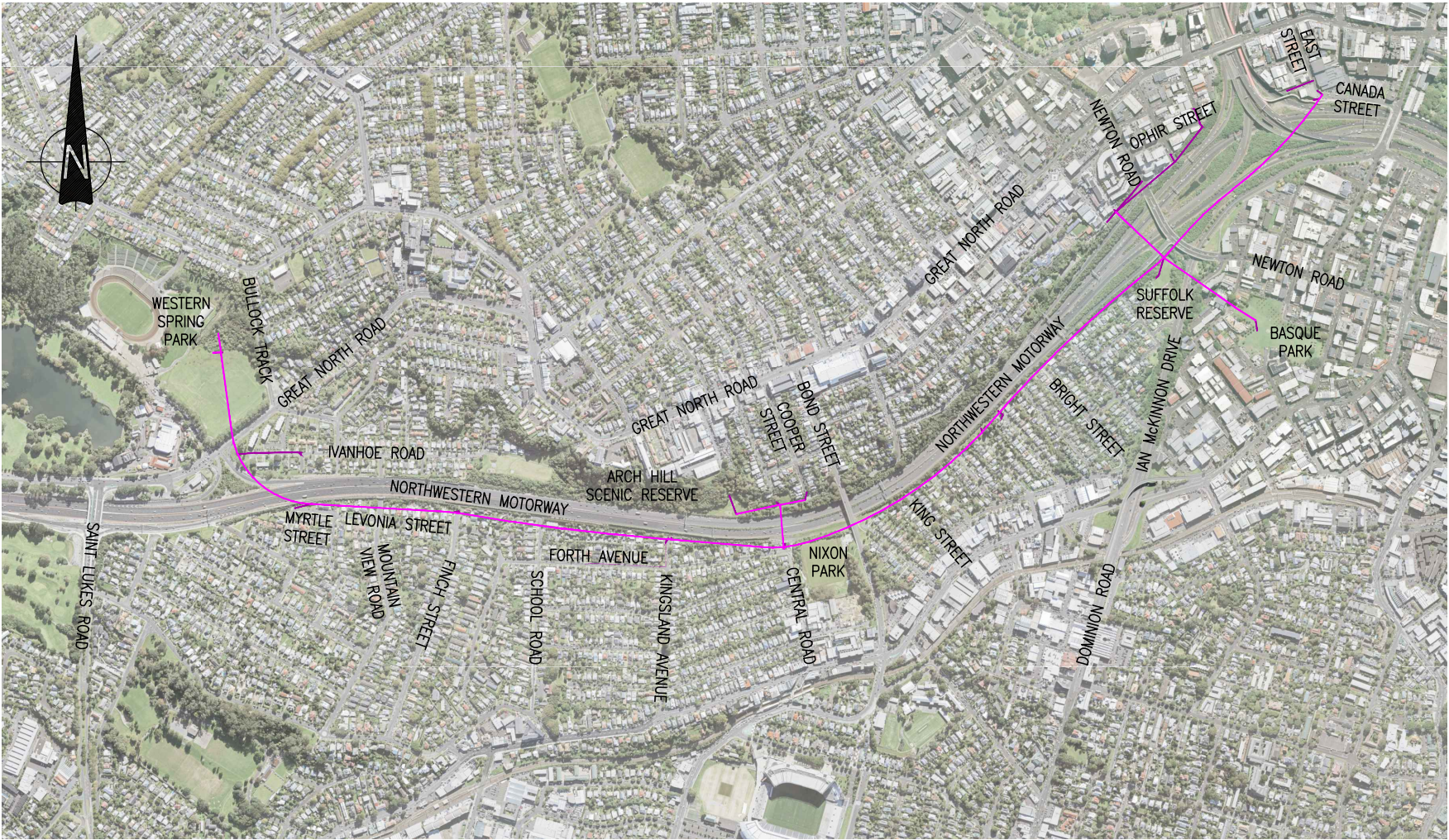


MOTIONS COLLECTOR SEWER DRAWINGS FOR RESOURCE CONSENT

DRAWING LIST	
DRAWING No.	DRAWING TITLE
2014581.290	MOTIONS COLLECTOR SEWER – CIVIL – LOCALITY PLAN AND DRAWING INDEX (DN4500 TUNNEL BORING OPTION)
2014581.200	MOTIONS COLLECTOR SEWER – CIVIL – OVERALL PLAN (DN4500 TUNNEL BORING OPTION)
2014581.201	MOTIONS COLLECTOR SEWER – CIVIL – OVERALL LONG SECTION (DN4500 TUNNEL BORING OPTION) – SHEET 1
2014581.202	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 1
2014581.203	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 2
2014581.204	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 3
2014581.205	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 4
2014581.206	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 5
2014581.207	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 6
2014581.208	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 7
2014581.209	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 8
2014581.210	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 9
2014581.211	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 10
2014581.212	MOTIONS COLLECTOR SEWER – CIVIL – PLAN (DN4500 TUNNEL BORING OPTION) – SHEET 11
2014581.213	MOTIONS COLLECTOR SEWER – CIVIL – BRANCH PLAN AND LONG SECTION – SHEET 1
2014581.214	MOTIONS COLLECTOR SEWER – CIVIL – BRANCH PLAN AND LONG SECTION – SHEET 2
2014581.215	MOTIONS COLLECTOR SEWER – CIVIL – BRANCH PLAN AND LONG SECTION – SHEET 3
2014581.216	MOTIONS COLLECTOR SEWER – CIVIL – BRANCH PLAN AND LONG SECTION – SHEET 4
2014581.217	MOTIONS COLLECTOR SEWER – CIVIL – BRANCH PLAN AND LONG SECTION – SHEET 5
2014581.218	MOTIONS COLLECTOR SEWER – CIVIL – SH–CRL CONNECTION – PLAN AND LONG SECTION
2014581.219	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH01
2014581.220	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH02
2014581.221	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH03
2014581.222	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH04
2014581.223	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH05
2014581.224	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH06
2014581.225	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH07a
2014581.226	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH07b SH07c
2014581.227	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH09 SH10
2014581.228	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH11
2014581.229	MOTIONS COLLECTOR SEWER – LOCAL NETWORK CONNECTIONS – PLAN AND LONG SECTION – SH13 SH14 SH15

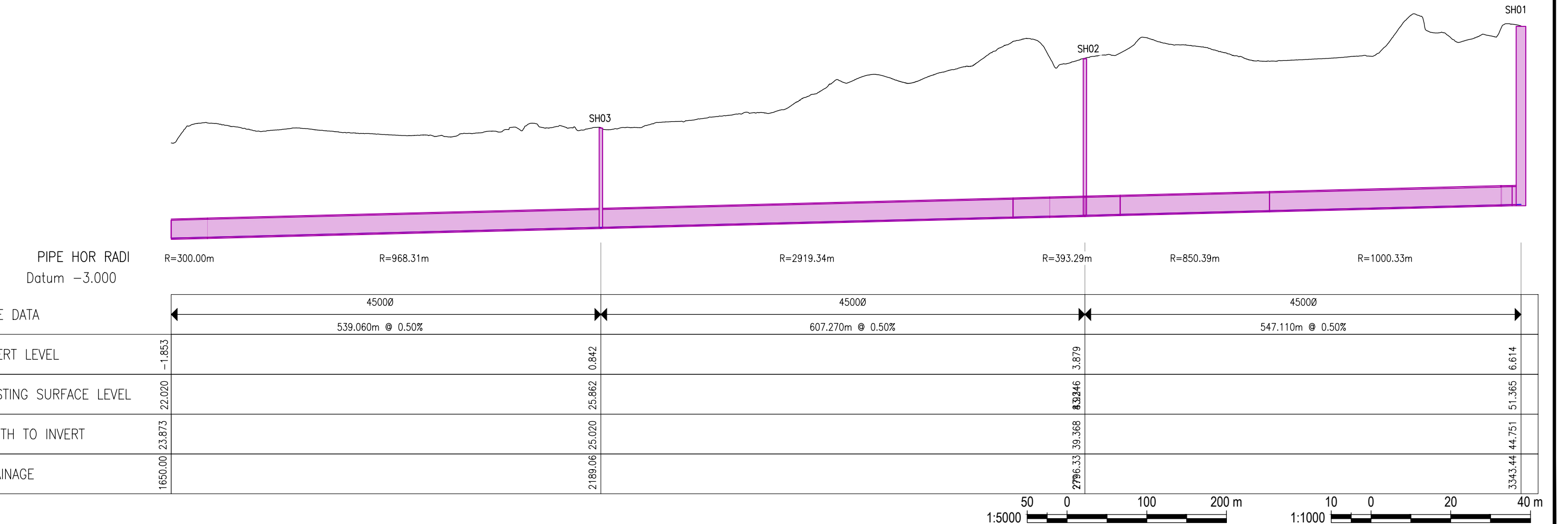


					DESIGNED			 Watercare COPYRIGHT – This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.	MOTIONS COLLECTOR SEWER CIVIL LOCALITY PLAN AND DRAWING INDEX (DN4500 TBM OPTION)	CAD FILE	2014581.290	DATE	29-07-2025
					DES. APPROVED					ORIGINAL SCALE	A3	CONTRACT No.	—
					DRAWN	J.FERNANDEZ	07-25				N.T.S.		
					DWG. APPROVED					REF No.	—		
2	29.07.25	ISSUE FOR INFORMATION	JF	MC	WSL DESIGN MGMT.	J.STOKES	07-25			DWG No.	2014581.290	ISSUE	2
1	16.05.25	ISSUE FOR INFORMATION	JF	MC	WSL PROJ. LEAD	J.STOKES	07-25						
ISSUE	DATE	AMENDMENT	BY	APPD.		BY	DATE						

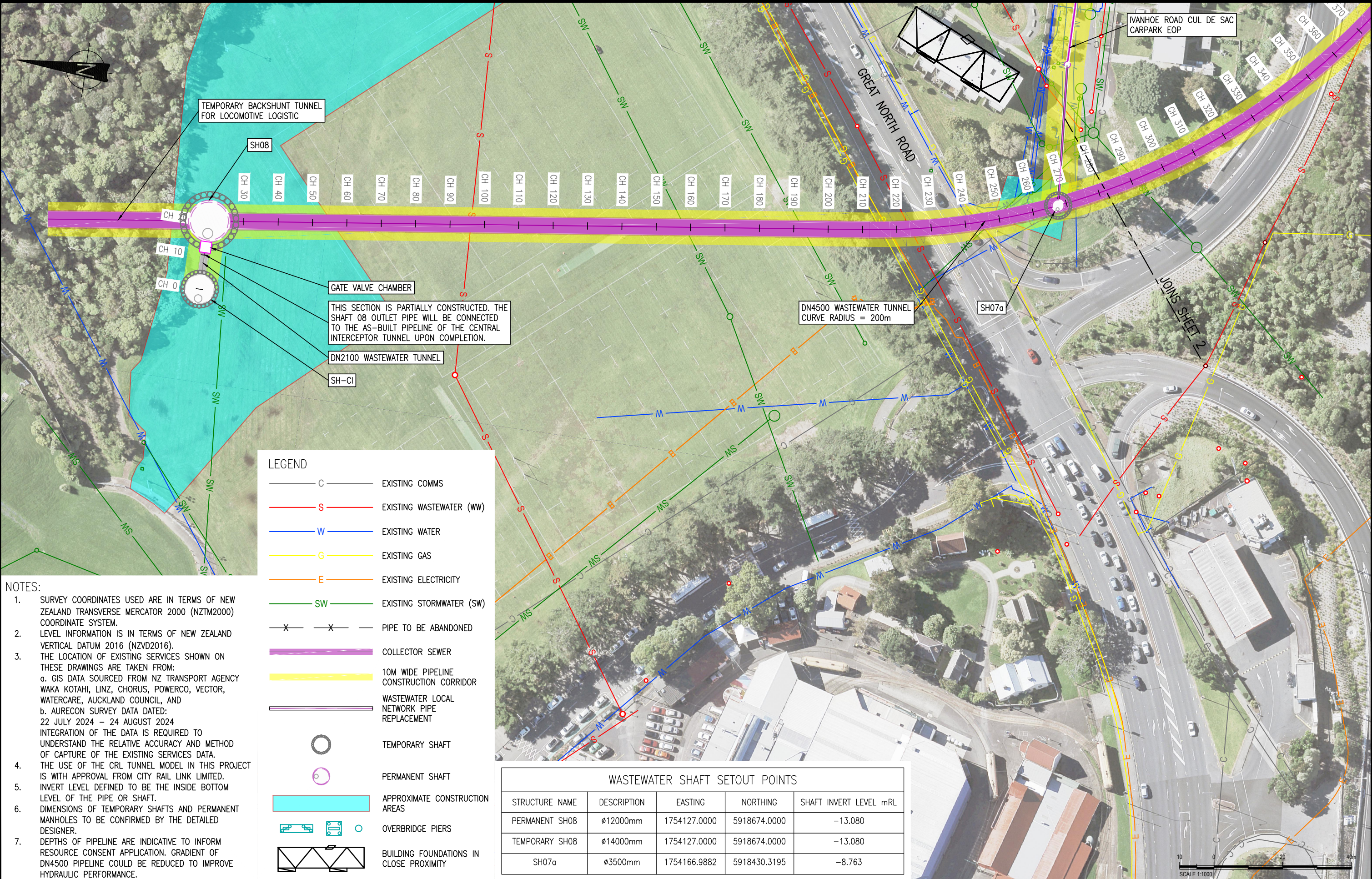


					DESIGNED			 Watercare COPYRIGHT - This drawing, the design concept, remain the exclusive property of Watercare Services Limited and may not be used without approval. Copyright reserved.	MOTIONS COLLECTOR SEWER CIVIL OVERALL PLAN (DN4500 TBM OPTION)	CAD FILE 2014581.200		DATE 25-07-2025			
					DES. APPROVED					ORIGINAL SCALE A3 1:7500		CONTRACT No. -			
4	25.07.25	ISSUE FOR INFORMATION	JF	MC	DRAWN	J.FERNANDEZ	07-25			REF No. -					
3	16.05.25	ISSUE FOR INFORMATION	JF	MC	DWG. APPROVED										
2	14.05.25	ISSUE FOR INFORMATION	JF	MC	WSL DESIGN MGMT.	J.STOKES	07-25								
1	25.04.25	ISSUE FOR INFORMATION	JF	MC	WSL PROJ. LEAD	J.STOKES	07-25			DWG No. 2014581.200				ISSUE 4	
ISSUE	DATE	AMENDMENT		BY	APPD.					BY	DATE				

1. THE EXISTING PIPELINES ARE NOT PRESENTED IN THIS DRAWING FOR CLARITY. DETAILS REFER TO CONCEPT DESIGN SET OF DRAWINGS. EXISTING SERVICE DATA TAKEN FROM ASSET OWNER GIS. FURTHER ON-SITE INVESTIGATION NEEDED TO CONFIRM LOCATION AND SIZE. DIVERSION MAY BE REQUIRED.
2. DEPTHS OF PIPELINE ARE INDICATIVE TO INFORM RESOURCE CONSENT APPLICATION. GRADIENT OF DN4500 PIPELINE COULD BE REDUCED TO IMPROVE HYDRAULIC PERFORMANCE.



					DESIGNED		 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 CIVIL OVERALL LONG SECTIONS (DN4500 TBM OPTION)	CAD FILE	2014581.201	DATE	25-07-2025
4	25.07.25	ISSUE FOR INFORMATION	JF	MC	DES. APPROVED				ORIGINAL SCALE	A3	CONTRACT No.	—
3	16.05.25	ISSUE FOR INFORMATION	JF	MC	DRAWN	J.FERNANDEZ			1:5000			
2	14.05.25	ISSUE FOR INFORMATION	JF	MC	DWG. APPROVED				REF No.	—		
1	25.04.25	ISSUE FOR INFORMATION	JF	MC	WSL DESIGN MGMT.	J.STOKES			DWG No.	2014581.201	ISSUE	4
ISSUE	DATE	AMENDMENT	BY	APPD.	WSL PROJ. LEAD	J.STOKES	BY	DATE				



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 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.
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.
7. DEPTHS OF PIPELINE ARE INDICATIVE TO INFORM RESOURCE CONSENT APPLICATION. GRADIENT OF DN4500 PIPELINE COULD BE REDUCED TO IMPROVE HYDRAULIC PERFORMANCE.

LEGEND

C

S

W

G

E

SW

X

X

EXISTING COMMS

EXISTING WASTEWATER (WW)

EXISTING WATER

EXISTING GAS

EXISTING ELECTRICITY

EXISTING STORMWATER (SW)

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 SH08	Ø12000mm	1754127.0000	5918674.0000	-13.080
TEMPORARY SH08	Ø14000mm	1754127.0000	5918674.0000	-13.080
SH07a	Ø3500mm	1754166.9882	5918430.3195	-8.763

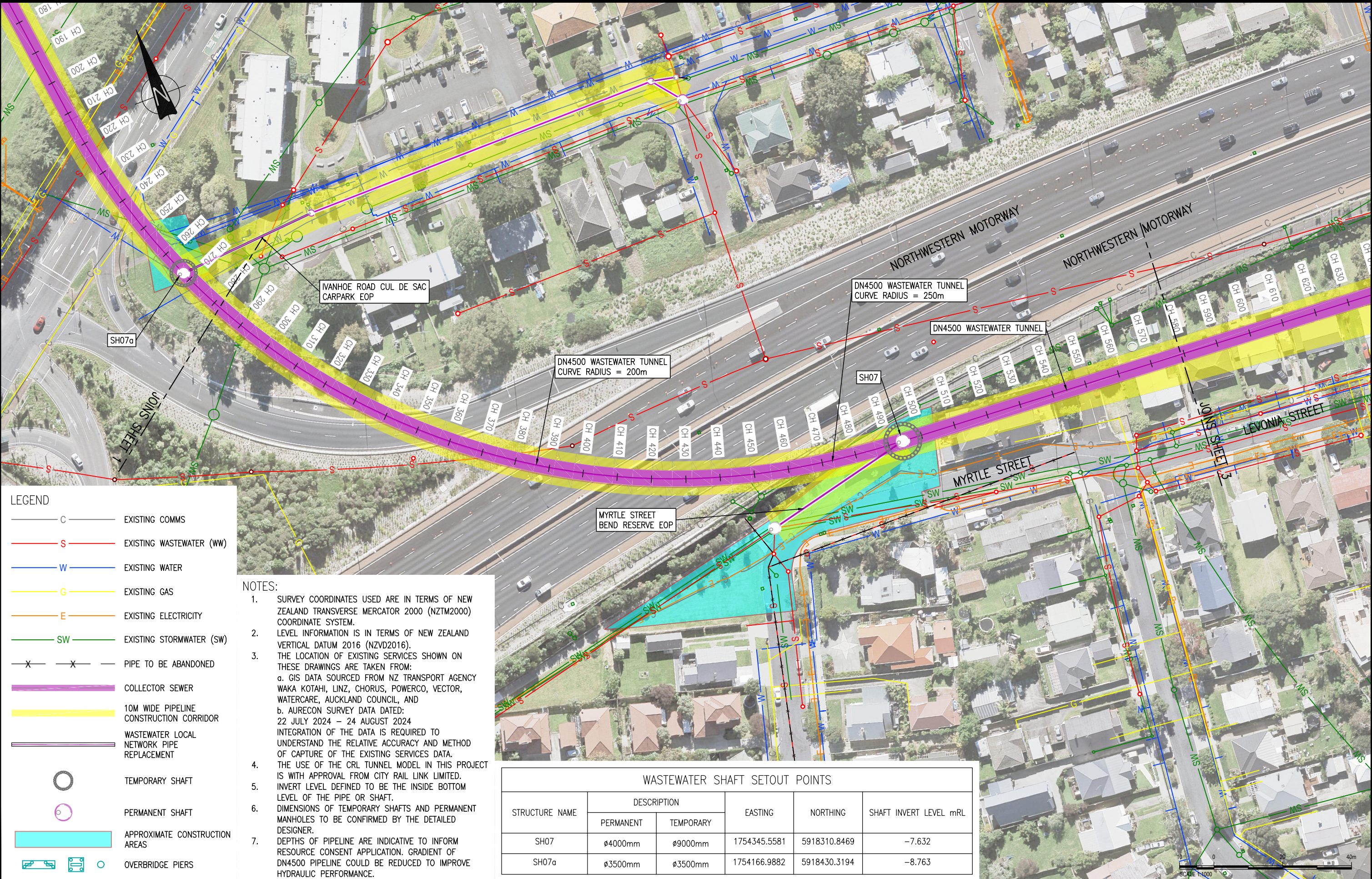
				DESIGNED		
				DES. APPROVED		
				DRAWN	J.FERNANDEZ	07-25
3	25.07.25	ISSUE FOR INFORMATION	JF	MC	DWG. APPROVED	
2	16.05.25	ISSUE FOR INFORMATION	JF	MC	WSL DESIGN MGMT.	J.STOKES 07-25
1	14.05.25	ISSUE FOR INFORMATION	JF	MC	WSL PROJ. LEAD	J.STOKES 07-25
ISSUE	DATE	AMENDMENT	BY	APPD.	BY	DATE

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MOTIONS COLLECTOR SEWER
CIVIL
PLAN (DN4500 TBM OPTION) – SHEET 1

CAD FILE	2014581.202	DATE	25-07-2025
ORIGINAL SCALE	A3 1:1000	CONTRACT No.	—
REF No.	—		
DWG No.	2014581.202	ISSUE	3



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

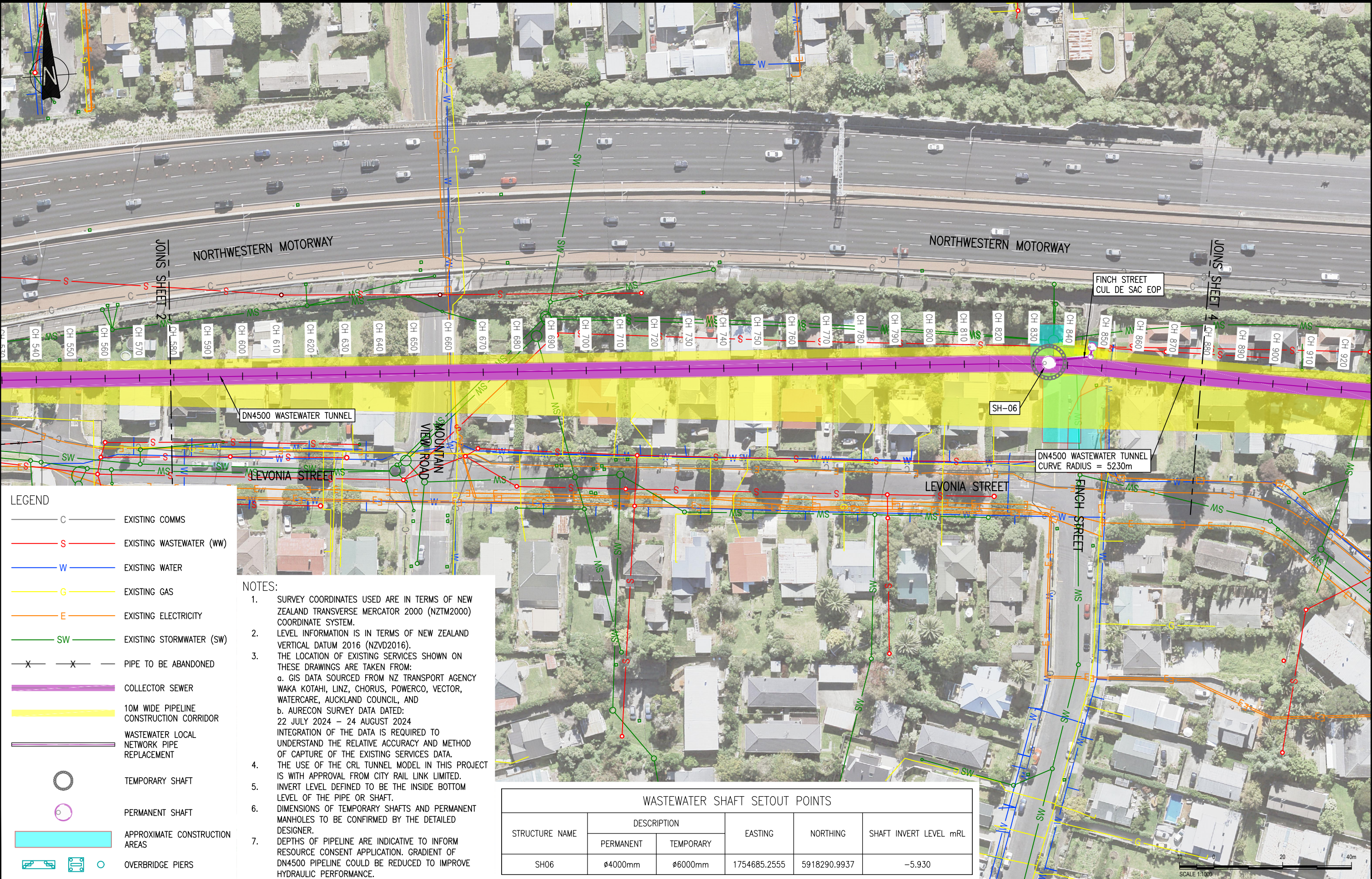
APPROXIMATE CONSTRUCTION AREAS

OVERBRIDGE PIERS

NOTES:

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- DEPTHS OF PIPELINE ARE INDICATIVE TO INFORM RESOURCE CONSENT APPLICATION. GRADIENT OF DN4500 PIPELINE COULD BE REDUCED TO IMPROVE HYDRAULIC PERFORMANCE.

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH07	ø4000mm	ø9000mm	1754345.5581	5918310.8469	-7.632
SH07a	ø3500mm	ø3500mm	1754166.9882	5918430.3194	-8.763



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:

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WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
SH06	ø4000mm	ø6000mm	1754685.2555	5918290.9937	-5.930

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

22.04.25

ISSUE FOR INFORMATION

JF

MC

BY

APPD.

BY

DATE

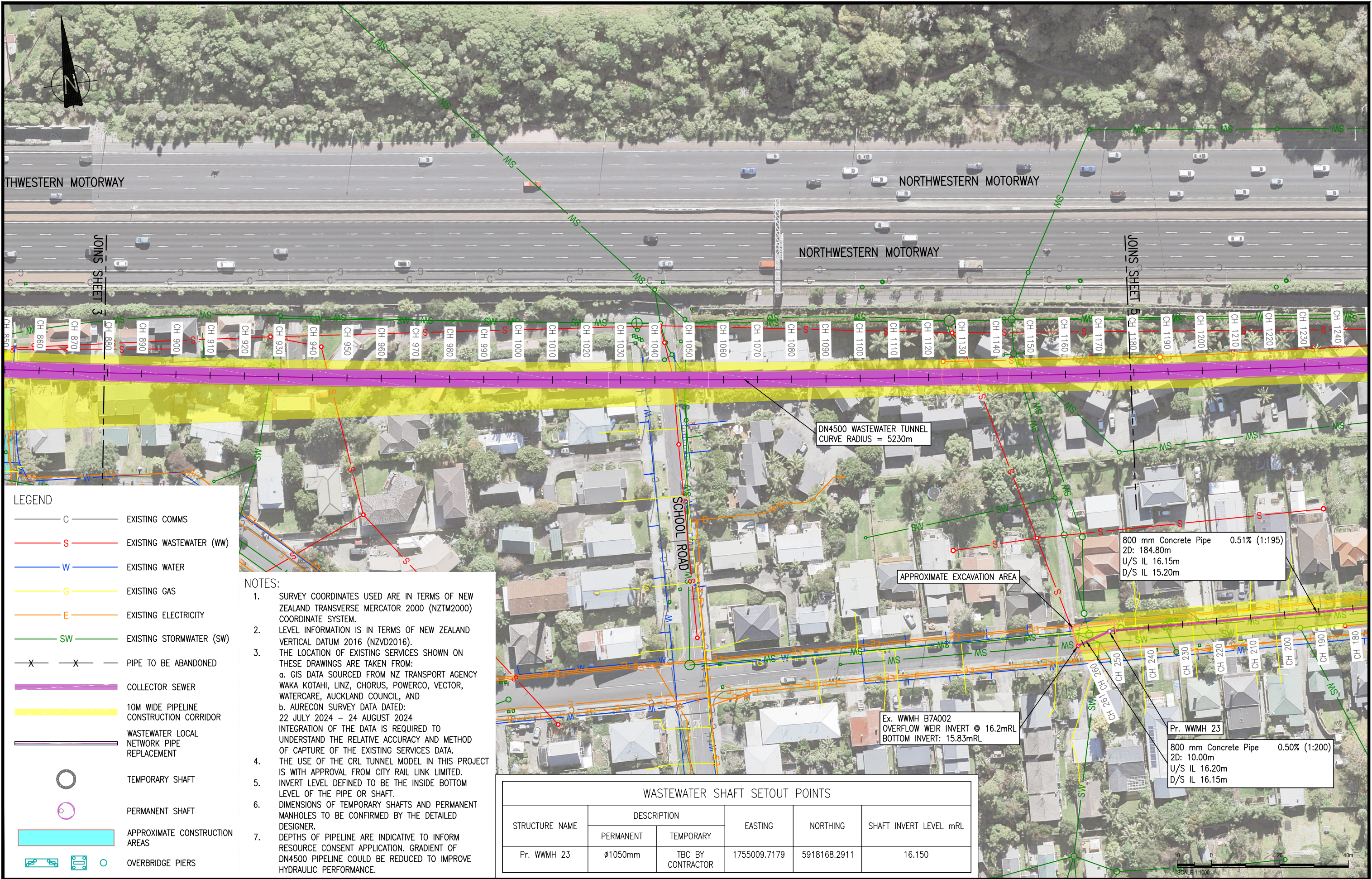
MOTIONS COLLECTOR SEWER

CIVIL

PLAN (DN4500 TBM OPTION) – SHEET 3

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CAD FILE	2014581.204	DATE	16-05-2025
ORIGINAL SCALE	A3	CONTRACT No.	—
1:1000			
REF No.	—		
DWG No.	2014581.204	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

NOTES:

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- DEPTHS OF PIPELINE ARE INDICATIVE TO INFORM RESOURCE CONSENT APPLICATION. GRADIENT OF DN4500 PIPELINE COULD BE REDUCED TO IMPROVE HYDRAULIC PERFORMANCE.

WASTEWATER SHAFT SETOUT POINTS					
STRUCTURE NAME	DESCRIPTION		EASTING	NORTHING	SHAFT INVERT LEVEL mRL
	PERMANENT	TEMPORARY			
Pr. WWMH 23	Ø1050mm	TBC BY CONTRACTOR	1755009.7179	5918168.2911	16.150

ISSUE	DATE	AMENDMENT	BY	APPD.
3	25.07.25	ISSUE FOR INFORMATION	JF	MC
2	28.05.25	ISSUE FOR INFORMATION	JF	MC
1	16.05.25	ISSUE FOR INFORMATION	JF	MC

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MOTIONS COLLECTOR SEWER
CIVIL
PLAN (DN4500 TBM OPTION) – SHEET 4

CAD FILE	2014581.205	DATE	25-07-2025
ORIGINAL SCALE	A3 1:1000	CONTRACT No.	—
REF No.	—	DWG No.	2014581.205
ISSUE	3		