

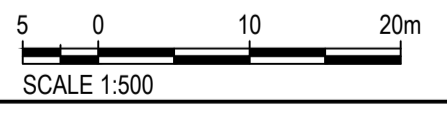
POSITIONS OF SERVICES SHOWN ARE GIVEN FOR GUIDANCE ONLY. LOCATIONS AND/OR DEPTHS MAY NOT BE ACCURATELY REPRESENTED AND OTHER SERVICES MAY EXIST ON SITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE POSITION OF ALL SERVICES ON SITE.

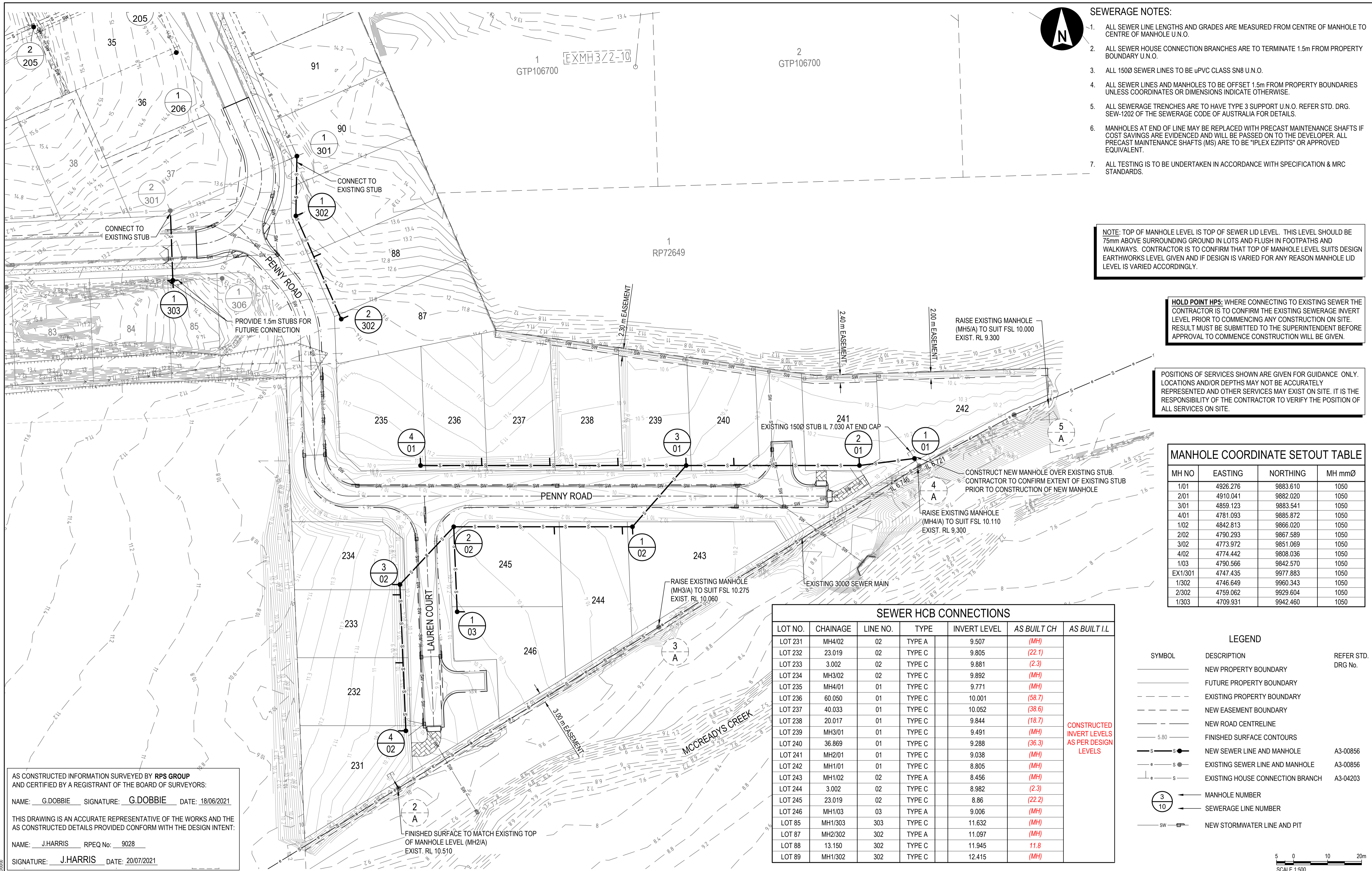
LEGEND

SYMBOL	DESCRIPTION	REFER STD. DRG No.
—	NEW PROPERTY BOUNDARY	
- - -	FUTURE PROPERTY BOUNDARY	
---	EXISTING PROPERTY BOUNDARY	
- - -	NEW EASEMENT BOUNDARY	
—	NEW ROAD CENTRELINE	
5.80	FINISHED SURFACE CONTOURS	
— W — W —	NEW WATER MAIN	
■	NEW FIRE HYDRANT, STOP VALVE AND ENDCAP	A3-00837 WA3-838
—	ADJACENT WATER CONNECTION	A3-00840
—	WATER CONNECTION CROSSING	A3-00840
— W —	EXISTING WATER MAIN	
— S — S —	NEW SEWER LINE AND MANHOLE	
— S — ●	EXISTING SEWER LINE AND MANHOLE	
— SW —	NEW STORMWATER LINE AND PIT	
— SW —	EXISTING STORMWATER LINE	
— E — E —	ELECTRICAL ROAD CROSSING (CONDUITS TO BE INSTALLED BY CIVIL CONTRACTOR)	
— E — E —	UNDERGROUND COMBINED SERVICES TRENCH AND ELECTRICAL PILLAR (CONDUITS TO BE INSTALLED BY ELECTRICAL CONTRACTOR)	
— E —	EXISTING ELECTRICAL LINE	
— FO —	NEW NBN CONDUIT, PIT LOCATION AND TYPE	
☀	NEW LIGHT POLE	
○	NEW STREET TREE	

THIS DRAWING IS AN ACCURATE REPRESENTATIVE OF THE WORKS AND THE AS CONSTRUCTED DETAILS PROVIDED CONFORM WITH THE DESIGN INTENT:
 CERTIFIED BY **J.HARRIS** RPEQ 9028
 AURECON JUSTIN HARRIS

CLIENT	REV	DATE	REVISION DETAILS	APPROVED	DRAWN	DESIGNED	PROJECT	AS CONSTRUCTED
SUGARVIEW DEVELOPMENTS PTY LTD No.2					J.BANKS	M.BOTEFUHR	SUGARVIEW ESTATE - STAGE 7	PROJECT No.
	2	20/07/21	AS CONSTRUCTED	J.HARRIS			TITLE	229444-008
	1	13/01/21	REISSUED FOR CONSTRUCTION	J.HARRIS	CHECKED		OVERALL SERVICES PLAN	SCALE
	0	23/07/14	FOR CONSTRUCTION	D.NELSON	C.RYAN			1:500
	A	30/01/14	FOR APPROVAL	D.NELSON	APPROVED			DRAWING No.
					J.HARRIS	DATE		SK-ST7-C-014
						13/01/21		SIZE
						RPEQ		A1
						9028		REV
								2





- SEWERAGE NOTES:**
1. ALL SEWER LINE LENGTHS AND GRADES ARE MEASURED FROM CENTRE OF MANHOLE TO CENTRE OF MANHOLE U.N.O.
 2. ALL SEWER HOUSE CONNECTION BRANCHES ARE TO TERMINATE 1.5m FROM PROPERTY BOUNDARY U.N.O.
 3. ALL 150Ø SEWER LINES TO BE uPVC CLASS SN8 U.N.O.
 4. ALL SEWER LINES AND MANHOLES TO BE OFFSET 1.5m FROM PROPERTY BOUNDARIES UNLESS COORDINATES OR DIMENSIONS INDICATE OTHERWISE.
 5. ALL SEWERAGE TRENCHES ARE TO HAVE TYPE 3 SUPPORT U.N.O. REFER STD. DRG. SEW-1202 OF THE SEWERAGE CODE OF AUSTRALIA FOR DETAILS.
 6. MANHOLES AT END OF LINE MAY BE REPLACED WITH PRECAST MAINTENANCE SHAFTS IF COST SAVINGS ARE EVIDENCED AND WILL BE PASSED ON TO THE DEVELOPER. ALL PRECAST MAINTENANCE SHAFTS (MS) ARE TO BE "IPLEX EZIPITS" OR APPROVED EQUIVALENT.
 7. ALL TESTING IS TO BE UNDERTAKEN IN ACCORDANCE WITH SPECIFICATION & MRC STANDARDS.

NOTE: TOP OF MANHOLE LEVEL IS TOP OF SEWER LID LEVEL. THIS LEVEL SHOULD BE 75mm ABOVE SURROUNDING GROUND IN LOTS AND FLUSH IN FOOTPATHS AND WALKWAYS. CONTRACTOR IS TO CONFIRM THAT TOP OF MANHOLE LEVEL SUITS DESIGN EARTHWORKS LEVEL GIVEN AND IF DESIGN IS VARIED FOR ANY REASON MANHOLE LID LEVEL IS VARIED ACCORDINGLY.

HOLD POINT HPS: WHERE CONNECTING TO EXISTING SEWER THE CONTRACTOR IS TO CONFIRM THE EXISTING SEWERAGE INVERT LEVEL PRIOR TO COMMENCING ANY CONSTRUCTION ON SITE. RESULT MUST BE SUBMITTED TO THE SUPERINTENDENT BEFORE APPROVAL TO COMMENCE CONSTRUCTION WILL BE GIVEN.

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MANHOLE COORDINATE SETOUT TABLE

MH NO	EASTING	NORTHING	MH mmØ
1/01	4926.276	9883.610	1050
2/01	4910.041	9882.020	1050
3/01	4859.123	9883.541	1050
4/01	4781.093	9885.872	1050
1/02	4842.813	9866.020	1050
2/02	4790.293	9867.589	1050
3/02	4773.972	9851.069	1050
4/02	4774.442	9808.036	1050
1/03	4790.566	9842.570	1050
EX1/301	4747.435	9977.883	1050
1/302	4746.649	9960.343	1050
2/302	4759.062	9929.604	1050
1/303	4709.931	9942.460	1050

SEWER HCB CONNECTIONS

LOT NO.	CHAINAGE	LINE NO.	TYPE	INVERT LEVEL	AS BUILT CH	AS BUILT I.L.
LOT 231	MH4/02	02	TYPE A	9.507	(MH)	
LOT 232	23.019	02	TYPE C	9.805	(22.1)	
LOT 233	3.002	02	TYPE C	9.881	(2.3)	
LOT 234	MH3/02	02	TYPE C	9.892	(MH)	
LOT 235	MH4/01	01	TYPE C	9.771	(MH)	
LOT 236	60.050	01	TYPE C	10.001	(58.7)	
LOT 237	40.033	01	TYPE C	10.052	(38.6)	
LOT 238	20.017	01	TYPE C	9.844	(18.7)	
LOT 239	MH3/01	01	TYPE C	9.491	(MH)	
LOT 240	36.869	01	TYPE C	9.288	(36.3)	
LOT 241	MH2/01	01	TYPE C	9.038	(MH)	
LOT 242	MH1/01	01	TYPE C	8.805	(MH)	
LOT 243	MH1/02	02	TYPE A	8.456	(MH)	
LOT 244	3.002	02	TYPE C	8.982	(2.3)	
LOT 245	23.019	02	TYPE C	8.86	(22.2)	
LOT 246	MH1/03	03	TYPE A	9.006	(MH)	
LOT 85	MH1/303	303	TYPE C	11.632	(MH)	
LOT 87	MH2/302	302	TYPE A	11.097	(MH)	
LOT 88	13.150	302	TYPE C	11.945	(11.8)	
LOT 89	MH1/302	302	TYPE C	12.415	(MH)	

LEGEND

- | | | |
|--------|----------------------------------|--------------------|
| SYMBOL | DESCRIPTION | REFER STD. DRG No. |
| --- | NEW PROPERTY BOUNDARY | |
| --- | FUTURE PROPERTY BOUNDARY | |
| --- | EXISTING PROPERTY BOUNDARY | |
| --- | NEW EASEMENT BOUNDARY | |
| --- | NEW ROAD CENTRELINE | |
| 5.80 | FINISHED SURFACE CONTOURS | |
| —s—s— | NEW SEWER LINE AND MANHOLE | A3-00856 |
| —e—e— | EXISTING SEWER LINE AND MANHOLE | A3-00856 |
| —e—s— | EXISTING HOUSE CONNECTION BRANCH | A3-04203 |
| ○ | MANHOLE NUMBER | |
| — | SEWERAGE LINE NUMBER | |
| —sw— | NEW STORMWATER LINE AND PIT | |

AS CONSTRUCTED INFORMATION SURVEYED BY RPS GROUP AND CERTIFIED BY A REGISTRANT OF THE BOARD OF SURVEYORS:
 NAME: G.DOBBIE SIGNATURE: G.DOBBIE DATE: 18/06/2021
 THIS DRAWING IS AN ACCURATE REPRESENTATIVE OF THE WORKS AND THE AS CONSTRUCTED DETAILS PROVIDED CONFORM WITH THE DESIGN INTENT:
 NAME: J.HARRIS RPEQ No: 9028
 SIGNATURE: J.HARRIS DATE: 20/07/2021



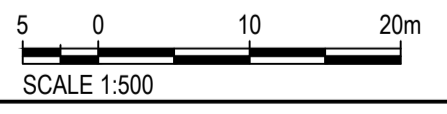
CLIENT
 SUGARVIEW DEVELOPMENTS
 PTY LTD No.2.

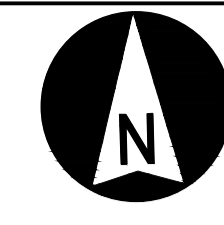
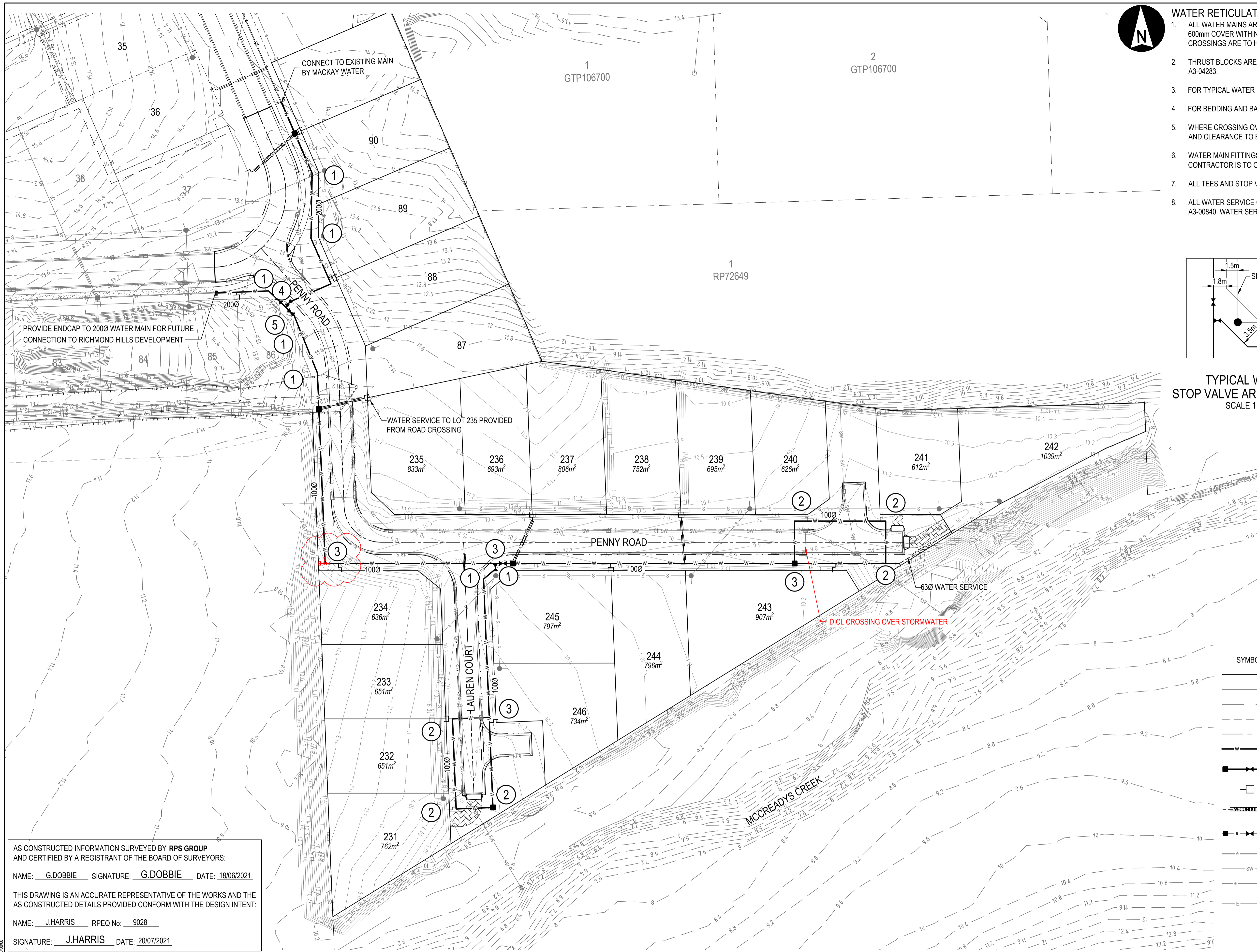
REV	DATE	REVISION DETAILS	APPROVED
2	20/07/21	AS CONSTRUCTED	J.HARRIS
1	13/01/21	REISSUED FOR CONSTRUCTION	J.HARRIS
0	23/07/14	FOR CONSTRUCTION	D.NELSON
A	30/01/14	FOR APPROVAL	D.NELSON

DRAWN	DESIGNED
J.BANKS	M.BOTEFUHR
CHECKED C.RYAN	
APPROVED J.HARRIS	

PROJECT
SUGARVIEW ESTATE - STAGE 7
TITLE
SEWERAGE RETICULATION PLAN

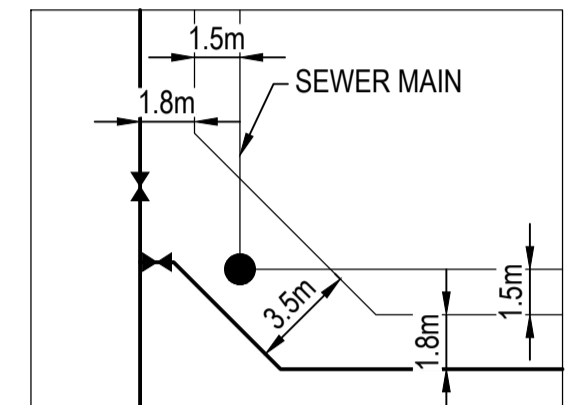
AS CONSTRUCTED
PROJECT No. 229444-008
SCALE 1:500
DRAWING No. SK-ST7-C-015
SIZE A1
REV 2





WATER RETICULATION NOTES:

- ALL WATER MAINS ARE TO BE CLASS 16 1000 & 2000 uPVC AS NOTED ON DRAWING WITH MIN. 600mm COVER WITHIN VERGE AND OFFSET 1.8m FROM PROPERTY BOUNDARIES U.N.O. ROAD CROSSINGS ARE TO HAVE MIN 1000mm COVER U.N.O. AS PER MRC STD. DRG. A3-00835
- THRUST BLOCKS ARE TO BE PROVIDED TO ALL WATER MAINS AS PER STD. DRG. A3-0836 AND A3-04283.
- FOR TYPICAL WATER RETICULATION LAYOUT REFER M.R.C. STD. DRG. A3-00833.
- FOR BEDDING AND BACKFILL TO WATER MAINS REFER M.R.C. STD. DRG. A3-00835.
- WHERE CROSSING OVER SERVICES SUCH AS STORMWATER DEFLECT WATER MAIN OVER. COVER AND CLEARANCE TO BE APPROVED BY MACKAY WATER.
- WATER MAIN FITTINGS SHOWN ON THIS PLAN ARE FOR INFORMATION PURPOSES ONLY. THE CONTRACTOR IS TO CONFIRM THAT ALL FITTINGS ARE SUITABLE.
- ALL TEES AND STOP VALVES ARE TO BE FLANGED.
- ALL WATER SERVICE CONNECTIONS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH STD DRG A3-00840. WATER SERVICES CROSSING ENVELOPERS ARE TO BE 100mm DIA.



TYPICAL WATER STOP VALVE ARRANGEMENT
SCALE 1:250

WATER MAIN FITTINGS LEGEND

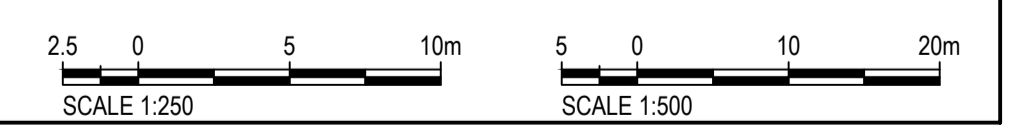
- ① 45.0° BEND
- ② 90.0° BEND
- ③ 100 - 100 x 100 TEE
- ④ 200 - 200 x 200 TEE
- ⑤ 200 - 100 REDUCER

ALL CONNECTIONS TO LIVE WATER SUPPLY AND SEWERAGE INFRASTRUCTURE MUST BE MADE BY WATER SERVICES AT DEVELOPER'S EXPENSE

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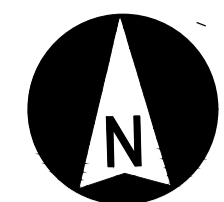
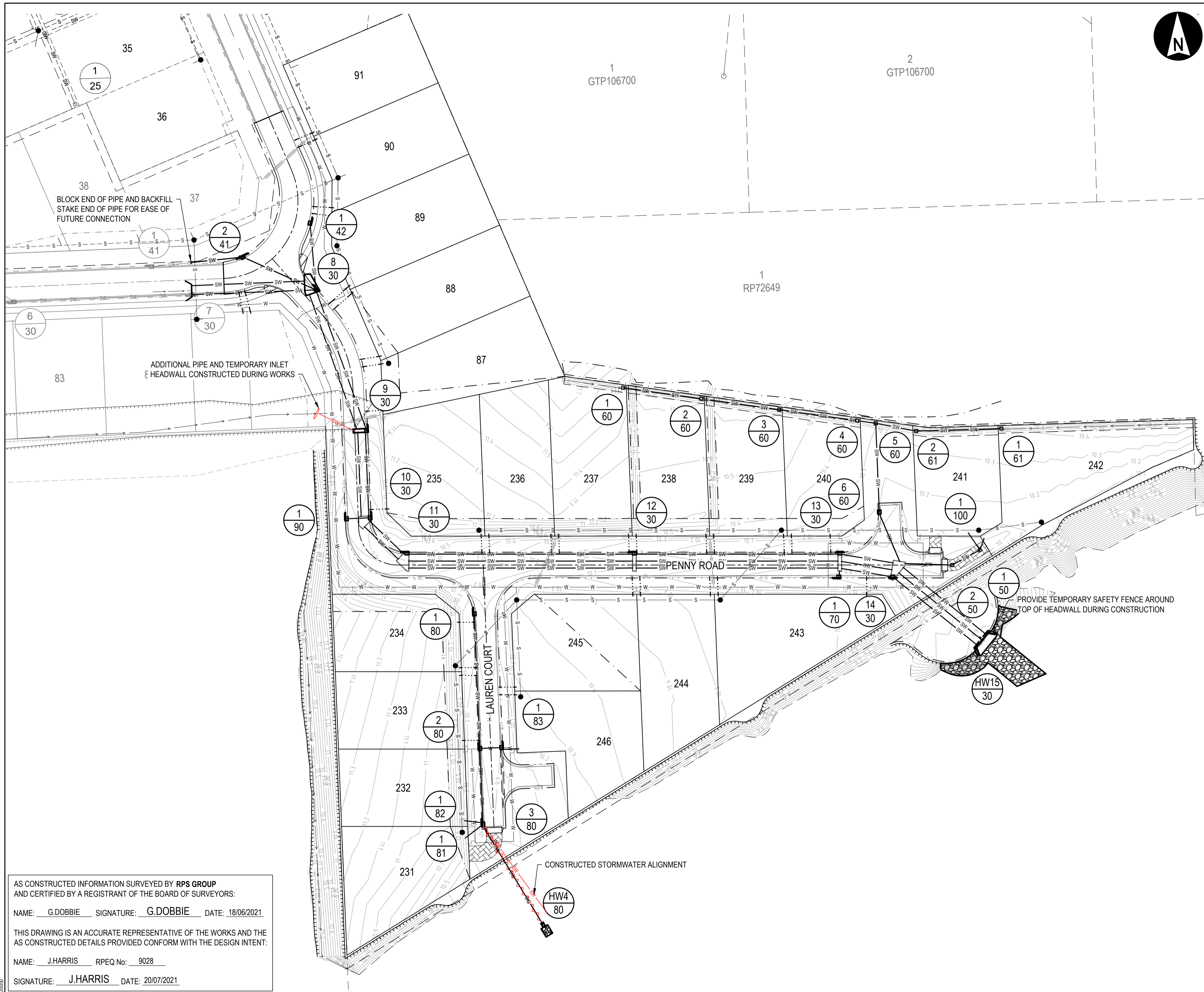
SYMBOL	DESCRIPTION	REFER STD. DRG No.
---	NEW PROPERTY BOUNDARY	
---	FUTURE PROPERTY BOUNDARY	
---	EXISTING PROPERTY BOUNDARY	
---	NEW EASEMENT BOUNDARY	
---	NEW ROAD CENTRELINE	
—W—W—	NEW WATER MAIN	
—H—H—	NEW FIRE HYDRANT, STOP VALVE AND ENDCAP	A3-00837 WA3-838
—C—C—	ADJACENT WATER CONNECTION	A3-00840
—X—X—	WATER CONNECTION CROSSING (REFER NOTE 8)	A3-00840
—E—E—	EXISTING WATER MAIN, FIRE HYDRANT AND STOP VALVE	
—S—S—	EXISTING SEWER LINE AND MANHOLE	
—SW—SW—	NEW STORMWATER LINE AND PIT	A3-00856
—E—E—	EXISTING STORMWATER LINE	
—E—E—	PROPOSED ELECTRICAL CONDUIT ALIGNMENT (REFER ELECTRICAL DESIGN)	



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 THIS DRAWING IS AN ACCURATE REPRESENTATIVE OF THE WORKS AND THE AS CONSTRUCTED DETAILS PROVIDED CONFORM WITH THE DESIGN INTENT:
 NAME: J.HARRIS RPEQ No: 9028
 SIGNATURE: J.HARRIS DATE: 20/07/2021

CLIENT	REV	DATE	REVISION DETAILS	APPROVED	DRAWN	DESIGNED	PROJECT	AS CONSTRUCTED
SUGARVIEW DEVELOPMENTS PTY LTD No.2					J.BANKS	M.BOTEFUHR	SUGARVIEW ESTATE - STAGE 7	PROJECT No.
					C.RYAN			229444-008
					J.HARRIS		WATER RETICULATION PLAN	SCALE
								1:500
								SIZE
								A1
								DRAWING No.
								SK-ST7-C-017
								REV
								3

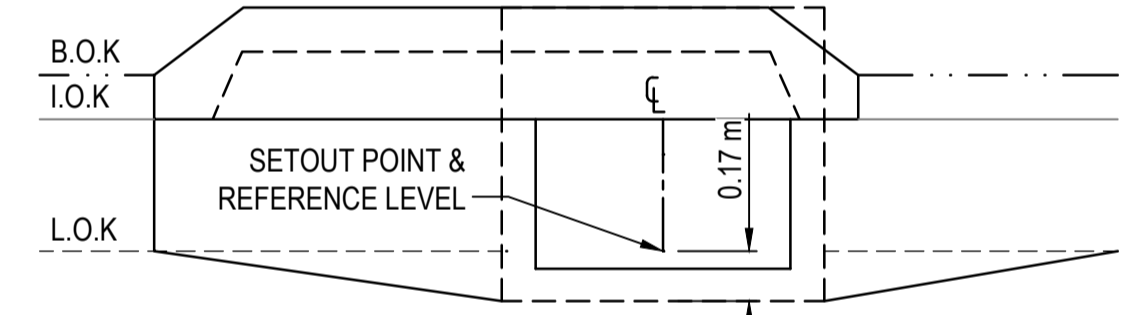




STORMWATER NOTES

1. ALL STORMWATER PIPES WITHIN ROAD RESERVES ARE TO BE CLASS 2 RUBBER RING JOINTED REINFORCED CONCRETE PIPES U.N.O. ALL STORMWATER PIPES WITHIN ALLOTMENTS ARE TO BE uPVC DWV SN4 OR APPROVED EQUIVALENT U.N.O.
2. COORDINATES AND REFERENCE LEVELS FOR GULLY PITS ARE TO LIP OF KERB AT CENTRELINE OF CHAMBER, AND CENTRE OF CHAMBER FOR FIELD PITS. (UNLESS SHOWN OTHERWISE ON DETAILS PLAN)
3. STORMWATER PIPE LENGTHS GIVEN ARE CALCULATED FROM CENTRE LINE OF CHAMBER U.N.O. (CONTRACTOR IS TO CALCULATE ACTUAL PIPE LENGTHS.)
4. FOR STORMWATER PIPE INVERT LEVELS REFER DRG. SK-ST7-C-019.
5. FOR PIPE BEDDING DETAILS REFER STD. DRG. CS SW 15 U.N.O.
6. CLASS OF STORMWATER PIPES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE CONCRETE PIPE ASSOCIATION OF AUSTRALASIA FOR IN SERVICE CONDITIONS ONLY. CONTRACTOR IS TO ENSURE CONSTRUCTION METHODS USED ON SITE DO NOT COMPROMISE THE INTEGRITY OF THE SPECIFIED PIPE.
7. WHERE NEW SERVICES PASS EXISTING SERVICES / STRUCTURES THE CONTRACTOR IS TO CONFIRM DEPTH / LOCATION OF EXISTING SERVICES / STRUCTURES BEFORE COMMENCING ANY WORK. REFER TO SUPERINTENDENT IF REQUIRED SEPARATION CANNOT BE ACHIEVED.
8. ALL TEMPORARY STORMWATER INLET / OUTLET HEADWALLS ARE TO HAVE TEMPORARY SAFETY FENCES INSTALLED TO THE APPROVAL OF THE SUPERINTENDENT.
9. ALLOTMENT PITS TO BE PLACED 0.80m FROM PROPERTY BOUNDARIES.
10. ROOF DRAINAGE OUTLETS ARE TO BE PROVIDED ON EACH SIDE OF ALLOTMENT (WHERE SHOWN) BETWEEN 0.5m & 1.0m FROM SIDE BOUNDARY. THE OUTLET SHALL BE FITTED WITH AN ALUMINUM KERB ADAPTER. THE PIPES SHALL EXTEND 0.5m INTO PROPERTY. ALL PIPES TO BE 900 uPVC, LAID @ 1 in 100.
11. LOCATION OF 1500 ROOF DRAINAGE OUTLETS TO BE STAKED FOR FUTURE REFERENCE.

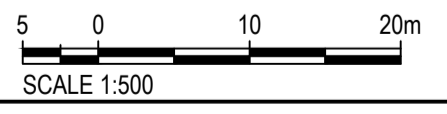
NOTE: CONTRACTOR MAY NOMINATE ALTERNATIVE PIT TYPE FOR APPROVAL BY COUNCIL. PITS MUST BE INSTALLED "KERB IN LINE" NOT "LIP IN LINE" TO AVOID PIPE CLASHES WITH LIGHT POLE FOOTINGS.



MAX Q KERBWAY INLET DETAIL
N.T.S

LEGEND

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- - -	EXISTING PROPERTY BOUNDARY	
- - -	NEW EASEMENT BOUNDARY	
—	NEW ROAD CENTRELINE	
5.80	FINISHED SURFACE CONTOURS	
— SW —	NEW STORMWATER LINE	
—	NEW MAX Q KERBWAY INLET	CS SW 13
— e — SW —	EXISTING STORMWATER LINE	
—	NEW ROOFWATER DRAINAGE OUTLET (REFER NOTE SW11.)	
1 70	SW PIT NUMBER	
—	SW LINE NUMBER	
— s —	NEW SEWER LINE AND MANHOLE	
— w —	NEW WATER MAIN	



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					CHECKED C.RYAN			229444-008
					APPROVED		TITLE	SCALE
	2	20/07/21	AS CONSTRUCTED	J.HARRIS			STORMWATER DRAINAGE PLAN	1:500
	1	13/01/21	REISSUED FOR CONSTRUCTION	J.HARRIS	J.HARRIS	DATE 13/01/21		SIZE A1
	0	23/07/14	FOR CONSTRUCTION	D.NELSON		RPEQ 9028		DRAWING No.
	A	30/01/14	FOR APPROVAL	D.NELSON	J.HARRIS			SK-ST7-C-018
								REV
								2

