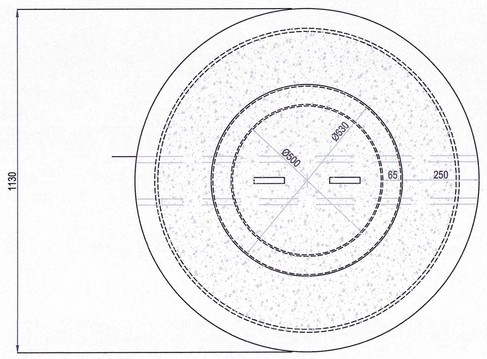
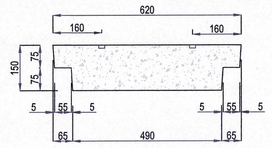
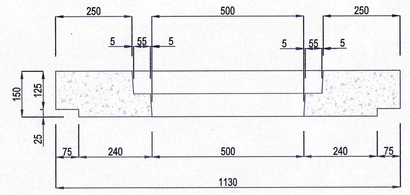


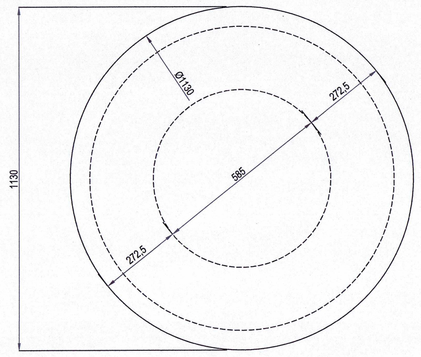
PLAN OF A CIRCULAR HEAVY DUTY MANHOLE
FOR 1000m NOMINAL DIAMETER MANHOLE



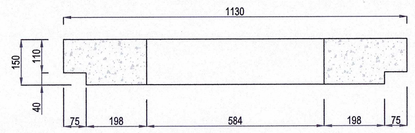
SECTION OF A CIRCULAR HEAVY
DUTY MANHOLE COVER



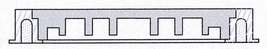
SECTION OF A CIRCULAR HEAVY
DUTY MANHOLE FRAME



PLAN OF A CIRCULAR COVER SLAB FOR
Ø1000m NOMINAL DIAMETER MANHOLE



SECTION OF A CIRCULAR COVER SLAB FOR
Ø1000m NOMINAL DIAMETER MANHOLE



SECTION OF A HEAVY DUTY
CAST IRON MANHOLE COVER

SECTION OF A 1000m NOMINAL
DIAMETER MANHOLE

SECTION OF A 1000m NOMINAL
DIAMETER MANHOLE

SEWER CHAMBER DETAILS
SCALE: 1:10

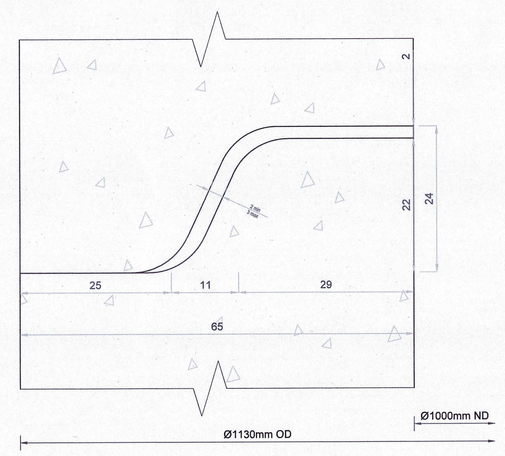
SEWER NOTES

1. ALL PRECAST CONCRETE MANHOLE COMPONENTS TO COMPLY WITH THE REQUIREMENTS OF SANS 1294
2. LENGTHS OF INDIVIDUAL WALL UNITS ARE TO VARY BASED ON THE TABLE IN THIS DRAWING
3. THE TOTAL LENGTH OF THE WALL WILL DEPEND ON THE LONG SECTION PROVIDED
4. HEAVY DUTY IRON COVERS AND FRAMES ARE TO BE USED ON MANHOLES UNDER VEHICULAR TRAFFIC.
5. HEAVY DUTY CONCRETE COVER SHALL BE USED IN SIDEWALKS, SERVITUDES AND ON GRASSED AREAS
6. RENDERING FOR MANHOLE BENCHING SHALL CONSIST OF 1 PART H.A.C TO 2 PARTS SAND THOROUGHLY MIXED AND APPLIED TO CONCRETE SURFACES WHILE THE LATTER ARE STILL GREEN. RENDERING SHALL BE AT LEAST 20mm THICK.
7. ALL PIPES BUILT INTO MANHOLES SHALL NOT EXCEED 1M IN LENGTH AND ADJOINING PIPES SHALL NOT EXCEED 2.0M IN LENGTH
8. EVERY U.P.V.C PIPE BUILT INTO THE MANHOLE SHALL HAVE A CLEAN DRY SAND (TO SANS 1083) GLUE TO ITS OUTSIDE AS RECOMMENDED BY THE PIPE MANUFACTURER USING A SPECIAL PVC COMMENT TO ENSURE GOOD ADHESION TO BASE CONCRETE.

PRECAST REINFORCED CONCRETE RING MANHOLE SPECIFICATIONS AS PER SANS 1294

NOMINAL DIAMETER	INSIDE DIAMETER	OUTSIDE DIAMETER	WALL THICKNESS	NOMINAL LENGTH	INSIDE SOCKET	APPROX MASS	Pipe Strength
ND	ID	OD	T	L	S		KN/m
mm	mm	mm	mm	mm	mm	KG/UNIT	
1000	1000	1130	65	250	19	140	15
1000	1000	1130	65	500	19	140	15
1000	1000	1130	65	1000	19	140	15

PRECAST PRODUCT DETAILS	
RING MANHOLES	38850
CIRCULAR FRAMES AND COVER SLAB	38851
SQUARE MANHOLE FRAMES	38852
MANHOLE COVERS	38853



ALL RADII ARE 10mm

DETAIL 1: Joint
SCALE: 2:1

APPROVED
PORT ENGINEER
DATE: 27/01/2026

XDN.E.0048 - 001 - C - DE - 0002	TYPICAL DETAILS
XDN.E.0048 - 001 - C - DE - 0001	SEWER MANHOLE DETAIL
XDN.E.0048 - 001 - C - LA - 0002	WATER LAYOUT DETAIL
XDN.E.0048 - 001 - C - LA - 0002	SEWER LONG SECTION
XDN.E.0048 - 001 - C - LA - 0001	INSERT A - ABLUTION DEVELOPMENT
XDN.E.0048 - 001 - C - GA - 0002	GENERAL SERVITUDES LAYOUT
XDN.E.0048 - 001 - C - GA - 0001	GENERAL SITE LAYOUT
DRAWING NO.	DRAWING DESCRIPTION

REFERENCE DRAWINGS

NOTES:

a. MEASUREMENTS ARE BASED ON METRIC SYSTEM.
b. ALL LEVELS ARE IN METERS TO MEAN SEA LEVELS (MSL)
c. DO NOT SCALE DRAWING - ONLY DIMENSIONS SHOWN TO BE USED.
d. THE CONTRACTOR SHALL VERFIY ALL SERVICES OR CONDITIONS ON THE SITE AND NOTIFY THE ENGINEERING OF ANY VARIATIONS FROM DIMENSIONS BEFORE CONSTRUCTION.

NO.	DESCRIPTION	BY	CHKD	APPD	DATE
01	ISSUED FOR CONSTRUCTION	SM	MT	MT	2026.05.26

REVISIONS

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DRAWN	.		. . .
CHECKED	.		. . .
DESIGNED	.		. . .
CHECKED	.		. . .
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NAME			DATE
SIGNATURE			. . .
REG. NUMBER			
TITLE			
SCALE :			
TRANSNET DRG. NO.			

TRANSNET NATIONAL PORTS AUTHORITY			
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DESIGNED	S MBATHA		26 05 25
CHECKED	M TYEBI		26 05 25
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NAME	M. TYEBI		DATE
SIGNATURE			26 05 25
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PROJECT / AREA / ASSET / SUBJECT/DRAWING TITLE

PORT OF DURBAN

UPGRADE OF THE NORTH GROYNE PROMENADE

SEWER MANHOLE

1 MAHATMA GANDHI ROAD, POINT, DURBAN
PORTION 13 OF ERF 10031 DURBAN - FU

PROJECT DRG. NO.	REV.
XDN.E.0048 - 001 - C - DE - 0001 - 01	01