

EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

CLIENT



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

DONOR



CONSULTANT

مركز الهندسة والتخطيط  
center for engineering and planning



CONSTRUCTION 100 HOUSING UNITS TO RE HOUSING  
THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP

PACKAGE NO. 06  
RESIDENTIAL BUILDING  
TYPE A (A6)



PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

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**ARCHITECTURAL DRAWINGS**

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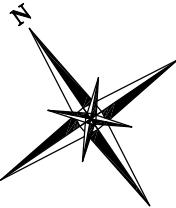


## LIST OF DRAWINGS

S/NO.	DRAWING NAME	DRG. NO.	S/NO.	DRAWING NAME	DRG. NO.
ARCHITECTURAL DRAWING			ARCHITECTURAL DRAWING		
01/27	GENERAL LAYOUT, LOCATION AND DESIGN LEVEL OF THE BUILDING	RE-A-001	15/27	LONGITUDINAL SECTION	RE-A-015
02/27	COORDINATES FOR THE BUILDING	RE-A-002	16/27	CROSS SECTIONS	RE-A-016
03/27	EXISTING LEVEL FOR THE BUILDING SITE	RE-A-003	17/27	WINDOWS & DOORS TABLE	RE-A-017
04/27	FURNITURE FOR UNDERGROUND FLOOR	RE-A-004	18/27	FINISHES TABLE (1/3)	RE-A-018
05/27	FURNITURE FOR GROUND FLOOR	RE-A-005	19/27	FINISHES TABLE (2/3)	RE-A-019
06/27	FURNITURE FOR TYPICAL FLOOR	RE-A-006	20/27	FINISHES TABLE (3/3)	RE-A-020
07/27	UNDERGROUND FLOOR PLAN	RE-A-007	21/27	METAL DOOR DETAILS(1/2)	RE-A-021
08/27	GROUND FLOOR PLAN	RE-A-008	22/27	METAL DOOR DETAILS(2/2)	RE-A-022
09/27	TYPICAL FLOOR PLAN	RE-A-009	23/27	WOODEN DOOR DETAILS(1/3)	RE-A-023
10/27	ROOF PLAN	RE-A-010	24/27	WOODEN DOOR DETAILS(2/3)	RE-A-024
11/27	FINAL ROOF PLAN	RE-A-011	25/27	WOODEN DOOR DETAILS(3/3)	RE-A-025
12/27	FRONT ELEVATION	RE-A-012	26/27	WINDOWS ELEVATION	RE-A-026
13/27	BACK ELEVATION	RE-A-013	27/27	KITCHEN DETAILS	RE-A-027
14/27	SIDE ELEVATIONS	RE-A-014			

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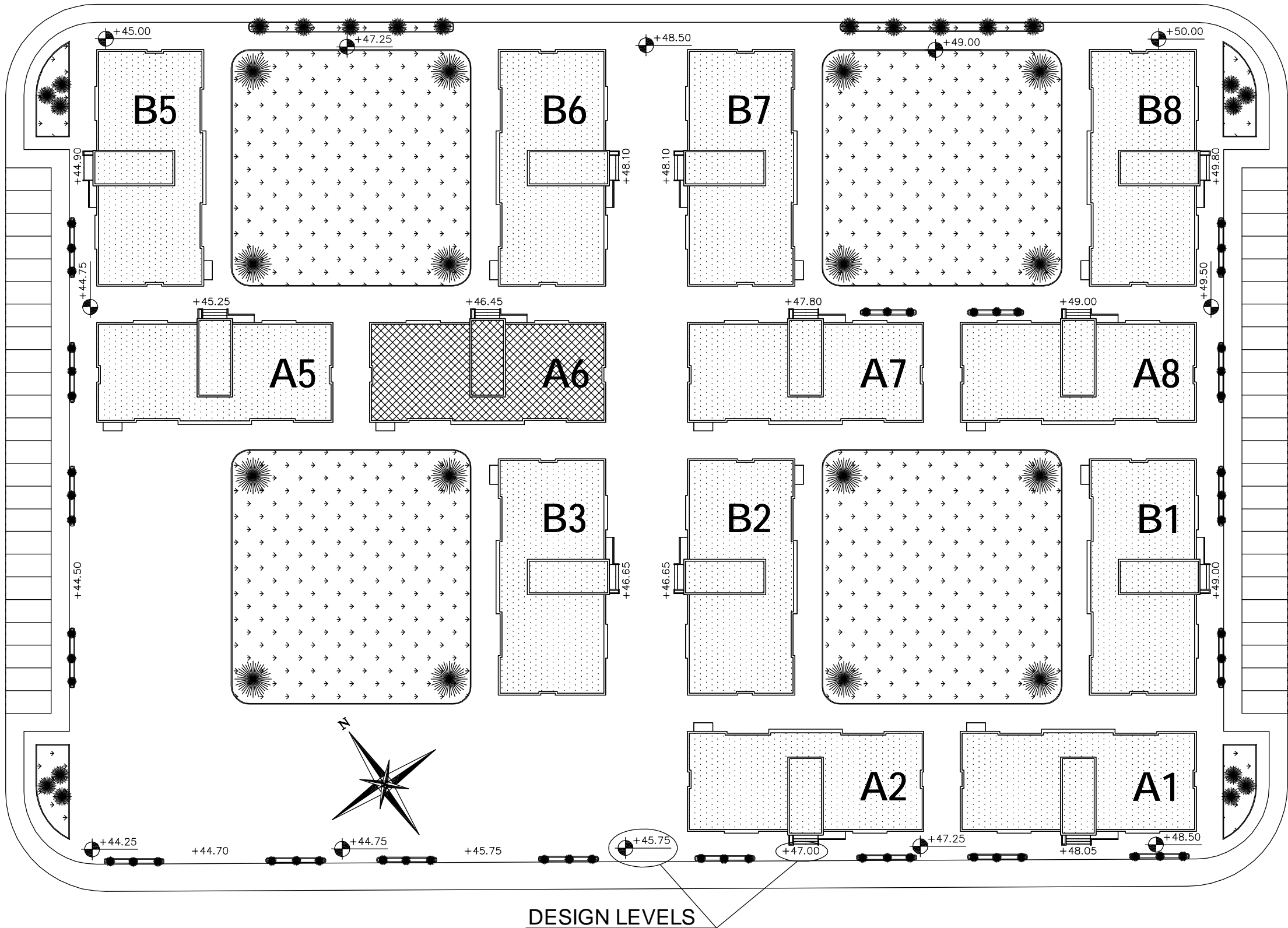
CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
GENERAL LAYOUT, LOCATION AND  
DESIGN LEVEL OF THE BUILDING

DRAWING NO.: **RE-A-001**

DATE: APRIL 2011 SCALE: 1:500

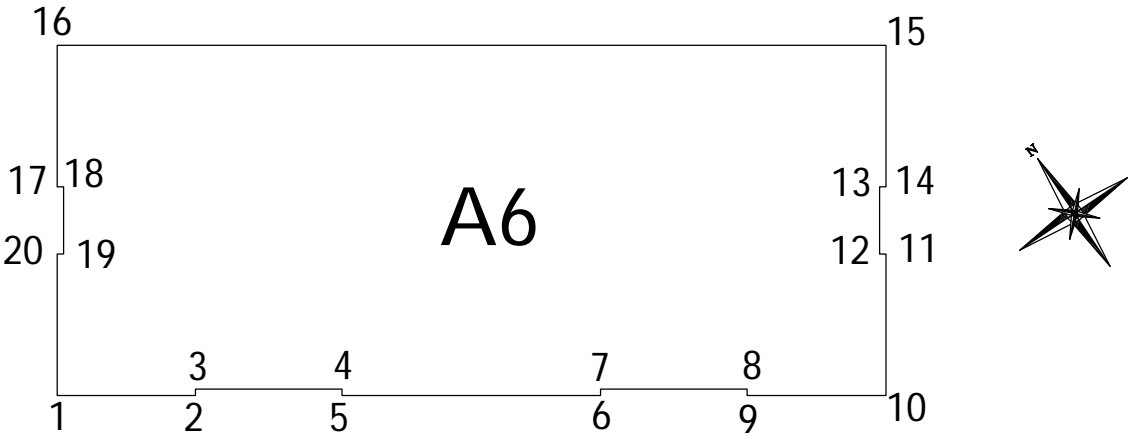


GENERAL LAYOUT, LOCATION AND DESIGN LEVEL OF THE BUILDING



BUILDING NO. A6

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3	100579.5174	107343.6109
4	100583.2991	107340.9920
5	100583.1852	107340.8275
6	100589.8443	107336.2159
7	100589.9581	107336.3801
8	100593.7398	107333.7614
9	100593.6260	107333.5969
10	100597.2038	107331.1227
11	100599.7357	107334.7787
12	100599.5712	107334.8926
13	100600.7608	107336.6190
14	100600.9313	107336.5051
15	100603.4648	107340.1635
16	100582.0901	107354.9662
17	100579.556	107351.3079
18	100579.7210	107351.1940
19	100578.5254	107349.4676
20	100578.3610	107349.5815





COORDINATES FOR THE BUILDING

NOTES :-

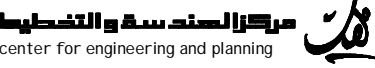
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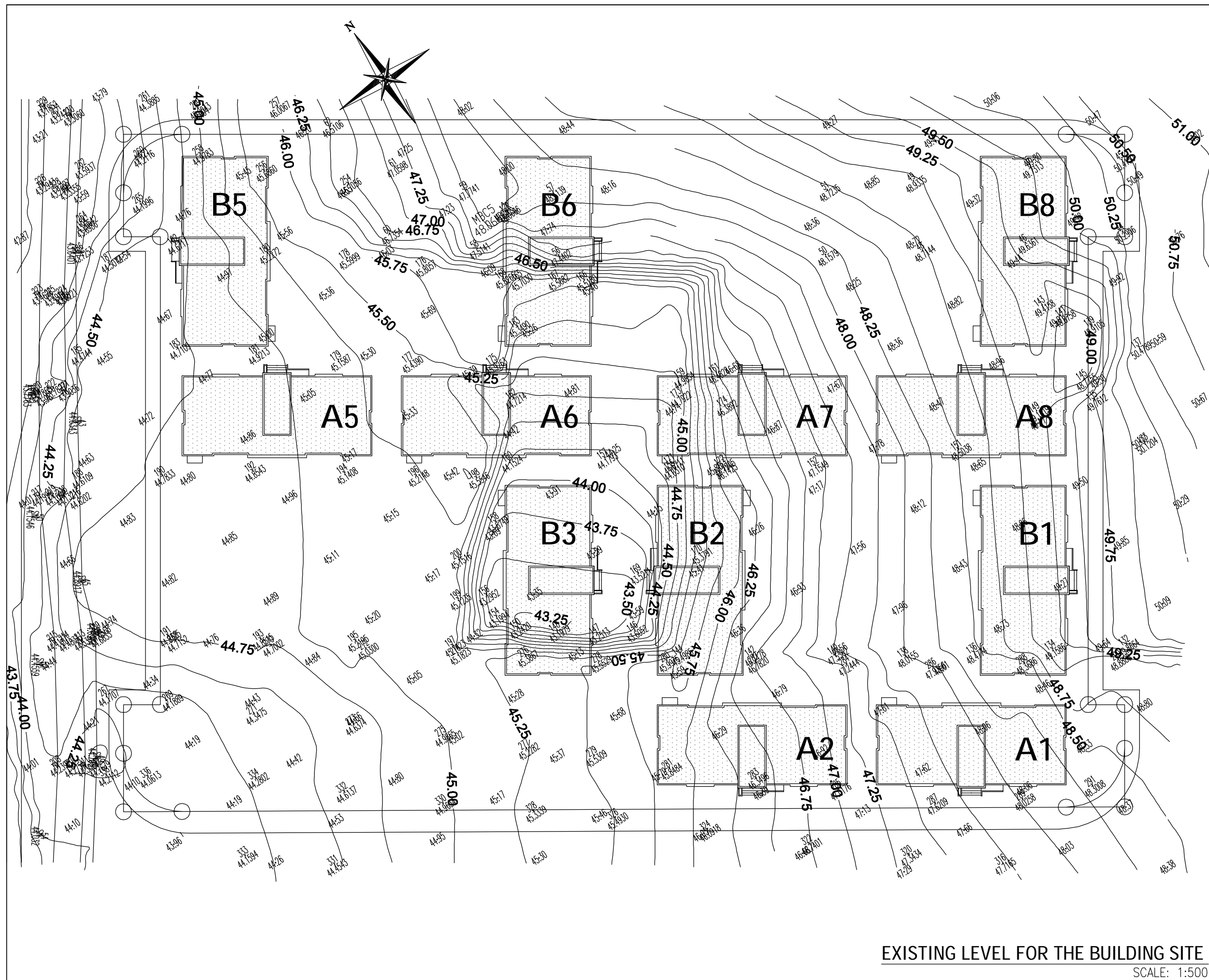
CONSULTANT:  
 center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
COORDINATES FOR THE BUILDING

DRAWING NO.: **RE-A-002**

DATE: APRIL 2011 | SCALE: NTS





SCALE: 1:500

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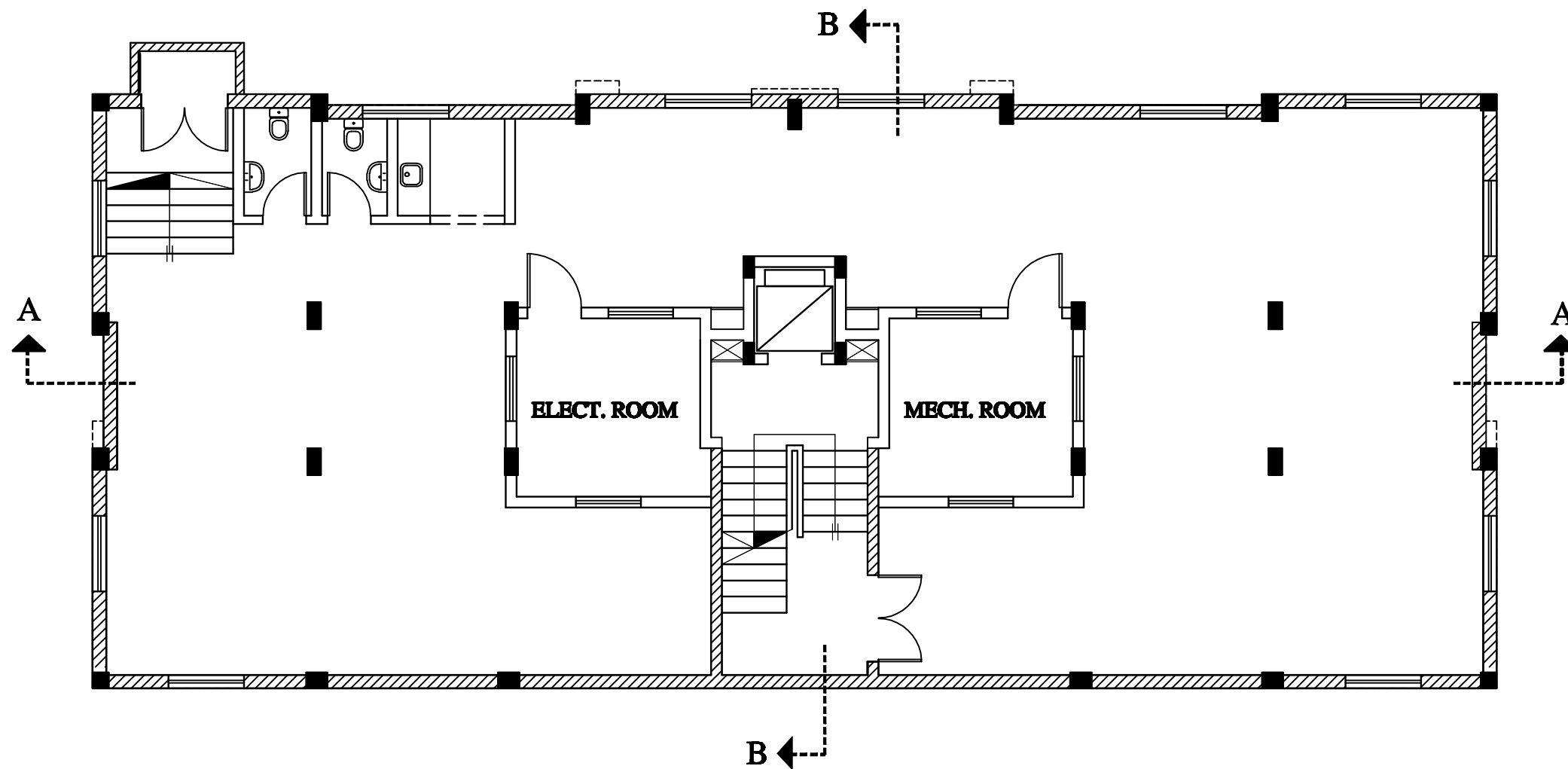
**CONSULTANT:**  
 **مركز الهندسة والتخطيط**  
center for engineering and planning

**BUILDING NAME:**  
RESIDENTIAL BUILDING NO. (A6)

**DRAWING TITLE:**  
EXISTING LEVEL FOR RESIDENTIAL

**DRAWING NO.:** RE-A-003

**DATE:** APRIL 2011 **SCALE:** 1:500



## FURNITURE FOR UNDERGROUND FLOOR

SCALE: 1:100

### NOTES :-



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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

#### CONSULTANT:

 **center for engineering and planning**

#### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A5)

#### DRAWING TITLE:

FURNITURE FOR UNDERGROUND FLOOR

**DRAWING NO.: RE-A-004**

DATE: APRIL 2011 SCALE: 1:100

NOTES :-

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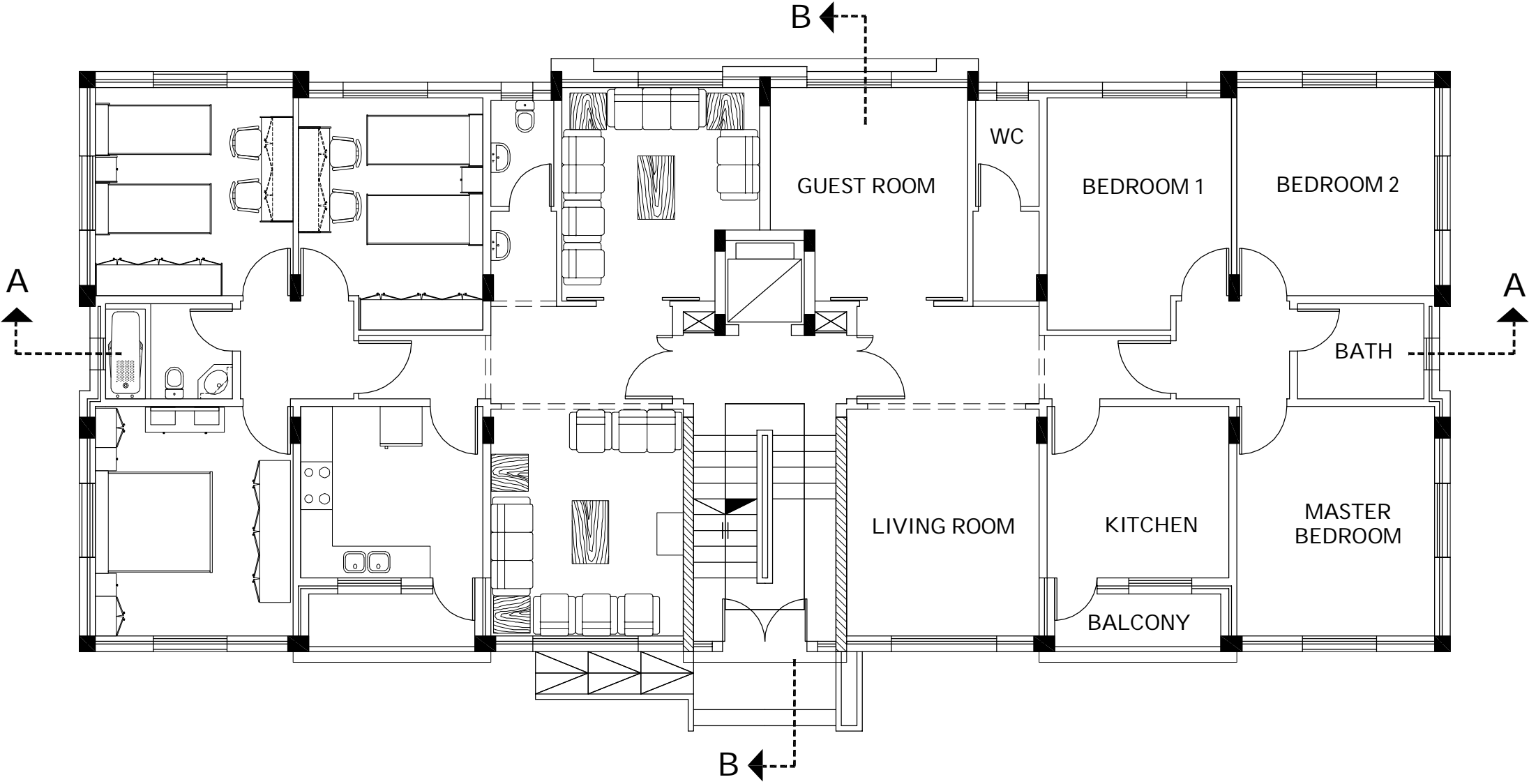
CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
FURNITURE FOR GROUND FLOOR

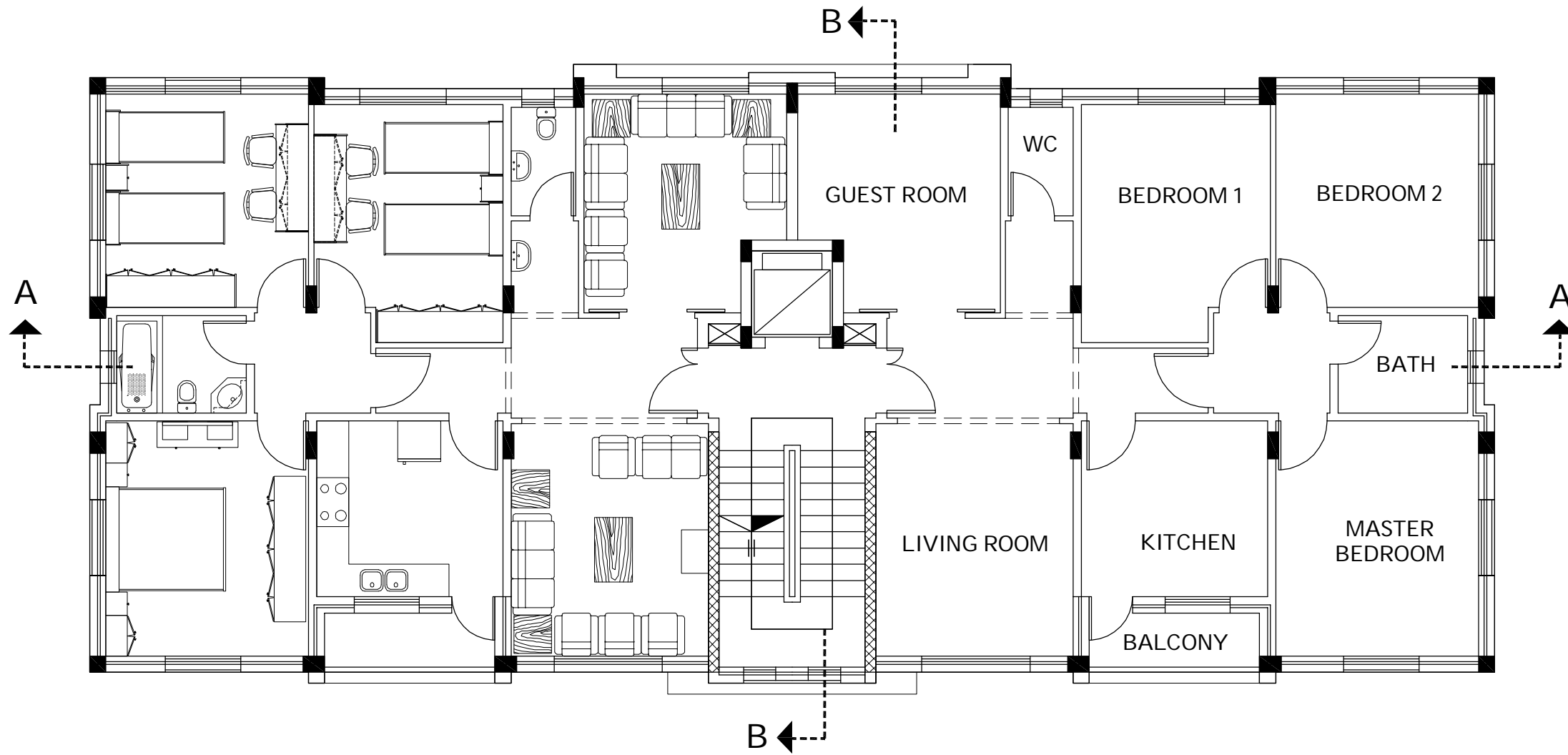
DRAWING NO.: RE-A-005

DATE: APRIL 2011 SCALE: 1:100



FURNITURE FOR GROUND FLOOR

SCALE: 1:100



FURNITURE FOR TYPICAL FLOOR  
SCALE: 1:100

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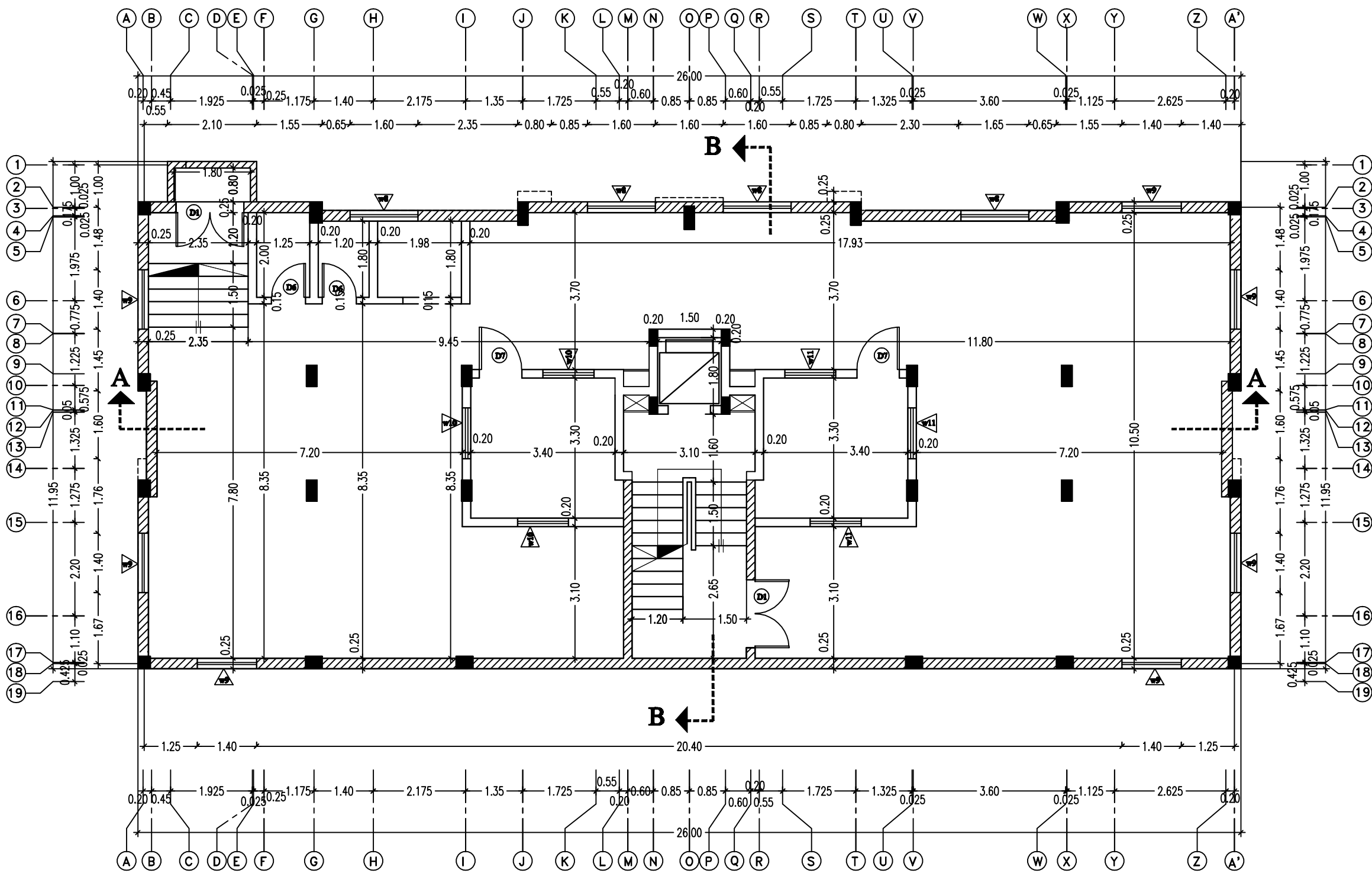
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

FURNITURE FOR TYPICAL FLOOR

DRAWING NO.: RE-A-006

DATE: APRIL 2011 SCALE: 1:100




**UNDERGROUND FLOOR PLAN**  
SCALE: 1:100

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**center for engineering and planning**

**BUILDING NAME:**  
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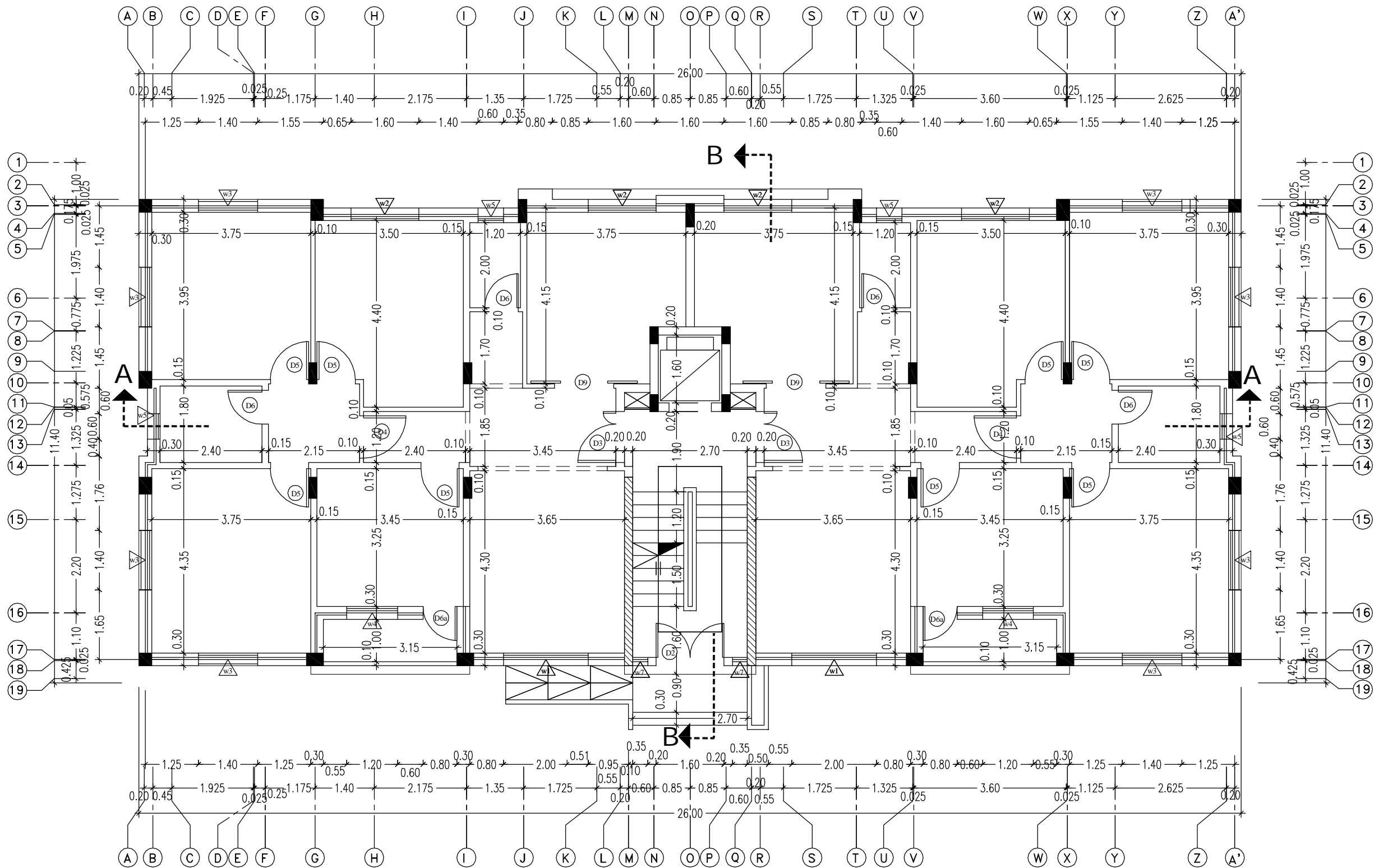
**DRAWING TITLE:**  
**UNDERGROUND FLOOR PLAN**

**DRAWING NO.: RE-A-007**

**DATE: APRIL 2011** **SCALE: 1:100**

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GROUND FLOOR PLAN

SCALE: 1:100

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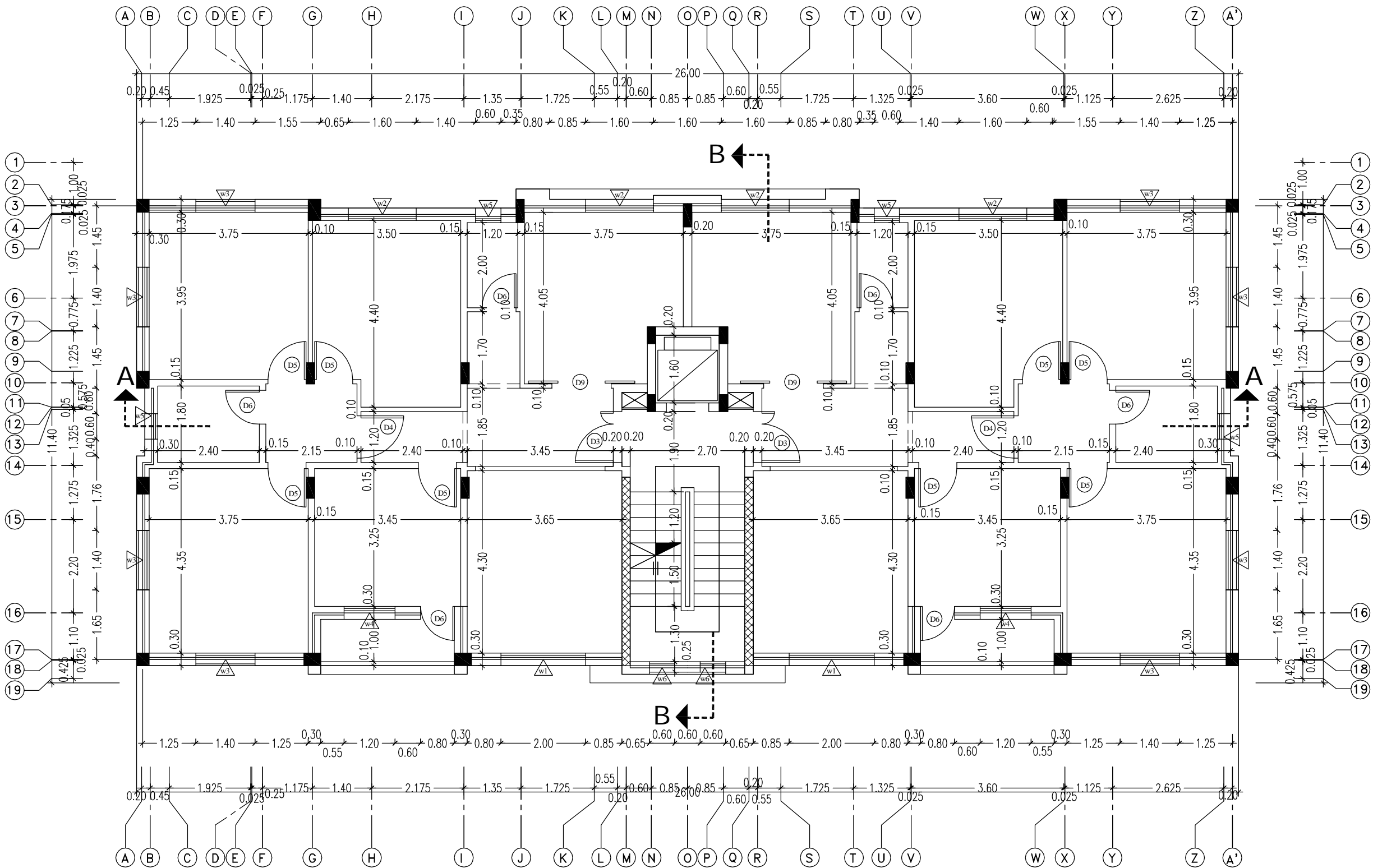
**DRAWING TITLE:**  
GROUND FLOOR PLAN

**DRAWING NO.:** RE-A-008

**DATE:** APRIL 2011 **SCALE:** 1:100

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TYPICAL FLOOR PLAN

SCALE: 1:100

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BUILDING NAME:

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DRAWING TITLE:

TYPICAL FLOOR PLAN

DRAWING NO.: RE-A-009

DATE: APRIL 2011 SCALE: 1:100



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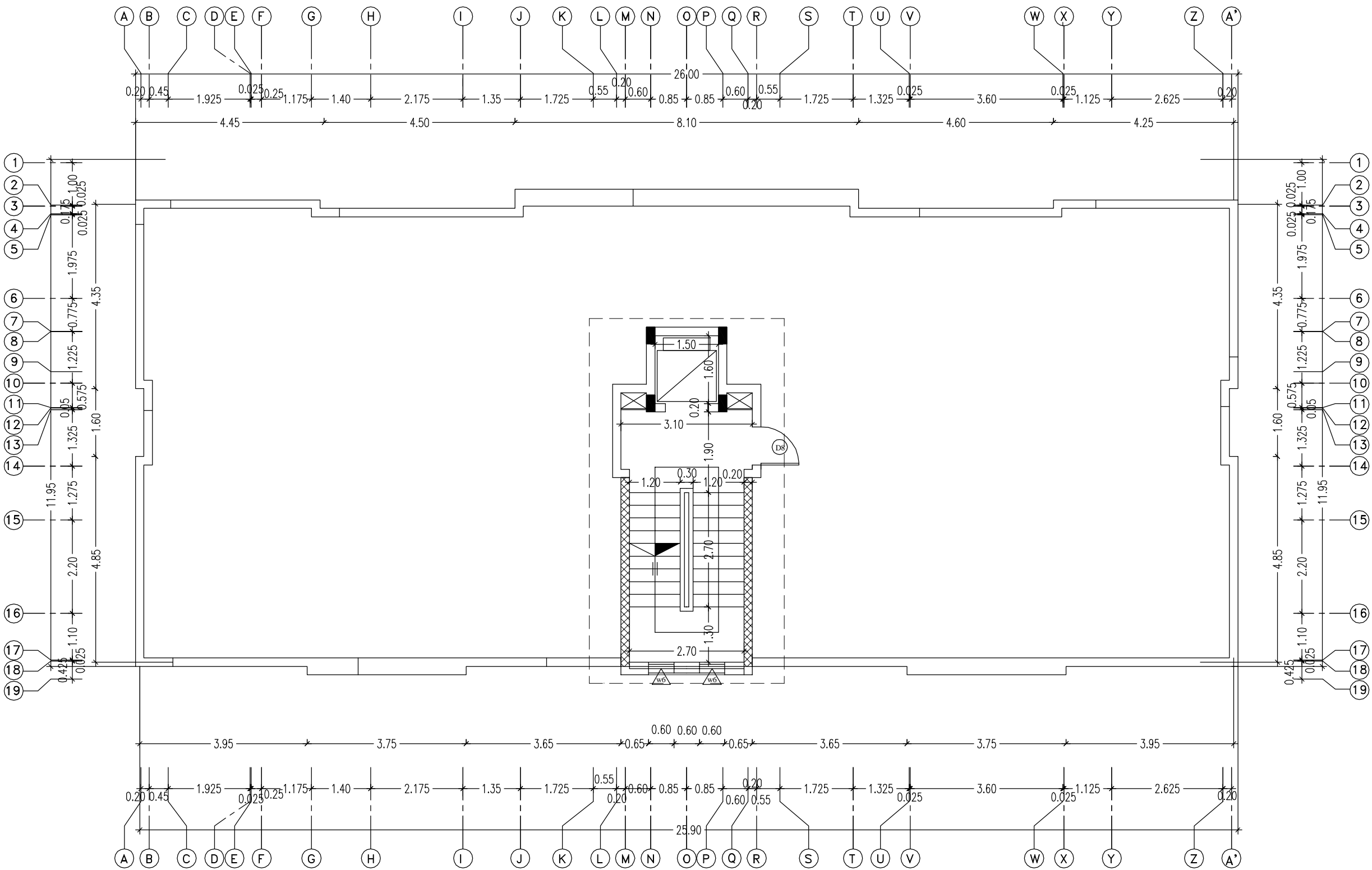
CONSULTANT:  
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center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
ROOF FLOOR PLAN

DRAWING NO.: RE-A-010

DATE: APRIL 2011 SCALE: 1:100




ROOF FLOOR PLAN


SCALE: 1:100

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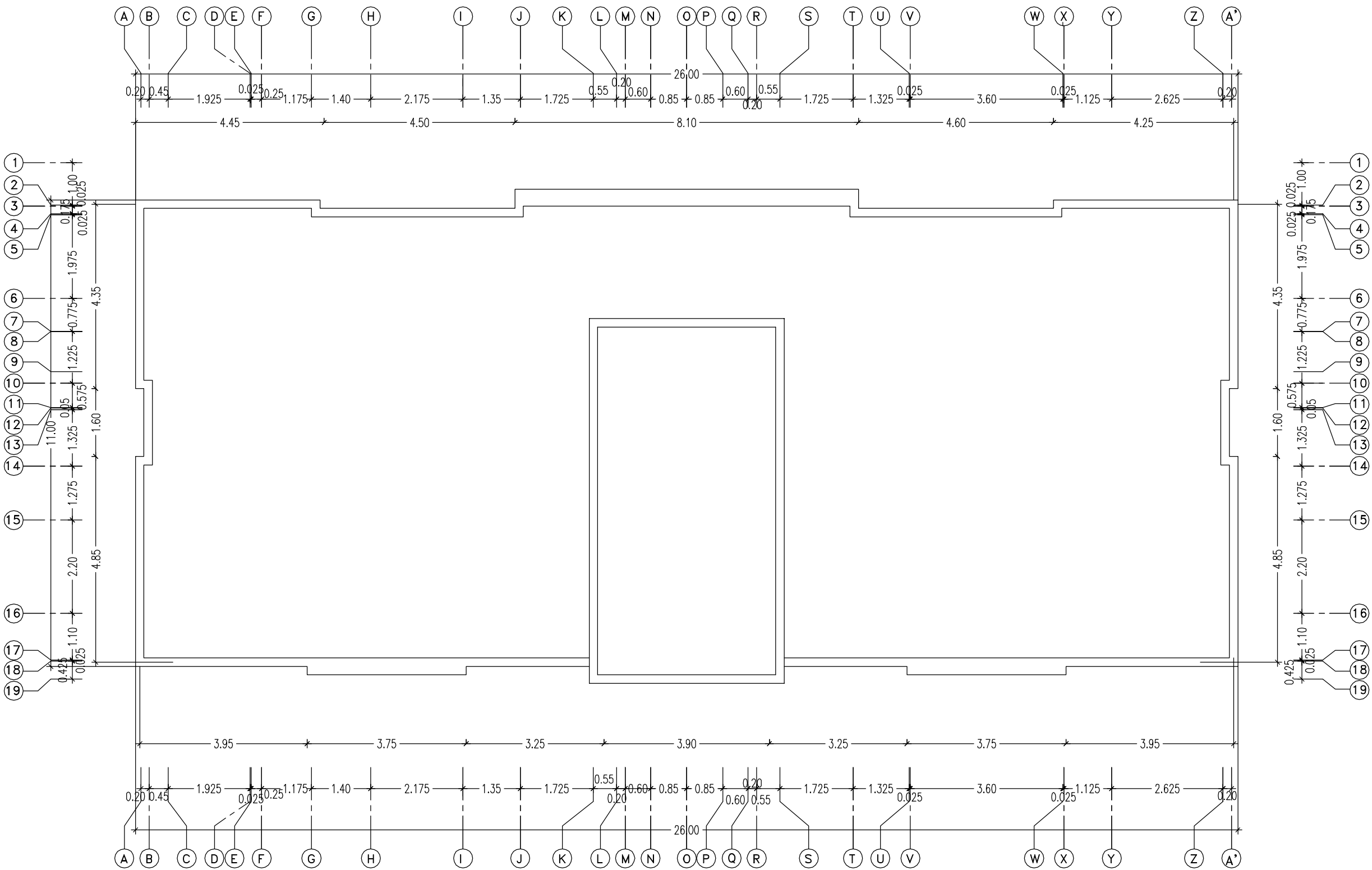
CONSULTANT:  
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BUILDING NAME:  
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DRAWING TITLE:  
FINAL ROOF PLAN

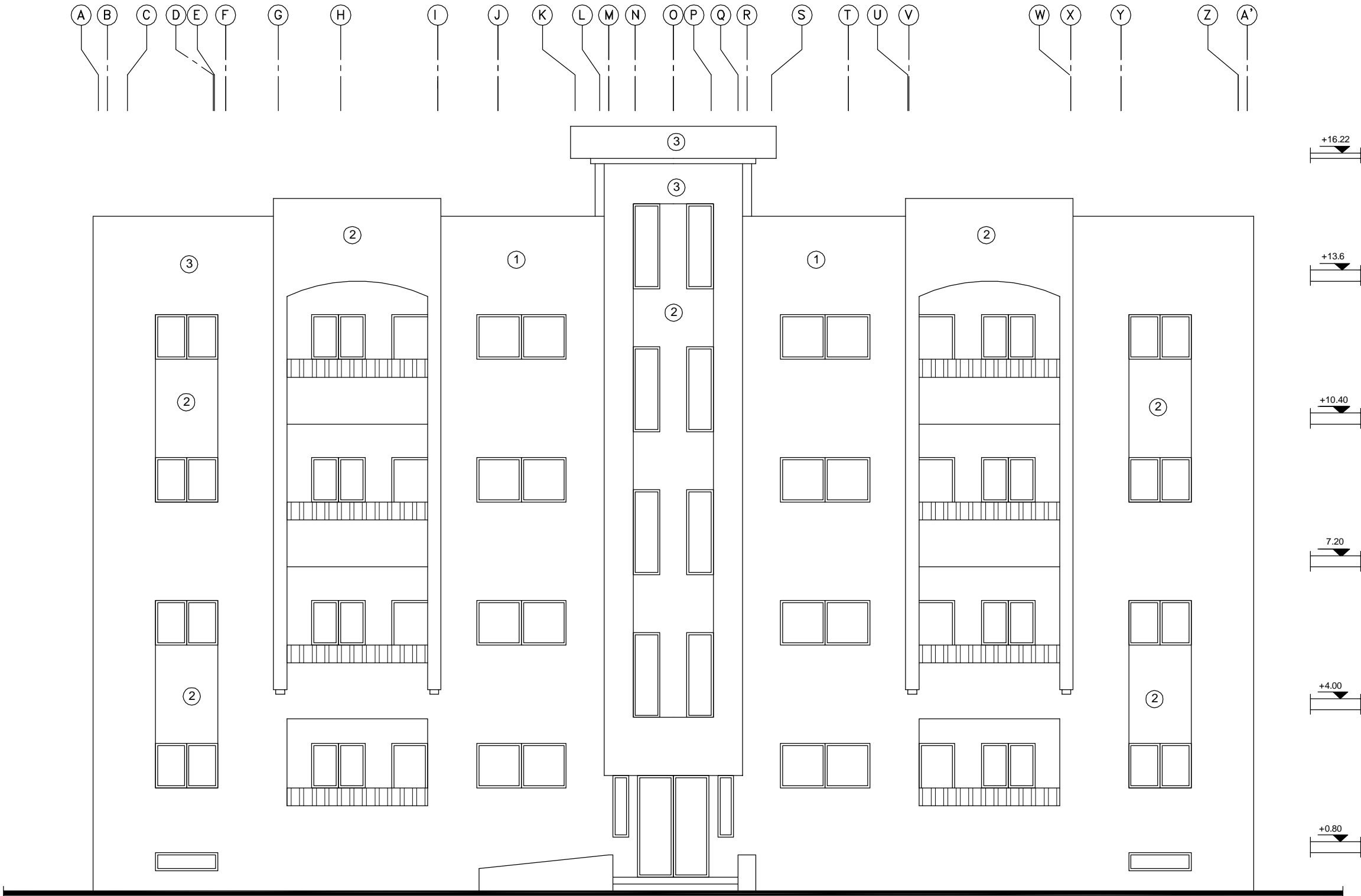
DRAWING NO.: RE-A-011

DATE: APRIL 2011 SCALE: 1:100



FINAL ROOF PLAN

SCALE: 1:100



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① مرمينا أبيض

② مرمينا بيـج

③ مرمينا أزرق فاتح

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**BUILDING NAME:**  
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**DRAWING TITLE:**  
FRONT ELEVATION

**DRAWING NO.:** RE-A-012

DATE: APRIL 2011 SCALE: 1:100

FRONT ELEVATION

SCALE: 1:100

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مرمينا أبيض ①

مرمينا بيج ②


مرمينا أزرق فاتح ③

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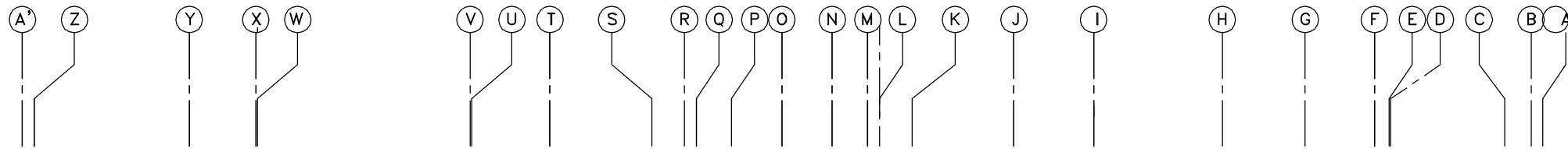
CONSULTANT:  
 مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
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DRAWING TITLE:  
BACK ELEVATION

DRAWING NO.: RE-A-013

DATE: APRIL 2011 SCALE: 1:100



BACK ELEVATION

SCALE: 1:100

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② مرمينا بيج


③ مرمينا أزرق فاتح

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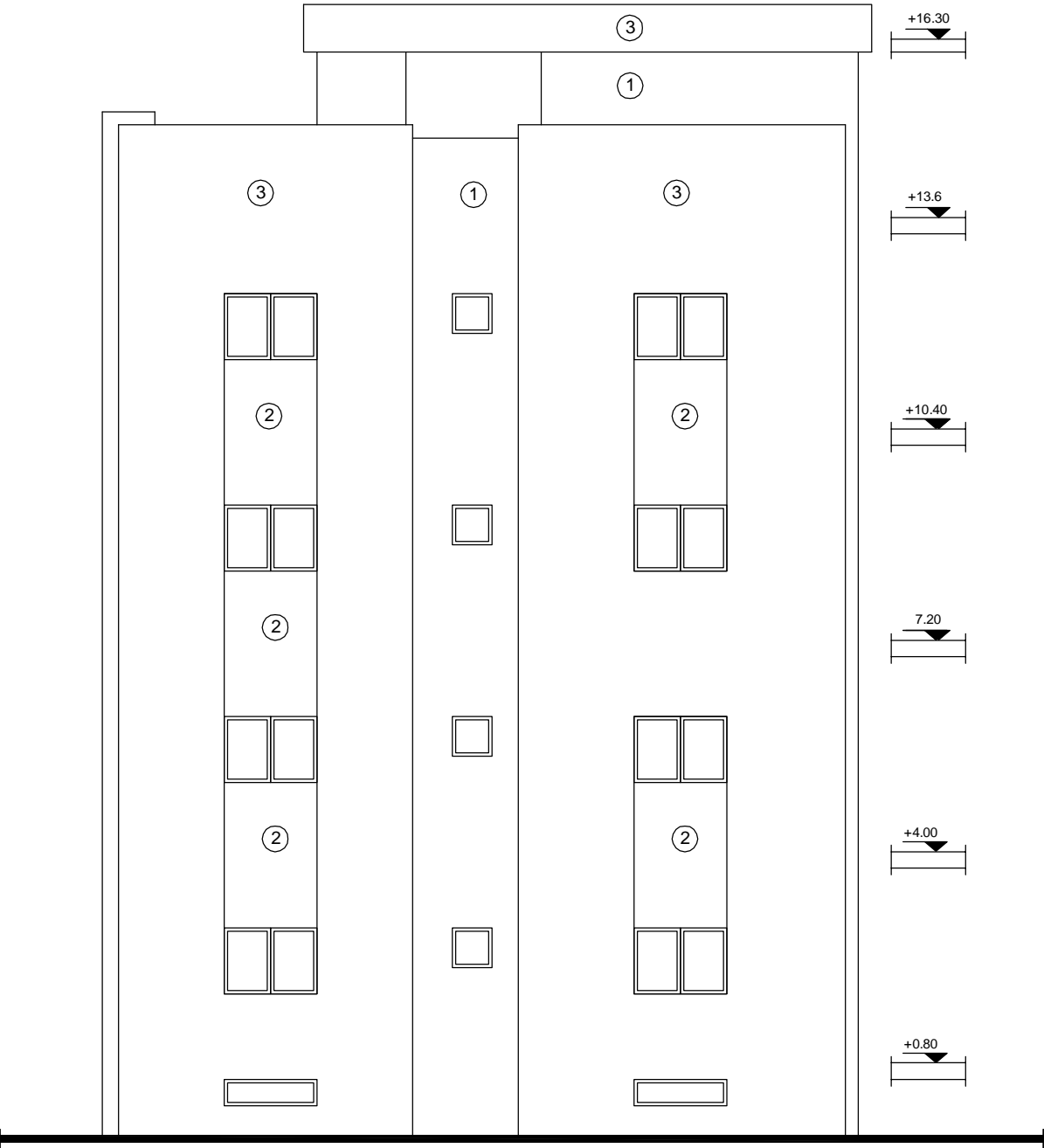
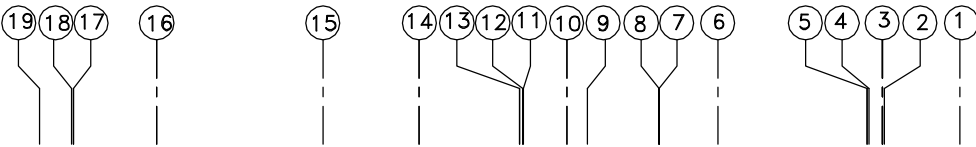
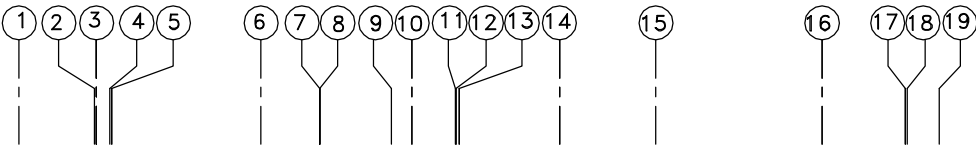
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BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

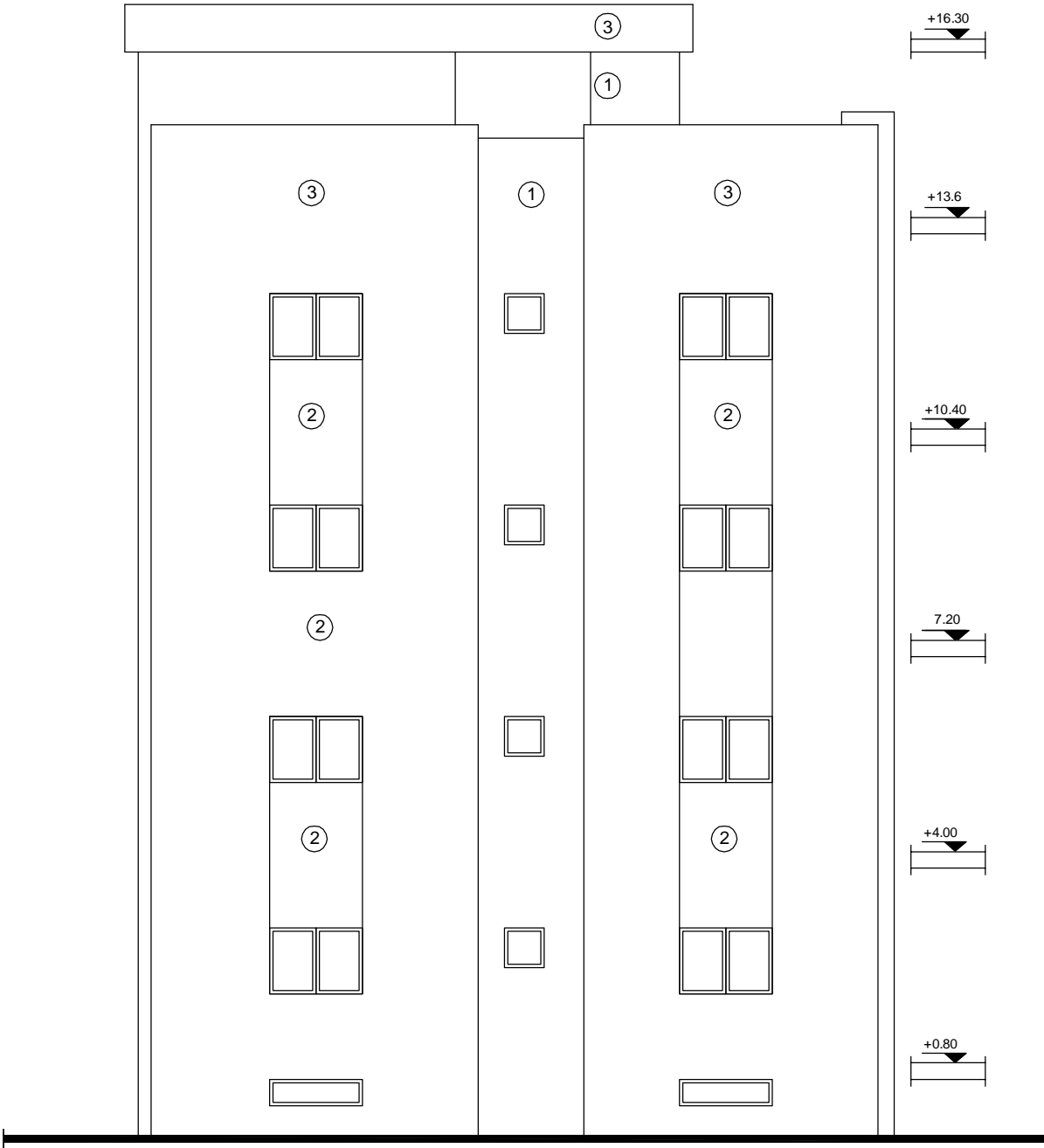
DRAWING TITLE:  
SIDE ELEVATIONS

DRAWING NO.: RE-A-014

DATE: APRIL 2011 SCALE: 1:100



SIDE ELEVATION  
SCALE 1:100



SIDE ELEVATION  
SCALE 1:100

SIDE ELEVATIONS  
SCALE: 1:100



**LONGITUDINAL SECTION A-A**

SCALE: 1:100

## NOTES :-


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## FOR TENDER ONLY

### CLIENT:

 **PALESTINIAN NATIONAL AUTHORITY**  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:

 **THE UNITED NATIONS DEVELOPMENT PROGRAMME**  
PROGRAMME OF ASSISTANCE TO THE  
**PALESTINIAN PEOPLE**  
(UNDP/PAPP)

### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

 **مركز الهندسة والتخطيط**  
center for engineering and planning

### BUILDING NAME:

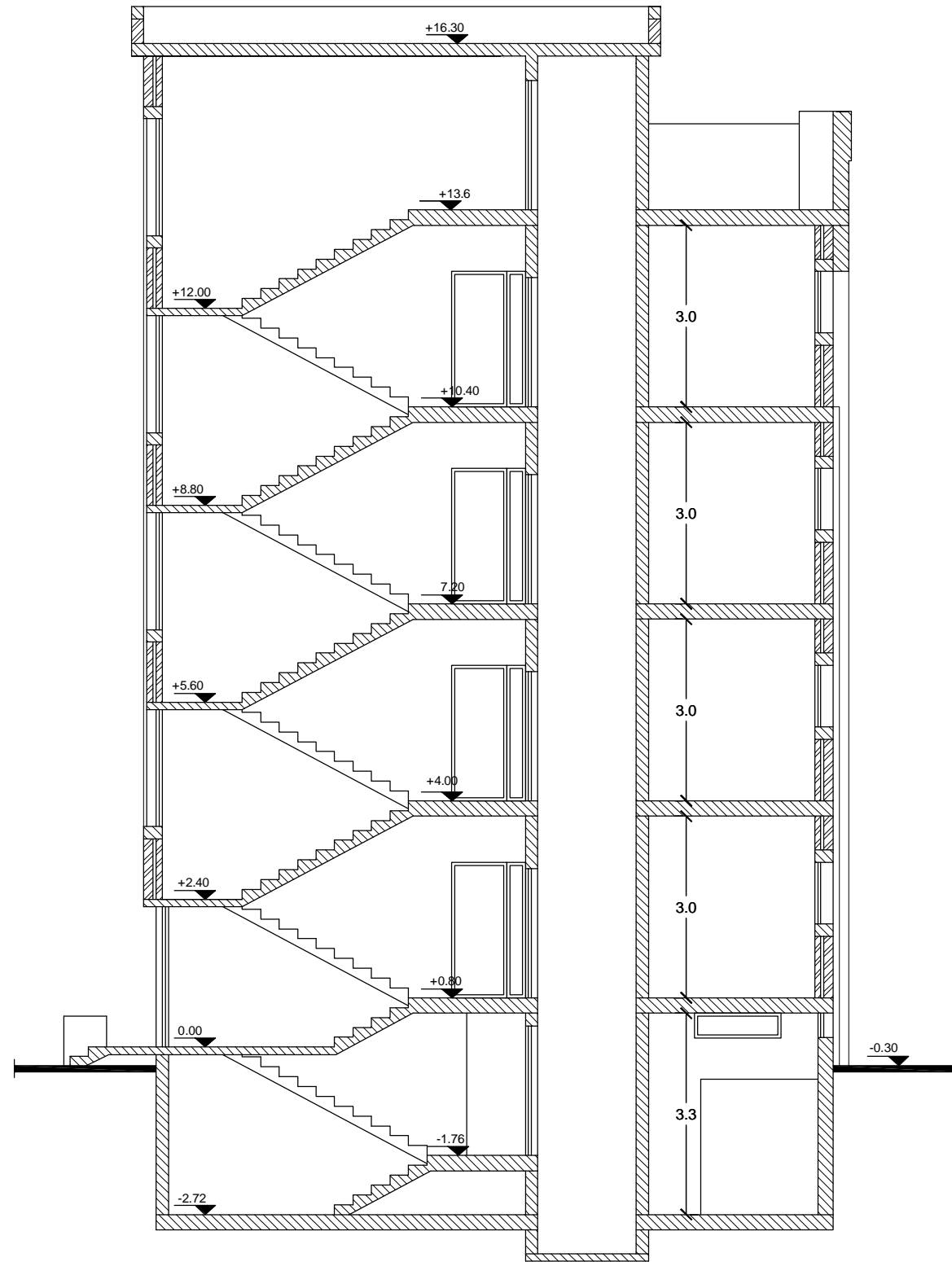
RESIDENTIAL BUILDING NO. (A5)

### DRAWING TITLE:

LONGITUDINAL SECTION A-A

### DRAWING NO.: RE-A-015

DATE: APRIL 2011 SCALE: 1:100



CROSS SECTION B-B

SCALE: 1:100

## NOTES :-

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## FOR TENDER ONLY

### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

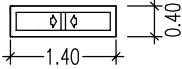
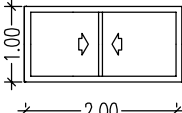
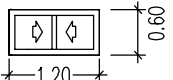
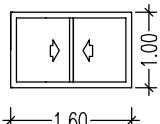
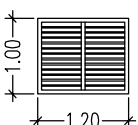
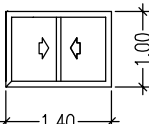
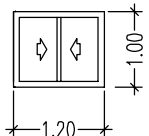



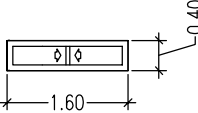
### DRAWING TITLE:

CROSS SECTIONS B-B

DRAWING NO.: RE-A-016

DATE: APRIL 2011 SCALE: 1:100

جدول الشبائيك

نظام الفتحة	المادة	الفتحة الانشائية	رقم الشباك	نظام الفتحة	المادة	الفتحة الانشائية	رقم الشباك
شبائيك البدروم سحاب	المنيوم		W9	سحاب	المنيوم		W1
سحاب	المنيوم		W10	سحاب	المنيوم		W2
لوفر	حديد		W11	سحاب	المنيوم		W3
				سحاب	المنيوم		W4
				قلاب	المنيوم		W5
				قلاب شبائيك الدرج	المنيوم		W6
				قلاب شبائيك بجوار مدخل الصارة	المنيوم		W7
				سحاب شبائيك البدروم	المنيوم		W8

جدول الابواب

نظام الفتحة وعدد العلف	المادة	الفتحة الانشائية		رقم الباب
		الارتفاع	العرض	
مفصلي خلفتين	حديد	220	160	D1
مفصلي خلفتين	حديد	230	160	D2
مفصلي خلفتين	خشب	220	120	D3
مفصلي خلفه واحدة	خشب	220	100	D4
مفصلي خلفه واحدة	خشب	220	90	D5
مفصلي خلفه واحدة	خشب	220	80	D6
مفصلي خلفه واحدة	حديد	220	80	D6a
مفصلي خلفه واحدة	حديد	220	100	D7
مفصلي خلفه واحدة	حديد	220	90	D8
سحاب خلفتين	خشب	220	140	D9


WINDOWS & DOORS TABLE


SCALE: 1:100

NOTES :-

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FOR TENDER ONLY

CLIENT:  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
D/P (UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
 مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
WINDOWS & DOORS TABLE

DRAWING NO.: RE-A-017

DATE: APRIL 2011 SCALE: 1:100



جدول التشطيبات  
الطبق تحت أرضي


البند	نوع التشطيب	الرقم	الصالة	الموزعات	المطبخ	الغرف الميكانيكية	دورات المياه	الادراج
الارضيات	بلاط كسر رخام	1	●	●		●		
	بلاط كراميك	2			●		●	
	رخام أو جرانيت	3						●
الجوانب	قضارة ودهان سوبركريد	1	●	●		●		●
	بلاط كراميك حتى السقف	2			●		●	
الاسقف	قضارة ودهان بوليسيد	1	●	●	●	●	●	●
الجانيل	كسر رخام	1	●	●		●		
	رخام أو جرانيت	2						●


FINISHES TABLE  
SCALE: NOT TO SCALE

NOTES :-

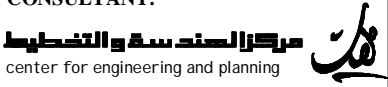
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
 **مركز الهندسة والتخطيط**  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
FINISHES TABLE (1/3)

DRAWING NO.: RE-A-018

DATE: APRIL 2011 | SCALE: NTS

جدول التشطيبات  
الطابق الارضي


البند	نوع التشطيب	الرقم	غرف الخيوف	غرف المعيشة	صالات المدخل	المطابخ	الموزعات	غرف النوم	الحمامات	دورات المياه	الادراج	البلاكين
الارضيات	بلاط كسر رخام	1	●	●	●		●	●				●
	بلاط كراميك	2				●			●	●		
	رخام أو جرانيت	3									●	
الحوائط	قضارة ودهان سوبركريد	1	●	●	●		●	●			●	●
	بلاط كراميك حتى السقف	2				●			●	●		
الاسقف	قضارة ودهان بوليسيد	1	●	●	●	●	●	●	●	●	●	●
البيانييل	كسر رخام	1	●	●	●		●	●			●	●
	رخام أو جرانيت	2									●	
الحوائط الخارجية	● مرمينا											


FINISHES TABLE  
SCALE: NOT TO SCALE

NOTES :-

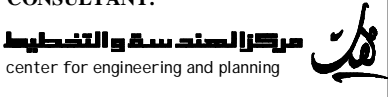
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
 مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
FINISHES TABLE (2/3)

DRAWING NO.: RE-A-019

DATE: APRIL 2011 | SCALE: NTS

NOTES :-


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جدول التشطيبات  
الطابق المتكرر

البند	نوع التشطيب	الرقم	غرف الخيوف	غرف المعيشة	صالات المدخل	المطابخ	الموزعات	غرف النوم	الحمامات	دورات المياه	الادراج	البلاكين
الارضيات	بلاط كسر رخام	1	●	●	●		●	●				●
	بلاط كراميك	2				●			●	●		
	رخام أو جرانيت	3									●	
الحوائط	قضارة ودهان سوبركريد	1	●	●	●		●	●			●	●
	بلاط كراميك حتى السقف	2				●			●	●		
الاسقف	قضارة ودهان بوليسيد	1	●	●	●	●	●	●	●	●	●	●
البيانييل	كسر رخام	1	●	●	●			●	●		●	●
	رخام أو جرانيت	2									●	
الحوائط الخارجية	● مرمينا											


FINISHES TABLE  
SCALE: NOT TO SCALE

FOR TENDER ONLY

CLIENT:  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
D/P (UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
 **مركز الهندسة والتخطيط**  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
FINISHES TABLE (3/3)

DRAWING NO.: RE-A-020

DATE: APRIL 2011 | SCALE: NTS

NOTES :-


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- ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.



NOTES FOR METAL DOORS:

- THE PRICE INCLUDE: SUPPLYING ,ERECTING PAINTING AND SWITCH UNION KEY.
- ALL METAL PROFILES ARE INDICATIVE ONLY. CONTRACTOR SHALL SUBMIT SHOP DRAWING BEFORE COMMENCING THE WORK.
- ALL MILD STEEL MUST RECEIVE ONE COAT (MINIMUM) PRIMER AND TWO COATS OIL PAINT.
- ALL GALVANIZED STEEL TO RECEIVE ONE PRIMER (POLYZINC) COAT & 2COATS OF OIL.


**\*\*SAMPLES OF ALL MATERIALS MUST BE APPROVED THE ENGINEER BEFORE STARTING THE WORK.**

FOR TENDER ONLY

**CLIENT:**  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

**EMPLOYER:**  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
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**PROJECT TITLE:**  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

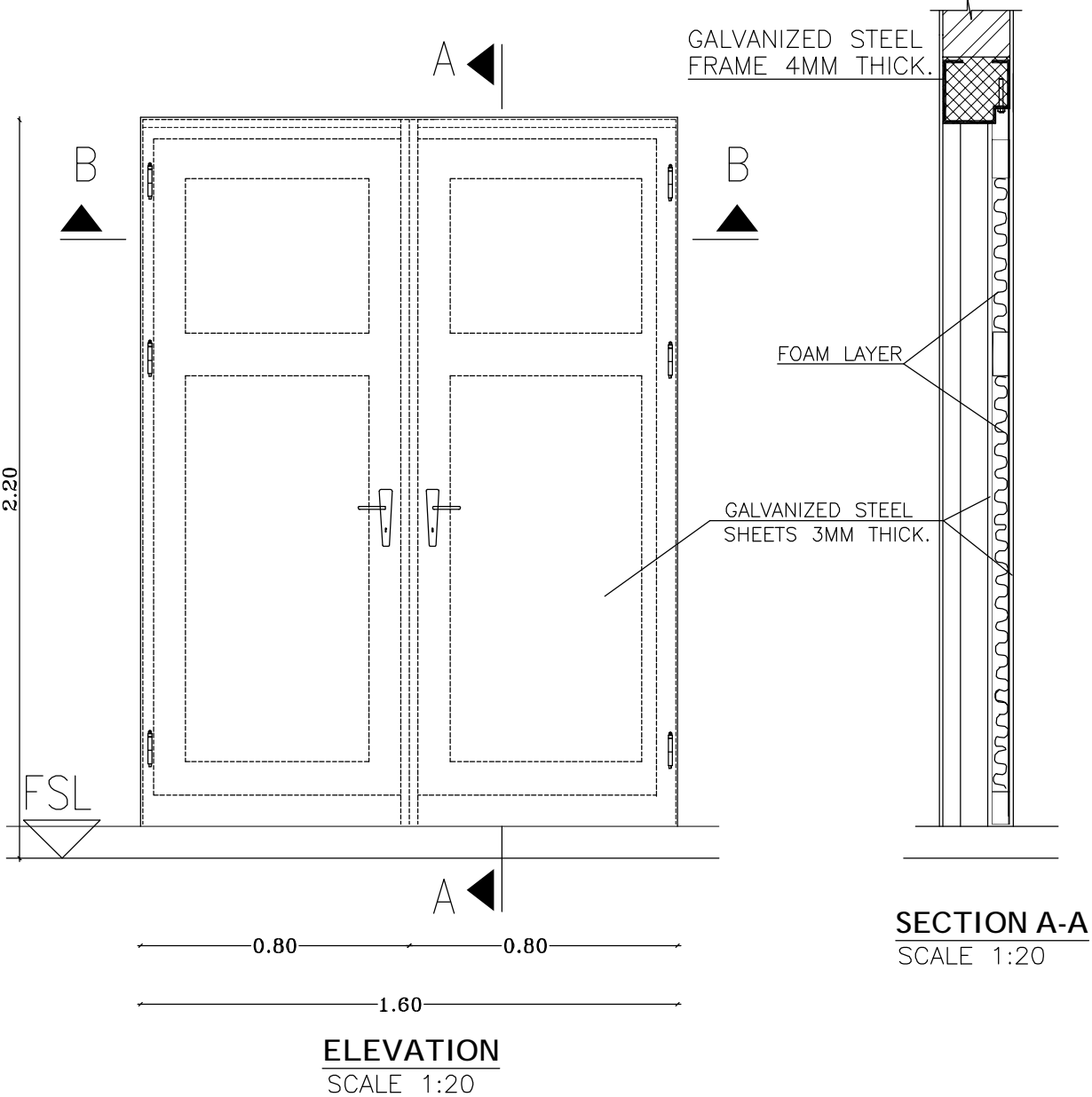
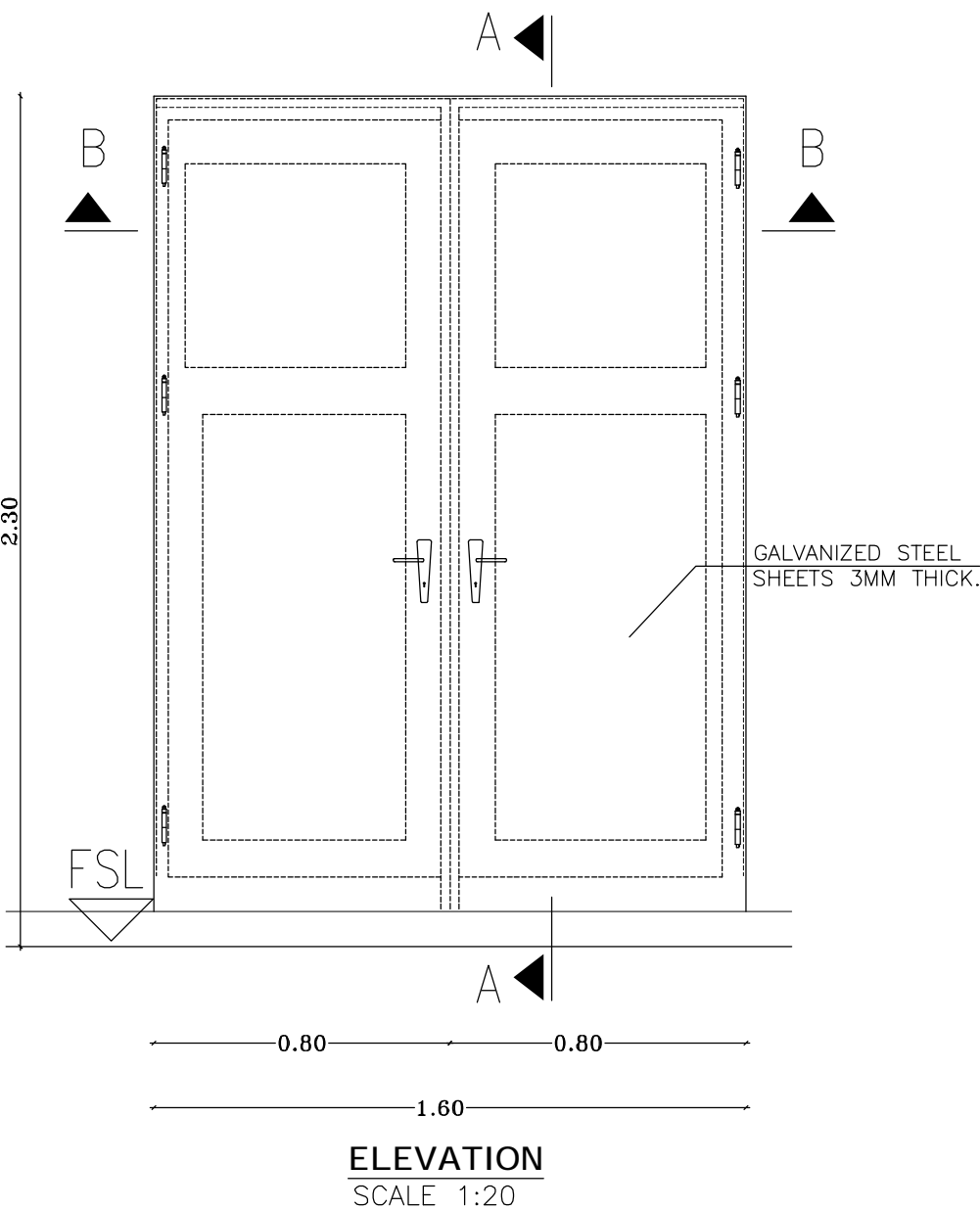
**CONSULTANT:**  
 **مركز الهندسة والتخطيط**  
center for engineering and planning

**BUILDING NAME:**  
RESIDENTIAL BUILDING NO. (A6)

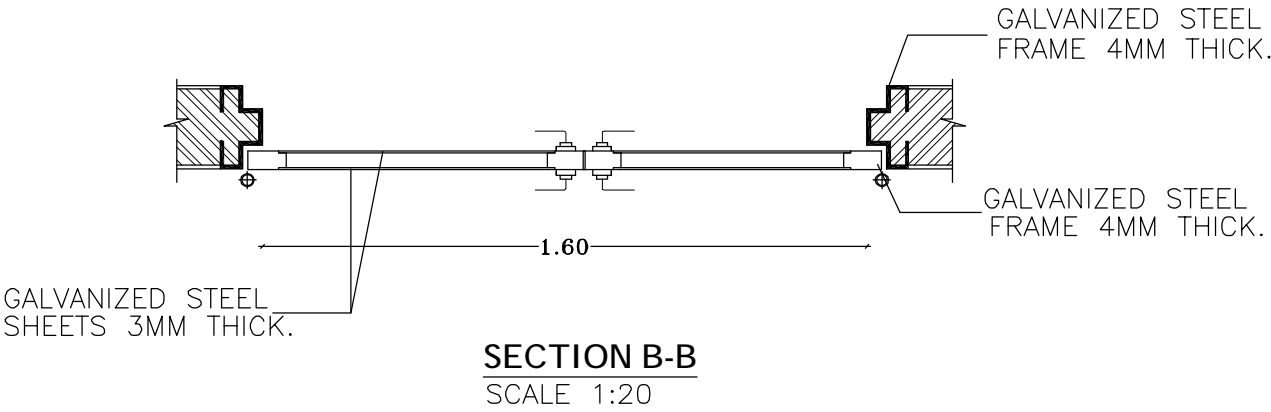
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METAL DOOR DETAILS(1/2)

**DRAWING NO.:** RE-A-021

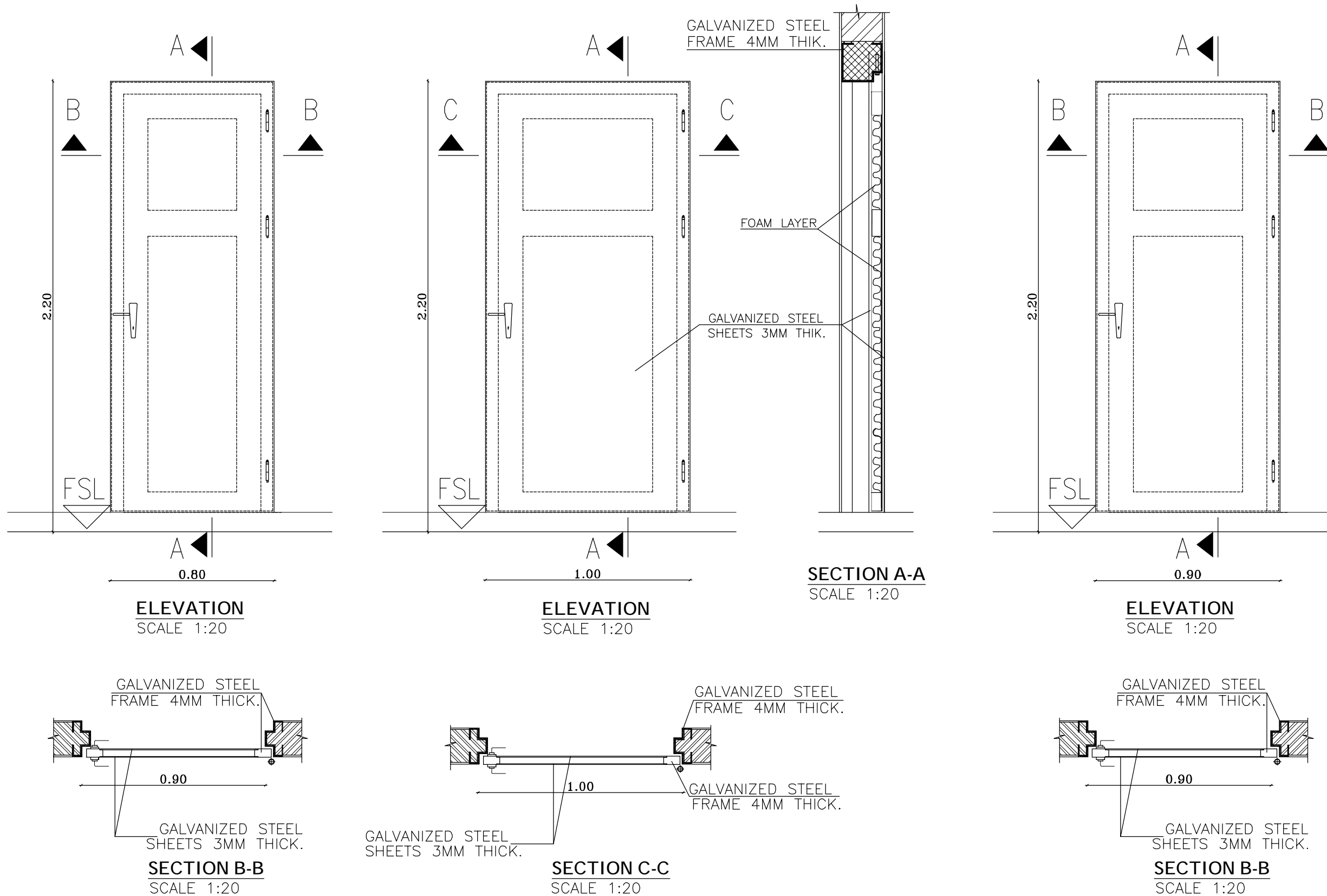
DATE: APRIL 2011 SCALE: 1:20



SECTION A-A  
SCALE 1:20



METAL DOOR DETAILS  
SCALE: 1:20



**D6a (0.80\* 2.20)**

**D7 (1.00\* 2.20)**

**D8 (0.90\* 2.20)**

**METAL DOOR DETAILS**  
SCALE: 1:20

## NOTES :-

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- ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.


### NOTES FOR METAL DOORS:

- THE PRICE INCLUDE: SUPPLYING ,ERECTING PAINTING AND SWITCH UNION KEY.
- ALL METAL PROFILES ARE INDICATIVE ONLY. CONTRACTOR SHALL SUBMIT SHOP DRAWING BEFORE COMMENCING THE WORK.
- ALL MILD STEEL MUST RECEIVE ONE COAT (MINIMUM) PRIMER AND TWO COATS OIL PAINT.
- ALL GALVANIZED STEEL TO RECEIVE ONE PRIMER (POLYZINC) COAT & 2COATS OF OIL.


**\*\*SAMPLES OF ALL MATERIALS MUST BE APPROVED THE ENGINEER BEFORE STARTING THE WORK.**

## FOR TENDER ONLY

### CLIENT:

 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:

 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

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center for engineering and planning

### BUILDING NAME:

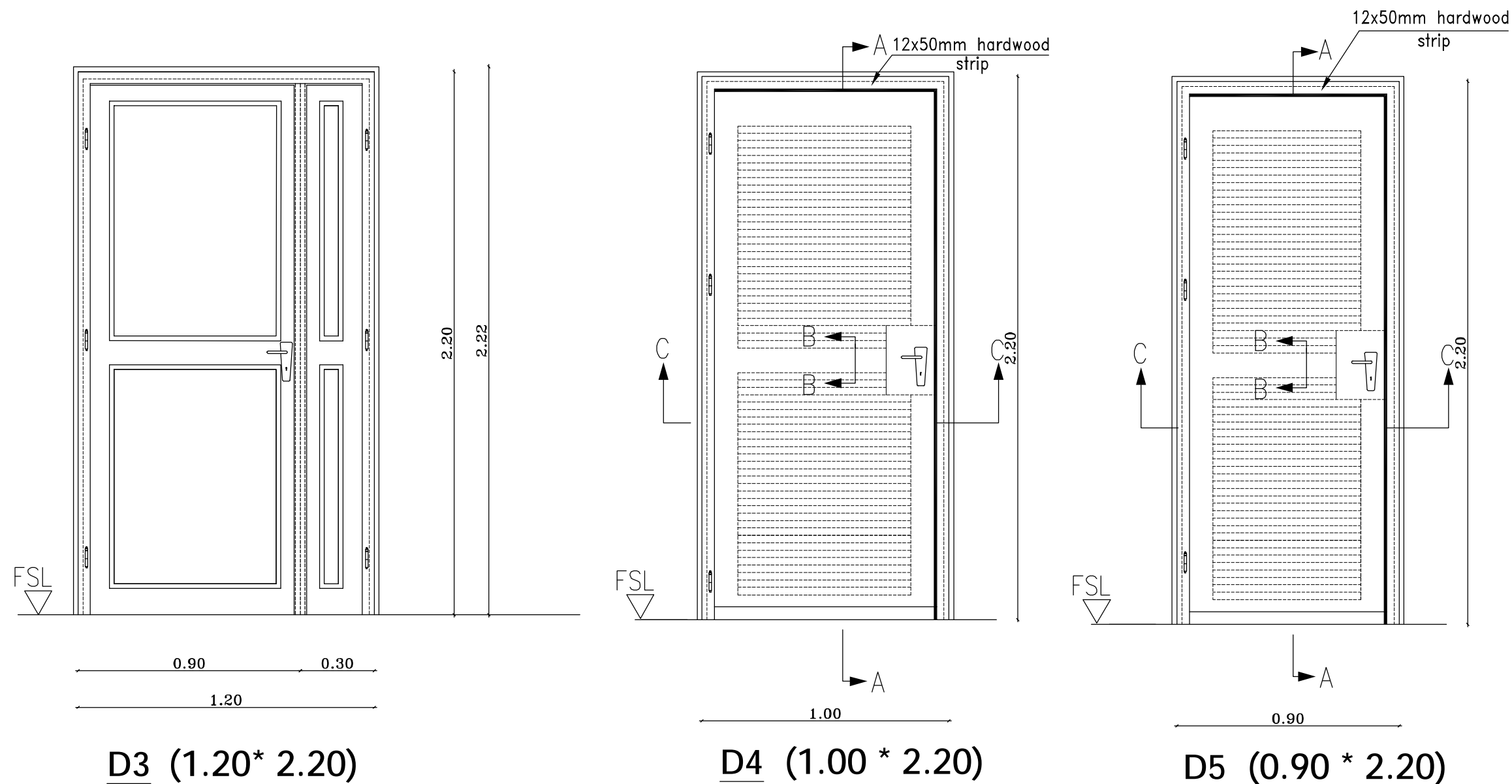
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

METAL DOOR DETAILS(2/2)

**DRAWING NO.:** RE-A-022

**DATE:** APRIL 2011 **SCALE:** 1:20



**WOODEN DOOR DETAILS**  
SCALE: 1:20

## NOTES :-

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- ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.


### – NOTES FOR WOODEN DOORS:

- ALL TIMBER TO BE SWEDISH CLASS A UNLESS OTHERWISE SHOWN.
- ARCHITRAVES AND COVER MOULDS TO BE FIXED TO DOOR FRAMES WITH PANEL PINS.
- 3 HINGES WHERE NECESSARY BUTT HINGES PER DOOR LEAF.
- WOODEN FRAMES: FRAMES ABUTTING BLOCKWORK TO BE BUILT IN WITH MILD STEEL CRAMPS AS PER SPECIFICATION & DRAWINGS.
- FRAMES ABUTTING CONCRETE TO BE DRILLED, COUNTERSUNK AND FIXED WITH EXPANSION BOLTS, 3 PER JAMB.
- DOORSTOPS: PROJECTING WALL MOUNTED TYPE 10CM LONG.
- WOODEN DOORS (FIRST CLASS) WOOD AND 4MM THICK PLYWOOD.
- ALL TIMBER WILL BE PAINTED ACCORDING TO THE SPECIFICATIONS.
- THE DOOR LOCK IS "SWITCH UNION" (BEST QUALITY).


**\*\*SAMPLES OF ALL MATERIALS MUST BE APPROVED THE ENGINEER BEFORE STARTING THE WORK.**

## FOR TENDER ONLY

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

 **مركز الهندسة والتخطيط**  
center for engineering and planning

### BUILDING NAME:

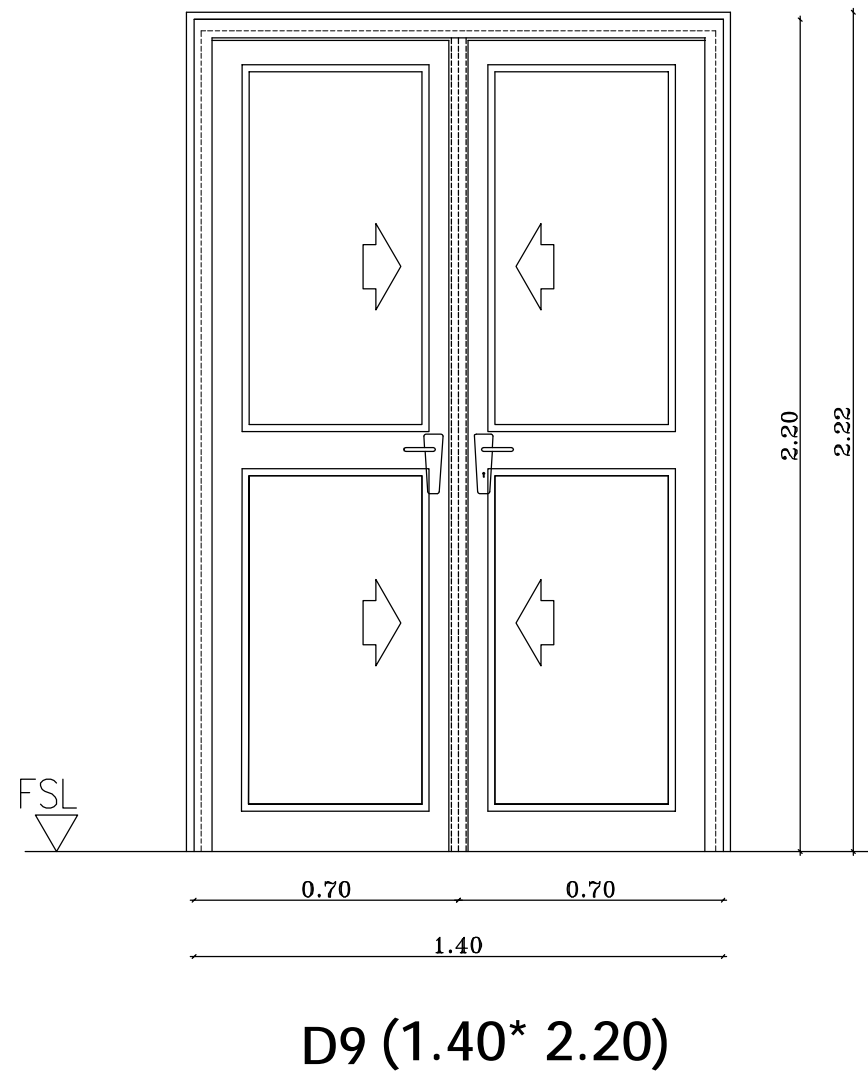
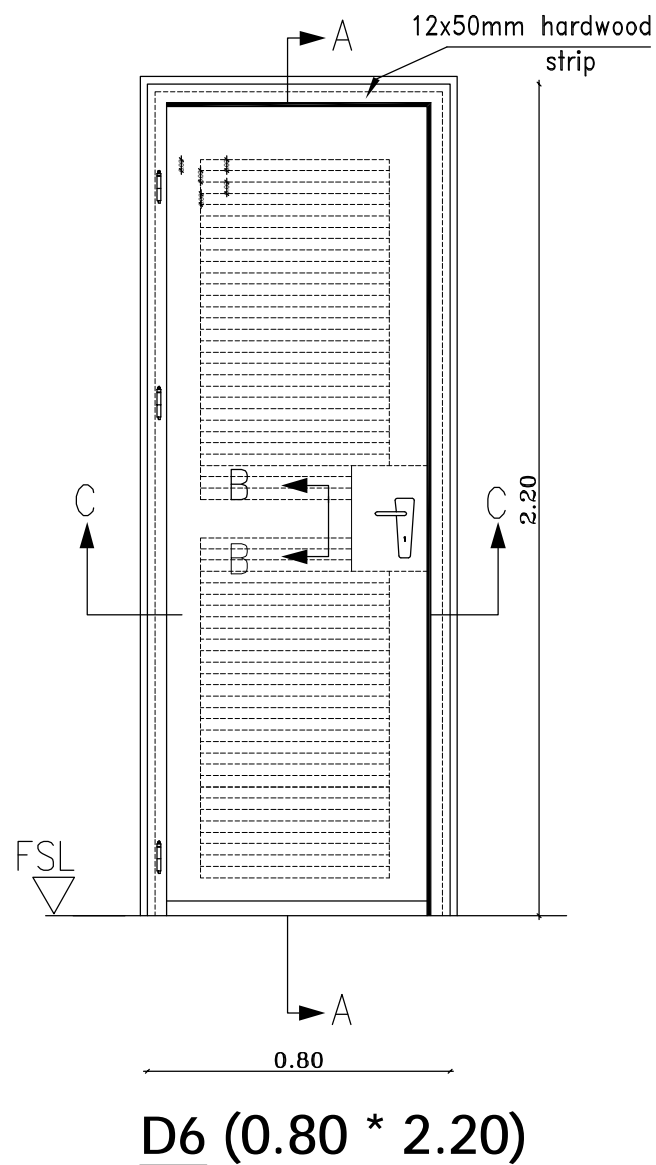
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

WOODEN DOOR DETAILS (1/3)

**DRAWING NO.:** RE-A-023

**DATE:** APRIL 2011 **SCALE:** 1:20



**WOODEN DOOR DETAILS**  
SCALE: 1:20

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### - NOTES FOR WOODEN DOORS:

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- ARCHITRAVES AND COVER MOULDS TO BE FIXED TO DOOR FRAMES WITH PANEL PINS.
- 3 HINGES WHERE NECESSARY BUTT HINGES PER DOOR LEAF.
- WOODEN FRAMES: FRAMES ABUTTING BLOCKWORK TO BE BUILT IN WITH MILD STEEL CRAMPS AS PER SPECIFICATION & DRAWINGS.
- FRAMES ABUTTING CONCRETE TO BE DRILLED, COUNTERSUNK AND FIXED WITH EXPANSION BOLTS, 3 PER JAMB.
- DOORSTOPS: PROJECTING WALL MOUNTED TYPE 10CM LONG.
- WOODEN DOORS (FIRST CLASS) WOOD AND 4MM THICK PLYWOOD.
- ALL TIMBER WILL BE PAINTED ACCORDING TO THE SPECIFICATIONS.
- THE DOOR LOCK IS "SWITCH UNION" (BEST QUALITY).

**\*\*SAMPLES OF ALL MATERIALS MUST BE APPROVED THE ENGINEER BEFORE STARTING THE WORK.**

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

WOODEN DOOR DETAILS (2/3)

DRAWING NO.: RE-A-024

DATE: APRIL 2011 SCALE: 1:20

NOTES :-


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NOTES FOR WOODEN DOORS:

- ALL TIMBER TO BE SWEDISH CLASS A UNLESS OTHERWISE SHOWN.
- ARCHITRAVES AND COVER MOULDS TO BE FIXED TO DOOR FRAMES WITH PANEL PINS.
- 3 HINGES WHERE NECESSARY BUTT HINGES PER DOOR LEAF.
- WOODEN FRAMES: FRAMES ABUTTING BLOCKWORK TO BE BUILT IN WITH MILD STEEL CRAMPS AS PER SPECIFICATION & DRAWINGS.
- FRAMES ABUTTING CONCRETE TO BE DRILLED, COUNTERSUNK AND FIXED WITH EXPANSION BOLTS, 3 PER JAMB.
- DOORSTOPS: PROJECTING WALL MOUNTED TYPE10CM LONG.
- WOODEN DOORS (FIRST CLASS) WOOD AND 4MM THICK PLYWOOD.
- ALL TIMBER WILL BE PAINTED ACCORDING TO THE SPECIFICATIONS.
- THE DOOR LOCK IS "SWITCH UNION" (BEST QUALITY).


**\*\*SAMPLES OF ALL MATERIALS MUST BE APPROVED THE ENGINEER BEFORE STARTING THE WORK.**

FOR TENDER ONLY

**CLIENT:**  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

**EMPLOYER:**  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
D/P (UNDP/PAPP)

**PROJECT TITLE:**  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

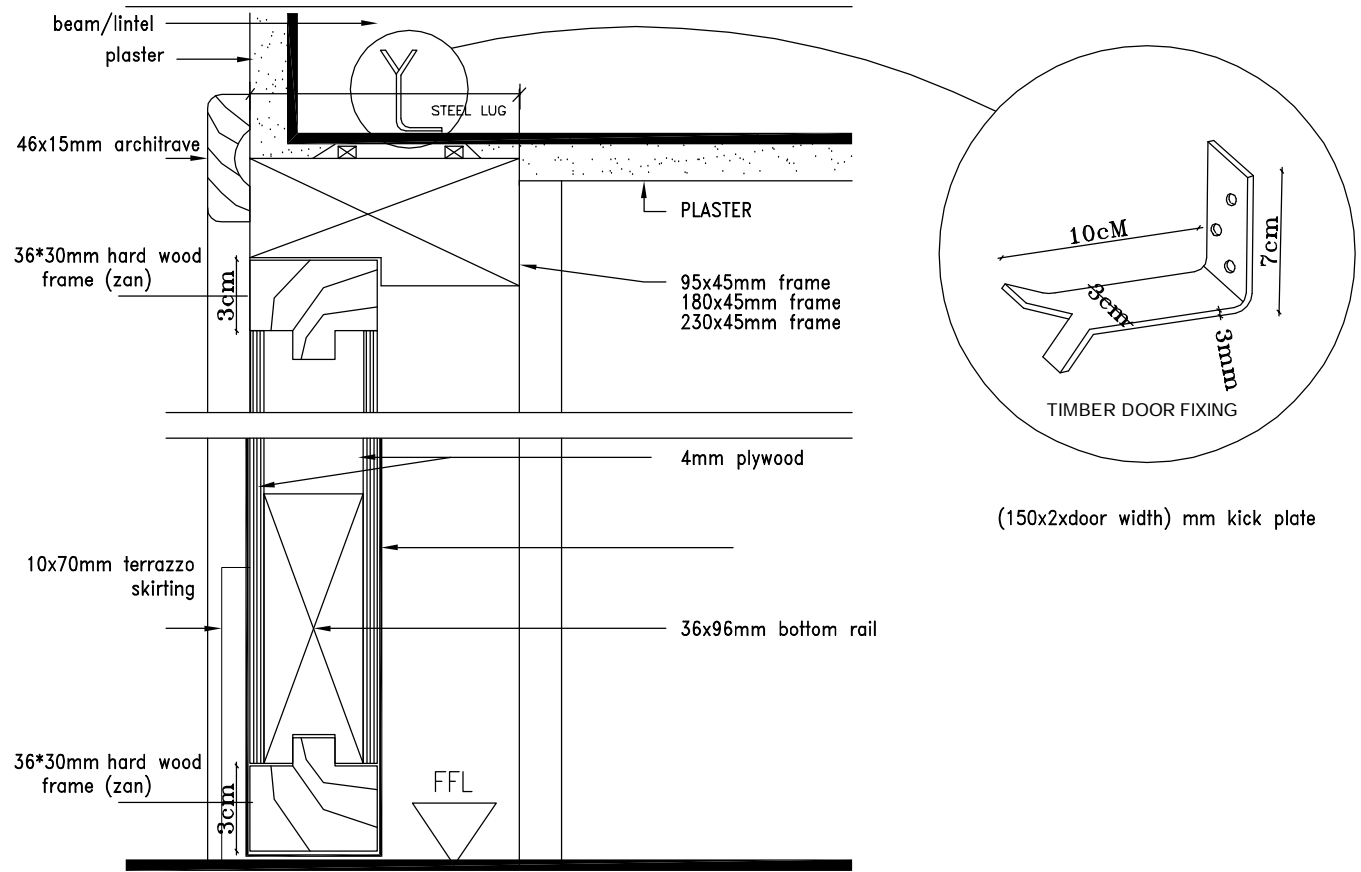
**CONSULTANT:**  
 مرکز الهندسة والتخطيط  
center for engineering and planning

**BUILDING NAME:**  
RESIDENTIAL BUILDING NO. (A6)

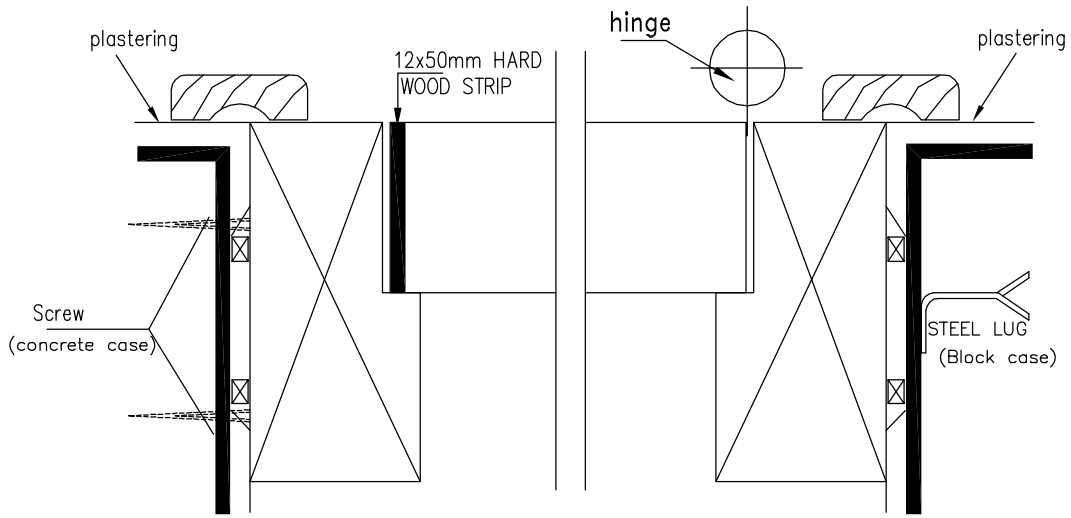
**DRAWING TITLE:**  
WOODEN DOOR DETAILS (3/3)

**DRAWING NO.:** RE-A-025

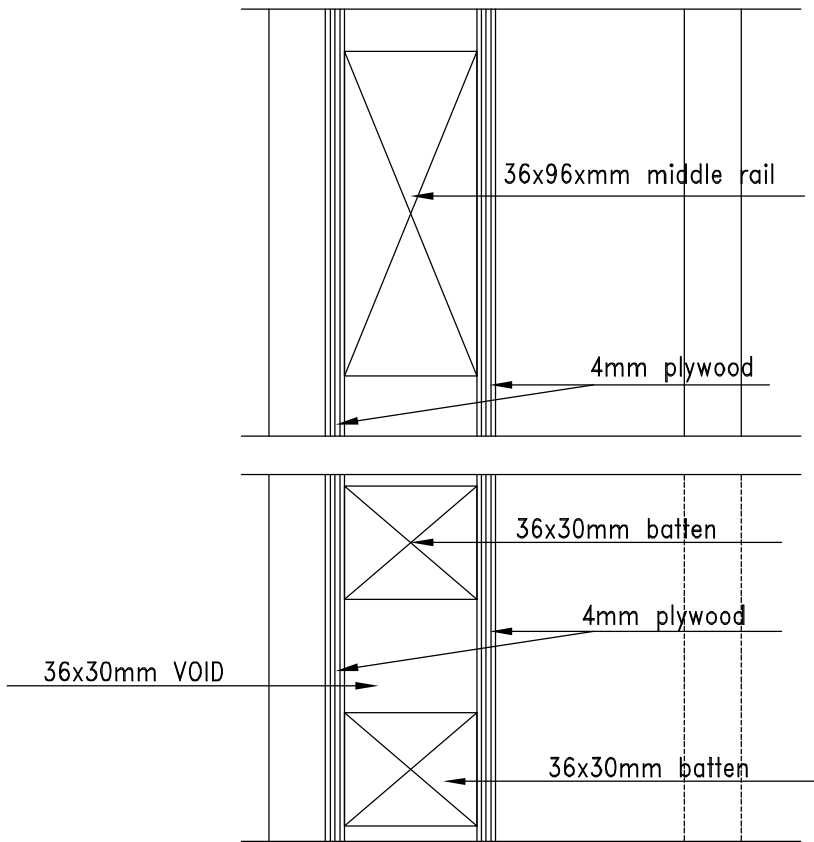
DATE: APRIL 2011 | SCALE: NTS



SECTION A-A



SECTION C - C

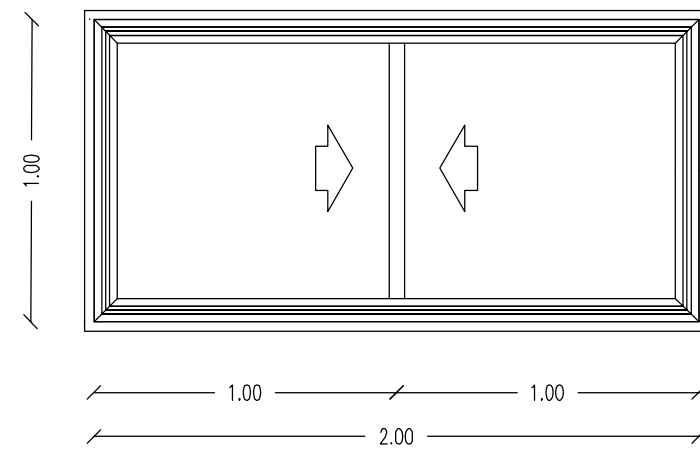


SECTION B-B

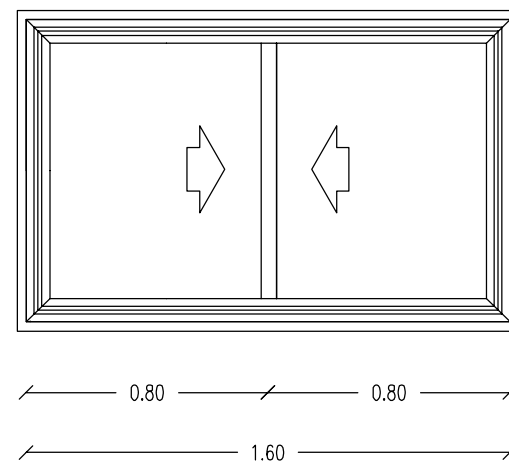
WOODEN DOOR DETAILS

SCALE: NTS

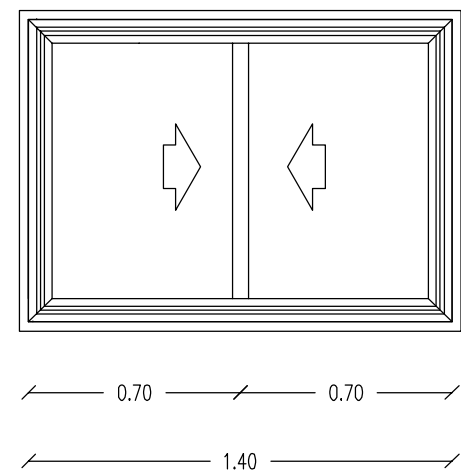




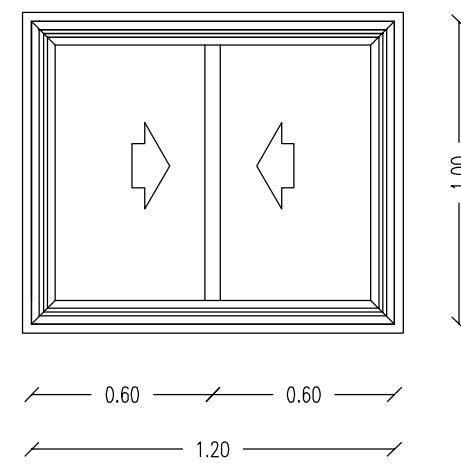
W1 (2.0\*1.0M)



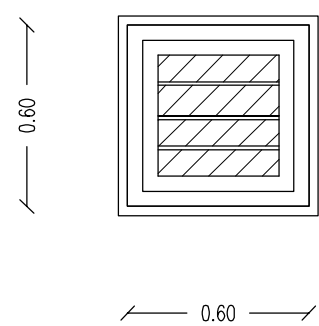
W2 (1.6\*1.0M)



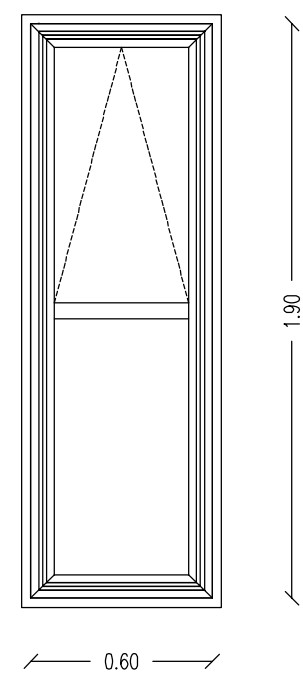
W3 (1.4\*1.0M)



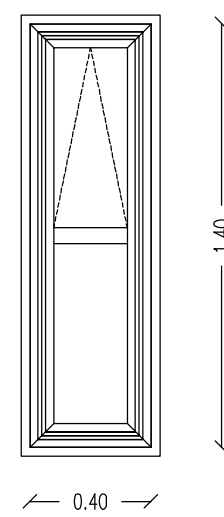
W4 (1.2\*1.0M)



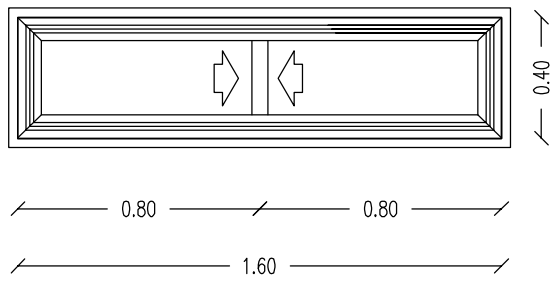
W5 (0.6\*0.6M)



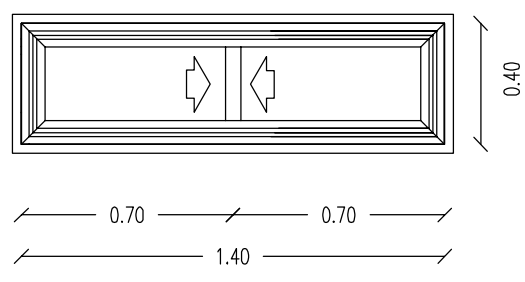
W6 (0.6\*1.9M)



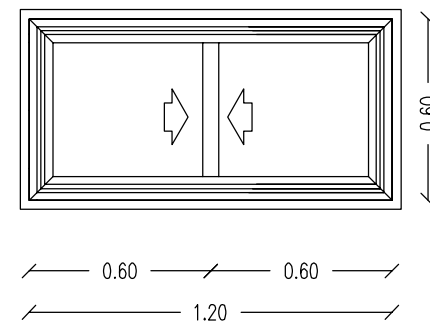
W7 (0.4\*1.4M)



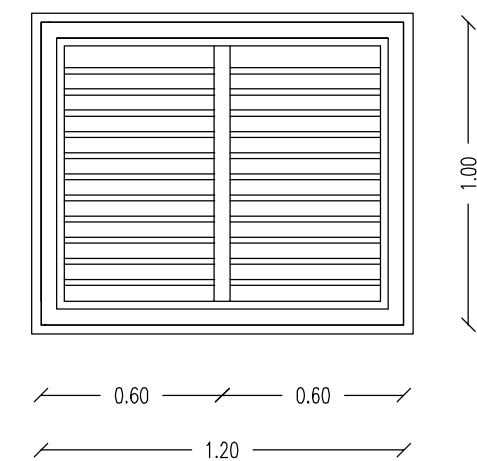
W8 (1.6\*0.4M)



W9 (1.4\*0.4M)



W10 (1.2\*0.6M)



W11 (1.2\*1.0M)


WINDOWS ELEVATION  
SCALE: 1:25

NOTES :-


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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
D/P (UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

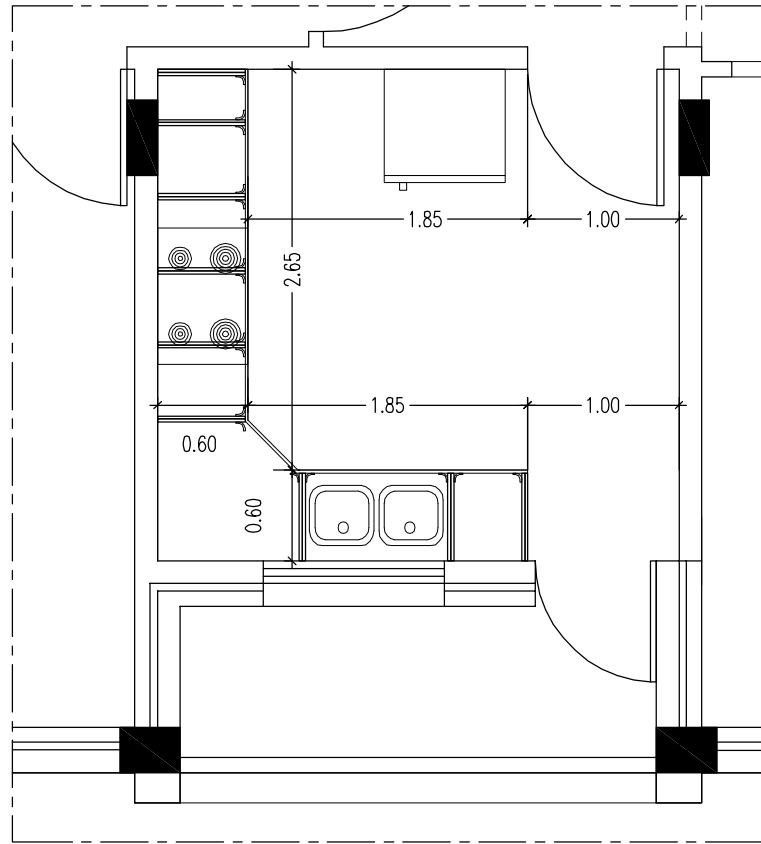
CONSULTANT:  
 مرکز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

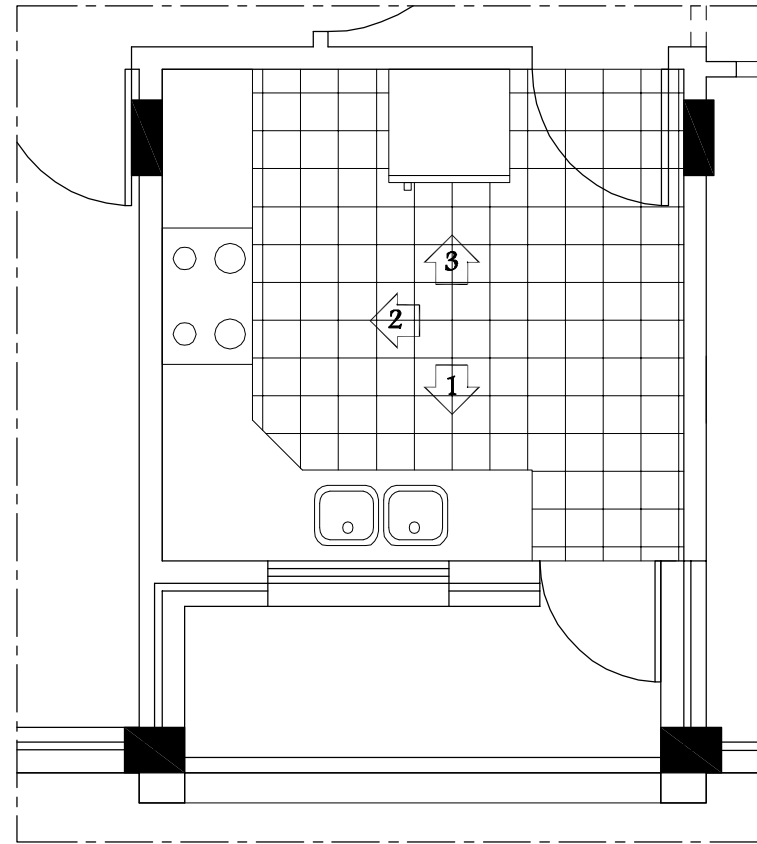
DRAWING TITLE:  
WINDOWS ELEVATION

DRAWING NO.: RE-A-026

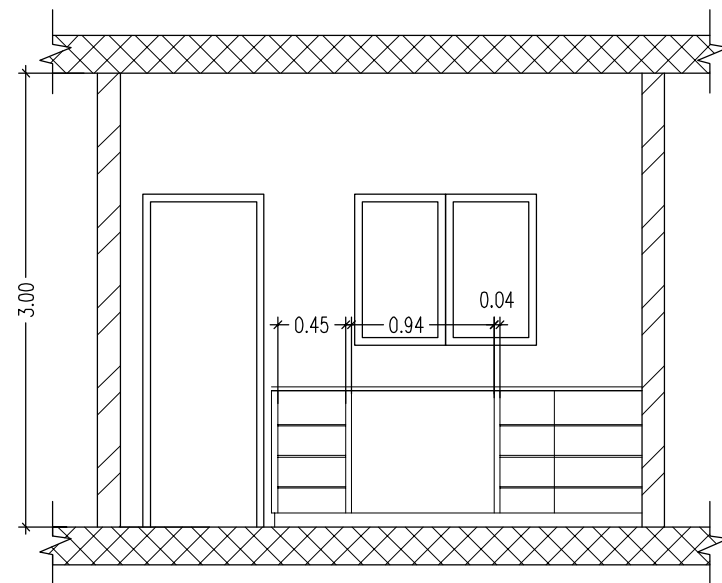
DATE: APRIL 2011 | SCALE: 1:25



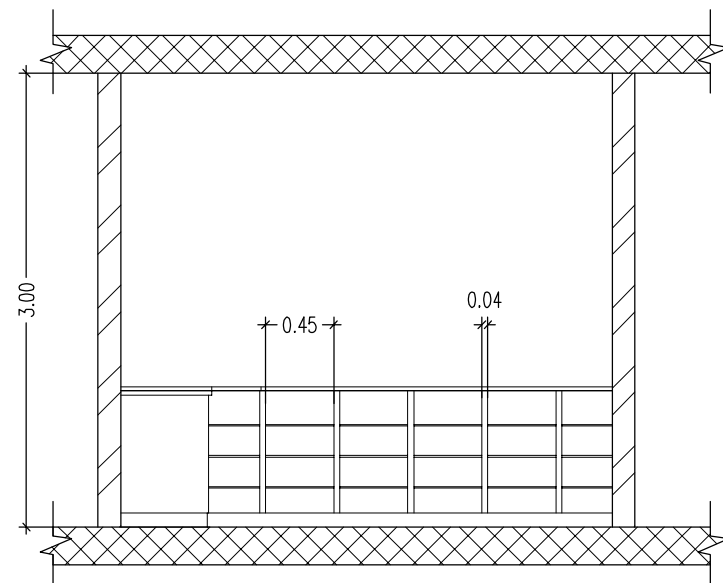
KITCHEN PLAN & DIMENSIONS  
SCALE 1:50



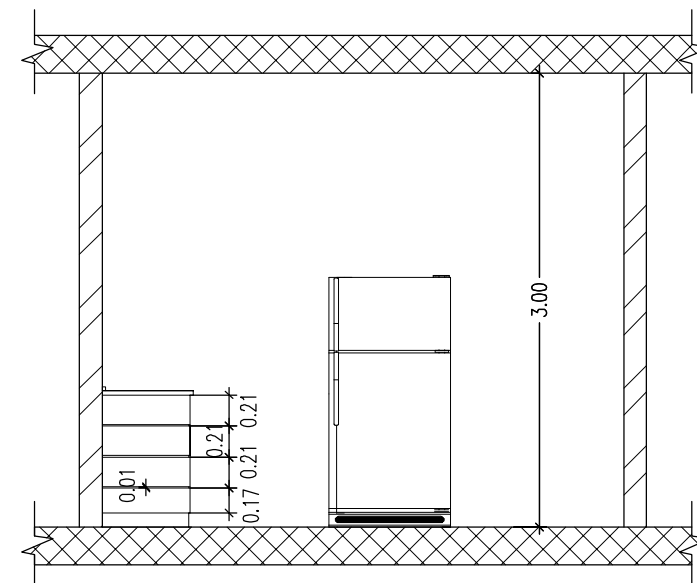
KITCHEN PLAN  
SCALE 1:50



ELEVATION 1  
SCALE 1:50



ELEVATION 2  
SCALE 1:50



ELEVATION 3  
SCALE 1:50

KITCHEN DETALIS  
SCALE: 1:50

## NOTES :-

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## FOR TENDER ONLY

### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
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### PROJECT TITLE:

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

KITCHEN DETAILS

DRAWING NO.: RE-A-027

DATE: APRIL 2011 SCALE: 1:50

EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

CLIENT



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

CONSULTANT

مركز الهندسة والتخطيط  
center for engineering and planning



**STRUCTURAL DRAWINGS**

## EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

## CLIENT



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

## CONSULTANT

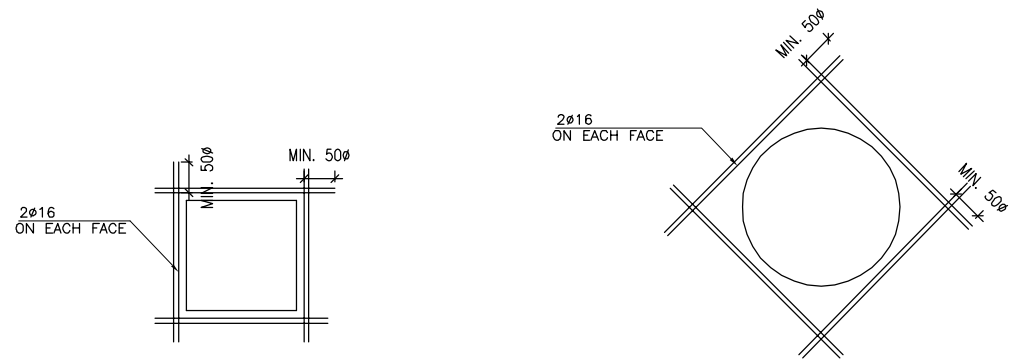
مركز الهندسة والتخطيط  
center for engineering and planning



## LIST OF DRAWINGS

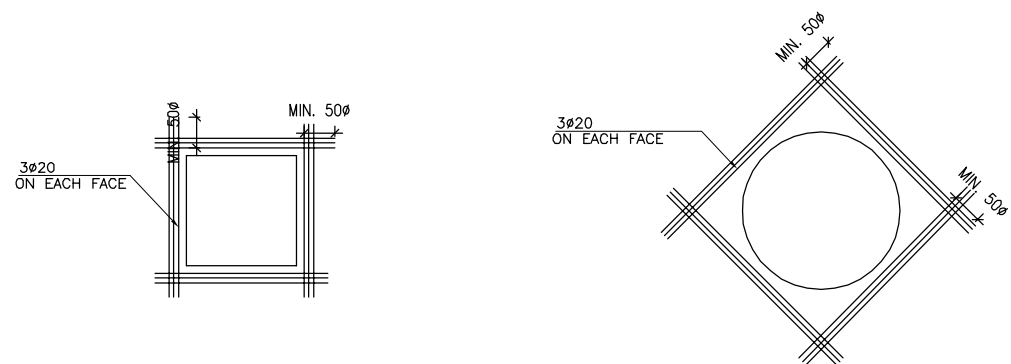
S/NO.	DRAWING NAME	DWG. NO.
STRUCTURAL DRAWING		
01/21	GENERAL STRUCTURAL DETAILS	RE-S-000
02/21	COLUMN AXES	RE-S-001
03/21	GENERAL LAYOUT AND DIMENSIONS FOR FOOTINGS	RE-S-002
04/21	FOOTING DETAILS (1/2)	RE-S-003
05/21	FOUNDATIONS DETAILS (2/2)	RE-S-004
06/21	BASEMENT WALL & SHEAR WALL DETAILS	RE-S-005
07/21	ELEVATOR WALL DETAILS	RE-S-006
08/21	COLUMNS DETAILS (1/4)	RE-S-007
09/21	COLUMNS DETAILS (2/4)	RE-S-008
10/21	COLUMNS DETAILS (3/4)	RE-S-009
11/21	COLUMNS DETAILS (4/4)	RE-S-010

S/NO.	DRAWING NAME	DWG. NO.
STRUCTURAL DRAWING		
12/21	GROUND BEAMS DETAILS	RE-S-011
13/21	BASEMENT SLAB DETAILS	RE-S-012
14/21	BEAMS DETAILS OF BASEMENT SLAB (1/2)	RE-S-013
15/21	BEAMS DETAILS OF BASEMENT SLAB (2/2)	RE-S-014
16/21	TYPICAL SLAB DETAILS	RE-S-015
17/21	BEAMS DETAILS OF TYPICAL SLAB (1/3)	RE-S-016
18/21	BEAMS DETAILS OF TYPICAL SLAB (2/3)	RE-S-017
19/21	BEAMS DETAILS OF TYPICAL SLAB (3/3)	RE-S-018
20/21	STAIRS ROOF SLAB DETAILS	RE-S-019
21/21	STRUCTURAL DETAILS FOR STAIRS	RE-S-020



RECTANGULAR OPENING < 500mm

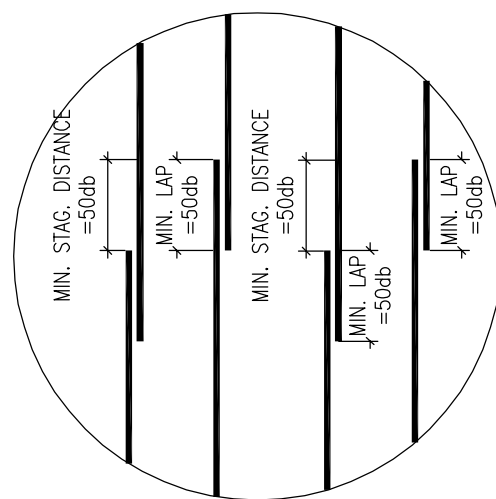
CIRCULAR OPENING < 500mm



RECTANGULAR OPENING > 500mm

CIRCULAR OPENING > 500mm

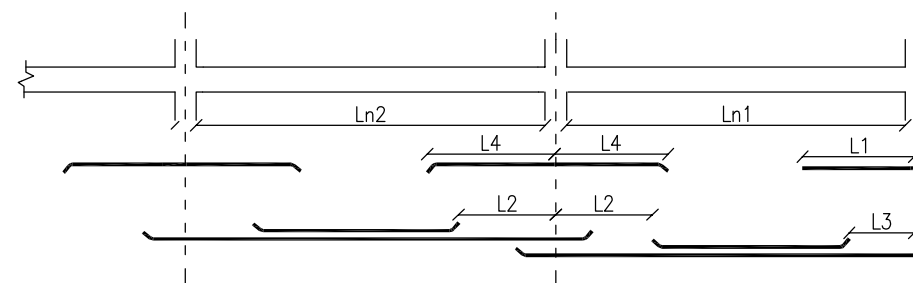
### DETAIL AROUND OPENING IN R.C. WALL & SLAB (UNLESS SHOWN OTHERWISE ON DRAWINGS)



### TYPICAL STAGGERING REINFORCEMENT DETAILS ( TO BE USED UNLESS SHOWN OTHERWISE ON THE DRAWINGS )

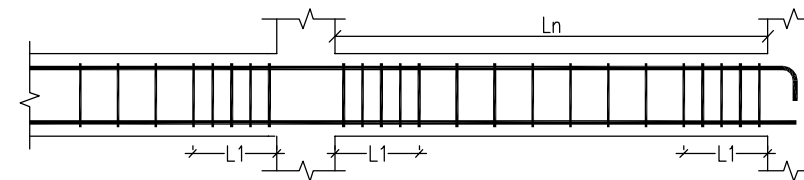
### - BARS CUTOFF IN BEAMS:

Bar extension in beams shall be not less than shown below:



- $L1 = 0.25Ln1$
- $L2 = 0.25Ln1$  or  $0.25Ln2$  which is longer.
- $L3 = 0.15Ln1$
- $L4 = 0.33Ln1$  or  $0.33Ln2$  which is longer.

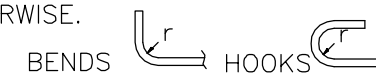
### BARS CUTOFF IN BEAMS



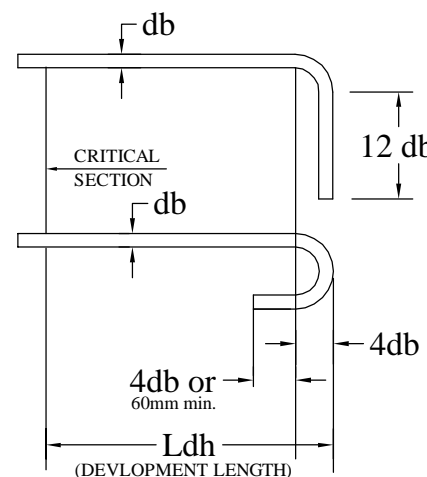
- $L1 = Ln/6$

### STIRRUPS CONCENTRATION DETAILS

– STANDARD RADII OF BENDS AND HOOKS AS GIVEN BELOW TO BE USED UNLESS SPECIFICALLY SHOWN OTHERWISE.



BAR SIZE	GRADE 250	GRADE 420
d	r	r
6	12	18
8	16	24
10	20	30
12	24	36
14	28	42
16	32	48
18	36	54
20	40	60
22	44	66
25	50	75



### STIRRUPS CONCENTRATION DETAILS

### GENERAL STRUCTURAL DETAILS

SCALE: AS SHOWN

### NOTES :-

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- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- CONCRETE SURFACE IN CONTACT WITH SOIL SHALL BE PAINTED 1–COAT PRIMER AND 2–COATS OF HOT BITUMEN.
- DESIGN CODE IS ACI 318–08.
- STEEL BARS PROVIDED BY CONTRACTOR (G420)  $F_y=420$  MPa.
- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH  $F_{cu}$  AS:
  - FOR R.C. COLUMNS & WALLS =35 MPa
  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
  - FOR FOOTINGS (CAST AGAINST SOIL) =7.5 cm
  - (FOR PROTECTED CONCRETE) =5.0 cm
  - FOR COLUMNS AND BEAMS =4.0 cm
  - FOR WALLS =5.0 cm
  - FOR SLABS =2.5 cm
- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS: 150 kN/m<sup>2</sup>.

### FOR TENDER ONLY

#### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

#### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

#### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

#### CONSULTANT:



مركز الهندسة والتخطيط  
center for engineering and planning

#### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

#### DRAWING TITLE:

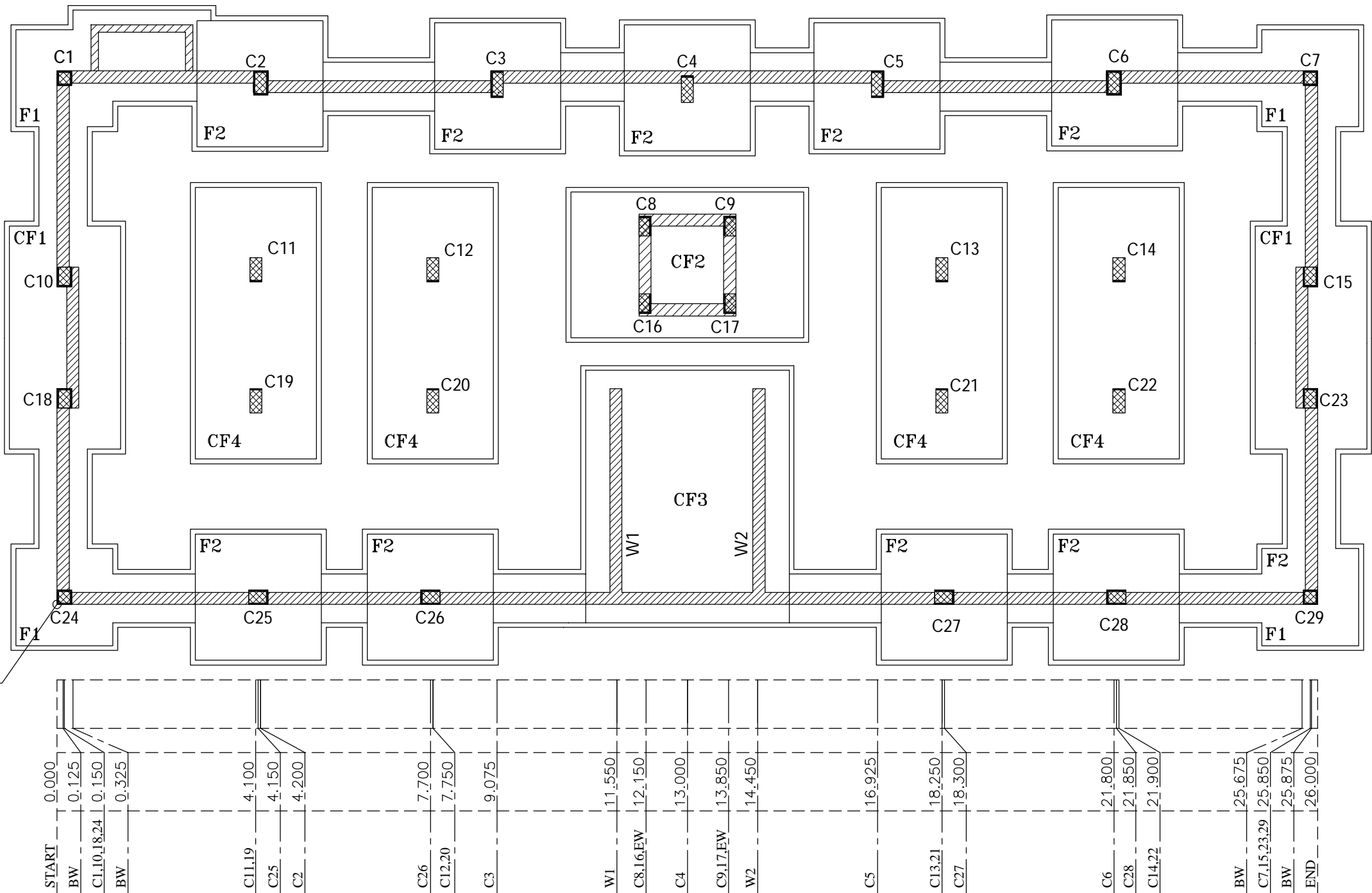
GENERAL STRUCTURAL DETAILS

#### DRAWING NO.: RE-S-000

DATE: APRIL 2011 SCALE: AS SHOWN

END	11.000
BW	10.875
C1,7	10.850
C2,6	10.750
C3,5	10.725
BW	10.675
C4	10.625
EW	7.925
C8,9	7.800
C11,12,13,14	6.900
C10,15	6.750
C16,17	6.200
EW	6.075
C18,23	4.250
C19,20,21,22	4.200
W1,2	2.350
C24,25,26,27,28,29	0.150
BW	0.125
START	0.000

X=0000.000  
Y=0000.000



NOTE:  
- BW = BASEMENT WALL.  
- EW = ELEVATOR WALL.

COLUMN AXES  
SCALE 1:100

## NOTES :-

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- CONCRETE SURFACE IN CONTACT WITH SOIL SHALL BE PAINTED 1-COAT PRIMER AND 2-COATS OF HOT BITUMEN.

- DESIGN CODE IS ACI 318-08.
- STEEL BARS PROVIDED BY CONTRACTOR (G420)  $F_y=420$  MPa.
- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH  $F_{cu}$  AS:
  - FOR R.C. COLUMNS & WALLS =35 MPa
  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
  - FOR FOOTINGS (CAST AGAINST SOIL) =7.5 cm
  - (FOR PROTECTED CONCRETE) =5.0 cm
  - FOR COLUMNS AND BEAMS =4.0 cm
  - FOR SLABS =2.5 cm

- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- BAR CUT OFF POINTS FOR TYPICAL BEAMS IS AS FOLLOWS:
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS:150 KN/m<sup>2</sup>.

CLIENT:  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
 مرکز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
COLUMN AXES

DRAWING NO.: RE-S-001

DATE: APRIL 2011 SCALE: AS SHOWN

NOTES :-

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CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

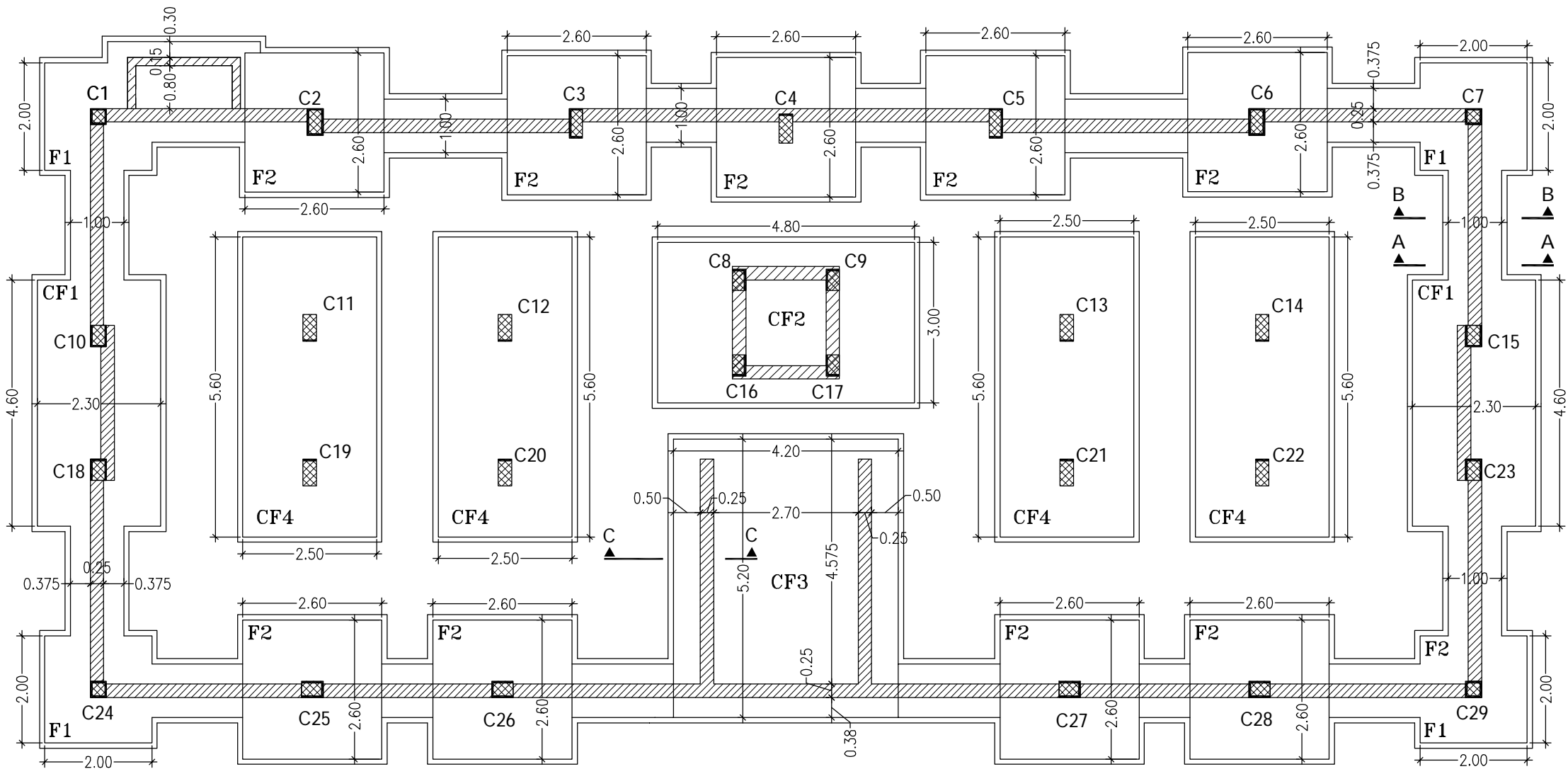
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

GENERAL LAYOUT AND DIMENSIONS  
FOR FOOTINGS

DRAWING NO.: RE-S-002

DATE: APRIL 2011 SCALE: AS SHOWN



GENERAL LAYOUT AND DIMENSIONS FOR FOOTINGS  
SCALE 1:100

- FOR DETAILS OF SEC. A-A, B-B & C-C REFER TO DWG. NO. RE-S-005
- FOR DETAILS OF FOOTING (CF2) REFER TO DWG. NO. RE-S-006

THE COL. SIZE IS FIXED FROM ALL SIDES ALONG THE BUILDING HEIGHT.	THE COL. SIZE IS FIXED FROM THREE SIDES.	THE COL. SIZE IS FIXED FROM TWO SIDES.	THE COL. SIZE IS FIXED FROM ONE SIDE.
C1,2,6,7,24,29	C3,5,10,15,18,23 25,26,27,28	C8,9,16,17	C4,11,12,13,14 19,20,21,22

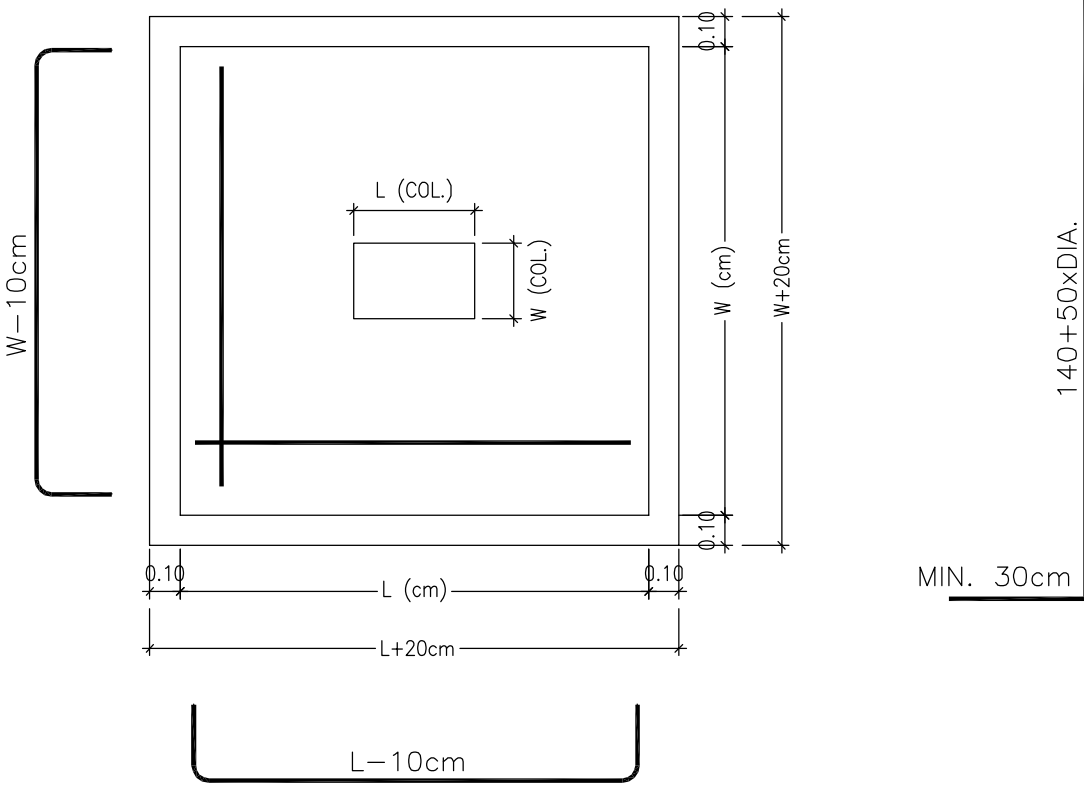
DIRECTIONS OF COLUMN SIZE CHANGE

GENERAL LAYOUT AND DIMENSIONS FOR FOOTINGS

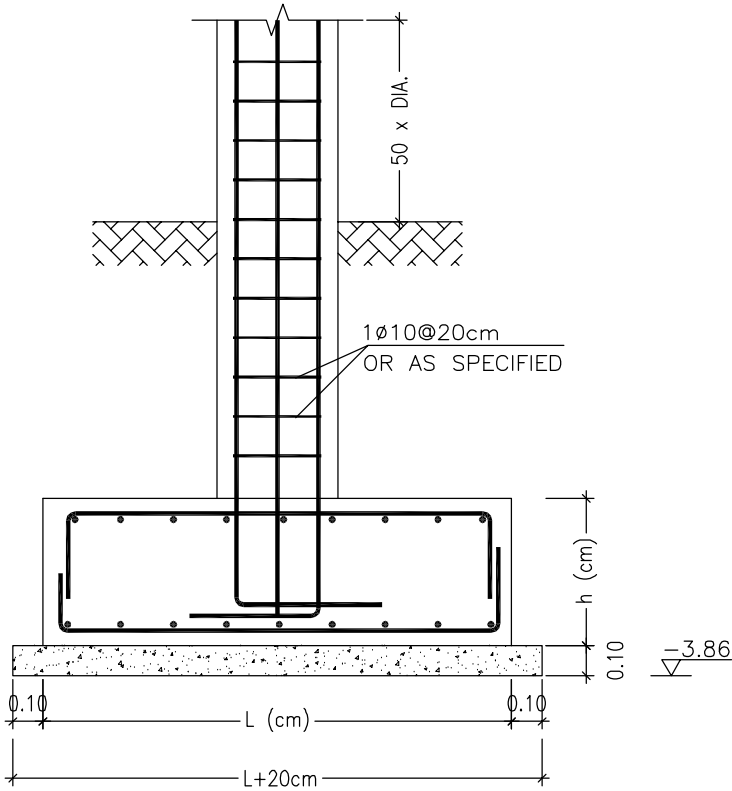
SCALE 1:100

Table of Footings (ISOLATED)

Footings		Total	Footings size			Reinforcement		
FOOT. NO.	COL. NO.		L(cm)	W(cm)	h(cm)	LONG DIR.	SHORT DIR.	Shape
F1	1,7,24,29	4	200	200	40	1∅12@15cm	1∅12@15cm	200 TOP/190cm BOT/190cm T.L=230cm
F2	2,3,4,5,6 25,26,27,28	9	260	260	50	1∅12@12.5cm	1∅12@12.5cm	300 TOP/250cm BOT/250cm T.L=310cm



TYPICAL DETAILS FOR ISOLATED FOOTING



FOUNDATIONS DETAILS (1/2)

SCALE: AS SHOWN

NOTES :-

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- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- CONCRETE SURFACE IN CONTACT WITH SOIL SHALL BE PAINTED 1-COAT PRIMER AND 2-COATS OF HOT BITUMEN.
- DESIGN CODE IS ACI 318-08.
- STEEL BARS PROVIDED BY CONTRACTOR (G420)  $F_y=420$  MPa.
- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH  $F_{cu}$  AS:
  - FOR R.C. COLUMNS & WALLS  $=35$  MPa
  - FOR R.C. SLAB  $=30$  MPa
  - FOR R.C. FOOTINGS  $=30$  MPa
  - FOR R.C. LINTELS  $=25$  MPa
  - FOR PLAIN CONCRET  $=20$  MPa
- STEEL COVERS:
  - FOR FOOTINGS (CAST AGAINST SOIL)  $=7.5$  cm
  - (FOR PROTECTED CONCRETE)  $=5.0$  cm
  - FOR COLUMNS AND BEAMS  $=4.0$  cm
  - FOR WALLS  $=5.0$  cm
  - FOR SLABS  $=2.5$  cm
- MIN. LAP FOR STEEL BAR  $= 60$ cm OR  $50 \times$  DIA. BAR WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS:  $150 \text{ kN/m}^2$ .

FOR TENDER ONLY

CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

FOOTING DETAILS (1/2)

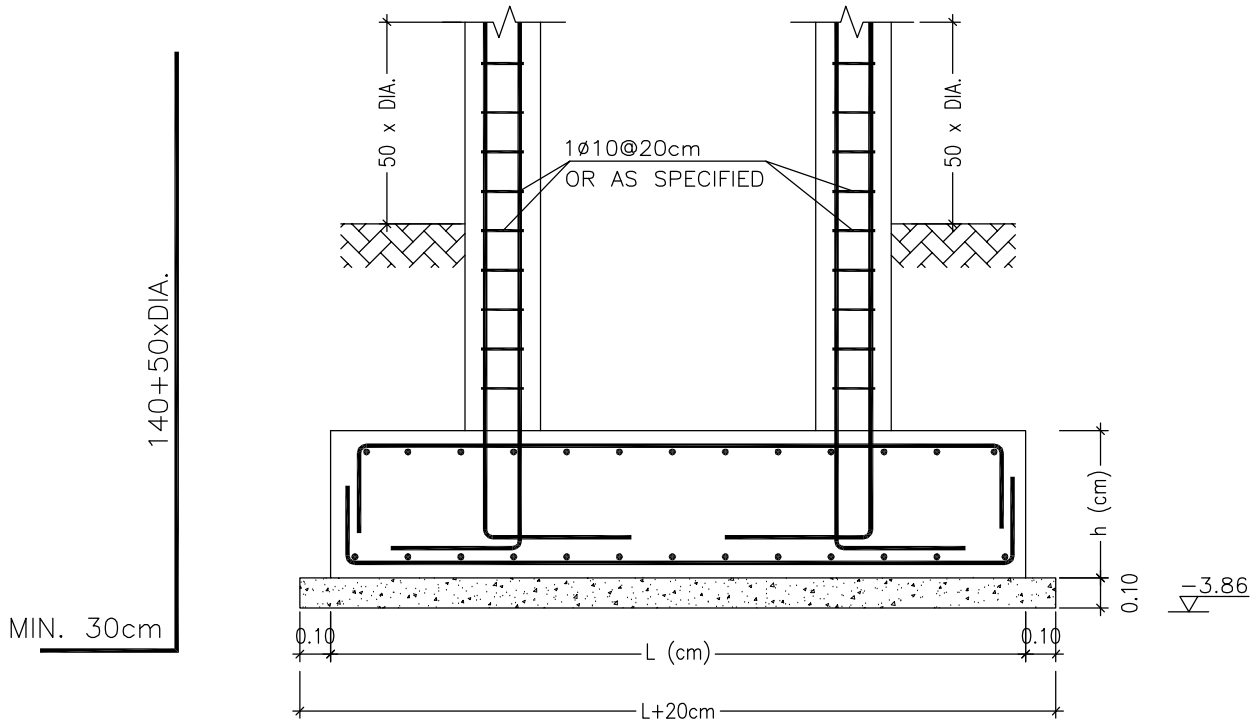
DRAWING NO.: RE-S-003

DATE: APRIL 2011 SCALE: AS SHOWN



Table of Footings (COMBINED)

Footings		Total	Footings size			Reinforcement		
FOOT. NO.	COL. NO.		L(cm)	W(cm)	h(cm)	LONG DIR. (TOP & BOT.)	SHORT DIR. (TOP & BOT.)	Shape
CF1	10,15,18,23	2	460	230	40	1∅12@15cm	1∅12@15cm	20  <div>TOP BOT. L OR W-10cm</div>  20
CF2	8,9,16,17	1	480	300	30	1∅12@20cm	1∅12@20cm	15  <div>TOP BOT. L OR W-10cm</div>  15
CF3	W1,W2	1	520	420	50	1∅12@10cm	1∅12@10cm	30  <div>TOP BOT. L OR W-10cm</div>  30
CF4	11,19,12,20 13,21,14,22	4	560	250	50	1∅12@10cm	1∅12@10cm	30  <div>TOP BOT. L OR W-10cm</div>  30



TYPICAL DETAILS FOR COMPINED FOOTING

FOUNDATIONS DETAILS (2/2)

SCALE: AS SHOWN

NOTES :-

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- ALL OF THE STRUCTURAL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE PERTINENT ARCHITECTURAL, CIVIL DEFENSE AND OTHER STRUCTURAL DRAWINGS
- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- CONCRETE SURFACE IN CONTACT WITH SOIL SHALL BE PAINTED 1-COAT PRIMER AND 2-COATS OF HOT BITUMEN.
- DESIGN CODE IS ACI 318-08.
- STEEL BARS PROVIDED BY CONTRACTOR (G420) Fy=420 MPa.
- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH Fcu AS:
  - FOR R.C. COLUMNS & WALLS =35 MPa
  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
  - FOR FOOTINGS (CAST AGAINST SOIL) =7.5 cm
  - (FOR PROTECTED CONCRETE) =5.0 cm
  - FOR COLUMNS AND BEAMS =4.0 cm
  - FOR WALLS =5.0 cm
  - FOR SLABS =2.5 cm
- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS: 150 kN/m².

FOR TENDER ONLY

CLIENT:



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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

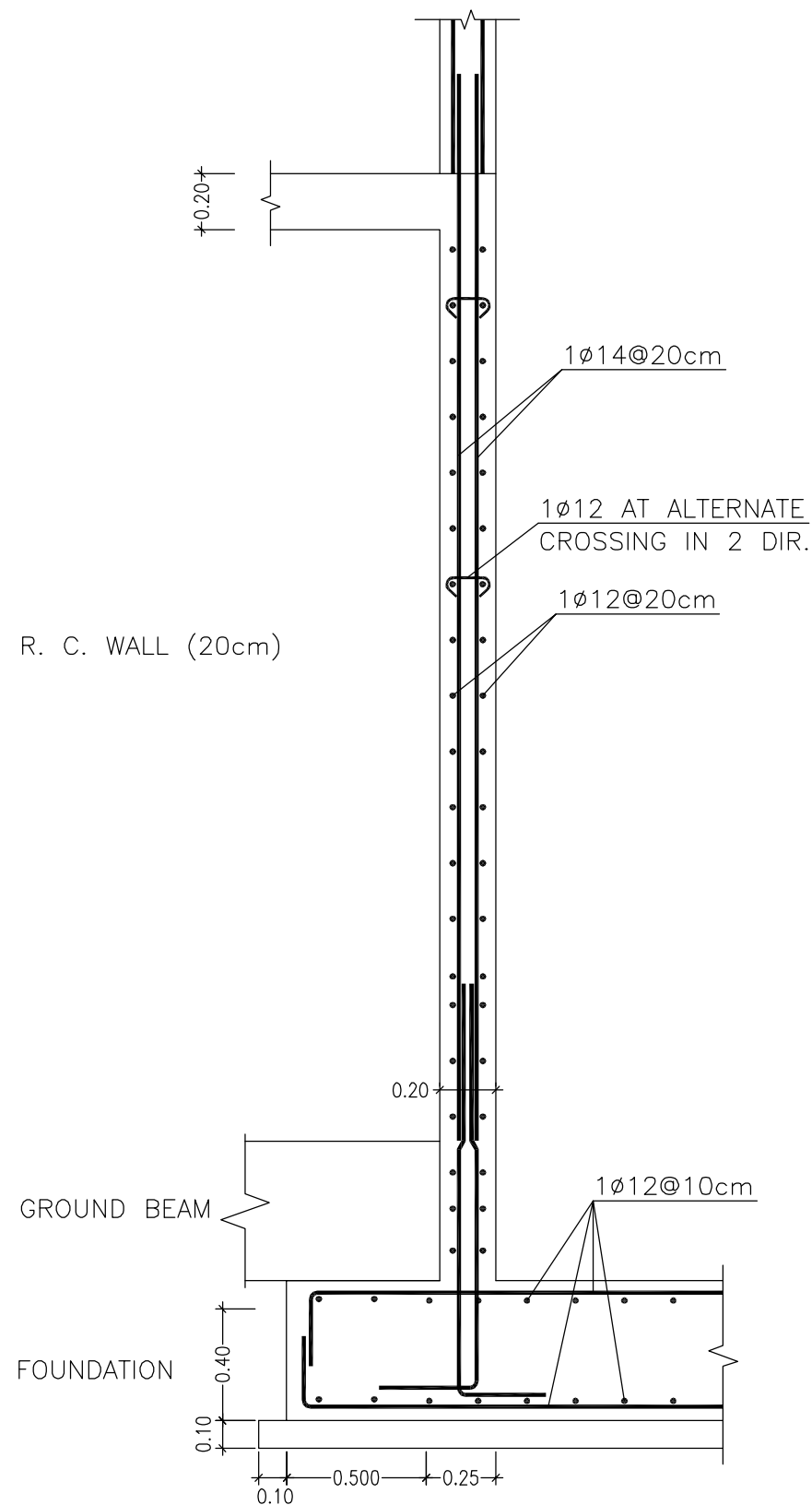
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

FOUNDATIONS DETAILS (2/2)

DRAWING NO.: RE-S-004

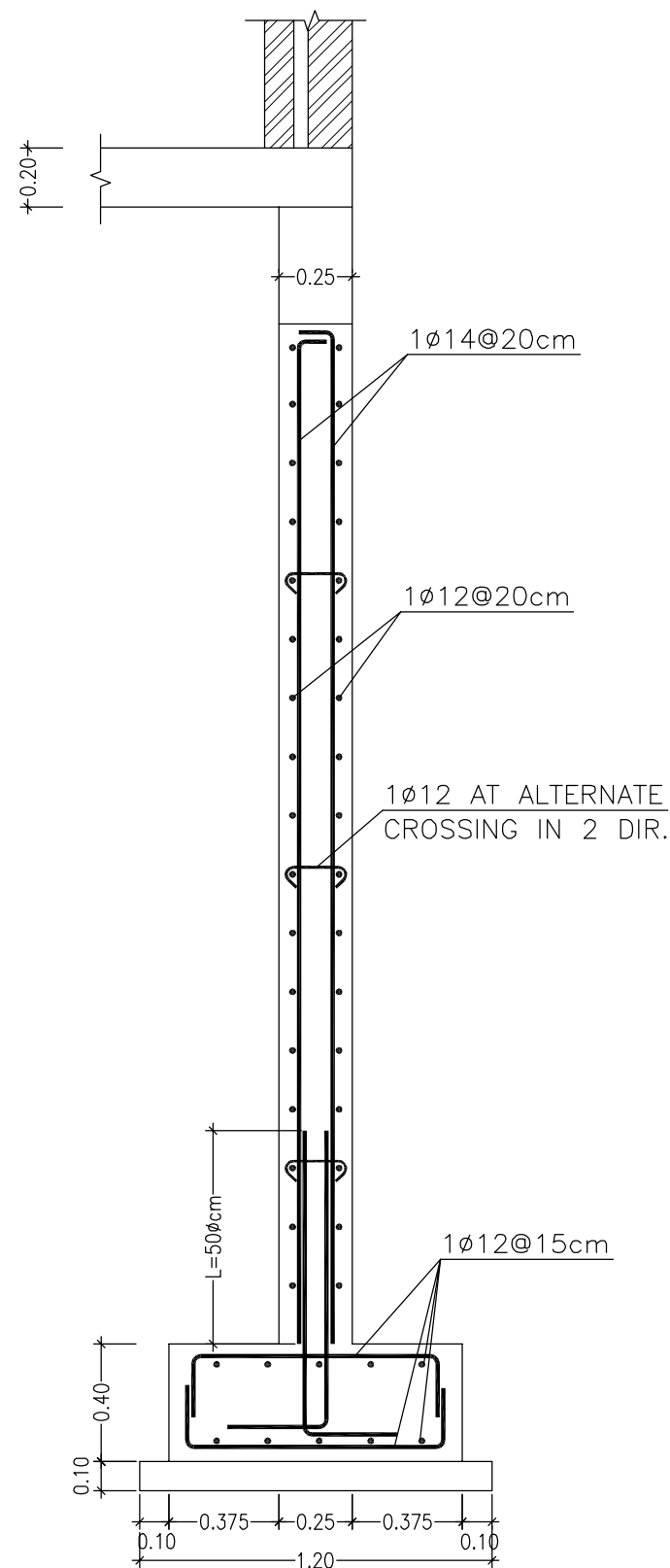
DATE: APRIL 2011 SCALE: AS SHOWN



SEC. C-C

**SHEAR WALL DETAILS**

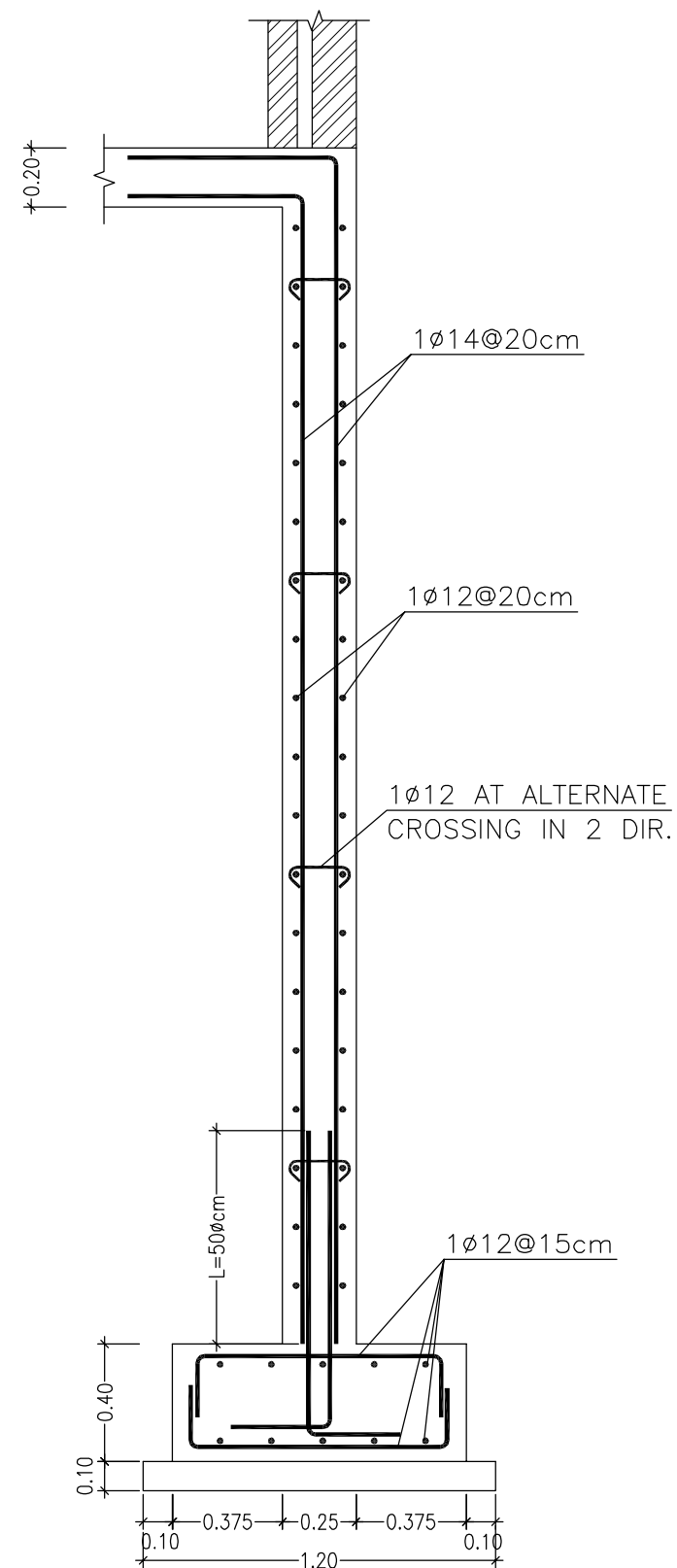
SCALE 1:25



SEC. B-B

**BASEMENT WALL DETAILS**

SCALE 1:25



SEC. A-A

**BASEMENT WALL & SHEAR WALL DETAILS**

SCALE: AS SHOWN

**NOTES :-**

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- CONCRETE SURFACE IN CONTACT WITH SOIL SHALL BE PAINTED 1-COAT PRIMER AND 2-COATS OF HOT BITUMEN.
- DESIGN CODE IS ACI 318-08.
- STEEL BARS PROVIDED BY CONTRACTOR (G420)  $F_y=420$  MPa.
- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH  $F_{cu}$  AS:
  - FOR R.C. COLUMNS & WALLS =35 MPa
  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
  - FOR FOOTINGS (CAST AGAINST SOIL) =7.5 cm
  - (FOR PROTECTED CONCRETE) =5.0 cm
  - FOR COLUMNS AND BEAMS =4.0 cm
  - FOR WALLS =5.0 cm
  - FOR SLABS =2.5 cm
- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS: 150 kN/m<sup>2</sup>.

**FOR TENDER ONLY**

**CLIENT:**



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

**EMPLOYER:**



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

**PROJECT TITLE:**

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

**CONSULTANT:**

مركز الهندسة والتخطيط  
center for engineering and planning

**BUILDING NAME:**

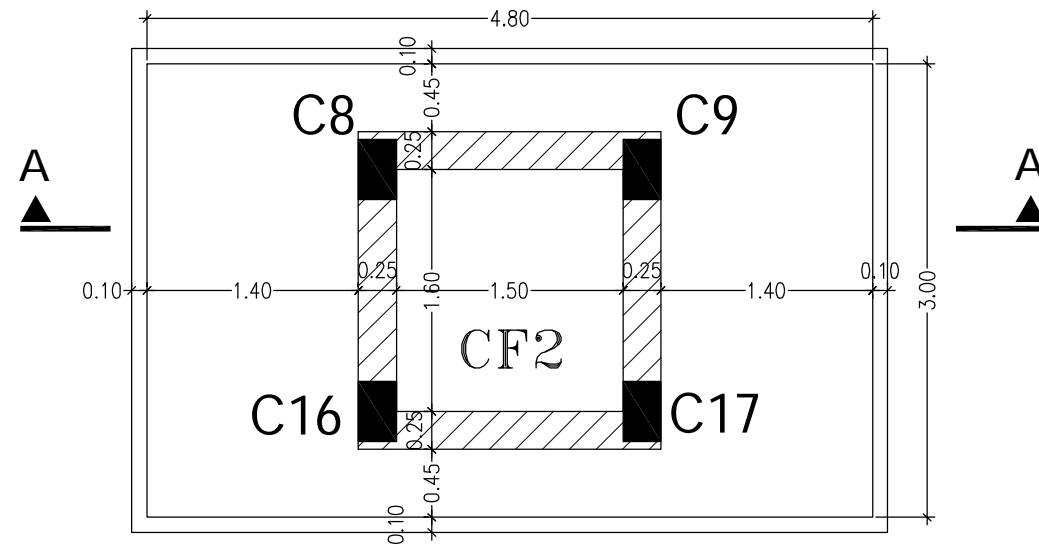
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**DRAWING TITLE:**

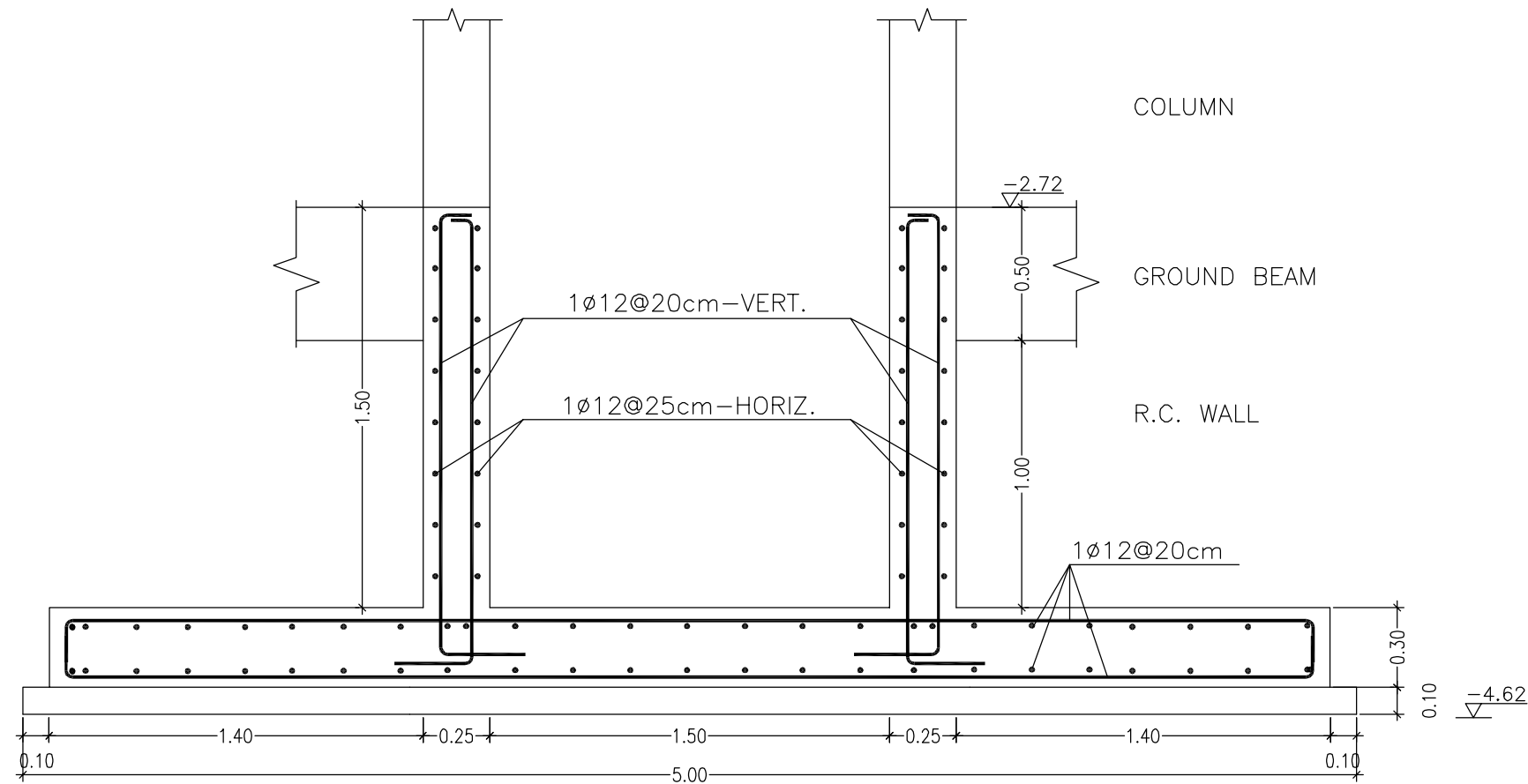
BASEMENT WALL & SHEAR WALL  
DETAILS

DRAWING NO.: RE-S-005

DATE: APRIL 2011 SCALE: AS SHOWN



ELEVATOR FOUNDATION PLAN  
SCALE 1:50



SEC. A-A  
SCALE 1:25  
ELEVATOR WALL DETAILS

ELEVATOR WALL DETAILS  
SCALE: AS SHOWN

## NOTES :-

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- DESIGN CODE IS ACI 318-08.
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- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH  $F_{cu}$  AS:
  - FOR R.C. COLUMNS & WALLS  $=35$  MPa
  - FOR R.C. SLAB  $=30$  MPa
  - FOR R.C. FOOTINGS  $=30$  MPa
  - FOR R.C. LINTELS  $=25$  MPa
  - FOR PLAIN CONCRET  $=20$  MPa
- STEEL COVERS:
  - FOR FOOTINGS (CAST AGAINST SOIL)  $=7.5$  cm
  - (FOR PROTECTED CONCRETE)  $=5.0$  cm
  - FOR COLUMNS AND BEAMS  $=4.0$  cm
  - FOR WALLS  $=5.0$  cm
  - FOR SLABS  $=2.5$  cm
- MIN. LAP FOR STEEL BAR  $= 60\text{cm}$  OR  $50 \times \text{DIA. BAR}$  WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS:  $150 \text{ kN/m}^2$ .

## FOR TENDER ONLY

### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

### PROJECT TITLE:

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IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

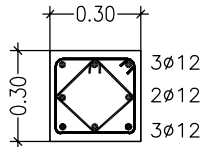
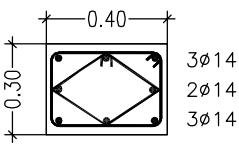
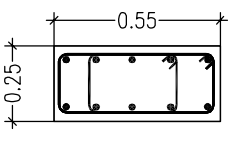
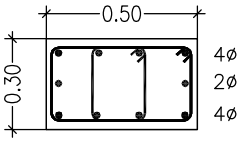
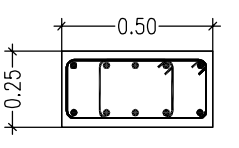
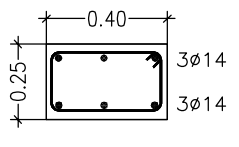
RESIDENTIAL BUILDING NO. (A6)

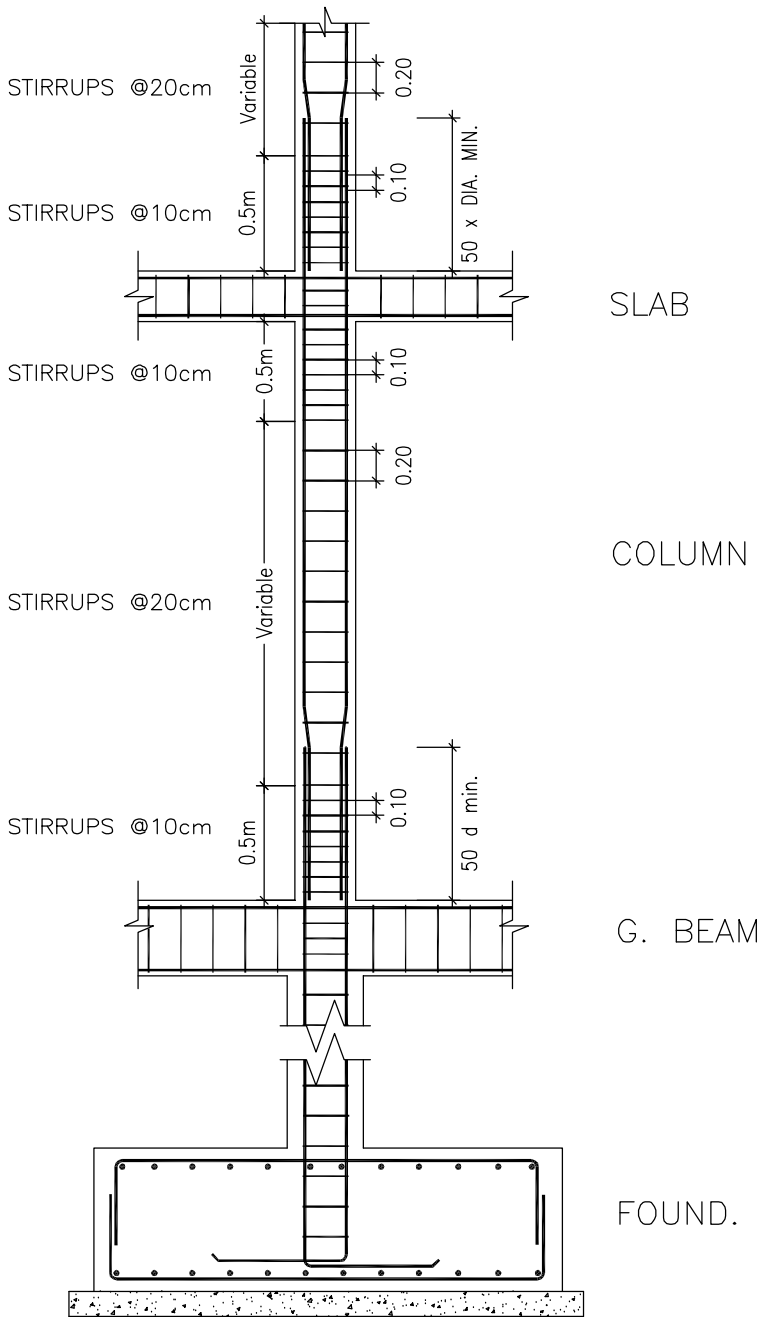
### DRAWING TITLE:

ELEVATOR WALL DETAILS

DRAWING NO.: RE-S-006

DATE: APRIL 2011 SCALE: AS SHOWN

DETAILS FOR COLUMNS NICK & COLUMNS			
FLOOR	COLUMNS NO.	TOTAL	DETAILS
COLUMN NICK	C1,7,24,29	4	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C10,15,18,23 25,26,27,28	8	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C3,4,5	3	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C2,6	2	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C11,12,13,14 19,20,21,22	8	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C8,9,16,17	4	 ST. 1Ø10@20cm—MIDDLE ST. 1Ø10@10cm—END




TYPICAL DETAILS FOR  
COLUMN STIRRUP SPACING  
NOT TO SCALE


COLUMNS DETAILS (1/3)  
SCALE: AS SHOWN

NOTES :-


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- DESIGN CODE IS ACI 318—08.
- STEEL BARS PROVIDED BY CONTRACTOR (G420)  $F_y=420$  MPa.
- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH  $F_{cu}$  AS:
  - FOR R.C. COLUMNS & WALLS =35 MPa
  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
  - FOR FOOTINGS (CAST AGAINST SOIL) =7.5 cm
  - (FOR PROTECTED CONCRETE) =5.0 cm
  - FOR COLUMNS AND BEAMS =4.0 cm
  - FOR WALLS =5.0 cm
  - FOR SLABS =2.5 cm
- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS: 200 kN/m<sup>2</sup>.

FOR TENDER ONLY

CLIENT:  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
DIP (UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE—HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10—00070416 (PACKAGE 06)

CONSULTANT:  
 مرکز الهندسة والتخطيط  
center for engineering and planning

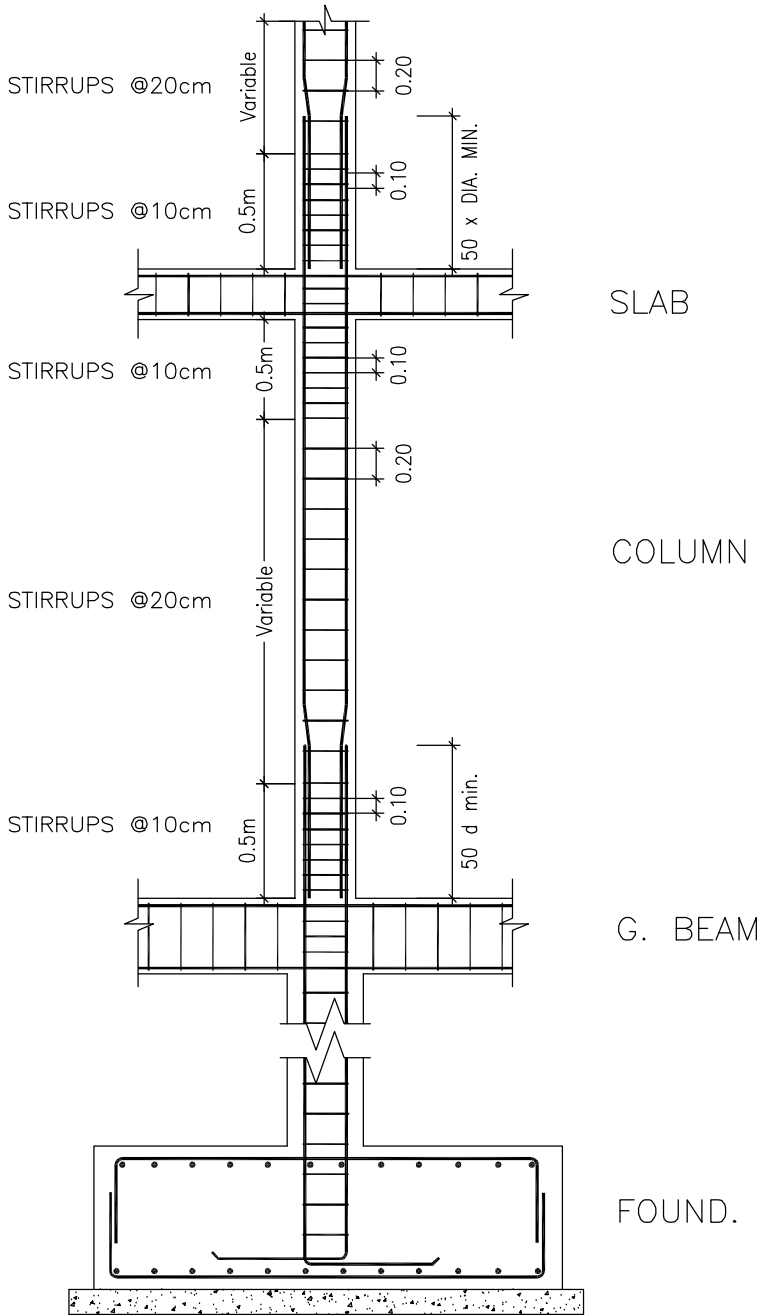
BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
COLUMNS DETAILS (1/4)

DRAWING NO.: RE-S-007

DATE: APRIL 2011 SCALE: AS SHOWN

DETAILS FOR COLUMNS NICK & COLUMNS			
FLOOR	COLUMNS NO.	TOTAL	DETAILS
BASEMENT FLOOR	C1,7,24,29	4	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C10,15,18,23 25,26,27,28	8	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C3,4,5	3	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C2,6	2	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C11,12,13,14 19,20,21,22	8	 ST. 2Ø10@20cm—MIDDLE ST. 2Ø10@10cm—END
	C8,9,16,17	4	 ST. 1Ø10@20cm—MIDDLE ST. 1Ø10@10cm—END



TYPICAL DETAILS FOR  
COLUMN STIRRUP SPACING  
NOT TO SCALE

COLUMNS DETAILS (1/3)  
SCALE: AS SHOWN

NOTES :-

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- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- CONCRETE SURFACE IN CONTACT WITH SOIL SHALL BE PAINTED 1—COAT PRIMER AND 2—COATS OF HOT BITUMEN.
- DESIGN CODE IS ACI 318—08.
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- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH  $F_{cu}$  AS:
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  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
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- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS: 200 kN/m<sup>2</sup>.

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CLIENT:  
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 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
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DIP (UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
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IN GAZA STRIP  
PROJECT NO.: PAL 10—00070416 (PACKAGE 06)

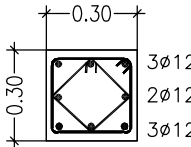
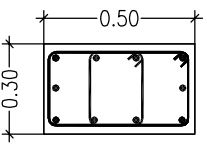
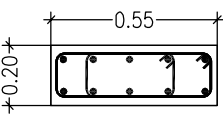
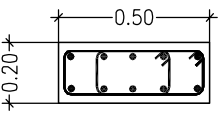
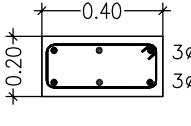
CONSULTANT:  
 مرکز الهندسة والتخطيط  
center for engineering and planning

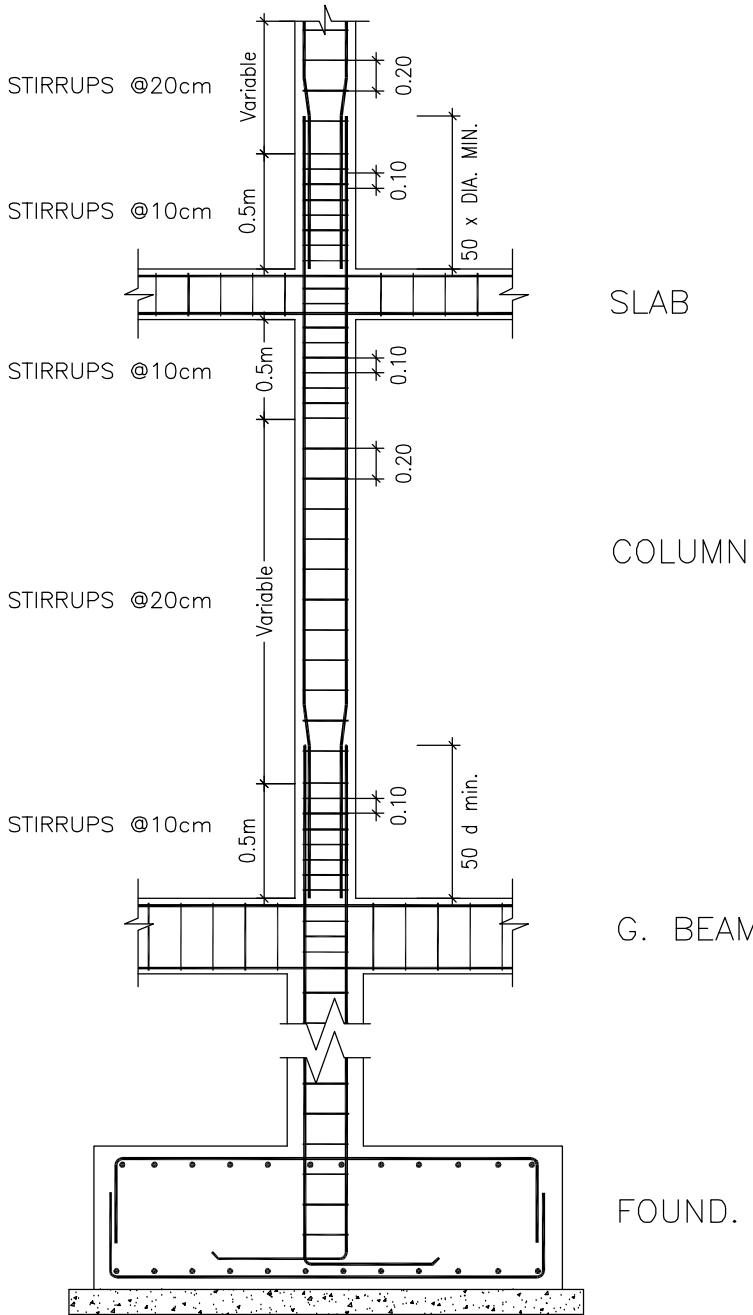
BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
COLUMNS DETAILS (2/4)

DRAWING NO.: RE-S-008

DATE: APRIL 2011 SCALE: AS SHOWN

DETAILS FOR COLUMNS NICK & COLUMNS			
FLOOR	COLUMNS NO.	TOTAL	DETAILS
GROUND & FIRST FLOOR	C1,7,10,15,18,23 24,25,26,27,28,29	12	 ST. 2ø10@20cm-MIDDLE ST. 2ø10@10cm-END
	C2,6	2	 ST. 2ø10@20cm-MIDDLE ST. 2ø10@10cm-END
	C3,5	2	 ST. 2ø10@20cm-MIDDLE ST. 2ø10@10cm-END
	C4,11,12,13,14 19,20,21,22	9	 ST. 2ø10@20cm-MIDDLE ST. 2ø10@10cm-END
	C8,9,16,17	4	 ST. 1ø10@20cm-MIDDLE ST. 1ø10@10cm-END




TYPICAL DETAILS FOR  
COLUMN STIRRUP SPACING  
NOT TO SCALE


COLUMNS DETAILS (2/3)  
SCALE: AS SHOWN

NOTES :-


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  - FOR R.C. COLUMNS & WALLS =35 MPa
  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
  - FOR FOOTINGS (CAST AGAINST SOIL) =7.5 cm
  - (FOR PROTECTED CONCRETE) =5.0 cm
  - FOR COLUMNS AND BEAMS =4.0 cm
  - FOR WALLS =5.0 cm
  - FOR SLABS =2.5 cm
- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS: 200 kN/m<sup>2</sup>.

FOR TENDER ONLY

CLIENT:  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
DIP (UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

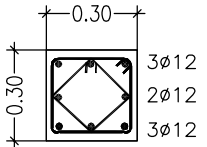
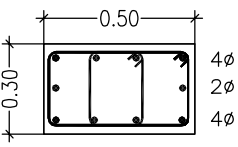
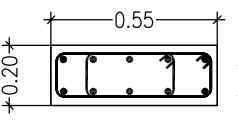
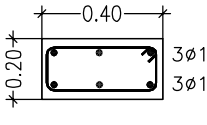
CONSULTANT:  
 مرکز الهندسة والتخطيط  
center for engineering and planning

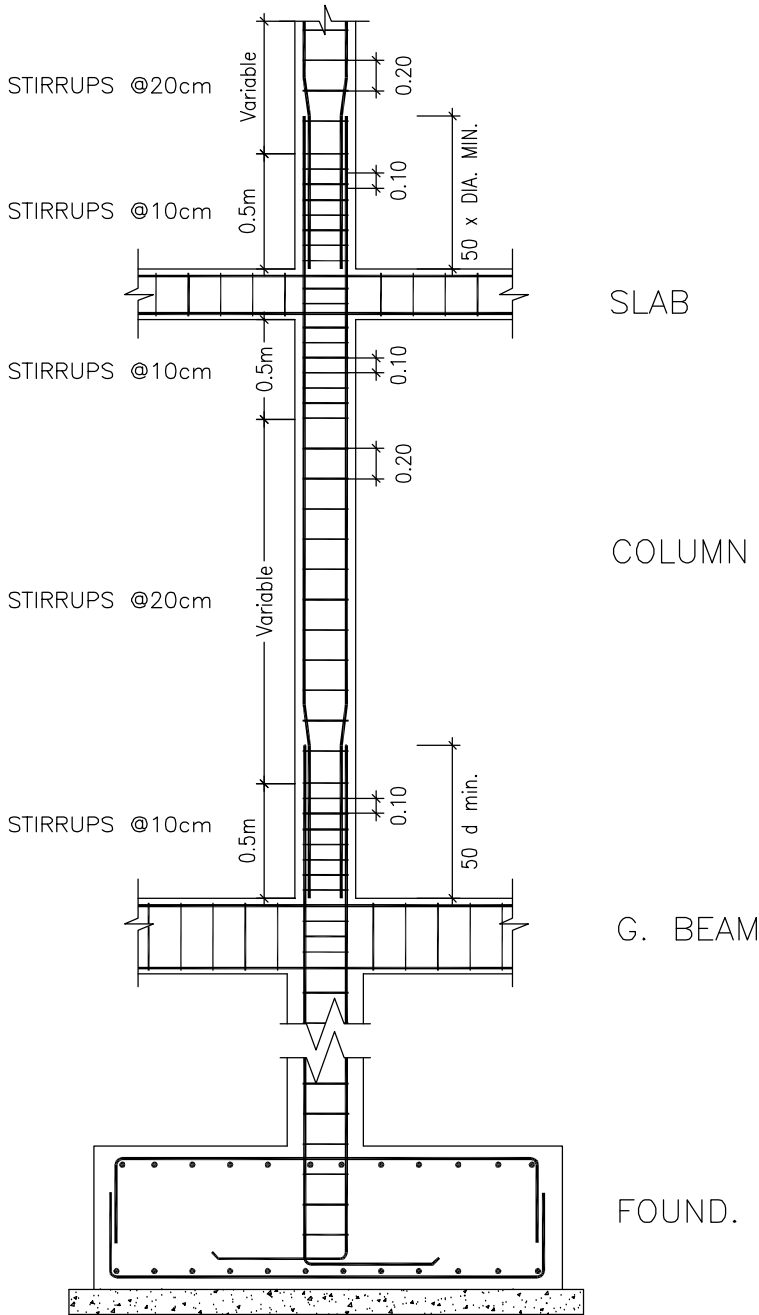
BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
COLUMNS DETAILS (3/4)

DRAWING NO.: RE-S-009

DATE: APRIL 2011 SCALE: AS SHOWN

DETAILS FOR COLUMNS NICK & COLUMNS			
FLOOR	COLUMNS NO.	TOTAL	DETAILS
SECOND & THIRD FLOOR	C1,7,10,15,18,23 24,25,26,27,28,29	12	 <div>3Ø12 2Ø12 3Ø12</div> <div>ST. 2Ø10@20cm-MIDDLE ST. 2Ø10@10cm-END</div>
	C2,6	2	 <div>4Ø14 2Ø14 4Ø14</div> <div>ST. 2Ø10@20cm-MIDDLE ST. 2Ø10@10cm-END</div>
	C3,5	2	 <div>5Ø14 5Ø14</div> <div>ST. 2Ø10@20cm-MIDDLE ST. 2Ø10@10cm-END</div>
	C4,8,9,11,12,13,14 16,17,19,20,21,22	13	 <div>3Ø14 3Ø14</div> <div>ST. 1Ø10@20cm-MIDDLE ST. 1Ø10@10cm-END</div>



TYPICAL DETAILS FOR  
COLUMN STIRRUP SPACING  
NOT TO SCALE

COLUMNS DETAILS (3/3)  
SCALE: AS SHOWN

### NOTES :-

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- CONCRETE SURFACE IN CONTACT WITH SOIL SHALL BE PAINTED 1-COAT PRIMER AND 2-COATS OF HOT BITUMEN.
- DESIGN CODE IS ACI 318-08.
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- CONCRETE PROVIDED BY CONTRACTOR FOR COMPRESSIVE STRENGTH  $F_{cu}$  AS:
  - FOR R.C. COLUMNS & WALLS =35 MPa
  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
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- SOIL BEARING CAPACITY IS: 200 kN/m<sup>2</sup>.

### FOR TENDER ONLY

#### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

#### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

#### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

#### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

#### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

#### DRAWING TITLE:

COLUMNS DETAILS (4/4)

#### DRAWING NO.: RE-S-010

DATE: APRIL 2011 SCALE: AS SHOWN





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CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

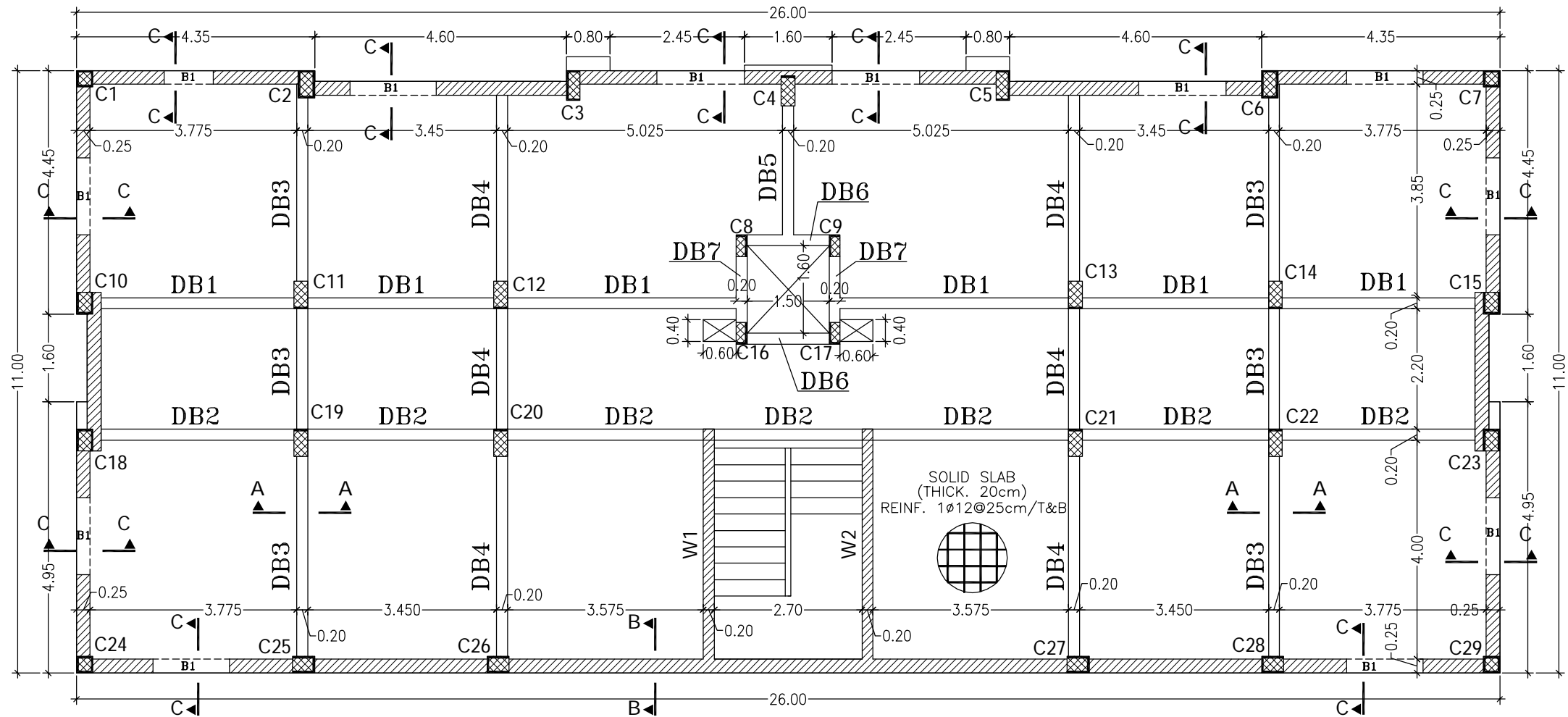
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

BASEMENT SLAB DETAILS

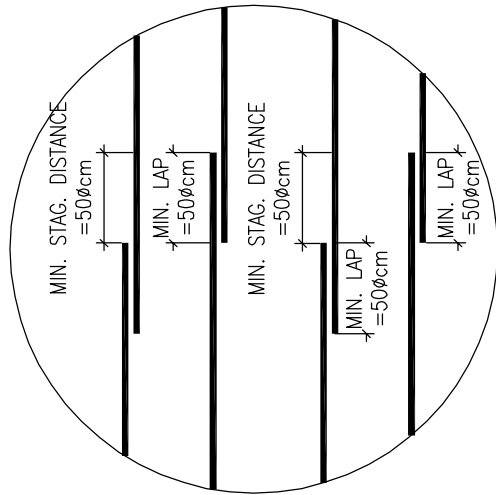
DRAWING NO.: RE-S-012

DATE: APRIL 2011 SCALE: AS SHOWN



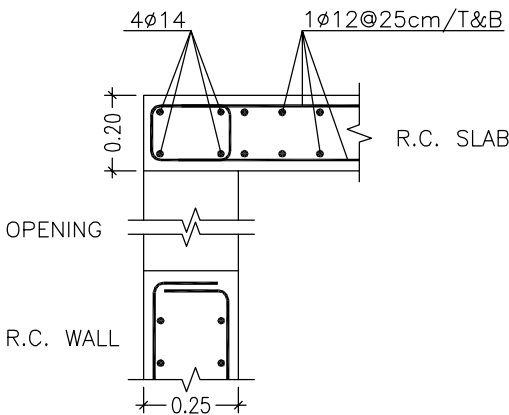
BASEMENT SLAB DETAILS

SCALE 1:100



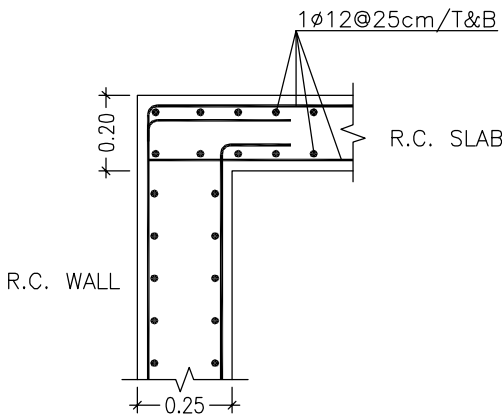
STAGGERING REINFORCEMENT DETAILS

NOT TO SCALE



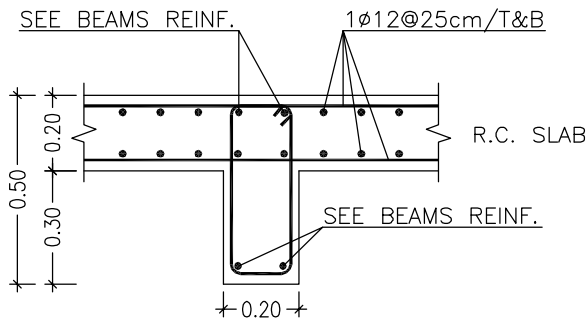
SECTION C-C (B1)

SCALE 1:20



SECTION B-B

SCALE 1:20

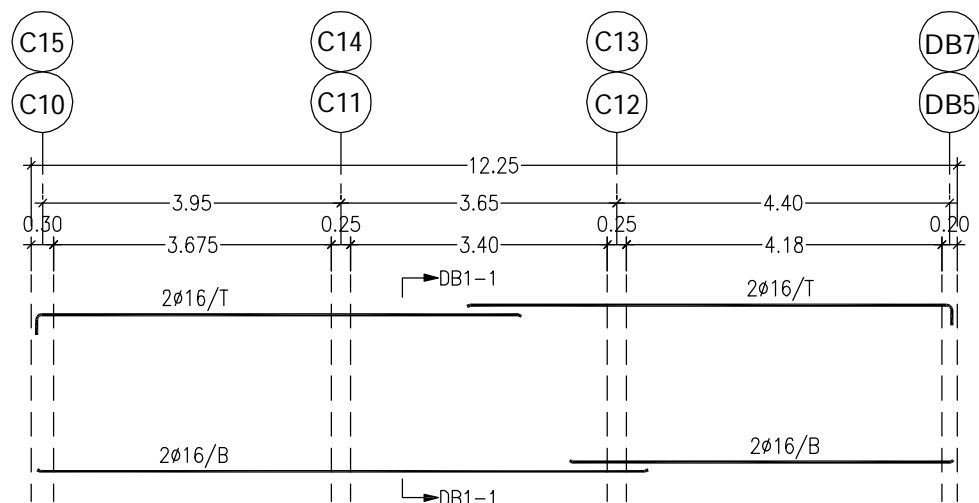


SECTION A-A

SCALE 1:20

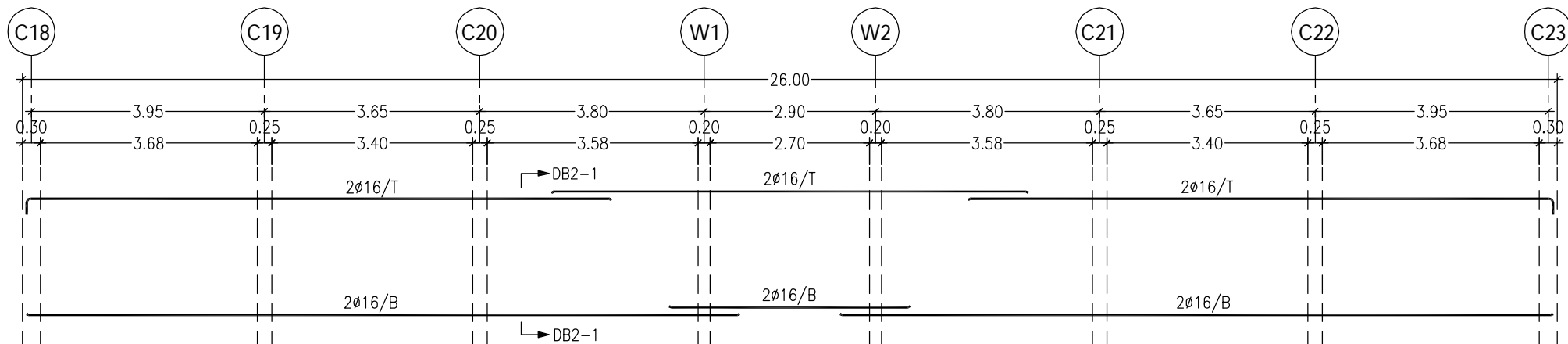
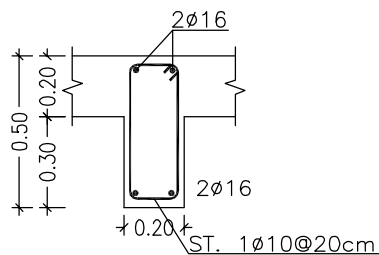
BASEMENT SLAB DETAILS

SCALE: AS SHOWN



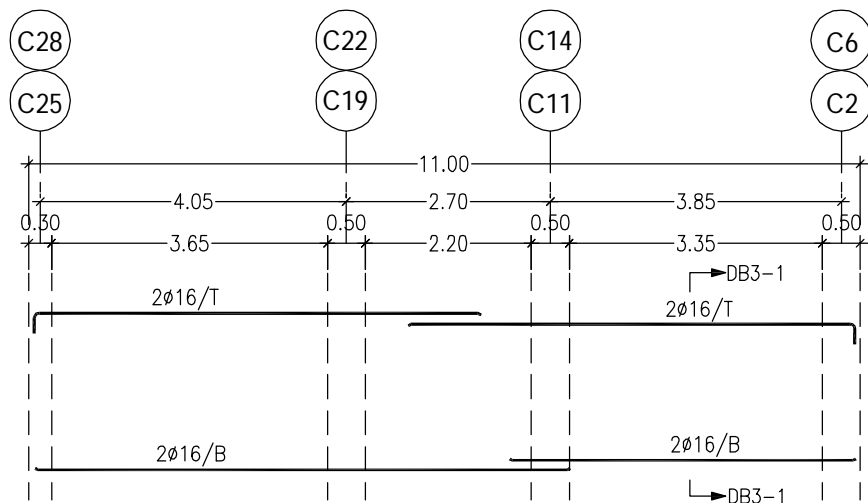
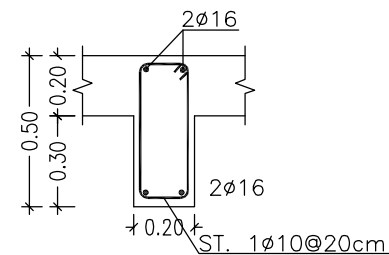
REINF. FOR BEAM NO. (DB1)  
SCALE: 1:100

SECTION: DB1-1  
SCALE: 1:25



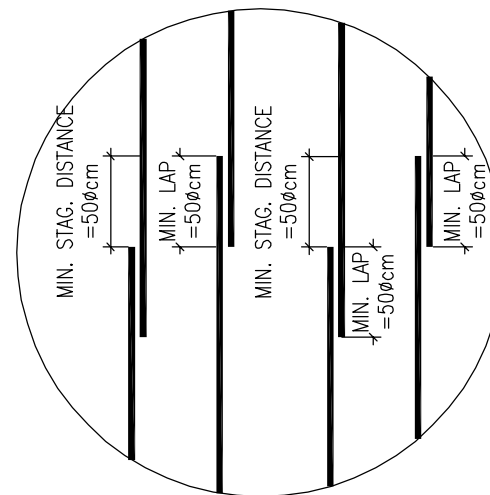
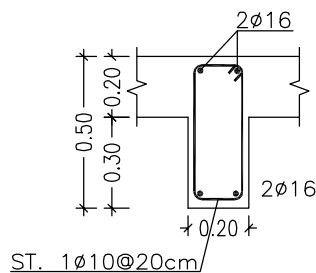
REINF. FOR BEAM NO. (DB2)  
SCALE: 1:100

SECTION: DB2-1  
SCALE: 1:25



REINF. FOR BEAM NO. (DB3)  
SCALE: 1:100

SECTION: DB3-1  
SCALE: 1:25



STAGGERING REINFORCEMENT DETAILS  
NOT TO SCALE

BEAMS DETAILS OF BASEMENT SLAB (1/2)  
SCALE: AS SHOWN

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## FOR TENDER ONLY

### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

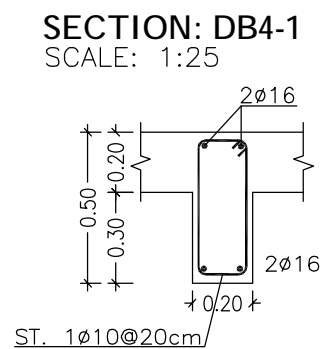
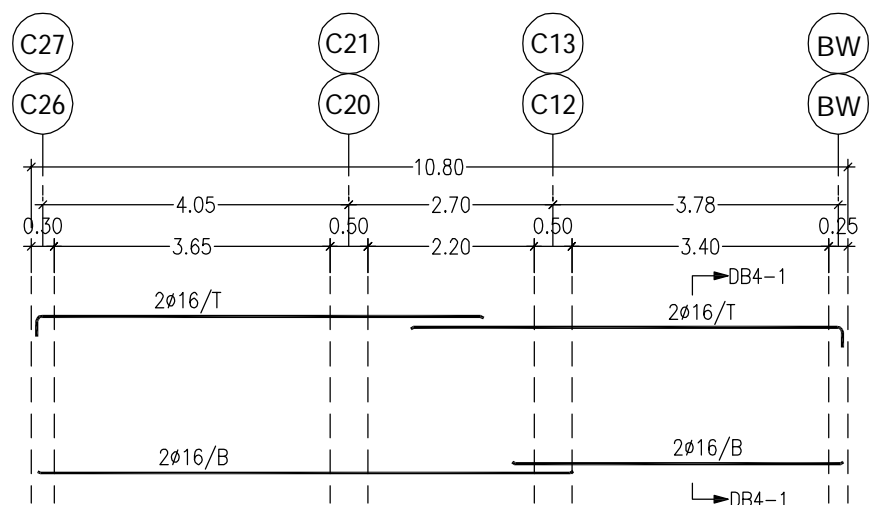
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

BEAMS DETAILS OF  
BASEMENT SLAB (1/2)

### DRAWING NO.: RE-S-013

DATE: APRIL 2011 SCALE: AS SHOWN



REINF. FOR BEAM NO. (DB4)  
SCALE: 1:100

BEAMS REINFORCEMENT TABLE  
FOR GROUND SLAB

NO.	DIM		BOTTOM REINF.	TOP REINF.	STIRRUPS
	W.	H.			
DB5	20	50	2Ø16	2Ø16	1Ø10/20cm
DB6	20	50	2Ø16	2Ø16	1Ø10/20cm
DB7	20	50	2Ø16	2Ø16	1Ø10/20cm


BEAMS DETAILS OF BASEMENT SLAB (2/2)  
SCALE: AS SHOWN

NOTES :-

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- DESIGN CODE IS ACI 318-08.
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  - FOR R.C. SLAB =30 MPa
  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
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  - (FOR PROTECTED CONCRETE) =5.0 cm
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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:




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PROGRAMME OF ASSISTANCE TO THE  
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PROJECT TITLE:

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IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:



مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

BEAMS DETAILS OF  
BASEMENT SLAB (2/2)

DRAWING NO.: RE-S-014

DATE: APRIL 2011 SCALE: AS SHOWN

NOTES :-

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BUILDING NAME:

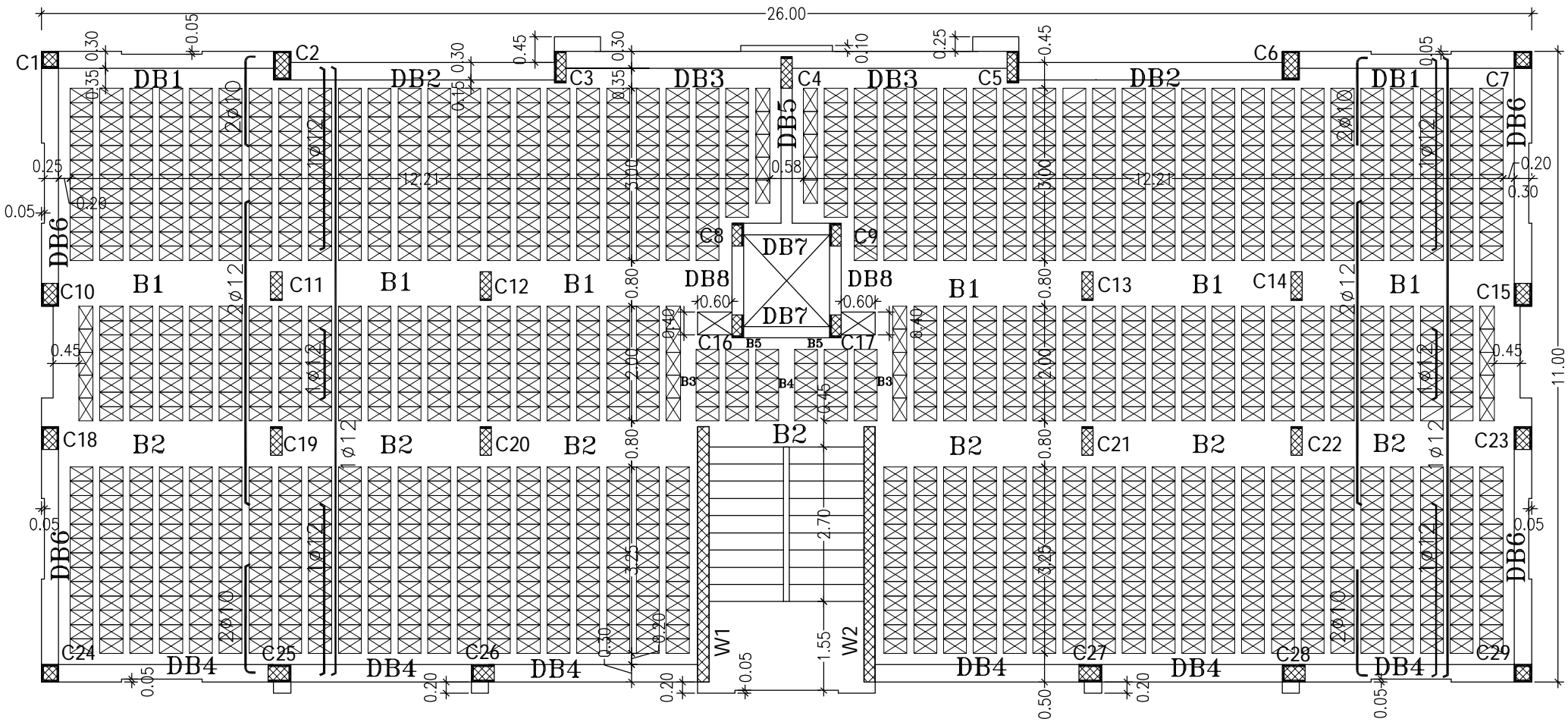
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

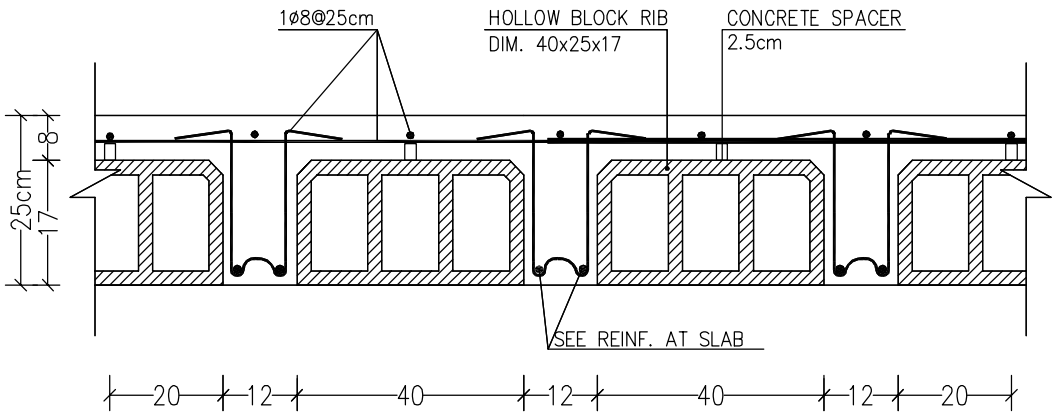
TYPICAL SLAB DETAILS

DRAWING NO.: RE-S-015

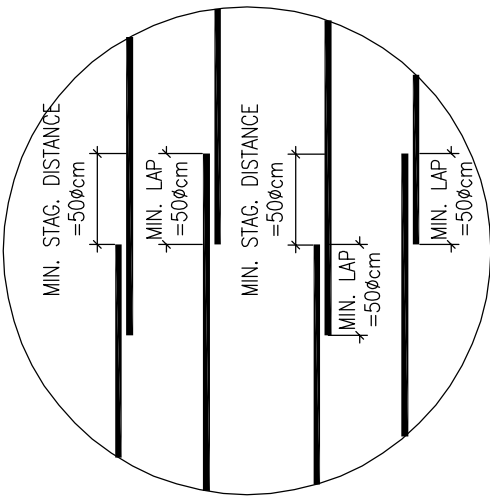
DATE: APRIL 2011 SCALE: AS SHOWN



REINF. DETAILS FOR TYPICAL SLAB  
SCALE 1:100

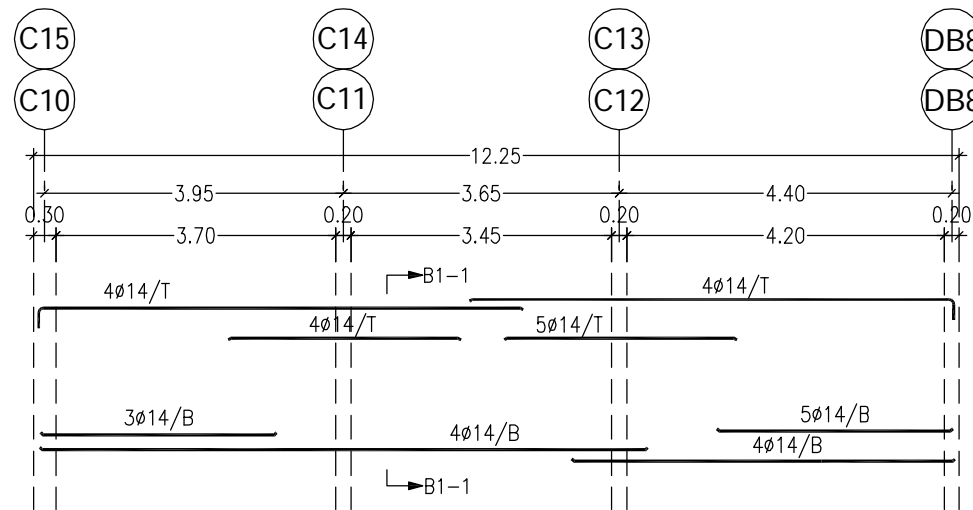


SECTION DETAIL FOR RIBS  
NOT TO SCALE



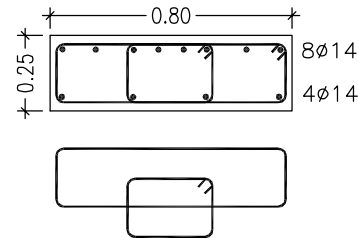
STAGGERING REINFORCEMENT DETAILS  
NOT TO SCALE

TYPICAL SLAB DETAILS  
SCALE: AS SHOWN

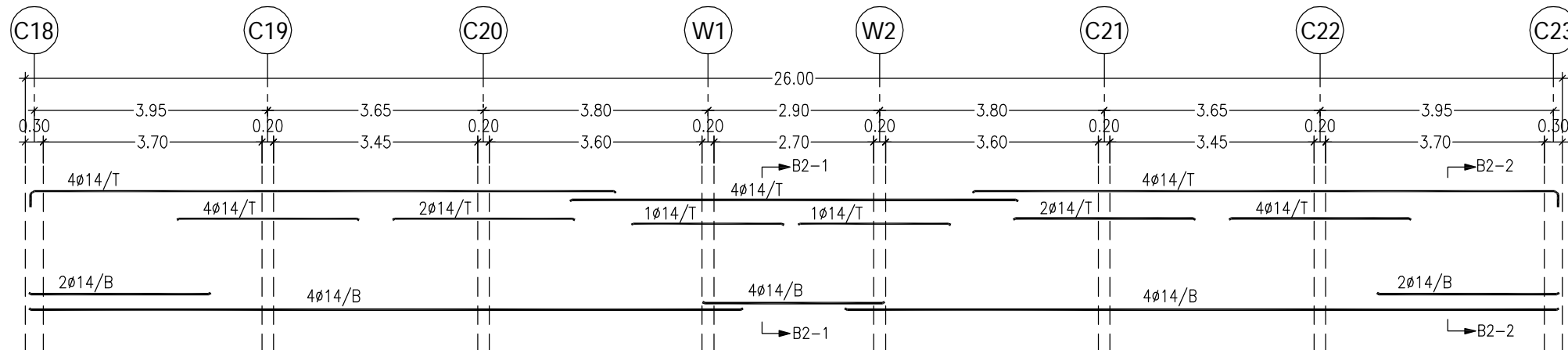


REINF. FOR BEAM NO. (B1)  
SCALE: 1:100

SECTION: B1-1  
SCALE: 1:25

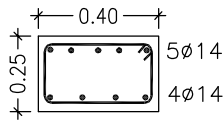


ST. 2Ø10@10cm-ENDS  
ST. 2Ø10@20cm-MIDDLE



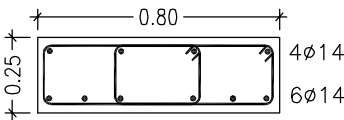
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SCALE: 1:100

SECTION: B2-1  
SCALE: 1:25

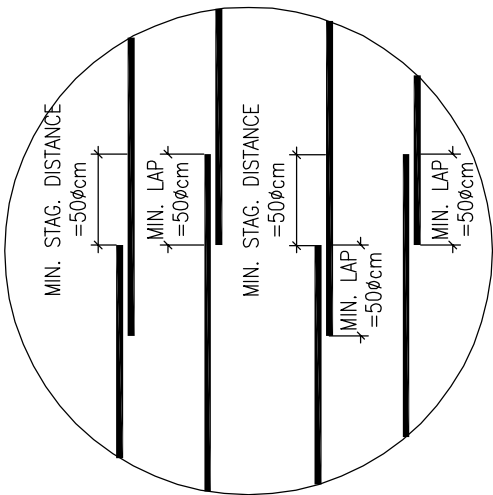


ST. 1Ø10@10cm-ENDS  
ST. 1Ø10@20cm-MIDDLE

SECTION: B2-2  
SCALE: 1:25



ST. 2Ø10@10cm-ENDS  
ST. 2Ø10@20cm-MIDDLE



STAGGERING REINFORCEMENT DETAILS  
NOT TO SCALE

BEAMS DETAILS OF TYPICAL SLAB (1/3)  
SCALE: AS SHOWN

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CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

BEAMS DETAILS OF  
TYPICAL SLAB (1/3)

DRAWING NO.: RE-S-016

DATE: APRIL 2011 SCALE: AS SHOWN

## NOTES :-

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- DESIGN CODE IS ACI 318-08.
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  - FOR R.C. FOOTINGS =30 MPa
  - FOR R.C. LINTELS =25 MPa
  - FOR PLAIN CONCRET =20 MPa
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  - FOR FOOTINGS (CAST AGAINST SOIL) =7.5 cm
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### CONSULTANT:



مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

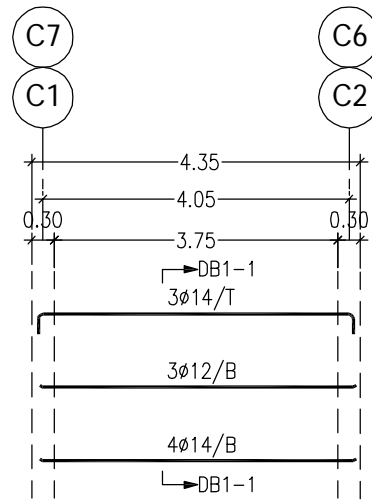
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

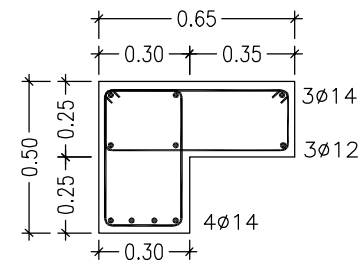
BEAMS DETAILS OF  
TYPICAL SLAB (2/3)

### DRAWING NO.: RE-S-017

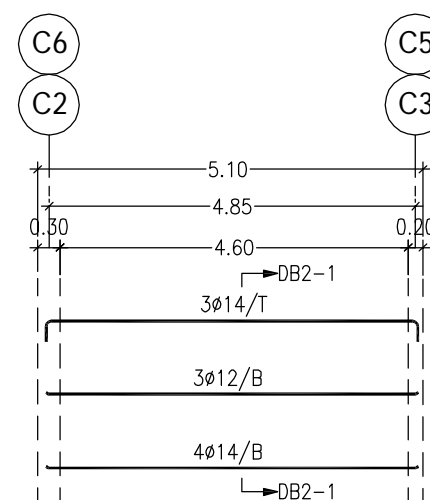
DATE: APRIL 2011 SCALE: AS SHOWN



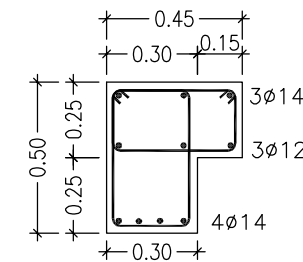
SECTION: DB1-1  
SCALE: 1:25



ST. 2ø10@20cm



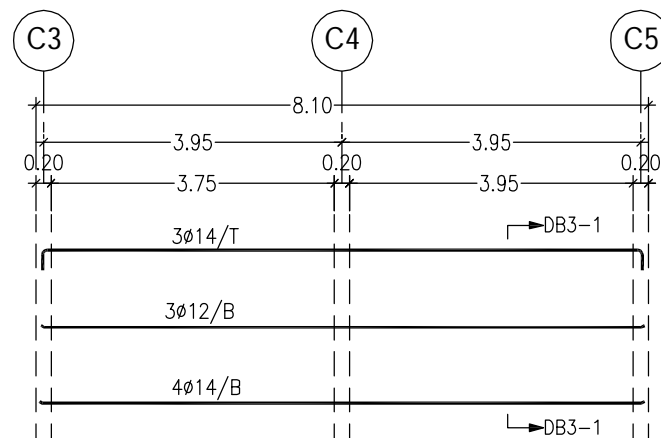
SECTION: DB2-1  
SCALE: 1:25



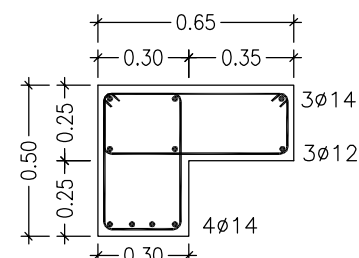
ST. 2ø10@20cm

### REINF. FOR BEAM NO. (DB1)

SCALE: 1:100



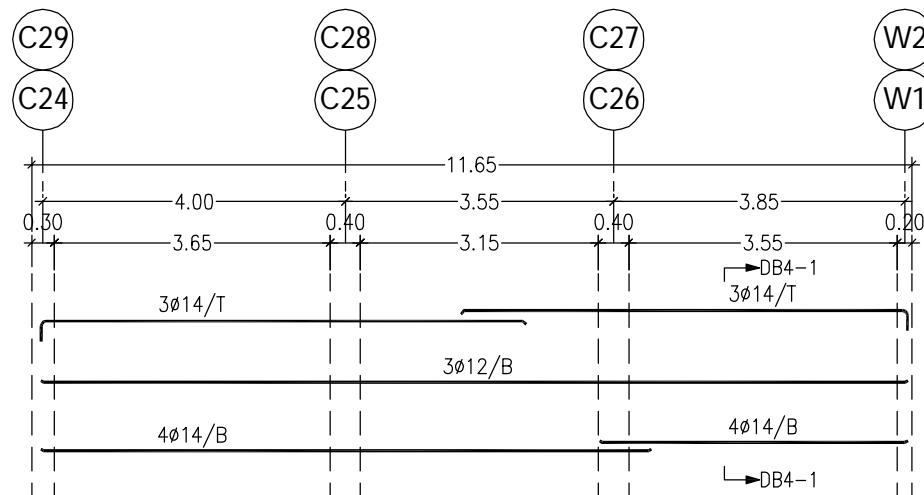
SECTION: DB3-1  
SCALE: 1:25



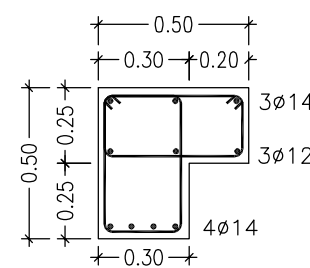
ST. 2ø10@20cm

### REINF. FOR BEAM NO. (DB3)

SCALE: 1:100



SECTION: DB4-1  
SCALE: 1:25



ST. 2ø10@20cm

### REINF. FOR BEAM NO. (DB4)

SCALE: 1:100


## BEAMS DETAILS OF TYPICAL SLAB (2/3)


SCALE: AS SHOWN

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

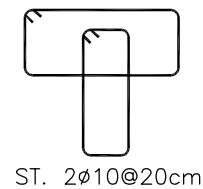
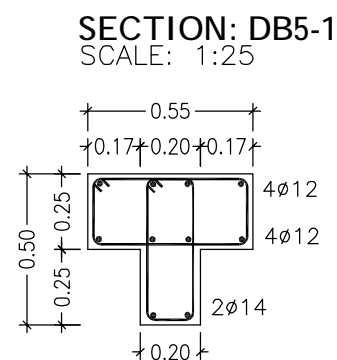
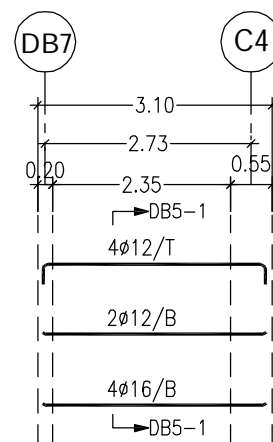
CONSULTANT:  
 مرکز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
BEAMS DETAILS OF  
TYPICAL SLAB (3/3)

DRAWING NO.: RE-S-018

DATE: APRIL 2011 | SCALE: AS SHOWN



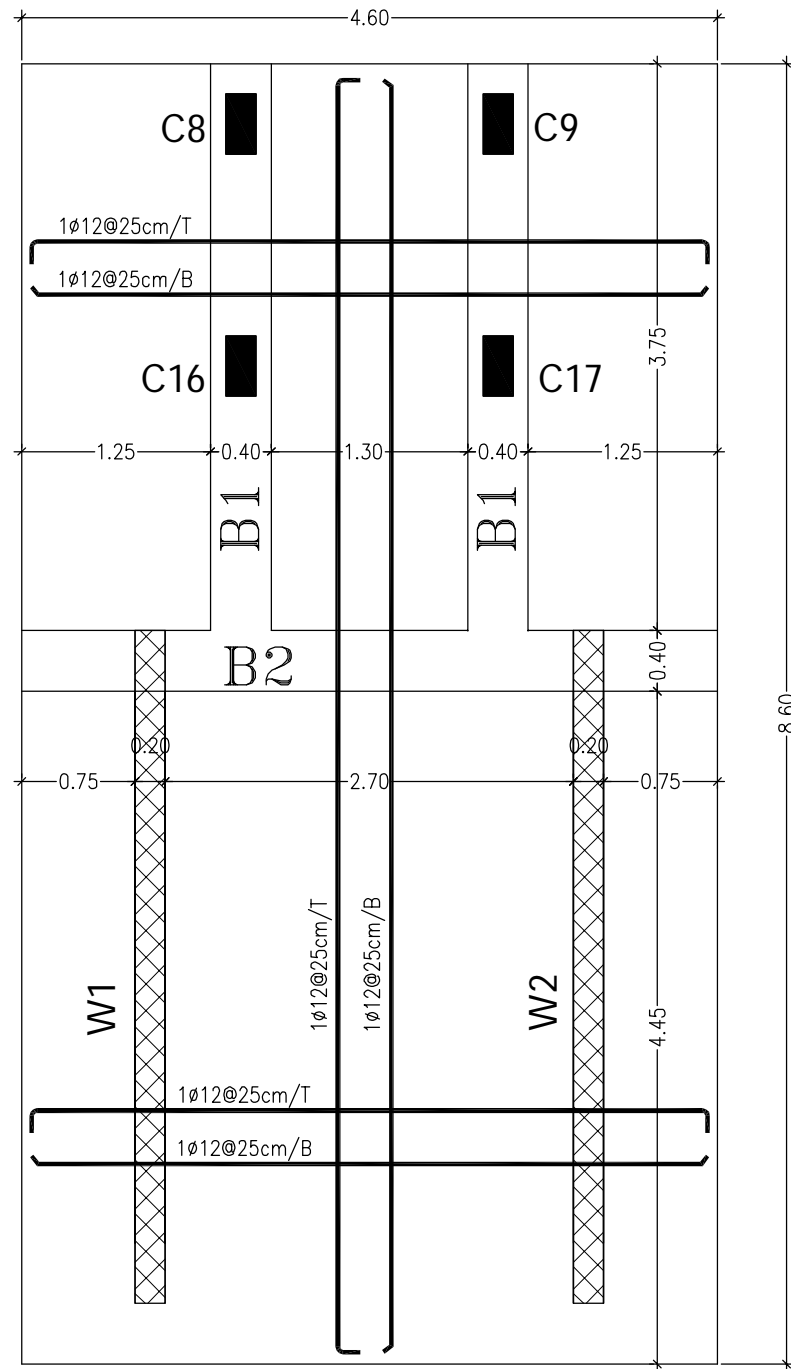
REINF. FOR BEAM NO. (DB5)  
SCALE: 1:100

BEAMS REINFORCEMENT TABLE  
FOR TYPICAL SLAB

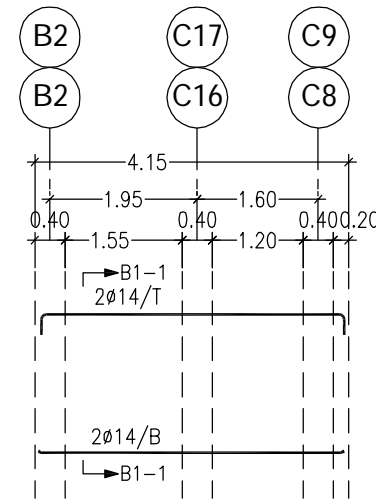
NO.	DIM		BOTTOM REINF.	TOP REINF.	STIRRUPS
	W.	H.			
DB6	30	50	4φ16	2φ12	1φ10/20cm
DB7	20	40	2φ14	2φ12	1φ10/20cm
DB8	20	40	2φ14	2φ12	1φ10/20cm
B3	25	25	2φ12	2φ12	1φ10/20cm
B4	25	25	2φ12	2φ12	1φ10/20cm
B5	20	25	2φ14	2φ12	1φ10/20cm

BEAMS DETAILS OF TYPICAL SLAB (3/3)

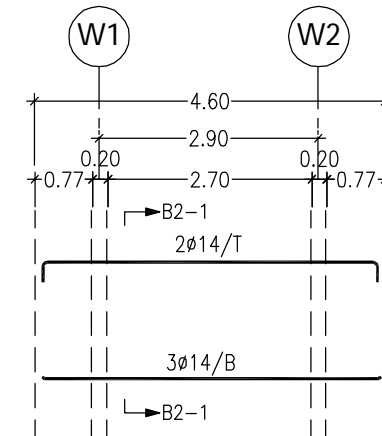
SCALE: AS SHOWN



STAIRS ROOF SLAB DETAILS  
SCALE 1:50

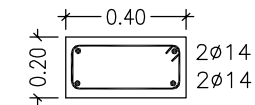


REINF. FOR BEAM NO. (B1)  
SCALE: 1:100



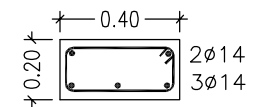
REINF. FOR BEAM NO. (B2)  
SCALE: 1:100

SECTION: B1-1  
SCALE: 1:25



ST. 1 $\phi$ 10@7.5cm-ENDS  
ST. 1 $\phi$ 10@15cm-MIDDLE

SECTION: B2-1  
SCALE: 1:25



ST. 1 $\phi$ 10@7.5cm-ENDS  
ST. 1 $\phi$ 10@15cm-MIDDLE

STAIRS ROOF SLAB DETAILS  
SCALE: AS SHOWN

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:



مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

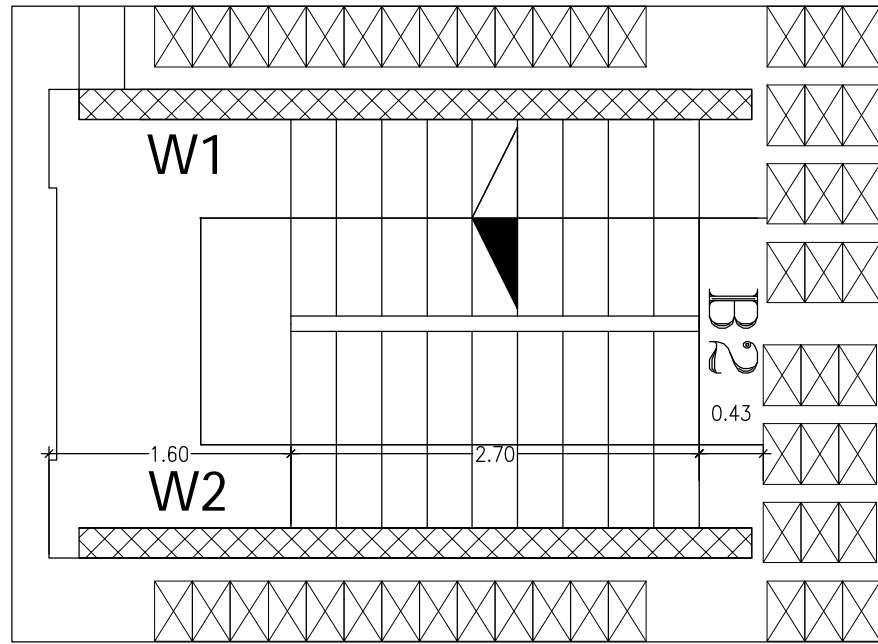
### DRAWING TITLE:

STAIRS ROOF SLAB DETAILS

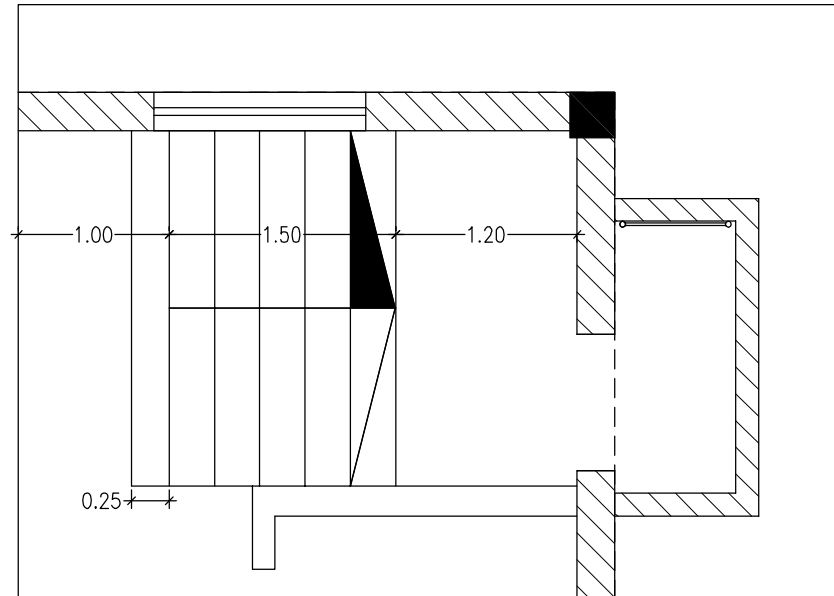
### DRAWING NO.: RE-S-019

DATE: APRIL 2011 SCALE: AS SHOWN

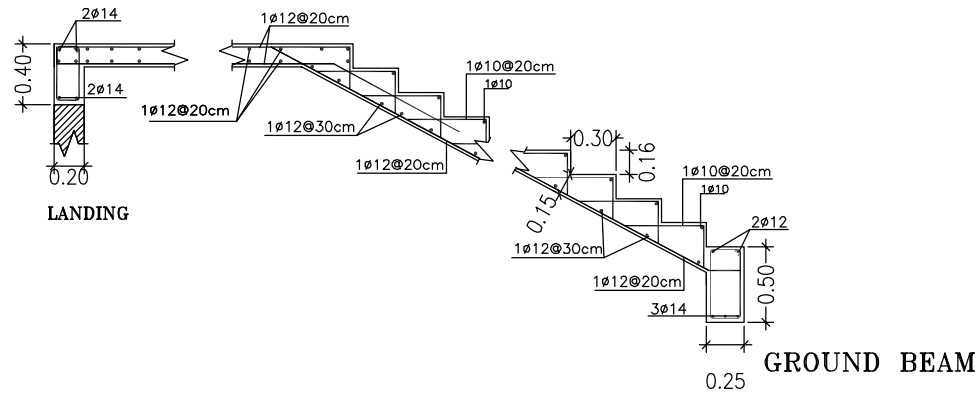




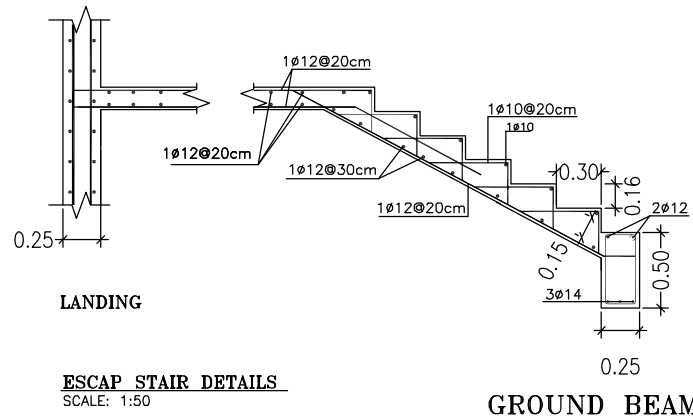
**GENERAL DETAILS OF STAIR**  
SCALE: 1:50



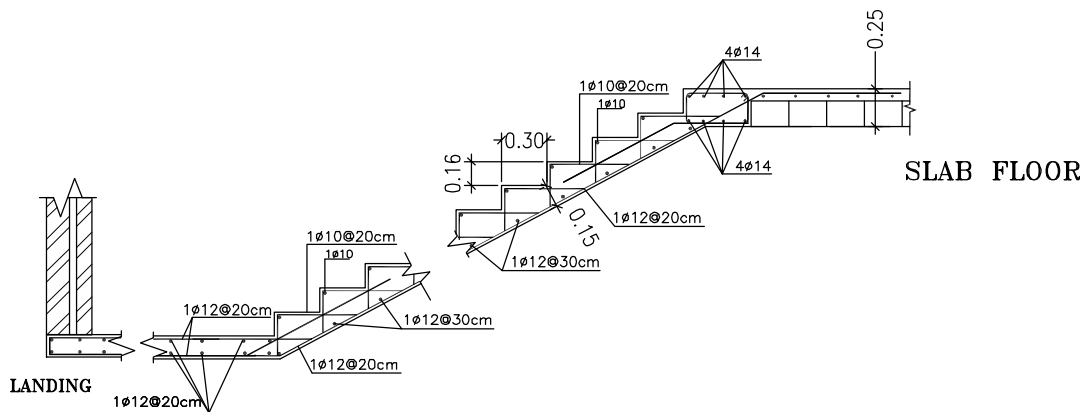
**GENERAL DETAILS OF ESCAP STAIR**  
SCALE: 1:50



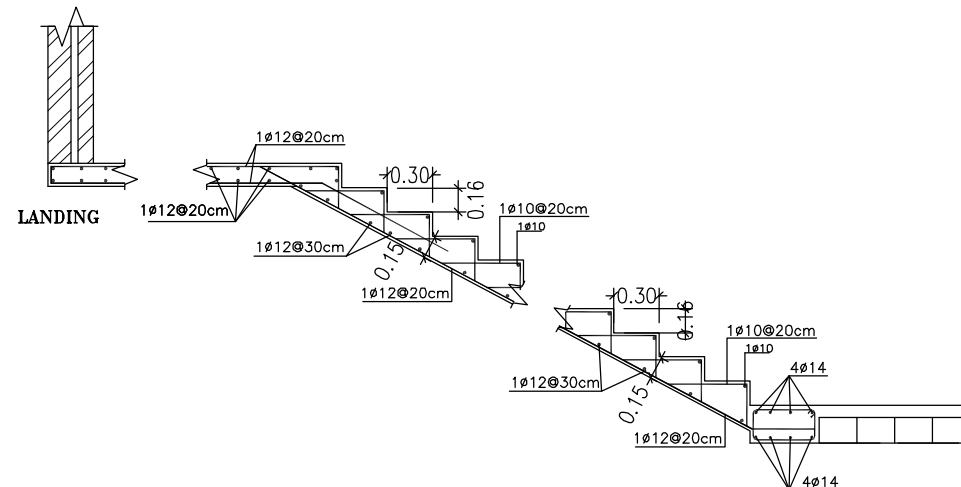
**GENERAL DETAILS FROM GROUND BEAM TO LANDING**  
SCALE: 1:50



**ESCAP STAIR DETAILS**  
SCALE: 1:50



**GENERAL DETAILS FROM LANDING TO SLAB FLOOR**  
SCALE: 1:50



**GENERAL DETAILS FROM SLAB FLOOR TO LANDING**  
SCALE: 1:50

**SLAB FLOOR  
STRUCTURAL DETAILS FOR STAIRS**  
SCALE: AS SHOWN

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:



مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

STRUCTURAL DETAILS FOR STAIRS

### DRAWING NO.: RE-S-020

DATE: APRIL 2011 SCALE: AS SHOWN

EMPLOYER:



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**MECHANICAL DRAWINGS**

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## CONSULTANT

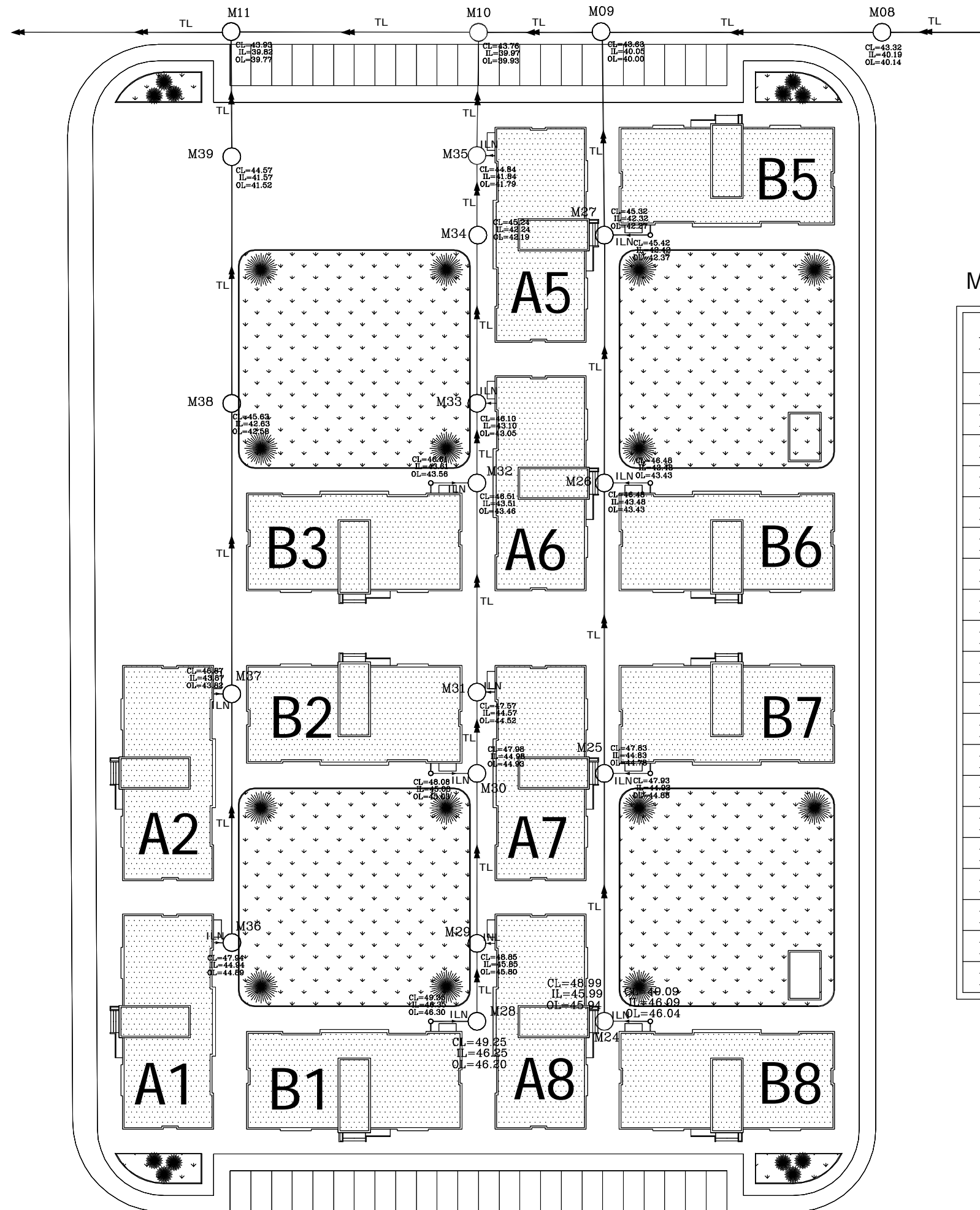
مركز الهندسة والتخطيط  
center for engineering and planning



## LIST OF DRAWINGS FOR PLUMBING

NO.	DRAWING NAME	DWG NO.
00	SANITARY NETWORK FOR HOUSING UNITS	RE-M-000
01	SEWER PIPE FOR THE BUILDING	RE-M-001
02	WATER NETWORK FOR UNDERGROUND FLOOR	RE-M-002
03	WATER NETWORK FOR GROUND FLOOR	RE-M-003
04	WATER NETWORK FOR TYPICAL FLOOR	RE-M-004
05	SANITARY NETWORK FOR UNDERGROUND FLOOR	RE-M-005
06	SANITARY NETWORK FOR GROUND FLOOR	RE-M-006

NO.	DRAWING NAME	DWG NO.
07	SANITARY NETWORK FOR TYPICAL FLOOR	RE-M-007
08	RAIN WATER FOR ROOF PLAN	RE-M-008
09	WATER NETWORK FOR UNDERGROUND FLOOR	RE-M-009
10	WATER NETWORK FOR ROOF FLOOR	RE-M-010
11	WATER NETWORK FOR ROOF FLOOR	RE-M-011
12	GENERAL DETAILS FOR MECHANICAL (1/2)	RE-GD-012
13	GENERAL DETAILS FOR MECHANICAL (2/2)	RE-GD-013



MANHOLES SCHEDULE


M.No.	COVER LEVEL	INVERT LEVEL	OUTLET LEVEL	DEPTH (m)	MH.SIZE ø (cm)
M08	43.32	40.19	40.14	3.13	80
M09	43.63	40.05	40.00	3.58	100
M10	43.76	39.97	39.93	3.79	100
M11	43.93	39.82	39.77	4.11	100
M24	48.99	45.99	45.94	3.00	100
M25	47.83	44.83	44.78	3.00	100
M26	46.48	43.48	43.43	3.00	100
M27	45.32	42.32	42.17	3.00	100
M28	49.25	46.25	46.20	3.00	100
M29	48.85	45.85	45.80	3.00	100
M30	47.98	44.98	44.93	3.00	100
M31	47.57	44.57	44.52	3.00	100
M32	46.51	43.51	43.46	3.00	100
M33	46.10	43.10	43.05	3.00	100
M34	45.24	42.24	42.19	3.00	100
M35	44.84	41.84	41.79	3.00	100
M36	47.94	44.94	44.89	3.00	100
M37	46.87	43.87	43.82	3.00	100
M38	45.63	42.63	42.58	3.00	100
M39	44.57	41.57	41.52	3.00	100


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- CL: COVER LEVEL
- IL: INVERT LEVEL
- OL: OUT LEVEL
- ILN: INVERT LINE
- TL: TRUNK LINE

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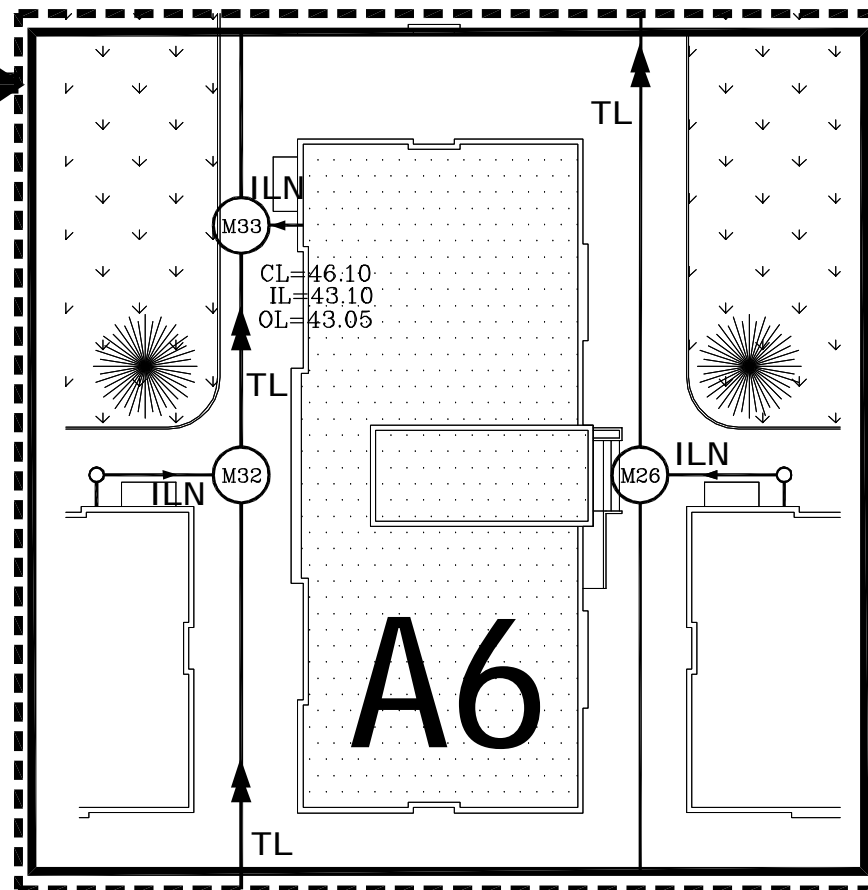
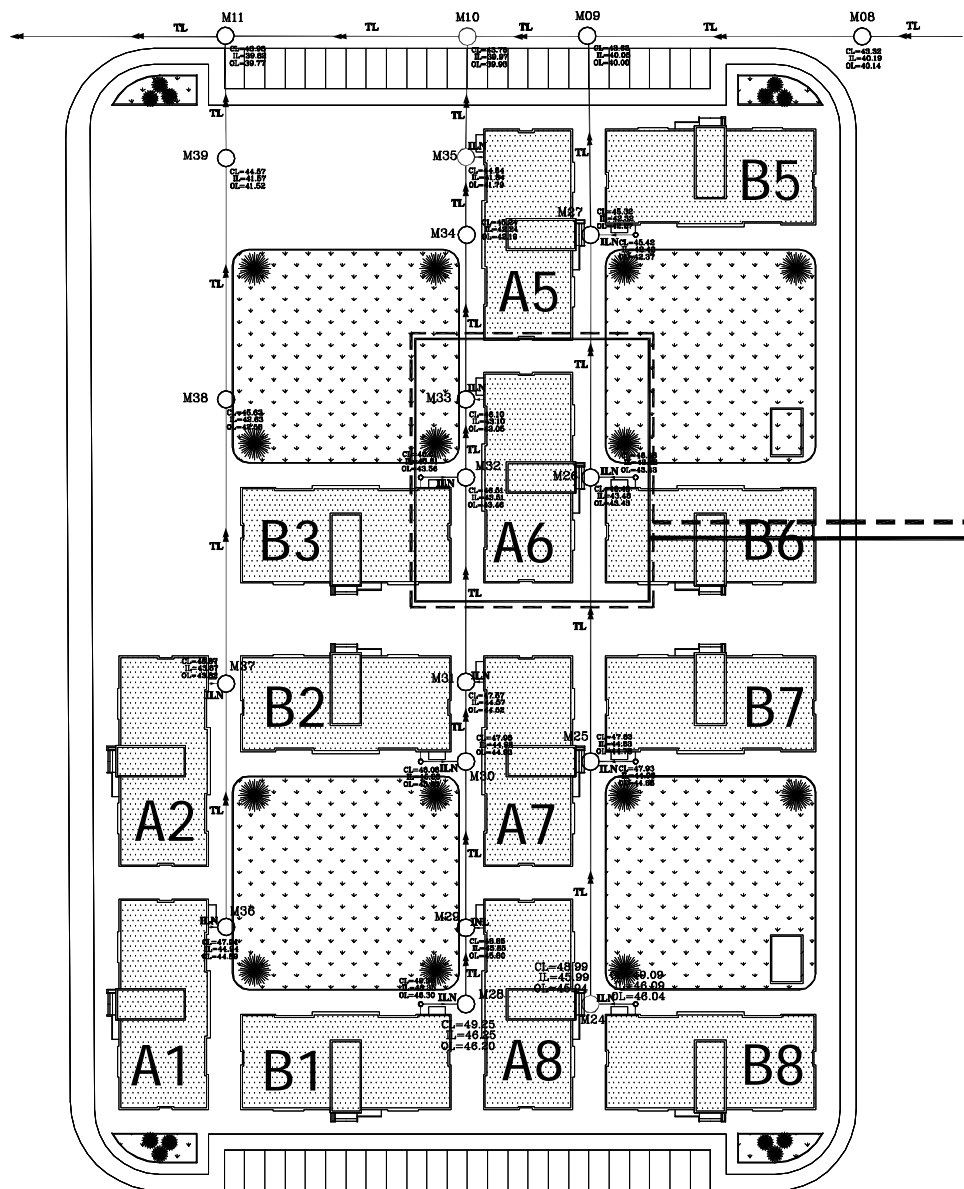
**CONSULTANT:**  
 مرکز الهندسة والتخطيط  
center for engineering and planning

**BUILDING NAME:**  
RESIDENTIAL BUILDING NO. (A6)

**DRAWING TITLE:**  
SANITARY NETWORK FOR  
SITE LAYOUT FLOOR

**DRAWING NO.:** RE-M-000

DATE: APRIL 2011    SCALE: NOT TO SCALE



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## LEGEND


Sewer Pipe on Profile	
Sewer Pipe on Plan	
Existing Level	
Design Level	
Sewer Manhole On Plan	
Manhole Number	
Sewer Manhole On Profile	
House	
Mosque	
School	
TREE	
Grass	

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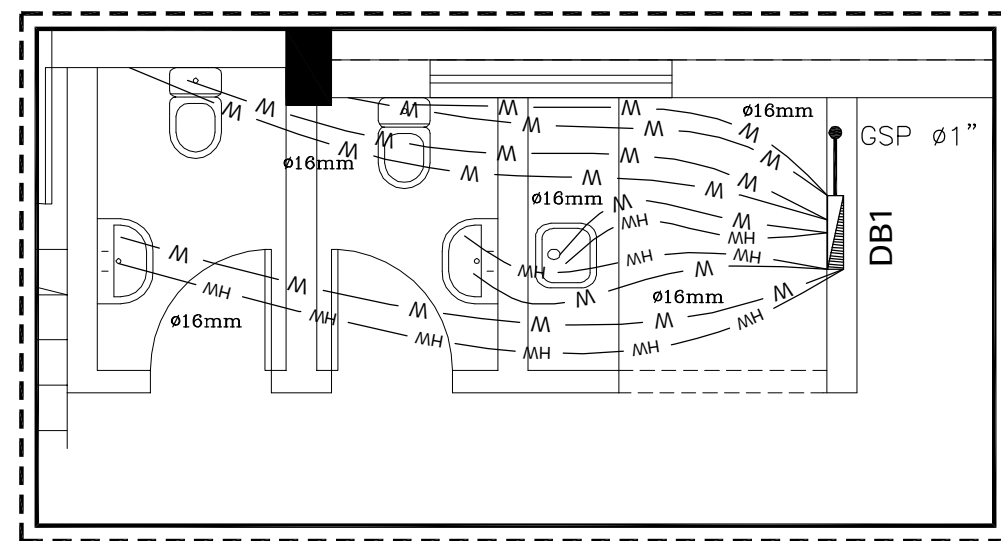
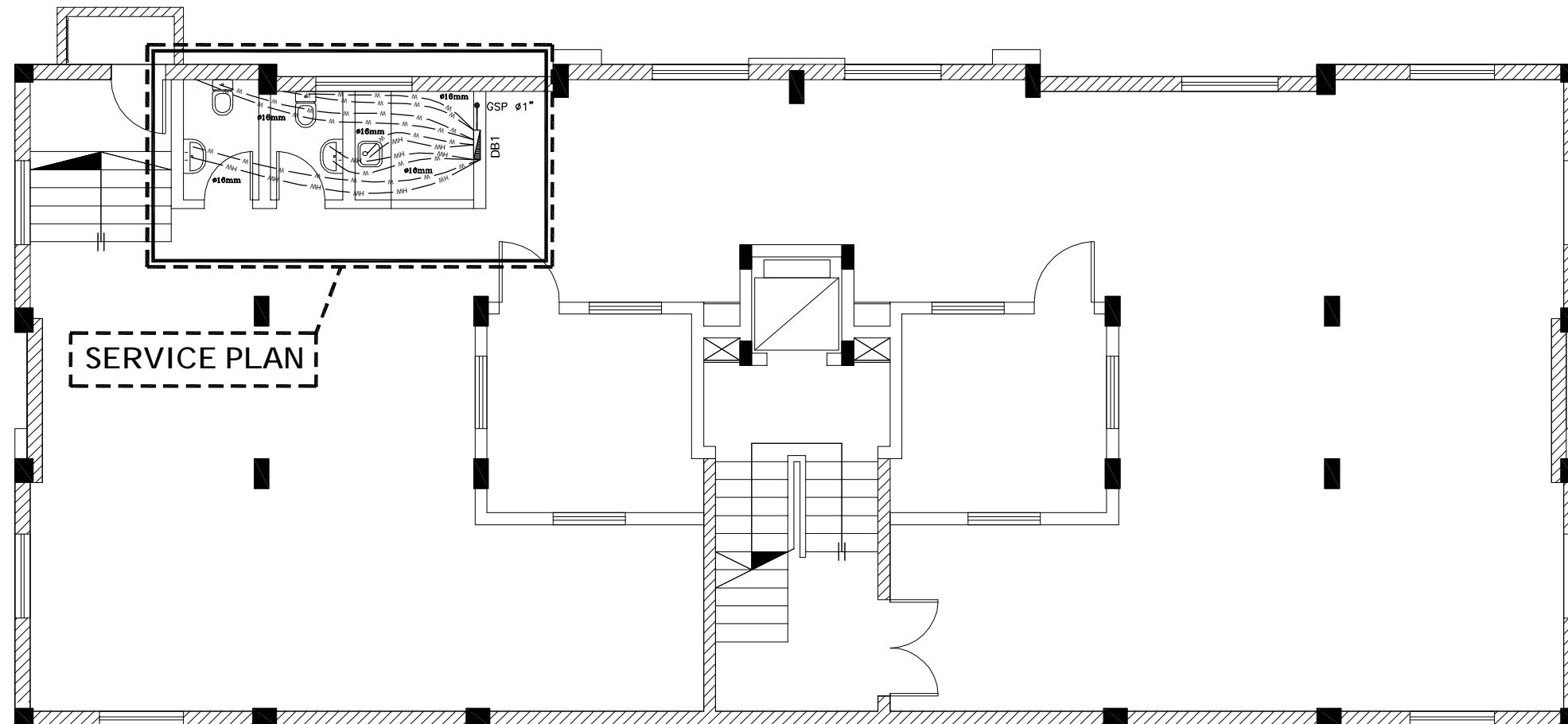
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

PLAN & PROFILE FOR SEWER PIPELINE

### DRAWING NO.: RE-M-001

DATE: APRIL 2011 SCALE:



WATER NETWORK FOR SERVICE PLAN

SCALE 1:50

## WATER NETWORK FOR UNDERGROUND FLOOR

### NOTES :-

- ALL DIMENSIONS ARE IN CM & M. EXCEPT WHERE OTHERWISE SHOWN OR NOTES
- CONTRACTOR SHALL SUBMIT THE MANUFACTURES, CATALOGS, DIMENSIONS, DETAILS AND CONNECTIONS FOR ALL MECHANICAL WORKS THAT SHOULD BE COMPATIBLE WITH THE SIZE OF BUILDING AND CHAMBERS
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL MECHANICAL WORKS, STEEL PARTS & CONNECTIONS FOR ENGINEERS APPROVAL
- IF THERE IS ANY DISCREPANCY IN DRAWINGS THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE

(G.S.P.) GALVANIZED STEEL PIPE

(DB) WATER DISTRIBUTION BOARD

— W — COLD WATER

— HW — HOT WATER

### FOR TENDER ONLY

#### CLIENT:



PALESTINIAN NATIONAL AUTHORITY

MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

#### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME

PROGRAMME OF ASSISTANCE TO THE

UN PALESTINIAN PEOPLE

(UNDP/PAPP)

#### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO

RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES

IN GAZA STRIP

PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

#### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

#### BUILDING NAME:

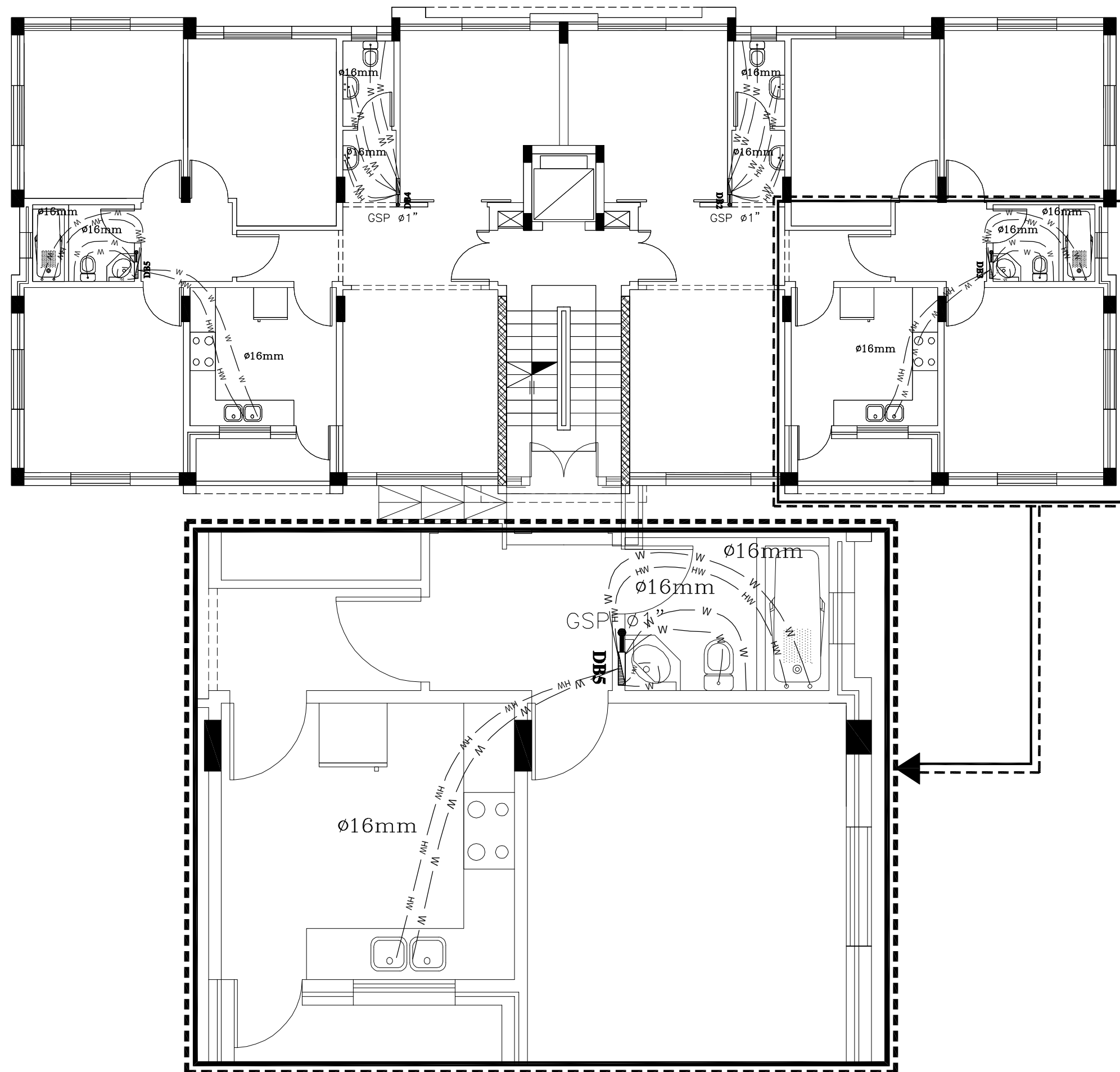
RESIDENTIAL BUILDING NO. (A6)

#### DRAWING TITLE:

WATER NETWORK FOR  
UNDERGROUND FLOOR

DRAWING NO.: RE-M-002

DATE: APRIL 2011 SCALE: NOT TO SCALE



WATER NETWORK FOR GROUND FLOOR

## NOTES :-

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(G.S.P.) GALVANIZED STEEL PIPE

(DB) WATER DISTRIBUTION BOARD

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— HW — HOT WATER

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PALESTINIAN NATIONAL AUTHORITY  
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THE UNITED NATIONS DEVELOPMENT PROGRAMME  
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

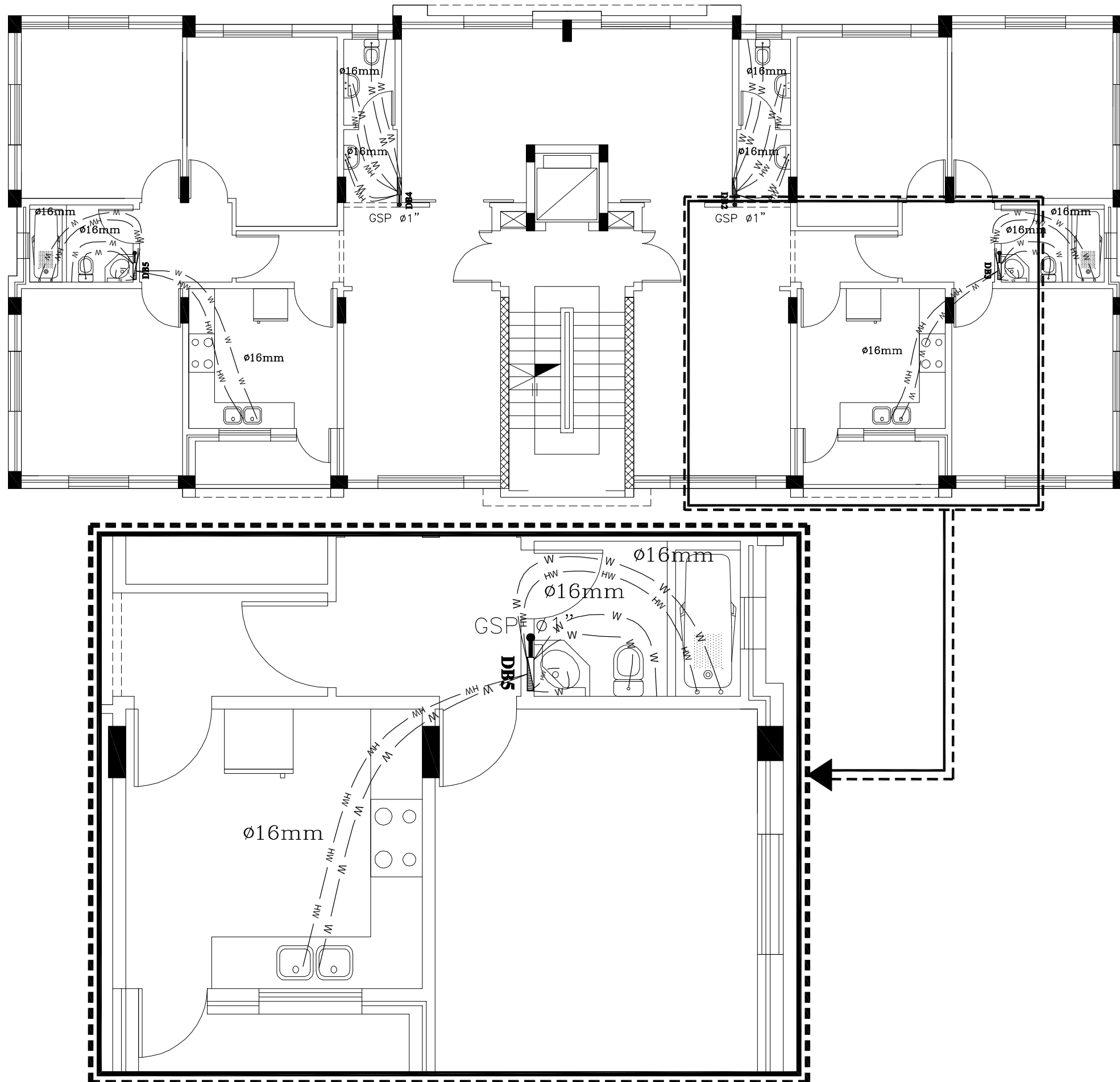
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

WATER NETWORK FOR  
GROUND FLOOR

DRAWING NO.: RE-M-003

DATE: APRIL 2011 SCALE: NOT TO SCALE



WATER NETWORK FOR TYPICAL FLOOR

## NOTES :-

- ALL DIMENSIONS ARE IN CM & M. EXCEPT WHERE OTHERWISE SHOWN OR NOTES
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(G.S.P.) GALVANIZED STEEL PIPE

(DB) WATER DISTRIBUTION BOARD

— W — COLD WATER

— HW — HOT WATER

## FOR TENDER ONLY

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PALESTINIAN NATIONAL AUTHORITY  
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### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

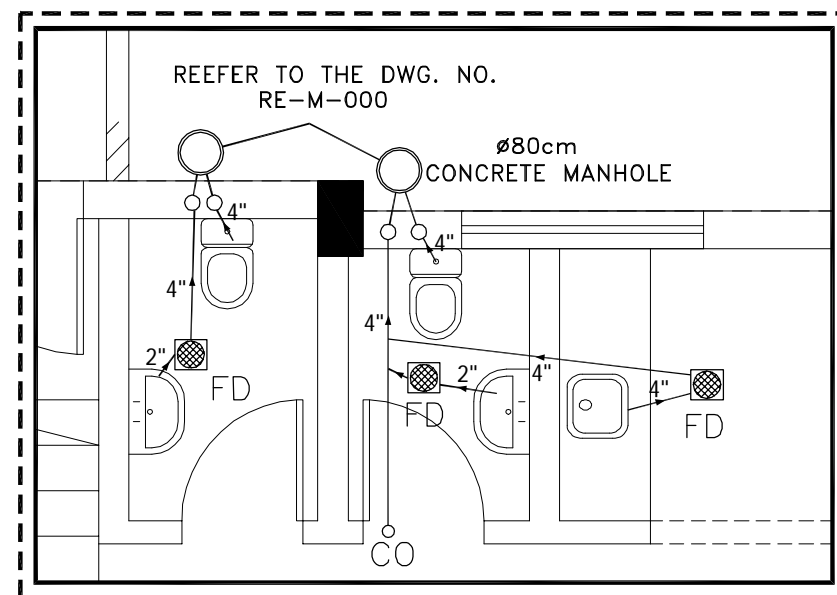
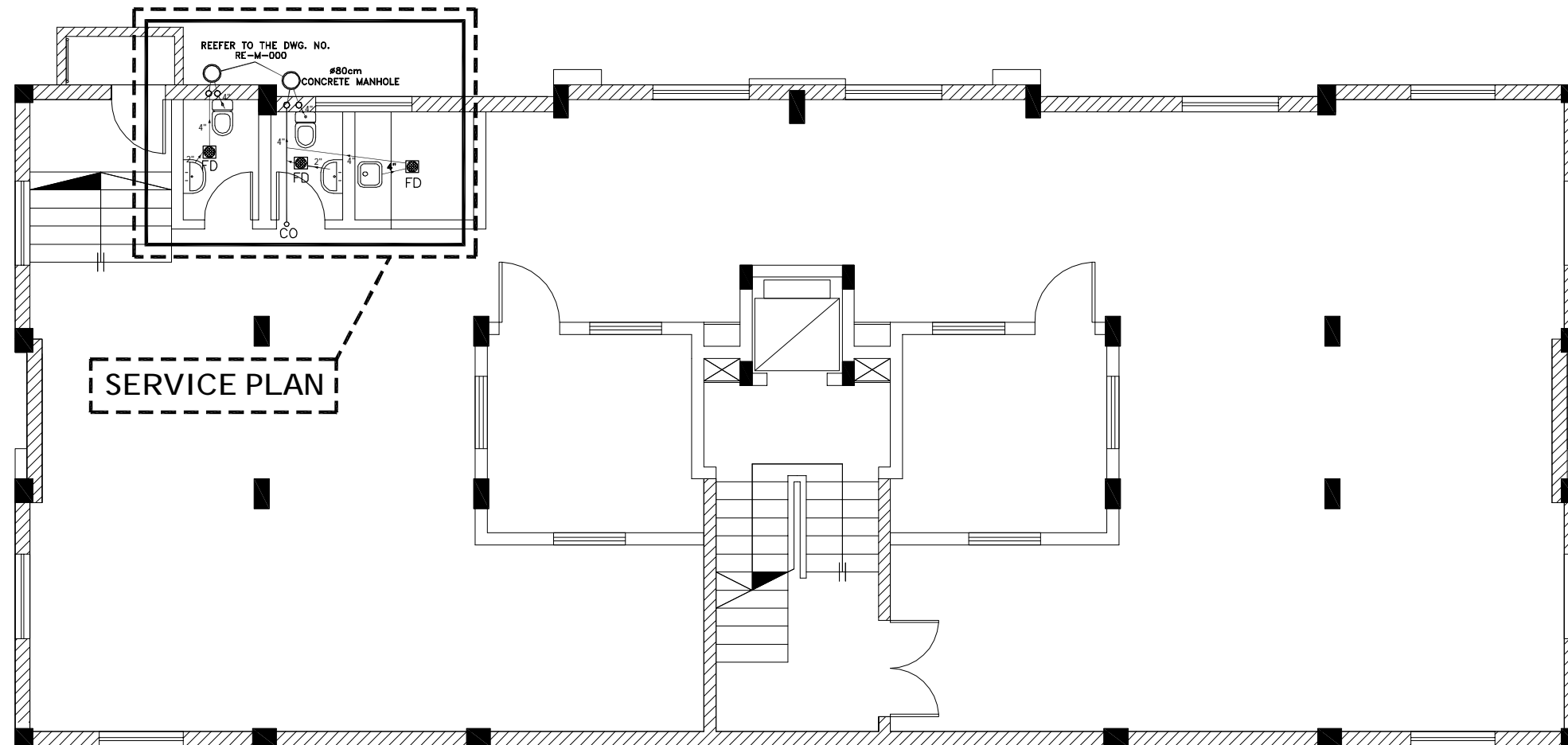
### DRAWING TITLE:

WATER NETWORK FOR  
TYPICAL FLOOR

DRAWING NO.: RE-M-004

DATE: APRIL 2011 SCALE: NOT TO SCALE





**SANITARY NETWORK FOR SERVICE PLAN**  
SCALE 1:50

## SANITARY NETWORK FOR UNDERGROUND FLOOR

### NOTES :-

- ALL DIMENSIONS ARE IN CM & M. EXCEPT WHERE OTHERWISE SHOWN OR NOTES
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(FD) FLOOR DRAIN

### FOR TENDER ONLY

#### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

#### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
DP (UNDP/PAPP)

#### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

#### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

#### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

#### DRAWING TITLE:

SANITARY NETWORK FOR  
UNDERGROUND FLOOR

DRAWING NO.: RE-M-005

DATE: APRIL 2011 SCALE: NOT TO SCALE



NOTES :-

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(FD) FLOOR DRAIN

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

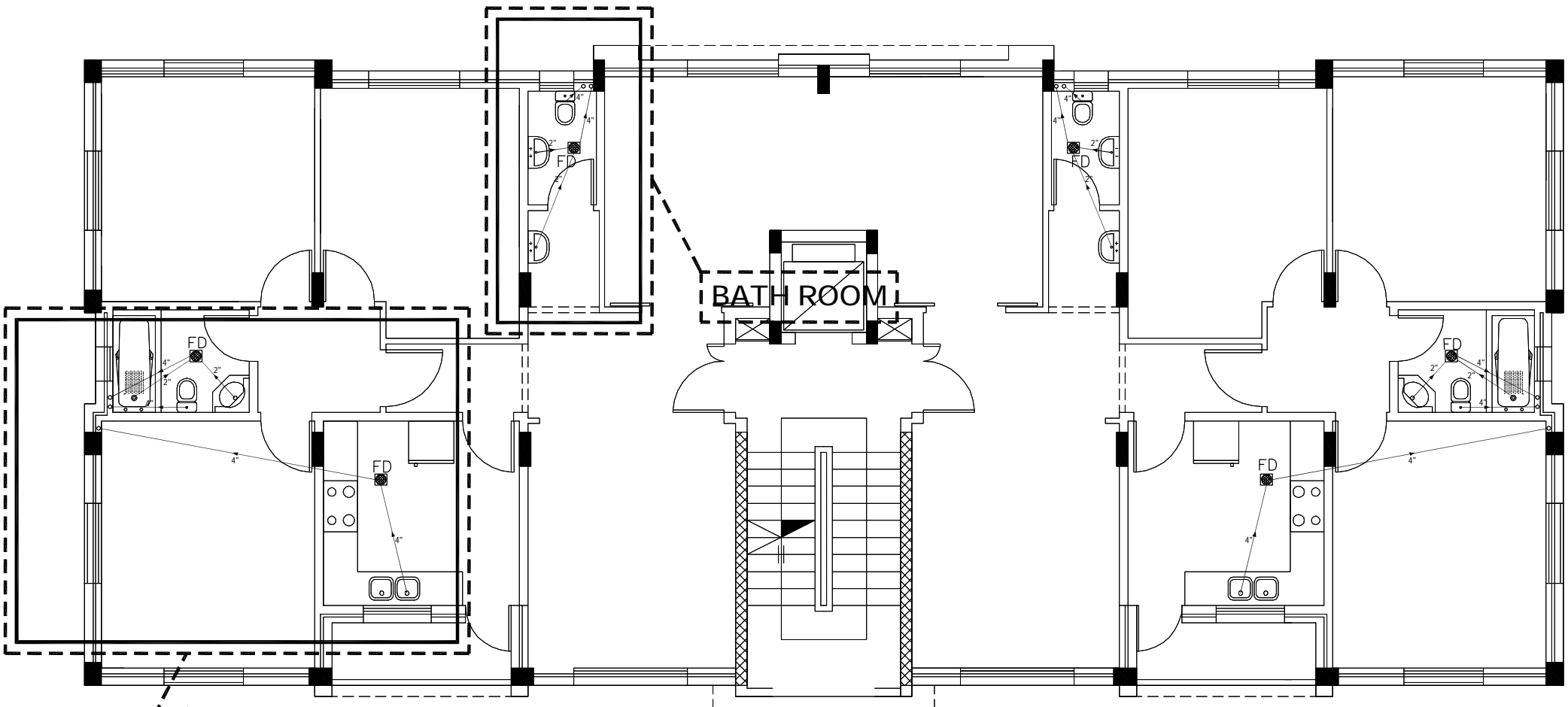
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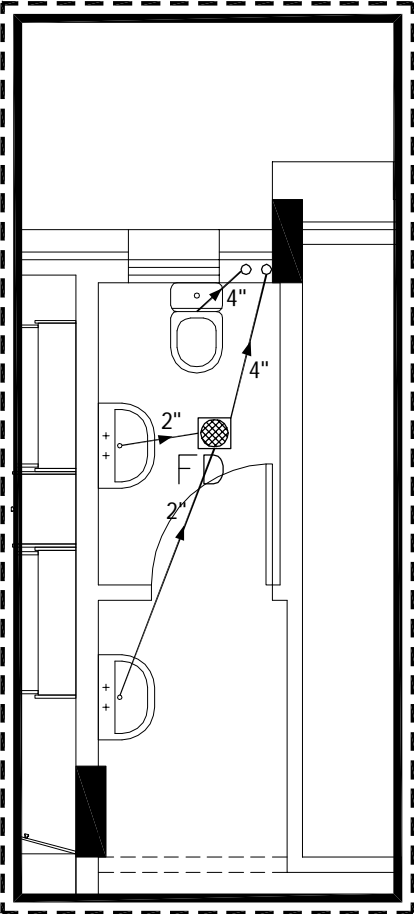
SANITARY NETWORK FOR  
TYPICAL FLOOR

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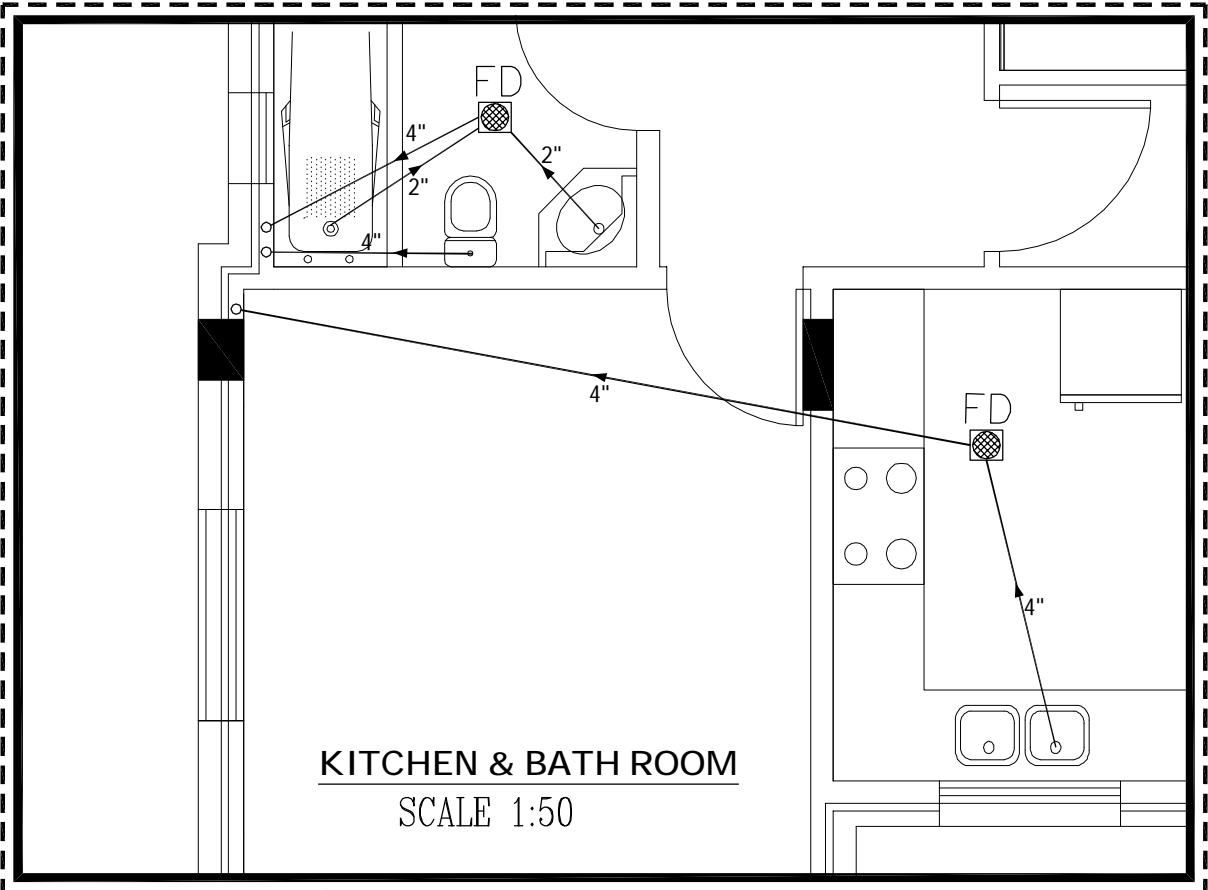
DATE: APRIL 2011 SCALE: NOT TO SCALE



KITCHEN &  
BATH ROOM

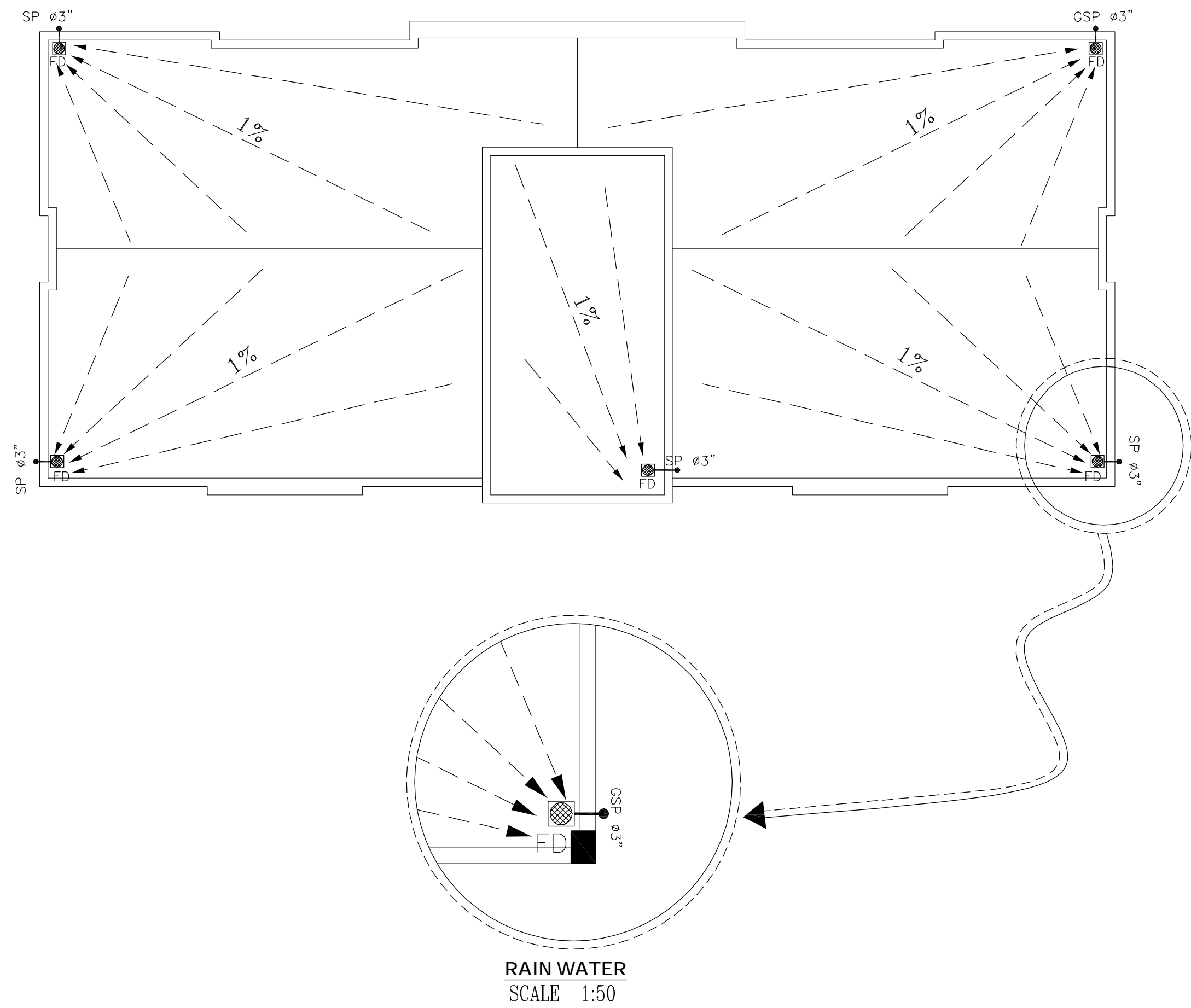


BATH ROOM  
SCALE 1:50



KITCHEN & BATH ROOM  
SCALE 1:50

SANITARY NETWORK FOR TYPICAL FLOOR



RAIN WATER  
SCALE 1:50

## RAIN WATER FOR ROOF PLAN



### NOTES :-

- ALL DIMENSIONS ARE IN CM & M. EXCEPT WHERE OTHERWISE SHOWN OR NOTES
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(G.S.P.) GALVANIZED STEEL PIPE  
(FD) FLOOR DRAIN

### FOR TENDER ONLY

**CLIENT:**  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

**EMPLOYER:**  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
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(UNDP/PAPP)

**PROJECT TITLE:**  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

**CONSULTANT:**  
 **مركز الهندسة والتخطيط**  
center for engineering and planning

**BUILDING NAME:**  
RESIDENTIAL BUILDING NO. (A6)





**DRAWING TITLE:**  
RAIN WATER FOR ROOF PLAN

**DRAWING NO.:** RE-M-008


DATE: APRIL 2011 | SCALE: NOT TO SCALE


NOTES :-

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- w — COLD WATER
-  (W.M) Water Meter
-  (G.V) Gate Valve
-  Collector Box (C.B)
-  WATER PUMP
- (G.S.P.) GALVANIZED STEEL PIPE

FOR TENDER ONLY

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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

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PROGRAMME OF ASSISTANCE TO THE  
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CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

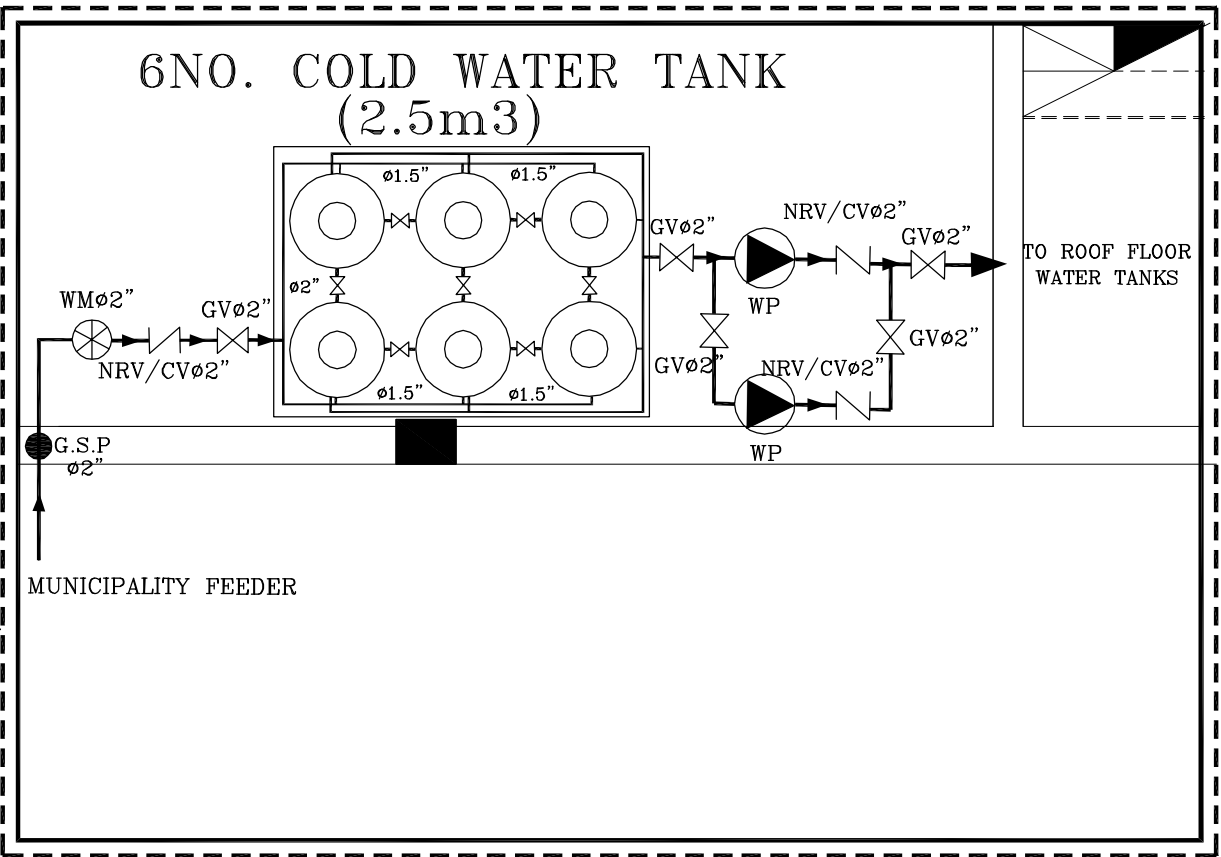
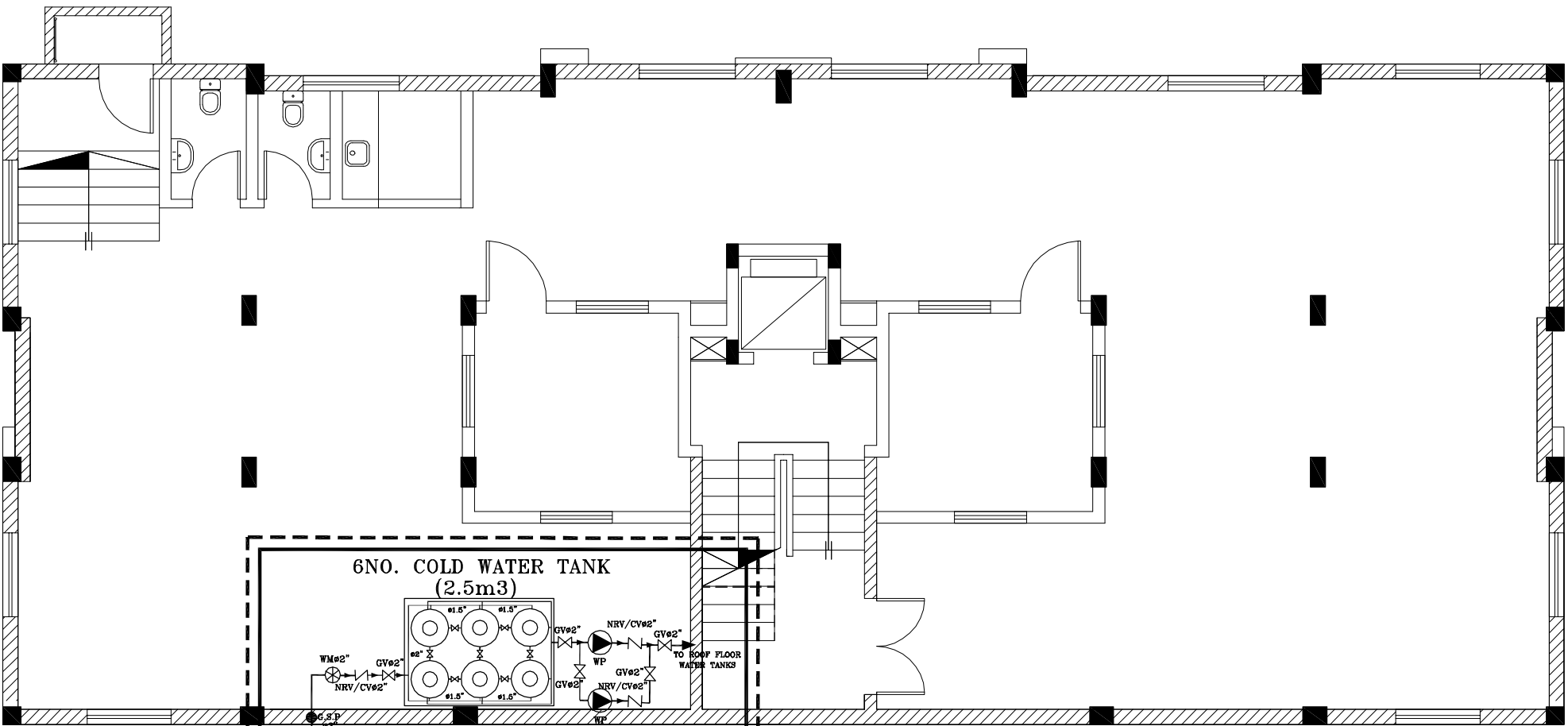
CONSULTANT:  
   
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

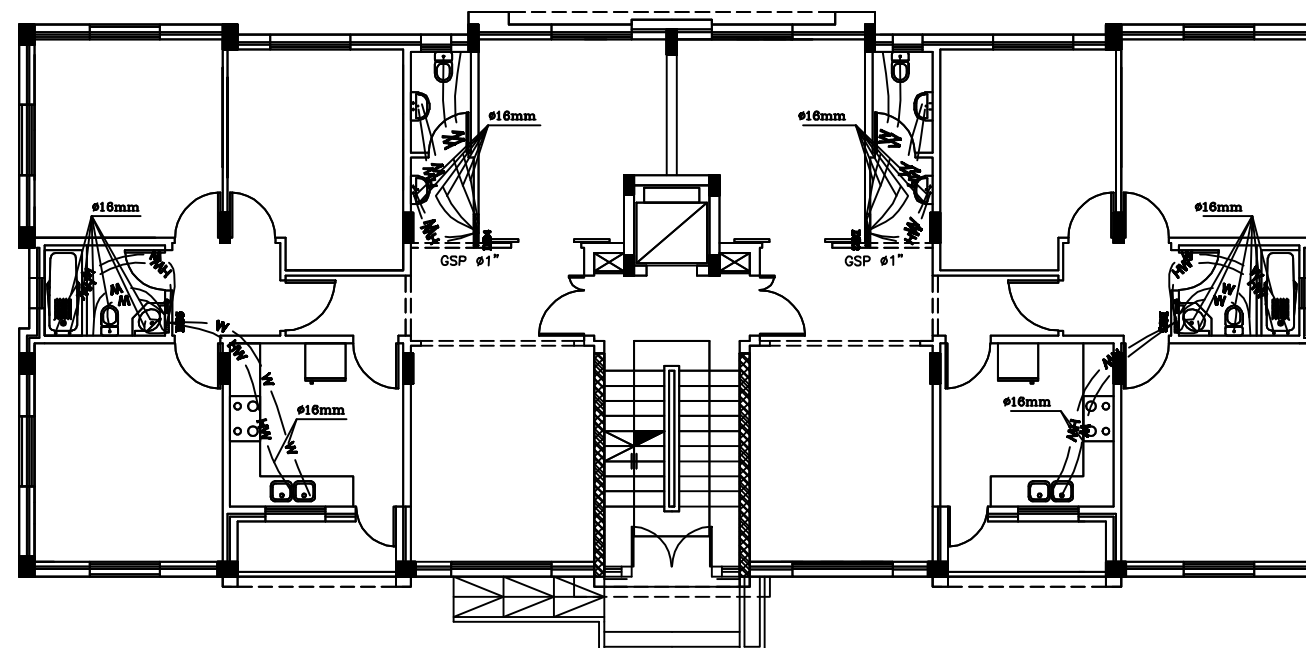
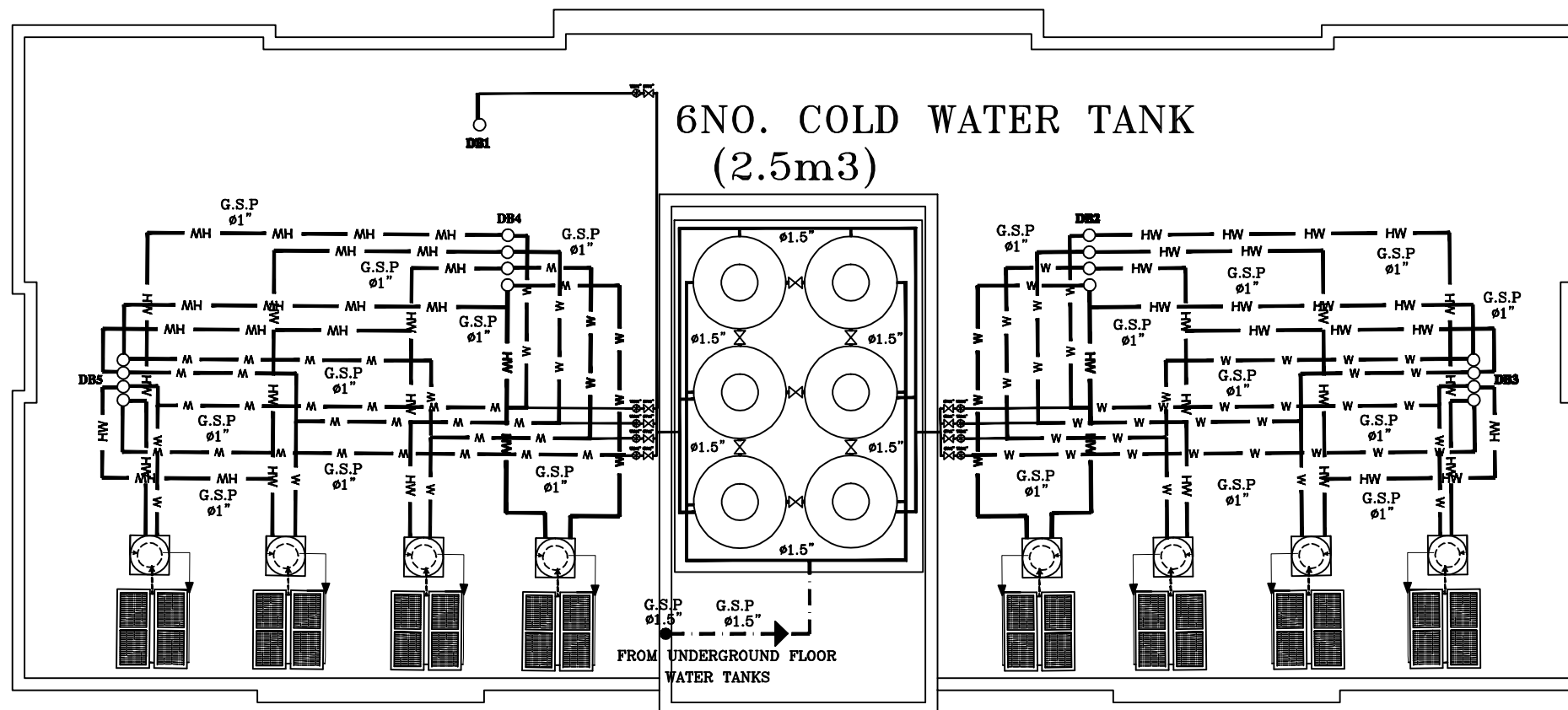
DRAWING TITLE:  
WATER NETWORK FOR  
UNDERGROUND FLOOR

DRAWING NO.: RE-M-009

DATE: APRIL 2011 SCALE: NOT TO SCALE



WATER NETWORK FOR UNDERGROUND FLOOR



NOT TO SCALE

## WATER NETWORK FOR ROOF FLOOR

### NOTES :-

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(G.S.P.) GALVANIZED STEEL PIPE  
(DB) WATER DISTRIBUTION BOARD

### FOR TENDER ONLY

#### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

#### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
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(UNDP/PAPP)

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CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

#### CONSULTANT:

مركز للتخطيط والهندسة  
center for engineering and planning

#### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

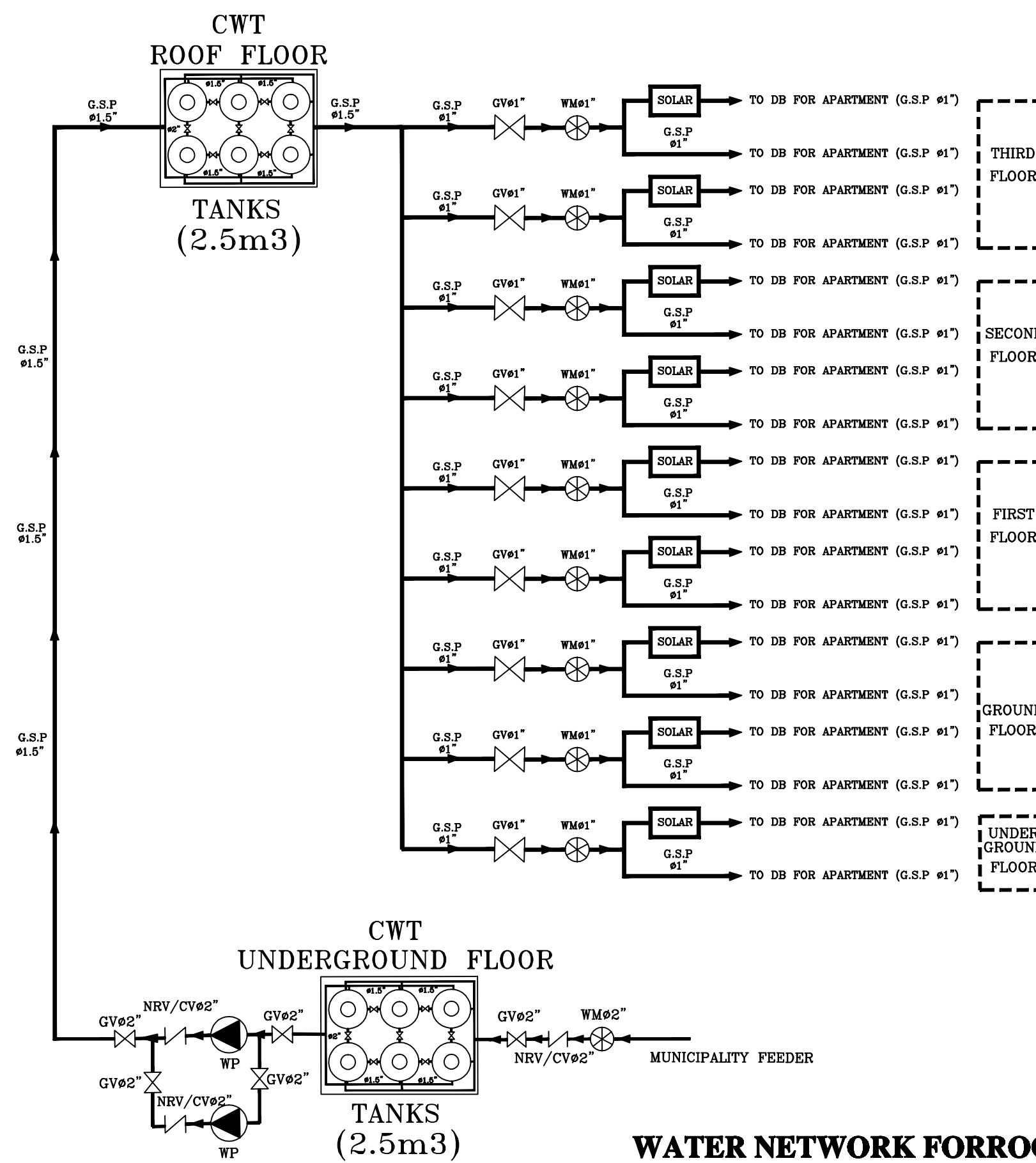
#### DRAWING TITLE:

WATER NETWORK FOR ROOF FLOOR

#### DRAWING NO.: RE-H-010

DATE: APRIL 2011

SCALE: NOT TO SCALE



WATER NETWORK FOR ROOF FLOOR

- NOTES :-**
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**FOR TENDER ONLY**

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(UNDP/PAPP)

**PROJECT TITLE:**  
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

**CONSULTANT:**  
center for engineering and planning

**BUILDING NAME:**  
RESIDENTIAL BUILDING NO. (A6)

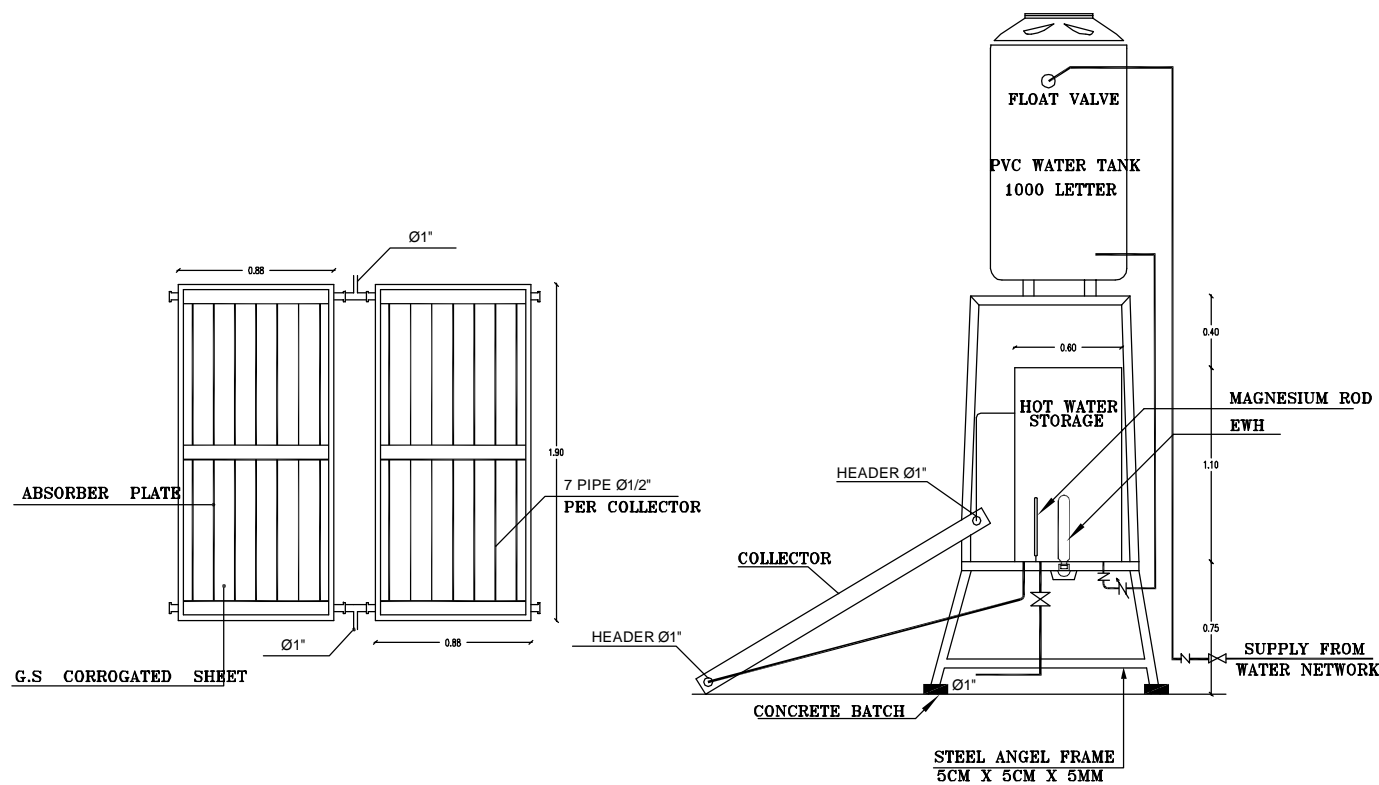
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WATER NETWORK FOR ROOF FLOOR

**DRAWING NO.:** RE-H-011

DATE: APRIL 2011    SCALE: NOT TO SCALE



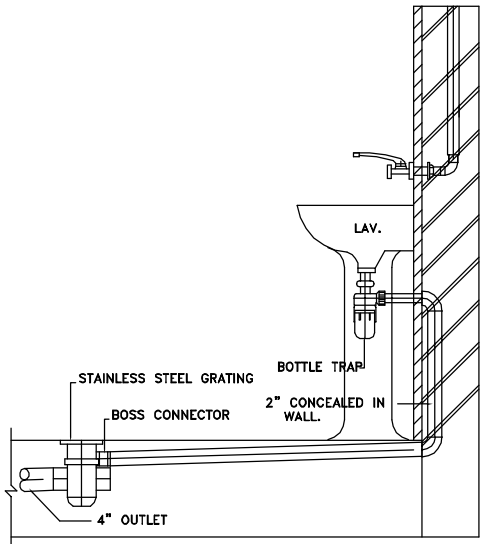




COLLECTOR PLAN

SOLAR COLLECTOR DIAGRAM

COLLECTOR DETAILS



TYPICAL PIPING IN SCREED AND  
FLOOR DRAIN CONNECTIONS

## GENRAL DETAILS FOR MECHANICAL(2/2)

### NOTES :-

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

#### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

#### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

#### DRAWING TITLE:

GENERAL DETAILS FOR MECHANICAL(2/2)

DRAWING NO.: **RE-GD-013**

DATE: APRIL 2011 | SCALE:

## EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

## CLIENT



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

## CONSULTANT

مركز الهندسة والتخطيط  
center for engineering and planning



# ELECTRICAL DRAWINGS

**EMPLOYER:**

THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

**CLIENT**

PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)


















**CONSULTANT**


















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center for engineering and planning



# LIST OF DRAWINGS


S/NO.	DRAWING NAME	DRG. NO.
ELECTRICAL DRAWING		
01/16	Legend	RE-E-001
02/16	Grounding System	RE-E-002
03/16	UNDERGROUND FLOOR-Electrical Arrangements	RE-E-003
04/16	UNDERGROUND FLOOR-Lighting Fittings Layout	RE-E-004
05/16	UNDERGROUND FLOOR-Power Fittings Layout	RE-E-005
06/16	GROUND FLOOR-Lighting Fittings Layout	RE-E-006
07/16	GROUND FLOOR-Power Fittings Layout	RE-E-007
08/16	GROUND FLOOR-Telephone & TV Fittings Layout	RE-E-008
09/16	TYPICAL FLOOR-Lighting Fittings Layout	RE-E-009
10/16	TYPICAL FLOOR-Power Fittings Layout	RE-E-010
11/16	TYPICAL FLOOR-Telephone & TV Fittings Layout	RE-E-011
12/16	TYPICAL FLAT PANEL-DB-G1 Single Line Power Diagram	RE-E-012
13/16	UNDERGROUND FLOOR-DB-B Single Line Power Diagram	RE-E-013
14/16	UNDERGROUND FLOOR-MDB Main Distribution Board	RE-E-014
15/16	Power Cables Riser Diagram	RE-E-015
16/16	Telephone Cables Riser Diagram	RE-E-016


SYMBOL	DESCRIPTION
	16A SINGLE PHASE, 3-PIN SOCKET OUTLET                      H=45CM F.F.F.L
	16A SINGLE PHASE, 3-PIN SOCKET OUTLET, WATER PROOF.IP65 H=140CM F.F.F.L
	1x20A – 220V AIR CONDITIONING SOCKETOUTLET +CONTROL SWITCH WITH INDICATOR LAMP. H=160CM F.F.F.L
	THREE PHASE, SOCKET OUTLET                      H=140CM F.F.F.L
	ELECTRICAL WATER HEATER                      H=180CM F.F.F.L
	OUTDOOR A/C UNITS
	A/C SPLIT UNIT
	SUB-DISTRIBUTION BOARD                      H=160CM F.F.F.L
	MAIN DISTRIBUTION BOARD (MDB)
	WALL OR WINDOW MOUNTED EXHAUST FAN
	Electrical Bell
	RJ11 TELEPHONE SOCKET OUTLET.
	TELEPHONE JUNCTION BOX                      H=45CM F.F.F.L
	Intercom Indoor Handle                      H=160CM F.F.F.L
	Intercom Outdoor Panel                      H=160CM F.F.F.L
	TV SOCKET OUTLET                      H=45CM F.F.F.L
	TELEPHONE JUNCTION BOX                      H=45CM F.F.F.L
	MAIN TELEPHONE FRAME                      H=45CM F.F.F.L

SYMBOL	DESCRIPTION
	2x36W SURFACE MOUNTED FLUORESCENT LIGHTING FIXTURE WITH OUT REFLECTOR IP20
	DITTO BUT WITH BACK UP POWER BUILT IN, FOR 1.5HR DURATION.
	2x36W SURFACE MOUNTED FLUORESCENT LIGHTING FIXTURE WATER PROOF IP65
	2x36W SURFACE MOUNTED FLUORESCENT LIGHTING FIXTURE WATER PROOF IP65
	26W COMPACT FLUORESCENT SURFACE MOUNTED LIGHT (IP45)
	DITTO BUT WALL MOUNTED
	10W INCANDESCENT WALL MOUNTED DECORATIVE NIGHT LIGHT
	CHNDELIER
	1-GANG LIGHTING SWITCH, ONE WAY 16A                      H=140CM F.F.F.L
	DITTO BUT WATER PROOF IP 65 .                      H=140CM F.F.F.L
	2-GANG LIGHTING SWITCH, ONE WAY 16A                      H=140CM F.F.F.L
	DITTO BUT WATER PROOF IP 65 .                      H=140CM F.F.F.L
	3-GANG LIGHTING SWITCH, ONE WAY 16A                      H=140CM F.F.F.L
	DITTO BUT WATER PROOF IP 65 .                      H=140CM F.F.F.L
	2-WAY LIGHTING SWITCH, 16A                      H=140CM F.F.F.L
	DITTO BUT WATER PROOF IP 65 .                      H=140CM F.F.F.L
	PUSHBUTTON LIGHTING SWITCH, ONE WAY 10A                      H=140CM F.F.F.L


NOTES :-

FOR TENDER ONLY

CLIENT:  
 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
UN PALESTINIAN PEOPLE  
DP (UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
 مرکز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

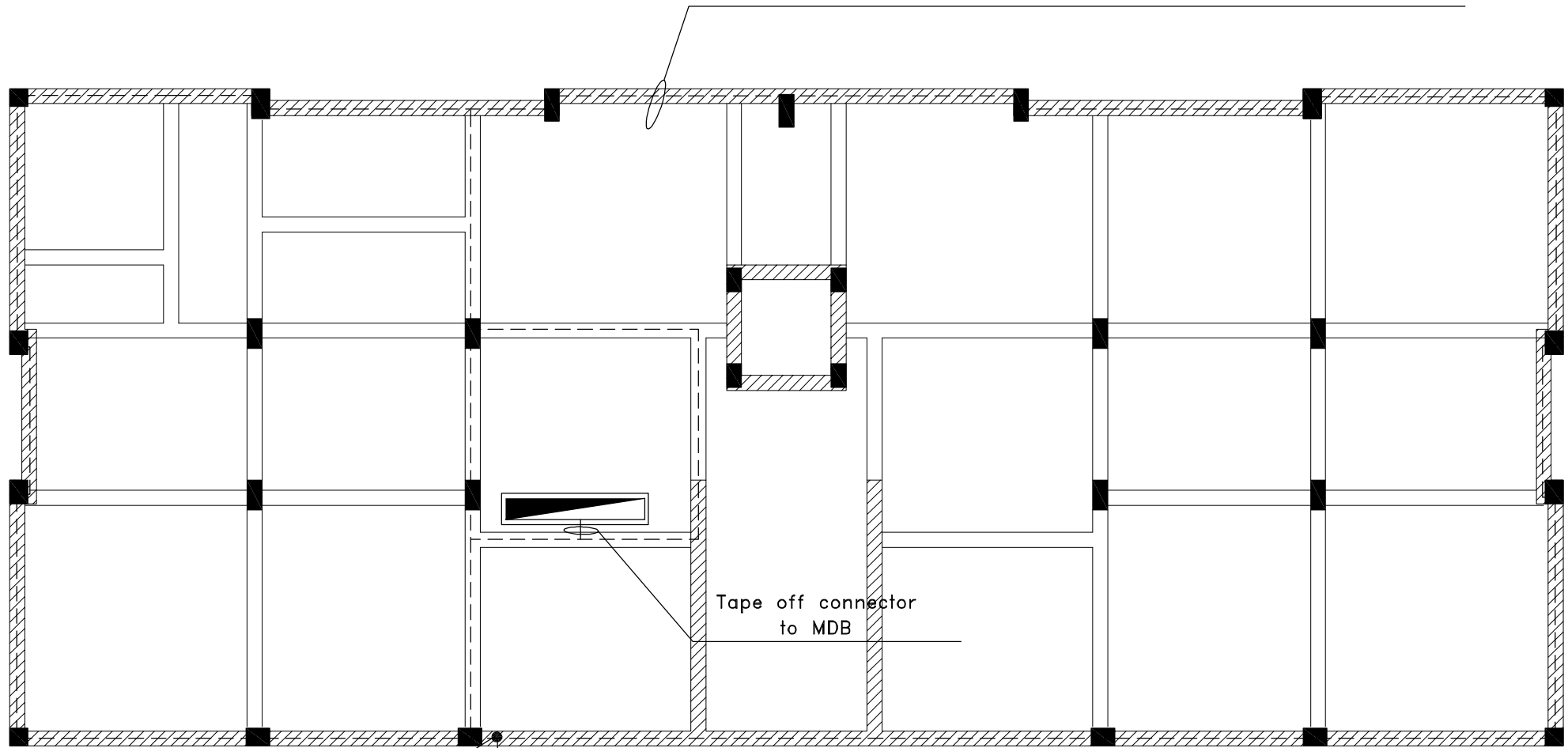
DRAWING TITLE:  
LEGEND

DRAWING NO.: RE-E-001

DATE:APRIL 2011      SCALE: 1:xxx

NOTES :-

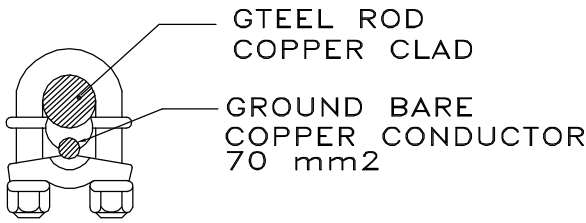
35X3 MM GALVANIZED STEEL SHEET WELDED  
TO GROUND BEAM REINFORCEMENT STEEL



Test Point  
EARTHING CONDUCTOR  
NYY 50 MM2 CU  
INSIDE 2" PVC PIPE

EARTHING PIT  
Ø 60cm

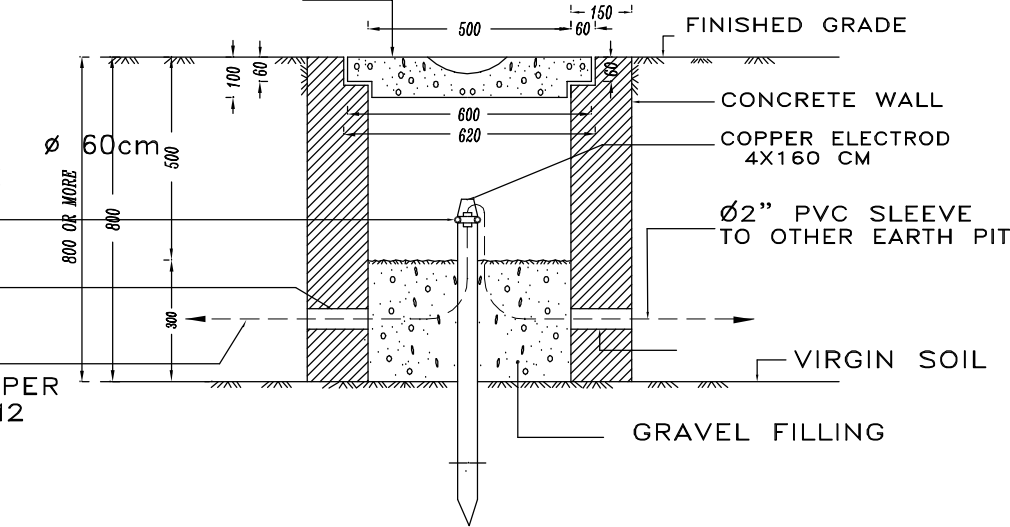
5 TON CONCRETE COVER



U - BOLTED TYPE  
CONNECTOR SEE  
DETAIL BELOW

Ø2" PVC SLEEVE

GROUND BARE COPPER  
CONDUCTOR 50 MM2



Earthing Pit

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CONSTRUCTION OF 100 HOUSING UNITS TO  
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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
Grounding System

DRAWING NO.: RE-E-002

DATE: APRIL 2011 SCALE: 1:100

NOTES :-

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CLIENT:  
PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

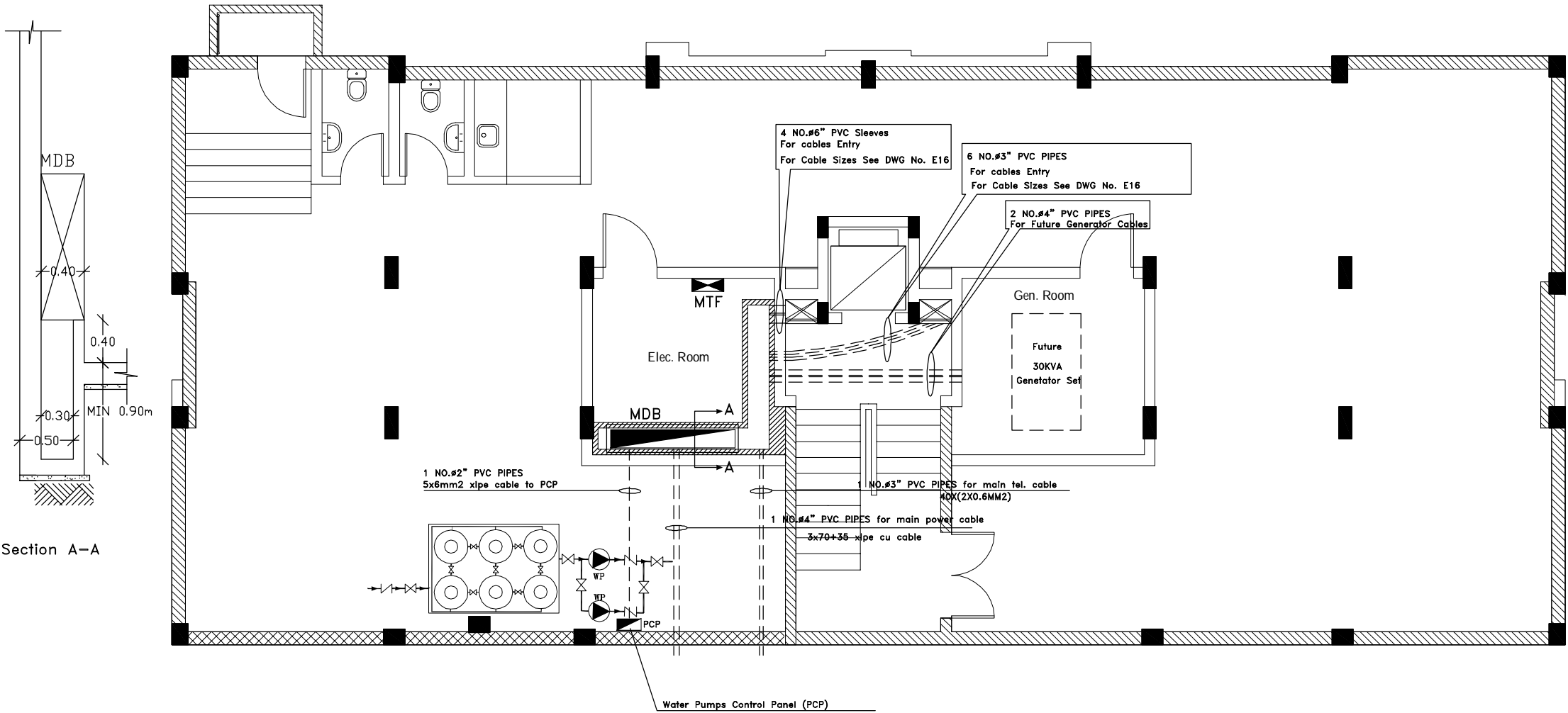
CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

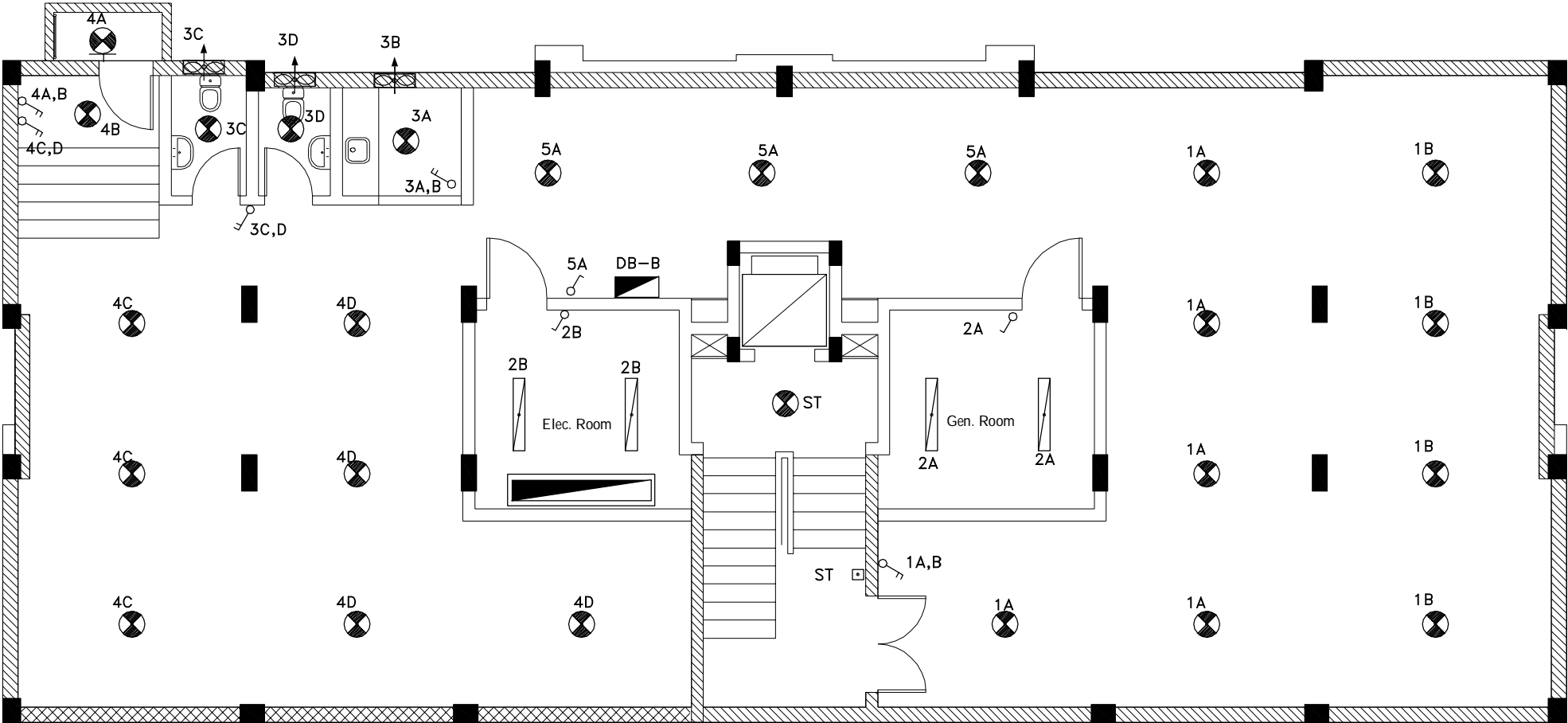
DRAWING TITLE:  
Underground Floor  
Electrical Arrangements

DRAWING NO.: RE-E-003

DATE:APRIL 2011 SCALE: 1:100



NOTES :-



FOR TENDER ONLY

CLIENT:  
PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

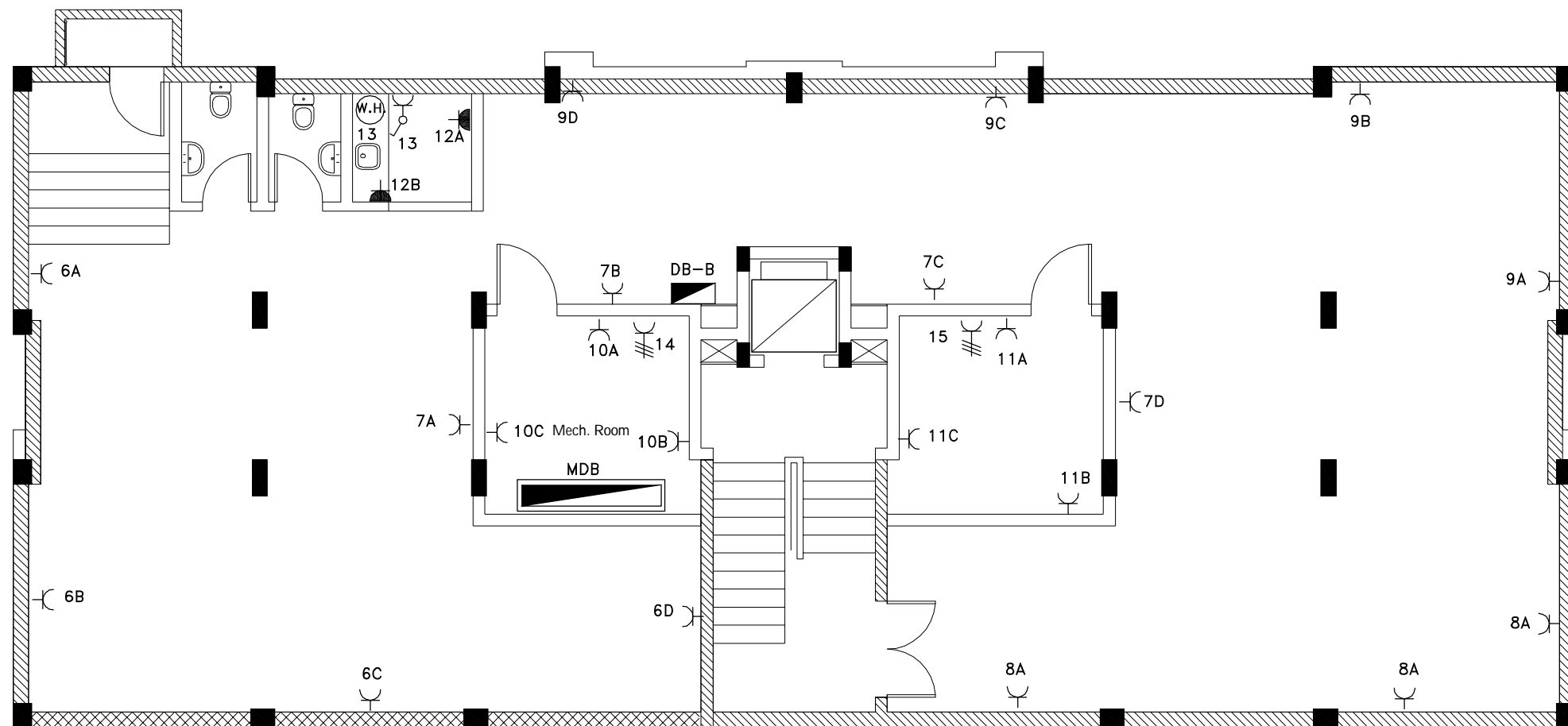
CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
Underground Floor  
Lighting Fittings Layout

DRAWING NO.: RE-E-004

DATE:APRIL 2011 SCALE: 1:100



## NOTES :-

FOR TENDER ONLY

### CLIENT:

PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:

THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

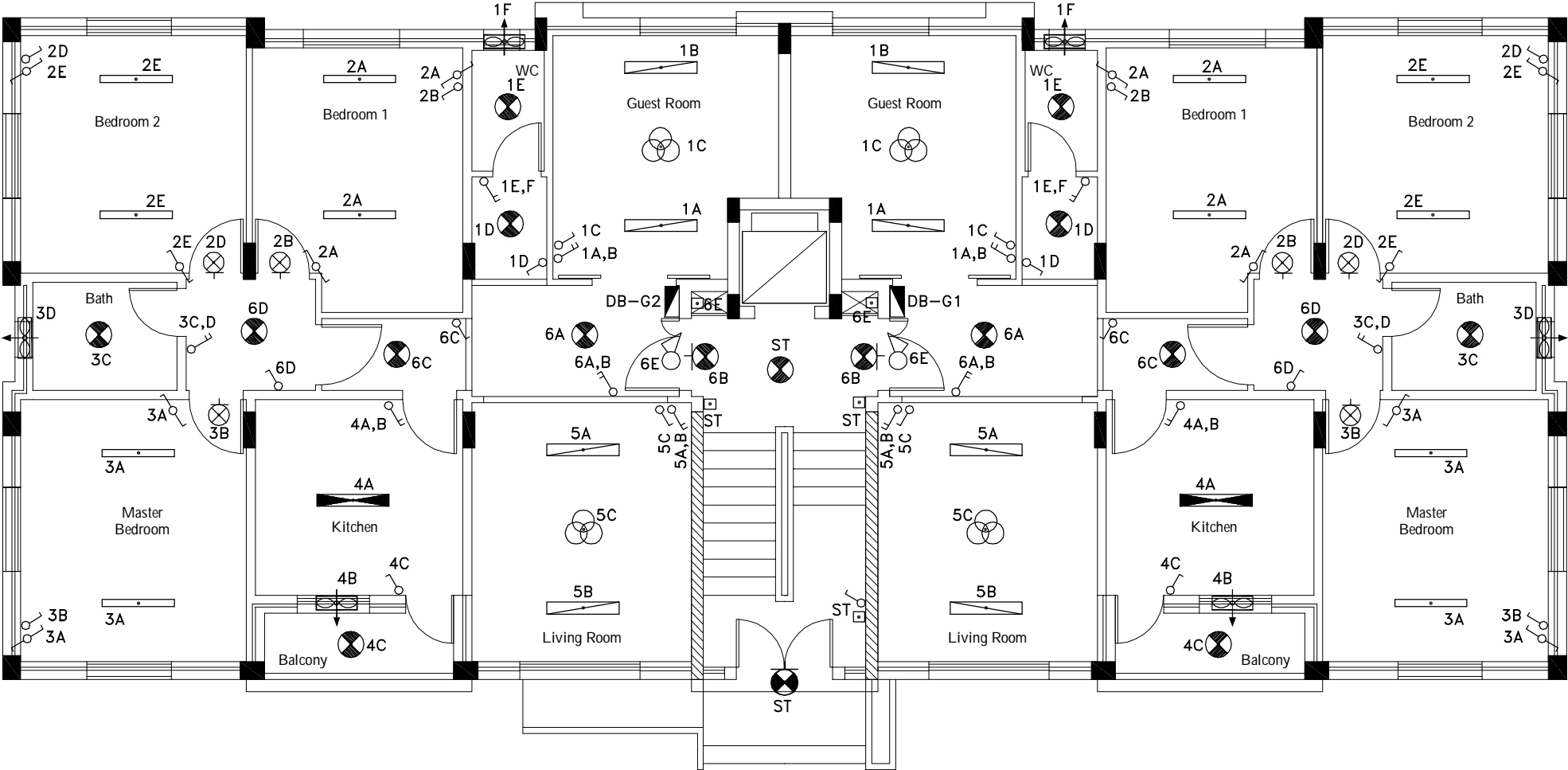
Underground Floor  
Power Fittings Layout

DRAWING NO.: RE-E-005

DATE: APRIL 2011 SCALE: 1:100



NOTES :-



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CLIENT:  
PALESTINIAN NATIONAL AUTHORITY  
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EMPLOYER:  
THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

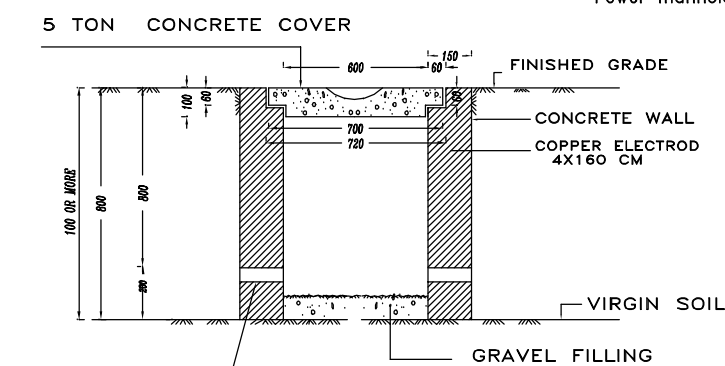
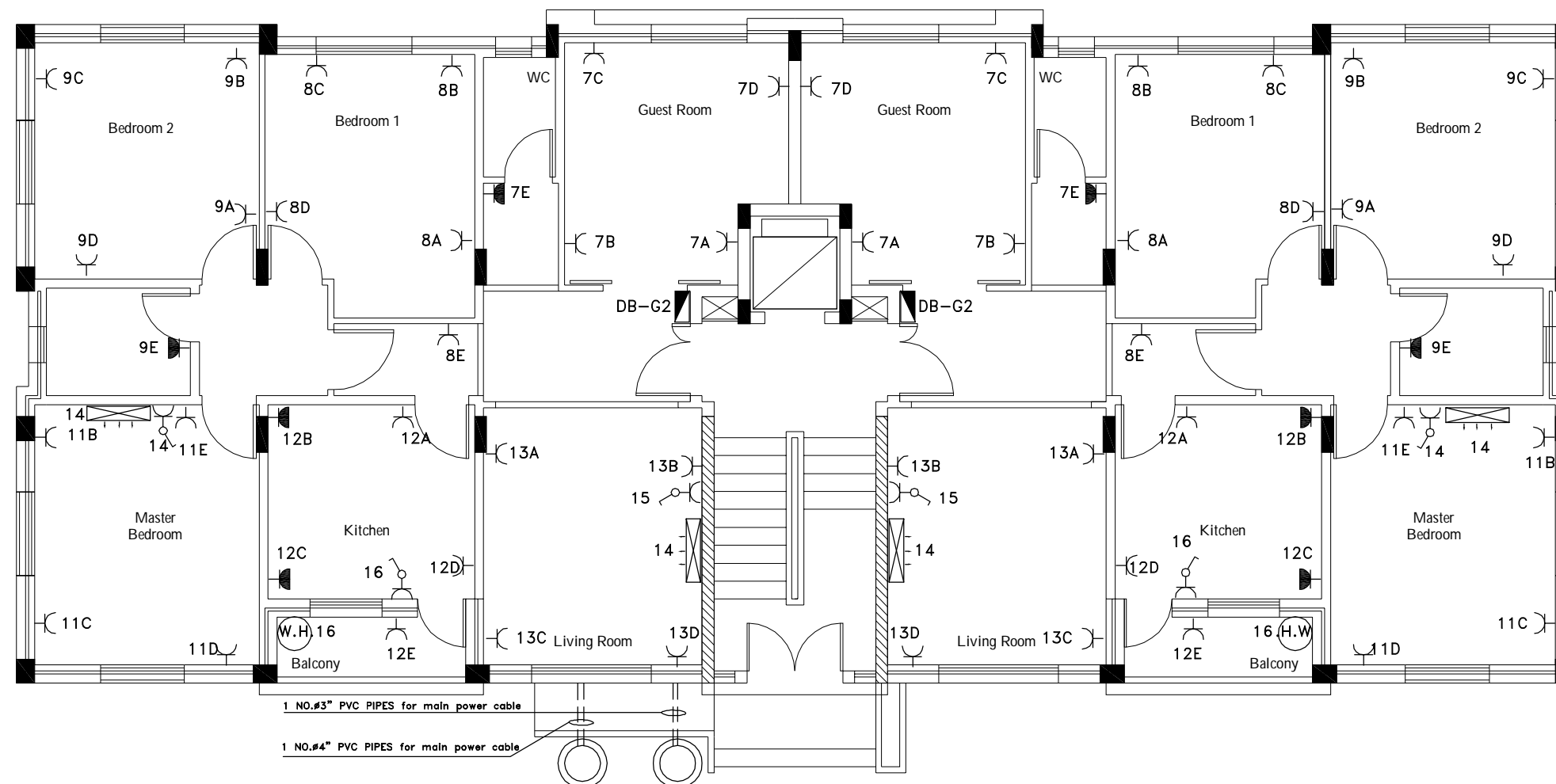
BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
Ground Floor  
Lighting Fittings Layout

DRAWING NO.: RE-E-006

DATE: APRIL 2011 | SCALE: 1:100

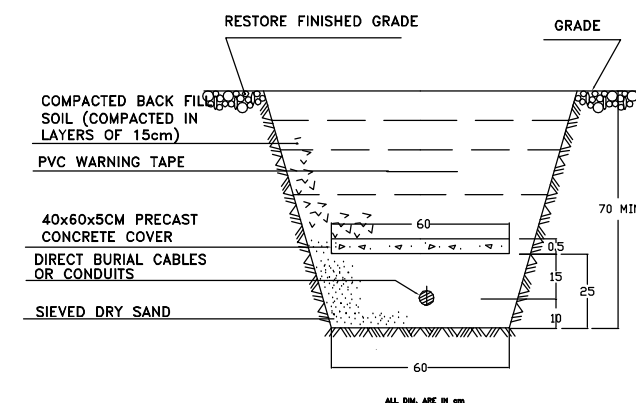
**NOTES :-**



U - BOLTED TYPE  
CONNECTOR SEE  
DETAIL BELOW

04" PVC SLEEVE

### Power Manhole Details




## TRENCH FOR ELECTRICAL CABLES


FOR TENDER ONLY

**CLIENT:**



 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

**EMPLOYER:**

 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

**PROJECT TITLE:**

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

**CONSULTANT:**

مركز الهندسة والتخطيط  
center for engineering and planning

**BUILDING NAME:**

RESIDENTIAL BUILDING NO. (A6)

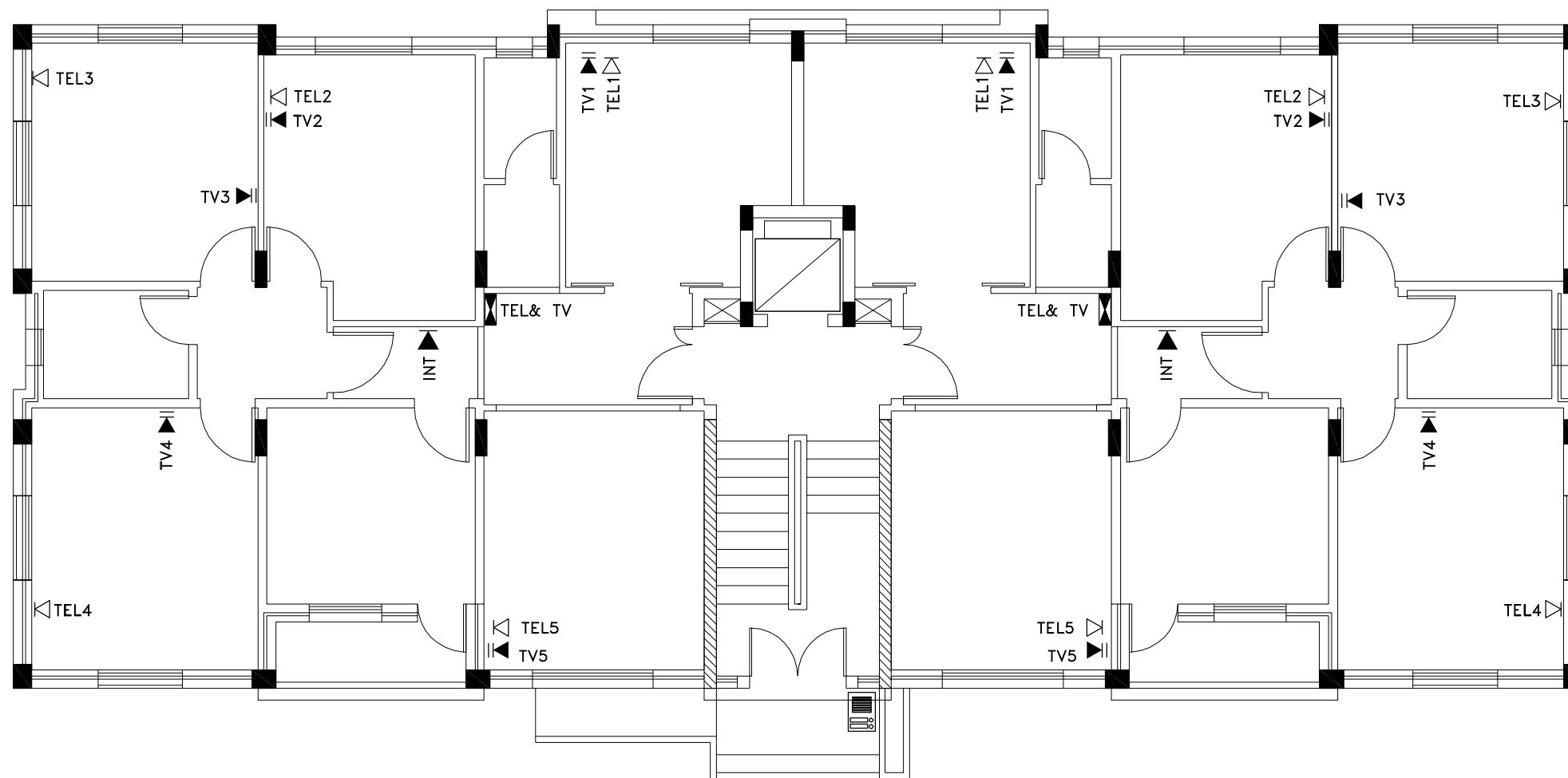
**DRAWING TITLE:**

Ground Floor

## Power Fittings Layout

**DRAWING NO.:** RE-E-007

DATE: APRIL 2011	SCALE: 1:100
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## NOTES :-

FOR TENDER ONLY

### CLIENT:

PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:

THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

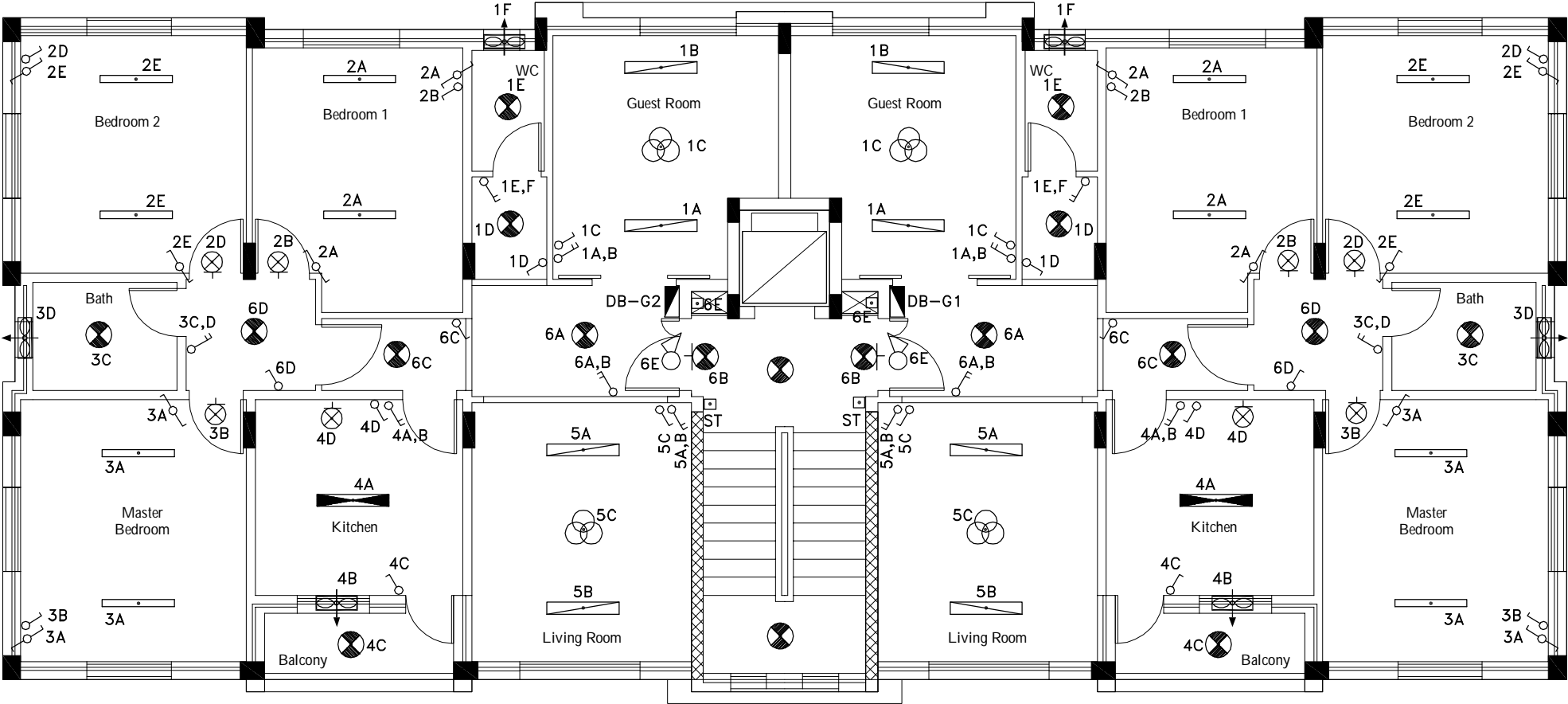
### DRAWING TITLE:

Ground Floor  
Telephone & TV Fittings Layout

DRAWING NO.: RE-E-008

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



FOR TENDER ONLY

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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

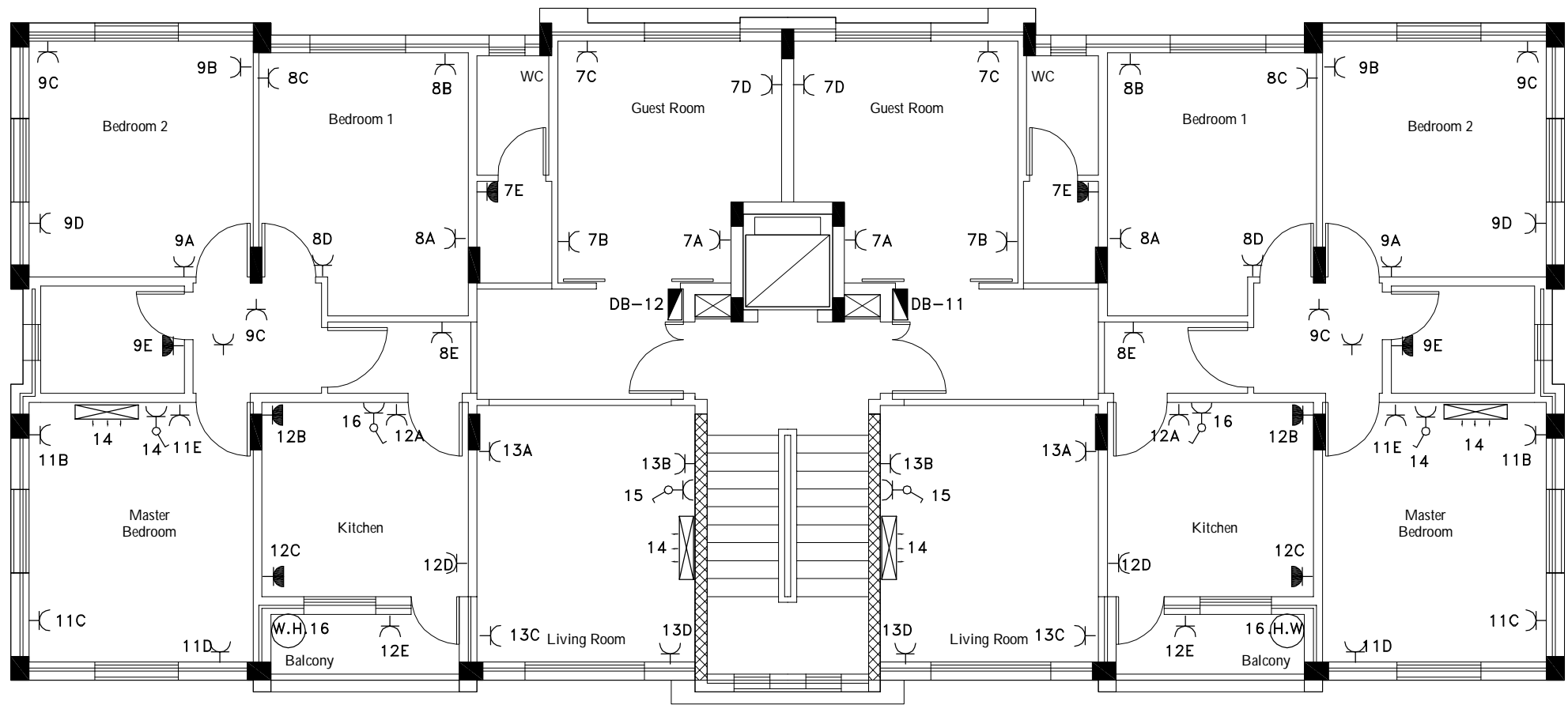
BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
Typical Floor  
Lighting Fittings Layout

DRAWING NO.: RE-E-009

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:

THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

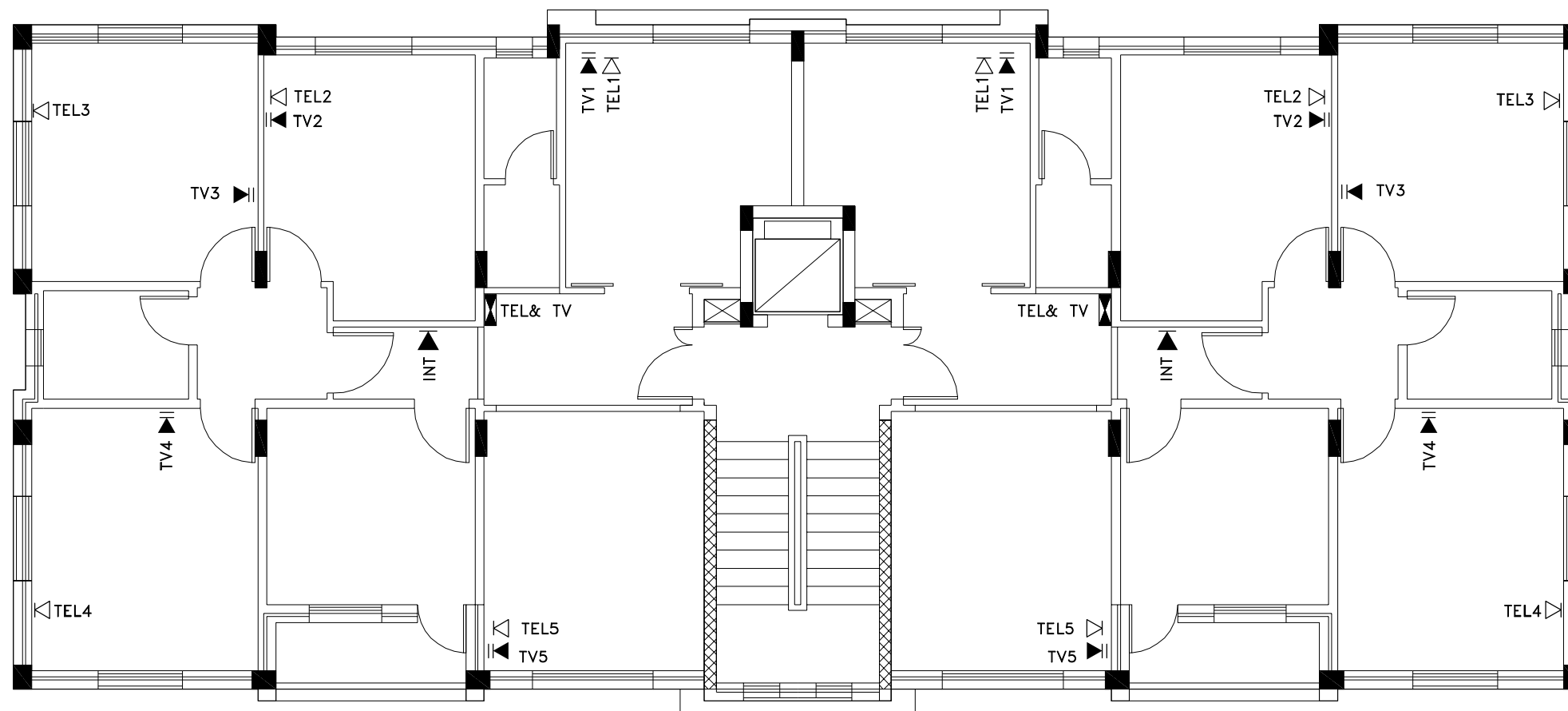
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

Typical Floor  
Power Fittings Layout

DRAWING NO.: RE-E-010


DATE: APRIL 2011 SCALE: 1:100





**NOTES :-**

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 PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

**EMPLOYER:**

 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
 PALESTINIAN PEOPLE  
(UNDP/PAPP)

**PROJECT TITLE:**

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

**CONSULTANT:**

  
center for engineering and planning

**BUILDING NAME:**

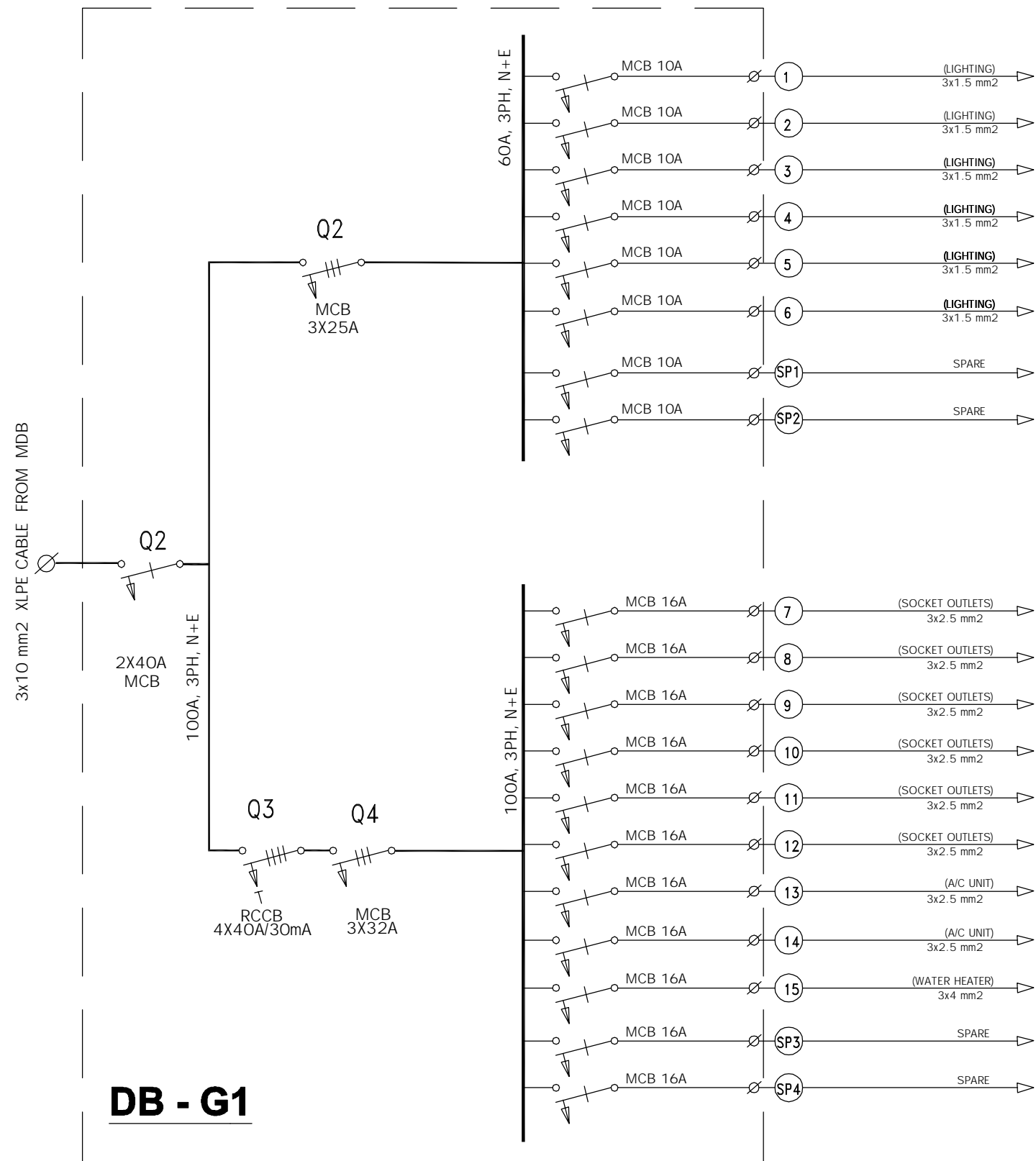
RESIDENTIAL BUILDING NO. (A6)

**DRAWING TITLE:**

Typical Floor  
Telephone & TV Fittings Layout

**DRAWING NO.:** RE-E-011

**DATE:** APRIL 2011 **SCALE:** 1:100



## NOTES :-

FOR TENDER ONLY

### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

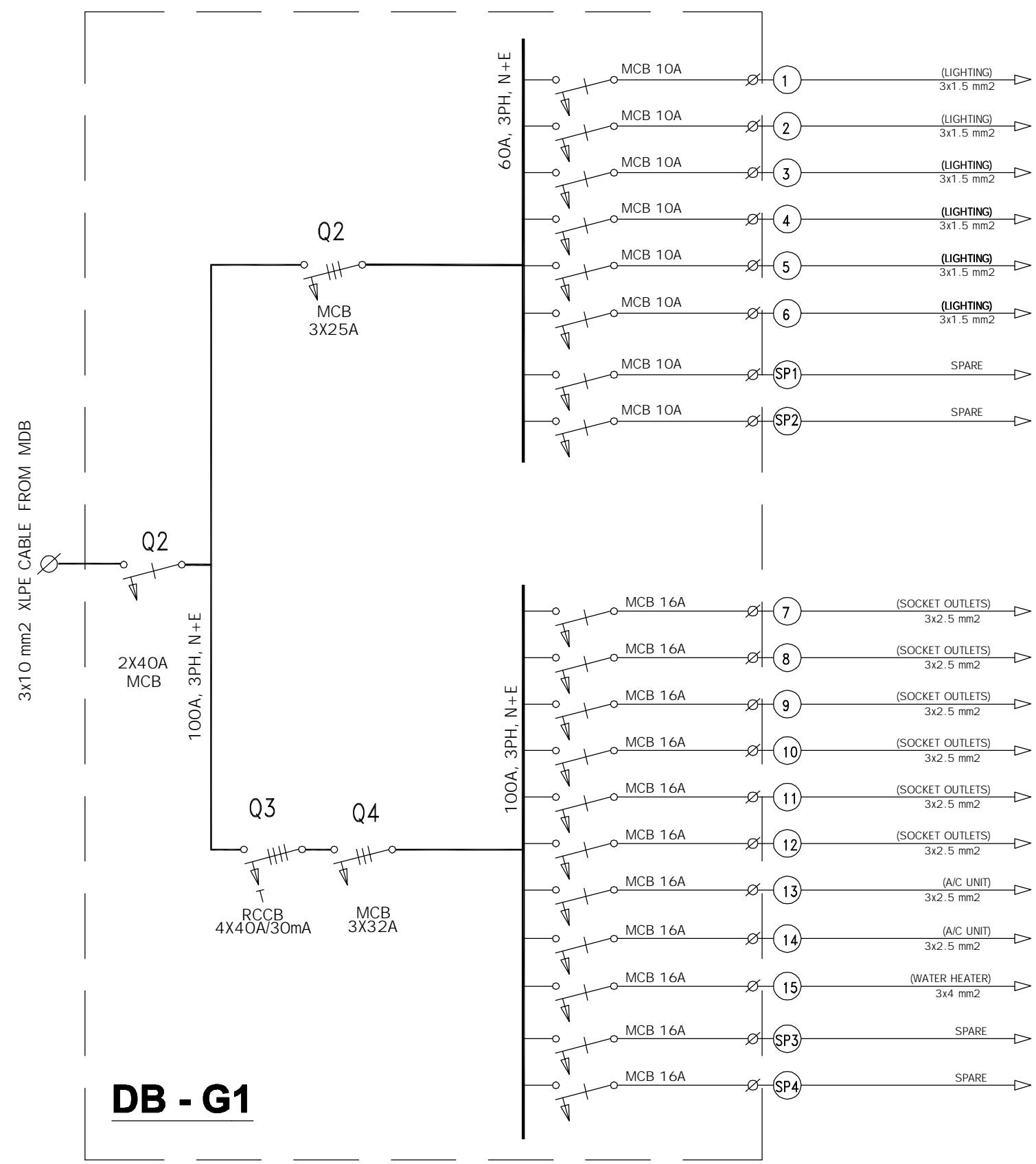
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

Typical Flat Panel  
DB-G1 Single Line Power Diagram

DRAWING NO.: RE-E-012

DATE: APRIL 2011 SCALE: 1:xxx



**DB - G1**

**NOTES :-**

**FOR TENDER ONLY**

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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

**EMPLOYER:**  
THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

**PROJECT TITLE:**  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

**CONSULTANT:**  
مركز الهندسة والتخطيط  
center for engineering and planning

**BUILDING NAME:**  
RESIDENTIAL BUILDING NO. (A6)

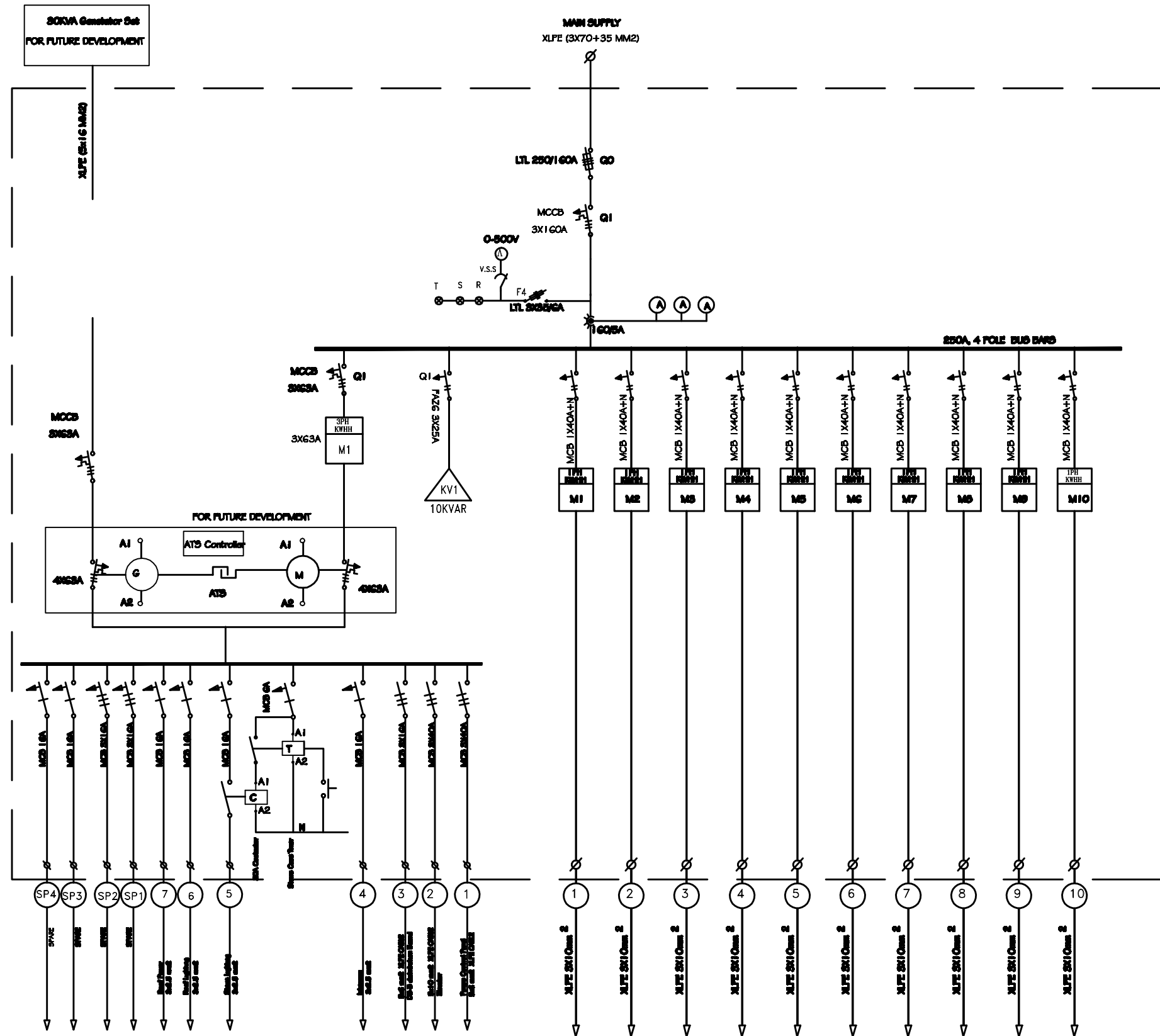
**DRAWING TITLE:**  
Under Ground Floor  
DB-B Single Line Power Diagram

**DRAWING NO.:** RE-E-013

DATE: APRIL 2011 SCALE: 1:xxx




**NOTES :-**

**FOR TENDER ONLY****CLIENT:**

**PALESTINIAN NATIONAL AUTHORITY**  
**MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)**

**EMPLOYER:**

 THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

**PROJECT TITLE:**

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

**CONSULTANT:**

مركز الهندسة والتخطيط  
center for engineering and planning

**BUILDING NAME:**

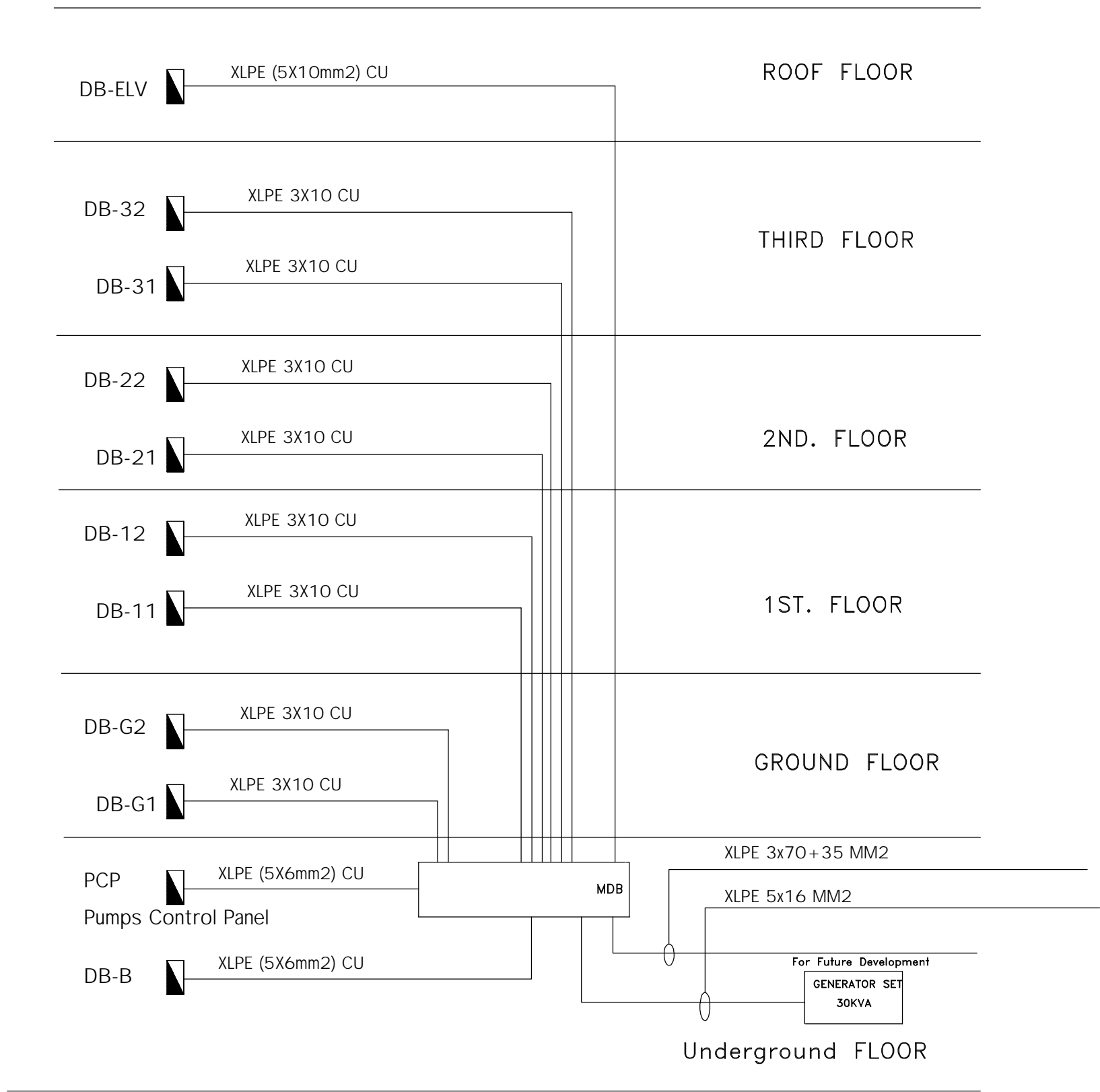
RESIDENTIAL BUILDING NO. (A5)

**DRAWING TITLE:**

**Under Ground Floor**  
**MDB Main Distribution Board**

**DRAWING NO.: RE-E-014**

DATE: APRIL 2011	SCALE: 1:200
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NOTES :-

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CLIENT:  
PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
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PALESTINIAN PEOPLE  
(UNDP/PAPP)

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PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
Power Cables Riser Diagram

DRAWING NO.: RE-E-015

DATE:APRIL 2011 | SCALE: 1:xxx

FOOF

3RD. FLOOR

2ND FLOOR

1ST FLOOR

GROUND FLOOR

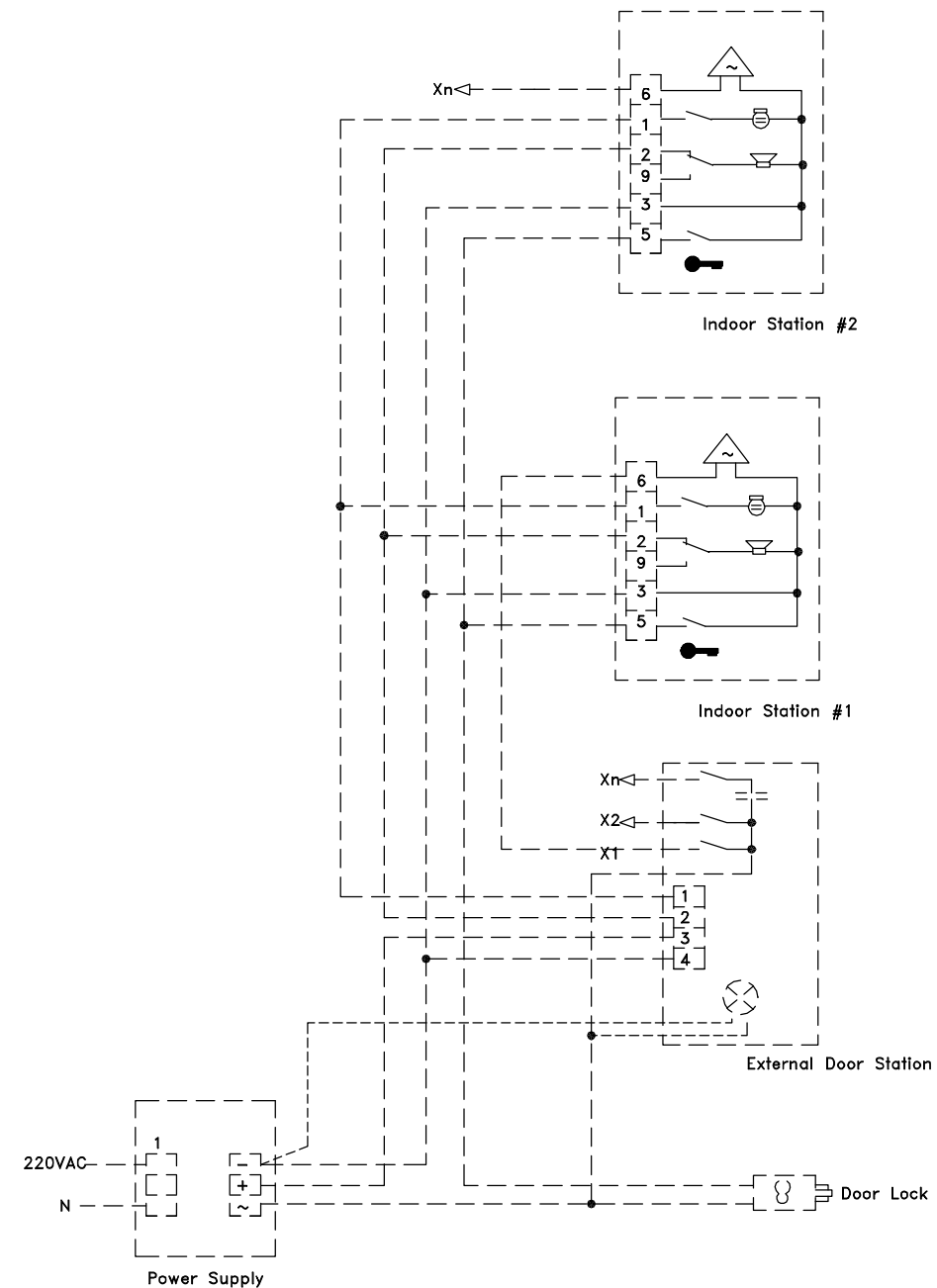
UNDERGROUND FLOOR

EACH 1No. 2 PAIRS TEL CABLE

MAIN TELEPHONE CABLE( 40 PAIRS).  
40X(2X0.6MM2)

MAIN TEL. FRAME  
MTF

Tel. System Riser Diagram



InDiagramtercom System Wiring

## NOTES :-

FOR TENDER ONLY

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PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:

THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
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IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 06)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

Telephone Cables Riser Diagram  
Intercom System Wiring Diagram

DRAWING NO.: RE-E-016

DATE: APRIL 2011 SCALE: 1:xxx

## EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

## CLIENT



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

## CONSULTANT

مركز الهندسة والتخطيط  
center for engineering and planning



# GENERAL DETAILS

**EMPLOYER:**

THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

**CLIENT**

PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

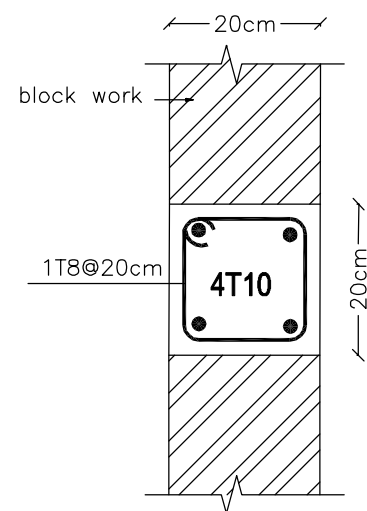
**CONSULTANT**

مركز الهندسة والتخطيط  
center for engineering and planning



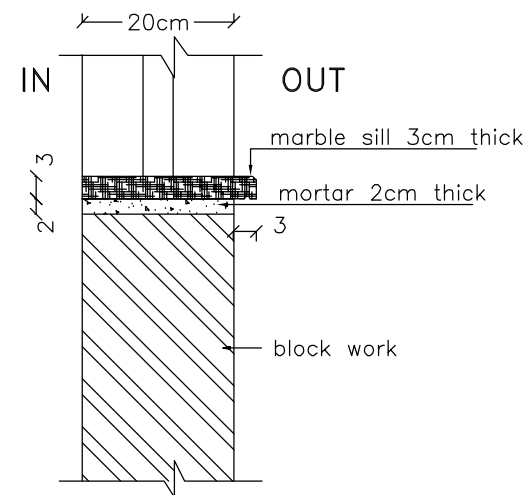
# LIST OF DRAWINGS

S/NO.	DRAWING NAME	DRG. NO.
GENERAL DETAILS		
01/07	GENERAL DETAILS (1)	RE-GD-001
02/07	GENERAL DETAILS (2)	RE-GD-002
03/07	GENERAL DETAILS (3)	RE-GD-003
04/07	GENERAL DETAILS (4)	RE-GD-004
05/07	GENERAL DETAILS (5)	RE-GD-005
06/07	GENERAL DETAILS (6)	RE-GD-006
07/07	GENERAL DETAILS (7)	RE-GD-007



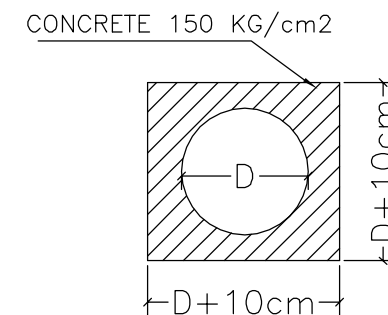
**LINTEL DETAIL**

SCALE 1 : 10



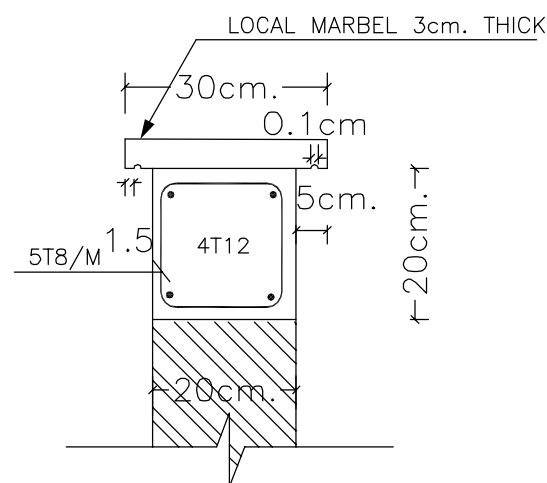
**WINDOW SILL DETAIL**

SCALE 1 : 10



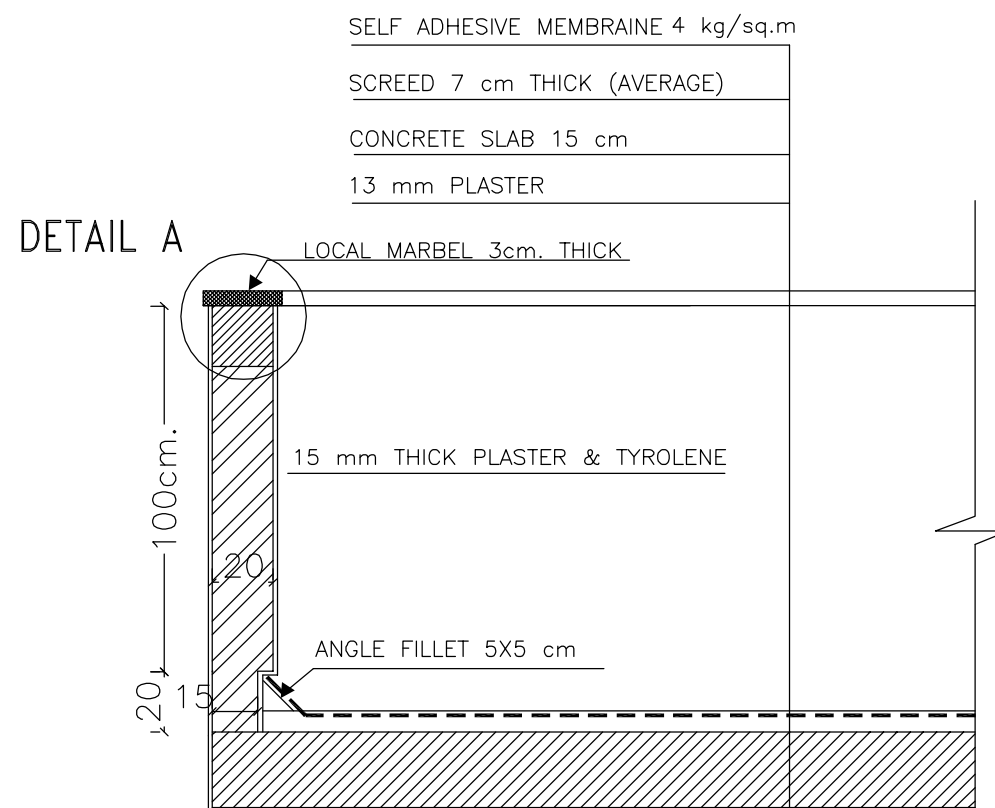
**ENCASEMENT FOR PIPE LINES**

NOT TO SCALE



**DETAIL A**

NOT TO SCALE



**PARAPET WALL SECTION**

SCALE 1 : 25

## NOTES :-

- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE START WORKS.
- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.

## FOR TENDER ONLY

### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
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### PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 04)

### CONSULTANT:



مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

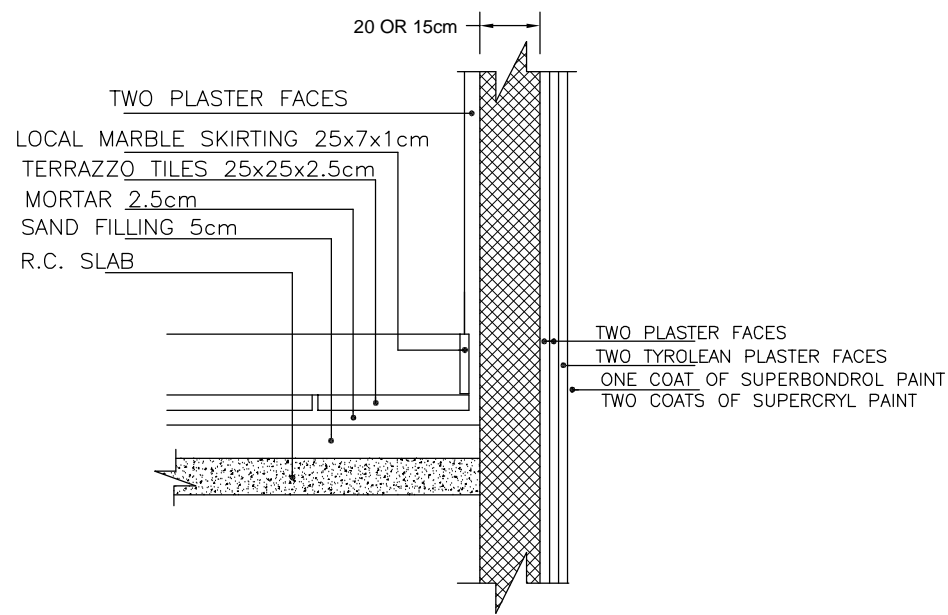
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

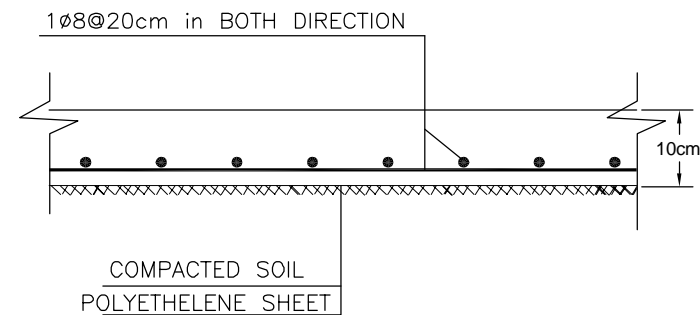
GENERAL DETAILS (1)

### DRAWING NO.: RE-GD-001

DATE: APRIL 2011 SCALE:

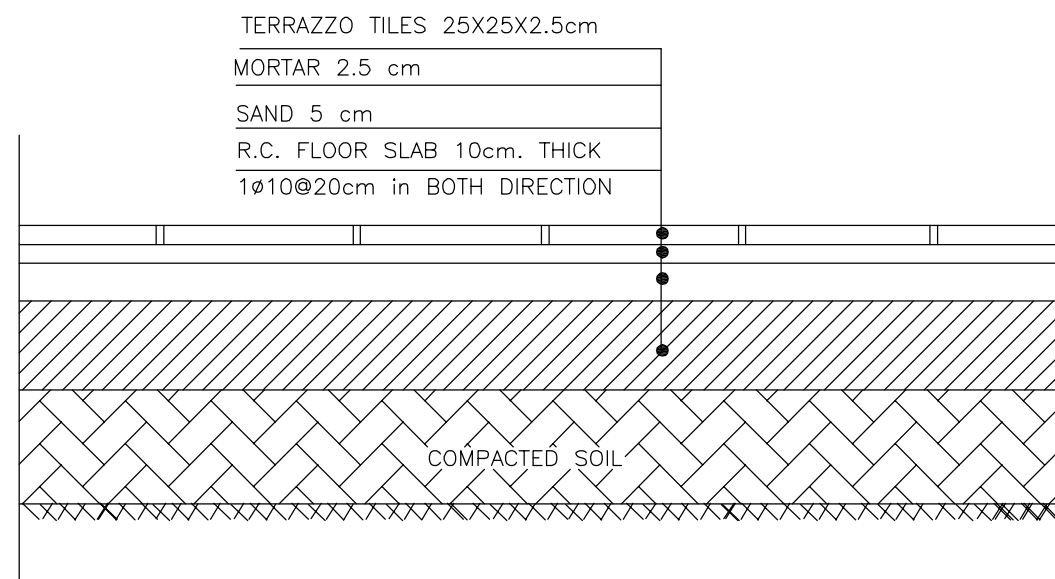


FINISH FOR PLASTERING



REINFORCED GROUND FLOOR SLAB

SCALE 1:10



FINISH GROUND & TYPICAL FLOOR SLAB

SCALE 1:10

## NOTES :-

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## FOR TENDER ONLY

### CLIENT:



PALESTINIAN NATIONAL AUTHORITY  
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

### EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME  
PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

### PROJECT TITLE:

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RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 04)

### CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

### BUILDING NAME:

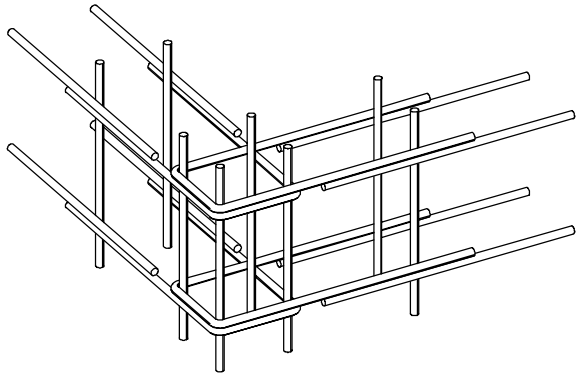
RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

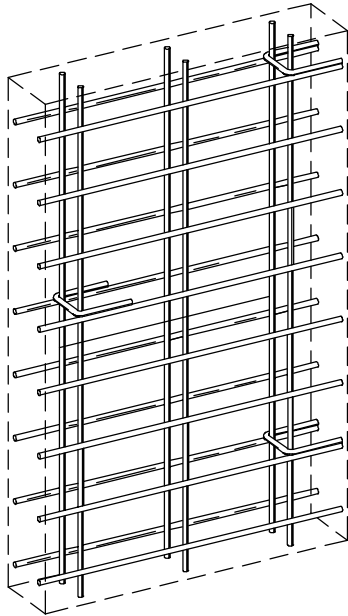
GENERAL DETAILS (2)

DRAWING NO.: **RE-GD-002**

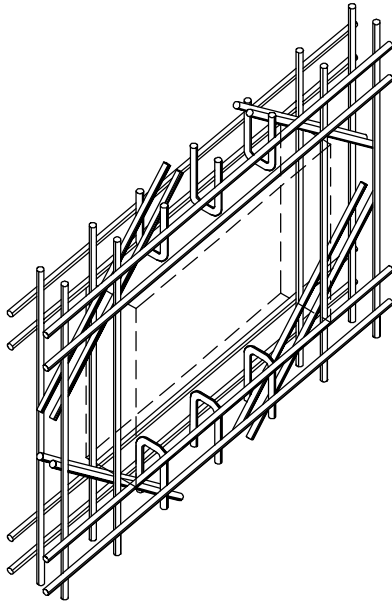
DATE: APRIL 2011 | SCALE:



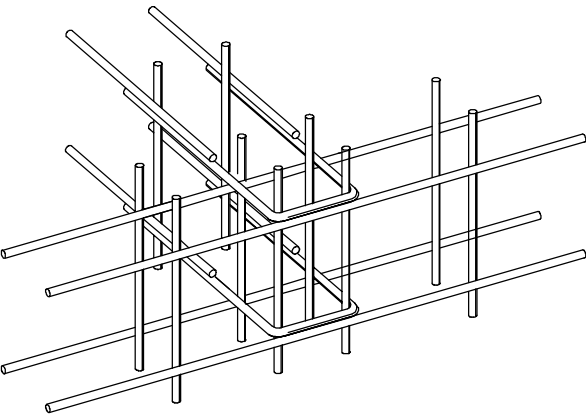
FOR ALL WALLS , WALL BEAMS AND DEEP BEAMS  
USE U BARS FOR ENDS AND CORNERS  
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



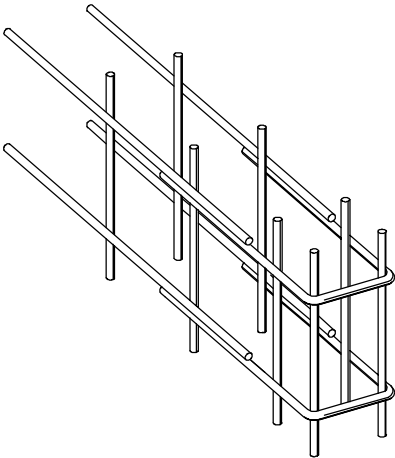
FOR ALL WALLS(SHEAR WALLS & RETAINING WALLS)  
USE  $\phi 12$  U TIE SPACERS STAGGERED AT 150 CM INTERVALS  
VERTICALLY & HORIZONTALLY.



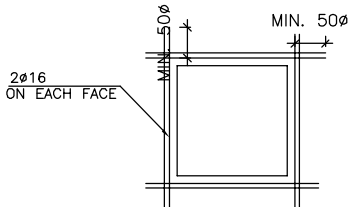
FOR ALL WALL OPENINGS  
FIX DIAGONAL  $2\phi 14$  BARS IN BOTH FACES, AT EACH CORNER.  
( TO BE USED UNLESS SHOWN OTHERWISE ON THE DRAWINGS )



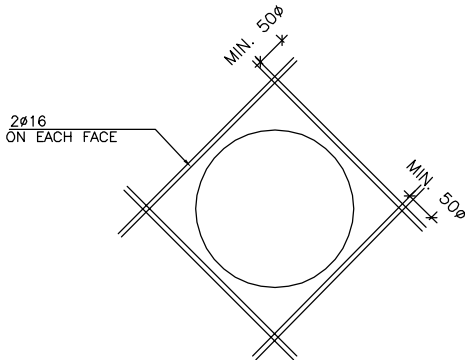
FOR ALL WALLS :  
USE U BARS FOR INTERSECTIONS OFF WALLS  
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



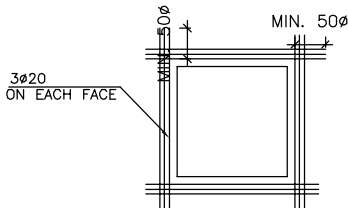
FOR ALL WALLS:  
USE U BARS FOR ENDS OF WALLS  
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



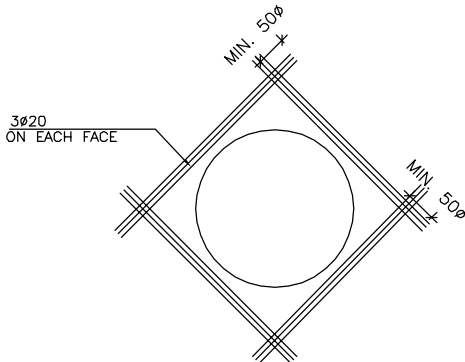
RECTANGULAR OPENING <500mm



CIRCULAR OPENING <500mm



RECTANGULAR OPENING > 500mm



CIRCULAR OPENING > 500mm

DETAIL AROUND OPENING IN R.C. WALL & SLAB  
(UNLESS SHOWN OTHERWISE ON DRAWINGS)

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FOR TENDER ONLY

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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:  
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PROGRAMME OF ASSISTANCE TO THE  
PALESTINIAN PEOPLE  
(UNDP/PAPP)

PROJECT TITLE:  
CONSTRUCTION OF 100 HOUSING UNITS TO  
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES  
IN GAZA STRIP  
PROJECT NO.: PAL 10-00070416 (PACKAGE 04)

CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

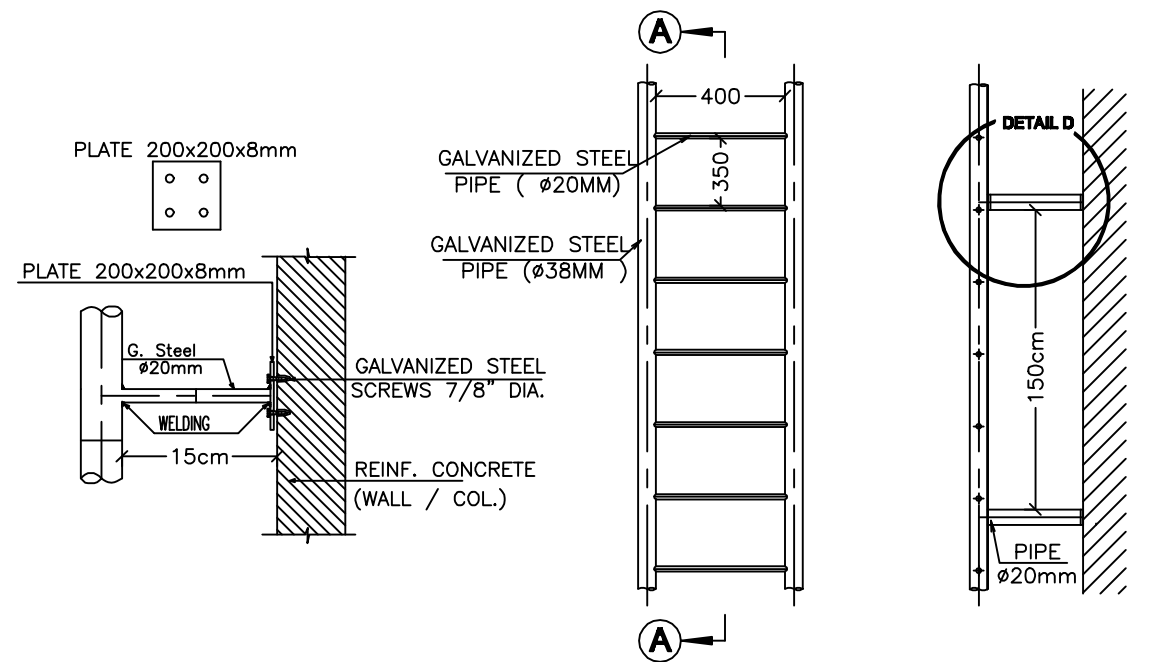
BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
GENERAL DETAILS (5)

DRAWING NO.: RE-GD-005

DATE: APRIL 2011 SCALE:





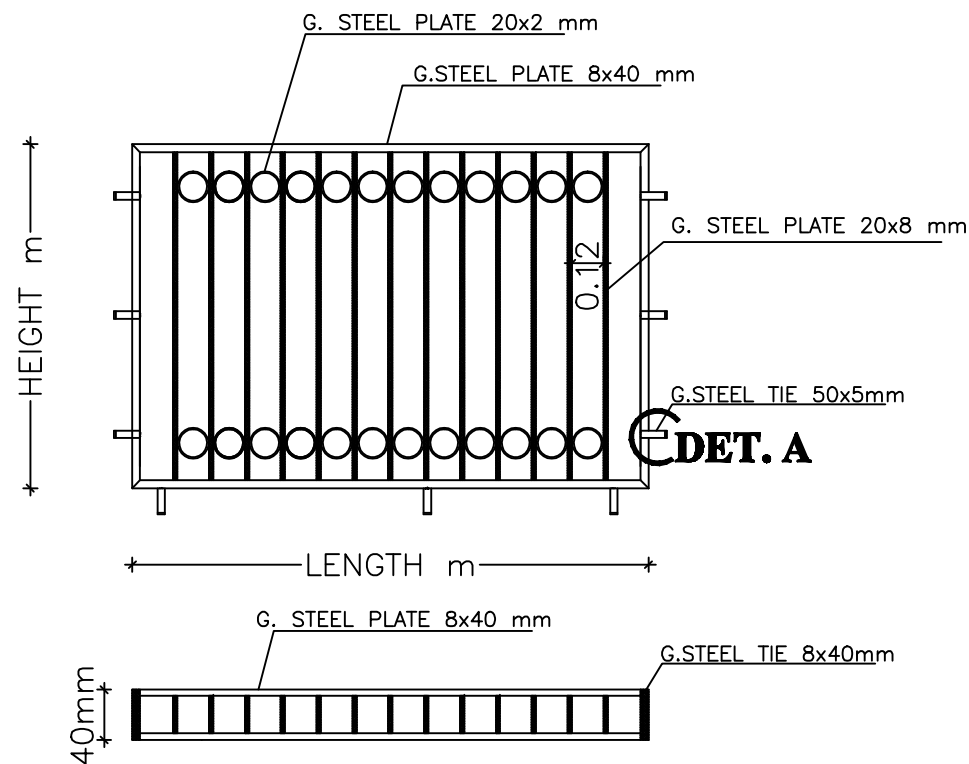
DETAIL D

FRONT VIEW

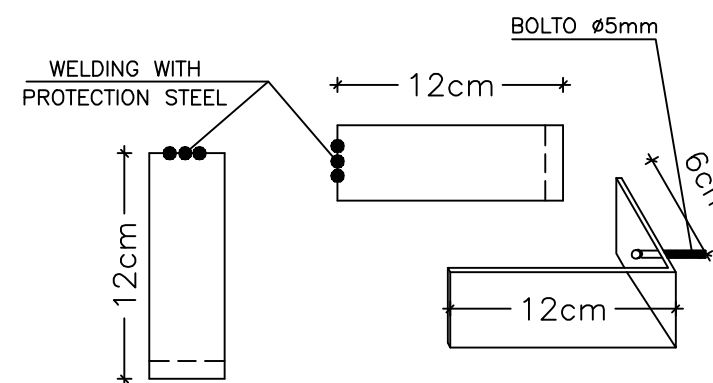
SECTION A-A

### LADDER DETAIL FOR BUILDINGS

NOT TO SCALE



**STEEL PROTECTION APW1**  
scale 1:25



**DETAIL A**  
scale 1:25

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PROJECT NO.: PAL 10-00070416 (PACKAGE 04)

**CONSULTANT:**  
مركز للتخطيط  
center for engineering and planning

**BUILDING NAME:**  
RESIDENTIAL BUILDING NO. (A6)

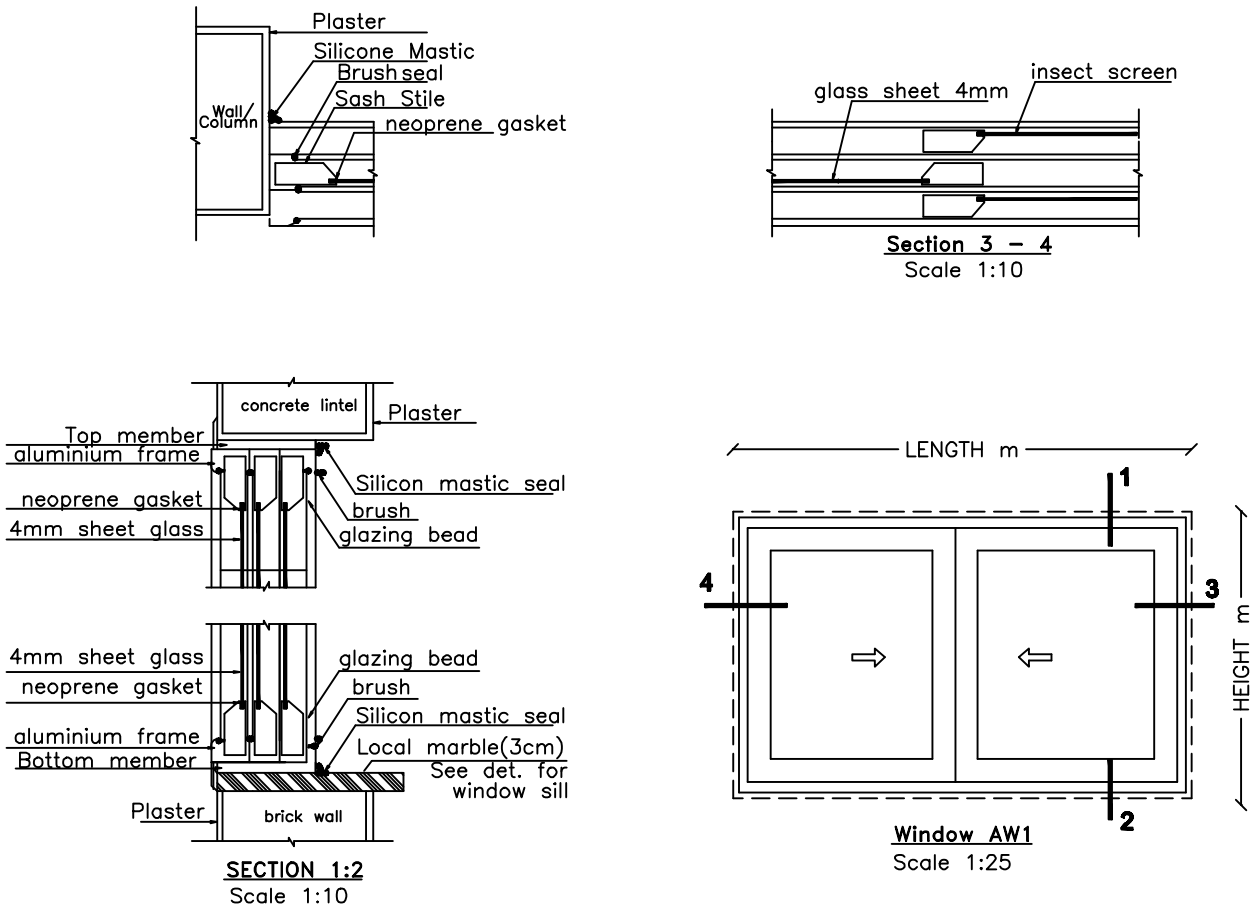
**DRAWING TITLE:**  
GENERAL DETAILS (3)

**DRAWING NO.:** RE-GB-003

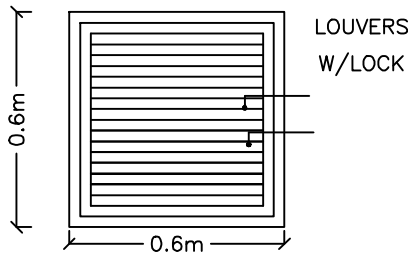
DATE: APRIL 2011 SCALE:

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TYPICAL DETAILED FOR WINDOW



DETAILED FOR WINDOW LOUVER

scale 1:20

FOR TENDER ONLY

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CONSULTANT:

مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:

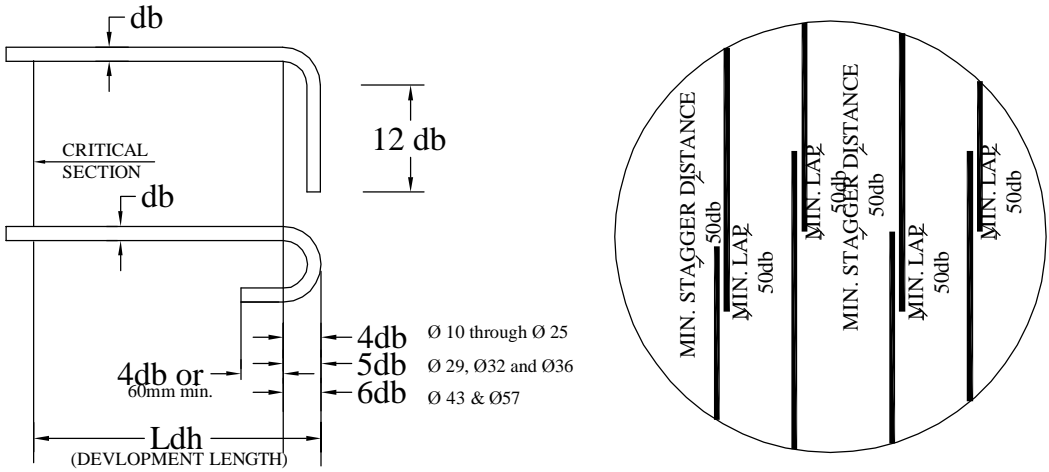
GENERAL DETAILS (4)

DRAWING NO.: RE-GB-004

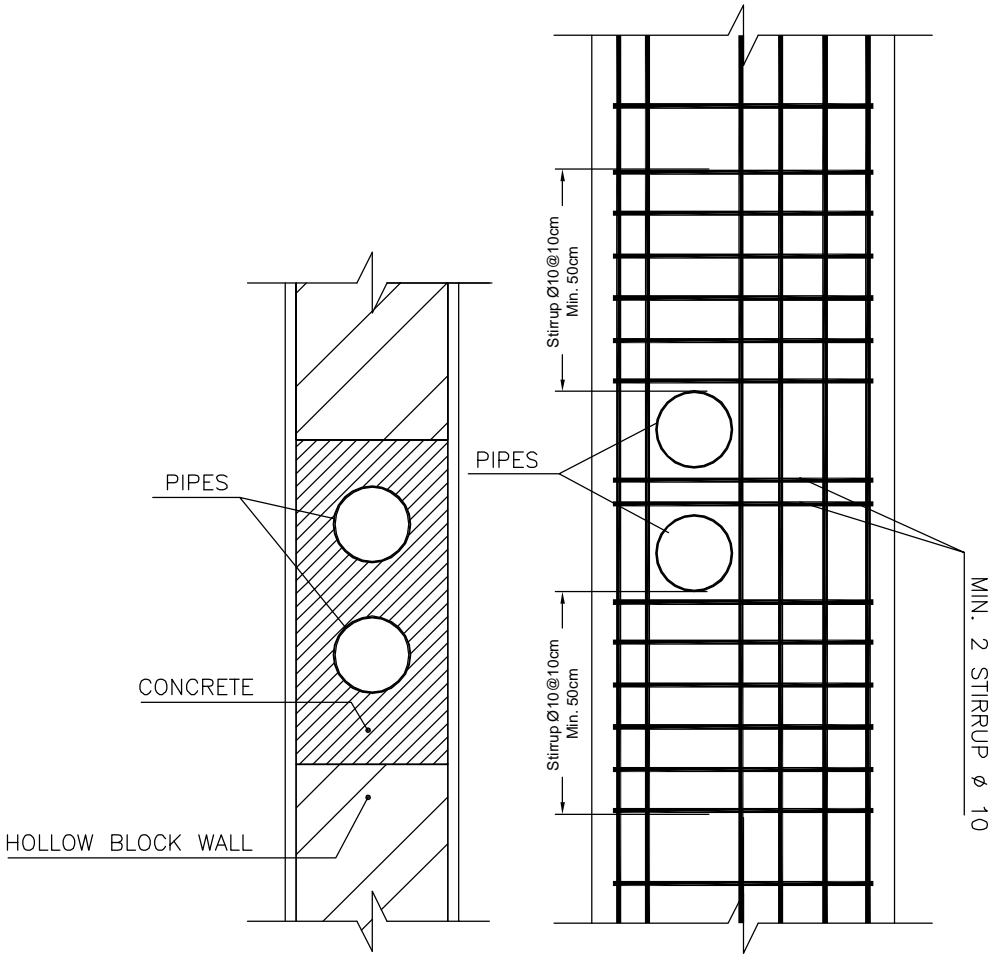
DATE: APRIL 2011 SCALE:

LINTELS DETAILS.

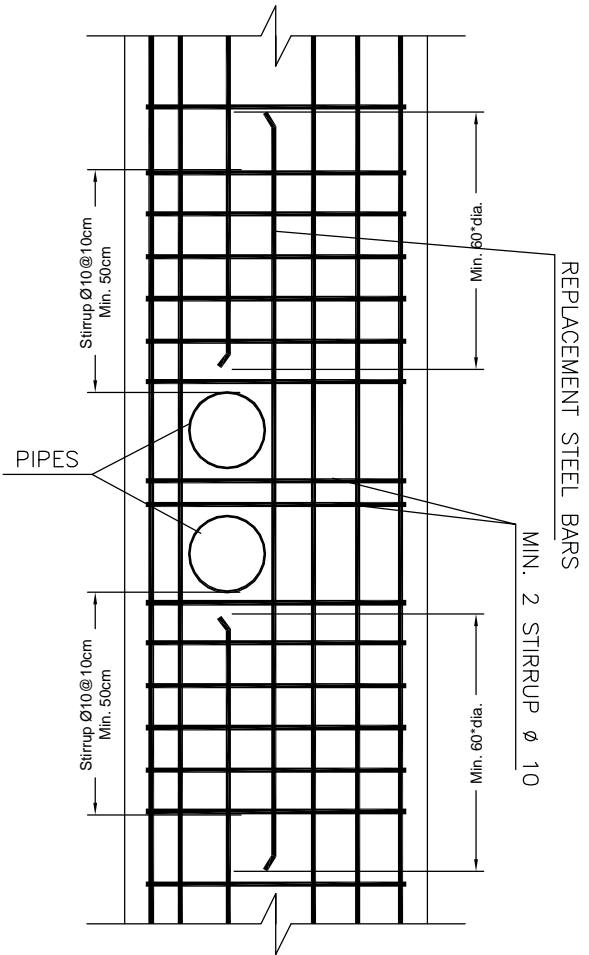
SCHEDULE OF LINTELS REINFORCEMENT								
LINTEL WIDTH =b CLEAR SPAN	b=10cm.		b=15cm.		b=20cm./30cm.		DEPTH= d	STIRRUPS
	TOP REINF.	BOTTOM REINF.	TOP REINF.	BOTTOM REINF.	TOP REINF.	BOTTOM REINF.		
< 200	1T12	1T14	2T12	2T12	2T12	2T14	20	1ø8@200mm
200–300	1T12	1T14	2T12	2T14	2T12	2T16	25	1ø8@200mm
301–400	1T12	1T16	2T12	2T14	2T12	2T16	30	1ø8@200mm
401–500	1T12	1T16	2T14	2T16	2T14	2T20	35	1ø8@200mm
501–600	1T14	1T20	2T14	2T16	2T14	2T20	40	1ø8@200mm
601–700	1T14	1T20	2T14	2T20	2T14	2T20	50	1ø8@200mm
701–800	1T14	1T20	2T16	2T20	2T16	3T20	55	1ø8@200mm



TYPICAL STAGGERING REINFORCEMENT DETAILS  
( TO BE USED UNLESS SHOWN OTHERWISE ON THE DRAWINGS )



PLUMPING DETAILS  
IN THE WALLS



GENERAL DETAIL (2)

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CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
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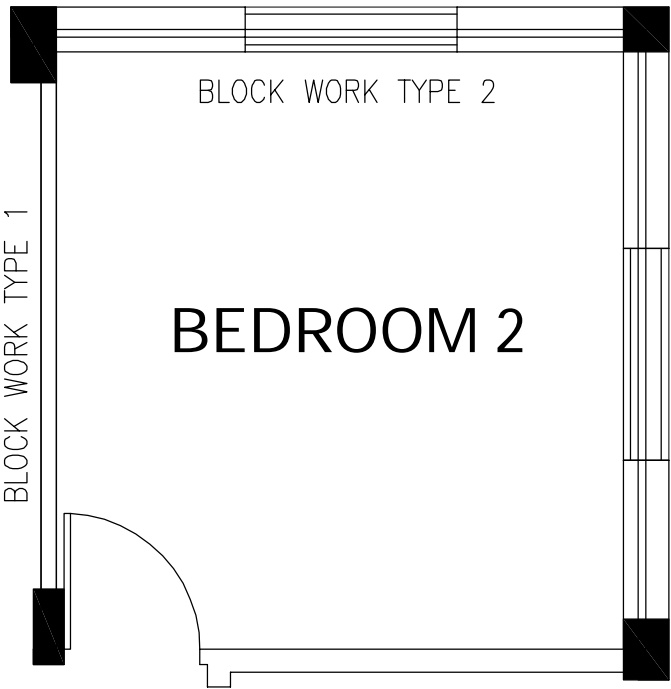
DRAWING TITLE:  
GENERAL DETAILS (6)

DRAWING NO.: RE-GD-006

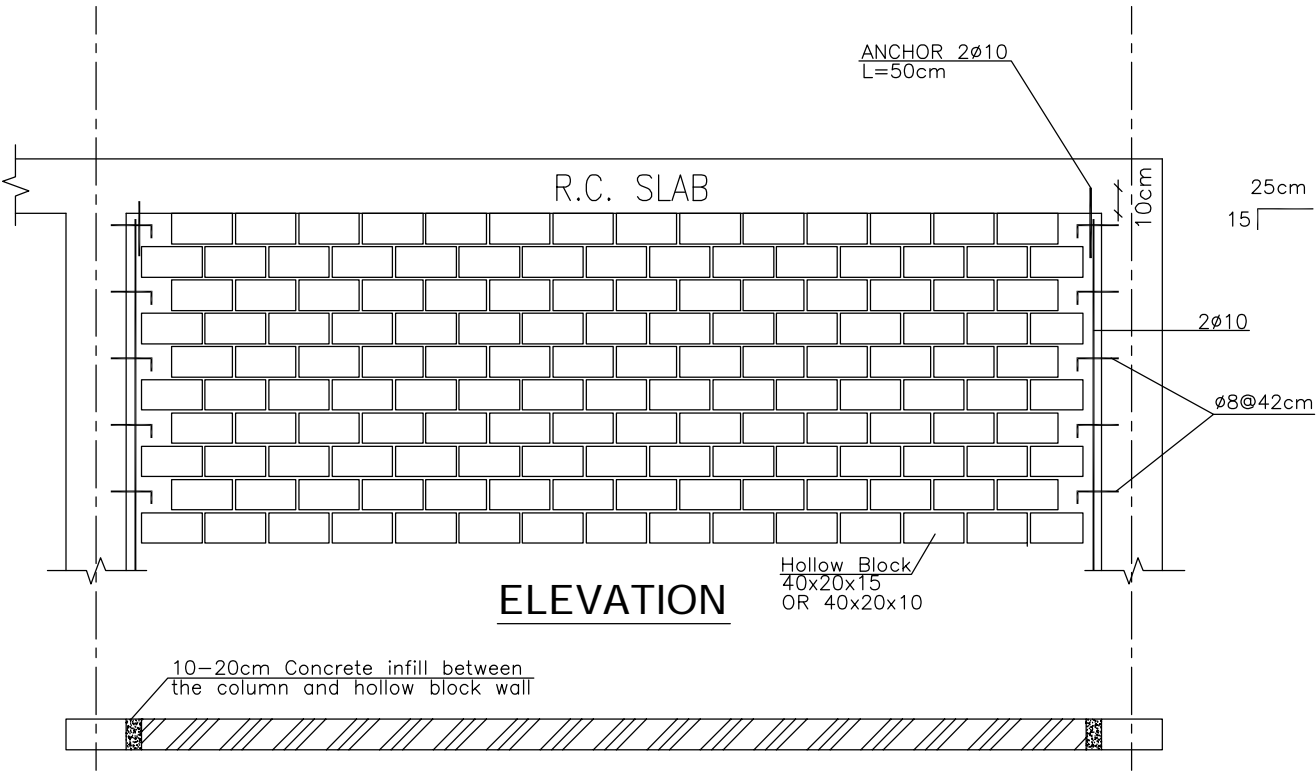
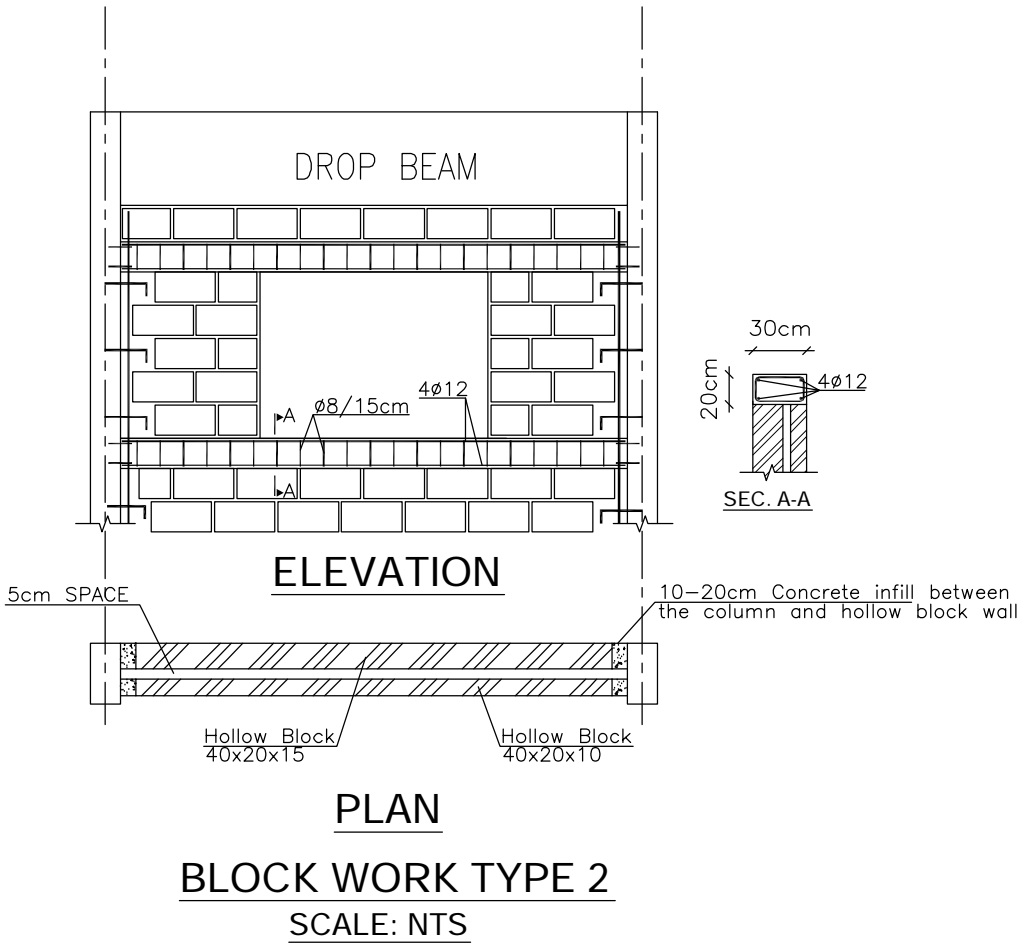
DATE: APRIL 2011 SCALE:

NOTES :-

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TYPICAL BLOCK WORK TYPES IN  
SCALE: 1:100



PLAN  
BLOCK WORK TYPE 1  
SCALE: NTS

FOR TENDER ONLY

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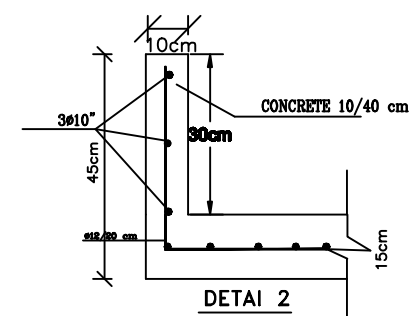
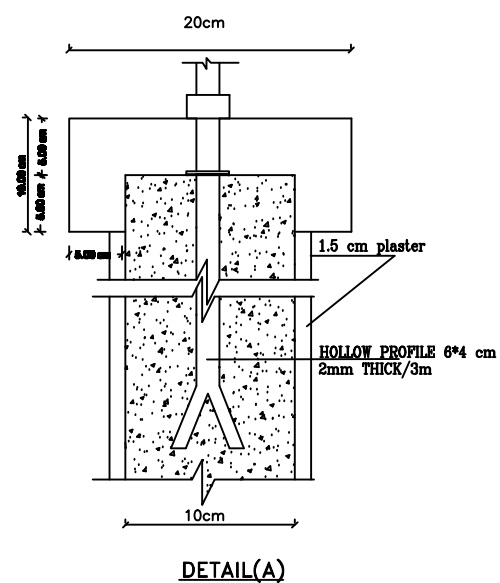
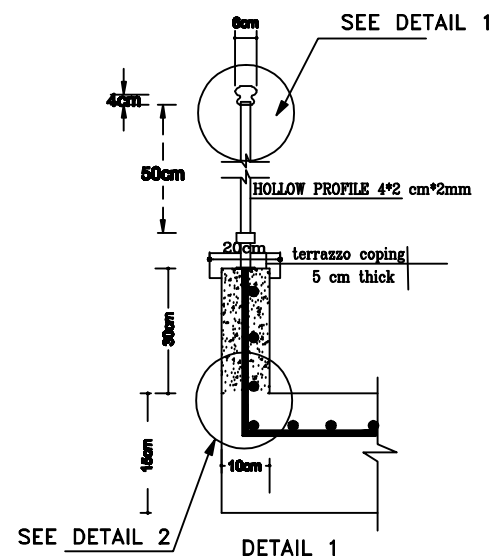
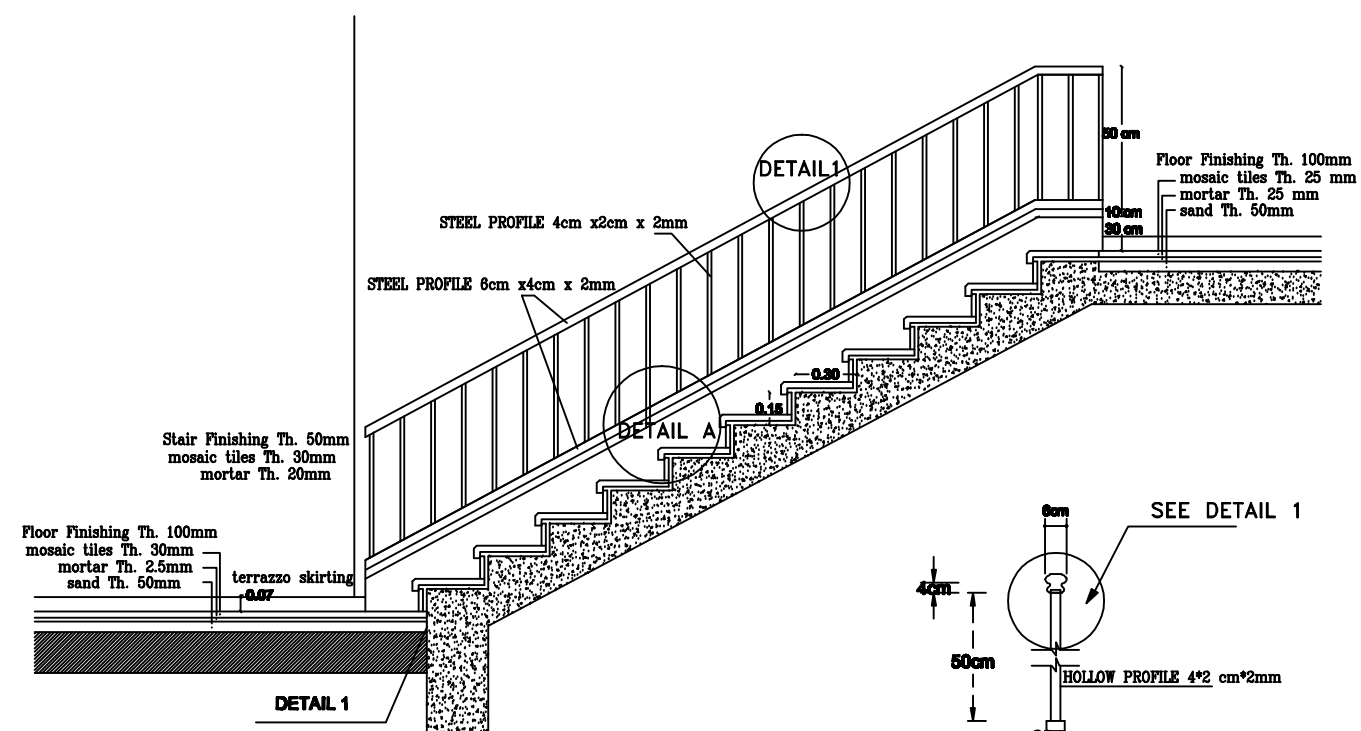
CONSULTANT:  
مركز الهندسة والتخطيط  
center for engineering and planning

BUILDING NAME:  
RESIDENTIAL BUILDING NO. (A6)

DRAWING TITLE:  
GENERAL DETAILS (7)

DRAWING NO.: RE-GD-007

DATE: APRIL 2011 SCALE:



DETAILS FOR HANDRAIL FOR STAIRS

## NOTES :-


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### CONSULTANT:

  
 center for engineering and planning

### BUILDING NAME:

RESIDENTIAL BUILDING NO. (A6)

### DRAWING TITLE:

GENERAL DETAILS (8)

### DRAWING NO.: RE-GB-007

DATE: APRIL 2011 SCALE: