

TILLERMAN

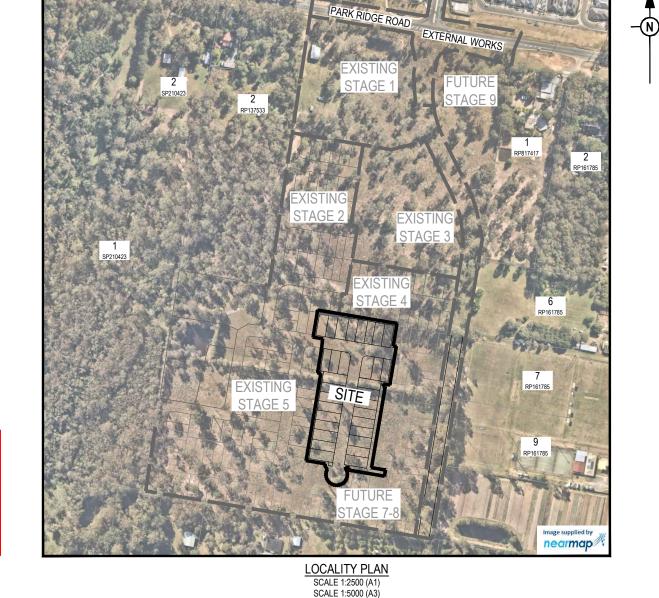
PARK RIDGE

PROPOSED RESIDENTIAL DEVELOPMENT

STAGE 6 OPERATIONAL WORKS 133-159 PARK RIDGE ROAD, PARK RIDGE FOR 'HB PARK RIDGE'

DRAWING LIST

SEWERA	GE AND WATER RETICULATION
22-0447-300	SEWERAGE AND WATER RETICULATION COVER PLAN
22-0447-301	SEWERAGE AND WATER RETICULATION GENERAL NOTES
22-0447-302	SEWERAGE AND WATER RETICULATION LIVE WORKS DETAILS
22-0447-303	SEWERAGE LAYOUT PLAN
22-0447-304	SEWERAGE LONGITUDINAL SECTIONS SHEET 1 OF 3
22-0447-305	SEWERAGE LONGITUDINAL SECTIONS SHEET 2 OF 3
22-0447-306	SEWERAGE LONGITUDINAL SECTIONS SHEET 3 OF 3
22-0447-307	WATER RETICULATION LAYOUT PLAN
22-0447-308	FIRE HYDRANT REACH LAYOUT PLAN



ENGINEER'S CERTIFICATION

- Dan Collins, hereby ce The information contained in this drawing / document is in compliance with approv
- drawings and design.
- The new water and sewerage works defined by this drawing have been designed a
- constructed in accordance with the SEQ code. This generally represents an accurate record of as-constructed works
- I accept responsibility for the information contained in this drawing / document.

S_____

PEQ (signature) RPEQ No. 18631 Date: 09/10/24

ΝN	REVISION DETAILS	DRAWN	STATUS				SCALE	CLIENT	PROJECT NAME	
	ISSUED FOR CONSTRUCTION	1								
)	AS CONSTRUCTED	4	AS CONS	TRUCTED					(\cap)	THEFDAAA
		1				'olliere	1:2500 50 0 50 100 A1	HE HB Land		TILLERMA
		L					1:5000 A3			
		DESIGN	APPROVED		DATE 9.10.24		1:5000 A3			PARK RIDGE
		4	DANIEL COLLINS	RPEQ 18631	9.10.24					TARK RIDUL
		4						ASSOCIATED CONSULTANT		
		1						SAUNDERS HAVILL GROUP		STAGE 6
		1							400.450	
		1	FOR AND ON BEHALF OF COLLIERS INTER	NATIONAL ENGINEERING & D	DESIGN PTY LTD			PH: 1300 123 744	133-159	PARK RIDGE ROAD, PARK RIDGE

ESTATE/S	TAGE		TILLERMAN STAGE 6			
CLIENT			HB PARK RIDGE			
LOGAN W	ATER APPLIC	ATION No.	COM/36/2	2021		
LOGAN W	ATER APPRO	VAL DATE				
No. OF AL	LOTMENTS		32			
	AS	SET REGIST	ER - SEWE	RAGE		
	DIAMETER	MAT	ERIAL	LEN	GTH	
MAINS	DIAMETER	DESIGN	CONST	DESIGN	CONST	
	DN150	uPVC SN8	-	-474m	457m	
	DN225	uPVC SN8	-	-	-	
	ASSET I	REGISTER - V	VATER RET	ICULATION		
		MAT	ERIAL	LENGTH		
	DIAMETER	DESIGN	CONST	DESIGN	CONST	
MAINS	DN150	PE100 PN16	-	265m -	264m	
	DN180	PE100 PN16	-	-	-	
	DN250	PE100 PN16	-	-	-	
		MAT	ERIAL	LENGTH		
	DIAMETER	DESIGN	CONST	DESIGN	CONST	
SERVICES	DN25	PE100 PN16	-	-26m -	16m	
	2 x DN25	PE100 PN16	-	-	133m	
	DN32	PE100 PN16	-	-42m -		
	DN40	PE100 PN16	-	-97m -		
	DIAMETER	NUM	/BER			
	DIAWETER	DESIGN	CONST			
METERS	20Ø	-31				
	25Ø	-	-			
	32Ø	-	-			

SEWERAGE AND WATER JLATION COVER PLAN

SEWE	A N	N A	D	I D			T
RETICU		IVI	R	LE	L		
			GE	RID	K	A R	P
PROJECT No.				E 6	TAC	S	

22-0447 300

2

GENERAL NOTES:

- THE CONTRACTOR SHALL SUPPLY ALL LABOR, MATERIALS, PLANT AND EQUIPMENT TO CONSTRUCT THE WORKS AS DOCUMENTED AND STRICTLY IN ACCORDANCE WITH THE RELEVANT AUTHORITY STANDARDS, SPECIFICATIONS AND REQUIREMENTS
- EXISTING SERVICES RELEVANT TO THE PROJECT HAVE BEEN CONSIDERED THROUGHOUT DESIGN AND IS BASED 2. ON SURVEY INFORMATION PROVIDED BY THE SURVEYOR AND THE CONTRACTOR. THE RPEQ WHO CERTIFIED THE DESIGN OR THE PRINCIPAL'S CONSTRUCTION RPEQ HAVE RELIED UPON THIS INFORMATION TO INFORM THE DESIGN. THE CONTRACTOR SHALL VERIFY THE POSITION OF ANY UNDERGROUND SERVICES WITHIN THE AREAS OF WORKS AND SHALL BE RESPONSIBLE FOR MAKING GOOD ANY DAMAGE THERETO. ANY ALTERATION WORKS TO SERVICES WILL BE CARRIED OUT ONLY BY THE SERVICE OWNER AUTHORITY UNLESS APPROVED OTHERWISE.
- ALL DESIGN AND CONSTRUCTION ACTIVITIES UNDERTAKEN SHALL COMPLY WITH CURRENT WORKPLACE HEALTH AND SAFETY REQUIREMENTS AND LEGISLATION.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL RELEVANT LOCAL AUTHORITY PERMITS
- THE CONTRACTOR SHALL NOT COMMENCE THE DEMOLITION OF ANY EXISTING BUILDINGS AND/OR STRUCTURES 5 WITHOUT APPROVAL FROM THE SUPERINTENDENT
- THE CONTRACTOR SHALL APPLY INDUSTRY BEST PRACTICE SO WORKS SHALL NOT DISTURB OR AFFECT NEARBY RESIDENTS EITHER BY DUST, NOISE, FLOODING OR DISCONNECTION OF SERVICES. CONTRACTOR TO ENSURE THAT ACCESS AND SERVICES TO EXISTING PROPERTIES ARE AVAILABLE AT ALL TIMES.
- THE CERTIFICATION OF THIS DESIGN IS BASED ON SURVEY AND POTHOLE INFORMATION PROVIDED BY THE SURVEYOR AND/OR CONTRACTOR AT THE TIME OF DESIGN. PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR SHALL VERIFY LEVELS OF EXISTING SERVICE CROSSINGS AND CONNECTION POINTS AND NOTIFY THE RPEQ WHO CERTIFIED THE DESIGN OR THE PRINCIPAL'S CONSTRUCTION RPEQ OF ANY DISCREPANCIES BETWEEN ACTUAL AND PROPOSED DESIGN LEVELS. THE CERTIFICATION OF THIS DESIGN IS BASED ON SURVEY AND POTHOLE INFORMATION PROVIDED BY THE SURVEYOR AND CONTRACTOR AT THE TIME OF DESIGN.
- THE CONTRACTOR SHALL VERIFY LEVELS OF EXISTING SERVICE CROSSINGS AND CONNECTION POINTS PRIOR TO COMMENCEMENT OF WORKS AND NOTIFY THE RPEQ WHO CERTIFIED THE DESIGN OR THE PRINCIPAL'S CONSTRUCTION RPEQ OF ANY DISCREPANCIES BETWEEN ACTUAL AND PROPOSED DESIGN LEVELS. THE CERTIFICATION OF THIS DESIGN IS BASED ON SURVEY AND POTHOLE INFORMATION PROVIDED BY THE SURVEYOR AND CONTRACTOR AT THE TIME OF DESIGN
- THESE ENGINEERING DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE APPROVED VEGETATION MANAGEMENT PLAN, WHERE APPLICABLE. WHEN IN DOUBT, ALL EXISTING TREES ARE TO REMAIN UNLESS DIRECTED OTHERWISE
- HOLD POINT: ONCE THE BASE OF MANHOLES HAVE BEEN POURED, CONSTRUCTION SHALL ONLY RE-COMMENCE ONCE THE SUPERINTENDENT AND/OR ENGINEER HAVE INSPECTED THE WORKS.
- THE CONTRACTOR SHALL NOTE DURING THE COURSE OF THE WORKS WHEN JOINT INSPECTIONS WITH THE AUTHORITY AND THE SUPERINTENDENT ARE REQUIRED. THESE INCLUDE PRE-STARTS, SUBGRADES, PRE-SEALS, CLEARING, AND OTHER SUCH INSPECTIONS AS NOMINATED DURING THE PRE-START. IN THE APPROVAL AND THE SPECIFICATIONS. THE CONTRACTOR SHALL ENSURE NO WORKS PROCEED PAST THE INSPECTION POINT UNTIL THE JOINT INSPECTION HAS BEEN SUCCESSFULLY COMPLETED.

ENVIRONMENTAL CONDITIONS

VEGETATION PROTECTION

- TREES LOCATED ALONG THE FOOTPATH SHALL BE, TRANSPLANTED PRIOR TO CONSTRUCTION, OR REPLACED IF DESTROYED
- WHEN WORKING WITHIN 4m OF TREES, RUBBER OR HARDWOOD GIRDLES SHALL BE CONSTRUCTED WITH 1.8m B BATTENS CLOSELY SPACED AND ARRANGED VERTICALLY FROM GROUND LEVEL. GIRDLES SHALL BE STRAPPED TO TREES PRIOR TO CONSTRUCTION AND REMAIN UNTIL COMPLETION.
- TREE ROOTS SHALL BE TUNNELED UNDER, RATHER THAN SEVERED. IF ROOTS ARE SEVERED THE DAMAGED AREA SHALL BE TREATED WITH A SUITABLE FUNGICIDE. CONTACT RELEVANT COUNCIL ARBORIST FOR FURTHER ADVICE
- D. ANY TREE LOPPING REQUIRED SHOULD BE UNDERTAKEN BY AN APPROVED ARBORIST.

SOIL

- TOPSOIL AND SUBSOIL SHALL BE STOCKPILED SEPARATELY. Α.
- CARE SHALL BE TAKEN TO PREVENT SEDIMENT FROM ENTERING THE STORMWATER SYSTEM. THIS MAY B. INVOLVE
- PLACING APPROPRIATE SEDIMENT CONTROLS AROUND STOCKPILES.

CREEK CROSSINGS

- SILTATION CONTROL MEASURES SHALL BE PLACED DOWNSTREAM OF ANY EXCAVATION WORK.
- APPROPRIATE SEDIMENT CONTROLS SHALL BE USED TO PREVENT SEDIMENT FROM ENTERING THE CREEK. В
- С NO SOIL SHALL BE STOCKPILED WITHIN 5m OF THE CREEK.

REHABILITATION

- PREDISTURBANCE SOIL PROFILES AND COMPACTION LEVELS SHALL BE REINSTATED. Α.
- PREDISTURBANCE VEGETATION PATTERNS SHALL BE RESTORED. R

SEWERAGE NOTES

- ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT WSAA GRAVITY SEWERAGE CODE OF AUSTRALIA SPECIFICATIONS AND STANDARD - SOUTH FAST QUEENSLAND SERVICE PROVIDERS EDITION
- 2 UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS. THE CONSTRUCTION OF THE SEWERAGE WORK SHOWN ON THIS DRAWING SHALL BE SUPERVISED BY AN ENGINEER WHO 3. HAS RPEQ REGISTRATION. SEWERAGE WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT INTO THE SEQ SERVICE PROVIDER SEWERAGE SYSTEM.
- ALL WORKS ON EXISTING SEWER MAINS ARE TO BE CARRIED OUT BY LOGAN CITY COUNCIL AT THE DEVELOPER'S EXPENSE 4 OR AS DIRECTED BY LOGAN CITY COUNCIL.
- ALL PIPES AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE "ACCEPTED PRODUCTS AND MATERIALS" LIST, 5. UNLESS APPROVED BY THE WATER AUTHORITY.
- 6
- WHERE PIPES ARE LAID IN FILL, THE FILLING SHALL BE CARRIED OUT IN LAYERS NOT EXCEEDING 300mm (LOOSE) IN DEPTH 7. AND SHALL BE COMPACTED UNTIL THE COMPACTION IS NOT LESS THAN 95% OF THE MATERIALS MAXIMUM COMPACTION WHEN TESTED IN ACCORDANCE WITH A.S.1289 (MODIFIED COMPACTION). TESTING SHALL BE CARRIED OUT AFTER EACH ALTERNATE LAYER. IN ALL SUCH CASES APPROVAL OF CONSTRUCTED SEWERS WILL NOT BE ISSUED BY THE SEQ SERVICE PROVIDER UNLESS CERTIFICATES ARE PRODUCED CERTIFYING THAT THE REQUIRED COMPACTION HAS BEEN ACHIEVED.
- 9
- 10. EACH ALLOTMENT SHALL BE SERVED BY A 100Ø PVC PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A 150Ø PVC PROPERTY CONNECTION SHALL BE PROVIDED. PROPERTY CONNECTIONS SHALL BE LOCATED WITHIN THE PROPERTY AS SHOWN IN THE DRAWINGS AND SHALL EXTEND INTO THE PROPERTY A MINIMUM OF 300mm (500mm FOR UNITY WATER) AND A MAXIMUM OF 750mm.
- 11. EXISTING ALLOTMENTS REQUIRING A PROPERTY CONNECTIONS FROM EXISTING SEWERS SHALL BE PROVIDED BY THE SEQ. SERVICE PROVIDER AT THE DEVELOPERS COST

ALL WATER AND SEWERAGE CONSTRUCTION SHALL ALL ENVIRONMENTAL PROTECTION MEASURES SHALL COMPLY WITH ALL QUEENSLAND LEGISLATION BE IMPLEMENTED PRIOR TO ANY CONSTRUCTION WORK COMMENCING, INCLUDING CLEARING

PROPERTY CONNECTIONS HAVE BEEN DESIGNED TO CONTROL THE REQUIRED SERVICE AREA OF EACH LOT AT A GRADE OF 1.60 AND A MAXIMUM DEPTH OF PROPERTY CONNECTION AT 1.5m UNLESS OTHERWISE STATED FOR JUNCTION DETAILS REFER SEQ-SEW-1104-1 AND SEQ-SEW-1105-1

Colliers

AS CONSTRUCTED

ND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN P

RPEQ 18631

DATE 9.10.24

DESIGN

DANIEL COLLINS

WATER RETICULATION NOTES

- 2

5

9

- STANDARDS. 3.
- BENCH MARK AND LEVELS TO AHD.

WHERE SEWERS HAVE A GRADE OF 1 IN 20 OR STEEPER, BULKHEADS, TRENCH STOPS AND TRENCH DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CLAUSE 9.10 OF THE SEQ SEWER CODE AND DRG'S SEQ-SEW-1206-1 AND 1207-1.

SEWERS SHALL BE DISUSED/ABANDONED IN ACCORDANCE WITH PROCEDURE SET OUT IN THE GRAVITY SEWER CODE.

HB Land	PROJECT NAM
SAUNDERS HAVILL GROUP	
PH: 1300 123 744	133-1

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT WSAA WATER SUPPLY CODE OF AUSTRALIA SPECIFICATIONS AND STANDARD - SOLITH FAST QUEENSI AND SERVICE PROVIDERS EDITION UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN

THE CONSTRUCTION OF THE WATER RETICULATION WORK SHOWN ON THIS DRAWING MUST BE SUPERVISED BY AN ENGINEER WHO HAS RPEQ REGISTRATION. WORKS NOT COMPLYING WITH THIS REQUIREMENT WILL NOT BE PERMITTED TO CONNECT TO THE RETICULATION SYSTEM

ALL MATERIALS USED IN THE WORKS SHALL COMPLY WITH THE SEQ-SP'S ACCEPTED PRODUCTS AND MATERIALS LIST OR BE APPROPRIATELY SHOWN, LISTED AND DEFINED IN THE ENGINEERING SUBMISSION SO THAT THE ALTERNATIVE PRODUCT OR MATERIAL CAN BE ASSESSED AND IF APPROPRIATE, APPROVED BY THE SEQ-SP.

ADOPT LIP OF KERB OR SHOULDER OF ROAD AS PERMANENT LEVEL.

COVER ON MAINS FROM PERMANENT LEVEL TO BE AS SHOWN IN SEQ-WAT-1200-2.

CONDUITS TO BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.

A WATER METER SUPPLIED AT THE DEVELOPER'S COST. IS TO BE INSTALLED AT THE SERVICE POINT OF EACH LOT IN ACCORDANCE WITH THE STANDARD DRAWING FOR THE SEO-SP

HYDRANTS TO BE INSTALLED AT THE END OF ALL NEW MAINS WHERE REQUIRED FOR TESTING AND COMMISSIONING PURPOSES

ENGINEER'S CERTIFICATION

Dan Collins, hereby certify t

The information contained in this drawing / document is in compliance with approve drawings and design.

The new water and sewerage works defined by this drawing have been designed an constructed in accordance with the SEQ code.

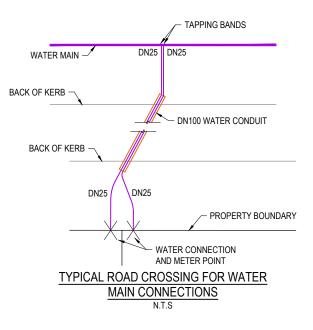
This generally represents an accurate record of as-constructed works

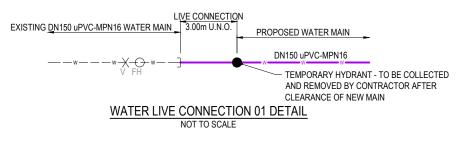
I accept responsibility for the information contained in this drawing / document

S- Coto

PEQ (signature) RPEQ No. 18631 Date: 09/10/24

NAME		DRAWING TITLE		
	TILLERMAN Park ridge	SEWERAGE A RETICULATION GE		-
2 150 5	STAGE 6 PARK RIDGE ROAD. PARK RIDGE	PROJECT No. 22-0447	DRAWING No. 301	REVISION
J-1J3 F	ANN NIDGE NOAD, FANN NIDGE			





WATER RETICULATION LIVE CONNECTIONS

STREET		ROAD 05			
LOCATION		LOT 602			
LENGTH	3.00m	TYPE OF MAIN	1500	Ø PVC-M	PN16
DATE COMMENCE	D —	DATE COMPLET	ΓED		
SIGNATURE					

LIVE SEWER WORKS

No.	DESCRIPTION	DIA. SEWER	EXISTING ASSET ID AT CONNECTION	MH/MS TYPE	COVER TYPE	LOT & PLAN No.	F.S.L.	E.S.L.	CONNECTION I.L.	DEPTH TO	ALTERATION TO EXISTING MH BENCHING REQUIRED (Y/N)
1 (A)	0.50m FROM EXISTING STUB, CONSTRUCTOR, TO LAY NEW SEWERS. AFTER CLEANSING, TESTING AND INSPECTION, NOTIFY AGENCY.	150Ø	-	-LINE- 2/26	-	602	-61.110- 62.84	-60.810-	-58.374- 60.19	-2.736 2.65	-
1 (B)	AGENCY TO REMOVE TEMPORARY END CAP ON EXISTING STUB AND MAKE LIVE CONNECTION AFTER SUCCESSFUL 'ON MAINTENANCE' INSPECTION.										
2 (A)	0.50m FROM EXISTING STUB, CONSTRUCTOR, TO LAY NEW SEWERS. AFTER CLEANSING, TESTING AND INSPECTION, NOTIFY AGENCY.	150Ø	-	-LINE- 1/27	-	630	-61.069 61.38	-62.75 -	-59.202 -59.61	- 1.867 - 1.77	-
2 (B)	AGENCY TO REMOVE TEMPORARY END CAP ON EXISTING STUB AND MAKE LIVE CONNECTION AFTER SUCCESSFUL 'ON MAINTENANCE' INSPECTION.										

REV DA	TE DES	SIGN I	DRAWN	REVISION DETAILS	DRAWN	STATUS	1		SCALE	CLIENT	PROJECT NA
1 27.0	5.24 (CL	CL	ISSUED FOR CONSTRUCTION							
2 09.1	0.24 (CL	BP	AS CONSTRUCTED		AS CONSTRUCTED					10
								- Conters			
	_				DESIGN	APPROVED DATE					
					-	APPROVED DATE DANIEL COLLINS RPEQ 18631 9.10.2	.24				
	_				-					ASSOCIATED CONSULTANT	
	_				-		- I <i>.</i>			SAUNDERS HAVILL GROUP	
	_				-	FOR AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINEERING & DESIGN PTY L				PH: 1300 123 744	133-

LIVE	WORKS NOTES:
1.	ALL LIVE WORKS SHALL BE UNDERTAKEN BY THE
	CONTRACTOR IN ACCORDANCE WITH AN
	APPROVED NETWORKS ACCESS PERMIT, UNDER
	THE SUPERVISION OF LCC, AT THE DEVELOPERS
	EXPENSE.
2.	LIVE WORKS CANNOT COMMENCE UNTIL ALL
	RELEVANT TEST CERTIFICATES HAVE BEEN
	PROVIDED AND ACCEPTED BY LCC.

ENGINEER'S CERTIFICATION

, Dan Collins, hereby certify that

The information contained in this drawing / document is in compliance with appro

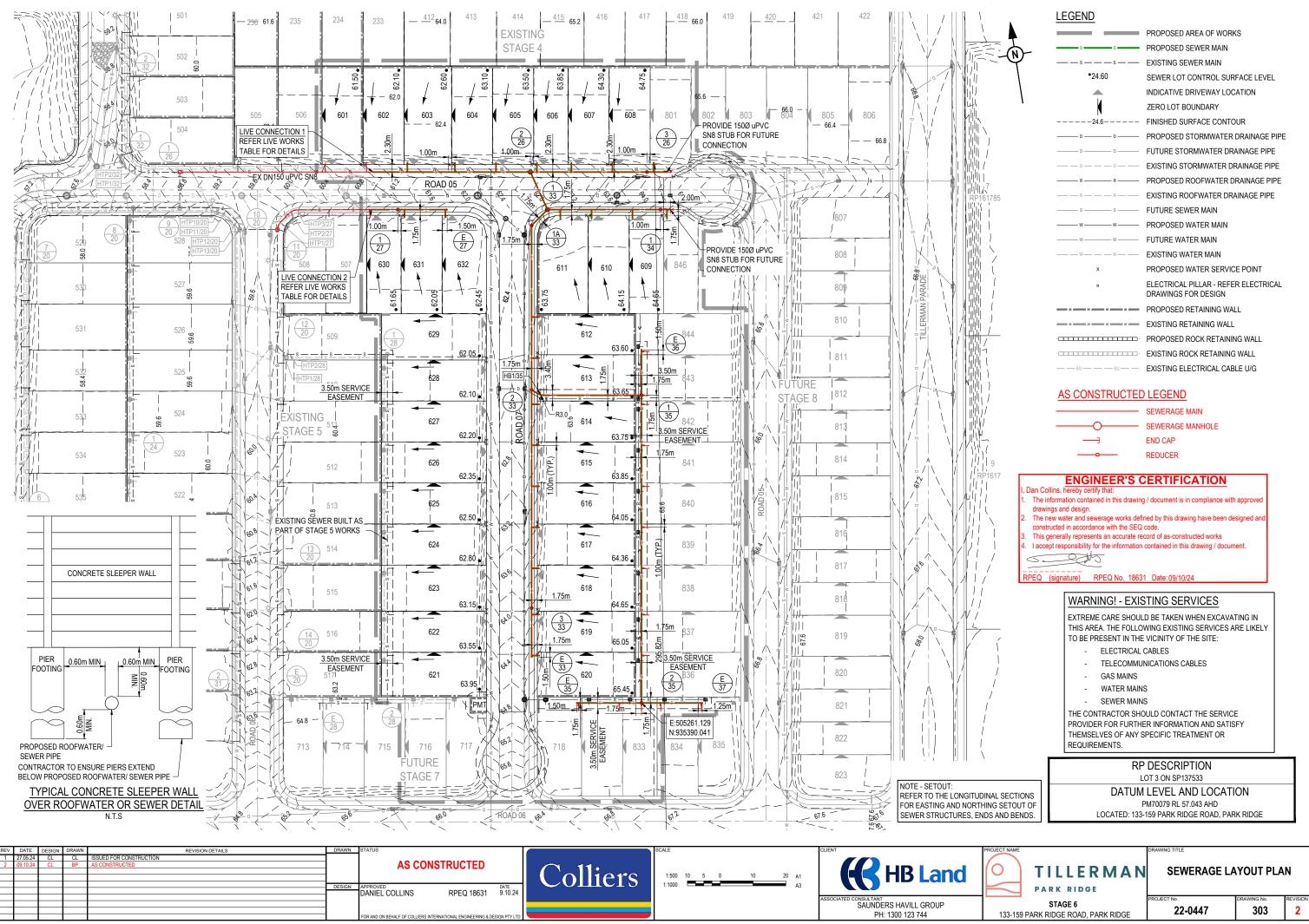
drawings and design. The new water and sewerage works defined by this drawing have been designed and constructed in accordance with the SEQ code.

This generally represents an accurate record of as-constructed works I accept responsibility for the information contained in this drawing / document.

S_____

RPEQ (signature) RPEQ No. 18631 Date: 09/10/24











STRUCTURE NAME	9/20 (1/	26)	2/26	3/26	M26) (5
STRUCTURE TYPE & DROP	-1050mm/	>	-1050mm		
	B P2- P2-		В		
	32 ²⁰		စို အ	Ô	
	<u>3 ∂ 7</u> <				<u>></u>
DEPTH TO HC		1,1,200 1,1,200 1,1,200 1,1,200 1,1,200 1,1,200 1,1,200 1,1,200 1,1,200 1,1,200	133 133 134 133 134 135 135 136 137 138 133 134 135 135 136 137 138 138 139 131 132 133 134 135 136 137 138 139 131	1.200 1.200 1.200	1.200 1.200 1.200
HC INVERT LEVEL		58.345 59.8139 59.81 59.81 60.79 60.79 60.79	61.26 61.76 61.72 62.11 62.11 62.11 62.13 62.59 62.59	63.04 63.04 63.104 63.125 64.125	64.059 64.189 64.448 64.568
HC TYPE					
HC LOT No.		604 601 5505 505 505 505 506 601 5505 505 505 505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 506 503 5505 500 500 500 500 500 500 500 50	605 608 607	804 802 802 804 804 804 804 807 807 807 807 807 807 807 807 807 807	809 808 809 808 810 810 810 808 810 810 810 810 810
CH FROM DS STRUCTURE		<u>17.709</u> 31.042 44.375 68.375 83.875	96.375 2.000 12.500	2.000	<u>31.100</u> <u>31.100</u> <u>51.100</u> <u>51.100</u>
STRUCTURE TYPES 22 = CAST-IN-SITU 1.5000 / 1.2000 22 = CAST-IN-SITU 1.5000 / 1.2000 4K3 = uPVC TYPE 'J' MAINTENANCE SHAFT MH DROP TYPES: 4K3 DROP TYPES: 4K5 PER SEQ STD DRG SEQ-SEW-1303-1 4K5 DROP TYPES: 4K5 - 2 > 750mm DROP THROUGH BULB 4K5 - 2 > 750mm DROP INTO RISER 10 TYPES 3 = NON-TRAFFICABLE 2 = TRAFFICABLE 3 = NON-TRAFFICABLE 2 = TRAFFICABLE 2 = TRAFFICABLE 3 = NON-TRAFFICABLE 9 = TRAFFICABLE 9 = TRAFFICABLE 9 = TRAFFICABLE 9 = TRAFFICABLE <t< td=""><td>DI TOS SWD LINE</td><td>NIVW WILLIAM SEG LAND AND AND AND AND AND AND AND AND AND</td><td>FFER</td><td>PROVIDE 150Ø uPVC SN8 STUB FOR FUTURE CONNECTION</td><td>SWD BRIDGING REQUIRED - REFER NOTE FUTURE STAGE 8 WORKS</td></t<>	DI TOS SWD LINE	NIVW WILLIAM SEG LAND AND AND AND AND AND AND AND AND AND	FFER	PROVIDE 150Ø uPVC SN8 STUB FOR FUTURE CONNECTION	SWD BRIDGING REQUIRED - REFER NOTE FUTURE STAGE 8 WORKS
HERE A STORMWATER PIPE >= 600mm DIA ROSSES OVER A SEWER, THE TORMWATER PIPE SHALL BE SUPPORTED Y A BRIDGE STRUCTURE THAT SPANS THE EWER TRENCH. REFER PEAK URBAN STD RG S-100. DATUM RL(m)	53.0	EXISTING STAGE 5	56.0		
LAND USE PIPE DIA & TYPE	Ø150uPVC SN	-	Ø150uPVC SN8		
PIPE GRADE (1 in x)	1 IN 153	− 27.84 110 27.167	20.40 1 10 20.408	1 IN 81.082	1 IN 71.429
EMBEDMENT	_# TYPE 3	• • • • • • • • • • • • • • • • • • •	# TYPE 3	><	243
INCTION INVERT LEVEL	56.049 56.258		60.214		099C 70
EPTH TO INVERT	3.431 2.841 2.770	2.665	2.76 2 .710 2.65	2.220 2.122 2.122 2.12	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
		56.200	60.08 60.134 60.19 60.19		62.2580 62.5580 62.5580
ESIGN SURFACE LEVEL	068.83	T 7 2 0 0 0 0 0 0 0 0 0 0 0 0 0	62.84 62.84 62.84	84.13 84.13 86.13 86.13 86.13 86.13 86.146	655.515 665
XISTING SURFACE	8.241	999 980 980	62.467	63.680	65.111
	624 416 5 448	162 5			19
SETOUT	505147. 935562. 505149.	0988 0986 0987	505254.816 935555.277		935542.2
RUNNING CHAINAGE	00.10.900	106.89 106.87 106.875	21. 35.50 35.500	\$27 41.825	61.600 61
INE NUMBER	LINE 26		I		
DESIGN DRAWN 4 CL CL ISSUED FOR CONSTRUCTION 4 CL BP AS CONSTRUCTED	REVISION E	AS CONSTRUCTED	Colliers	SCALE 1:500 10 5 0 10 20 A1 1:1000 HORIZONTAL 1:50 1 0.5 0 1 2 A1	CLIENT PROJECT NAME
		DESIGN APPROVED DANIEL COLLINS RPEQ 18631 9 For and on behalf of colliers international engineering & design	.10.24	1:100 VERTICAL A3	ASSOCIATED CONSULTANT SAUNDERS HAVILL GROUP PH: 1300 123 744 133-1

REV 1

_		
5/2	26)	
~	>	
8		
>		
-		
-	ENGINEER'S	CERTIFICATION
	 Dan Collins, hereby certify that: The information contained in this draw drawings and design. The new water and sewerage works constructed in accordance with the S This generally represents an accurate 	wing / document is in compliance with approved defined by this drawing have been designed and EQ code. e record of as-constructed works tion contained in this drawing / document.
->		
>		
2.451		
63.442		
	65.894	
	64.651	
505320.308	5479.043	
505	266.700 935479.043	
	251	
NAME	TILLEDNAAN	DRAWING TITLE SEWERAGE LONGITUDINAL
_	TILLERMAN PARK RIDGE	SECTIONS SHEET 1 OF 3

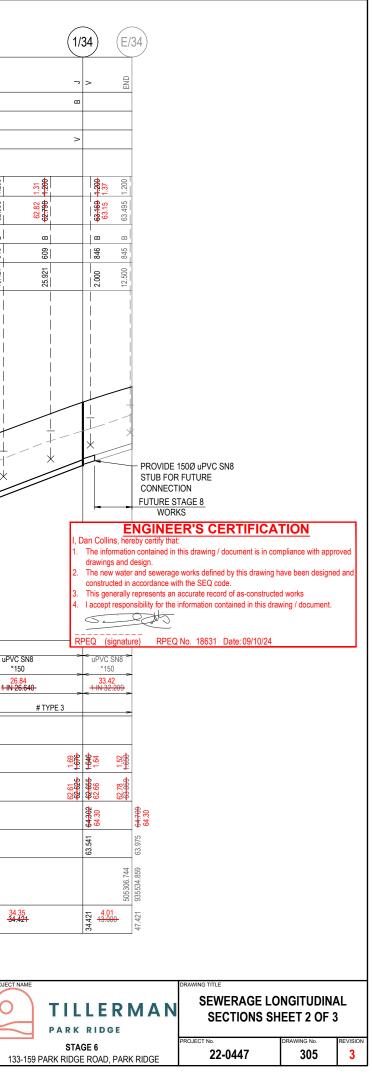
STAGE 6 133-159 PARK RIDGE ROAD, PARK RIDGE

22-0447

304

2

	8 R3.00 H R3.00 H	E/27 (2/26) (1/33) (1A/33) B B B B	(2/33)	(3/3	33) (E/33) 물	(1/33)
STRUCTURE TYPE & DROI	НТР НТР	 < <	~ >	. ح	>	P2-1
STRUCTURE LID TYPE	<u>m</u>			۵		m
JUNCT. LINE No.	50	 45° 45° 45° 		>		33
JUNCT. DROP TYPES	>					×
DEPTH TO HC	1.18 1.18 1.18		11.33 11.33 11.33 11.33 11.33 11.33 11.38	1,1,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2	1-21-2 1-23-2 1-	1.200
HC INVERT LEVEL			2515 155 155 101 101 101 101 101 101 101 101 101 101	130 130 130 130 130 130 130 130 130 130	1 1 1 1 1 1 1 1 1 1	<u>61.984</u>
HC TYPE		<u>ه</u> ا			<mark>ام س</mark> ام م	^{له} ف س
HC LOT No.	631 E 630 E	632	615 613 612	0 0 0	620	611
CH FROM DS STRUCTURE		14.500	27.357 <u>6</u> 40.174 <u>6</u> 4.403 <u>6</u>		1:500	3.921
STRUCTURE TYPES 52 = CAST-IN-SITU 1.5000 / 1.2000 22 = PRE-CAST CONCRETE 1.0500 WS = uPVC TYPE 'J1' MAINTENANCE SHAFT WH DROP TYPES: AS PER SEQ STD DRG SEQ-SEW-1303-1 MS DROP TYPES: MS - 8 30m DROP THROUGH BULB MS-V = 30mm DROP THROUGH BULB MS-V = 3750mm DROP INTO RISER JD TYPES 3 = NON-TRAFFICABLE D TRAFFICABLE			LINE 60 SW0 0375 CLR 0.339			
D(BD) = TRAFFICABLE WITH BOLT DOWN NOTE: PE LINING OF MANHOLES: WAINTENANCE HOLES ≥ 1500Ø IN DIA OR ≥ 4.0m IN DEPTH, REQUIRE PE LINED PROTECTIVE COATING					*	
# EMBEDMENT NOTE: PIPE EMBEDMENT & TRENCHFILL SHALL BE N ACCORDANCE WITH SEQ-SEW-1200-2, 1201-1 TO 1201-5. TYPE 3 SUPPORT IS PROPOSED UNTIL FINAL GEOTECHNICAL NVESTIGATIONS ARE COMPLETED PRIOR TO CONSTRUCTION.	EXISTING STAGE 5	2.222 TION 2 - REFER	JIRED - REFER NOTE			*
STORMWATER BRIDGING NOTE: WHERE A STORMWATER PIPE ≫ 600mm DIA CROSSES OVER A SEWER, THE STORMWATER PIPE SHALL BE SUPPORTED BY A BRIDGE STRUCTURE THAT SPANS THE SEWER TRENCH. REFER PEAK URBAN STD DRG S-100.	DETAILS					Ë
DATUM RL(m)	53.0	57.0				56.0
LAND USE	ROAD RESERVE	ROAD	ROAD RESERVE			<
PIPE DIA & TYPE	Ø150uPVC SN8		Ø150uPVC SN8			-
PIPE GRADE (1 in x)	1 IN 22.222 1 IN 22.222 1 IN 22.222 1 IN 22.222 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	63.15 1 IN 68.817 110.180 2 2 2 2 2 2 2 2 2 	178.75 <mark>- 1 IN 180</mark>	51.91 1 IN 51.114	24.90 1 IN 23.677	-
EMBEDMENT	# TYPE 3		# TYPE 3		>	<
JUNCTION INVERT LEVEL	227770	60.214	61.593			61.333
DEPTH TO INVERT	3.243 1.814 1.766 1.766 1.766 1.875 1.875 1.964 1.964 1.964 1.964 1.964	1245 2560 2560 2560 2560 2560 2561 1388 2560 2561 1388 13 1388 13 1388 13 1388 138	1.88 1.87 1.82	198 198	1.840 1.82 1.65 1.650	2.61 2.552 1.66
SEWER INVERT LEVEL	56.340 57.770 57.876 57.876 57.876 58.072 58.072 58.178 58.178 58.178 58.178 58.178 58.178 58.178	80.24 80.26 80.08 80.08 80.38 80.38 80.38 80.35 80.55 80	60.84 60.84 60.87 60.87	82,15 82,155 1656	62.185 62.20 62.80 62.818 62.818	60.38 60.38 61.33 61.33
DESIGN SURFACE LEVEL	59.584 5 59.584 5 59.642 5 59.946 5 59.946 5 59.946 5 51.41 5 60.141 5 5 61.138 5 61.38	4 4 5 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	62.69		64.02 64.033 - 64.02 64.02 64.45 64.45	6 6 62.937 6 62.99 6 62.99
			62.018 62.018 65		.032	
EXISTING SURFACE	59.257 59.339 59.539 59.658 60.815					62.354
SETOUT	505175,847 935550,309 935551,068 935552,853 935555,368 935555,368 935555,368 935555,879 935555,879	505230.348 935547.817 8935547.817 N935555.277 N935554.3118 N93554.3.118 N93554.3.118 N93554.3.118 N9355.462 N93553.3.165	E505244.075 N935489.753	E5052.32.946	N935424.188 E505230.436 N935409.400	505258.031 935543.118
	8 2.356 8 4.344 2.2356 8 30.678 8 14.90 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	9000 12.63 12.677 L5 7.02 12.677 12.577 15 6.024 12.67	50.05 50.118	66.44 66.503	14.94 15.000 151.021	0.000
RUNNING CHAINAGE	ο 0 0 0	LINE 33	-	1	<u>-</u>	LINE
RUNNING CHAINAGE	LINE 27					
LINE NUMBER	REVISION DETAILS DRAV		SCALE 1:500 10	5 0 10 20 A1		
	REVISION DETAILS DRAV	AS CONSTRUCTED		.5 0 1 2 //1	CONSULTANT SAUNDERS HAVILL GRO	



STRUCTURE NAME	(2/33) (HB1/35) (1/35			2/35	(E/35)	(1/35) (E/36)	(2/35) (E/37)
STRUCTURE TYPE & DROP STRUCTURE LID TYPE JUNCT. LINE No.					ت > ه	END		
JUNCT. DROP TYPES		-90, -90,			90°		V 35	z 35
DEPTH TO HC		1.122 1.122 1.1288 1.1288 1.128 1.128 1.128 1.128 1.128 1.128 1.128 1.128 1.128 1.12	1.22 1.22 1.200	1.18 1.20 1.20 1.200	1.11 1.121 1.200 1.200 1.200 1.200 1.200 1.200 1.200	1.46 1.200	1.11 1.24	1.1.1 1.1.1.1 1.1.
HC INVERT LEVEL		64.060 1 64.16 64.08 1	64.39 64.65 64.65 64.65 64.65	64.97 64.97 65.31 65.31	65.51 65.51 65.72 65.61 65.61 65.61	65.14 85.159 65.159	63.92 63.92 63.765 63.77	66.72 66.07 66.07 66.05 66.42 66.42 66.42 66.42 66.42 66.42 66.42 66.42 66.42 66.42 66.42 66.44 66.07 67.07 66
HC TYPE				a a	<u>م</u> م	<	مهم	
HC LOT No.		847	0 845 844	0 843 0 842	0 841 0 838 1 833	217	848	838 839 840
CH FROM DS STRUCTURE		<u>2.750</u> 15.250	27.750	52.750 66.850	79.350 93.800 7.000	19.500	11.350	0.000
STRUCTURE TYPES C2 = CAST-IN-SITU 1.5000 / 1.2000 P2 = PRE-CAST CONCRETE 1.0500 MS = uPVC TYPE 'J1' MAINTENANCE SHAFT MH DROP TYPES: AS PER SEG STD DRG SEQ-SEW-1303-1 MS DROP TYPES: MS-V = 30mm DROP THROUGH BULB MS-V = 30mm DROP THROUGH BULB MS-V = 30mm DROP INTO RISER LID TYPES B = NON-TRAFFICABLE D = TRAFFICABLE D(B) = TRAFFICABLE WITH BOLT DOWN NOTE: PE LINING OF MANHOLES: MAINTENANCE HOLES ≥ 150000 IN DIA OR ≥ 4.0m IN DEPTH, REQUIRE PE LINED PROTECTIVE COATING # EMBEDMENT NOTE: PIPE EMBEDMENT & TRENCHFILL SHALL BE IN ACCORDANCE WITH SEQ-SEW-1200-2, 1201-1 TO 1201-5. TYPE 3 SUPPORT IS PROPOSED UNTIL FINAL GEOTECHNICAL INVESTIGATIONS ARE COMPLETED PRIOR TO CONSTRUCTION. * STORMWATER BRIDGING NOTE; WHERE A STORWATER PIPE >= 600mm DIA CROSSES OVER A SEWALL BE SUPPORTED STORMWATER PIPE SHALL BE SUPPORTED STORMWATER PIPE SHALL BE SUPPORTED STORMWATER PIPE SHALL BE SUPPORTED STOR MATER PIPE SHALL BE SUPPORTED	CONS OBSERVE				X + 2250 SWD			
SEWER TRENCH. REFER PEAK URBAN STD DRG S-100. DATUM RL(m)	58.0						57.0	60.0
LAND USE	UPVC SN8 UPVC SN8 UPVC SN8		1.D\/	C SN8		PVC SN8	- uPVC SN8 -	
PIPE DIA & TYPE	°150 °150 °150		ō.	0.16 49.905		°150 104.16 100.000	°150 39.11 1 IN 40.000	°150 19.16 1 <mark>1.1N 25.000</mark>
PIPE GRADE (1 in x) EMBEDMENT	<u>+ IN 26.316 + IN 26.316 + 1 IN 26.316</u>	><		40.005 YPE 3		<u>+ 100.000</u>	_ # TYPE 3 _	# TYPE 3
UNCTION INVERT LEVEL	61.581	62.900			65.050	~	62.900	65.050
DEPTH TO INVERT		2:238 6 2:15 2:15			2,228 2,159 2,255 2,255 2,255 2,255	1.55 1.155	2,200 6 2,200 6 2,16 2,16 1,168 1,168	2.28 2.103 6 1.106 1.106 1.106
		62.910 2 62.900 2 62.911 1 62.91			64.78 64.81 64.81 64.81 64.81	65.00 65.009	62.86 62.970 2 62.900 2 63.25 63.25 63.25 63.25 63.25	64.779 64.779 64.82 64.82 64.82 64.82 64.82 64.779 64.82 64.7799 64.779 64.779 64.779 64.779 64.7799 74.779979 74.779979 74.77997797797777777777
DESIGN SURFACE LEVEL	32 45 45 46 47 46<	65.06 65.06 65.06 62 62			61.06	66.359 66.359 66.55	64.03 64	67.06 67.06
EXISTING SURFACE	62.090 6 62.174 6 62.230 6	63.164			690.08	65.523	63.164	66.069
SETOUT		505276.826 935482.518			605261.129 935390.041	505241.411 935393.388	505276.826 935482.518 935482.518 505279.144 935496.173	935390.041 935390.041 935396.945 935386.945
RUNNING CHAINAGE	8 2.376 8 29.918 6 2.376 9 1.623 8 29.918 7 1.623 8 29.918	33.918	9. 93	3.79 1.800 -	127.718	19.79 20.000 12.741	13.96 86 13.850	18.59 00 1 8.500 03 18.590 18.590 18.590 86
LINE NUMBER	LINE 35	-			1.	²	LINE 36	LINE 37
E DESIGN DRAWN 24 CL CL ISSUED FOR CONSTRUCTION 24 CL BP AS CONSTRUCTED	REVISION DETAILS			TRUCTED	Collie	1:1000	10 5 0 10 HORIZONTAL	
		DESI	DANIEL COLLINS	RPEQ 18631 9.10.24			1 0.5 0 1 VERTICAL	A1 A3 A3 A3 A3 A3 A3 A3 A3 A3 A3 A3 A3 A3

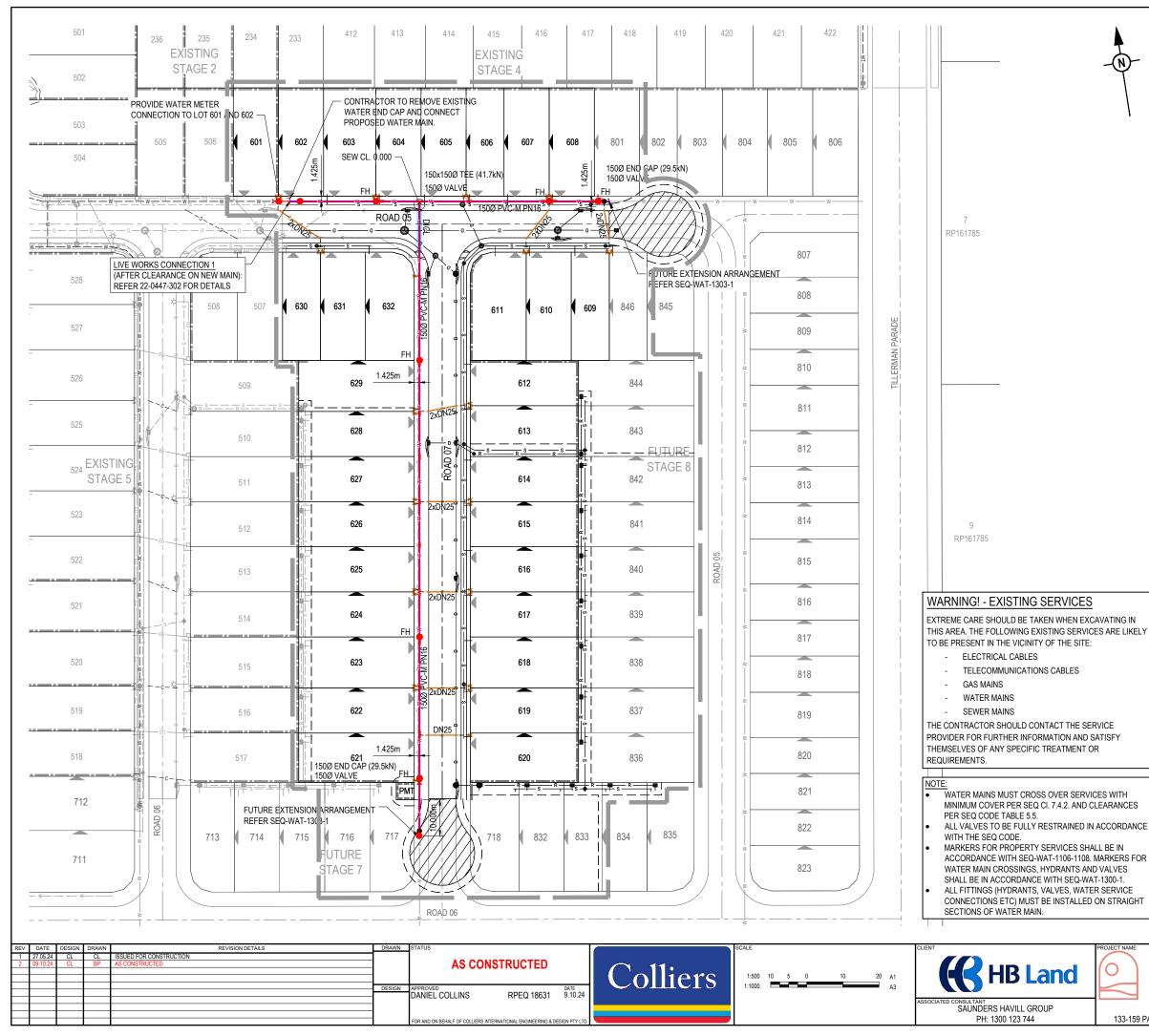
AND ON BEHALF OF COLLIERS INTERNATIONAL ENGINE

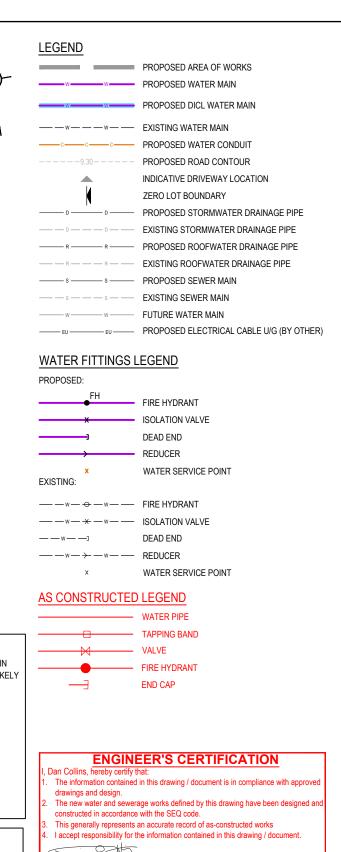
CONSULTANT SAUNDERS HAVILL GROUP PH: 1300 123 744

133-159

-

 Dan Collins, hereby certify that: The information contained in this drawing drawings and design. The new water and sewerage works defit constructed in accordance with the SEQ. This generally represents an accurate rer I accept responsibility for the information 	ned by this drawing have been d code. cord of as-constructed works	esigned and	
	DRAWING TITLE SEWERAGE LO SECTIONS SH		
STAGE 6	PROJECT No. 22-0447	DRAWING No.	REVISIO

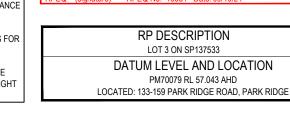




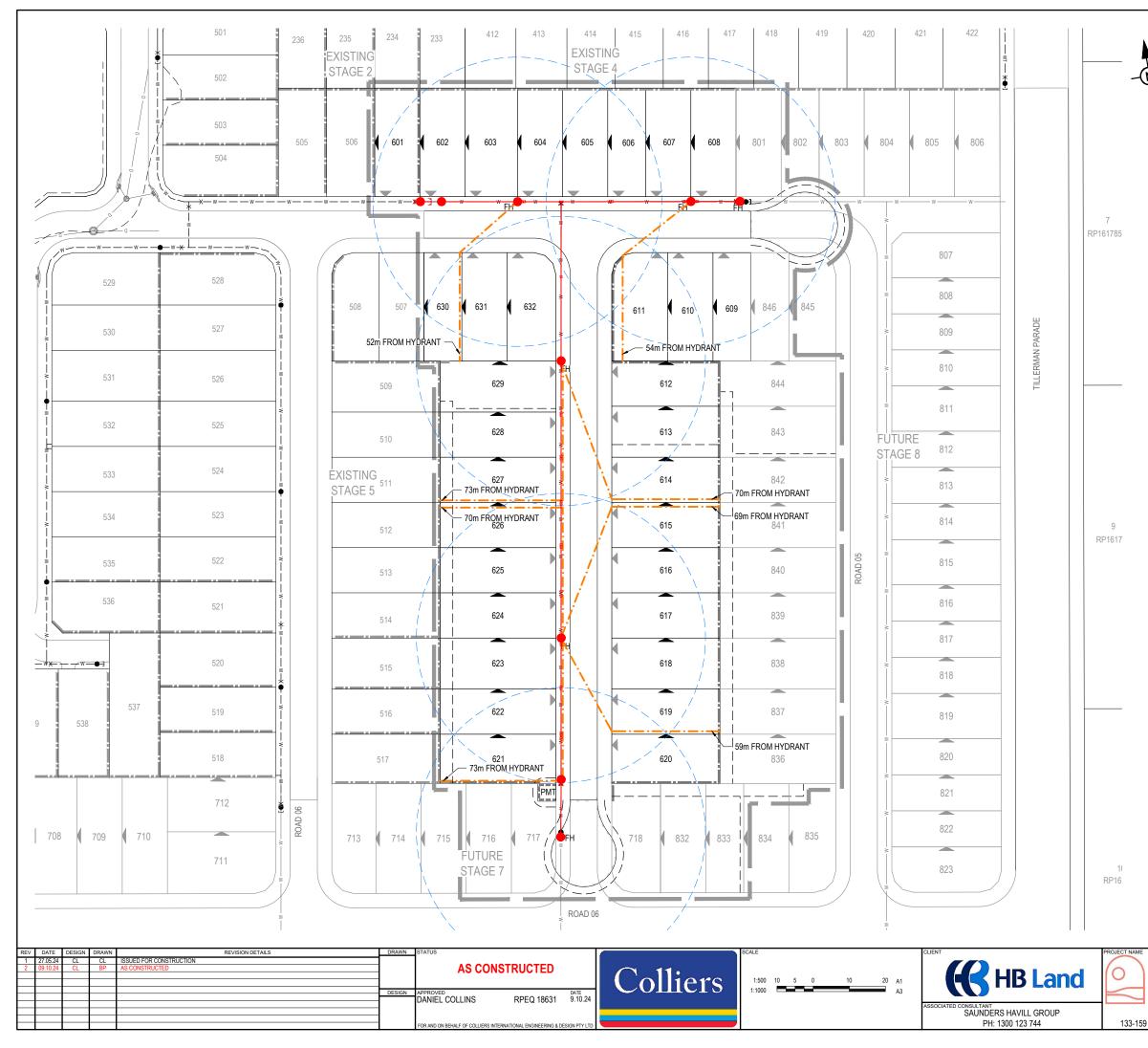


Singh

RPEQ (signature) RPEQ No. 18631 Date: 09/10/24



TILLERMAN PARK RIDGE	WATER RETICUL/ PLA		OUT
STAGE 6	PROJECT №.	DRAWING No.	REVISION
33-159 PARK RIDGE ROAD, PARK RIDGE	22-0447	307	2



LEGEND

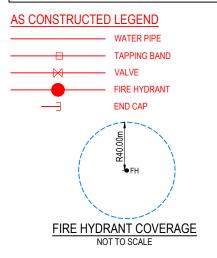
ww
ww

PROPOSED AREA OF WORKS PROPOSED WATER MAIN

EXISTING WATER MAIN PROPOSED HYDRANT REACH (WORST CASE ALLOTMENT) FIRE HYDRANT SPACING (RADIUS 40m)

NOTE:

ALL FIRE HYDRANT LOCATIONS SHALL MEET CLASS 1 BUILDING COVERAGE REQUIREMENTS OF THE SEQ CODE. FIRE HYDRANT COVERAGE IS AS SHOWN AND DEMONSTRATES THE WORST POSSIBLE LOCATION OF ANY PROPOSED CLASS 1 BUILDING WITHIN 90m OF HYDRANT REACH.



 The information contained in this drawing / document is in compliance with approved drawings and design. The new water and sewerage works defined by this drawing have been designed and constructed in accordance with the SEQ code. This generally represents an accurate record of as-constructed works I accept responsibility for the information contained in this drawing / document. RPEQ (signature) RPEQ No. 18631 Date: 09/10/24			
drawings and design.2. The new water and sewerage works defined by this drawing have been designed and constructed in accordance with the SEQ code.3. This generally represents an accurate record of as-constructed works	RPEQ (signature) RPEQ No. 18	631 Date: 09/10/24	
1 The information contained in this drawing / document is in compliance with approved	drawings and design.The new water and sewerage works of constructed in accordance with the SEThis generally represents an accurate	lefined by this drawing have been designed and EQ code.	

ENGINEER'S CERTIFICATION

