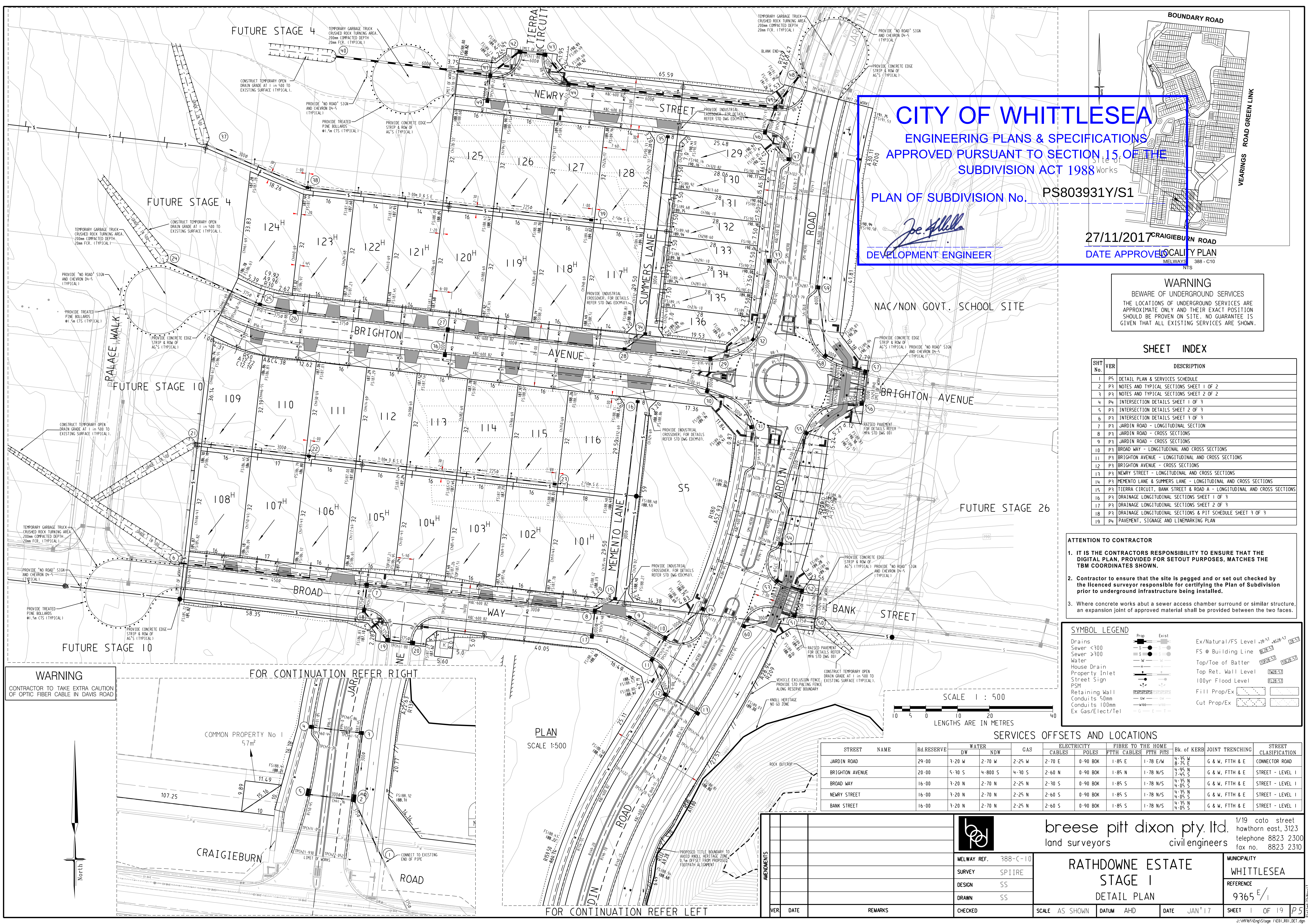




CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS

APPROVED PURSUANT TO SECTION 15 OF THE SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S1

27/11/2017

DEVELOPMENT ENGINEER

LOCALITY PLAN

CRAGIEBURN ROAD

MELWAYS 388-C10

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.

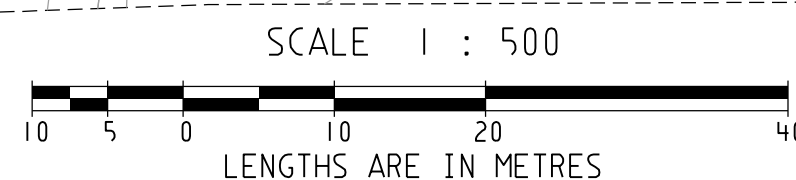
SHEET INDEX

SHT No.	VER	DESCRIPTION
1	P5	DETAIL PLAN & SERVICES SCHEDULE
2	P3	NOTES AND TYPICAL SECTIONS SHEET 1 OF 2
3	P3	NOTES AND TYPICAL SECTIONS SHEET 2 OF 2
4	P4	INTERSECTION DETAILS SHEET 1 OF 3
5	P3	INTERSECTION DETAILS SHEET 2 OF 3
6	P3	INTERSECTION DETAILS SHEET 3 OF 3
7	P3	JARDIN ROAD - LONGITUDINAL SECTION
8	P3	JARDIN ROAD - CROSS SECTIONS
9	P3	JARDIN ROAD - CROSS SECTIONS
10	P3	BROAD WAY - LONGITUDINAL AND CROSS SECTIONS
11	P3	BRIGHTON AVENUE - LONGITUDINAL AND CROSS SECTIONS
12	P3	BRIGHTON AVENUE - CROSS SECTIONS
13	P3	NEWRY STREET - LONGITUDINAL AND CROSS SECTIONS
14	P3	MEMENTO LANE & SUMMERS LANE - LONGITUDINAL AND CROSS SECTIONS
15	P3	TERRACE CIRCUIT, BANK STREET & ROAD A - LONGITUDINAL AND CROSS SECTIONS
16	P3	DRAINAGE LONGITUDINAL SECTIONS SHEET 1 OF 3
17	P3	DRAINAGE LONGITUDINAL SECTIONS SHEET 2 OF 3
18	P3	DRAINAGE LONGITUDINAL SECTIONS & PIT SCHEDULE SHEET 3 OF 3
19	P4	PAVEMENT, SIGNAGE AND LITEMARKING PLAN

- ATTENTION TO CONTRACTOR**
- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
 - Contractor to ensure that the site is pegged and or set out checked by the licenced surveyor responsible for certifying the Plan of Subdivision prior to underground infrastructure being installed.
 - Where concrete works about a sewer access chamber surround or similar structure, an expansion joint of approved material shall be provided between the two faces.

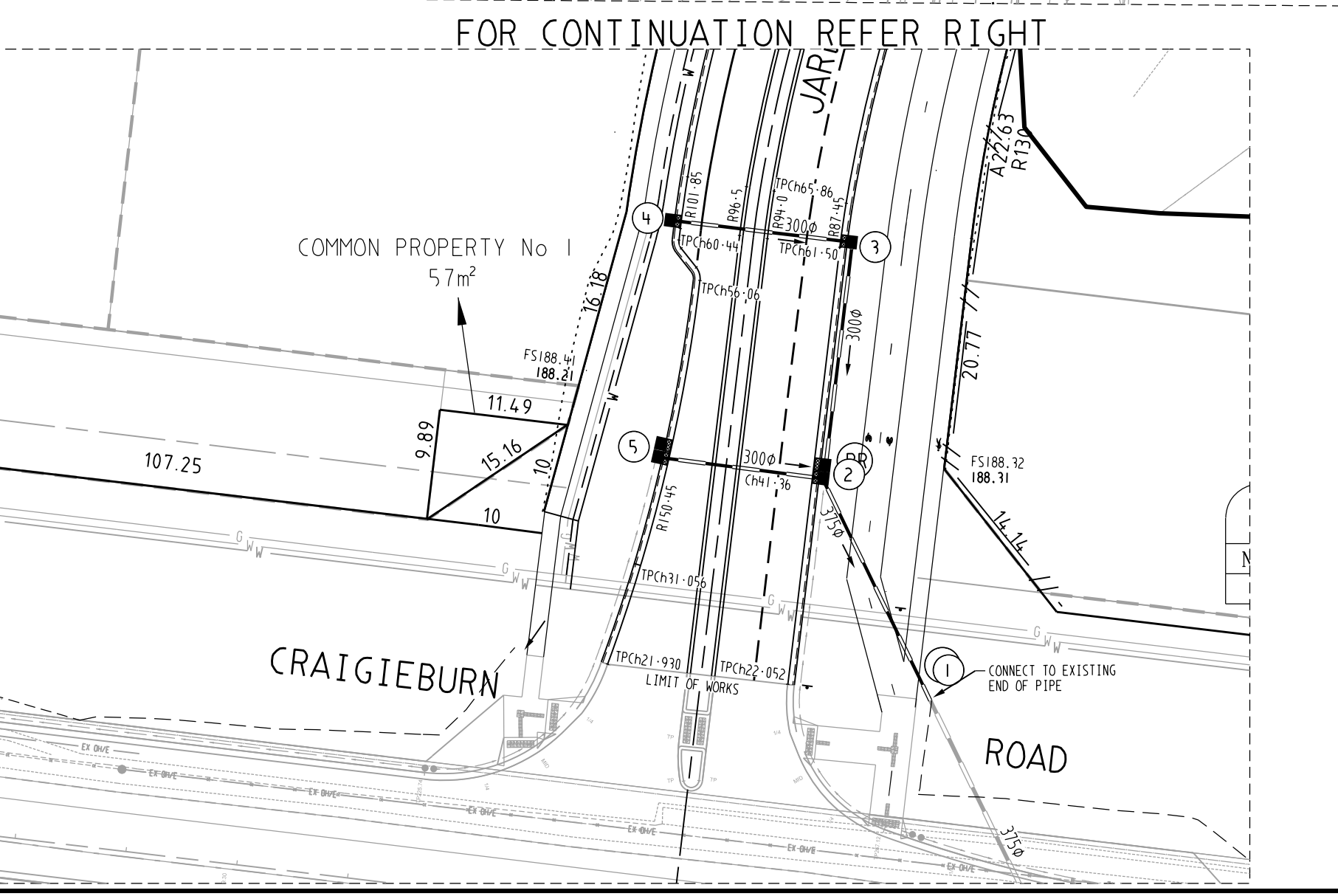
SYMBOL LEGEND

Drains	Prop	Exist	Ex/Natural/FS Level
Sewer <300	—	—	FS @ Building Line
Sewer >300	—	—	Top/Toe of Batter
Water	—	—	Top Ret. Wall Level
House Drain	—	—	100yr Flood Level
Property Inlet	—	—	Fill Prop/Ex
Street Sign	—	—	Cut Prop/Ex
PSM	—	—	
Retaining Wall	—	—	
Conduits 50mm	—	—	
Conduits 100mm	—	—	
Ex Gas/Elect/Tel	—	—	



STREET	NAME	Rd.RESERVE	WATER		GAS	ELECTRICITY		FIBRE TO THE HOME		Bk. of KERB	JOINT TRENCHING	STREET CLASSIFICATION
			DW	NDW		CABLES	POLES	FTTH CABLES	FTTH PITS			
JARDIN ROAD		29.00	3.20 W	2.70 W	2.25 W	2.70 E	0.90 BOK	1.85 E	1.78 E/W	4.35 W 8.75 E	G & W, FTTH & E	CONNECTOR ROAD
BRIGHTON AVENUE		20.00	5.30 S	4.800 S	4.30 S	2.60 N	0.90 BOK	1.85 N	1.78 N/S	4.35 N 7.45 S	G & W, FTTH & E	STREET - LEVEL 1
BROAD WAY		16.00	3.20 N	2.70 N	2.25 N	2.30 S	0.90 BOK	1.85 S	1.78 N/S	4.35 N 4.05 S	G & W, FTTH & E	STREET - LEVEL 1
NEWRY STREET		16.00	3.20 N	2.70 N	2.25 N	2.60 S	0.90 BOK	1.85 S	1.78 N/S	4.35 N 4.05 S	G & W, FTTH & E	STREET - LEVEL 1
BANK STREET		16.00	3.20 N	2.70 N	2.25 N	2.60 S	0.90 BOK	1.85 S	1.78 N/S	4.35 N 4.05 S	G & W, FTTH & E	STREET - LEVEL 1

WARNING
CONTRACTOR TO TAKE EXTRA CAUTION OF OPTIC FIBER CABLE IN DAVIS ROAD



breese pitt dixon pty. ltd.

land surveyors

civil engineers

1/19 coto street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

MELWAY REF. 388-C-10

SURVEY SPIIRE

DESIGN SS

DRAWN SS

RATHDOWNE ESTATE

STAGE 1

DETAIL PLAN

MUNICIPALITY WHITTLESEA

REFERENCE 9365 E/1

VER	DATE	REMARKS	CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JAN 17	SHEET 1 OF 19	P5
-----	------	---------	---------	----------------	-----------	-------------	---------------	----

1. ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH PLANS AND CURRENT CITY OF WHITLESEA SPECIFICATIONS AND STANDARD DRAWINGS APPROVED BY COUNCIL AND TO THE SATISFACTION OF THE ENGINEER. PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION:
 - a) SOURCES OF QUARRY MATERIAL
 - b) N.A.T.A. APPROVED TEST RESULTS FOR THE F.C.R. THAT IS TO BE USED.
 - c) IF THE SOURCE THE QUARRY MATERIAL IS CHANGED DURING THE COURSE OF THE WORKS, THEN NEW TEST RESULTS SHALL BE PROVIDED.
2. COUNCIL TO BE NOTIFIED 2 CLEAR DAYS PRIOR TO COMMENCEMENT OF WORKS.
3. ALL DIMENSIONS ARE IN METERS UNLESS NOTED OTHERWISE
4. ALL LEVELS ARE TO BE AUSTRALIAN HEIGHT DATUM (AHD)
5. DRAINAGE AND PITS TO BE SET OUT FROM OFFSETS SHOWN RATHER THAN FROM CENTRELINE PIPE CHAINAGES.
6. ALL PIPES TO BE CLASS 2 UNLESS OTHERWISE SPECIFIED AND SHALL BE RRJ UP TO AND INCLUDING 750mm DIAMETER. ALL DRAINS THAT CROSS UNDER ROAD PAVEMENTS ARE TO BE RRJ CLASS 2 R.C.P.
7. JOINTING FOR CURVED PIPE ALIGNMENT SHALL CONFORM TO MANUFACTURER'S SPECIFICATIONS (RRJ'S FOR MINOR DEFLECTIONS OR COMPLETE R.C. BANDAGES)
8. PROPERTY INLETS ARE TO BE PLACED 1.0m FROM THE LOW CORNER OF LOT UNLESS OTHERWISE SHOWN.
9. LOTS DENOTED THUS 416H ARE TO BE PROVIDED WITH A 100mm HOUSE DRAIN PLACED 7.00m FROM THE LOW CORNER OF THE LOT UNLESS OTHERWISE SHOWN. HOUSE DRAINS TO BE CONNECTED TO STREET DRAINAGE WITH 27A & CAP. CLEAR OF ANY PAVING. IF CONNECTION IS WITHIN PAVING A PIT MUST BE USED.
10. APPROVED GRANULAR BACKFILL TO BE PROVIDED WHERE PIPE TRENCHES ENCR OACH UNDER ROADWAY DUE TO DEEP EXCAVATIONS IN ROCK.
11. SHALLOW CUT OFF DRAINS ARE TO BE PROVIDED ON SUBDIVISION BOUNDARY WHERE NECESSARY.
12. WHERE CONCRETE PAVING CROSSES SERVICE TRENCHES, SEWERAGE AND DRAINAGE, TRENCHES SHALL BE BACKFILL WITH COMPACTED FINE CRUSH ROCK.
13. ALL CROSSEOVERS MUST BE 0.75m FROM THE DRAINAGE PITS AND PRAM CROSSINGS. IN ADDITION, THE PRAM CROSSING MUST BE 2m FROM THE DRAINAGE PITS.
14. PRIOR TO COMMENCEMENT OF WORKS ON SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004, INCLUDING ALL RELEVANT REGULATIONS, HAVE BEEN ADDRESSED. IN PARTICULAR, THE REQUIRED NOTIFICATIONS MUST BE CONVEYED TO THE VICTORIAN WORKCOVER AUTHORITY - HEALTH & SAFETY DIVISION WITH RESPECT TO TRENCHING OPERATIONS. DETAILS OF THE CONTRACTORS OCCUPATIONAL HEALTH & SAFETY PROCEDURES MUST BE LODGED WITH THE SUPERINTENDENT PRIOR TO COMMENCEMENT OF WORKS.
15. AGRICULTURAL PIPE DRAINS 100mm PVC CLASS 4 TO BE PLACED BEHIND ALL KERB AND CHANNEL AND BUFFER PITCHERS AND WHERE DIRECTED BY THE ENGINEER (REFER TO COUNCIL STANDARD DRAWINGS), WHERE KERB AND CHANNEL IS LOCATED ON TITLE BOUNDARY AG'S ARE TO BE PLACED BENEATH KERB AND 750mm BELOW TOP OF KERB.
16. ALL DRAINS BEHIND KERB AND CHANNEL SHALL BE BACKFILLED TO MATCH PAVEMENT SUBGRADE LEVEL WITH 20mm CLASS 2 F.C.R. COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE MODIFIED COMPACTION TEST IN ACCORDANCE WITH A.S. 1289.5.2.1-2003. EXCEPT WHERE DRAINS UP TO AND INCLUDING 450mm DIA. PIPES ARE LOCATED BEHIND KERB, THESE TRENCHES ARE TO BE BACKFILLED WITH SCREENINGS IN LIEU OF AG'S.
17. AGRICULTURAL DRAINS ARE TO BE 760mm BELOW TOP OF KERB.
18. BATTERS SHALL BE 1 IN 6 FOR CUT & FILL UNLESS OTHERWISE SHOWN.
19. ALL NATIVE TREES AND SHRUBS TO BE RETAINED UNLESS ROAD CONSTRUCTION NECESSITATES THEIR REMOVAL OR REMOVAL IS DIRECTED BY THE ENGINEER.
20. LOTS TO BE GRADED AND LEFT CLEAN TO THE SATISFACTION OF THE ENGINEER.
21. ON COMPLETION THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF RUBBISH AND SPOIL FROM SITE.
22. WHERE WORKS ARE IN THE VICINITY OF EXISTING SERVICES, THESE SERVICES ARE TO BE LOCATED AND THE VARIOUS AUTHORITIES NOTIFIED PRIOR TO COMMENCEMENT OF WORKS.
23. ALL MATERIAL SURROUNDING SERVICE AUTHORITY PITS LOCATED IN FOOTPATHS MUST BE ADEQUATELY COMPACTED IN 150mm LAYERS AND TESTED TO THE SATISFACTION OF THE CITY OF WHITLESEA, PRIOR TO THE CONSTRUCTION OF FOOTPATH BAYS ADJACENT TO THESE PITS.
24. THE WATER CONDUIT OFFSET FROM THE LOT BOUNDARY IS GIVEN ON THE WATER RETICULATION PLAN. THE CONTRACTOR MUST CONSTRUCT CONDUITS TO ACCORD WITH THE GIVEN OFFSET AND ENSURE THAT THE CONCRETE MARKS THE KERB AND FOOTPATH EXACTLY ABOVE THE CONDUIT.
25. ALL GAS AND WATER CONDUIT TYPES ARE PVC CLASS 12 WITH A 50mm DIAMETER FOR RESIDENTIAL LOTS.
26. TELSTRA/NBN Co TO BE NOTIFIED 7 DAYS PRIOR TO CONCRETE BEING PLACED.
27. CONDUITS ARE TO BE EXTENDED 450mm BEHIND FACE OF KERB AND TO BE REFERENCED ON FACE OF KERB.
28. ALL STREET SIGNS TO BE CONSTRUCTED AND ERECTED TO CURRENT CITY OF WHITLESEA STANDARDS. STREET NAME PLATES TO BE IN ACCORDANCE WITH STANDARD DRAWING SDB12, INCLUDING "NO THROUGH ROAD" NOMINATION WHERE APPLICABLE.
29. TRAFFIC CONTROL SIGNS, MARKINGS & DELINEATORS TO BE INSTALLED IN ACCORDANCE WITH AS1742.2. ALL LINE MARKING IS TO BE LONG LIFE ROAD MARKING, WITH LONGITUDINAL LINES IN THERMOPLASTIC & TRANSVERSE MARKINGS IN COLD APPLIED.
30. ALL DRIVEWAYS TO BE OFFSET 0.75m FROM SIDE BOUNDARY OR EASEMENT (REFER EDM501) UNLESS OTHERWISE SHOWN.
31. ALL DRIVEWAY RAMPS INTO PROPERTIES ARE TO BE CUT IN AT A MAXIMUM GRADE OF 1 IN 6.
32. FILL AREAS ARE TO BE STRIPPED OF TOPSOIL, FILLED AND TOPSOIL REPLACED TO OBTAIN FINAL FILL LEVELS AS SHOWN ON PLANS. FILLING TO BE CLEAN CLAY COMPACTED TO A DRY DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE STANDARD COMPACTION TEST IN ACCORDANCE WITH AUSTRALIAN STANDARD AS1289.5.2.1-1993. TESTING TO COMPLY WITH AS3798-1996 APPENDIX B, LEVEL 1.
33. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL IMPORTED FILL MATERIAL, INCLUDING TOPSOIL, SATISFIES THE DESCRIPTION FOR CLEAN FILL MATERIAL IN EPA BULLETIN PUBLICATION No. 448 (SEPT '95) AND SUBSEQUENT REVISIONS. THE CONTRACTOR SHALL PROVIDE VERIFICATION INCLUDING TEST CERTIFICATES TO THE SUPERVISING ENGINEER.
34. FILL REQUIRED UNDER ROADWAY KERB AND CHANNEL AND FOOTPATH TO BE APPROVED GRANULAR MATERIAL COMPACTED TO 95% AASHTO IN 150mm LAYERS.

- PAVEMENT TO CONSIST OF: JARDIN ROAD
(40mm DEPTH)

 - 40mm COMPACTED DEPTH SIZE 14 TYPE H ASPHALT WITH A C320 BINDER (ASPHALT TO BE 5mm PROUD OF LIP OF KERB)
 - 75mm COMPACTED DEPTH SIZE 20 TYPE S1 ASPHALT WITH A C320 BINDER
 - 75mm COMPACTED DEPTH SIZE 20 TYPE SF ASPHALT WITH A C320 BINDER
 - BITUMINOUS PRIME
 - 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 2 CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
 - 250mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM SOAKED CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSITY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%

Refer to "Technical Specification for Roads and Drainage Works"
Section 20.35 & Table 20.35 for requirements

SAMI TREATMENT (STRAIN ALLEVIATING MEMBRANE INTERLAYER) CONSISTING SIZE 10 SPRAYED SEAL USING CLASS S18RF BITUMEN CRUMB RUBBER BINDER PLACED AT AN APPLICATION RATE $\geq 1.8 \text{ l/m}^2$ AND COVERED WITH A LIGHT APPLICATION OF PRE-COATED SIZE 10 AGGREGATE.

PAVEMENT TO CONSIST OF: ROUNDABOUT
(570mm DEPTH)

 - 40mm COMPACTED DEPTH SIZE 14 TYPE V ASPHALT WITH A C320 BINDER (ASPHALT TO BE 5mm PROUD OF LIP OF KERB)
 - 75mm COMPACTED DEPTH SIZE 20 TYPE S1 ASPHALT WITH A C320 BINDER
 - 75mm COMPACTED DEPTH SIZE 20 TYPE SF ASPHALT WITH A C320 BINDER
 - BITUMINOUS PRIME
 - 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 2 CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
 - 280mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM SOAKED CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSITY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
 - SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR $\geq 2.0\%$) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR* OR APPROVED EQUIVALENT MATERIAL.

PAVEMENT TO CONSIST OF: INTERSECTIONS JARDIN ROAD/ CRAIGIEBURN ROAD (80m TOWARDS JARDIN ROAD FROM LEFT TURN LANE OF CRAIGIEBURN RD).
(860mm DEPTH)

 - 40mm COMPACTED DEPTH SIZE 14 TYPE V ASPHALT WITH A C320 BINDER (ASPHALT TO BE 5mm PROUD OF LIP OF KERB)
 - 75mm COMPACTED DEPTH SIZE 20 TYPE S1 ASPHALT WITH A C320 BINDER
 - 75mm COMPACTED DEPTH SIZE 20 TYPE SF ASPHALT WITH A C320 BINDER
 - BITUMINOUS PRIME
 - 180mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
 - 140mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 4 CR, COMPACTED TO AT LEAST 95% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT
 - 350mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM SOAKED CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSITY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
 - SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR $\geq 2.0\%$) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR* OR APPROVED EQUIVALENT MATERIAL.

PAVEMENT TO CONSIST OF: BRIGHTON AVENUE, BROAD WAY, BANK STREET AND HALO LANE
(580mm DEPTH)

 - 30mm COMPACTED DEPTH SIZE 10 TYPE N ASPHALT WITH A C170 BINDER
 - 30mm COMPACTED DEPTH SIZE 10 TYPE N ASPHALT WITH A C170 BINDER
 - SAMI SEAL WITH CLASS S18RF BINDER AND BITUMINOUS PRIME
 - BITUMINOUS PRIME
 - 130mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 2 FCR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
 - 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
 - 140mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 4 FCR, COMPACTED TO AT LEAST 95% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
 - 150mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSITY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
 - SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR $\geq 2.5\%$) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR* OR APPROVED EQUIVALENT MATERIAL.

PAVEMENT TO CONSIST OF: NEWRY STREET
(540mm DEPTH)

 - 30mm COMPACTED DEPTH SIZE 10 TYPE N ASPHALT WITH A C170 BINDER
 - 30mm COMPACTED DEPTH SIZE 10 TYPE N ASPHALT WITH A C170 BINDER
 - SAMI SEAL WITH CLASS S18RF BINDER AND BITUMINOUS PRIME
 - BITUMINOUS PRIME
 - 130mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 2 FCR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
 - 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 3 CEMENT MODIFIED CR, COMPACTED TO AT LEAST 98% MODIFIED DRY DENSITY RATIO WITHIN 2% OF THE MODIFIED OPTIMUM MOISTURE CONTENT WITH A MINIMUM YOUNG'S MODULUS OF 500MPa AND A MAXIMUM YOUNG'S MODULUS OF 1500MPa.
 - 100mm COMPACTED DEPTH OF 20mm NOMINAL SIZE CLASS 4 FCR, COMPACTED TO AT LEAST 95% MODIFIED DRY DENSITY RATIO WITHIN 1% OF THE MODIFIED OPTIMUM MOISTURE CONTENT.
 - 150mm COMPACTED DEPTH OF SELECT GRANULAR MATERIAL "TYPE A" WITH A MINIMUM CBR OF 10% COMPACTED TO 98% STANDARD DRY DENSITY RATIO WITHIN 1% OF THE STANDARD OPTIMUM MOISTURE CONTENT AND A PERCENTAGE SWELL OF LESS THAN 1.5%
 - SUBGRADE TO CONSIST OF SILTY CLAY COMPACTED TO AT LEAST 100% STANDARD DRY DENSITY RATIO (SOAKED CBR $\geq 2.5\%$) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT. SUBGRADE IMPROVEMENT FOR SOFT OR ROCK AREAS, TO BE 150mm MINIMUM DEPTH OF COMPACTED CLASS 3 FCR* OR APPROVED EQUIVALENT MATERIAL.

PAVEMENT TO CONSIST OF: MEMENTO LANE AND SUMMERS LANE

 - 200mm CONCRETE PAVEMENT REINFORCED SL82 32MPa
 - 150mm SUBBASE CLASS 3 CRUSHED ROCK

TOTAL PAVEMENT DEPTH 350mm.

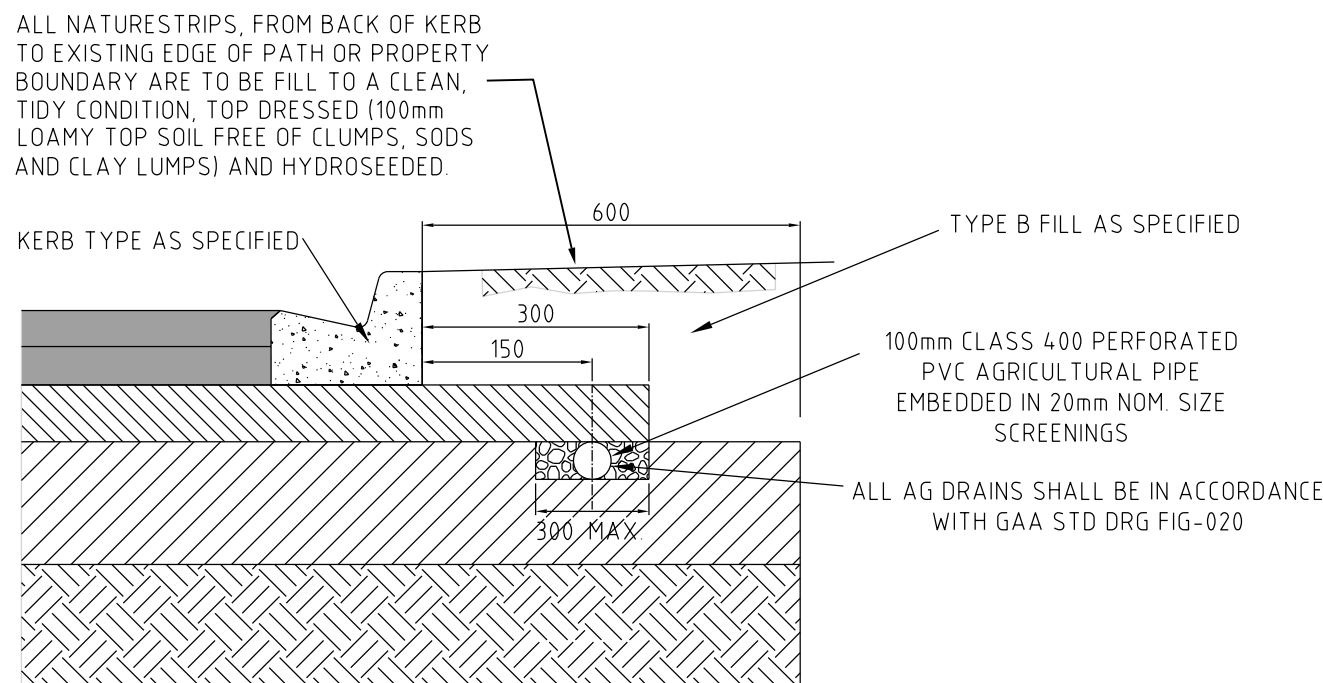
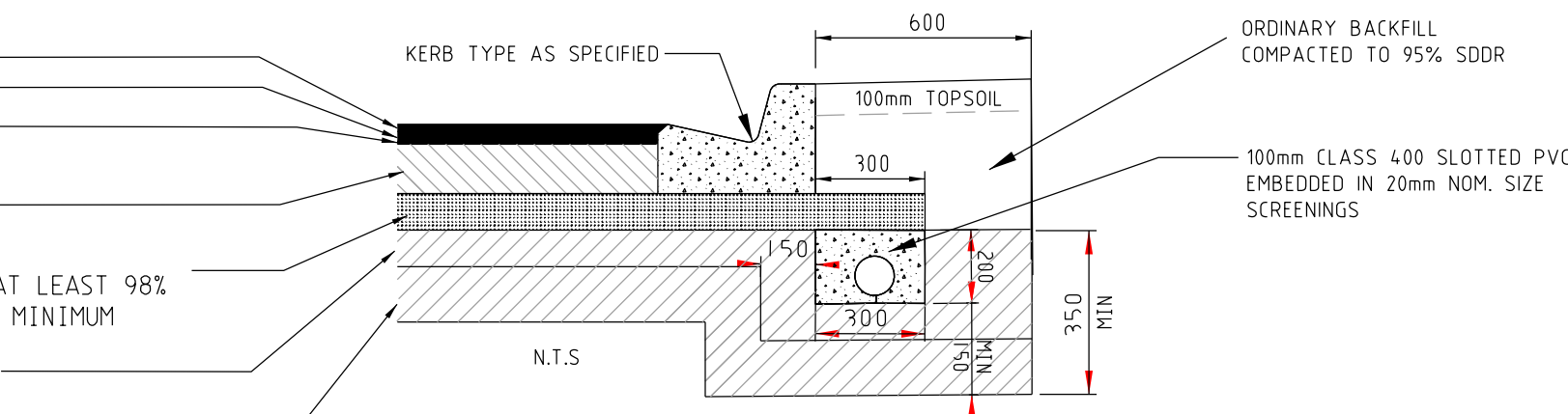
76. PAVEMENT DEPTH MAY BE MODIFIED AS DIRECTED BY THE ENGINEER.

77. ALL 125mm THICK FOOTPATH CONCRETE PAVING TO BE REINFORCED WITH SL72 MESH AND MUST BE CONSTRUCTED WITH A 50mm UNDERLAYER OF 20mm COMPACTED CLASS 3 FCR IN ACCORDANCE WITH EDMC STANDARD DRAWING 401.

78. THE CONTRACTOR IS TO ORGANISE AND PAY FOR TESTING OF PAVEMENT BASE COURSE MATERIAL AND FINAL LAYER OF CRUSHED ROCK. A COPY OF RESULTS IS TO BE FORWARDED TO THE DIRECTOR OF ENGINEERING OR HIS REPRESENTATIVE. THE RESULTS MUST MEET THE REQUIREMENTS OF THE CITY OF WHITTESEA SPECIFICATION BEFORE ANY FURTHER WORKS ARE REQUIRED.

79. THE CONTRACTOR MUST COMPLETE A LEVEL CHECK BETWEEN ALL TBM'S TO VERIFY LEVEL VALUES BEFORE COMMENCEMENT OF WORKS. ALL TBM's AND CONTROL POINTS ARE TO BE MAINTAINED AND PROTECTED AT ALL TIMES DURING CONSTRUCTION. SHOULD ANY MARKS BE DISTURBED, THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE DEVELOPER'S CONSULTANT TO ARRANGE RE-INSTALLMENT AT THE CONTRACTORS EXPENSE.

PAVEMENT DETAILS
MEMENTO LANE AND
SUMMERS LANE



PAVEMENT COMPOSITION

NOT TO SCALE

CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

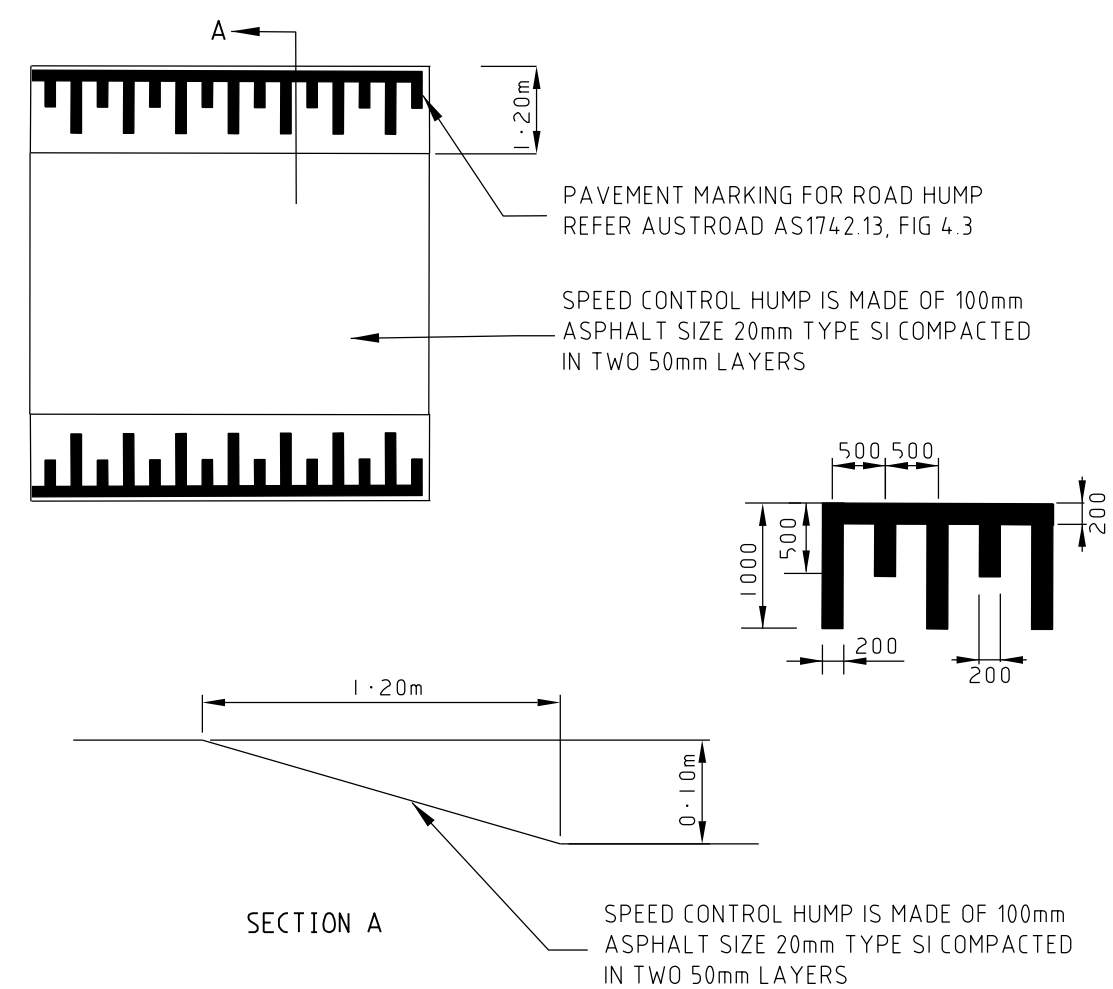
PLAN OF SUBDIVISION No. PS803931Y/S1

Joe. G. G. G.
DEVELOPMENT ENG

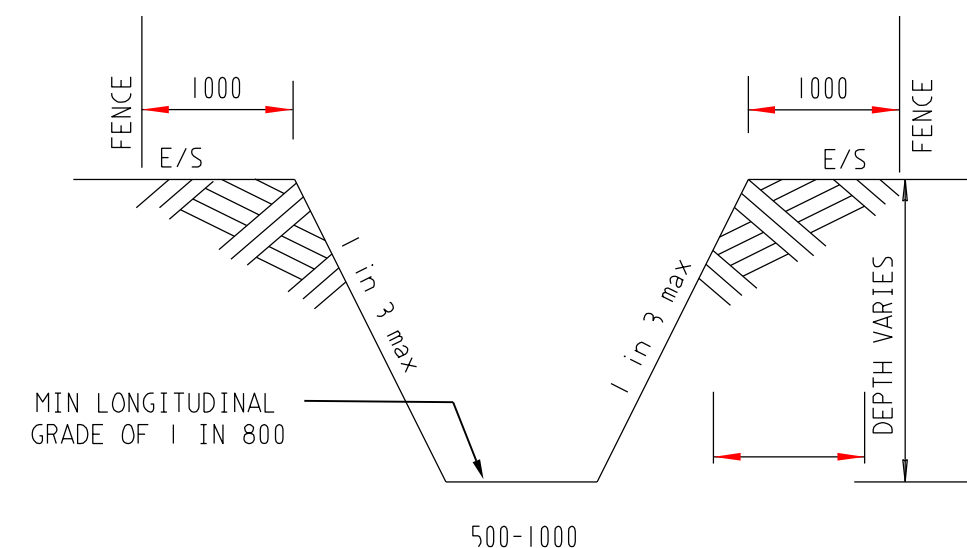
27/11/2017

DATE APPROVED

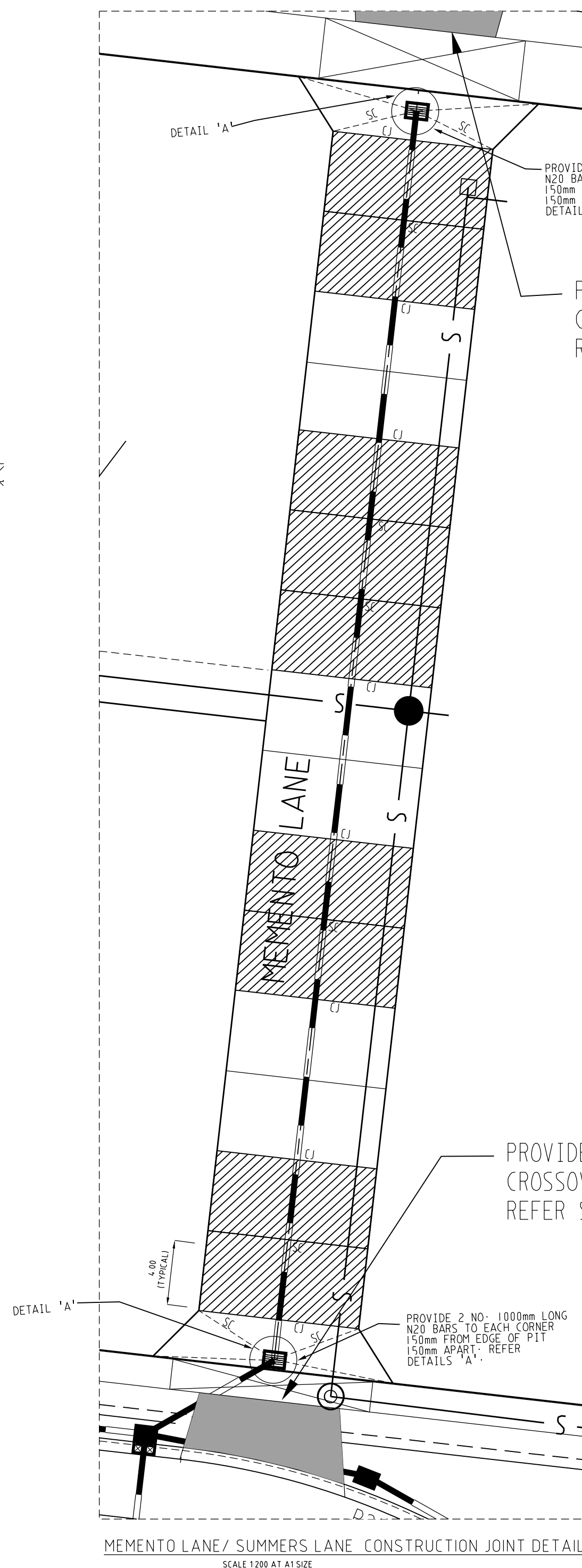
AMENDMENTS					breese pitt dixon Pty. Ltd. land surveyors civil engineers				1/19 coto street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310							
				MELWAY REF.	388-C-10	RATHDOWNE ESTATE STAGE I NOTES AND LOCALITY PLAN				MUNICIPALITY						
			SURVEY	SPIRE	WHITTLESEA											
			DESIGN	SS	REFERENCE											
			DRAWN	SS	9365 E/1											
VER	DATE	REMARKS		CHECKED	SCALE AS SHOWN		DATUM	AHD	DATE	JAN'17		SHEET	2	OF	19	P3



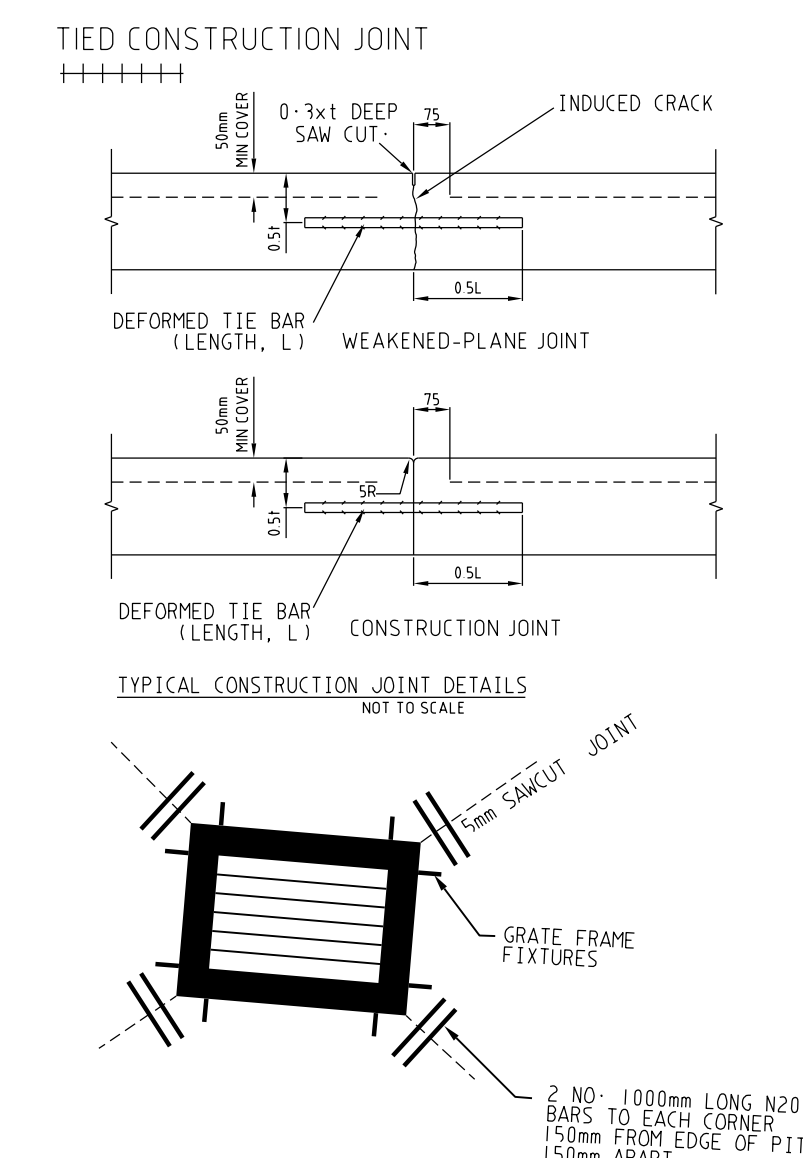
NOTE: ASPHALT TO BE COMPACTED IN LAYERS NOT MORE THAN 50mm



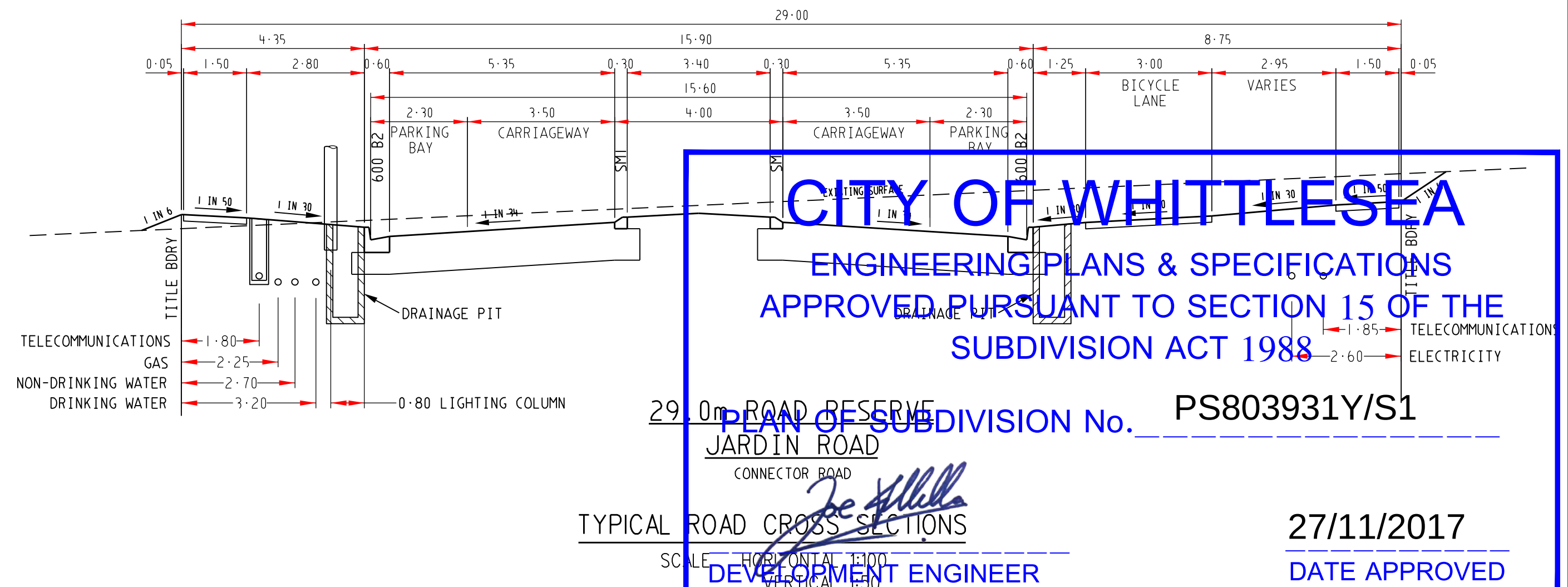
TYPICAL PARKING BAY SETOUT
(N.T.S.)



WEAKENED-PLANE JOINT AS SHOWN ON PLAN - MAX SPACING
12m



CONCRETE JOINT DETAILS AROUND GRATED PIT



CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

29.0m ROAD RESERVE
JARDIN ROAD

PLAN OF SUBDIVISION No. PS803931Y/S1

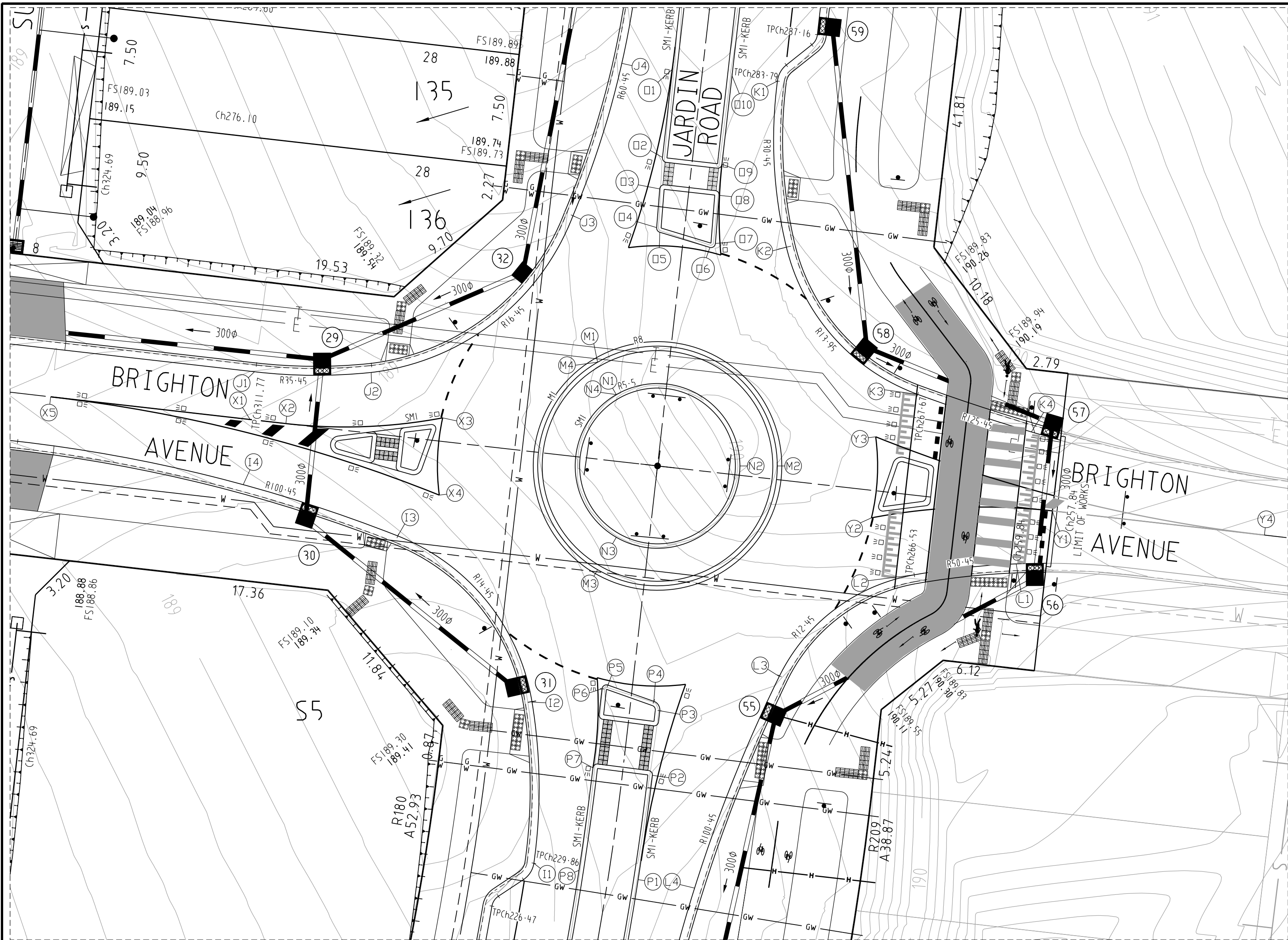
TYPICAL ROAD CROSS SECTIONS

SCALE: HORIZONTAL 1:100
VERTICAL 1:50

27/11/2017

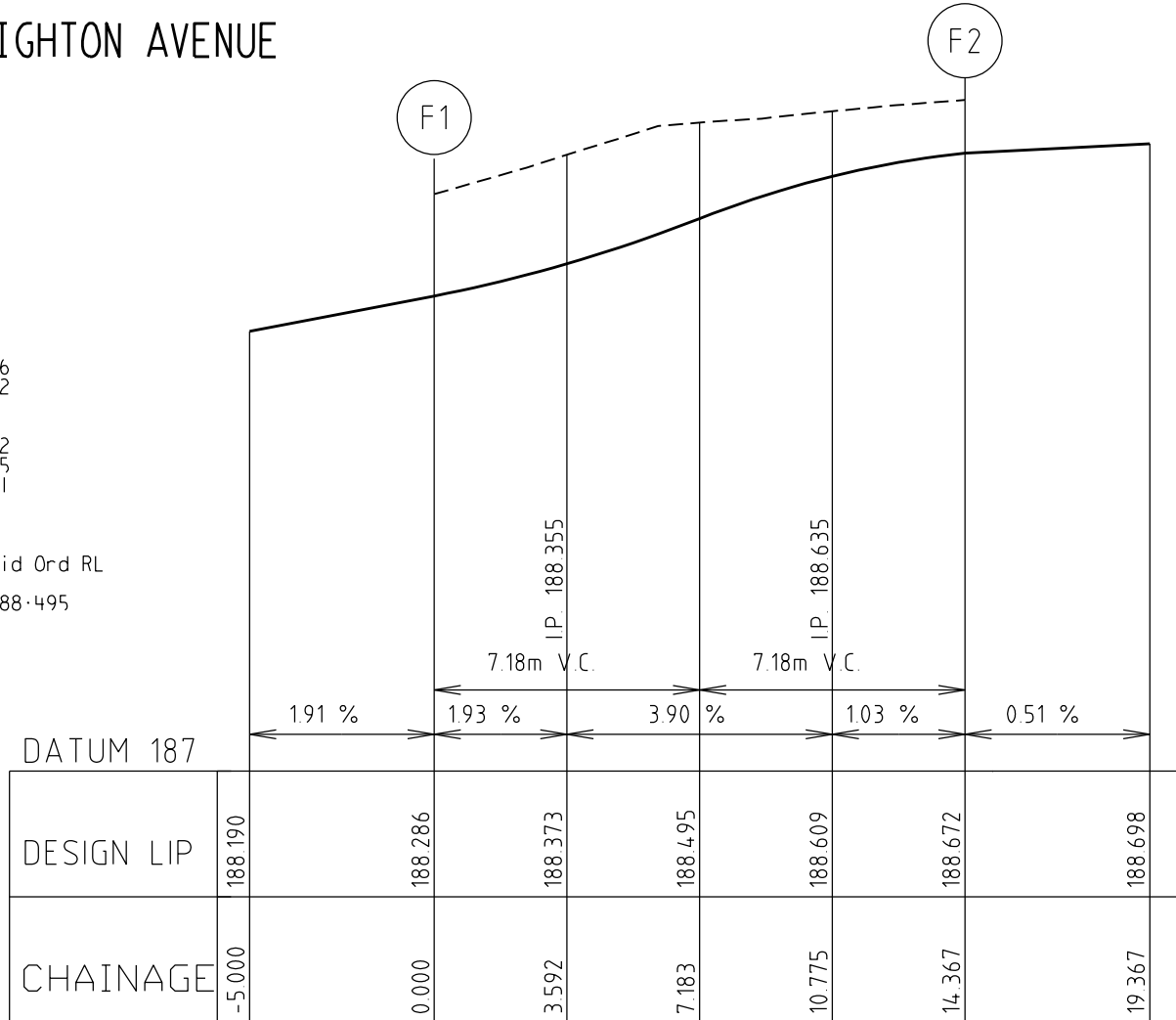
DATE APPROVED

AMENDMENTS					breese pitt dixon pty. ltd. land surveyors			civil engineers			1/19 coto street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310					
				MELWAY REF.	388-C-10		RATHDOWNE ESTATE STAGE 1 NOTES AND LOCALITY PLAN				MUNICIPALITY					
			SURVEY	SPIIRE		WHITTLESEA										
			DESIGN	SS		REFERENCE										
			DRAWN	SS		9365 E/1										
VER.	DATE	REMARKS		CHECKED	SCALE	AS SHOWN	DATUM	AHD	DATE	JAN '17		SHEET	3	OF	19	P3

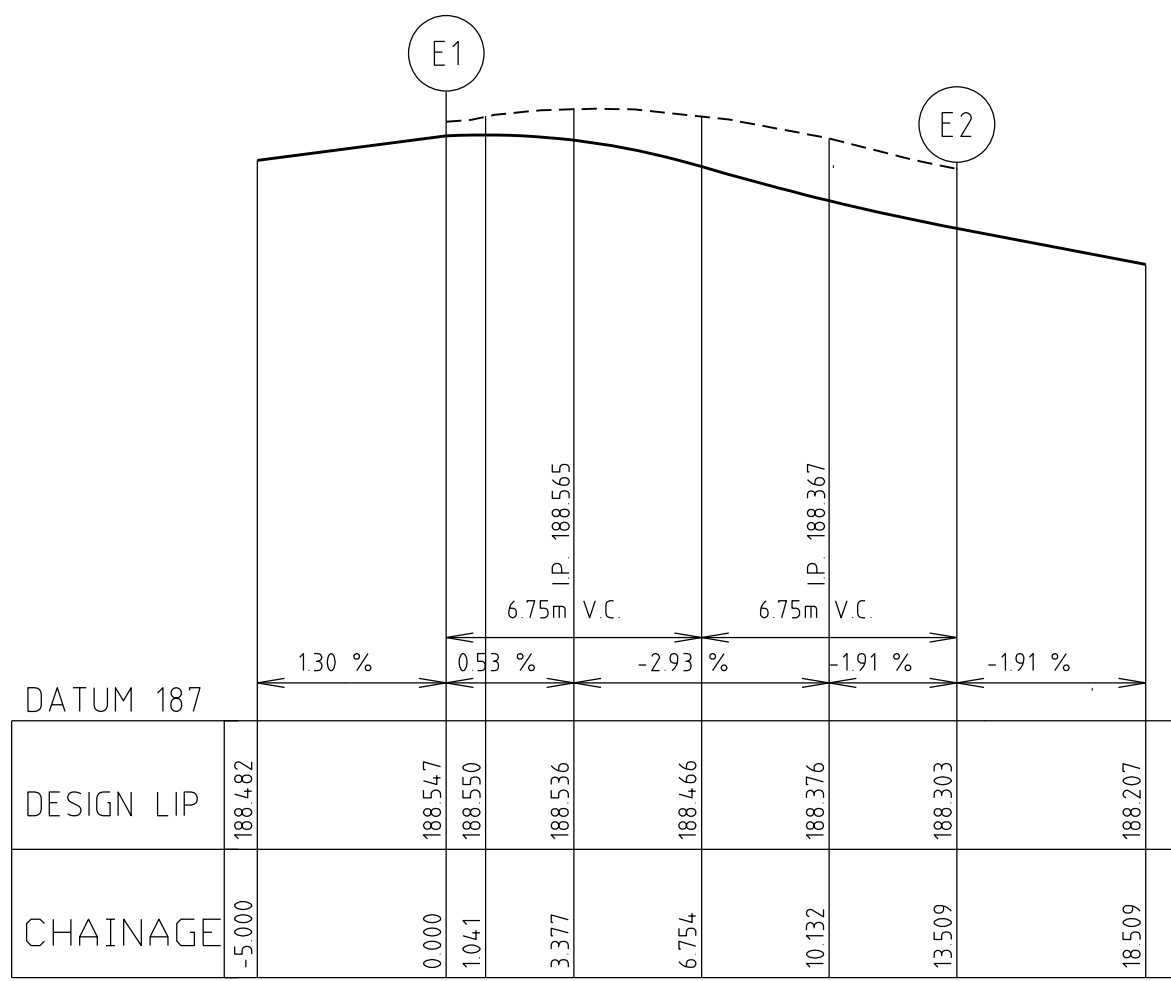


ROUNDABOUT JARDIN ROAD/ BRIGHTON AVENUE

Alignment F					
Point no	Easting	Northing	RL		
1	322317.874	5836338.984	188.286		
2	322330.095	5836342.630	188.672		
3	322321.563	5836337.771	188.382		
4	322324.732	5836338.095	188.495		
5	322327.673	5836339.594	188.601		
Curve data					
Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
F 1 2	-8.600	12.754	2.830	2.217	188.495



Alignment E				
Point no	Easting	Northing	RL	
1	322318.205	5836321.238	188.547	
2	322315.313	5836333.052	188.303	
3	322319.389	5836324.658	188.532	
4	322319.206	5836327.744	188.466	
5	322317.943	5836330.565	188.382	
Curve data				
Curve no	Radius	Chord	Mid Ord	Qtr Ord
E 1 2	-8.600	12.162	2.519	1.963



LIP LINE E

INTERSECTION DETAILS

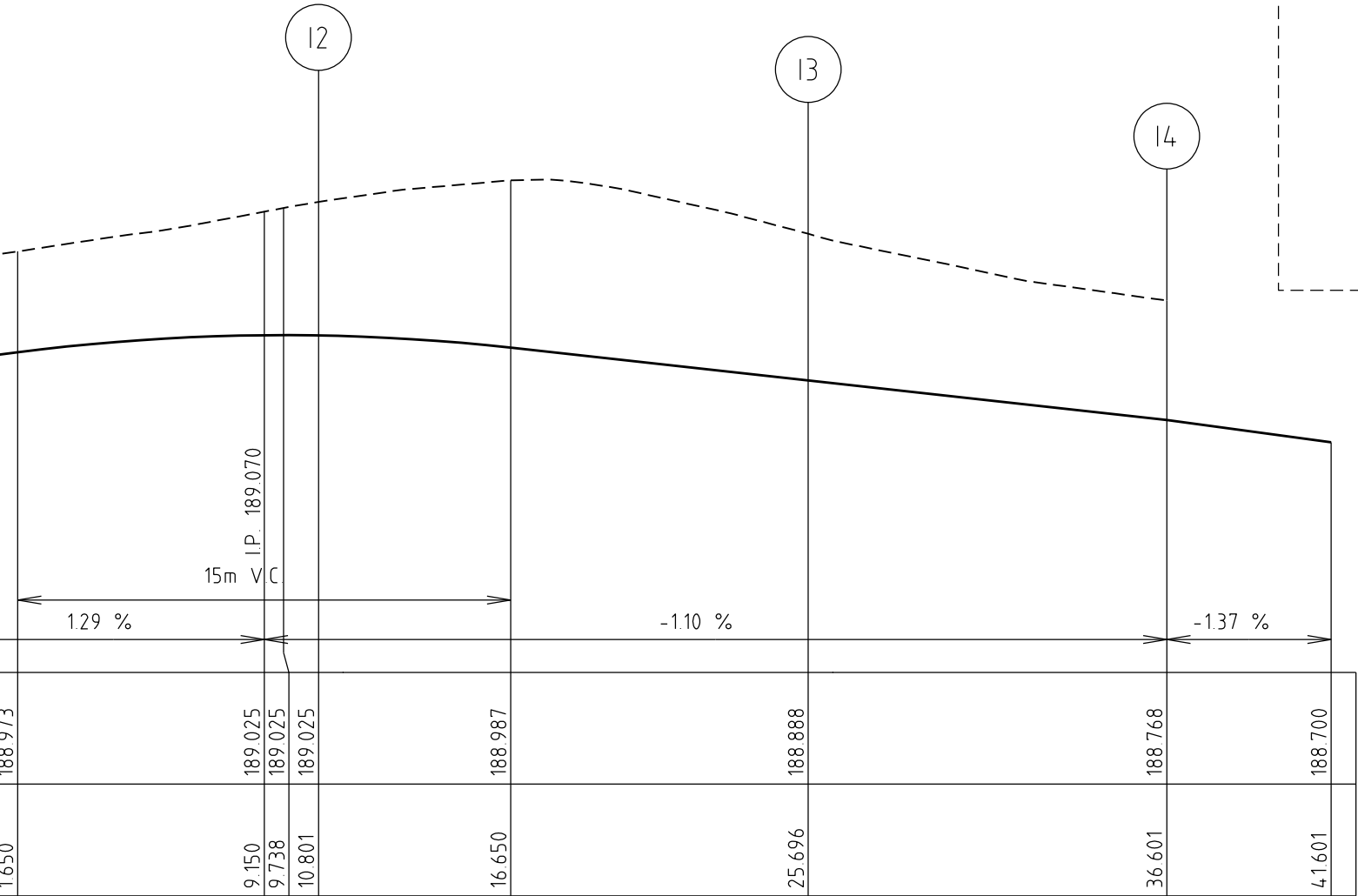
SCALE 1:200

SCALE 1 : 200

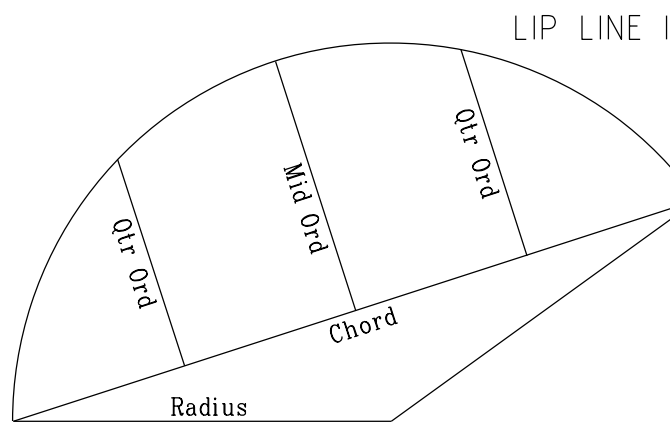
LIP OF KERB PROFILES

SCALE: HORIZONTAL 1:200

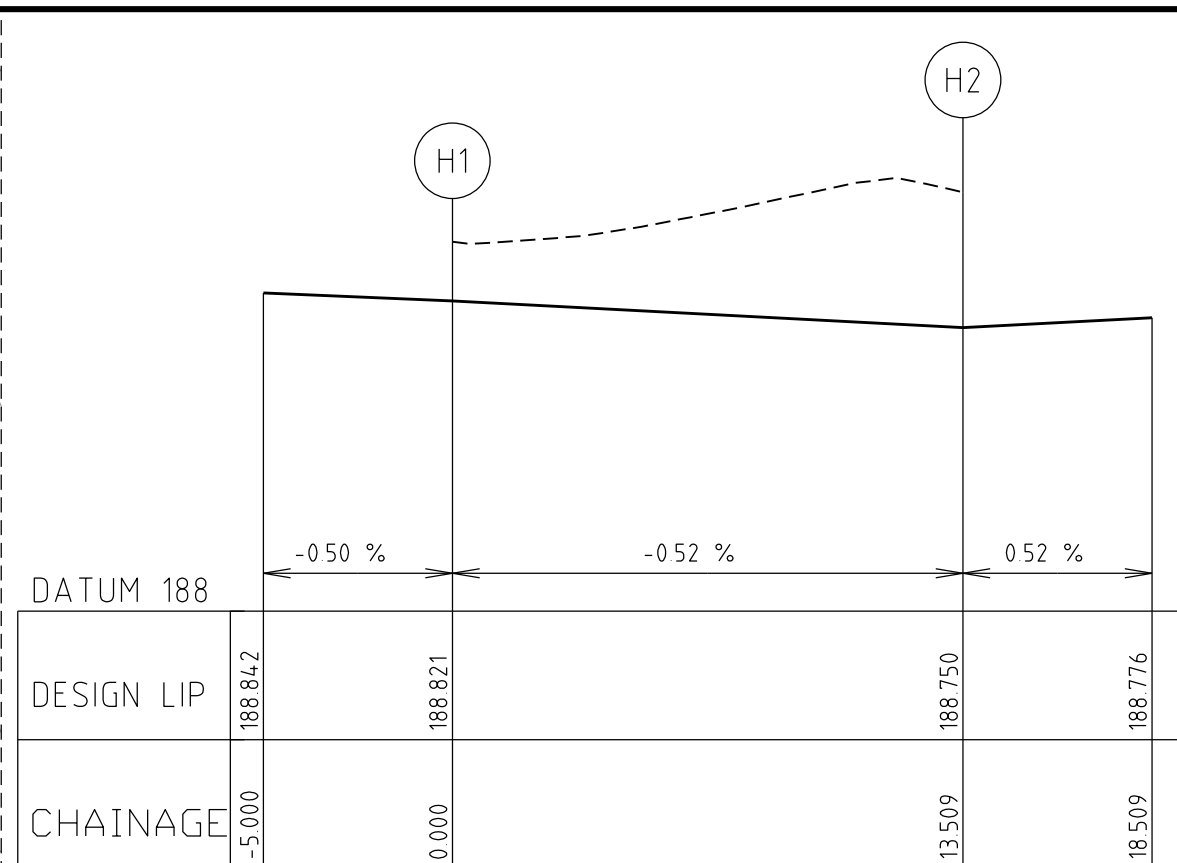
VERTICAL 1:20



LIP LINE I



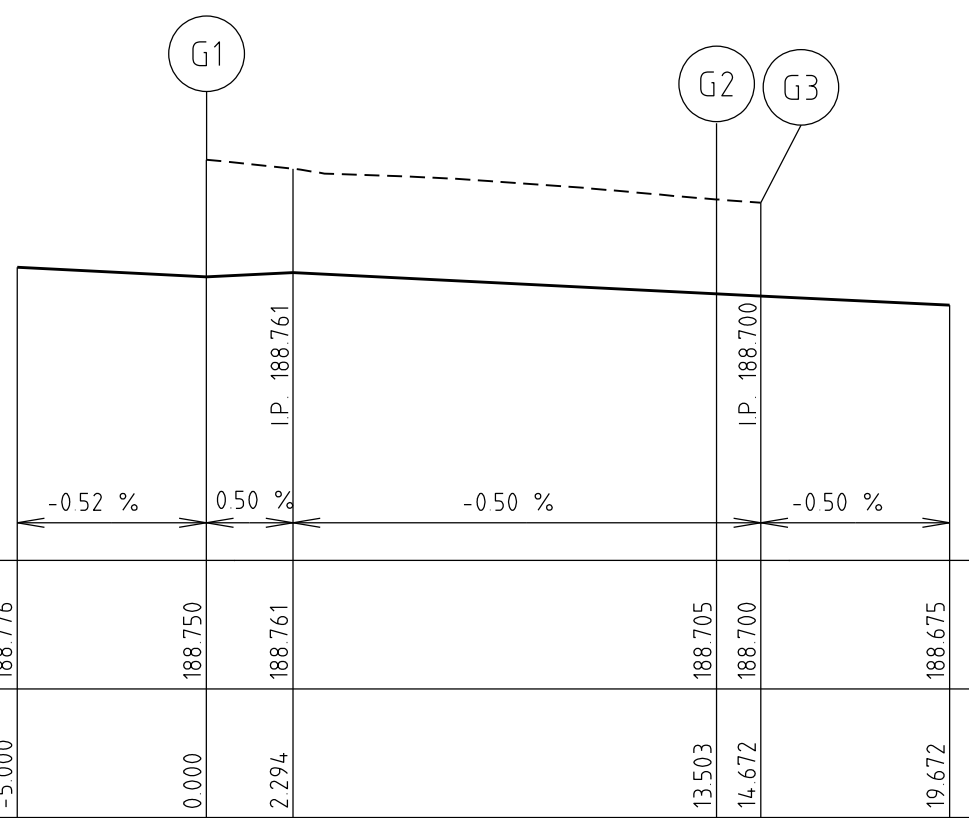
CURVE SETOUT DIAGRAM



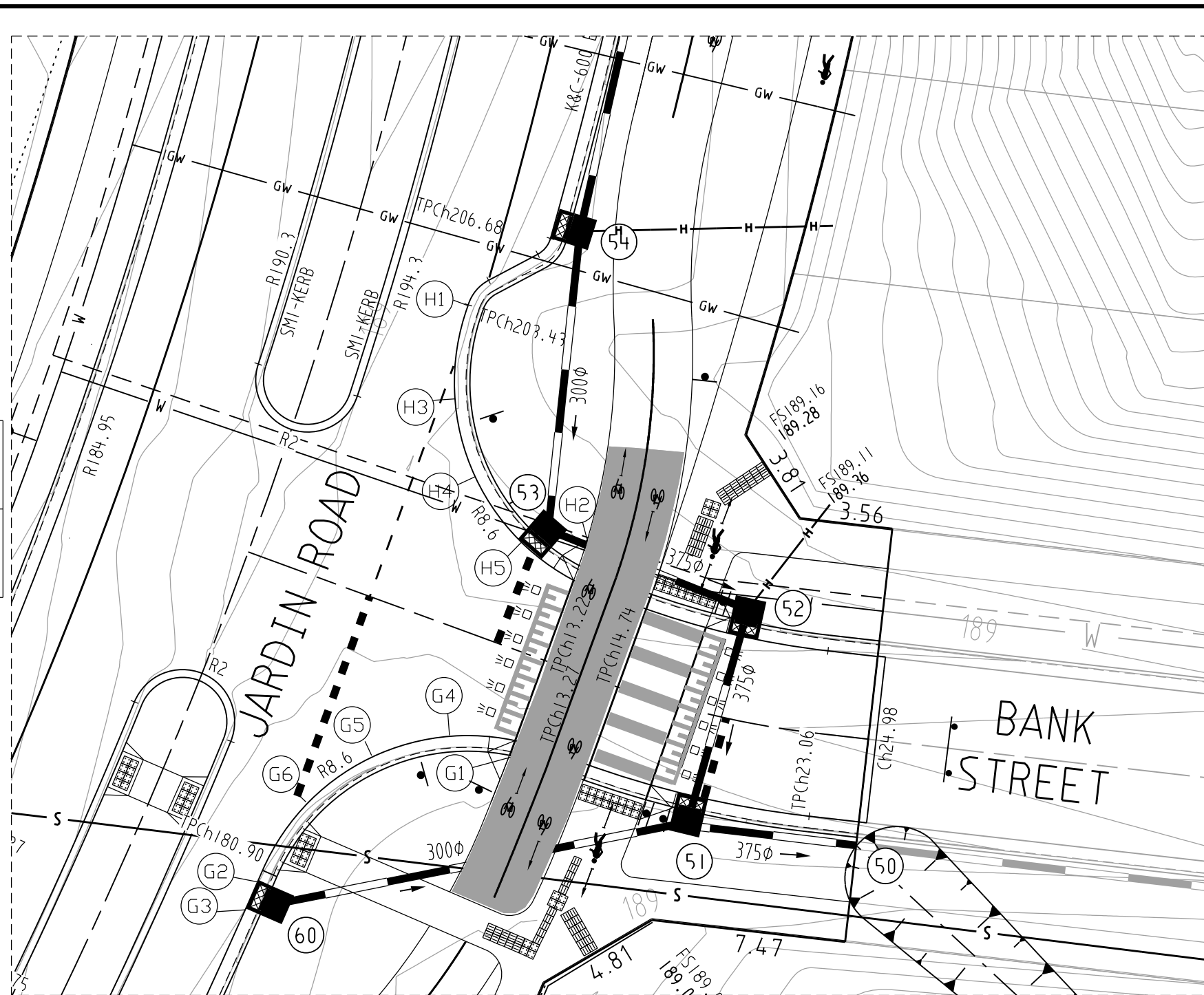
LIP LINE H

Alignment H				
Point no	Easting	Northing	RL	
1	322350.142	5836366.670	188.821	
2	322355.259	5836355.637	188.750	
3	322349.640	5836363.086	188.802	
4	322350.415	5836360.094	188.786	
5	322352.199	5836357.569	188.769	
Curve data				
Curve no	Radius	Chord	Mid Ord	Qtr Ord
H 1 2	-8.600	12.162	2.519	1.963

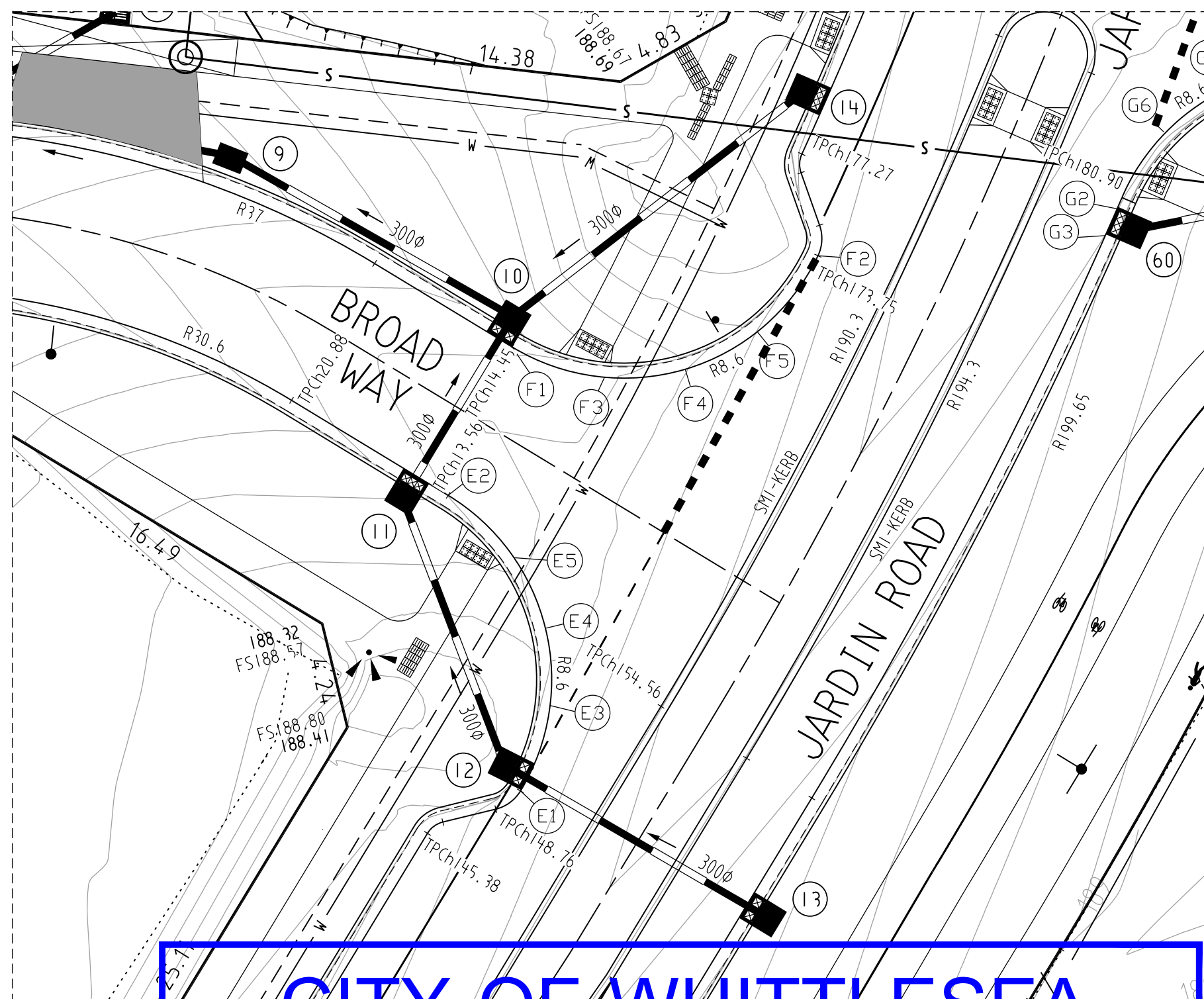
Alignment G				
Point no	Easting	Northing	RL	
1	322353.013	5836349.644	188.750	
2	322341.584	5836344.524	188.705	
3	322341.582	5836343.435	188.700	
4	322349.424	5836350.148	188.755	
5	322346.436	5836349.373	188.730	
6	322343.914	5836347.592	188.724	
Curve data				
Curve no	Radius	Chord	Mid Ord	Qtr Ord
G 1 2	-8.590	12.149	2.516	1.962



LIP LINE G



INTERSECTION JARDIN ROAD AND BANK STREET



CITY OF WHITTLESEA

INTERSECTION JARDIN ROAD AND BROAD WAY

ENGINEERING PLANS & SPECIFICATIONS

APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S1

DEVELOPMENT ENGINEER

DATE APPROVED

27/11/2017

DATE APPROVED



breese pitt dixon pty. ltd.
land surveyors civil engineers

1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

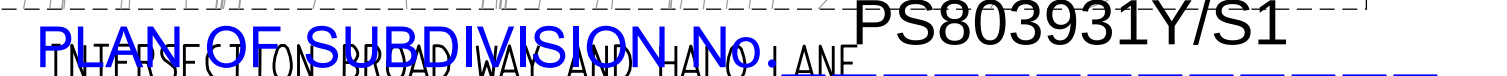
RATHDOWNE ESTATE
STAGE I
INTERSECTION DETAILS

MUNICIPALITY
WHITTLESEA
REFERENCE
9365 E/1

MELWAY REF. 388-C-10
SURVEY SPIIRE
DESIGN SS
DRAWN SS

CHECKED

SCALE AS SHOWN DATUM AHD DATE JAN '17 SHEET 4 OF 19



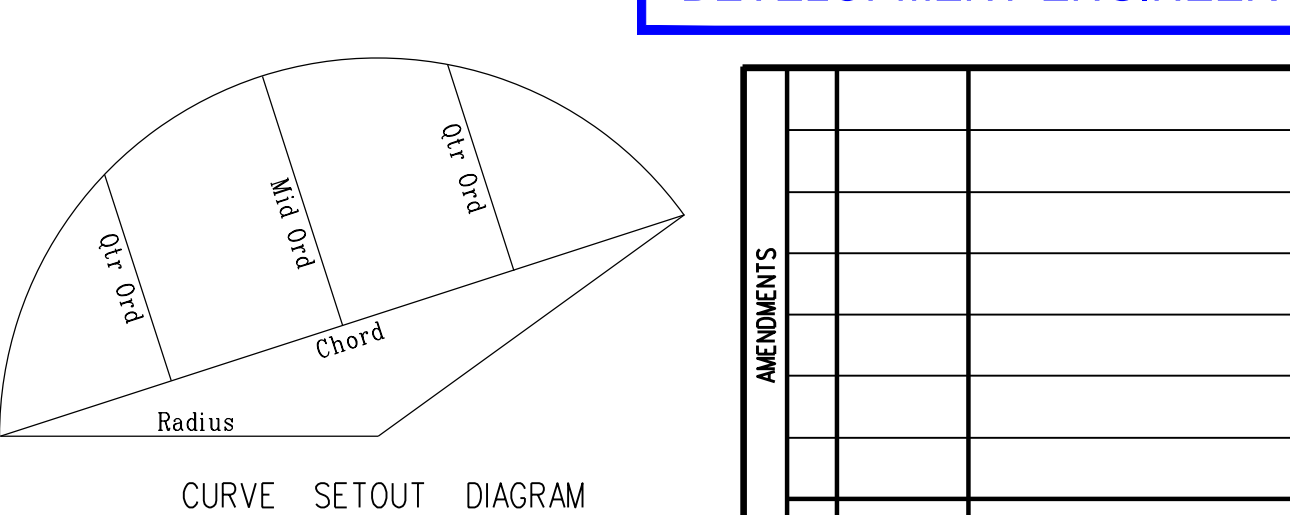
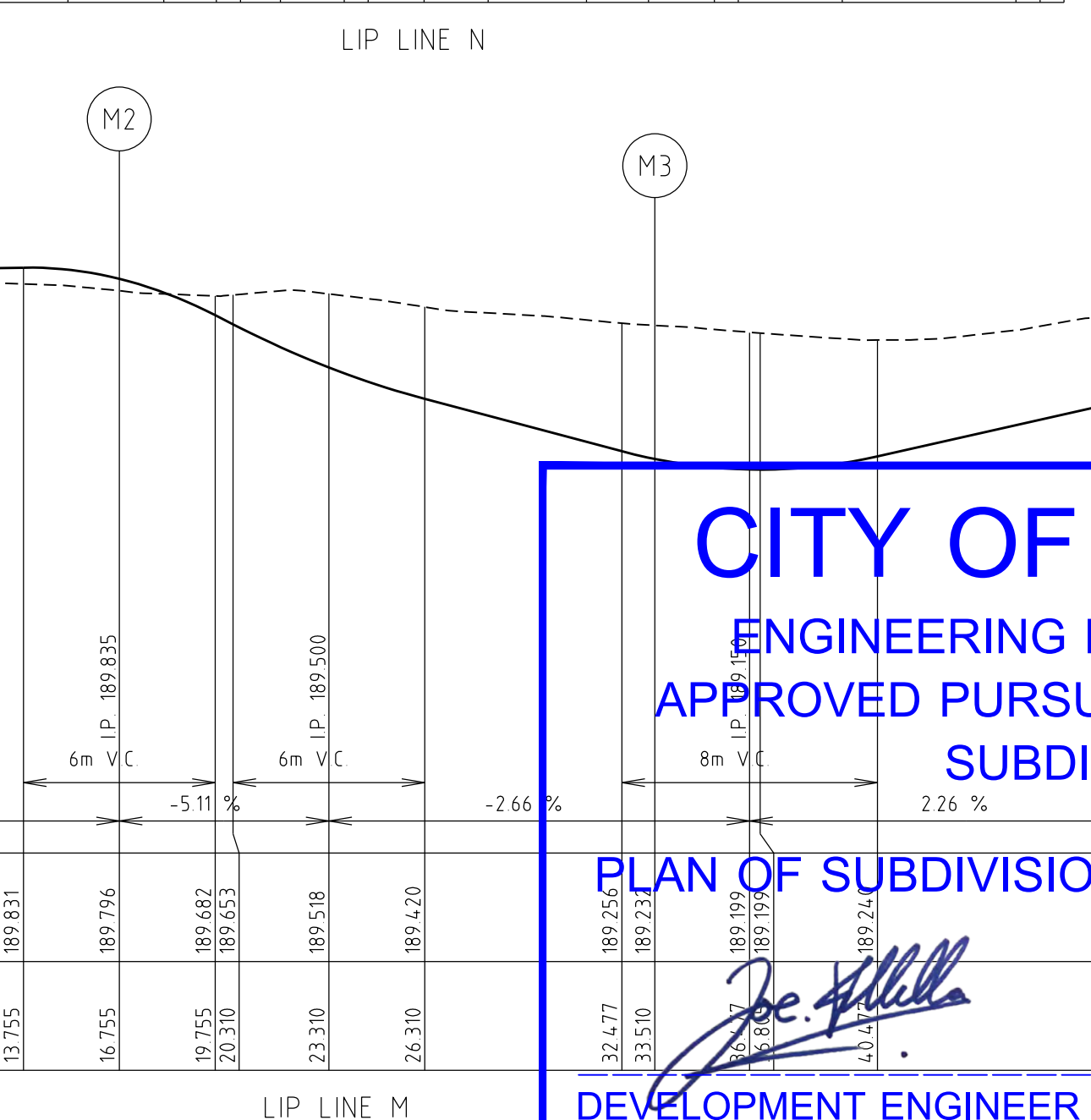
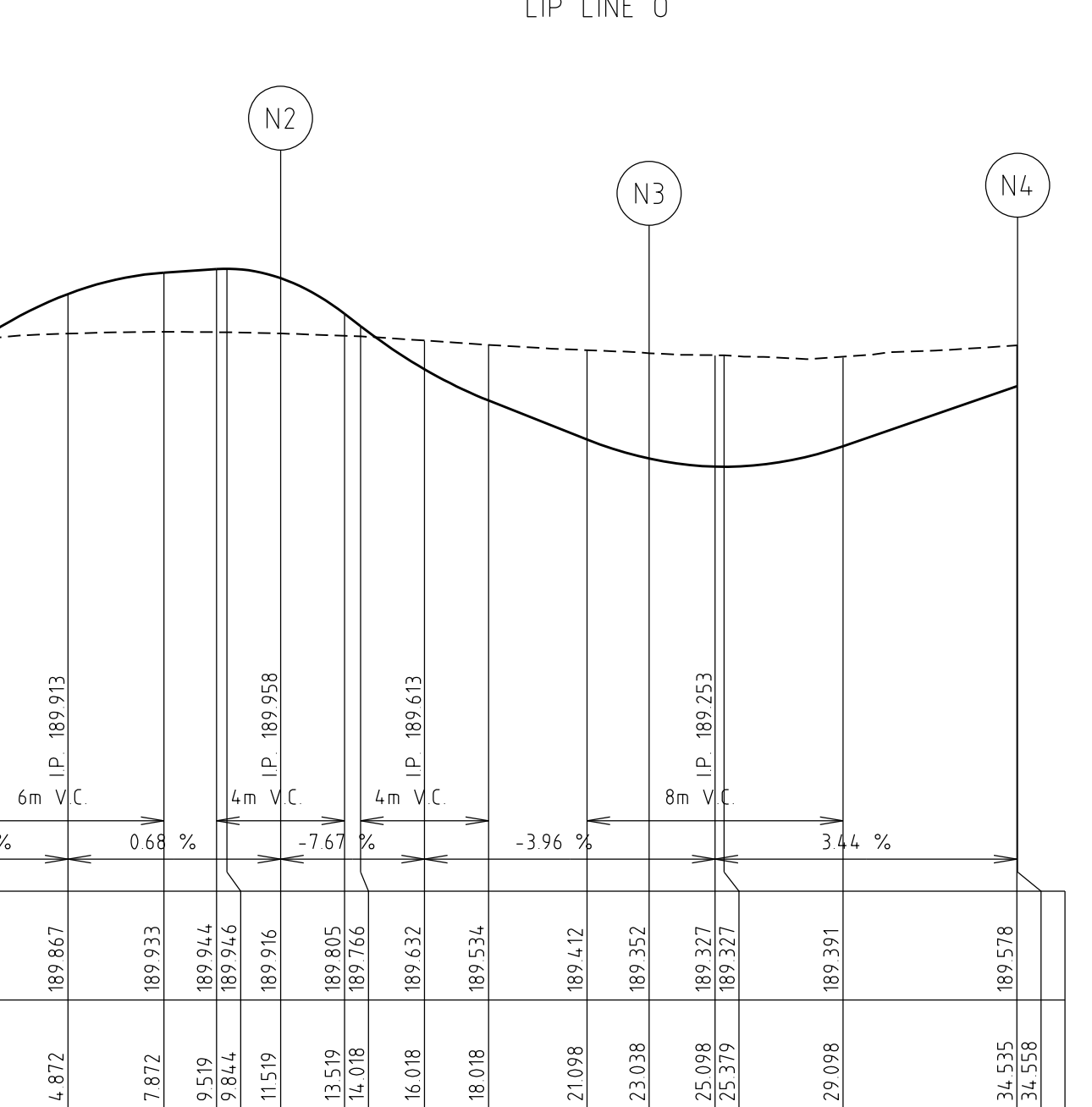
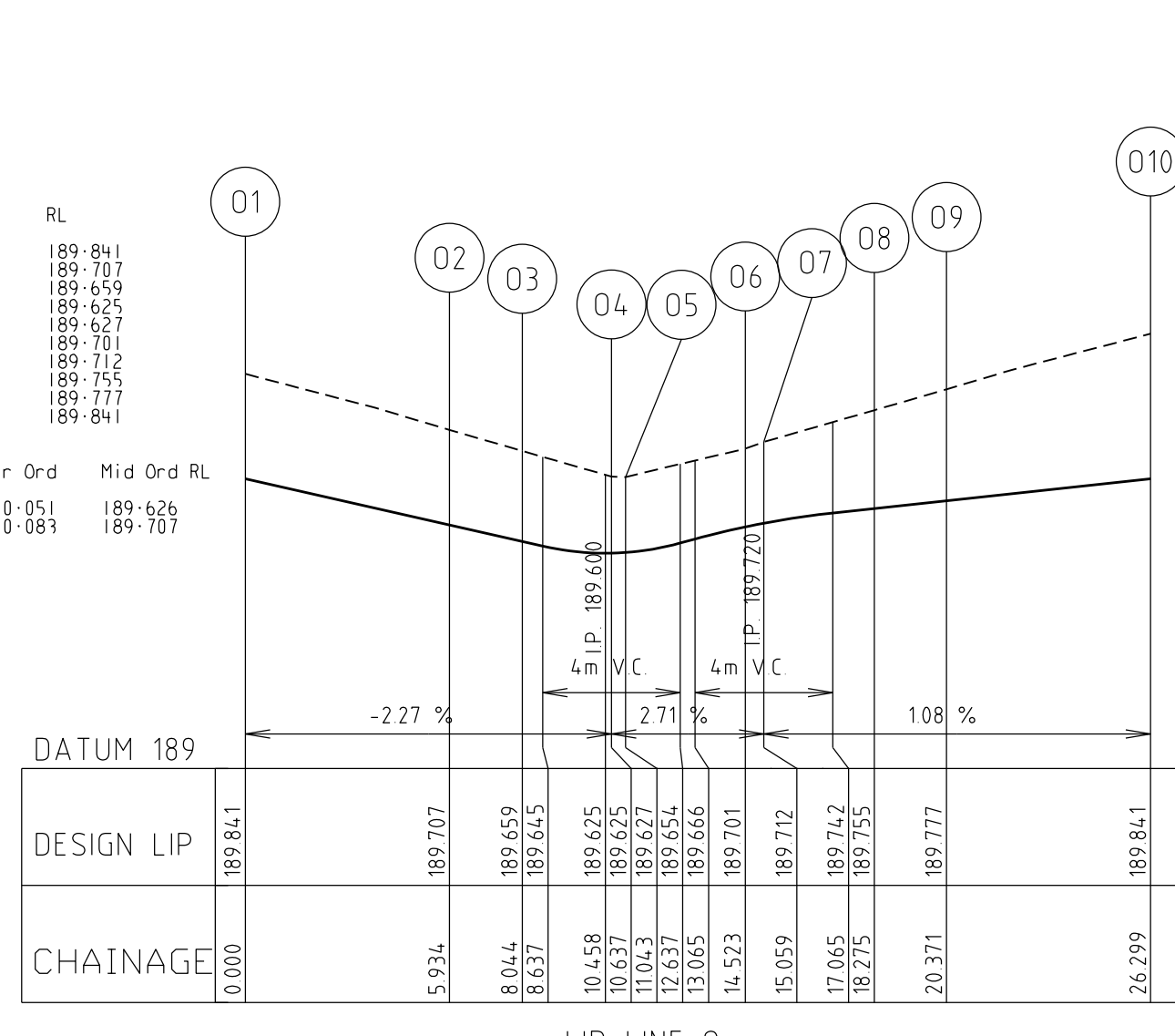
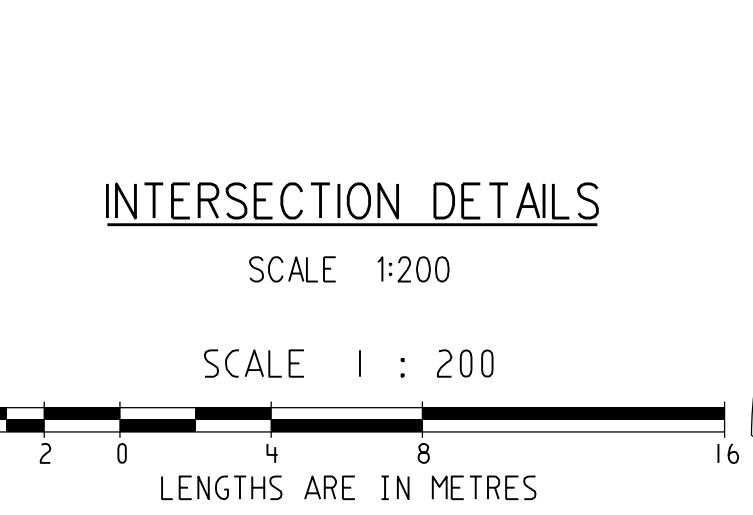
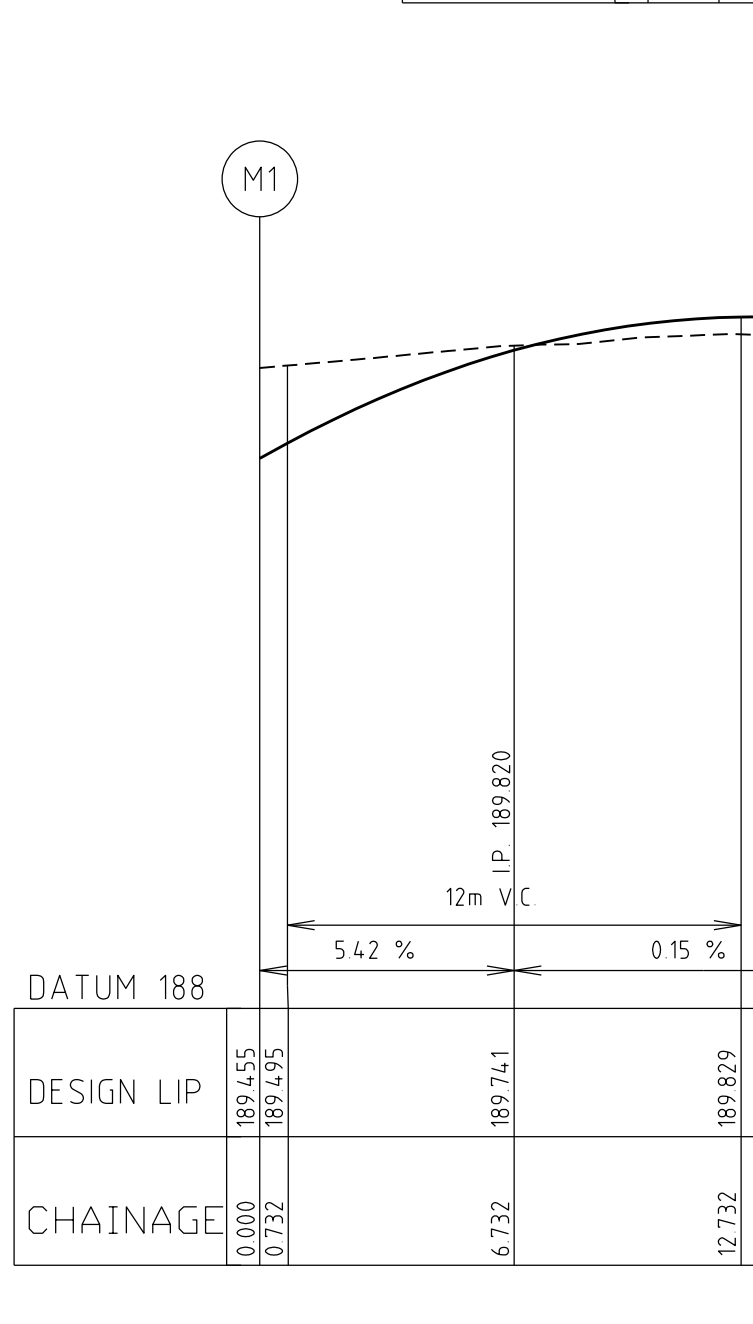
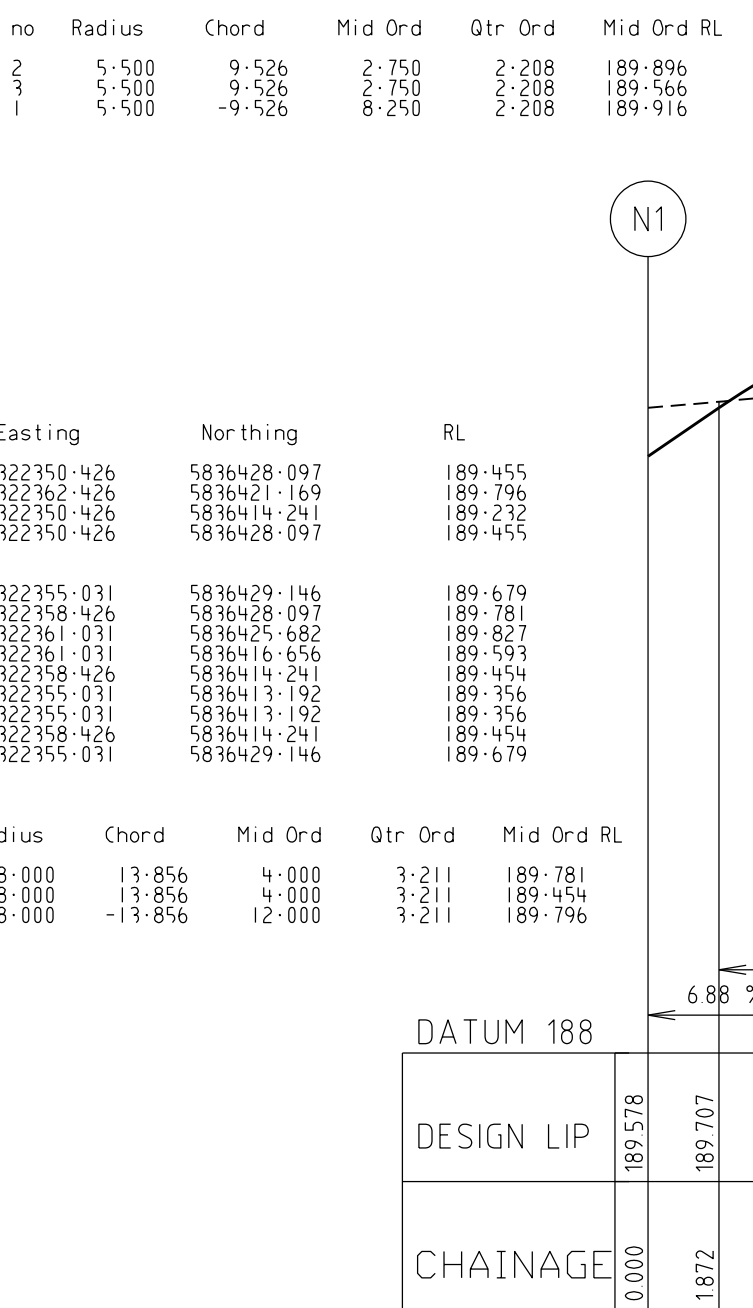
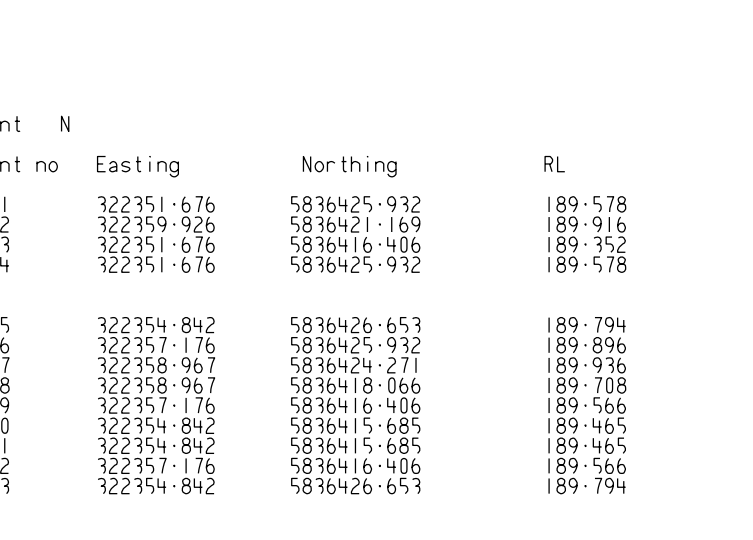
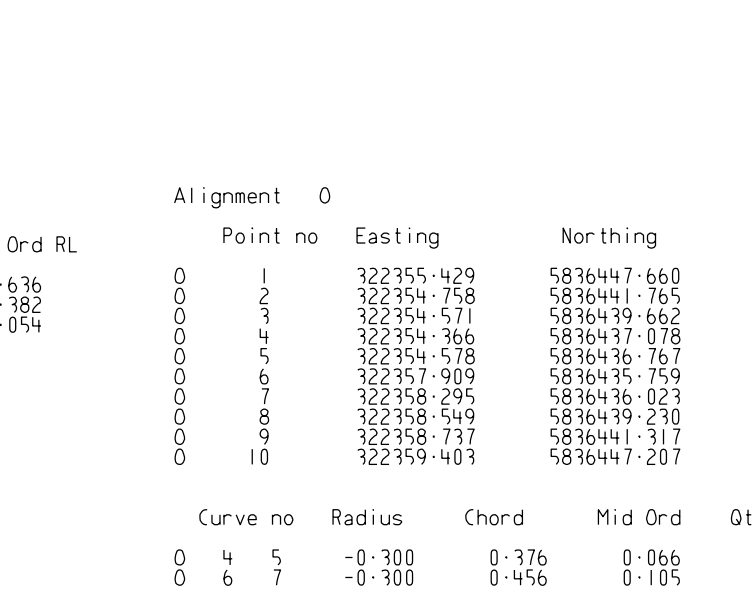
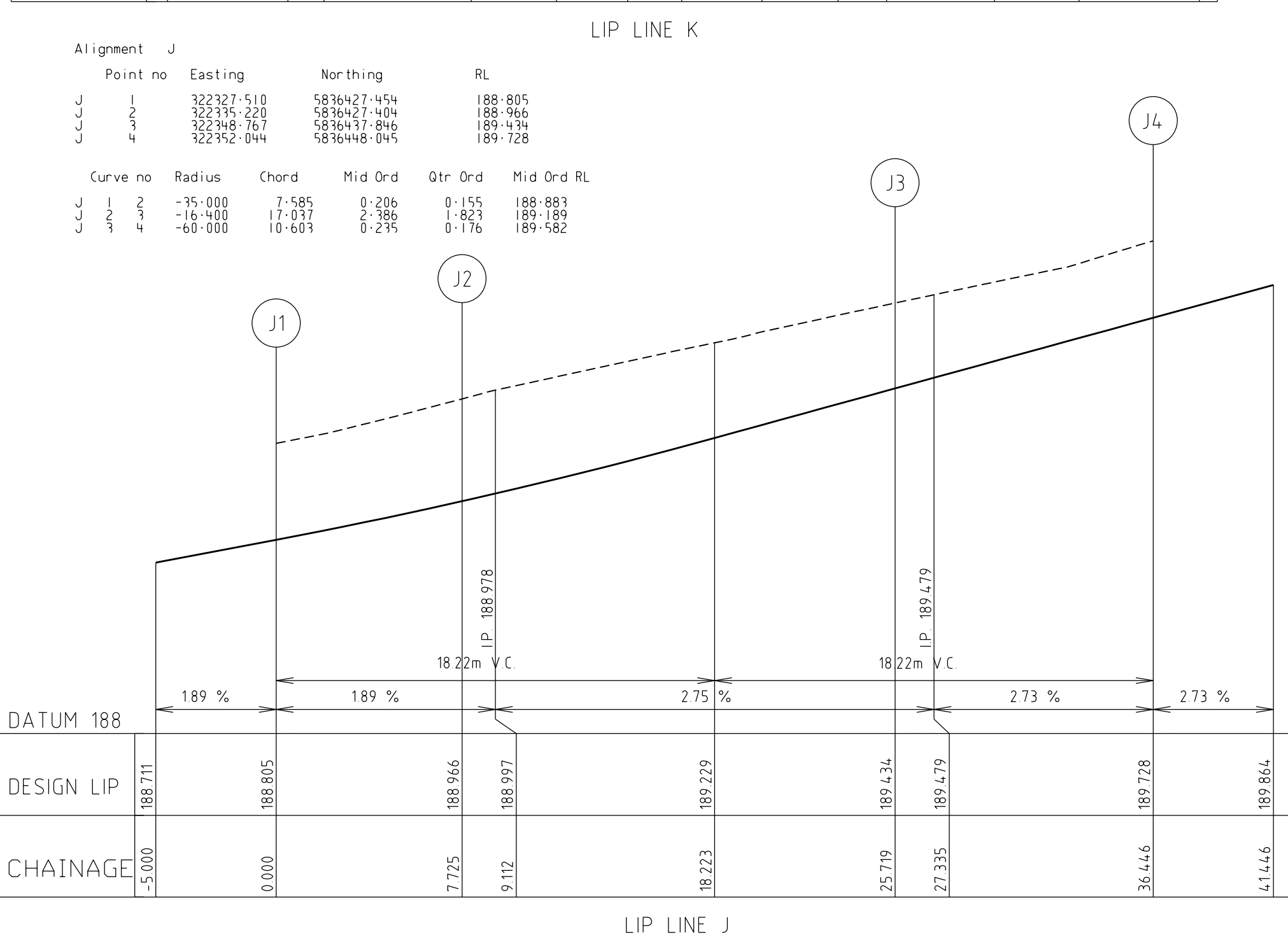
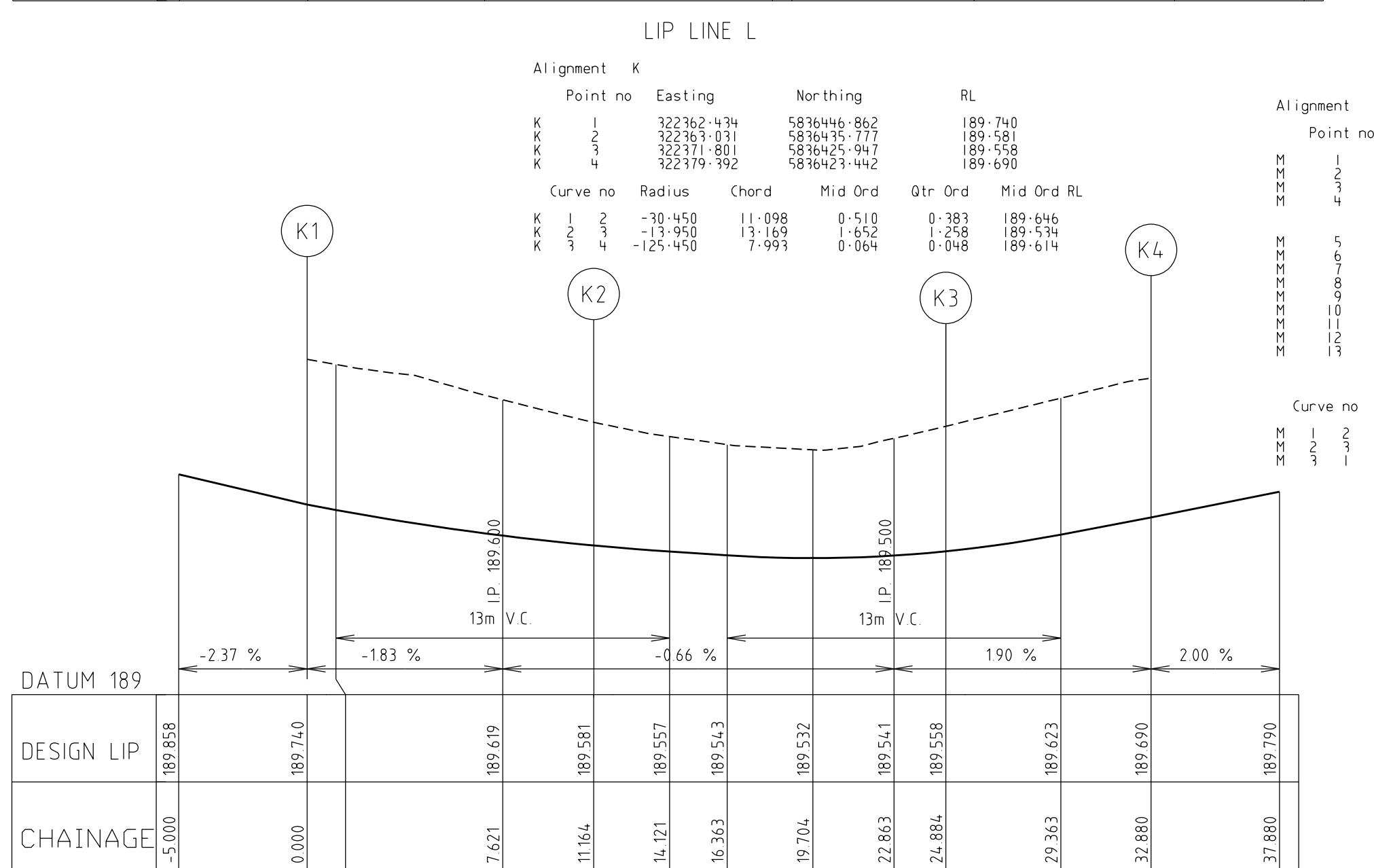
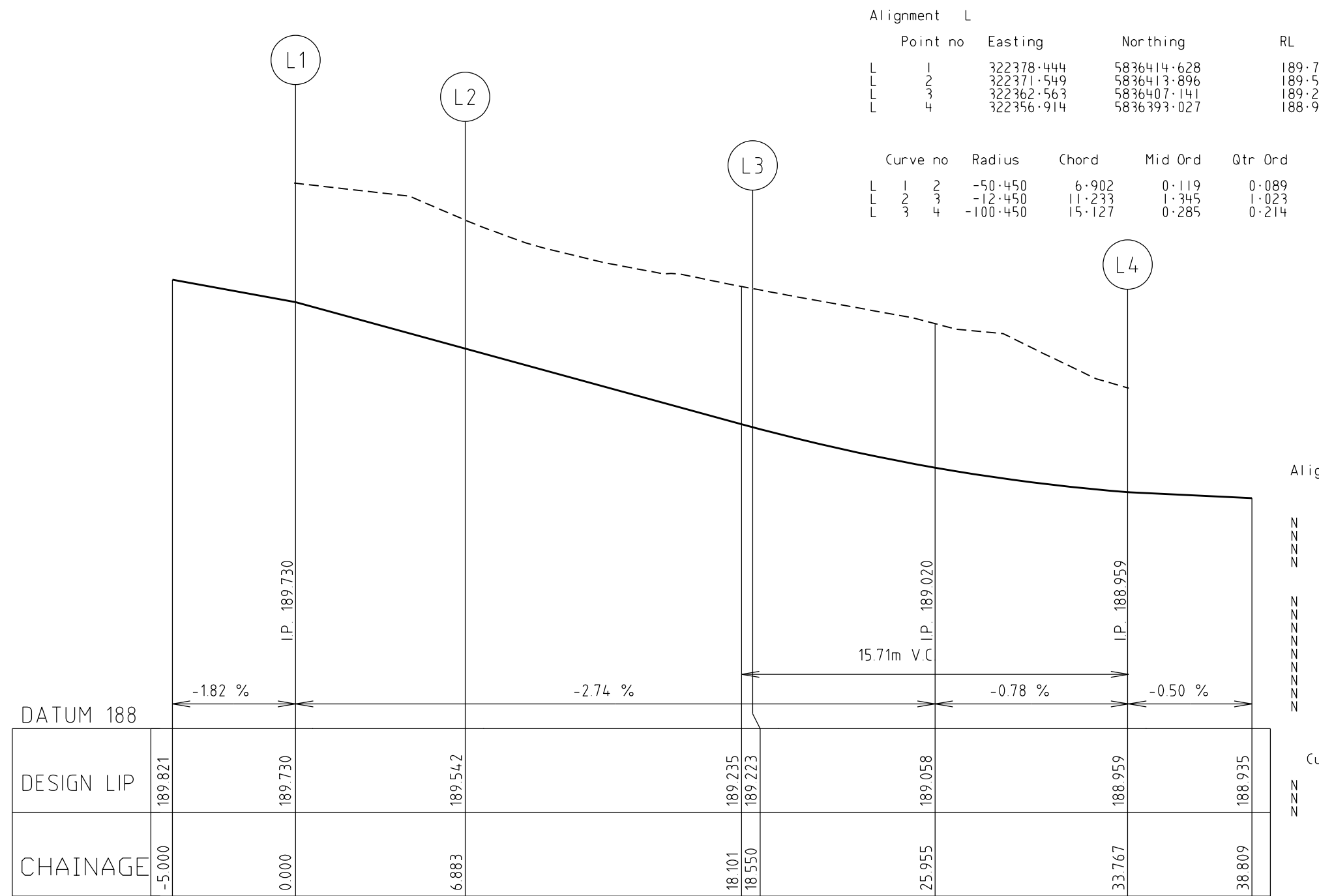
Alignment	B	Point no	Easting	Northing	RL
B	1	322279-041	5836523-253	189-177	
B	2	322286-612	5836513-735	189-397	
B	3	322279-397	5836519-651	189-195	
B	4	322280-875	5836516-926	189-229	
B	5	322283-183	5836514-892	189-294	
Curve no	Radius	Chord	Mid Ord	Qtr Ord	Mid Ord RL
B 1 2	-8-600	12-162	2-519	1-963	189-224

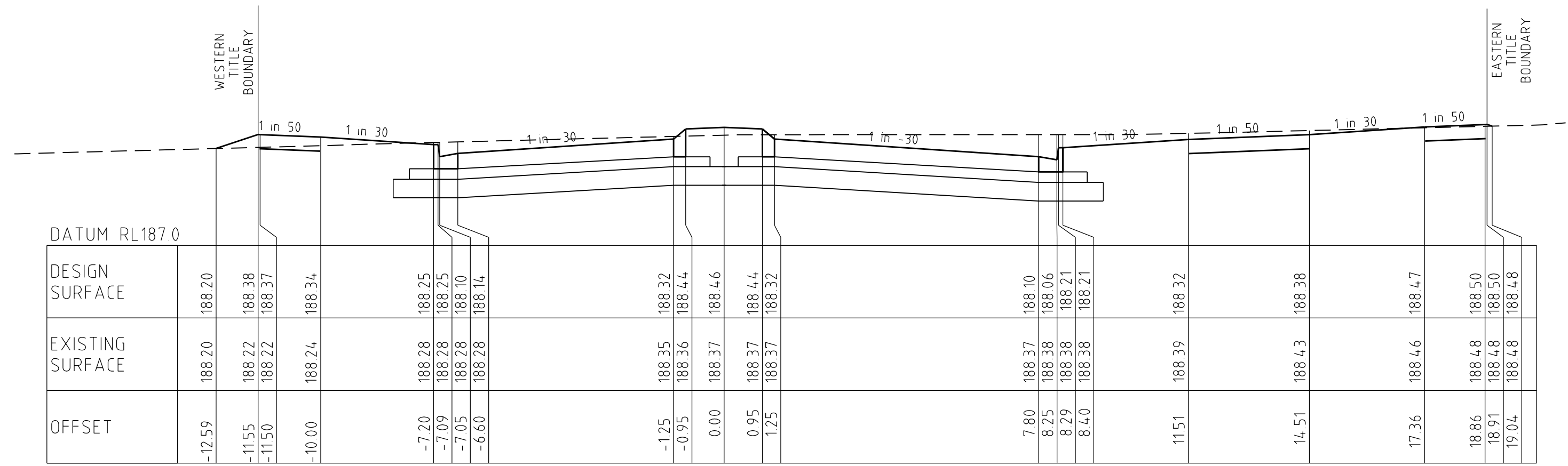


LIP OF KERB PROFILES

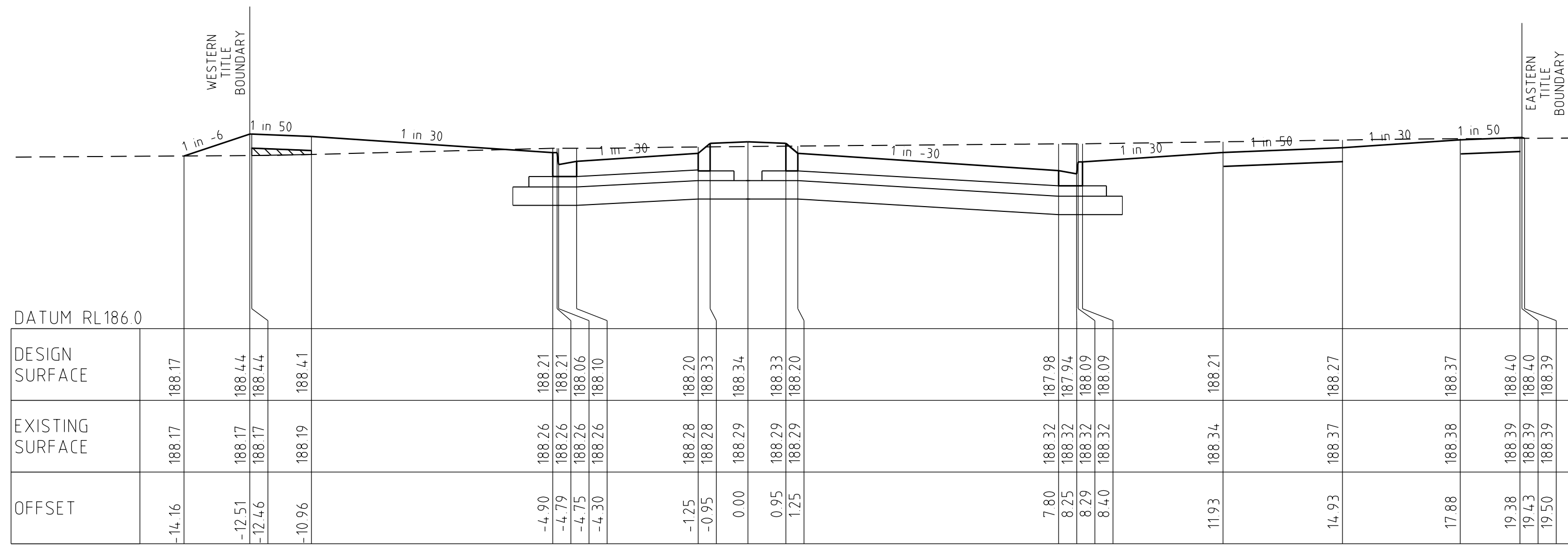
SCALE: HORIZONTAL 1:200
VERTICAL 1:20

AMENDMENTS					breese pitt dixon pty. ltd. land surveyors			civil engineers			1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310		
				MELWAY REF.	388-C-10		RATHDOWNE ESTATE STAGE 1 INTERSECTION DETAILS				MUNICIPALITY		
			SURVEY	SPIIRE		WHITTLESEA							
			DESIGN	SS		REFERENCE							
			DRAWN	SS		9365 E/1							
VER.	DATE	REMARKS		CHECKED	SCALE AS SHOWN		DATUM AHD		DATE JAN'17		SHEET 5 OF 19		PD

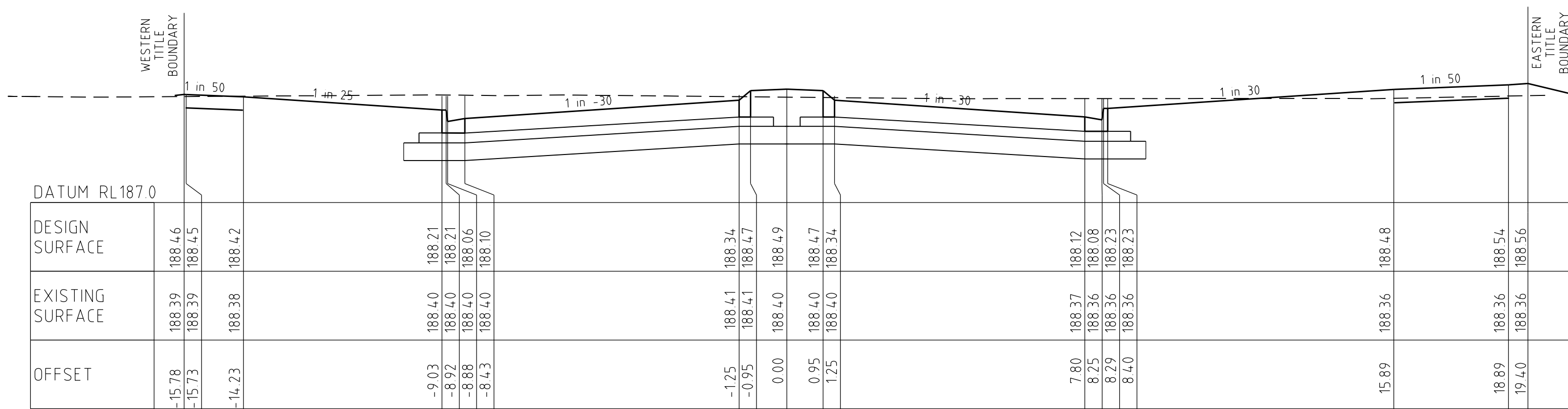




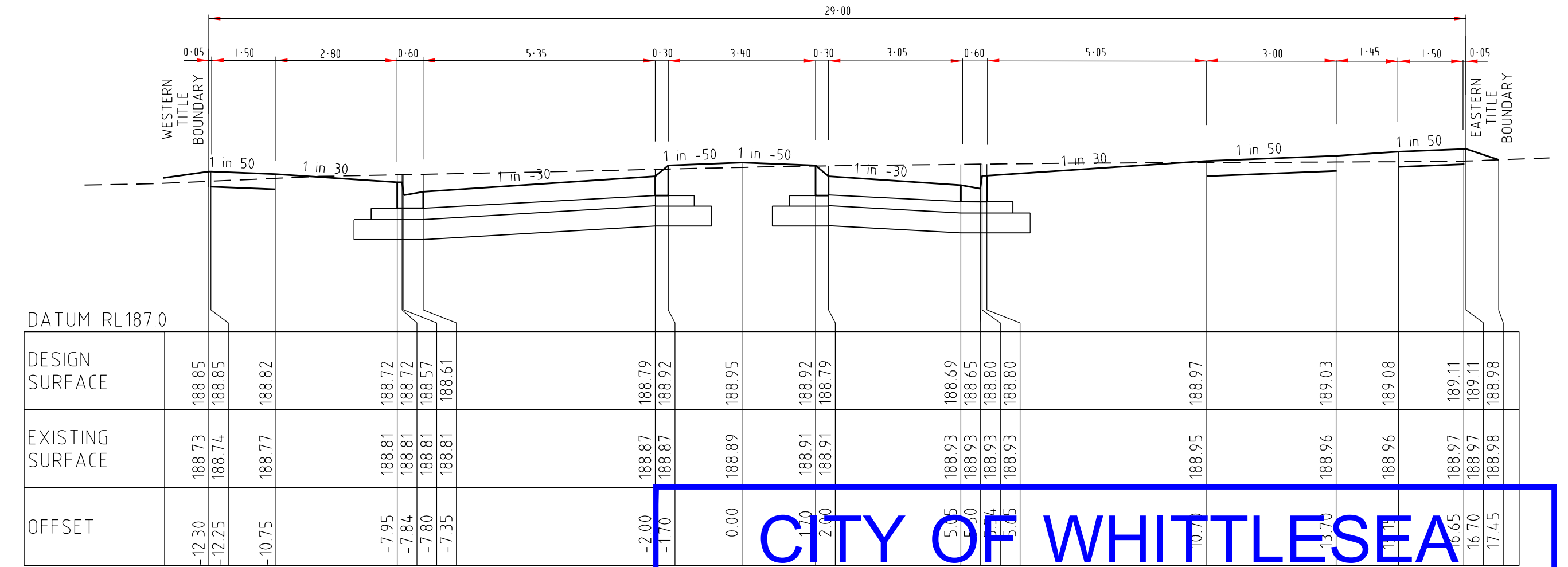
80.00



56.06



22.05



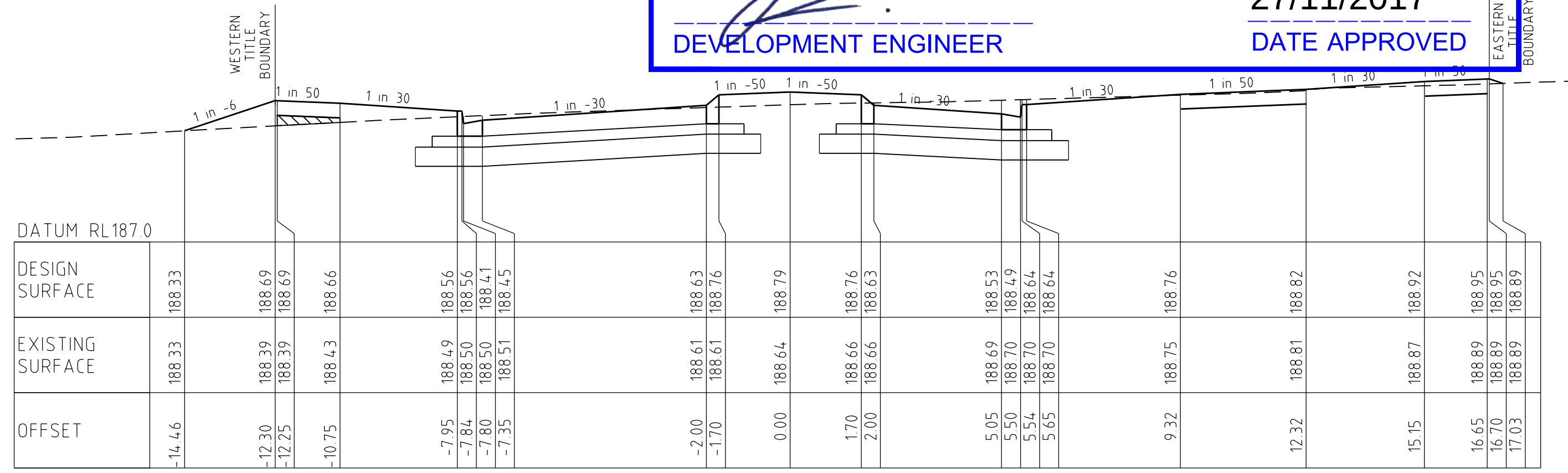
CITY OF WHITTLESEA

ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

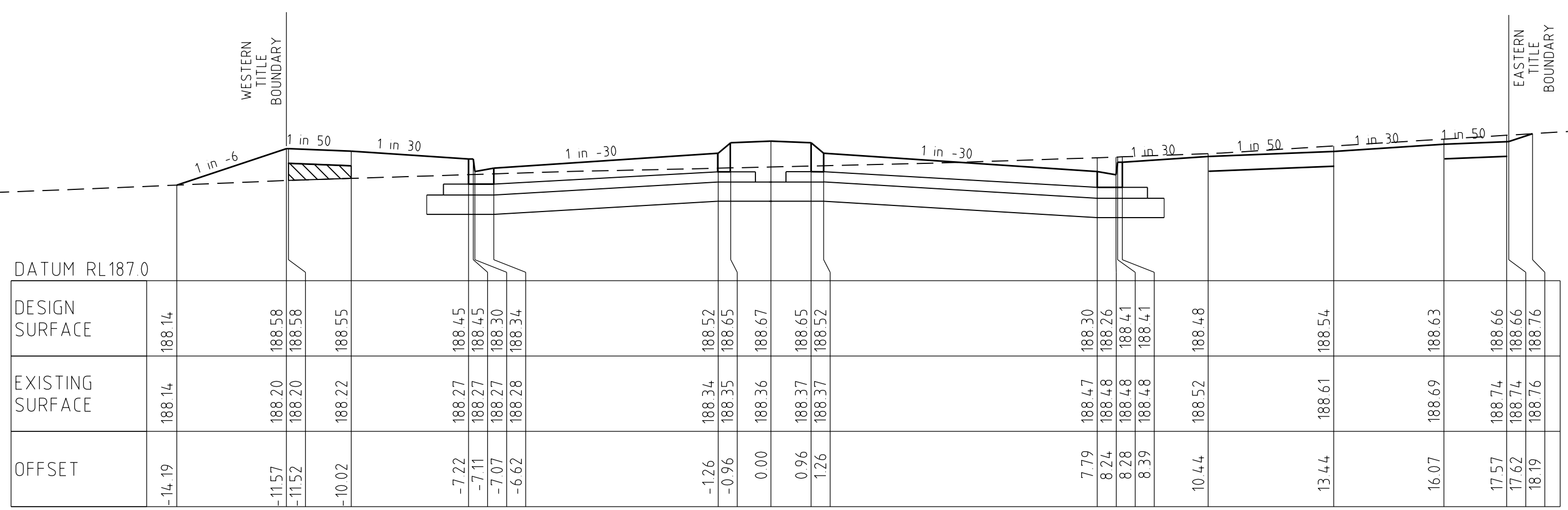
PLAN OF SUBDIVISION No. PS803931Y/S1

Development Engineer

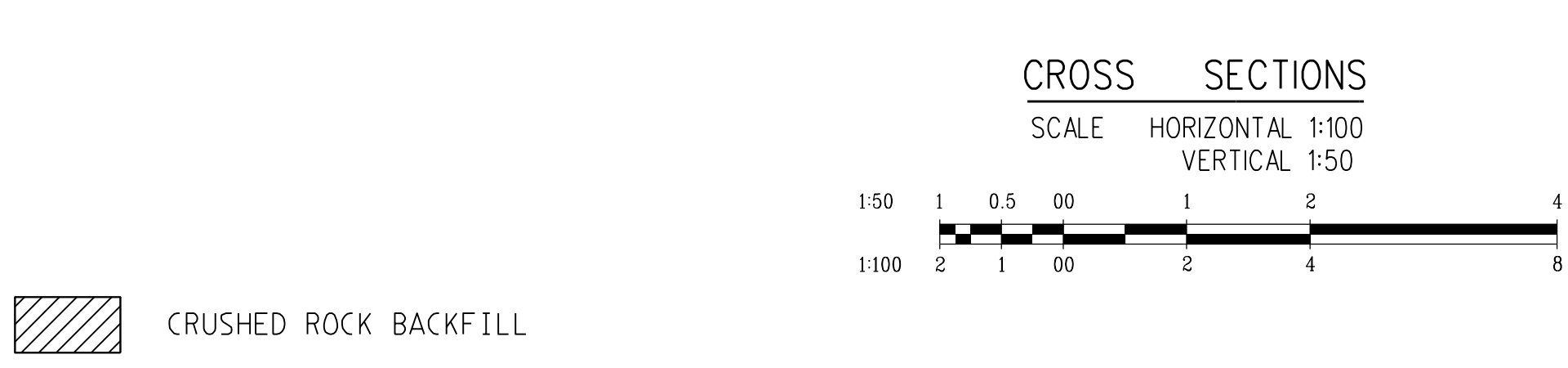
27/11/2017
DATE APPROVED



145.38

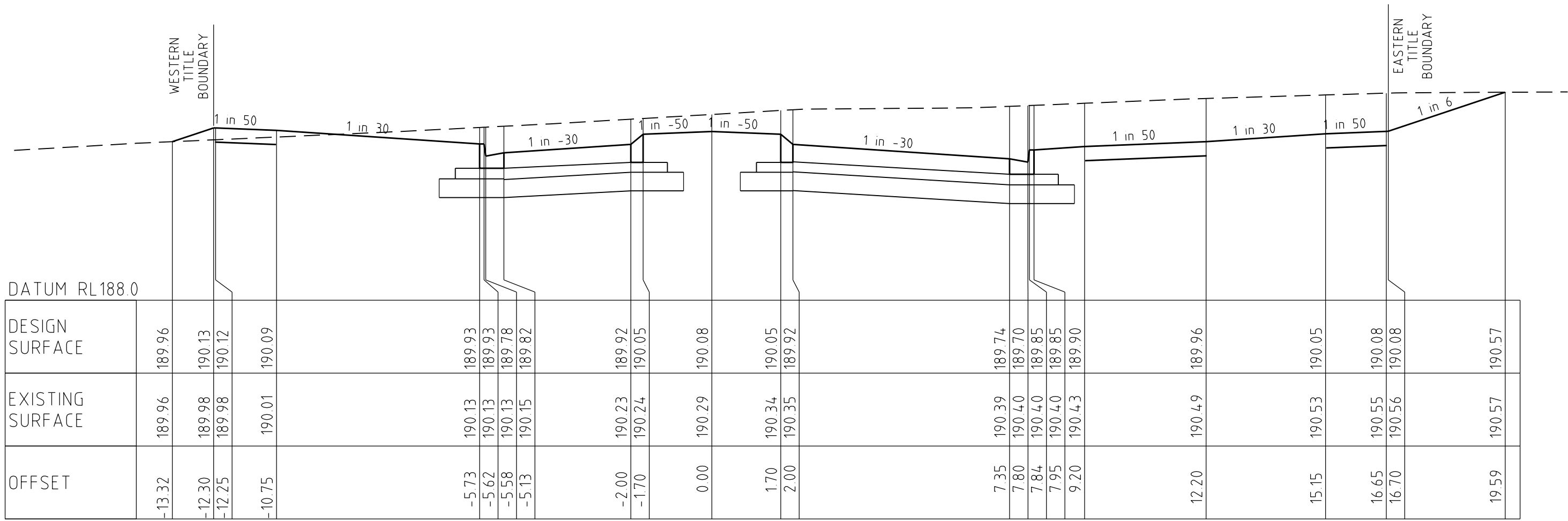


120.42

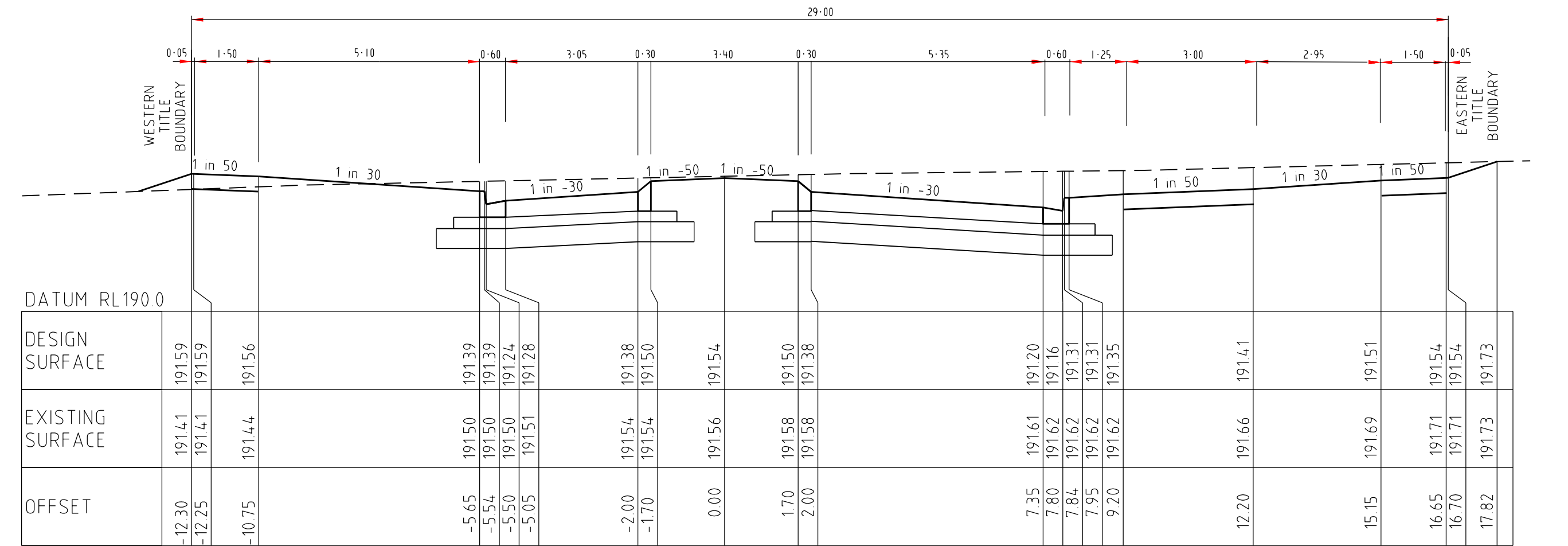


JARDIN ROAD

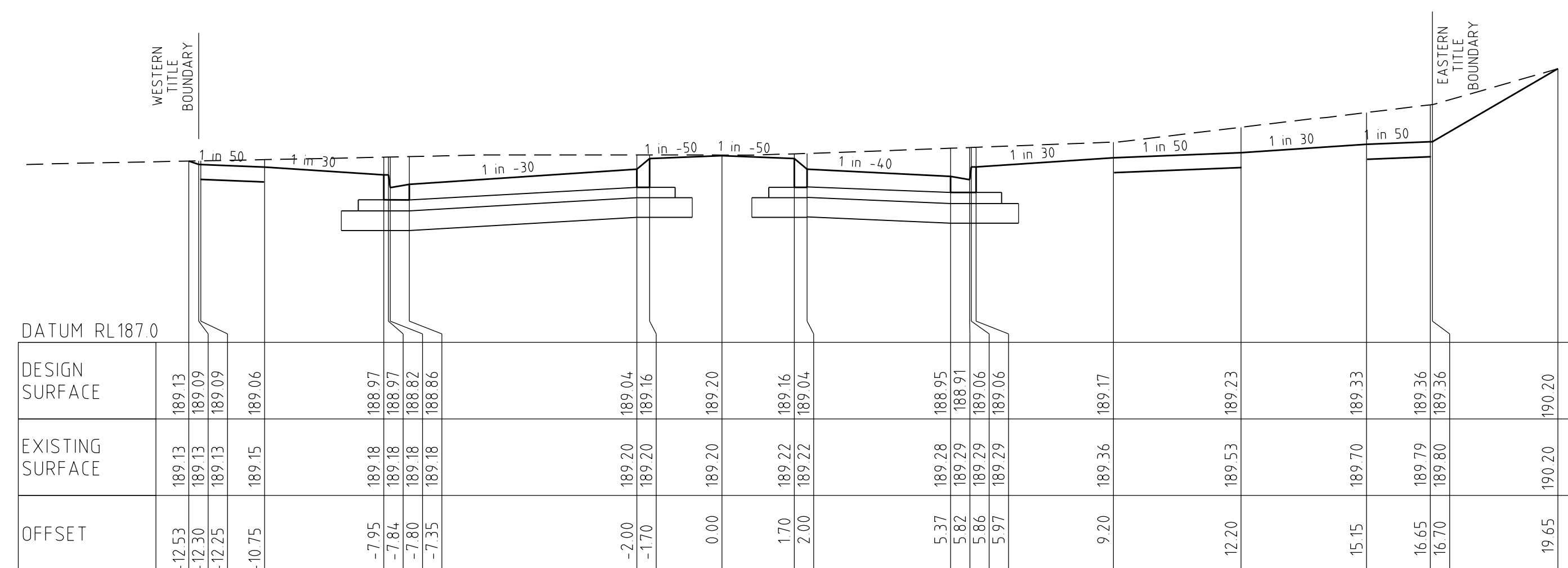
AMENDMENTS		bpd		breese pitt dixon Pty. Ltd. land surveyors civil engineers		1/19 coto street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
VER		DATE		REMARKS		MELWAY REF. 388-C-10	
						SURVEY SPIIRE	
						DESIGN SS	
						DRAWN SS	
						CHECKED	
						SCALE AS SHOWN	
						DATUM AHD	
						DATE JAN '17	
						SHEET 8 OF 19	
						P3	



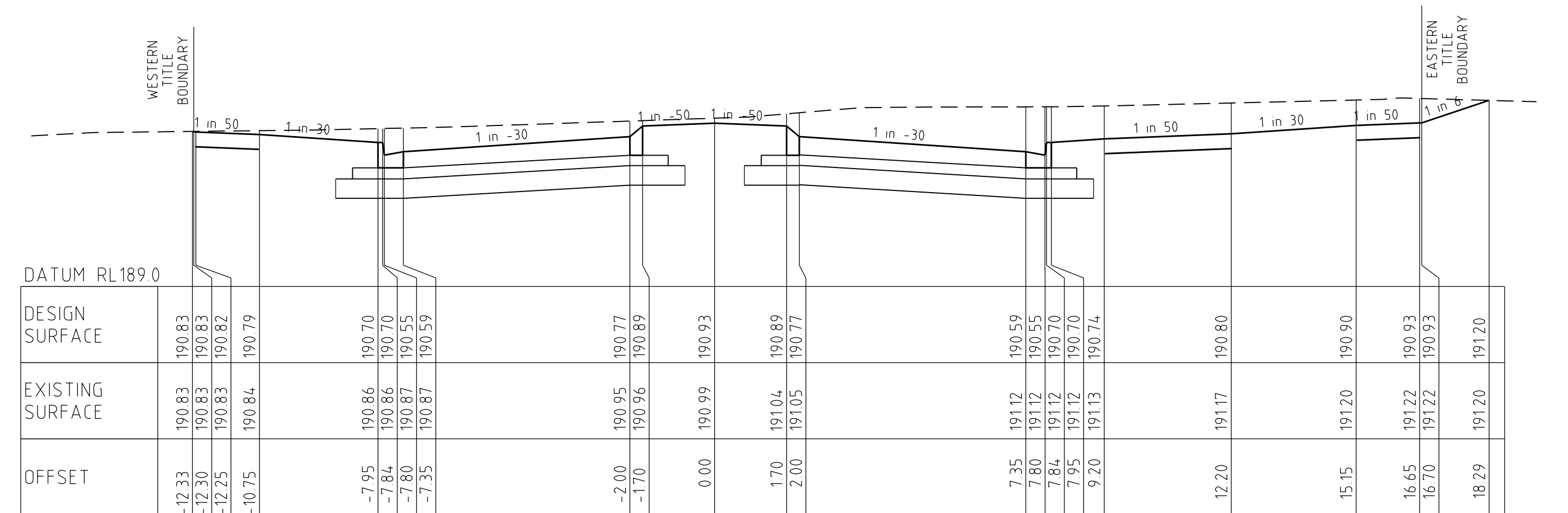
287.16



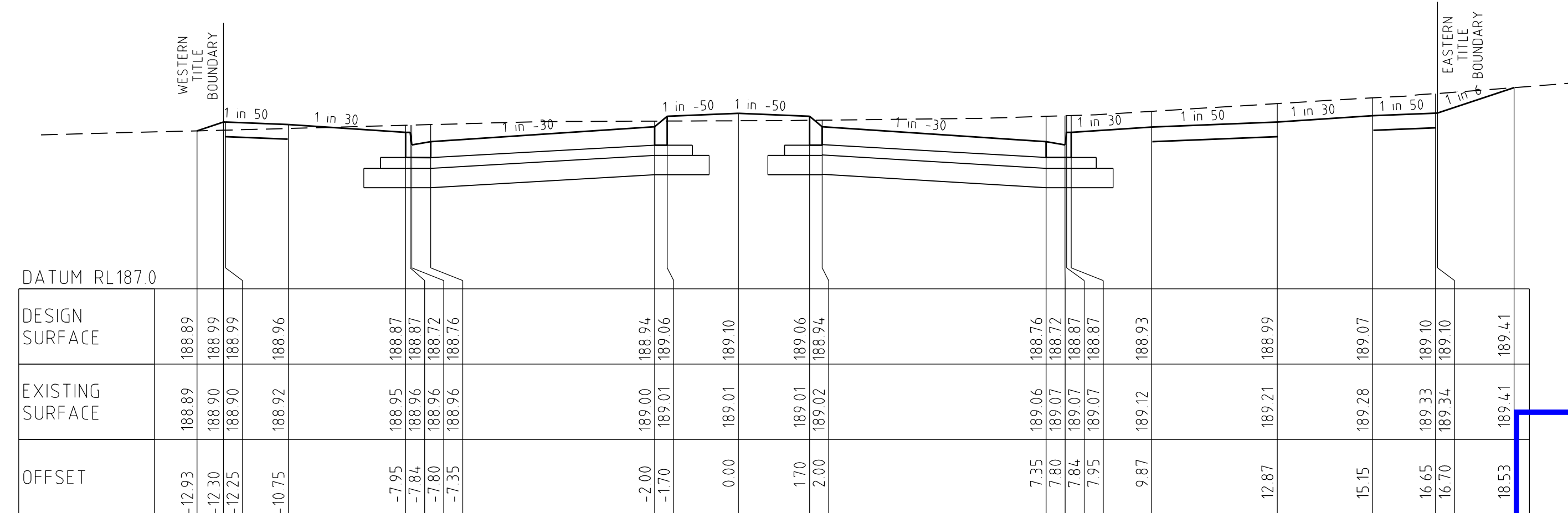
348.33



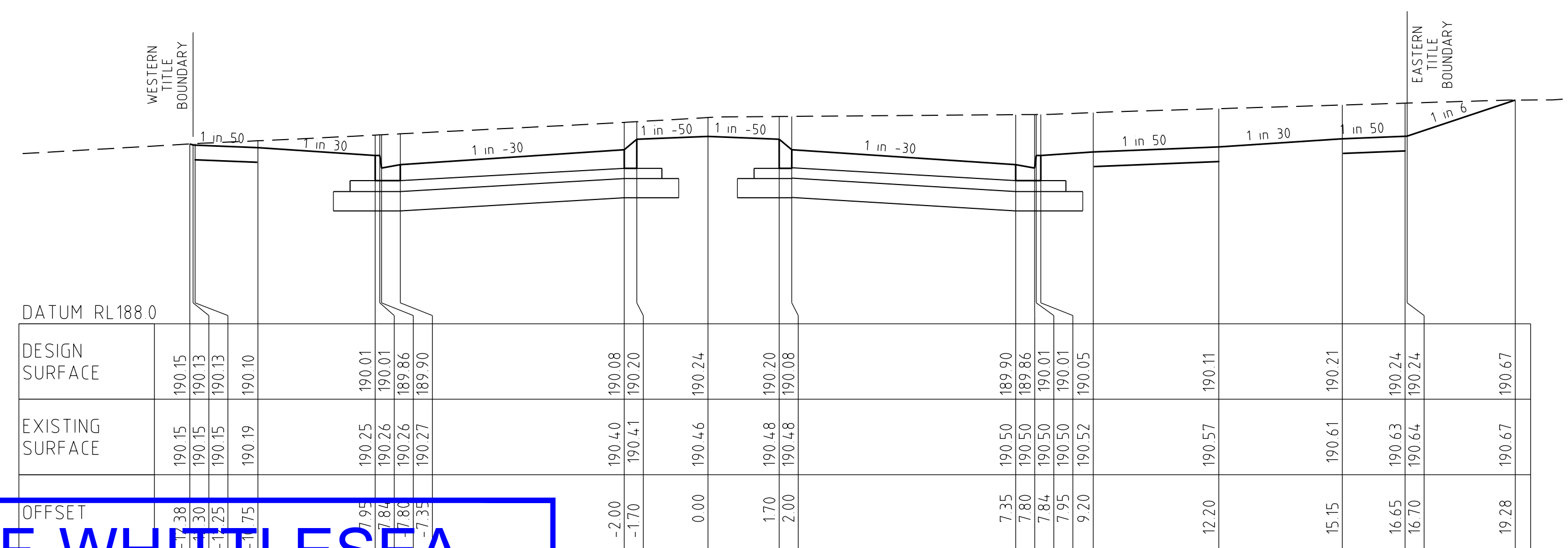
226.47



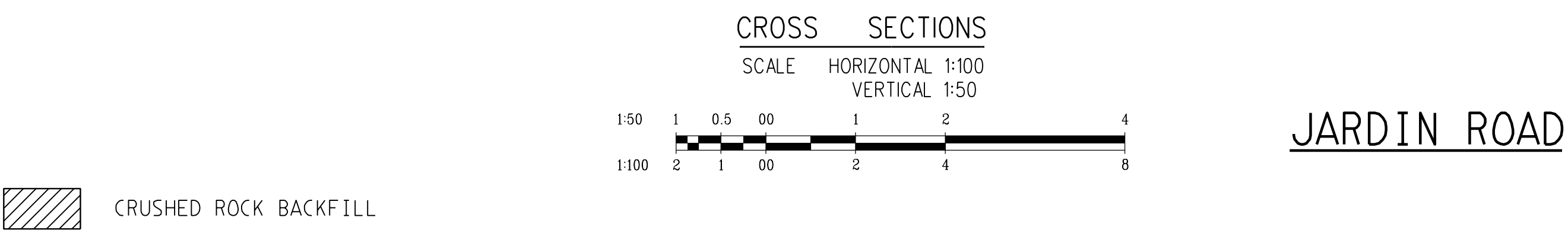
322.75



206.68



293.73



CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. **PS803931Y/S1**

27/11/2017
DATE APPROVED

DEVELOPMENT ENGINEER

breese pitt dixon pty. ltd.
land surveyors civil engineers

1/19 cato street
hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

**RATHDOWNE ESTATE
STAGE I
JARDIN ROAD**

MUNICIPALITY
WHITTLESEA

REFERENCE
9365 E/1

SHEET 9 OF 19

SCALE AS SHOWN
DATUM AHD
DATE JAN '17

TRUE LEFT & RIGHT ARE IN THE DIRECTION OF THE INCREASING CHAINAGE.

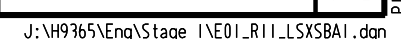
DESIGN GRADELINE
DATUM 183

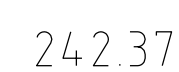
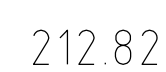
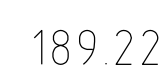
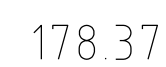
SCALE HORIZONTAL 1:500
 VERTICAL 1:50



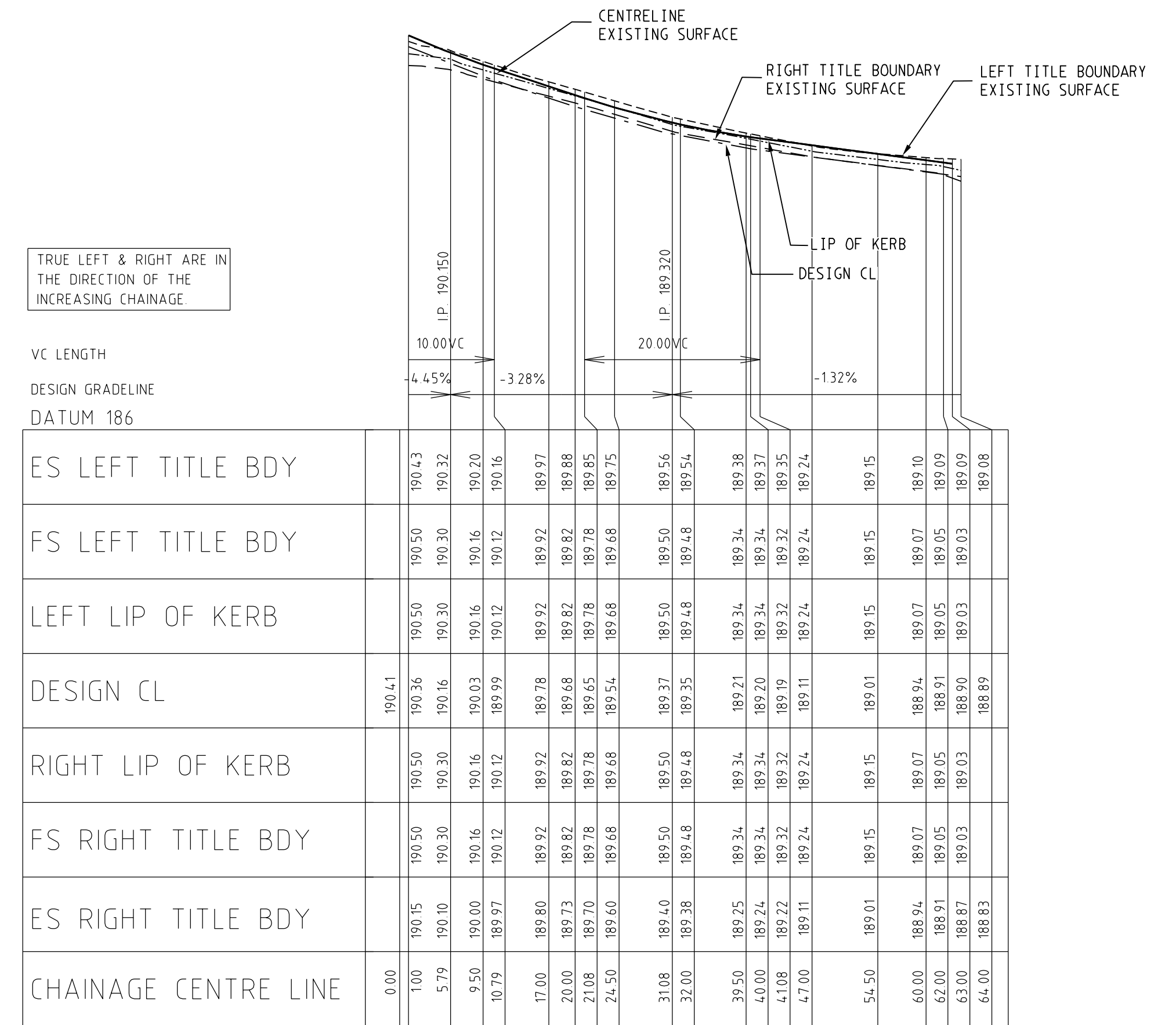
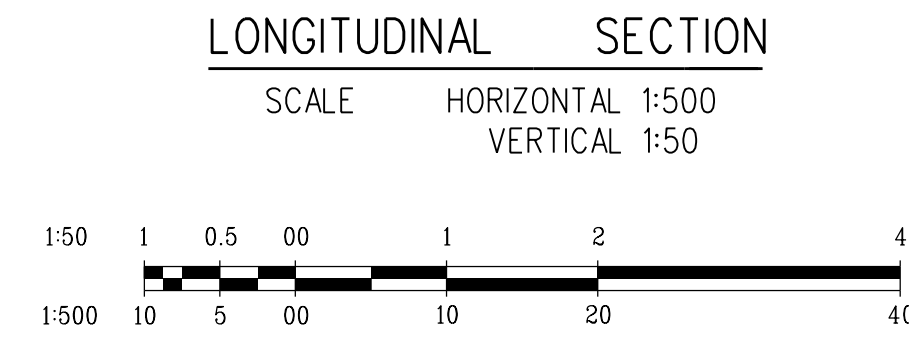
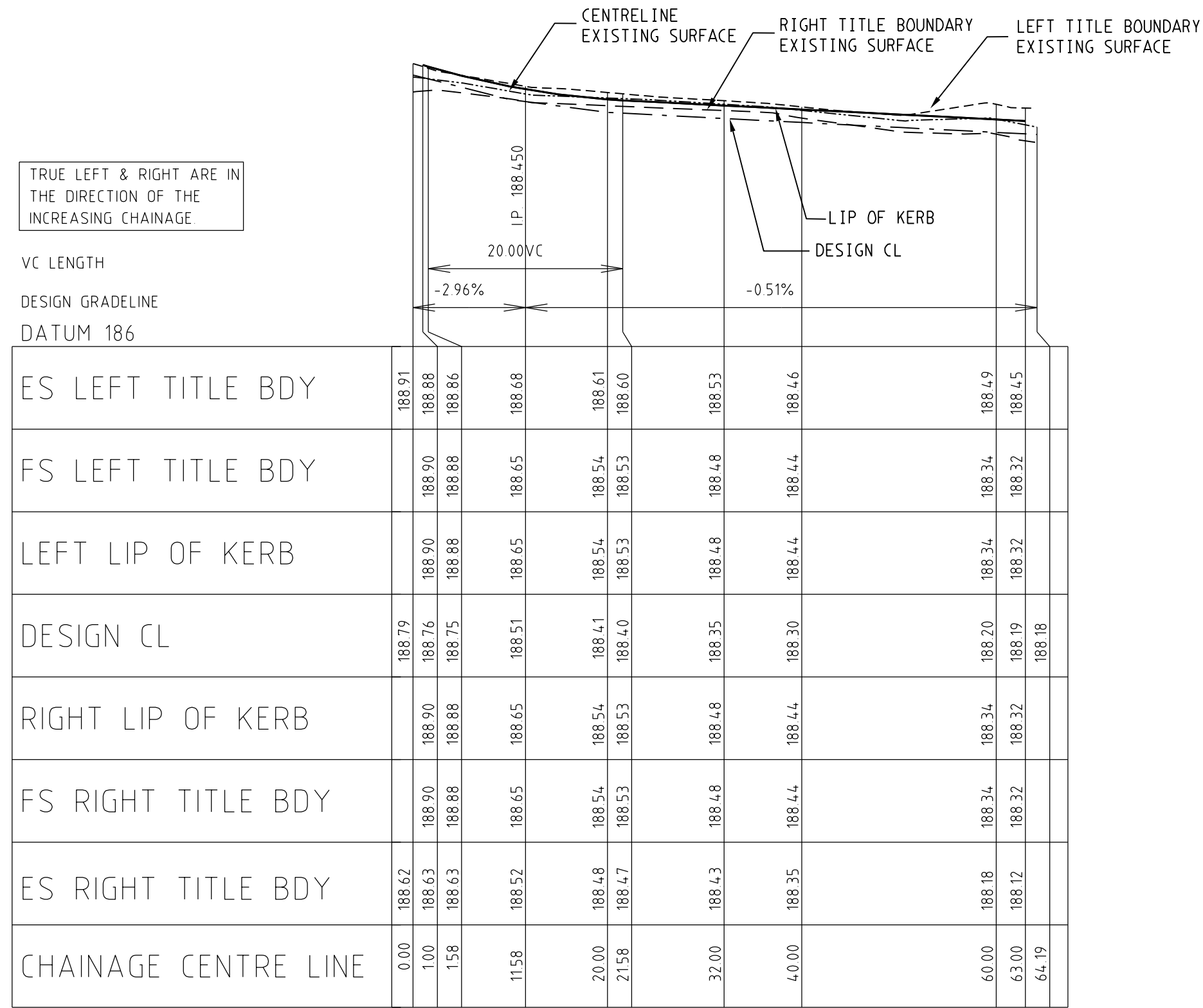
PLAN OF SUBDIVISION No. PS803931Y/S1

DEVELOPMENT ENGINEER



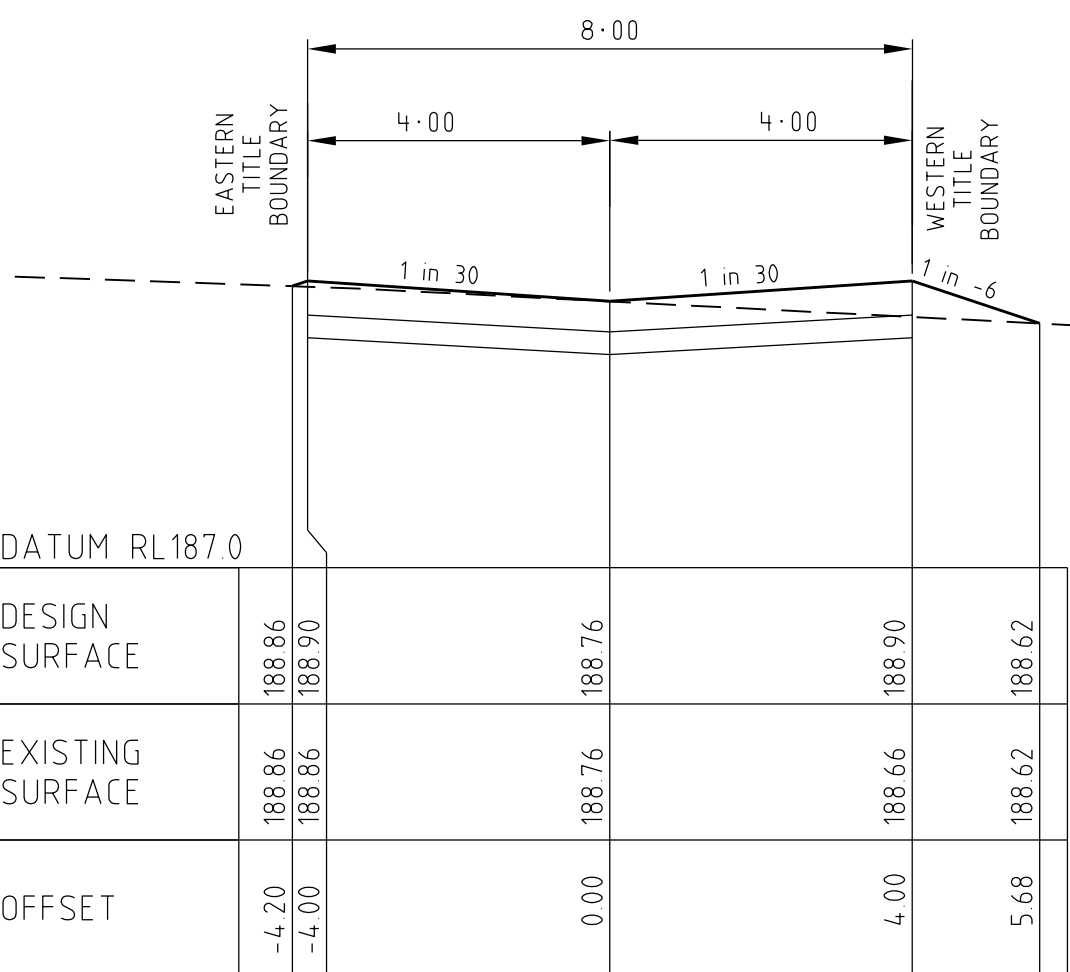
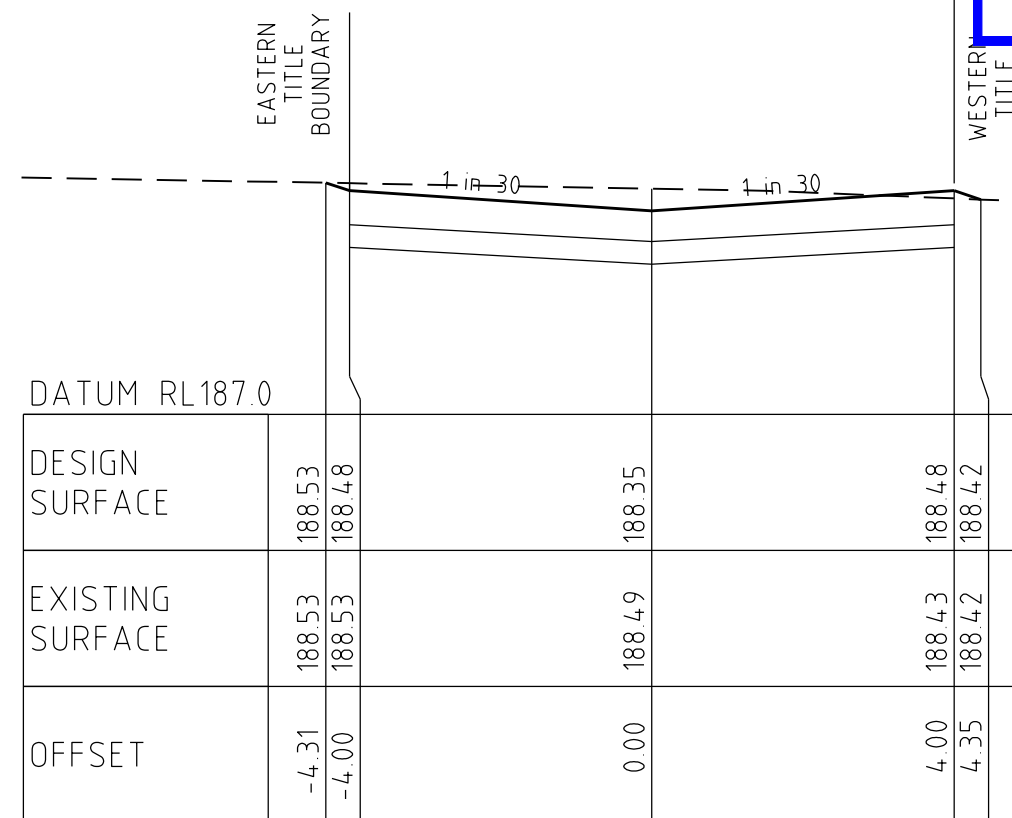
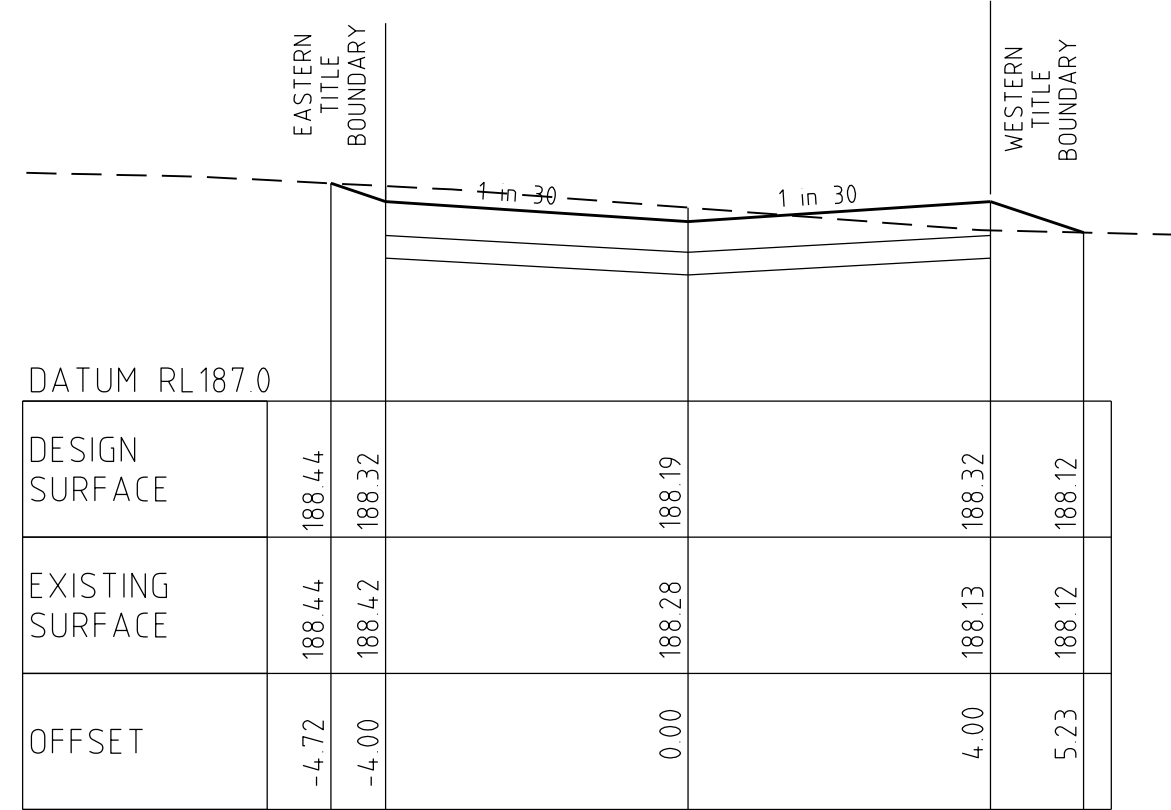
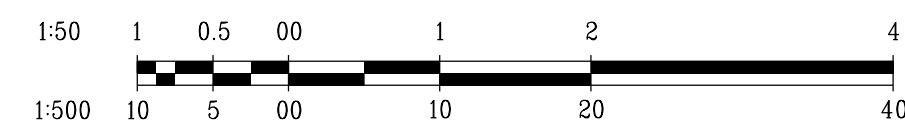


J:\H9365\Eng\Stage 1\E01_R13_LXSNS.dgn



LONGITUDINAL SECTION

SCALE HORIZONTAL 1:500
VERTICAL 1:50



CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

PLAN OF SUBDIVISION No. PS803931Y/S1

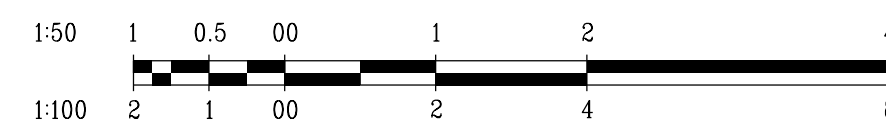
DEVELOPMENT ENGINEER

27/11/2017
DATE APPROVED

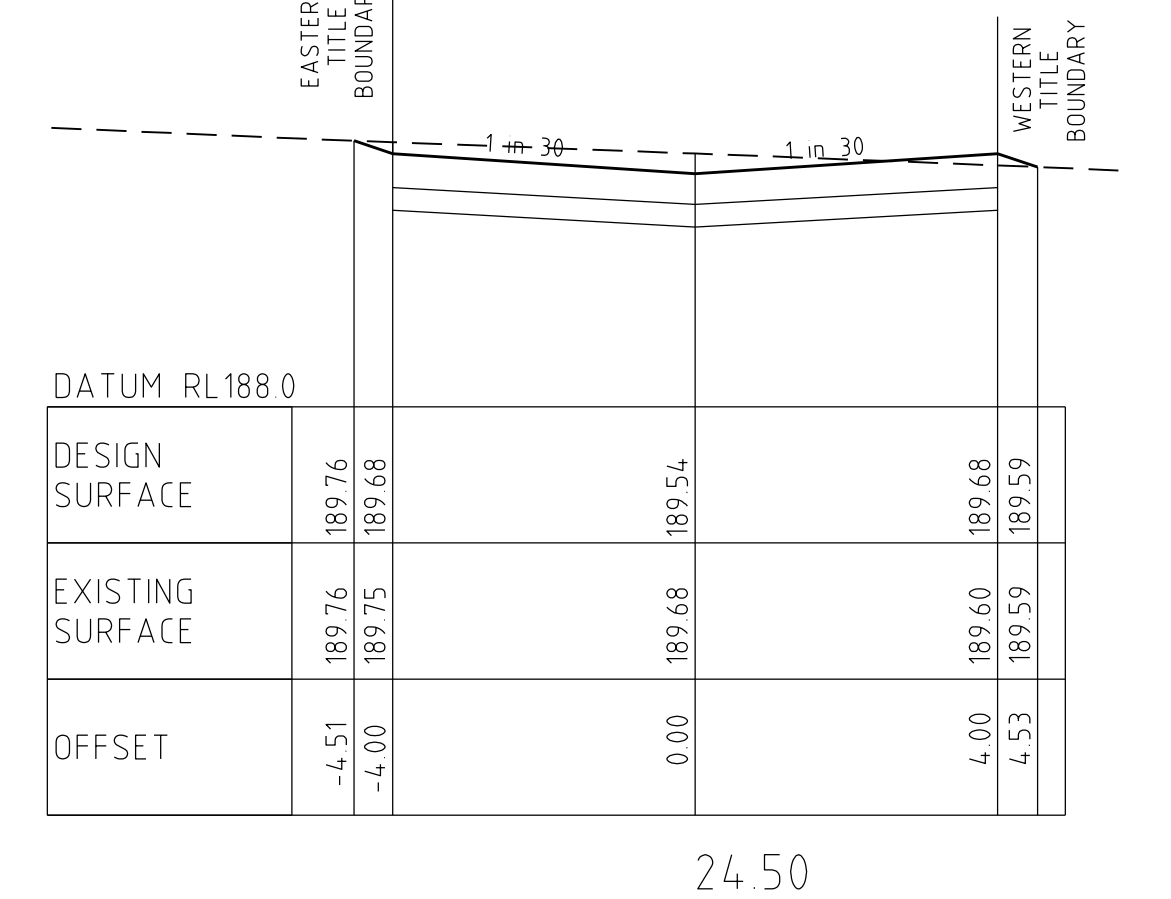
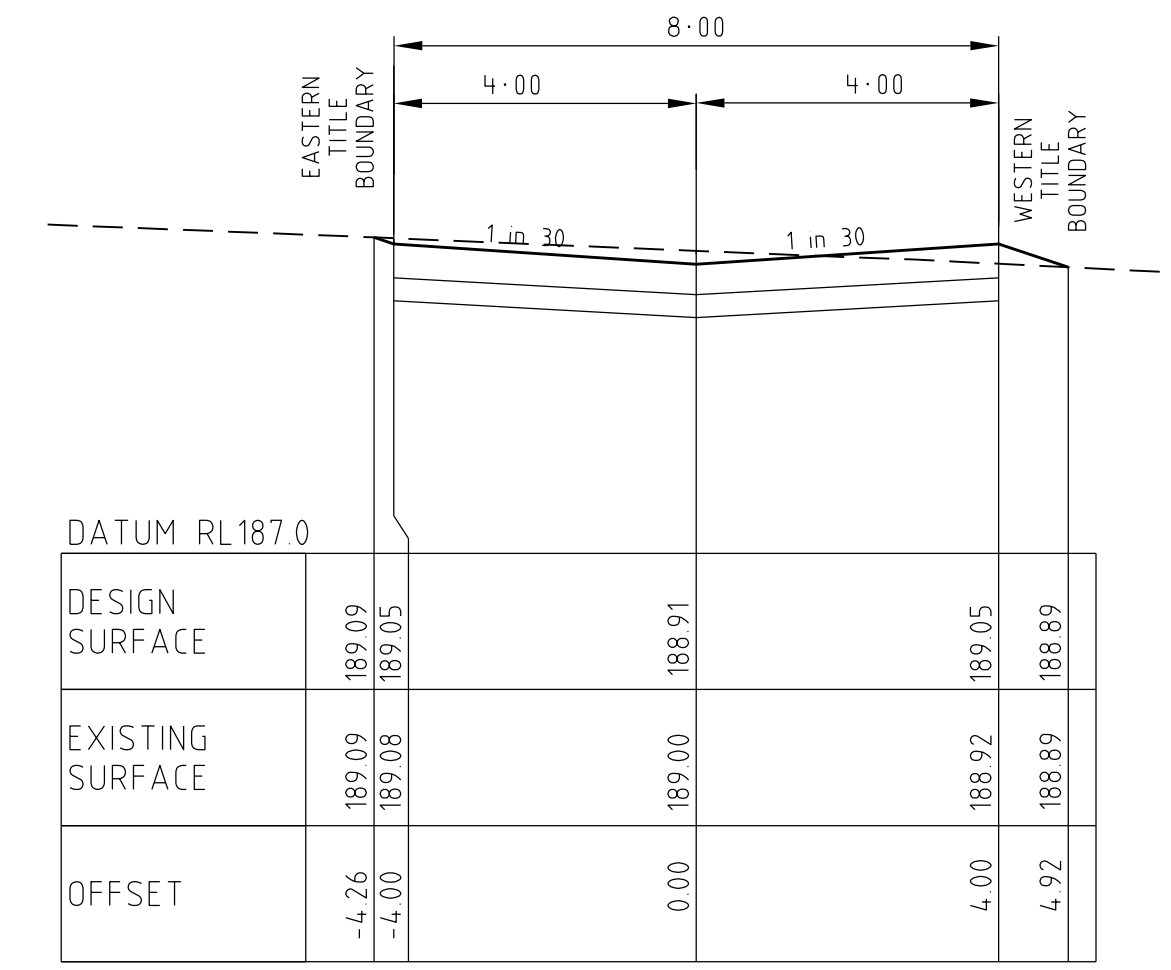
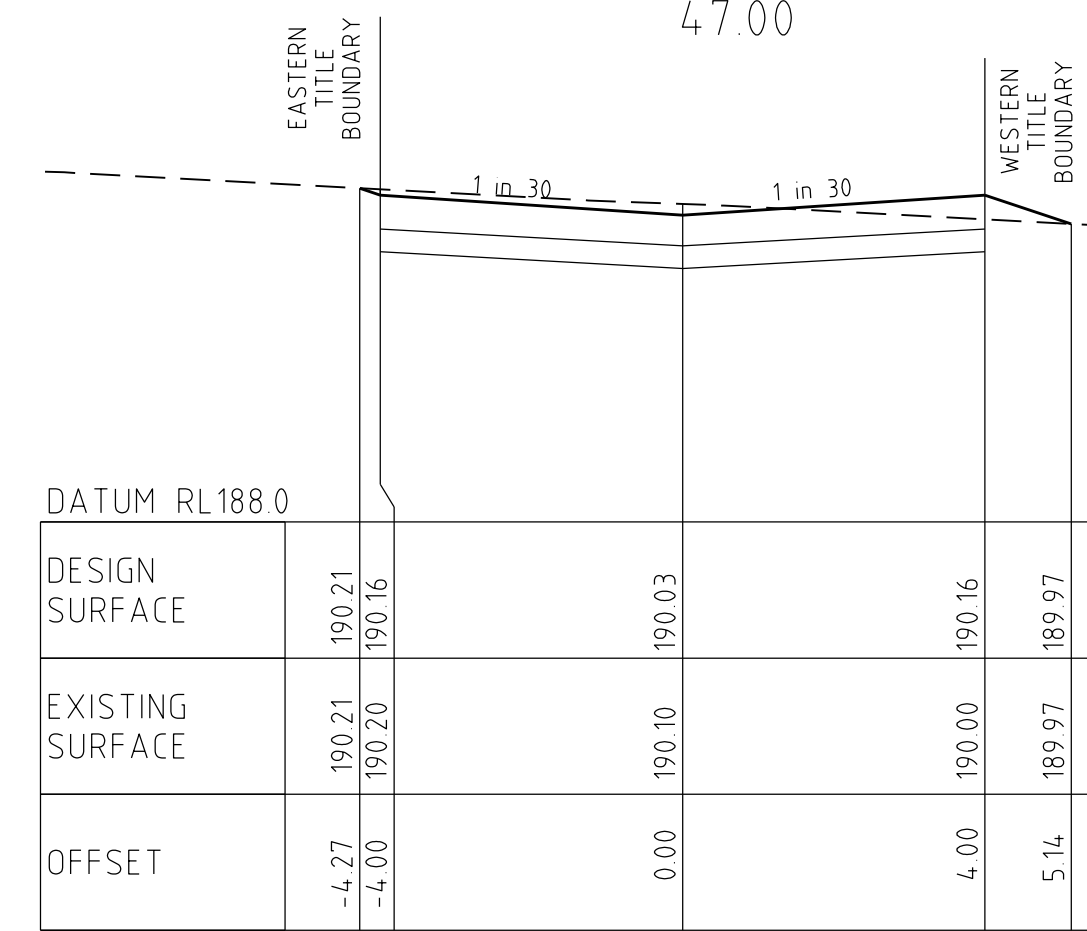
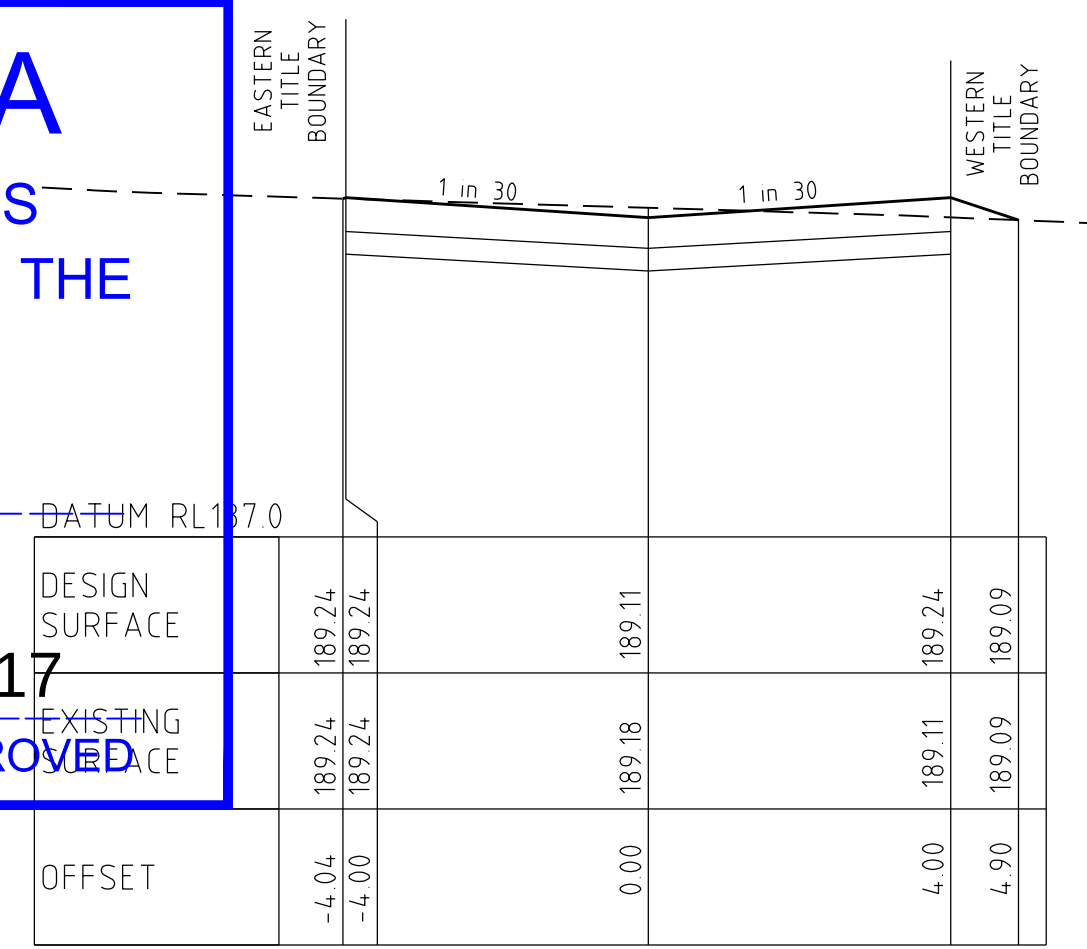
SUMMERS LANE

CROSS SECTIONS

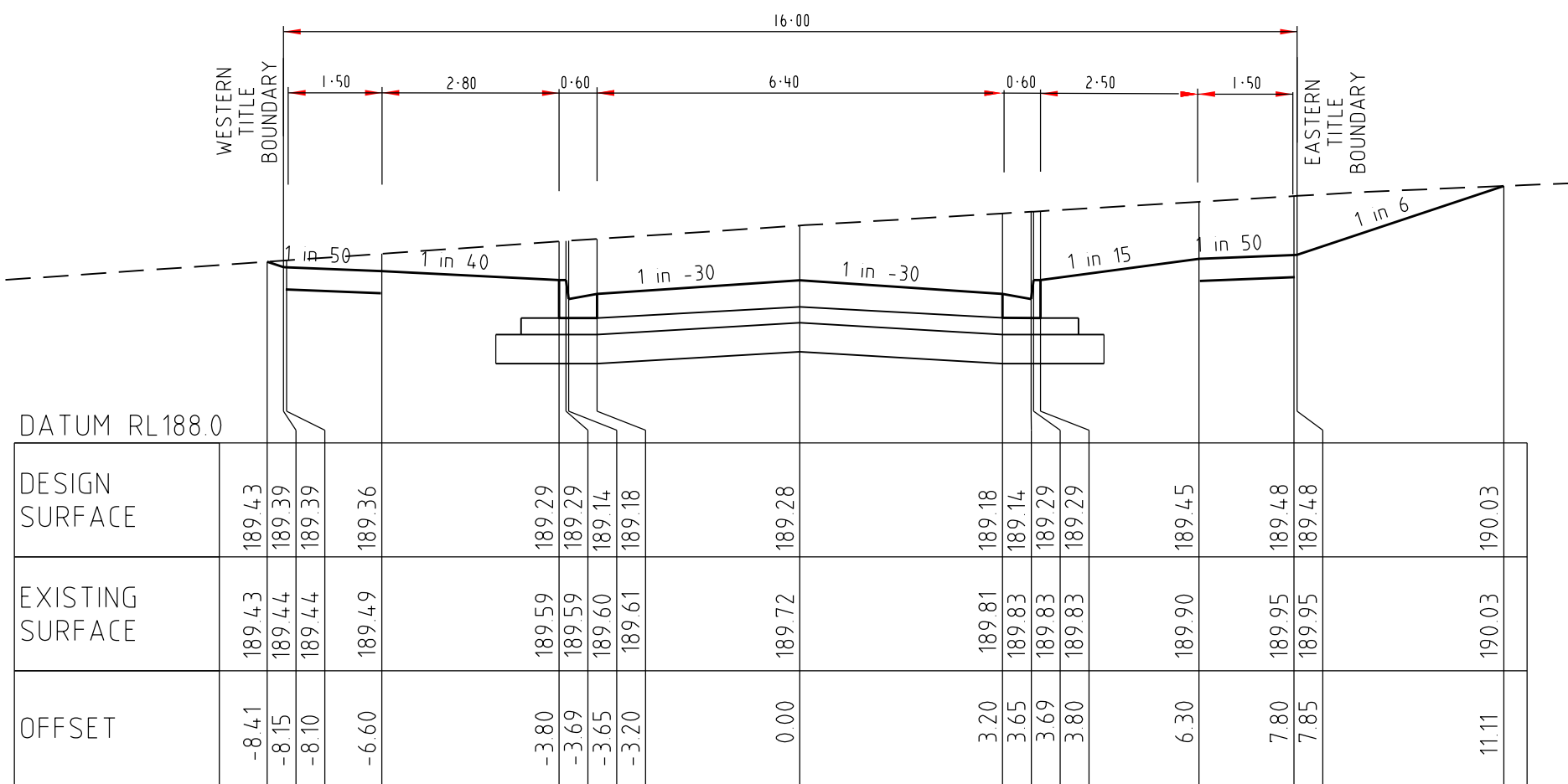
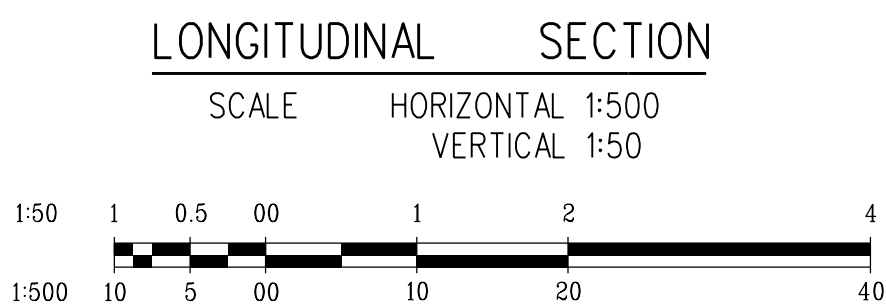
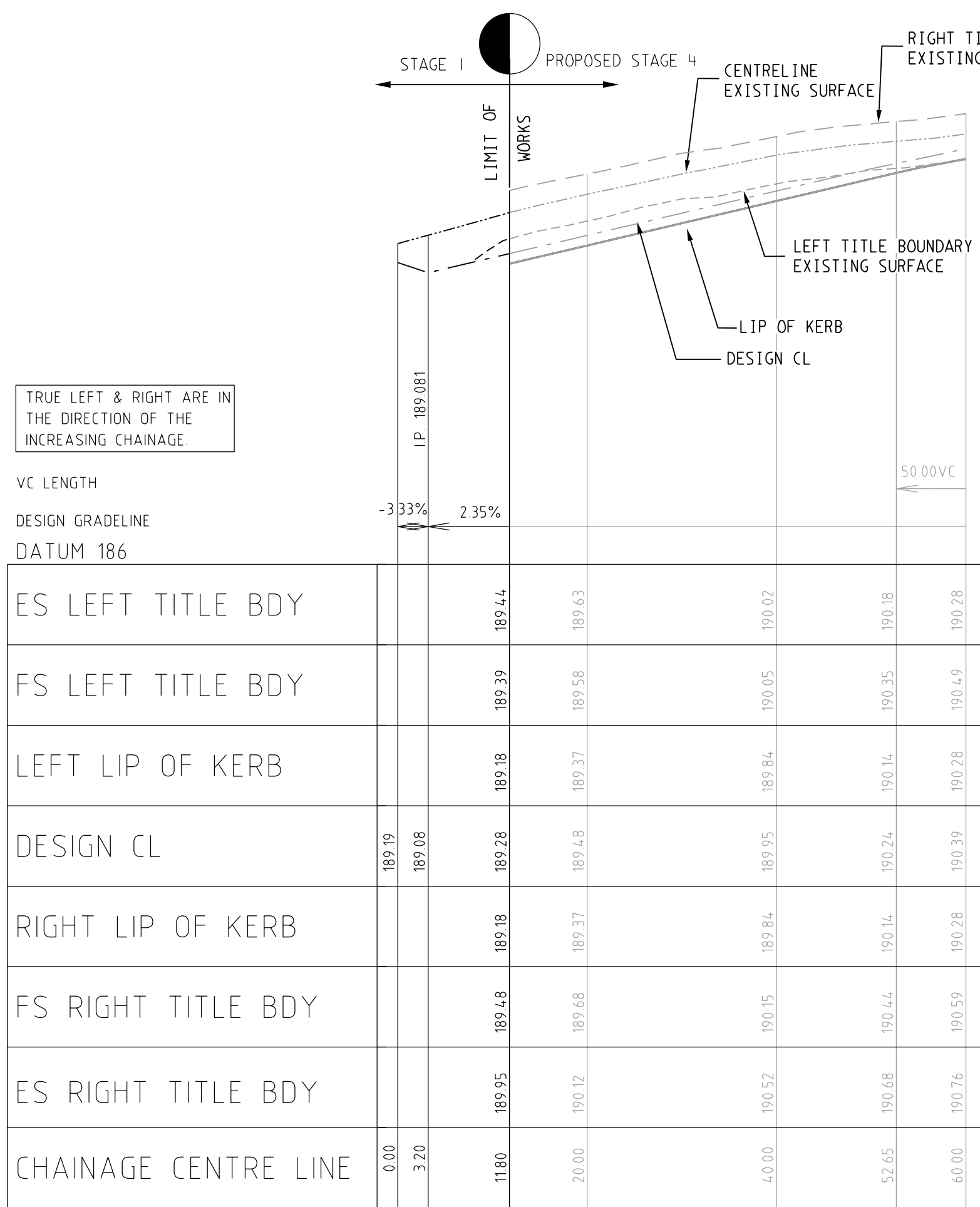
SCALE HORIZONTAL 1:100
VERTICAL 1:50



CRUSHED ROCK BACKFILL

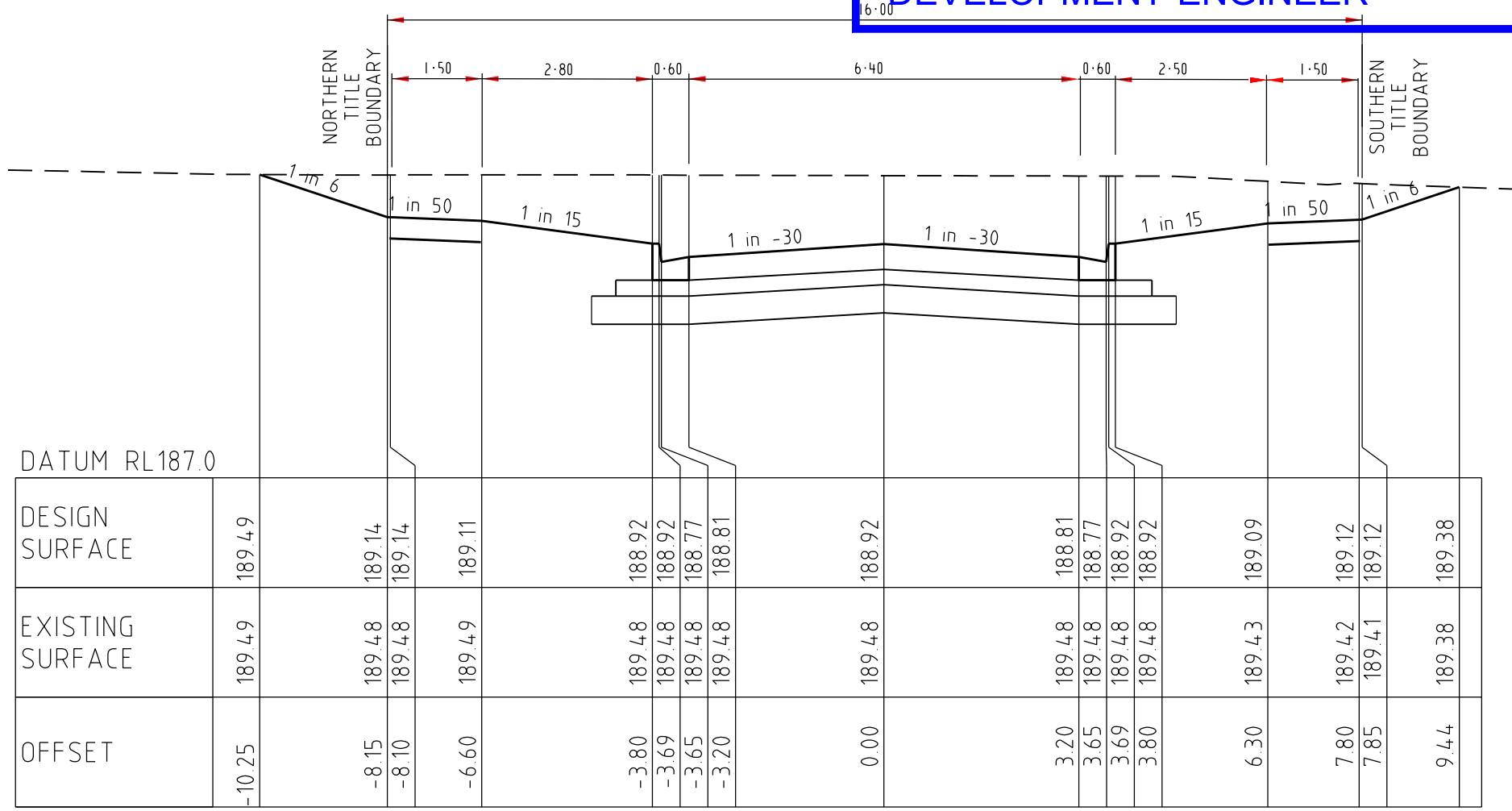
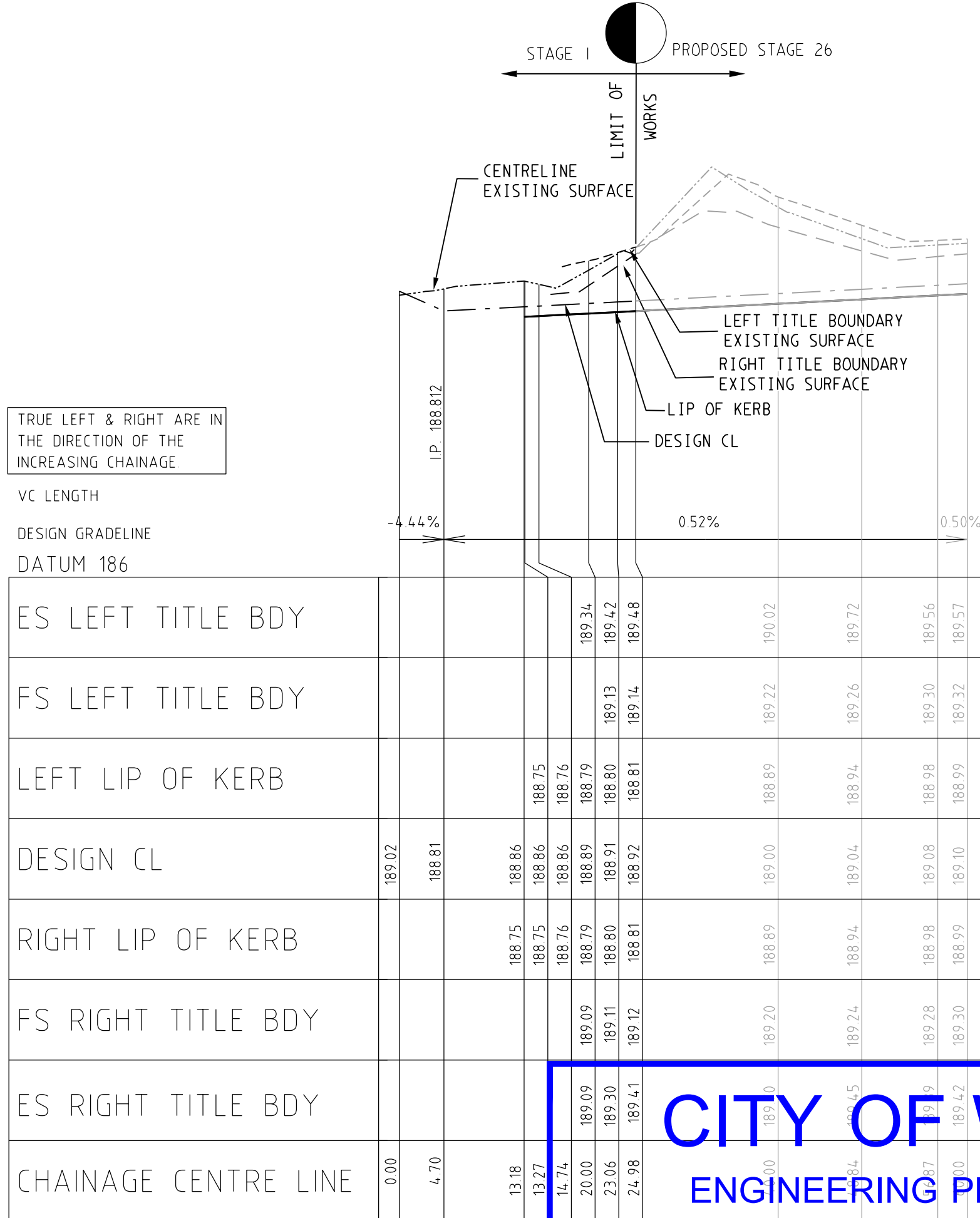


AMENDMENTS		bpd		breese pitt dixon Pty. Ltd. land surveyors civil engineers		1/19 coto street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF.		388-C-10		RATHDOWNE ESTATE STAGE 1 MEMENTO LANE AND SUMMERS LANE		MUNICIPALITY WHITTLESEA REFERENCE 9365 E/1	
SURVEY		SPIIRE		DESIGN		SS	
DRAWN		SS		CHECKED		SCALE AS SHOWN	
DATE		REMARKS		DATE		JAN '17	
SHEET 14 OF 19		P3		DATE		JAN '17	



1180

TIERRA CIRCUIT

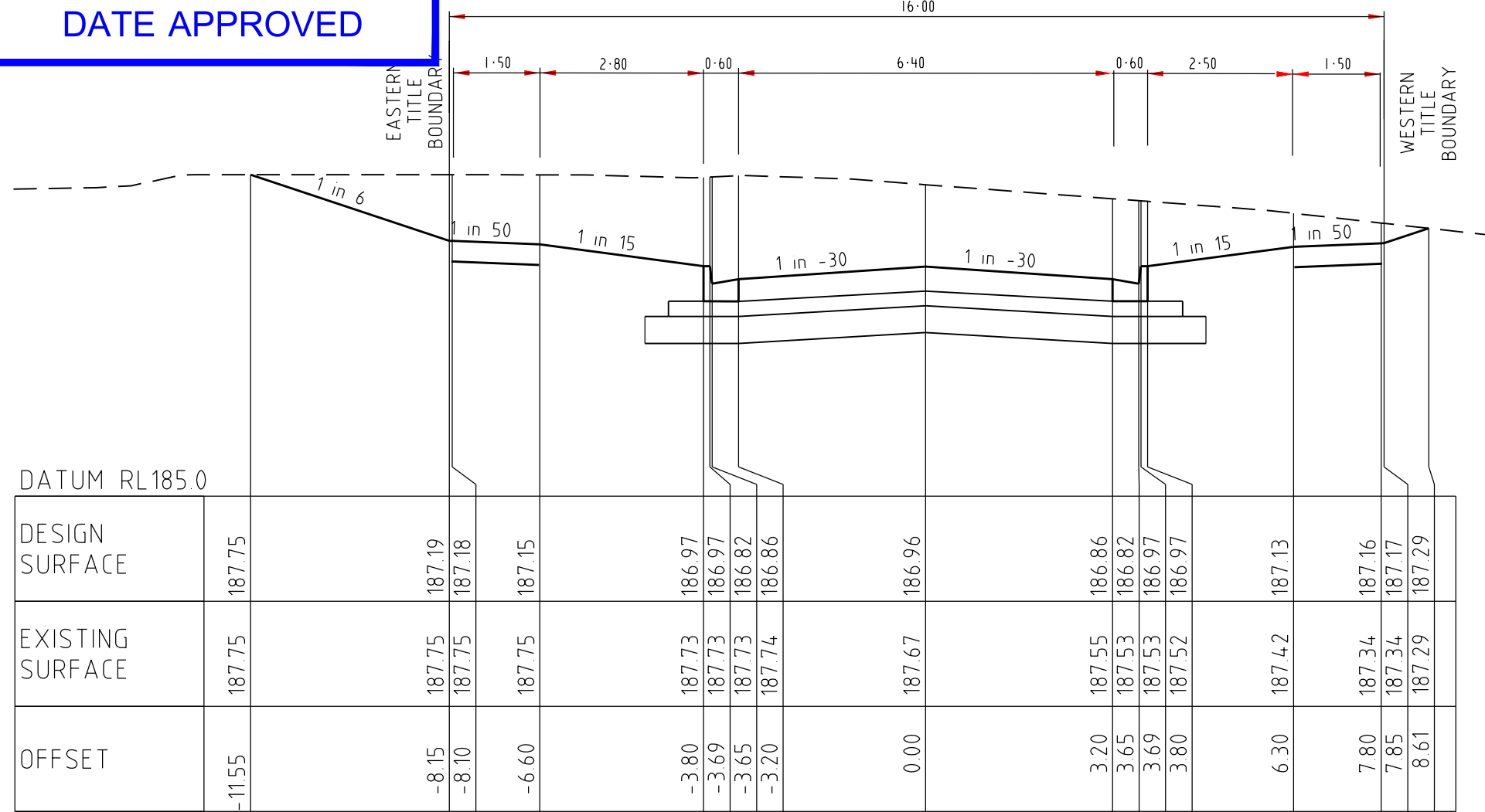
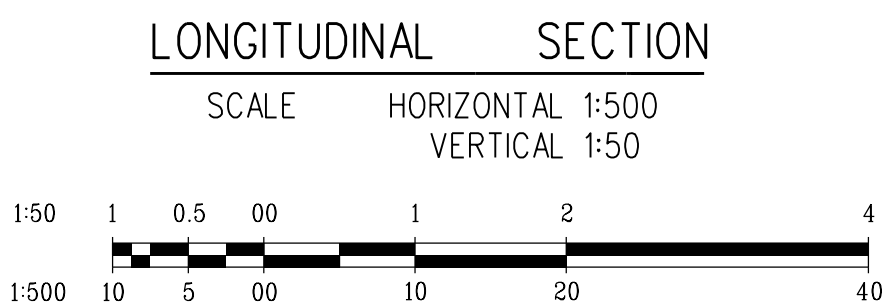
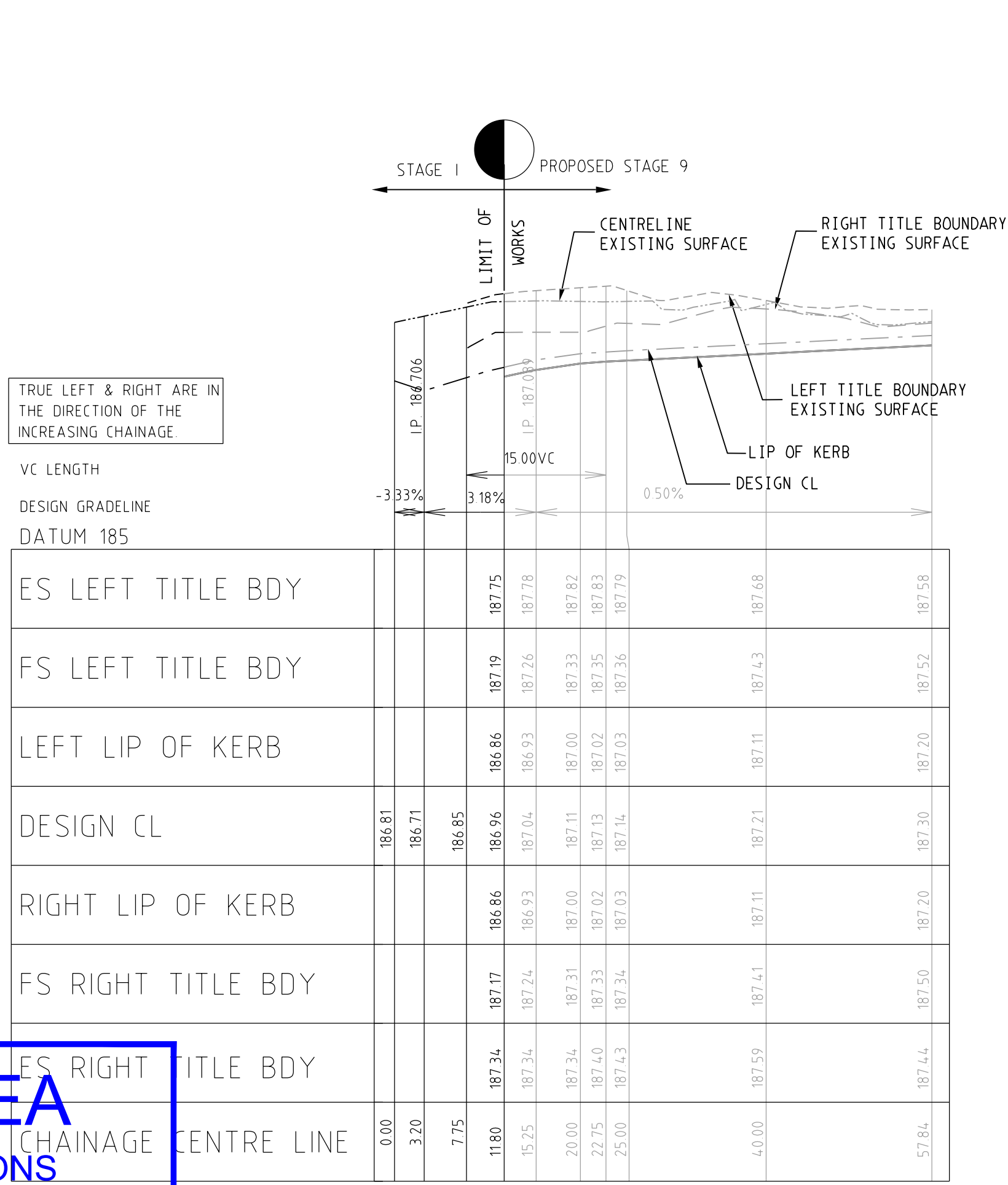


24.98

BANK STREET

CROSS SECTIONS
SCALE HORIZONTAL 1:100
VERTICAL 1:50

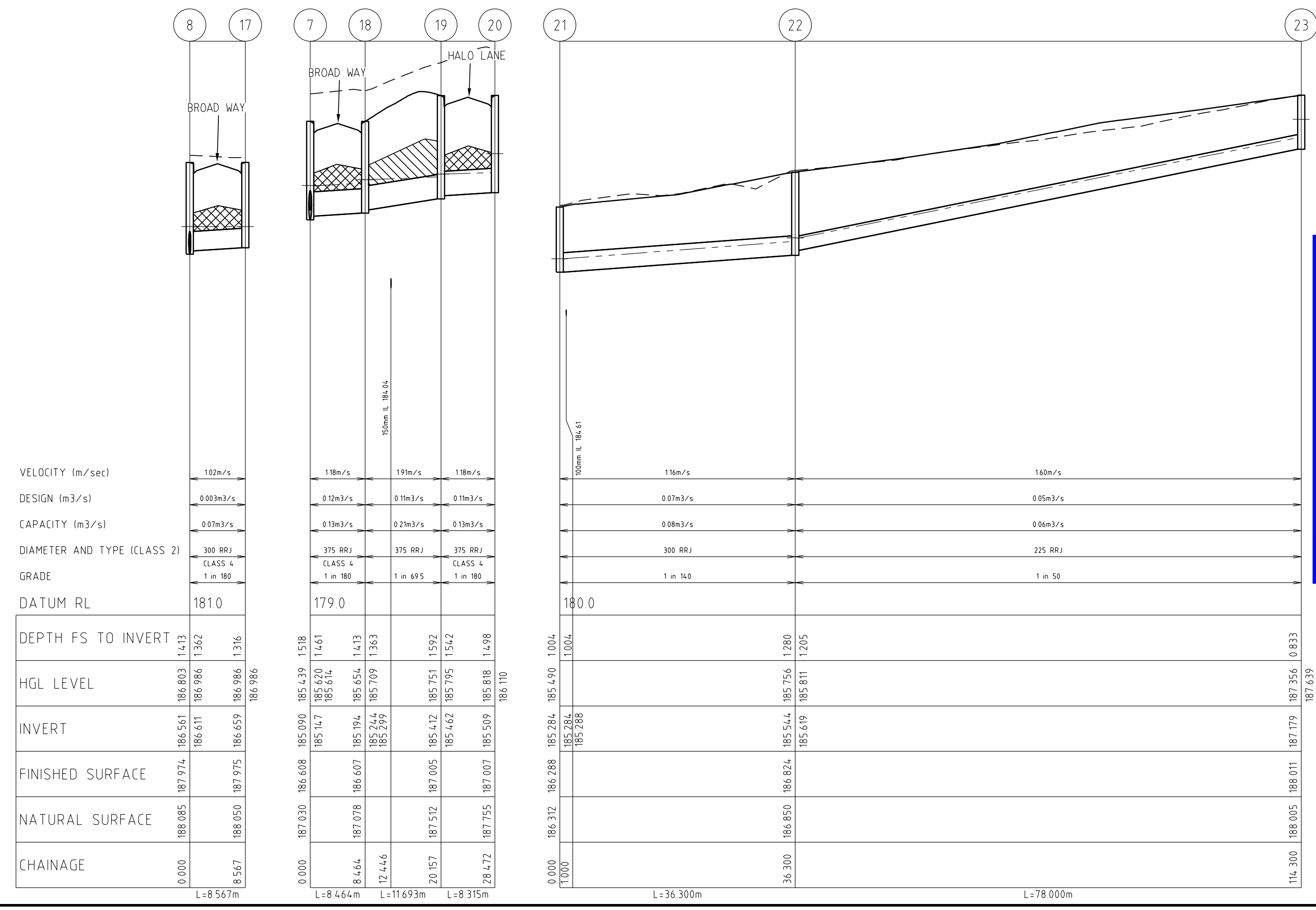
1:50 1 0.5 00 1 2 4
1:100 2 1 00 2 4 8



1180

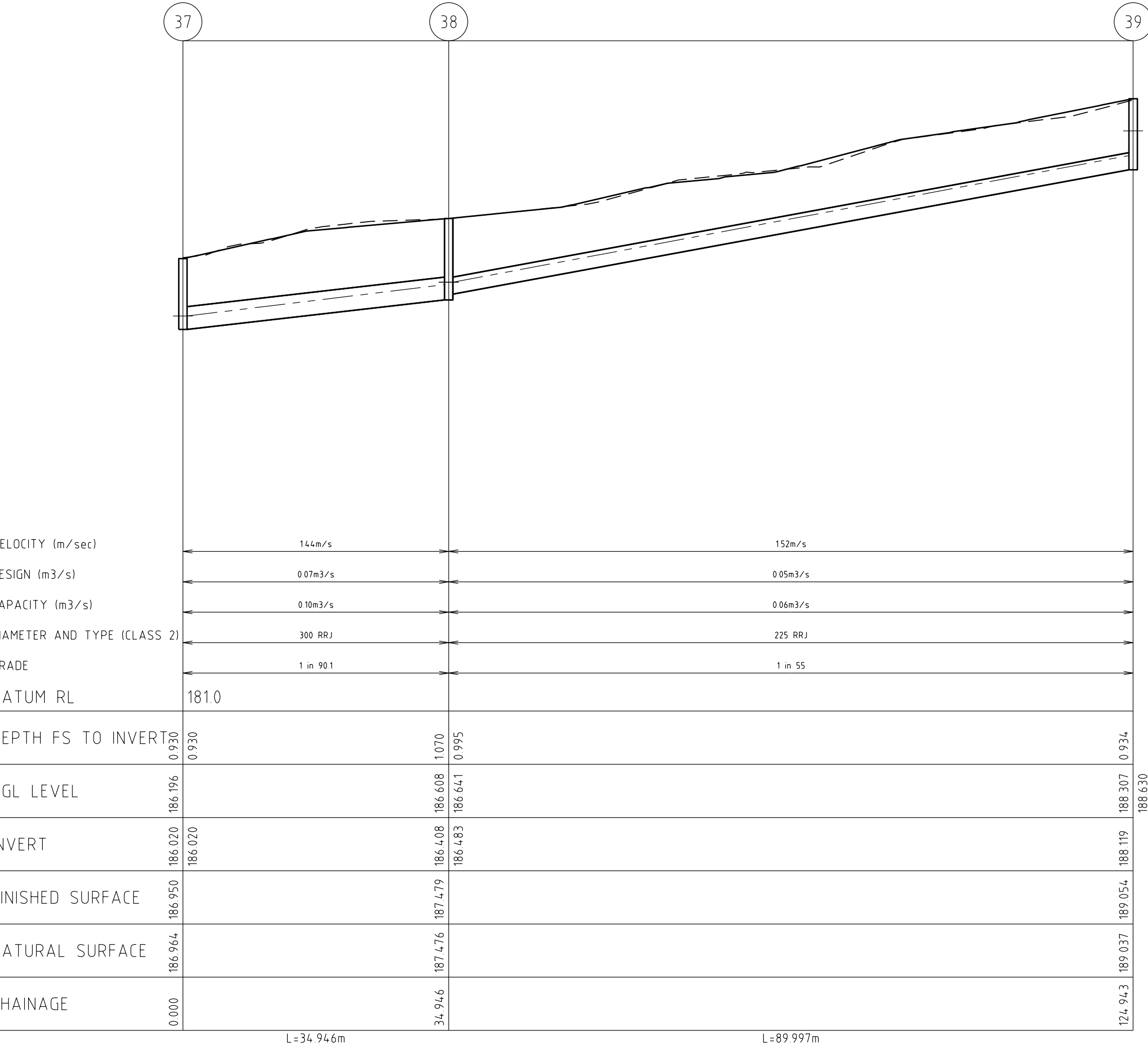
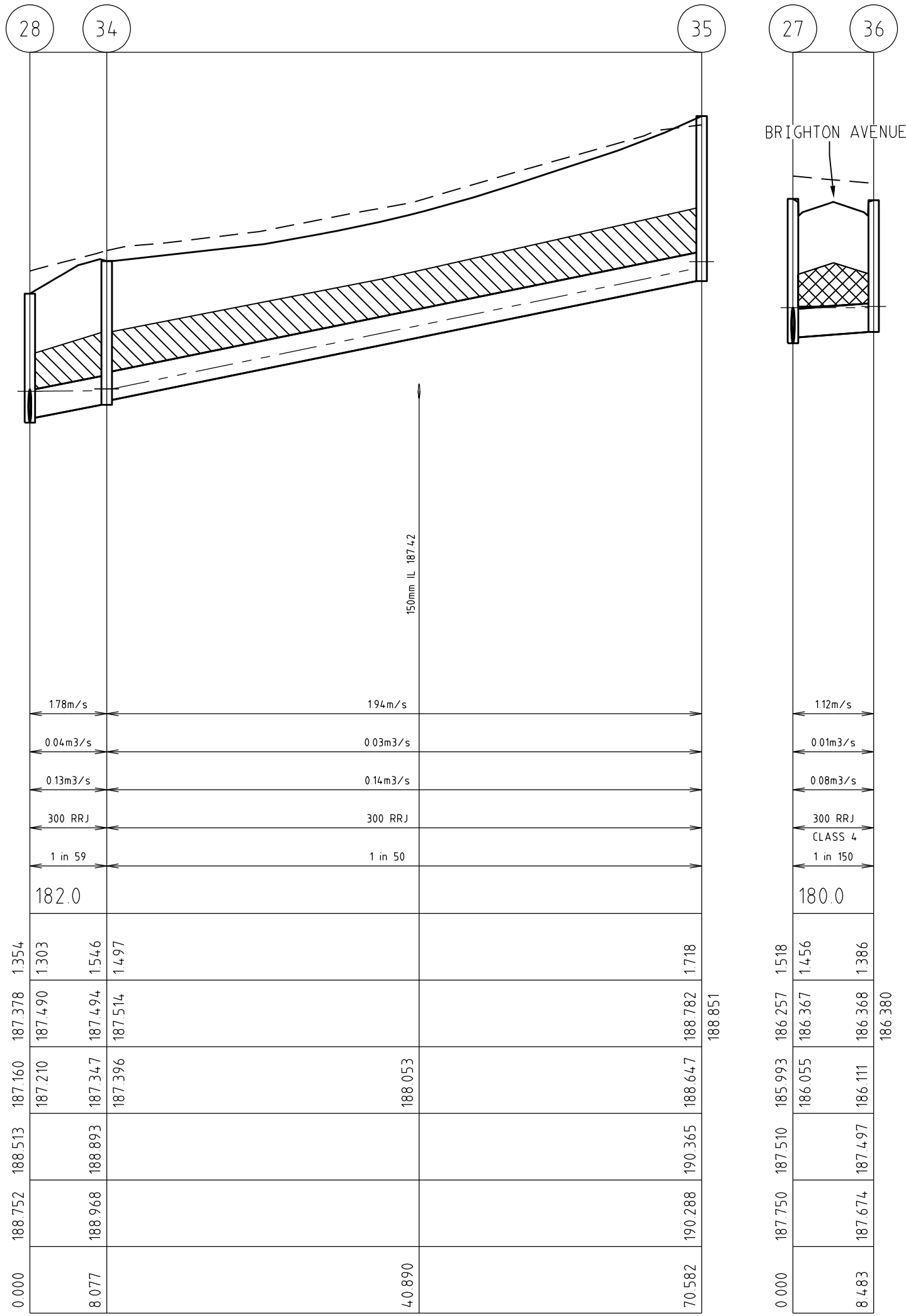
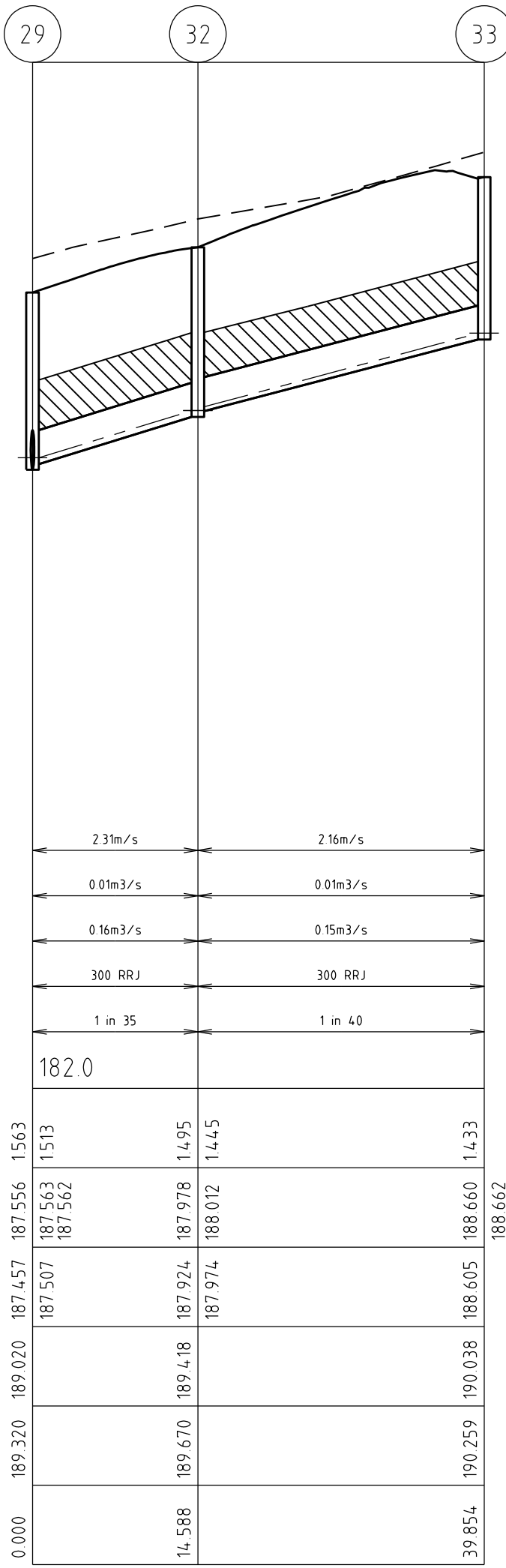
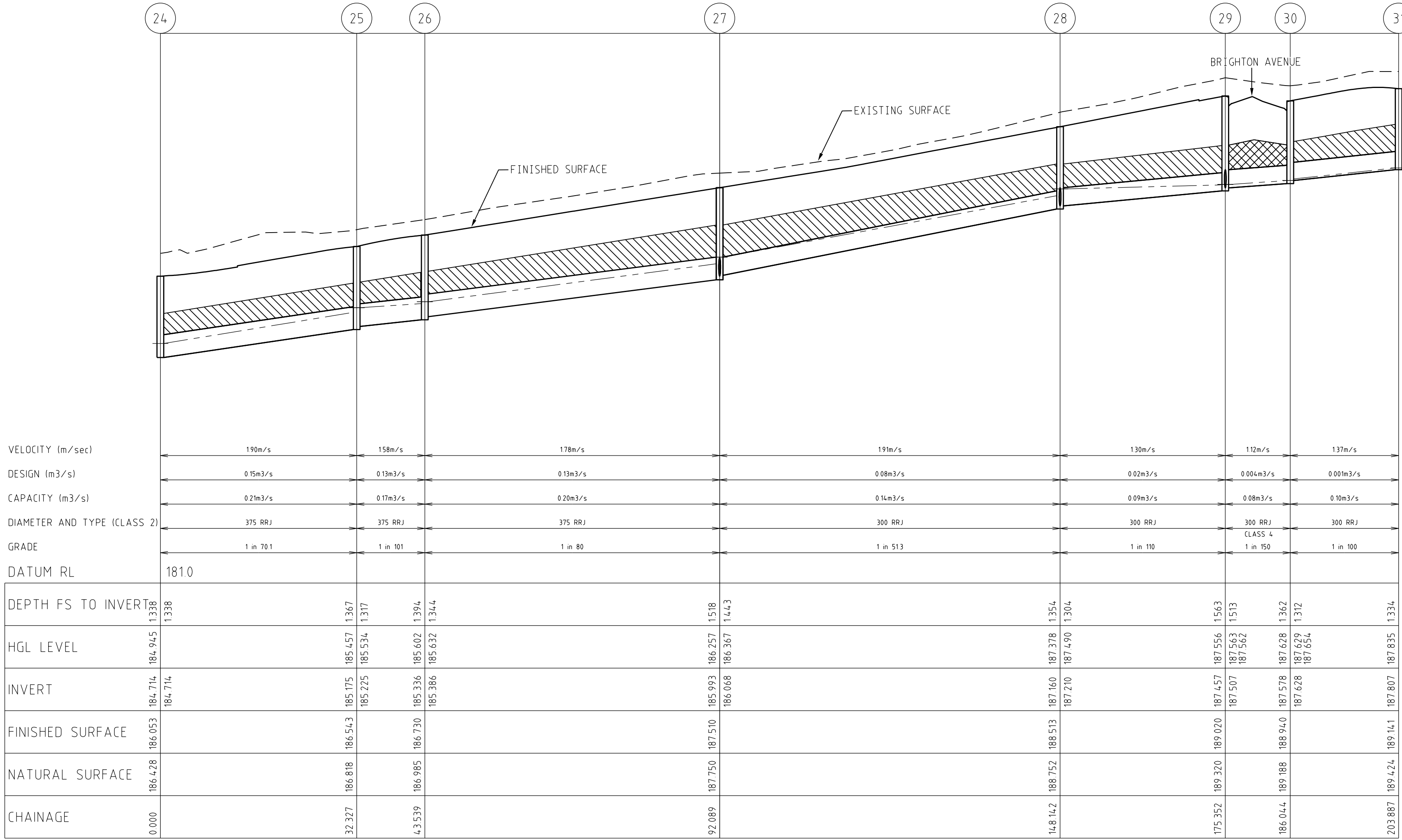
HALO LANE

AMENDMENTS		bpd		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF. 388-C-10		SURVEY SPIIRE		RATHDOWNE ESTATE STAGE 1		MUNICIPALITY WHITTLESEA	
DESIGN SS		DRAWN SS		TIERRA CIRCUIT, BANK STREET & ROAD A		REFERENCE 9365 E/1	
VER	DATE	REMARKS	CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JAN '17	SHEET 15 OF 19



— - — INDICATES 5YR HGL

AMENDMENTS					breese pitt dixon Pty. Ltd. land surveyors civil engineers			1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310				
				MELWAY REF.	388-C-10	RATHDOWNE ESTATE STAGE I DRAINAGE LONGITUDINAL SECTION			MUNICIPALITY			
			SURVEY	SPIIRE	WHITTLESEA							
			DESIGN	SS	REFERENCE							
			DRAWN	SS	9365 E/I							
VER	DATE	REMARKS		CHECKED	SCALE AS SHOWN		DATUM AHD	DATE	JAN'17	SHEET	16 OF 19	P.3



CITY OF WHITTLESEA
ENGINEERING PLANS & SPECIFICATIONS
APPROVED PURSUANT TO SECTION 15 OF THE
SUBDIVISION ACT 1988

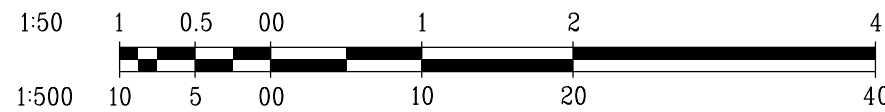
PLAN OF SUBDIVISION No. PS803931Y/S1

[Signature]
DEVELOPMENT ENGINEER

27/11/2017
DATE APPROVED

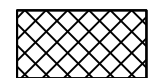
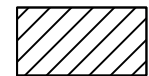
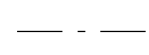
DRAINAGE LONGITUDINAL SECTIONS

SCALE HORIZONTAL 1:500
VERTICAL 1:50



SCHEDULE NOTES:-

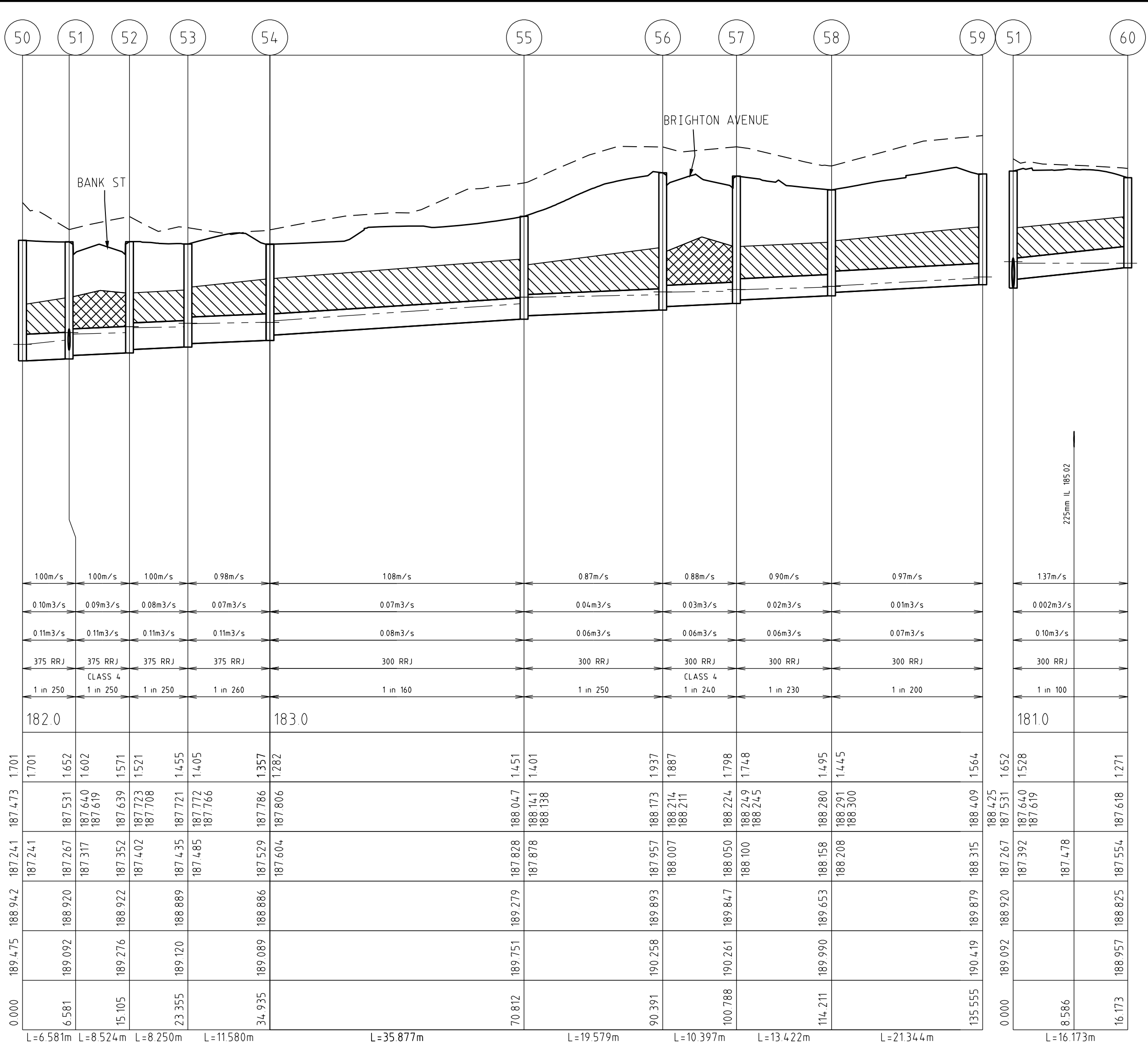
- WHERE PIT HAUNCHING IS REQUIRED, INTERNAL PIT WALL DIMENSIONS MUST ALLOW 50mm CLEARANCE EACH SIDE OF PIPE OUTSIDE DIAMETER, INCLUDING ANGULAR PIPE ENTRY TO PIT. MINIMUM DIMENSIONS OF PIT BASE ARE TO BE AS PER SIZES SPECIFIED IN THE PIT SCHEDULE. TOP OF PIT OPENING FOR ALL HAUNCHED PITS TO BE 900mm x 600mm.
- PIT BASE TO BE SHAPED TO MATCH LOWER HALF OF PIPE WHERE DROP ACROSS PIT IS LESS THAN 50mm.
- PROVIDE BICYCLE SAFE "V" SHAPED CLASS D GRATE (600mm MIN WIDTH).

-  INDICATES CRUSHED ROCK BACKFILL CLASS 2
-  INDICATES CRUSHED ROCK BACKFILL CLASS 3
-  INDICATES 5YR HGL

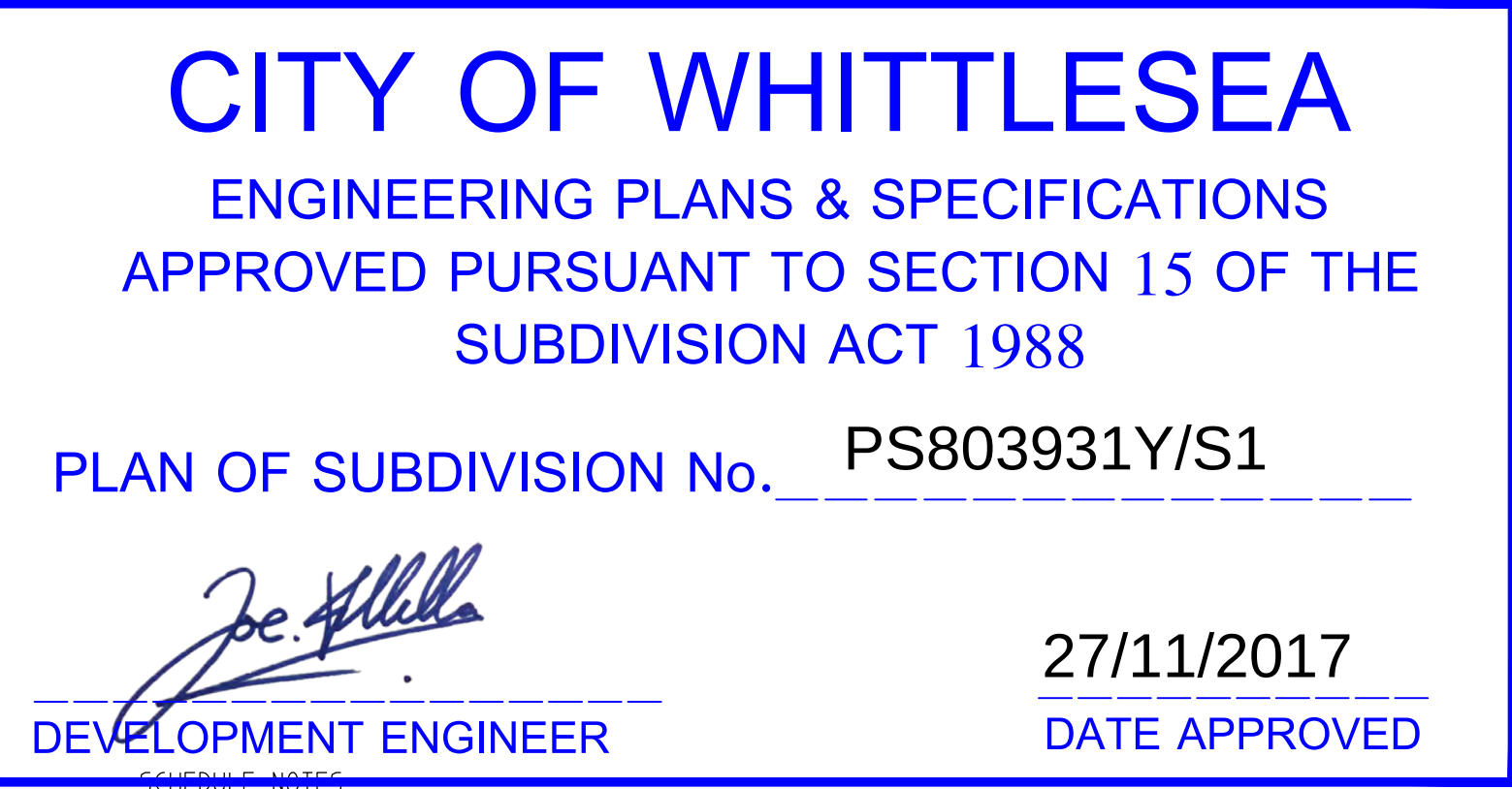
AMENDMENTS					breese pitt dixon pty. ltd.		1/19 cato street
					land surveyors	civil engineers	hawthorn east, 3123
							telephone 8823 2300
							fax no. 8823 2310
VER	DATE	REMARKS	CHECKED	SCALE AS SHOWN	DATUM AHD	DATE JAN '17	SHEET 17 OF 19

MELWAY REF.	388-C-10	RATHDOWNE ESTATE STAGE 1 DRAINAGE LONGITUDINAL SECTION	MUNICIPALITY	WHITTLESEA
SURVEY	SPIIRE		REFERENCE	9365 E/I
DESIGN	SS			
DRAWN	SS			

J:\VH\65\Eng\Stage 1\EB1_R17.DRN2.dgn



PIT SCHEDULE									
PIT No.	PIT DESCRIPTION	LENGTH	WIDTH	INLET INVERT DIA	OUTLET INVERT DIA	TOP PIT RL	DEPTH INVERT	REMARKS	
41	GRADED ENTRY PIT (B2)	900	900	186-79 187-09	600 300	186-64	1-90	EDCM STD DWG 601 (HAUNCHED)	
42	GRADED ENTRY PIT (B2)	900	900	188-40 188-70	600 300	188-35	1-74	EDCM STD DWG 601 (HAUNCHED)	
43	GRADED ENTRY PIT (B2)	900	900	189-35 189-05	300 600	189-00	2-01	EDCM STD DWG 601 (HAUNCHED)	
44	GRADED ENTRY PIT (B2)	900	600	189-45	300	189-40	1-55	EDCM STD DWG 601	
45	GRADED ENTRY PIT (B2)	900	600		300	189-50	1-38	EDCM STD DWG 601	
46	GRADED ENTRY PIT (B2)	900	600		300	188-62	1-43	EDCM STD DWG 601	
47	GRADED ENTRY PIT (B2)	900	600		300	188-76	1-32	EDCM STD DWG 601	
48	END PIPE					189-71	1-42	1-71 BLANK END	
50	END PIPE			187-241	375		1-701	TEMPORARY SANDBAG ENDWALL	
51	GRADED ENTRY PIT (B2)	900	600	187-317 187-392	375 300	187-267	1-652	EDCM STD DWG 601	
52	GRADED ENTRY PIT (B2)	900	600	187-402	375	187-352	1-571	EDCM STD DWG 601	
53	GRADED ENTRY PIT (B2)	900	600	187-485	375	187-435	1-455	EDCM STD DWG 601	
54	GRADED ENTRY PIT (B2)	900	600	187-604	300	187-529	1-357	EDCM STD DWG 601	
55	GRADED ENTRY PIT (B2)	900	600	187-878	300	187-828	1-451	EDCM STD DWG 601	
56	GRADED ENTRY PIT (B2)	900	600	188-007	300	187-957	1-937	EDCM STD DWG 601	
57	GRADED ENTRY PIT (B2)	900	600	188-100	300	188-050	1-798	EDCM STD DWG 601	
58	GRADED ENTRY PIT (B2)	900	600	188-208	300	188-158	1-495	EDCM STD DWG 601	
59	GRADED ENTRY PIT (B2)	900	600		300	188-315	1-564	EDCM STD DWG 601	
60	GRADED ENTRY PIT (B2)	900	600		300	187-554	1-271	EDCM STD DWG 601	



- | | | | | | | | | |
|------------|------|--|---|---|-------------|----------------|------------------|----|
| AMENDMENTS | | |  <div style="display: inline-block; vertical-align: middle;"> <p style="margin: 0;">breese pitt dixon pty. ltd.</p> <p style="margin: 0;">land surveyors civil engineers</p> </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> <p style="margin: 0;">1/19 coto street</p> <p style="margin: 0;">hawthorn east, 3123</p> <p style="margin: 0;">telephone 8823 2300</p> <p style="margin: 0;">fax no. 8823 2310</p> </div> | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | MELWAY REF. 388-C-10
SURVEY SPIRE
DESIGN SS
DRAWN SS | RATHDOWNE ESTATE
STAGE 1
DRAINAGE LONGITUDINAL SECTION | MUNICIPALITY
WHITTLESEA
REFERENCE
9365 E/1 | | | | |
| VER. | DATE | REMARKS | CHECKED | SCALE AS SHOWN | DATUM AHD | DATE JAN'17 | SHEET 18 OF 19 | P3 |

27/11/2017
DATE APPROVED

