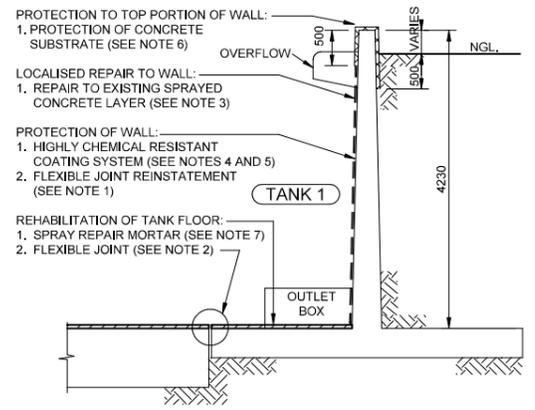
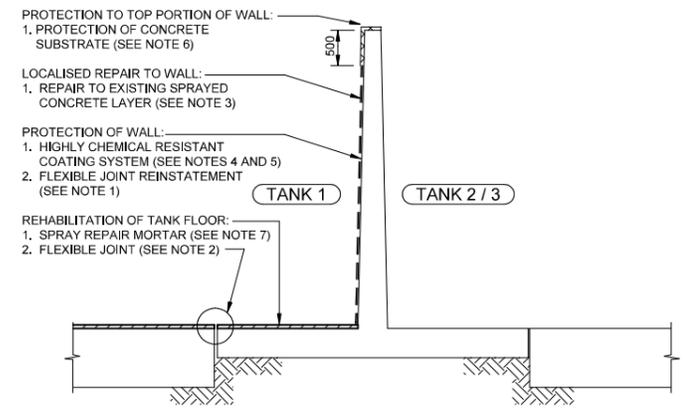


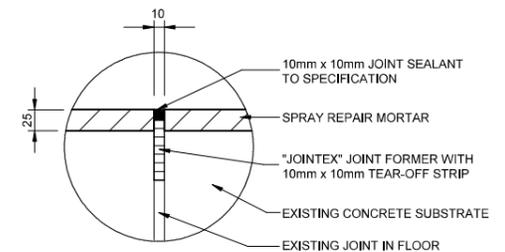
PLAN ON LOW LEVEL TANK 1
SCALE 1:200



TYPICAL WALL SECTION 1
SCALE 1:50



TYPICAL WALL SECTION 2
SCALE 1:50



TYPICAL FLOOR JOINT DETAIL
SCALE 1:5

REHABILITATION OF CONCRETE TANK 1

1. FLEXIBLE JOINT REINSTATEMENT IN WALLS (REFER SPECIFICATION PST.1.1 & PST.6.1)
 - a. HIGH PRESSURE WATER JET ALL SURFACES AS PER SPECIFICATION PST.2.2.
 - b. CAREFULLY REMOVE ALL SEALANT AND BACKING MATERIAL, TO MINIMUM DEPTH OF 20mm, FROM MOVEMENT JOINTS, TAKING DUE CARE TO PRESERVE AND NOT TO DAMAGE THE WATER BAR.
 - c. MECHANICALLY REAM OUT EXISTING JOINTS TO REMOVE ALL LAITANCE AND HIGH PRESSURE WATER JET THEREAFTER TO REMOVE ALL DUST PARTICLES.
 - d. INSERT HIGH DENSITY BACKING CORD SUITED TO HIGH HYDROSTATIC PRESSURE AND MINIMUM DENSITY OF 130 KG/m³.
 - e. PRIME ALL BOND SURFACES WITH APPROVED PRIMER BY BRUSH AND MASK AND APPLY APPROVED SEALANT 20mm WIDE x 10mm DEEP.
2. FLEXIBLE JOINT IN FLOOR (REFER SPECIFICATION PST.1.2 & PST.6.2)
 - a. HIGH PRESSURE WATER JET ALL SURFACES AS PER SPECIFICATION PST.2.2.
 - b. CAREFULLY REMOVE ALL SEALANT AND BACKING MATERIAL, TO MINIMUM DEPTH OF 80mm, FROM MOVEMENT JOINTS, TAKING DUE CARE TO PRESERVE AND NOT TO DAMAGE THE WATER BAR.
 - c. INSTALL "JOINTEX" JOINT FORMER WITH 10mm x 10mm TEAR-OFF STRIP.
 - d. PRIME ALL BOND SURFACES WITH APPROVED PRIMER BY BRUSH AND MASK AND APPLY APPROVED 10mm x 10mm SEALANT TO A SMOOTH FINISH.
 - e. ALLOW SUFFICIENT TIME FOR FULL CURE OF THE SEALANT PRIOR TO FILLING THE TANK WITH WASTEWATER.
3. LOCALISED REPAIRS TO EXISTING SPRAYED CONCRETE LAYER (REFER SPECIFICATION PST.2 & PST.3.2)
 - a. IDENTIFY AREAS OF DE-BONDED SPRAYED CONCRETE LAYER TO WALLS, WALL FOUNDATION AND OVERFLOW / OUTLET BOXES INSIDE SURFACES AND MARK OUT AND CHIP OUT DE-BONDED LAYER.
 - b. SCABBLE SMOOTH CONCRETE SUBSTRATE AND HIGH PRESSURE WATER JET ALL SURFACES AS PER SPECIFICATION PST.2.5.
 - c. PREPARE AREA AND APPLY SPRAYED REPAIR MORTAR AS PER SPECIFICATION PST.3.2.
4. APPLICATION OF MOISTURE BARRIER TO WALLS AND INTERNAL AND EXTERNAL FACES OF THE OVERFLOW / OUTLET BOXES (REFER SPECIFICATION PST.5)
 - a. APPLY 3mm THICK MOISTURE BARRIER ("SIKAGARD 720 EPOCEM" OR APPROVED EQUAL) IN 2 LAYERS (1.5mm EACH LAYER) TO WALLS AND INTERNAL AND EXTERNAL FACES OF THE OVERFLOW / OUTLET BOXES AS PER SPECIFICATION PST.5.1.
5. HIGHLY CHEMICAL RESISTANT COATING TO WALLS AND INTERNAL AND EXTERNAL FACES OF THE OVERFLOW / OUTLET BOXES (REFER SPECIFICATION PST.5)
 - a. APPLY 1 COAT OF "SIKAFLOOR 1562A" PRIMER OR EQUAL APPROVED TO WALLS AND INTERNAL AND EXTERNAL FACES OF THE OVERFLOW / OUTLET BOXES PRIMING OVER ALL SURFACES OF THE MOISTURE BARRIER AS PER SPECIFICATION PST.5.3.
 - b. APPLY 3 COATS OF "SIKAGARD 63N" OR EQUAL APPROVED TO WALLS AND INTERNAL AND EXTERNAL FACES OF THE OVERFLOW / OUTLET BOXES AS PER SPECIFICATION PST.5.4.
6. PROTECTION OF CONCRETE SUBSTRATE TO TOP OF PORTION OF WALLS AND EXTERNAL WALL SURFACES (REFER SPECIFICATION PST.4)
 - a. EXCAVATE 600mm BELOW NGL. AROUND EXTERIOR PERIMETER OF WALLS.
 - b. HIGH PRESSURE WATER JET ALL SURFACES AS PER SPECIFICATION PST.2.2.
 - c. APPLY 3mm THICK "SIKALASTIC 152", OR APPROVED EQUAL, IN 3 COATS (1mm EACH COAT) TO THE TOP OF THE WALLS. EXTERNAL SURFACES TO 500mm BELOW NGL. AND 500mm FROM TOP OF WALL ON THE INTERNAL SURFACES. TO OVERLAP THE MOISTURE BARRIER COATING AS PER SPECIFICATION PST.4.
 - d. ALLOW COATING TO ACHIEVE FULL CURE PRIOR TO BACKFILLING AND PROTECT COATING INTEGRITY DURING BACKFILLING.
7. REHABILITATION OF CONCRETE SUBSTRATE TO FLOOR
 - a. HIGH PRESSURE WATER JET ALL SURFACES AS PER SPECIFICATION PST.2.2.
 - b. INSTALL NARROW WIDTH FORMWORK TO LINE THROUGH WITH THE EXISTING MOVEMENT JOINTS.
 - c. APPLY A HIGH PERFORMANCE, CALCIUM ALUMINATE SPRAY MORTAR SUCH AS "SIKA MONOTOP - 4400 MIC" OR "SEWPERCOAT" OR APPROVED EQUAL TO AN OVERALL WOOD FLOATED THICKNESS OF 25mm.
 - d. THE SPRAY REPAIR MORTAR SHALL BE APPLIED IN PANELS BETWEEN THE NARROW WIDTH FORMWORK TO COINCIDE WITH THE MOVEMENT JOINTS IN THE FLOOR.
 - e. ALLOW SUFFICIENT TIME FOR FULL CURE OF THE REPAIR MORTAR PRIOR TO FILLING THE TANK WITH WASTEWATER.

REVISIONS		
Revision	Date	Description
AS BUILT		
DATE :		SIGN :
REDUCED PLAN USE SCALE BELOW		
70mm ON ORIGINAL PLAN		
LEGEND OF EXISTING UNDERGROUND SERVICES		
SEWERS AND M.H.'S		
STORM WATER DRAIN AND M.H.'S		
WATER MAINS AND VALVES		
ELECTRICITY CABLES		
TELKOM CABLES		
UNDERGROUND SERVICES CHECKED		
SERVICE	DATE	SIGNATURE
S.W DRAINS		
SEWERS		
WATER MAINS		
TELKOM CABLES		
ELECTRIC CABLES		
SPOORNET CABLES		
E.S.C. CABLES		
OIL PIPE LINE		
<small>NOTE: Only underground services affected by new construction work are shown. Care must be taken during excavations for road foundations, trenches etc. to avoid damage to underground services such as sewers, drains, cables, water mains and connections. Wherever possible these must be located before work proceeds.</small>		
<small>NOTE: No construction work to commence until land and servitude acquisitions have been completed.</small>		 NORTH POINT
Date	Engineer	
WATER AND SANITATION		
 ETHEKWINI MUNICIPALITY		
ENGINEERING: DESIGN BRANCH		
WS 7780		
Contract No.		
Project Title		
SOUTHERN WASTEWATER TREATMENT WORKS: CONCRETE REHABILITATION OF THE LOW LEVEL TANK 1		
Project No. (Y9146)		
Drawing Title		
PLAN AND SECTIONS		
Reference Drgs.		
Scales : AS SHOWN		
Surveyed :	Date :	
Drawn : V. Naidoo	Date : February 2023	
Designed : V. Naidoo	Date : February 2023	
Works Project Manager: A. Pillay		
Manager : (Sanitation Design): A. Pillay		
Deputy Head: Technical Support: B. Soni		
Drawing No.	60484	Sheet 1
		Rev. -

FOR TENDER PURPOSES ONLY