



<p>ENGINEER:</p> <p>TECHNO DESIGNS Civil Structural & Transport Engineers</p> <hr/> <p>TECHNO DESIGNS ENGINEERING 32 Cecil Street, Gent Austin Melrand Tel: (011) 345 2532 Cell: (072) 301 8811 Email: engineer@technodesigns.co.za Website: www.technodesigns.co.za</p>	<p>CLIENT:</p> <p>JOHANNESBURG WATER Turbine Hall, 698 Main Place Street, Newtown, Johannesburg</p>	<p>THESE NOTES SERVE AS AN ADDENDUM TO THE SPECIFICATION IN THE BILL OF QUANTITIES (BOQ), IN THOSE CASES WHERE THE BOQ SPECIFICATIONS DIFFER FROM THESE NOTES. THESE NOTES SHALL TAKE PREFERENCE ON ORIGINAL.</p>	<p>CONCRETE NOTES:</p> <ol style="list-style-type: none"> 1.0 SETTING OUT AND GENERAL CONSTRUCTION 1.1 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ARCHITECT'S DRAWINGS. 1.2 ALL DIMENSIONS AND HEIGHTS ARE TO BE CHECKED ON SITE BEFORE WORK IS PUT IN HAND. 1.3 REPORT DISCREPANCIES TO ARCHITECT OR ENGINEER. 1.4 THIS DRAWING MUST NOT BE USED TO SCALE OFF. ONLY WRITTEN DIMENSIONS. CONTACT THE ENGINEER OR ARCHITECT WHERE CLARITY IS SOUGHT. 1.5 FOR SETTING OUT DATA, SETTING OUT POINTS AND DATUM LEVELS REFER TO SURVEY INFORMATION AND ARCHITECT'S DRAWINGS. 1.6 STRUCTURAL WORK IS TO BE CARRIED OUT IN ACCORDANCE WITH THE PROJECT SPECIFICATION AND THE RELEVANT S.A.N.S SPECIFICATIONS. ALL CONCRETE WORK IS TO BE DONE IN ACCORDANCE WITH S.A.N.S 1200G AND EARTHWORKS IN ACCORDANCE WITH S.A.N.S 1200G. 1.8 CONSULT RELEVANT AUTHORITIES, MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS AND DETAILS AS RELEVANT FOR DRAINAGE, STORMWATER OUTLETS, RWDS AND HOLES AND SLEEVES FOR THESE SERVICES. NO HOLES ARE TO BE CORED WITHOUT ENGINEER'S WRITTEN APPROVAL. 2.1 ALL FOUNDATION EXCAVATIONS TO BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER BEFORE CONCRETE IS CAST. 	<p>CAST</p> <ol style="list-style-type: none"> 2.2 NO FOUNDATIONS ARE TO BE CAST IN FILL MATERIAL. A 50mm THICK LAYER OF 10MPa / 15mm BLINDING CONCRETE IS TO BE CAST UNDER ALL FOUNDATIONS BASES, REINFORCED STRIP FOOTINGS AND GROUND BEAMS. 2.3 ANY OVER EXCAVATIONS ARE TO BE MADE GOOD WITH 10MPa / 15mm CONCRETE AT CONTRACTOR'S EXPENSE. 2.4 BACKFILLING OVER COLUMN BASES SHALL BE DONE WITH AN APPROVED MATERIAL COMPACTED IN LAYERS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. 2.5 ALLOWABLE BEARING PRESSURE UNDER CONCRETE BASES = 100kPa / 100t/m². 2.6 STRIP FOOTINGS = 100kPa / 100t/m². 2.7 CONCRETE CHARACTERISTIC 28 DAY STRENGTH: 25MPa / 15mm STRIP FOOTINGS: 25MPa / 15mm SURFACE BEDS: 30MPa / 15mm SUSPENDED SLABS & BEAMS: 30MPa / 15mm COLUMNS: 30MPa / 15mm 2.8 TENSILE NET MIX DESIGNS FOR ALL TYPES OF CONCRETE TO BE GIVEN TO ENGINEER FOR PERUSAL AND COMMENT. CONCRETE MIX DESIGNS FOR SURFACE BEDS TO HAVE MINIMUM BLEED CHARACTERISTICS. 2.9 ALL CONCRETE TO BE ADEQUATELY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP FOR AT LEAST 5 DAYS AFTER CASTING. 	<p>BASES:</p> <ol style="list-style-type: none"> 3.4 ALL CONCRETE TO BE CONSTRUCTED TO THE S.A.N.S 1200G PERMISSIBLE DEVIATION DEGREE OF ACCURACY CLASS I UNLESS SPECIFIED OTHERWISE. 3.5 CONCRETE CURB TEST RESULTS TO BE SUBMITTED TIMELY TO ENGINEER FOR PERUSAL, RECORDS, COMMENT AND APPROVAL. 3.6 CHARACTERISTIC STRENGTH: MILD STEEL: 250N/mm² HIGH YIELD STEEL: 400N/mm² 3.7 ALL REINFORCEMENT TO BE CHECKED AND APPROVED BY ENGINEER BEFORE ANY CONCRETE IS CAST. 48 HOURS WRITTEN NOTICE TO BE GIVEN TO ENGINEER BEFORE TIME OF INSPECTION. 3.8 LAP LENGTH TO REINFORCING TO BE MINIMUM 5x SMALLER BARS. 3.9 BAR DIAMETER UNLESS OTHERWISE NOTED. 3.10 MESH REINFORCEMENT REFERENCE 245 TO BE PLACED IN SLAB (TOP) MINIMUM LAPS = 300mm UNLESS OTHERWISE NOTED. 3.11 THE CONTRACTOR MUST TAKE PARTICULAR CARE TO ENSURE THAT THE SPECIFIED COVER TO ALL REINFORCEMENT HAS BEEN MAINTAINED THROUGHOUT. IF REQUIRED, IT IS CALLED TO SITE FOR INSPECTION OF THE REINFORCEMENT. 3.12 COVER TO REINFORCEMENT: STRIP FOOTINGS: 50mm COLUMNS AND WALLS: 30mm SUSPENDED SLABS: 30mm 	<p>SUSPENDED BEAMS: 30mm</p> <p>CONTRACTOR IS TO CONDUCT HIS OWN INSPECTION OF REINFORCEMENT BEFORE CALLING THE ENGINEER FOR INSPECTION.</p> <p>FORMWORK AND PROPPING</p> <ol style="list-style-type: none"> 5.1 STRIPPING TIMES FOR: COLUMN AND WALL SHUTTERING: 15 DAYS BEAM SHUTTERING: 7 DAYS IN HOT WEATHER, 12 DAYS IN COLD WEATHER. 4 DAYS IN HOT WEATHER, 7 DAYS IN COLD WEATHER. 5.2 PROPPING TIMES FOR: SLABS AND BEAMS: 14 DAYS IN HOT WEATHER, 21 DAYS IN COLD WEATHER. 5.3 CANTILEVER SLABS AND BEAMS: 21 DAYS (SUBJECT TO CURB TEST RESULTS BEING SUBMITTED TIMELY TO ENGINEER FOR APPROVAL). 5.4 NO DEPROPPING OF SUSPENDED ELEMENTS UNTIL INSTRUCTED BY ENGINEER. 5.5 CONCRETE FINISHES: UNLESS NOTED OTHERWISE COLUMNS AND WALLS - OFF SHUTTER BEAMS AND SLAB SORTIE - OFF SHUTTER TOP OF SUSPENDED SLABS - STEEL FLOAT SURFACE BEDS - POWER FLOAT SURFACE BEDS - GRINDING BEAMS TO BE SHUTTERED. 	<p>Refer To Drawing No:</p> <p>Key Plan:</p> <p>Issue For: TENDER</p> <p>Size: A1 Scale: As Shown Sheet No: 3 Of 4 Original Date: 09 SEPT 2023</p> <p>Project No: C01486 Drawing No: PS-04 Revision: 0</p>										
		Engineer:		Drawn By:		Designed By:		Checked By:		Date:		Date:		Date:		Date:	
				B. Manyau		T.Chikwata		T.Chikwata		SEPT 2023		SEPT 2023		SEPT 2023		SEPT 2023	
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