

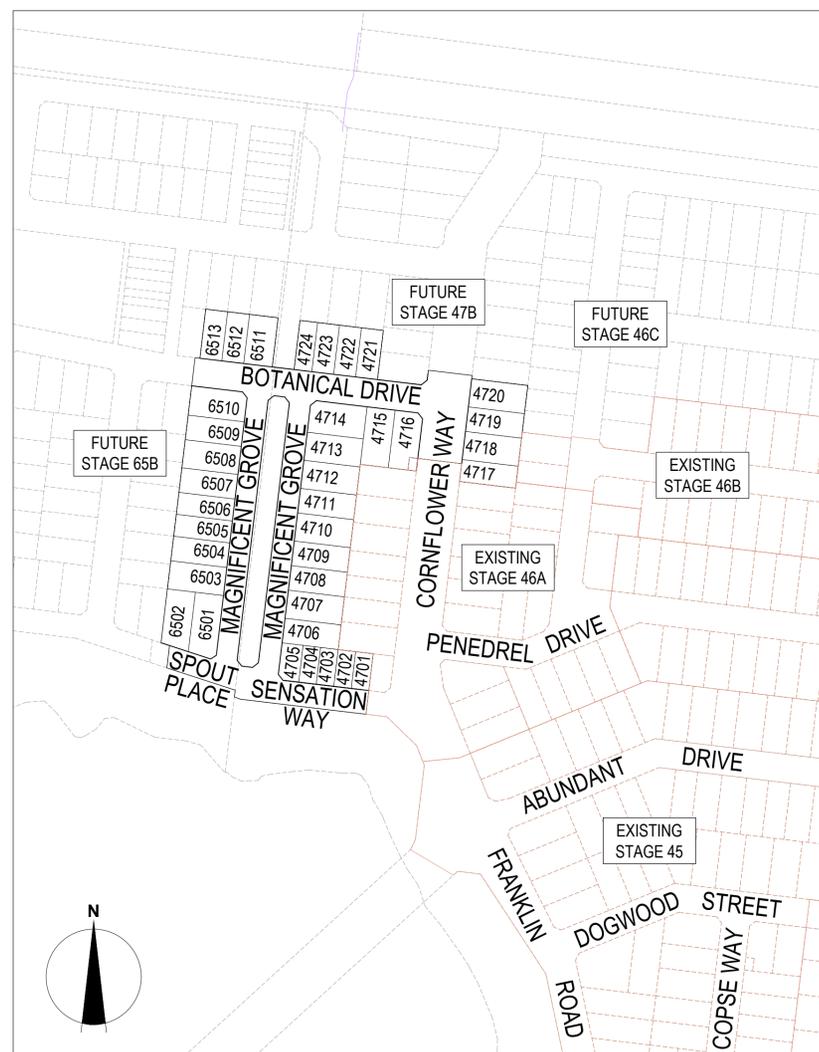
# ARMSTRONG

## STAGE 47A/65A

### CITY OF GREATER GEELONG

**GENERAL NOTES:**

- THE WORKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT INFRASTRUCTURE DESIGN MANUAL STANDARD DRAWINGS AND GREATER GEELONG CITY COUNCIL 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. THEY SHALL ERECT AND MAINTAIN ALL SHORING, PLANKING AND STRUTTING, DEWATERING DEVICES, BARRICADES, SIGNS, LIGHTS, ETC. NECESSARY TO KEEP WORKS IN A SAFE AND STABLE CONDITION, AND TO PROTECT THE PUBLIC FROM HAZARDS ASSOCIATED WITH THE WORKS.
- THE CONTRACTOR SHALL:
  - COMPLY WITH THE "SAFETY PRECAUTIONS IN TRENCHING OPERATIONS" (CODE OF PRACTICE No.8, 1998)
  - NOTIFY WORK SAFE OF HIS INTENTION TO COMMENCE TRENCHING OPERATIONS WHERE TRENCHES ARE 1.5 METRES OR DEEPER.
  - ENSURE THAT THE MINE MANAGER OR HIS DEPUTY AS REQUIRED BY THE REGULATIONS IS IN ATTENDANCE WHEN TRENCHING OPERATIONS ARE IN PROGRESS.
- THE CONTRACTOR IS TO NOTIFY COUNCIL AND ALL SERVICE AUTHORITIES SEVEN (7) DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION. THE LOCATION OF EXISTING SERVICES SHOULD BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCING ANY EXCAVATION BY CONTACTING ALL RELEVANT SERVICE AUTHORITIES. ANY EXISTING SERVICES SHOWN ON THE DRAWINGS ARE OFFERED AS A GUIDE ONLY AND ARE NOT GUARANTEED AS CORRECT.
- REDGUM TREES MARKED ON THE APPROVED PLANS FOR REMOVAL MUST BE REMOVED IN ACCORDANCE WITH COUNCIL'S PLANNING PERMIT. NO EXCAVATION SHALL BE CARRIED OUT WITHIN THE TREE PROTECTION ZONE OF ANY EXISTING TREE WITHOUT WRITTEN APPROVAL FROM COUNCIL'S ENVIRONMENT DEPARTMENT.
- 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.
- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM.
- ALL EXCAVATED OR FILLED AREAS OUTSIDE THE ROAD RESERVES TO BE STRIPPED OF TOPSOIL AND STOCKPILED PRIOR TO EARTHWORKS COMMENCING. THESE AREAS SHALL BE RESURFACED WITH A 150mm LAYER OF TOPSOIL AS SPECIFIED.
- NO TOPSOIL TO BE REMOVED FROM SITE.
- NO FILL OR STOCKPILING OF MATERIAL IS TO BE PLACED ON ANY RESERVE UNLESS DIRECTED BY THE SUPERINTENDENT.
- FILLING ON ALLOTMENTS AND UNDER ROAD PAVEMENTS TO HAVE LEVEL 1 SUPERVISION IN ACCORDANCE WITH AS3798-1996. INDIVIDUAL LOT CERTIFICATES ARE TO BE PROVIDED TO THE SUPERINTENDENT.
- FILLING UNDER DRIVEWAYS AND FOOTPATH IS TO BE APPROVED BY THE SUPERINTENDENT AND CONSTRUCTED IN LAYERS 150mm DEPTH. COMPACTION ACHIEVING A MINIMUM DENSITY RATIO OF 98% (STANDARD) IN ACCORDANCE WITH AS1289 CLAUSE 5.1.1.
- CUT AND FILL BATTER SLOPES ARE NOT TO EXCEED 1 IN 6 UNLESS SHOWN OTHERWISE.
- ALL DRAINAGE PIPES ARE TO BE SPIGOT-SOCKET RUBBER RING JOINTED UNLESS STATED OTHERWISE.
- ALL DRAINAGE TRENCHES UNDER PARKING BAYS, DRIVEWAYS, FOOTPATHS AND BEHIND KERB & CHANNEL, SHALL BE BACKFILLED WITH CRUSHED ROCK AS SPECIFIED.
- ALL PIPES UNDER ROADS SHALL BE BACKFILLED WITH 2% STABILIZED SAND TO SPRINGLINE. ABOVE THIS POINT, PROVIDE 20mm NOM. SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 98% MODIFIED COMPACTION IN 150mm MAXIMUM LAYER.
- PROPERTY INLETS AS PER INFRASTRUCTURE DESIGN MANUAL (IDM) STANDARD DRAWING SD 520 ARE TO BE LOCATED 1.0m FROM LOW SIDE BOUNDARY UNLESS SHOWN OTHERWISE.
- ALL HOUSE DRAIN CONNECTIONS ARE TO BE LOCATED NO CLOSER THAN 6.0m FROM THE SIDE BOUNDARY OR FROM EASEMENT ALONG THE SIDE BOUNDARY UNLESS NOTED OTHERWISE AND CONNECTED DIRECTLY TO UNDERGROUND DRAIN OR PIT. HOUSE DRAIN LOCATION TO BE MARKED (50mm STAMPED IMPRESSION) ON THE TOP OF THE KERB.
- SUBSOIL DRAINS SHALL BE INSTALLED BEHIND OR BELOW ALL KERBS AND CHANNEL.
- CONDUIT LOCATIONS ARE SUBJECT TO AMENDMENT AND CONDUITS SHALL NOT BE LAID UNTIL WRITTEN APPROVAL IS GIVEN BY THE SUPERINTENDENT. CONDUITS TO BE EXTENDED TO PROPERTY LINE AND ARE REQUIRED WHEN CONNECTIONS EXTEND UNDER ROAD PAVEMENT, FOOTPATH OR OTHER INFRASTRUCTURE. BOTH KERBS ARE TO BE MARKED (50mm STAMPED IMPRESSION) WITH THE LETTERS E (ELECTRICAL), G (GAS), T (TELEPHONE), W (WATER) AND C (COUNCIL COMMUNICATION) ABOVE CONDUIT LOCATION.
- ALL SERVICING TRENCHES UNDER ROADS, DRIVEWAYS, FOOTPATHS ETC. ARE TO BE BACKFILLED & COMPACTED WITH F.C.R. IN THE CASE OF TRENCHES UNDER ROADS WHERE BACKFILLING HAS NOT ACHIEVED THE SPECIFIED COMPACTION OR SHOWS EXCESSIVE MOVEMENT UNDER PROOF ROLLING, THE BACKFILLING SHALL BE REMOVED AND REPLACED WITH 2% STABILISED COMPACTED F.C.R.
- NO COMMUNICATION PITS ARE TO BE LOCATED IN THE FOOTPATH.
- VEHICULAR CROSSINGS TO BE LOCATED CLEAR OF DRAINAGE PITS, SEWER MAINTENANCE HOLES AND EXISTING TREES. VEHICLE CROSSINGS TO BE 1m FROM PROPERTY BOUNDARY OR EASEMENT UNLESS OTHERWISE SHOWN. VEHICULAR CROSSINGS TO BE CONSTRUCTED AS PER CITY OF GREATER GEELONG "DESIGN NOTES No.4" DATED AUGUST 2012 & IDM STANDARD DRAWINGS SD205 to SD265.
- ALL PEDESTRIAN CROSSINGS TO BE IN ACCORDANCE WITH INFRASTRUCTURE DESIGN MANUAL SD200.
- ALL STREET SIGNS TO BE IN ACCORDANCE WITH INFRASTRUCTURE DESIGN MANUAL STANDARD DRAWINGS. STREET SIGNS TO BE ATTACHED TO LIGHT POLES USING 'SINGLE DIRECTION COLLAR' OR '90° RIGHT ANGLE COLLAR' UNLESS SHOWN OTHERWISE.
- ALL PAVEMENT MARKINGS AND TRAFFIC SIGNS SHOULD BE TO AS1742.2 AND AS1742.1 STANDARD RESPECTIVELY. TEMPORARY LINEMARKING TO BE PLACED DURING MAINTENANCE PERIOD PRIOR TO PLACEMENT OF WEARING COURSE. FINAL LINEMARKING TO BE LONG LIFE ROAD MARKING WITH LONGITUDINAL LINES IN THERMOPLASTIC AND TRANSVERSE MARKINGS IN COLD APPLIED.
- UPON COMPLETION OF CONSTRUCTION THE WHOLE SITE SHALL BE CLEANED, GRADED, ALL RUBBISH REMOVED AND LEFT IN A CLEAN AND TIDY CONDITION TO THE SATISFACTION OF THE SUPERINTENDENT.
- ALL AREAS OF SUBDIVISION EXPOSED OF VEGETATION, INCLUDING NATURE STRIPS, LOTS AND RESERVES ARE TO BE FULLY GRASSSED BY HYDRO MULCHING, WATERED AND MAINTAINED, UNTIL THE END OF MAINTENANCE PERIOD.
- ALL SUMPS IN PRECAST 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.
- CITY OF GREATER GEELONG REQUIRES CCTV OF ALL DRAINAGE PIPES AND PITS, PRIOR TO THE ISSUE OF THE STATEMENT OF COMPLIANCE



**LOCALITY PLAN**  
MELWAYS REF: 479 F1  
Scale: 1:2000 (0 to 100m) and 1:4000 (0 to 50m)

**NOTE:**  
THE SITE OF WORKS IS SUBJECT TO THE PROVISIONS OF CULTURAL HERITAGE MANAGEMENT PLAN 12748. ALL WORKS AND PERSONNEL MUST OBSERVE THE REQUIREMENTS OF THE MANAGEMENT PLAN AT ALL TIMES.

Sheet List Table		
Drawing No.	Drawing Title	Revision
R100	COVER SHEET	AC
R200	LAYOUT PLAN	AC
R201	TYPICAL CROSS SECTIONS	AC
R300	INTERSECTION DETAILS - 1	AC
R301	INTERSECTION DETAILS - 2	AC
R400	ROAD LONGITUDINAL SECTIONS - 1	AC
R401	ROAD LONGITUDINAL SECTIONS - 2	AC
R500	ROAD CROSS SECTIONS - 1	AC
R501	ROAD CROSS SECTIONS - 2	AC
R502	ROAD CROSS SECTIONS - 3	AC
R503	ROAD CROSS SECTIONS - 4	AC
R504	ROAD CROSS SECTIONS - 5	AC
R505	ROAD CROSS SECTIONS - 6	AC
R600	DRAINAGE LONG SECTIONS - 1	AC
R601	DRAINAGE LONG SECTIONS - 2	AC
R602	DRAINAGE LONG SECTIONS - 3	AC
R603	DRAINAGE LONG SECTIONS - 4	AC
R604	PIT SCHEDULE	AC
R700	TYPICAL DETAILS - 1	AC
R701	TYPICAL DETAILS - 2	AC
R800	SIGNAGE & LINEMARKING	AC
R900	CONCRETE JOINTING PLAN	AC
R901	DRAINAGE LAYOUT PLAN	AC

SIGNED (CONSULTANT)

SIGNED (CONTRACTOR)

**WARNING**  
**BEWARE OF UNDERGROUND & OVERHEAD SERVICES**  
THE LOCATIONS OF UNDERGROUND & OVERHEAD SERVICES ARE APPROXIMATE ONLY & 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)

P:\2018\80016 - VILLAWOOD ARMSTRONG\80016-479\12 - DRAFTING\AC\80016-479 - R100 - COVER SHEET.DWG

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
1	25/11/20	LOT 6508 CROSSOVER RELOCATION & ADDED BLOCKOUT	C.ROHDE	M.TROUNCE	T.PALIOS
0	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

**villawood properties**  
Communities Designed for Living

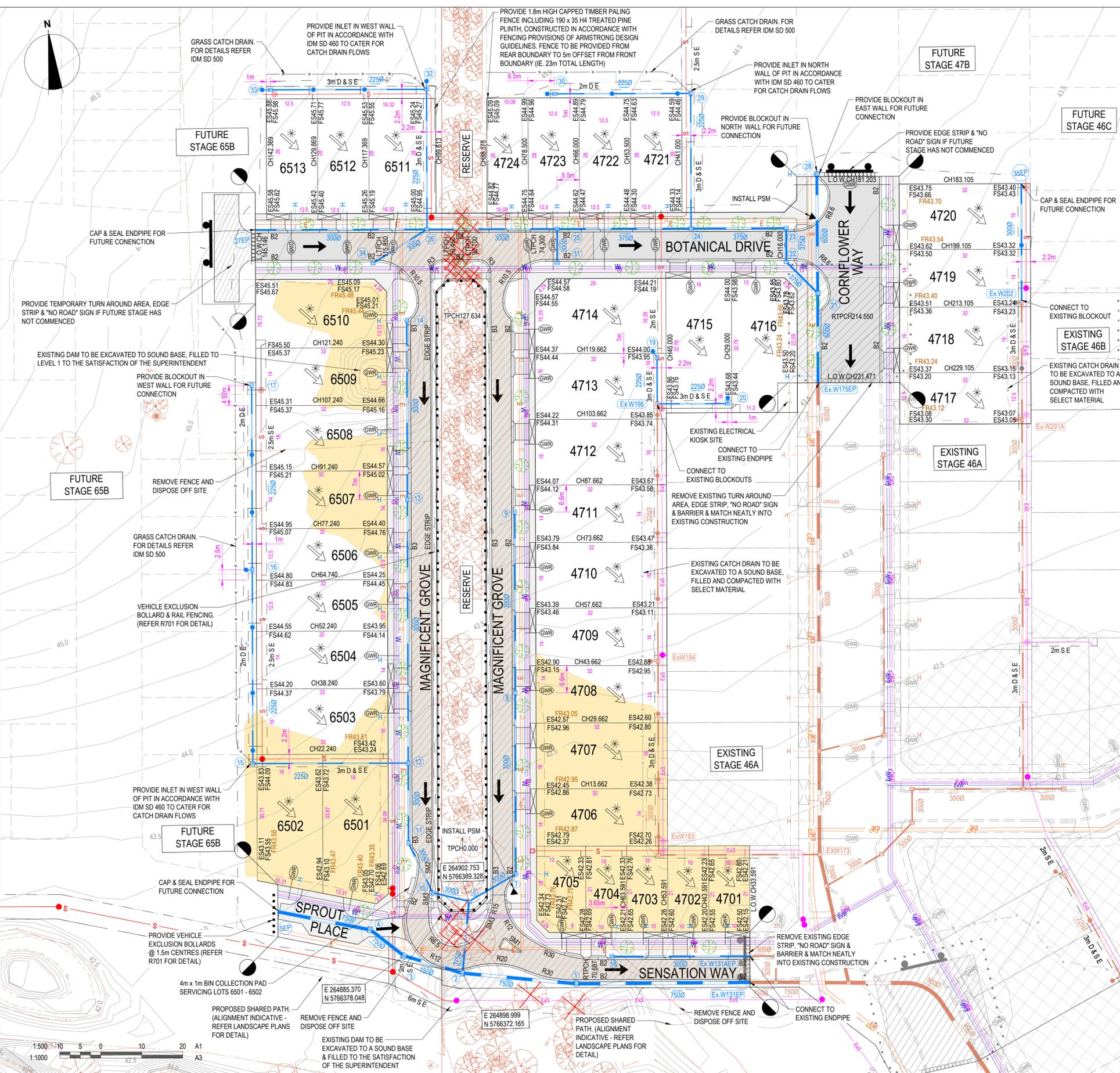
**creo CONSULTANTS**  
Level 7, 176 Wellington Parade  
East Melbourne, VIC, Australia 3002

**ARMSTRONG**  
MT DUNEED

**ARMSTRONG - STAGE 47A/65A**  
COVER SHEET

**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
1:2000 @ A1	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R100</b>	<b>AC</b>



CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

- NOTES:**
- ALL VEHICLE AND PRAM CROSSING LAYBACKS, TO BE MINIMUM OF 1.0m FROM PITS.
  - ALL PRAM CROSSINGS TO BE A MINIMUM 2.0m FROM VEHICLE CROSSINGS.
  - ALL PRAM CROSSINGS TO BE DDA COMPLIANT.
  - VEHICLE EXCLUSION MEASURES BETWEEN ROAD RESERVE AND RESERVE TO FORM PART OF LANDSCAPE WORKS.
  - THE USE OF DIRECTIONAL AND HAZARD TACTILE PAVERS MUST ACCORD WITH SECTION 2.2.3.1 OF AS/NZS 1428.4:2002.
  - SEWER MAINTENANCE HOLE CONVERTER SLAB OR CONE, TO BE ROTATED TO ENSURE COVER POSITION IS CENTRALLY LOCATED WITHIN FOOTPATH.
  - CHAINAGES FOR SETOUT OF PROPERTY INLET POINTS, SERVING FUTURE LOTS, ARE MEASURED FROM THE DOWNSTREAM PIT.
  - CONTRACTOR TO LOCATE ALL EXISTING ASSETS PRIOR TO COMMENCEMENT OF WORKS. ANY DAMAGE TO EXISTING ASSETS TO BE RECTIFIED AT CONTRACTORS EXPENSE.
  - CONTRACTOR TO VERIFY DEPTH OF EXISTING SERVICES, PRIOR TO COMMENCEMENT OF CONSTRUCTION.

**LEGEND - LAYOUT PLAN**

- STORMWATER DRAIN, PIT & PROPERTY INLET
- SWALE DRAIN
- SEWER & MAINTENANCE STRUCTURES
- HOUSE DRAIN
- SERVICE CONDUITS
- EXISTING ELECTRICITY (UNDERGROUND)
- EXISTING ELECTRICITY (OVERHEAD)
- EXISTING GAS
- EXISTING OPTIC FIBRE
- EXISTING TELSTRA
- EXISTING WATER
- EXISTING RECYCLED WATER
- EXISTING STORMWATER DRAIN
- EXISTING SEWER
- EXISTING SURFACE LEVEL
- FINISHED BUILDING LINE LEVEL
- FINISHED RIDGE LINE LEVEL
- PAVEMENT TREATMENT
- STRUCTURAL FILL > 200mm DEEP
- EXISTING STRUCTURAL FILL > 200mm DEEP
- DIRECTION OF FALL
- OVERLAND FLOW
- ALLOTMENT TO BE GRADED EVENLY IN DIRECTION OF FALL TO LEVELS INDICATED
- CONCRETE EDGE STRIP WITH SUBSOIL DRAIN, "NO ROAD" SIGN & BARRIER
- LIMIT OF WORKS
- EXISTING TREE TO BE REMOVED
- PERMANENT SURVEY MARK
- TEMPORARY BENCH MARK
- PROPOSED DRIVEWAY
- STORM WATER PIT SETOUT POINT

**AS CONSTRUCTED SUBGRADE IMPROVEMENT**

EXCAVATE 200mm BELOW SUBGRADE AND REPLACE WITH CAPPING MATERIAL

SIGNED (CONSULTANT)

SIGNED (CONTRACTOR)

**NOTE: STREET TREE LOCATIONS SHOWN ARE INDICATIVE ONLY. ULTIMATE LOCATION IS TO BE PROVIDED/CONFIRMED BY LANDSCAPE ARCHITECTS**

**WARNING**  
**BEWARE OF UNDERGROUND & OVERHEAD SERVICES**  
 The locations of underground & overhead services are approximate only & 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)

**SERVICES OFFSET SCHEDULE**

ROAD NAME	GAS		RECYCLED WATER		POTABLE WATER		OPTIC FIBRE		ELECTRICITY		PUBLIC LIGHTING	
	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET	SIDE	OFFSET
SENSATION DRIVE	N	2.10	N	2.50	N	3.00	N	3.60	N	4.20	N	1.00*
CORNFLOWER WAY	E	2.10	E	2.60	E	3.20	N	2.80	W	3.60	W	1.00*
BOTANICAL DRIVE	S	2.10	S	2.50	S	3.00	N	1.80	N	2.60	N	1.00*
SPROUT PLACE	N	2.10	N	2.50	N	3.00	S	1.80	S	1.00	-	-
MAGNIFICENT PARADE (SOUTHBOUND)	E	1.80	E	2.20	E	2.70	E	3.30	E	3.90	E	1.00*
MAGNIFICENT PARADE (NORTHBOUND)	W	1.80	W	2.20	W	2.70	W	3.30	W	3.90	W	1.00*

1. \* DENOTES OFFSET FROM BACK OF KERB.

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
1	25/11/20	LOT 6508 CROSSOVER RELOCATION & ADDED BLOCKOUT	C.ROHDE	M.TROUNCE	T.PALIOS
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**villawood properties**  
 Communities Designed for Living

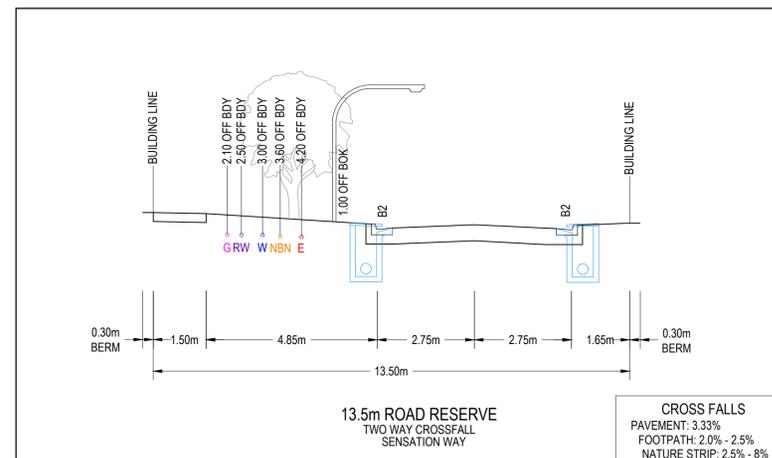
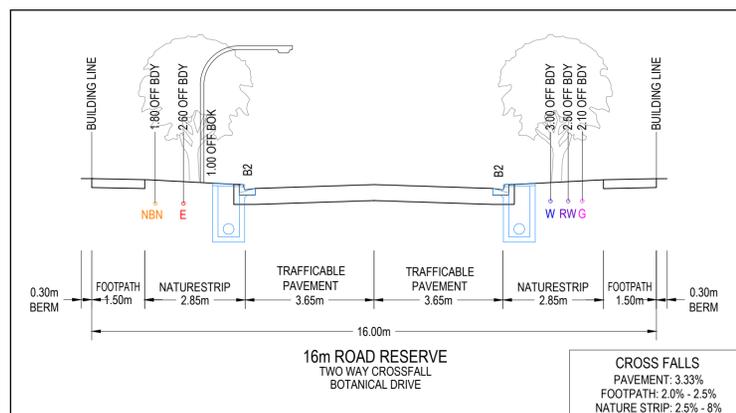
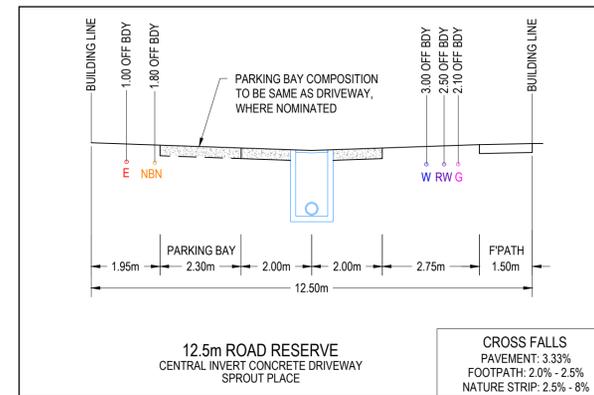
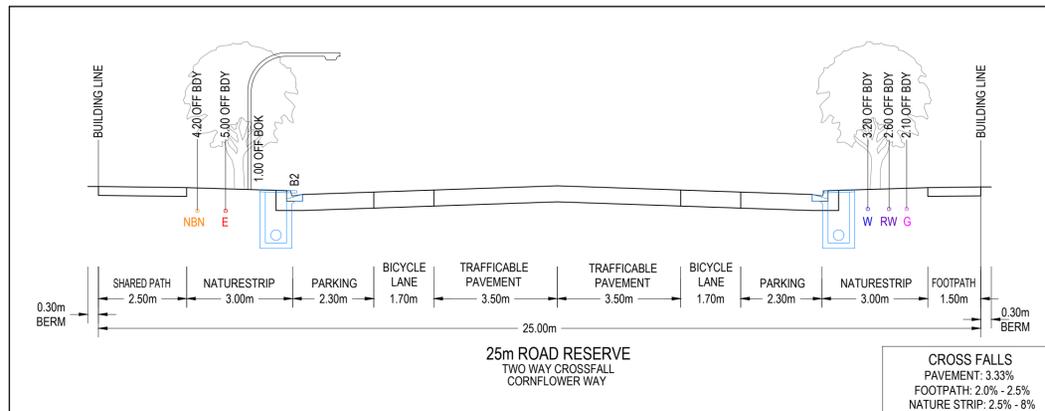
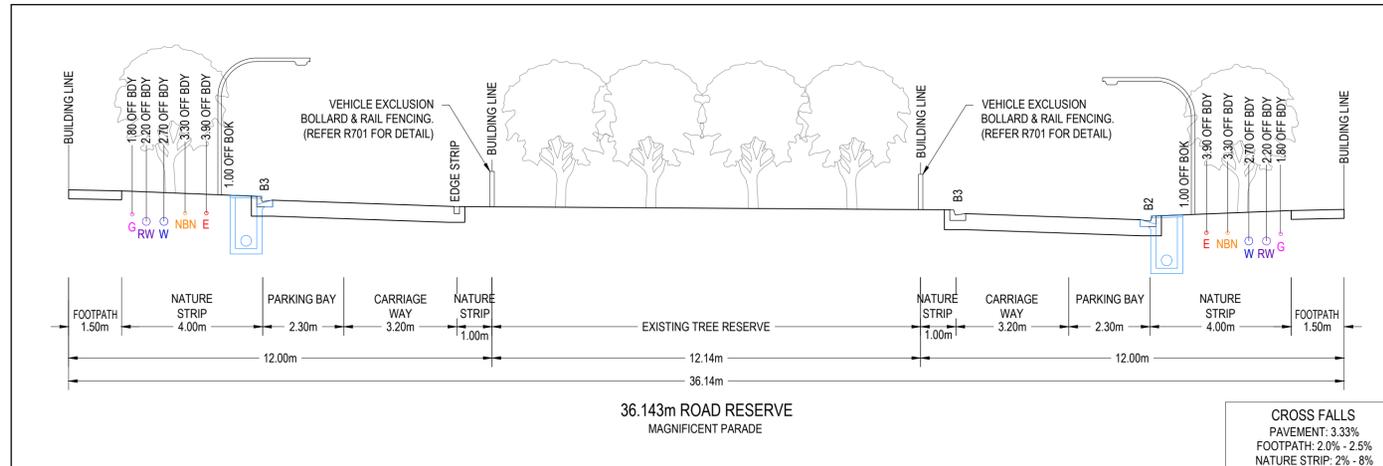
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 Level 7, 176 Wellington Parade  
 East Melbourne, VIC, Australia 3002

**ARMSTRONG**  
 MT DUNEED

**ARMSTRONG - STAGE 47A/65A**  
 LAYOUT PLAN

**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
1:500 @ A1	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R200</b>	<b>AC</b>



SIGNED (CONSULTANT)

SIGNED (CONTRACTOR)

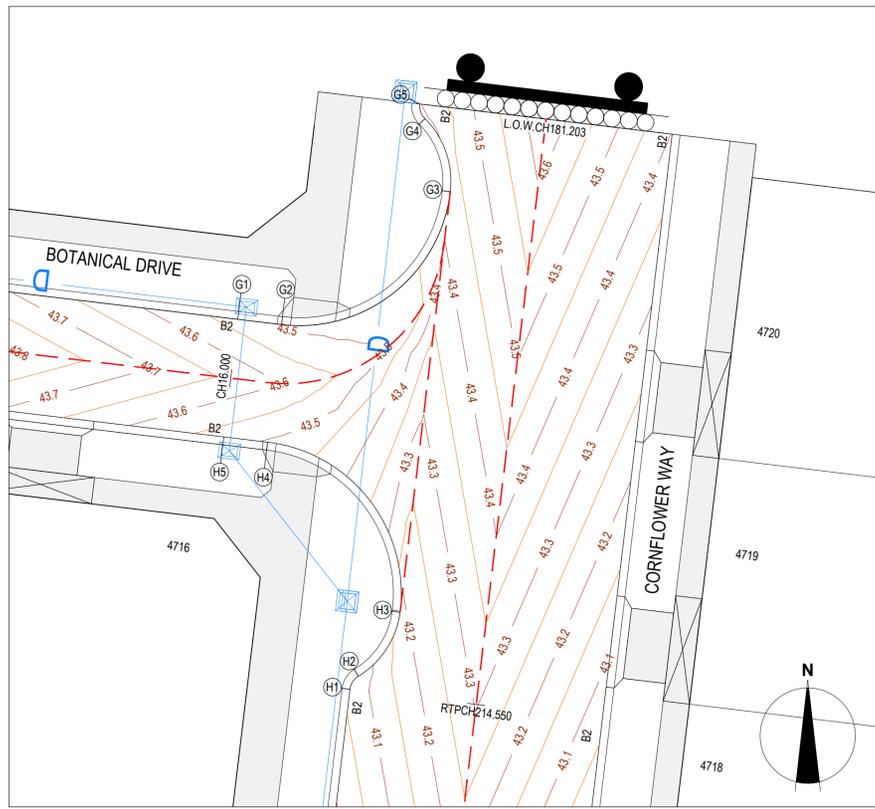
REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
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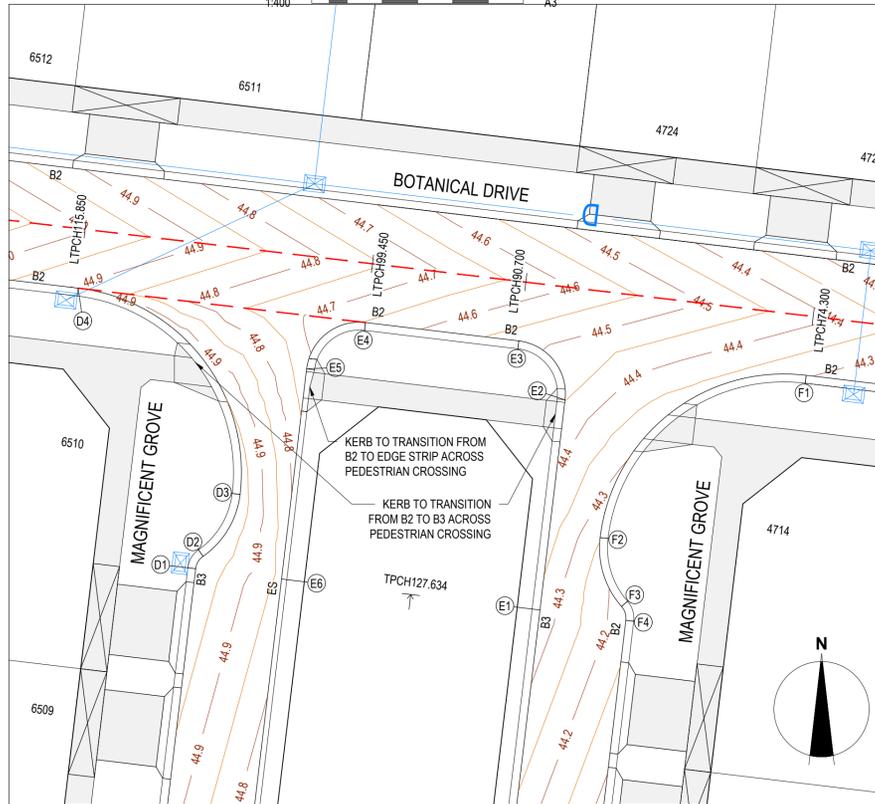
DRAWING TITLE  
**ARMSTRONG - STAGE 47A/65A  
TYPICAL CROSS SECTIONS**

STATUS  
**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
N.T.S	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R201</b>	<b>AC</b>



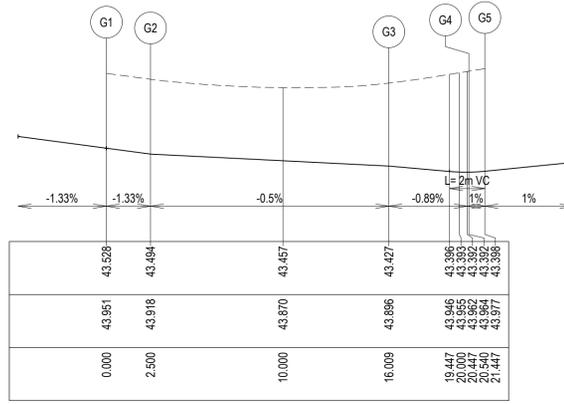
INTERSECTION OF CORNFLOWER WAY & BOTANICAL DRIVE



INTERSECTION OF BOTANICAL DRIVE & MAGNIFICENT GROVE



VERTICAL GEOMETRY  
DATUM RL43  
DESIGN LEVEL  
EXISTING SURFACE  
CHAINAGE



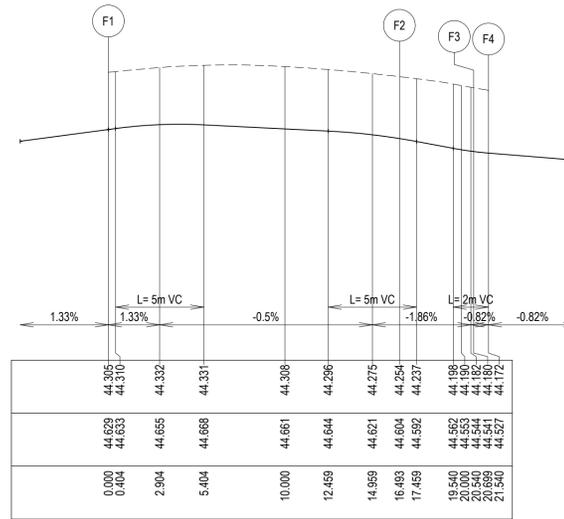
LIP LINE G

ALIGNMENT G

PT NO	EASTING	NORTHING	RL
G1	264999.059	5766541.963	43.528
G2	265001.542	5766541.666	43.494
G3	265011.102	5766549.184	43.427
G4	265009.666	5766553.32	43.392
G5	265009.379	5766554.147	43.396

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
G2-G3	90	8.6	13.509	2.519	1.864	3.291	2.79	3.377	43.461
G3-G4	51.927	5	4.531	0.505	0.377	1.123	1.066	1.133	43.407
G4-G5	51.927	1	0.906	0.101	0.075	0.225	0.213	0.227	43.394

VERTICAL GEOMETRY  
DATUM RL43  
DESIGN LEVEL  
EXISTING SURFACE  
CHAINAGE



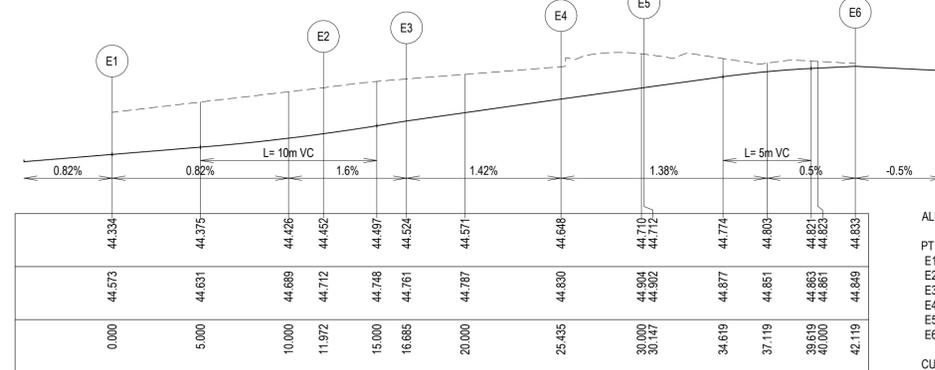
LIP LINE F

ALIGNMENT F

PT NO	EASTING	NORTHING	RL
F1	264940.376	5766542.234	44.305
F2	264928.704	5766533.055	44.254
F3	264929.916	5766529.156	44.18
F4	264930.158	5766528.377	44.112

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
F1-F2	90	10.5	16.493	3.075	2.276	4.018	3.406	4.123	44.317
F2-F3	48.19	5	4.205	0.436	0.326	1.044	0.998	1.051	44.216
F3-F4	48.19	1	0.841	0.087	0.065	0.209	0.2	0.21	44.175

VERTICAL GEOMETRY  
DATUM RL44  
DESIGN LEVEL  
EXISTING SURFACE  
CHAINAGE



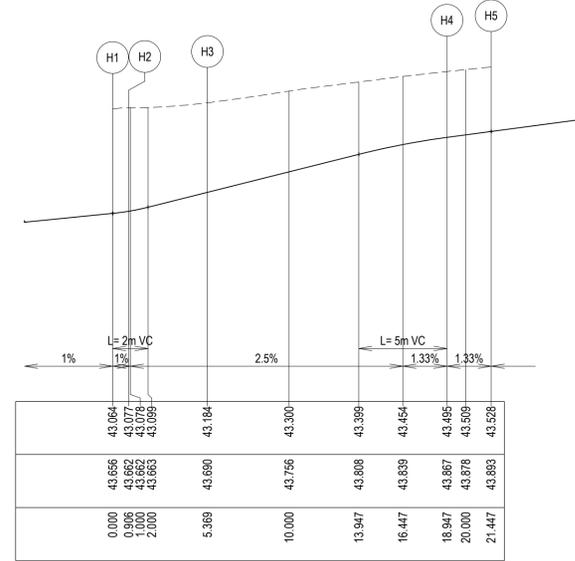
LIP LINE E

ALIGNMENT E

PT NO	EASTING	NORTHING	RL
E1	264925.293	5766528.959	44.334
E2	264926.715	5766540.846	44.452
E3	264924.932	5766544.181	44.524
E4	264915.404	5766545.22	44.648
E5	264912.069	5766542.598	44.712
E6	264910.647	5766530.71	44.833

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
E1-E2	90	3	4.712	0.879	0.65	1.148	0.973	1.178	44.486
E4-E5	90	3	4.712	0.879	0.65	1.148	0.973	1.178	44.68

VERTICAL GEOMETRY  
DATUM RL42  
DESIGN LEVEL  
EXISTING SURFACE  
CHAINAGE



LIP LINE H

ALIGNMENT H

PT NO	EASTING	NORTHING	RL
H1	265005.419	5766521.037	43.064
H2	265005.893	5766521.773	43.077
H3	265008.255	5766525.385	43.184
H4	265000.746	5766535.014	43.495
H5	264998.264	5766535.311	43.528

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
H1-H2	51.927	1	0.906	0.101	0.075	0.225	0.213	0.227	43.07
H2-H3	51.14	5	4.463	0.49	0.366	1.106	1.052	1.116	43.128
H3-H4	90.46	8.6	13.577	2.543	1.882	3.307	2.798	3.394	43.354

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

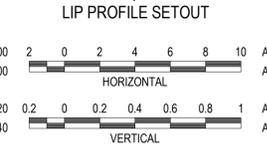
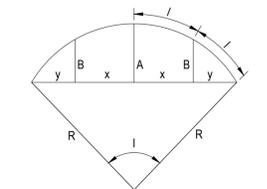
**LEGEND - INTERSECTION PLAN**

- STORMWATER DRAIN, PIT & PROPERTY INLET
- MAJOR CONTOUR - 0.1m
- MINOR CONTOUR - 0.05m
- CROWN / GRADE LINE

**WARNING**  
**BEWARE OF UNDERGROUND & OVERHEAD SERVICES**  
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**DIAL 1100 BEFORE YOU DIG**  
www.1100.com.au

**LEGEND**

- EXISTING SURFACE
- DESIGN LINE



SIGNED (CONSULTANT)

SIGNED (CONTRACTOR)

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
0	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

**villawood properties**  
Communities Designed for Living

**creo CONSULTANTS**  
Level 7, 176 Wellington Parade  
East Melbourne, VIC, Australia 3002

**ARMSTRONG**  
MT DUNEED

**ARMSTRONG - STAGE 47A/65A**  
INTERSECTION DETAILS - 1

**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
1:200 @ A1	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
180016.47A	R300	AC

ALIGNMENT A

PT NO	EASTING	NORTHING	RL
A1	264931.655	5766366.532	42.312
A2	264925.862	5766367.225	42.341
A3	264914.458	5766371.013	42.402
A4	264901.031	5766373.379	42.38
A5	264889.251	5766378.15	42.433
A6	264888.363	5766390.829	42.521
A7	264889.822	5766393.198	42.575
A8	264891.817	5766400.204	42.745
A9	264890.825	5766403.835	42.829
A10	264890.626	5766404.561	42.835

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
A2 - A3	23.106	30	12.099	0.608	0.455	3.02	2.989	3.025	42.372
A3 - A4	39.858	20	13.913	1.198	0.896	3.461	3.356	3.478	42.429
A4 - A5	63.953	12	13.394	1.821	1.357	3.305	3.05	3.349	42.399
A5 - A6	63.953	12	13.394	1.821	1.357	3.305	3.05	3.349	42.466
A7 - A8	21.154	20	7.384	0.34	0.255	1.843	1.828	1.846	42.658
A8 - A9	44.22	5	3.859	0.368	0.275	0.959	0.923	0.965	42.79
A9 - A10	44.22	1	0.772	0.074	0.055	0.192	0.185	0.193	42.833

ALIGNMENT C

PT NO	EASTING	NORTHING	RL
C1	264895.491	5766403.979	42.672
C2	264894.976	5766399.667	42.65
C3	264893.658	5766393.216	42.617
C4	264892.462	5766385.306	42.577
C5	264892.033	5766379.397	42.541
C6	264892.907	5766380.034	42.542
C7	264908.695	5766390.173	42.562
C8	264910.137	5766402.228	42.623

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
C2 - C3	9.442	40	6.592	0.136	0.102	1.647	1.645	1.648	42.634
C3 - C4	15.324	30	8.024	0.268	0.201	2.004	1.995	2.006	42.597
C4 - C5	64.156	6.5	7.278	0.992	0.739	1.796	1.656	1.82	42.559
C5 - C6	64.156	6.5	7.278	0.992	0.739	1.796	1.656	1.82	42.539
C6 - C7	45.805	15	11.992	1.182	0.884	2.978	2.859	2.998	42.548

ALIGNMENT B

PT NO	EASTING	NORTHING	RL
B1	264915.002	5766401.646	42.459
B2	264914.092	5766394.032	42.421
B3	264913.672	5766393.331	42.422
B4	264911.575	5766389.829	42.465
B5	264911.537	5766389.512	42.464
B6	264915.221	5766379.355	42.408
B7	264932.237	5766371.398	42.312

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
B2 - B3	48.19	1	0.841	0.087	0.065	0.209	0.2	0.21	42.42
B3 - B4	48.19	5	4.205	0.436	0.326	1.044	0.998	1.051	42.456
B5 - B6	53.511	12	11.207	1.285	0.959	2.776	2.626	2.802	42.436
B6 - B7	36.489	30	19.106	1.508	1.129	4.756	4.636	4.776	42.36

ALIGNMENT I

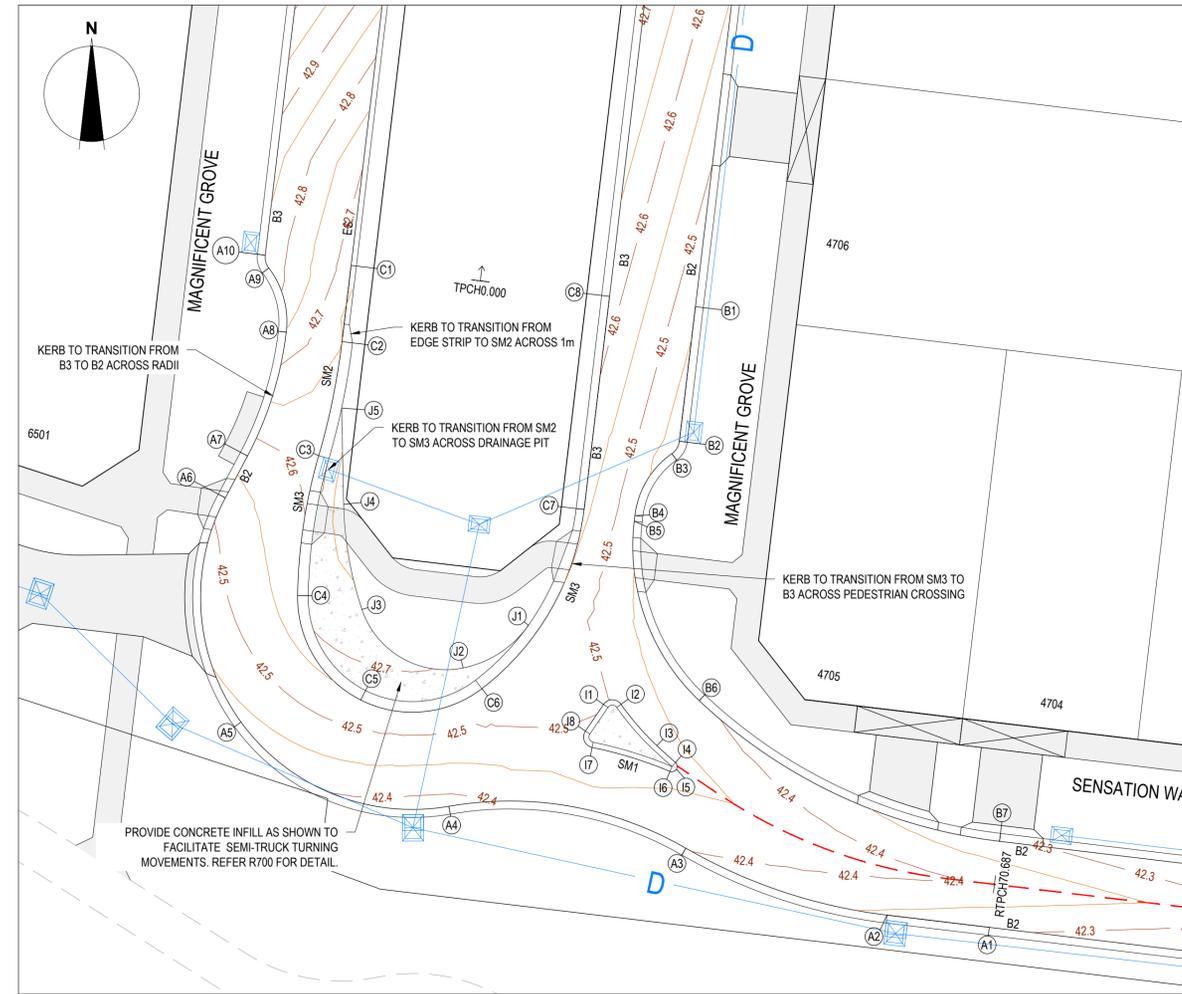
PT NO	EASTING	NORTHING	RL
I1	264909.8	5766379.145	42.504
I2	264910.786	5766379.153	42.496
I3	264912.82	5766376.808	42.476
I4	264913.872	5766376.858	42.466
I5	264913.931	5766375.473	42.464
I6	264913.56	5766375.354	42.465
I7	264909.15	5766376.711	42.488
I8	264908.773	5766377.636	42.494

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
I1 - I2	110.556	0.6	1.158	0.258	0.19	0.278	0.215	0.289	42.5
I2 - I3	11.494	15.5	3.109	0.078	0.058	0.777	0.775	0.777	42.486
I3 - I4	2.425	33.5	1.418	0.008	0.006	0.355	0.354	0.355	42.471
I4 - I5	80.922	0.3	0.424	0.072	0.053	0.104	0.091	0.106	42.465
I5 - I6	80.922	0.3	0.424	0.072	0.053	0.104	0.091	0.106	42.464
I6 - I7	11.269	23.5	4.622	0.114	0.085	1.155	1.152	1.155	42.477
I7 - I8	112.787	0.6	1.181	0.268	0.197	0.283	0.216	0.295	42.491

ALIGNMENT J

PT NO	EASTING	NORTHING	RL
J1	264905.539	5766383.612	42.657
J2	264901.843	5766381.208	42.688
J3	264896.107	5766384.517	42.738
J4	264895.072	5766390.458	42.78
J5	264894.957	5766395.908	42.717

CURVE NO	I	RAD.	ARC	A	B	X	Y	I	MID POINT RL
J1 - J2	43.106	6	4.514	0.42	0.314	1.122	1.082	1.129	42.672
J2 - J3	82.936	5	7.238	1.253	0.93	1.77	1.541	1.809	42.713
J3 - J4	17.343	20	6.054	0.229	0.171	1.512	1.503	1.513	42.759



INTERSECTION OF SENSATION WAY & MAGNIFICENT GROVE



CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

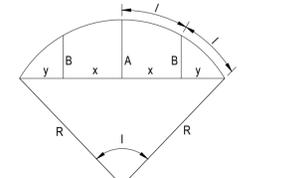
LEGEND - INTERSECTION PLAN

- Stormwater Drain, Pit & Property Inlet
- Major Contour - 0.1m
- Minor Contour - 0.05m
- Crown / Grade Line

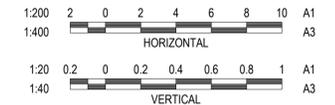
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LEGEND

- Existing Surface
- Design Line



LIP PROFILE SETOUT



SIGNED (CONSULTANT)  
 SIGNED (CONTRACTOR)

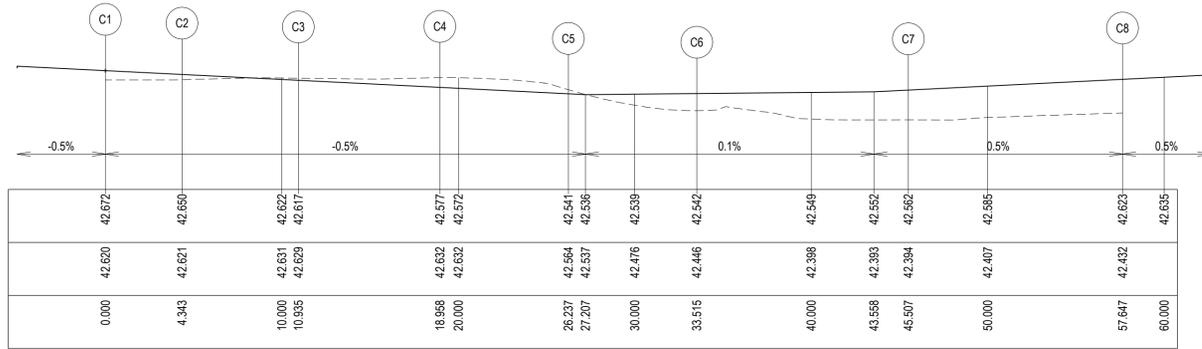
VERTICAL GEOMETRY

DATUM RL42

DESIGN LEVEL

EXISTING SURFACE

CHAINAGE



LIP LINE C

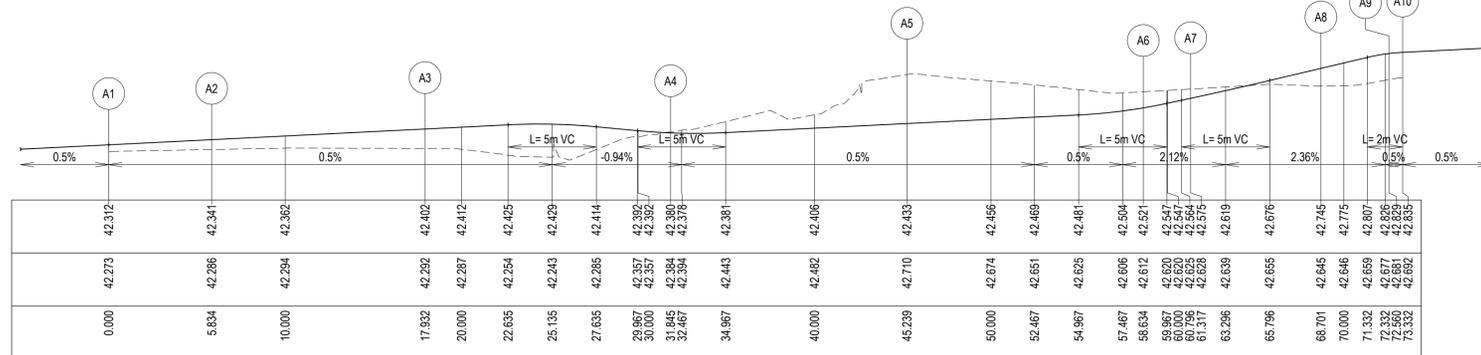
VERTICAL GEOMETRY

DATUM RL42

DESIGN LEVEL

EXISTING SURFACE

CHAINAGE



LIP LINE A

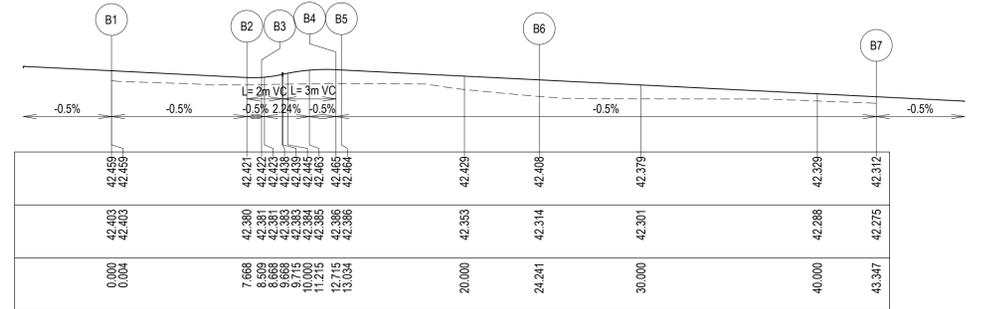
VERTICAL GEOMETRY

DATUM RL42

DESIGN LEVEL

EXISTING SURFACE

CHAINAGE



LIP LINE B

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
0	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
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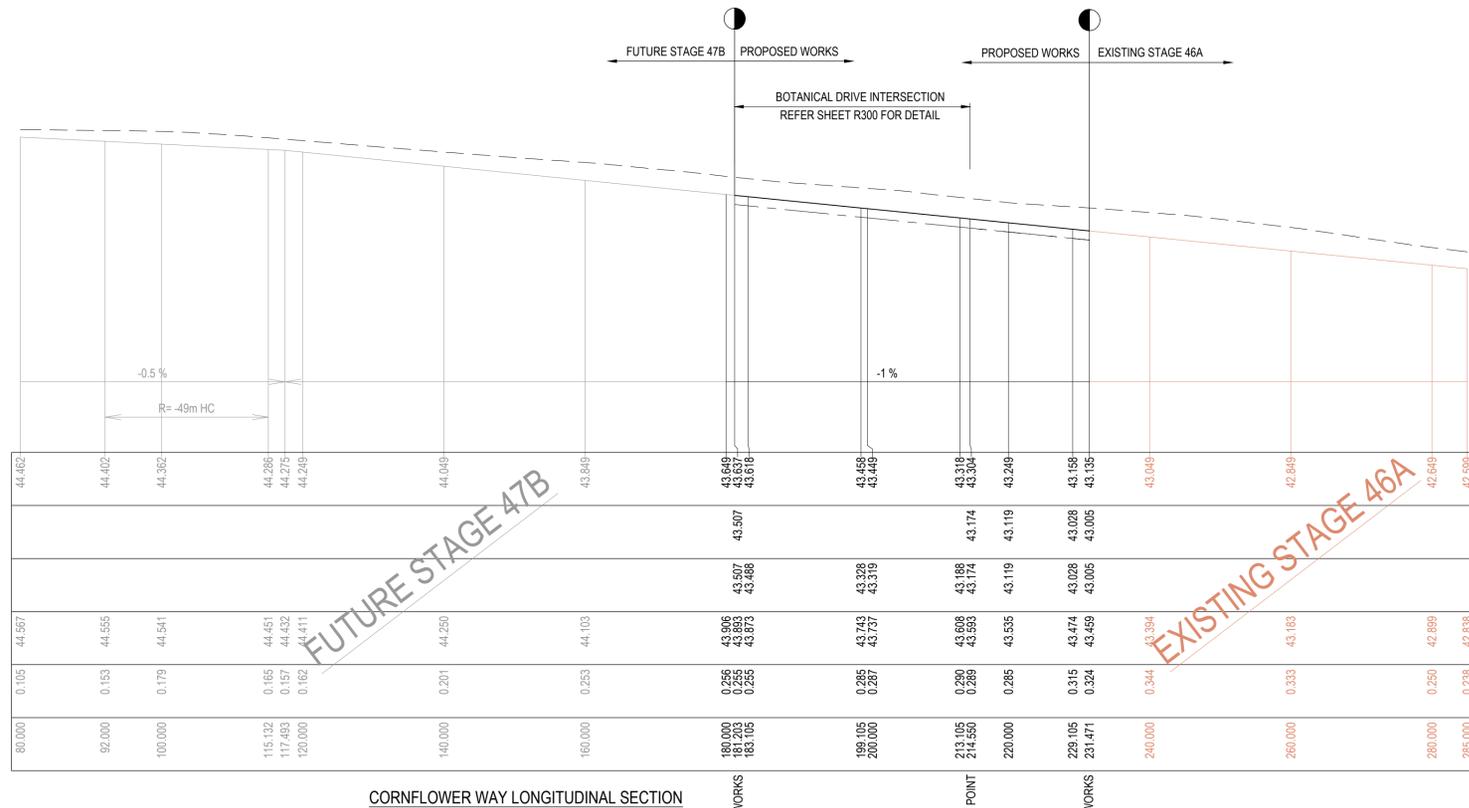


DRAWING TITLE  
**ARMSTRONG - STAGE 47A/65A**  
**INTERSECTION DETAILS - 2**

STATUS  
**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
1:200 @ A1	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R301</b>	<b>AC</b>

VERTICAL GEOMETRY  
 HORIZONTAL GEOMETRY  
 DATUM RL40  
 DESIGN CENTRELINE  
 RIGHT BACK OF KERB  
 LEFT BACK OF KERB  
 EXISTING SURFACE  
 CENTRELINE DEPTH  
 CHAINAGE



CORNFLOWER WAY LONGITUDINAL SECTION

CORNFLOWER WAY DESIGN LINE  
 CHAINAGE EASTING NORTHING BEARING

181.203	265016.528	5766553.292	186°49'11"	IP
200.000	265014.296	5766534.628	186°49'11"	
231.470	265010.559	5766503.381	186°49'11"	IP

CORNFLOWER WAY DESIGN LINE

--- IP Details ---

IP 1

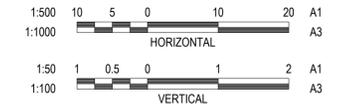
coordinate =	265016.5282	5766553.2925
chainage =	181.2030	

IP 2

coordinate =	265010.5591	5766503.3809
chainage =	231.4703	

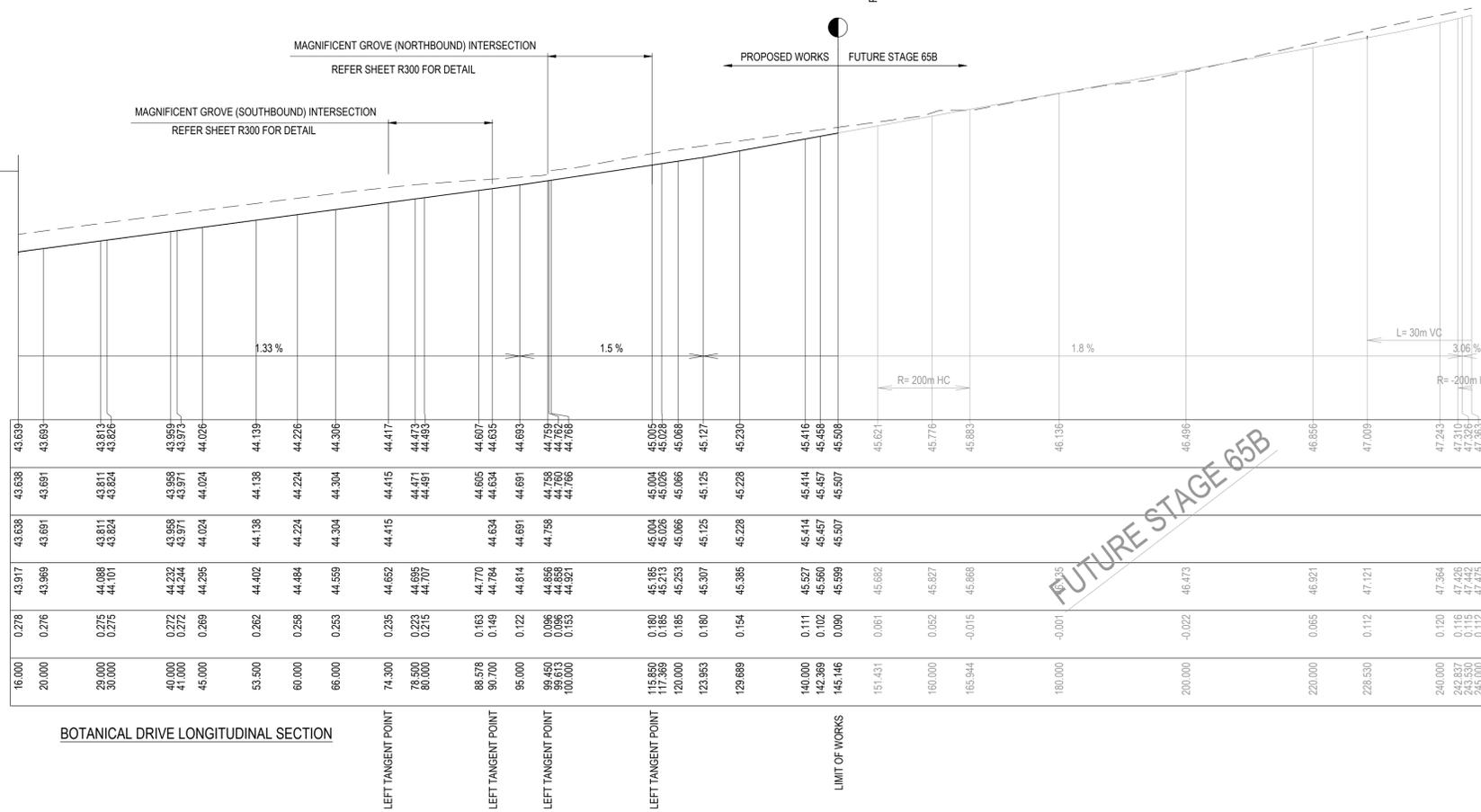
**LEGEND**

- EXISTING SURFACE
- DESIGN LINE
- FUTURE DESIGN LINE
- LEFT BACK OF KERB
- RIGHT BACK OF KERB



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CORNFLOWER WAY INTERSECTION  
 REFER R300 FOR DETAIL  
 VERTICAL GEOMETRY  
 HORIZONTAL GEOMETRY  
 DATUM RL41  
 DESIGN CENTRELINE  
 RIGHT BACK OF KERB  
 LEFT BACK OF KERB  
 EXISTING SURFACE  
 CENTRELINE DEPTH  
 CHAINAGE



BOTANICAL DRIVE LONGITUDINAL SECTION

BOTANICAL DRIVE DESIGN LINE  
 CHAINAGE EASTING NORTHING BEARING

0.000	265014.548	5766536.737	276°49'11"	IP
145.150	264870.425	5766553.973	276°49'11"	IP

BOTANICAL DRIVE DESIGN LINE

--- IP Details ---

IP 1

coordinate =	265014.5483	5766536.7371
chainage =	0.0000	

IP 2

coordinate =	264870.4253	5766553.9731
chainage =	145.1500	

SIGNED (CONSULTANT)  
 SIGNED (CONTRACTOR)

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

CLIENT

Communities Designed for Living

creo CONSULTANTS

Level 7, 176 Wellington Parade  
 East Melbourne, VIC, Australia 3002

PROJECT

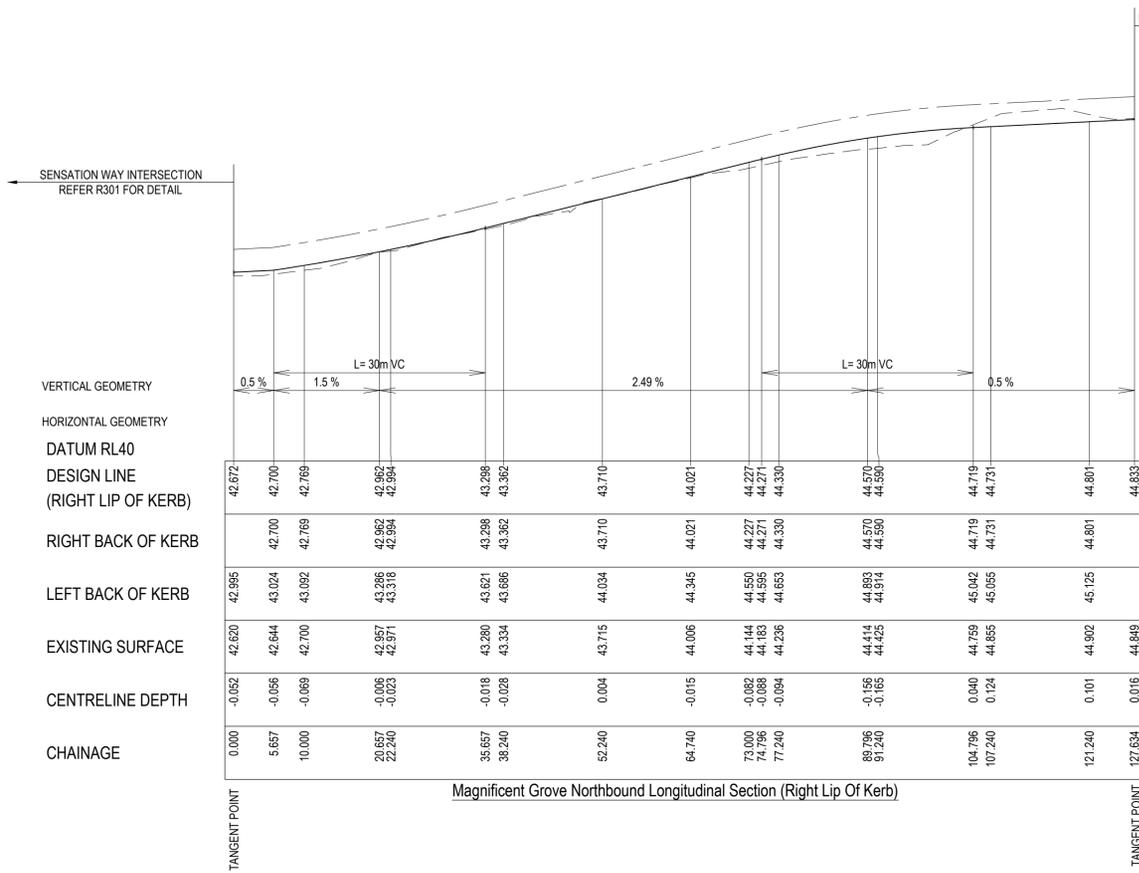
DRAWING TITLE

**ARMSTRONG - STAGE 47A/65A  
 ROAD LONGITUDINAL SECTIONS - 1**

STATUS

**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R400</b>	<b>AC</b>



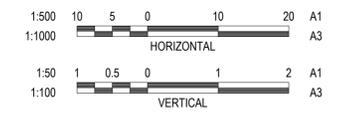
MAGNIFICENT GROVE NORTHBOUND DESIGN LINE  
 CHAINAGE EASTING NORTHING BEARING  
 0.000 264895.491 5766403.979 6°49'11" IP  
 127.634 264910.647 5766530.710 6°49'11" IP

MAGNIFICENT GROVE NORTH BOUND DESIGN LINE  
 -- IP Details --  
 IP 1  
 coordinate = 264895.4915 5766403.9793  
 chainage = 0.0000

IP 2  
 coordinate = 264910.6475 5766530.7101  
 chainage = 127.6339

**LEGEND**

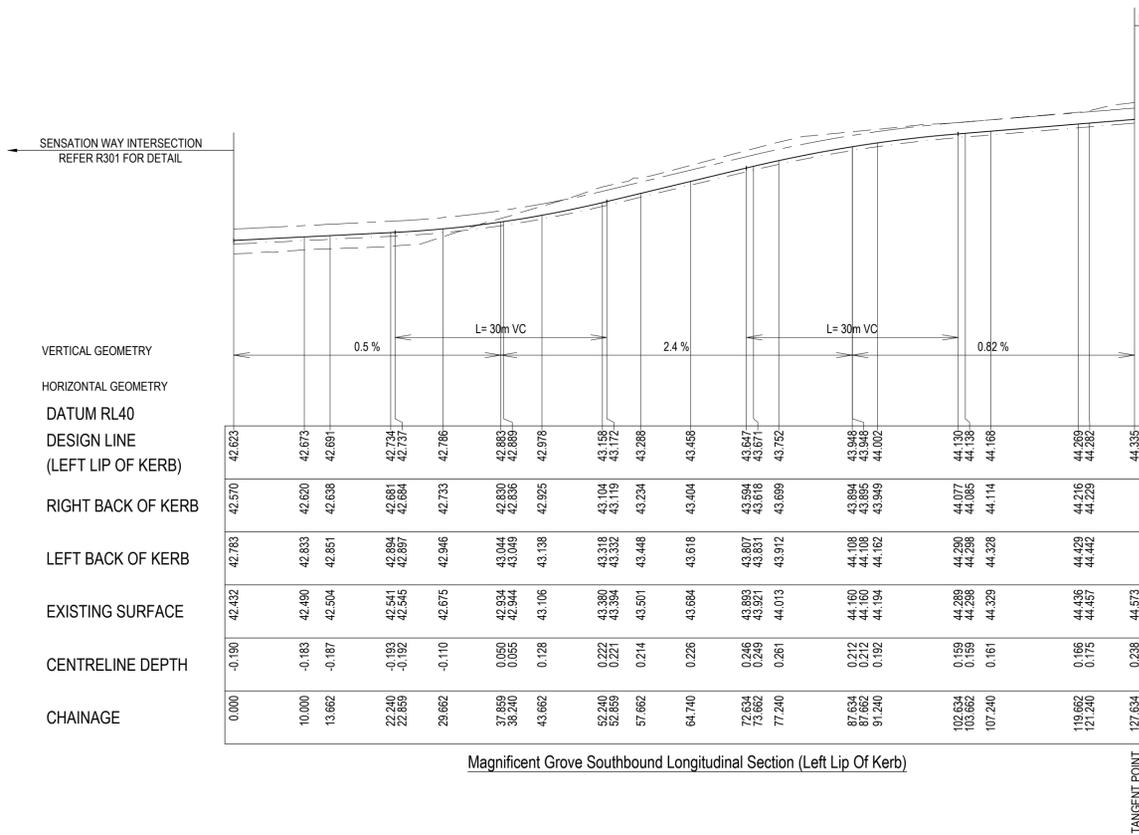
- EXISTING SURFACE
- DESIGN LINE
- FUTURE DESIGN LINE
- LEFT BACK OF KERB
- RIGHT BACK OF KERB



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\_\_\_\_\_  
 SIGNED (CONSULTANT)

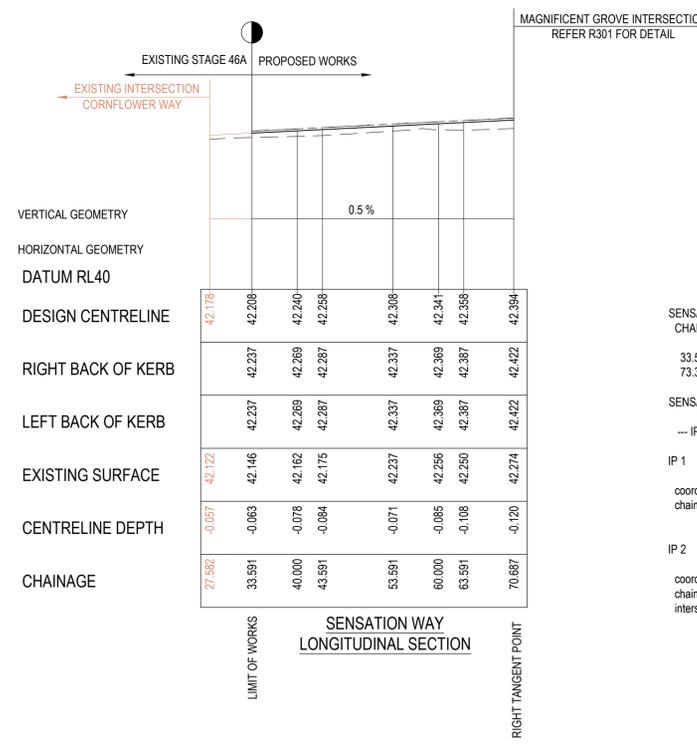
\_\_\_\_\_  
 SIGNED (CONTRACTOR)



MAGNIFICENT GROVE SOUTH BOUND DESIGN LINE  
 CHAINAGE EASTING NORTHING BEARING  
 0.000 264910.137 5766402.228 6°49'11" IP  
 127.634 264925.293 5766528.959 6°49'11" IP

MAGNIFICENT GROVE SOUTH BOUND DESIGN LINE  
 -- IP Details --  
 IP 1  
 coordinate = 264910.1371 5766402.2278  
 chainage = 0.0000

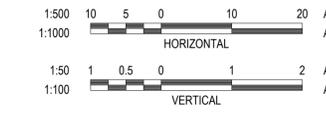
IP 2  
 coordinate = 264925.2931 5766528.9586  
 chainage = 127.6339



SENSATION WAY DESIGN LINE  
 CHAINAGE EASTING NORTHING BEARING  
 33.591 264968.779 5766364.560 276°49'11" IP  
 73.306 264929.345 5766369.276 276°49'11" IP

SENSATION WAY DESIGN LINE  
 -- IP Details --  
 IP 1  
 coordinate = 264968.7791 5766364.5599  
 chainage = 33.5910

IP 2  
 coordinate = 264929.3452 5766369.2759  
 chainage = 73.3059  
 intersect angle = 0°00'00"



REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

**villawood properties**  
 Communities Designed for Living

**creo CONSULTANTS**  
 Level 7, 176 Wellington Parade  
 East Melbourne, VIC, Australia 3002

**ARMSTRONG**  
 MT DUNEED

DRAWING TITLE  
**ARMSTRONG - STAGE 47A/65A ROAD LONGITUDINAL SECTIONS - 2**

STATUS  
**AS CONSTRUCTED**

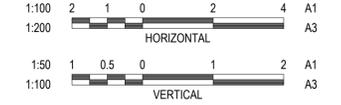
SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R401</b>	<b>AC</b>

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CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

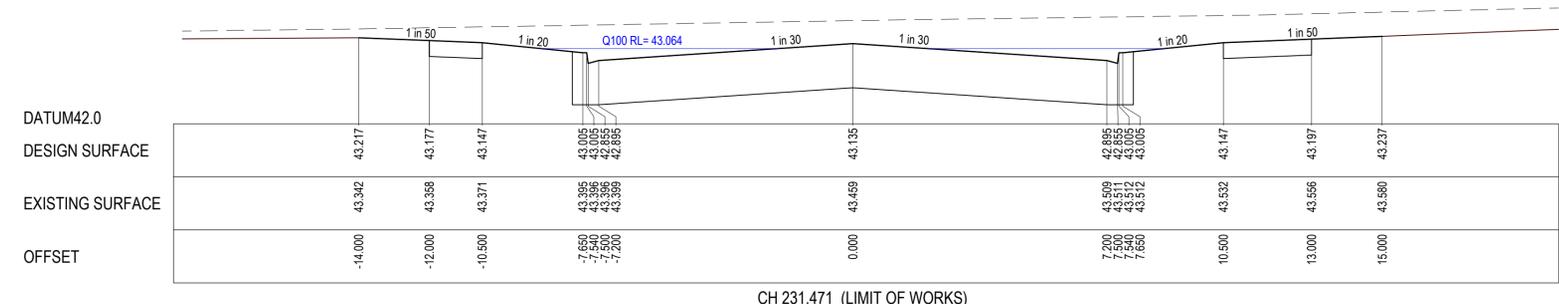
**LEGEND**

	EXISTING SURFACE
	DESIGN LINE
	SELECT FILL

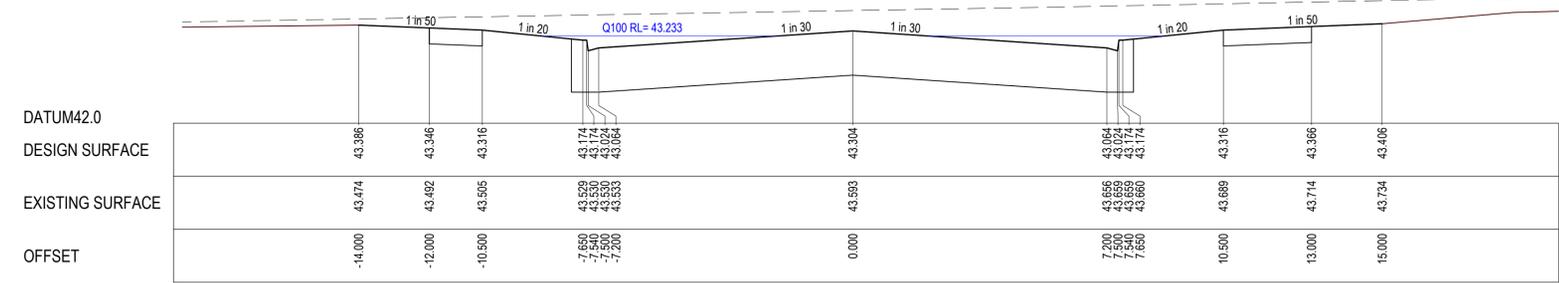


**NOTE**  
 SELECT STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE NATURAL SURFACE

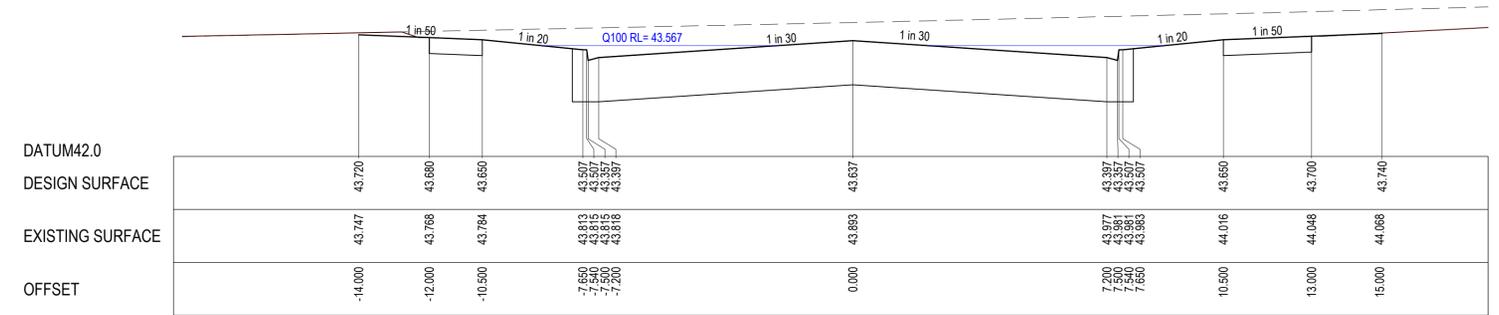
**NOTE**  
 CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES



CH 231.471 (LIMIT OF WORKS)



CH 214.550 (RIGHT TANGENT POINT)



CH 181.203 (LIMIT OF WORKS)

SIGNED (CONSULTANT)  
 \_\_\_\_\_  
 SIGNED (CONTRACTOR)  
 \_\_\_\_\_

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
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**ARMSTRONG - STAGE 47A/65A  
 ROAD CROSS SECTIONS - 1  
 CORNFLOWER WAY**

**AS CONSTRUCTED**

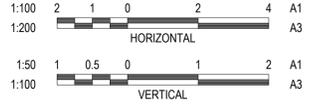
SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R500</b>	<b>AC</b>

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CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

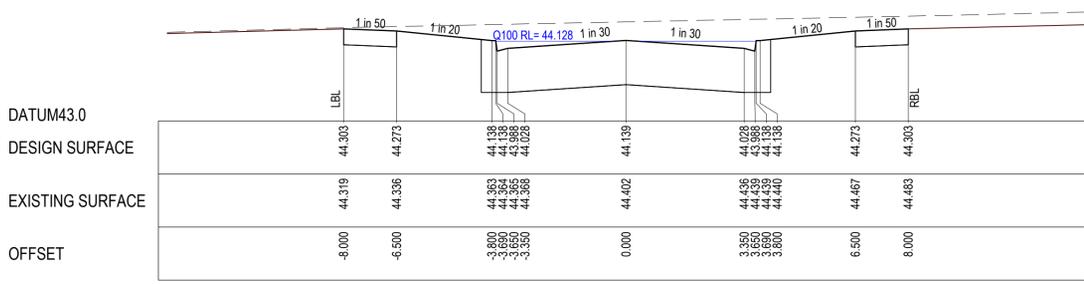
**LEGEND**

	EXISTING SURFACE
	DESIGN LINE
	SELECT FILL

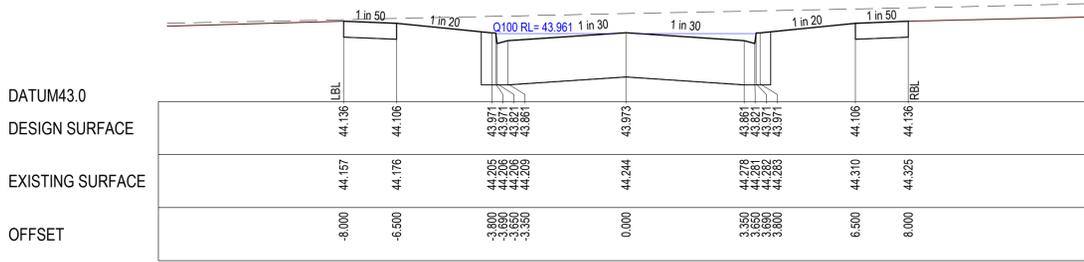


**NOTE**  
 SELECT STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE NATURAL SURFACE

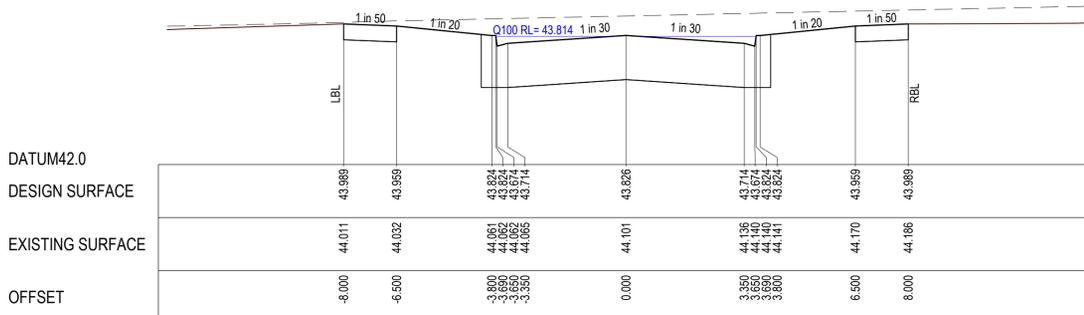
**NOTE**  
 CROSS SECTIONS LBL & RBL LABELS REFER TO LEFT AND RIGHT TITLE BOUNDARY RESPECTIVELY, READ IN ASCENDING ORDER ALONG THE RELEVANT LONG SECTION CHAINAGES



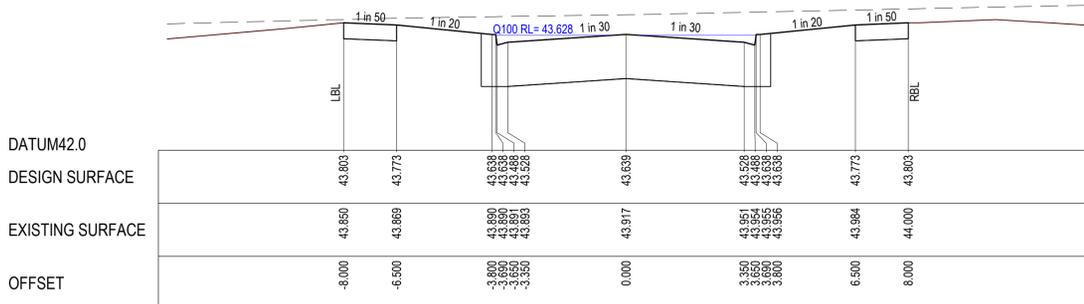
CH 53.500



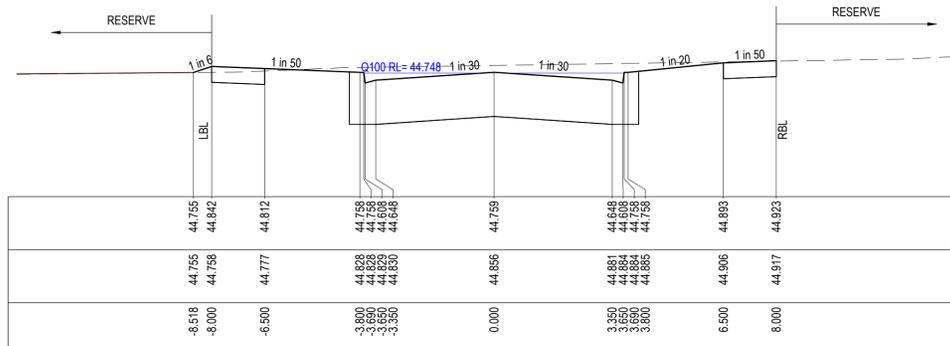
CH 41.000



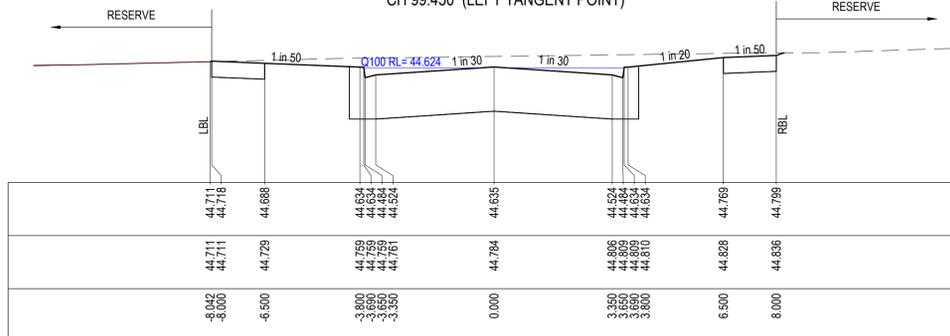
CH 30.000



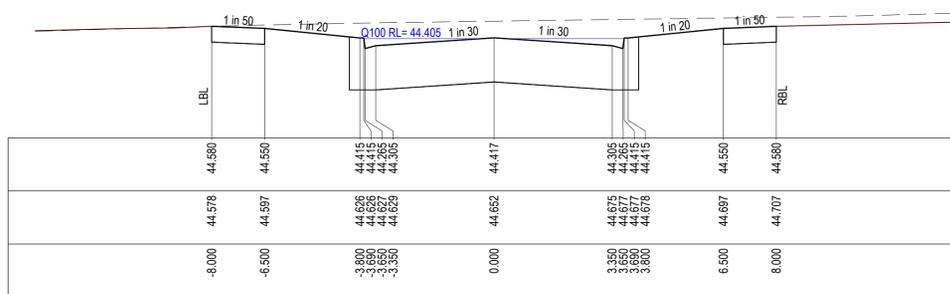
CH 16.000



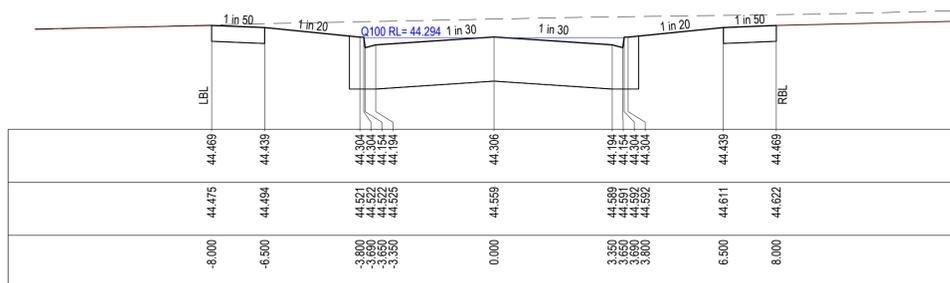
CH 99.450 (LEFT TANGENT POINT)



CH 90.700 (LEFT TANGENT POINT)



CH 74.300 (LEFT TANGENT POINT)



CH 66.000

SIGNED (CONSULTANT)  
 \_\_\_\_\_  
 SIGNED (CONTRACTOR)  
 \_\_\_\_\_

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

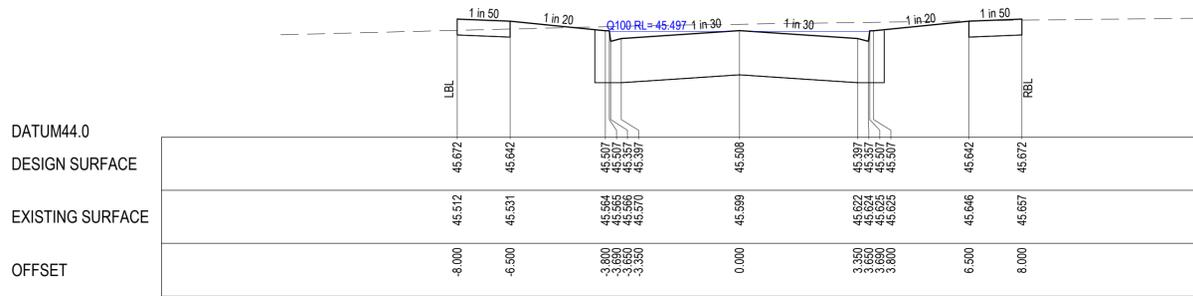


**ARMSTRONG - STAGE 47A/65A**  
**ROAD CROSS SECTIONS - 2**  
**BOTANICAL DRIVE - SHEET 1**

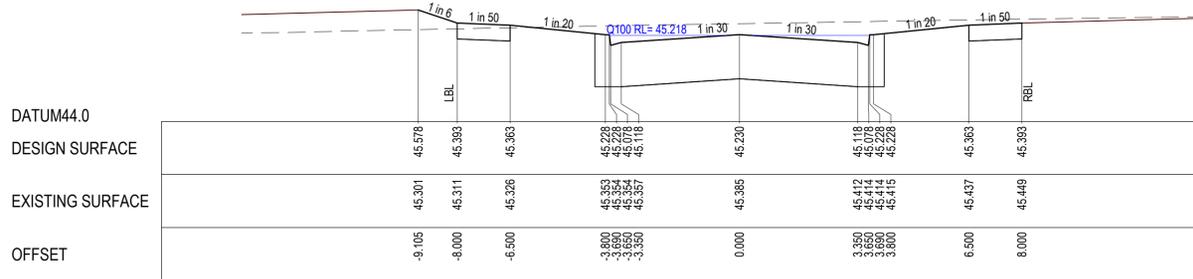
**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R501</b>	<b>AC</b>

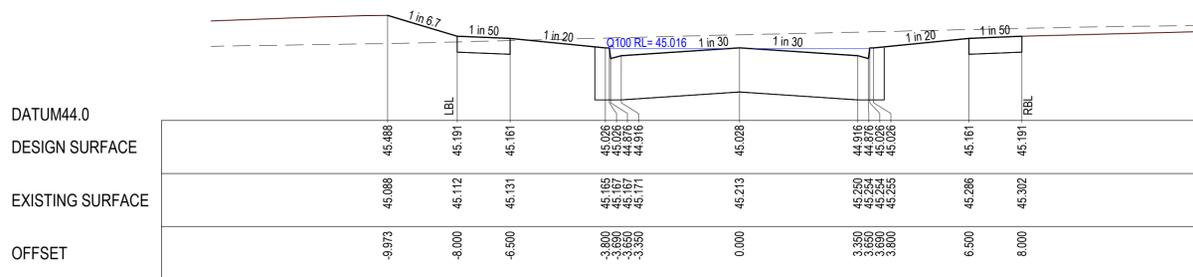
# BOTANICAL DRIVE



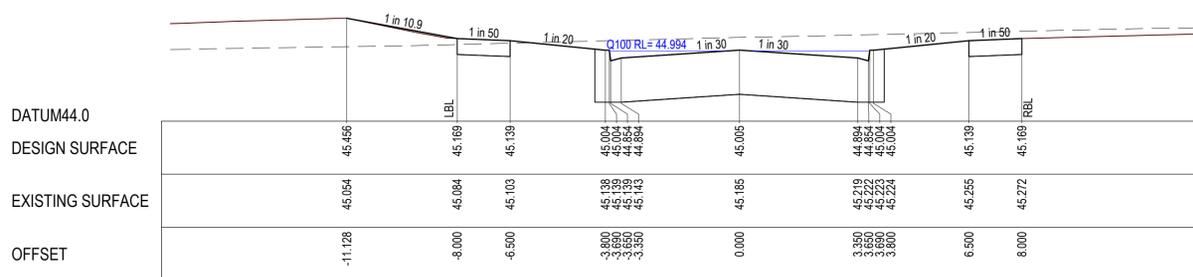
CH 145.146 (LIMIT OF WORKS)



CH 129.689



CH 117.369



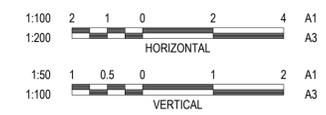
CH 115.850 (LEFT TANGENT POINT)

SIGNED (CONSULTANT)  
SIGNED (CONTRACTOR)

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

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

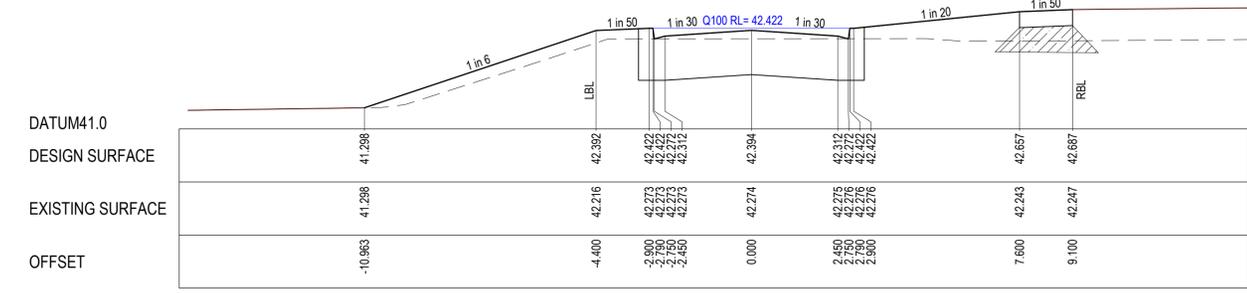
**LEGEND**  
--- EXISTING SURFACE  
--- DESIGN LINE  
[Hatched Box] SELECT FILL



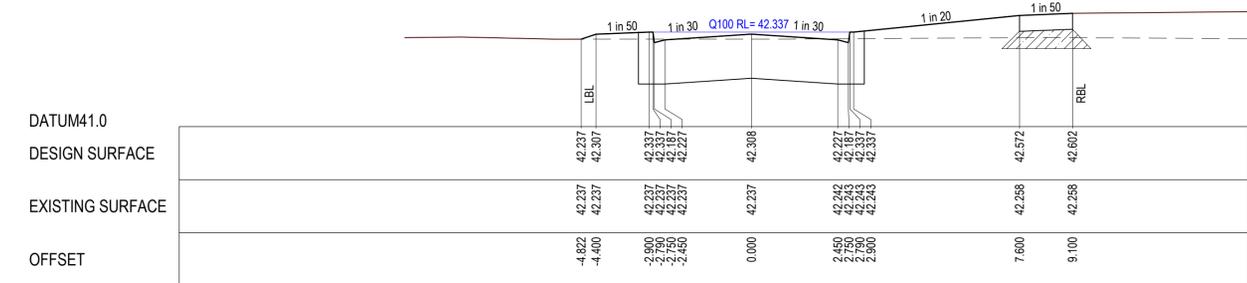
**NOTE**  
SELECT STRUCTURAL FILL REQUIRED UNDER PAVEMENT AND FOOTPATHS @ 45° WHERE CONSTRUCTED ABOVE NATURAL SURFACE

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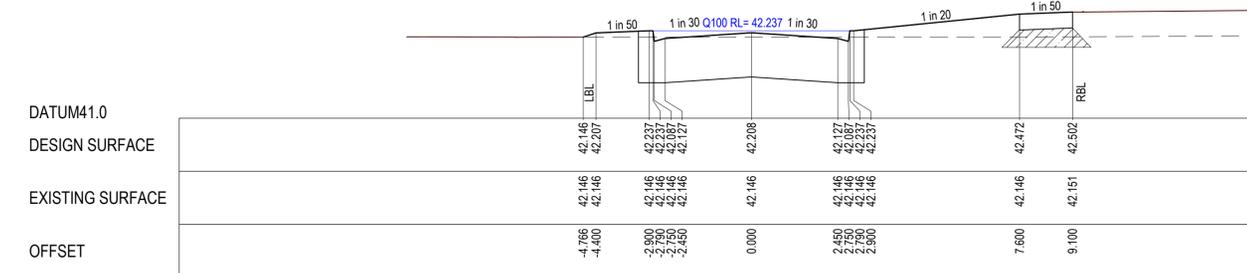
# SENSATION WAY



CH 70.687 (RIGHT TANGENT POINT)



CH 53.591



CH 33.591 (LIMIT OF WORKS)

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS



**ARMSTRONG - STAGE 47A/65A**  
**ROAD CROSS SECTIONS - 3**  
**BOTANICAL DRIVE - SHEET 2**  
**SENSATION WAY**

**AS CONSTRUCTED**

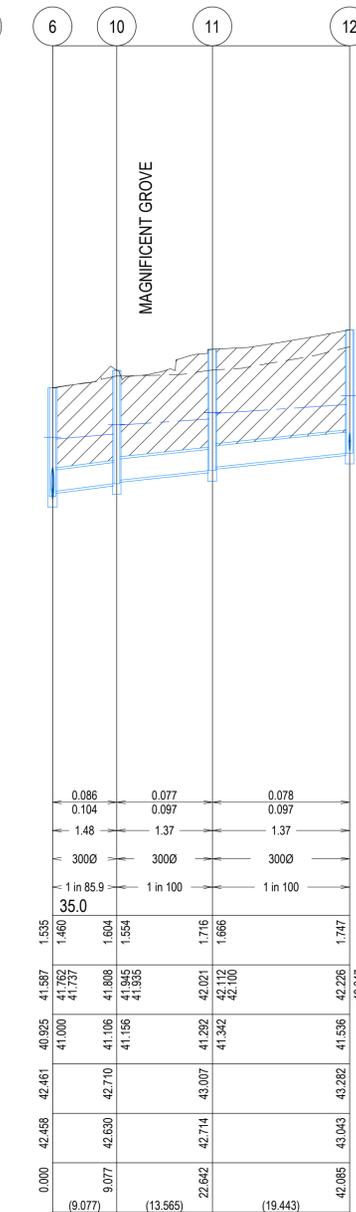
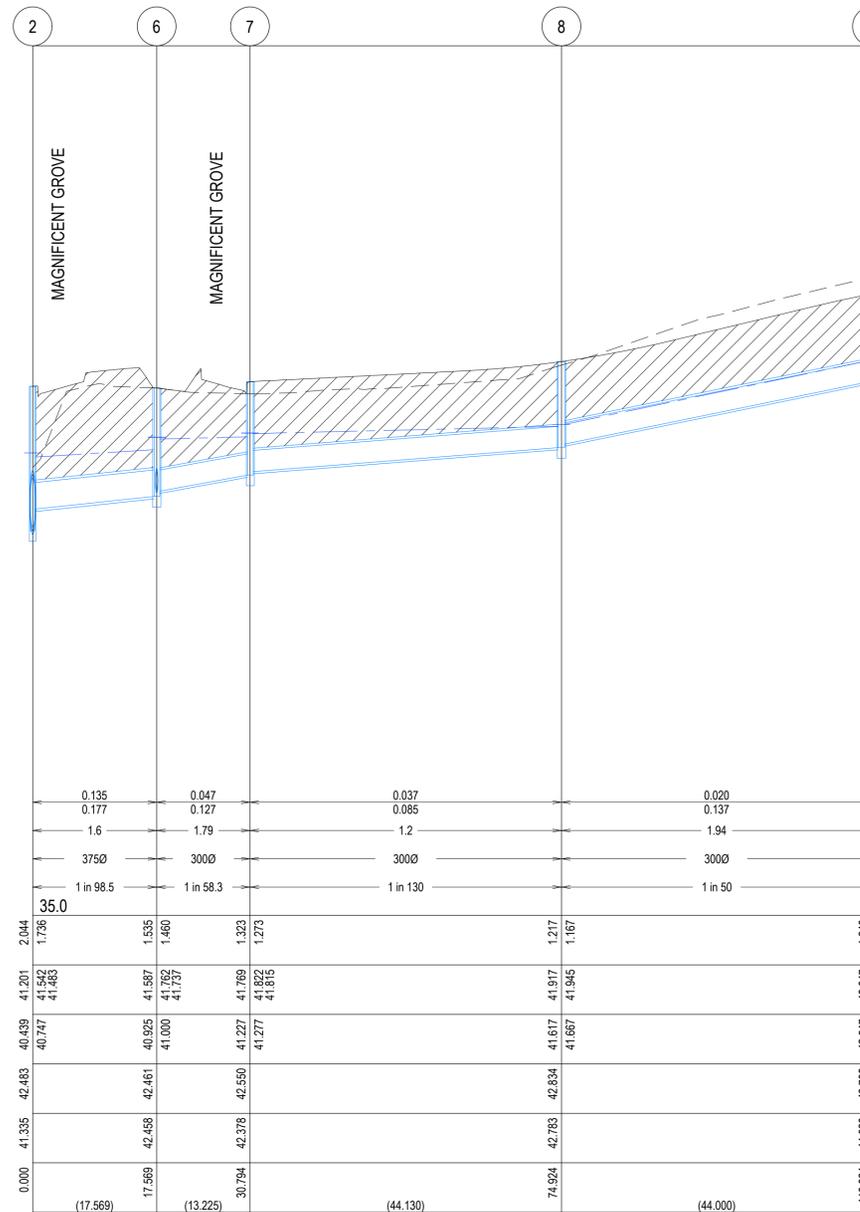
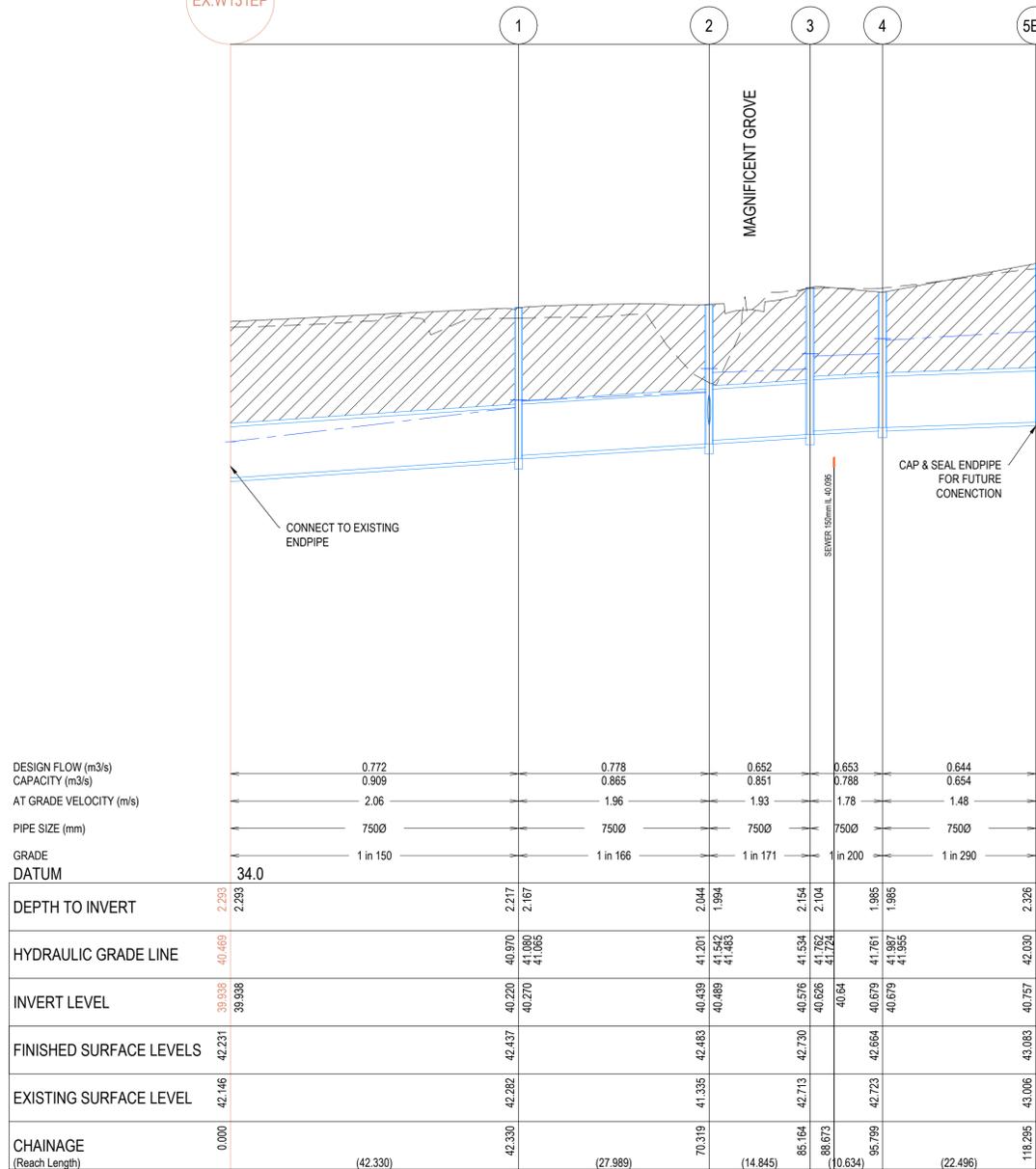
SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R502</b>	<b>AC</b>





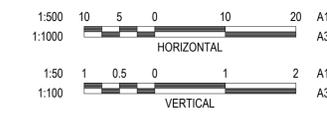


EX.W131EP



- NOTES**
- PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm NOM. SIZE CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98% MODIFIED RELATIVE COMPACTION IN 150mm THICK LAYER FOR THE FOLLOWING:
    - BENEATH DRIVEWAY CROSSOVERS TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER.
    - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM NEAR THE LOWER EDGE.
  - ALL PIPES UNDER ROADS SHALL BE BACKFILLED WITH 2% STABILISED SAND TO SPRINGLINE. ABOVE THIS POINT, PROVIDE 20mm NOMINAL SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 98% MODIFIED COMPACTION IN 150mm MAXIMUM LAYER.
  - ALL DRAINAGE PIPES TO BE SPIGOT-SOCKET RUBBER RING JOINTED (RRJ).
  - ALL DRAINAGE PIPES SHALL BE CLASS 2 RCP, UNLESS OTHERWISE NOTED.
  - WHERE PITS DROP LESS THAN 50mm, THE PIT FLOOR MUST BE SHAPED TO MATCH THE LOWER HALF OF THE PIPE.
  - ALL SPLAYED SECTIONS OF PIPE ARE TO BE BACKFILLED WITH 2% STABILIZED SAND, 300mm ABOVE TOP OF PIPE.

**REINFORCED CONCRETE PIPES**  
 ALL STORMWATER DRAINAGE PIPES SHALL NOT BE SUBJECTED TO CONSTRUCTION TRAFFIC LOADING DURING CONSTRUCTION UNLESS THE PIPE STRENGTH CHARACTERISTICS HAVE BEEN COMPUTED AND APPROVED BY THE CONTRACTORS ENGINEER. COMPUTATIONS ARE TO ACCORD WITH AS.3725-1989, LOADS ON BURIED PIPES. CONCRETE PIPES DAMAGED DUE TO CONSTRUCTION LOADS SHALL BE REPAIRED AT THE CONTRACTORS COST.



**LEGEND**

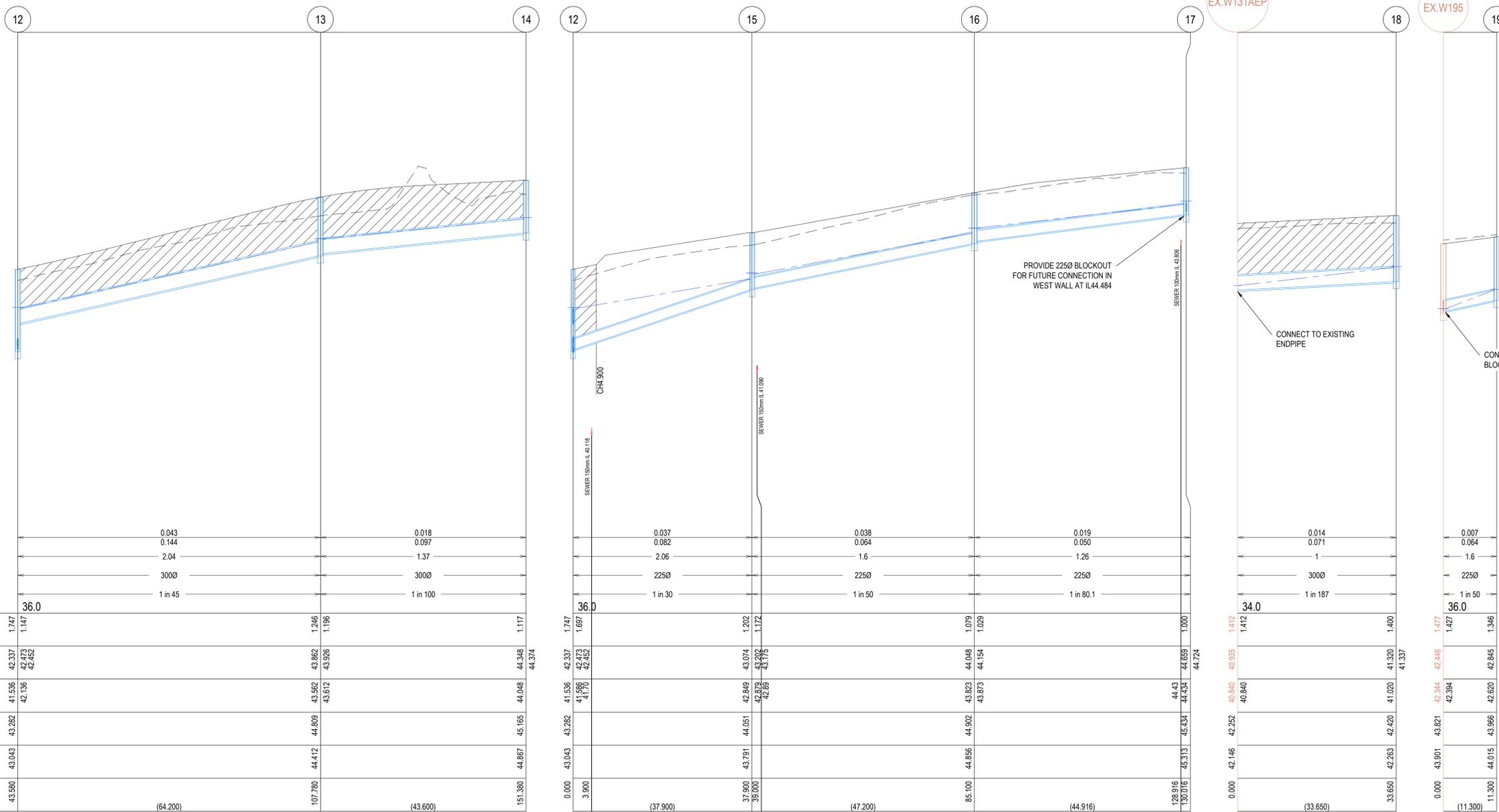
- EXISTING SURFACE
- DESIGN SURFACE
- DRAINAGE PIPE/PIT
- EXISTING DRAINAGE PIPE/PIT
- HYDRAULIC GRADE LINE
- CRUSHED ROCK BACKFILL

SIGNED (CONSULTANT)

SIGNED (CONTRACTOR)

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REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED	CLIENT	PROJECT	DRAWING TITLE	STATUS	SCALE AT A1	DRAWN	DESIGNED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS	<p>Communities Designed for Living</p>	<p>Level 7, 176 Wellington Parade East Melbourne, VIC, Australia 3002</p>	<p>ARMSTRONG - STAGE 47A/65A DRAINAGE LONG SECTIONS - 1</p>	<p>AS CONSTRUCTED</p>	AS SHOWN	C.ROHDE	C.ROHDE
1	06/01/21	ALTERED DRAINAGE GRADE & SIZE (RUN 04 - 05EP)	C.ROHDE	M.TROUNCE	T.PALIOS					PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
0	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS					M.TROUNCE	T.PALIOS	APRIL 2020
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS					PROJECT No.	DRAWING No.	REVISION
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS					<b>180016.47A</b>	<b>R600</b>	<b>AC</b>



DESIGN FLOW (m3/s)	0.043	0.018
CAPACITY (m3/s)	0.144	0.097
AT GRADE VELOCITY (m/s)	2.04	1.37
PIPE SIZE (mm)	3000	3000
GRADE DATUM	36.0	1 in 100
DEPTH TO INVERT	1.747 1.147	1.246 1.196
HYDRAULIC GRADE LINE	42.337 42.473 42.462	43.862 43.926
INVERT LEVEL	41.536 42.136	43.612
FINISHED SURFACE LEVELS	43.282	44.809 44.112
EXISTING SURFACE LEVEL	43.043	44.887 45.165
CHAINAGE (Reach Length)	43.680 (64.200)	107.780 (43.600)

SEWER 150mm I.L. 40.118	0.037	0.038
CH4 900	0.082	0.064
SEWER 150mm I.L. 41.090	2.06	1.6
36.0	1 in 30	1 in 50
DEPTH TO INVERT	1.747 1.697	1.202 1.172
HYDRAULIC GRADE LINE	42.337 42.473 42.462	43.074 43.292 43.175
INVERT LEVEL	41.536 41.770	42.849 42.873 42.89
FINISHED SURFACE LEVELS	43.282	44.051 44.292
EXISTING SURFACE LEVEL	43.043	44.886 44.902
CHAINAGE (Reach Length)	3.900 (37.900)	37.900 (47.200)

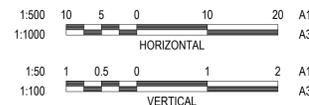
SEWER 100mm I.L. 43.806	0.014	0.007
34.0	0.071	0.064
1 in 187	1	1.6
DEPTH TO INVERT	1.412 1.412	1.427 1.346
HYDRAULIC GRADE LINE	40.840 40.840	42.446 42.394
INVERT LEVEL	42.252 42.252	43.821 43.986
FINISHED SURFACE LEVELS	42.252	44.015
EXISTING SURFACE LEVEL	42.146	44.015
CHAINAGE (Reach Length)	0.000 (33.650)	11.300 (11.300)

**NOTES**

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- ALL PIPES UNDER ROADS SHALL BE BACKFILLED WITH 2% STABILISED SAND TO SPRINGLINE. ABOVE THIS POINT, PROVIDE 20mm NOMINAL SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 98% MODIFIED COMPACTION IN 150mm MAXIMUM LAYER.
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**LEGEND**

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

SIGNED (CONSULTANT)

SIGNED (CONTRACTOR)

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REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

**villawood properties**  
 Communities Designed for Living

**creo CONSULTANTS**  
 Level 7, 176 Wellington Parade  
 East Melbourne, VIC, Australia 3002

**ARMSTRONG**  
 MT DUNEED

**ARMSTRONG - STAGE 47A/65A**  
**DRAINAGE LONG SECTIONS - 2**

**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R601</b>	<b>AC</b>

SIGNED (CONSULTANT)

SIGNED (CONTRACTOR)

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

EX.W195

20

EX.W175EP

21

22

23

24

25

26

27EP

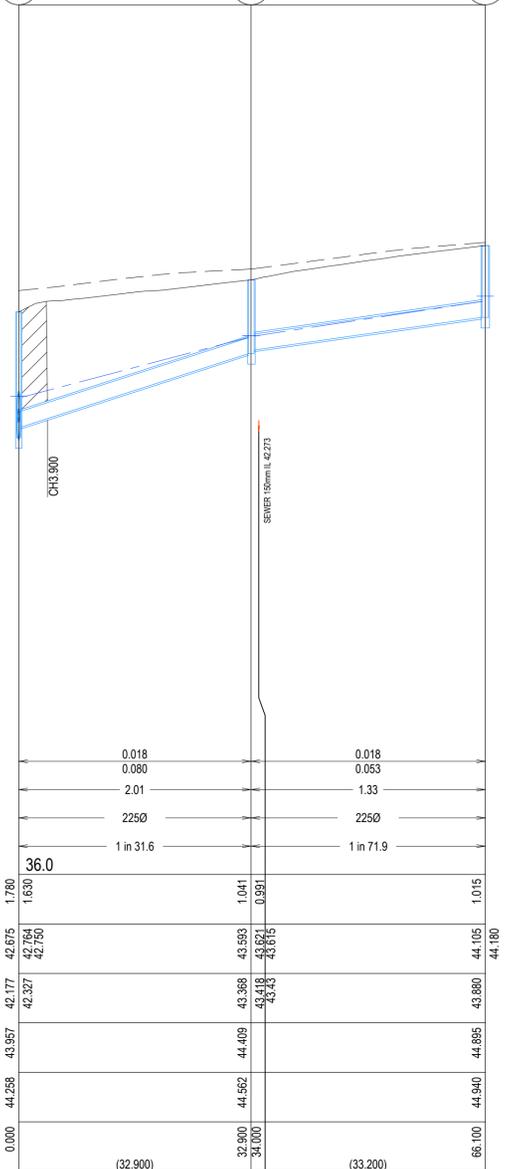
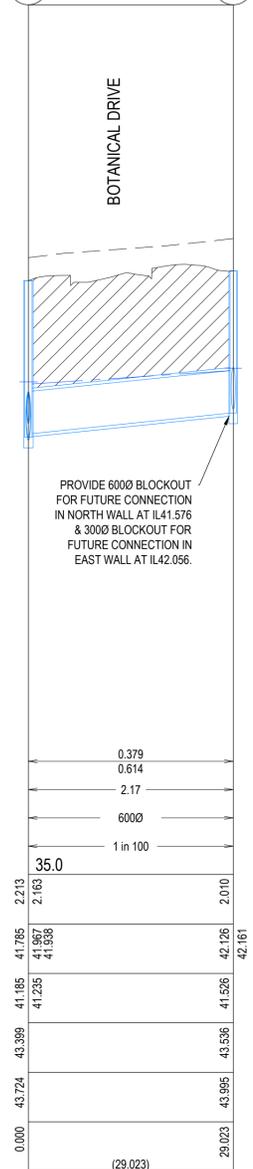
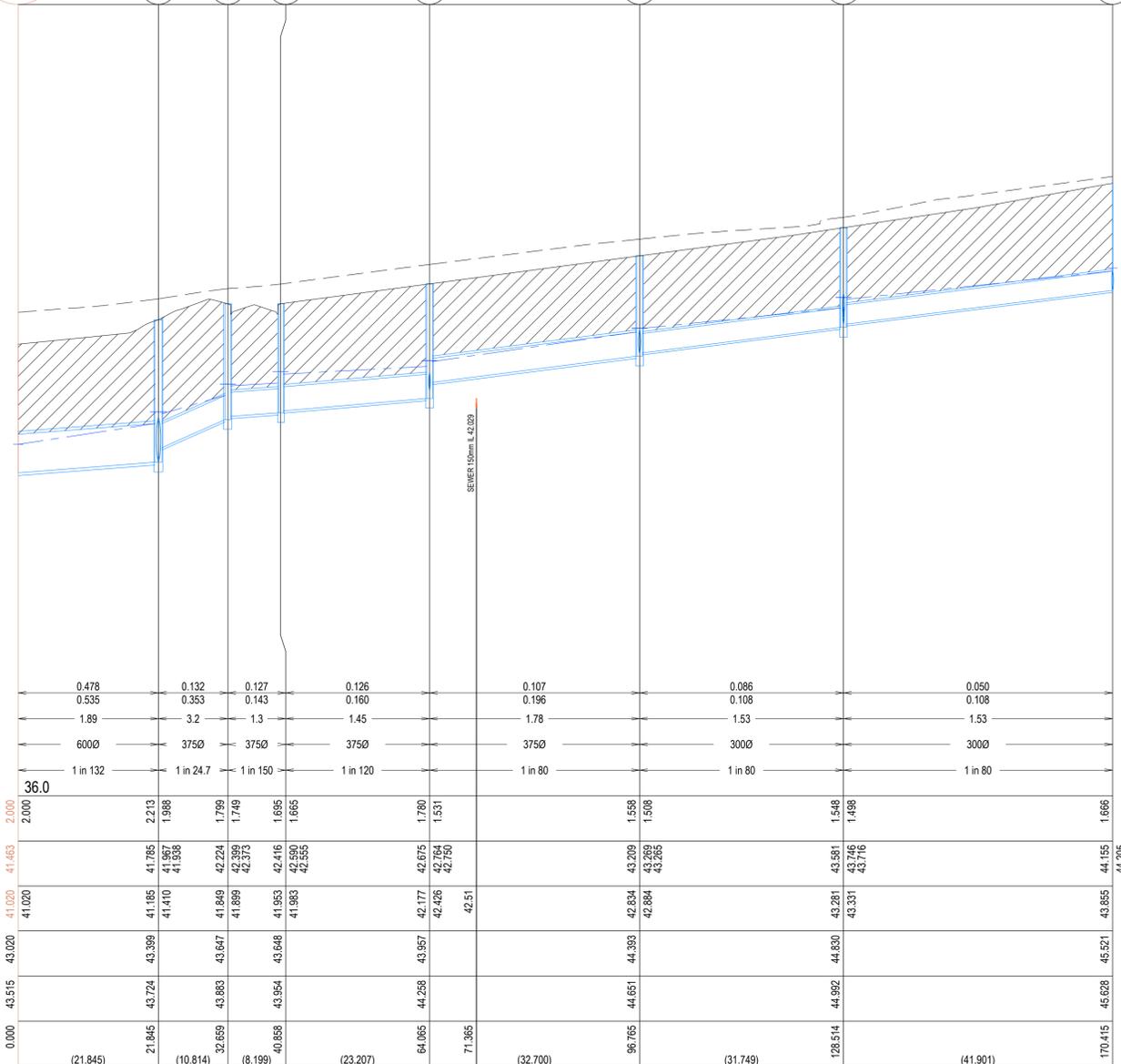
21

28

24

29

30



DESIGN FLOW (m <sup>3</sup> /s)	0.006
CAPACITY (m <sup>3</sup> /s)	0.040
AT GRADE VELOCITY (m/s)	1.01
PIPE SIZE (mm)	2250
GRADE	1 in 125
DATUM	36.0
DEPTH TO INVERT	1.477
HYDRAULIC GRADE LINE	42.456
INVERT LEVEL	42.344
FINISHED SURFACE LEVELS	43.821
EXISTING SURFACE LEVEL	43.901
CHAINAGE (Reach Length)	0.000

DESIGN FLOW (m <sup>3</sup> /s)	0.478
CAPACITY (m <sup>3</sup> /s)	0.535
AT GRADE VELOCITY (m/s)	1.89
PIPE SIZE (mm)	6000
GRADE	1 in 132
DATUM	36.0
DEPTH TO INVERT	2.213
HYDRAULIC GRADE LINE	41.785
INVERT LEVEL	41.885
FINISHED SURFACE LEVELS	43.399
EXISTING SURFACE LEVEL	43.724
CHAINAGE (Reach Length)	21.845

DESIGN FLOW (m <sup>3</sup> /s)	0.379
CAPACITY (m <sup>3</sup> /s)	0.614
AT GRADE VELOCITY (m/s)	2.17
PIPE SIZE (mm)	6000
GRADE	1 in 100
DATUM	35.0
DEPTH TO INVERT	2.213
HYDRAULIC GRADE LINE	41.785
INVERT LEVEL	41.885
FINISHED SURFACE LEVELS	43.399
EXISTING SURFACE LEVEL	43.724
CHAINAGE (Reach Length)	29.023

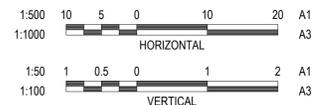
DESIGN FLOW (m <sup>3</sup> /s)	0.018
CAPACITY (m <sup>3</sup> /s)	0.080
AT GRADE VELOCITY (m/s)	2.01
PIPE SIZE (mm)	2250
GRADE	1 in 31.6
DATUM	36.0
DEPTH TO INVERT	1.780
HYDRAULIC GRADE LINE	42.675
INVERT LEVEL	42.327
FINISHED SURFACE LEVELS	44.409
EXISTING SURFACE LEVEL	44.562
CHAINAGE (Reach Length)	32.900

NOTES

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LEGEND

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

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1	25/11/20	ADDED BLOCKOUT	C.ROHDE	M.TROUNCE	T.PALIOS
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A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS



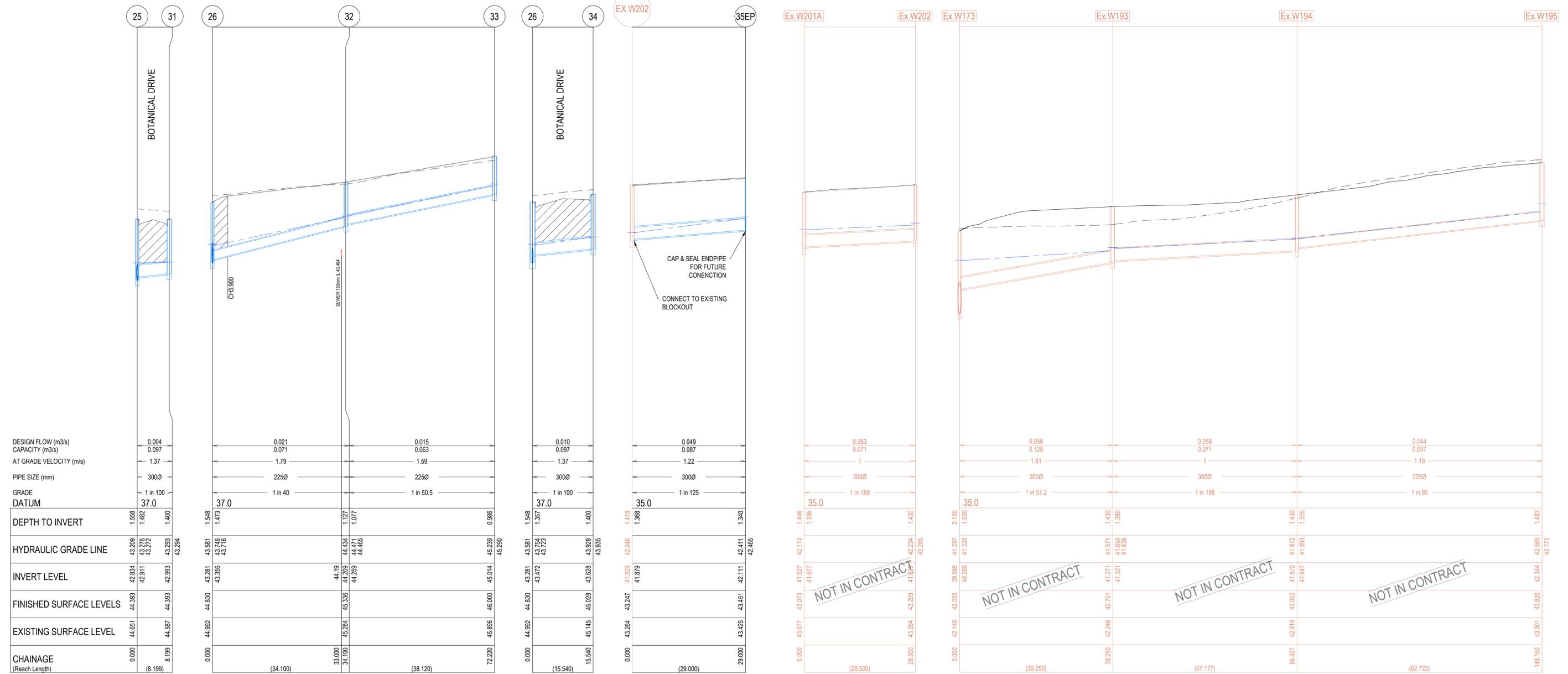
DRAWING TITLE  
**ARMSTRONG - STAGE 47A/65A**  
**DRAINAGE LONG SECTIONS - 3**

STATUS  
**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R602</b>	<b>AC</b>

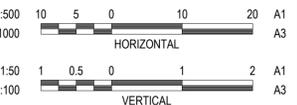
SIGNED (CONSULTANT)  
 \_\_\_\_\_  
 SIGNED (CONTRACTOR)  
 \_\_\_\_\_

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL



- NOTES**
- PIPE TRENCHES WITHIN THE ROAD RESERVE MUST BE BACKFILLED WITH 20mm NOM. SIZE CLASS 3 CRUSHED ROCK TO BE COMPACTED TO A DRY DENSITY NOT LESS THAN 98% MODIFIED RELATIVE COMPACTION IN 150mm THICK LAYER FOR THE FOLLOWING:
    - BENEATH DRIVEWAY CROSSOVERS TO THE UNDERSIDE OF THE PAVEMENT OR CROSSOVER.
    - ADJACENT TO KERBING OR CONCRETE WORKS TO A LEVEL THAT IS NOT AFFECTED BY A 45 DEGREE ANGLE OF REPOSE FROM NEAR THE LOWER EDGE.
  - ALL PIPES UNDER ROADS SHALL BE BACKFILLED WITH 2% STABILISED SAND TO SPRINGLINE. ABOVE THIS POINT, PROVIDE 20mm NOMINAL SIZE CLASS 3 FINE CRUSHED ROCK (WETMIX) COMPACTED TO 98% MODIFIED COMPACTION IN 150mm MAXIMUM LAYER.
  - ALL DRAINAGE PIPES TO BE SPIGOT-SOCKET RUBBER RING JOINTED (RRJ).
  - ALL DRAINAGE PIPES SHALL BE CLASS 2 RCP, UNLESS OTHERWISE NOTED.
  - WHERE PITS DROP LESS THAN 50mm, THE PIT FLOOR MUST BE SHAPED TO MATCH THE LOWER HALF OF THE PIPE.
  - ALL SPLAYED SECTIONS OF PIPE ARE TO BE BACKFILLED WITH 2% STABILIZED SAND, 300mm ABOVE TOP OF PIPE.

**REINFORCED CONCRETE PIPES**  
 ALL STORMWATER DRAINAGE PIPES SHALL NOT BE SUBJECTED TO CONSTRUCTION TRAFFIC LOADING DURING CONSTRUCTION UNLESS THE PIPE STRENGTH CHARACTERISTICS HAVE BEEN COMPUTED AND APPROVED BY THE CONTRACTORS ENGINEER. COMPUTATIONS ARE TO ACCORD WITH AS 3725-1989. LOADS ON BURIED PIPES. CONCRETE PIPES DAMAGED DUE TO CONSTRUCTION LOADS SHALL BE REPAIRED AT THE CONTRACTORS COST.



**NOTE:**  
 IN ACCORDANCE WITH C.O.G.G DESIGN NOTE 8 (DATED JANUARY 2020) EXISTING DRAINAGE LOCATED WITHIN PROPOSED STAGE WORKS ARE REQUIRED TO BE RE-CCTV'D TO CONFIRM NO CONSEQUENTIAL DAMAGE HAS OCCURRED.

**LEGEND**

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

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

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS



DRAWING TITLE  
**ARMSTRONG - STAGE 47A/65A DRAINAGE LONG SECTIONS - 4**

STATUS  
**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R603</b>	<b>AC</b>

PIT SCHEDULE											
PIT NAME	TYPE	INTERNAL		INLET		OUTLET		F.S.L. (m)	DEPTH(m)	STANDARD DRAWING	REMARKS
		WIDTH(mm)	LENGTH(mm)	DIAMETER(mm)	INVERT R.L.(m)	DIAMETER(mm)	INVERT R.L.(m)				
Ex.W131EP	EXISTING ENDDPIPE	-	-	750	39.938	Ex.750	39.938	42.231	2.293		CONNECT TO EXISTING ENDDPIPE
1	SIDE ENTRY PIT	1050	900	750	40.27	750	40.22	42.437	2.217	IDM SD 430 & 410	HAUNCHED TO 600 x 900 COVER
2	SIDE ENTRY PIT	1200	900	750	40.489	750	40.439	42.483	2.044	IDM SD 430 & 410	HAUNCHED TO 600 x 900 COVER
				375	40.747						
3	JUNCTION PIT	1200	900	750	40.626	750	40.576	42.730	2.154	IDM SD 420 & 410	HAUNCHED TO 600 x 900 COVER
4	GRATED PIT	1200	900	750	40.679	750	40.679	42.664	1.985	IDM SD 420 & 410	HAUNCHED TO 600 x 900 COVER. WITH CLASS D BICYCLE SAFE GRATE.
5EP	ENDDPIPE	-	-	750	40.757			43.083	2.326		CAP & SEAL FOR FUTURE CONNECTION
6	DEPRESSED GRATED PIT	600	900	300	41.000	375	40.925	42.461	1.535	IDM SD 455	
				300	41.000						
7	SIDE ENTRY PIT	600	900	300	41.277	300	41.227	42.550	1.323	IDM SD 430	
8	SIDE ENTRY PIT	600	900	300	41.667	300	41.617	42.834	1.217	IDM SD 430	
9	SIDE ENTRY PIT	600	900			300	42.547	43.792	1.246	IDM SD 430	
10	SIDE ENTRY PIT	600	900	300	41.156	300	41.106	42.710	1.604	IDM SD 435	WITH CLASS D TRAFFICABLE COVER
11	JUNCTION PIT	600	900	300	41.342	300	41.292	43.007	1.716	IDM SD 420	
12	JUNCTION PIT	600	900	300	42.136	300	41.536	43.282	1.747	IDM SD 420	
				225	41.586						
13	JUNCTION PIT	600	900	300	43.612	300	43.562	44.809	1.246	IDM SD 420	
14	JUNCTION PIT	600	900			300	44.048	45.165	1.117	IDM SD 420	
15	JUNCTION PIT	600	900	225	42.879	225	42.849	44.051	1.202	IDM SD 460	
16	JUNCTION PIT	600	900	225	43.873	225	43.823	44.902	1.079	IDM SD 425	
17	JUNCTION PIT	600	900	Fut.225	44.484	225	44.434	45.434	1.000	IDM SD 425	PROVIDE 2250 BLOCKOUT IN WEST WALL FOR FUTURE CONNECTION AT IL44.484
Ex.W131AEP	EXISTING ENDDPIPE	-	-	300	40.840	Ex.300	40.840	42.252	1.412		CONNECT TO EXISTING ENDDPIPE
18	SIDE ENTRY PIT	600	900			300	41.020	42.420	1.400	IDM SD 430	
Ex.W195	EXISTING PIT	600	900	225	42.394	Ex.225	42.344	43.821	1.477		CONNECT TO EXISTING BLOCKOUT
				225	42.394						CONNECT TO EXISTING BLOCKOUT
19	JUNCTION PIT	600	900			225	42.620	43.966	1.346	IDM SD 425	
20	JUNCTION PIT	600	900			225	42.532	43.492	0.960	IDM SD 425	
Ex.W175EP	EXISTING ENDDPIPE	-	-	600	41.020	Ex.600	41.020	43.020	2.000		CONNECT TO EXISTING ENDDPIPE
21	JUNCTION PIT	900	900	375	41.410	600	41.185	43.399	2.213	IDM SD 420 & 410	HAUNCHED TO 600 x 900 COVER
				600	41.235						
22	SIDE ENTRY PIT	600	900	375	41.899	375	41.849	43.647	1.799	IDM SD 430	
23	SIDE ENTRY PIT	600	900	375	41.983	375	41.953	43.648	1.695	IDM SD 430	
24	SIDE ENTRY PIT	600	900	375	42.426	375	42.177	43.957	1.780	IDM SD 430	
				225	42.327						
25	SIDE ENTRY PIT	600	900	300	42.884	375	42.834	44.393	1.558	IDM SD 430	
				300	42.911						
26	SIDE ENTRY PIT	600	900	300	43.331	300	43.281	44.830	1.548	IDM SD 430	
				225	43.356						
				300	43.472						
27EP	ENDDPIPE	-	-	300	43.855			45.521	1.666		CAP & SEAL FOR FUTURE CONNECTION
28	SIDE ENTRY PIT	900	900	Fut.600	41.576	600	41.526	43.536	2.010	IDM SD 430 & 410	HAUNCHED TO 600 x 900 COVER. PROVIDE TEMPORARY COVER UNTIL FUTURE WORKS COMMENCE. PROVIDE 6000 BLOCKOUT FOR FUTURE CONNECTION IN NORTHWALL AT IL41.576 & 3000 BLOCKOUT FOR FUTURE CONNECTION IN EAST WALL AT IL42.056.
				Fut.300	42.056						
29	JUNCTION PIT	600	900	225	43.418	225	43.368	44.409	1.041	IDM SD 460	
30	JUNCTION PIT	600	900			225	43.880	44.895	1.015	IDM SD 425	
31	SIDE ENTRY PIT	600	900			300	42.993	44.393	1.400	IDM SD 430	
32	JUNCTION PIT	600	900	225	44.209	225	44.209	45.336	1.127	IDM SD 460	
33	JUNCTION PIT	600	900			225	45.014	46.000	0.986	IDM SD 425	
34	SIDE ENTRY PIT	600	900			300	43.628	45.028	1.400	IDM SD 430	
Ex.W202	EXISTING PIT	600	900	300	41.879	Ex.300	41.829	43.247	1.418		CONNECT TO EXISTING BLOCKOUT
35EP	ENDDPIPE	-	-	300	42.111			43.451	1.340		CAP & SEAL FOR FUTURE CONNECTION

**NOTE:**  
PIT COVERS ARE TO BE PROVIDED IN ACCORDANCE WITH CITY OF GREATER GEELONG DESIGN NOTE 13. ALL PITS WITHIN ROAD RESERVE ARE TO BE CLASS C FIBREGLASS REINFORCED PLASTIC (FRP) UNLESS AGREED OTHERWISE.

\_\_\_\_\_  
SIGNED (CONSULTANT)

\_\_\_\_\_  
SIGNED (CONTRACTOR)

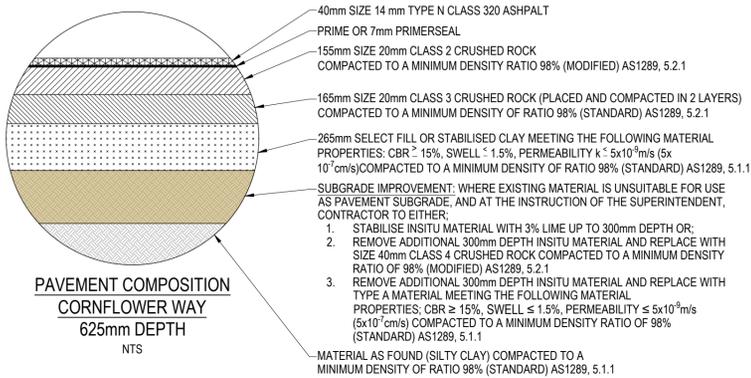
REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
1	25/11/20	ADDED BLOCKOUT	C.ROHDE	M.TROUNCE	T.PALIOS
0	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS



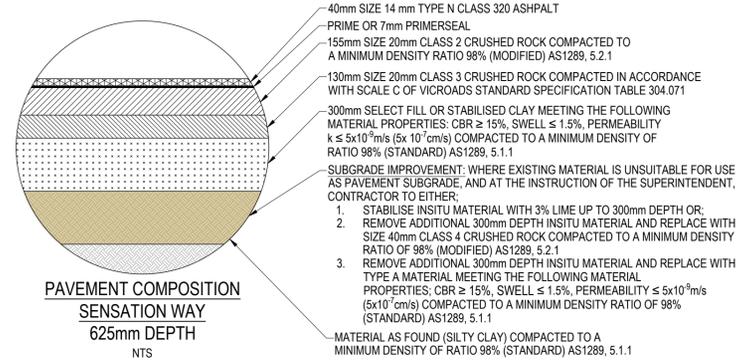
DRAWING TITLE  
**ARMSTRONG - STAGE 47A/65A  
PIT SCHEDULE**

STATUS  
**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R604</b>	<b>AC</b>

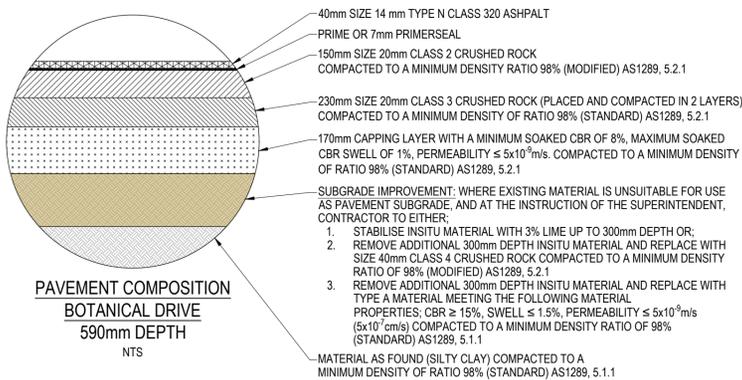


**PAVEMENT COMPOSITION  
CORNFLOWER WAY  
625mm DEPTH  
NTS**

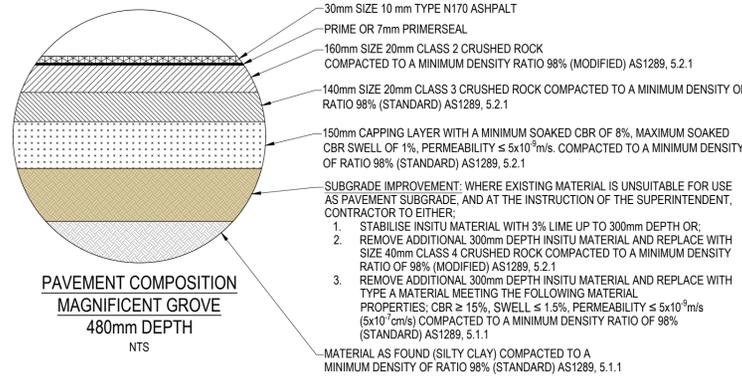


**PAVEMENT COMPOSITION  
SENSATION WAY  
625mm DEPTH  
NTS**

**NOTE:**  
DETAIL PROVIDED IN ACCORDANCE WITH  
GEOTECHNICAL REPORT PREPARED BY  
TONKIN & TAYLOR DATED APRIL 2014.

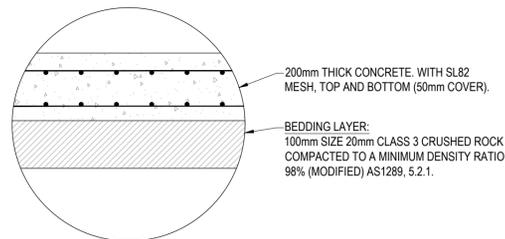


**PAVEMENT COMPOSITION  
BOTANICAL DRIVE  
590mm DEPTH  
NTS**

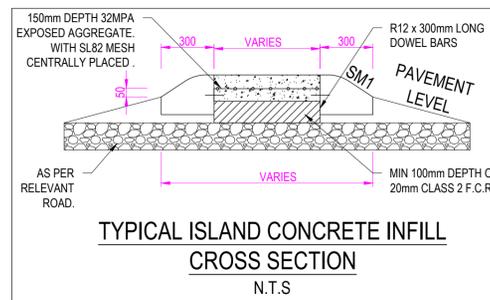


**PAVEMENT COMPOSITION  
MAGNIFICENT GROVE  
480mm DEPTH  
NTS**

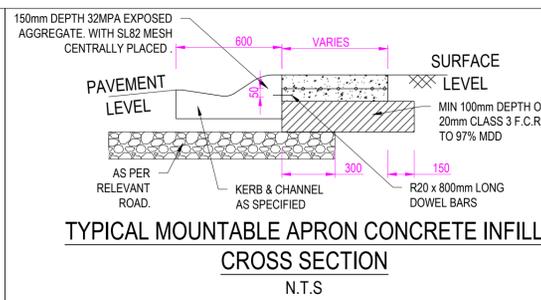
**NOTE:**  
DETAIL PROVIDED IN ACCORDANCE WITH  
GEOTECHNICAL REPORT PREPARED BY  
DOUGLAS PARTNERS DATED MARCH 2020.



**RIGID PAVEMENT COMPOSITION  
SPROUT PLACE  
300mm DEPTH**

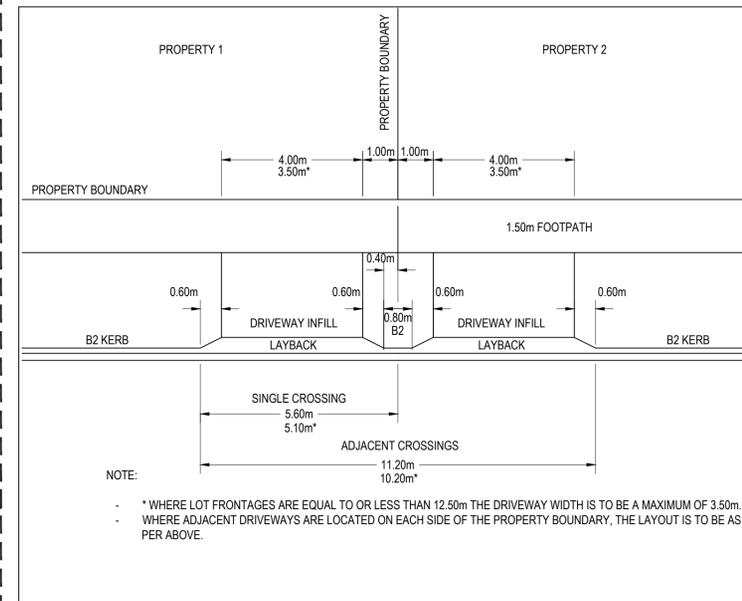


**TYPICAL ISLAND CONCRETE INFILL  
CROSS SECTION  
N.T.S**



**TYPICAL MOUNTABLE APRON CONCRETE INFILL  
CROSS SECTION  
N.T.S**

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

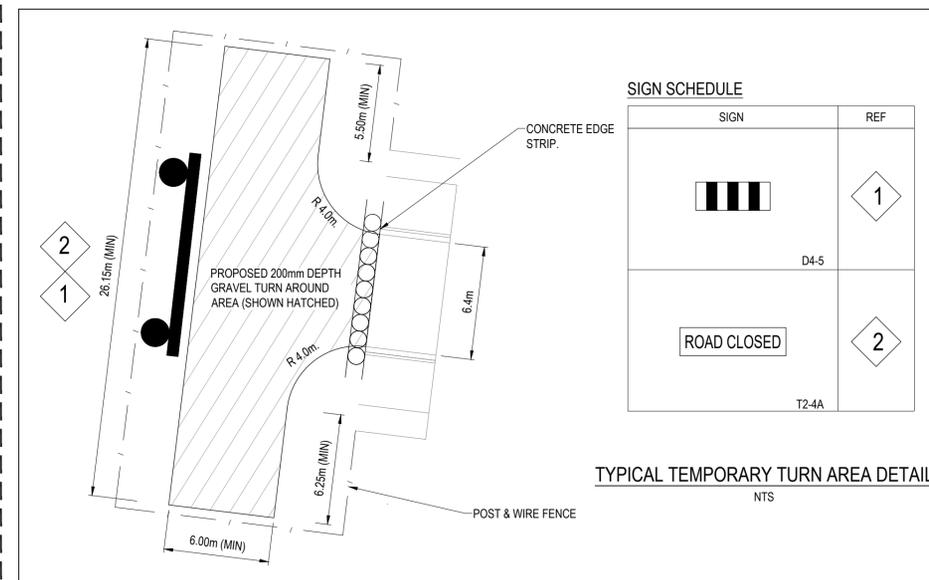


**NOTE:**  
\* WHERE LOT FRONTAGES ARE EQUAL TO OR LESS THAN 12.50m THE DRIVEWAY WIDTH IS TO BE A MAXIMUM OF 3.50m.  
WHERE ADJACENT DRIVEWAYS ARE LOCATED ON EACH SIDE OF THE PROPERTY BOUNDARY, THE LAYOUT IS TO BE AS PER ABOVE.

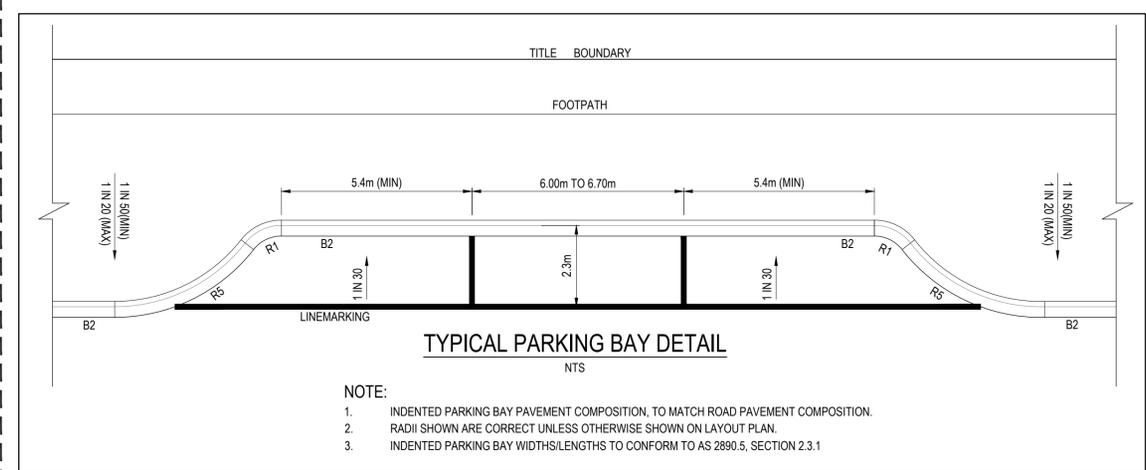
CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

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SIGNED (CONTRACTOR)



**TYPICAL TEMPORARY TURN AREA DETAIL  
NTS**



**NOTE:**  
1. INDENTED PARKING BAY PAVEMENT COMPOSITION, TO MATCH ROAD PAVEMENT COMPOSITION.  
2. RADII SHOWN ARE CORRECT UNLESS OTHERWISE SHOWN ON LAYOUT PLAN.  
3. INDENTED PARKING BAY WIDTHS/LENGTHS TO CONFORM TO AS 2890.5, SECTION 2.3.1

REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

CLIENT

**villawood properties**  
Communities Designed for Living

PROJECT

**creo CONSULTANTS**  
Level 7, 176 Wellington Parade  
East Melbourne, VIC, Australia 3002

DRAWING TITLE

**ARMSTRONG**  
MT DUNEED

DRAWING TITLE

**ARMSTRONG - STAGE 47A/65A  
TYPICAL DETAILS - 1**

STATUS

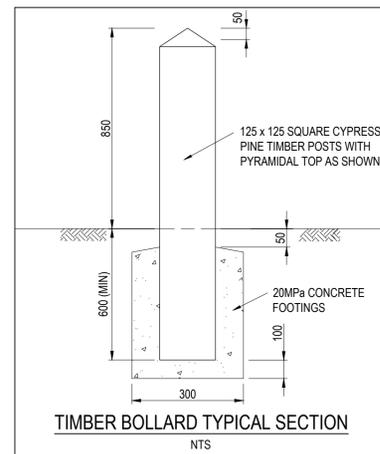
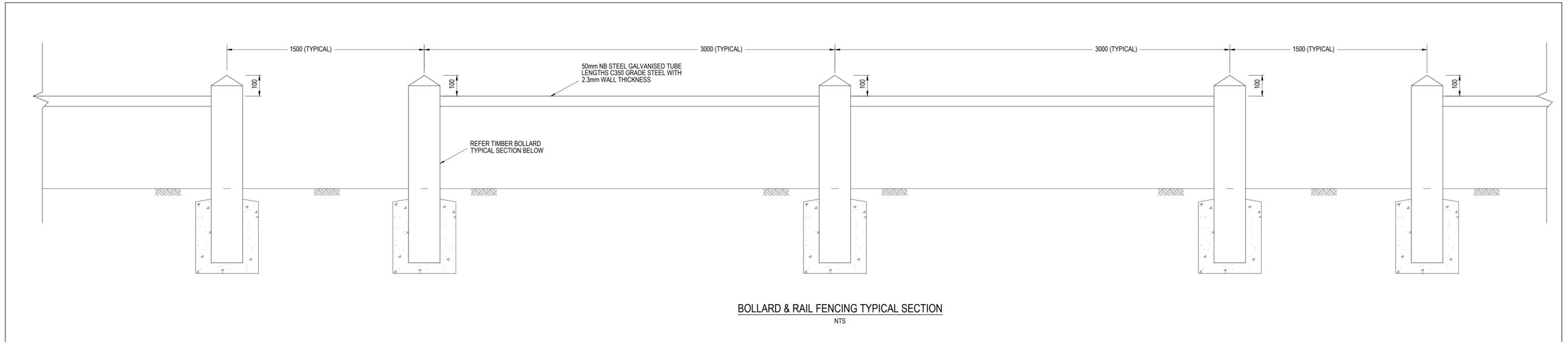
**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R700</b>	<b>AC</b>

SIGNED (CONSULTANT)

SIGNED (CONTRACTOR)

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL



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**DIAL 1100 BEFORE YOU DIG**  
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REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
0	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

CLIENT

Communities Designed for Living

Level 7, 176 Wellington Parade  
East Melbourne, VIC, Australia 3002

PROJECT

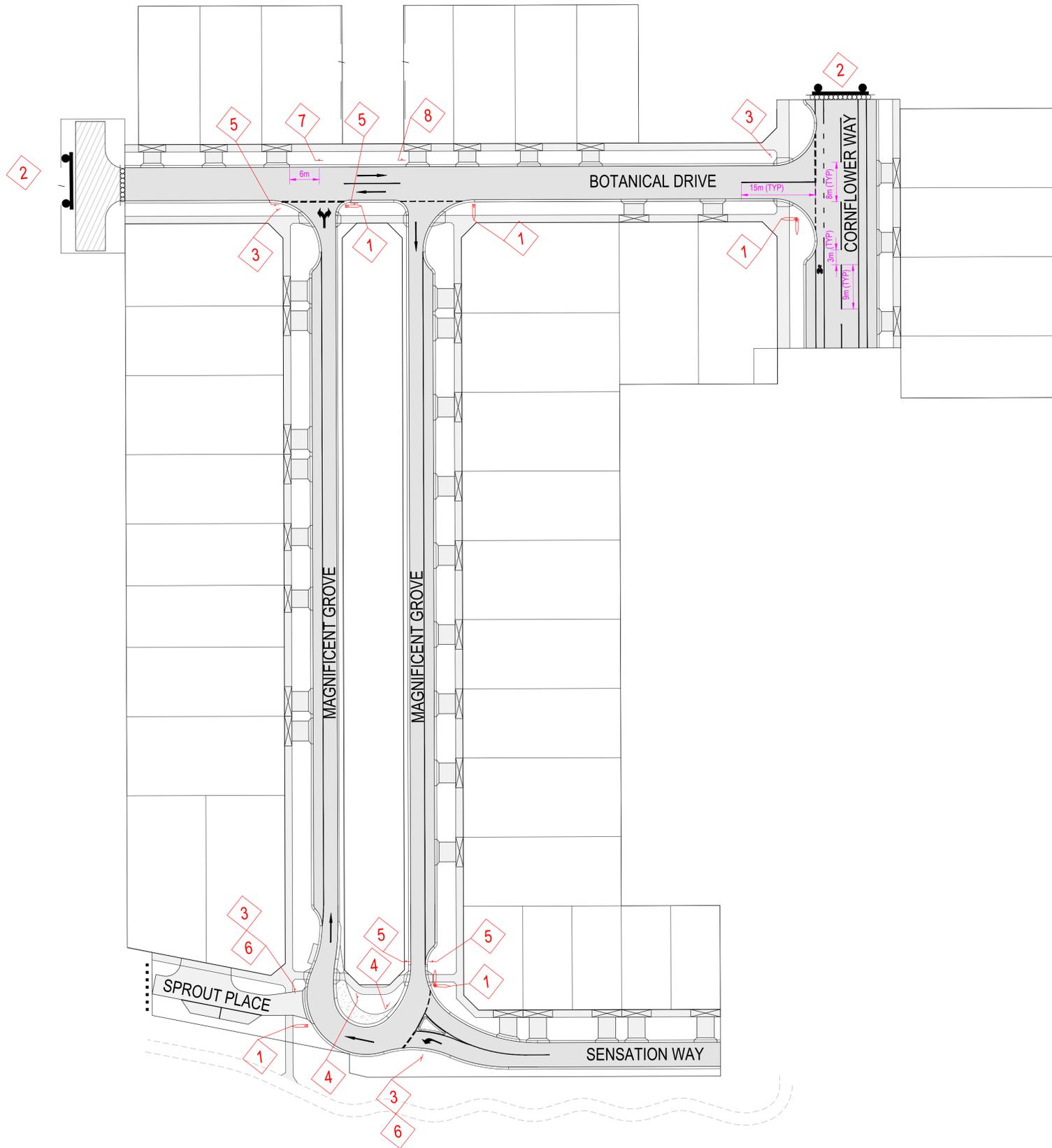
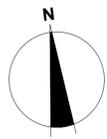
DRAWING TITLE

**ARMSTRONG - STAGE 47A/65A  
TYPICAL DETAILS - 2**

STATUS

**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R701</b>	<b>AC</b>



SIGNED (CONSULTANT)  
 \_\_\_\_\_  
 SIGNED (CONTRACTOR)  
 \_\_\_\_\_

CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

**SIGN SCHEDULE**

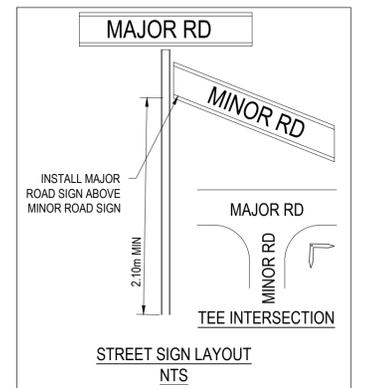
SIGN	REF	QUANTITY
	1	REFER BELOW
STREET SIGN		
	2	2No
T2-4A		
D4-5		
	3	4 No
R1-2		
	4	2 No
R2-1L		
	5	4 No
R2-4		
	6	2 No
R2-14L		
	7	1 No
R5-35R		
	8	1 No
R5-35L		

**STREET SIGN SCHEDULE**

CORNFLOWER WAY	1No.
BOTANICAL DR	2No.
MAGNIFICENT GR	2No.
SENSATION WAY	1No.
SPROUT PL	1No.

**LINEMARKING & SIGNAGE NOTES:**

- ALL LINE MARKING AND SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AS 1742.1 AND AS 1742.2, UNLESS SPECIFICALLY SHOWN OTHERWISE.
- ALL TEMPORARY WARNING SIGNS USED DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH AS 1742.3.
- LINEMARKING SET OUT SHALL BE INSPECTED AND APPROVED BY COUNCIL BEFORE FINAL LINEMARKING IS CARRIED OUT.



REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS

**villawood properties**  
 Communities Designed for Living

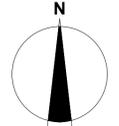
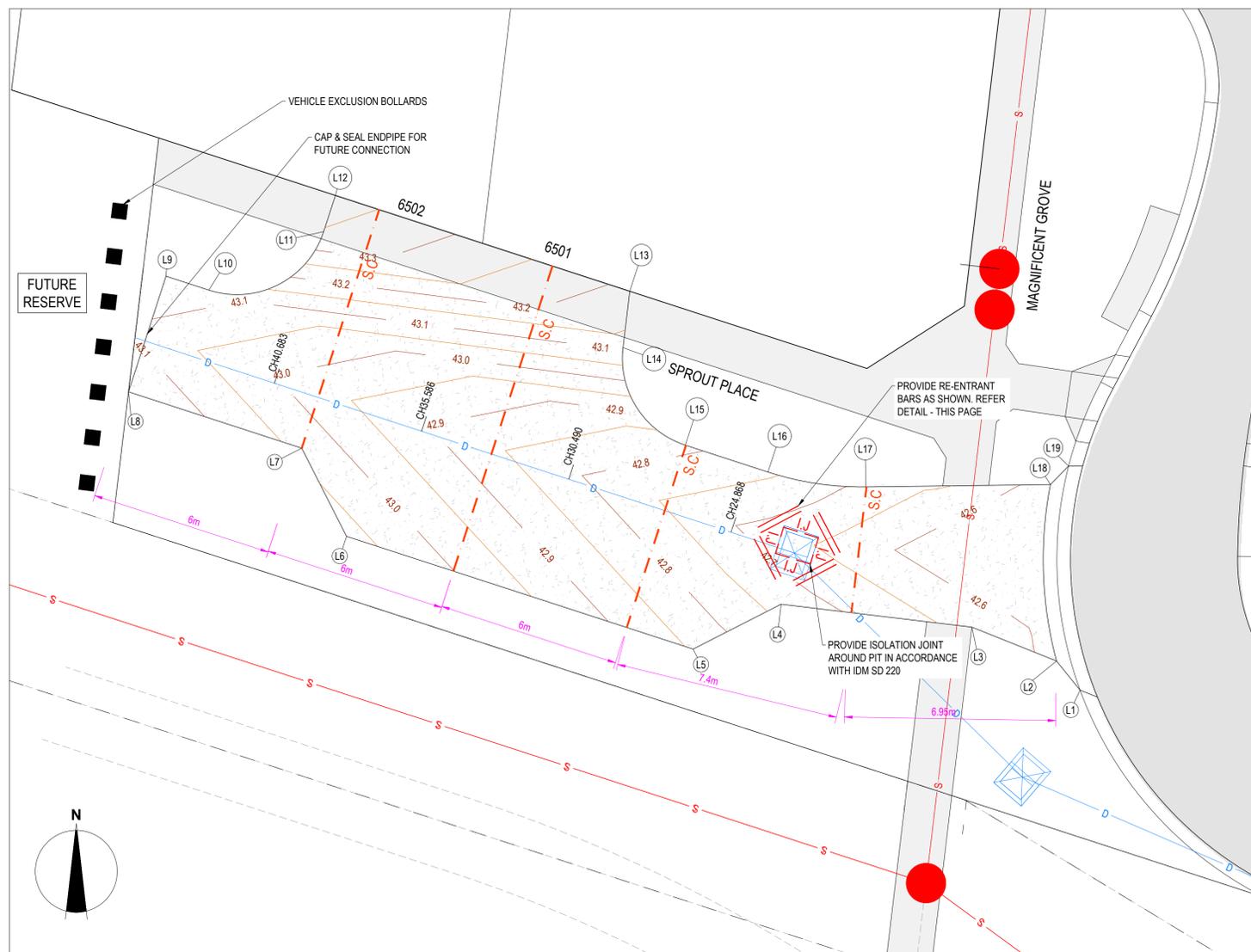
**creo CONSULTANTS**  
 Level 7, 176 Wellington Parade  
 East Melbourne, VIC, Australia 3002

**ARMSTRONG**  
 MT DUNEED

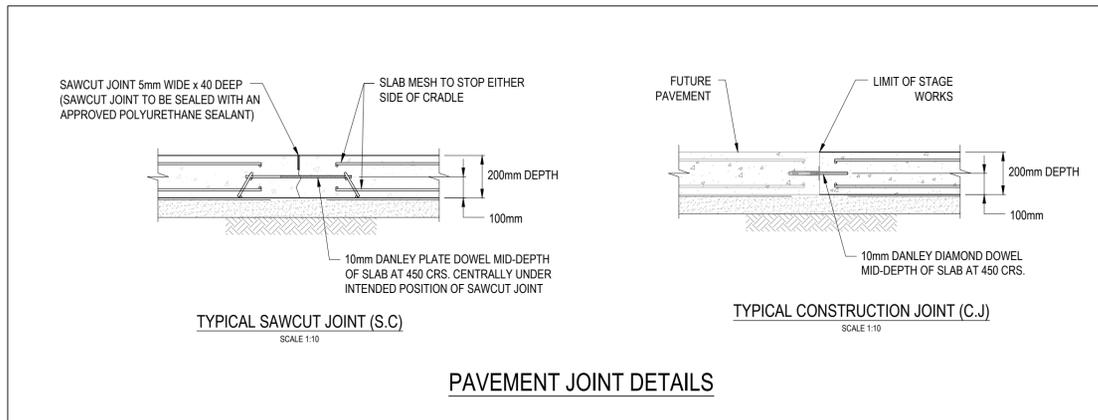
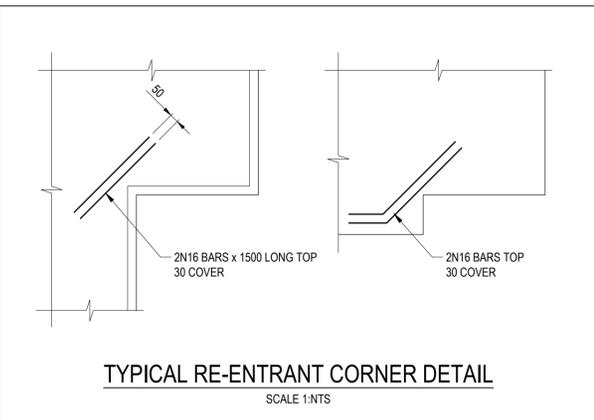
**ARMSTRONG - STAGE 47A/65A  
 SIGNAGE & LINEMARKING**

**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
1:500 @ A1	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R800</b>	<b>AC</b>



SIGNED (CONSULTANT)  
SIGNED (CONTRACTOR)



CH 40.683

DATUM42.0	42.864	43.207	43.065	42.989	43.065	43.340	43.378	43.505
DESIGN SURFACE	42.864	42.892	42.949	42.955	42.967	43.005	43.018	43.035
EXISTING SURFACE	-8.309	-6.250	-2.000	0.000	2.000	4.750	6.250	8.250
OFFSET								

CH 35.586

DATUM42.0	42.834	43.111	43.046	42.903	42.970	43.245	43.282	43.473
DESIGN SURFACE	42.834	42.857	42.883	42.885	42.874	42.917	42.941	42.973
EXISTING SURFACE	-7.911	-6.250	-4.300	0.000	2.000	4.750	6.250	8.250
OFFSET								

CH 30.490

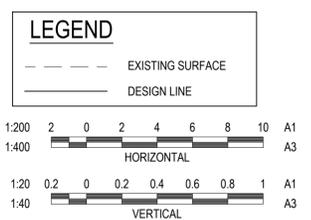
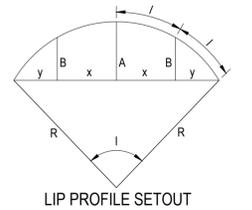
DATUM42.0	42.808	43.015	42.850	42.807	42.874	43.149	43.186	43.442
DESIGN SURFACE	42.808	42.822	42.838	42.815	42.805	42.822	42.846	42.879
EXISTING SURFACE	-7.483	-6.250	-4.300	0.000	2.000	4.750	6.250	8.250
OFFSET								

CH 24.868

DATUM42.0	42.779	42.910	42.845	42.702	42.768	43.043	43.081	43.407
DESIGN SURFACE	42.779	42.784	42.767	42.747	42.737	42.727	42.735	42.752
EXISTING SURFACE	-7.037	-6.250	-4.300	0.000	2.000	4.750	6.250	8.250
OFFSET								

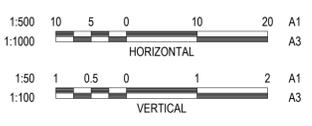
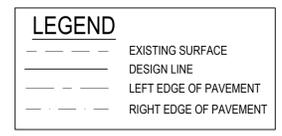
CITY OF GREATER GEELONG TO STAMP HERE UPON APPROVAL

**WARNING**  
**BEWARE OF UNDERGROUND & OVERHEAD SERVICES**  
The locations of underground & overhead services are approximate only & 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**  
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EXTENDED DRIVEWAY BOUNDARY - ALIGNMENT L

PT NO	EASTING	NORTHING	RL
L1	264887.276	5766380.905	42.56
L2	264886.501	5766381.861	42.579
L3	264883.714	5766382.976	42.632
L4	264877.431	5766383.727	42.733
L5	264874.531	5766382.255	42.845
L6	264863.119	5766385.964	43.07
L7	264861.843	5766388.863	43.037
L8	264855.937	5766390.718	43.125
L9	264857.173	5766394.522	43.15
L10	264858.585	5766394.063	43.122
L11	264862.366	5766395.988	43.347
L12	264862.752	5766397.177	43.378
L13	264872.446	5766394.026	43.186
L14	264872.225	5766392.171	43.109
L15	264874.276	5766388.962	42.812
L16	264876.998	5766388.077	42.758
L17	264880.218	5766387.588	42.691
L18	264886.299	5766387.666	42.593
L19	264886.897	5766388.274	42.597



VERTICAL GEOMETRY  
HORIZONTAL GEOMETRY  
DATUM RL40  
DESIGN CENTRELINE  
RIGHT EDGE OF PAVEMENT  
LEFT EDGE OF PAVEMENT  
EXISTING SURFACE  
CENTRELINE DEPTH  
CHAINAGE

42.702	42.807	42.903	42.986	43.083
42.768	42.874	42.970	43.052	43.150
42.845	42.950	43.046	43.052	43.150
42.747	42.815	42.885	42.945	43.006
0.045	0.008	-0.018	-0.040	-0.077
24.868	30.490	35.586	40.000	40.683
			43.065	43.150
			42.999	43.083
			42.903	42.807
			42.807	42.702

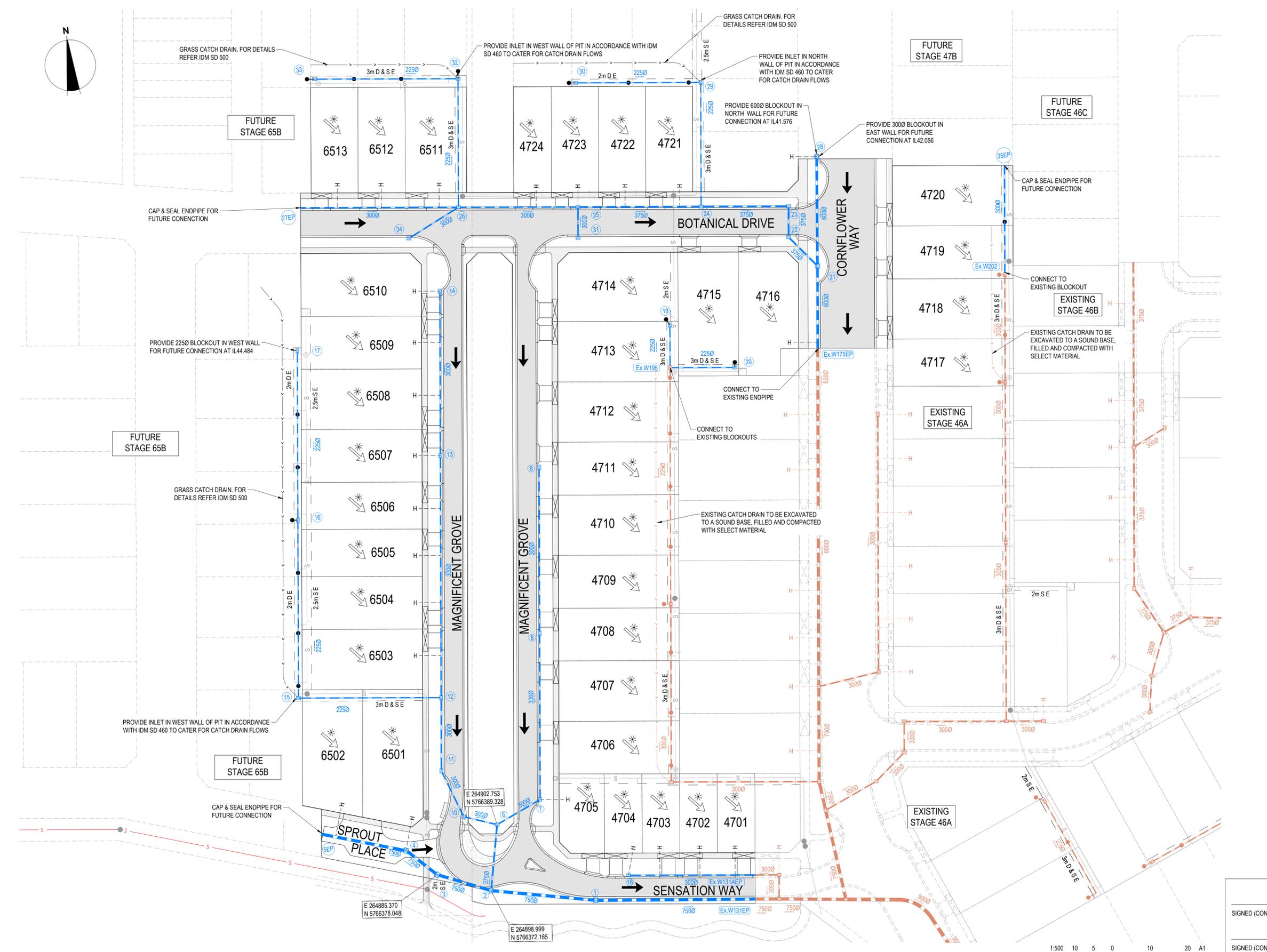
REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
O	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS
A	24/09/20	ISSUED FOR APPROVAL	C.ROHDE	M.TROUNCE	T.PALIOS



DRAWING TITLE  
**ARMSTRONG - STAGE 47A/65A  
CONCRETE JOINTING PLAN**

STATUS  
**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R900</b>	<b>AC</b>



SIGNED (CONSULTANT)  
 \_\_\_\_\_  
 SIGNED (CONTRACTOR)  
 \_\_\_\_\_



REVISION	DATE	ISSUE DESCRIPTION	DRAWN	CHECKED	APPROVED
AC	21/06/21	AS CONSTRUCTED	B.LEECH	M.TROUNCE	T.PALIOS
2	06/01/21	ALTERED DRAINAGE GRADE & SIZE (RUN 04 - 05EP)	C.ROHDE	M.TROUNCE	T.PALIOS
1	25/11/20	ADDED BLOCKOUT	C.ROHDE	M.TROUNCE	T.PALIOS
0	02/11/20	CONSTRUCTION ISSUE	C.ROHDE	M.TROUNCE	T.PALIOS
B	26/10/20	AMENDED TO COUNCIL COMMENTS (22/10/20)	C.ROHDE	M.TROUNCE	T.PALIOS

CLIENT

Communities Designed for Living

creo CONSULTANTS

Level 7, 176 Wellington Parade  
 East Melbourne, VIC, Australia 3002

PROJECT

MT DUNEED

DRAWING TITLE

**ARMSTRONG - STAGE 47A/65A  
 DRAINAGE LAYOUT PLAN**

STATUS

**AS CONSTRUCTED**

SCALE AT A1	DRAWN	DESIGNED
AS SHOWN	C.ROHDE	C.ROHDE
PROJECT ENGINEER	PROJECT MANAGER	DATE FIRST ISSUE
M.TROUNCE	T.PALIOS	APRIL 2020
PROJECT No.	DRAWING No.	REVISION
<b>180016.47A</b>	<b>R901</b>	<b>AC</b>