# MINISTRY OF EDUCATION

## (MOE/DOC)

### DEPARTMENT OF CONSTRUCTION / TECHNICAL SERVICES

## (DOC)

# TYPICAL 30 CLASS ROOM SCHOOL

ARCHITECTURE
&
ENGINEERING

# DESIGN

## JANUARY 2007

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT /DESIGN | ARCH.NAKILA AFZALI | APPROVED: Doc/Moe | ENG.AB .MOMEN RAAD | DRAWING TYPE: ARCHITECTURE | PROJECT NAME |
| | | CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE: S0203 - 6/25 | PROJECT TYPE /DRAWING TITLE: CLASSROOM SCHOOL /FRONT ELEVATION |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | |

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|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT /DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE S0263 | 9 / 25 | PROJECT TYPE /DRAWING TITLE | 30 CLASSROOM SCHOOL /LONG SECTION |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

FRONT ELEVATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT /DESIGN | ARCH.NAKILA AFZALI | APPROVED: Doc/Moe | ENG.AB .MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE SN0203 | 6 / 25 | PROJECT TYPE /DRAWING TITLE | CLASSROOM SCHOOL /FRONT ELEVATION |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

FRONT ELEVATION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT /DESIGN | ARCH.NAKILA AFZALI | APPROVED: Doc/Moe | ENG.AB .MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE SN263 - | 6 / 25 | PROJECT TYPE /DRAWING TITLE | CLASSROOM SCHOOL /FRONT ELEVATION |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

N
Site Plan of Koz Sikhmisree School
Propose Boundary wall L=15m Wall
Toilets
Toilets
Toilets
Well
Well
Reservoir
Reservoir
Well
Propose Boundary
Wall L =420
Propose New Well
Propose New
Reservoir
Propose Septic
Toilets
Propose 3 Story
Building
Door

# LONG SECTION

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT /DESIGN | ARCH.NAKILA AFZAL1 | APPROVED-Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE S0263 | 9 / 25 | PROJECT TYPE /DRAWING TITLE | 30 CLASSROOM SCHOOL /LONG SECTION |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

# SIDEWALK PLAN

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|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED: Doc/Moe | ENG.AB. MOMEN RAAD | DRAWING TYPE ARCHITECTURE | PROJECT NAME |
| | | CHECKED BY | ARCH. SAYED RASUL | SCALE | AS SHOWN (A3) | code S-026 / 1 / 25 | |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | PROJECT TYPE/DRAWING TITLE 30 CLASSROOM SCHOOL/PAVEMENT PLAN |

# GROUND FLOOR PLAN

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|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED: Doc/Moe | ENG.AB. MOMEN RAAD | DRAWING TYPE ARCHITECTURE |
| | | CHECKED BY | ARCH. SAYED RASUL | SCALE | AS SHOWN (A3) | CODE S-026 / 2 / 25 |
| | | TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | |

PROJECT NAME

PROJECT TYPE/DRAWING TITLE 30 CLASSROOM SCHOOL/GROUND FLOOR PLAN

# FIRST FLOOR PLAN

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|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED: Doc/Moe | ENG.AB. MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH. SAYED RASUL | SCALE | AS SHOWN (A3) | CODE S- 0263 | 3 / 25 | PROJECT TYPE/DRAWING TITLE | 30 CLASSROOM SCHOOL/FIRST FLOOR PLAN |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

SECOND
FLOOR PLAN

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED: Doc/Mon | ENG.AB. MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| CHECKED BY | ARCH. SAYED RASUL | SCALE | AS SHOWN (A3) | CODE S-026 | 4 / 25 | PROJECT TYPE/DRAWING TITLE | 30 CLASSROOM SCHOOL/SECOND FLOOR PLA |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

# GROUND FLOOR PLAN

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|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED: Doc/Mon | ENG.AB. MOMEN RAAD | DRAWING TYPE ARCHITECTURE | PROJECT NAME |
| | | CHECKED BY | ARCH. SAYED RASUL | SCALE | AS SHOWN (A3) | CODE S-026 / 5 / 25 | |
| | | TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | PROJECT TYPE/DRAWING TITLE 30 CLASSROOM SCHOOL/ENTRANCE DETAILS |

FOUNDATION PLAN LAYOUT

MINISTRY OF EDUCATION
I S D

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| ARCHITECT/DESIGN | ENG.NAKILA. AFZALI | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| DESINED BY | ENJ. FATMA ZEWARI | SCALE | AS SHOWN (A3) | CODE No S.D.2.0.3 | 3 / 42 |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES / FOUNDATION PLAN

1-Base on soil that resutl the safe bearing capacity of soil has been assumed as (1.5 Kg/cm2) at foundation level.
2-Minimum depth of foundation below original firm soil will be (75cm).
3-Concrete for foundation will be of ratio(1:1.5:3) and cylindrical strength of (200kg/cm2) after 28 days.
4 -P.C.C(1:2:4).
5- All Column are M25 Concrete with Specified Compressive Strength of Fc= 250 Kg/Cm2 (3550psi) with the following mix properties:
Max Gravel size =2.5Cm
Max W/C (0.45) and slump (5-10Cm)
Minimum cement content of 380 Kg/m3.

## FOUNDATION PLAN

FOUNDATION PLAN LAYOUT

MINISTRY OF EDUCATION
I S D

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

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|---|---|---|---|---|---|
| ARCHITECT/DESIGN | ENG.NAKILA. AFZALI | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| DESINED BY | ENJ. FATMA ZEWARI | SCALE | AS SHOWN (A3) | CODE No S.0.26.3 | 2 / 42 |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 2,7,2014 | | |

PROJECT NAME: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES

PROJECT TYPE / DRAWING TITLE: / FOUNDATION PLAN

# NOTE:

RCC design based on UBC code

1-All dimensions are in cm

2-Foundation have been checked in bearing capacity of soil 1.5kg/cm$^2$,if the bearing capacity of soil is less than 1.5kg/cm$^2$ the site Engineer should contact with design Engineer.

3-R.C.C mark should be 200kg/cm$^2$ M(1:1.5:3) and P.C.C mark should be 150kg/cm$^2$

4-Sand and gravel should be clean of dust.

5-Concrete should be vibrated and watered.

6-Before concrete the shuttering plan and reinforcement plan must be checked by site engineer.

7-The steel bar is class A-II(Ra=2700kg/cm$^2$) (for stirrups and secdary reinforcement class A-I will also be used).

9-During the concrete working a cubic sample should be taken.

8-Cement - mortar which use for other walls and stone masonry the ratio are 1:5

مقاومت فشاری مجازخاک (qall) براساس kg/cm2

**Bearing Capacity of Soil Based on (ACI)**

| Recommendatio | Limit | Specifications | Types of Soil |
|---|---|---|---|
| 8 | 7-10 | Very dense Campacted | Gravel, Gravel & Sand, Mix of Gravel & Stone<br>جغل، جغل وریگ ،مخلوط جغل وسنگ |
| 6 | 5-7 | Medium Course Compacted | |
| 4 | 3-6 | Loos Campacted | |
| 4 | 4-6 | Very dense Campacted | Stiff Sand, Sand with a little Greval<br>ریگ سخت ، ریگ باکمی جغل |
| 3 | 3-4 | Medium Course Compacted | |
| 2 | 2-3 | Loos Campacted | |
| 3 | 3-5 | Very dense Campacted | Medium Stiff Sand , Sand with Mud or Clay<br>ریگ باسختی متوسط ، ریگ با لای برس |
| 2.5 | 2-4 | Medium Course Compacted | |
| 1.5 | 1-2 | Loos Campacted | |
| 3 | 3-4 | Very dense Campacted | Uniform Sand, Sand with a little Mud or Clay<br>ریگ یکنواخت، ریگ باکمی جغل |
| 2 | 2-3 | Meldum Course Compacted | |
| 1.5 | 1-2 | Loos Campacted | |
| 4 | 3-6 | Very Stiff | Uniform Clay , Clay with Sand or Mud<br>رس یکنواخت، ریگ باکمی جغل |
| 2 | 1-3 | Medium Siff | |
| 0.5 | 0.5-1 | Uncompacted | |
| 3 | 2-4 | Very Stiff | Mud,Sandy Mud or Clay<br>لای ،لای ریگی بارسی |
| 1.5 | 1-3 | Medium Siff | |
| 0.5 | 0.5-1 | Uncompacted | |

Prepared by : EN. S. Basharat Abid

تبصره:

1- مارک کانکریت سیخدار در تمام عناصر ساختمانی (M-200 ) با تناسب (1:1.5:3)،

و مارک کانکریت بدون سیخ(M-150 ) با تناسب (1:2:4)، استفاده شود

2- در تعمیر مذکور از سیخ های با مقاومت سنجشی ($Ra=2100kg/cm^2$ ) درگژدمکها و

3- برای خشت کاری از مصالح سمنت وریگ با نا سب (1:5 ) استفاده شود.

4- پلستر دیوارهای داخلی و خارجی ازمصلح سمنت وریگ با مارک (M-300)با تناسب ( 1:3) استفاده شودرتمام امور سا ختمانی که از سمنت استفاده میشود برای مدت بیشتر از 14 یوم نظر به شرایط جوی و اقلیمی آب پاشی متداوم صورت گیرد تا عنصر مقاومت پروژوی خود را حاصل نماید .

5- قالب هاقبل ازاستفاده باید خوب چرب کاری شود.

6- خشت ها قبل ازاستفاده باید خوب مرطوب گردده دارای کیفیت عالی باشد .

7- سیخ های مورد استفاده باید عاری از زنگ زده گی باشد .

8- ریگ وجغل قبل ازاستفاده باید شستشو گردد .

9- آب های مورد استفاده برای مخلوط کانکریت شور و نمکی نباشد .

10- در مخلوط کانکریت جغل کرش نوع دریایی با سورت های الی قطر 2.5 سانتی متر استفاده گردد و از جغل کرش نوع صخره ای یا کوهی استفاده نشود .

11- جنی کانکریت ریزی و ویبراتور استفاده گردد .

12 - قالب های عناصر انحنایی به هیچ وجه قبل از 18 روز دور نگردد .

13- در حصه تعدیل نقشه با انجنیر دیزاین کننده مشوره گردد .

14- پروسه کار پروژه از شروع تا ختم توسط انجنیر ساختمان مراقبت گردد.

15 - مقاومت خاک (1,5 cm/gk) برای دیزاین تهداب ها درنظر گرفته شده است .

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|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>ISD | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ENG.NAKILA. AFZAL | APPROVED: Doc/Mod | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| | | DESINED BY | ENG. FATMA ZEWAR | SCALE | AS SHOWN (A3) | CODE NO S.D.2.5 | 1 / 42 |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

PROJECT NAME: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES

PROJECT TYPE / DRAWING TITLE: NOT:

FOUNDATION PLAN LAYOUT

MINISTRY OF EDUCATION
I S D

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| ARCHITECT/DESIGN | ENG.NAKILA. AFZALI | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| DESINED BY | ENJ. FATMA ZEWAR | SCALE | AS SHOWN (A3) | CODE No S.D.2.0.5 | 4 / 42 |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 2,7,2014 | | |

PROJECT NAME

30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES

PROJECT TYPE / DRAWING TITLE /FOUNDATION PLAN

# FOUNDATION PLAN

MINISTRY OF EDUCATION
ISD

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| ARCHITECT/DESIGN | ENG.NAKILA. AFZALI | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| DESINED BY | ENJ. FATMA ZEWARI | SCALE | AS SHOWN (A3) | DOCE No S.D.D.D | 5 / 42 |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

PROJECT NAME: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES

PROJECT TYPE / DRAWING TITLE: /FOUNDATION PLAN

## VERTICAL SUN SHEDE PLEAT

NO ( )

Section D:D

Section B:B

Section A:A

Section E:E

Section B́:B́

FOUNDATION PLAN LAYOUT

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| MINISTRY OF EDUCATION I S D | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ARCHITECT/DESIGN ENG.NAKILA. AFZALI | APPROVED: Doc/Mod | ENGINEERING | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | DESIED BY ENJ. FATMA ZEWAR | SCALE | AS SHOWN (A3) | CODE No S.D.7.6.0 / 6 / 42 | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES |
| | | TECH- APPROVED ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE / VERTICAL SUNSHEDE PLAT , RAMP SECTION OF FOUN |

FOUNDATION PLAN LAYOUT

MINISTRY OF EDUCATION
I S D

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

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|---|---|---|---|---|---|
| ARCHITECT/DESIGN | ENG.NAKILA. AFZALI | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| DESINED BY | ENJ. FATMA ZEWAR | SCALE | AS SHOWN (A3) | CODE No S.D.2.6.3 | 7 / 42 |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /SECTION OF FOUNDATION

Footing Beam -3

Nors (2)

**SEC 1-1**

**SEC 2-2**

43N10@10-20C/C-4lgd
L=225

FOUNDATION PLAN LAYOUT

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|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION I S D | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ARCHITECT/DESIGN ENG.NAKILA. AFZALI | APPROVED: Doc/Moe ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES | |
| | | DESINED BY ENJ. FATMA ZEWARI | SCALE AS SHOWN (A3) | CODE No S.D.2.0.3 | 8 / 42 | PROJECT TYPE / DRAWING TITLE | /FOUNDATION BEAME-3 |
| | | TECH- APPROVED BY ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | | |

Footing Beam -1

Nors (2)

***SEC 1-1***

***SEC 2-2***

***SEC 3-3***

***SEC 4-4***

FOUNDATION PLAN LAYOUT

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|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION I S D | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ARCHITECT/DESIGN ENG.NAKILA. AFZALI | APPROVED: Doc/Moe ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES | |
| | | DESINED BY ENJ. FATMA ZEWAR | SCALE AS SHOWN (A3) | CODE No S.0.2.0.0 | 9 / 42 | PROJECT TYPE / DRAWING TITLE | /FOOTING BEAM-1 |
| | | TECH- APPROVED BY ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | | |

Footing Beam -2

Nors (2)

***SEC 1-1***

***SEC 2-2***

***SEC 3-3***

FOUNDATION PLAN LAYOUT

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|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION I S D | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ARCHITECT/DESIGN ENG.NAKILA. AFZALI | APPROVED: Doc/Moe ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES |
| | | DESINED BY ENJ. FATMA ZEWAR | SCALE AS SHOWN (A3) | CODE NO S.D.263 | 10 / 42 | PROJECT TYPE / DRAWING TITLE / FOUNDATION BEAM-2 |
| | | TECH- APPROVED BY ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

FOUNDATION PLAN LAYOUT

MINISTRY OF EDUCATION
I S D

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | |
|---|---|---|---|
| ARCHITECT/DESIGN | | APPROVED: Doc/Moe | |
| DESINED BY | ENJ. FATMA ZEWAR | SCALE | AS SHOWN (A3) |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | |

CODE No S.D.2.6.0

11
42

PROJECT NAME

PROJECT TYPE / DRAWING TITLE

30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF.
WITH COMPUTER AND LABRATORY CLASSES
COLUMN (1,2,5

FOUNDATION PLAN LAYOUT

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|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>I S D | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ENG.NAKILA. AFZALI | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| | | DESINED BY | ENJ. FATMA ZEWAR | SCALE | AS SHOWN (A3) | CODE No S.026.3 | 12<br>42 |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 2,7,2014 | | |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES COLUMN (3,4,5)

# F1-
## Nors(2)

Sec A5-A5

261Ø8x170@10-20c/c

Sec A1-A1

Sec A2-A2

Sec A3-A3

Sec A4-A4

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|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mon | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No SU2603 30 42 | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. |
| | | TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE WITH COMPUTER AND LABRATORY CLASSES FRAME–1 |

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | |
|---|---|---|---|---|
| DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mo | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S/226-3 |
| TECH- APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | 31 / 42 |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES. FRAME-2

# F3-
## Nors(2)

| | | | | | | |
|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mo | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.0267 |
| | | TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | 32 / 42 |

PROJECT NAME: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES

PROJECT TYPE / DRAWING TITLE: FRAME–3

# F4-
## Nors(2)

Sec M1-M1 | Sec M2-M2 | Sec M3-M3 | Sec M4-M4 | Sec M5-M5

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mo | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S0265 | 33 42 |
| TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES FRAME-4 |

# F5-
## Nors(2)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mon | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No SU2603 34 42 | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES |
| | | TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE FRAME–5 |

F6-
Nors(2)

| | | | | | | |
|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mon | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.0226-3 |
| | | TECH- APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | 35 / 42 |

PROJECT NAME: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES

PROJECT TYPE / DRAWING TITLE: FRAME-6

# F-7

Nors(2)

Sec 8-8

Sec 9-9

Sec 10-10

Sec 1-1

Sec 3-3

Sec 4-4

Sec 5-5

Sec 6-6

Sec 7-7

435Ø8x150@10-20 c/c

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mo | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.0267 36 42 | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES |
| | | TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE FRAME–7 |

# F8-
## Nors(4)

435Ø8x150@10-20 c/c

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mon | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.0265 | 37 / 42 |
| | | TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES FRAME–8 |

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mo | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.0267 38 42 | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE FRAME–9 |

F10-

Nors(2) 35X40 ,35X45

Sec S7-S7

35X45

Sec S8-S8

Sec S9-S9

Sec S1-S1

Sec S2-S2

Sec S3-S3

Sec S4-S4

Sec S5-S5

Sec S6-S6

35X45

82Ø8x160@10-20c/c

389Ø8x150@10-20c/c

| | | | | | |
|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mon | ENG . MOMEN RAAD |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) |
| | | TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 2,7,2014 |

DRAWING TYPE STRUCTURE

CODE No S.0226.3

39 / 42

PROJECT NAME

PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES

FRAME–10

# REINFORCEMENT OF FRAME11–

**Section( 35x40 ,35x70)**

SEC 5-5

**SEC 6-6**

**SEC 7-7**

**SEC 8-8**

168Ø10 L=150

138Ø10 L=210

**SEC 1-1**

**SEC 2-2**

**SEC 3-3**

**SEC 4-4**

| | | | | | | |
|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mon | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No SJ/25-7 |
| | | TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 2,7,2014 | 40 / 42 |

PROJECT NAME: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF WITH COMPUTER AND LABRATORY CLASSES

PROJECT TYPE / DRAWING TITLE: FRAME–11

F12-

Nors 1

Sec R7-R7




Sec R8-R8




Sec R9-R9



389Ø8x150@10-20 c/c

82Ø8x160@10-20 c/c

Sec R1-R1

Sec R2-R2

Sec R3-R3

Sec R4-R4

Sec R5-R5

Sec R6-R6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mo | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.226.3 / 41 42 | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. |
| | | TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE WITH COMPUTER AND LABRATORY CLASSES FRAME–12 |

Sec D1-D1

Sec D2-D2

Sec D3-D3

BEAM-13 at leval +9.30

BEAM-13 at leval +6.15

123Ø8x170@10-20c/c

BEAM-13 at leval +3.00

Ø8x150@10-20 c/c

Sec a-a

Ø8x150@10-20 c/c

Sec b-b

Ø8x150@10-20 c/c

Sec c-c

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | DESIGN ENG | Eng FATMA ZEWAR | APPROVED: Doc/Mo | ENG . MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.0.2.6.3 42 42 | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE /FRAME-3 ,BEAM- 3 |

**FIRST Floor Plan SHUTTERING AT LEVEL 3.00**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | EngRAHIM | SCALE | AS SHOWN (A)4 | CODE No SD2763. 13 / 42 | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES / SHUTTERING PLAN AT LEVEL 3.00 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

**SECOND FLOOR PLAN SHUTTERING AT LEVEL 6.15**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| | | CHECKED BY | EngRAHIM | SCALE | AS SHOWN (A)4 | CODE No 30263. | 14<br>42 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE

30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF .
WITH COMPUTER AND LABRATORY CLASSES
/ SHUTTERINGP LAN AT LEVEL 6.15

**THIRT FLOOR PLAN SHUTTERING AT LEVEL 9.30**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No. S0263. / 15 / 42 | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF . WITH COMPUTER AND LABRATORY CLASSES / SHUTTERING PLAN AT LEVEL 9.30 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

**FIRST Floor Plan SHUTTERING AT LEVEL 3.00**

**FIRST Floor Plan SHUTTERING AT LEVEL 6.15**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263 / 16 / 42 | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF . WITH COMPUTER AND LABRATORY CLASSES / PLAN OF SHUTTERING AT LEVEL 3.00,6.15 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

**SECOND FLOOR PLAN SHUTTERING AT LEVEL 6.15**

**FIRST Floor Plan SHUTTERING AT LEVEL 3.00**

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | EngFATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No SD263. | 17 / 42 |
| TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE

30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF .
WITH COMPUTER AND LABRATORY CLASSES
/SHUTTERING PLAN AT LEVEL 3.00,6.15

# THIRT FLOOR PLAN SHUTTERING AT LEVEL 9.30

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No 50263. 18 / 42 | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /SHUTTERING PLAN AT LEVEL 9.30 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

# THIRT FLOOR PLAN SHUTTERING AT LEVEL 9.30

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOHAMMAD RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263. | 19 / 42 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /SHUTTERING PLAN AT LEVEL 9.30 |

**FIRST FLOOR PLAN REINFORCMENT AT LEVEL +3.00**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No 50263. | 20 / 42 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 3.00 |

**SECOD FLOOR PLAN REINFORCMENT AT LEVEL +6.15**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | EngFATMA | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263. | 21 / 42 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

PROJECT NAME: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES

PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 6.15

**THIRD FLOOR Plan REINFORCMENT AT LEVEL +9.30**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No 50263. | 22 / 42 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF . WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 9.30 |

# FIRST FLOOR PLAN REINFORCMENT AT LEVEL +3.00

# SECOND FLOOR PLAN REINFORCMENT AT LEVEL +6.15

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No 50263. 23 / 42 | PROJECT TYPE / DRAWING TITLE |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 6.15 , 3.00 |

**SECOND FLOOR PLAN REINFORCMENT AT LEVEL +6.15**

**FIRST FLOOR PLAN REINFORCMENT AT LEVEL +3.00**

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOHAMMAD RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263. 24 / 42 | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 6.15, 3.00 |
| TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

# THIRD FLOOR Plan REINFORCMENT AT LEVEL +9.30

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE | PROJECT NAME | |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263. | 25 / 42 | PROJECT TYPE / DRAWING TITLE | 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 9.30 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | | | |

# THIRD FLOOR Plan REINFORCMENT AT LEVEL +9.30

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263. | 26 / 42 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF . WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 9.30 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263 | 27 / 42 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /DETIALS |

# CENTER STAIRS REINFORCING

| | | | | | | |
|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263 |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | 28 / 42 |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE

30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF . WITH COMPUTER AND LABRATORY CLASSES

STAIRS

# CORNER STAIRS REINFORCING

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A)4 | CODE No S0263 | 29 / 42 |
| TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE

30CLASS SCHOOL BURNT BRICK IRON SHEET ROOF .
WITH COMPUTER AND LABRATORY CLASSES
/STAIRS

**FIRST Floor Plan SHUTTERING AT LEVEL 3.00**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | EngRAHIM | SCALE | AS SHOWN (A4) | CODE No S.D.2.03 | 13 / 42 |
| | | TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /SHUTTERING PLAN AT LEVEL 3.00 |

**SECOND FLOOR PLAN SHUTTERING AT LEVEL 6.15**

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | Eng FATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | STRUCTURE |
| CHECKED BY | EngRAHIM | SCALE | AS SHOWN (A4) | CODE No | S/02/05 |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | 14 / 42 | |

PROJECT NAME

PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /SHUTTERINGP LAN AT LEVEL 6.15

**THIRT FLOOR PLAN SHUTTERING AT LEVEL 9.30**

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | Eng FATMA | APPROVED: Doc/Mon | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S/0263 | 15 / 42 |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /SHUTTERING PLAN AT LEVEL 9.30 |

**FIRST Floor Plan SHUTTERING AT LEVEL 3.00**

**FIRST Floor Plan SHUTTERING AT LEVEL 6.15**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Mon | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.026.3 / 16 / 42 | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /PLAN OF SHUTTERING AT LEVEL 3.00,6.15 |
| | | TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | |

**SECOND FLOOR PLAN SHUTTERING AT LEVEL 6.15**

**FIRST Floor Plan SHUTTERING AT LEVEL 3.00**

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | EngFATMA | APPROVED: Doc/Mon | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S0265 | 17 / 42 |
| TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /SHUTTERING PLAN AT LEVEL 3.00,6.15. |

# THIRT FLOOR PLAN SHUTTERING AT LEVEL 9.30

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Mon | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S/0265 | 18 / 42 |
| | | TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /SHUTTERING PLAN AT LEVEL 9.30 |

# THIRT FLOOR PLAN SHUTTERING AT LEVEL 9.30

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | Eng FATMA | APPROVED: Doc/Mod | ENG.EMIMEMRAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S/226-3 19/42 | 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES |
| | | TECH– APPROVED | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE /SHUTTERING PLAN AT LEVEL 9.30 |

**FIRST FLOOR PLAN REINFORCMENT AT LEVEL +3.00**

| | | | | | |
|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG: Eng FATMA | APPROVED: Doc/Mon: ENG.MOMEN RAAD | DRAWING TYPE: STRUCTURE | PROJECT NAME |
| | | CHECKED BY: Eng RAHIM | SCALE: AS SHOWN (A4) | CODE No: S/026.3 | 20 / 42 |
| | | TECH– APPROVED BY: ENG.AB.MATIN MAQOL | DATE: 2,7,2014 | | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 3.00 |

**SECOD FLOOR PLAN REINFORCMENT AT LEVEL +6.15**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | DESIGN ENG | EngFATMA | APPROVED: Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF WITH COMPUTER AND LABRATORY CLASSES |
| | | CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S.0263 | 21 / 42 |
| | | TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 6.15 |

**THIRD FLOOR Plan REINFORCMENT AT LEVEL +9.30**

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN ENG | Eng FATMA | APPROVED: Doc/Mon | ENG.MOMEN RAAD | DRAWING TYPE STRUCTURE | PROJECT NAME |
| CHECKED BY | Eng RAHIM | SCALE | AS SHOWN (A4) | CODE No S0263 | 22 / 42 |
| TECH– APPROVED BY | ENG.AB.MATIN MAQOL | DATE 2,7,2014 | | | PROJECT TYPE / DRAWING TITLE: 30 CLASS SCHOOL BURNT BRICK IRON SHEET ROOF. WITH COMPUTER AND LABRATORY CLASSES /REINFORCING PLAN AT LEVEL 9.30 |

Door,Window-1 n=1

Door,Window-3 n=2

Door-5 n=4

Window-6 n=6

Door-5 n=24

Door-4 n=2

Door-3 n=8

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | | |
|---|---|---|---|---|---|---|
| ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.AB.MOMEN RAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME |
| CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE S 06/3 | 19 / 25 | PROJECT TYPE/ DRAWING TITLE: 30 CLASSROOM SCHOOL/DOOR &WINDOW DETAIL/S. |
| TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | |

Window-4 n=70

Window-1 n=40

Window-8 n=6

Door,Window-2 n=2

Door,Window-4 n=4

Window-5 n=2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.AB.MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE S'0063 | 20 / 25 | DRAWING TITLE | 30 CLASSROOM SCHOOL /DOOR &WINDOW DETAIL'S. |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

# (Door horizontal section)

## (Door Vertical section)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.AB .MOMEN RAD | DRAWING TYPE | ARCHITETURE | PROJECT NAME | |
| | | CHECKED BY | ARCH.SAYED RASUL | SCALE | AS SHOWN (A)3 | CODE S 0.03 | 21 / 25 | PROJECT TYPE / DRAWING TITLE | 30CLASSROOM SCHOOL/DOOR &DETAIL'S. |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

Door-1"n=4

Door-1 n=12

Door-1 n=27

Window-2 n=40

Window-2 n=20

Window-8 n=12

Door-5 n=4

Window-3 n=12

Window-1 n=20

Window-7 n=6

Window-5 n=2

Window-5 n=4

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | | |
|---|---|---|---|---|---|---|
| ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.AB.MOMEN RAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME |
| CHECKED BY | ARCH.SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE S 0263 | 22 / 25 | |
| TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | PROJECT TYPE /DRAWING TITLE: 30 CLASSROOM SCHOOL /DOOR &WINDOW DETAIL'S. |

## (Window horizontal section)

## (Window Vertical section)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT/DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.AB.MOHMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE S'0.0.3 | 23 / 25 | PROJECT TYPE/DRAWING TITLE | **30** CLASSROOM SCHOOL/DOOR &DETAIL/S. |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

PANEL BOARD NAME : PB2 60 AMP BUS BAR RATE MAIN BREAKER :70 A
PANEL LOCATION: FIRST FLOOR PANEL 220 VOLT , 1 PHASE , 3 WIRE , 50HZ 30KA ISO / 0.5 SEC RECESSED MOUNTED NAME ENCLOSURE

| WIRE ,CONDUIT AND DESCRIPTION | | | SINGLE PHASE | | | TRIP & CIRCUIT | | | | SINGLE PHASE | | | WIRE ,CONDUIT AND DESCRIPTION | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WIRE AND CONDUIT | GND WIRE | DESCRIPTION | A (VA) | A (VA) | A (VA) | AMP | CKT | CKT | AMP | A (VA) | A (VA) | A (VA) | DESCRIPTION | GND WIRE | WIRE AND CONDUIT |
| 1(2X2.5mm²)Ø20mm | 2.5mm² | LIGHTING | 1356.0 | | | 16 | 1 | 2 | 16 | 1464.0 | | | LIGHTING | 2.5mm² | 1(2X2.5mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | 576.0 | | 20 | 3 | 4 | 20 | | 720.0 | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | | 720.0 | 20 | 5 | 6 | 20 | | | 864.0 | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | 864.0 | | | 20 | 7 | 8 | 20 | 864.0 | | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | 864.0 | | 20 | 9 | 10 | 20 | | 1008.0 | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | | 864.0 | 20 | 11 | 12 | 20 | | | 864.0 | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| | | SPARE | 0.0 | | | 20 | 13 | 14 | 20 | | | | SPARE | | |
| | | SPARE | | | | 20 | 15 | 16 | 20 | | | | SPARE | | |
| SUB - TOTAL IN ( VA ) | | | 2220.0 | 1440.0 | 1584.0 | - | - | - | - | 2328.0 | 1728.0 | 1728.0 | SUB - TOTAL IN ( VA ) | | |

| | | |
|---|---|---|
| TOTAL PHASE (A) = | 4548.0 | 20.7 |
| TOTAL PHASE (A) = | 3168.0 | 14.4 |
| TOTAL PHASE (A) = | 3312.0 | 15.1 |
| TOTAL CONNECTED LOAD | 11028.0 | 16.8 |
| DEMAND FACTOR | 0.7 | |
| DEMAND LOAD | 7719.6 | |
| 25% FUTURE LOAD | 1929.9 | |
| TOTAL LOAD | 9649.5 | |
| TOTAL AMPERE | 43.9 | |
| BREAKER SIZE | 54.8 | |

# PANEL SCHEDULE AND RISER DIAGRAM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENG.AB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME | |
| | | CHEEKED | ENG.RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No 7 / 10 | DRAWING TITLE | 30 CLASS ROOM SCHOOL |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02,08,2014 | S.0263 | | | FIST FLOOR PENAL SCHEDULE AND SINGLE LINE DIAGRAM. |

PANEL BOARD NAME : PB1 75 AMP BUS BAR RATE MAIN BREAKER :80 A

PANEL LOCATION: GROUND FLOOR PANEL 220 VOLT , 1 PHASE , 3 WIRE , 50HZ 30KA ISO / 0.5 SEC RECESSED MOUNTED NAME ENCLOSURE

| WIRE ,CONDUIT AND DESCRIPTION | | | SINGLE PHASE | | | TRIP & CIRCUIT | | | | SINGLE PHASE | | | WIRE ,CONDUIT AND DESCRIPTION | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WIRE AND CONDUIT | GND WIRE | DESCRIPTION | A (VA) | A (VA) | A (VA) | AMP | CKT | CKT | AMP | A (VA) | A (VA) | A (VA) | DESCRIPTION | GND WIRE | WIRE AND CONDUIT |
| 1(2X2.5mm²)Ø20mm | 2.5mm² | LIGHTING | 1256.4 | | | 16 | 1 | 2 | 16 | 1435.0 | | | LIGHTING | 2.5mm² | 1(2X2.5mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | 720.0 | | 20 | 3 | 4 | 20 | | 720.0 | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | | 720.0 | 20 | 5 | 6 | 20 | | | 1728.0 | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | 1728.0 | | | 20 | 7 | 8 | 20 | 720.0 | | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | 576.0 | | 20 | 9 | 10 | 20 | | 864.0 | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | | 864.0 | 20 | 11 | 12 | 20 | | | 720.0 | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | 720.0 | | | 20 | 13 | 14 | 20 | 864.0 | | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | 864.0000 | | 20 | 15 | 16 | 20 | | 0.0000 | | SPARES | | |
| | | SPARES | | | | 20 | 17 | 18 | 20 | | | | SPARES | | |
| SUB - TOTAL IN ( VA ) | | | 3704.4 | 2160.0 | 1584.0 | - | - | - | - | 3019.0 | 1584.0 | 2448.0 | SUB - TOTAL IN ( VA ) | | |

| | | |
|---|---|---|
| TOTAL PHASE (A) = | 6723.4 | 30.6 |
| TOTAL PHASE (A) = | 3744.0 | 17.0 |
| TOTAL PHASE (A) = | 4032.0 | 18.3 |
| TOTAL CONNECTED LOAD | 14499.4 | 22.1 |
| DEMAND FACTOR | 0.7 | |
| DEMAND LOAD | 10149.6 | |
| 25% FUTURE LOAD | 2537.4 | |
| TOTAL LOAD | 12687.0 | |
| TOTAL AMPERE | 57.7 | |
| BREAKER SIZE | 72.1 | |

# PANEL SCHEDULE AND RISER DIAGRAM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENG.AB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME | |
| | | CHEEKED | ENG.RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No 6 / 10 | DRAWING TITLE | 30 CLASS ROOM SCHOOL<br>GROUND FLOOR PENAL SCHEDULE AND SINGLE LINE DIAGRAM |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02,08,2014 | S.0263 | | | |

PANEL BOARD NAME : PB3 60 AMP BUS BAR RATE MAIN BREAKER :70 A

PANEL LOCATION: 2RD FLOOR PANEL 220 VOLT , 1 PHASE , 3 WIRE , 50HZ 30KA ISO / 0.5 SEC RECESSED MOUNTED NAME ENCLOSURE

| WIRE ,CONDUIT AND DESCRIPTION | | | SINGLE PHASE | | | TRIP & CIRCUIT | | | | SINGLE PHASE | | | WIRE ,CONDUIT AND DESCRIPTION | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WIRE AND CONDUIT | GND WIRE | DESCRIPTION | A (VA) | A (VA) | A (VA) | AMP | CKT | CKT | AMP | A (VA) | A (VA) | A (VA) | DESCRIPTION | GND WIRE | WIRE AND CONDUIT |
| 1(2X2.5mm²)Ø20mm | 2.5mm² | LIGHTING | 1356.0 | | | 16 | 1 | 2 | 16 | 1464.0 | | | LIGHTING | 2.5mm² | 1(2X2.5mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | 576.0 | | 20 | 3 | 4 | 20 | | 720.0 | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | | 864.0 | 20 | 5 | 6 | 20 | | | 864.0 | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | 864.0 | | | 20 | 7 | 8 | 20 | 864.0 | | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | 864.0 | | 20 | 9 | 10 | 20 | | 864.0 | | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | | | 1008.0 | 20 | 11 | 12 | 20 | | | 1008.0 | RECEPTACLE | 4mm² | 1(2X4mm²)Ø20mm |
| 1(2X4mm²)Ø20mm | 4mm² | RECEPTACLE | 864.0 | | | 20 | 13 | 14 | 20 | 0.0 | | | SPARE | | |
| | | SPARE | | | | 20 | 15 | 16 | 20 | | | | SPARE | | |
| SUB - TOTAL IN ( VA ) | | | 3084.0 | 1440.0 | 1872.0 | - | - | - | - | 2328.0 | 1584.0 | 1872.0 | SUB - TOTAL IN ( VA ) | | |

| | | |
|---|---|---|
| TOTAL PHASE (A) = | 5412.0 | 24.6 |
| TOTAL PHASE (A) = | 3024.0 | 13.7 |
| TOTAL PHASE (A) = | 3744.0 | 17.0 |
| TOTAL CONNECTED LOAD | 12180.0 | 18.5 |
| DEMAND FACTOR | 0.7 | |
| DEMAND LOAD | 8526.0 | |
| 25% FUTURE LOAD | 2131.5 | |
| TOTAL LOAD | 10657.5 | |
| TOTAL AMPERE | 48.4 | |
| BREAKER SIZE | 60.6 | |

# PANEL SCHEDULE AND RISER DIAGRAM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENG.AB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME | |
| | | CHEEKED | ENG.RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No 8 / 10 | DRAWING TITLE | 30 CLASS ROOM SCHOOL<br>SECOND FLOOR PENAL SCHEDULE AND SINGLE LINE DIAGRAM. |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02,08,2014 | S.0263 | | | |

# First floor power plan

# First floor lighting plan

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENG.AB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME | |
| | | CHEEKED | ENG.RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No 4 / 10 | DRAWING TITLE | 30 CLASS ROOM SCHOOL |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02,08,2014 | S.0263 | | | FIRSTFLOOR LIGHTING AND POWER PLAN |

# Ground floor lighting plan

# Ground floor power plan

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENG.AB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME |
| | | CHEEKED | ENG.RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No | 3 / 10 | DRAWING TITLE |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02,08,2014 | S.0263 | | | 30 CLASS ROOM SCHOOL<br>GROUND FLOOR LIGHTING AND POWER PLAN |

LATM RISER DIAGRAM

NOT TO SCALE

PANEL INSTALLATION DETAIL

NOT TO SCALE

COLUMN GROUNDING DETAIL

NOT TO SCALE

NOTES:

1. CONDUCTOR SIZE SHALL BE AS INDICATED ON PLANS.
2. EXOTHERMIC WELDS SHALL BE AS RECOMMENDED BY MANUFACTURER FOR THE SIZE OF CONNECTION AND MATERIAL INVOLVED.SEE DETAIL 5 ON SHEET SE-7.

BELOW GRADE GROUNDING ROD DETAIL

NOT TO SCALE

MATERIAL LIST

1. GROUND ROD
2. EXOTHERMIC WELD
3. GROUNDING CONDUCTOR 70mm² COPPER
4. POLYMER CONCRETE FIBERGLASS REINFORCED BOX
5. COVER FOR ABOVE BOX
6. GRAVEL OR CRUSHED STONE

GROUND ROD ACCESS BOX INSTALLATION DETAIL

NOT TO SCALE

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENGAB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME | |
| | | CHEEKED | ENG.M.RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No 2 / 10 | DRAWING TITLE | 30 CLASS ROOM SCHOOL GROUNDING. |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02.08.2014 | S.0263 | | | |

# LIST OF SPECIFICATIONS

| NO. | DESCRIPTION | SIGNS | UNIT | PIECES | REMARKS |
|---|---|---|---|---|---|
| 1 | SINGLE POLE SWITCH UNDER PLASTER10 AMP WATER PROVE TYPE GOOD QUALITY. | | NO | 11 | |
| 1 | SINGLE POLE SWITCH UNDER PLASTER10 AMP GOOD QUALITY. | | NO | 7 | |
| 2 | SINGLE POLE SWITCH UNDER PLASTER ANTI DUMP | | NO | 18 | |
| 3 | TWO WAY SWITCHES | | NO | 33 | |
| 4 | SOCKET OUTLET - SINGLE PHASE | | NO | 191 | |
| 5 | CEILING FLUORESCENT TUBE 2x36W GOOD QUALITY. | | SET | 130 | |
| 6 | CEILING FLUORESCENT 4x15W GOOD QUALITY. | | NO | 57 | |
| 7 | ROUND/GLOBE FITTING ON WALL 1x24W WATER PROOF OUT DOOR | | NO | 6 | |
| 8 | ROUND/GLOBE FITTING ON WALL 1x18W WATER PROOF. | | NO | 18 | |
| 9 | DISTRIBUTOR PANEL BOARD50AMP3PHASE MINE C B,3X70AMP CB,1X80 AMP CB. | | SET | 1 | |
| 10 | CEILING FLUORESCENT 4x15W WATER PROVE GOOD QUALITY OUT DOOR. | | NO | 7 | |
| 11 | DOUBLE POLE SWITCH UNDER PLASTER 10AMP GOOD QUALITY. | | NO | 31 | |
| 12 | ROUND/GLOBE FITTING 1x24W WATER PROOF | | NO | 12 | |
| 13 | CHANGE OVER 3PHASE 30AMP. | | NO | 1 | When we use power from net work we do not need change over. |
| 14 | CHANGE OVER 1PASE30 AMP. | | NO | 1 | When we use power from net work we do not need change over. |
| 15 | DISTRIBUTION PENAL BOARD1X80AMP MINE CB, 2X16AMP CB+R,C,B,O AND 16X20AMP CB+R,C,B,O | | NO | 1 | RCBO(Residual Circuit Breaker Over Current. |
| 16 | DISTRIBUTION PENAL BOARD1X70AMP MINE CB, 2X16AMP CB+R,C,B,O AND 16X20AMP CB+R,C,B,O | | NO | 2 | RCBO(Residual Circuit Breaker Over Current. |
| 17 | WIRE 1X2.5MM² COPPER FOR LIGHTING. | | M | 3100 | |
| 18 | WIRE 1X4MM² COPPER FOR POWER. | | M | 2900 | |
| 19 | CONDUIT 20MM FOR2.5MM² AND4MM² WIRE. | | M | 1800 | |
| 20 | CABAL 1X35MM² COPPER FOR GROUNDING. | | M | 27 | |
| 21 | CABAL 1(3X10MM²) COPPER FROM MINE PENAL TO OTHER PENAL. | | M | 25 | |
| 22 | CONDUIT 2INCH FOR1(3X10)MM² CABAL. | | M | 50 | |
| 23 | CABAL 1(4X35)MM2 FOR MINE FADER+1x35mm2 for ground. | | M | 50 | IF DISTANCE IS MORE THEN 50METERS TAKE 1(4X50)MM2. |
| 24 | CONDUIT 4INCH FOR2.5MM2 AND4MM2 WIRE. | | M | 50 | |
| 25 | CEILING PVC JOIN POX. | | NO | 185 | |

# NOTES

1-Hight of sockets 450mm from floor.
2-Hight of switches 135mm from floor.
3-Hight of penal boards& Mine penal board1800mm the highest.
4-All wire 1x2.5and1x4mm2 should install in conduit pipe 20mm diameters.
5-All conduit must be in the plaster.
6-All bulbs,switches and sockets which are in moisture must be water prove type.
7-Connect Phase wire in CB and Neutral wire on RCBO.
8-MDP Mine Distribution Penal.
9-PB Penal Board.
10-CB Circuit Breaker.
11-All connection must have plastic joint clapper(from one bulb to other).
12-Install ceiling PVC joint box for 2x36W&4x15W bulb(small size which are not shown from down) bulb should cover them.
13-R.C.B.O Residual Circuit Breaker Over Current.
14-Amp Amperes.
15-W Watt.
16-Hz Hertz.
17-Use 3color wire one for phase one for neutral one for grounding.
18-All wire in Penal board must have mark 1,2,3..Whaich show the Circuit numbers.
19-All wire in penal boards must be in plastic cover.
20-Resistase of grounding should be not more then 25 Omes per NIC code.
21-Use one phase for ground floor,one phase for first floor and other phase for second floor.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENGAB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME | |
| | | CHEEKED | ENG.M,RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No 1 / 10 | DRAWING TITLE | 30 CLASS ROOM SCHOOL LEGENDS |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02,08,2014 | S.0263 | | | |

PANEL BOARD NAME : MDP 50 AMP BUS BAR RATE MAIN BREAKER :50 A
PANEL LOCATION: GROUND FLOOR PANEL 380 VOLT 3 PHASE , 5 WIRE , 50HZ 30KA ISO / 0.5 SEC RECESSED MOUNTED NAME ENCLOSURE

| WIRE ,CONDUIT AND DESCRIPTION | | | SINGLE PHASE | | | TRIP & CIRCUIT | | | | SINGLE PHASE | | | WIRE ,CONDUIT AND DESCRIPTION | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WIRE AND CONDUIT | GND WIRE | DESCRIPTION | | B (VA) | A (VA) | AMP | CKT | CKT | AMP | C (VA) | | | DESCRIPTION | GND WIRE | WIRE AND CONDUIT |
| 1(4X16mm²)Ø25mm | 10mm² | PB-1 | 0 | | 12671 | 80 | 1 | 2 | 70 | 10405 | | | PB-2 | 10mm² | 1(4X16mm²)Ø25mm |
| 1(4X16mm²)Ø25mm | 10mm² | PB-3 | | 10657 | | 40 | 3 | 4 | 40 | | 0 | 0 | SPARE | | |
| SUB - TOTAL IN ( VA ) | | | 0.0 | 10657.0 | 12671.0 | - | - | - | - | 10405.0 | 0.0 | 0.0 | SUB - TOTAL IN ( VA ) | | |

| | | |
|---|---|---|
| TOTAL PHASE (C) = | 10405.0 | 47.3 |
| TOTAL PHASE (B) = | 10657.0 | 48.4 |
| TOTAL PHASE (A) = | 12671.0 | 57.6 |
| TOTAL CONNECTED LOAD | 33733.0 | 51.3 |
| DEMAND FACTOR | 0.6 | |
| DEMAND LOAD | 20239.8 | |
| 25% FUTURE LOAD | 5060.0 | |
| TOTAL LOAD | 25299.8 | |
| TOTAL AMPERE | 38.5 | |
| BREAKER SIZE | 48.1 | |

# PANEL SCHEDULE AND RISER DIAGRAM

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENG.AB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME | |
| | | CHEEKED | ENG.RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No 9 / 10 | DRAWING TITLE | 30 CLASS ROOM SCHOOL<br>MINE DESTRUCTION PENAL DIAGRAM. |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02,08,2014 | S.0263 | | | |

# Second floor power plan

# Second floor lighting plan

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ELECTRICAL/DESIGN | ENG.FEROZ SADID | APPROVED:Doc/Moe | ENG.AB.MOMEN RAAD | DRAWING TYPE | Elictrical | PROJECT NAME |
| | | CHEEKED | ENG.RAHIM | SCALE | AS SHOWN (A3) | CODE NO | SHEET No 5 / 10 | DRAWING TITLE: 30 CLASS ROOM SCHOOL |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | DATE | 02,08,2014 | S.0263 | | SECOND FLOOR ELECTRICAL PLAN |

# MINISTRY OF EDUCATION

## (MOE/DOC)

### INFRASTRUCTURE SERVICE DEPARTMENT

## (DOC)

# 30 CLASSROOMS SCHOOL R.C.C CONCRETE IRON SHEET ROOF.

WATER SUPPLY
WATER SUPPLY
&
ENGINEERING
ENGINEERING

# DESIGN SUBMITTAL

## JUNE 2012

WATER SUPPLY FOR SECOND FLOOR PLAN

MINISTRY OF EDUCATION
DEPARTMENT OF CONSTRUCTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | | |
|---|---|---|---|---|---|---|
| WATER SUPPLY / DESIGN | ENG- HUMA SADAT | APPROVED.Doc/Hoe | ENG.AB.MOMIN RAAD | DRAWING TYPE | WATER SUPPLY | PROJECT NAME |
| CHECKED BY | ENG - M. RAHIM | SCALE | AS SHOWN IN A3 | CODE NO S-0263 | 1 / 8 | 30-CLASS ROOM SCHOOL. |
| TECH- APPROVED BY | ENG.AB.MATIN MAQOL | Date | 2014 / 4 / 16 | | | PROJECT TYPE&DRAWING TITLE: PLAN OF WATER SUPPLY. |

| water supply symbols |
|---|
| Elbow |
| Wash basin |
| Western Water closet |
| Tap |
| Elbow |
| Valve |
| Reducer |

*WATER SUPPLY DIAGRAM*
*TOILET -1 , SCALE 1-100*

MINISTRY OF EDUCATION
DEPARTMENT OF CONSTRUCTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DESIGNED BY / DRAWN | ENG. SOHEL FARAZ | APPROVED by / Dir | ENG.ABDUL RAHMAN NADIR | DRAWING TYPE | WATER SUPPLY | PROJECT NAME | |
| CHECKED BY | ENG. AL. NADIR | STAMP | AT. NAWROOZ ALI | | | | 30-CLASS ROOM SCHOOL. |
| DIR. APPROVED BY | ENG.ABDUL RAUF NIAZI | Date | 2018/3/15 | SHEET NO. 2 | 2 | PROJECT TYPE&DRAWING TITLE | DIAGRAM OF WATER SUPPLY. |

| water supply symbols |
|---|
| Elbow |
| Wash basin |
| Western Water closet |
| Tap |
| Elbow |
| Valve |
| Reducer |

*WATER SUPPLY DIAGRAM*
*TOILET -2 , SCALE 1-100*

MINISTRY OF EDUCATION
DEPARTMENT OF CONSTRUCTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DRAWING TITLE: | | | | | | WATER SUPPLY | PROJECT NAME |
| DESIGN | ENG. ABDUL GHAFAR | APPROVED BY: Eng. Hilal | ENGINEERING GROUP | DRAWING TYPE | | | |
| CHECKED BY | ENG. AL. KARIM | CHECK | DRAWING BY | | | | |
| DATE APPROVED BY | ENGINEERING MODEL | DATE | DATE / 1:100 | | | | PROJECT TYPE&DRAWING TITLE |

30-CLASS ROOM SCHOOL
DIAGRAM OF WATER SUPPLY.

CLASS ROOM 500x750
COMPUTER ROOM 500x750
LAB CLASS ROOM 500x750
Black board 120x240cm
WIDTH OF CORRIDOR 300cm
Constraction joint
TOILET -1
TOILET -2
INFORMATION 350x358
OFFICE 350x358
Mainhol-1
Mainhol-2
Connected to septic tank
Connected to
Construction Joint 4cm
DETAIL-X (see in Engineering Details)
DETAIL-A
DETAIL-B
chimney pipe 12"Diam
Ventilation 10"Diam
Vent Pipe 4"Diam
So-pipe 1 and Vent- Pipe 4" - 100 mm
So-pipe 2 and Vent- Pipe 4" - 100 mm
Floor Drain
Hot Water
Cold Water
Ventilation 10"Diam
Ventilation 10"Diam
Ventilation 10"Diam

| water supply symbols |
|---|
| Elbow |
| Wash basin |
| Western Water closet |
| Tap |
| Elbow |
| Valve |
| Reducer |

CANALIZATION DIAGRAM
TOILET -1, SCALE 1-100




MINISTRY OF EDUCATION
DEPARTMENT OF CONSTRUCTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | |
|---|---|---|---|---|---|
| DESIGN | | | | | |
| CHECKED BY | | | | | |
| DATE | | | | | |
| PROJECT NAME | 30-CLASS ROOM SCHOOL | | | | |
| PROJECT TYPE&DRAWING TITLE | DIAGRAM OF WATER SUPPLY | | | | |

| water supply symbols |
|---|
| Elbow |
| Wash basin |
| Western Water closet |
| Tap |
| Elbow |
| Valve |
| Reducer |

CANALIZATION DIAGRAM
TOILET -2 , SCALE 1-100




MINISTRY OF EDUCATION
DEPARTMENT OF CONSTRUCTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

PROJECT NAME

PROJECT TYPE&DRAWING TITLE

36-CLASS ROOM SCHOOL
DIAGRAM OF WATER SUPPLY

MAIN HOLE PLAN
SCALE 1:100

RENFORCEMENT SLAB

bracket

MAIN HOLE PLAN DETAIL.

Section B-B

TYPICAL FLOOR DRAIN DETAIL
NOT TO SCALE

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | WATER SUPPLY / DESIGN | ENG- HUMA SADAT | APPROVED.Doc/Mon | ENG.AB.MOMIN BAAD | DRAWING TYPE | WATER SUPPLY |
| | | CHECKED BY | ENG - M . RAHIM | SCALE | AS SHOWN IN A3 | CODE NO S-0263 | 7 / 8 |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | Date | 2014 / 4 / 16 | | |

PROJECT NAME

PROJECT TYPE&DRAWING TITLE

30-CLASS ROOM SCHOOL.
MAIN HOLE DETAIL .

## EQUIPMENT IDENTIFICATION

مشخصات تیکنیکی باب در نقشه آبرسانی

| | |
|---|---|
| GV | GATE VALVE |
| CHK V | CHECK VALVE |
| AV | ANGLE VALVE |
| DV | DRAIN VALVE |
| FCO | FLOOR CLEANOUT |
| BV | BALL VALVE |
| | Y-TYPE STRAINER |
| | REDUCER - INCREASER |
| FD | FLOOR DRAIN |
| FS | FLOOR SIPHON |
| | GREASE INTERCEPTOR |
| CW | COLD WATER PIPES |
| HW | HOT WATER PIPES |
| H/L | HIGH LEVEL |
| L/L | LOW LEVEL |
| SP | SOIL PIPE |
| WP | WASTE PIPE |
| VP | VENT PIPE |
| IC | INSPECTION CHAMBER |
| U/G | UNDER GROUND |
| P | PUMP |
| FT | FLASH TANK |
| WCO | WALL CLEANOUT |
| HWR | HOT WATER RETURN |
| AFF | ABOVE FINISH FLOOR |

PLUMBING

COLD WATER ( CW )

HOT WATER ( HW )

VENT PIPE ( VP )

WASTE PIPE ( WP )

# PLUMBING FIXTURE SCHEDULE

| SYMBOL | FIXTURE NAME | C.W. (MM) | H.W. (MM) | WASTE (MM) | VENT (MM) | HIGH |
|---|---|---|---|---|---|---|
| | WESTERN WATER CLOSET BACK OUTLET OR FLOOR OUTLET | 15 | - | 100 | 50 | +0.40 |
| | EASTERN WATER CLOSET WITH FLASH TANK | 15 | - | 100 | 50 | +0.04 |
| | SINK WALL OR COUNTER MOUNTED | 15 | 15 | 50 | 50 | +0.80 |
| | SHOWER | 15 | 15 | 50 | 50 | +2.00 |
| | TAP | 15 | 15 | 0 | 0 | + 0.50 |
| | KITCHEN SINK (SINGLE BOWL) | 15 | 15 | 50 | 50 | +0.800 |
| | FLOR DRAIN | 0 | 0 | 50 | 50 | 0 |

NOTE :-

1. ALL DOMESTIC WATER LINES SHALL BE PVC OR PPR POLYPROPYLENE(COLD WATER ONLY) , CPVC OR EQUIVALENT MATERIAL (HOT WATER ONLY) ,UPVC (WASTE WATER AND VENT PIPES)
2. ALL WATER PIPE THAT IS EXPOSED SHALL BE COVERED WITH METAL COVER TO KEEP AWAY FROM ACCESS OF PRISONERS
3. WATER PIPING AND WATER TANK EXPOSED TO OUTDOOR CONDITIONS SHALL BE INSULATED FOR FREEZE AND SUN LIGHT PROTECTION AND THE INSULATION CONFORMING TO SPECIFICATION.
4. THE DOMESTIC WATER PIPE AND FITTING WHICH RUINING ON THE ROOF UNDER CORRUGATED SHEETS SHALL BE PROPERLY INSULATED FOR FREEZE PROTECTION.
5. INSULATION SHALL BE PROVIDED WHERE REQUIRED TO CONTROL SWEATING OF PIPES OR TO PROVIDE PROTECTION FROM FREEZING. TOILETS SHALL BE ORIENTED NORTH AND SOUTH.
6. ALL PIPES WHICH CROSSING FROM RCC. SLAB AND FOUNDATION NEEDS SLEEVES FOR PIPE PROTECTION.
7. ALL VERTICAL WATER AND SEWER MAIN PIPES TO BE FASTENET TO THE BRICK M . WALL AT 100mm C/C

مشخصات وشرایط مسیر یابی سیستم ابرسانی.

1 - نل های آبرسان داخلی از نوعیت پلاستیکی قرار ذیل انتخاب گردیده نل آب سرد از PPR ویا PVC نل آب گرم از CPVC ونل های هوا کش و فضلاب از UPVC.

2- تمام نل های که از دیوار ها عبور داده میشوند باید مجهز با پوشش محافظتی بوده و دور از دسترس عام باشد.

3- تمام نل ها وپایپ ها وفیتنگ باب باید بخطر مواجه نشدن باخطریخ زدن وشعاع افتاب بامواد محافظتی مانند مواد ضد یخ وپشم شیشه عایق و محافظه گردند.

4- تمام نل های که در زیر فرش ویا بالای بام تعمیرات مسیر یابی می گردند همچنان با مواد محافظتی از خطر فرسوده گی محفظت گردند.

5- نصب تجیزات مانند کموده و پورین ه باید با در نظر داشت جهت تعمیر ودر نظر داشتن جهت شرق وغرب {جهت قبله} صورت گیرد.

6- تمام نل ها و پایپ ها ی که از سلب وتهداب ها میگذرد باید مجهز با پوشش محافظتی باشد.

7 - تمام نل های اب وپایپ ها فضلاب عمودی باید توسط گیرا ها bracket به دیوار ها در فاصله الی یک متر نصب گردند.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION DEPARTMENT OF CONSTRUCTION | STANDARD SCHOOL DESIGN IN AFGHANISTAN | WATER SUPPLY / DESIGN | ENG- HUMA SADAT | APPROVED.Doc/Mon | ENG.AB.MOMIN BAAD | DRAWING TYPE | WATER SUPPLY | PROJECT NAME |
| | | CHECKED BY | ENG - M . RAHIM | SCALE | AS SHOWN IN A3 | CODE-NO S-0263 | 8 / 8 | |
| | | TECH- APPROVED BY | ENG.AB.MATIN MAQOL | Date | 2014 / 4 / 16 | | | PROJECT TYPE&DRAWING TITLE: 30-CLASS ROOM SCHOOL. PLUMBING FIXTURE SCHEDLE' |

SECTION
B-B

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT /DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE S0263 | 9 / 25 | PROJECT TYPE /DRAWING TITLE | 30 CLASSROOM SCHOOL /LONG SECTION |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |

MINISTRY OF EDUCATION
DEPARTMENT OF CONTRACTION

STANDARD SCHOOL DESIGN
IN AFGHANISTAN

| | | | | | | |
|---|---|---|---|---|---|---|
| ARCHITECT /DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME |
| CHECKED BY | ARCH .SAYEED RASUL | SCALE | AS SHOWN (A)3 | CODE S0263 | 9 / 25 | |
| TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | PROJECT TYPE /DRAWING TITLE: 30 CLASSROOM SCHOOL /LONG SECTION |

SIDEWALK
PLAN

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MINISTRY OF EDUCATION<br>DEPARTMENT OF CONTRACTION | STANDARD SCHOOL DESIGN<br>IN AFGHANISTAN | ARCHITECT /DESIGN | ARCH.NAKILA AFZALI | APPROVED:Doc/Moe | ENG.AB .MOMEN RAAD | DRAWING TYPE | ARCHITECTURE | PROJECT NAME | |
| | | CHECKED BY | ARCH .SAYED RASUL | SCALE | AS SHOWN (A1) | CODE S0363 | 1 / 25 | PROJECT TYPE /DRAWING TITLE | 30 CLASSROOM SCHOOL /PAVEMENT PLAN |
| | | TECH -APPROVED BY | ENG.AB.MATIN MAQOL | DATE | JUNE 2014 | | | | |