

STANDARD NOTES

1. ALL WORKS IN THIS CONTRACT ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT STANDARD DRAWINGS AND SPECIFICATIONS OF THE RELEVANT RESPONSIBLE AUTHORITIES. ANY DISPUTE THAT ARISES AT ANY TIME UNTIL THE RESPONSIBLE AUTHORITIES ACCEPT THE WORKS FOR FUTURE CARE AND MAINTENANCE, THE STANDARD DRAWING AND SPECIFICATION WILL TAKE PRECEDENCE OVER THE CONSTRUCTION PLAN.
2. ALL ROADWORKS SIGNAGE IS TO BE IN ACCORDANCE WITH VICROADS WORKSITE TRAFFIC MANAGEMENT CODE OF PRACTICE INCORPORATING AS 1742.3.

SITE MANAGEMENT

3. ALL WORKS ARE TO BE UNDERTAKEN IN ACCORDANCE WITH THE APPROVED CONSTRUCTION MANAGEMENT PLAN.
4. ALL TREES, SHRUBS ETC ARE TO BE RETAINED UNLESS OTHERWISE INDICATED.
5. DURING THE CONSTRUCTION AND MAINTENANCE PERIOD SILT FENCES ARE TO BE PLACED DOWNSTREAM OF ALL EXPOSED AREAS, AND SILT BARRIERS ARE TO BE PLACED UPSTREAM OF ALL PITS. THE SILT FENCES AND SILT BARRIERS ARE TO BE CHECKED AND MAINTAINED UNTIL THE END OF THE MAINTENANCE PERIOD.
6. ALL AREAS OF THE SUBDIVISION EXPOSED OF VEGETATION, INCLUDING NATURESTRIPS, LOTS AND RESERVE ARE TO BE FULLY GRASSED BY HYDOMULCHING, WATERING AND MAINTAINED UNTIL THE END OF THE MAINTENANCE PERIOD.

GENERAL

7. THE CONTRACTOR SHALL:
- a) GIVE 48 HOURS NOTICE IN WRITING TO COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORKS.
- b) NOTIFY COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE 24 HOURS PRIOR TO WORKING ON ANY WEEKEND.
- c) BE FULLY AWARE OF ALL SITE CONDITIONS PRIOR TO TENDERING.
- d) BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF WORKS AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE SERVICES.
- e) BE RESPONSIBLE FOR THE INSTALLATION OF ALL SERVICES REQUIRED FOR THE PROJECT.
- f) ENSURE THAT ALL SERVICES ARE INSTALLED TO THE SPECIFIED OFFSETS AND MEETS MINIMUM COVER REQUIREMENTS. ALL SURFACE FIXTURES, PITS, VALVES, FIREPLUGS, ETC. SHALL BE INSTALLED A MINIMUM OF 6.5m FROM ANY SIDE BOUNDARY IN THE ROAD RESERVE AND SHALL MATCH THE REQUIRED FINISHED SURFACE LEVEL. THIS APPLIES TO ALL SERVICES REQUIRED FOR THE PROJECT IRRESPECTIVE IF THEY ARE INSTALLED BY THE CONTRACTOR OR OTHERWISE.
- g) COMPLY WITH THE REQUIREMENTS OF THE MINES ACT 1958 AND RELEVANT REGULATIONS INCLUDING NOTIFICATION IN WRITING (CLAUSE 385) TO THE CHIEF MINING INSPECTOR OF THE INTENTION TO COMMENCE EXCAVATION OPERATIONS WHERE ANY TRENCH IS 15m OR MORE IN DEPTH.
- h) GIVE 24 HOURS NOTICE TO COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE PRIOR TO BACKFILLING OF ANY PIPE TRENCHES OR LAYING OF ANY PAVEMENT OR CONCRETE WORKS SO THAT THE WORKS CAN BE CHECKED AND APPROVED.
- i) COMPLY WITH THE OCCUPATIONAL HEALTH AND SAFETY (CONFINED SPACES) REGULATIONS AND CODE OF PRACTICE FOR CONFINED SPACES.
- j) BE RESPONSIBLE FOR THE COMPACTION AND/OR ANY OTHER REQUIRED TESTING OF THE PAVEMENT MATERIAL BY AN APPROVED GEOTECHNICAL CONSULTANT AS AND WHEN DIRECTED BY COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.
8. ANY WORKS WITHIN ROADWAYS SHALL SATISFY COUNCIL'S "REQUIREMENTS FOR OCCUPANCY OF ROAD RESERVE". CONTACT COGG TRAFFIC MANAGEMENT OFFICER ON TELEPHONE (03) 52724384 FOR FURTHER SPECIFIC DETAILS RELATING TO THIS PROJECT. A COPY OF THE TRAFFIC MANAGEMENT PLAN IS TO BE FORWARDED TO THE COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE PRIOR TO WORKS COMMENCING.
9. ALL REASONABLE CARE SHALL BE TAKEN BY THE CONTRACTOR TO PRESERVE THE SURVEY PEGS. ANY REINSTATEMENT OF BOUNDARY PEGS FOR CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR. BENCHMARK VALUES ARE VALID FOR 6 MONTHS FROM THE ISSUED DATE OF THE SURVEY AND ARE TO BE CHECKED PRIOR TO COMMENCEMENT OF WORKS AND ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY.
10. ALL DIMENSIONS ARE IN METRES AND LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (A.H.D.)

ROADWORKS

11. SUBSOIL DRAINS ARE TO BE CONSTRUCTED BEHIND THE KERB AND CHANNEL OR AS DIRECTED BY THE COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.
12. WHERE DRAINAGE LINES EXIST BEHIND THE KERB AND CHANNEL SUBSOIL DRAINAGE IS NOT REQUIRED HOWEVER A 1m LENGTH OF SUBSOIL DRAIN INCLUDING FILTER SOCK IS REQUIRED BOTH SIDES OF DRAINAGE PITS.
13. ALL FOOTPATHS ARE TO BE A MINIMUM OF 125mm THICK WITH F72 REINFORCEMENT AND BEDDED ON A MINIMUM OF 50mm COMPACTED CLASS 3 FCR WITH THE BEDDING TO EXTEND 100mm BEYOND THE EDGES OF THE PROPOSED FOOTPATH PRIOR TO THE PLACEMENT OF THE TIMBERS AND BOARDS. CONTRACTION OR EXPANSION JOINTS ARE TO BE CONSTRUCTED BETWEEN 10 TO 15 METER INTERVALS
14. WHERE FILLING IS REQUIRED UNDER THE FOOTPATH BEDDING MATERIAL THEN CLASS 4 FCR IS TO BE USED UNLESS OTHERWISE APPROVED BY THE COGG SUBDIVISIONS ENGINEER.
15. CONCRETE FOR KERB AND CHANNEL USED IN EXTRUSION MACHINES SHALL HAVE A MINIMUM CEMENT CONTENT OF 320 KG/M3.
16. CONCRETE FOR STORMWATER PITS AND ANY OTHER STORMWATER RELATED STRUCTURE IS TO HAVE A MINIMUM STRENGTH OF 32 MPA AT 28 DAYS.
17. CONCRETE FOR ALL OTHER APPLICATIONS IS TO HAVE A MINIMUM STRENGTH OF 25 MPA AT 28 DAYS.
18. TO ALLOW FOR A CONTINUOUS CONCRETE KERB AND CHANNEL POUR THE STORMWATER PIT CONCRETE SURROUND IS TO BE IN PLACE PRIOR TO THE POUR COMMENCING. IF THE PIT SURROUNDS ARE NOT IN PLACE THEN THE INITIAL KERB AND CHANNEL POUR IS TO STOP ONE METRE EITHER SIDE OF EVERY PIT.
19. PRIOR TO ANY FILLING ON LOTS ALL TOPSOIL IS TO BE REMOVED AND STOCKPILED. THE FILL MUST BE APPROVED AND CONSOLIDATED IN 150mm COMPACTED LAYERS TO A DRY DENSITY OF 95% STANDARD COMPACTION IN ACCORDANCE WITH AS1289. THE TOPSOIL IS THEN TO BE UNIFORMLY REPLACED TO A COMPACTED DEPTH OF 100mm. COMPACTION TESTING WILL BE REQUIRED AT THE DISCRETION OF THE COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.
20. ALLOTMENTS SHALL BE GRADED TO AN EVEN SURFACE AT THE COMPLETION OF ALL WORKS AND SHALL HAVE A MINIMUM GRADE OF 1 IN 200 (IDM) TO THEIR NOMINATED DRAINAGE CONNECTION POINTS. ALL SURPLUS SPOIL, BOXTHORN, FENCING, CONSTRUCTION WASTE AND OTHER RUBBISH SHALL BE REMOVED FROM SITE AT THE COMPLETION OF WORKS.
21. BATTER SLOPES ON LOTS SHALL BE A MAXIMUM OF 1 IN 6 FOR FILL AND 1 IN 3 FOR CUT UNLESS OTHERWISE SHOWN.
22. ROUNDED-TOPPED WHITE CYPRUS HARVESTED FROM SUSTAINABLE FOREST BOLLARDS (0.6m HIGH) OR AS APPROVED BY COUNCIL PARKS/RECREATION AND OPEN SPACE/ENVIROMENT DEPARMENTS ARE TO BE PLACED ACROSS THE RESERVE FRONTAGE AT 1.5M CENTRES, REFER TO COUNCIL STANDARD DRAWING CGG 701. A DEMOUNTABLE SECTION FOR VEHICLE ACCESS TO COUNCIL STANDARDS, REFER STANDARD DRAWING CGG702 & CGG703.
23. STREET SIGNS ARE TO BE LOCATED AS INDICATED ON THE PLANS AND INSTALLED IN ACCORDANCE WITH VICROADS TRAFFIC ENGINEERING MANUAL VOLUME 2. MOUNTING HEIGHT IS TO BE TO THE UNDERSIDE OF THE SIGN AND IS TO BE A MINIMUM OF 2.1m AND MAXIMUM OF 3.0m.
24. 'NO THROUGH ROAD' SIGN IS TO BE INSTALLED BELOW THE STREET SIGN WHERE APPLICABLE.
25. ALL REINFORCEMENT USED IN CONCRETE WORKS FOR FOOTPATH DRIVEWAYS AND ROADS IS TO BE ADEQUATELY SUPPORTED BY APPROPRIATE SIZED BAR CHAIRS PRIOR TO THE POURING/PLACEMENT OF CONCRETE.
26. AT THE TERMINATION OF STAGED PAVEMENT CONSTRUCTION, A CONCRETE EDGE STRIP 200mm X 200mm AND SUBSOIL DRAIN IS TO BE INSTALLED ACROSS THE WIDTH OF THE PAVEMENT AND A 'NO THROUGH ROAD' AND CHEVRON MARKER SIGNS ARE TO BE INSTALLED ACROSS THE FULL WIDTH OF THE ROAD RESERVE. APPROPRIATE RETAINING WALLS AND FENCING IS TO BE PROVIDED AS DIRECTED BY COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.
27. WHERE LINE MARKING NEEDS TO BE REMOVED, THESE LINES ARE TO BE PERMANENTLY REMOVED EITHER BY GRINDING THE OLD LINES OFF OR BY PLACING A SEAL AND GRIT TREATMENT (USING THE 'FLOCON' SYSTEM) OVER THE UNWANTED LINES.
28. LOT NUMBERS SHALL BE STENCILED IN 50mm HIGH FIGURES WITH WHITE PAINT ON THE FACE OF THE KERB AND CHANNEL.
29. CIVIL CONTRACTOR TO CONTACT SUPERINTENDENT MINIMUM OF 7 DAYS PRIOR TO POURING ANY KERB & CHANNEL TO ENSURE THAT DRIVEWAY LOCATIONS HAVE NOT ALTERED.

DRAINAGE

30. PIPE DRAINAGE WITHIN ROADWAYS TO BE REINFORCED CONCRETE PIPES - CLASS 2 UNLESS OTHERWISE SHOWN.
31. ALL REINFORCED CONCRETE PIPES ARE TO BE RUBBER RING JOINTED.
32. PIPES IN EASEMENTS ARE TO BE RUBBER RING JOINTED OR UPVC SEWER CLASS PIPES WITH SOLVENT CEMENT JOINTS.
33. ALL DRAINAGE PITS IN COUNCIL ROAD RESERVES, DRAINAGE RESERVES AND RECREATION RESERVES ARE TO HAVE LIDS THAT ARE, AT LEAST CLASS D (HEAVY DUTY) IN ACCORDANCE WITH AUSTRALIAN STANDARD AS 3996.
34. ALL PITS ARE TO BE SET OUT FROM SURVEY CO-ORDINATES USING SET OUT POINTS DETAILED IN THE COGG STANDARD DRAWINGS.
49. ALL DRAINAGE PIT LIDS ARE TO BE 'TERRA-FIRMA' OR APPROVED EQUIVALENT.
50. ALL PIPES UNDER FOOTPATHS, DRIVEWAYS AND BEHIND BACK OF KERB SHALL BE BACKFILLED WITH 20mm NOM SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 95% MODIFIED COMPACTION IN 150mm MAXIMUM LAYERS.
51. CONTRACTOR TO USE 2% CEMENT STABILISED SAND FROM THE BOTTOM OF THE STORMWATER PIPE TO THE SPRINGLINE WHEN DRAINAGE IS CONSTRUCTED UNDER THE ROAD. CLASS 3 CRUSHED ROCK TO BE USED FOR BACKFILL FROM THE SPRINGLINE TO THE PAVEMENT SUB-BASE.
52. PIPEWORK AT ALL PITS TO BE WELL ALIGNED TO ENSURE FLOW IS GUIDED DIRECTLY TO OUTLET PIPE.
53. ALL PIPELINES ARE TO BE INSPECTED VIA CCTV AT PRACTICAL COMPLETION AT THE CONTRACTORS' EXPENSE AND UNDER THE SUPERVISION OF COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.
54. PROPERTY INLET PITS TO BE LOCATED 1M FROM THE LOW CORNER UNLESS OTHERWISE SHOWN.
55. HOUSE DRAINS ARE TO BE 100mm DIAMETER SEWER CLASS PVC SOCKETED PIPES LOCATED 6.5m FROM THE LOW CORNER OF THE LOT UNLESS OTHERWISE SHOWN. OPTION "No. 1" IS TO CONNECT TO A PIT, "No.2" IS TO CONNECT TO THE UNDERGROUND DRAINAGE PIPE AND "No.3" IS TO KERB (MINIMUM 1.0m AWAY FROM EDGE OF VEHICLE LAYBACK.
56. HOUSE DRAINS ARE TO BE A MINIMUM OF 0.5m BELOW FINISHED SURFACE AT THE LOT BOUNDARY UNLESS OTHERWISE SHOWN.
57. EASEMENT DRAIN CONNECTION TO BE A MINIMUM OF 0.5m BELOW FINISHED SURFACE UNLESS OTHERWISE SHOWN.
58. WHEN USING 150mm DIAMETER UPVC SEWER CLASS PIPES IN EASEMENTS FOR PRIVATELY OWNED PROPERTIES, THE HOUSE DRAINS ARE TO BE CONNECTED USING STANDARD T-PIECE FITTINGS.
59. WHEN USING 225mm DIAMETER OR LARGER UPVC PIPES, HOUSE DRAINS ARE TO BE CONNECTED IN A SIMILAR WAY TO CONCRETE PIPES SUBJECT TO THE INLET BEING CORE DRILLED.
60. WATER AND GAS SERVICE CONDUITS SHALL BE LOCATED CLEAR OF ALL DRIVEWAY CROSSINGS AND SHALL EXTEND FROM THE POINT OF SUPPLY TO AT LEAST 500mm INSIDE THE HOUSE LOT TO BE SERVICED AND LEFT EXPOSED UNTIL INSPECTED BY COGG SUBDIVISIONS ENGINEER.
- WATER CONDUITS ARE TO BE LOCATED AT LEAST 6.5m FROM SIDE BOUNDARY.
- GAS CONDUITS ARE TO BE LOCATED 2m FROM "NON-DRIVEWAY" SIDE BOUNDARY OF LOT TO BE SERVICED. CONDUIT TRENCHES ARE TO BE BACKFILLED WITH CLASS 3 FCR. NEXT TO WATER CONDUIT IS PREFERRED.
61. THE LOCATION OF HOUSE DRAINS (H) AND SERVICE CONDUITS (W, G, T, AND E) ARE TO BE NEATLY ETCHED ON THE KERB FACE WITH 50mm HIGH LETTERS.
62. IN ROAD RESERVE EXISTING OPEN DRAINS ARE TO BE CLEANED OUT TO AN APPROVED BASE AND ANY SPOIL IS TO BE REMOVED FROM THE SITE. STRUCTURAL FILL (CLASS 4 MINIMUM) IS TO BE PLACED IN NOT MORE THAN 150mm LAYERS AND COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION. COMPACTION TESTS ARE TO BE PROVIDED TO THE SATISFACTION OF COGG SUBDIVISIONS ENGINEER OR REPRESENTATIVE.
63. ALL SUMPS IN PRE-CAST CONCRETE PITS ARE TO BE INFILLED WITH CONCRETE FLUSH TO THE INVERT LEVEL OF THE OUTLET PIPE, UNLESS APPROVED OTHERWISE BY THE COUNCIL WORKS INSPECTOR.

ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	K. BOON	DATE:	SEPT 2017
01	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	23/11/19	GR	NLT	DRAWN:	J.KUZMAR	SCALE:	REFER SHEET
02	FOR APPROVAL	07/12/17						SURVEY:	TGM GEELONG	SHEET SIZE:	A1
	FOR APPROVAL	18/01/18						CHECKED:		APPROVED:	
								POS NO:	PS 809817 P	VERSION:	3
								PERMIT NO:	1123/2004/A		
WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION											



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PROJECT:

PHALARIS PARK ESTATE
STAGE 9
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

CIVIL DRAWING

DRAWING TITLE:
INDEX & NOTES

TGM REF. No.: 004108-209

SHEET: 1 OF 18

REV: A



PHALARIS PARK PTY LTD

PHALARIS PARK ESTATE

STAGE 9

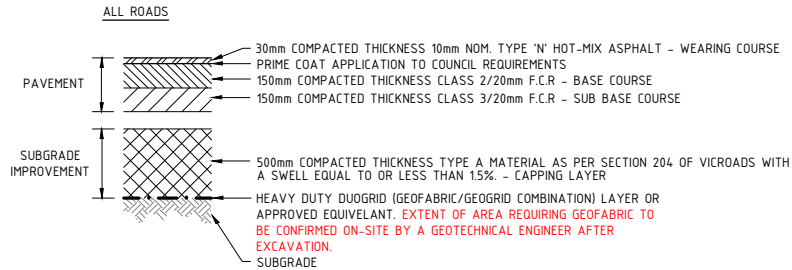
LOVELY BANKS, VIC 3221

INDEX

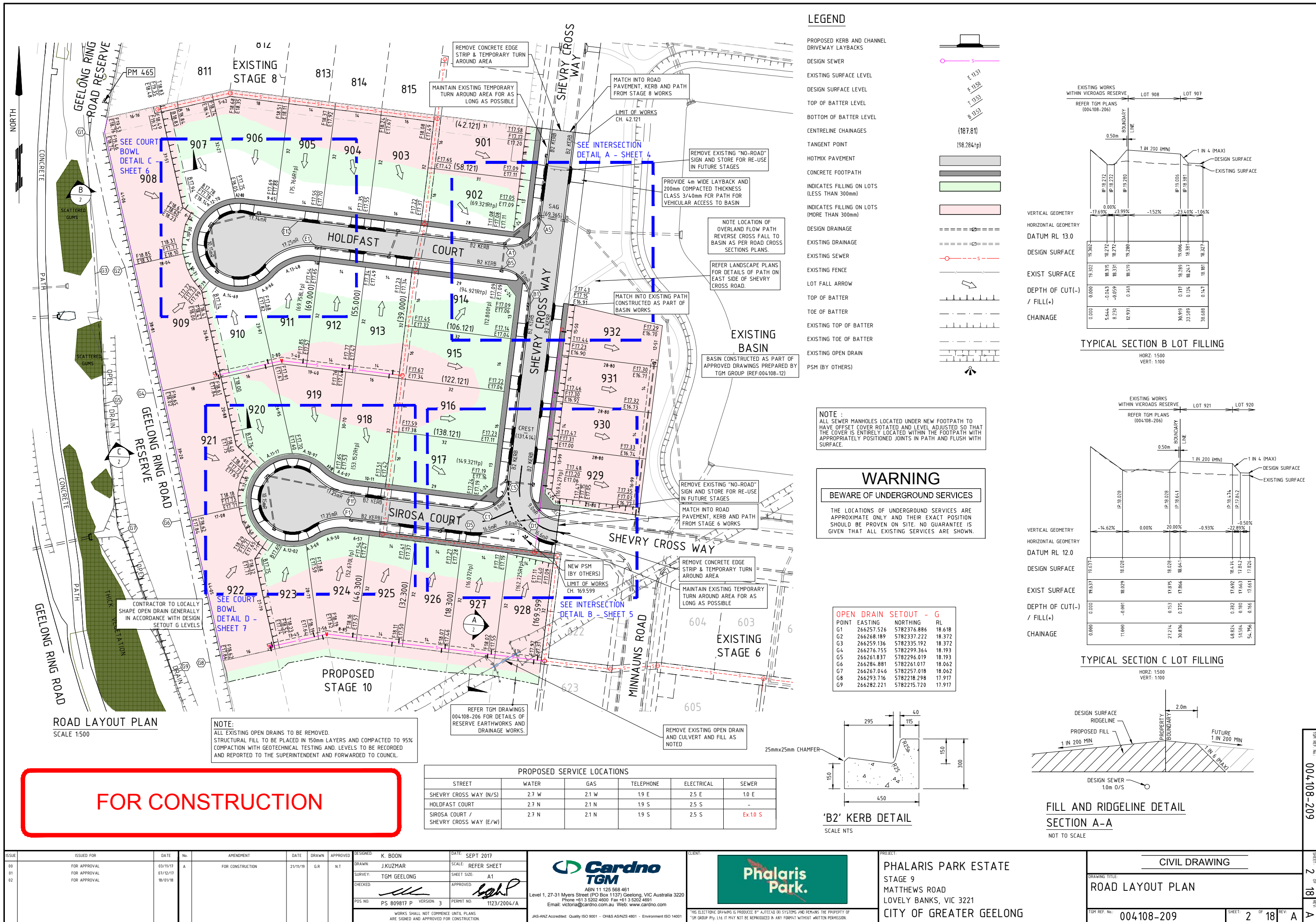
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SHEET 4	REV A	INTERSECTION DETAIL PLAN A & KERB LONGIDUTINAL SECTIONS
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SHEET 9	REV A	ROAD CROSS SECTIONS - SHEVRY CROSS WAY
SHEET 10	REV A	ROAD CROSS SECTIONS - SHEVRY CROSS WAY
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SHEET 17	REV A	ENVIRONMENTAL MANAGEMENT PLAN - LAYOUT PLAN
SHEET 18	REV A	ENVIRONMENTAL MANAGEMENT PLAN - TYPICAL DETAILS

FOR CONSTRUCTION

PAVEMENT CONSTRUCTION DETAIL



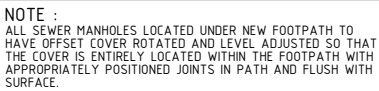
LOCALITY PLAN
MELWAYS REF: 431 GB





LEGEND

- DESIGN PROPOSED KERB AND CHANNEL
DRIVEWAY LAYBACKS
- DESIGN SEWER
- DESIGN TELEPHONE
- DESIGN WATER
- DESIGN ELECTRICAL
- DESIGN GAS
- DESIGN DRAINAGE / PIT
- HOUSE DRAIN
- GAS WATER CONDUIT
- EXISTING SEWER
- EXISTING TELEPHONE
- EXISTING WATER
- EXISTING ELECTRICAL
- EXISTING GAS
- EXISTING DRAINAGE
- LOT FALL ARROW
- TOP OF BATTER
- TOE OF BATTER
- EXISTING TOP OF BATTER
- EXISTING TOE OF BATTER
- FUTURE TOP OF BATTER
- EXISTING TOE OF BATTER



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

PERMANENT SURVEY MARKS (SMES)

SURVEY CONTROL POINTS
DATE OF SURVEY: 13/11/2019

DESCRIPTION	PLANE EASTING	PLANE NORTHING	AHD LEVEL
MOORPANYAL PM 446	266526.45	5782399.55	16.94
MOORPANYAL PM 465	266262.01	5782387.15	18.71
MOORPANYAL PM 500	266426.34	5782257.79	16.78
MOORPANYAL PM 523	266419.58	5782171.78	17.09
MOORPANYAL PM 545	266298.16	5782417.71	17.98
TBM 6 - RDD	266305.44	5782195.28	17.86
TBM 13 - RIVET	266404.54	5782425.86	17.15

ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED:	K. BOON	DATE:	SEPT 2017			
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	G.R	N.T	DRAWN	J.KUZMAR	SCALE:	1:500			
01	FOR APPROVAL	07/12/17						SURVEY:	TGM GEELONG	SHEET SIZE:	A1			
02	FOR APPROVAL	18/01/18						CHECKED:		APPROVED:				
									POS. NO:	PS 809817 P	VERSION:	3	PERMIT NO:	1123/2004/A
WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION.														

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PROJECT

PHALARIS PARK ESTATE
STAGE 9
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

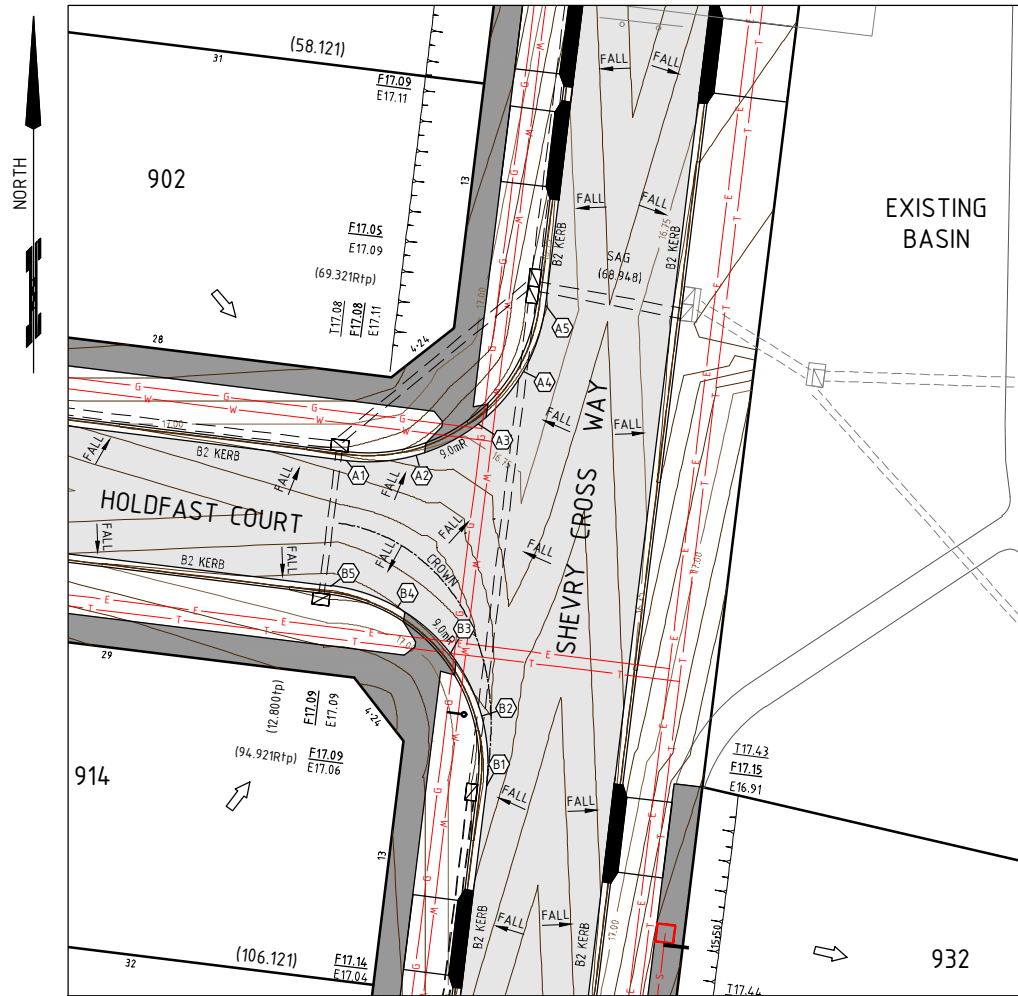
CIVIL DRAWING

DRAWING TITLE:
SERVICES LAYOUT PLAN

TGM REF. No.: 004108-209

SHEET: 3 OF 18	REV: A
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LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER



INTERSECTION DETAIL A
SCALE 1:200

WARNING

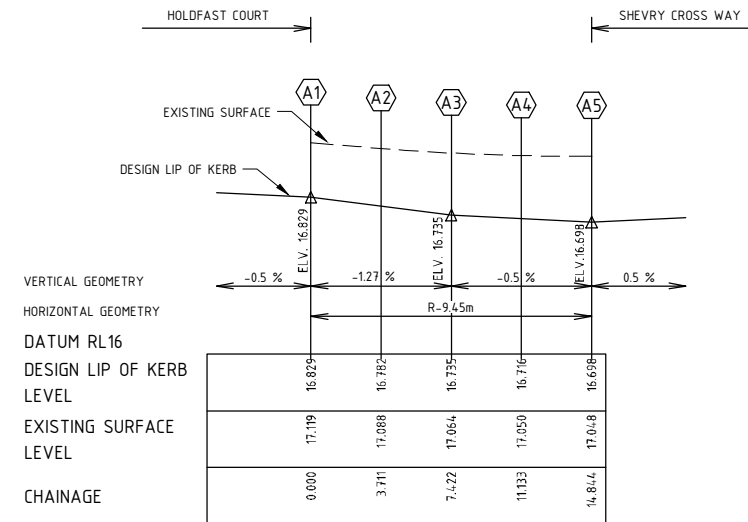
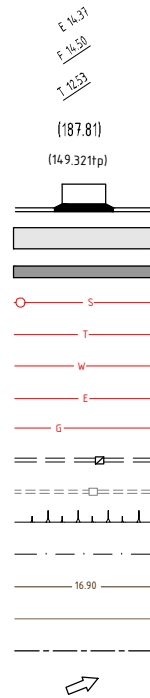
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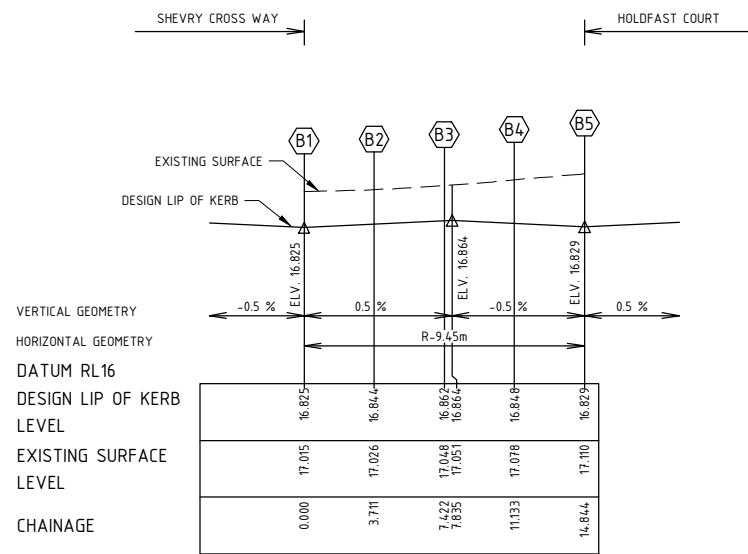
FOR CONSTRUCTION

LEGEND

EXISTING SURFACE LEVEL
DESIGN SURFACE LEVEL
TOP OF BATTER LEVELS
CENTRELINE CHAINAGES
TANGENT POINT
PROPOSED KERB AND CHANNEL
DRIVEWAY LAYBACKS
HOTMIX PAVEMENT
CONCRETE FOOTPATH
DESIGN SEWER
DESIGN TELEPHONE
DESIGN WATER
DESIGN ELECTRICAL
DESIGN GAS
DESIGN PIPE DRAINAGE / PIT
EXISTING PIPE DRAINAGE / PIT
TOP OF BATTER
TOE OF BATTER
DESIGN CONTOURS (MINOR)
DESIGN CONTOURS (MAJOR)
ROAD CROWN
LOT FALL ARROW



KERB RETURN A LONGITUDINAL SECTION
HORZ: 1:200
VERT: 1:20



KERB RETURN B LONGITUDINAL SECTION
HORZ: 1:200
VERT: 1:20

ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	SCALE	CLIENT	PROJECT	DRAWING TITLE
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	GR	N.T.	K. BOON	REFER TO SHEET	Phalaris Park.	PHALARIS PARK ESTATE	CIVIL DRAWING
01	FOR APPROVAL	07/12/17						J. KUZMAR			STAGE 9	DRAWING TITLE:
02	FOR APPROVAL	18/01/18						TGM GEELONG	A1		MATTHEWS ROAD	INTERSECTION DETAIL A & KERB LONGITUDINAL SECTIONS
								CHECKED: [Signature]			LOVELY BANKS, VIC 3221	TGM REF. No: 004108-209
								POS NO: PS 809817 P VERSION: 3 PERMIT NO: 1123/2004/A			CITY OF GREATER GEELONG	SHEET: 4 OF 18 REV: A
								WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION				

INTERSECTION DETAIL B
SCALE 1:200

WARNING

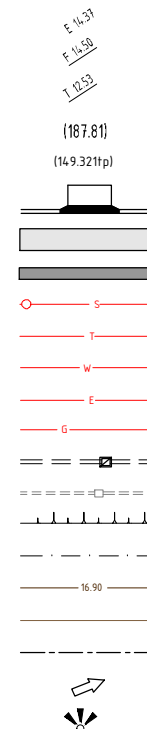
BEWARE OF ABOVE GROUND SERVICES

ANY EXCAVATION IN THE VICINITY OF POWER POLES
TO BE IN ACCORDANCE WITH THE ELECTRICAL SAFETY
(NETWORK ASSETS) REGULATIONS 1999 - RULE 36 (d).
NO GO ZONE RULES MAY ALSO APPLY

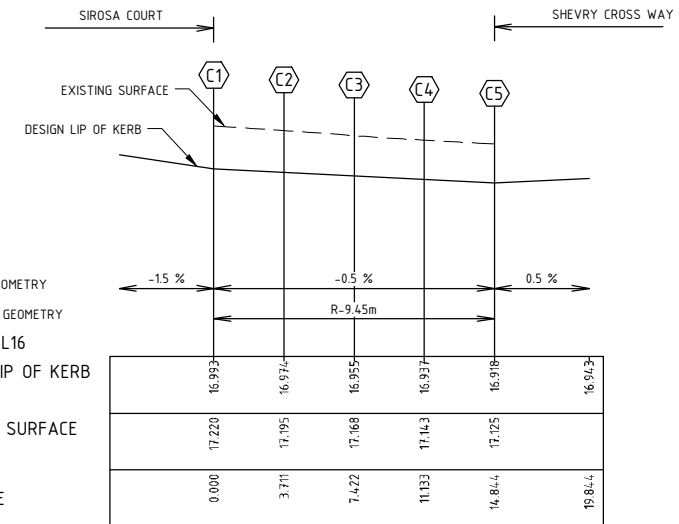
FOR CONSTRUCTION

LEGEND

- EXISTING SURFACE LEVEL
DESIGN SURFACE LEVEL
TOP OF BATTER LEVELS
CENTRELINE CHAINAGES
TANGENT POINT
PROPOSED KERB AND CHANNEL
DRIVEWAY LAYBACKS
HOTMIX PAVEMENT
CONCRETE FOOTPATH
DESIGN SEWER
DESIGN TELEPHONE
DESIGN WATER
DESIGN ELECTRICAL
DESIGN GAS
DESIGN PIPE DRAINAGE / PIT
EXISTING PIPE DRAINAGE / PIT
TOP OF BATTER
TOE OF BATTER
DESIGN CONTOURS (MINOR)
DESIGN CONTOURS (MAJOR)
ROAD CROWN
LOT FALL ARROW
PSM (BY OTHERS)



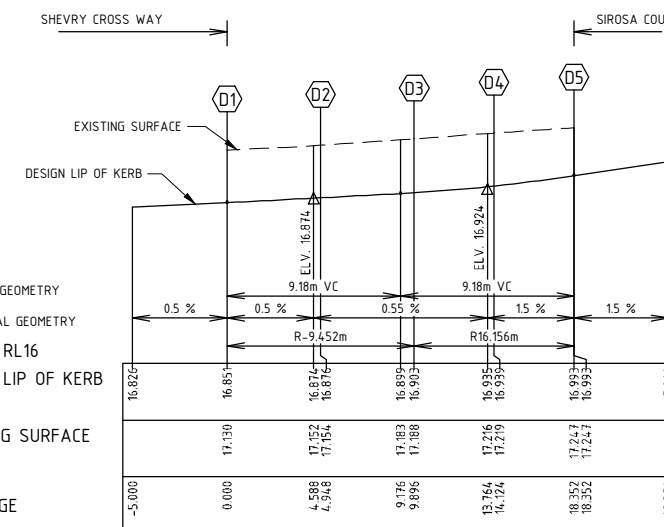
VERTICAL GEOMETRY
HORIZONTAL GEOMETRY
DATUM RL16
DESIGN LIP OF KERB
LEVEL
EXISTING SURFACE
LEVEL
CHAINAGE



KARB RETURN C LONGITUDINAL SECTION

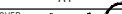
HORZ: 1:200
VERT: 1:20

VERTICAL GEOMETRY
HORIZONTAL GEOMETRY
DATUM RL16
DESIGN LIP OF KERB
LEVEL
EXISTING SURFACE
LEVEL
CHAINAGE



KARB RETURN D LONGITUDINAL SECTION

HORZ: 1:200
VERT: 1:20

ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	K. BOON	DATE	SEPT 2017
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	G.R	N.T	DRAWN:	J.KUZMAR	SCALE:	REFER SHEET
01	FOR APPROVAL	07/12/17						SURVEY:	TGM GEELONG	SHEET SIZE:	A1
02	FOR APPROVAL	18/01/18						CHECKED:		APPROVED:	
								POS NO:	PS 809817 P	VERSION:	3
										PERMIT NO:	1123/2004/A
											WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION.

 **Cardno**
TGM
ABN 11 125 568 461
Level 1, 27-31 Myers Street (PO Box 1137) Geelong, VIC Australia 3220
Phone: +61 3 5202 4681 Fax: +61 3 5202 4681
Email: victoria@cardno.com.au Web: www.cardno.com
JAS-ANZ Accredited: Quality ISO 9001 - OHSAS/AS/NZS 4801 - Environment ISO 14001

CLIENT:

0

Phalaris Park.

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PROJECT:

PHALARIS PARK ESTATE
STAGE 9
MATTHEWS ROAD
LOVELY BANKS, VIC 3221
CITY OF GREATER GEELONG

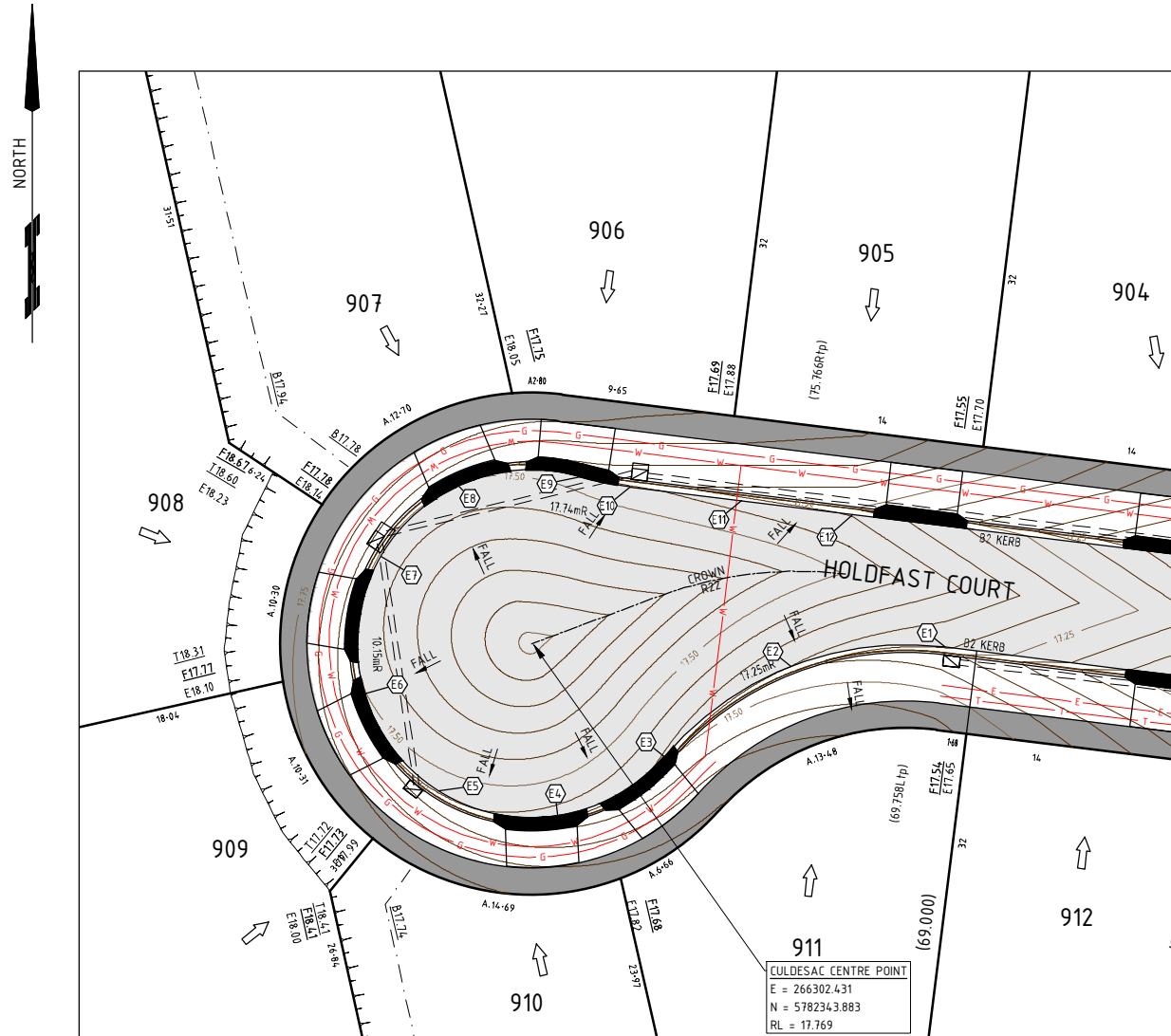
CIVIL DRAWING

DRAWING TITLE:

INTERSECTION DETAIL B & KERB LONGITUDINAL SECTIONS

TGM REF. No.: 004108-209

SHEET: 5 OF 18 REV: A



COURT BOWL DETAIL C
SCALE 1:200

LEGEND

EXISTING SURFACE LEVEL	
DESIGN SURFACE LEVEL	
TOP OF BATTER LEVELS	
CENTRELINE CHAINAGES	
TANGENT POINT	
PROPOSED KERB AND CHANNEL DRIVEWAY LAYBACKS	
HOTMIX PAVEMENT	
CONCRETE FOOTPATH	
DESIGN SEWER	
DESIGN TELEPHONE	
DESIGN WATER	
DESIGN ELECTRICAL	
DESIGN GAS	
DESIGN PIPE DRAINAGE / PIT	
EXISTING PIPE DRAINAGE / PIT	
TOP OF BATTER	
TOE OF BATTER	
DESIGN CONTOURS (MINOR)	
DESIGN CONTOURS (MAJOR)	
ROAD CROWN	
LOT FALL ARROW	

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.

FOR CONSTRUCTION

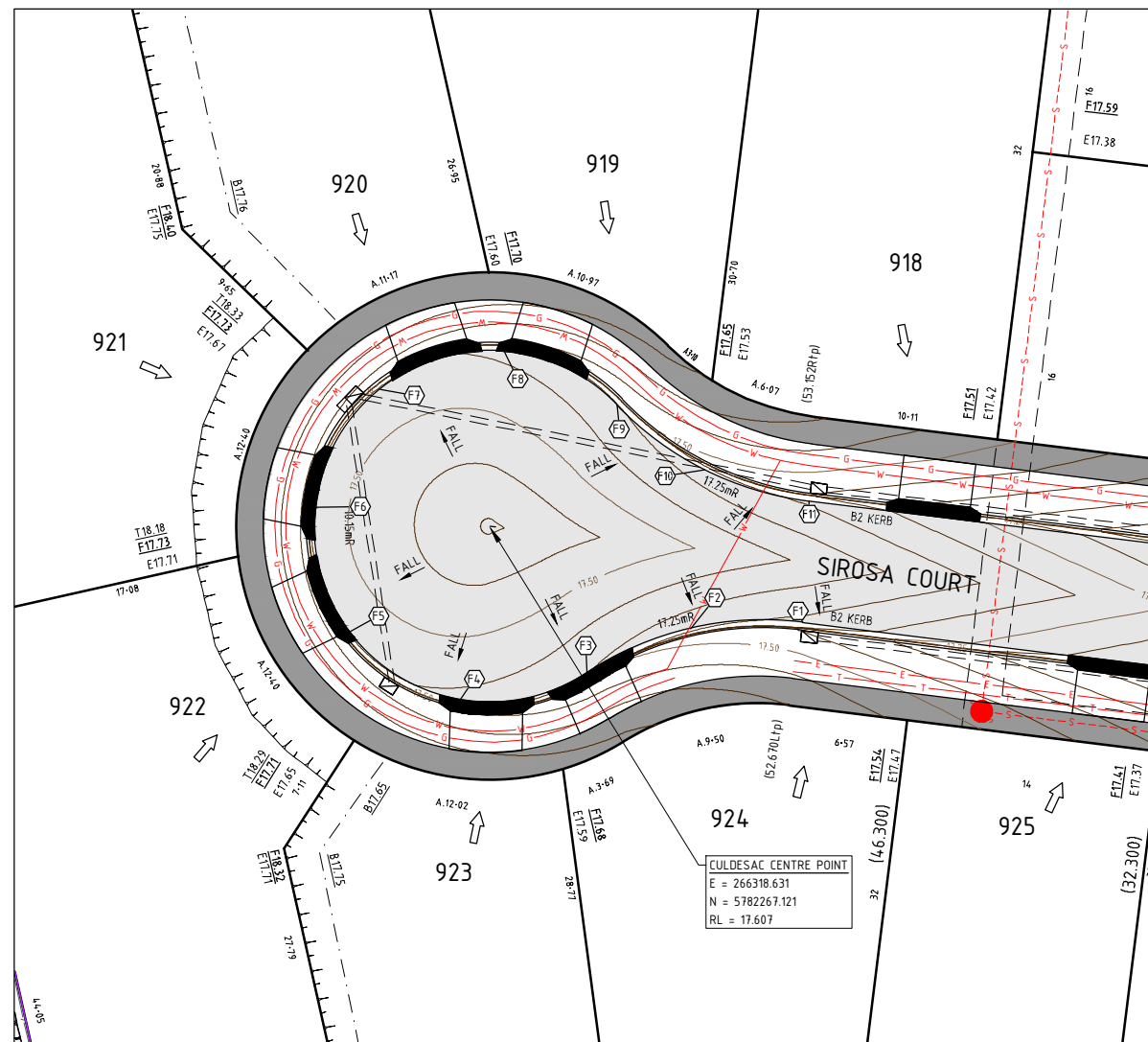


KERB RETURN HOLDFAST COURT (E) CULDESAC LONGITUDINAL SECTION

HORZ: 1:200
VERT: 1:20

LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER

ISSUE		ISSUED FOR		DATE	No.	AMENDMENT		DATE	DRAWN	APPROVED	DESIGNED	DATE		 ABN 11 125 568 461 Level 1, 27-31 Myers Street (PO Box 1137) Geelong, VIC Australia 3220 Phone +61 3 5202 4600 Fax +61 3 5202 4691 Email: victoria@cardno.com.au Web: www.cardno.com	CLIENT	 PHALARIS PARK ESTATE STAGE 9 MATTHEWS ROAD LOVELY BANKS, VIC 3221 CITY OF GREATER GEELONG	PROJECT			
00		FOR APPROVAL		03/11/17	A	FOR CONSTRUCTION		23/11/19	G.R	N.T	DRAWN:	K. BOON	SCALE:		REFER SHEET		CIVIL DRAWING DRAWING TITLE: COURT BOWL DETAIL C & KERB LONGITUDINAL SECTIONS TGM REF. No.: 004108-209 SHEET: 6 OF 18 REV: A			
01		FOR APPROVAL		07/12/17							SURVEY:	TGM GEELONG	SHEET SIZE:		A1					
02		FOR APPROVAL		18/01/18							CHECKED:		APPROVED:							
												POS NO:	PS 809817 P		VERSION:			3	PERMIT NO:	1123/2004/A
												WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION.								
												JAS-ANZ Accredited: Quality ISO 9001 - OH&S AS/NZS 4801 - Environment ISO 14001								
												THIS ELECTRONIC DRAWING IS PRODUCED BY A/TECCAS (B) SYSTEMS AND REMAINS THE PROPERTY OF TGM GROUP Pty. Ltd. IT MAY NOT BE REPRODUCED IN ANY FORMAT WITHOUT WRITTEN PERMISSION.								



COURT BOWL DETAIL D
SCALE 1:200

REFER SHEET 2 FOR
SURROUNDS AND
CONTEXT

LEGEND

- EXISTING SURFACE LEVEL
- DESIGN SURFACE LEVEL
- TOP OF BATTER LEVELS
- CENTRELINE CHAINAGES
- TANGENT POINT
- PROPOSED KERB AND CHANNEL
DRIVEWAY LAYBACKS
- HOTMIX PAVEMENT
- CONCRETE FOOTPATH
- DESIGN SEWER
- DESIGN TELEPHONE
- DESIGN WATER
- DESIGN ELECTRICAL
- DESIGN GAS
- DESIGN PIPE DRAINAGE / PIT
- EXISTING PIPE DRAINAGE / PIT
- TOP OF BATTER
- TOE OF BATTER
- DESIGN CONTOURS (MINOR)
- DESIGN CONTOURS (MAJOR)
- ROAD CROWN
- LOT FALL ARROW

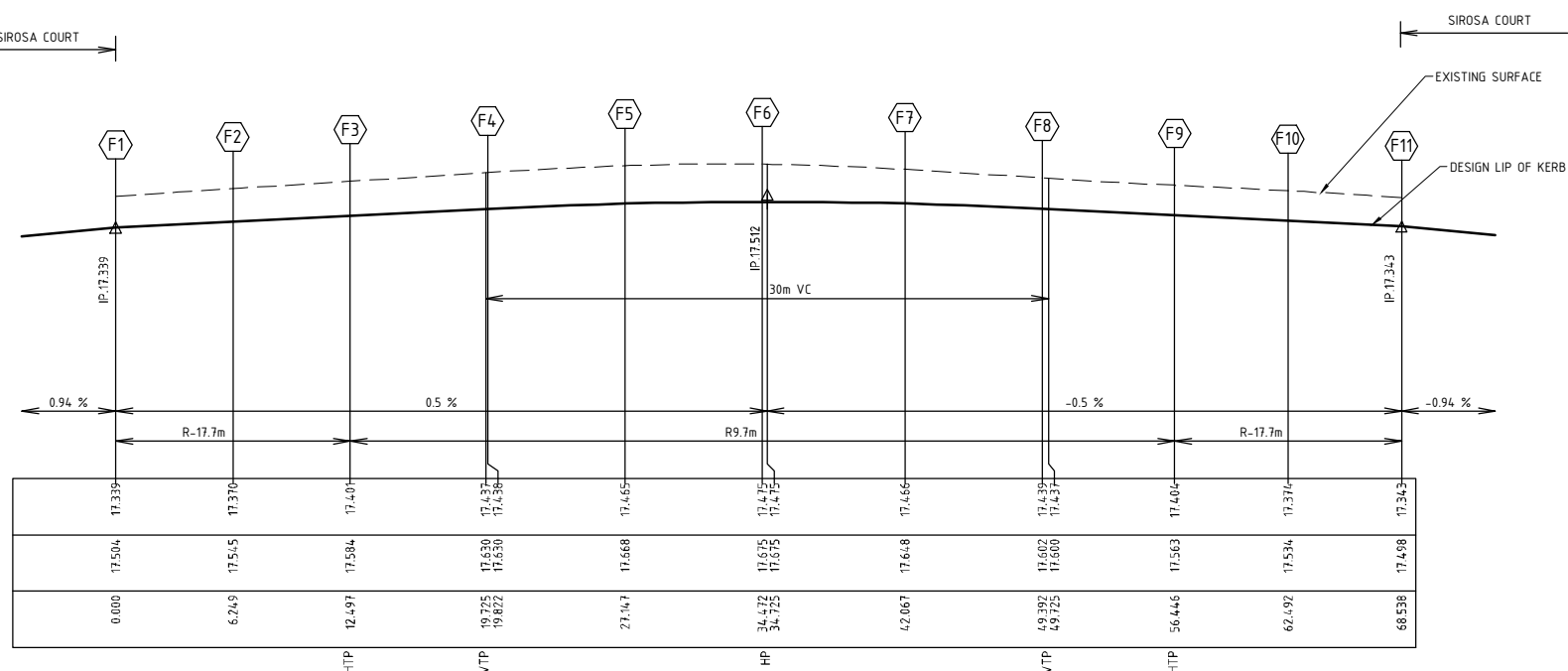
FOR CONSTRUCTION

WARNING

BEWARE OF UNDERGROUND SERVICES

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SHOULD BE PROVEN ON SITE. NO GUARANTEE IS
GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

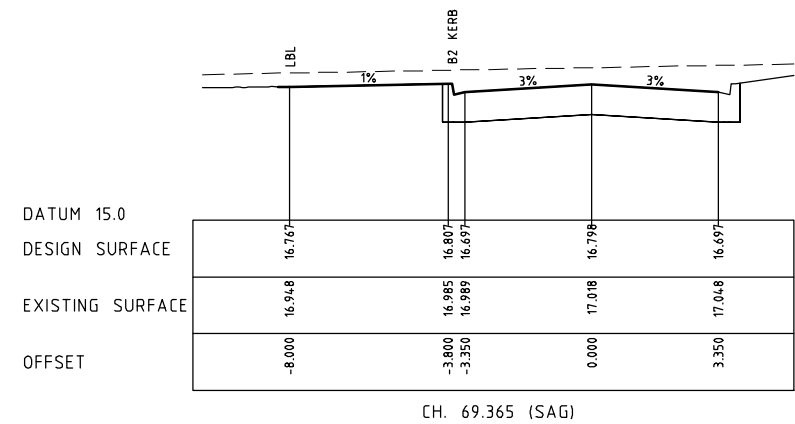
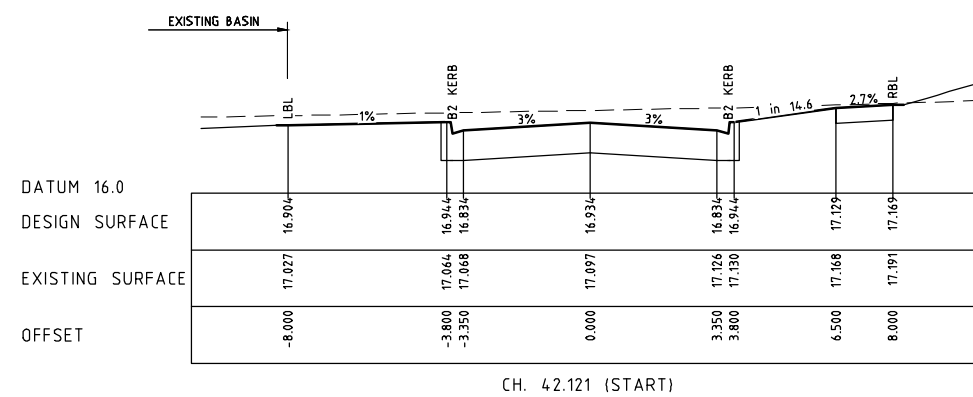
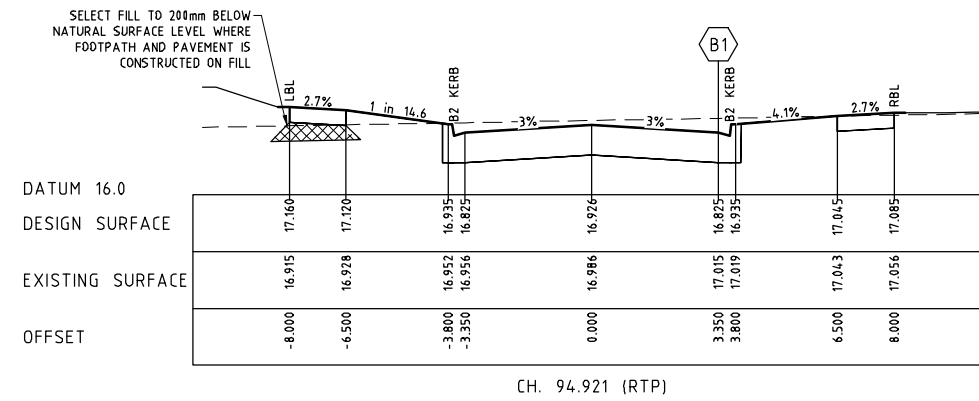
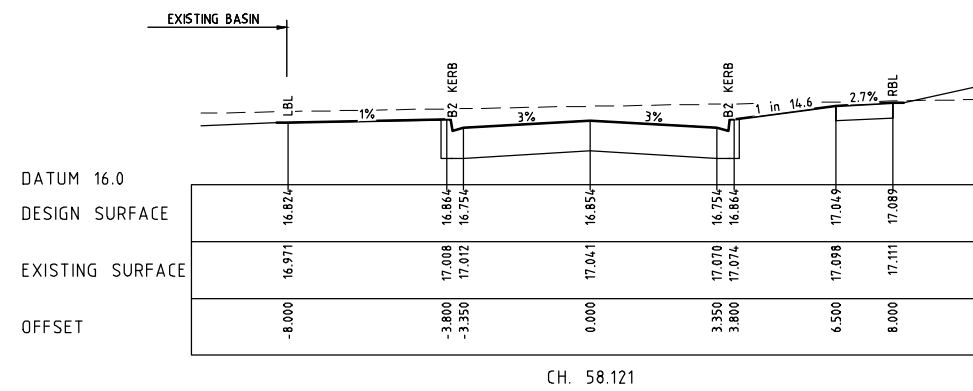
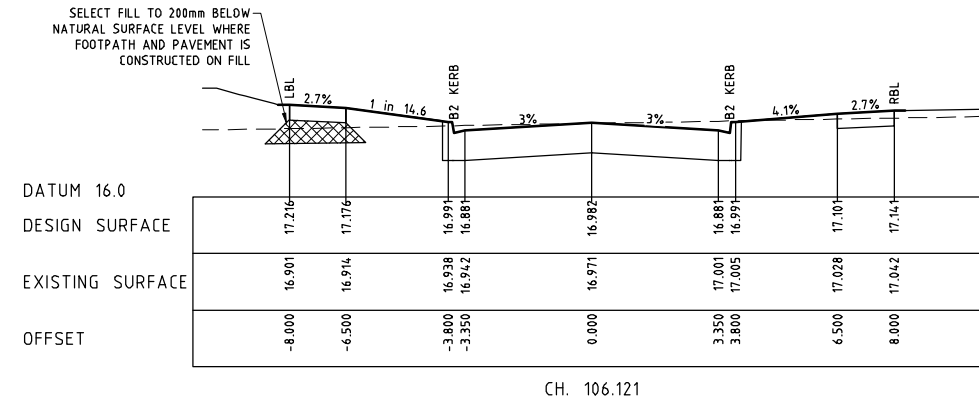
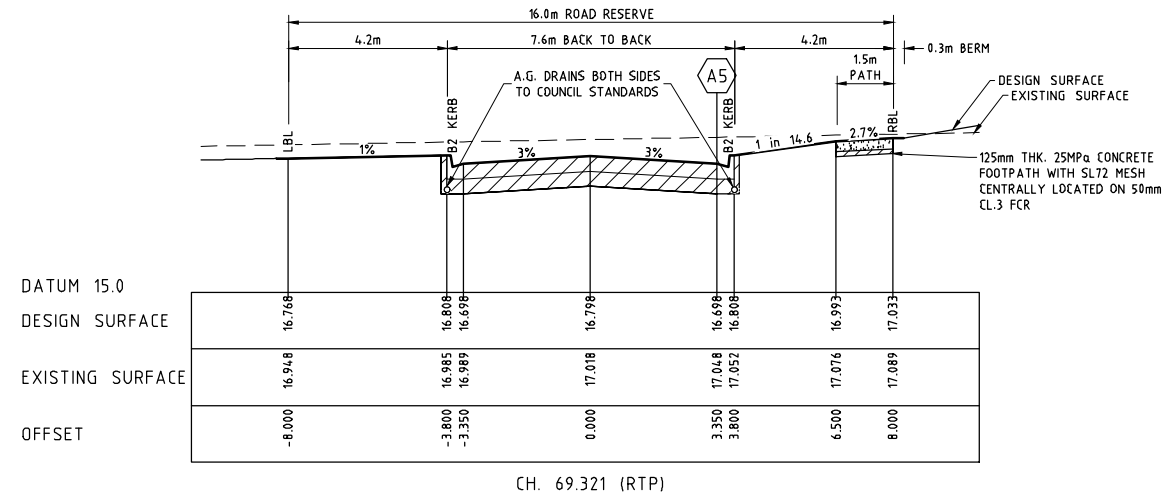
VERTICAL GEOMETRY
HORIZONTAL GEOMETRY
DATUM RL16
DESIGN LIP OF KERB
LEVEL
EXISTING SURFACE
LEVEL
CHAINAGE



LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER

ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	SCALE	CLIENT	PROJECT	DRAWING TITLE
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	G.R.	N.T.	K. BOON	REFER SHEET	PHALARIS PARK ESTATE	STAGE 9	COURT BOWL DETAIL D & KERB LONGITUDINAL SECTIONS
01	FOR APPROVAL	07/12/17						J. KUZMAR	A1	MATTHEWS ROAD	LOVELY BANKS, VIC 3221	
02	FOR APPROVAL	18/01/18						TGM GEELONG		CITY OF GREATER GEELONG		
WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION									SHEET 7 OF 18			

LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER



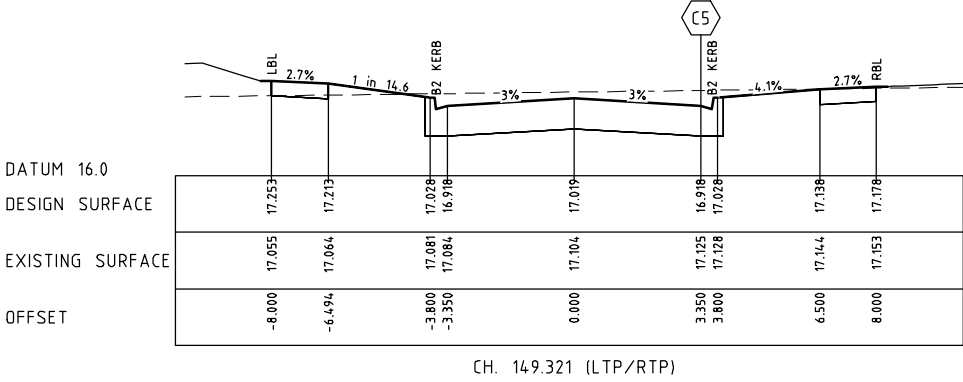
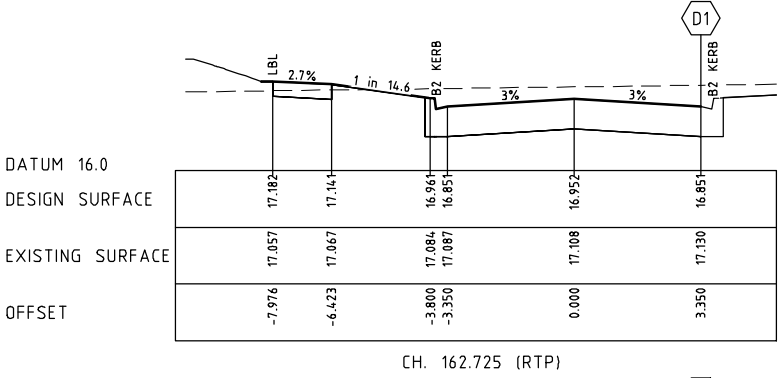
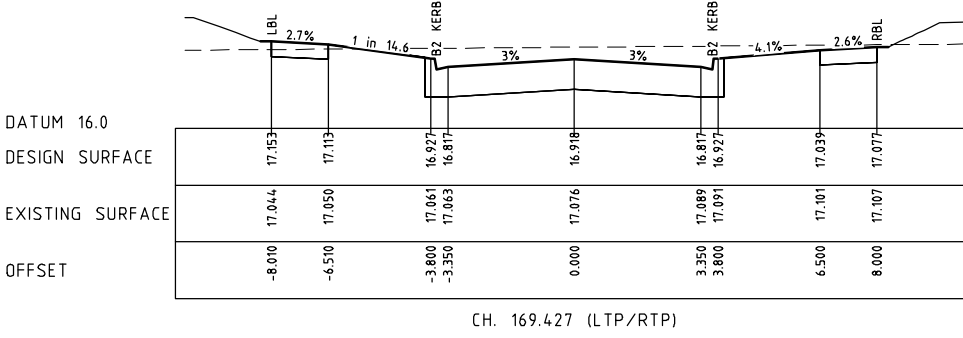
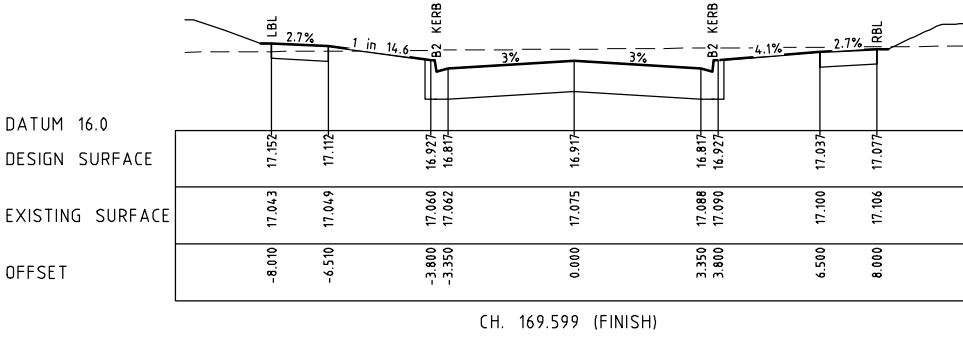
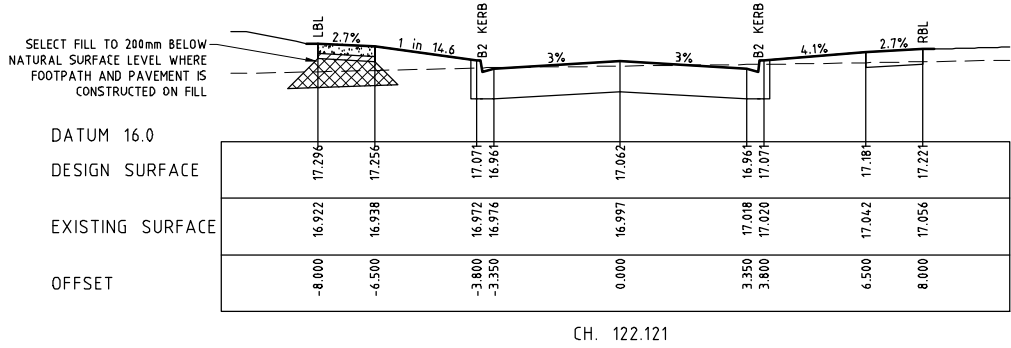
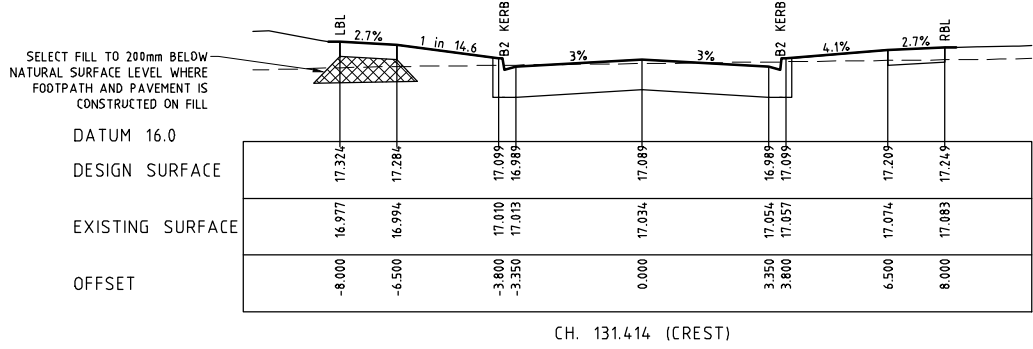
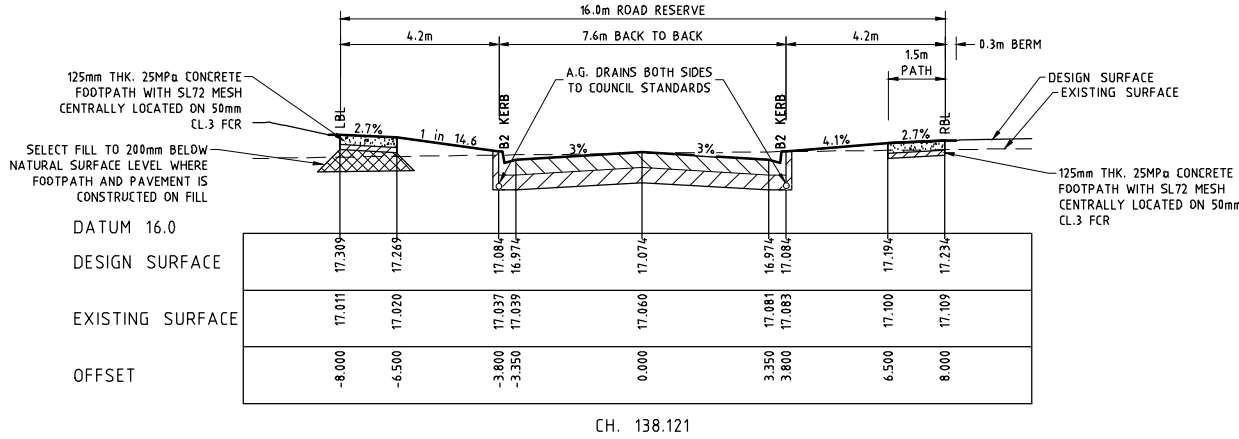
FOR CONSTRUCTION

SHEVRY CROSS WAY - CROSS SECTIONS

HORZ: 1:100
VERT: 1:50

ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	SCALE	CLIENT	PROJECT	DRAWING TITLE	TGP REF. No.	SHEET	OF	REV.
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	G.R.	N.T.	K. BOON	H 1:100, V 1:50	Cardno TGM	PHALARIS PARK ESTATE	ROAD CROSS SECTIONS - SHEVRY CROSS WAY	004108-209	9	18	A
01	FOR APPROVAL	07/12/17						J. KUZMAR			STAGE 9					
02	FOR APPROVAL	18/01/18						TGM GEELONG			MATTHEWS ROAD					
								CHECKED: [Signature]			LOVELY BANKS, VIC 3221					
								POS NO: PS 809817 P			CITY OF GREATER GEELONG					
								VERSION: 3								
								PERMIT NO: 1123/2004/A								
								WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION								
								JAS-ANZ Accredited: Quality ISO 9001 - OH&S AS/NZS 4801 - Environment ISO 14001								

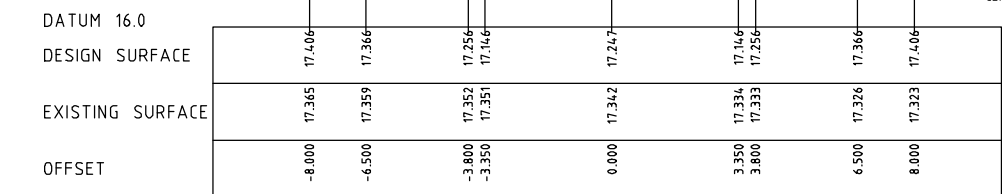
FOR CONSTRUCTION



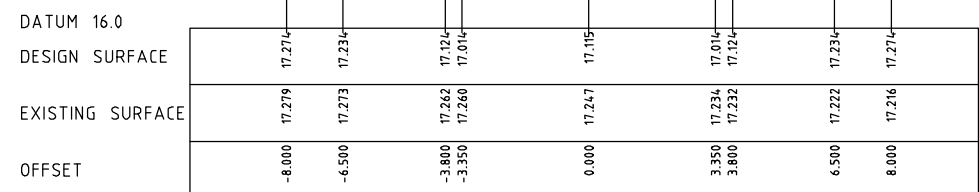
SHEVRY CROSS WAY - CROSS SECTIONS

HORZ: 1:100
VERT: 1:50

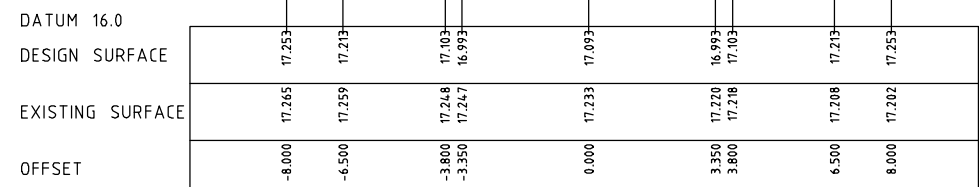
ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	K. BOON	DATE	SEPT 2017
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	GR	N.T.	DRAWN	J.KUZMAR	SCALE	H 1:100, V 1:50
01	FOR APPROVAL	07/12/17						SURVEY	TGM GEELONG	SHEET SIZE	A1
02	FOR APPROVAL	18/01/18						CHECKED		APPROVED	
								POS NO.	PS 805917 P	VERSION	3
								PERMIT NO.	1123/2004/A		
								WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION			
								ABN 11 125 558 461 Level 1, 27-31 Myers Street (PO Box 1137) Geelong, VIC Australia 3220 Phone +61 3 5202 4600 Fax +61 3 5202 4691 Email: victoria@cardno.com.au Web: www.cardno.com			
								JAS-ANZ Accredited: Quality ISO 9001 - OH&S AS/NZS 4801 - Environment ISO 14001			
								CLIENT: PHALARIS PARK ESTATE STAGE 9 MATTHEWS ROAD LOVELY BANKS, VIC 3221 CITY OF GREATER GEELONG			
								PROJECT: CIVIL DRAWING			
								DRAWING TITLE: ROAD CROSS SECTIONS - SHEVRY CROSS WAY			
								TGM REF. No.: 004108-209			
								SHEET: 10 OF 18			
								REV: A			



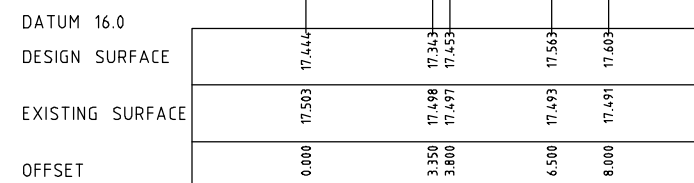
CH. 32.300



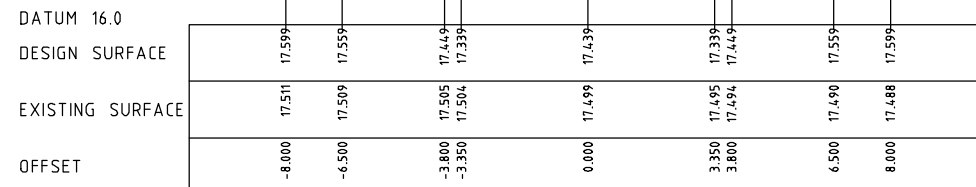
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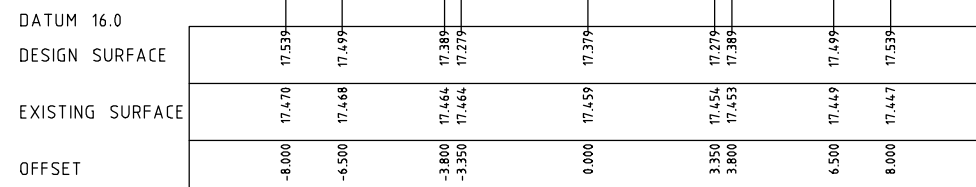
CH. 16.072 (TP)



CH. 53.152 (RTP)



CH. 52.670 (LTP)



CH. 46.300

LTP = LEFT TANGENT POINT
RTP = RIGHT TANGENT POINT
TP = TANGENT POINT
CREST = HIGH POINT
SAG = LOW POINT
IP = INTERSECTION POINT
B1 = TANGENT POINT NUMBER

FOR CONSTRUCTION

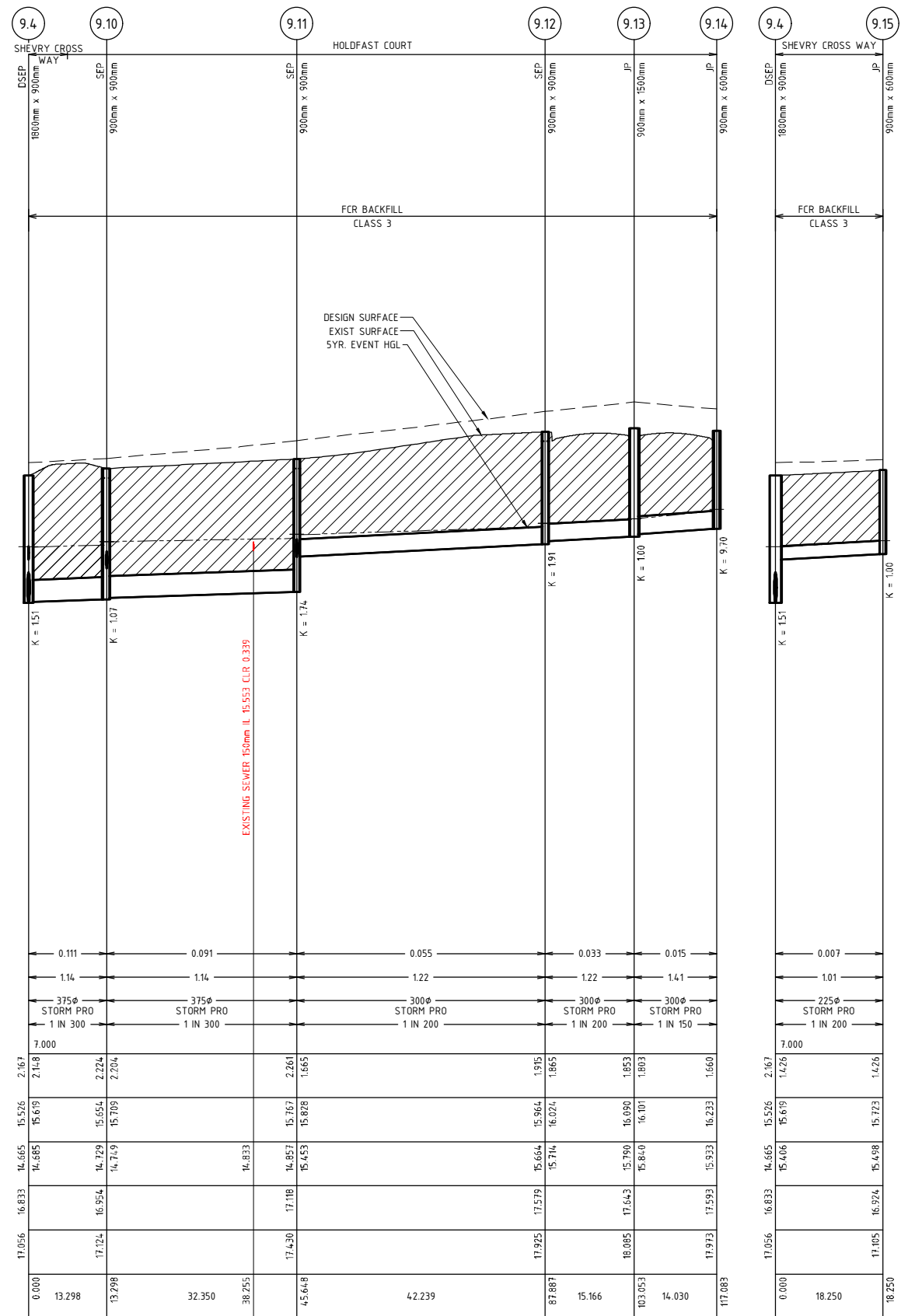
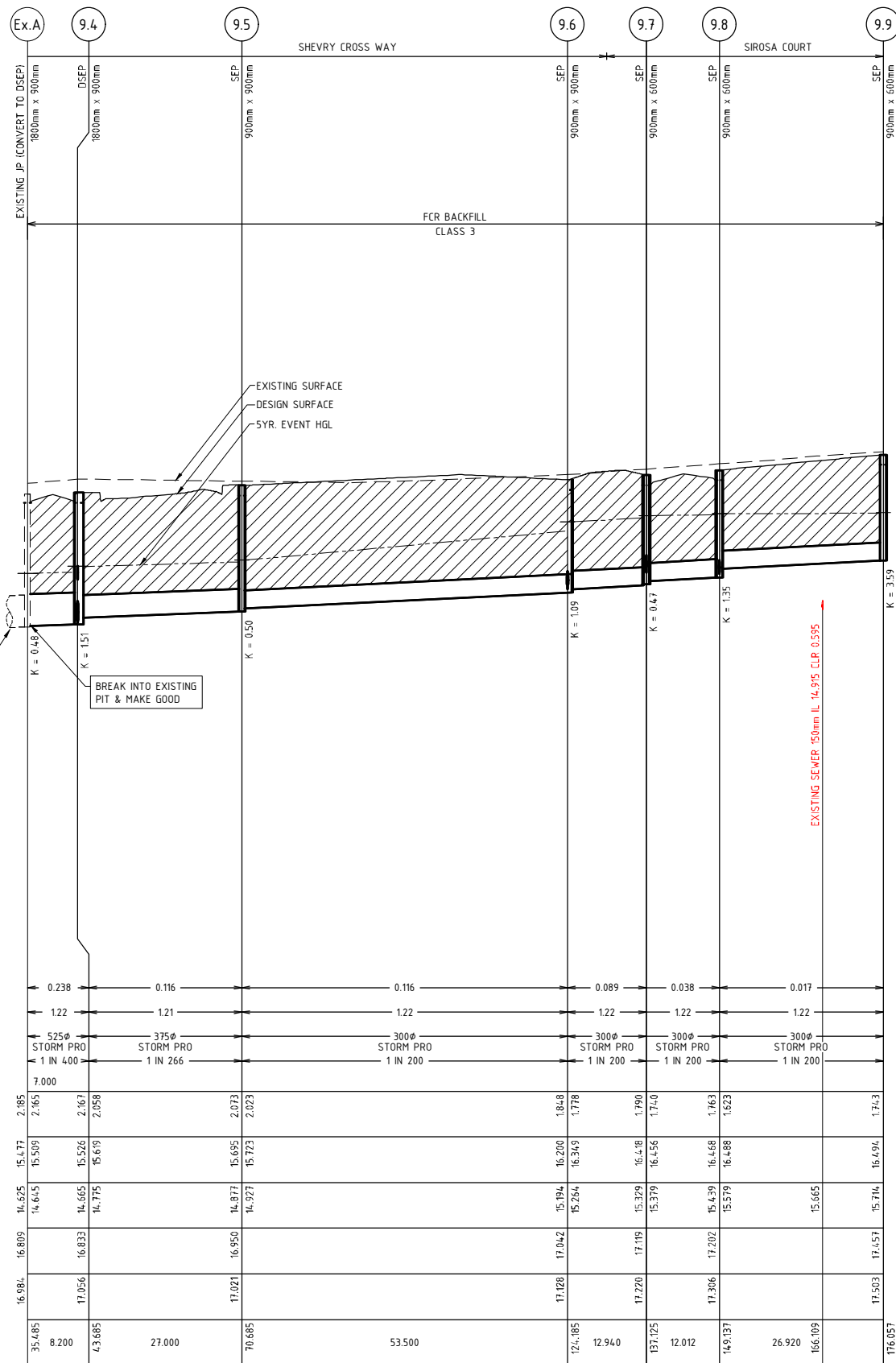
SIROSA COURT - CROSS SECTIONS

HORZ: 1:100
VERT: 1:50

ISSUE		ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED:	K. BOON	DATE:	SEPT 2017	 Level 1, 27-31 Myers Street (PO Box 1137) Geelong, VIC Australia 3220 Phone +61 3 5202 4600 Fax +61 3 5202 4691 Email: victoria@cardno.com.au Web: www.cardno.com JAS-ANZ Accredited: Quality ISO 9001 - OHAS AS/NZS 4801 - Environment ISO 14001		PROJECT:	PHALARIS PARK ESTATE STAGE 9 MATTHEWS ROAD LOVELY BANKS, VIC 3221 CITY OF GREATER GEELONG	SHEET: 11 OF 18 REV: A
00		FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	G.R	N.T	DRAWN:	J.KUZMAR	SCALE:	H 1:100, V 1:50			DRAWING TITLE:	CIVIL DRAWING	
01		FOR APPROVAL	07/12/17						SURVEY:	TGM GEELONG	SHEET SIZE:	A1			ROAD CROSS SECTIONS -		
02		FOR APPROVAL	18/01/18						CHECKED:		APPROVED:				SIROSA COURT		
									POS NO:	PS 809817 P	VERSION:	3			PERMIT NO:	1123/2004/A	
WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION.																	

FOR CONSTRUCTION

FLOW (CUMEC/S)
AT GRADE VELOCITY (m/s)
PIPE SIZE (mm)
GRADE
DATUM
DEPTH TO INVERT
HYDRAULIC GRADE LINE
INVERT LEVEL
FINISHED SURFACE LEVELS
EXISTING SURFACE LEVEL
CHAINAGE



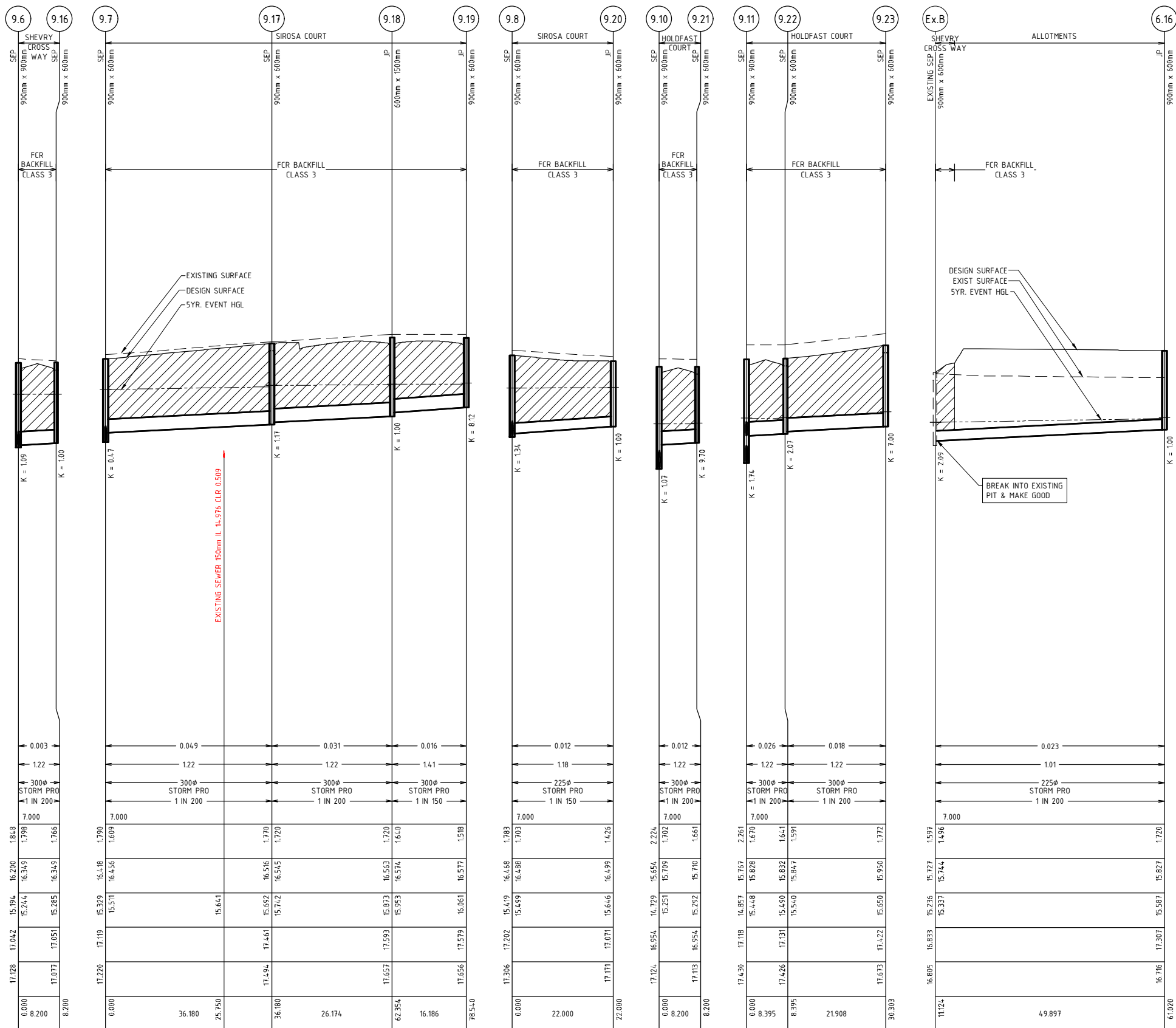
DRAINAGE LONGITUDINAL SECTIONS

HORZ 1:500
VERT 1:50

ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	K. BOON	DATE	SEPT 2017
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	GR	N.T.	DRAWN	J. KUZMAR	SCALE	H 1:500, V 1:50
01	FOR APPROVAL	07/12/17						SURVEY	TGM GEELONG	SHEET SIZE	A1
02	FOR APPROVAL	18/01/18						CHECKED		APPROVED	
								POS NO.	PS 809817 P	VERSION	3
								PERMIT NO.	1123/2004/A		
								WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION			
								JAS-ANZ Accredited: Quality ISO 9001 - OH&AS/NZS 4801 - Environment ISO 14001			
								Cardno TGM			
								ABN 11 125 568 481			
								Level 1, 27-31 Myers Street (PO Box 1137) Geelong, VIC Australia 3220			
								Phone +61 3 5202 4600 Fax +61 3 5202 4691			
								Email: victoria@cardno.com.au Web: www.cardno.com			
								CLIENT: Phalaris Park.			
								PROJECT: PHALARIS PARK ESTATE			
								STAGE 9			
								MATTHEWS ROAD			
								LOVELY BANKS, VIC 3221			
								CITY OF GREATER GEELONG			
								CIVIL DRAWING			
								DRAWING TITLE: DRAINAGE LONGITUDINAL SECTIONS			
								TGM REF. No.: 004108-209			
								SHEET: 13 OF 18			
								REV: A			

FOR CONSTRUCTION

FLOW (CUMecs)
AT GRADE VELOCITY (m/s)
PIPE SIZE (mm)
GRADE
DATUM
DEPTH TO INVERT
HYDRAULIC GRADE LINE
INVERT LEVEL
FINISHED SURFACE LEVELS
EXISTING SURFACE LEVEL
CHAINAGE



DRAINAGE LONGITUDINAL SECTIONS

HORZ 1:500
VERT 1:50

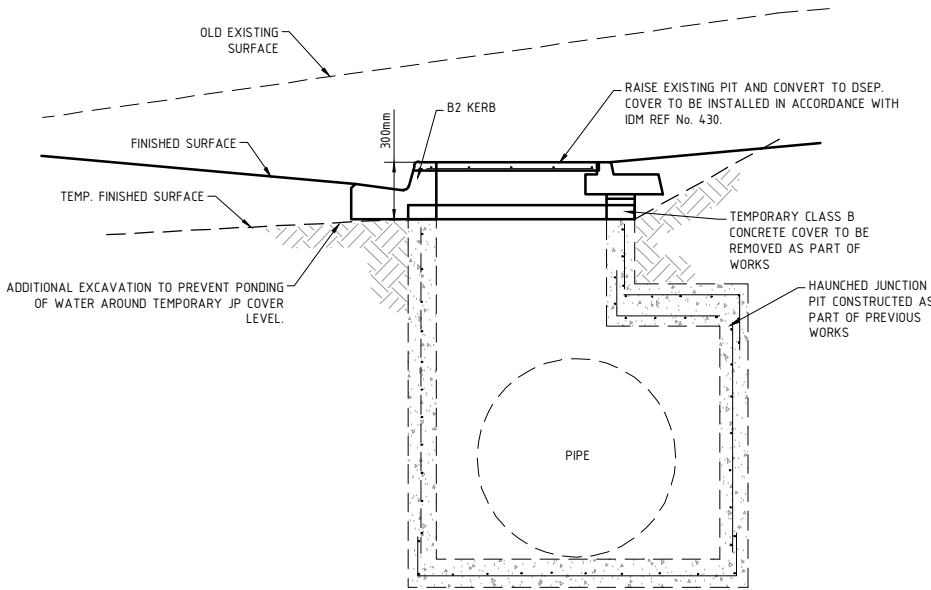
ISSUE		ISSUED FOR	DATE	No.	AMENDMENT		DATE	DRAWN	APPROVED	DESIGNED	K. BOON	DATE	SEPT 2017	 ABN 11 125 568 481 Level 1, 27-31 Myers Street (PO Box 1137) Geelong, VIC Australia 3220 Phone +61 3 5202 4600 Fax +61 3 5202 4691 Email: victoria@cardno.com.au Web: www.cardno.com JAS-ANZ Accredited: Quality ISO 9001 - OH&S AS/NZS 4801 - Environment ISO 14001	 THIS ELECTRONIC DRAWING IS PRODUCED BY A/TEC3 (B) SYSTEMS AND REMAINS THE PROPERTY OF TGM GROUP Pty Ltd. IT MAY NOT BE REPRODUCED IN ANY FORMAT WITHOUT WRITTEN PERMISSION.	CLIENT PHALARIS PARK ESTATE STAGE 9 MATTHEWS ROAD LOVELY BANKS, VIC 3221 CITY OF GREATER GEELONG	PROJECT CIVIL DRAWING DRAWING TITLE: DRAINAGE LONGITUDINAL SECTIONS TGM REF. No.: 004108-209
00		FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION		21/11/19	GR	N.T.	DRAWN:	J.KUZMAR	SCALE:	H 1:500, V1:50				
01		FOR APPROVAL	07/12/17							SURVEY:	TGM GEELONG	SHEET SIZE:	A1				
02		FOR APPROVAL	18/01/18							CHECKED:		APPROVED:					
										POS NO:	PS 809817 P	VERSION:	3				
										PERMIT NO:	1123/2004/A						
WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION.																	

PIT SCHEDULE

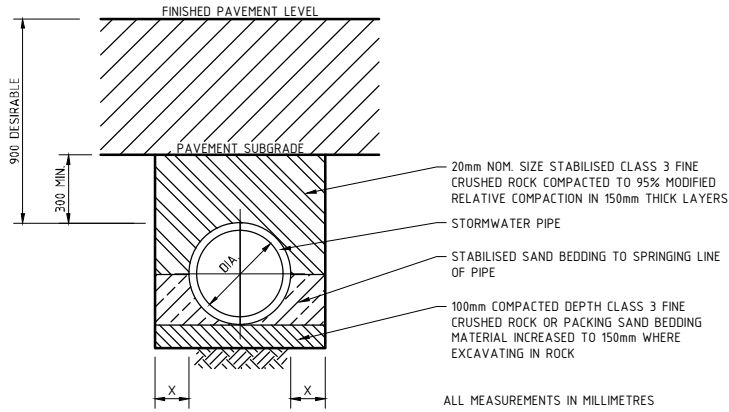
PIT		EASTING	NORTHING	INTERNAL	INLET		OUTLET		SETOUT	PIT	COVER	REMARKS			
NAME	TYPE			LEN	WD	FROM DIA	INV LEV	DIA	INV LEV	RL	DEPTH	CLASS			
Ex A	EXIST	266400.875	5782351.637	1800	900	9.4	525	14.645	525	14.625	16.809	2.185	CLASS D	Convert existing JP to DSEP. Refer IDM SD 445 & SD 410	
9.4	xx	DSEP	266392.737	5782352.641	1800	900	9.5	375	14.775	525	14.665	2.167	CLASS D	Refer IDM SD 445 & SD 410	
							9.10	375	14.685						
							9.15	225	15.406						
9.5	x	SEP	266389.431	5782325.845	900	900	9.6	300	14.927	375	14.877	16.950	2.073	CLASS D	Refer IDM SD 430 & SD 410
9.6	x	SEP	266382.880	5782272.747	900	900	9.7	300	15.264	300	15.194	17.042	1.848	CLASS D	Refer IDM SD 430 & SD 410
							9.16	300	15.244						
9.7		SEP	266372.678	5782264.786	900	600	9.8	300	15.379	300	15.329	17.119	1.790	CLASS D	Refer IDM SD 430
							9.17	300	15.511						
9.8		SEP	266362.963	5782257.723	900	600	9.9	300	15.579	300	15.439	17.202	1.763	CLASS D	Refer IDM SD 430
							9.20	225	15.499						
9.9		SEP	266336.245	5782261.019	900	600	--	---	---	300	15.714	17.457	1.743	CLASS D	Refer IDM SD 430
9.10	x	SEP	266382.474	5782344.185	900	900	9.11	375	14.749	375	14.729	16.954	2.224	CLASS D	Refer IDM SD 430 & SD 410
							9.21	300	15.251						
9.11	x	SEP	266350.368	5782348.146	900	900	9.12	300	15.453	375	14.857	17.118	2.261	CLASS D	Refer IDM SD 430 & SD 410
							9.22	300	15.448						
9.12	x	SEP	266308.447	5782353.318	900	900	9.13	300	15.714	300	15.664	17.579	1.915	CLASS D	Refer IDM SD 430 & SD 410
9.13	x	JP	266293.727	5782349.664	900	1500	9.14	300	15.840	300	15.790	17.643	1.853	CLASS D	Refer IDM SD 420 & SD 410
9.14		JP	266295.818	5782335.790	900	600	--	---	---	300	15.933	17.593	1.660	CLASS D	Refer IDM SD 420
9.15		JP	266394.972	5782370.754	900	600	--	---	---	225	15.498	16.924	1.426	CLASS D	Refer IDM SD 420
9.16		SEP	266391.018	5782271.743	900	600	--	---	---	300	15.285	17.051	1.766	CLASS D	Refer IDM SD 430
9.17		SEP	266336.771	5782269.217	900	600	9.18	300	15.742	300	15.692	17.461	1.770	CLASS D	Refer IDM SD 430
9.18	x	JP	266311.111	5782274.377	600	1500	9.19	300	15.953	300	15.873	17.593	1.720	CLASS D	Refer IDM SD 420
9.19		JP	266313.022	5782258.304	900	600	--	---	---	300	16.061	17.579	1.518	CLASS D	Refer IDM SD 420
9.20		JP	266384.797	5782255.029	900	600	--	---	---	225	15.646	17.071	1.426	CLASS D	Refer IDM SD 420
9.21		SEP	266381.470	5782336.046	900	600	--	---	---	300	15.292	16.954	1.661	CLASS D	Refer IDM SD 430
9.22		SEP	266347.577	5782340.228	900	600	9.23	300	15.540	300	15.490	17.131	1.641	CLASS D	Refer IDM SD 430
9.23		SEP	266325.834	5782342.910	900	600	--	---	---	300	15.650	17.422	1.772	CLASS D	Refer IDM SD 430
Ex.B	Exist	266421.357	5782258.784	900	600	6.16	225	15.337	225	15.236	16.833	1.597	CLASS D	Existing SEP.	
6.16		JP	266427.467	5782308.305	900	600	--	---	---	225	15.587	17.307	1.720	CLASS B	Refer IDM SD 425

NOTE:

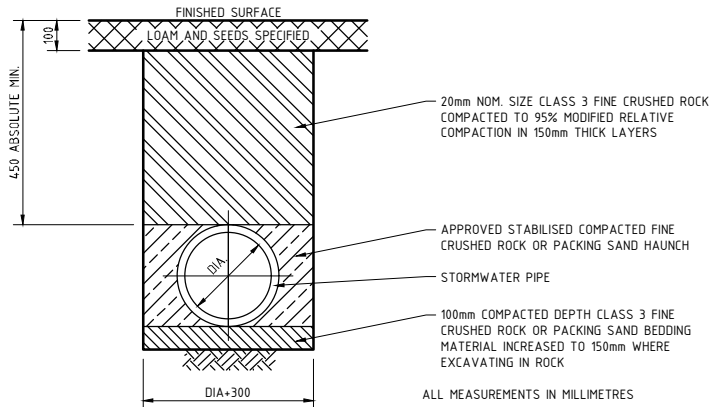
- ALL SETOUT POINTS QUOTED TO CENTRE OF 900x600 PIT
e.g.:
- SEP PITS NOTED WITH 'x' TO BE HAUNCHED TO A 900x600 (INTERNAL) OPENING WITH APPROPRIATE COVER.
- DSEP PITS NOTED WITH 'xx' TO BE HAUNCHED TO A 1900x600 (INTERNAL) OPENING WITH APPROPRIATE COVER.



TYPICAL PIT CONVERSION DETAIL
PROPOSED CONVERSION OF JP TO SEP
N.T.S.



UNDER ROAD PAVEMENT BACKFILL DETAIL



BEHIND KERB

NOTES:

- TRENCHING DETAILS INDICATIVE ONLY AND SHOULD BE INSTALLED TO MANUFACTURERS SPECIFICATIONS.
- WHERE PIPE IS BEHIND KERB AND CHANNEL, INSTALL ONE METRE (1m) MINIMUM OF APPROVED 900 CLASS 400 SLOTTED/ PERFORATED SUBSOIL DRAIN WITH GEOTEXTILE SOCK SURROUND INTO PIT IN LIEU OF SUB-SOIL DRAINAGE BEHIND KERB.
- BACKFILL DESIGN TO BE IN ACCORDANCE WITH CEMENT & CONCRETE ASSOCIATION OF AUSTRALIA 'PIPE CLASS' REQUIREMENTS. BACKFILL UNDER ROAD PAVEMENT TO BE STABILISED WHERE CCAA INFORMATION IS NOT AVAILABLE.
- APPROVAL MAY BE GIVEN FOR USE OF BACKFILL MATERIAL OTHER THAN CRUSHED ROCK WHERE IT CAN BE DEMONSTRATED THAT A MINIMUM OF 95% MODIFIED RELATIVE COMPACTION CAN BE ACHIEVED.
- CEMENT, CONCRETE OR CEMENT STABILISED CRUSHED ROCK TO BE USED WHERE SETTLEMENT OF TRENCH WILL EFFECT INFRASTRUCTURE.

FOR CONSTRUCTION

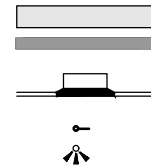
ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	K. BOON	DATE	SEPT 2017	CLIENT	PROJECT	CIVIL DRAWING
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	GR	N.T.	DRAWN	J.KUZMAR	SCALE	REFER SHEET	PHALARIS PARK ESTATE	STAGE 9	DRAWING TITLE:
01	FOR APPROVAL	07/12/17						SURVEY	TGM GEELONG	SHEET SIZE	A1	MATTHEWS ROAD	LOVELY BANKS, VIC 3221	DRAINAGE PIT SCHEDULE
02	FOR APPROVAL	18/01/18						CHECKED	[Signature]	APPROVED	[Signature]	CITY OF GREATER GEELONG		
								POS NO.	PS 809817 P	VERSION	3	PERMIT NO.	1123/2004/A	TGM REF. No.: 004108-209
								WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION				SHEET 15 OF 18		
								JAS-ANZ Accredited: Quality ISO 9001 - OH&S AS/NZS 4801 - Environment ISO 14001				REV A		



SIGNAGE AND LINEMARKING PLAN
SCALE 1:500

LEGEND

HOT MIX PAVEMENT
125mm FOOTPATH
PROPOSED KERB AND CHANNEL/
DRIVEWAY LAYBACKS
STREET SIGN
PSM (BY OTHERS)



① x 1		G5 SERIES	STREET NAME
② x 1		G5 SERIES	STREET NAME
③ x 1		R1-2	GIVE WAY
		RRPM's	RRPM INC. COLOUR Y-YELLOW R-RED W-WHITE

ALL SIGNS AND LINEMARKING TO BE CARRIED OUT IN ACCORDANCE WITH VIC ROADS STANDARDS, REFER TO VICROADS TRAFFIC MANAGEMENT MANUAL.
PAINT TO BE WATER BASED LONG LIFE PAINT IN ACCORDANCE WITH VICROADS STANDARDS.
RRPM'S TO BE INSTALLED IN ACCORDANCE WITH VICROAD STANDARDS.

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.

FOR CONSTRUCTION

ISSUE	ISSUED FOR	DATE	No.	AMENDMENT	DATE	DRAWN	APPROVED	DESIGNED	K. BOON	DATE	SEPT 2017
00	FOR APPROVAL	03/11/17	A	FOR CONSTRUCTION	21/11/19	GR	N.T.	DRAWN	J. KUZMAR	SCALE	1:500
01	FOR APPROVAL	07/12/17						SURVEY	TGM GEELONG	SHEET SIZE	A1
02	FOR APPROVAL	18/01/18						CHECKED		APPROVED	
								POS NO.	PS 809817 P	VERSION	3
								PERMIT NO.	1123/2004/A		
WORKS SHALL NOT COMMENCE UNTIL PLANS ARE SIGNED AND APPROVED FOR CONSTRUCTION											
 ABN 11 125 568 461 Level 1, 27-31 Myers Street (PO Box 1137) Geelong, VIC Australia 3220 Phone +61 3 5202 4600 Fax +61 3 5202 4691 Email: victoria@cardno.com.au Web: www.cardno.com											
JAS-ANZ Accredited: Quality ISO 9001 - OH&S AS/NZS 4801 - Environment ISO 14001											
CLIENT:											
PROJECT: PHALARIS PARK ESTATE STAGE 9 MATTHEWS ROAD LOVELY BANKS, VIC 3221 CITY OF GREATER GEELONG											
DRAWING TITLE: CIVIL DRAWING SIGNAGE AND LINEMARKING PLAN											
TGM REF. No.: 004108-209											
SHEET: 16 OF 18 REV: A											