

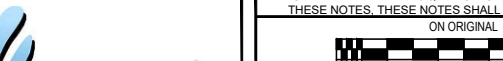
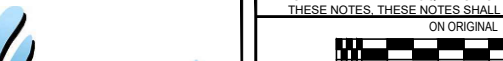
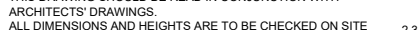






STORMWATER LAYOUT PLAN

<div>Engineer:</div> <div></div> <div><div>TECHNO DESIGNS ENGINEERING</div><div>KEON CONSULTING ENGINEERS</div></div> <div><div>34 Dene Street Glen Austin Midlands TELEPHONE (011) 045 2532 FAX (011) 045 2532 EMAIL engineering@keonengineers.co.za OFFICE JOHANNESBURG WEBSITE: www.technodesigns.co.za</div><div><div>5th Avenue Office Park 6465 5th Avenue Newlands Port Elizabeth TELEPHONE +27 413610180 FAX +27 413610180 WEBSITE: www.keon.co.za</div></div><div><div>Drift Struivaler & Transpore, Engineers</div><div></div><div><div>Johannesburg WATER</div><div>Turfloop Hill 62 Nereus Place Street Newtown, Johannesburg</div></div></div></div>	<div>Client:</div> <div></div> <div><div>Johannesburg WATER</div><div>Turfloop Hill 62 Nereus Place Street Newtown, Johannesburg</div></div>	<div>THESE NOTES SERVE AS AN ADDENDUM TO THE SPECIFICATION IN THE BILL OF QUANTITIES (BOQ). IN THOSE CASES WHERE THE BOQ AND THESE NOTES DIFFER, THESE NOTES SHALL TAKE PRECEDENCE.</div> <div></div> <div>On ORIGINAL</div> <div>Engineer:</div> <div><div>T. Chikwaka P.Eng (20140009)</div><div></div></div> <div><div>Drawn By:</div><div>M. Mumba</div><div><div>Designed By:</div><div>T. Mapumo</div><div><div>Checked By:</div><div>T. Chikwaka</div></div></div><div><div>Signature:</div><div></div><div><div>Signature:</div><div></div><div><div>Signature:</div><div></div></div></div><div><div>Date:</div><div>November 2024</div><div><div>Date:</div><div>November 2024</div><div><div>Date:</div><div>November 2024</div></div></div></div></div></div>	<div>CONCRETE NOTES:</div> <div>1.0 SETTING OUT AND LAYING OUT</div> <div>1.1 THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ARCHITECT'S DRAWINGS.</div> <div>1.2 ALL DIMENSIONS AND HEIGHTS ARE TO BE CHECKED ON SITE BEFORE WORK IS PUT IN HAND.</div> <div>1.3 REPORT DISCREPANCIES TO ARCHITECT OR ENGINEER.</div> <div>1.4 THIS DRAWING MUST NOT BE USED TO SCALE OFF. USE ONLY WRITTEN DIMENSIONS. CONTACT THE ENGINEER OR ARCHITECT WHERE CLARITY IS SOUGHT.</div> <div>1.5 FOR SETTING OUT DATA, SETTING OUT POINTS AND DATUM LEVELS REFER TO SURVEY INFORMATION AND ARCHITECT'S DRAWINGS.</div> <div>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 12000.</div> <div>1.7 CONSULT RELEVANT ARCHITECTS, MECHANICAL, ELECTRICAL & PLUMBING DRAWINGS AND DETAILS AS RELEVANT FOR DRAINAGE, STORMWATER OUTLETS, RIGIDS AND HOLES AND SLEEVES FOR THESE SERVICES. NO HOLES ARE TO BE CORED OUT WITHOUT ENGINEER'S WRITTEN APPROVAL.</div> <div>2.0 FOUNDATIONS</div> <div>2.1 ALL FOUNDATION EXCAVATIONS TO BE INSPECTED AND APPROVED IN WRITING BY THE ENGINEER BEFORE CONCRETE IS CAST.</div> <div>2.2 CAST</div> <div>2.3 NO FOUNDATIONS ARE TO BE CAST IN FILL MATERIAL. A 50mm THICK LAYER OF 10MPa / 19mm BLINDING CONCRETE IS TO BE CONCRETE CUBE TEST RESULTS TO BE SUBMITTED TIMELY TO ENGINEER FOR PERUSAL. RECORDS, COMMENT AND ANY OVER EXCAVATION ARE TO BE MADE GOOD WITH 10MPa / 19mm CONCRETE AT THE CONTRACTORS EXPENSE.</div> <div>2.4 APPROVED HORIZONTAL COLUMN BASES SHALL BE DONE WITH AN IMPROVED MATERIAL, COMPACTED IN LAYERS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.</div> <div>2.5 ALLOWABLE BEARING PRESSURE 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.</div> <div>3.0 CONCRETE</div> <div>3.1 CHARACTERISTIC 28 DAY STRENGTH: BASES 25MPa / 19mm TOP MINIMUM SLABS = 300mm UNLESS OTHERWISE NOTED SUSPENDED SLABS & BEAMS: 30MPa / 19mm COLUMNS: 35MPa / 19mm CONCRETE MIX DESIGNS FOR ALL GRADES OF CONCRETE TO BE DONE TO ENGINEER'S APPROVAL. CONCRETE MIX DESIGNS FOR SURFACE BEDS TO HAVE MINIMUM BLEED CHARACTERISTICS.</div> <div>4.0 ALL CONCRETE TO BE ADEQUATELY CURED BY KEEPING SURFACES CONTINUOUSLY DAMP FOR AT LEAST 5 DAYS AFTER CASTING.</div> <div>4.1 CAST</div> <div>4.2 ALL CONCRETE TO BE CONSTRUCTED TO THE S.A.N.S 1200G PERMISSIBLE DEVIATION DEGREE OF ACCURACY CLASS B UNLESS SPECIFIED OTHERWISE.</div> <div>4.3 CONCRETE CUBE TEST RESULTS TO BE SUBMITTED TIMELY TO ENGINEER FOR PERUSAL. RECORDS, COMMENT AND ANY OVER EXCAVATION ARE TO BE MADE GOOD WITH 10MPa / 19mm CONCRETE AT THE CONTRACTORS EXPENSE.</div> <div>4.4 CHARACTERISTIC STRENGTH: 2500mm² MILD STEEL 4500mm² HIGH YIELD STEEL</div> <div>4.5 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.</div> <div>4.6 LAP LENGTH TO REINFORCING TO BE MINIMUM 50 x SMALLER BAR DIAMETER, UNLESS OTHERWISE NOTED.</div> <div>4.7 MESH REINFORCING TO REFERENCE 245 TO BE PLACED IN SURFACE BEDS.</div> <div>4.8 THE CONTRACTOR MUST TAKE PARTICULAR CARE TO ENSURE THAT THE SPECIFICATION OF REINFORCEMENT IS FULLY ATTAINED THROUGHOUT BEFORE THE ENGINEER IS CALLED TO THE SITE FOR INSPECTION OF REINFORCEMENT.</div> <div>4.9 COVER TO REINFORCEMENT:</div> <div>4.10 TOP FOOTINGS: 50mm 50mm 50mm COLUMNS AND WALLS: 50mm 50mm 50mm CASTING: 50mm</div> <div>4.11 SUSPENDED BEAMS: 300mm</div> <div>4.12 CONTRACTOR IS TO CONDUCT HIS OWN INSPECTION OF REINFORCEMENT BEFORE CALLING THE ENGINEER FOR INSPECTION.</div> <div>4.13 FORMWORK AND PROPPING</div> <div>4.14 STRIPPING TIMES FOR COLUMN AND WALL SHUTTERING: 15 DAYS. BEAM SHUTTERING: 7 DAYS IN HOT WEATHER, 12 DAYS IN COLD WEATHER.</div> <div>4.15 FLAT SLABS: 4 DAYS IN HOT WEATHER, 7 DAYS IN COLD WEATHER.</div> <div>4.16 STRIPPING TIMES FOR SLABS AND BEAMS: 14 DAYS IN HOT WEATHER, 21 DAYS IN COLD WEATHER.</div> <div>4.17 CANTILEVER SLABS AND BEAMS: 21 DAYS (SUBJECT TO CUBE TEST RESULTS BEING SUBMITTED TIMELY TO ENGINEER FOR APPROVAL).</div> <div>4.18 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ELEMENTS UNTIL INSTRUCTED BY ENGINEER.</div> <div>4.19 CONCRETE FINISHES: UNLESS NOTED OTHERWISE COLUMNS AND WALLS: OFF SHUTTER BEAMS AND SLAB SOFFIT: OFF SHUTTER TOP OF SUSPENDED SLABS: STEEL FLOAT SURFACE BEDS: POWER FLAT SURFACE OF GROUND BEAMS TO BE SHUTTERED.</div>	<div>Refer To Drawing No:</div> <div></div> <div>Key Plan:</div> <div></div> <div>Project:</div> <div>JW14471-SEALING OF THE LEAKING CONCRETE WATER SUMP</div> <div>Description:</div> <div>STORMWATER LAYOUT&DETAIL</div> <div>Issued For:</div> <div>TENDER</div> <div>Size:</div> <div>A1</div> <div>Scale:</div> <div>As Shown</div> <div>Sheet No:</div> <div>1 OF 1</div> <div>Original Date:</div> <div>November 2024</div> <div>Project No:</div> <div>JW14471</div> <div>Drawing No:</div> <div>STRUCT-02</div> <div>Revision:</div> <div>0</div> <div>No</div> <div>Date</div> <div>Details</div> <div>Revisions</div> <div>Chd</div> <div>Appd</div>
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