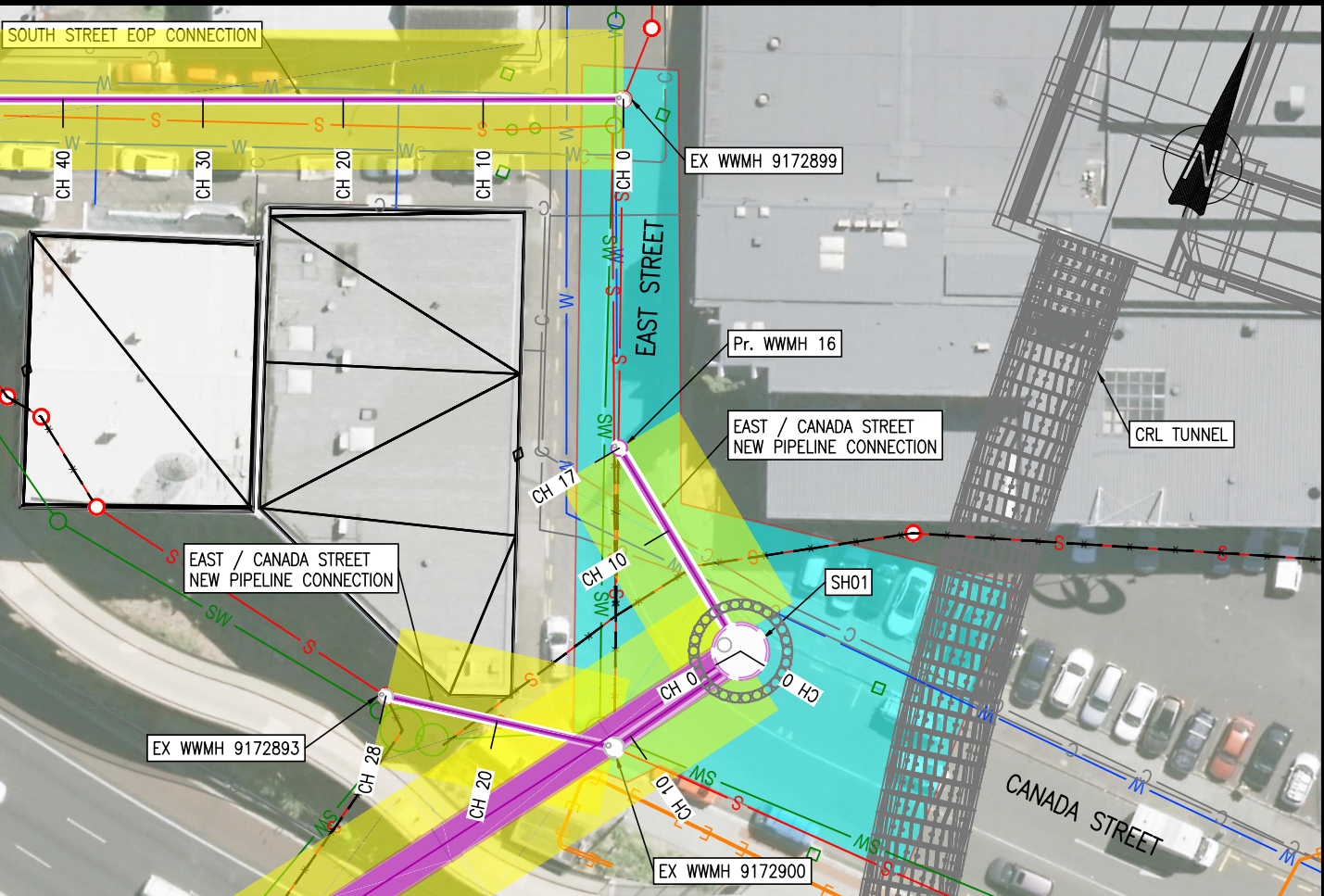


- NOTES:
1. SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 2. LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 3. THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHI, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 4. THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 5. INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 6. DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

LEGEND

- C — EXISTING COMMS
- S — EXISTING WASTEWATER (WW)
- W — EXISTING WATER
- G — EXISTING GAS
- E — EXISTING ELECTRICITY
- SW — EXISTING STORMWATER (SW)
- X — X — PIPE TO BE ABANDONED
- COLLECTOR SEWER
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- OVERBRIDGE PIERS
- BUILDING FOUNDATIONS IN CLOSE PROXIMITY

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH01	ø4000mm	ø6000mm	1756769.4177	5919292.9737	27.898
EX WWMH 9172893	ø1050mm	—	1756746.9613	5919280.8689	47.000
EX WWMH 9172899	ø1050mm	—	1756747.4394	5919326.6992	48.006
EX WWMH 9172900	ø1500mm	—	1756763.4855	5919283.3184	46.833
Pr WWMH 16	ø1050mm	—	1756756.1211	5919303.3906	49.671
EX WWMH 8806838	ø1050mm	—	1756683.4023	5919301.9841	54.529



DATUM 24.00

PIPE DATA

INVERT LEVEL ⁵	9.976m	3000	2250	16.705m
	27.898	46.733	46.833	47.000
EXISTING SURFACE LEVEL	51.365	51.814	51.310	
DEPTH TO INVERT	23.411	4.632	4.981	4.310
CHAINAGE	0.00	1.29	11.43	28.14

LONG SECTION (SH01a)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

DATUM 24.00

PIPE DATA

INVERT LEVEL ⁵	15.483m	3000	
	27.954	49.515	49.671
EXISTING SURFACE LEVEL	51.365	52.069	
DEPTH TO INVERT	23.411	1.850	2.398
CHAINAGE	0.00	1.29	16.89

LONG SECTION (SH01b)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

DATUM 26.00

PIPE DATA

INVERT LEVEL ⁵	68.641m	2250	
	52.300	54.067	54.529
EXISTING SURFACE LEVEL	54.067	56.353	
DEPTH TO INVERT	1.767	1.824	
CHAINAGE	0.00	68.64	

LONG SECTION (SH01c)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

				DESIGNED		
				DES. APPROVED		
				DRAWN	J.FERNANDEZ	05-25
				DWG. APPROVED		
				WSL DESIGN MGMT.	J.STOKES	05-25
				WSL PROJ. LEAD	J.STOKES	05-25
1	16.05.25	ISSUE FOR INFORMATION	JF	MC		
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE

Watercare

COPYRIGHT - This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.

MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS
PLAN AND LONG SECTION – SH01 (OPTION B1)

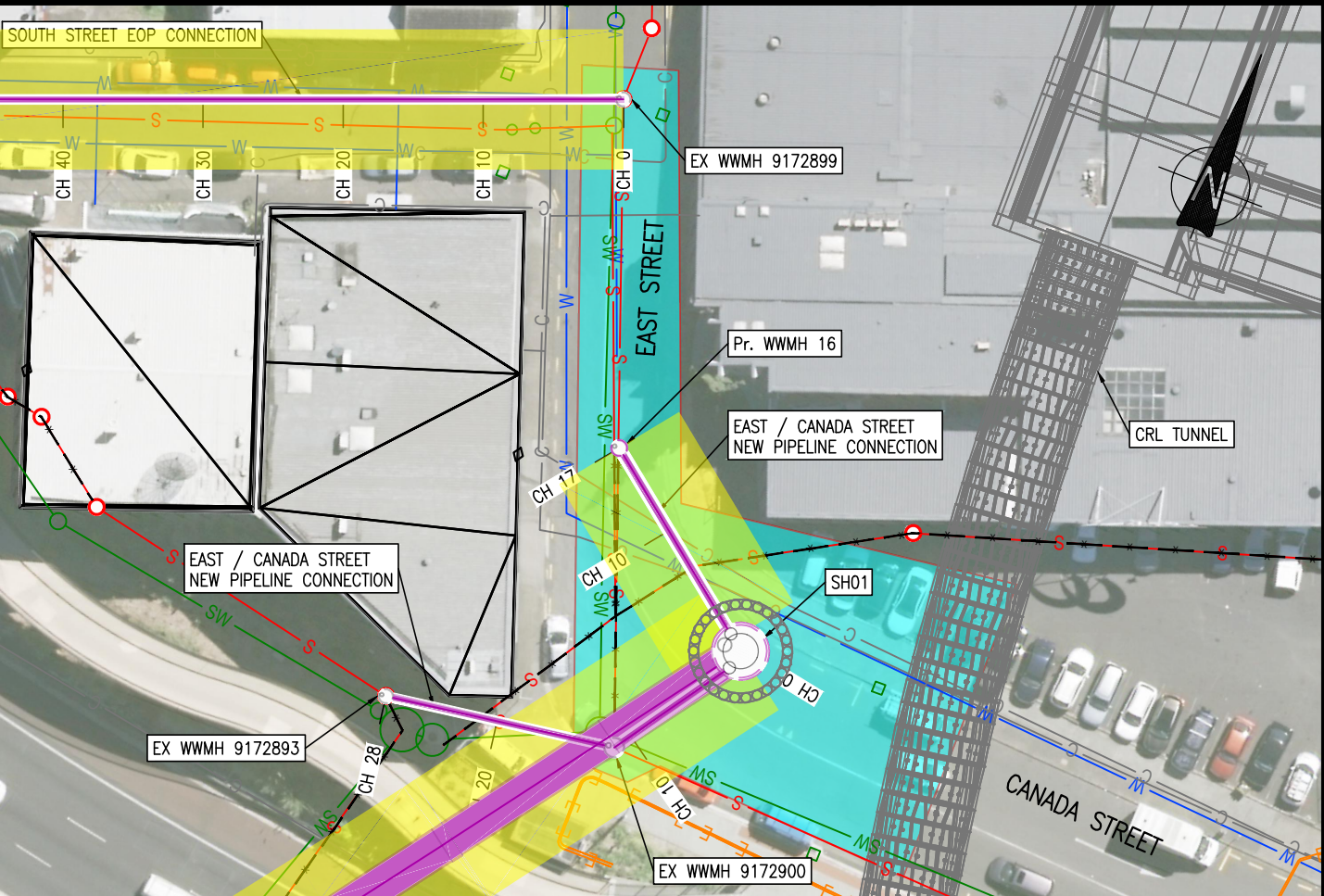
CAD FILE	2014581.130	DATE	16-05-2025
ORIGINAL SCALE	A3	CONTRACT No.	—
AS SHOWN			
REF No.	—		
DWG No.	2014581.130	ISSUE	1

- NOTES:
1. SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 2. LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 3. THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHI, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 4. THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 5. INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 6. DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

LEGEND

- C — EXISTING COMMS
- S — EXISTING WASTEWATER (WW)
- W — EXISTING WATER
- G — EXISTING GAS
- E — EXISTING ELECTRICITY
- SW — EXISTING STORMWATER (SW)
- X — X — PIPE TO BE ABANDONED
- COLLECTOR SEWER
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- OVERBRIDGE PIERS
- BUILDING FOUNDATIONS IN CLOSE PROXIMITY

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH01	ø4000mm	ø6000mm	1756769.4177	5919292.9737	6.360
EX WWMH 9172893	ø1050mm	—	1756746.9613	5919280.8689	47.000
EX WWMH 9172899	ø1050mm	—	1756747.4394	5919326.6992	48.006
EX WWMH 9172900	ø1500mm	—	1756763.4855	5919283.3184	46.833
Pr WWMH 16	ø1050mm	—	1756756.1211	5919303.3906	49.671
EX WWMH 8806838	ø1050mm	—	1756683.4023	5919301.9841	54.529



DATUM 24.00

PIPE DATA

INVERT LEVEL ⁵	6.360	46.733	46.833	47.000
	9.976m @ 1.00%	16.705m @ 1.00%		
EXISTING SURFACE LEVEL	51.365	51.814	51.310	
DEPTH TO INVERT	45.005	4.981	4.981	4.310
CHAINAGE	0.00	1.29	11.43	28.14

LONG SECTION (SH01a)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

DATUM 24.00

PIPE DATA

INVERT LEVEL ⁵	6.360	49.515	49.671
	15.483m @ 1.00%		
EXISTING SURFACE LEVEL	51.365	52.069	
DEPTH TO INVERT	45.005	1.850	2.398
CHAINAGE	0.00	1.29	16.89

LONG SECTION (SH01b)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

DATUM 26.00

PIPE DATA

INVERT LEVEL ⁵	48.006	52.300	54.529
	68.641m @ 3.25%		
EXISTING SURFACE LEVEL	54.067	56.353	
DEPTH TO INVERT	1.767	1.824	
CHAINAGE	0.00		68.64

LONG SECTION (SH01c)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

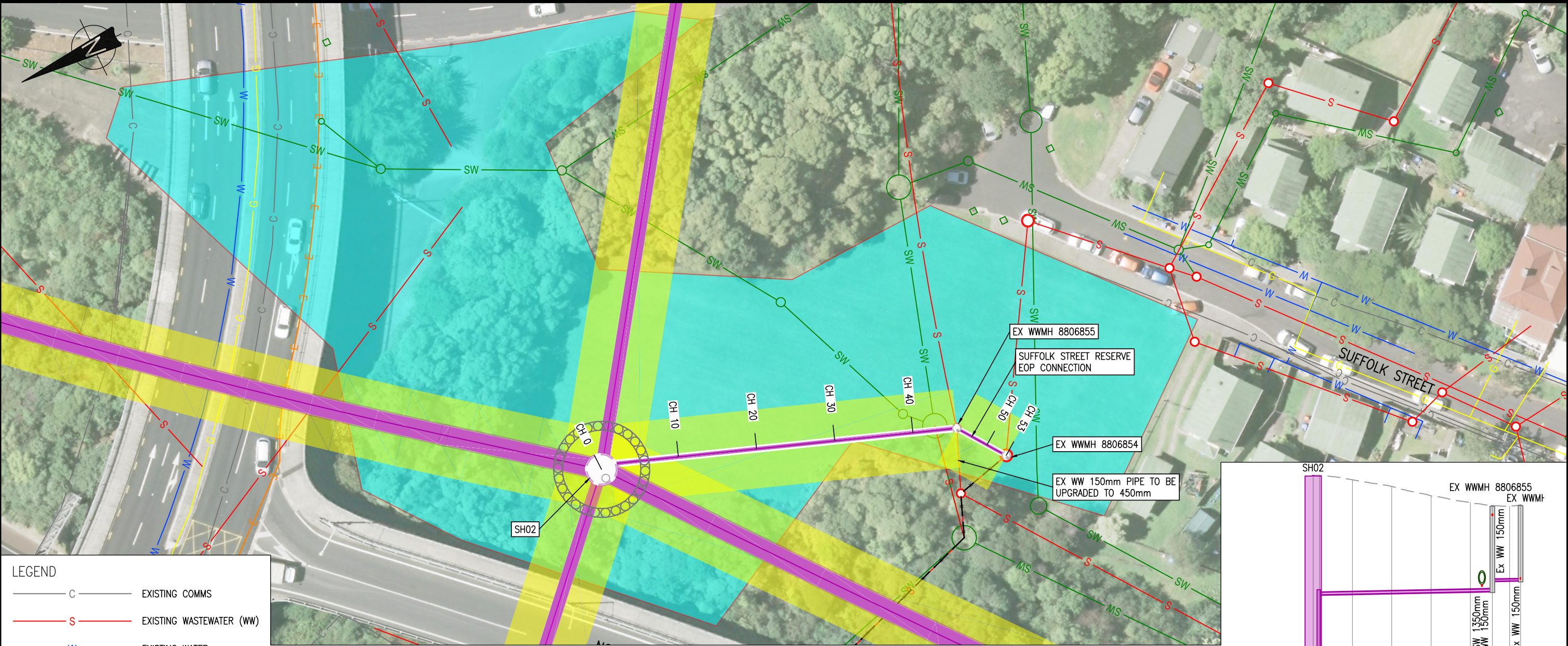


				DESIGNED		
				DES. APPROVED		
				DRAWN	J.FERNANDEZ	05-25
				DWG. APPROVED		
				WSL DESIGN MGMT.	J.STOKES	05-25
				WSL PROJ. LEAD	J.STOKES	05-25
1	16.05.25	ISSUE FOR INFORMATION	JF	MC		
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE


Watercare
COPYRIGHT - This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.

MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS
PLAN AND LONG SECTION – SH01 (OPTION B2)

CAD FILE	2014581.131	DATE	16-05-2025
ORIGINAL SCALE	A3 AS SHOWN	CONTRACT No.	—
REF No.	—		
DWG No.	2014581.131	ISSUE	1



LEGEND

- C — EXISTING COMMS
- S — EXISTING WASTEWATER (WW)
- W — EXISTING WATER
- G — EXISTING GAS
- E — EXISTING ELECTRICITY
- SW — EXISTING STORMWATER (SW)
- X — X — PIPE TO BE ABANDONED
- Collector Sewer
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- OVERBRIDGE PIERS

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH02	ø4000mm	ø10000mm	1756390.7636	5918900.5494	11.861
EX WWMH 8806855	ø1050mm	—	1756375.7879	5918857.5843	28.712
EX WWMH 8806854	ø1050mm	—	1756369.9320	5918853.4204	30.072

- NOTES:**
- SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 - LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 - THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHĪ, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 - THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 - INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 - DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

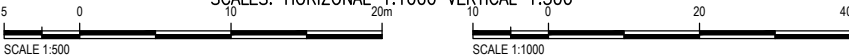
DATUM 9.00

PIPE DATA

INVERT LEVEL ⁵		EXISTING SURFACE LEVEL		DEPTH TO INVERT		CHAINAGE	
11.861	28.271	43.467	39.614	31.606	10.902	0.00	45.60
			30.000	15.196	9.614	1.60	52.79
			39.699		9.627		

LONG SECTION (SH02a)

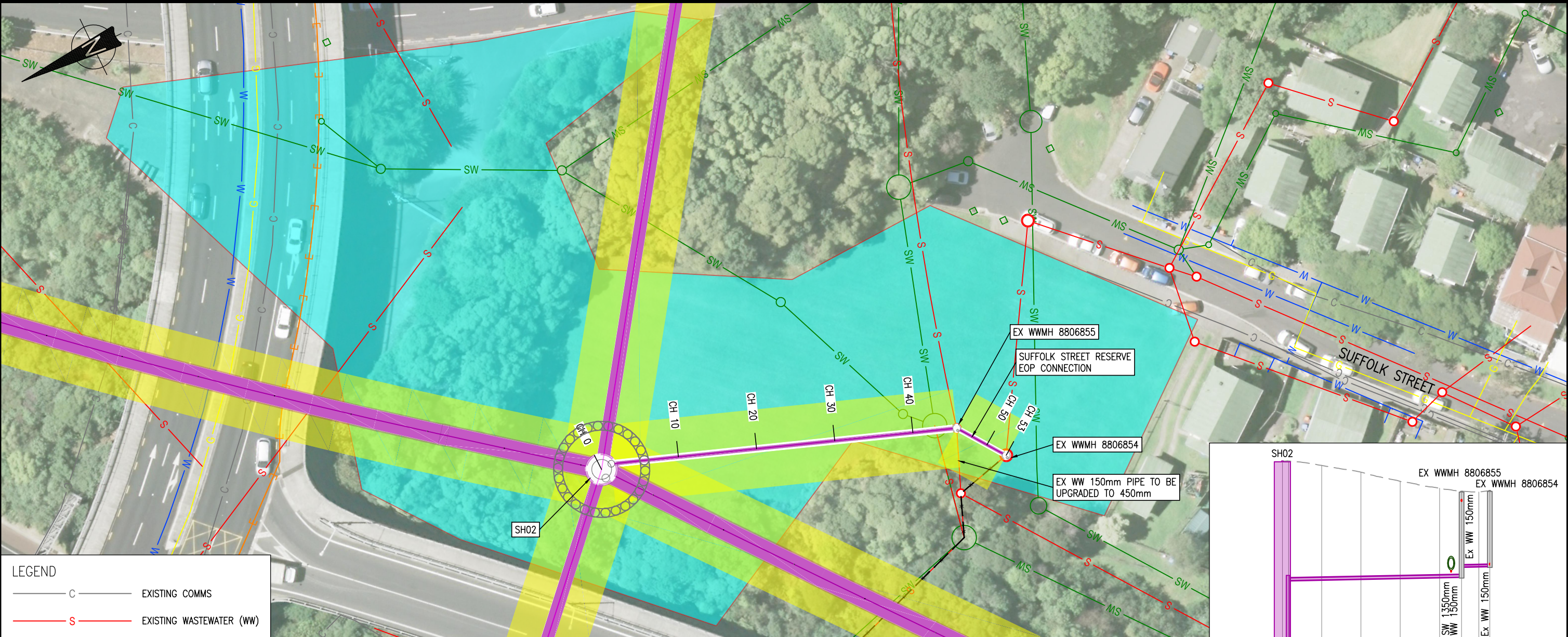
SCALES: HORIZONTAL 1:1000 VERTICAL 1:500



				DESIGNED			
				DES. APPROVED			
				DRAWN		J.FERNANDEZ	05-25
				DWG. APPROVED			
				WSL DESIGN MGMT.		J.STOKES	05-25
				WSL PROJ. LEAD		J.STOKES	05-25
1	16.05.25	ISSUE FOR INFORMATION	JF	MC			
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE	

**MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS**
PLAN AND LONG SECTION – SH02 (OPTION B1)

CAD FILE	2014581.132	DATE	16-05-2025
ORIGINAL SCALE	A3 AS SHOWN	CONTRACT No.	—
REF No.	—		
DWG No.	2014581.132	ISSUE	1



LEGEND

- C — EXISTING COMMS
- S — EXISTING WASTEWATER (WW)
- W — EXISTING WATER
- G — EXISTING GAS
- E — EXISTING ELECTRICITY
- SW — EXISTING STORMWATER (SW)
- X — X — PIPE TO BE ABANDONED
- Collector Sewer
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- OVERBRIDGE PIERS

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH02	ø4000mm	ø10000mm	1756390.7636	5918900.5494	3.614
EX WWMH 8806855	ø1050mm	—	1756375.7879	5918857.5843	28.712
EX WWMH 8806854	ø1050mm	—	1756369.9320	5918853.4204	30.072

- NOTES:**
- SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 - LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 - THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHĪ, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 - THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 - INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 - DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

DATUM 9.00

PIPE DATA

INVERT LEVEL ⁵	3.614	28.271	28.712	30.000	30.072
EXISTING SURFACE LEVEL	43.467		39.614	39.699	
DEPTH TO INVERT	39.853	15.196	10.902	9.614	9.627
CHAINAGE	0.00	1.60	45.60	52.79	

LONG SECTION (SH02a)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

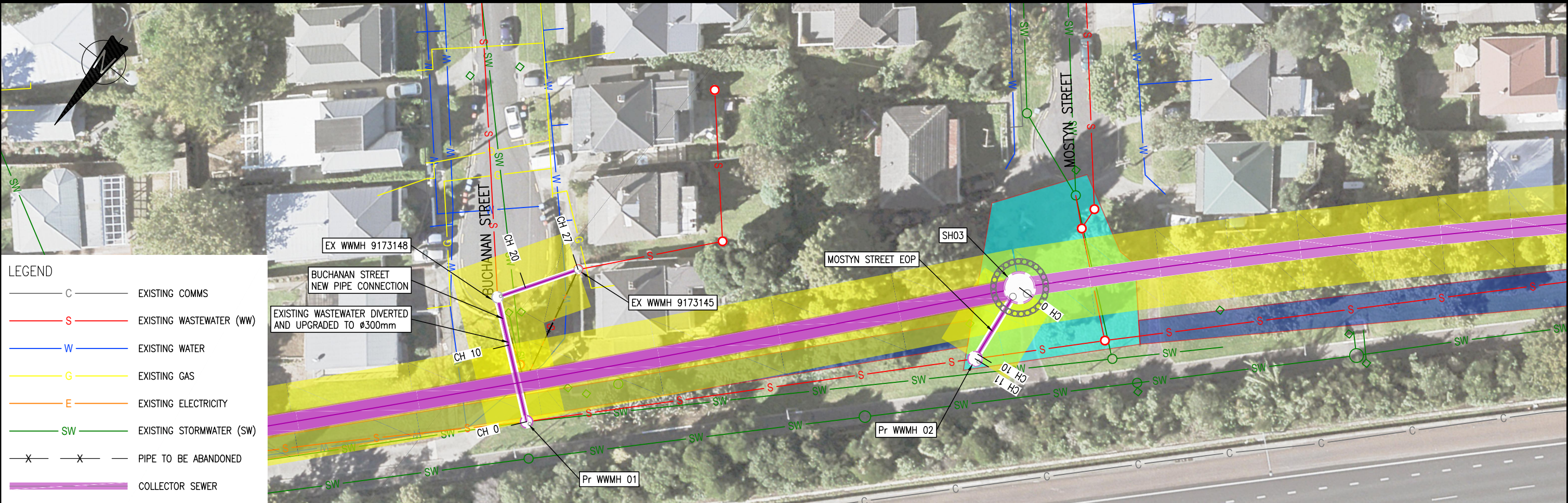


				DESIGNED			
				DES. APPROVED			
				DRAWN		J.FERNANDEZ	05-25
				DWG. APPROVED			
				WSL DESIGN MGMT.		J.STOKES	05-25
				WSL PROJ. LEAD		J.STOKES	05-25
1	16.05.25	ISSUE FOR INFORMATION	JF	MC			
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE	

**MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS**
PLAN AND LONG SECTION – SH02 (OPTION B2)

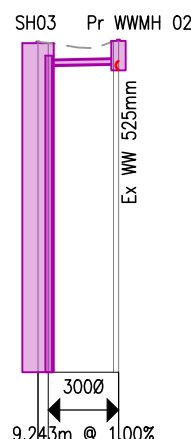
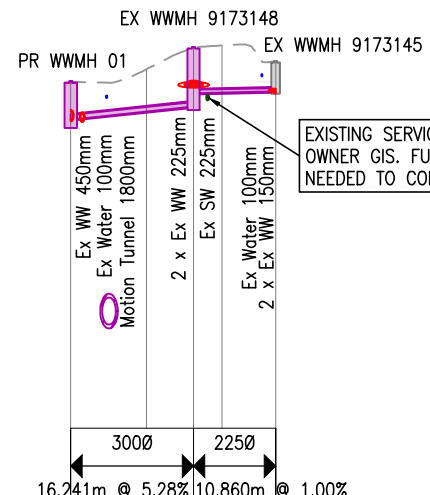
COPYRIGHT – This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.

CAD FILE	2014581.133	DATE	16-05-2025
ORIGINAL SCALE	A3 AS SHOWN	CONTRACT No.	—
REF No.	—		
DWG No.	2014581.133	ISSUE	1



LEGEND

- C — EXISTING COMMS
- S — EXISTING WASTEWATER (WW)
- W — EXISTING WATER
- G — EXISTING GAS
- E — EXISTING ELECTRICITY
- SW — EXISTING STORMWATER (SW)
- X — PIPE TO BE ABANDONED
- Collector Sewer
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- ACCESS/EGRESS TRACK
- OVERBRIDGE PIERS



DATUM 4.00

PIPE DATA

INVERT LEVEL ⁵	24.009	24.411	25.268	26.151	26.260	26.160
EXISTING SURFACE LEVEL	26.944		29.209		28.289	
DEPTH TO INVERT	2.935	2.533	3.941	3.058	2.009	
CHAINAGE	0.00		16.24		27.10	

DATUM 4.00

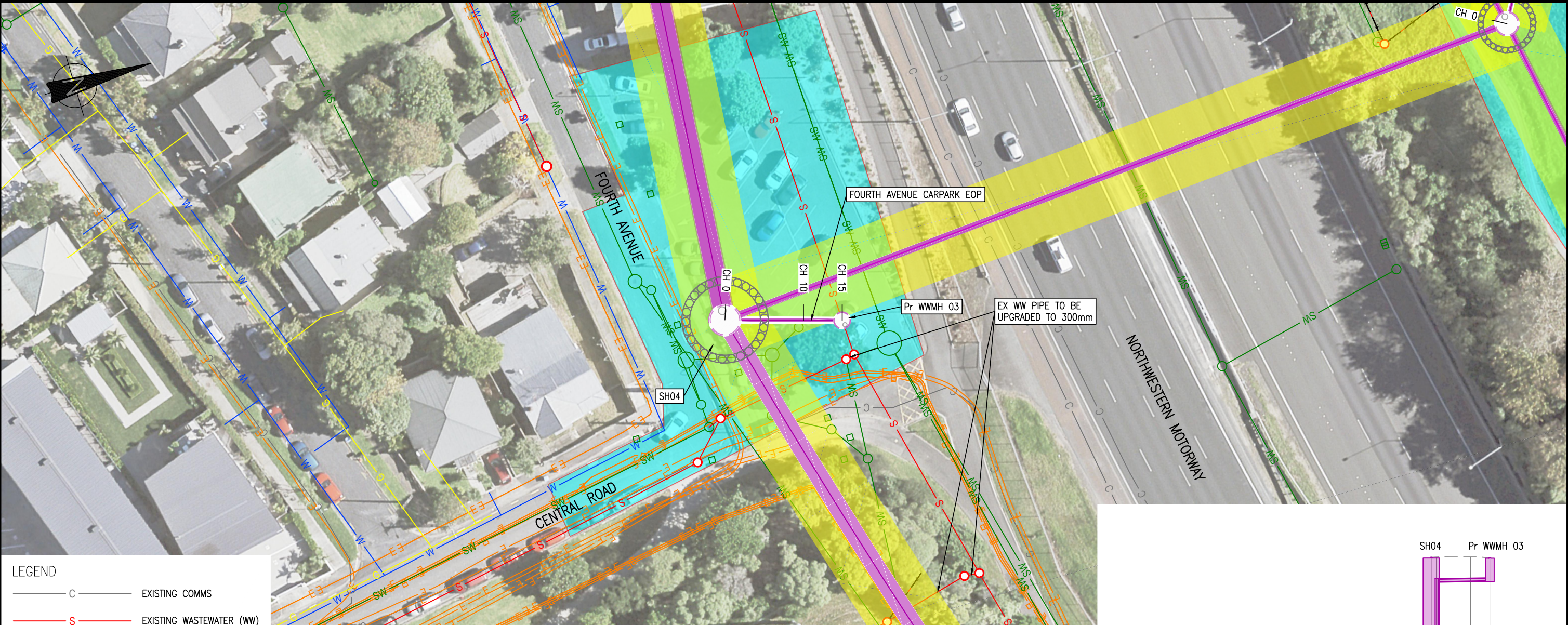
PIPE DATA

INVERT LEVEL ⁵	0.586	24.308	24.400	24.106
EXISTING SURFACE LEVEL	25.862		25.998	
DEPTH TO INVERT	25.276	1.554	1.598	
CHAINAGE	0.00	1.37	10.66	

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
EX WWMH 9173145	Ø1050mm	—	1755997.4388	5918515.1043	26.160
EX WWMH 9173148	Ø1500mm	—	1756003.3233	5918524.2318	25.268
Pr WWMH 01	Ø1500mm	—	1755990.6249	5918534.3570	24.009
Pr.WWMH 02	Ø1800mm	—	1755950.7463	5918492.7330	24.106
SH03	Ø4000mm	Ø6000mm	1755951.8984	5918482.1414	0.586

- NOTES:
- SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 - LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 - THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHI, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 - THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 - INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 - DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.





LEGEND

- C ——— EXISTING COMMS
- S ——— EXISTING WASTEWATER (WW)
- W ——— EXISTING WATER
- G ——— EXISTING GAS
- E ——— EXISTING ELECTRICITY
- SW ——— EXISTING STORMWATER (SW)
- X — X — PIPE TO BE ABANDONED
- Collector Sewer
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- OVERBRIDGE PIERS

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
Pr WWMH 03	ø2050mm	—	1755480.9129	5918216.9883	19.239
SH04	ø7000mm	ø9000mm	1755476.6498	5918202.6941	-2.209

- NOTES:**
- SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 - LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 - THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHI, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 - THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 - INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 - DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.



DATUM -5.00

PIPE DATA

INVERT LEVEL ⁵	-2.209	19.104	19.239
EXISTING SURFACE LEVEL	22.214		22.183
DEPTH TO INVERT	24.423	3.110	2.944
CHAINAGE	0.00	1.30	14.92

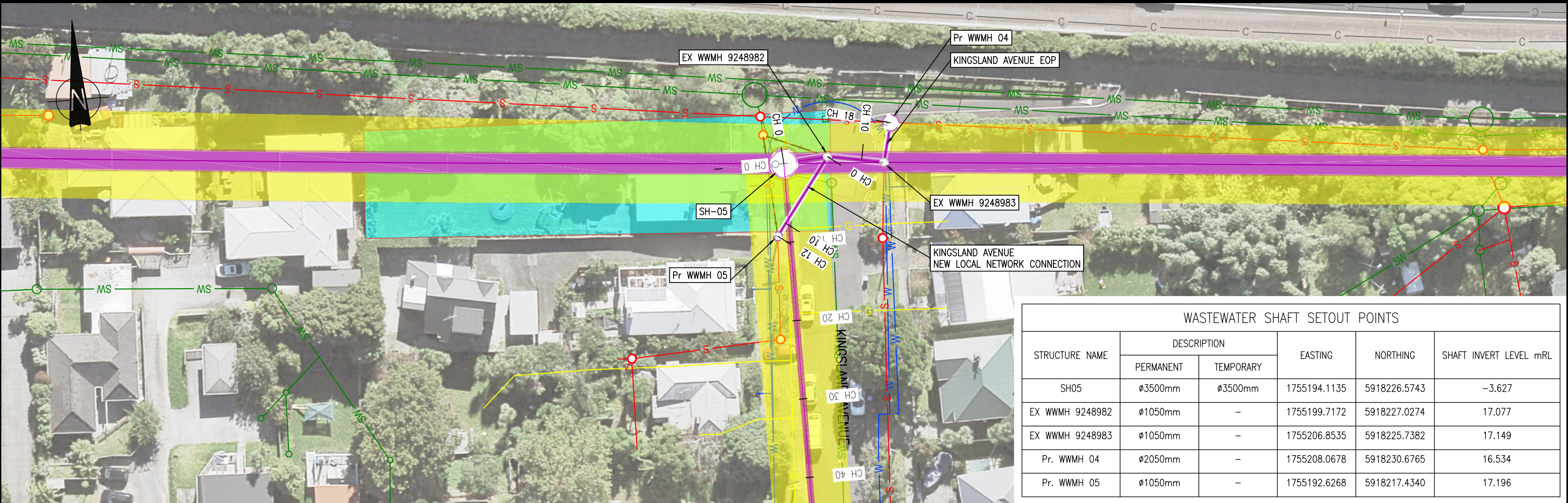
LONG SECTION (SH04a)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

				DESIGNED	R.GHORBANNEJAD	05-25
				DES. APPROVED	M.COBELEDICK	05-25
				DRAWN	J.FERNANDEZ	05-25
				DWG. APPROVED	M.COBELEDICK	05-25
				WSL DESIGN MGMT.	J.STOKES	05-25
				WSL PROJ. LEAD	J.STOKES	05-25
1	16.05.25	ISSUE FOR INFORMATION	JF MC	BY	APPD.	DATE
ISSUE	DATE	AMENDMENT	BY	APPD.	DATE	

**MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS**
PLAN AND LONG SECTION – SH04

CAD FILE	2014581.136	DATE	16-05-2025
ORIGINAL SCALE	A3	CONTRACT No.	—
AS SHOWN			
REF No.	—		
DWG No.	2014581.136	ISSUE	1



WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH05	ø3500mm	ø3500mm	1755194.1135	5918226.5743	-3.627
EX WWMH 9248982	ø1050mm	—	1755199.7172	5918227.0274	17.077
EX WWMH 9248983	ø1050mm	—	1755206.8535	5918225.7382	17.149
Pr. WWMH 04	ø2050mm	—	1755208.0678	5918230.6765	16.534
Pr. WWMH 05	ø1050mm	—	1755192.6268	5918217.4340	17.196

LEGEND

- C — EXISTING COMMS
- S — EXISTING WASTEWATER (WW)
- W — EXISTING WATER
- G — EXISTING GAS
- E — EXISTING ELECTRICITY
- SW — EXISTING STORMWATER (SW)
- X — PIPE TO BE ABANDONED
- Collector Sewer
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- OVERBRIDGE PIERS

- NOTES:**
- SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 - LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 - THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHĪ, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED: 22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 - THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 - INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 - DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

DATUM -10.00

PIPE DATA

	5.622m @ 1.00%	4500	3000	2250	5.085m @ 1.00%
		7.252m @ 1.00%			
INVERT LEVEL ⁵	-3.627	17.020	17.077	17.149	17.149
EXISTING SURFACE LEVEL	19.033	19.234	19.105	19.173	19.173
DEPTH TO INVERT	22.660	2.013	2.157	1.956	1.973
CHAINAGE	0.00	5.62	12.87	17.96	

LONG SECTION (SH05a)
SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

DATUM -10.00

PIPE DATA

	2250	11.929m @ 1.00%
INVERT LEVEL ⁵	17.077	17.196
EXISTING SURFACE LEVEL	19.234	19.365
DEPTH TO INVERT	2.157	2.169
CHAINAGE	5.62	11.93

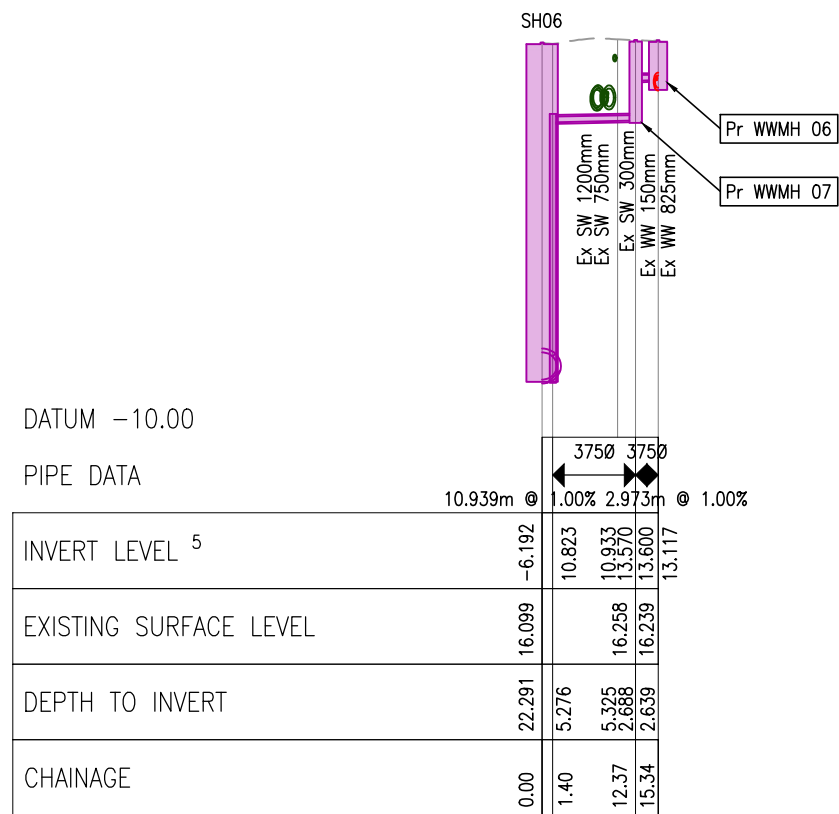
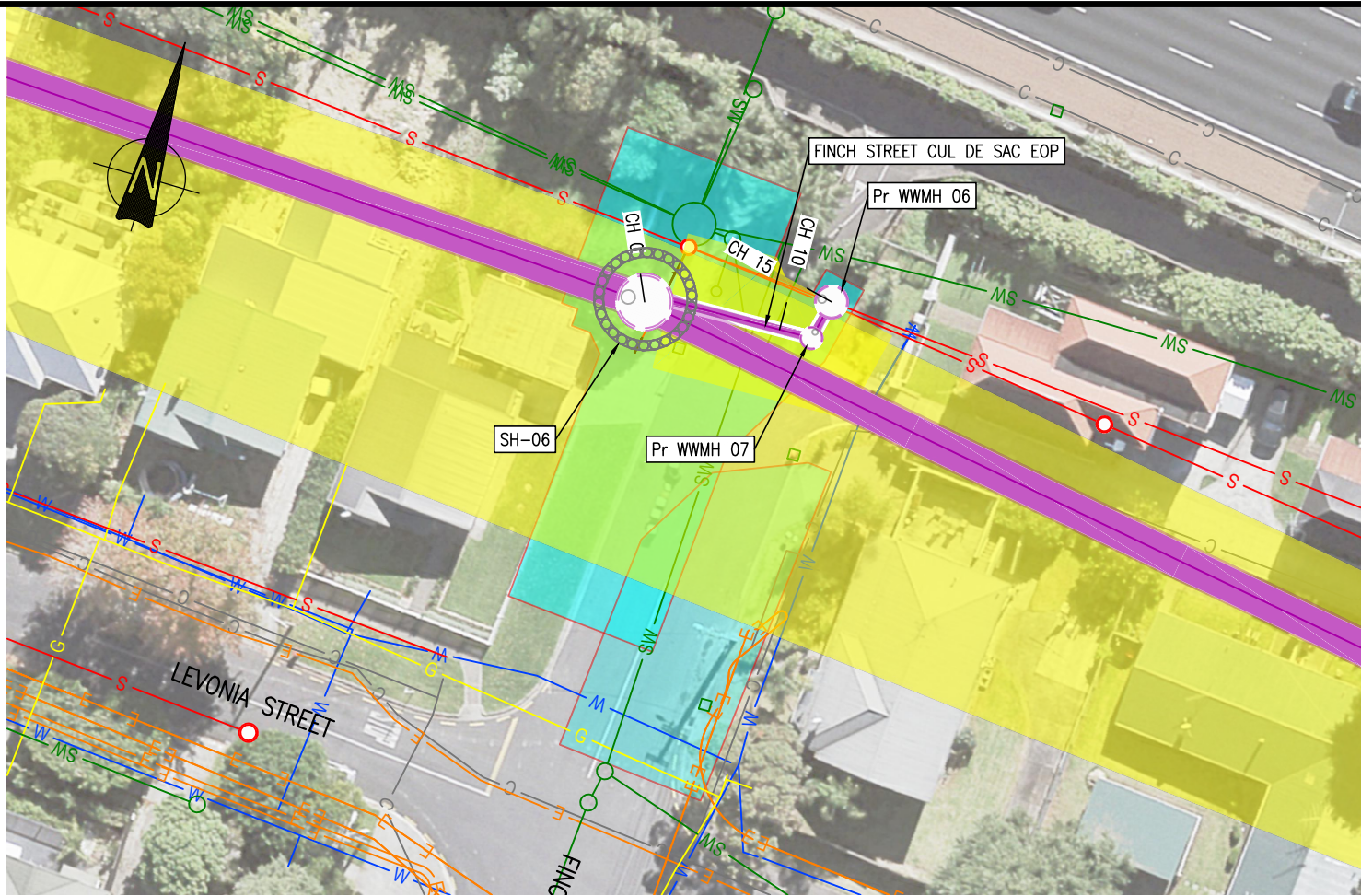
LONG SECTION (SH05b)
SCALES: HORIZONTAL 1:1000 VERTICAL 1:500



				DESIGNED				MOTIONS COLLECTOR SEWER LOCAL NETWORK CONNECTIONS PLAN AND LONG SECTION – SH05	CAD FILE 2014581.137	DATE 25-07-2025
				DES. APPROVED					ORIGINAL SCALE A3 AS SHOWN	CONTRACT No. —
				DRAWN	J.FERNANDEZ	07-25			REF No. —	
				DWG. APPROVED					DWG No. 2014581.137	ISSUE 2
2	25.07.25	ISSUE FOR INFORMATION	JF	MC	WSL DESIGN MGMT.	J.STOKES	07-25	COPYRIGHT – This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.		
1	16.05.25	ISSUE FOR INFORMATION	JF	MC	WSL PROJ. LEAD	J.STOKES	07-25			
ISSUE	DATE	AMENDMENT	BY	APPD.		BY	DATE			

LEGEND

- C ——— EXISTING COMMS
- S ——— EXISTING WASTEWATER (WW)
- W ——— EXISTING WATER
- G ——— EXISTING GAS
- E ——— EXISTING ELECTRICITY
- SW ——— EXISTING STORMWATER (SW)
- X — X — PIPE TO BE ABANDONED
- COLLECTOR SEWER
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- OVERBRIDGE PIERS



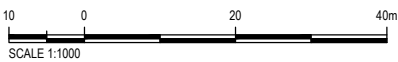
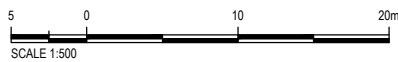
LONG SECTION (SH06)
SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

WASTEWATER SHAFT SETOUT POINTS

STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH06	ø4000mm	ø6000mm	1754685.2555	5918290.9937	-6.192
Pr. WWMH 06	ø2300mm	—	1754698.1651	5918294.7054	13.117
Pr. WWMH 07	ø1500mm	—	1754697.4995	5918291.8080	10.933

NOTES:

- SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
- LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
- THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHU, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED: 22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
- THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
- INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
- DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

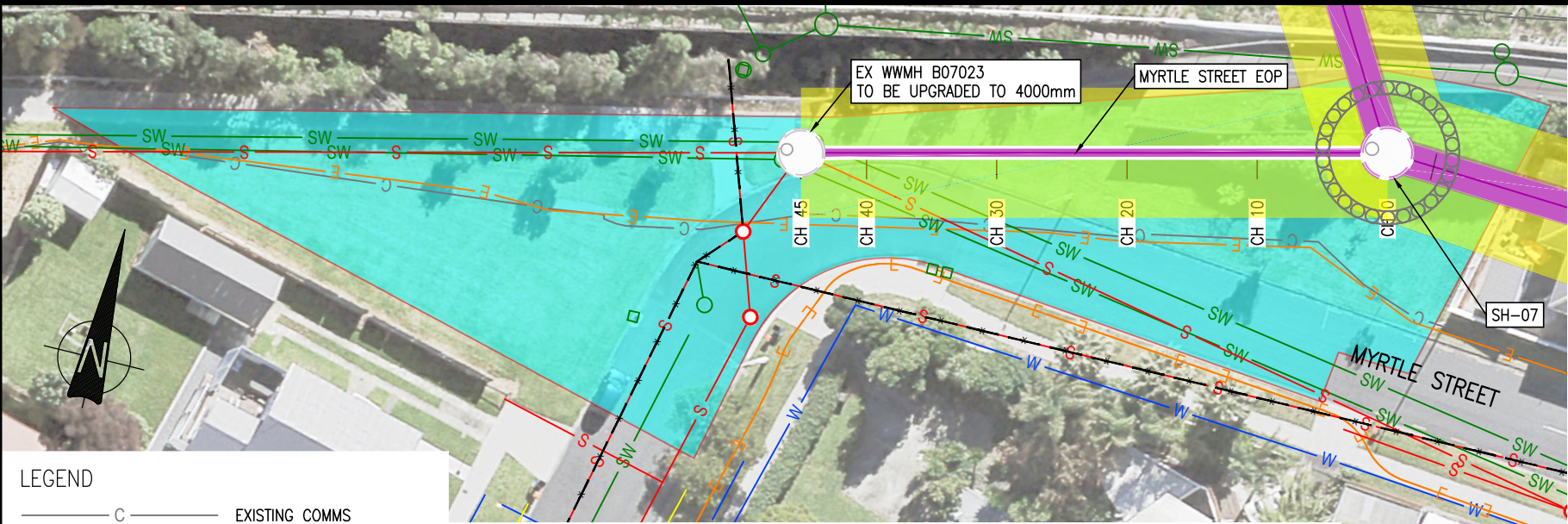


				DESIGNED		
				DES. APPROVED		
				DRAWN	J.FERNANDEZ	07-25
				DWG. APPROVED		
2	25.07.25	ISSUE FOR INFORMATION	JF	WSL DESIGN MGMT.	J.STOKES	07-25
1	16.05.25	ISSUE FOR INFORMATION	JF	WSL PROJ. LEAD	J.STOKES	07-25
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE


Watercare
COPYRIGHT – This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.

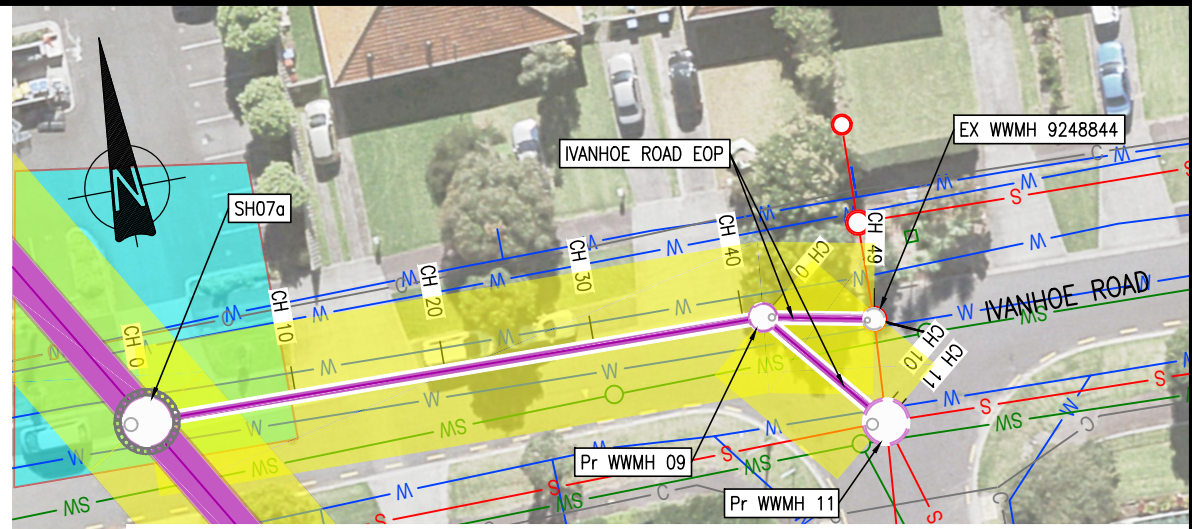
MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS
PLAN AND LONG SECTION – SH06

CAD FILE	2014581.138	DATE	25-07-2025
ORIGINAL SCALE	A3	CONTRACT No.	—
AS SHOWN			
REF No.	—		
DWG No.	2014581.138	ISSUE	2

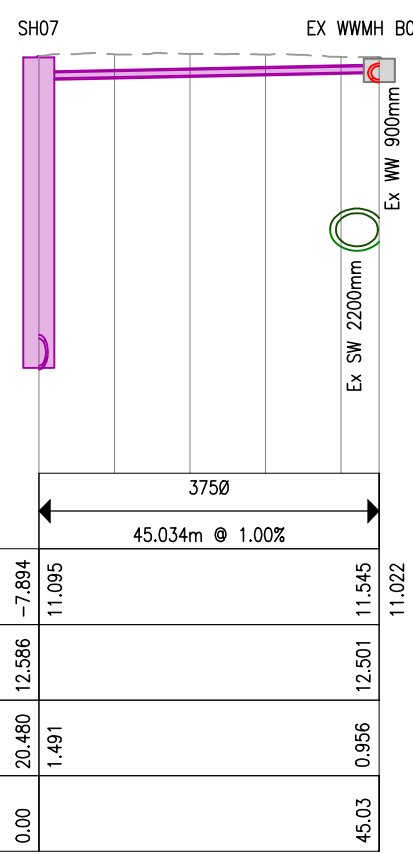


- LEGEND
- C — EXISTING COMMS
 - S — EXISTING WASTEWATER (WW)
 - W — EXISTING WATER
 - G — EXISTING GAS
 - E — EXISTING ELECTRICITY
 - SW — EXISTING STORMWATER (SW)
 - X — PIPE TO BE ABANDONED
 - Collector Sewer
 - 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
 - WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
 - TEMPORARY SHAFT
 - PERMANENT SHAFT
 - APPROXIMATE CONSTRUCTION AREAS
 - OVERBRIDGE PIERS

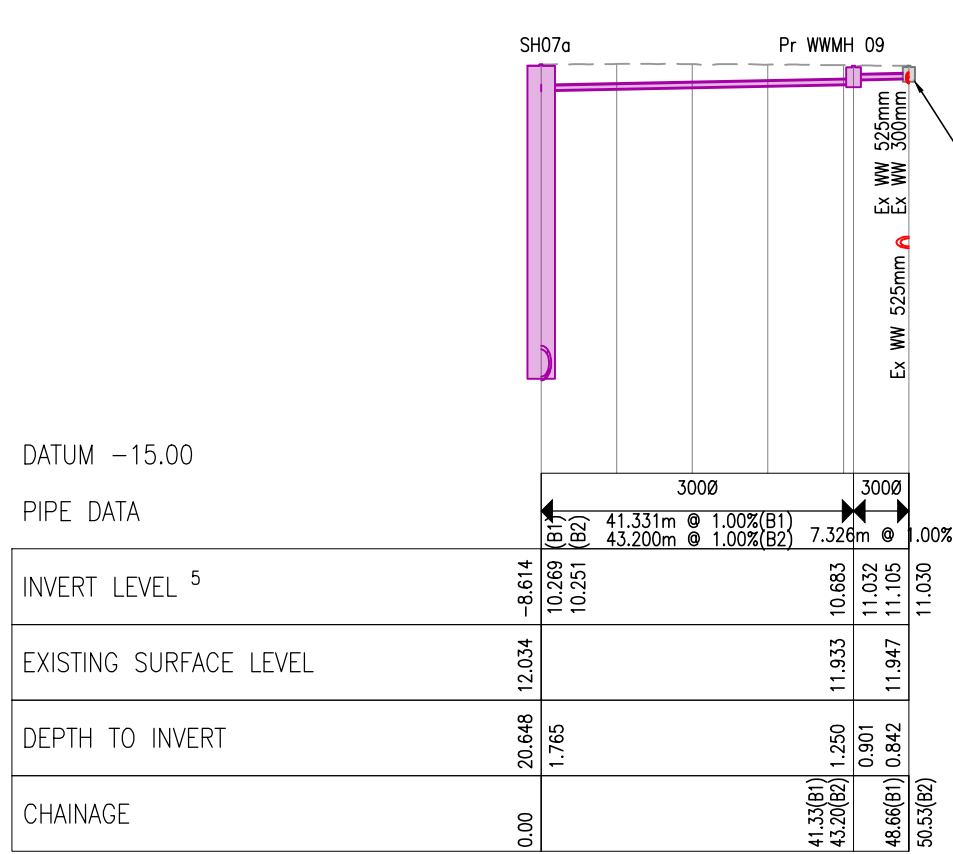
- NOTES:
- SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 - LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 - THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHI, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 - THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 - INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 - DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.



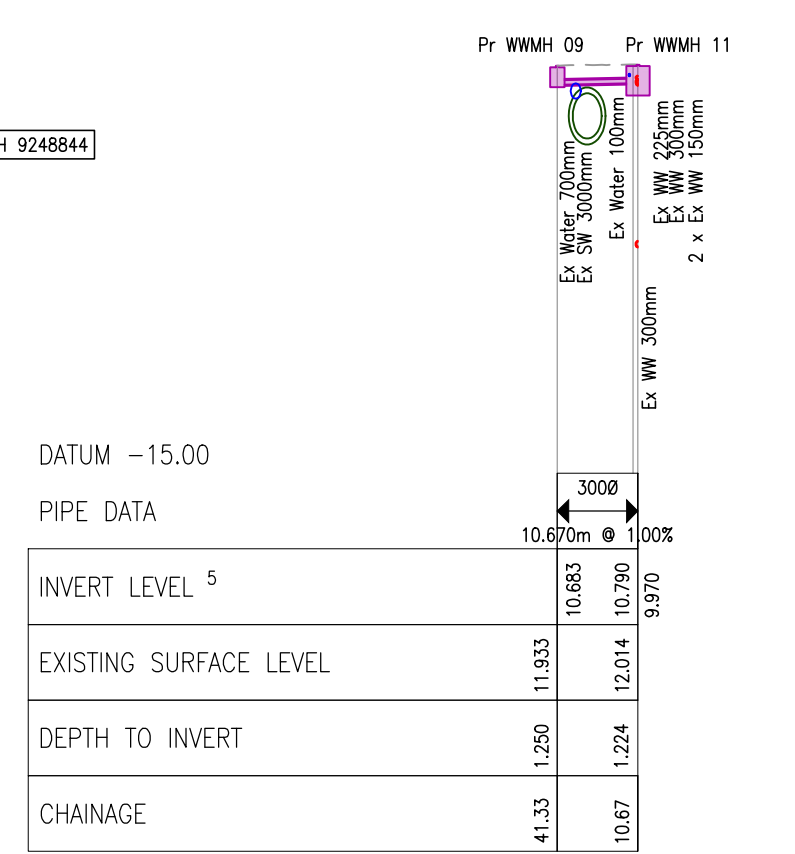
WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH07a	ø3500mm	ø3500mm	1754272.5728	5918435.1943	-8.614
EX WWMH 9248844	ø1500mm	—	1754321.0830	5918433.1282	11.030
Pr. WWMH 09	ø1800mm	—	1754313.8992	5918434.5641	10.683
Pr. WWMH 11	ø3000mm	—	1754320.6458	5918426.2978	9.970
SH07	ø4000mm	ø9000mm	1754345.5581	5918310.8469	-7.894
EX WWMH B07023	ø4000mm	—	1754301.7811	5918300.2810	11.022



DATUM -15.00				
PIPE DATA				
INVERT LEVEL ⁵				
EXISTING SURFACE LEVEL				
DEPTH TO INVERT				
CHAINAGE				



DATUM -15.00				
PIPE DATA				
INVERT LEVEL ⁵				
EXISTING SURFACE LEVEL				
DEPTH TO INVERT				
CHAINAGE				

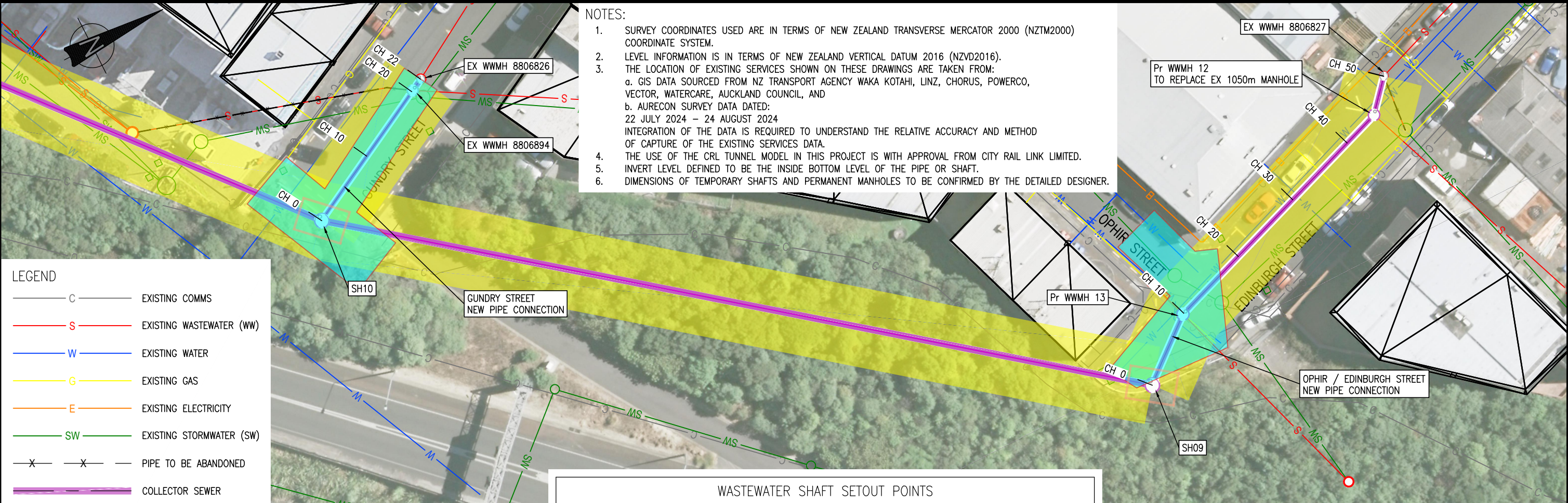


DATUM -15.00				
PIPE DATA				
INVERT LEVEL ⁵				
EXISTING SURFACE LEVEL				
DEPTH TO INVERT				
CHAINAGE				

DESIGNED					
DES. APPROVED					
DRAWN		J.FERNANDEZ		05-25	
DWG. APPROVED					
WSL DESIGN MGMT.		J.STOKES		05-25	
WSL PROJ. LEAD		J.STOKES		03-25	
1	16.05.25	ISSUE FOR INFORMATION		JF	MC
ISSUE	DATE	AMENDMENT		BY	APPD.

MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS
PLAN AND LONG SECTION – SH07 SH07a

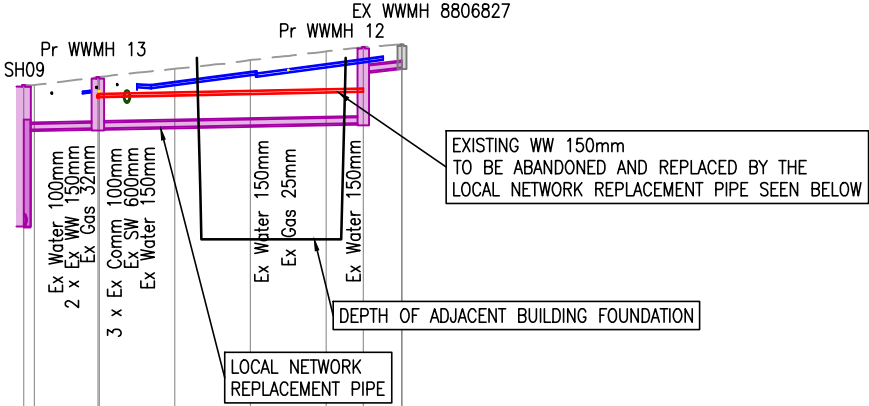
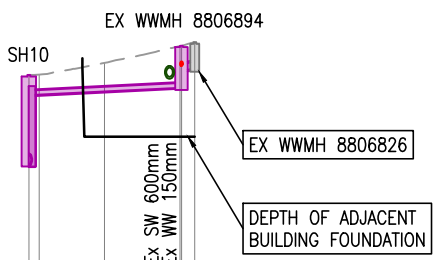
CAD FILE	2014581.139	DATE	16-05-2025
ORIGINAL SCALE	A3	CONTRACT No.	—
AS SHOWN			
REF No.	—		
DWG No.	2014581.139	ISSUE	1



- NOTES:
1. SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 2. LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 3. THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHĪ, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 4. THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 5. INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 6. DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

LEGEND

- C — EXISTING COMMS
- S — EXISTING WASTEWATER (WW)
- W — EXISTING WATER
- G — EXISTING GAS
- E — EXISTING ELECTRICITY
- SW — EXISTING STORMWATER (SW)
- X — PIPE TO BE ABANDONED
- Collector Sewer
- 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
- WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
- TEMPORARY SHAFT
- PERMANENT SHAFT
- APPROXIMATE CONSTRUCTION AREAS
- OVERBRIDGE PIERS
- BUILDING FOUNDATIONS IN CLOSE PROXIMITY



WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH10	Ø1800mm	6m x 4m	1756414.8857	5919130.8579	46.000
EX WWMH 8806894	Ø1500mm	—	1756405.4128	5919148.6902	51.067
Pr. WWMH 12	Ø1400mm	—	1756463.8559	5919256.2199	56.700
Pr. WWMH 13	Ø1500mm	—	1756475.3478	5919223.0331	56.353
EX WWMH 8806826	Ø1050mm	—	1756404.5889	5919150.2489	52.356
EX WWMH 8806827	Ø1050mm	—	1756460.0260	5919259.5700	60.369
SH09	Ø1800mm	6m x 4m	1756481.6102	5919215.4656	50.000

DATUM 30.00

PIPE DATA

	3000		4500	
	19.785m	2.50%	1.763m	11.88%
INVERT LEVEL ⁵	46.000	50.572	51.067	52.356
EXISTING SURFACE LEVEL	51.902		53.838	54.062
DEPTH TO INVERT	5.902	1.330	2.771	1.691
CHAINAGE	0.00	1.38	20.19	

LONG SECTION (SH10)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

DATUM 35.00

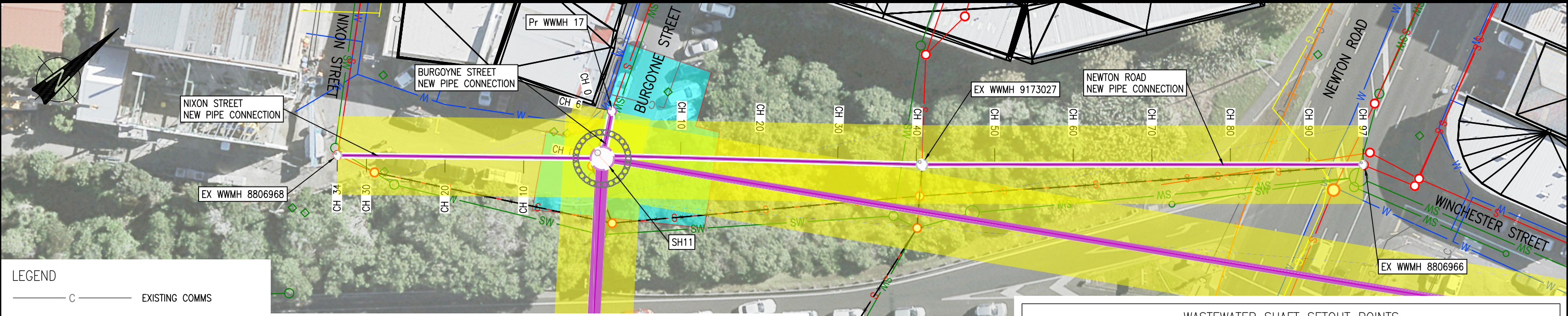
PIPE DATA

	3750		3750		3750	
	9.374	1.00%	35.120m	1.00%	5.088m	5.70%
INVERT LEVEL ⁵	50.000	56.260	56.353	56.349	56.700	60.079
EXISTING SURFACE LEVEL	59.214	59.735			61.723	61.904
DEPTH TO INVERT	9.214	2.954	3.382	3.386	5.023	1.644
CHAINAGE	0.00	1.42	9.82		44.94	50.03

LONG SECTION (SH09)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500





LEGEND

C

EXISTING COMMS

S

EXISTING WASTEWATER (WW)

W

EXISTING WATER

G

EXISTING GAS

E

EXISTING ELECTRICITY

SW

EXISTING STORMWATER (SW)

X

PIPE TO BE ABANDONED

COLLECTOR SEWER

10M WIDE PIPELINE CONSTRUCTION CORRIDOR

WASTEWATER LOCAL NETWORK PIPE REPLACEMENT

TEMPORARY SHAFT

PERMANENT SHAFT

APPROXIMATE CONSTRUCTION AREAS

OVERBRIDGE PIERS

BUILDING FOUNDATIONS IN CLOSE PROXIMITY

- NOTES:
1.

SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
2.

LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
3.

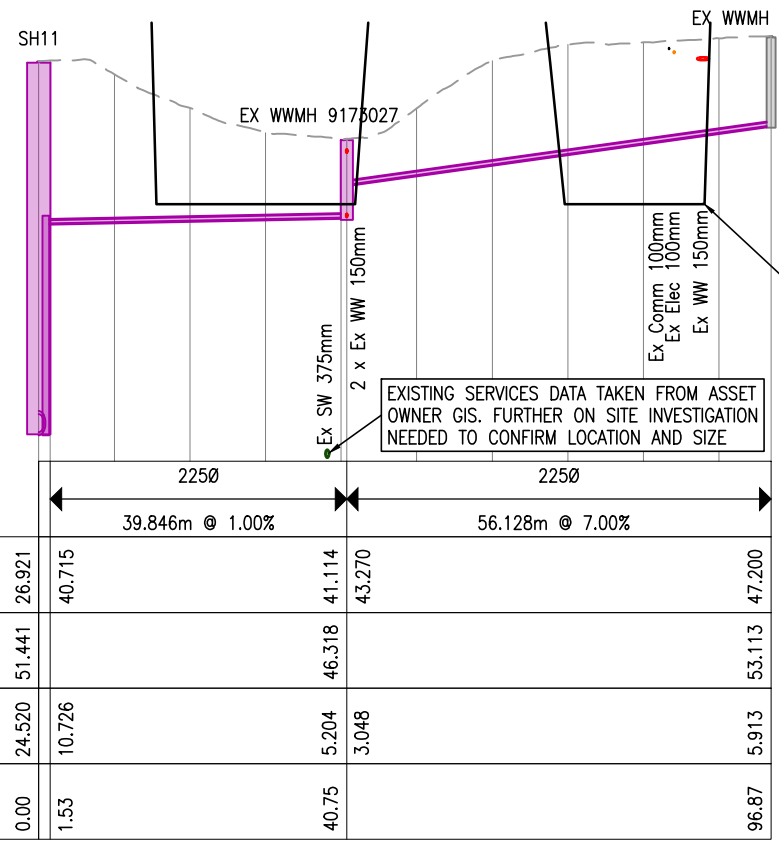
THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHI, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
4.

THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
5.

INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
6.

DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH11	ø3000mm	ø6000mm	1756273.4725	5919012.0745	26.921
EX WWMH 8806968	ø1050mm	–	1756251.2924	5918986.6883	46.100
EX WWMH 9173027	ø1500mm	–	1756300.4973	5919042.5074	41.114
Pr. WWMH 17	ø1050mm	–	1756269.6759	5919016.9057	47.700
EX WWMH 8806966	ø1050mm	–	1756337.0510	5919085.2190	47.200



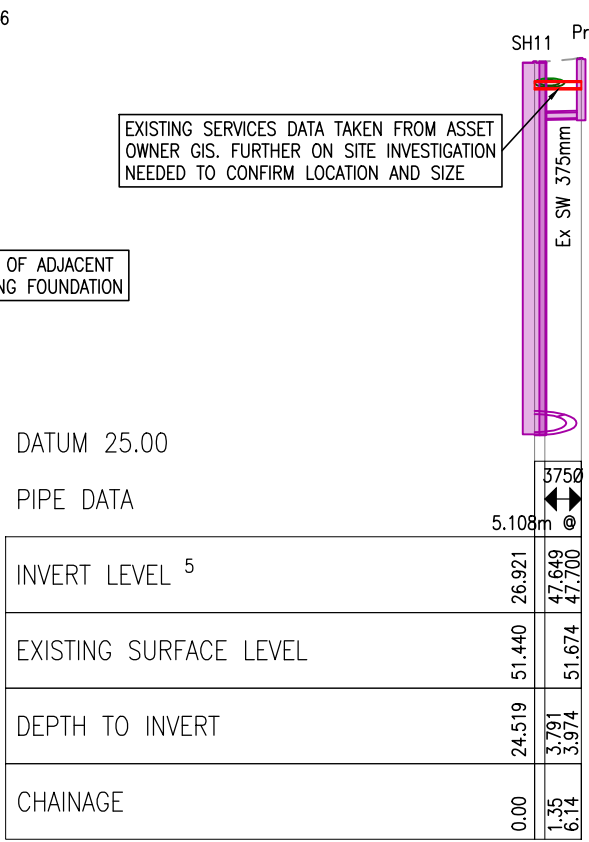
DATUM 25.00

PIPE DATA

INVERT LEVEL ⁵	26.921	40.715	41.114	43.270	47.200
EXISTING SURFACE LEVEL	51.441		46.318		53.113
DEPTH TO INVERT	24.520	10.726	5.204	3.048	5.913
CHAINAGE	0.00	1.53	40.75		96.87

LONG SECTION (SH11a)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500



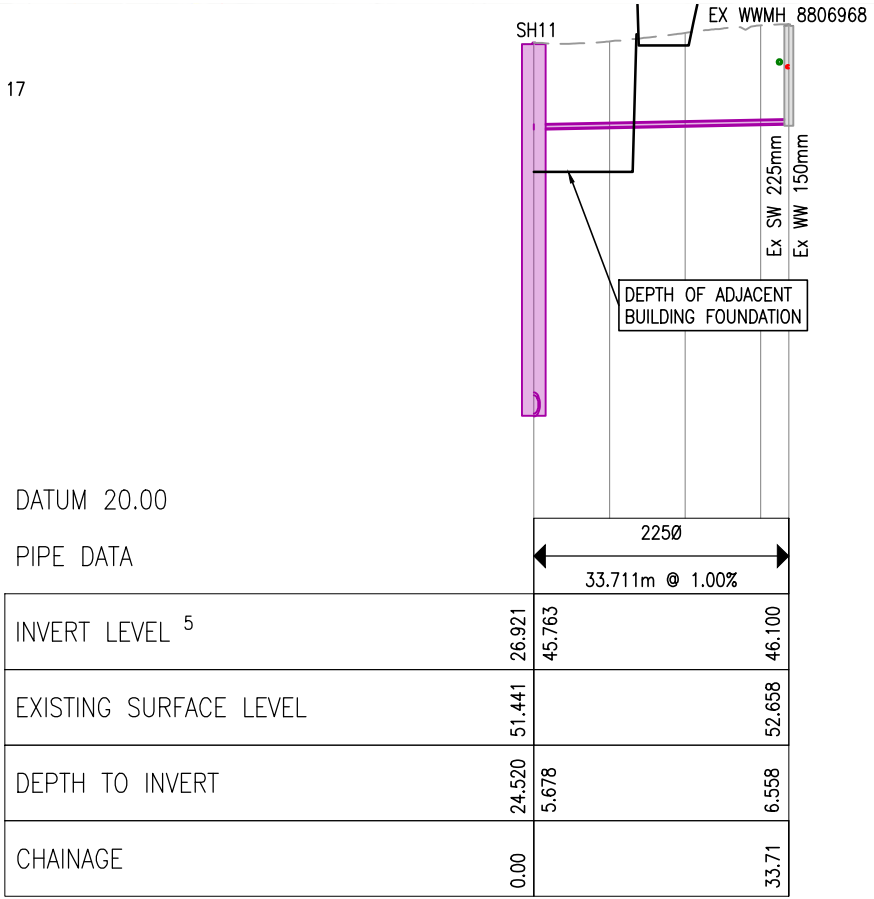
DATUM 25.00

PIPE DATA

INVERT LEVEL ⁵	26.921	47.649	47.700
EXISTING SURFACE LEVEL	51.440	51.674	
DEPTH TO INVERT	24.519	3.791	3.974
CHAINAGE	0.00	1.35	6.14

LONG SECTION (SH11b)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500



DATUM 20.00

PIPE DATA

INVERT LEVEL ⁵	26.921	45.763	46.100
EXISTING SURFACE LEVEL	51.441		52.658
DEPTH TO INVERT	24.520	5.678	6.558
CHAINAGE	0.00		33.71

LONG SECTION (SH11c)

SCALES: HORIZONTAL 1:1000 VERTICAL 1:500

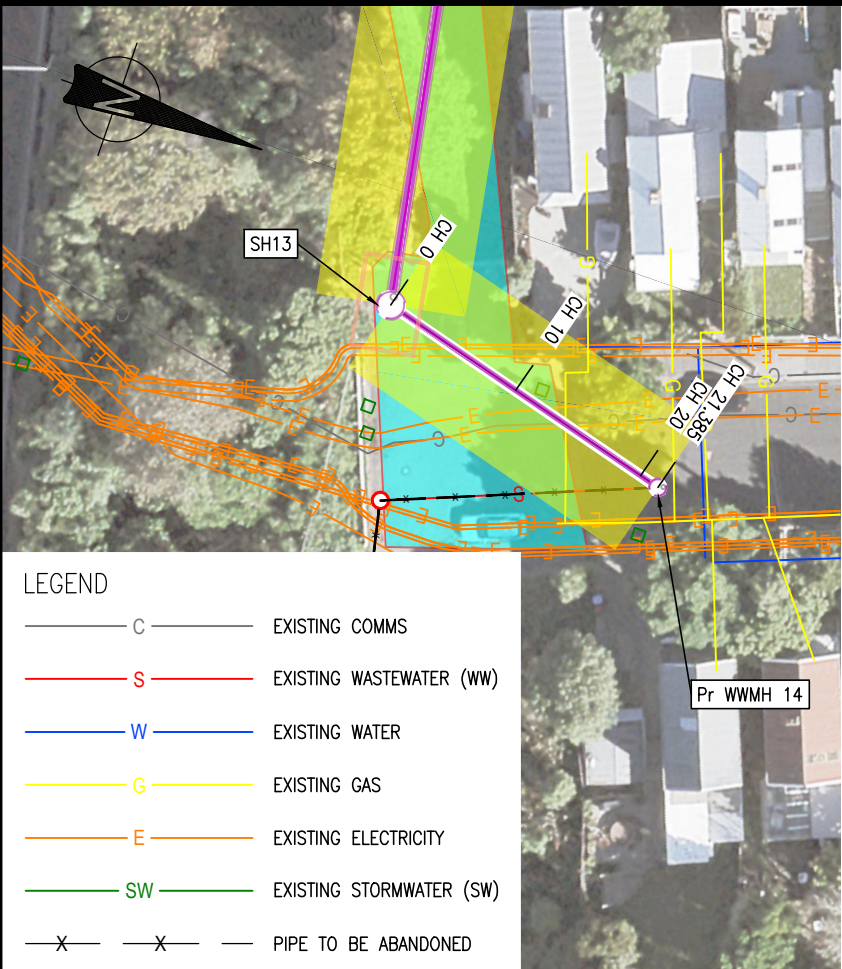
				DESIGNED		
				DES. APPROVED		
				DRAWN	J.FERNANDEZ	05-25
				DWG. APPROVED		
				WSL DESIGN MGMT.	J.STOKES	05-25
1	16.05.25	ISSUE FOR INFORMATION	JF	MC	WSL PROJ. LEAD	J.STOKES
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE

Watercare

COPYRIGHT – This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.

MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS
PLAN AND LONG SECTION – SH11

CAD FILE	2014581.141	DATE	16-05-2025
ORIGINAL SCALE	A3	CONTRACT No.	–
AS SHOWN			
REF No.	–		
DWG No.	2014581.141	ISSUE	1

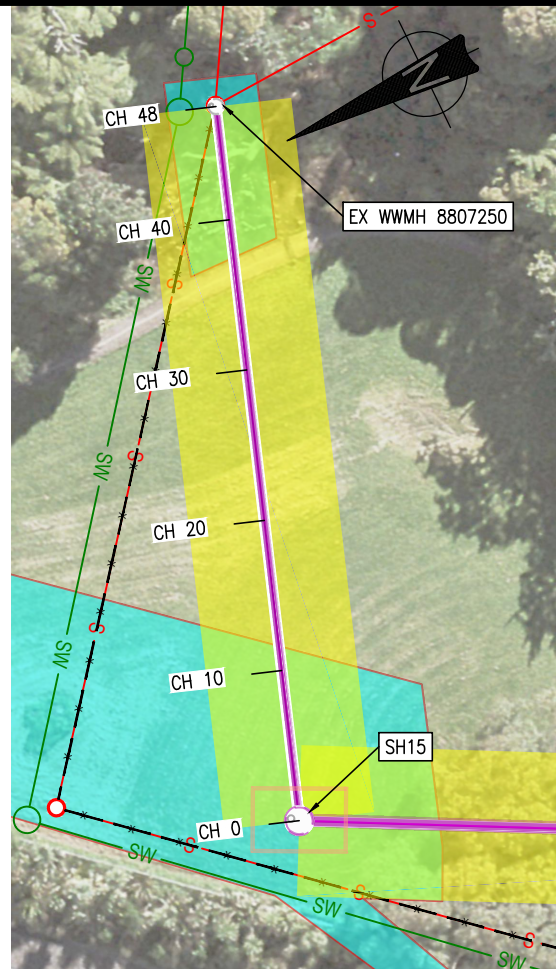


- LEGEND
- C — EXISTING COMMS
 - S — EXISTING WASTEWATER (WW)
 - W — EXISTING WATER
 - G — EXISTING GAS
 - E — EXISTING ELECTRICITY
 - SW — EXISTING STORMWATER (SW)
 - X — PIPE TO BE ABANDONED
 - COLLECTOR SEWER
 - 10M WIDE PIPELINE CONSTRUCTION CORRIDOR
 - WASTEWATER LOCAL NETWORK PIPE REPLACEMENT
 - TEMPORARY SHAFT
 - PERMANENT SHAFT
 - APPROXIMATE CONSTRUCTION AREAS
 - OVERBRIDGE PIERS

DATUM 10.00

PIPE DATA

	2250	
	21.385m @ 2.00%	
INVERT LEVEL ⁵	25.846	33.228
EXISTING SURFACE LEVEL	33.986	35.954
DEPTH TO INVERT	8.140	2.726
CHAINAGE	0.00	21.39



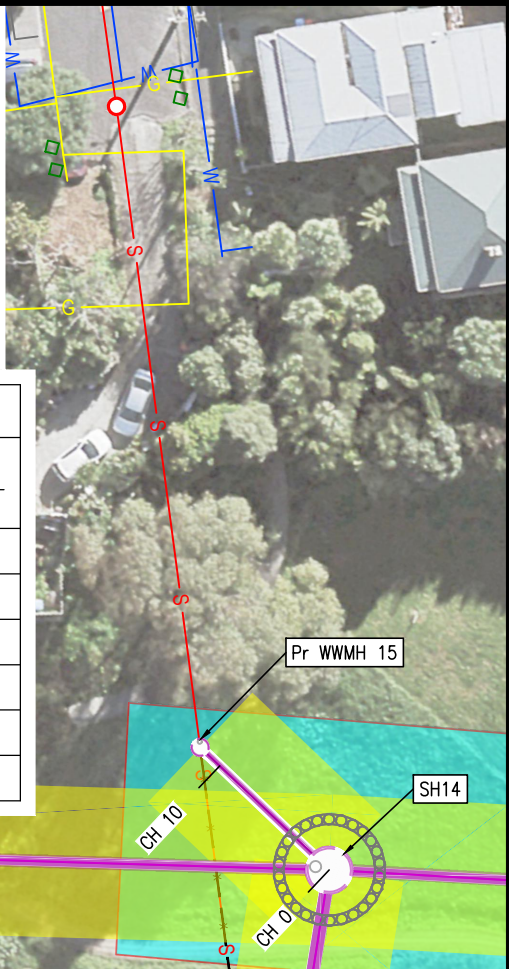
DATUM -1.00

PIPE DATA

	3000	
	47.546m @ 2.00%	
INVERT LEVEL ⁵	17.281	22.000
EXISTING SURFACE LEVEL	23.280	26.100
DEPTH TO INVERT	5.999	4.100
CHAINAGE	0.00	47.62

- NOTES:
- SURVEY COORDINATES USED ARE IN TERMS OF NEW ZEALAND TRANSVERSE MERCATOR 2000 (NZTM2000) COORDINATE SYSTEM.
 - LEVEL INFORMATION IS IN TERMS OF NEW ZEALAND VERTICAL DATUM 2016 (NZVD2016).
 - THE LOCATION OF EXISTING SERVICES SHOWN ON THESE DRAWINGS ARE TAKEN FROM:
a. GIS DATA SOURCED FROM NZ TRANSPORT AGENCY WAKA KOTAHĪ, LINZ, CHORUS, POWERCO, VECTOR, WATERCARE, AUCKLAND COUNCIL, AND
b. AURECON SURVEY DATA DATED:
22 JULY 2024 – 24 AUGUST 2024
INTEGRATION OF THE DATA IS REQUIRED TO UNDERSTAND THE RELATIVE ACCURACY AND METHOD OF CAPTURE OF THE EXISTING SERVICES DATA.
 - THE USE OF THE CRL TUNNEL MODEL IN THIS PROJECT IS WITH APPROVAL FROM CITY RAIL LINK LIMITED.
 - INVERT LEVEL DEFINED TO BE THE INSIDE BOTTOM LEVEL OF THE PIPE OR SHAFT.
 - DIMENSIONS OF TEMPORARY SHAFTS AND PERMANENT MANHOLES TO BE CONFIRMED BY THE DETAILED DESIGNER.

STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH13	ø1800mm	6m x 4m	1755527.2827	5918319.4689	25.846
Pr. WWMH 14	ø1050mm	—	1755532.8596	5918340.1138	32.228
SH14	ø3000mm	ø6000mm	1755468.603	5918308.8144	14.314
SH15	ø1800mm	6m x 4m	1755362.838	5918286.6948	17.281
Pr. WWMH 15	ø1500mm	—	1755458.401	5918314.7053	27.842
EX WWMH 8807250	ø1050mm	—	1755346.3670	5918331.3680	22.000



DATUM -1.00

PIPE DATA

	2250	
	11.780m @ 4.10%	
INVERT LEVEL ⁵	14.314	27.842
EXISTING SURFACE LEVEL	29.210	31.006
DEPTH TO INVERT	14.896	3.164
CHAINAGE	0.00	11.78

				DESIGNED		
				DES. APPROVED		
				DRAWN	J.FERNANDEZ	05-25
				DWG. APPROVED		
				WSL DESIGN MGMT.	J.STOKES	05-25
				WSL PROJ. LEAD	J.STOKES	05-25
1	16.05.25	ISSUE FOR INFORMATION	JF	MC		
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE

MOTIONS COLLECTOR SEWER
LOCAL NETWORK CONNECTIONS
PLAN AND LONG SECTION – SH13 SH14 SH15

CAD FILE	2014581.142	DATE	16-05-2025
ORIGINAL SCALE	A3	CONTRACT No.	—
AS SHOWN			
REF No.	—		
DWG No.	2014581.142	ISSUE	1