



GENERAL NOTES

CONCRETE STRENGTH
(A) FOUNDATIONS..... 25 Mpa cube strength at 28 days
(B) SLABS..... 30 Mpa cube strength at 28 days
(C) WALLS..... 30 Mpa cube strength at 28 days
(D) APRON..... 25 Mpa cube strength at 28 days

COVER TO REINFORCEMENT:
(A) STRIP FOOTING..... + 40mm
(B) RAFT FOUNDATION..... + 40mm
(C) SUSPENDED SLAB..... UNDERSIDE + 40mm TOP + 30mm
(D) GROUND SLAB..... UNDERSIDE + 40mm TOP + 30mm

NOTE:
1. BEAM DEPTH INCLUDES SLAB THICKNESS
2. CONTRACTOR IS TO MAINTAIN STEEL IN CORRECT POSITION AFTER PLACING AND DURING CONCRETING
3. STONE, SAND AND CEMENT TO BE TO THE SATISFACTION OF THE CONSULTING ENGINEER
4. NO CONCRETE TO BE POURED UNTIL THE STEEL HAS BEEN INSPECTED BY THE CONSULTING ENGINEER
5. ANY BREAKS IN THE CONCRETE ARE TO BE MADE IN ACCORDANCE WITH THE ENGINEER'S INSTRUCTIONS
6. NO STRUCTURAL ALTERATIONS TO BE MADE WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER
7. THE DESIGN ON THIS DRAWING REMAINS THE PROPERTY OF KETSHANA CONSULTING ENGINEERS - COPYRIGHT IS RESERVED.
(A) LIVE LOAD ON SLAB..... 75 kN/sq m
(B) LIVE LOAD ON SLAB..... 2.5 kN/sq m
8. THE DESIGN ON THIS DRAWING REMAINS THE PROPERTY OF KETSHANA CONSULTING ENGINEERS - COPYRIGHT IS RESERVED.
9. ALL DIMENSIONS TO BE CHECKED ON SITE BEFORE WORK IS PUT IN HAND. ANY DISCREPANCY MUST IMMEDIATELY BE REPORTED TO THE ENGINEER.
10. THIS DRAWING IS NOT TO BE SCALED.
11. APRON COVER TO BE 25mm
12. FOR FFL, REFER TO SITE LAYOUT AND ARCHITECT'S DRAWINGS.
13. UNIT TO BE MIRRORED DEPENDANT ON SITE CONDITIONS.
14. THE CONCRETE MIX FOR THE FLOOR SLAB AND WALLS OF THE PIT MUST INCLUDE 2.5kg COPROX / 50kg OF CEMENT OR SIMILAR APPROVED.

REINFORCING NOTES:
1. MINIMUM LAP LENGTH + 40 x BAR Ø
2. LAP LENGTHS FOR UNEQUAL BAR DIAMETERS SHALL BE BASED ON THE SMALLER BAR DIAMETER
3. MAXIMUM SIZE OF AGGREGATES SHALL BE 20mm. AGGREGATE SHALL BE WELL GRADED
4. BENDING OF REINFORCEMENT SHALL COMPLY WITH SANS 282
5. MILD STEEL YIELD STRESS..... + 250Mpa
6. HIGH TENSILE STEEL YIELD STRESS..... + 450Mpa
7. WELDING OF REINFORCEMENT IS NOT ALLOWED UNLESS IT HAS BEEN APPROVED BY THE ENGINEER IN WRITING.
8. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS AND SPECIFICATIONS. ANY DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE ENGINEER.

NOTE: REINFORCEMENT
REBAR ESTIMATES = 120kg PER
CUBIC METER OF CONCRETE

1	06-03-23	ISSUED FOR CONSTRUCTION	JvdL
NO.	DATE	REVISION	CHECK'D

PRINCIPAL AGENT / CIVIL / STRUCTURAL ENGINEER

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ARCHITECTURAL PROFESSIONAL SACAP NUMBER and signature:
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THE ENGINEERING COUNCIL OF SOUTH AFRICA (ECSA) NUMBER and
signature:

201670008

ASSOCIATED REFERENCE DRAWING

FIELD	DESCRIPTION	REV.	DATE

KEY: A = ARCHITECT; C = CIVIL; S = STRUCTURAL; M = MECHANICAL; E = ELECTRICAL; L = LANDSCAPE

NAME	DATE	SHEET NO.
M. SEWCHARAN	18-08-2020	A1
M. SEWCHARAN	18-08-2020	AS SHOWN
M. SEWCHARAN	18-08-2020	FOR MEASURE
J.P. V.D. LINDE	18-08-2020	FOR TENDER
J.P. V.D. LINDE	18-08-2020	AS BUILT
J.P. V.D. LINDE	18-08-2020	FOR APPROVAL

CLIENT

IMPLEMENTED BY

education
Department of
Education
PROVINCE OF KWAZULU-NATAL

DBSA
Development Bank
of Southern Africa

PROJECT
Kwa-Zulu Natal Department of Education
Infrastructure Development and Maintenance Programme
PROVINCE: KZN PROVINCE
ENTUMENI PRIMARY SCHOOL

DRAWING TITLE

ABUTMENT

STRUCTURAL PLAN

SECTIONS AND DETAILS

TYPE OF INFRASTRUCTURE WATER & SANITATION

DWG NUMBER	DISCIPLINE	PROJ NUMBER	REV.	DATE
500169423	STRUCTURAL	31462-60-100	I	A