LOCALITY
NTS.

DRAWING LEGEND

- NEW MANHOLE (MH.)
- NEW CLEANING EYE (CE.)
- EXISTING MANHOLE (EXT.MH.)
- EXISTING PIPE, SIZE AS PER LAYOUT
- NEW uPVC H/D CL400 SEWER PIPE, SIZE AS PER LAYOUT
- CONNECTION POINTS TO EXISTING SYSTEM
- NEW GAUTRANS AND JRA ROADS

NOTES:

1. ALL PIPES TO BE LAID IN ACCORDANCE WITH SANS 1200, LATEST REVISION AND THE REQUIREMENTS OF JOHANNESBURG WATER SOC LTD.
2. CONTRACTOR TO CONFIRM LEVELS OF EXISTING PIPES BEFORE COMMENCING CONSTRUCTION.
3. POSITIONS OF ALL EXISTING SERVICES ARE APPROXIMATED AND MUST BE VERIFIED ON SITE PRIOR TO CONSTRUCTION.

1) GENERAL NOTES

1.1. THE NEW CUSTOMER MANAGER AT THE JOHANNESBURG WATER (PTY) LTD REGIONAL OFFICE MUST BE NOTIFIED BEFORE ANY CONSTRUCTION WORKS RELATED TO THE INSTALLATION OF WATER OR SEWER MAY COMMENCE.

1.2. ALL CONSTRUCTION WORK SHALL COMPLY WITH THE RELEVANT SABS 1200 SPECIFICATION AND THE JOHANNESBURG WATER (PTY) LTD SPECIFIC REQUIREMENTS.

1.3. ALL MATERIALS USED IN INSTALLING WATER AND SEWER MAINS SHALL COMPLY WITH THE RELEVANT SABS SPECIFICATION AND WITH THE MINIMUM REQUIREMENTS OF JOHANNESBURG WATER (PTY) LTD.

1.4. THE POSITION AND DEPTH OF ALL EXISTING SERVICES ON THE SITE AND OFF SITE WHERE AFFECTED BY THE WORKS SHALL BE CONFIRMED PRIOR TO ANY CONSTRUCTION WORK ON THE INSTALLATION OF THE WATER OR THE SEWER MAINS BEING COMMENCED.

1.5. NOTE THAT A MINIMUM OF 2 WEEKS NOTICE SHALL BE GIVEN TO JOHANNESBURG WATER (Pty) Ltd TO ATTEND SITE INSPECTIONS, MEETINGS AND ANY NECESSARY ON SITE LIAISON.

INSPECTION NOTES

1. ALL WATER SUPPLY INSTALLATIONS ARE TO BE INSPECTED IN THE PRESENCE OF THE ENGINEER, THE CONTRACTOR & THE JHB WATER'S WORKS INSPECTOR.
2. FIRST INSPECTION: THE FIRST INSPECTION SHALL BE HELD ONCE THE PIPING AND FITTINGS HAVE BEEN INSTALLED, BACK- FILLED AND COMPACTED TO 50% OF THE DIAMETER.
3. SECOND INSPECTION: THE SECOND INSPECTION SHALL BE HELD ONCE THE COMPACTED FILLING HAS BEEN COMPLETED TO APPROXIMATELY 300mm ABOVE THE TOP OF THE OF THE PIPE. ALL JOINTS AND FITTINGS ARE TO REMAIN EXPOSED FOR THIS INSPECTION. THE PRESSURE TEST WILL BE DONE AS PART OF THE SECOND INSPECTION. NOTE: -THE PRESSURE TEST FOR JHB'S WATER IS STRICTER THAN THE RECOMMENDED IN SABS 1200, AND PROVISION MUST BE MADE FOR THIS. THE NEW WATER RETICULATION IS TO BE TESTED TO 1.5 TIMES THE WORKING PRESSURE OF THE PIPE THAT IS BEING INSTALLED. (I.E. 1800 kPA). PIPES.
4. THIRD INSPECTION: THE THIRD INSPECTION WILL BE THE FINAL HAND OVER INSPECTION AND WILL ONLY TAKE PLACE ONCE ALL SNAGS FROM THE PREVIOUS INSPECTIONS HAVE BEEN ATTENDED TO.

2) SPECIFIC WATER REQUIREMENTS

2.1 FOR STANDARD DETAILS REFER TO JOHANNESBURG WATER STANDARD DRAWINGS

2.2 PROTECTION OF FITTINGS AND MAINS :
- 2.2.1 STEEL MAINS : COPON LINED AND SUITABLE WRAPPED PER SPECIFICATION.
- 2.2.2 STEEL FITTINGS : COPON COATED INTERNALLY AND SUITABLE WRAPPED PER SPECIFICATION.
- 2.2.3 GALVANISED FITTINGS : SUITABLE WRAPPED PER SPECIFICATION.

2.3 ALL VALVE AND BELOW HYDRANT CHAMBERS TO BE WATER TIGHT.

2.4 POSITION OF ACROSS THE ROAD ERF CONNECTIONS TO BE MARKED BY A W CUT INTO THE CURBSTONE.

2.5 THE CONTRACTOR SHALL NOT OPERATE ANY WATER VALVE OR OTHER FITTING WITHOUT THE PERMISSION OF JOHANNESBURG WATER (PTY) LTD.

2.6 COVER TO WATER MAINS : THE DEPTHS LISTED ARE DEPTHS TO FINAL GROUND LEVEL INCLUSIVE OF ANY LANDSCAPING UNDERTAKEN ON THE SITE

	MINIMUM	MAXIMUM
GRAVEL ROAD	1000mm	1500mm
TARRED ROADS AND TRAFFIC AREAS	800mm	1500mm
PEDESTRIAN AREAS AND OTHER NON VEHICULAR AREAS	600mm	1500mm

2.7 ALL WATER MAINS ARE TO BE INSTALLED AT 2.0m FROM ERF BOUNDARIES UNLESS OTHERWISE SHOWN ON THE DRAWING

2.8 ANY ANCHOR BLOCKS CONSTRUCTED ARE TO BE PROPERLY SHUTTERED AND CAST AGAINST UNDISTURBED GROUND. ANY OVER EXCAVATION IS TO BE FILLED WITH MASS CONCRETE

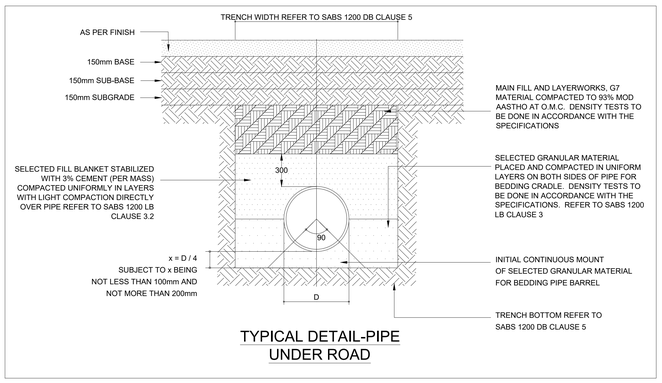
SEWER PIPES SPECIFICATIONS :

uPVC HEAVY DUTY SOLID (SANDWICHED) WALLED uPVC CLASS 400 TO SANS 1601 FOR SIZES UP TO 400mm DIAMETER.

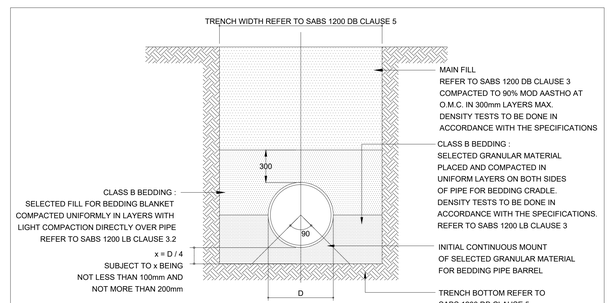
HDPE SEWER PIPES FOR ALL SIZES ABOVE 400mm DIAMETER.

SPECIFIC SEWER REQUIREMENTS

1. FOR STANDARD DETAILS REFER TO JOHANNESBURG WATER STANDARD DRAWINGS.
2. ALL MATERIALS SHALL COMPLY WITH THE RELEVANT SABS SPECIFICATION AND WITH THE REQUIREMENTS OF JOHANNESBURG WATER (PTY) LTD.
3. ANCHORING OF SEWER MAINS;
   3.1 GRADE- / 1:2 AND STEEPER - ANCHOR BLOCKS SHALL BE INSTALLED AT INTERVALS NOT EXCEEDING 12 METERS.
4. NO TREES OR SHRUBS SHALL BE PLANTED WITHIN 2m OF A SEWER MAIN.
5. SEWER MANHOLES ARE TO BE SPACED A MAXIMUM DISTANCE OF 80 METERS.



TYPICAL DETAIL-PIPE UNDER ROAD



TYPICAL DETAIL- NORMAL PIPE TRENCH

REFER TO DRAWING No:
No.JW100-DET01-W01-
No.JW100-DET01-S01-
No.JW100-DET02-S01-

DEPARTMENT	APPROVED	DESIGNATION	DATE

CONSULTING ENGINEERS

C-PLAN DEVELOPMENT CONSULTANTS
409 Cnr Kloppers Road, Florida Hills, Vereeniging
P.O. Box 9622, Vereeniging
Tel: (011) 472 2277
Fax: (011) 472 2305
E-Mail: kcc@iafrica.com
Web: www.cplan.co.za

PRIVATE DRAWING No 20521-700
APPROVED
Pr. Eng. No.
DATE

SURVEYED			
DESIGNED	G.HUYSAMEN	OCTOBER 2020	
DRAWN	G.HUYSAMEN	OCTOBER 2020	
CHECKED	KC OOLIKAAS	OCTOBER 2020	
SERVICES CHECKED			
GEOTECHNICAL INVESTIGATION			
SERVITUDES			
APPROVED			

JOHANNESBURG WATER (PTY) LTD

Johannesburg Water

17 HARRISON STREET
MARSHALLTOWN
JOHANNESBURG
2107
TEL: (011) 688-1400
FAX: (011) 688-1529

CITY OF JOHANNESBURG

SEWER RETICULATION LAYOUT FOR THE NEW PROPOSED DEVELOPMENT ON STRUBENSVALLEI EXT.24

DESIGN MANAGER

DATE

SCALE: A0 1:500

AMENDMENTS	APPROVED	DATE
A ISSUED FOR COUNCIL APPROVAL		2020/10/08
B SEWER REVISED		2021/05/13

DRAWING No. 20521-700
1 OFF 1
FILE No