	900	750	45.663	750	45.643	48.162	2.519	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
37	SIDE ENTRY PIT	1350	900	750	45.809	750	45.789	48.373	2.583	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
38	SIDE ENTRY PIT	1350	900	750	45.865	750	45.845	48.469	2.625	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
				375	46.195						
39	SIDE ENTRY PIT	900	900	750	45.91	750	45.89	48.469	2.579	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
40	SIDE ENTRY PIT	1350	900	750	46.223	750	46.203	48.691	2.489	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
41	SIDE ENTRY PIT	1350	900	750	46.278	750	46.258	48.592	2.334	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
42	SIDE ENTRY PIT	900	900	675	46.364	750	46.344	48.658	2.314	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
				300	46.894						
43	END STUB			675	46.462	675	46.462	48.764	2.302		
57	SIDE ENTRY PIT	600	900			300	46.127	47.473	1.346	EDCM 601	
58	SIDE ENTRY PIT	600	900	375	46.4	375	46.35	48.703	2.353	EDCM 601	
59	SIDE ENTRY PIT	600	900			375	46.592	48.656	2.064	EDCM 601	
60	SIDE ENTRY PIT	900	600	375	46.148	375	46.098	48.078	1.98	EDCM 601	
61	SIDE ENTRY PIT	600	900	375	46.333	375	46.283	48.28	1.998	EDCM 601	
62	SIDE ENTRY PIT	600	900			375	46.492	48.52	2.028	EDCM 601	
64	SIDE ENTRY PIT	600	900	300	46.574	300	46.524	48.101	1.577	EDCM 601	

65	SIDE ENTRY PIT	600	900	300	46.822	300	46.772	48.329	1.558	EDCM 601	
66	SIDE ENTRY PIT	600	900			300	46.931	48.456	1.525	EDCM 601	
67	SIDE ENTRY PIT	600	900	375	45.632	375	45.612	47.948	2.336	EDCM 601	
68	SIDE ENTRY PIT	600	900	375	45.681	375	45.661	47.952	2.291	EDCM 601	
69	SIDE ENTRY PIT	600	900	300	45.967	375	45.947	47.591	1.644	EDCM 601	
70	SIDE ENTRY PIT	600	900	300	46.09	300	46.04	47.475	1.436	EDCM 601	
71	SIDE ENTRY PIT	600	900			300	46.108	47.536	1.427	EDCM 601	
72	SIDE ENTRY PIT	600	900			300	46.141	47.822	1.681	EDCM 601	
73	DOUBLE SIDE ENTRY PIT	600	900			300	45.718	47.503	1.785	EDCM 602	
74	DOUBLE SIDE ENTRY PIT	900	900	750	45.375	750	45.355	47.548	2.193	EDCM 602	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
75	SIDE ENTRY PIT	900	900	375	45.54	750	45.52	47.838	2.317	EDCM 601	PIT TO BE HAUNCHED AS PER STANDARD DRAWING EDCM607
76	SIDE ENTRY PIT	600	900			750	45.55	47.84	2.29	EDCM 601	
77	ENDWALL (PIPE OUTLET)			600	42.29			42.89	0		ENDWALL AND PIPE OUTFALL TO BE CONSTRUCTED AS PER MELBOURNE WATER SD 7251/10/119
78	JUNCTION PIT	900	600	600	42.596	600	42.576	43.49	0.914	EDCM 605	
79	JUNCTION PIT	900	600	600	43.87	600	43.85	45.55	1.7	EDCM 605	
80	SIDE ENTRY PIT	600	900	600	45.059	600	45.039	47.282	2.243	EDCM 601	
81	SIDE ENTRY PIT	600	900	600	45.333	600	45.313	47.593	2.28	EDCM 601	
82	JUNCTION PIT	900	600	600	46.334	600	46.314	48.66	2.346	EDCM 605	
83	JUNCTION PIT	900	600	600	46.551	600	46.531	48.652	2.12	EDCM 605	
84	SIDE ENTRY PIT	900	600	600	46.833	600	46.813	48.584	1.771	EDCM 601	
85	SIDE ENTRY PIT	900	600			600	47	48.591	1.591	EDCM 601	
86	SIDE ENTRY PIT	600	900			300	46.931	48.662	1.731	EDCM 601	

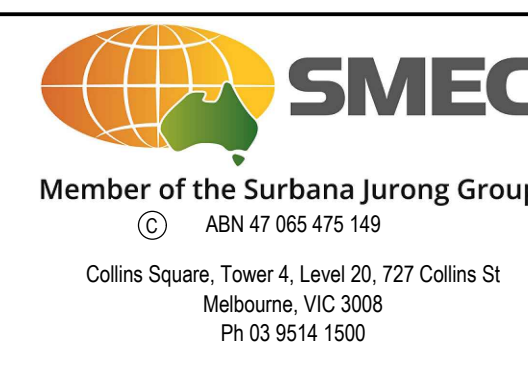


Pit 2 (Non-Standard)		Pit 5			
E	N	E	N		
Setout Point 1	296767.85	5811838.96	Setout Point 1	296880.56	5812046.58
Setout Point 2	296769.35	5811840.31	Setout Point 2	296881.46	5812046.59
Setout Point 3	296769.51	5811839.07	Setout Point 3	296880.56	5812044.93
Setout Point 4	296768.02	5812050.62	Setout Point 4	296881.46	5812044.93
Pit 3 (Non-Standard)		Pit 7			
E	N	E	N		
Setout Point 1	296777.34	5812057.16	Setout Point 1	296892.60	5812095.21
Setout Point 2	296778.82	5812057.00	Setout Point 2	296892.69	5812096.11
Setout Point 3	296777.24	5812056.26	Setout Point 3	296893.79	5812095.09
Setout Point 4	296778.74	5812056.11	Setout Point 4	296893.88	5812095.99
Pit 6		Pit 8			
E	N	E	N		
Setout Point 1	296888.30	5812053.23	Setout Point 1	296885.19	5812104.31
Setout Point 2	296888.39	5812054.13	Setout Point 2	296886.08	5812104.22
Setout Point 3	296889.94	5812053.06	Setout Point 3	296885.31	5812105.50
Setout Point 4	296890.03	5812053.96	Setout Point 4	296886.20	5812105.42
Pit 9		Pit 10			
E	N	E	N		
Setout Point 1	296884.92	5812113.49	Setout Point 1	296878.31	5812121.58
Setout Point 2	296885.81	5812113.40	Setout Point 2	296878.40	5812122.48
Setout Point 3	296884.81	5812112.44	Setout Point 3	296877.26	5812121.68
Setout Point 4	296885.72	5812112.35	Setout Point 4	296877.36	5812122.59
Pit 37		Pit 38			
E	N	E	N		
Setout Point 1	296901.74	5812095.18	Setout Point 1	296910.75	5812101.69
Setout Point 2	296901.65	5812094.28	Setout Point 2	296909.86	5812101.79
Setout Point 3	296900.31	5812094.42	Setout Point 3	296910.00	5812103.13
Setout Point 4	296900.40	5812095.32	Setout Point 4	296910.89	5812103.04
Pit 40		Pit 41			
E	N	E	N		
Setout Point 1	297007.64	5812100.92	Setout Point 1	297016.65	5812107.43
Setout Point 2	297008.54	5812100.83	Setout Point 2	297016.75	5812108.32
Setout Point 3	297007.52	5812099.73	Setout Point 3	297017.94	5812108.20
Setout Point 4	297008.42	5812099.64	Setout Point 4	297017.86	5812107.31

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	

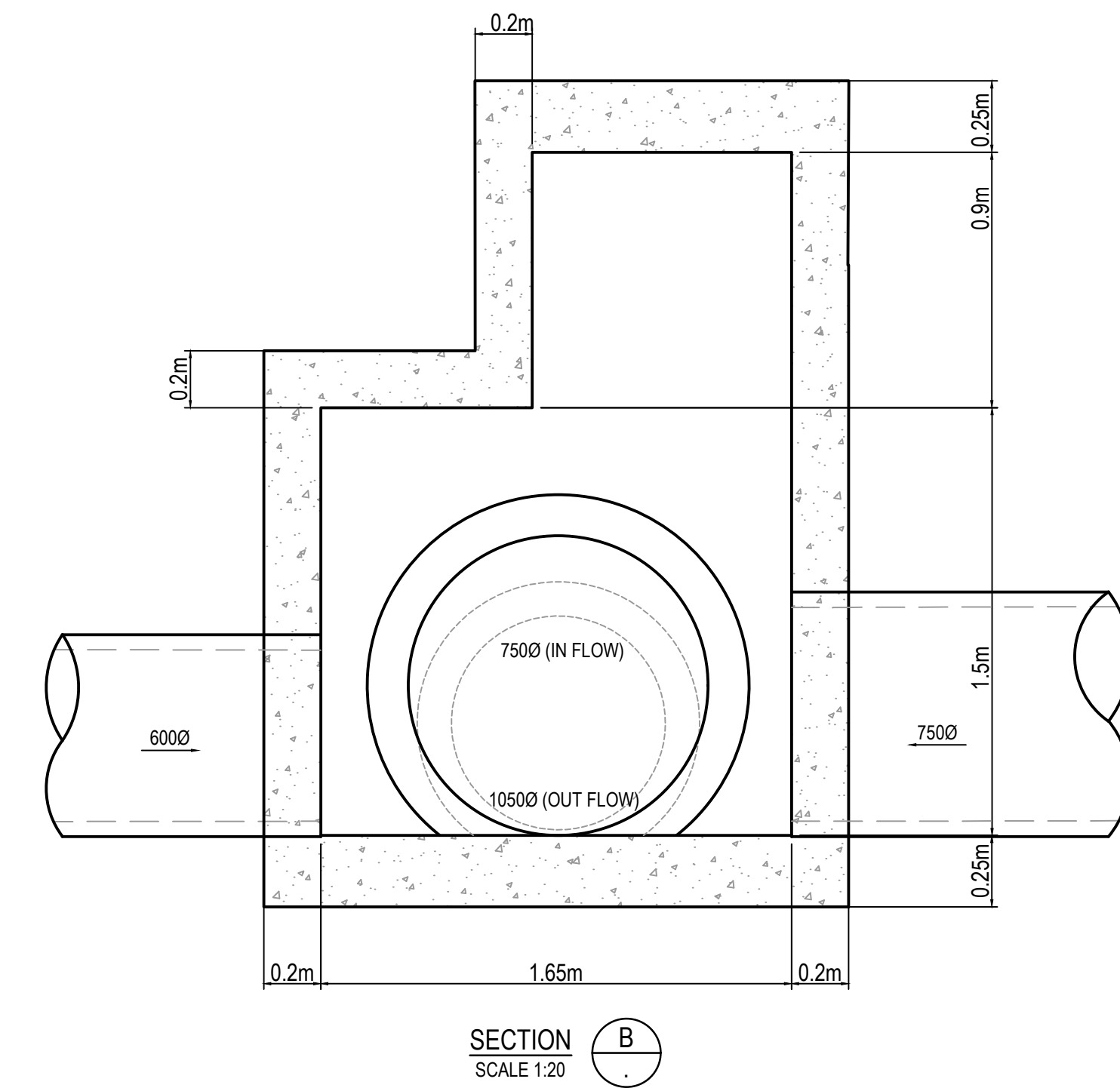
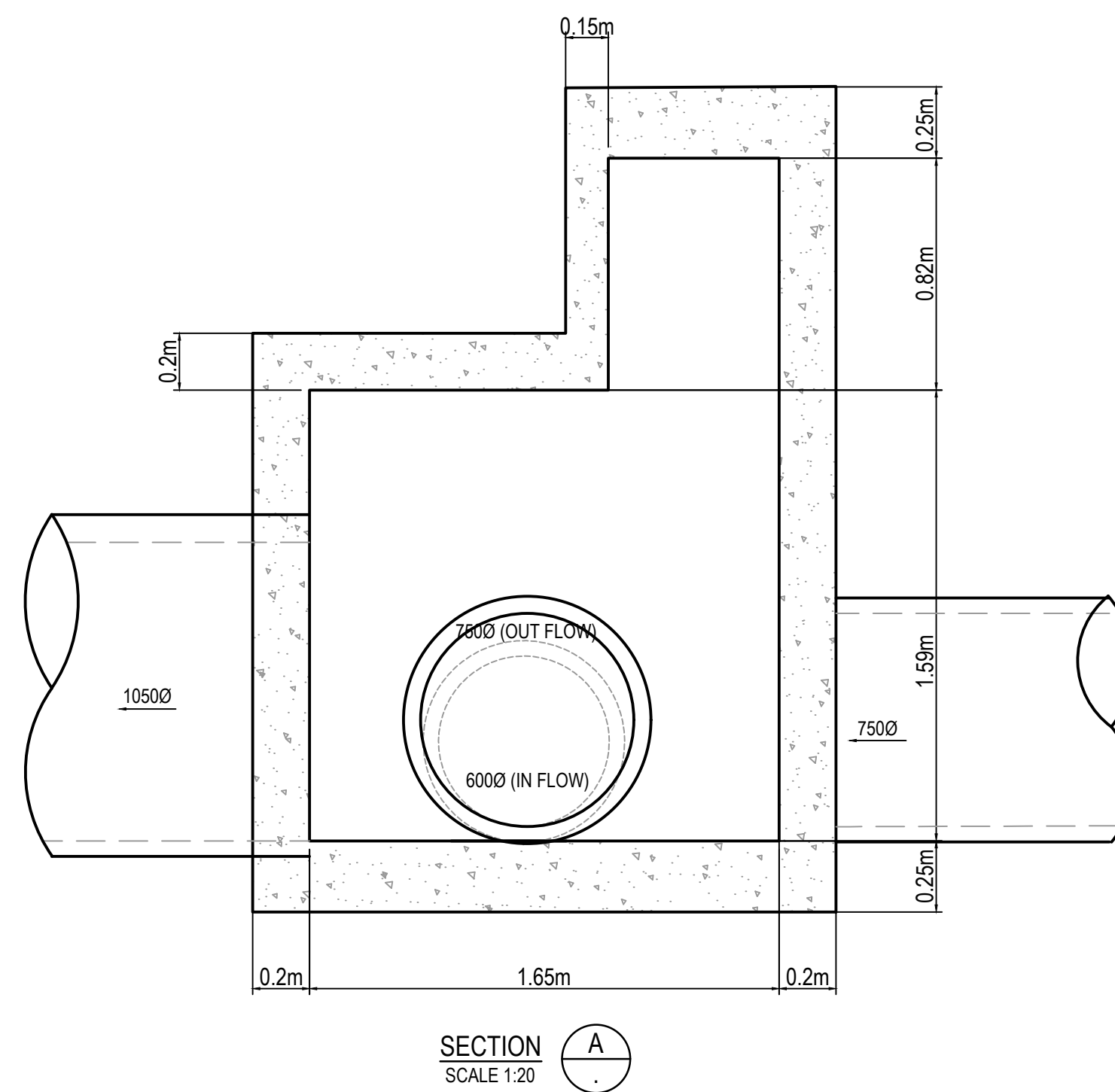
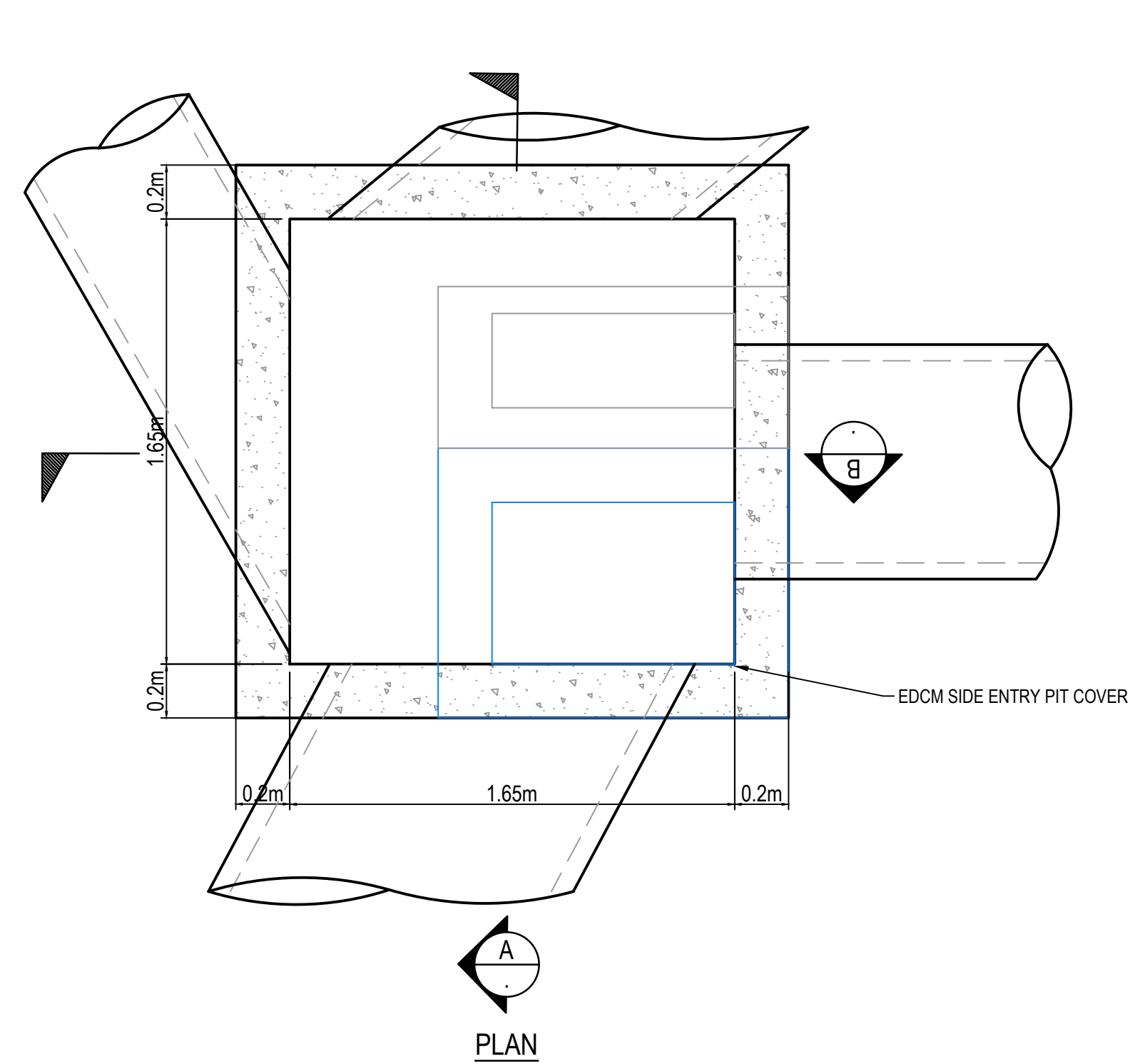


Marigold - Stage 9  
Wynham City Council  
Road and Drainage  
Pit Schedule & Pit Setout Table

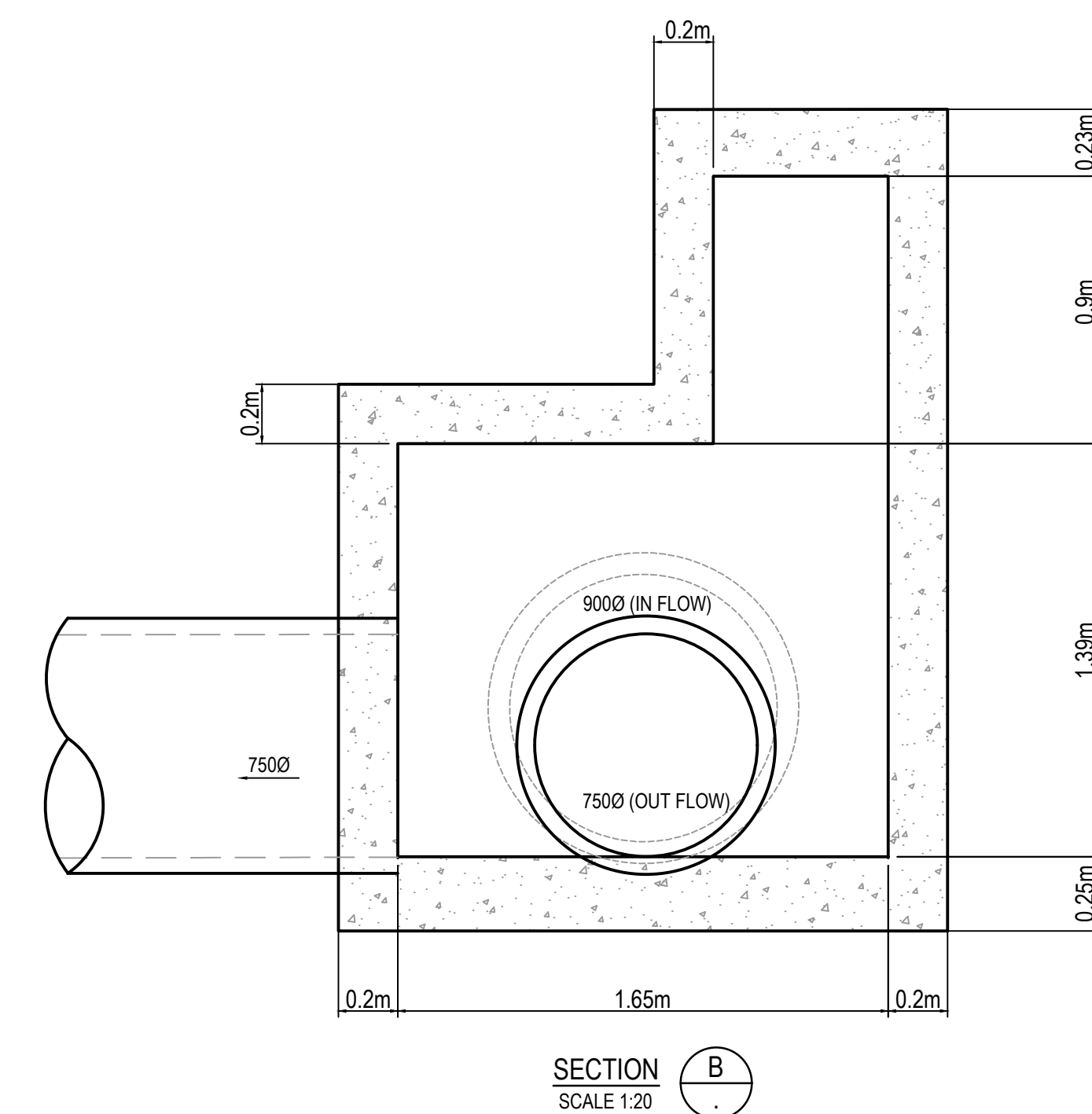
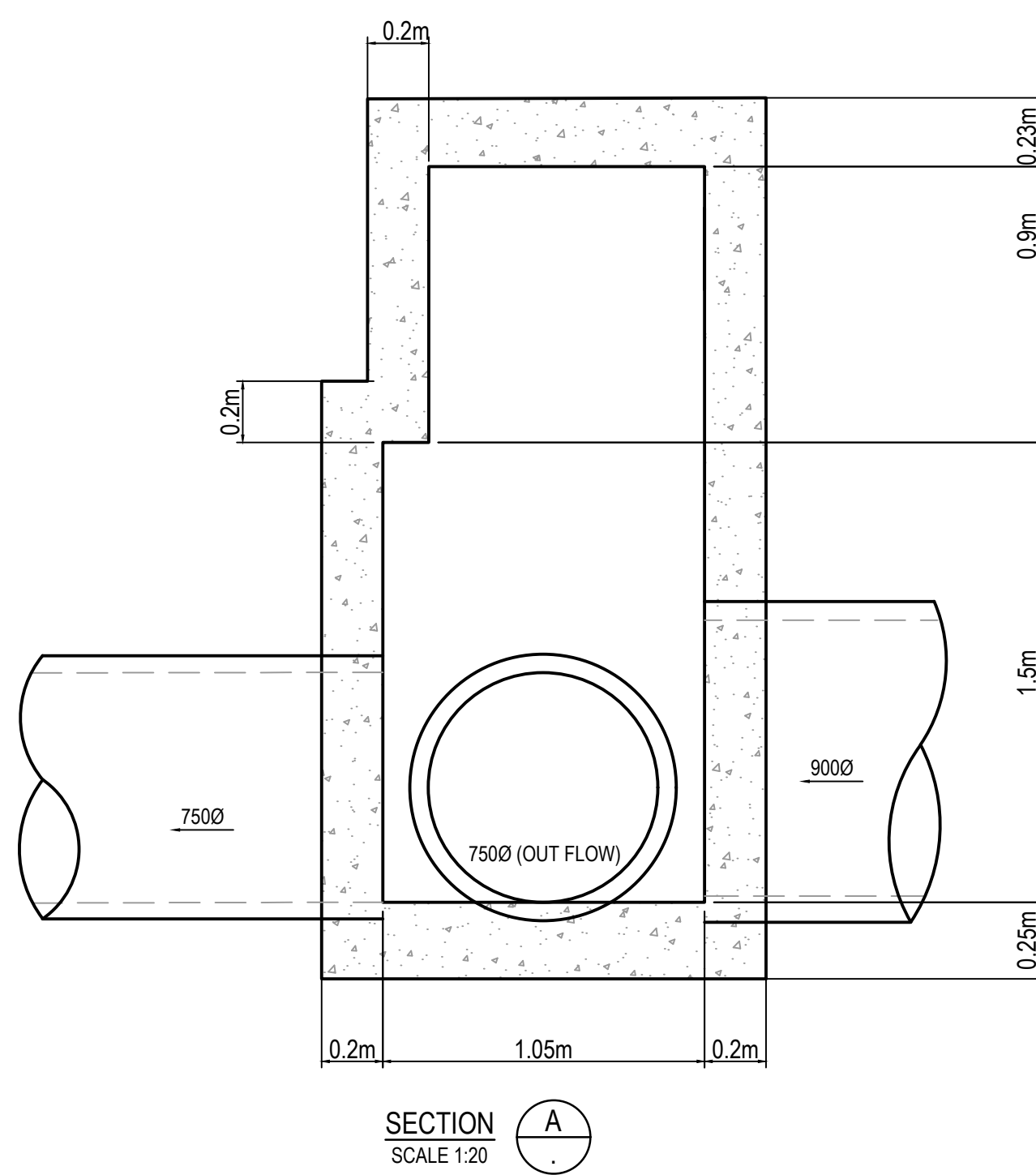
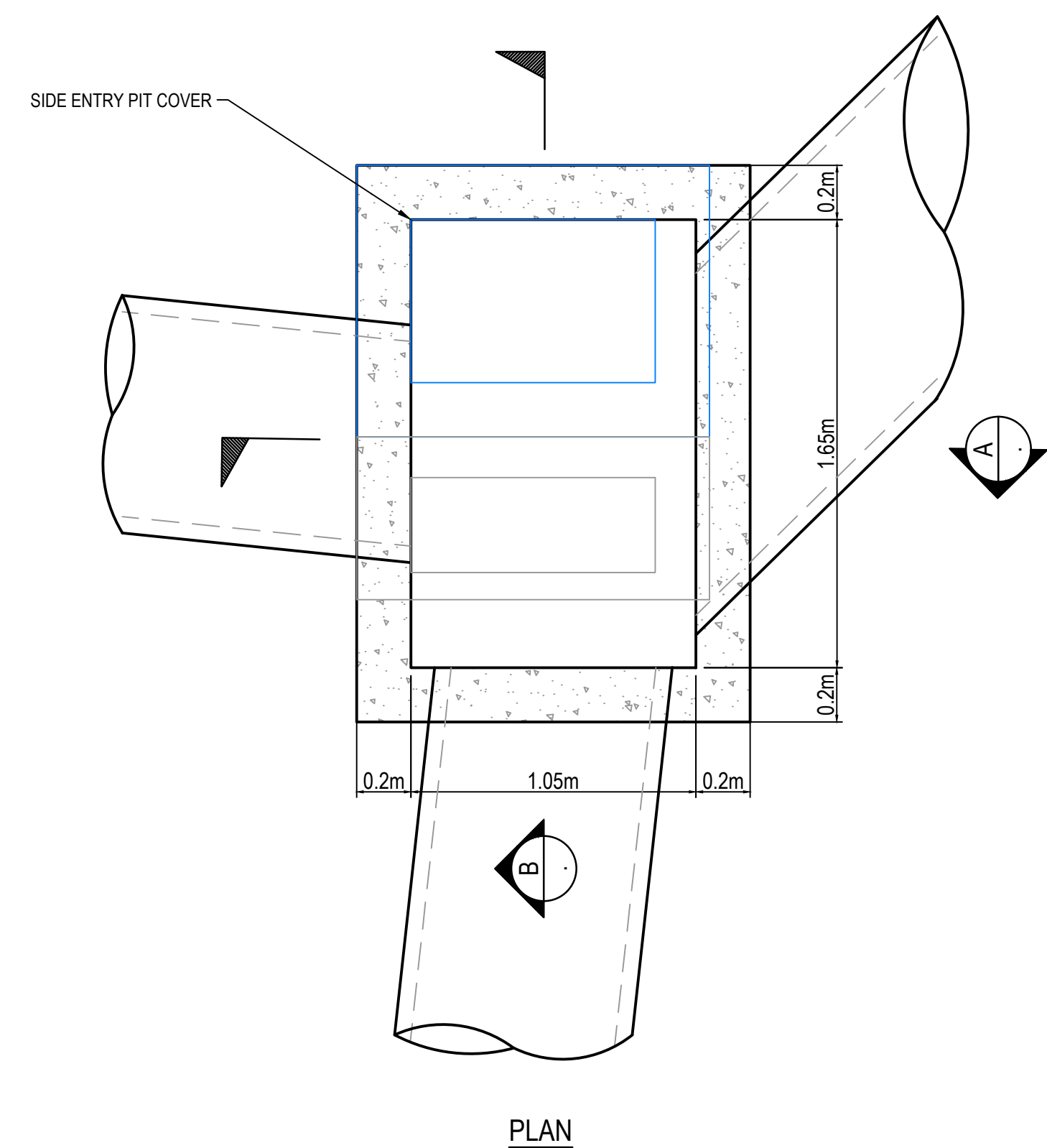
MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
359 F9	2360E-09-21	21 of 25	B



THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE MIGLIC MACLEOD PIT SCHEDULE FOR MARIGOLD ESTATE. THE PIT SCHEDULE DETAILS THICKNESS AND REINFORCEMENT FOR STRUCTURALLY CERTIFIED PITS.



SIDE ENTRY PIT (2)  
SCALE 1:20



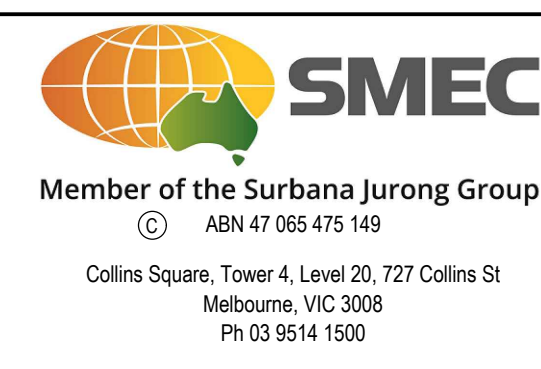
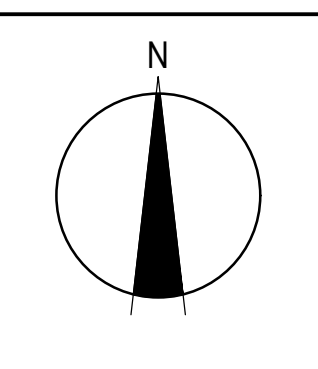
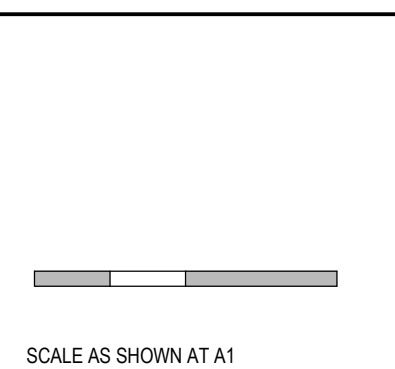
SIDE ENTRY PIT (5)  
SCALE 1:20

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGNER	APPROVAL
A	15.12.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

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



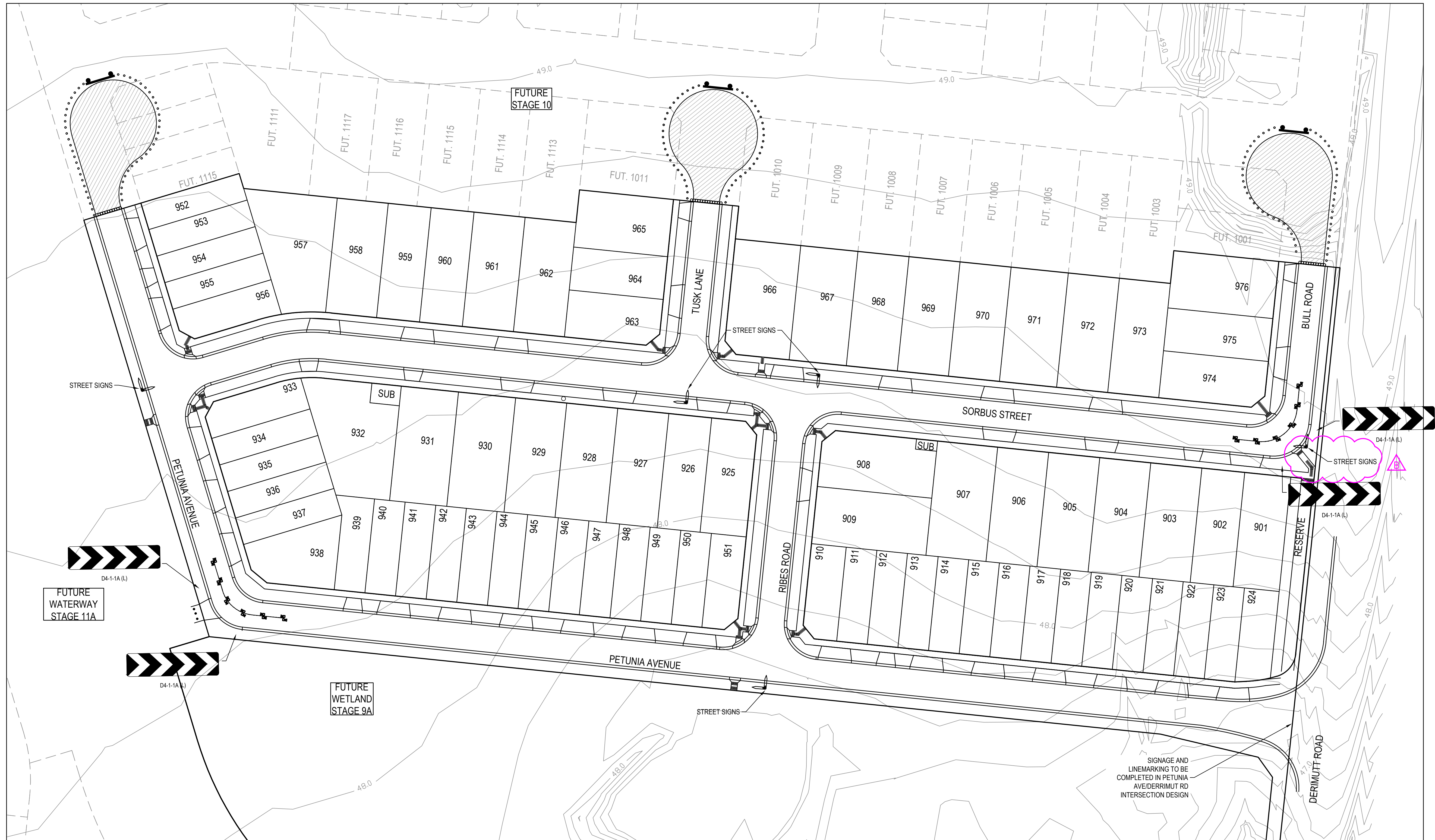
TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



Marigold - Stage 9 Wyndham City Council Road and Drainage Pit Details		MELWAYS REF 359 F9	PROJECT / DRAWING No. 2360E-09-22	SHEET No. 22 of 25	REVISION A
--	--	-----------------------	--------------------------------------	-----------------------	---------------

**SUBJECT TO APPROVAL**





- 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.

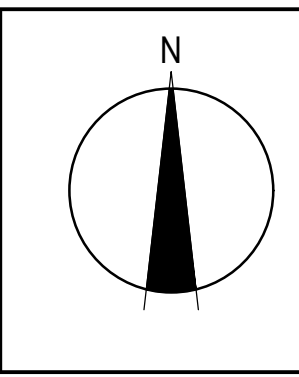
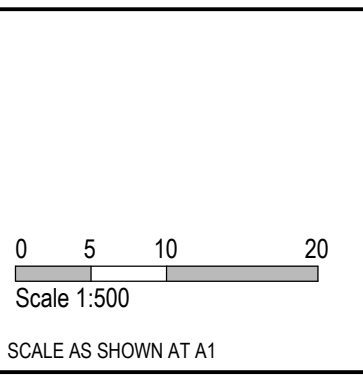
**WARNING**  
**BEWARE OF UNDERGROUND SERVICES**  
 The locations of underground services are approximate only and their exact position should be proven on site.  
 No guarantee is given that all existing services are shown.  
 Locate all underground services before commencement of works  
**DIAL 1100 BEFORE YOU DIG**  
[www.1100.com.au](http://www.1100.com.au)

SIGNAGE AND LINEMARKING TO BE COMPLETED IN PETUNIA AVE/DERRIMUT RD INTERSECTION DESIGN

REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGNER	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS
B	12.11.19	COUNCIL COMMENTS	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



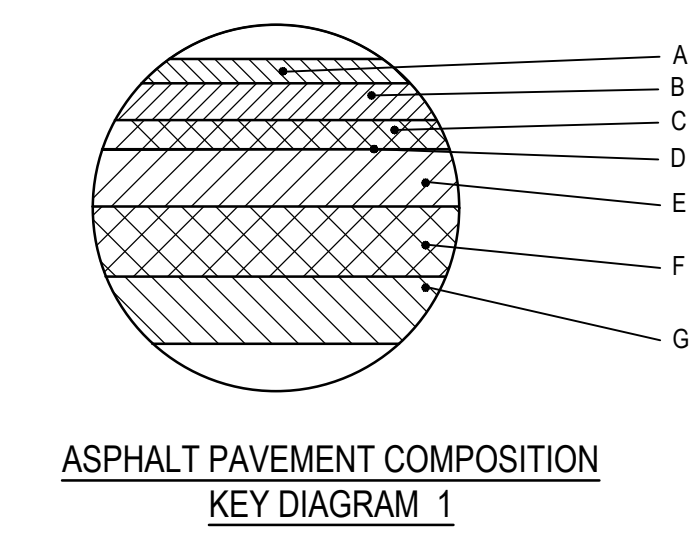
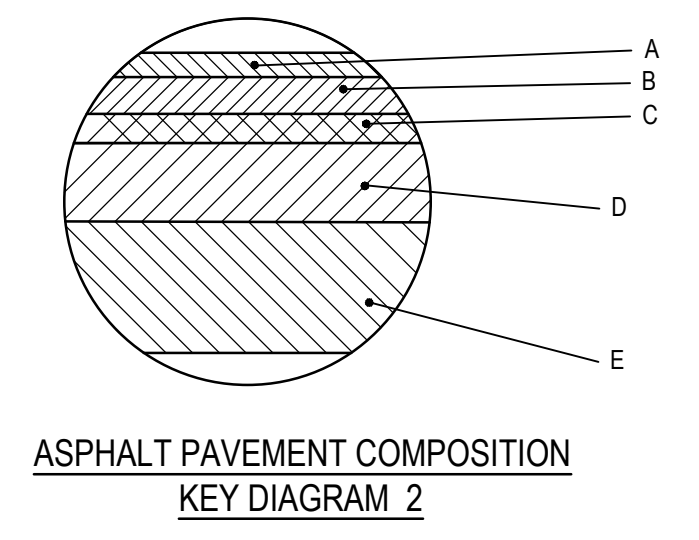
**SMEC**  
 Member of the Surlana Jurong Group  
 © ABN 47 065 475 149  
 Collins Square, Tower 4, Level 20, 727 Collins St  
 Melbourne, VIC 3008  
 Ph 03 9514 1500

**GROWLAND**

Marigold - Stage 9  
 Wyndham City Council  
 Road and Drainage  
 Signage & Linemarking Plan

MELWAYS REF: 359 F9 PROJECT / DRAWING No: 2360E-09-23 SHEET No: 23 of 25 REVISION: B





625mm SORBUS ST, BULL ROAD, TUSK LANE & RIBES RD PAVEMENT COMPOSITION (TYPE A)

PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
A WEARING COURSE	30	SIZE 10 TYPE N ASPHALT, CLASS 320 BINDER
B BASE COURSE	30	SIZE 10 TYPE N ASPHALT, CLASS 320 BINDER
C SEALING LAYER	10	SIZE 10 SAMI S18RF
D BONDING LAYER		BITUMINOUS PRIME
E BASE	130	SIZE 20 CLASS 2 FCR, COMPACTED DEPTH, COMPACTED TO A MEAN DENSITY RATIO OF 98% (MODIFIED) MAXIMUM DRY DENSITY AS1289.5.2.1
F SUBBASE	175	SIZE 20 CLASS 3 FCR, COMPACTED DEPTH, COMPACTED TO A MEAN DENSITY RATIO OF 97% (MODIFIED) MAXIMUM DRY DENSITY AS1289.5.2.1
G CAPPING LAYER	250	TYPE A MATERIAL CBR ≥8%, SWELL ≤1.5% & PERMEABILITY $k \leq 1 \times 10^{-10}$ m/s SUBGRADE (DESIGN CBR 2%), PLACED AND COMPACTED IN TWO LAYERS, COMPACTED TO A MINIMUM DENSITY RATIO OF 98% (STANDARD) MAXIMUM DRY DENSITY AS1289.5.1.1

540mm PETUNIA AVE (TYPE C)

PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
A WEARING COURSE	40	SIZE 14 TYPE N ASPHALT, CLASS 320 BINDER
B INTERMEDIATE COURSE	75	SIZE 20 TYPE SI ASPHALT, CLASS 320 BINDER
C BASE COURSE	75	SIZE 20 TYPE SF ASPHALT, CLASS 320 BINDER
D SUBBASE	100	SIZE 20 CLASS 3 CEMENT TREATED CRUSHED ROCK (3%), COMPACTED DEPTH, COMPACTED TO A MEAN DENSITY RATIO OF 96% (MODIFIED) MAXIMUM DRY DENSITY AS1289.5.2.1
E CAPPING LAYER	250	TYPE A MATERIAL CBR ≥8%, SWELL ≤1.5% & PERMEABILITY $k \leq 1 \times 10^{-10}$ m/s SUBGRADE (DESIGN CBR 2%), PLACED AND COMPACTED IN TWO LAYERS, COMPACTED TO A MINIMUM DENSITY RATIO OF 98% (STANDARD) MAXIMUM DRY DENSITY AS1289.5.1.1

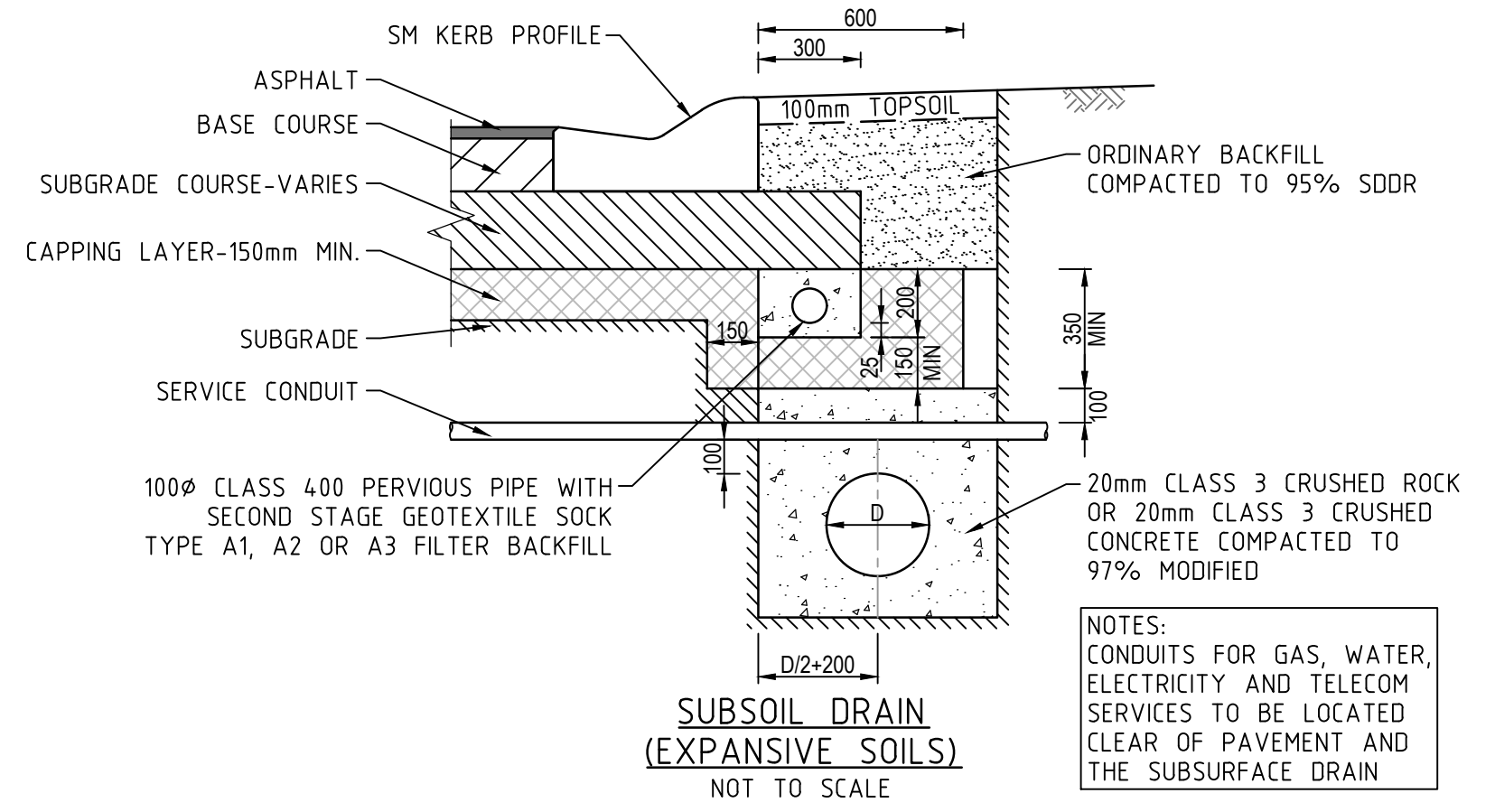
720mm PETUNIA AVE (TYPE B)

PAVEMENT LAYER	LAYER THICKNESS (mm)	MATERIAL
A WEARING COURSE	40	SIZE 14 TYPE N ASPHALT, CLASS 320 BINDER
B BASE COURSE	40	SIZE 14 TYPE HP ASPHALT, CLASS A10E BINDER
C SEALING LAYER	10	SIZE 10 SAMI S18RF
D BONDING LAYER		BITUMINOUS PRIME
E BASE	110	SIZE 20 CLASS 2 FCR, COMPACTED DEPTH, COMPACTED TO A MEAN DENSITY RATIO OF 98% (MODIFIED) MAXIMUM DRY DENSITY AS1289.5.2.1
F SUBBASE	270	SIZE 20 CLASS 3 FCR, COMPACTED DEPTH (PLACED AND COMPACTED IN TWO LAYERS), COMPACTED TO A MEAN DENSITY RATIO OF 97% (MODIFIED) MAXIMUM DRY DENSITY AS1289.5.2.1
G CAPPING LAYER	250	TYPE A MATERIAL CBR ≥8%, SWELL ≤1.5% & PERMEABILITY $k \leq 1 \times 10^{-10}$ m/s SUBGRADE (DESIGN CBR 2%), PLACED AND COMPACTED IN TWO LAYERS, COMPACTED TO A MINIMUM DENSITY RATIO OF 98% (STANDARD) MAXIMUM DRY DENSITY AS1289.5.1.1

**PAVEMENT NOTE**  
ALL PAVEMENT DESIGNS HAVE BEEN PROVIDED BY TONKIN AND TAYLOR, SMEC 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 (1008775.1000/3) FOR THIS DEVELOPMENT STAGE. THIS DOCUMENT SHOULD BE REVIEWED BY THE CONTRACTOR TO ENSURE DESIGN HAS BEEN INTERPRETED CORRECTLY. A COPY OF THIS DOCUMENT WILL BE MADE AVAILABLE ON REQUEST.

**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

THE PAVEMENT SHOULD COMPRISE ROAD BASE OR SUBBASE QUALITY MATERIALS SPREAD IN LAYERS NOT EXCEEDING 200mm LOOSE LAYER THICKNESS, MOISTURE CONDITIONED TO WITHIN ± 2% MODIFIED OPTIMUM MOISTURE CONTENT (OMC) AND COMPACTED TO A DRY DENSITY RATIO OF 98% MODIFIED, PLACES IN ACCORDANCE WITH VICROADS REQUIREMENT.

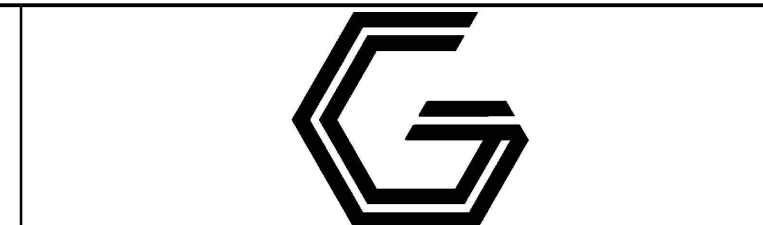


REV	DATE	AMENDMENT / REVISION DESCRIPTION	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	M/HMH	BS
B	12.11.19	COUNCIL COMMENTS	M/HMH	BS

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.

Quality Management ISO 9001  
Site Management - AS/NZS 1801  
Environmental Management - ISO 14001

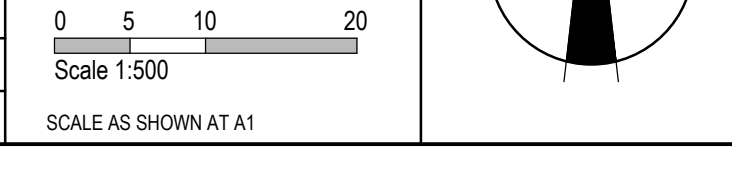
TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



Marigold - Stage 9  
Wyndham City Council  
Road and Drainage  
Pavement Details

**SUBJECT TO APPROVAL**

DWG PATH: V:\Vault\Projects\_Urban\2360E-Marigold\2360E-09\DWGs\2360E-09-24.dwg PRINTED BY: MH14688 on 10/12/2019 at 02:47:57 PM



MELWAYS REF	PROJECT / DRAWING No.	SHEET No.	REVISION
359 F9	2360E-09-24	24 of 25	B



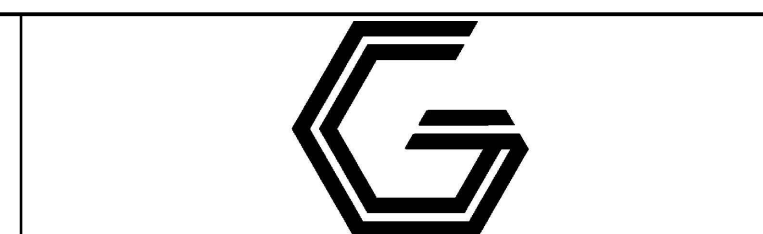
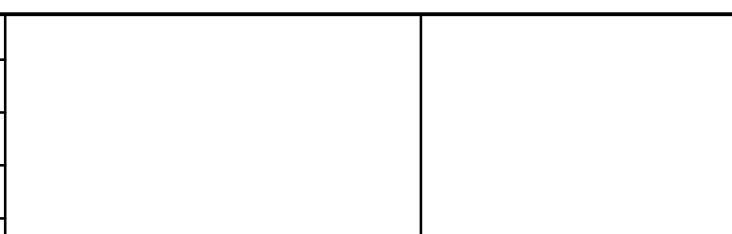
**Safety in Design**

Project Name: Marigold Stage 09		Design Package: 2360E-09		Date: 09.10.2019											
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	If not eliminated Score residual risk			RESIDUAL RISK OWNER		
									"Residual Risk Likelihood (0-5)"	"Residual Risk Consequence (0-5)"	"Residual Risk Rating"				
			<b>Road Furniture / Roadside features</b>												
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		
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		
			<b>Drainage</b>												
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	Authority		
			<b>Sewer</b>												
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	DESIGN	APPROVAL
A	11.10.19	ISSUED TO COUNCIL FOR APPROVAL	MH/MH	BS

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

TITLE	NAME
DRAFTER	M.Holmquist
DESIGNER	M.Holmquist
CHECKED	S.Pellew
AUTHORISED	B.Sanderson
REFERENCE No. 1	2360E-09
REFERENCE No. 2	



Marigold - Stage 9  
Wyndham City Council  
Road and Drainage  
Safety In Design

**SUBJECT TO APPROVAL**



SCALE AS SHOWN AT A1

MELWAYS REF: 359 F9  
PROJECT / DRAWING No: 2360E-09-85  
SHEET No: 25 of 25  
REVISION: A

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

**GROWLAND**

MELWAYS REF: 359 F9  
PROJECT / DRAWING No: 2360E-09-85  
SHEET No: 25 of 25  
REVISION: A