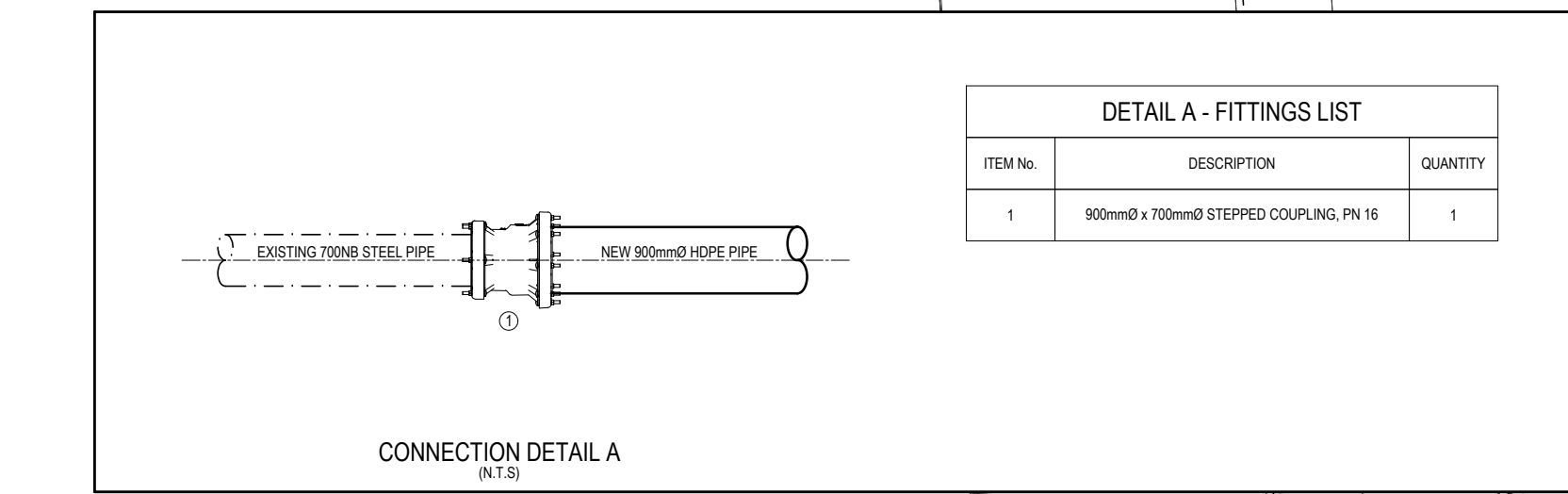


Coordinate List		
Lo 27		
Node	Craigston	XL0
Const.		
W144	102 543.234	2 879 059.152
W145	102 510.171	2 879 061.013
W146	102 477.109	2 879 062.874
W147	102 444.046	2 879 064.735
W148	102 410.983	2 879 066.596
W149	102 377.921	2 879 068.458
W150	102 344.858	2 879 070.319
W151	102 311.795	2 879 072.180
W152	102 278.733	2 879 074.041
W153	102 245.670	2 879 075.902
W154	102 212.607	2 879 077.763
W155	102 179.545	2 879 079.624
W156	102 146.482	2 879 081.485
W157	102 113.419	2 879 083.347
W158	102 080.357	2 879 085.208
W159	102 047.294	2 879 087.069
W160	101 734.127	2 879 087.230
W161	101 704.818	2 879 088.622
W162	102 014.221	2 879 088.930
W163	101 675.509	2 879 090.003
W164	101 581.169	2 879 090.791
W165	101 646.200	2 879 091.435
W166	101 548.106	2 879 092.652
W167	101 616.891	2 879 092.837
W168	101 587.881	2 879 094.239
W169	101 515.043	2 879 094.513
W170	101 558.272	2 879 095.640

Pipe Data List						
Node	Node	Length	Da	MATERIAL	CLASS	
Craigston						
		(m)	(mm)			
W144	W145	33.11	900	PE100 HDPE	PN16	
W145	W146	33.11	900	PE100 HDPE	PN16	
W146	W147	33.11	900	PE100 HDPE	PN16	
W147	W148	33.11	900	PE100 HDPE	PN16	
W148	W149	33.11	900	PE100 HDPE	PN16	
W149	W150	33.11	900	PE100 HDPE	PN16	
W150	W151	33.11	900	PE100 HDPE	PN16	
W151	W152	33.11	900	PE100 HDPE	PN16	
W152	W153	33.11	900	PE100 HDPE	PN16	
W153	W154	33.11	900	PE100 HDPE	PN16	
W154	W155	33.11	900	PE100 HDPE	PN16	
W155	W156	33.11	900	PE100 HDPE	PN16	
W156	W157	33.11	900	PE100 HDPE	PN16	
W157	W158	33.11	900	PE100 HDPE	PN16	
W158	W159	33.11	900	PE100 HDPE	PN16	
W159	W160	29.34	900	PE100 HDPE	PN16	
W160	W161	22.77	900	PE100 HDPE	PN16	
W161	W162	29.34	900	PE100 HDPE	PN16	
W162	W163	33.11	900	PE100 HDPE	PN16	
W163	W164	29.34	900	PE100 HDPE	PN16	
W164	W165	33.11	900	PE100 HDPE	PN16	
W165	W166	29.34	900	PE100 HDPE	PN16	
W166	W167	29.34	900	PE100 HDPE	PN16	
W167	W168	29.34	900	PE100 HDPE	PN16	
W168	W169	29.34	900	PE100 HDPE	PN16	
W169	W170	29.34	900	PE100 HDPE	PN16	

PIPE MATERIAL LIST		
Diameter (mm)	Class	Length (m)
PE100 HDPE	PN16	890.35
900		
Total length PACKAGE 1 Sheet 2		890.35



SEWER:

1. ALL PIPES TO BE LAID IN ACCORDANCE WITH SANS 1200, LATEST REVISION AND THE REQUIREMENTS OF JOHANNESBURG WATER SOC LTD.
2. ALL PIPES TO LAID UNDER TRENCH CONDITIONS UNLESS OTHERWISE SHOWN.
3. ALL CONSTRUCTION WORK TO BE CARRIED OUT IN STRICT ACCORDANCE WITH REQUIREMENTS OF JOHANNESBURG WATER.
4. SEWERS GENERALLY 1.5m FROM BOUNDARIES UNLESS OTHERWISE SHOWN.
5. DO NOT SCALE FROM THESE DRAWINGS.
6. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS.
7. THE FINAL PIPE ROUTE TO BE DETERMINED ON SITE AFTER EXPOSING OF EXISTING SERVICES.
8. ALL WORKS TO BE APPROVED BY EMPLOYEE AGENT REPRESENTATIVE BEFORE CONSTRUCTION.
9. CONTRACTOR TO CONFIRM LEVELS OF EXISTING PIPES BEFORE COMMENCING CONSTRUCTION.
10. POSITIONS OF ALL EXISTING SERVICES ARE APPROXIMATED AND MUST BE VERIFIED ON SITE.
11. ALL MATERIALS USED IN INSTALLING SEWER MAINS SHALL COMPLY WITH THE RELEVANT SABS SPECIFICATION AND WITH THE MINIMUM REQUIREMENTS OF JOHANNESBURG WATER (SOC) LTD.
12. THE POSITION AND DEPTH OF ALL EXISTING SERVICES ON THE SITE AND OFF THE SITE WHERE AFFECTED BY THE WORKS SHALL BE CONFIRMED PRIOR TO ANY CONSTRUCTION WORK ON THE INSTALLATION OF WATER OR SEWER MAINS BEING COMMENCED.
13. THE CONTRACTOR SHALL CARRY OUT WORKS TO TIE-IN CONNECTIONS TO EXISTING SEWER MANHOLES AND MAINS.
14. POSITIONS OF ALL EXISTING SERVICES ARE APPROXIMATED AND MUST BE VERIFIED ON SITE BY ENGINEER REPRESENTATIVE AND CONTRACTOR.

PIPE ANCHOR
1. GRADE BETWEEN 1:10 AND 1:6 ANCHOR BLOCKS SHALL BE INSTALLED AT INTERVALS NOT EXCEEDING 12 METERS.

SEWER MANHOLES
1. SEWER MANHOLES ARE TO BE SPACED AT A MAXIMUM OF 80 METERS.

PLEASE NOTE:
- STREET NAMES EXTRACTED FROM IMGS.

LEGEND

- NEW SEWER PIPE
- NEW SEWER MANHOLE
- DIRECTION OF FLOW
- EXISTING SEWER PIPE
- EXISTING SEWER MANHOLE
- CONTOURS
- 1:100m FLOOD LINE
- PACKAGE BOUNDARY

DRAWING REFERENCE:

JW14460-CRA-GACL-P-S01	GENERAL LAYOUT PLAN
JW14460-CRA-COR-S01	COORDINATES TABLE
JW14460-CRA-LAY-S01	LAYOUT PLAN PACKAGE 1 SHEET 1
JW14460-CRA-LAY-S02	LAYOUT PLAN PACKAGE 1 SHEET 2
JW14460-CRA-LAY-S03	LAYOUT PLAN PACKAGE 2 SHEET 1
JW14460-CRA-LAY-S04	LAYOUT PLAN PACKAGE 2 SHEET 2
JW14460-CRA-LAY-S05	LAYOUT PLAN PACKAGE 2 SHEET 3
JW14460-CRA-L-S-S01	PACKAGE 1 LONG SECTION SHEET 1
JW14460-CRA-L-S-S02	PACKAGE 1 LONG SECTION SHEET 2
JW14460-CRA-L-S-S03	PACKAGE 1 LONG SECTION SHEET 3
JW14460-CRA-L-S-S04	PACKAGE 2 LONG SECTION SHEET 1
JW14460-CRA-L-S-S05	PACKAGE 2 LONG SECTION SHEET 2
JW14460-CRA-L-S-S06	PACKAGE 2 LONG SECTION SHEET 3
JW14460-CRA-L-S-S07	PACKAGE 2 LONG SECTION SHEET 4
JW14460-CRA-L-S-S08	PACKAGE 2 LONG SECTION SHEET 5
JW14460-CRA-VCD-S01	TYPICAL AIR VALVE CHAMBER DETAIL
JW14460-CRA-VCD-S02	TYPICAL SCOUR VALVE CHAMBER DETAIL
JW100-DET02-W01	BEDDING DETAIL
JW100-DET03-S01	MANHOLE DETAILS FOR SEWER
JW100-DET04-S01	SEWER ERF CONNECTIONS
JW100-DET01-L-W01	NAMEBOARD

LOCALITY PLAN:

CONSULTING ENGINEERS
CAPEX - ENGINEERING SERVICE UNIT
TURBINE HALL - 3RD FLOOR
65 NTEMI PILISO STREET
NEWTOWN
JOHANNESBURG
2113

DESIGNED: N.NKOSI 16/09/2024

DRAWN: M.I.BALLIM 25/09/2024

CHECKED: N.NKOSI 25/09/2024

APPROVED BY: T.M.PANDAGUTA 201170150
SIGNATURE: ECSA REG. No.

JOHANNESBURG WATER SOC Ltd
TURBINE HALL
65 NTEMI PILISO STREET
NEWTOWN
JOHANNESBURG
2113
TEL: +27 (0)11 688 1400
FAX: +27(0)11 688-1528

Municipality: Joburg
Project description: UPGRADING OF INCHANGA SEWER RISING MAIN
PACKAGE 1
LAYOUT PLAN
W 170 - W 144

SCALE: 1:1000

REV	DESCRIPTION	DATE	BY	APV
A	PRELIMINARY DESIGN REPORT	2023/03/03	MB	T.M
B	DETAILED DESIGN REPORT	2024/06/10	MB	T.M
C	ISSUE FOR TENDER	2024/09/10	MB	T.M

AMENDMENTS

REV	DESCRIPTION	DATE	BY	APV
A	PRELIMINARY DESIGN REPORT	2023/03/03	MB	T.M
B	DETAILED DESIGN REPORT	2024/06/10	MB	T.M
C	ISSUE FOR TENDER	2024/09/10	MB	T.M

DRAWING No: JW14460-CRA-LAY-S01

PROJECT No: UR1404

DISCIPLINARY: SEWER - C

FILE No: A0

SHEET: 2 OF 2

ORIGINAL PAGE SIZE