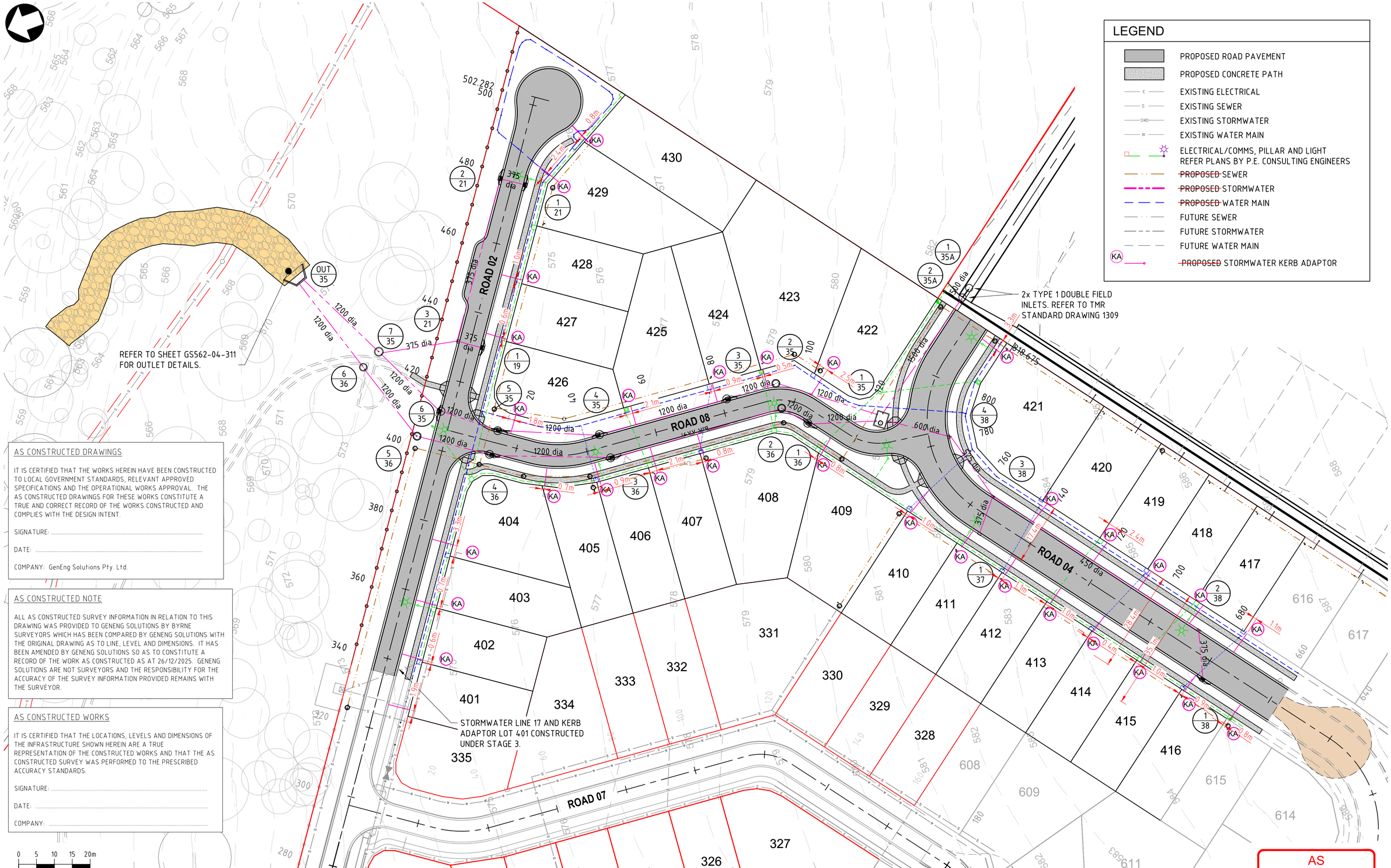


AS CONSTRUCTED DRAWINGS

IT IS CERTIFIED THAT THE WORKS HEREIN HAVE BEEN CONSTRUCTED TO LOCAL GOVERNMENT STANDARDS, RELEVANT APPROVED SPECIFICATIONS AND THE OPERATIONAL WORKS APPROVAL. THE AS CONSTRUCTED DRAWINGS FOR THESE WORKS CONSTITUTE A TRUE AND CORRECT RECORD OF THE WORKS CONSTRUCTED AND COMPLIES WITH THE DESIGN INTENT.

SIGNATURE: .....

DATE: .....

COMPANY: GenEng Solutions Pty. Ltd.

AS CONSTRUCTED NOTE

ALL AS CONSTRUCTED SURVEY INFORMATION IN RELATION TO THIS DRAWING WAS PROVIDED TO GENENG SOLUTIONS BY BYRNE SURVEYORS WHICH HAS BEEN COMPARED BY GENENG SOLUTIONS WITH THE ORIGINAL DRAWING AS TO LINE, LEVEL AND DIMENSIONS. IT HAS BEEN AMENDED BY GENENG SOLUTIONS SO AS TO CONSTITUTE A RECORD OF THE WORK AS CONSTRUCTED AS AT 26/12/2025. GENENG SOLUTIONS ARE NOT SURVEYORS AND THE RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY INFORMATION PROVIDED REMAINS WITH THE SURVEYOR.

AS CONSTRUCTED WORKS

IT IS CERTIFIED THAT THE LOCATIONS, LEVELS AND DIMENSIONS OF THE INFRASTRUCTURE SHOWN HEREIN ARE A TRUE REPRESENTATION OF THE CONSTRUCTED WORKS AND THAT THE AS CONSTRUCTED SURVEY WAS PERFORMED TO THE PRESCRIBED ACCURACY STANDARDS.

SIGNATURE: .....

DATE: .....

COMPANY: .....

0 5 10 15 20m

SCALE 1:500 (A1)
SCALE 1:1,000 (A3)

STORMWATER LAYOUT PLAN

SCALE 1:500

REV.	DATE	DRAWN	APP'D	DRAWING REVISION
1	26/12/25	DB	BGL	AS CONSTRUCTED
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification			
Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

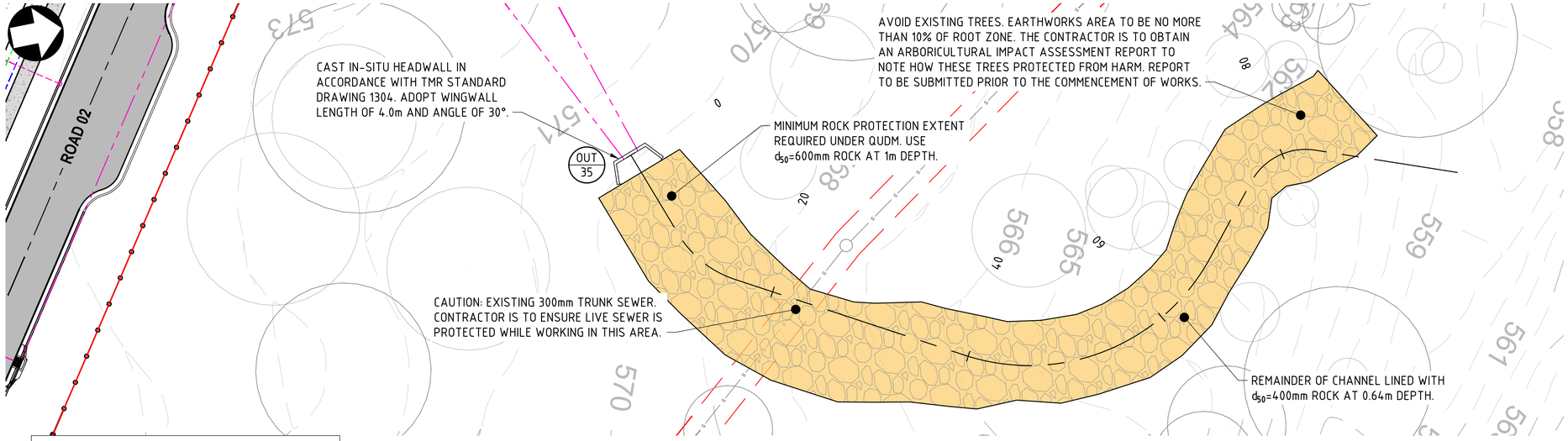
BOTANIC HIGHFIELDS

GenEng Solutions Pty Ltd
ABN 81 150 773 961
PO Box 300
Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT	BIRD IN HAND 3 PTY LTD			
PROJECT	BOTANIC HIGHFIELDS STAGE 4			
DRAWN Y.LI	CHECKED D.TAYLOR	ENGINEER B.LUSK	SURVEYOR PARKINSON SURVEYS	
DESIGNED A.HALL			HORIZ. DATUM MGA2020 (Z 56)	VERT. DATUM AHD

TITLE: STORMWATER DRAINAGE LAYOUT PLAN

SHEET	SCALE	JOB No	SHEET No	REVISION
A1	AS SHOWN	GS562-04	310	1



OUTLET CHANNEL LAYOUT PLAN

SCALE 1:250

LEGEND

- PROPOSED ROAD PAVEMENT
- PROPOSED CONCRETE PATH
- EXISTING ELECTRICAL
- EXISTING SEWER
- EXISTING STORMWATER
- EXISTING WATER MAIN
- ELECTRICAL/COMMS, PILLAR AND LIGHT REFER PLANS BY P.E. CONSULTING ENGINEERS
- PROPOSED SEWER
- PROPOSED STORMWATER
- PROPOSED WATER MAIN
- FUTURE SEWER
- FUTURE STORMWATER
- FUTURE WATER MAIN
- PROPOSED STORMWATER KERB ADAPTOR

AS CONSTRUCTED WORKS

IT IS CERTIFIED THAT THE LOCATIONS, LEVELS AND DIMENSIONS OF THE INFRASTRUCTURE SHOWN HEREIN ARE A TRUE REPRESENTATION OF THE CONSTRUCTED WORKS AND THAT THE AS CONSTRUCTED SURVEY WAS PERFORMED TO THE PRESCRIBED ACCURACY STANDARDS.

SIGNATURE: .....

DATE: .....

COMPANY: .....

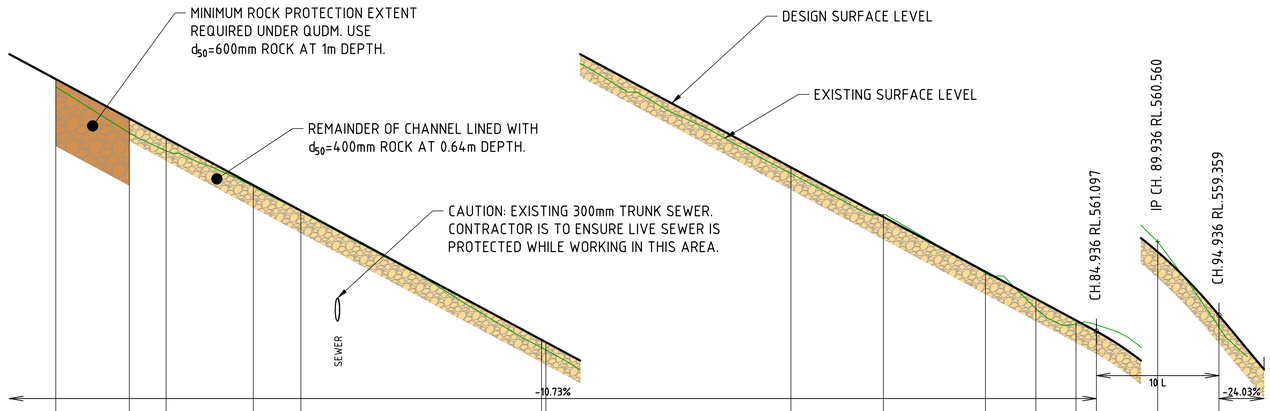
AS CONSTRUCTED DRAWINGS

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SIGNATURE: .....

DATE: .....

COMPANY: GenEng Solutions Pty. Ltd.



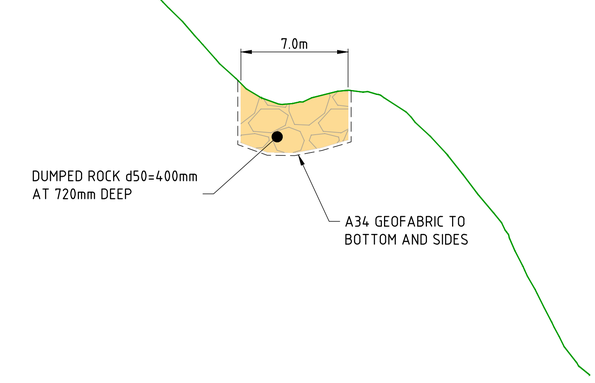
VERT. CURVE LENGTH														
VERT. GEOMETRY														
HORZ. GEOMETRY		-10 R				-20 R					6 R			
DATUM RL	564					559							557	
DESIGN INVERT LEVEL	570.213	569.165 ~~569.246~~	568.391 ~~568.483~~	567.795 ~~568.066~~	565.931 ~~565.958~~	565.920	565.902	563.667 ~~563.773~~	562.839 ~~562.963~~	562.156 ~~562.069~~	561.766 ~~561.627~~	561.446 ~~561.276~~	561.097	560.394	559.359
EXIST. SURFACE LEVEL	570.085	569.043	568.461	568.055	565.831	565.794		563.675	563.000	562.047	561.466	561.216	561.203	560.560	559.165
CUT / FILL DEPTH	0.128	0.204	0.023	0.012	0.127	0.126		0.099	-0.037	0.023	0.161	0.060	-0.106	-0.166	0.194
CONTROL LINE CHAINAGE	0	9.004	16.115	20	39.645	40		60	67.547	75.875	80	83.268	84.936	89.936	94.936

OUTLET CHANNEL LONGITUDINAL SECTION

SCALE 1:250(H), 1:50(V)

AS CONSTRUCTED NOTE

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TYPICAL CHANNEL SECTION

SCALE 1:200(H), 1:40(V)

AS CONSTRUCTED

0 2.5 5 7.5 10m — SCALE 1:250 (A1) SCALE 1:500 (A3)

0 2 4 6 8m — SCALE 1:200 (A1) SCALE 1:400 (A3)

0 0.5 1.0 1.5 2.0m — SCALE 1:50 (A1) SCALE 1:100 (A3)

REV.	DATE	DRAWN	APP'D	DRAWING REVISION
1	26/12/25	DB	BGL	AS CONSTRUCTED
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification

Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

BOTANIC HIGHFIELDS

GenEng Solutions Pty Ltd
ABN 81 150 773 961
PO Box 300
Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT: BIRD IN HAND 3 PTY LTD

PROJECT: BOTANIC HIGHFIELDS STAGE 4

DRAWN	CHECKED	ENGINEER	SURVEYOR
D. TAYLOR	D.TAYLOR	B.LUSK	PARKINSON SURVEYS
DESIGNED: D. TAYLOR			HORIZ. DATUM: MGA2020 (Z 56) VERT. DATUM: AHD

TITLE: STORMWATER DRAINAGE OUTLET CHANNEL LAYOUT PLAN

SHEET	SCALE	JOB No	SHEET No	REVISION
A1	AS SHOWN	GS562-04	311	1

STORMWATER

STRUCTURE NAME	1/19	3/21	1/21	2/21	3/21	7/35	1/35	2/35	3/35	4/35	5/35	6/35	OUT/35 ~~7/35~~	OUT/35 ~~8/35~~	1/35A	2/35A	1/35	1/35	1/36	2/36
STRUCTURE DESCRIPTION	BCC TYPE A GULLY (SAG) L.I.L. 2.4m Lintel	BCC TYPE A GULLY (SAG) L.I.L. 2.4m Lintel	BCC TYPE A GULLY L.I.L. 2.4m Lintel	BCC TYPE A GULLY L.I.L. 2.4m Lintel	BCC TYPE A GULLY (SAG) L.I.L. 2.4m Lintel	BCC MANHOLE 1800mm DIA	CUSTOM PIT	BCC MANHOLE 1800mm DIA	BCC TYPE A GULLY L.I.L. 2.4m Lintel	BCC MANHOLE WITH TYPE A GULLY 1800mm DIA WITH L.I.L. 2.4m Lintel	BCC MANHOLE WITH TYPE A GULLY 1800mm DIA WITH L.I.L. 2.4m Lintel	BCC MANHOLE WITH TYPE A GULLY 1800mm DIA WITH L.I.L. 2.4m Lintel	BCC MANHOLE 1800mm DIA	HEADWALL	TMR DOUBLE FIELD INLET TYPE 1 AS PER STD DWG 1309	TMR DOUBLE FIELD INLET TYPE 1 AS PER STD DWG 1309	CUSTOM PIT	CUSTOM PIT	BCC TYPE A GULLY L.I.L. 2.4m Lintel	BCC MANHOLE 1800mm DIA
	394,286.090 E 6963891.873 N	394,290.212 E 6963897.819 N	394,324.761 E 6963865.062 N	394,328.884 E 6963871.008 N	394,290.212 E 6963897.819 N	394,293.489 E 6963919.062 N	394,230.770 E 6963794.519 N	394,248.205 E 6963817.358 N	394,249.167 E 6963832.344 N	394,252.097 E 6963869.864 N	394,262.879 E 6963895.550 N	394,273.540 E 6963909.377 N	394,293.489 E 6963919.062 N	394,321.547 E 6963932.683 N	394,255.972 E 6963757.776 N	394,254.167 E 6963760.172 N	394,230.642 E 6963792.732 N	394,229.114 E 6963795.770 N	394,235.257 E 6963803.661 N	394,241.039 E 6963808.634 N
PIPE SIZE (mm)	375		375	375	375		1200	1200	1200	1200	1200	1200	1200		1500	1500		1200	1200	
PIPE CLASS	3		3	3	3		3	3	3	3	3	3	3		3	3		3	3	
PIPE GRADE (%)	3.23% ~~3.34%~~		1.57% ~~1.00%~~	1.71% ~~1.74%~~	3.02% ~~3.05%~~		3.21% ~~3.00%~~	3.03 ~~3.00%~~	3.00% ~~3.00%~~	3.04% ~~3.00%~~	3.07% ~~3.00%~~	1.28% ~~1.20%~~	1.03% ~~1.00%~~		2.29% ~~1.00%~~	1.47% ~~1.50%~~		3.05% ~~3.00%~~	3.06% ~~3.00%~~	
PIPE SLOPE (1 in X)	~~29.9~~ 31.0		100.0 63.9	~~57.5~~ 58.6	~~32.0~~ 33.1		~~33.3~~ 31.1	~~33.3~~ 33.0	~~33.3~~ 33.4	~~33.3~~ 32.9	~~33.3~~ 32.6	~~03.1~~ 78.1	100.0 96.8		100.0 43.7	~~66.7~~ 68.1		~~33.3~~ 32.7	~~33.3~~ 32.7	
CAPACITY VELOCITY (m/s)	2.90		1.59	2.09	2.77		5.97	5.97	5.97	5.97	5.97	3.78	3.46		4.00	4.90		5.97	5.97	
NORMAL DEPTH VELOCITY (m/s)	1.86		1.30	1.63	2.35		4.36	4.36	4.38	4.40	4.42	3.18	3.04		0.00	3.96		4.36	4.40	
PIPE FLOW (cumecs)	0.032		0.041	0.046	0.082		1.066	1.066	1.086	1.106	1.119	1.121	1.202		0.000	1.964		1.066	1.101	
CAPACITY FLOW (cumecs)	0.321		0.175	0.231	0.306		6.756	6.756	6.756	6.756	6.756	4.278	3.915		7.072	8.661		6.756	6.756	
DATUM RL	551.000		550.000				553.000								559.000			556.000		
HGL ELEVATION	572.870	572.750	573.678	573.583	573.534	572.750	572.690	571.958	570.408	578.873	577.774	577.560	576.871	575.631	574.261	573.655	572.577	572.385	571.932	571.842	571.419	570.408	569.957	579.716	579.716	578.879	578.873	578.361	578.271	577.800
FINISHED (& EXISTING) SURFACE LEVEL	574.048 ~~574.065~~ (574.272)	574.076 ~~574.065~~ (573.898)	574.855 ~~574.855~~ (574.961)	574.854 ~~574.855~~ (574.689)	574.076 ~~574.065~~ (573.898)	572.916 ~~572.964~~	581.530 ~~581.236~~ (581.003)	579.662 ~~579.647~~ (579.196)	578.484 ~~578.584~~ (578.490)	575.942 ~~575.970~~ (576.413)	574.210 ~~574.301~~ (575.051)	574.140 ~~574.151~~ (574.232)	572.916 ~~572.964~~	571.120 ~~570.700~~ (570.110)	581.541 ~~591.300~~ (583.068)	581.424 ~~591.300~~ (583.000)	581.530 ~~591.479~~ (581.114)	581.130 ~~581.177~~ (580.979)	580.139 ~~580.138~~ (579.757)	579.683 ~~579.583~~ (579.350)
DEPTH OF INVERT BELOW FSL	~~1.433~~ 1.335	1.540 ~~1.675~~ ~~1.695~~ 1.603	~~1.433~~ 1.283	1.379 ~~1.506~~ ~~1.586~~ 1.500	1.512 ~~1.675~~ ~~1.695~~ 1.603	~~1.139~~ ~~1.152~~ 3.140	~~3.268~~ 3.195	2.250 ~~2.195~~ ~~2.647~~ 2.655	1.867 ~~2.145~~ ~~3.629~~ 3.513	2.030 ~~2.144~~ ~~2.996~~ 2.967	2.044 ~~2.162~~ ~~2.600~~ 2.436	2.844 ~~2.974~~ ~~2.994~~ 2.919	1.979 ~~1.964~~ ~~3.152~~ 3.152	1.646 ~~0.610~~ ~~0.640~~ 1.646	~~3.613~~ 2.491	2.429 ~~3.547~~ ~~3.567~~ 2.438	3.195 ~~3.430~~ ~~3.430~~ 3.195	~~3.083~~ 3.221	2.248 ~~2.502~~ ~~2.546~~ 2.431	2.085 ~~2.123~~
INVERT LEVEL	~~572.742~~ 572.733	572.536 ~~572.500~~ ~~572.480~~ 572.473	~~573.531~~ 573.574	573.475 ~~573.459~~ ~~573.379~~ 573.354	572.564 ~~572.560~~ ~~572.480~~ 572.473	571.813 ~~571.825~~ ~~569.812~~ 569.776	~~578.313~~ 578.335	577.412 ~~577.451~~ ~~577.000~~ 577.007	576.617 ~~576.549~~ ~~575.065~~ 574.971	573.912 ~~573.936~~ ~~573.084~~ 572.975	572.169 ~~572.240~~ ~~571.811~~ 571.774	571.299 ~~571.287~~ ~~571.267~~ 571.221	570.937 ~~571.000~~ ~~569.812~~ 569.812	569.474 ~~569.500~~ ~~569.500~~ 569.474	~~579.046~~ 579.050	578.995 ~~579.016~~ ~~578.996~~ 578.986	578.335 ~~578.393~~ ~~578.393~~ 578.335	~~578.313~~ 578.369	577.752 ~~577.746~~ ~~577.701~~ 577.738	577.426 ~~577.472~~
CHAINAGE	0.000 6.724m ~~7.235m~~ 6.724 ~~7.235~~		0.000 6.326m ~~7.235m~~ 6.326 ~~7.235~~	46.312m ~~47.056m~~ 39.738 ~~54.291~~	20.864m ~~21.495m~~ 72.638 ~~75.786~~		0.000 28.737m ~~28.734m~~ 28.717 ~~28.734~~	12.872m ~~15.017m~~ 12.872 ~~15.751~~	35.321m ~~37.634m~~ 76.910 ~~81.384~~	24.125m ~~27.857m~~ 41.589 ~~43.751~~	101.035 ~~109.242~~ 15.480m ~~17.460m~~ 116.515 ~~126.701~~	22.141m ~~22.175m~~ 138.656 ~~148.877~~	29.221m ~~31.190m~~ 167.877 ~~180.066~~		0.000 2.485m ~~3.000m~~ 2.485 ~~3.000~~	38.880m ~~40.169m~~ 41.285 ~~43.169~~		0.000 18.265m ~~18.909m~~ 18.265 ~~18.909~~	7.267m ~~7.626m~~ 25.532 ~~26.535~~	

LINE 19 | 21 | 35 | 35A | 36

REFER SHEET 350 FOR STRUCTURE DETAILS.

EXISTING SURFACE LEVEL

FINISHED SURFACE LEVEL

39.35% STORM H.G.L.

REFER SHEET 350 FOR STRUCTURE DETAILS.

SEWER 300mm CLR ~~0.338~~ 0.414

SEWER 150mm CLR ~~0.301~~ WATER 100mm CLR ~~0.232~~ 0.382 0.222

SEWER 300mm CLR ~~0.327~~ WATER 100mm CLR ~~1.124~~ 0.488 0.228

SEWER 300mm CLR ~~0.401~~ 0.445

AS CONSTRUCTED NOTE

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SIGNATURE: .....

DATE: .....

COMPANY: .....

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SIGNATURE: .....

DATE: .....

COMPANY: GenEng Solutions Pty. Ltd.

0 10 20 30 40m
SCALE 1:1,000 (A1)
SCALE 1:2,000 (A3)

0 1 2 3 4m
SCALE 1:100 (A1)
SCALE 1:200 (A3)

STORMWATER LONGITUDINAL SECTIONS

SCALE 1:1000(H), 1:100(V)

AS CONSTRUCTED

STORMWATER

REV.	DATE	DRAWN	APP'D	DRAWING REVISION
1	26/12/25	DB	BGL	AS CONSTRUCTED
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification

Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

BOTANIC HIGHFIELDS

GenEng Solutions Pty Ltd
ABN 81 150 773 961
PO Box 300
Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT: BIRD IN HAND 3 PTY LTD

PROJECT: BOTANIC HIGHFIELDS STAGE 4

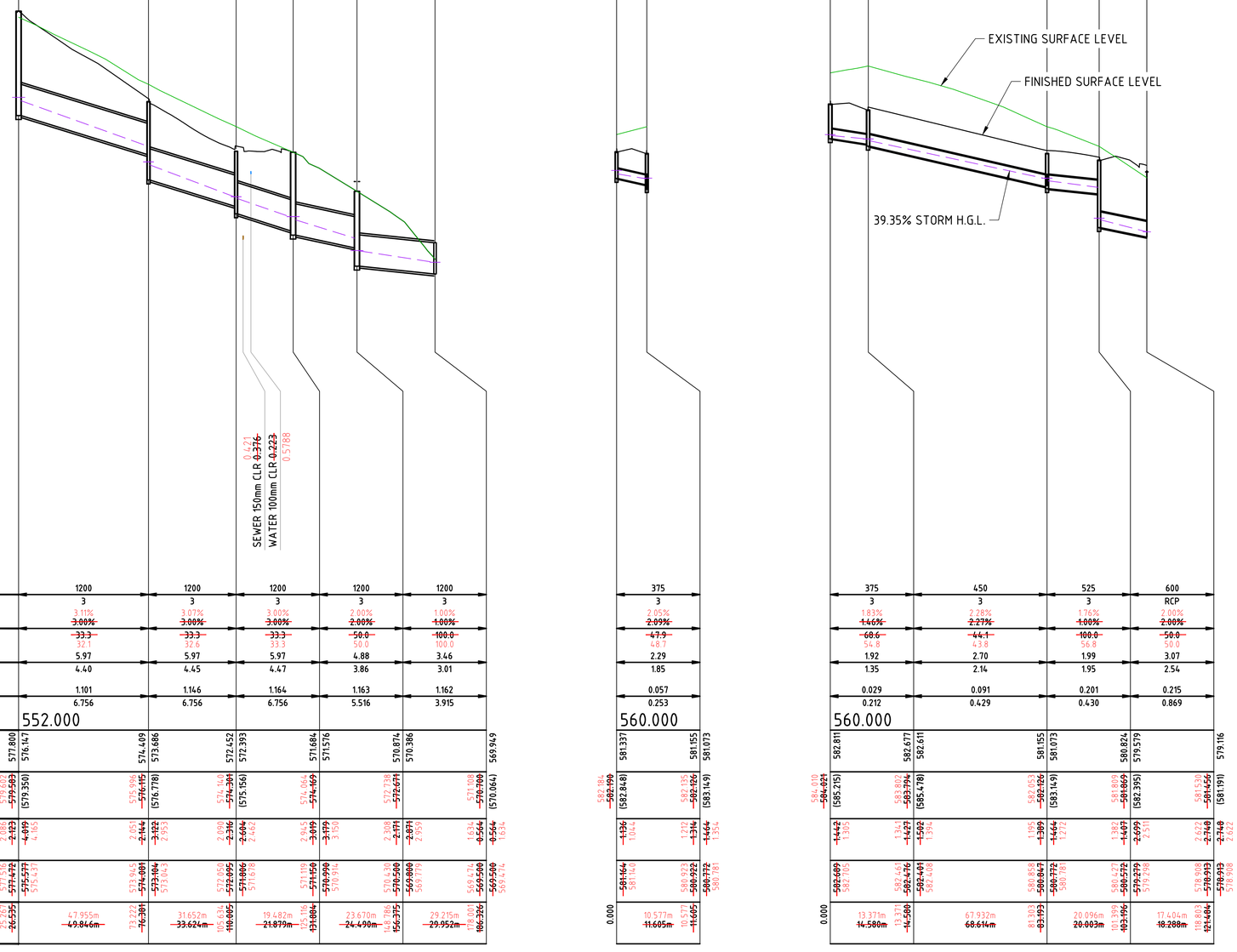
DRAWN	CHECKED	ENGINEER	SURVEYOR
Y.LI	D.TAYLOR	B.LUSK	PARKINSON SURVEYS
DESIGNED: A.HALL			HORIZ. DATUM: MGA2020 (Z 56) VERT. DATUM: AHD

TITLE: STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 1 OF 2

SHEET	SCALE	JOB No	SHEET No	REVISION
A1	AS SHOWN	GS562-04	320	1

STRUCTURE NAME	2/36	3/36	4/36	5/36	6/36	7/36	1/37	3/38	1/38	2/38	3/38	4/38	1/35
	394,241.039 E 6963818.634 N	394,244.722 E 6963868.344 N	394,256.934 E 6963899.672 N	394,269.098 E 6963917.858 N	394,292.471 E 6963925.172 N	394,321.055 E 6963934.119 N	394,189.521 E 6963779.238 N	394,198.598 E 6963772.008 N	394,129.597 E 6963734.136 N	394,143.777 E 6963730.747 N	394,198.598 E 6963772.008 N	394,217.781 E 6963717.679 N	394,228.142 E 6963792.149 N
STRUCTURE DESCRIPTION	BCC MANHOLE 1800mm DIA	BCC MANHOLE WITH TYPE A GULLY 1800mm DIA WITH L.I.L; 2.4m Lintel	TYPE A GULLY (SAG) 1800mm DIA WITH L.I.L; 2.4m Lintel	BCC MANHOLE 1800mm DIA	BCC MANHOLE 1800mm DIA	HEADWALL	BCC TYPE A GULLY L.I.L; 3.6m Lintel	BCC TYPE A GULLY L.I.L; 4.8m Lintel; TYPE E K&C	BCC TYPE A GULLY L.I.L; 2.4m Lintel	BCC TYPE A GULLY L.I.L; 4.8m Lintel; TYPE E K&C	BCC TYPE A GULLY L.I.L; 4.8m Lintel; TYPE E K&C	BCC TYPE A GULLY (SAG) L.I.L; 4.8m Lintel; TYPE E K&C	CUSTOM PIT
PIPE SIZE (mm)	1200	1200	1200	1200	1200		375		375	450		525	600
PIPE CLASS	3	3	3	3	3		3		3	3		3	RCP
PIPE GRADE (%)	~~3.00%~~	3.03% ~~3.00%~~	3.00% ~~3.00%~~	2.00% ~~2.00%~~	1.00% ~~1.00%~~		2.56% ~~2.09%~~		1.83% ~~1.46%~~	2.28% ~~2.27%~~		1.76% ~~1.00%~~	2.00% ~~2.00%~~
PIPE SLOPE (1 in X)	~~33.3~~ 32.1	~~33.3~~ 32.6	~~33.3~~ 33.3	~~50.0~~ 50.0	~~100.0~~ 100.0		~~47.9~~ 48.7		~~68.6~~ 54.8	~~44.1~~ 43.8		~~100.0~~ 56.8	~~50.0~~ 50.0
CAPACITY VELOCITY (m/s)	5.97	5.97	5.97	4.88	3.46		2.29		1.92	2.70		1.99	3.07
NORMAL DEPTH VELOCITY (m/s)	4.40	4.45	4.47	3.86	3.01		1.85		1.35	2.14		1.95	2.54
PIPE FLOW (cumecs)	1.101	1.146	1.164	1.163	1.162		0.057		0.029	0.091		0.201	0.215
CAPACITY FLOW (cumecs)	6.756	6.756	6.756	5.516	3.915		0.253		0.212	0.429		0.430	0.869
DATUM RL	552.000						560.000		560.000				
HGL ELEVATION	577.800 576.147	574.409 573.686	572.452 572.393	571.684 571.576	570.874 570.386	569.949	581.337	581.155 581.073	582.811	582.677 582.611	581.155 581.073	580.824 579.519	579.116
FINISHED (& EXISTING) SURFACE LEVEL	579.602 ~~579.503~~ (579.350)	575.996 ~~576.195~~ (576.778)	574.388 ~~574.301~~ (575.156)	573.062 ~~574.169~~	572.730 ~~572.671~~	570.700 (570.064)	581.191 ~~582.990~~ (582.840)	581.135 ~~582.126~~ (583.149)	584.610 ~~584.021~~ (585.215)	584.432 ~~582.926~~ (583.149)	581.800 ~~581.669~~ (582.395)	581.536 ~~581.456~~ (581.191)	
DEPTH OF INVERT BELOW FSL	2.086 ~~2.103~~ 4.165	2.051 ~~2.144~~ 2.953	2.006 ~~2.216~~ 2.462	2.045 ~~2.019~~ 2.165	2.206 ~~2.171~~ 2.285	1.434 ~~0.564~~ 0.564	1.136 1.044	1.314 ~~1.314~~ 1.394	1.443 1.305	1.245 ~~1.427~~ 1.394	1.181 ~~1.427~~ 1.272	1.717 ~~2.699~~ 2.951	2.740 ~~2.740~~ 2.682
INVERT LEVEL	577.516 ~~577.412~~ 575.437	573.945 ~~574.051~~ 573.104	572.480 ~~572.695~~ 571.866	571.419 ~~571.450~~ 570.990	570.281 ~~570.500~~ 569.800	569.266 ~~569.500~~ 569.414	580.164 581.045	580.932 ~~580.932~~ ~~580.772~~ 580.772	582.609 582.705	582.441 ~~582.476~~ ~~582.401~~ 582.408	580.807 ~~580.647~~ ~~580.772~~ 580.787	580.627 ~~580.532~~ ~~579.279~~ 579.258	578.903 ~~578.913~~ ~~578.913~~ 578.908
CHAINAGE	25.267 ~~26.535~~	73.222 ~~76.301~~ 47.955m ~~49.846m~~	104.874 ~~110.005~~ 31.652m ~~33.624m~~	124.356 ~~131.804~~ 19.482m ~~21.879m~~	148.046 ~~156.375~~ 23.670m ~~24.490m~~	177.716 ~~186.326~~ 29.215m ~~29.952m~~	0.000 10.577m ~~11.605m~~	10.577 ~~11.605~~	0.000 13.371m ~~14.580m~~	13.371 ~~14.580~~ 67.932m ~~68.614m~~	81.303 ~~81.193~~ ~~83.193~~	101.399 ~~100.196~~ 20.096m ~~20.003m~~	118.803 ~~121.404~~ 17.404m ~~18.288m~~

SEWER 150mm CLR ~~0.376~~ 0.421
WATER 100mm CLR ~~0.223~~ 0.5788



LINE

36 37 38

0 10 20 30 40m
SCALE 1:1,000 (A1)
SCALE 1:2,000 (A3)

0 1 2 3 4m
SCALE 1:100 (A1)
SCALE 1:200 (A3)

STORMWATER LONGITUDINAL SECTIONS

SCALE 1:1000(H), 1:100(V)

AS CONSTRUCTED NOTE

ALL AS CONSTRUCTED SURVEY INFORMATION IN RELATION TO THIS DRAWING WAS PROVIDED TO GENENG SOLUTIONS BY BYRNE SURVEYORS WHICH HAS BEEN COMPARED BY GENENG SOLUTIONS WITH THE ORIGINAL DRAWING AS TO LINE, LEVEL AND DIMENSIONS. IT HAS BEEN AMENDED BY GENENG SOLUTIONS SO AS TO CONSTITUTE A RECORD OF THE WORK AS CONSTRUCTED AS AT 26/12/2025. GENENG SOLUTIONS ARE NOT SURVEYORS AND THE RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY INFORMATION PROVIDED REMAINS WITH THE SURVEYOR.

AS CONSTRUCTED WORKS

IT IS CERTIFIED THAT THE LOCATIONS, LEVELS AND DIMENSIONS OF THE INFRASTRUCTURE SHOWN HEREIN ARE A TRUE REPRESENTATION OF THE CONSTRUCTED WORKS AND THAT THE AS CONSTRUCTED SURVEY WAS PERFORMED TO THE PRESCRIBED ACCURACY STANDARDS.

SIGNATURE: .....

DATE: .....

COMPANY: .....

AS CONSTRUCTED DRAWINGS

IT IS CERTIFIED THAT THE WORKS HEREIN HAVE BEEN CONSTRUCTED TO LOCAL GOVERNMENT STANDARDS, RELEVANT APPROVED SPECIFICATIONS AND THE OPERATIONAL WORKS APPROVAL. THE AS CONSTRUCTED DRAWINGS FOR THESE WORKS CONSTITUTE A TRUE AND CORRECT RECORD OF THE WORKS CONSTRUCTED AND COMPLIES WITH THE DESIGN INTENT.

SIGNATURE: .....

DATE: .....

COMPANY: GenEng Solutions Pty. Ltd.

AS CONSTRUCTED

STORMWATER

REV.	DATE	DRAWN	APP'D	DRAWING REVISION
1	26/12/25	DB	BGL	AS CONSTRUCTED
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification			
Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

BOTANIC HIGHFIELDS

GenEng Solutions Pty Ltd
ABN 81 150 773 961
PO Box 300
Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT: BIRD IN HAND 3 PTY LTD
PROJECT: BOTANIC HIGHFIELDS STAGE 4
DRAWN: Y.LI | CHECKED: D.TAYLOR | ENGINEER: B.LUSK | SURVEYOR: PARKINSON SURVEYS
DESIGNED: A.HALL
HORIZ. DATUM: MGA2020 (Z 56) VERT. DATUM: AHD

TITLE: STORMWATER DRAINAGE LONGITUDINAL SECTIONS SHEET 2 OF 2

SHEET	SCALE	JOB No	SHEET No	REVISION
A1	AS SHOWN	GS562-04	321	1



EARTHWORKS LAYOUT PLAN

SCALE 1:500

AS CONSTRUCTED NOTE

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AS CONSTRUCTED WORKS

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SIGNATURE: Byrne Cogman

DATE: Aug 05, 2026

COMPANY: BYRNE SURVEYORS PTY LTD

AS CONSTRUCTED DRAWINGS

IT IS CERTIFIED THAT THE WORKS HEREIN HAVE BEEN CONSTRUCTED TO LOCAL GOVERNMENT STANDARDS, RELEVANT APPROVED SPECIFICATIONS AND THE OPERATIONAL WORKS APPROVAL. THE AS CONSTRUCTED DRAWINGS FOR THESE WORKS CONSTITUTE A TRUE AND CORRECT RECORD OF THE WORKS CONSTRUCTED AND COMPLIES WITH THE DESIGN INTENT.

SIGNATURE:

DATE: Aug 05, 2026

COMPANY: GenEng Solutions Pty. Ltd.

AS CONSTRUCTED

REV.	DATE	DRAWN	APPD	DRAWING REVISION
2	26/12/25	DB	BGL	AS CONSTRUCTED
1	14/04/25	DET	BGL	EARTHWORKS ADJUSTMENT FOR PREVIOUS FILL
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification			
Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

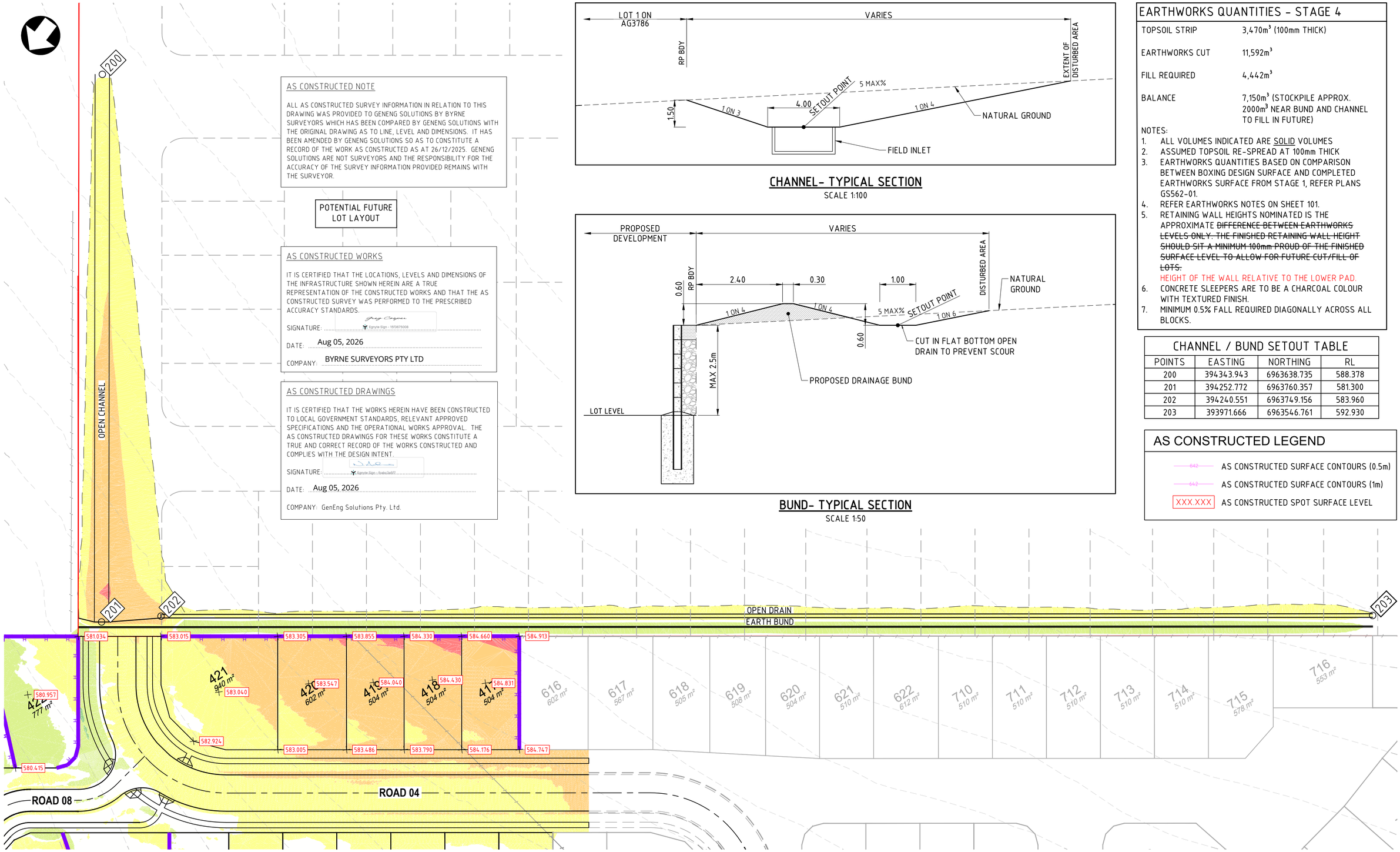
BOTANIC HIGHFIELDS

GenEng Solutions Pty Ltd
ABN 81 150 773 961
PO Box 300
Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT	BIRD IN HAND 3 PTY LTD
PROJECT	BOTANIC HIGHFIELDS STAGE 4
DRAWN	Y.LI
CHECKED	D.TAYLOR
ENGINEER	B.LUSK
SURVEYOR	PARKINSON SURVEYS
DESIGNED	A.HALL
HORIZ. DATUM	MGA2020 (Z 56)
VERT. DATUM	AHD

TITLE	EARTHWORKS LAYOUT PLAN SHEET 1 OF 2			
SHEET	SCALE	JOB No	SHEET No	REVISION
A1	AS SHOWN	GS562-04	100	2

GENERAL



0 5 10 15 20m

SCALE 1:500 (A1)
SCALE 1:1,000 (A3)

EARTHWORKS LAYOUT PLAN

SCALE 1:500

AS CONSTRUCTED NOTE

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POTENTIAL FUTURE LOT LAYOUT

AS CONSTRUCTED WORKS

IT IS CERTIFIED THAT THE LOCATIONS, LEVELS AND DIMENSIONS OF THE INFRASTRUCTURE SHOWN HEREIN ARE A TRUE REPRESENTATION OF THE CONSTRUCTED WORKS AND THAT THE AS CONSTRUCTED SURVEY WAS PERFORMED TO THE PRESCRIBED ACCURACY STANDARDS.

SIGNATURE: Signyte Sign - 1573675008

DATE: Aug 05, 2026

COMPANY: BYRNE SURVEYORS PTY LTD

AS CONSTRUCTED DRAWINGS

IT IS CERTIFIED THAT THE WORKS HEREIN HAVE BEEN CONSTRUCTED TO LOCAL GOVERNMENT STANDARDS, RELEVANT APPROVED SPECIFICATIONS AND THE OPERATIONAL WORKS APPROVAL. THE AS CONSTRUCTED DRAWINGS FOR THESE WORKS CONSTITUTE A TRUE AND CORRECT RECORD OF THE WORKS CONSTRUCTED AND COMPLIES WITH THE DESIGN INTENT.

SIGNATURE: Signyte Sign - fcebb3e9f7

DATE: Aug 05, 2026

COMPANY: GenEng Solutions Pty. Ltd.

CHANNEL- TYPICAL SECTION

SCALE 1:100

BUND- TYPICAL SECTION

SCALE 1:50

EARTHWORKS QUANTITIES - STAGE 4

TOPSOIL STRIP	3,470m³ (100mm THICK)
EARTHWORKS CUT	11,592m³
FILL REQUIRED	4,442m³
BALANCE	7,150m³ (STOCKPILE APPROX. 2000m³ NEAR BUND AND CHANNEL TO FILL IN FUTURE)

NOTES:
1. ALL VOLUMES INDICATED ARE SOLID VOLUMES
2. ASSUMED TOPSOIL RE-SPREAD AT 100mm THICK
3. EARTHWORKS QUANTITIES BASED ON COMPARISON BETWEEN BOXING DESIGN SURFACE AND COMPLETED EARTHWORKS SURFACE FROM STAGE 1, REFER PLANS GS562-01.
4. REFER EARTHWORKS NOTES ON SHEET 101.
5. RETAINING WALL HEIGHTS NOMINATED IS THE APPROXIMATE ~~DIFFERENCE BETWEEN EARTHWORKS LEVELS ONLY. THE FINISHED RETAINING WALL HEIGHT SHOULD SIT A MINIMUM 100mm PROUD OF THE FINISHED SURFACE LEVEL TO ALLOW FOR FUTURE CUT/FILL OF LOTS.~~ HEIGHT OF THE WALL RELATIVE TO THE LOWER PAD.
6. CONCRETE SLEEPERS ARE TO BE A CHARCOAL COLOUR WITH TEXTURED FINISH.
7. MINIMUM 0.5% FALL REQUIRED DIAGONALLY ACROSS ALL BLOCKS.

CHANNEL / BUND SETOUT TABLE

POINTS	EASTING	NORTHING	RL
200	394343.943	6963638.735	588.378
201	394252.772	6963760.357	581.300
202	394240.551	6963749.156	583.960
203	393971.666	6963546.761	592.930

AS CONSTRUCTED LEGEND

- 642 — AS CONSTRUCTED SURFACE CONTOURS (0.5m)
- 642 — AS CONSTRUCTED SURFACE CONTOURS (1m)
- XXX.XXX — AS CONSTRUCTED SPOT SURFACE LEVEL

AS CONSTRUCTED

REV.	DATE	DRAWN	APP'D	DRAWING REVISION
1	26/12/25	DB	BGL	AS CONSTRUCTED
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification			
Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

BOTANIC HIGHFIELDS

GenEng Solutions Pty Ltd
ABN 81 150 773 961
PO Box 300
Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT: BIRD IN HAND 3 PTY LTD
PROJECT: BOTANIC HIGHFIELDS STAGE 4

DRAWN	CHECKED	ENGINEER	SURVEYOR
Y.LI	D.TAYLOR	B.LUSK	PARKINSON SURVEYS
DESIGNED: A.HALL			HORIZ. DATUM: MGA2020 (Z 56) VERT. DATUM: AHD

TITLE: EARTHWORKS LAYOUT PLAN SHEET 2 OF 2

SHEET	SCALE	JOB No	SHEET No	REVISION
A1	AS SHOWN	GS562-04	101	1

GENERAL

AS CONSTRUCTED NOTES:
1. BRIDGE OF SEWER DETAILS FOR LOTS 405, 406, 407, 408, 409, 410, 422, 423, 424, 425, 426, 427, 428, 429 AND 430 IN ACCORDANCE WITH DWG 110 "EARTHWORKS TYPICAL RETAINING WALL AND BATTER DETAILS"

AS CON LEGEND:
Ⓢ AS CON INDICATOR DISC ON KERB.

NOTES:
1. ALL MANHOLES TO BE AT 1.5m OFFSETS TO LOT BOUNDARIES.
2. MANHOLES ON 150 mm Φ SEWER LINES SHALL BE PRE-CAST 1050 mm DIAMETER UNLESS NOTED OTHERWISE AND CONSTRUCTED IN ACCORDANCE WITH WSAA STANDARD DRAWING NO. SEW-1300.
3. MANHOLES ON 300 mm Φ SEWER LINES SHALL BE PRE-CAST CALCAREOUS CONCRETE 1200 mm DIAMETER, EPOXY COATED WITH:
   - 3.1. EPIREZ 133 EPOXY PRIMER
   - 3.2. TROWEL COATING OF EPIREZ 633 HIGH BUILD EPOXY MIXED WITH WASHED KILN, DRIED SAND TO ACHIEVE DRY FILM THICKNESS OF 2.0 mm.
   - 3.3. FINAL COAT OF EPIREZ 733 HIGH BUILD EPOXY COATING TO A 1.0mm DRY FILM THICKNESS.
   - 3.4. COATING APPLIED TO BASES AND CHAMBERS INSITU, FOLLOWING SUCCESSFUL VACUUM TEST.

LEGEND
- PROPOSED ROAD PAVEMENT
- PROPOSED CONCRETE PATH
- EXISTING ELECTRICAL
- EXISTING SEWER
- EXISTING STORMWATER
- EXISTING WATER MAIN
- ELECTRICAL/COMMS, PILLAR AND LIGHT REFER PLANS BY P.E. CONSULTING ENGINEERS
- ~~PROPOSED~~ SEWER, MANHOLE & HOUSE CON.
- ~~PROPOSED~~ TRUNK SEWER
- ~~PROPOSED~~ STORMWATER
- ~~PROPOSED~~ WATER MAIN
- ~~PROPOSED~~ RETAINING WALL
- FUTURE SEWER
- FUTURE STORMWATER
- FUTURE WATER MAIN

STAGE 4

STAGE 6

ROAD 02

ROAD 04

~~PROVIDE~~ STUB FOR FUTURE CONNECTION IL 581.056

~~PROVIDE~~ STUB FOR FUTURE CONNECTION IL 584.308

POTENTIAL FUTURE LOT LAYOUT

POTENTIAL FUTURE LOT LAYOUT

CONNECTIONS TO LINE S6 FROM STAGE 3 CONSTRUCTION. REFER PLAN SET GS562-03.

AS CONSTRUCTED NOTE

ALL AS CONSTRUCTED SURVEY INFORMATION IN RELATION TO THIS DRAWING WAS PROVIDED TO GENENG SOLUTIONS BY BYRNE SURVEYORS WHICH HAS BEEN COMPARED BY GENENG SOLUTIONS WITH THE ORIGINAL DRAWING AS TO LINE, LEVEL AND DIMENSIONS. IT HAS BEEN AMENDED BY GENENG SOLUTIONS SO AS TO CONSTITUTE A RECORD OF THE WORK AS CONSTRUCTED AS AT 26/12/2025. GENENG SOLUTIONS ARE NOT SURVEYORS AND THE RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY INFORMATION PROVIDED REMAINS WITH THE SURVEYOR.

AS CONSTRUCTED WORKS

IT IS CERTIFIED THAT THE LOCATIONS, LEVELS AND DIMENSIONS OF THE INFRASTRUCTURE SHOWN HEREIN ARE A TRUE REPRESENTATION OF THE CONSTRUCTED WORKS AND THAT THE AS CONSTRUCTED SURVEY WAS PERFORMED TO THE PRESCRIBED ACCURACY STANDARDS.

SIGNATURE: Egnyte Sign - a48bda8add3...
DATE: Aug 05, 2026
COMPANY: BYRNE SURVEYORS PTY LTD

AS CONSTRUCTED DRAWINGS

IT IS CERTIFIED THAT THE WORKS HEREIN HAVE BEEN CONSTRUCTED TO LOCAL GOVERNMENT STANDARDS, RELEVANT APPROVED SPECIFICATIONS AND THE OPERATIONAL WORKS APPROVAL. THE AS CONSTRUCTED DRAWINGS FOR THESE WORKS CONSTITUTE A TRUE AND CORRECT RECORD OF THE WORKS CONSTRUCTED AND COMPLIES WITH THE DESIGN INTENT.

SIGNATURE: Egnyte Sign - ada9e12781
DATE: Aug 05, 2026
COMPANY: GenEng Solutions Pty. Ltd.

AS CONSTRUCTED

0 5 10 15 20m
SCALE 1:500 (A1)
SCALE 1:1,000 (A3)

SEWERAGE LAYOUT PLAN
SCALE 1:500

REV.	DATE	DRAWN	APPD	DRAWING REVISION
2	29/07/26	DET	DET	FIX OF LOT 411 HC
1	26/12/25	DB	BGL	AS CONSTRUCTED
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification

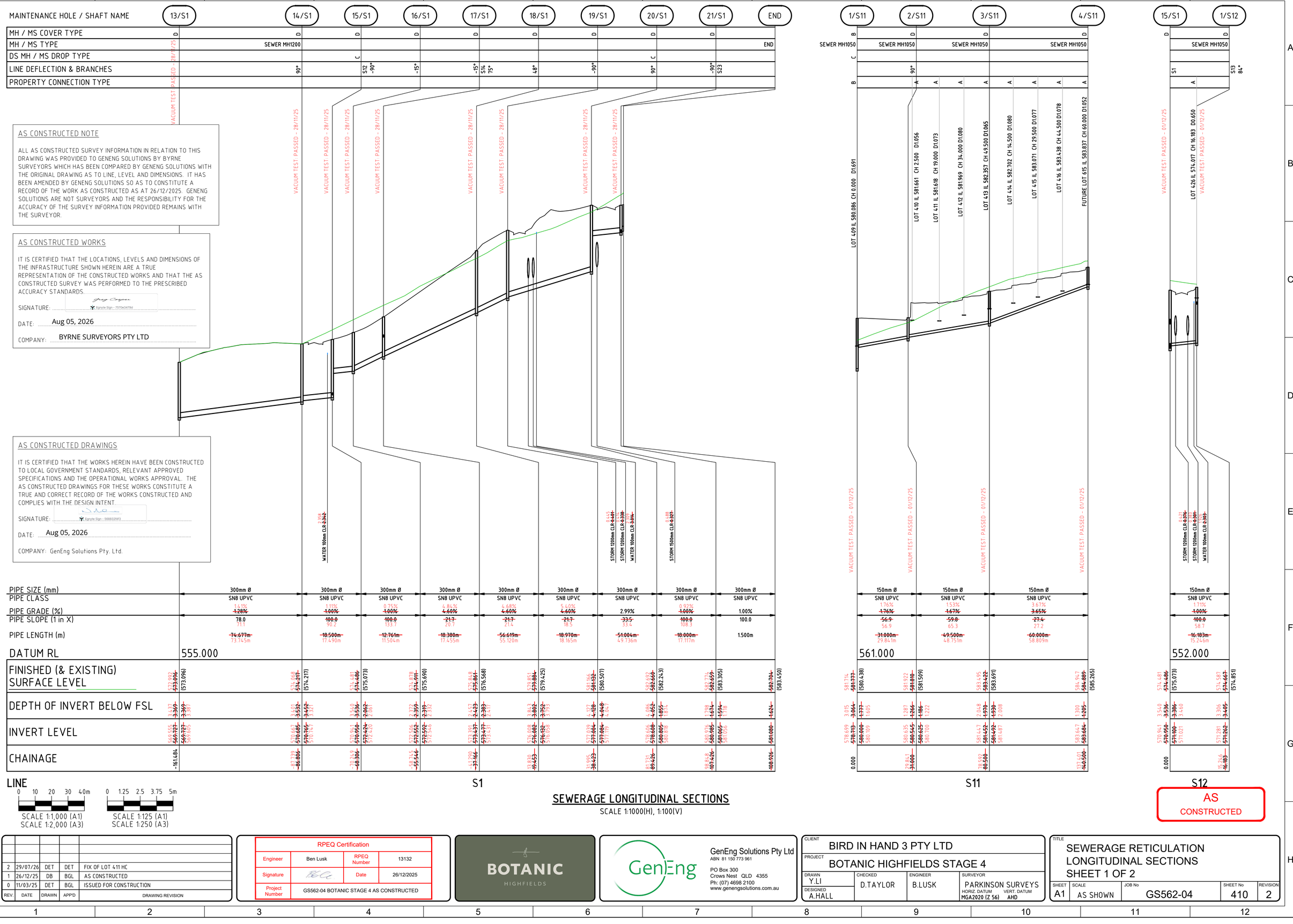
Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

BOTANIC HIGHFIELDS

GenEng Solutions Pty Ltd
ABN 81 150 773 961
PO Box 300
Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT: BIRD IN HAND 3 PTY LTD
PROJECT: BOTANIC HIGHFIELDS STAGE 4
DRAWN: Y.LI | CHECKED: D.TAYLOR | ENGINEER: B.LUSK | SURVEYOR: PARKINSON SURVEYS
DESIGNED: D.TAYLOR | HORIZ. DATUM: MGA2020 (Z 56) | VERT. DATUM: AHD

TITLE: SEWERAGE RETICULATION LAYOUT PLAN
SHEET: A1 | SCALE: AS SHOWN | JOB No: GS562-04 | SHEET No: 400 | REVISION: 2



AS CONSTRUCTED NOTE

ALL AS CONSTRUCTED SURVEY INFORMATION IN RELATION TO THIS DRAWING WAS PROVIDED TO GENENG SOLUTIONS BY BYRNE SURVEYORS WHICH HAS BEEN COMPARED BY GENENG SOLUTIONS WITH THE ORIGINAL DRAWING AS TO LINE, LEVEL AND DIMENSIONS. IT HAS BEEN AMENDED BY GENENG SOLUTIONS SO AS TO CONSTITUTE A RECORD OF THE WORK AS CONSTRUCTED AS AT 26/12/2025. GENENG SOLUTIONS ARE NOT SURVEYORS AND THE RESPONSIBILITY FOR THE ACCURACY OF THE SURVEY INFORMATION PROVIDED REMAINS WITH THE SURVEYOR.

AS CONSTRUCTED WORKS

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SIGNATURE: Byrne Sign - 7570e34794

DATE: Aug 05, 2026

COMPANY: BYRNE SURVEYORS PTY LTD

AS CONSTRUCTED DRAWINGS

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SIGNATURE: Byrne Sign - 5668329f49

DATE: Aug 05, 2026

COMPANY: GenEng Solutions Pty. Ltd.

SEWERAGE LONGITUDINAL SECTIONS

SCALE 1:1000(H), 1:100(V)

AS CONSTRUCTED

REV.	DATE	DRAWN	APP'D	DRAWING REVISION
2	29/07/26	DET	DET	FIX OF LOT 411 HC
1	26/12/25	DB	BGL	AS CONSTRUCTED
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification			
Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

BOTANIC HIGHFIELDS

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ABN 81 150 773 961
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Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT: BIRD IN HAND 3 PTY LTD

PROJECT: BOTANIC HIGHFIELDS STAGE 4

DRAWN	CHECKED	ENGINEER	SURVEYOR
Y.LI	D.TAYLOR	B.LUSK	PARKINSON SURVEYS
DESIGNED: A.HALL			HORIZ DATUM: MGA2020 (Z 56) VERT. DATUM: AHD

TITLE: SEWERAGE RETICULATION LONGITUDINAL SECTIONS SHEET 1 OF 2

SHEET	SCALE	JOB No	SHEET No	REVISION
A1	AS SHOWN	GS562-04	410	2

SEWER

63mm O.D. PE PIPE ~~IN 100Ø ENVELOPER~~
AS PER TRC STD DRG 10213-001. REFER SHEET 251 FOR MORE DETAIL.

"DUCK FOOT" FIRE HYDRANT TO END OF LINE FOR EASY FLUSHING
- AS PER WAT-1207
THRUST BLOCK IN ACCORDANCE WITH WAT-1205

Ø63mm PE100 PN16
length 74.8m, depth 0.9m

Ø63mm PE100 PN16
length 19.2m, depth 1.2m

Ø100 PVC-M PN16
length 66.4m, depth 0.8m

THRUST BLOCK IN ACCORDANCE WITH WAT-1205

Ø100 PVC-M PN16
length 21.7m, depth 0.9m

THRUST BLOCK FOR SOCKETED AND FLANGED VALVES

Ø100 DICL PN35
length 15.1m, depth 1.0m

DICL UNDER ROAD TO EXTEND 1m BEHIND BACK OF KERB.

THRUST BLOCK FOR SOCKETED AND FLANGED VALVES

Ø100 PVC SN10
length 14.7m, depth 0.6m

THRUST BLOCK IN ACCORDANCE WITH WAT-1205

THRUST BLOCK IN ACCORDANCE WITH WAT-1205

Ø100 PVC-M PN16
length 89.4m, depth 0.8m

CONNECTION TO LIVE MAIN BY COUNCIL AT DEVELOPERS COST.

Ø100 PVC-M PN16
length 15.2m, depth 0.8m

100mm PVC-M WATERMAIN

Ø100 PVC-M PN16
length 68.7m, depth 0.6m

Ø100 PVC-M PN16
length 21.3m, depth 0.6m

100mm PVC-M WATERMAIN

DICL UNDER ROAD TO EXTEND 1m BEHIND BACK OF KERB.

Ø100 PVC SN10
length 16m, depth 0.5m

THRUST BLOCK IN ACCORDANCE WITH WAT-1205

THRUST BLOCK FOR BENDS

Ø100 PVC SN10
length 22.9m, depth 0.5m

Ø100 PVC SN10
length 19.8m, depth 0.7m

Ø100 PVC SN10
length 20.6m, depth 0.8m

Ø100 PVC SN10
length 20.6m, depth 0.6m

Ø100 DICL PN35
length 30m, depth 1.4m

Ø150 PVC-M PN16
length 13.5m, depth 0.7m

TEMPORARY "DUCK FOOT" FIRE HYDRANT TO END OF LINE FOR EASY FLUSHING.
- AS PER WAT-1207
- THRUST BLOCK IN ACCORDANCE WITH WAT-1205

THRUST BLOCK FOR BENDS

Ø150 PVC-M PN16
length 9m, depth 0.9m

Ø150 PVC-M PN16
length 9m, depth 0.8m

Ø150 PVC-M PN16
length 10m, depth 0.7m

THRUST BLOCK IN ACCORDANCE WITH WAT-1205

Ø150 PVC-M PN16
length 100.6m, depth 0.65m

150mm PVC-M WATERMAIN

THRUST BLOCK IN ACCORDANCE WITH WAT-1205

TEMPORARY "DUCK FOOT" FIRE HYDRANT TO END OF LINE FOR EASY FLUSHING.
- AS PER WAT-1207.
- THRUST BLOCK IN ACCORDANCE WITH WAT-1205

ROAD 02
ROAD 08
ROAD 04
ROAD 07

430 429 428 427 426 425 424 423 422 421 420 418 417 416 414 412 410 409 407 406 404 403 402 401 335 334 333 332 331 330 329 328 327 326

616 617 620 621 608 609 615 614 611

AS CONSTRUCTED NOTE

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AS CONSTRUCTED WORKS

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SIGNATURE: Byrne Surveyors Sign - 69000fd609...
DATE: Aug 05, 2026
COMPANY: BYRNE SURVEYORS PTY LTD

AS CONSTRUCTED DRAWINGS

IT IS CERTIFIED THAT THE WORKS HEREIN HAVE BEEN CONSTRUCTED TO LOCAL GOVERNMENT STANDARDS, RELEVANT APPROVED SPECIFICATIONS AND THE OPERATIONAL WORKS APPROVAL. THE AS CONSTRUCTED DRAWINGS FOR THESE WORKS CONSTITUTE A TRUE AND CORRECT RECORD OF THE WORKS CONSTRUCTED AND COMPLIES WITH THE DESIGN INTENT.

SIGNATURE: Ignyte Sign - da4c5f29eb...
DATE: Aug 05, 2026
COMPANY: GenEng Solutions Pty. Ltd.

LEGEND

- PROPOSED ROAD PAVEMENT
- EXISTING ELECTRICAL
- EXISTING SEWER
- EXISTING STORMWATER
- EXISTING WATER MAIN
- ELECTRICAL/COMMS, PILLAR AND LIGHT REFER PLANS BY P.E. CONSULTING ENGINEERS
- ~~PROPOSED~~ SEWER
- ~~PROPOSED~~ STORMWATER
- ~~PROPOSED~~ WATER MAIN & HOUSE CONNECTION
- FH SV DEC FIRE HYDRANT, STOP VALVE AND DEAD END CAP
- ~~PROPOSED~~ WATER MAIN BEND
- ~~PROPOSED~~ RETAINING WALL
- FUTURE SEWER
- FUTURE STORMWATER
- FUTURE WATER MAIN

AS CONSTRUCTED NOTES

- ALL THRUST BLOCKS HAVE BEEN CONSTRUCTED/INSTALLED IN ACCORDANCE WITH WATER SERVICES ASSOCIATION OF AUSTRALIA (WSAA), STD DRG WAT-1205 & WAT-1207.
- ALL BENDS HAVE BEEN INSTALLED WITH THRUST BLOCKS FOR BENDS IN ACCORDANCE WITH WATER SERVICES ASSOCIATION OF AUSTRALIA (WSAA), STD DRG WAT-1208.
- ALL MAINS ARET INSTALLED TO THE MINIMUM OR MAXIMUM COVER AS PER COUNCIL'S POLICY.

0 5 10 15 20m
SCALE 1:500 (A1)
SCALE 1:1,000 (A3)

WATER RETICULATION LAYOUT PLAN

SCALE 1:500

AS CONSTRUCTED

REV.	DATE	DRAWN	APP'D	DRAWING REVISION
2	14/07/26	DET	BGL	OUTSTANDING COUNCIL ISSUES
1	26/12/25	DB	BGL	AS CONSTRUCTED
0	11/03/25	DET	BGL	ISSUED FOR CONSTRUCTION

RPEQ Certification			
Engineer	Ben Lusk	RPEQ Number	13132
Signature		Date	26/12/2025
Project Number	GS562-04 BOTANIC STAGE 4 AS CONSTRUCTED		

BOTANIC HIGHFIELDS

GenEng Solutions Pty Ltd
ABN 81 150 773 961
PO Box 300
Crows Nest QLD 4355
Ph: (07) 4698 2100
www.genengsolutions.com.au

CLIENT: BIRD IN HAND 3 PTY LTD
PROJECT: BOTANIC HIGHFIELDS STAGE 4
DRAWN: Y.LI | CHECKED: D.TAYLOR | ENGINEER: B.LUSK | SURVEYOR: PARKINSON SURVEYS
DESIGNED: D.TAYLOR | HORIZ. DATUM: MGA2020 (Z 56) | VERT. DATUM: AHD

TITLE: WATER RETICULATION LAYOUT PLAN
SHEET: A1 | SCALE: AS SHOWN | JOB No: GS562-04 | SHEET No: 500 | REVISION: 2

WATER