HOMES FOR NGARANNAM, TEACHERS' ACCOMMODATION MAFA LGA, BORNO.

ISSUED FOR TENDER
Figured dimensions must be taken in preference to line dimensions.

Contractor, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings. All signed drawings to be pressure treated with anti-fungal and anti-infection on approved treatment.

All internal doors to have 25mm undercut to avoid internal pressure build up.

NOTE

All Internal Doors to have 25mm undercut to avoid internal pressure build up.

HOMES FOR NGarannam, MAFIA LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

FF 1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SINE.

WALL FINISH - WF

WF 3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT: COLOUR TO ARCHITECT’S FURTHER SPECIFICATION.

WF 3.2 CEMENT, LATEXTE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS

WF 3.3 CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT’S FURTHER SPECIFICATIONS AND ARTIST MURAL.

CEILING FINISH - CF

CF 4.1 WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

RF 5.1 0.6mm LONG SPAN ALUMINIUM SHEETS; COLOUR TO ARCHITECT’S FURTHER SPECIFICATION.

FASCIA BOARD - FB

FB 6.1 300x 25mm HARDWOOD PANELS FINISHED WITH GLASS PAINT; COLOUR TO ARCHITECT’S FURTHER SPECIFICATION.
Figured dimension must be taken in preference to linear dimensions.

Contractor, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings. All trades to be pre-registered with, and budget and site inspection on approved location.

All Internal Doors to have 25mm undercut to avoid internal pressure build-up.

HOMES FOR NGARANNAM, MAFIA LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

1.1 50mm SCREED TO CONCRETE SLAB INSTALLED TO A SHEEN.

WALL FINISH - WF

3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT: COLOUR TO ARCHITECT’S FURTHER SPECIFICATION.

3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS

12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT’S FURTHER SPECIFICATIONS AND ARTIST MURAL.

CEILING FINISH - CF

4.1 WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

5.1 0.5mm LONG SPAN ALUMINIUM SHEETS. COLOUR TO ARCHITECT’S FURTHER SPECIFICATION.

FASCIA BOARD - FB

6.1 300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT’S FURTHER SPECIFICATION
Figured dimensions must be taken in preference of permanent dimensions.

Contractor, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings. All lines to be pressure treated with anti-fungal and anti-insect treatment.

All Internal Doors to have 25mm undercut to avoid internal pressure build up.

All timber to be pressure treated with anti-fungal and anti-insect treatment.

NOTE

All Internal Doors to have 25mm undercut to avoid internal pressure build up.

HOMES FOR NGAARRANAM,
MAFA LGA, BORNO.

TEACHERS' ACCOMMODATION
ROOF PLAN

Scale: 1 : 125
Date: JUNE, 2021

Drwg. No. AADS-01-202

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

FF 1.1 50mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

WF 3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT; COLOUR TO ARCHITECT’S FURTHER SPECIFICATION.

WF 3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS

WF 3.3 12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT’S FURTHER SPECIFICATIONS AND ARTIST MURAL.

CEILING FINISH - CF

CF 4.1 WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

RF 5.1 0.5mm LONG SPAN ALUMINIUM SHEETS; COLOUR TO ARCHITECT’S FURTHER SPECIFICATION.

FASCIA BOARD - FB

FB 6.1 300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT; COLOUR TO ARCHITECT’S FURTHER SPECIFICATION
NOTE
Figured dimensions must be taken in preference to line dimensions.
Contractors, sub-contractors and suppliers should verify all dimensions on site before commencing any work or making any shop drawings. All plans to be produced at the architect's discretion.
All internal doors to have 25mm undercut to avoid internal pressure build up.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS.

12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT'S FURTHER SPECIFICATIONS AND ARTIST MURAL.

3.3 CEILING FINISH - CF

WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

0.5mm LONG SPAN ALUMINUM SHEETS. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

FASCIA BOARD - FB

300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

HOMES FOR NGARANNAM, MAFI LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS.

12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT'S FURTHER SPECIFICATIONS AND ARTIST MURAL.

3.3 CEILING FINISH - CF

WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

0.5mm LONG SPAN ALUMINUM SHEETS. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

FASCIA BOARD - FB

300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

HOMES FOR NGARANNAM, MAFI LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS.

12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT'S FURTHER SPECIFICATIONS AND ARTIST MURAL.

3.3 CEILING FINISH - CF

WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

0.5mm LONG SPAN ALUMINUM SHEETS. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

FASCIA BOARD - FB

300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

HOMES FOR NGARANNAM, MAFI LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS.

12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT'S FURTHER SPECIFICATIONS AND ARTIST MURAL.

3.3 CEILING FINISH - CF

WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

0.5mm LONG SPAN ALUMINUM SHEETS. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

FASCIA BOARD - FB

300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

HOMES FOR NGARANNAM, MAFI LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS.

12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT'S FURTHER SPECIFICATIONS AND ARTIST MURAL.

3.3 CEILING FINISH - CF

WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

0.5mm LONG SPAN ALUMINUM SHEETS. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

FASCIA BOARD - FB

300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

HOMES FOR NGARANNAM, MAFI LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS.

12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT'S FURTHER SPECIFICATIONS AND ARTIST MURAL.

3.3 CEILING FINISH - CF

WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

0.5mm LONG SPAN ALUMINUM SHEETS. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

FASCIA BOARD - FB

300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

HOMES FOR NGARANNAM, MAFI LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEEN FINISH PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

3.2 CEMENT, LATERITE AND SAND (1:2) TYROLEAN RENDER; 12MM THICK IN TWO COATS.

12mm CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT'S FURTHER SPECIFICATIONS AND ARTIST MURAL.

3.3 CEILING FINISH - CF

WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

0.5mm LONG SPAN ALUMINUM SHEETS. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

FASCIA BOARD - FB

300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

HOMES FOR NGARANNAM, MAFI LGA, BORNO.
NOTE
Figured dimensions must be taken in preference dimensions.
Contractor, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings.
All details to be pressure orientated with anti-fungal and anti-infection.
NOTE
Figured dimensions must be taken in preference to line dimensions.
Contractors, subcontractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings.
All lines to be pressure-etched with antiseptic and anti-insecticidal treatment.
All internal doors to be relieved undercuts to avoid internal pressure build up.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF
FF 1.1 50mm screed to concrete slab installed to a shine.

WALL FINISH - WF
WF 3.1 12mm cement screed finish with two coats of sheen finish paint. Colour to architect's further specification.
WF 3.2 Cement, Lint, Lates and Sand. 1:2 Tyrolean Render, 12mm thick in two coats.
WF 3.3 12mm cement screed finish with weather proof paint to architect's further specifications and artist mural.

CEILING FINISH - CF
CF 4.1 Willow reed bamboo to be installed to timber noggins.

ROOF FINISH - RF
RF 5.1 0.8mm long span aluminium sheets. Colour to architect's further specification.

FASCIA BOARD - FB
FB 6.1 300x25mm hardwood plank finished with gloss paint. Colour to architect's further specification.

HOUSES FOR NGARANNAM,
MATA LGA, BORNO.

ISSUED FOR TENDER

Scale: 1:125
Date: JUNE, 2021
Doc No: A425-01-201
ITEM NO. | D1 | D1
---|---|---
QUANTITY | 06 | 18
LOCATION | D1 / 001, 002, 003, 004 | D1 / 001, 002, 003, 004, 005, 006, 007, 008
DESCRIPTION | 900mm BY 2100mm SINGLE LEAF INWARD SWING METAL DOOR HAVING 75mm BY 50mm METAL PROFILE FRAME, WITH 2mm BY 250mm WIDE METAL SHEETS AT 5 INTERVALS AND 2mm BY 700mm HIGH BASE SHEETS SEPARATED BY 45mm WIDE METAL MESH, ALL WELDED TO DOOR FRAME FINISHED WITH ANTIRUST PAINT WITH COLOUR TO ARCHITECTS FURTHER SPECIFICATION | 900mm BY 2100mm SINGLE LEAF INWARD SWING SEMI SOLID FLUSH DOOR WITH 75mm ARCHITRAVE. COLOUR TO ARCHITECTS FURTHER SPECIFICATION

NOTE
Figured dimensions must be taken in preference above.

Contractor, sub-contractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings.

All trades to be pressure-coated with anti-fungal and anti-infectious on approved treatment.

All internal doors to have 9mm underside to avoid internal pressure build up.

HOMES FOR NGARANNAM, MATA LGA, BORNO.

ISSUED FOR TENDER

SPECIFICATION

FLOOR FINISH - FF

FF 1.1 30mm SCREED TO CONCRETE SLAB INSTALLED TO A SHINE.

WALL FINISH - WF

WF 3.1 12mm CEMENT SCREED FINISH WITH TWO COATS OF SHEET FINISH PAINT. COLOUR TO ARCHITECTS FURTHER SPECIFICATION.

WF 3.2 CEMENT, LATERRITE AND SAND (1:2) TYREELD RENDER; 12MM THICK IN TWO COATS.

WF 3.3 CEMENT SCREED FINISH WITH WEATHER PROOF PAINT TO ARCHITECT'S FURTHER SPECIFICATIONS AND ARTIST MURAL.

CEILING FINISH - CF

CF 4.1 WILLOW REED BAMBOO TO BE INSTALLED TO TIMBER NOGGINS.

ROOF FINISH - RF

RF 5.1 0.5mm LONG SPAN ALUMINUM SHEETS. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

FASCIA BOARD - FB

FB 6.1 300x 25mm HARDWOOD PLANK FINISHED WITH GLOSS PAINT. COLOUR TO ARCHITECT'S FURTHER SPECIFICATION.

Scale: 1:50
Date: JUNE, 2021

TEACHERS' ACCOMMODATION DOOR AND WINDOW SCHEDULE

NO. | W1 | W1
---|---|---
QUANTITY | 14 | 14
LOCATION | W1 / 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014 | ALL ROOMS
DESCRIPTION | 1000mm BY 1000mm DOUBLE LEAF OUTWARD SWING METAL WINDOW HAVING 50mm BY 50mm SQUARE METAL PROFILE FRAME, WITH 2mm BY 275mm WIDE METAL SHEETS AT 4 INTERVALS SEPARATED BY 45mm METAL MESH. ALL WELDED TO WINDOW FRAME FINISHED WITH ANTIRUST PAINT WITH COLOUR TO ARCHITECTS FURTHER SPECIFICATION |
GENERAL NOTES.

1. **All drawings are to be read in conjunction with all relevant architect's drawings.**

2. **Safe ground pressure assumed is 150 KN/m2.**

3. **75mm conc. blinding to be provided.**

4. **Minimum depth of foundation to be 1200mm.**

5. **Use concrete nominal mix 1:3:6 for blinding.**

6. **Conc. cube strength of 1:2:4 mix for other reinf. conc. at 28 days.**

7. **High yield reinf. of characteristic strength of at least 410 N/mm2.**

8. **Cover to main reinforcements to be 15mm in slab, 25mm in beam, 40mm in columns and 50mm in foundations.**

9. **All dimensions are in (mm).**

10. **No concrete work shall be carried out until all steel reinforcement and formwork for concrete sections must have been checked and correct by the engineer.**

11. **Engineers shall **not** be held responsible for jobs **not** supervised by them.**

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**Reinforced Concrete:***

1. **Design is to BS 8110.**
2. **Concrete grades are to be as follows with figures in brackets denoting maximum size aggregate:**
   - Foundation: 30(25)
   - Columns: 30(20)
   - Beams & slabs: 30(20)
3. **Unless otherwise indicated, reinforcement shall be high yield steel (type 2), denoted by 'Y', having characteristic strength not less than 410N/mm².
4. **Cover to reinforcement shall be:**
   - Foundation: 50mm (bottom) 75mm (sides)
   - Columns: 25mm
   - Beams: 25mm
   - Slabs: 20mm
5. **Drawings must be read in conjunction with the relevant architectural drawings and in case of any discrepancy refer to the design engineer for clarification.**
6. **Dimensions are in millimetres (mm) and must not be scaled at any time.**
7. **Foundation was designed for an assumed allowable soil bearing pressure of 150KN/m².**
8. **This design engineer will not take responsibility for any job not supervised by him.**

**Blockwork:**

1. **Hollow block walls below ground slab level are to be filled with mass concrete. Backfilling is to be carried out simultaneously on both sides.**
2. **The wall thickness of the blocks should not be more than 250mm.**
3. **The maximum crushing strength of the hollow block is to be 20N/mm² of gross area of block at 28 days.**
4. **Blockwork ties between blockwork wall and columns are to be provided at every course. Ties to be 6mm mild steel 700mm long into the blockwork.**
5. **Maximum pour height for all filled blockwork to be 2 courses at a time.**
6. **All service pipes shall only be put through blockwork after Due consultation with structural engineers. Putting service pipes inside load bearing blockwork corners must be avoided.**

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**Issued for Tender:**

**Homes for Ngaranann, Mafa LGA, Borno.**

**C. A. Olorundare**

**Issued for Tender Date: 1st March, 2021**
GENERAL NOTES

1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS
   FOLLOWS WITH FIGURES IN BRACKETS DENOTING MAXIMUM SIZE
   AGGREGATE:
   - FOUNDATION           30/25
   - COLUMNS               30/20
   - BEAMS & SLABS     30/20
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD
   STEEL (TYPE 2), DENOTED BY 'Y', HAVING CHARACTERISTIC STRENGTH
   NOT LESS THAN 410N/MM²
4. COVER TO REINFORCEMENT SHALL BE THE:
   - FOUNDATION: 50MM (BOTTOM) 75MM (SIDES)
   - COLUMNS: 25MM
   - BEAMS: 25MM
   - SLABS: 20MM
5. DRAWINGS MUST BE READ IN CONJUCTION WITH THE RELEVANT
   ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER
   TO THE DESIGN ENGINEER FOR CLARIFICATION.
6. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALED AT
   ANY TIME.
7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING
   PRESSURE OF 150KN/M²
8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY
   JOB NOT SUPERVISED BY HIM.

BLOCKWORK

1. HOLLOW BLOCKWALLS BELOW GROUND SLAB LEVEL ARE TO BE FILLED
   WITH MASS CONCRETE. BACK FILLING IS TO BE CARRIED OUT
   SIMULTANEOUSLY ON BOTH SIDES.
2. THE WALL THICKNESS OF THE BLOCKS SHOULD NOT BE MORE THAN 250MM.
3. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM²
   OF GROSS AREA OF BLOCK AT 28 DAYS.
4. BLOCKWORK TIES BETWEEN BLOCKWORK WALL AND COLUMNS/STANTIONS
   ARE TO BE PROVIDED AT EVERY COURSE. TIES TO BE 6MM BAR STRAPS
   700MM LONG INTO THE BLOCKWORK.
5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCKWORK TO BE 2 COURSES
   AT A TIME.
6. ALL SERVICE PIPES SHALL ONLY BE PUT INSIDE BLOCKWORK AFTER
   DUE CONSULTATION WITH STRUCTURAL ENGINEERS. PUTTING SERVICE
   PIPES INSIDE LOAD BEARING BLOCKWORK CORNERS MUST BE AVOIDED.

CHRISTOPHER OIORUNDARE
UNDP CONSULTANT

ISSUED FOR TENDER HOMES FOR NGOARANNAN, MAFIA LGA, BORNO.
1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS FOLLOWS WITH FIGURES IN BRACKETS DENOTING MAXIMUM SIZE OF AGGREGATE:
   - FOUNDATION: 30(25)
   - COLUMNS: 30(20)
   - BEAMS & SLABS: 30(20)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL (TYPE 2), DENOTED BY 'Y', HAVING CHARACTERISTIC STRENGTH NOT LESS THAN 410N/MM².
4. COVER TO REINFORCEMENT SHALL BE THE FOLLOWING:
   - FOUNDATION: 50MM (BOTTOM) 75MM (SIDES)
   - COLUMNS: 25MM
   - BEAMS: 25MM
   - SLABS: 20MM
5. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALING AT ANY TIME.
6. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 150KN/M²
7. ALL SERVICE PIPES SHALL ONLY BE PUT INSIDE BLOCKWORK AFTER DUE CONSULTATION WITH STRUCTURAL ENGINEERS. PUTTING SERVICE PIPES INSIDE LOAD BEARING BLOCKWORK CORNERS MUST BE AVOIDED.
1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS
   FOLLOWS WITH FIGURES IN BRACKET DENOTING MAXIMUM SIZE
   AGGREGATE:
   - FOUNDATION: 30(25)
   - COLUMNS: 30(20)
   - BEAMS & SLABS: 30(20)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL(TYPE 2), DENOTED BY 'Y', HAVING CHARACTERISTIC STRENGTH NOT LESS THAN 410N/MM²
4. COVER TO REINFORCEMENT SHALL BE:
   - FOUNDATION: 50MM (BOTTOM) 75MM (SIDES)
   - COLUMNS: 25MM
   - BEAMS: 25MM
   - SLABS: 20MM
5. DRAWINGS MUST BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO THE DESIGN ENGINEER FOR CLARIFICATION.
6. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALING AT ANY TIME.
7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 150KN/M²
8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY JOB NOT SUPERVISED BY HIM.

BLOCKWORK
1. HOLLOW BLOCK WALLS BELOW GROUND SLAB LEVEL ARE TO BE FILLED WITH MASS CONCRETE. BACK FILLING IS TO BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES.
2. THE WALL THICKNESS OF THE BLOCKS SHOULD NOT BE MORE THAN 25MM.
3. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM² OF GROSS AREA OF BLOCK AT 28 DAYS.
4. BLOCKWORK TIES BETWEEN BLOCKWORK WALLS AND COLUMN STATIONS ARE TO BE PROVIDED AT EVERY COURSE, TIES TO BE 6MM BAR STRAPS 700MM LONG INTO THE BLOCKWORK.
5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCKWORK TO BE 2 COURSES AT A TIME.
6. ALL SERVICE PIPES SHALL ONLY BE PUT INSIDE BLOCKWORK AFTER DUE CONSULTATION WITH STRUCTURAL ENGINEERS. PUTTING SERVICE PIPES INSIDE LOAD BEARING BLOCKWORK CORNERS MUST BE AVOIDED.
1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS FOLLOWS WITH FIGURES IN BRACKET DENOTING MAXIMUM SIZE AGGREGATE:
   - FOUNDATION: 30(25)
   - COLUMNS: 30(20)
   - BEAMS & SLABS: 30(20)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL (TYPE 2), DENOTED BY 'Y', HAVING CHARACTERISTIC STRENGTH NOT LESS THAN 410N/MM².
4. COVER TO REINFORCEMENT SHALL BE:
   - FOUNDATION: 50MM (BOTTOM), 75MM (SIDES)
   - COLUMNS: 25MM
   - BEAMS: 25MM
   - SLABS: 20MM
5. DRAWINGS MUST BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO THE DESIGN ENGINEER FOR CLARIFICATION.
6. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALING AT ANY TIME.
7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 150KN/M².
8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY JOB NOT SUPERVISED BY HIM.

HOLLOW BLOCKS:
1. HOLLOW BLOCKS BELOW GROUND LEVEL ARE TO BE FILLED WITH MASS CONCRETE. BACK FILLING IS TO BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES.
2. THE WALL THICKNESS OF THE BLOCKS SHOULD NOT BE MORE THAN 25MM.
3. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM² OF GROSS AREA OF BLOCK AT 28 DAYS.
4. BLOCKWORK TIES BETWEEN BLOCKWORK WALL AND COLUMNS/STANCHIONS ARE TO BE PROVIDED AT EVERY COURSE. TIES TO BE 6MM BAR STRAPS 700MM LONG INTO THE BLOCKWORK.
5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCKWORK TO BE 2 COURSES AT A TIME.
6. ALL SERVICE PIPES SHALL ONLY BE PUT INSIDE BLOCKWORK AFTER DUE CONSULTATION WITH STRUCTURAL ENGINEERS. PUTTING SERVICE PIPES INSIDE LOAD BEARING BLOCKWORK CORNERS MUST BE AVOIDED.

CHIEF ENGINEER
1. Issued for Tender
HOMES FOR NOGARNNAM, MAFI, LGA, BORNO.

C. A. OGORUNDARE
REINFORCED CONCRETE

1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS FOLLOWS WITH FIGURES IN BRACKET DENOTING MAXIMUM SIZE OF AGGREGATE:
   - FOUNDATION: 30(25)
   - COLUMNS: 30(20)
   - BEAMS & SLABS: 30(20)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL (TYPE 2), DENOTED BY 'Y', HAVING CHARACTERISTIC STRENGTH NOT LESS THAN 410N/MM².
4. COVER TO REINFORCEMENT SHALL BE:
   - FOUNDATION: 50MM (BOTTOM), 75MM (SIDES)
   - COLUMNS: 25MM
   - BEAMS: 25MM
   - SLABS: 20MM
5. DRAWINGS MUST BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO THE DESIGN ENGINEER FOR CLARIFICATION.
6. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALING AT ANY TIME.
7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 150KN/M².
8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY JOB NOT SUPERVISED BY HIM.

BLOCKWORK

1. HOLLOW BLOCK WALLS BELOW GROUND SLAB LEVEL ARE TO BE FILLED WITH MASS CONCRETE. BACK FILLING IS TO BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES.
2. THE WALL THICKNESS OF THE BLOCKS SHOULD NOT BE MORE THAN 25MM.
3. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM² OF GROSS AREA OF BLOCK AT 28 DAYS.
4. BLOCKWORK TIES BETWEEN BLOCKWORK WALL AND COLUMNS ARE TO BE PROVIDED AT EVERY COURSE. TIES TO BE 6MM, BAR STRAPS 700MM LONG INTO THE BLOCKWORK.
5. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCK BLOCKWORK TO BE 2 COURSES AT A TIME.
6. ALL SERVICE PIPES SHALL ONLY BE PUT INSIDE BLOCKWORK AT RECOMMENDATION OF THE STRUCTURAL ENGINEER. PUTTING SERVICE PIPES INSIDE LOAD BEARING BLOCKWORK CORNERS MUST BE AVOIDED.

CHRISTOPHER OLORUNDARE
STRUCTURAL ENGINEER
UNDP CONSULTANT

ROOF BEAM DETAILS CONT.
GENERAL NOTES:

1. DESIGN IS TO BS 8110
2. CONCRETE GRADES ARE TO BE AS FOLLOWS WITH FIGURES IN BRACKET DENOTING MAXIMUM SIZE AGGREGATE:
   - FOUNDATION           30(25)
   - COLUMNS               30(20)
   - BEAMS & SLABS     30(20)
3. UNLESS OTHERWISE INDICATED, REINFORCEMENT SHALL BE HIGH YIELD STEEL (TYPE 2), DENOTED BY ‘Y’, HAVING CHARACTERISTIC STRENGTH NOT LESS THAN 410N/MM².
4. COVER TO REINFORCEMENT SHALL BE:
   - FOUNDATION:       50MM (BOTTOM) 75MM (SIDES)
   - COLUMNS:          25MM
   - BEAMS:            25MM
   - SLABS:             20MM
5. DRAWINGS MUST BE READ IN CONJUNCTION WITH THE RELEVANT ARCHITECTURAL DRAWINGS AND IN CASE OF ANY DISCREPANCY REFER TO THE DESIGN ENGINEER FOR CLARIFICATION.
6. DIMENSIONS ARE IN MILLIMETRE (MM) AND MUST NOT BE SCALDED AT ANY TIME.
7. FOUNDATION WAS DESIGNED FOR AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 150KN/M²
8. THIS DESIGN ENGINEER WILL NOT TAKE RESPONSIBILITY FOR ANY JOB NOT SUPERVISED BY HIM.

BLOCKWORK:
1. HOLLOW BLOCKWALLS BELOW GROUND SLAB LEVEL ARE TO BE FILLED WITH MASS CONCRETE. BACK FILLING IS TO BE CARRIED OUT SIMULTANEOUSLY ON BOTH SIDES.
2. THE MAXIMUM CRUSHING STRENGTH OF THE HOLLOW BLOCK IS TO BE 20N/MM² OF GROSS AREA OF BLOCK AT 28 DAYS.
3. BLOCKWORK TIES BETWEEN BLOCKWORK WALL AND COLUMNS/STANCHIONS ARE TO BE PROVIDED AT EVERY COURSE. TIES TO BE 6MM BAR STRAPS 700MM LONG INTO THE BLOCKWORK.
4. MAXIMUM POUR HEIGHT FOR ALL FILLED BLOCKWORK TO BE 2 COURSES AT A TIME.
5. ALL SERVICE PIPES SHALL ONLY BE PUT INSIDE BLOCKWORK AFTER DUE CONSULTATION WITH STRUCTURAL ENGINEERS. PUTTING SERVICE PIPES INSIDE LOAD BEARING BLOCKWORK CORNERS MUST BE AVOIDED.

REINFORCED CONCRETE:

1.  Issued for Tender
2.  HOMES FOR NGABANANN, MAFIA LGA, BORNO.

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ROOF BEAM DETAILS CONT.