

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. 08
RESIDENTIAL BUILDING
TYPE B (B5)



PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

EMPLOYER:



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center for engineering and planning



ARCHITECTURAL DRAWINGS

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center for engineering and planning

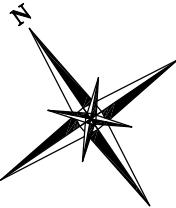


LIST OF DRAWINGS

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			

NOTES :-

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

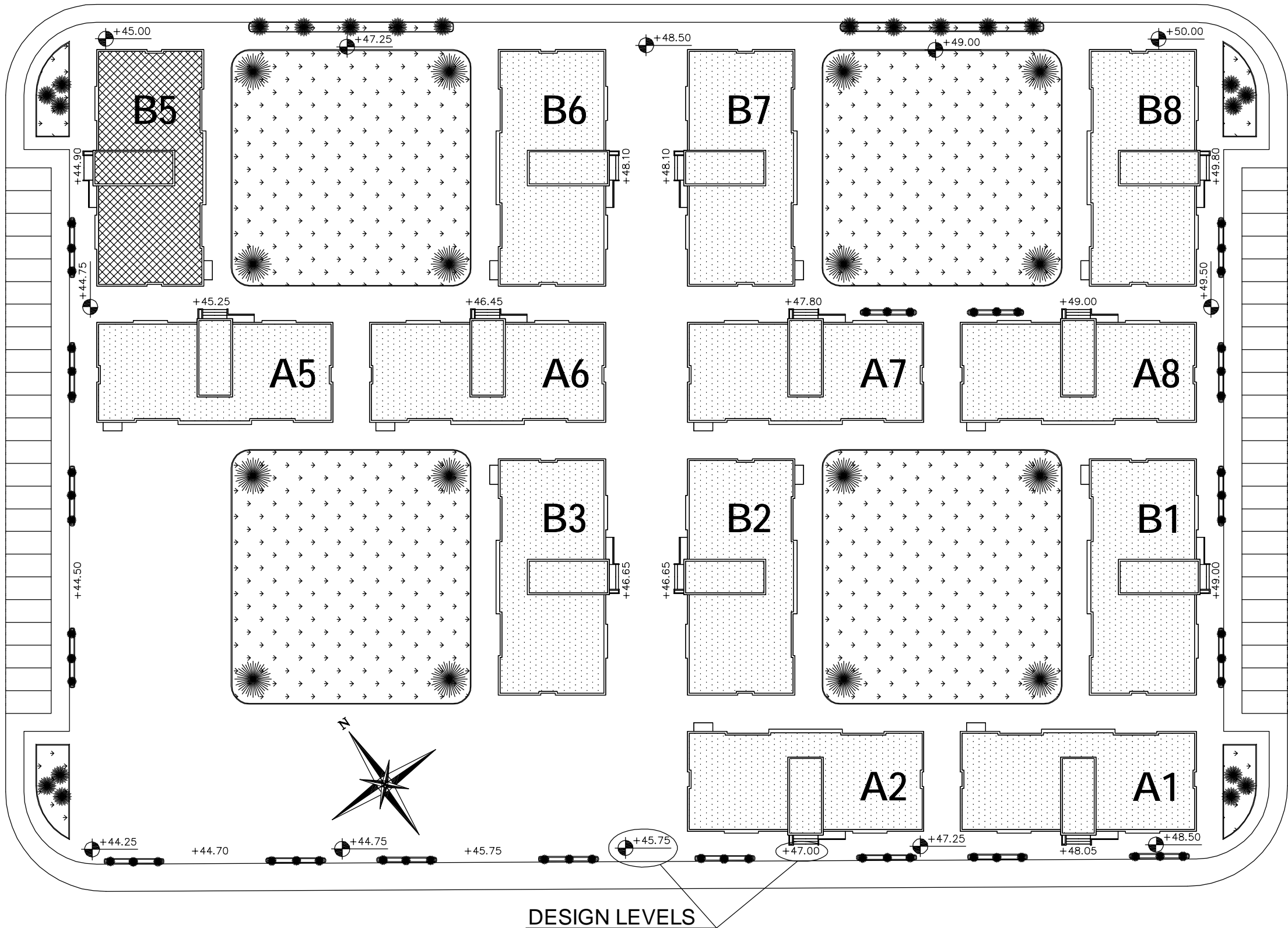
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

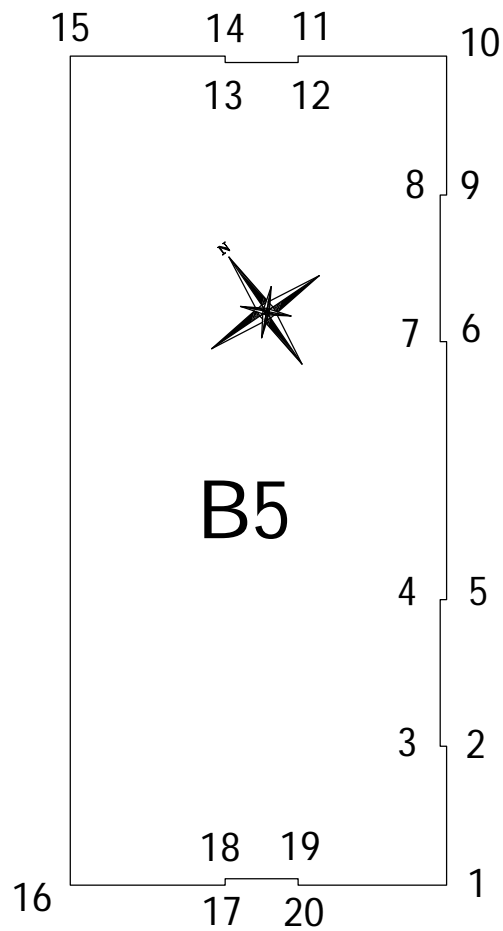
DRAWING TITLE:
GENERAL LAYOUT, LOCATION AND
DESIGN LEVEL OF THE BUILDING

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

DATE: APRIL 2011 SCALE: 1:500



GENERAL LAYOUT, LOCATION AND DESIGN LEVEL OF THE BUILDING



BUILDING NO. B5


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2	100571.8786	107372.1950
3	100571.7142	107372.3088
4	100571.3332	107376.0905
5	100574.4976	107375.9766
6	100579.1092	107382.6357
7	10057.9448	107382.7495
8	100581.5638	107386.5312
9	100581.7282	107386.4173
10	100584.2048	107389.9935
11	100580.3820	107392.6409
12	100580.2681	107392.4765
13	100578.3773	107393.7860
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15	100574.5040	107396.7117
16	100559.7012	107375.3370
17	100563.6884	107372.5757
18	100563.8023	107372..7401
19	100565.6931	107371.4306
20	100565.5792	107371.2662


COORDINATES FOR THE BUILDING

NOTES :-



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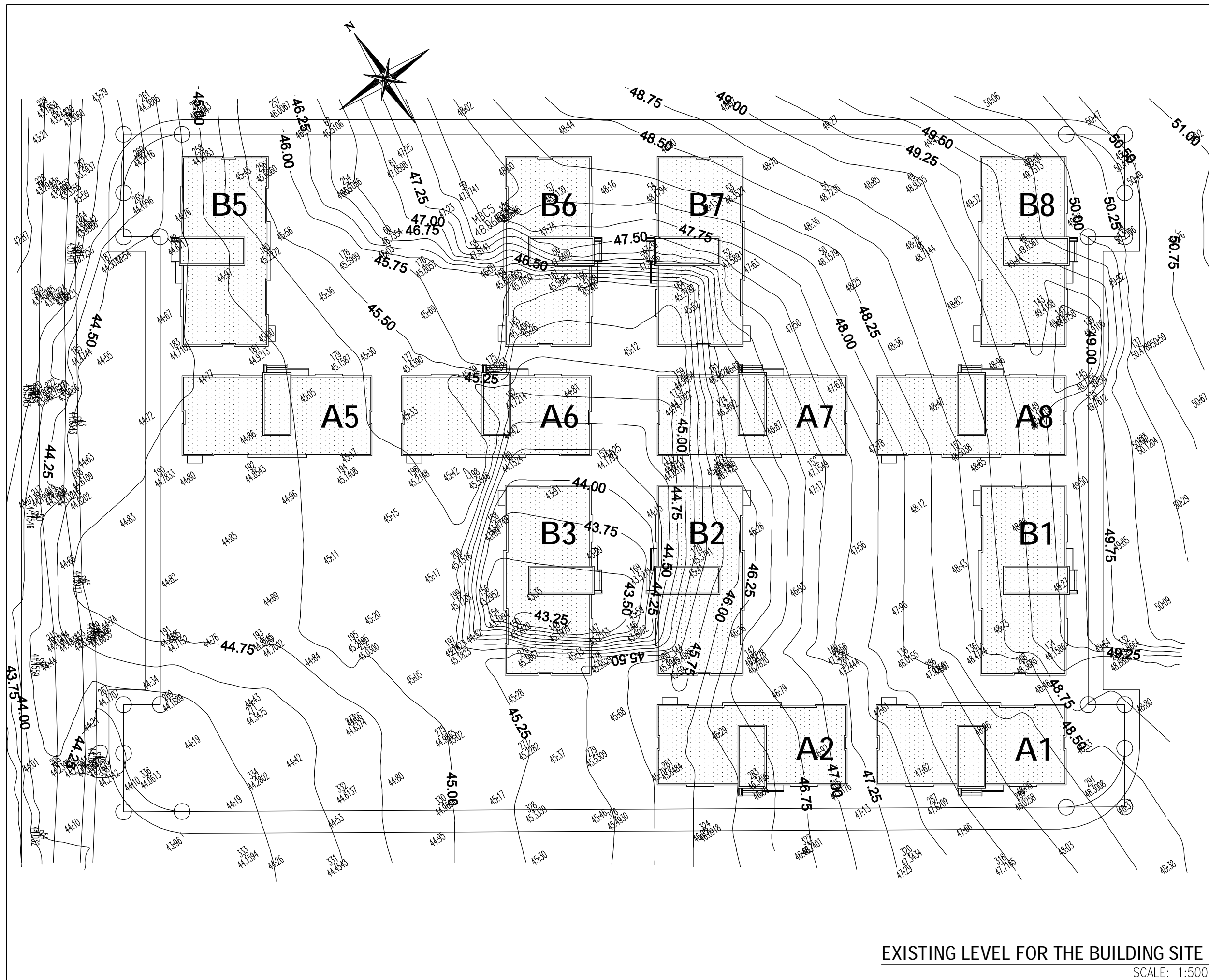
CONSULTANT:
 
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
COORDINATES FOR THE BUILDING

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

DATE: APRIL 2011 | SCALE: NTS





SCALE: 1:500

NOTES :-

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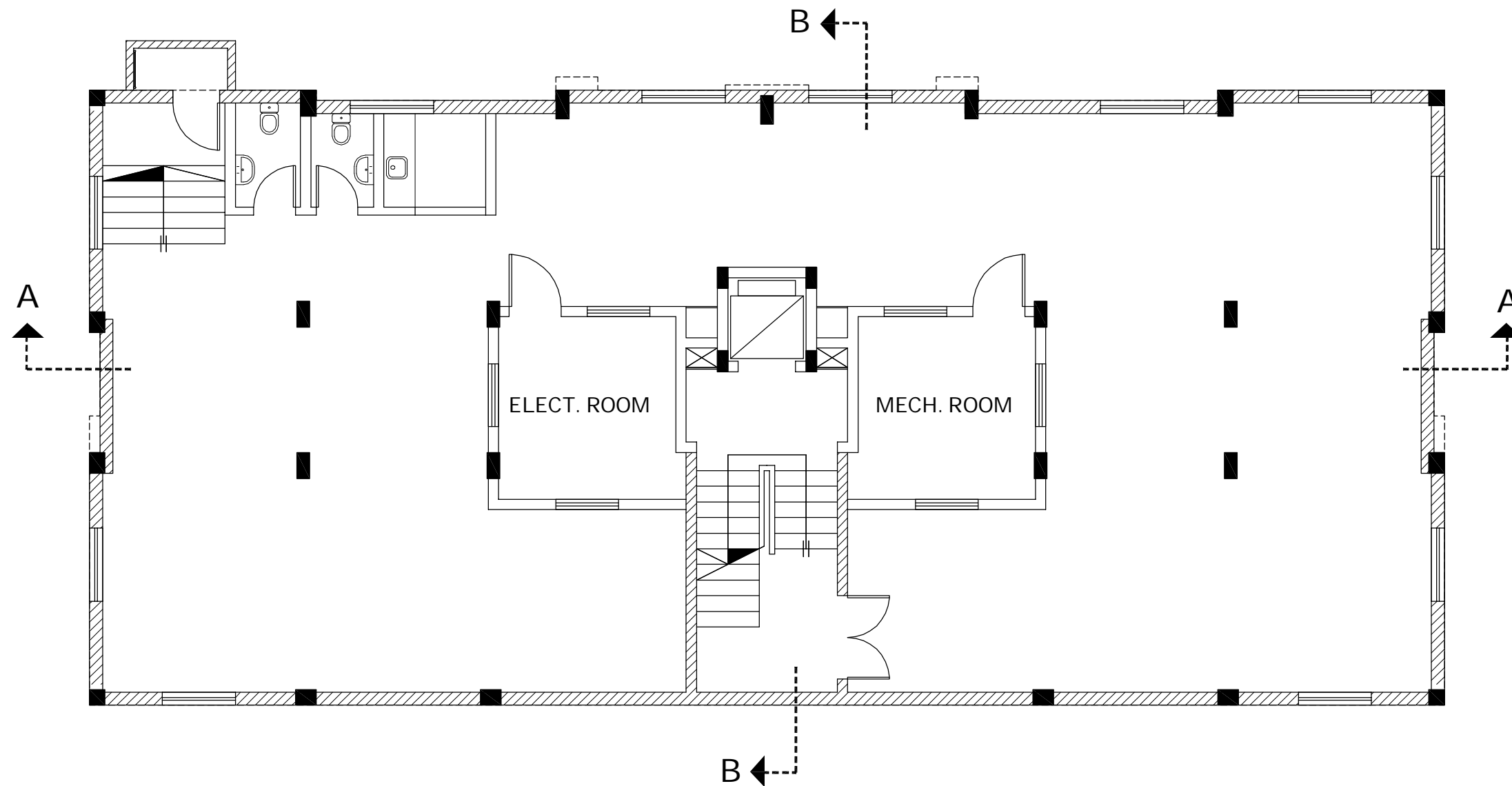
CONSULTANT:
 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
EXISTING LEVEL FOR RESIDENTIAL

DRAWING NO.: RE-A-003

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



FURNITURE FOR UNDERGROUND FLOOR

SCALE: 1:100

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DRAWING TITLE:

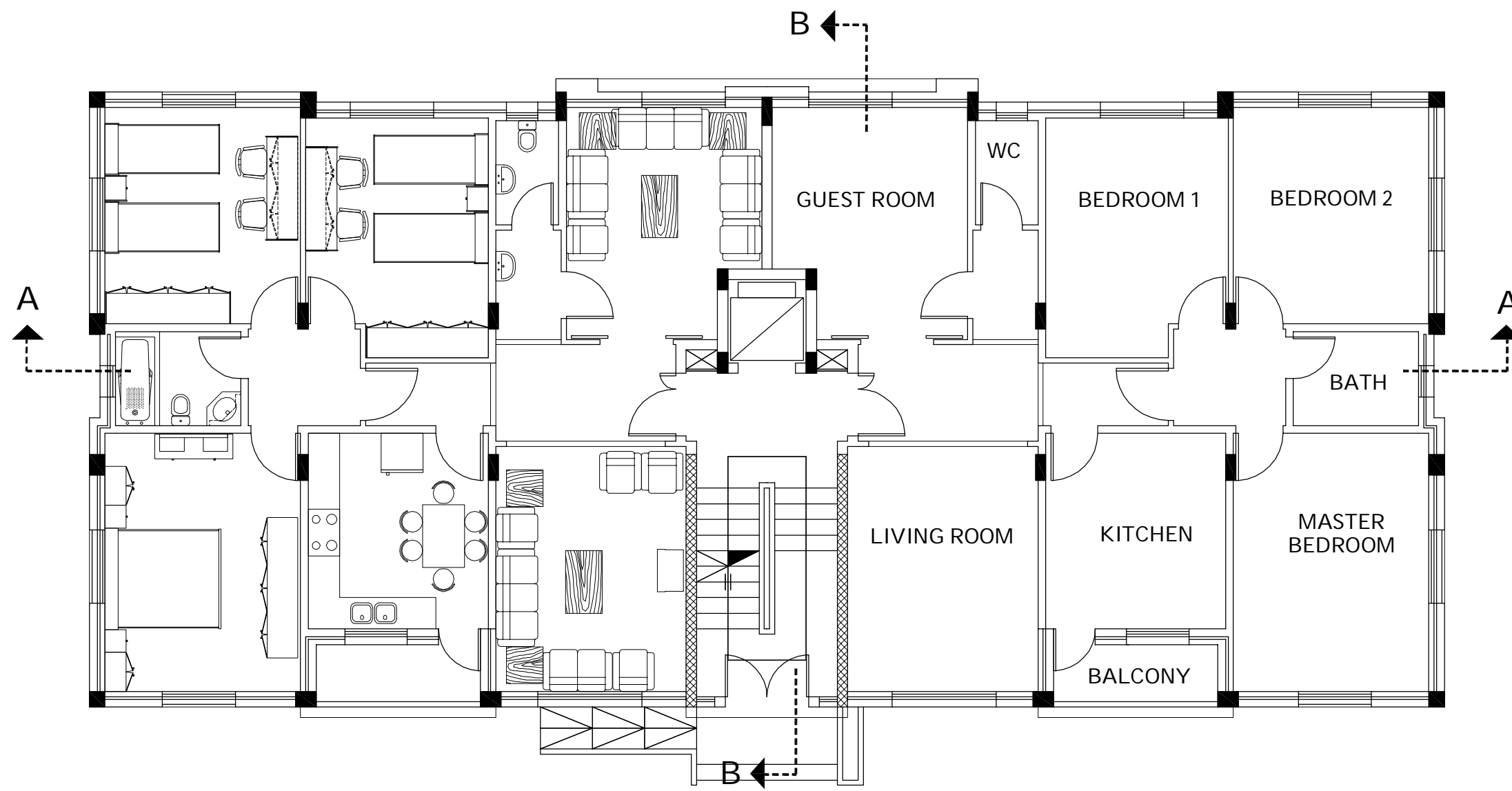
FURNITURE FOR UNDERGROUND FLOOR

DRAWING NO.:

RE-A-004

DATE: APRIL 2011

SCALE: 1:100



FURNITURE FOR GROUND FLOOR
SCALE: 1:100

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DRAWING TITLE:

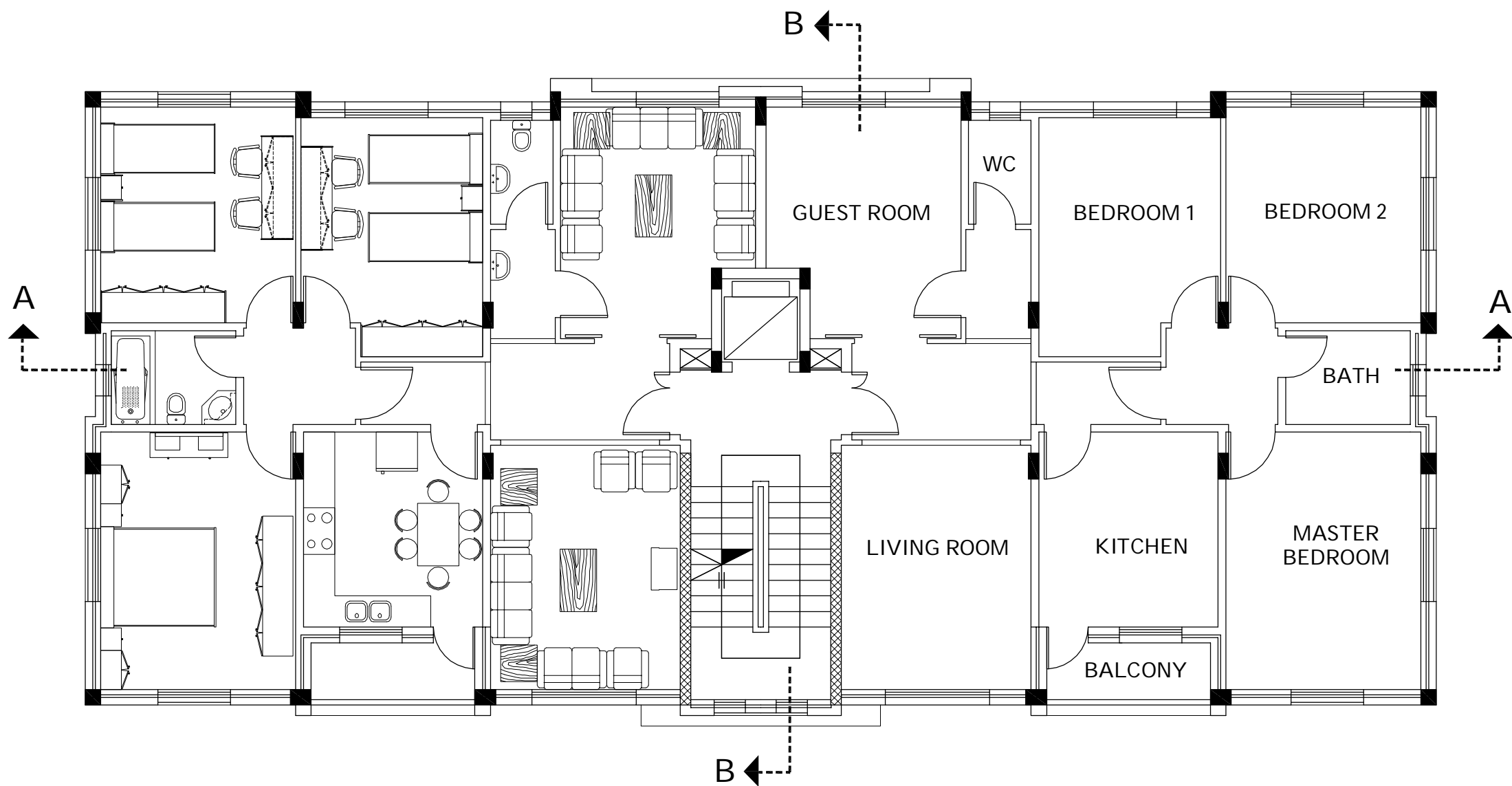
FURNITURE FOR GROUND FLOOR

DRAWING NO.:

RE-A-005

DATE: APRIL 2011

SCALE: 1:100



FURNITURE FOR TYPICAL FLOOR

SCALE: 1:100

NOTES :-

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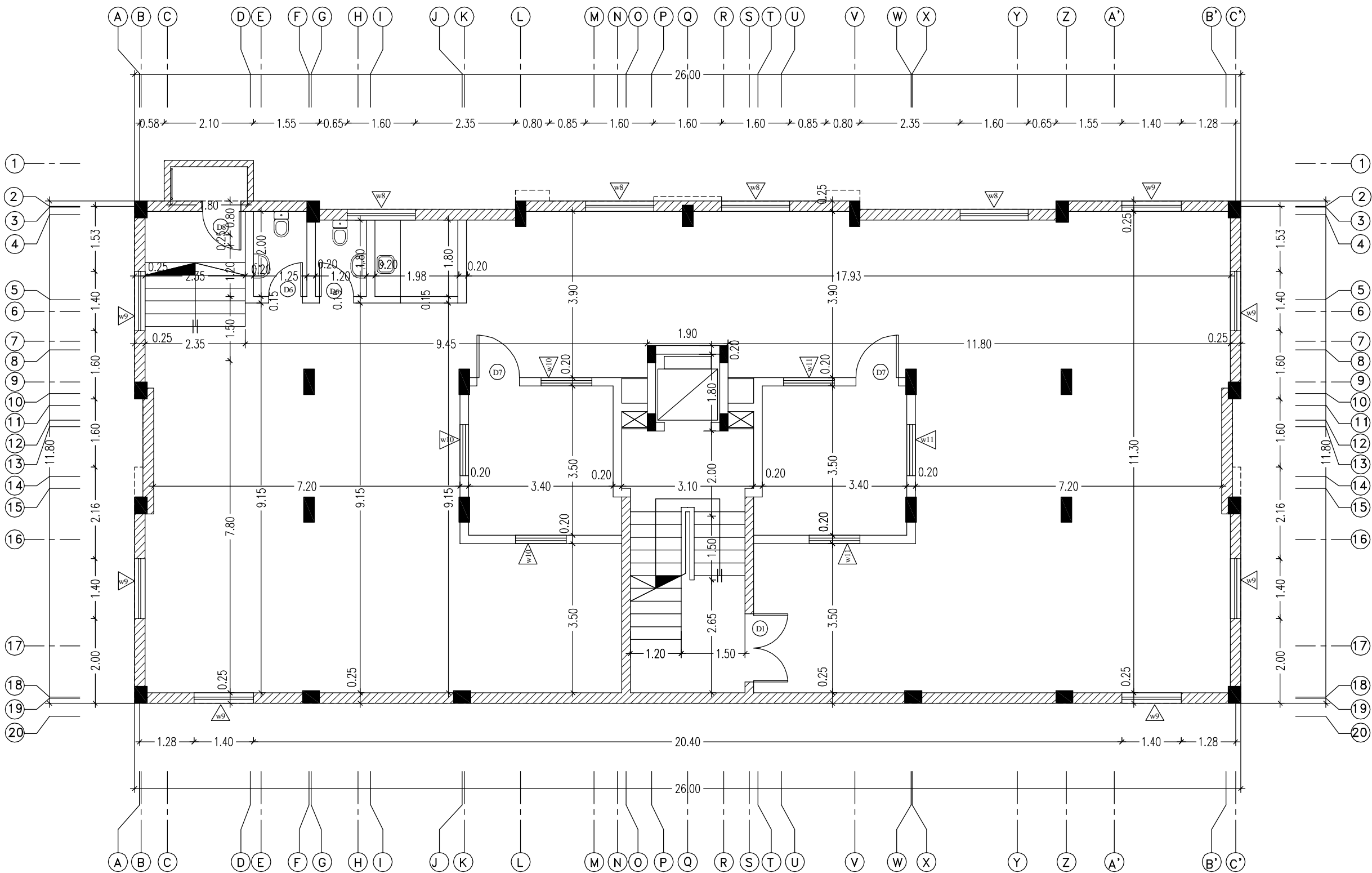
DRAWING TITLE:
FURNITURE FOR TYPICAL FLOOR

DRAWING NO.: RE-A-006

DATE: APRIL 2011 SCALE: 1:100

NOTES :-

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UNDERGROUND FLOOR PLAN

SCALE: 1:100

FOR TENDER ONLY

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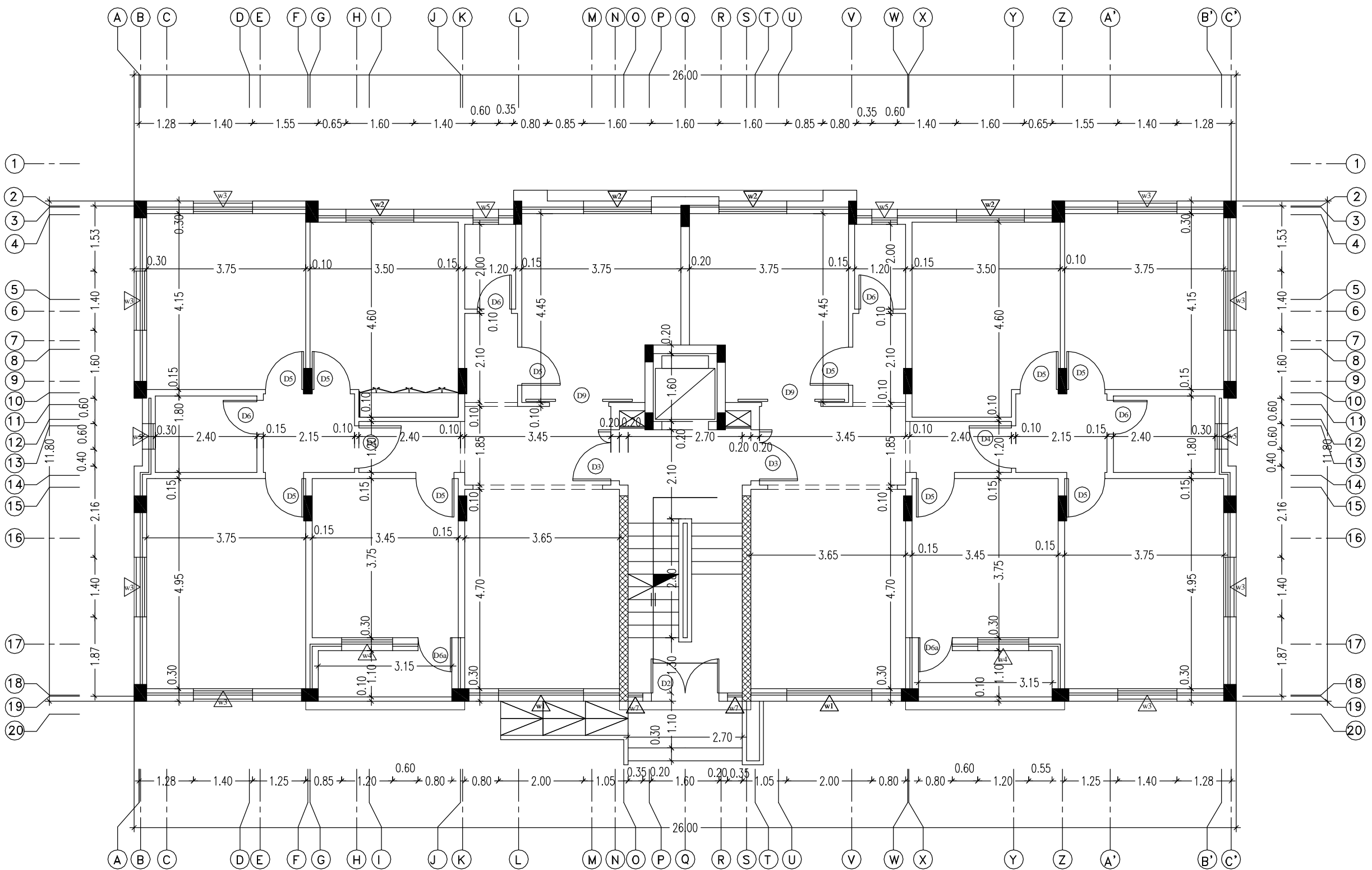
DRAWING TITLE:
UNDERGROUND FLOOR PLAN

DRAWING NO.: RE-A-07

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

NOTES :-

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GROUND FLOOR PLAN

SCALE: 1:100

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BUILDING NAME:
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DRAWING TITLE:
GROUND FLOOR PLAN

DRAWING NO.: RE-A-008

DATE: APRIL 2011 SCALE: 1:100

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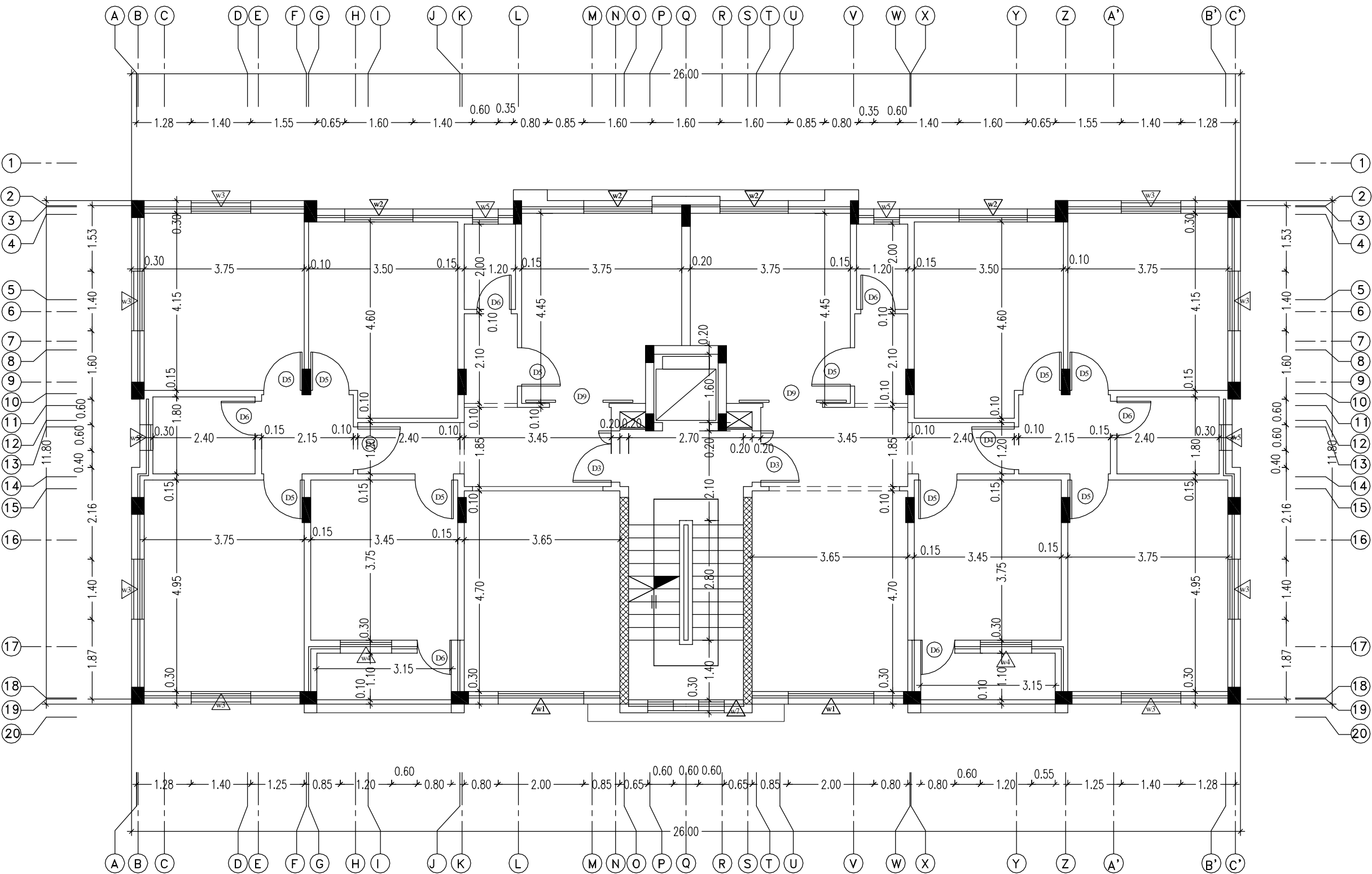
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
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DRAWING TITLE:
TYPICAL FLOOR PLAN

DRAWING NO.: RE-A-009

DATE: APRIL 2011 SCALE: 1:100



TYPICAL FLOOR PLAN

SCALE: 1:100

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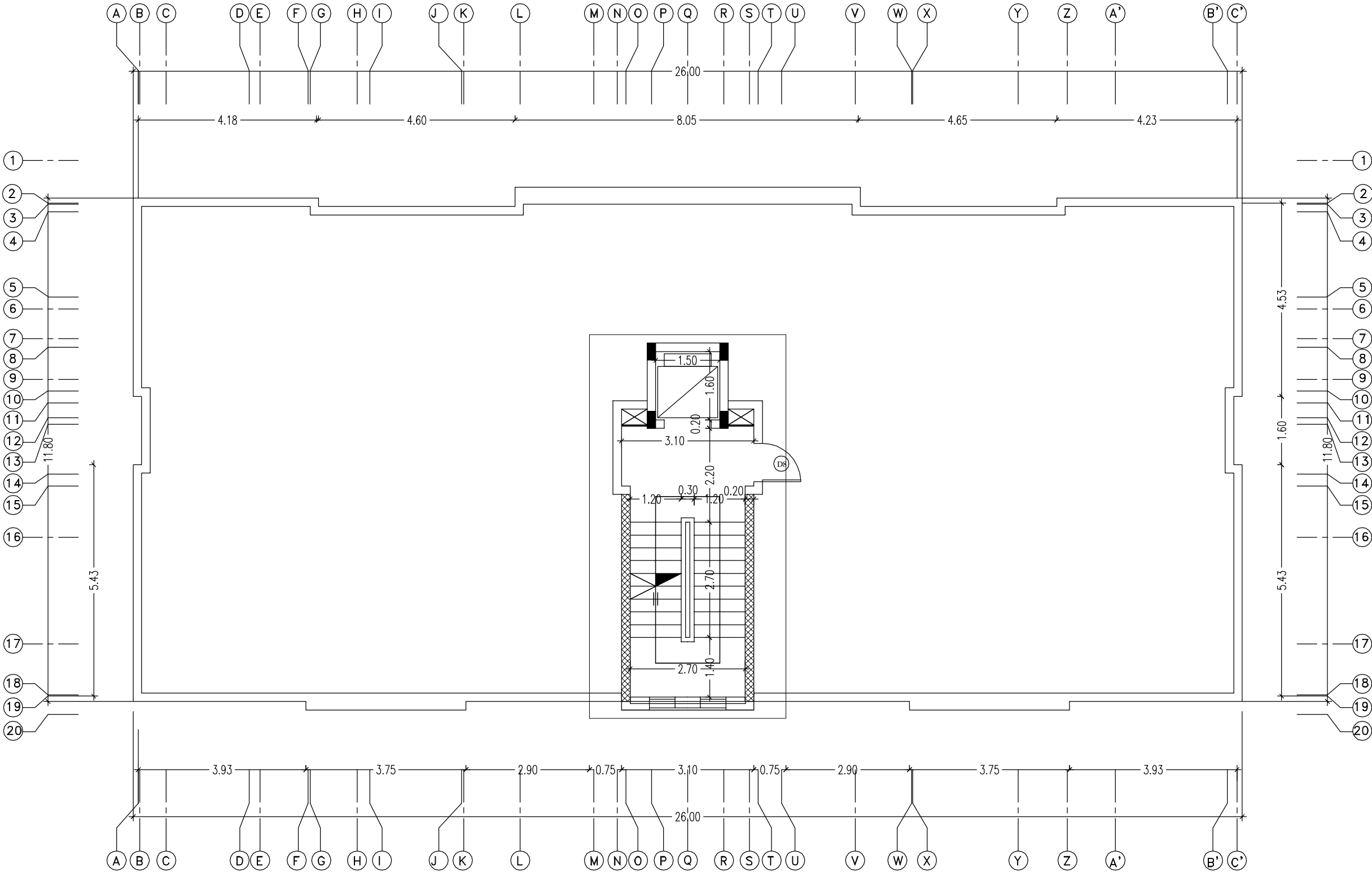
CONSULTANT:
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center for engineering and planning

BUILDING NAME:
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DRAWING TITLE:
ROOF PLAN

DRAWING NO.: RE-A-010

DATE: APRIL 2011 SCALE: 1:100




ROOF FLOOR PLAN


SCALE: 1:100

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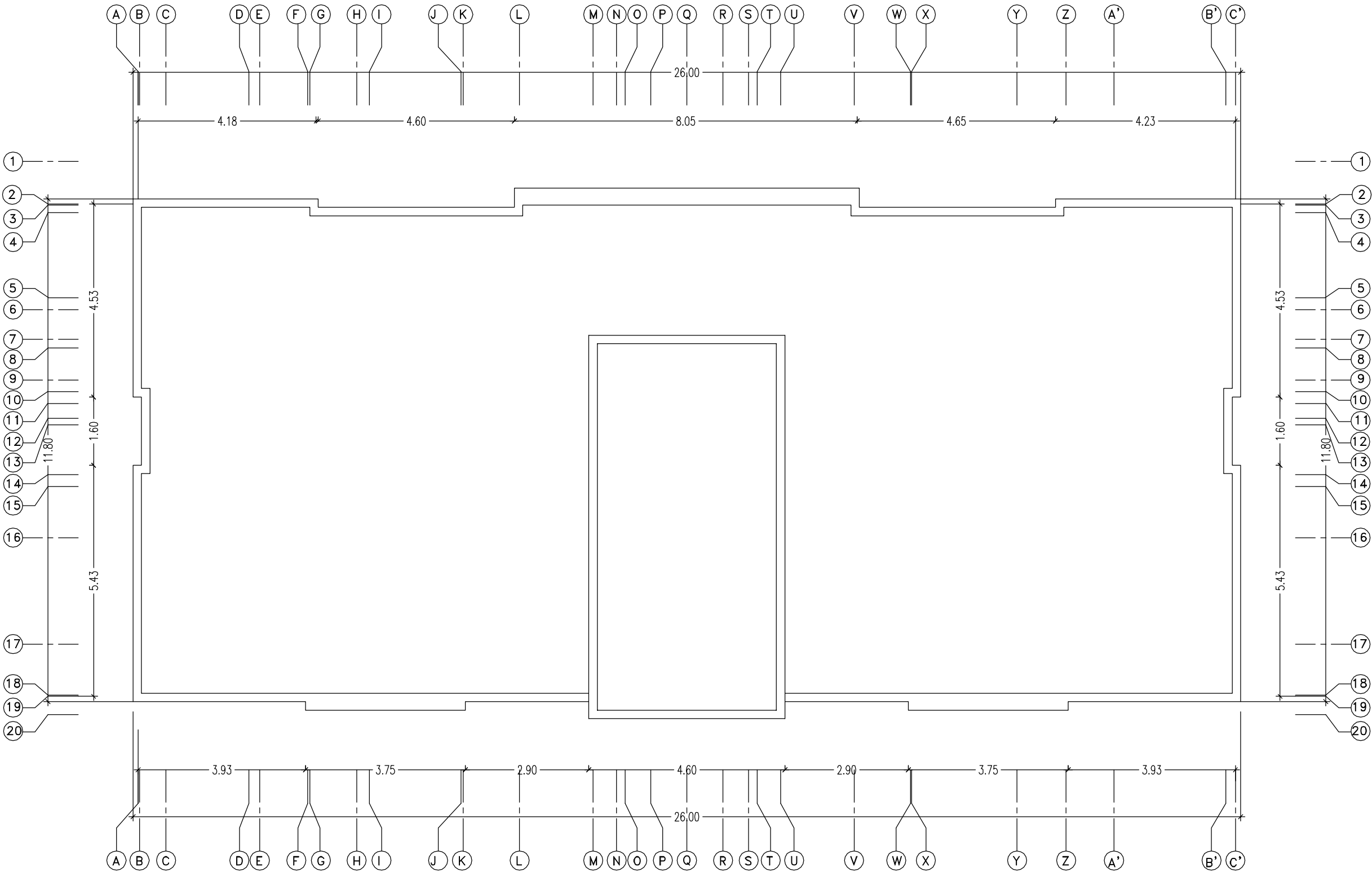
CONSULTANT:
 
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

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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ممرينا أبيض ①

ممرينا بيج ②

ممرينا أزرق فاتح ③

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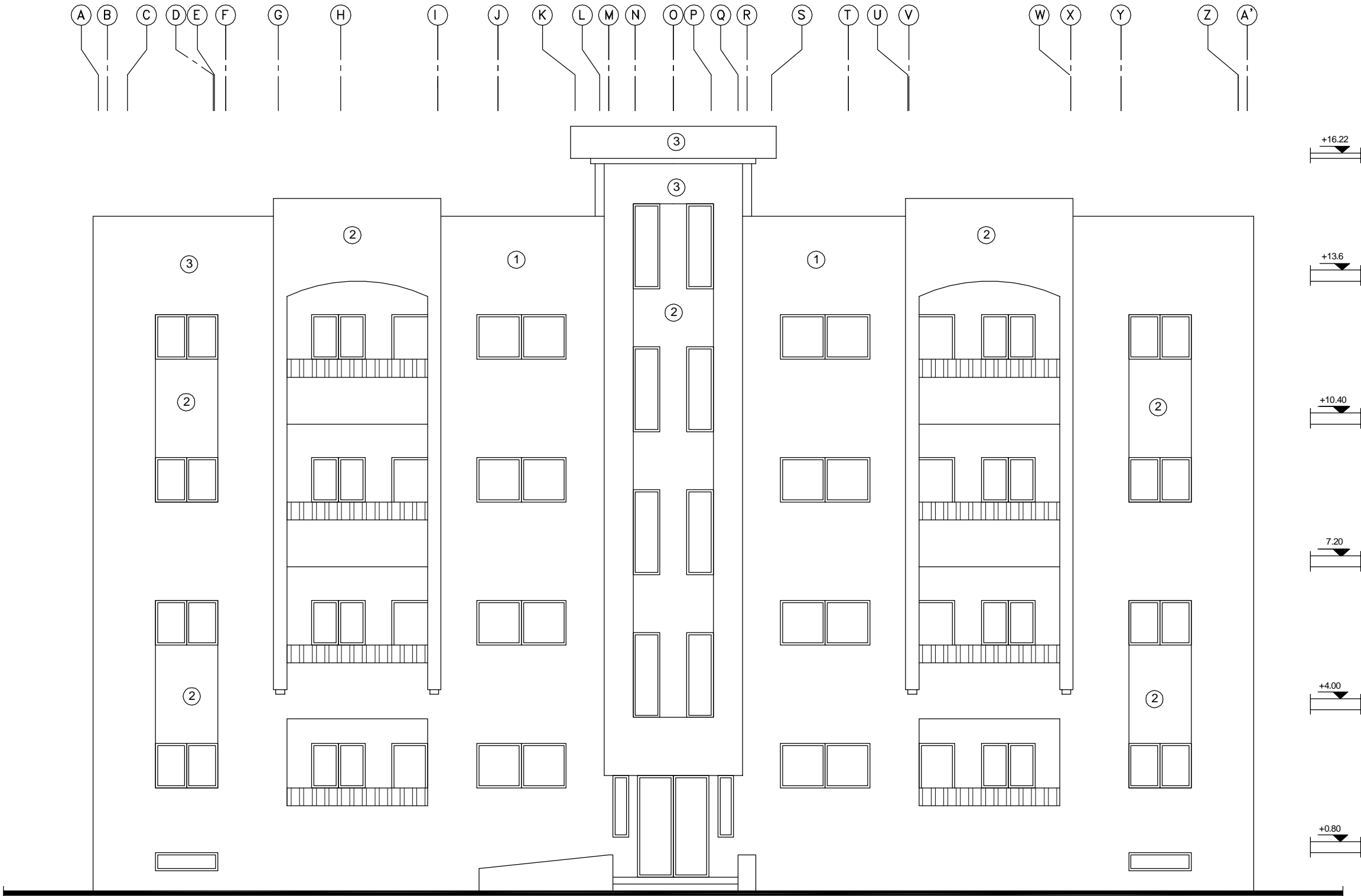
CONSULTANT:
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BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
TYPICAL FRONT ELEVATION

DRAWING NO.: RE-A-012

DATE: APRIL 2011 SCALE: 1:100



FRONT ELEVATION

SCALE: 1:100

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① مرمينا أبيض

② مرمينا بيج

③ مرمينا أزرق فاتح

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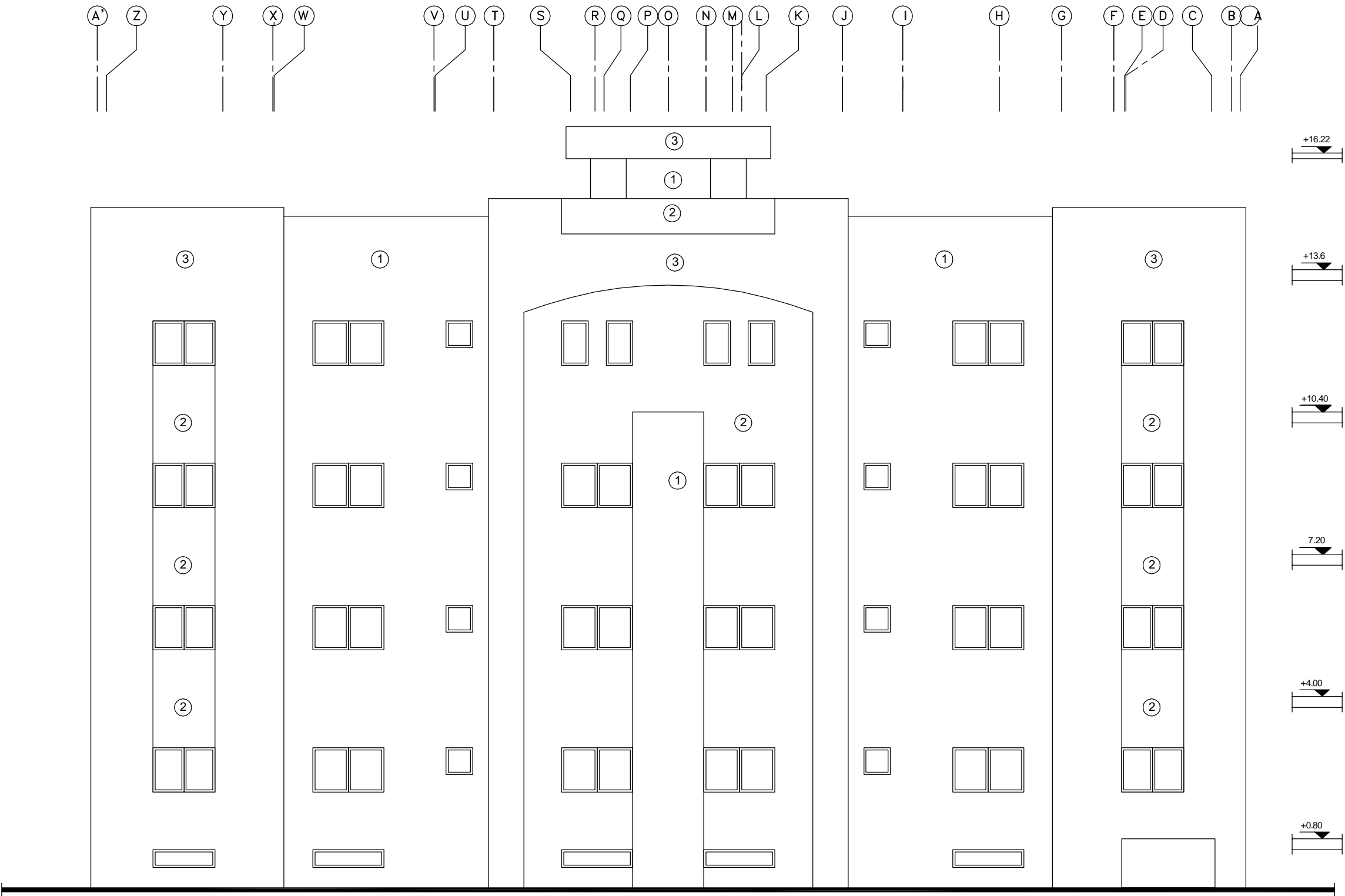
CONSULTANT:
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center for engineering and planning

BUILDING NAME:
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DRAWING TITLE:
TYPICAL BACK ELEVATION

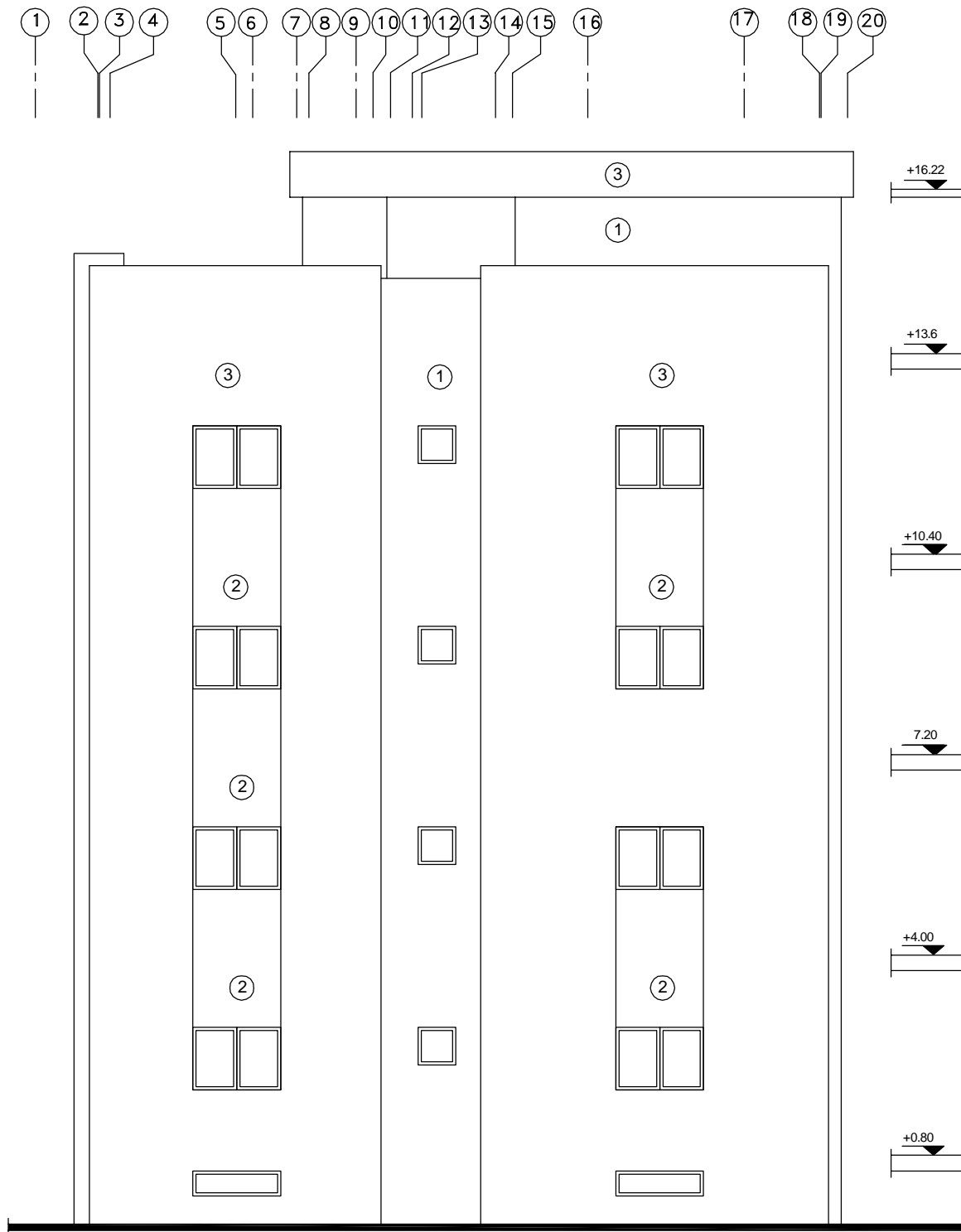
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DATE: APRIL 2011 SCALE: 1:100

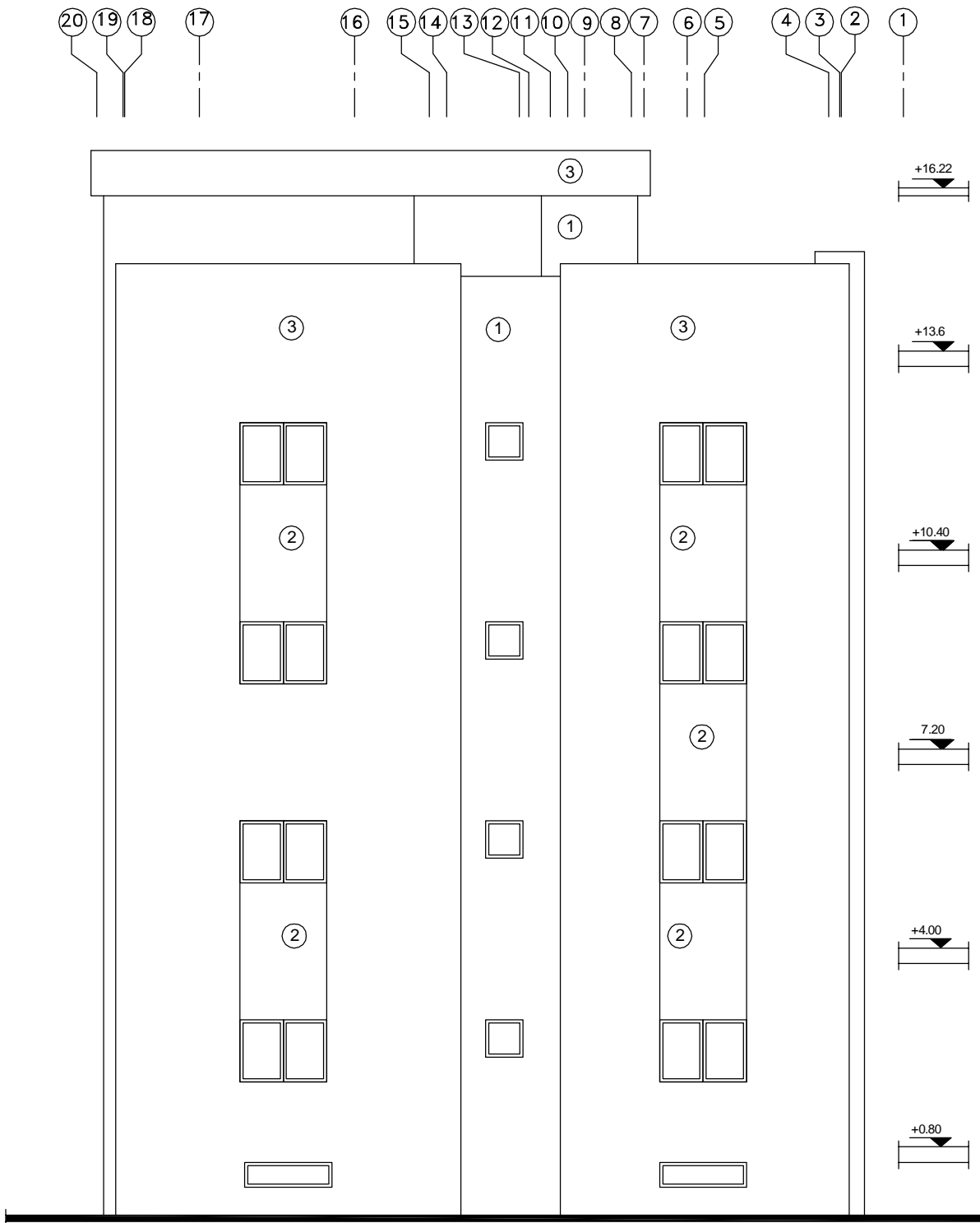


BACK ELEVATION

SCALE: 1:100



SIDE ELEVATION
SCALE 1:100



SIDE ELEVATION
SCALE 1:100


SIDE ELEVATIONS
SCALE: 1:100


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- ① مرمينا أبيض
- ② مرمينا بييج
- ③ مرمينا أزرق فاتح

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BUILDING NAME:
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DRAWING TITLE:
SIDE ELEVATIONS, TYPE B

DRAWING NO.: RE-A-014

DATE: APRIL 2011 SCALE: 1:100

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DRAWING TITLE:
TYPICAL LONGITUDINAL SECTION

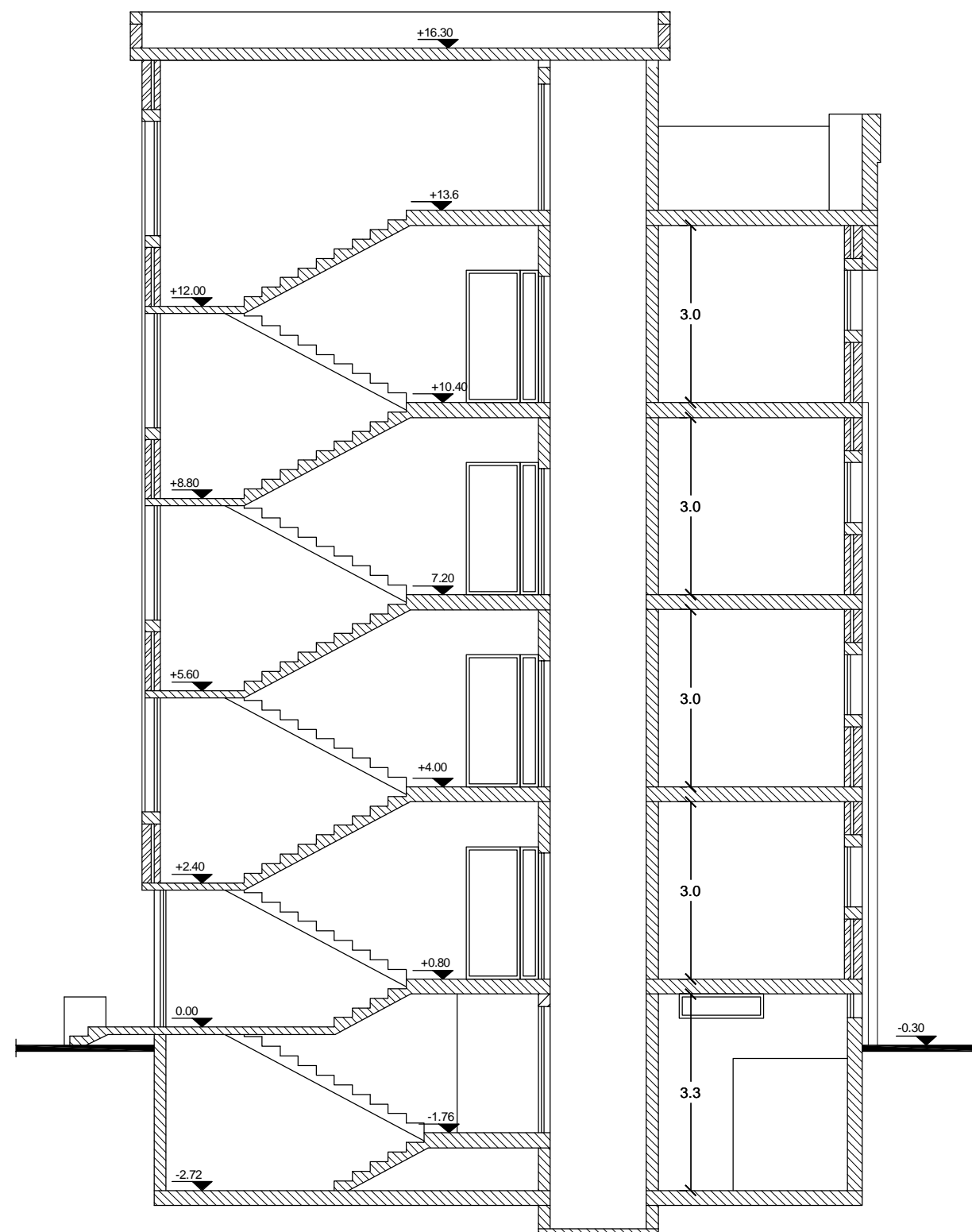
DRAWING NO.: RE-A-015

DATE: APRIL 2011 SCALE: 1:100



LONGITUDINAL SECTION A-A

SCALE: 1:100





CROSS SECTION B-B
SCALE: 1:100

NOTES :-

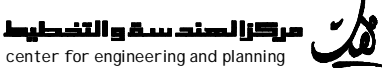
- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE STARTING ANY WORKS.
- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.

FOR TENDER ONLY

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

EMPLOYER:
 THE UNITED NATIONS DEVELOPMENT PROGRAMME
PROGRAMME OF ASSISTANCE TO THE
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 08)

CONSULTANT:
 center for engineering and planning

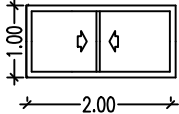
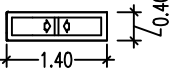
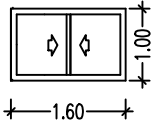
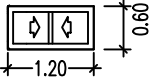
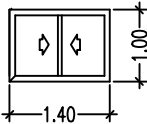
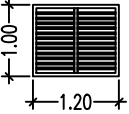
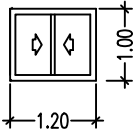

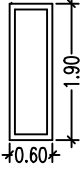

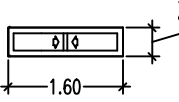
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
CROSS SECTIONS

DRAWING NO.: RE-A-016

DATE: APRIL 2011 SCALE: 1:100

جدول الشبائيك

رقم الشباك	الفتحة الانشائية	المادة	نظام الفتحة	رقم الشباك	الفتحة الانشائية	المادة	نظام الفتحة
W1		المنيوم	سحاب	W9		المنيوم	سحاب شباك الهدوم
W2		المنيوم	سحاب	W10		المنيوم	سحاب
W3		المنيوم	سحاب	W11		حديده	لوفر
W4		المنيوم	سحاب				
W5		المنيوم	قلاّب				
W6		المنيوم	قلاّب شباك الدرج				
W7		المنيوم	قلاّب شباك بجوار مدخل الصارة				
W8		المنيوم	سحاب شباك الهدوم				

جدول الابواب

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

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 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 08)

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

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

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	الدراج
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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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 08)

CONSULTANT:
 مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

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	● قضارة + رشقة شبريز											


FINISHES TABLE
SCALE: NOT TO SCALE

NOTES :-


- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE STARTING ANY 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
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 08)

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

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
FINISHES TABLE (2/3)

DRAWING NO.: RE-A-019

DATE: APRIL 2011 | SCALE: NTS

NOTES :-


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- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.


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
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
 مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
FINISHES TABLE (3/3)

DRAWING NO.: RE-A-020

DATE: APRIL 2011 | SCALE: NTS

NOTES :-


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- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- 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
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 08)

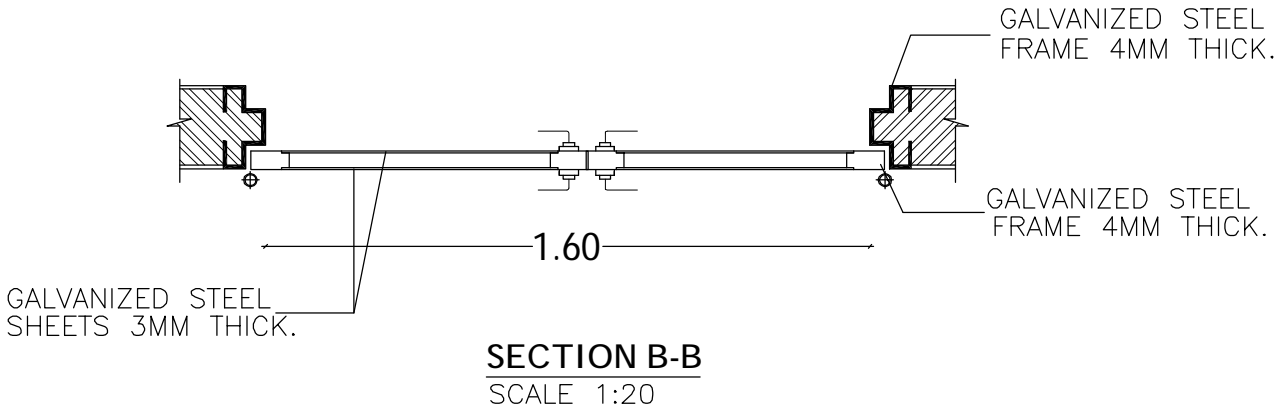
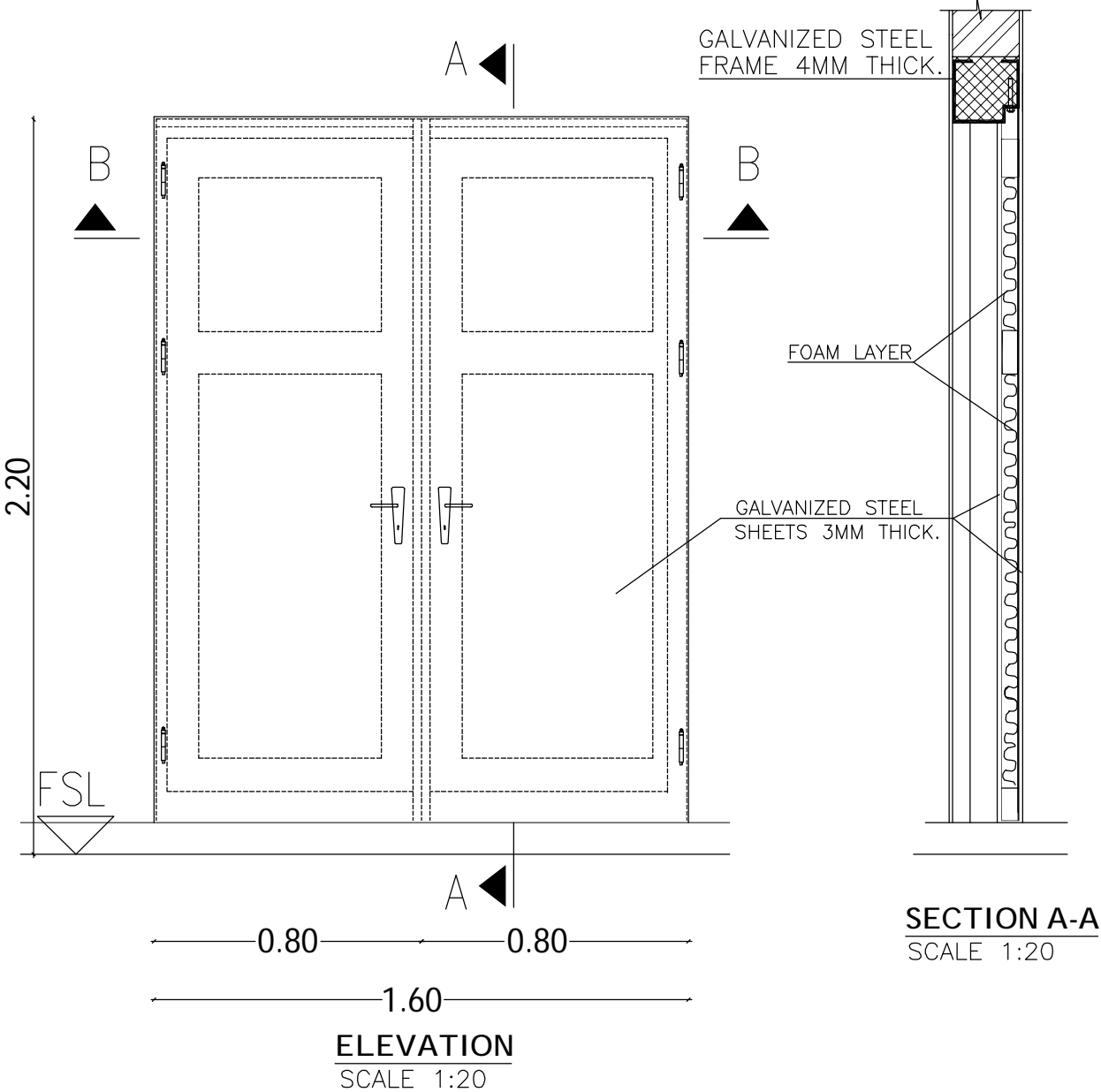
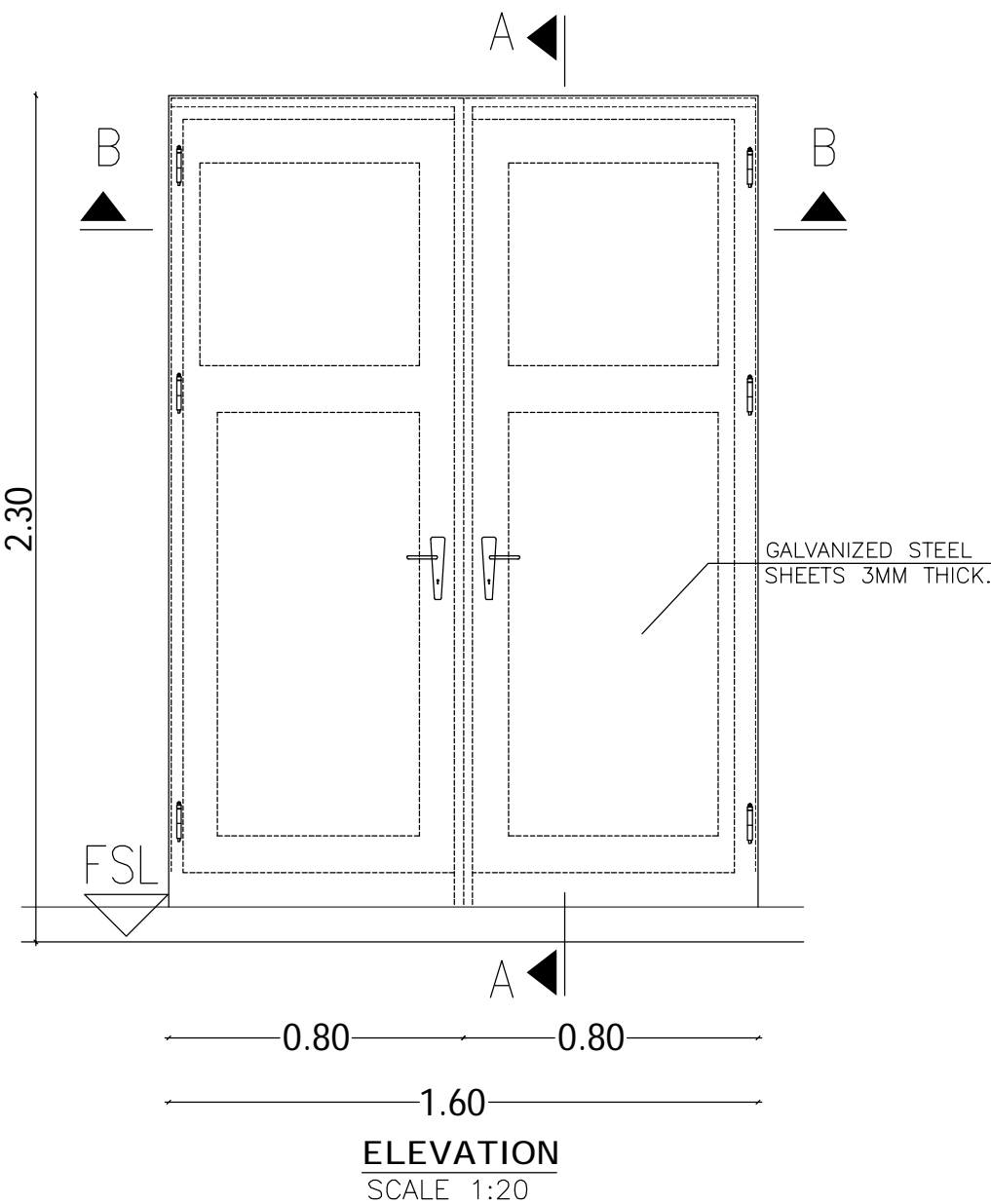
CONSULTANT:
 **مركز الهندسة والتخطيط**
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

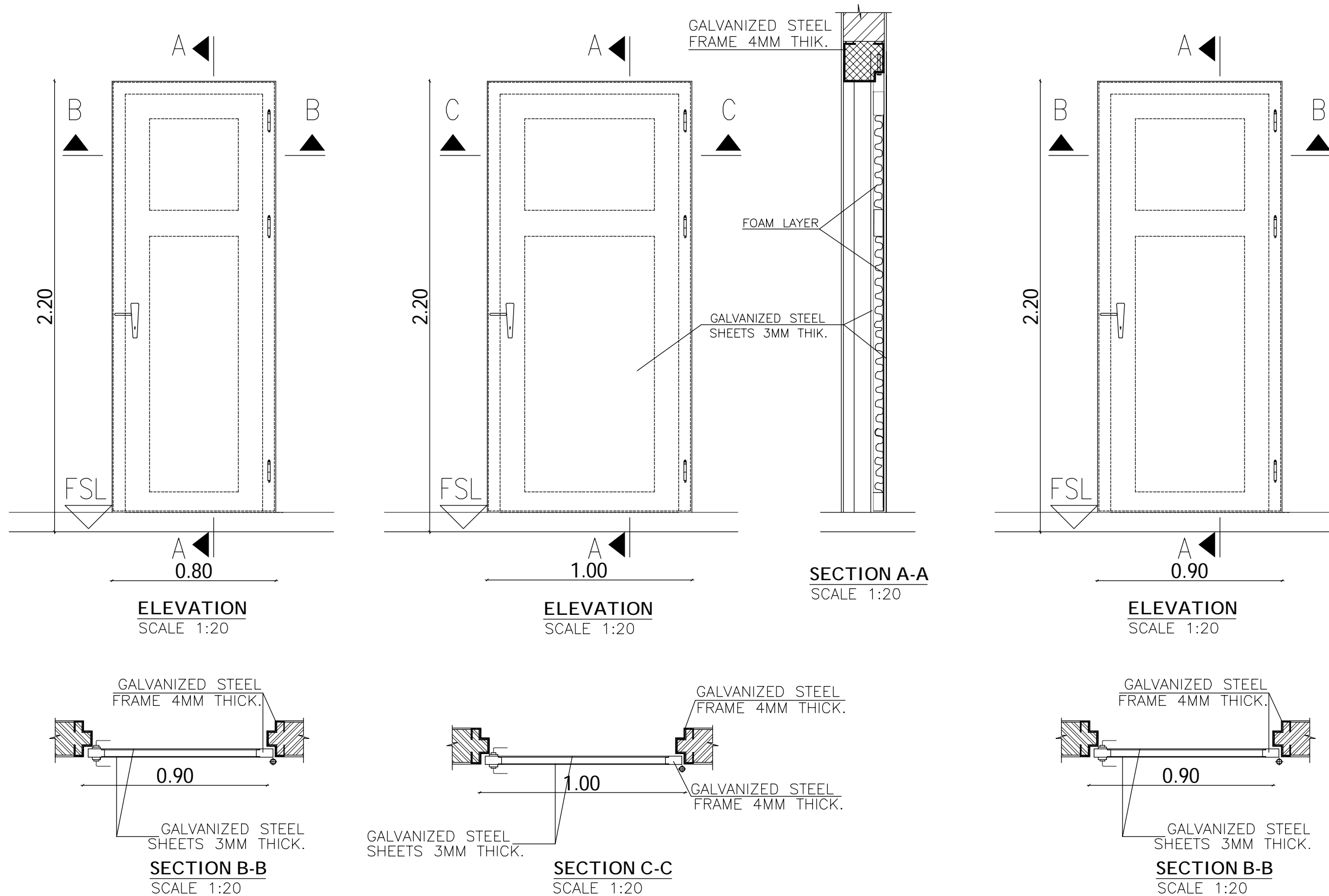
DRAWING TITLE:
METAL DOOR DETAILS(1/2)

DRAWING NO.: RE-A-021

DATE: APRIL 2011 SCALE: 1:20



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
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 08)

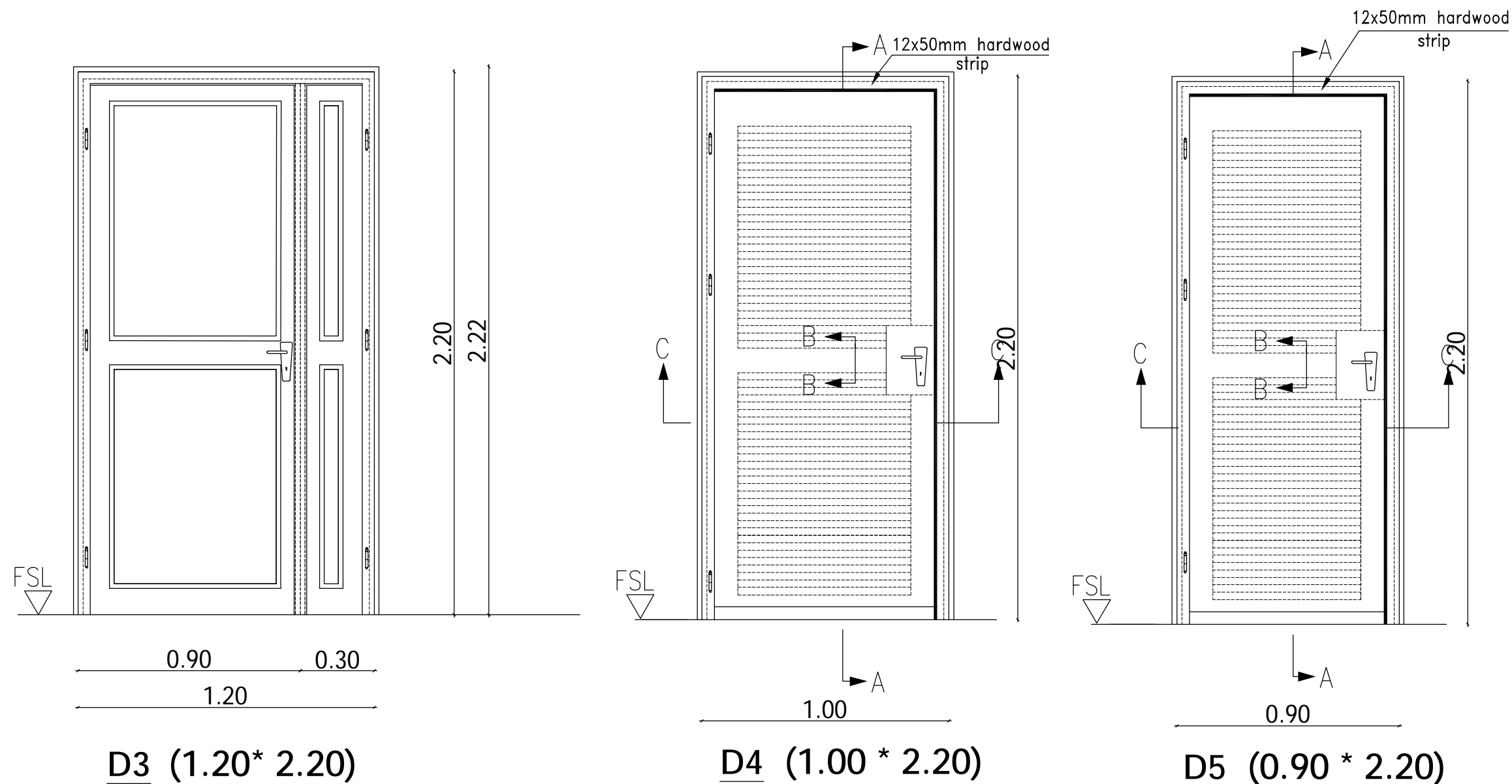
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

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 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 08)

CONSULTANT:

 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

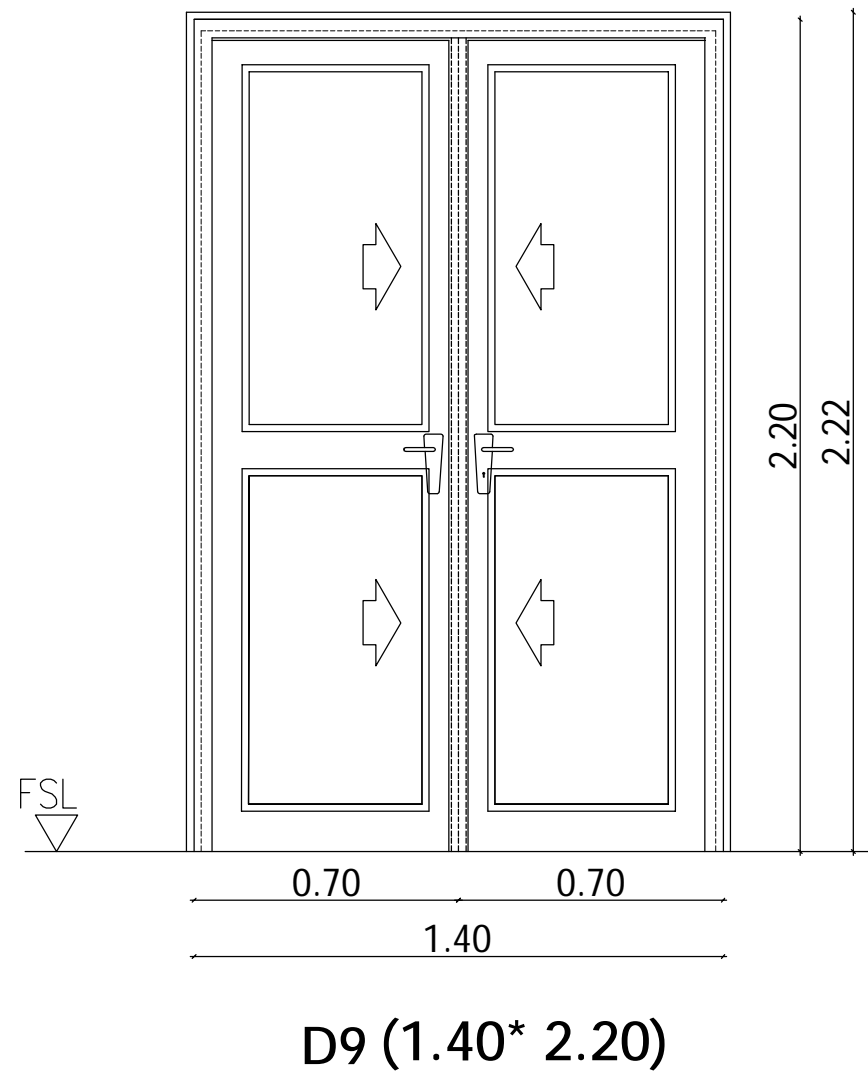
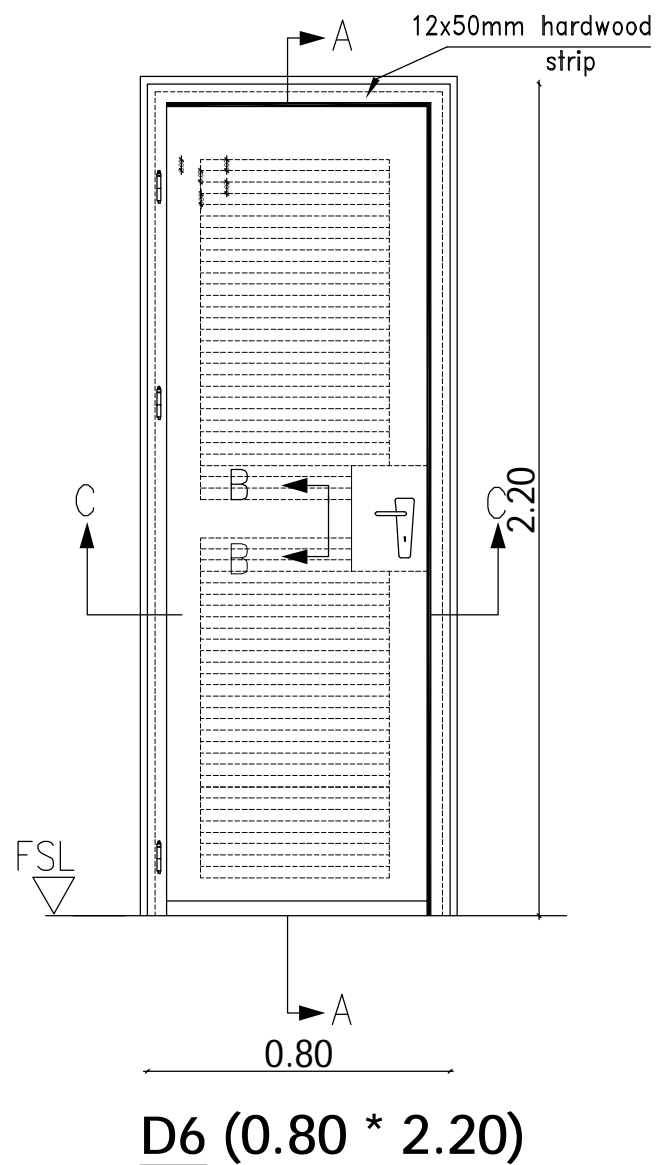
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

WOODEN DOOR DETAILS(1/2)

DRAWING NO.: RE-A-023

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



WOODEN DOOR DETAILS
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:

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EMPLOYER:

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

PROJECT TITLE:

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

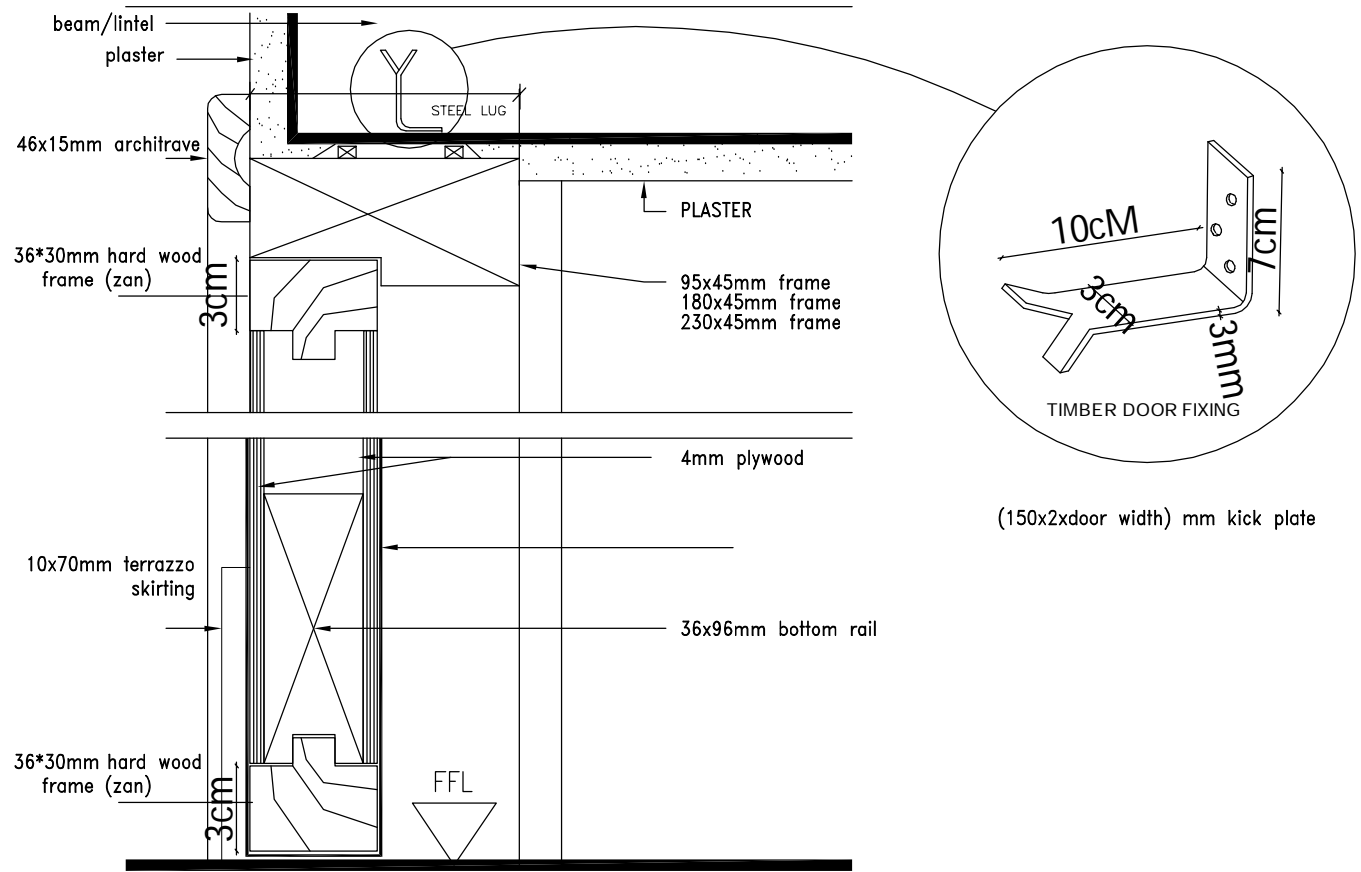
WOODEN DOOR DETAILS(2/2)

DRAWING NO.: RE-A-024

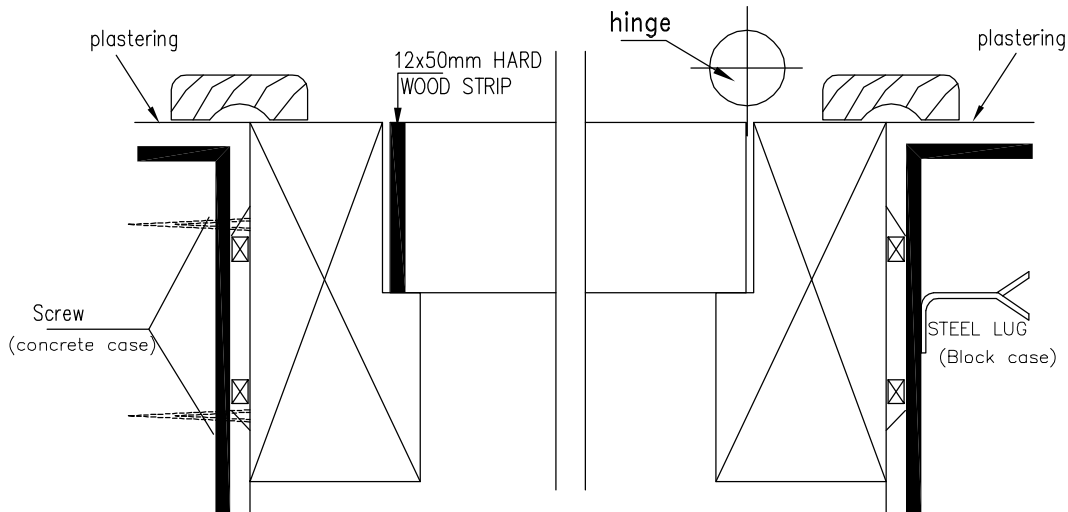
DATE: APRIL 2011 **SCALE:** 1:20

NOTES :-

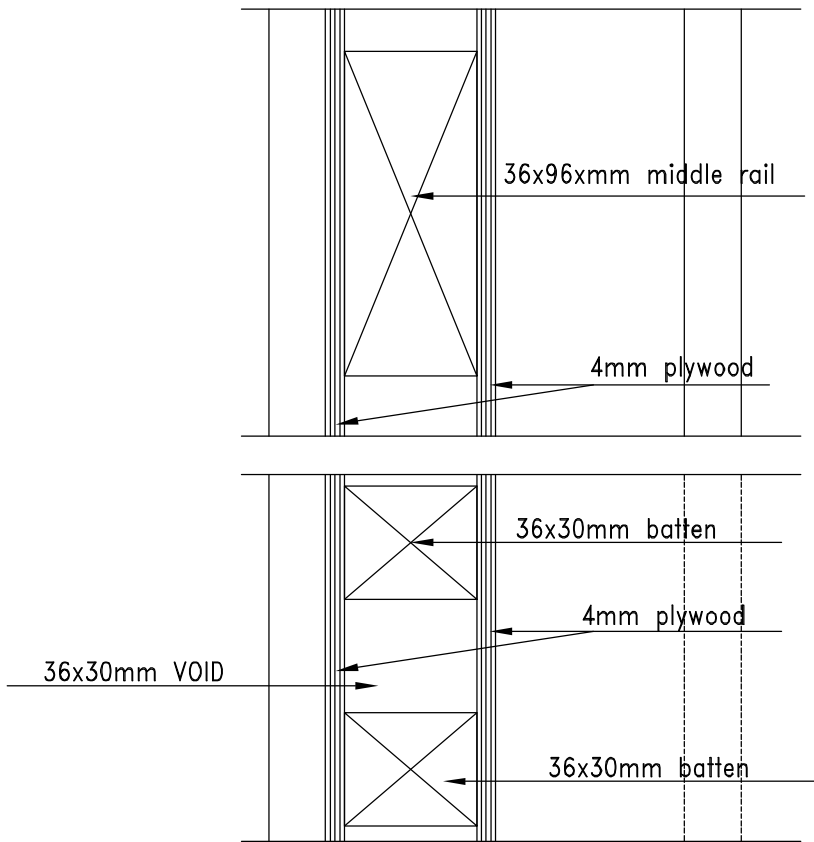
- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE STARTING ANY WORKS.
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SECTION A-A



SECTION C - C



SECTION B-B

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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CONSTRUCTION OF 100 HOUSING UNITS TO
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

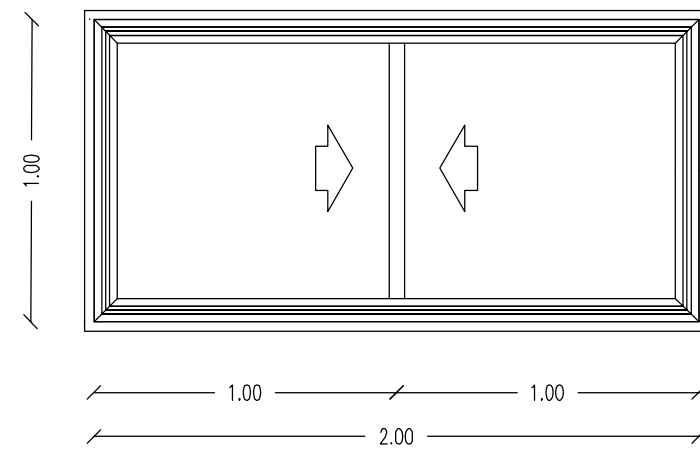
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

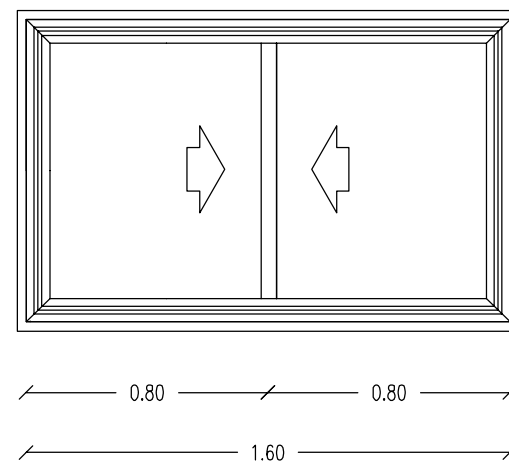
DRAWING TITLE:
WINDOWS ELEVATION

DRAWING NO.: RE-A-025

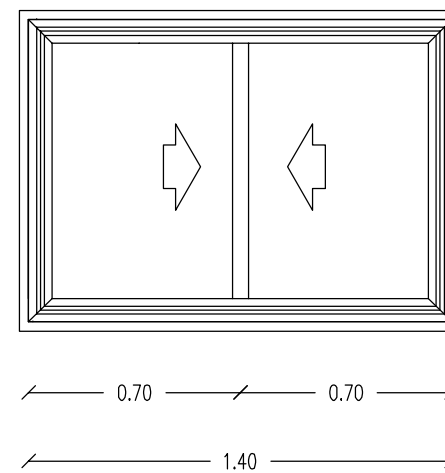
DATE: APRIL 2011 **SCALE:** NTS



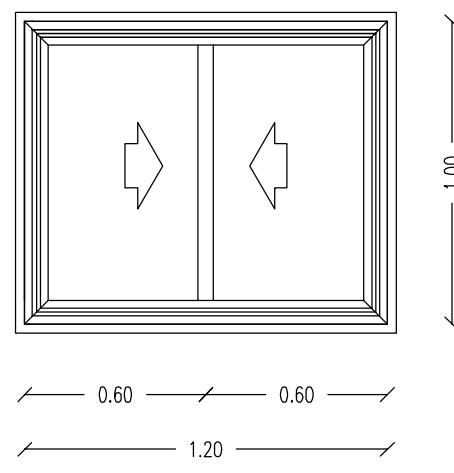
W1 (2.0*1.0M)



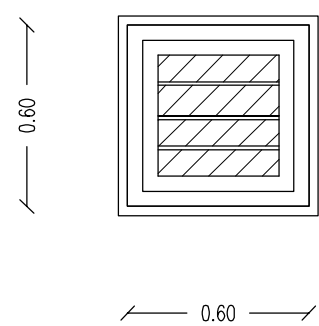
W2 (1.6*1.0M)



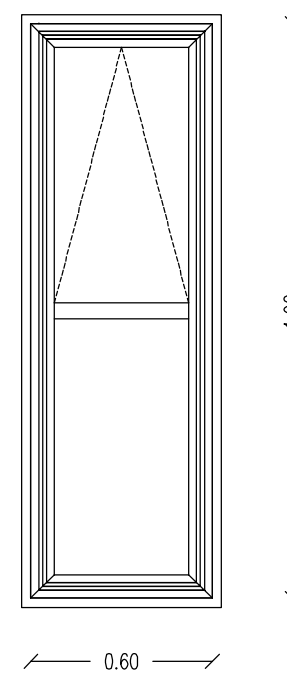
W3 (1.4*1.0M)



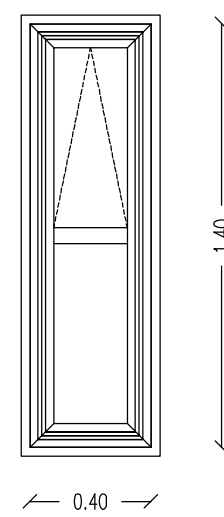
W4 (1.2*1.0M)



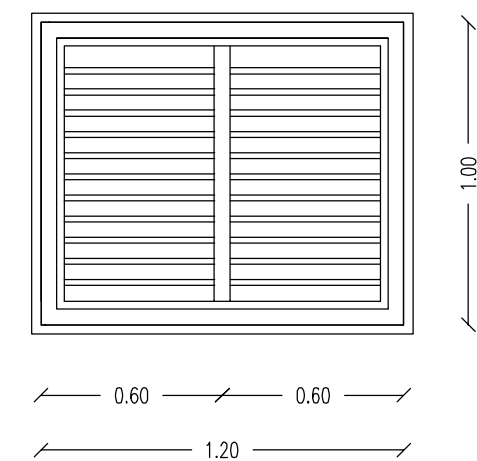
W5 (0.6*0.6M)



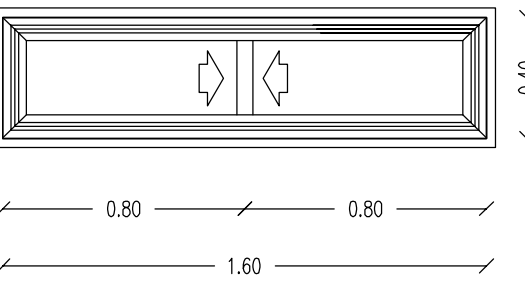
W6 (0.6*1.9M)



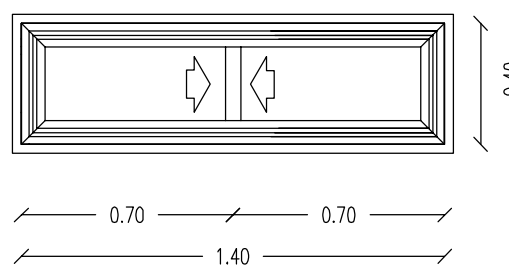
W7 (0.4*1.4M)



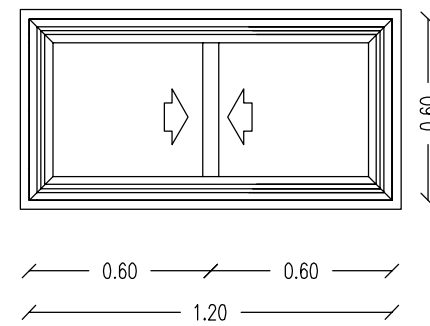
W11 (1.2*1.0M)



W8 (1.6*0.4M)



W9 (1.4*0.4M)




W10 (1.2*0.6M)


WINDOWS ELEVATION
SCALE: 1:25

NOTES :-


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- 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
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 08)

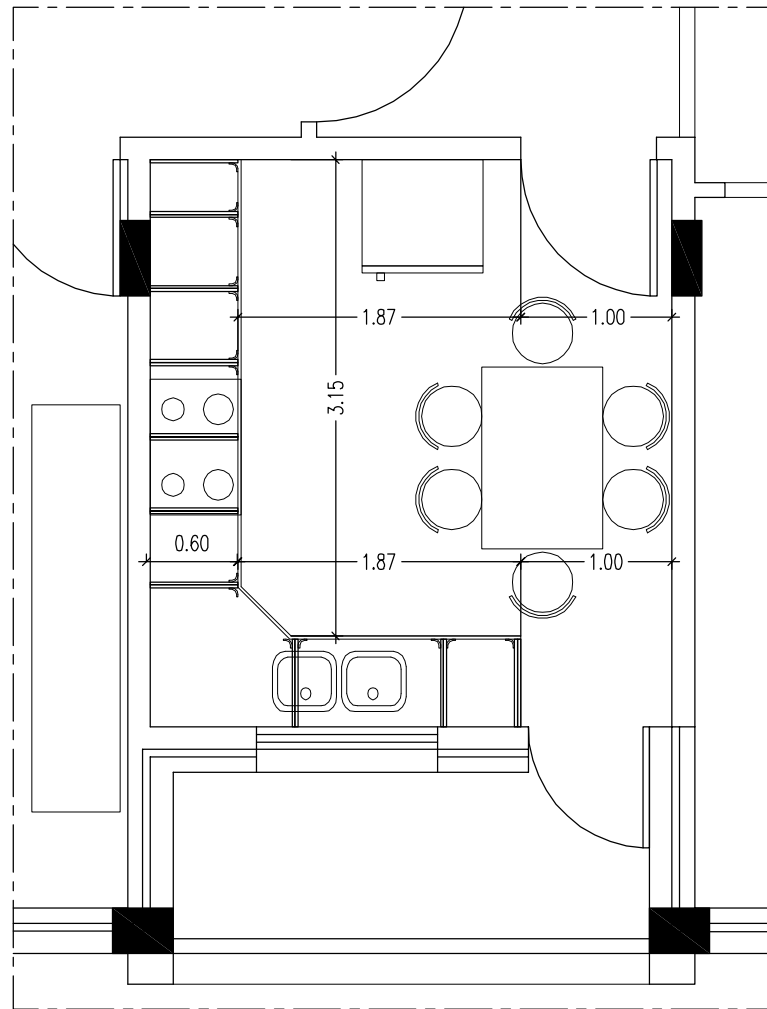
CONSULTANT:
 **مركز الهندسة والتخطيط**
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

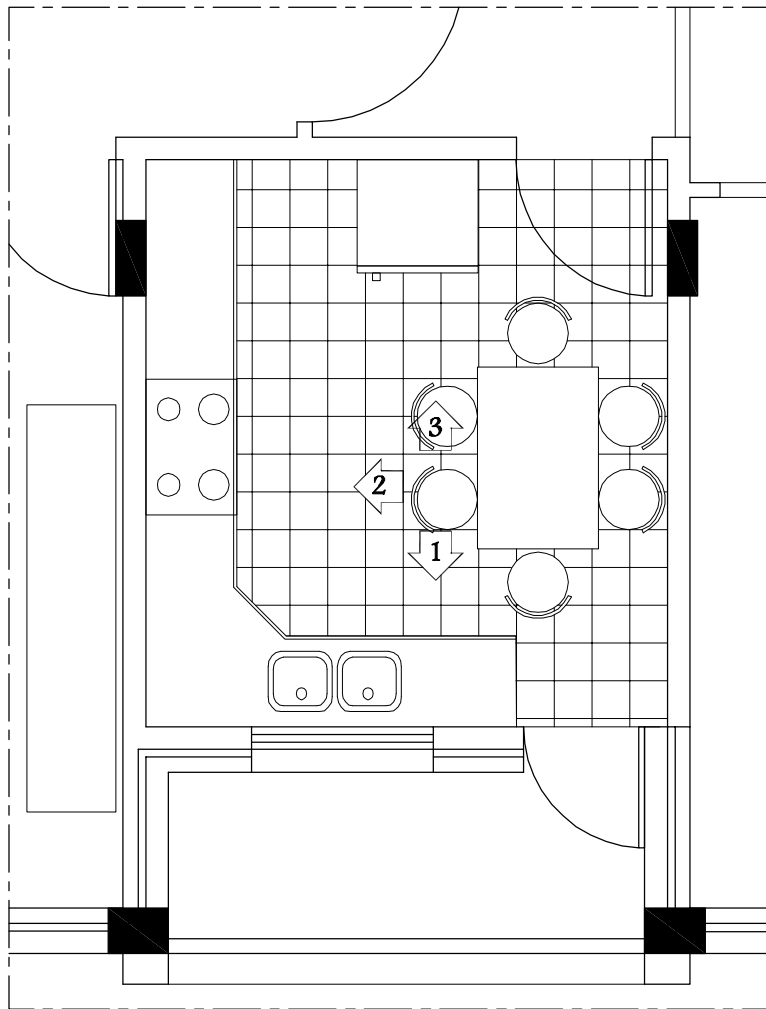
DRAWING TITLE:
WINDOWS ELEVATION

DRAWING NO.: RE-A-026

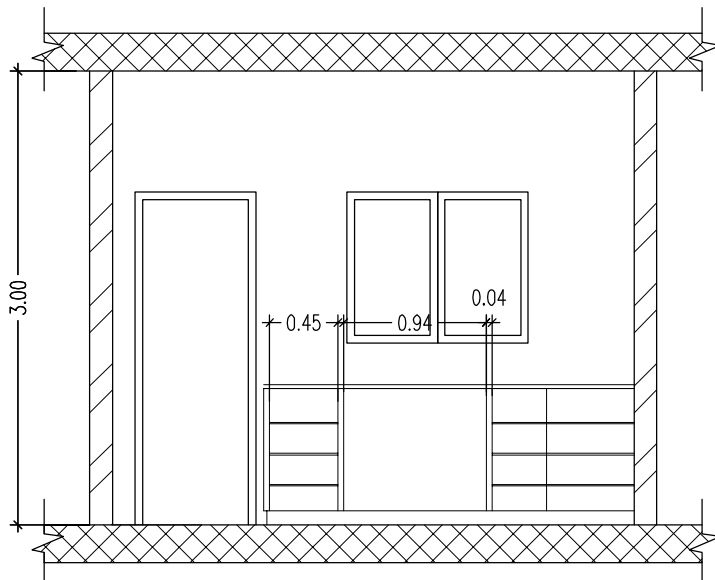
DATE: APRIL 2011 **SCALE:** 1:25



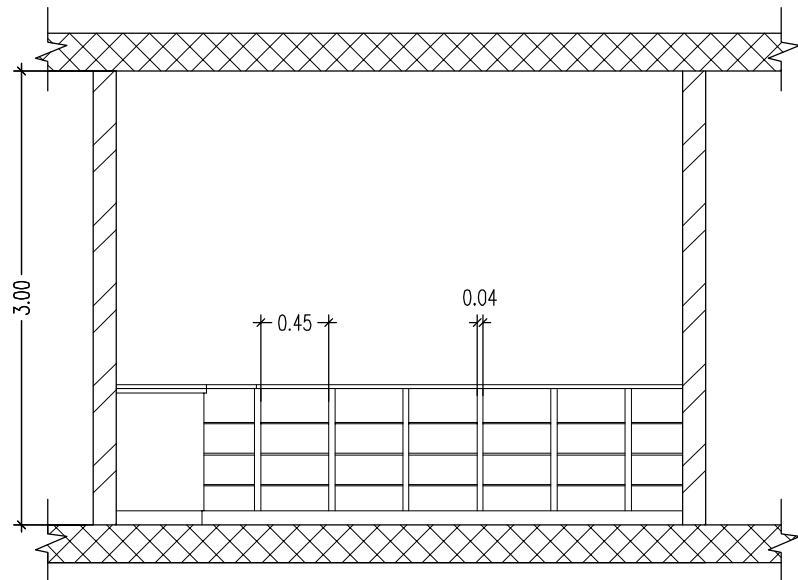
KITCHEN PLAN & DIMENSIONS
SCALE 1:50



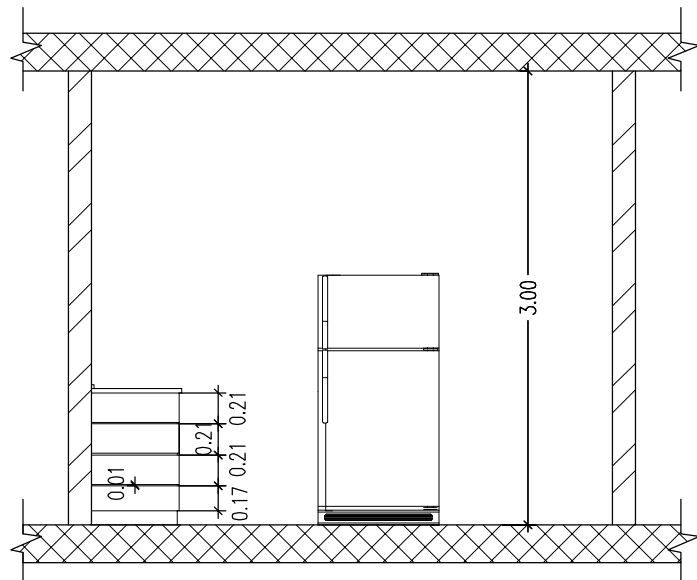
KITCHEN PLAN
SCALE 1:50



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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EMPLOYER:
THE UNITED NATIONS DEVELOPMENT PROGRAMME
PROGRAMME OF ASSISTANCE TO THE
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CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

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

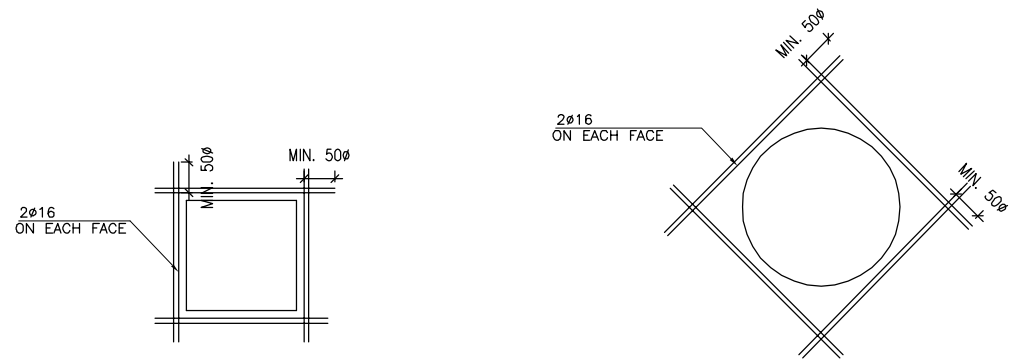
مركز الهندسة والتخطيط
center for engineering and planning



LIST OF DRAWINGS

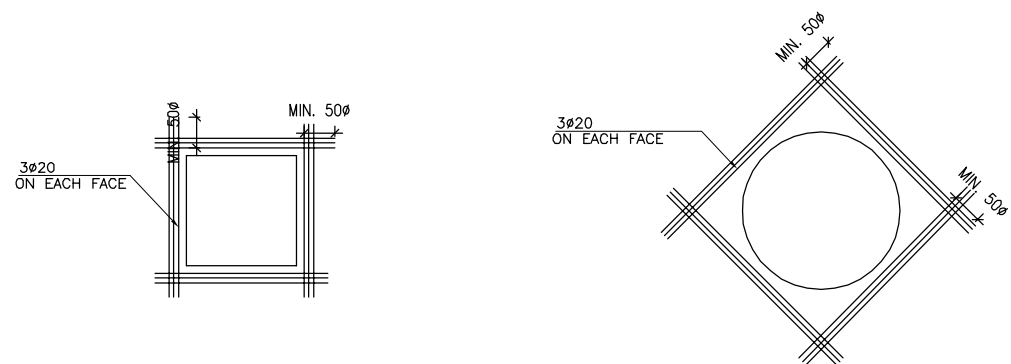
S/NO.	DRAWING NAME	DWG. NO.
STRUCTURAL DRAWING		
01/21	GENERAL STRUCTURAL DETAILS	RE-S-000
02/21	COLUMN AXES	RE-S-001
03/21	GENERAL LAYOUT AND DIMENSIONS FOR FOOTINGS	RE-S-002
04/21	FOOTING DETAILS (1/2)	RE-S-003
05/21	FOUNDATIONS DETAILS (2/2)	RE-S-004
06/21	BASEMENT WALL & SHEAR WALL DETAILS	RE-S-005
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

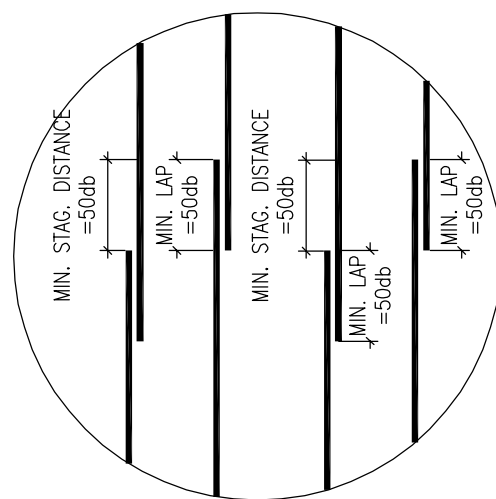
CIRCULAR OPENING < 500mm



RECTANGULAR OPENING > 500mm

CIRCULAR OPENING > 500mm

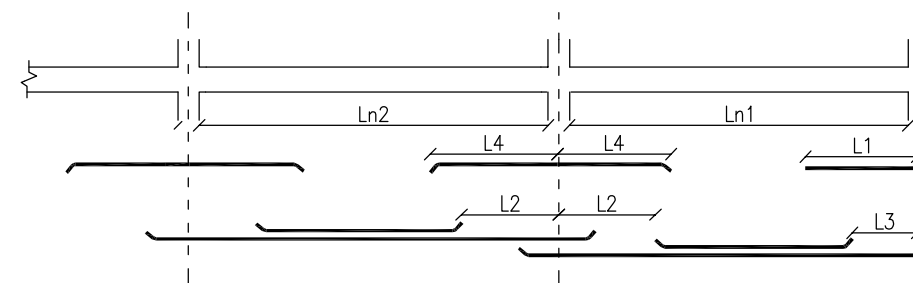
DETAIL AROUND OPENING IN R.C. WALL & SLAB (UNLESS SHOWN OTHERWISE ON DRAWINGS)



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

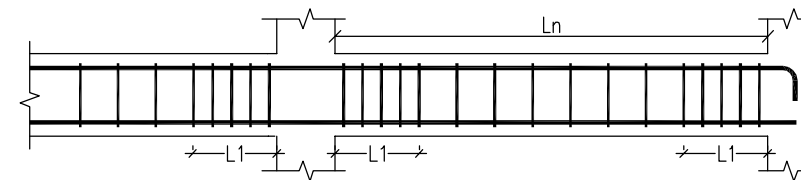
- BARS CUTOFF IN BEAMS:

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.

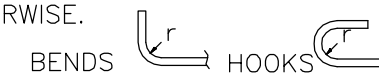
BARS CUTOFF IN BEAMS



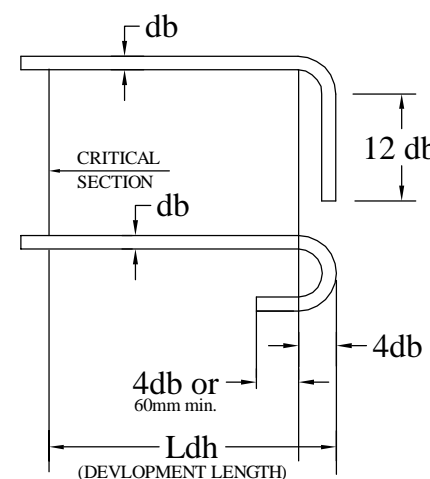
- $L1 = Ln/6$

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/m².

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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

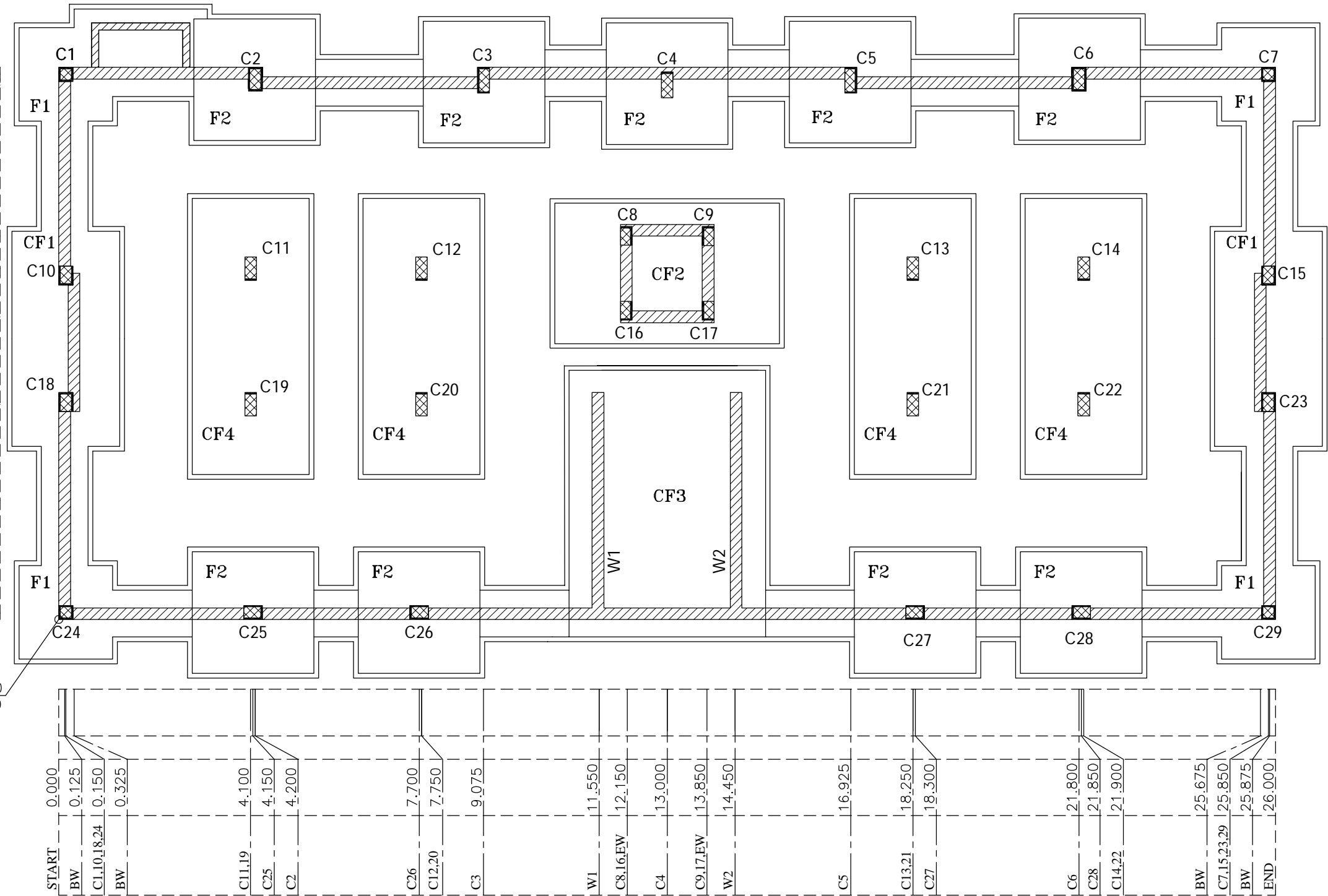
GENERAL STRUCTURAL DETAILS

DRAWING NO.: RE-S-000

DATE: APRIL 2011 SCALE: AS SHOWN

END	11.800
BW	11.675
C1,7	11.650
C2,6	11.550
C3,5	11.525
BW	11.475
C4	11.425
C8,9	8.322
C8,9	8.200
C11,12,13,14	7.500
C10,15	7.350
C16,17	6.600
EW	6.472
C18,23	4.650
C19,20,21,22	4.600
W1,2	2.550
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.

SCALE 1:100


NOTES :-

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- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
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- 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:
 - 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/m².

CLIENT:

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

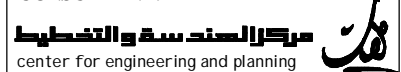
EMPLOYER:

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

PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

 center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

COLUMN AXES

DRAWING NO.: RE-S-001

DATE: MARCH 2011 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.
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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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 - 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

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EMPLOYER:

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مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

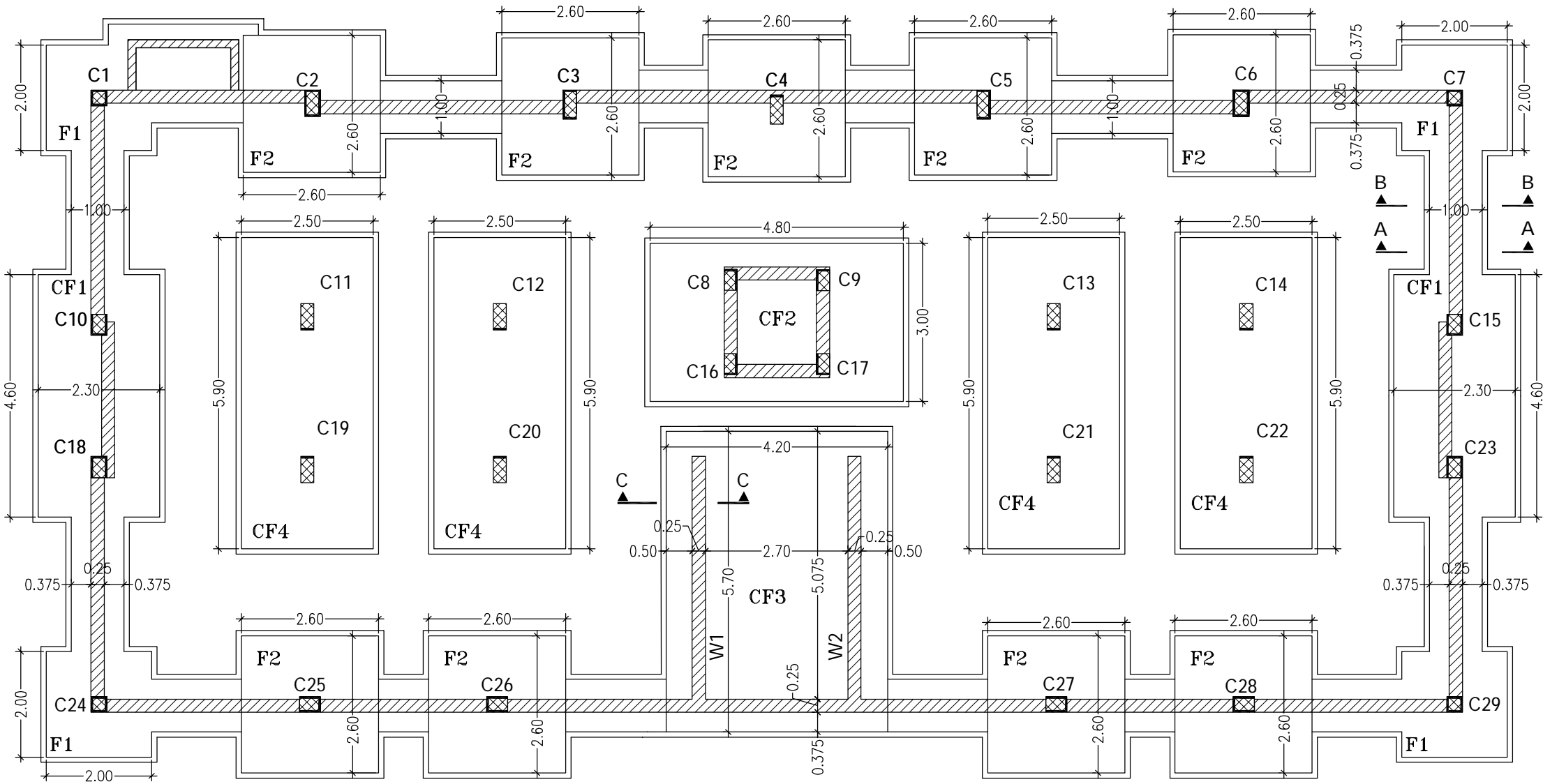
RESIDENTIAL BUILDING NO. (B5)

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

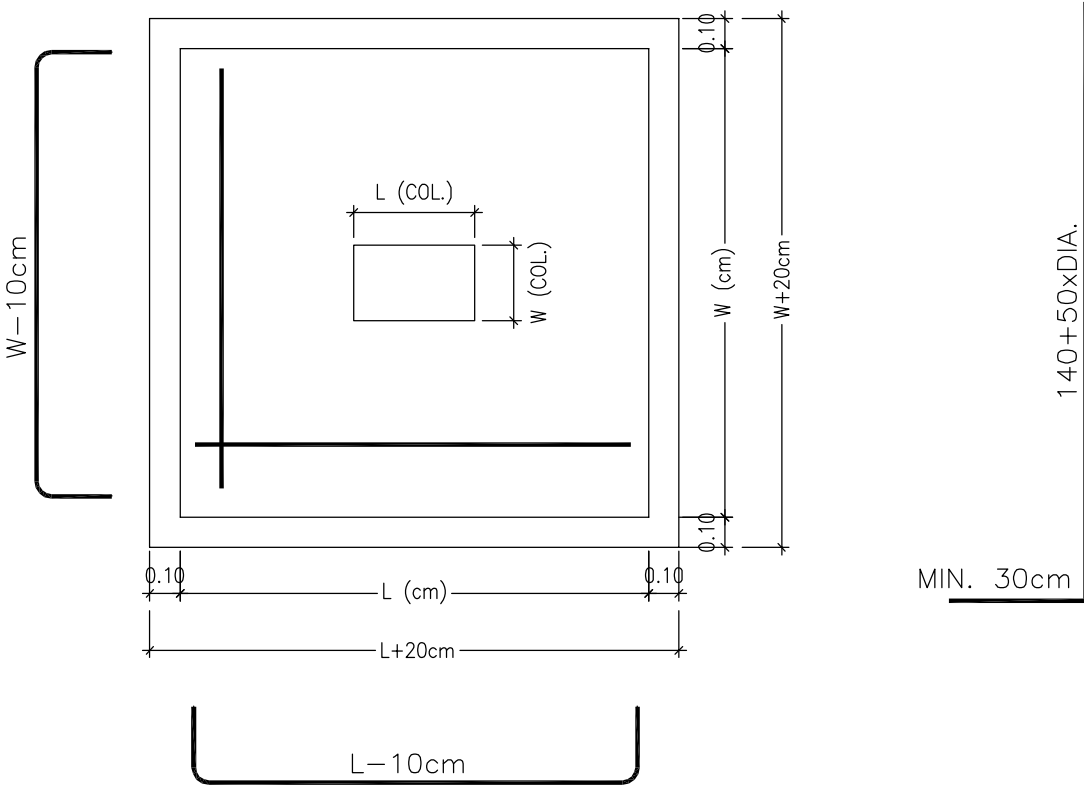
DIRECTIONS OF COLUMN SIZE CHANGE

GENERAL LAYOUT AND DIMENSIONS FOR FOOTINGS

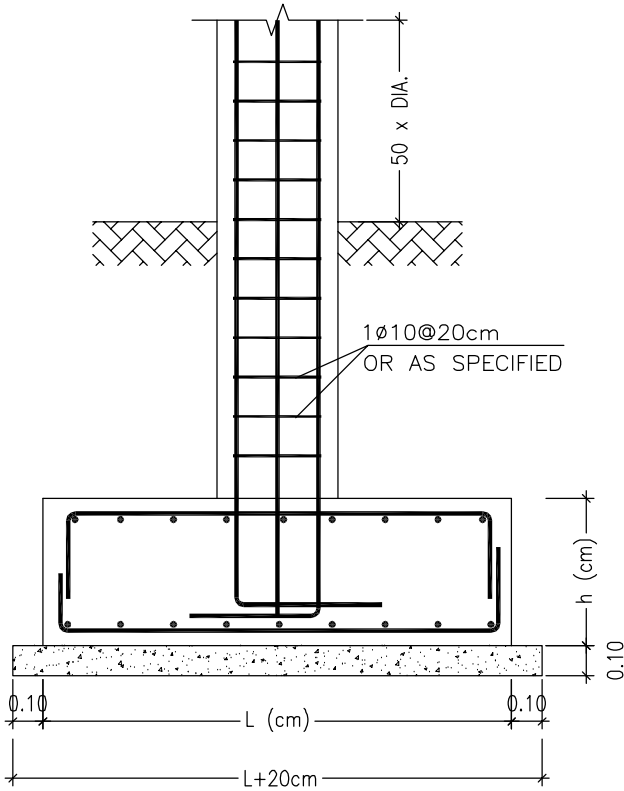
SCALE 1:100

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 200 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/250m 300 T.L=310cm



TYPICAL DETAILS FOR ISOLATED FOOTING



FOUNDATIONS DETAILS (1/2)

SCALE: AS SHOWN

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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) 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 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

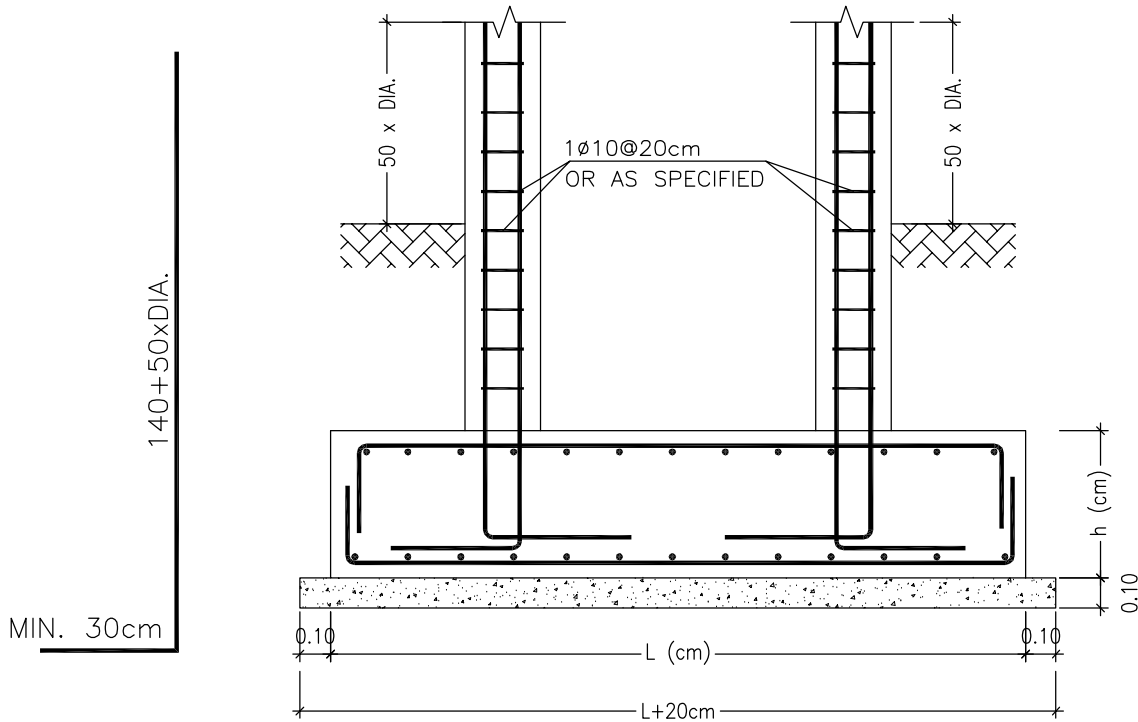
DRAWING TITLE:
FOOTING DETAILS (1/2)

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	570	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	590	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 :-

- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE START WORKS.
- 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:



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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

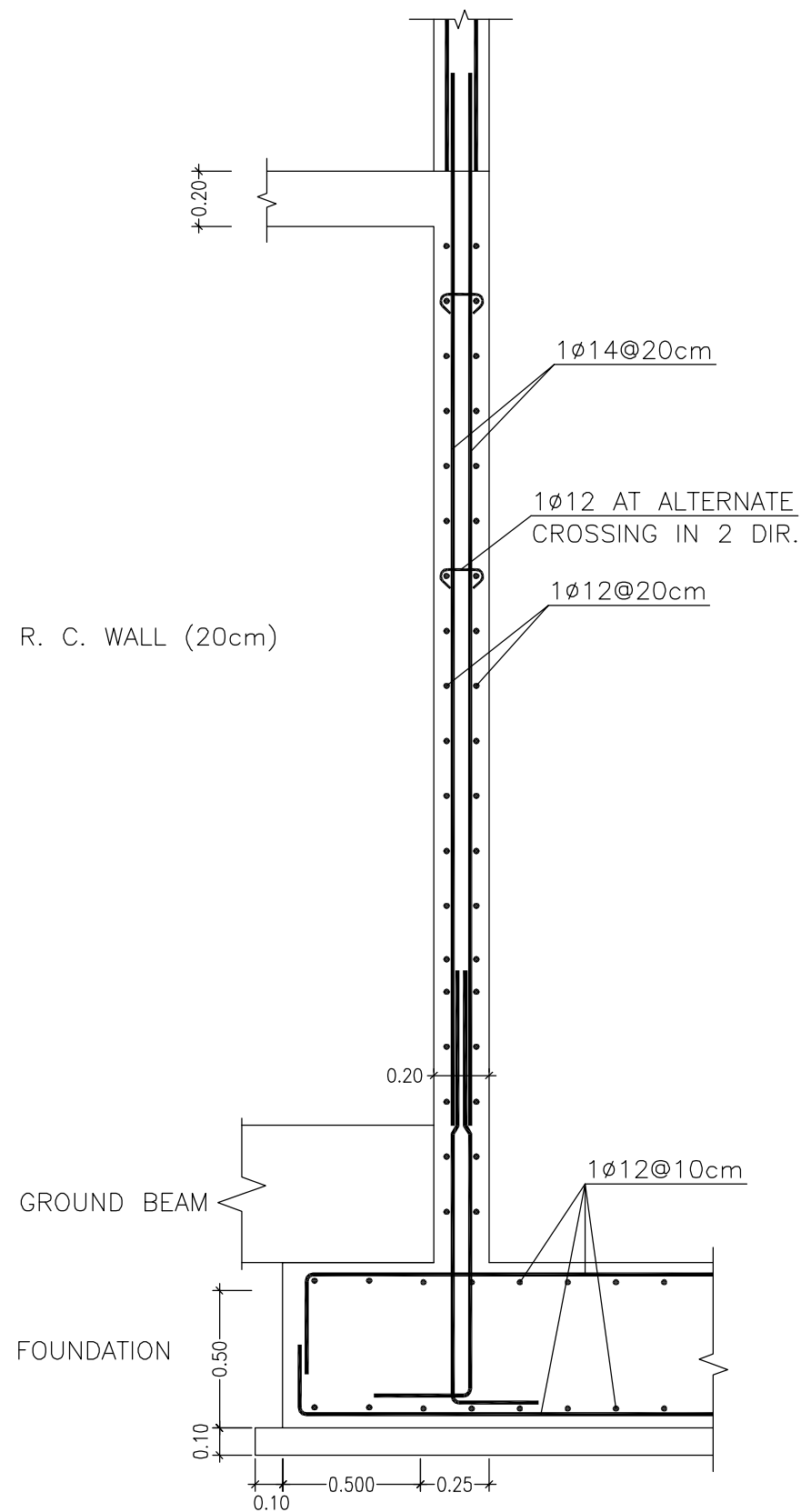
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

FOUNDATIONS DETAILS (2/2)

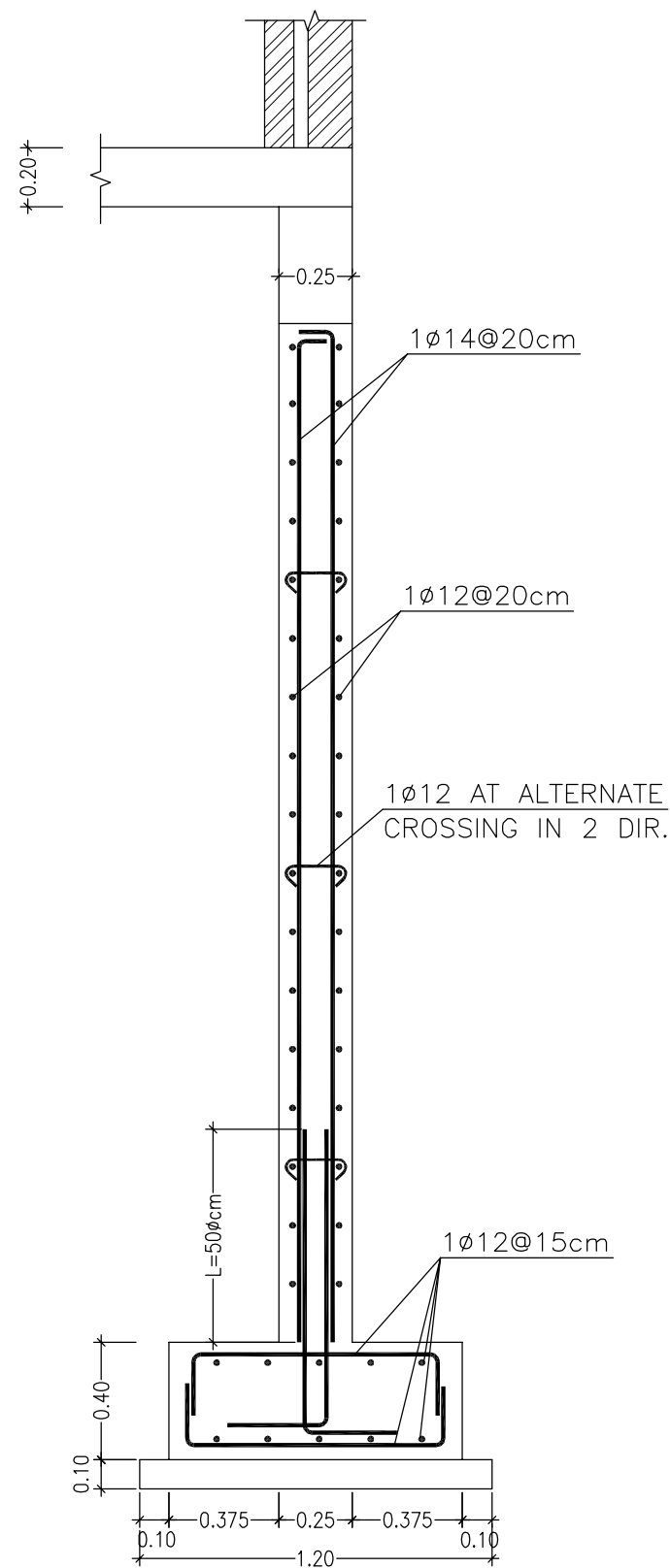
DRAWING NO.: RE-S-004

DATE: APRIL 2011 SCALE: AS SHOWN



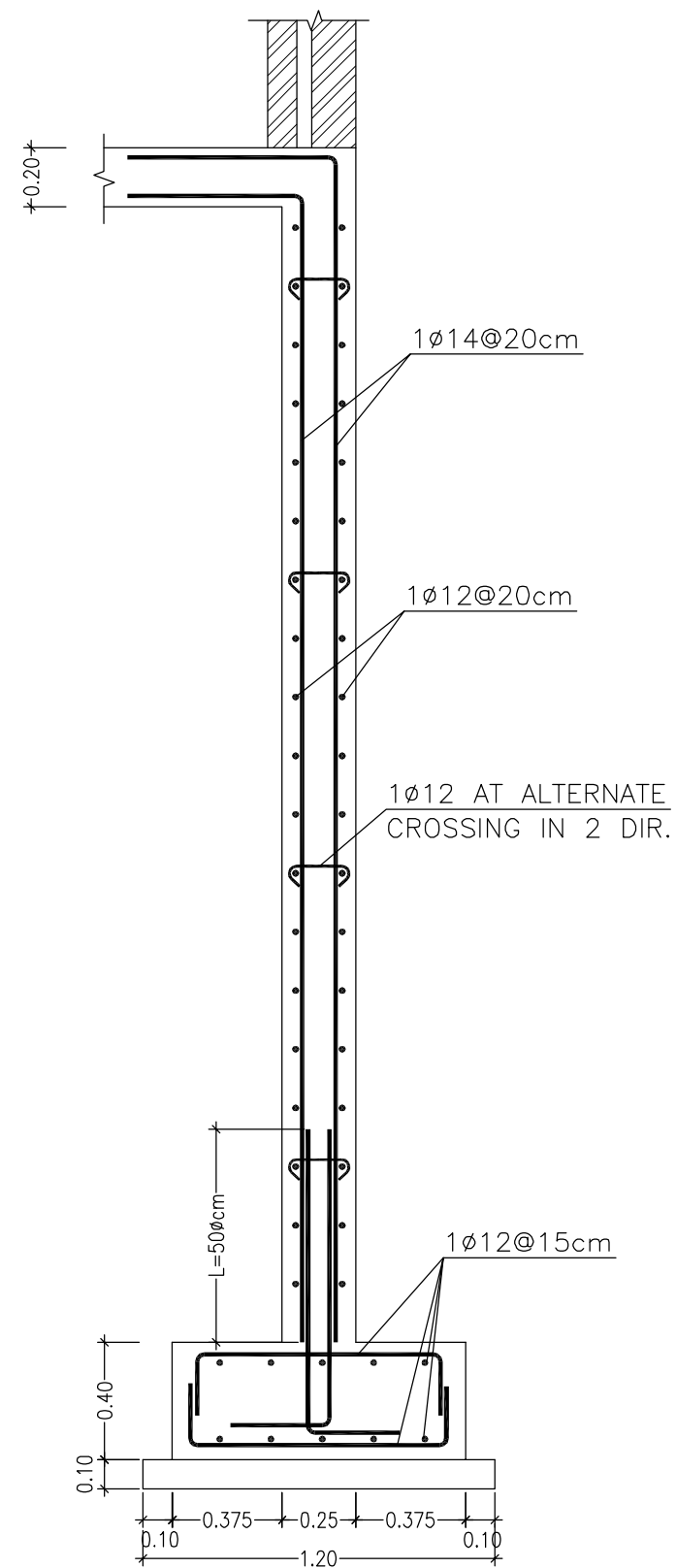
SEC. C-C

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.
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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 = 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:



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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

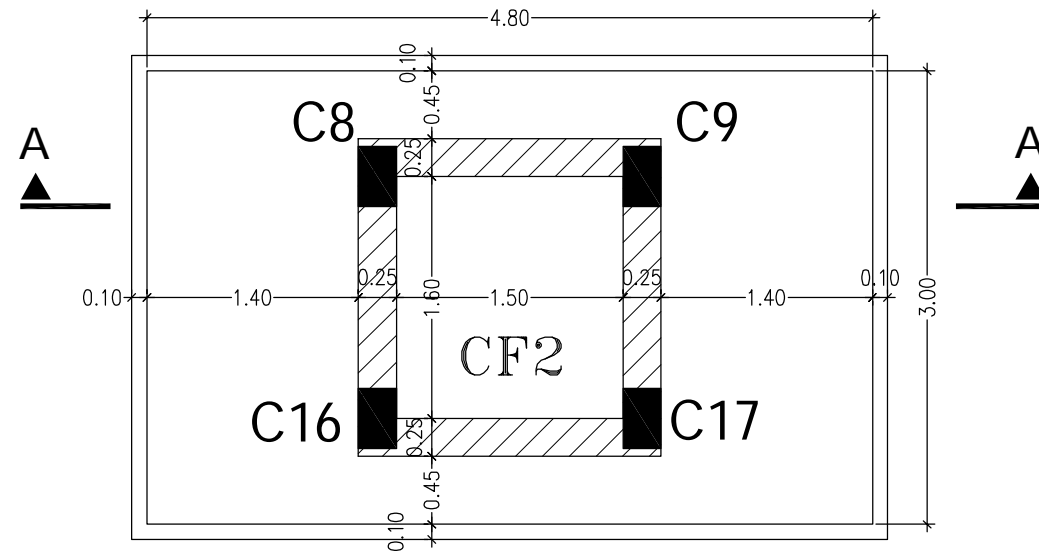
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DRAWING TITLE:

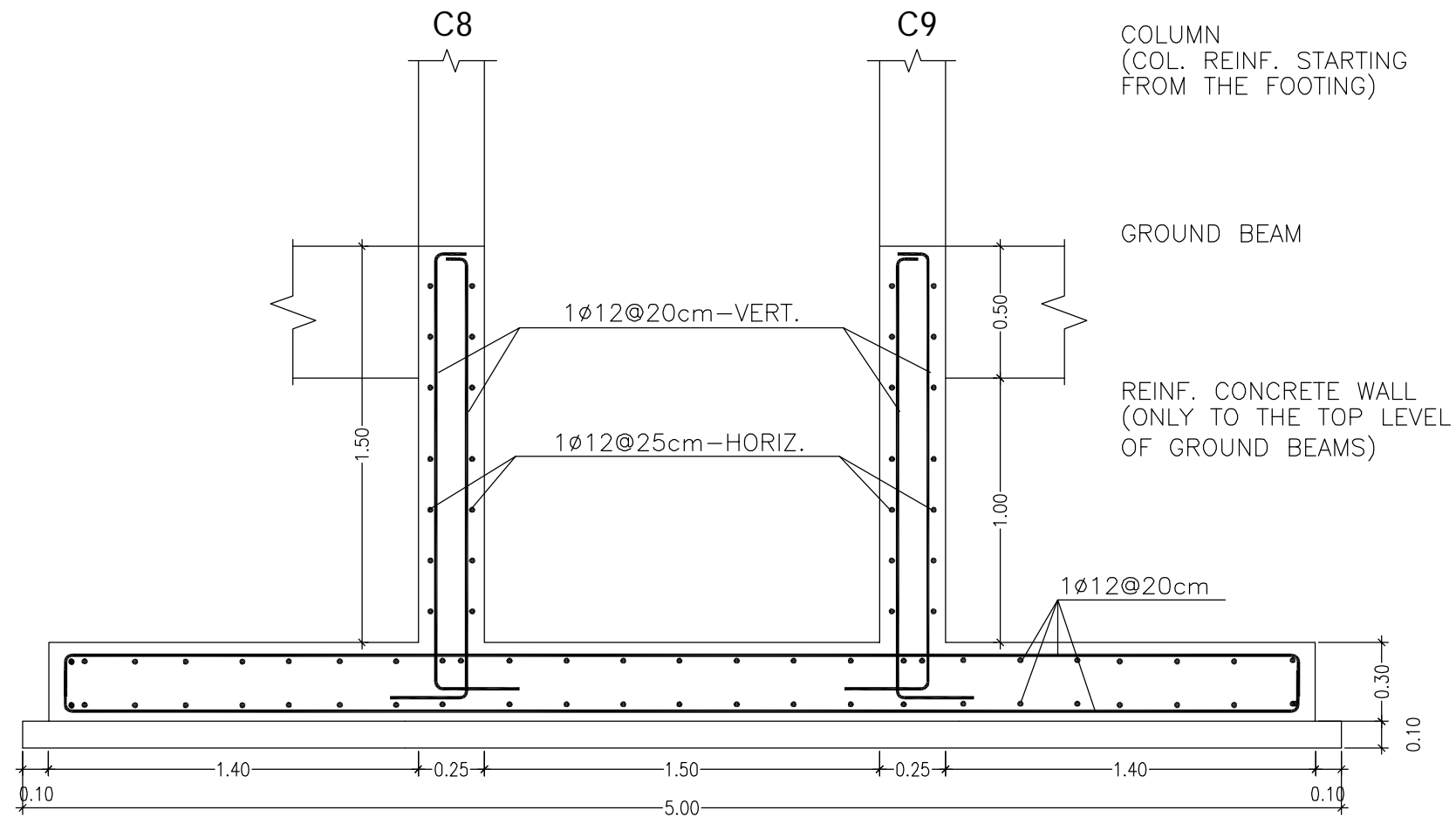
BASEMENT WALL & SHEAR WALL
DETAILS

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.
- 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:
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 - 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:



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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

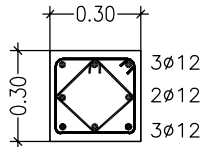
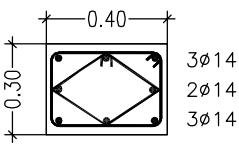
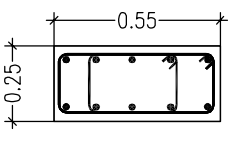
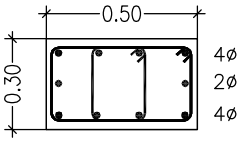
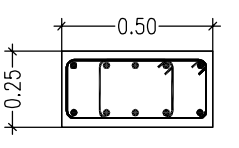
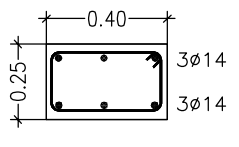
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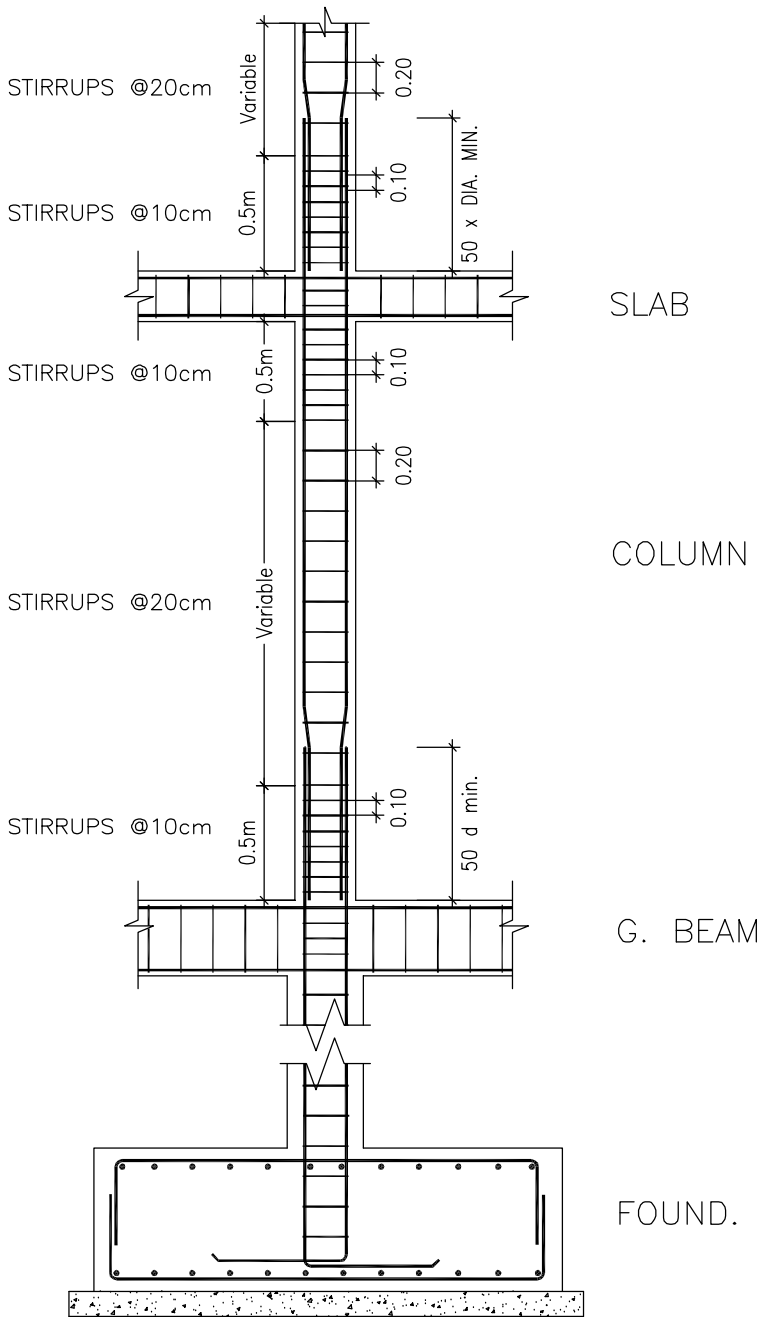
DRAWING TITLE:

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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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: 200 KN/m².

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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

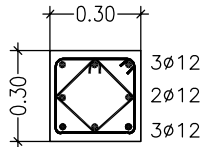
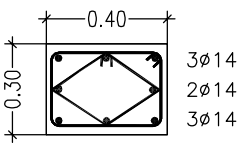
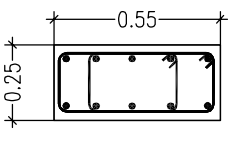
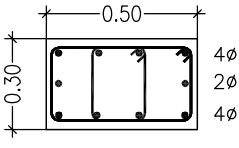
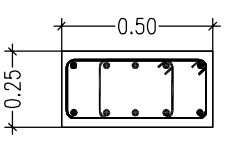
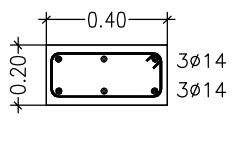
COLUMNS DETAILS (1/4)

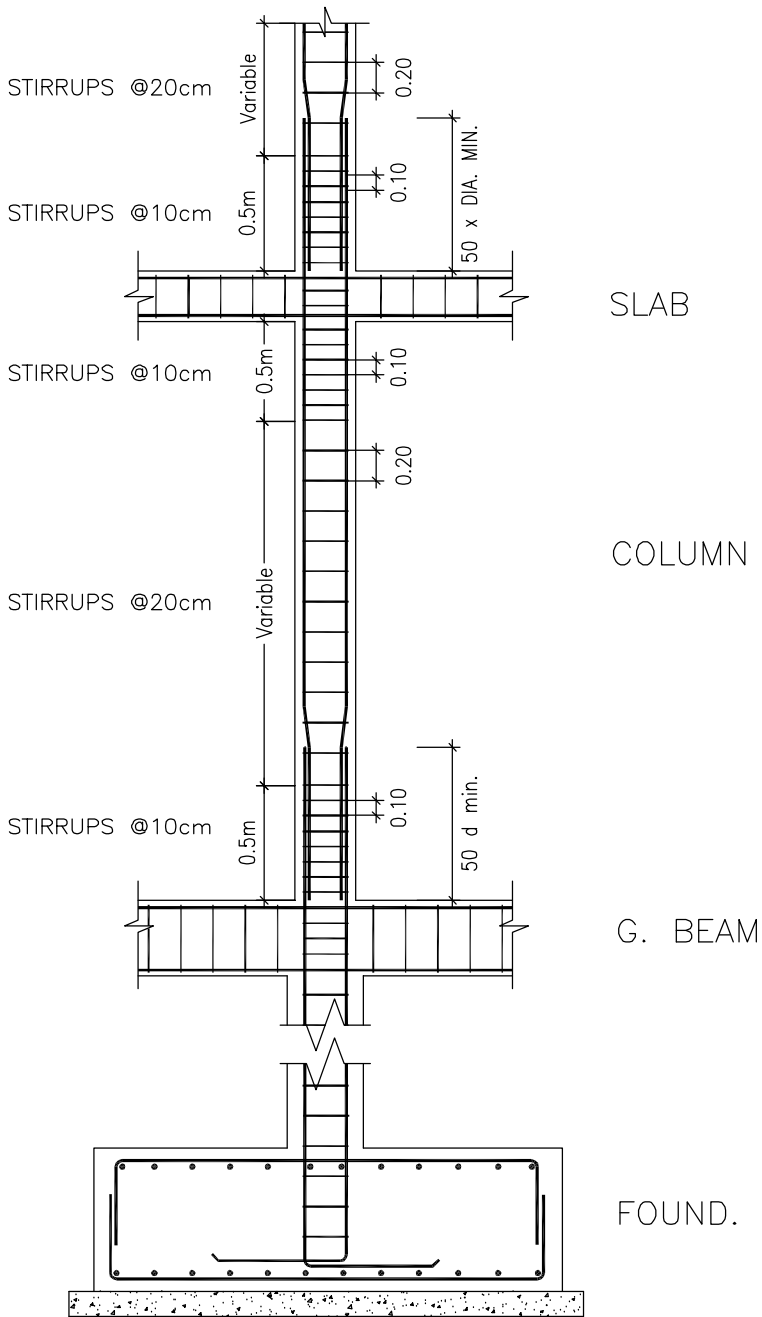
DRAWING NO.:

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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- 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
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 - FOR COLUMNS AND BEAMS =4.0 cm
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 - 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/m².

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 08)

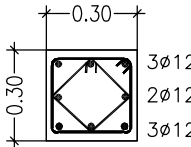
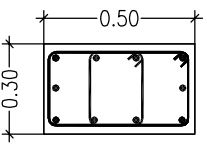
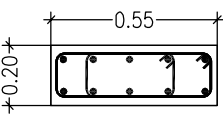
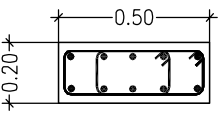
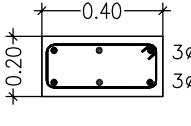
CONSULTANT:مركز الهندسة والتخطيط
center for engineering and planning

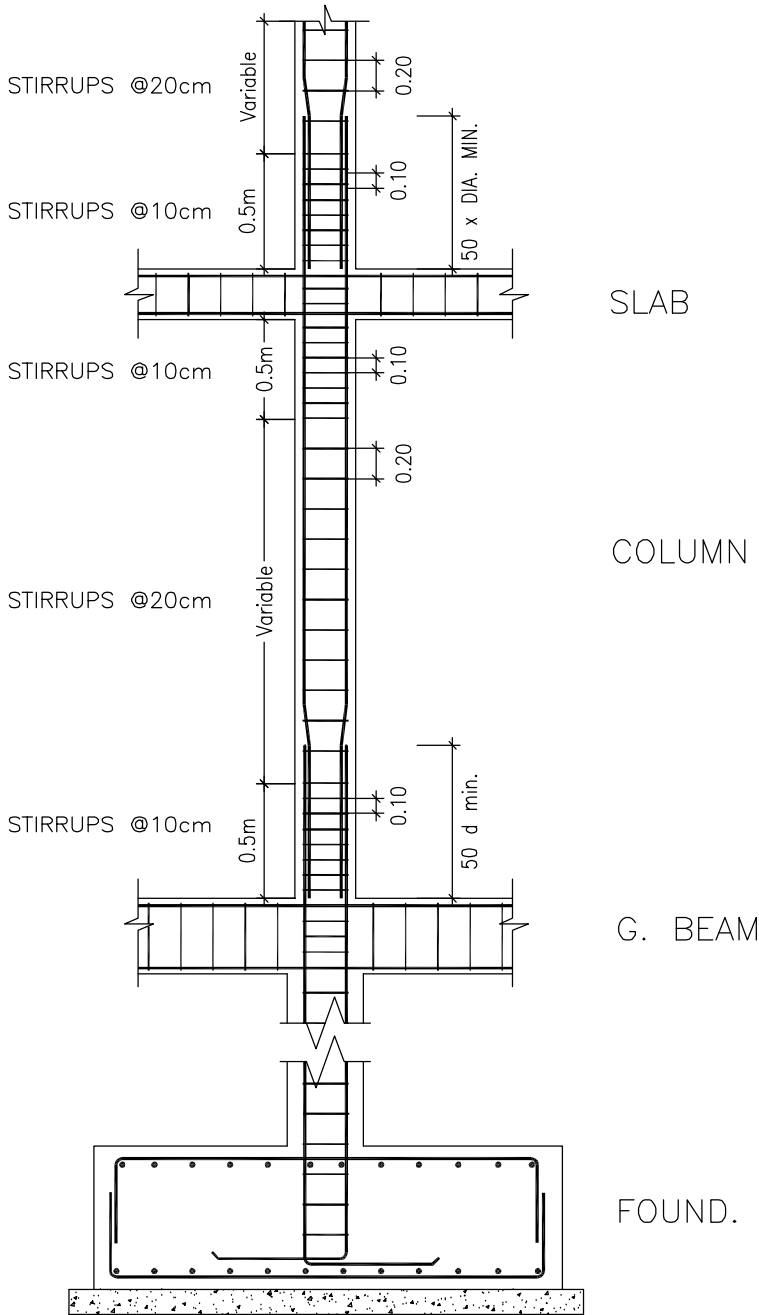
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

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	 <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>
	C4,11,12,13,14 19,20,21,22	9	 <div>5ø14 5ø14</div> <div>ST. 2ø10@20cm-MIDDLE ST. 2ø10@10cm-END</div>
	C8,9,16,17	4	 <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 (2/3)
SCALE: AS SHOWN

NOTES :-


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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:
 - 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/m².

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 08)

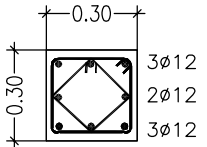
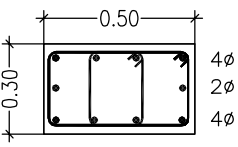
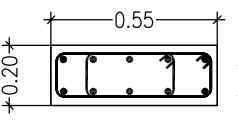
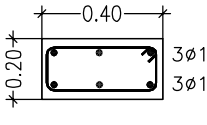
CONSULTANT:
 مرکز الهندسة والتخطيط
center for engineering and planning

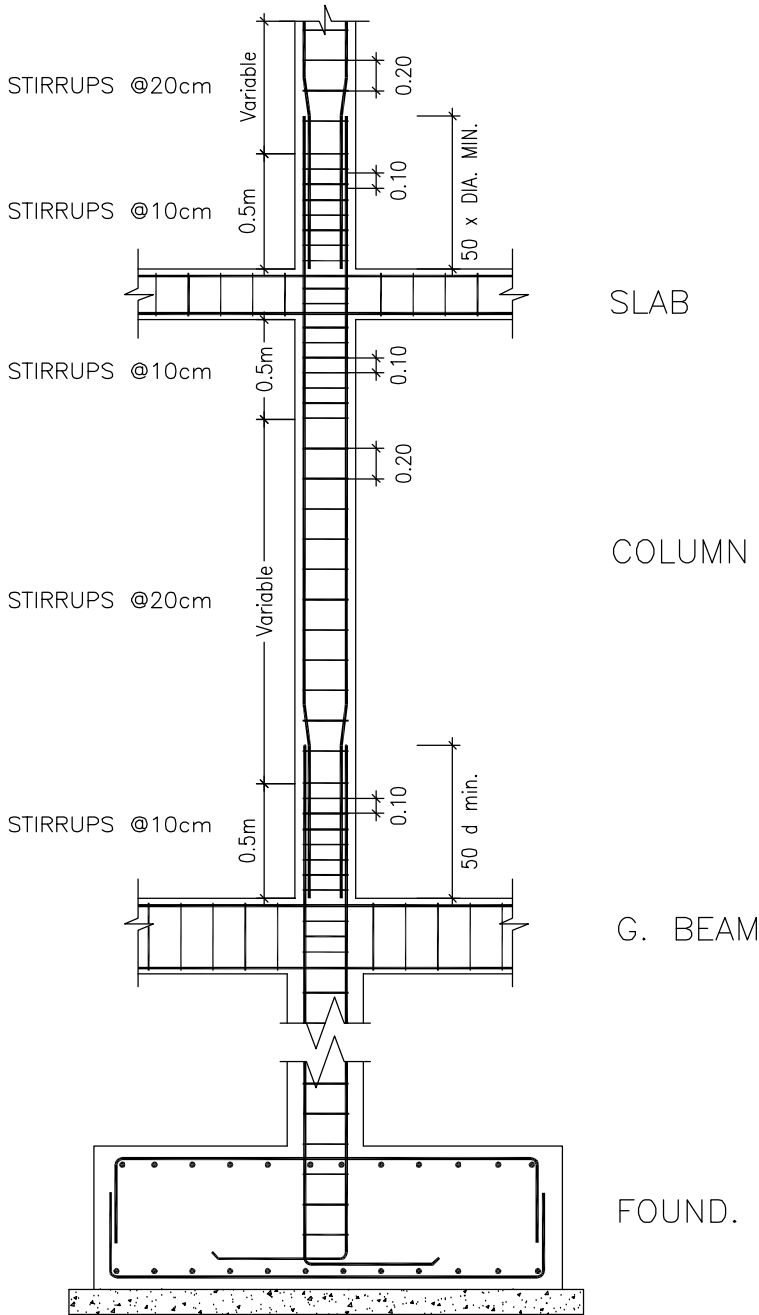
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

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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 - FOR R.C. SLAB =30 MPa
 - FOR R.C. FOOTINGS =30 MPa
 - FOR R.C. LINTELS =25 MPa
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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 08)

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

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
COLUMNS DETAILS (4/4)

DRAWING NO.: RE-S-010

DATE: APRIL 2011 SCALE: AS SHOWN

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مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

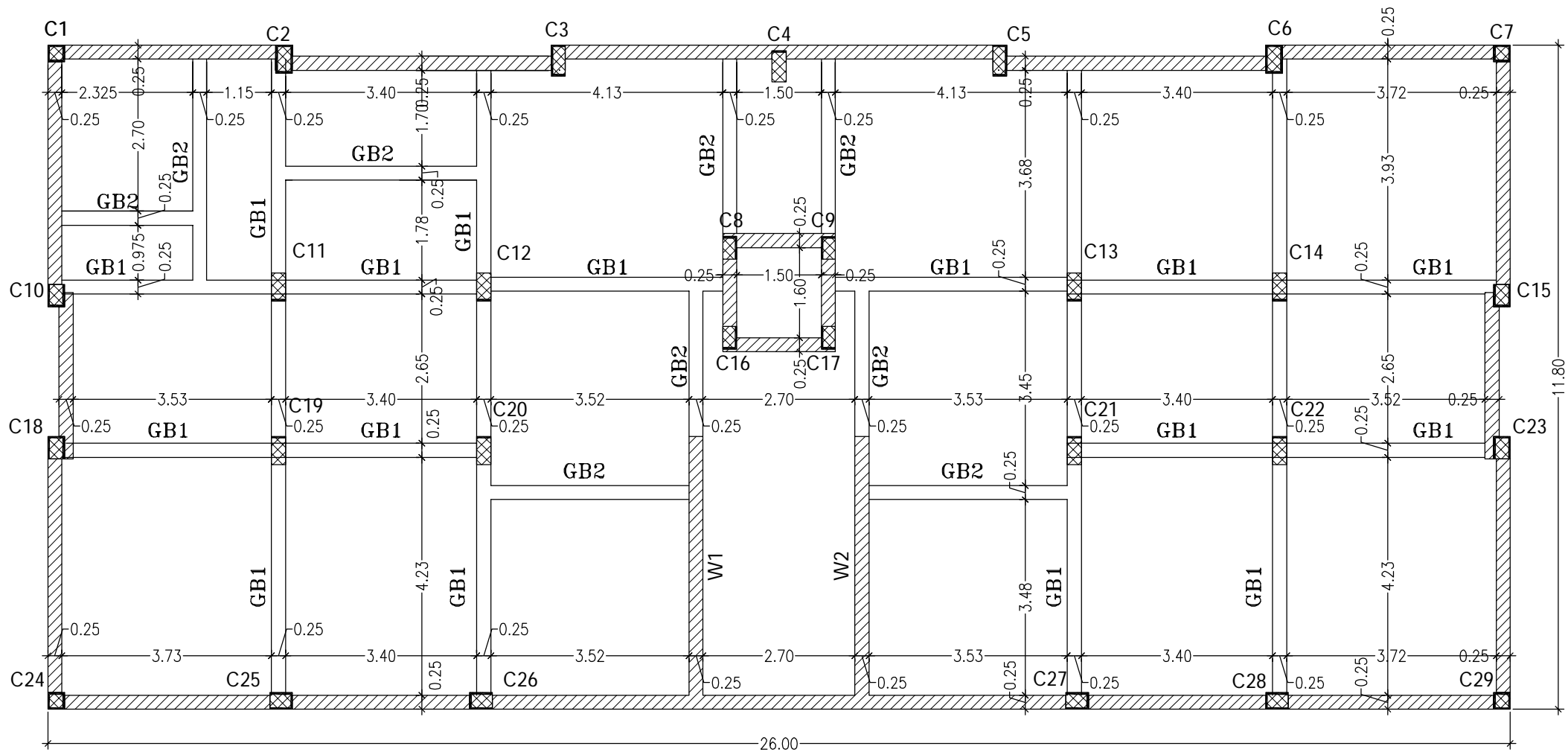
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

GROUND BEAMS DETAILS

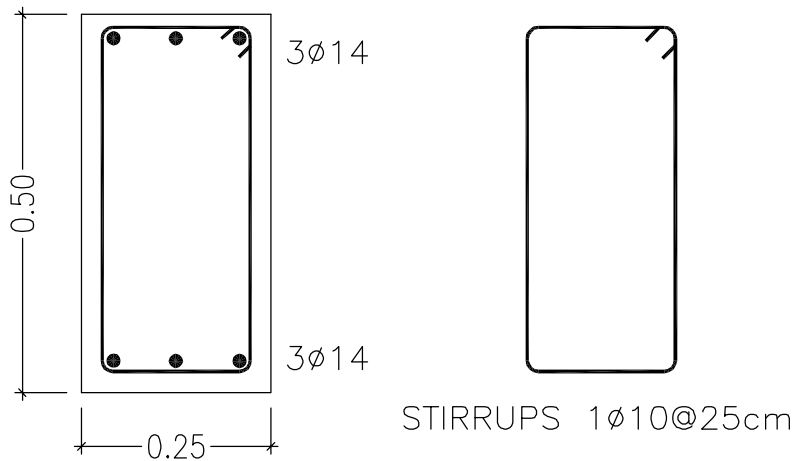
DRAWING NO.: RE-S-011

DATE: APRIL 2011 SCALE: AS SHOWN



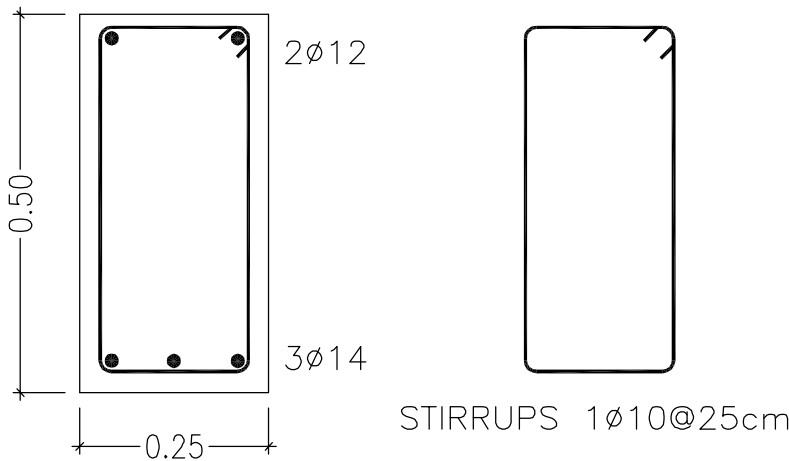
GROUND BEAMS LAYOUT

SCALE 1:100



GROUND BEAMS DETAILS (GB1)

SCALE 1:10



GROUND BEAMS DETAILS (GB2)

SCALE 1:10

GROUND BEAMS DETAILS

SCALE: AS SHOWN

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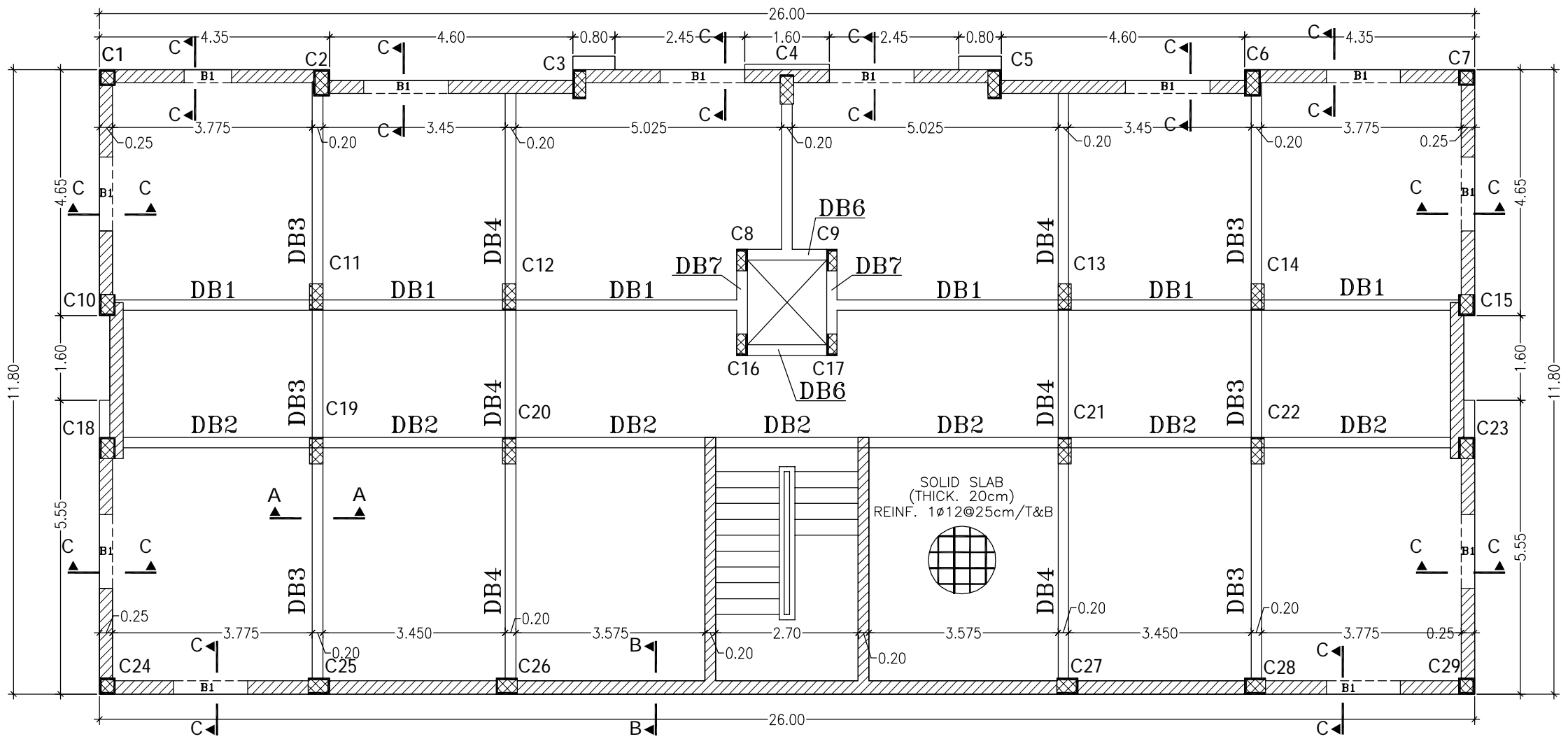
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

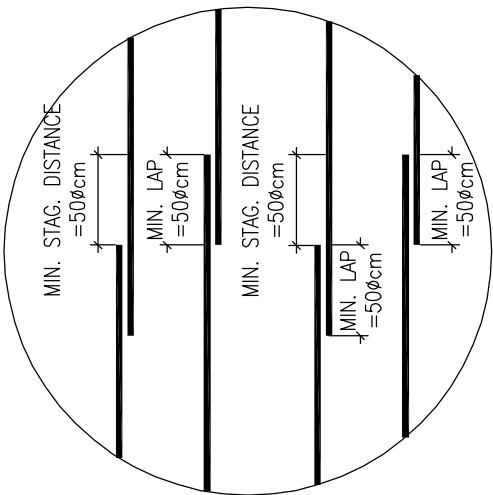
DRAWING TITLE:
BASEMENT SLAB DETAILS

DRAWING NO.: RE-S-012

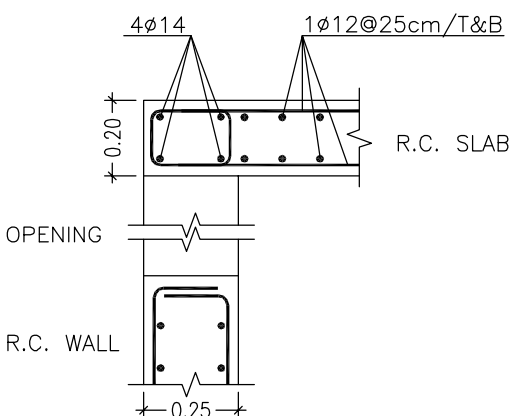
DATE: APRIL 2011 SCALE: AS SHOWN



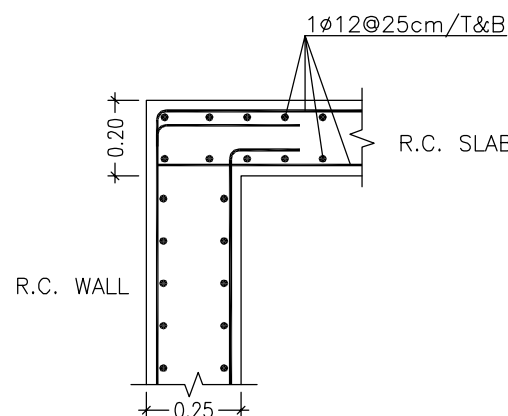
BASEMENT SLAB DETAILS
SCALE 1:100



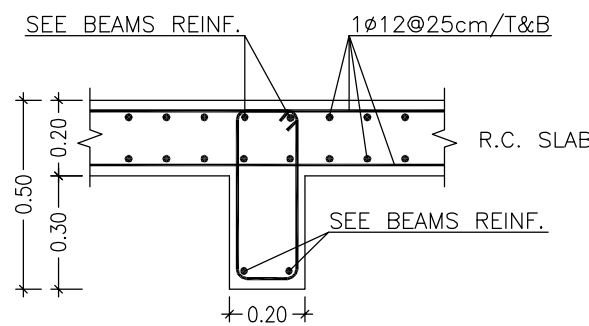
STAGGERING REINFORCEMENT DETAILS
NOT TO SCALE



SECTION C-C (B1)
SCALE 1:20

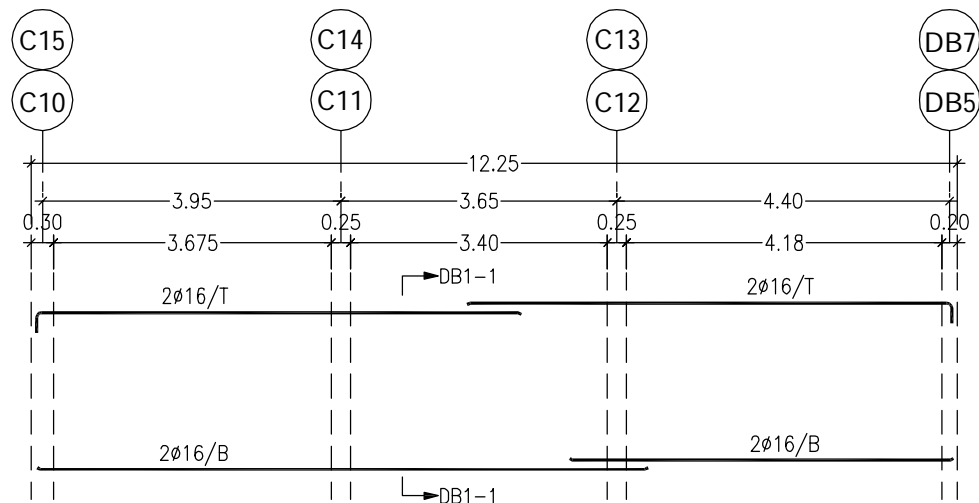


SECTION B-B
SCALE 1:20



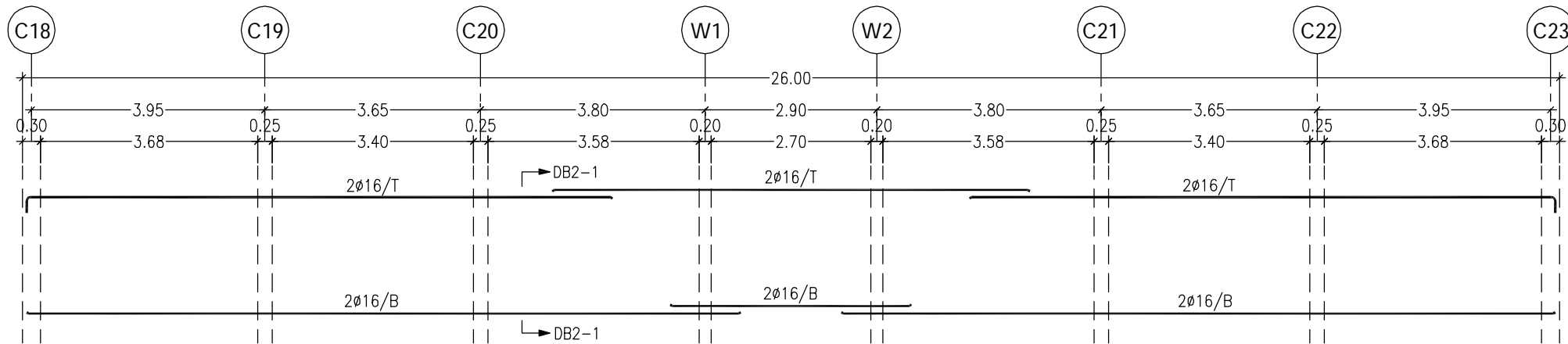
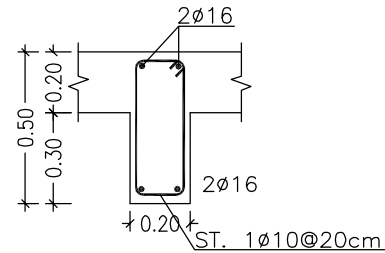
SECTION A-A
SCALE 1:20

BASEMENT SLAB DETAILS
SCALE: AS SHOWN



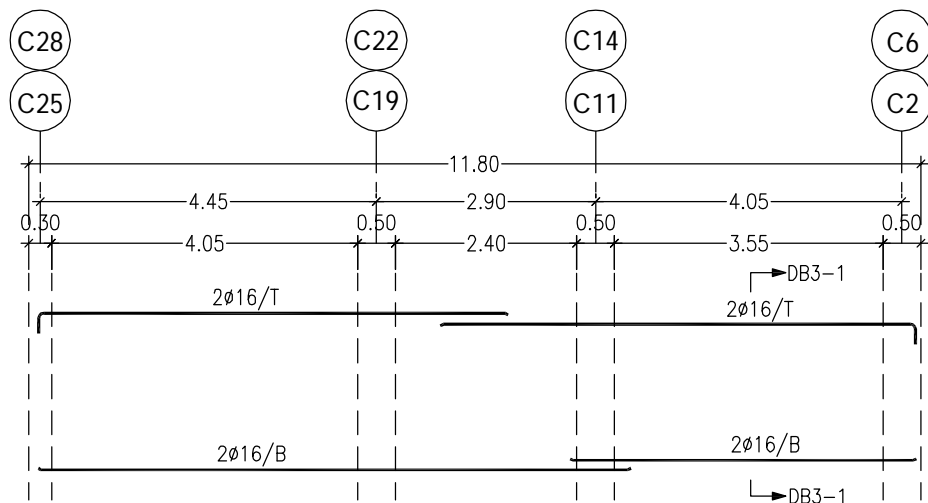
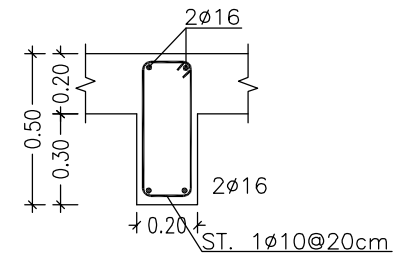
REINF. FOR BEAM NO. (DB1)
SCALE: 1:100

SECTION: DB1-1
SCALE: 1:25



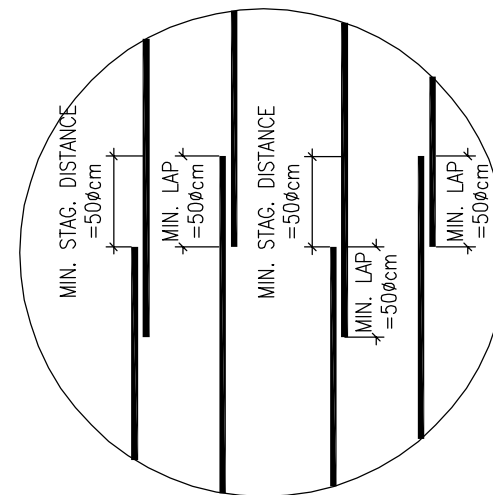
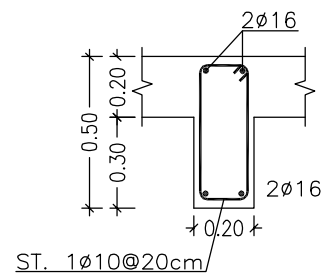
REINF. FOR BEAM NO. (DB2)
SCALE: 1:100

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

NOTES :-

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FOR TENDER ONLY

CLIENT:

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EMPLOYER:

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

PROJECT TITLE:

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

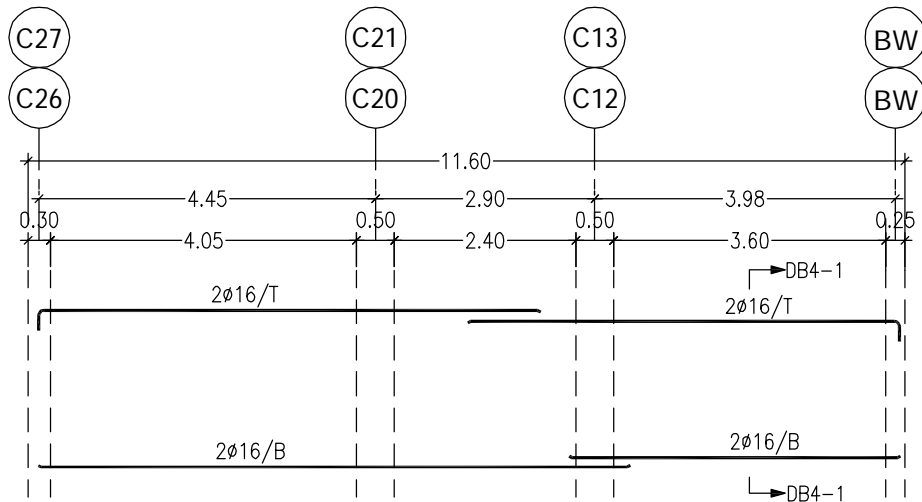
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

BEAMS DETAILS OF
BASEMENT SLAB (1/2)

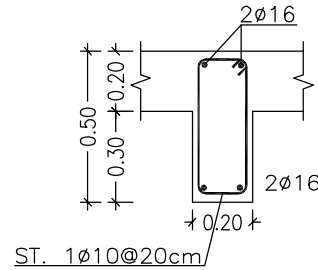
DRAWING NO.: RE-S-013

DATE: APRIL 2011 SCALE: AS SHOWN



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

SECTION: DB4-1
SCALE: 1:25




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

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DP (UNDP/PAPP)

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
 center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
BEAMS DETAILS OF
BASEMENT SLAB (2/2)

DRAWING NO.: RE-S-014

DATE: APRIL 2011 SCALE: AS SHOWN


BEAMS DETAILS OF BASEMENT SLAB (2/2)



SCALE: AS SHOWN

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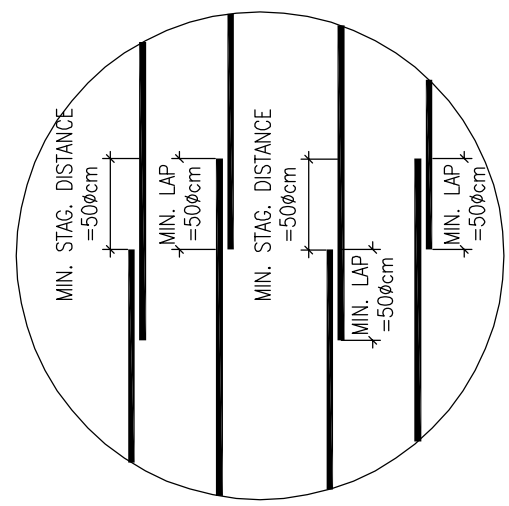
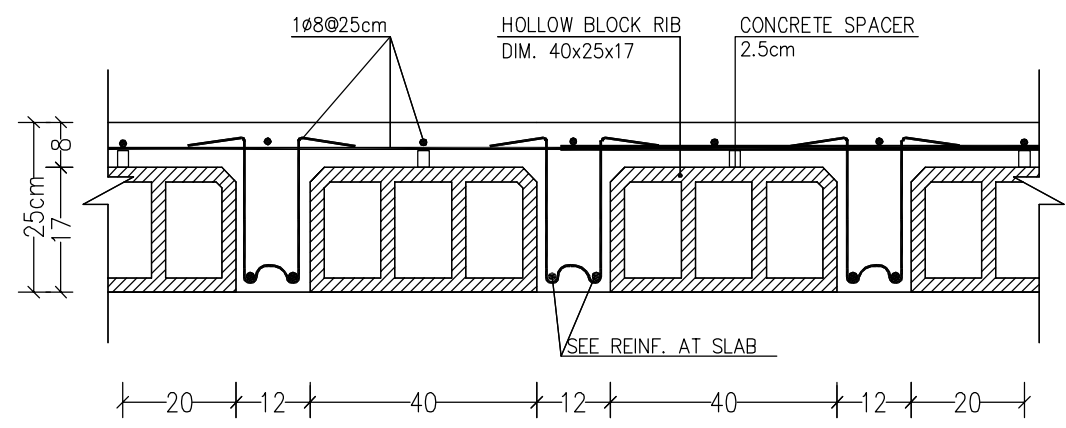
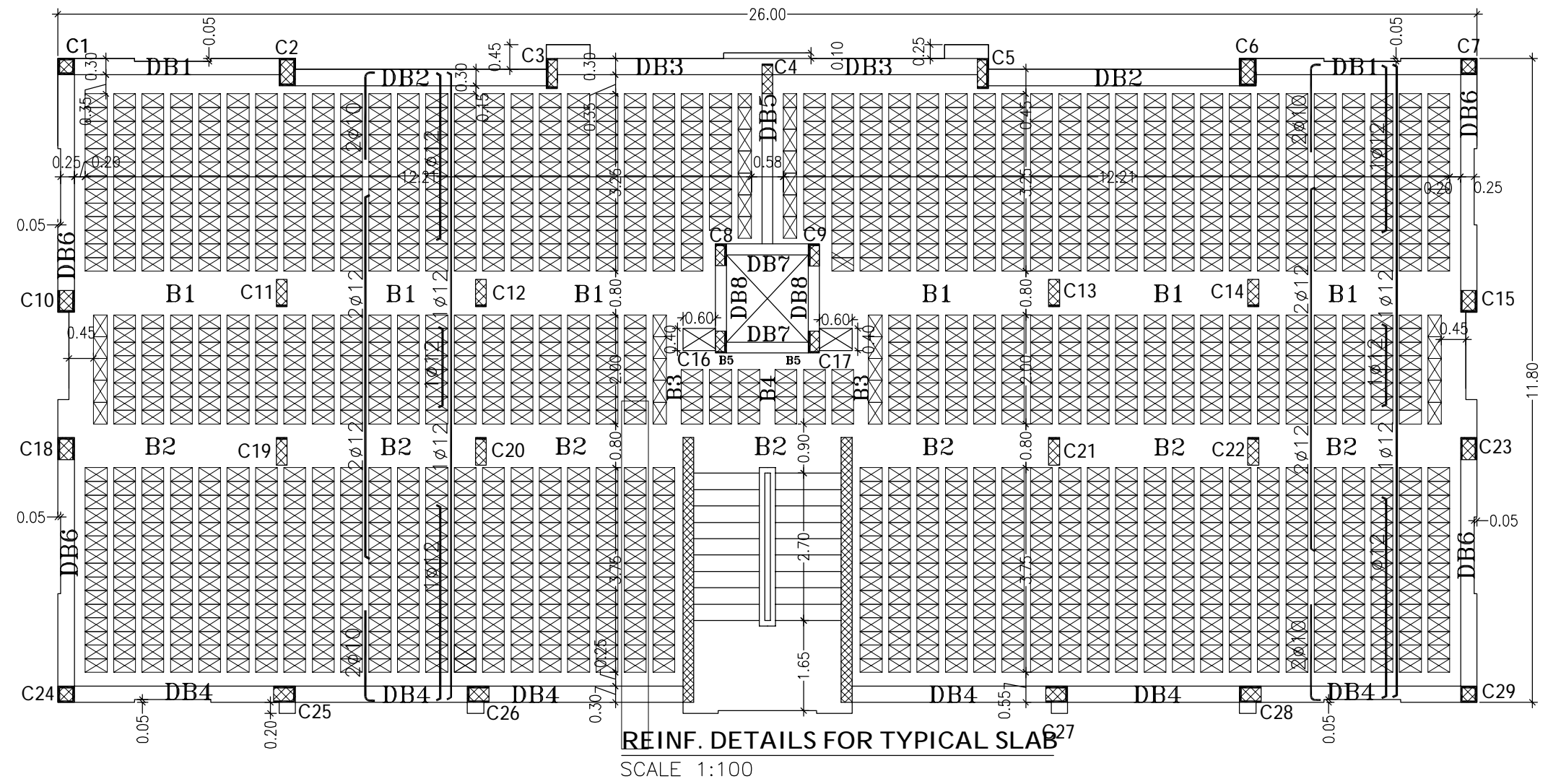
CONSULTANT:
 **مركز الهندسة والتخطيط**
center for engineering and planning

BUILDING NAME:
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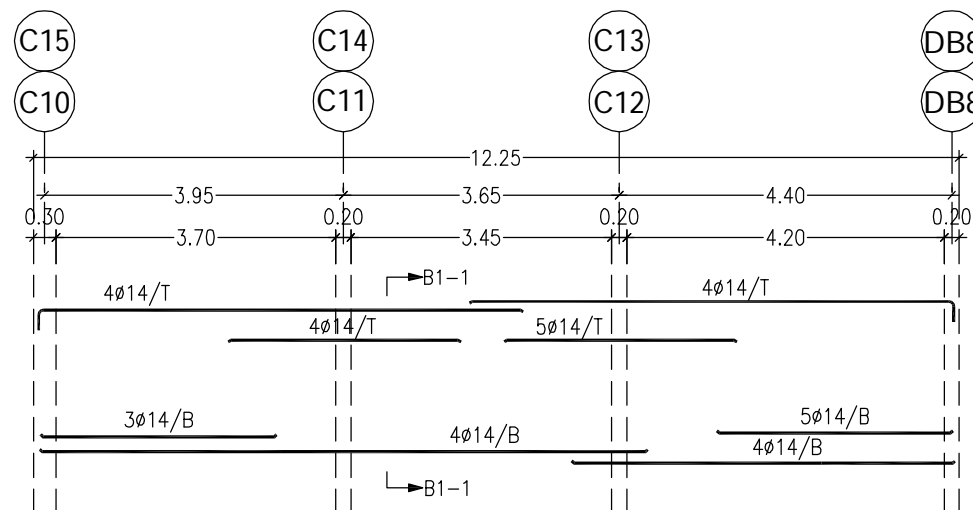
DRAWING TITLE:
TYPICAL SLAB DETAILS

DRAWING NO.: RE-S-015

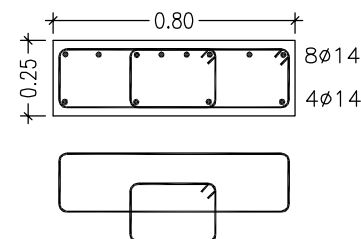
DATE: APRIL 2011 SCALE: AS SHOWN



TYPICAL SLAB DETAILS
SCALE: AS SHOWN

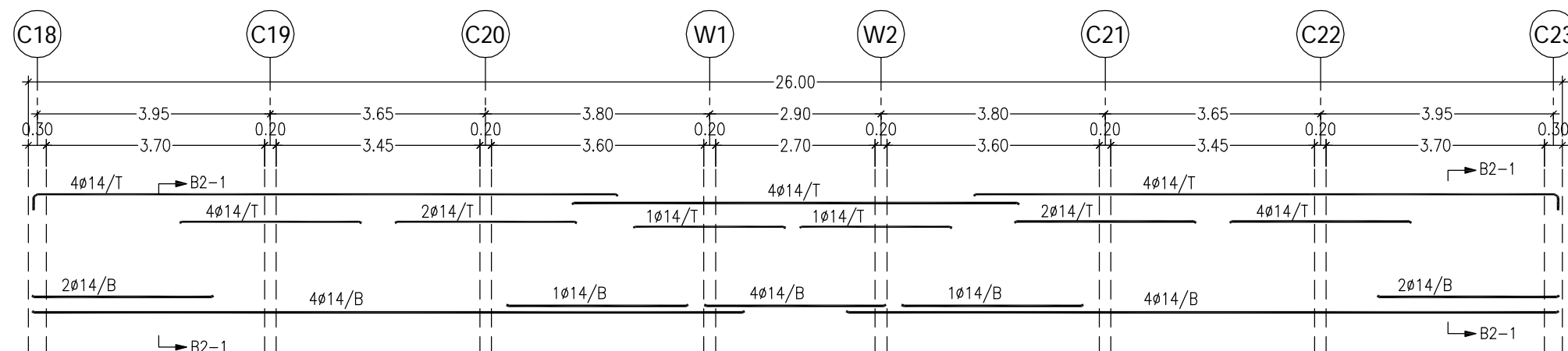


SECTION: B1-1
SCALE: 1:25



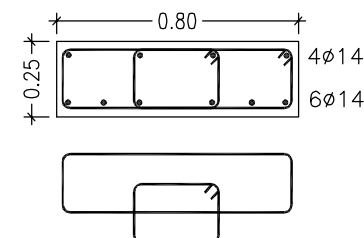
ST. 2Ø10@10cm-ENDS
ST. 2Ø10@20cm-MIDDLE

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

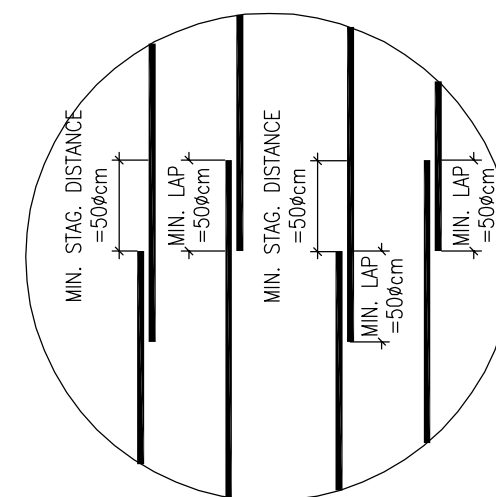


REINF. FOR BEAM NO. (B2)
SCALE: 1:100

SECTION: B2-1
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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EMPLOYER:



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center for engineering and planning

BUILDING NAME:

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DRAWING TITLE:

BEAMS DETAILS OF
TYPICAL SLAB (1/3)

DRAWING NO.:

RE-S-016

DATE: APRIL 2011 SCALE: AS SHOWN

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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:
 - FOR FOOTINGS (CAST AGAINST SOIL) =7.5 cm
 - (FOR PROTECTED CONCRETE) =5.0 cm
 - FOR COLUMNS AND BEAMS =4.0 cm
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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
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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

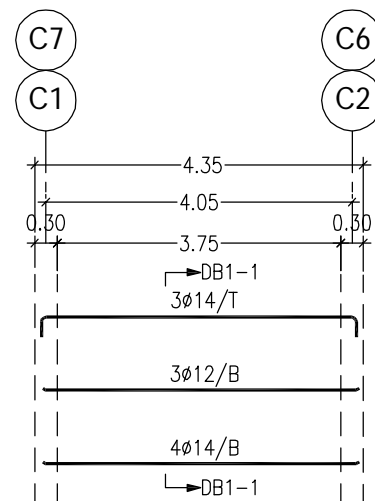
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

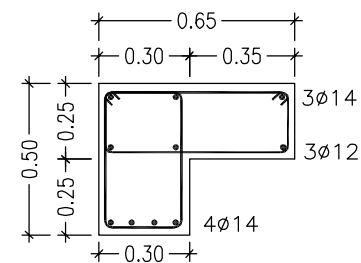
BEAMS DETAILS OF
TYPICAL SLAB (2/3)

DRAWING NO.: RE-S-017

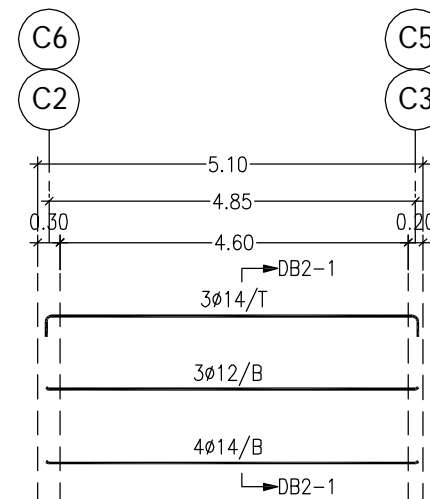
DATE: APRIL 2011 SCALE: AS SHOWN



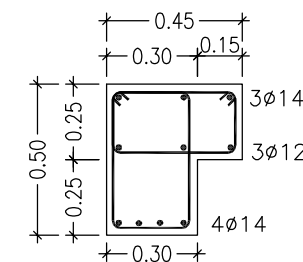
SECTION: DB1-1
SCALE: 1:25



ST. 2ø10@20cm



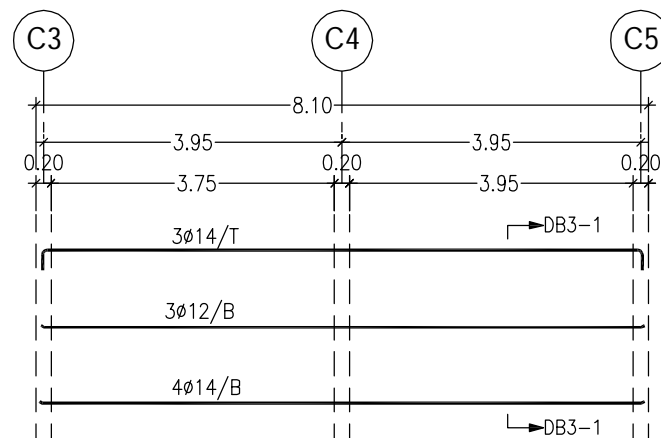
SECTION: DB2-1
SCALE: 1:25



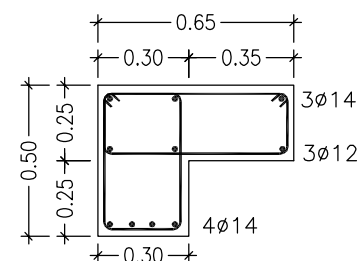
ST. 2ø10@20cm

REINF. FOR BEAM NO. (DB1)

SCALE: 1:100



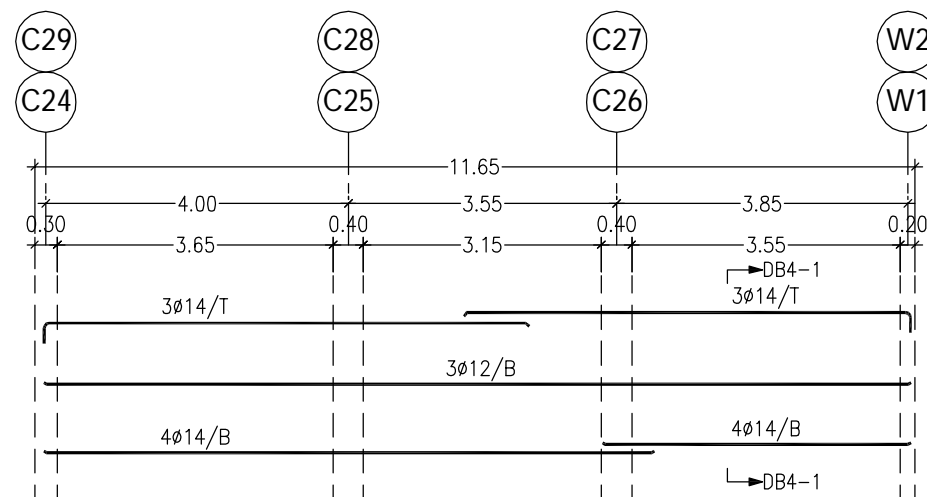
SECTION: DB3-1
SCALE: 1:25



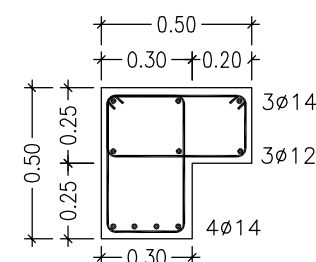
ST. 2ø10@20cm

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

NOTES :-

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FOR TENDER ONLY

CLIENT:



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BUILDING NAME:

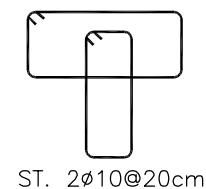
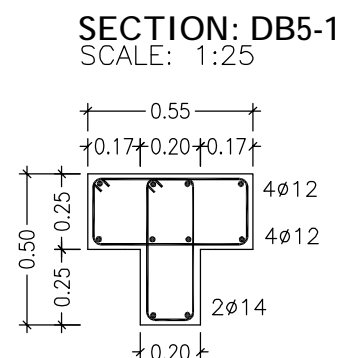
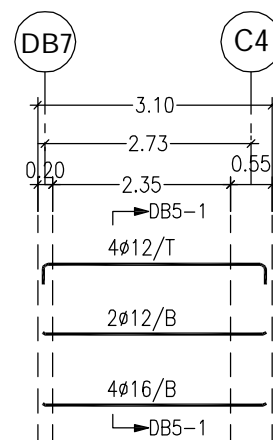
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

BEAMS DETAILS OF
TYPICAL SLAB (3/3)

DRAWING NO.: RE-S-018

DATE: APRIL 2011 SCALE: AS SHOWN



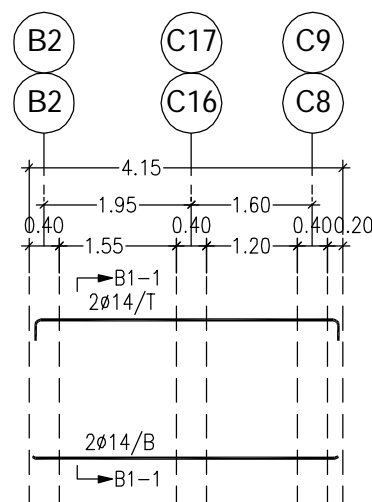
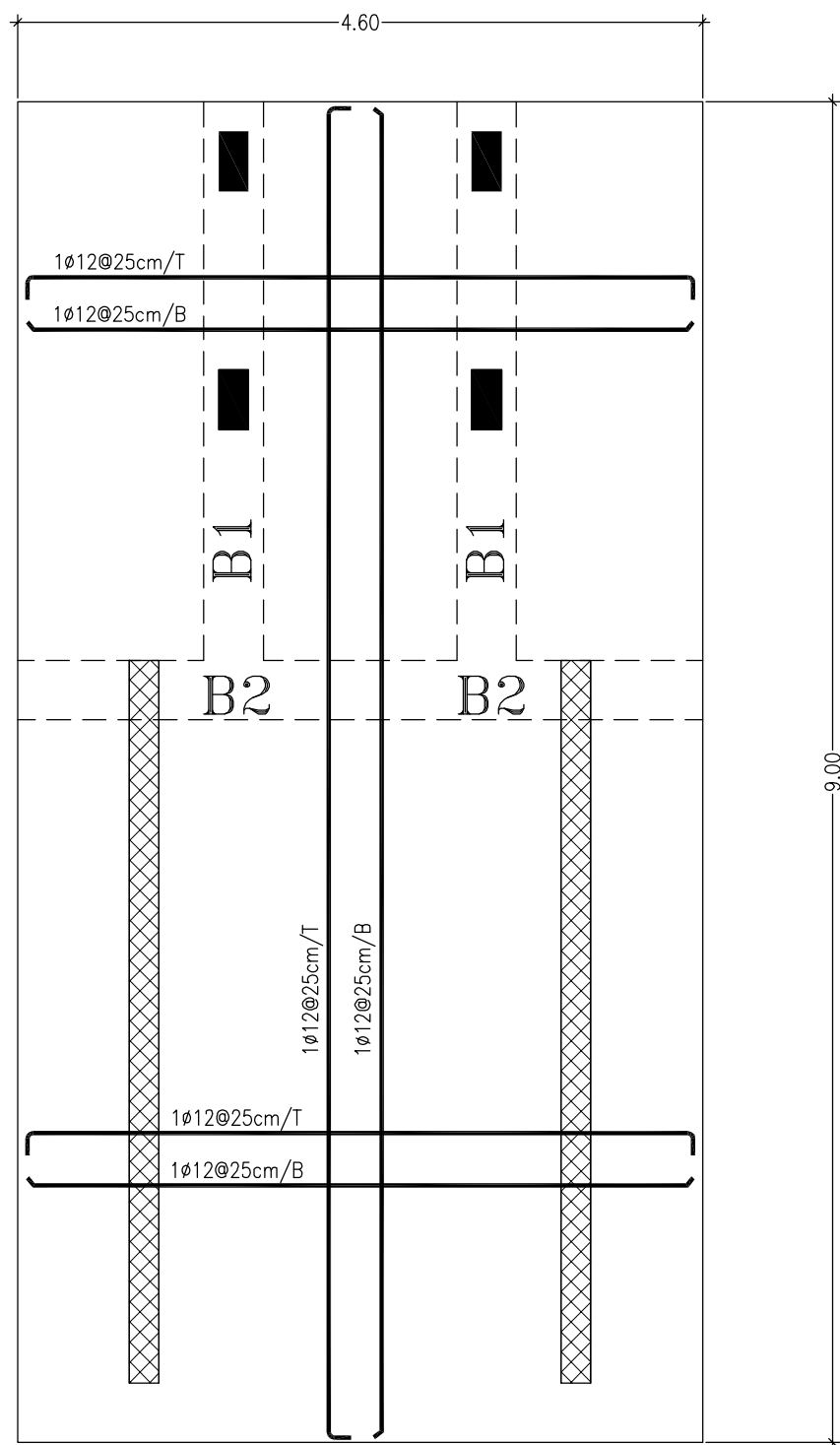
REINF. FOR BEAM NO. (DB5)
SCALE: 1:100

BEAMS REINFORCEMENT TABLE
FOR TYPICAL SLAB

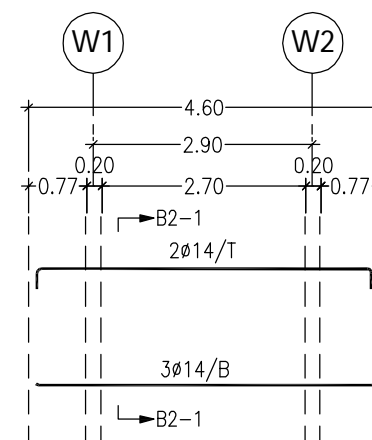
NO.	DIM		BOTTOM REINF.	TOP REINF.	STIRRUPS
	W.	H.			
DB6	30	50	4φ16	2φ12	1φ10/20cm
DB7	20	40	2φ14	2φ12	1φ10/20cm
DB8	20	40	2φ14	2φ12	1φ10/20cm
B3	25	25	2φ12	2φ12	1φ10/20cm
B4	25	25	2φ12	2φ12	1φ10/20cm
B5	30	25	2φ14	2φ12	1φ10/20cm

BEAMS DETAILS OF TYPICAL SLAB (3/3)

SCALE: AS SHOWN

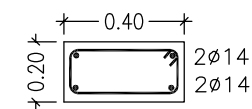


REINF. FOR BEAM NO. (B1)
SCALE: 1:100



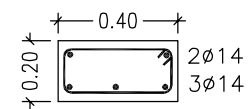
REINF. FOR BEAM NO. (B2)
SCALE: 1:100

SECTION: B1-1
SCALE: 1:25



ST. 1Ø10@7.5cm—ENDS
ST. 1Ø10@15cm—MIDDLE

SECTION: B2-1
SCALE: 1:25



ST. 1Ø10@7.5cm—ENDS
ST. 1Ø10@15cm—MIDDLE

STAIRS ROOF SLAB DETAILS
SCALE: AS SHOWN

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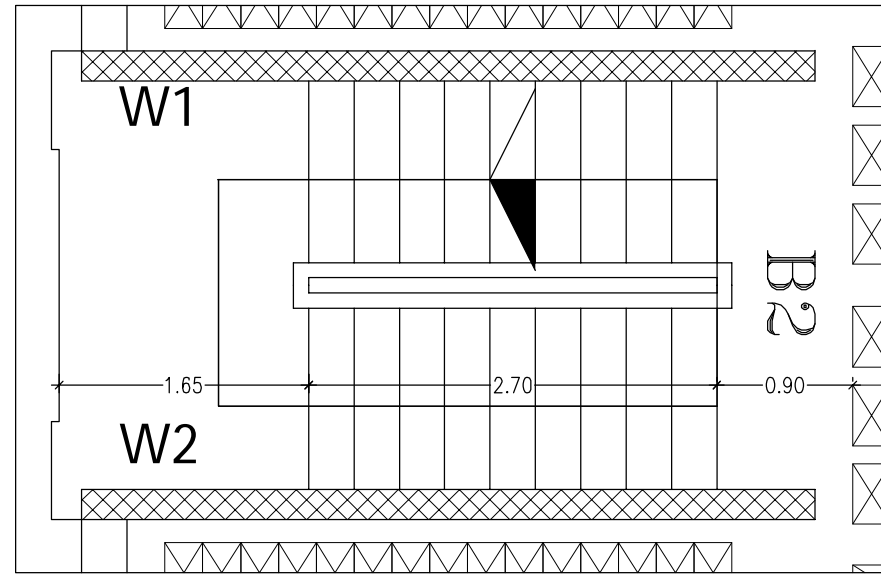
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

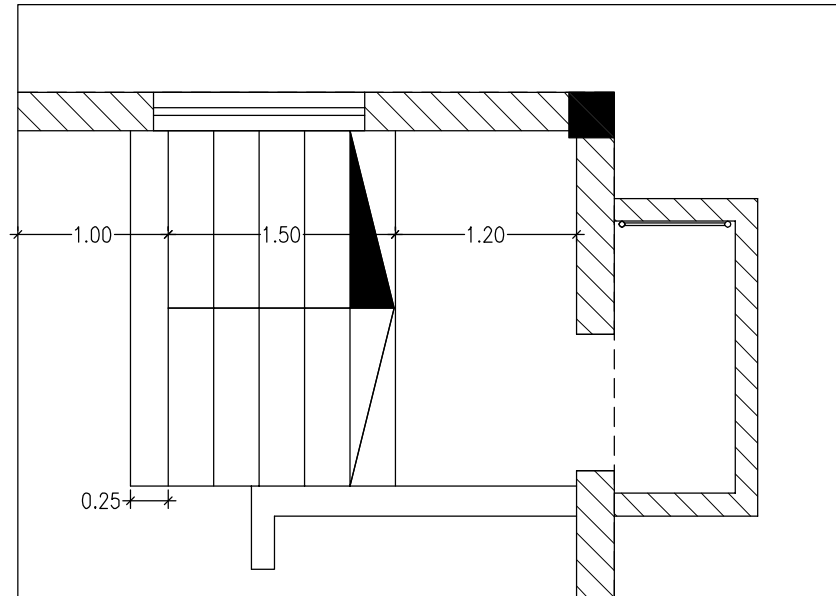
STAIRS ROOF SLAB DETAILS

DRAWING NO.: RE-S-019

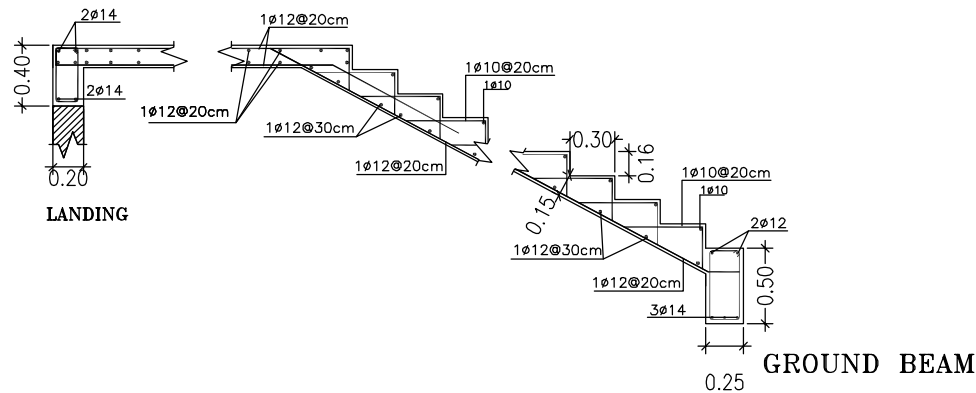
DATE: APRIL 2011 SCALE: AS SHOWN



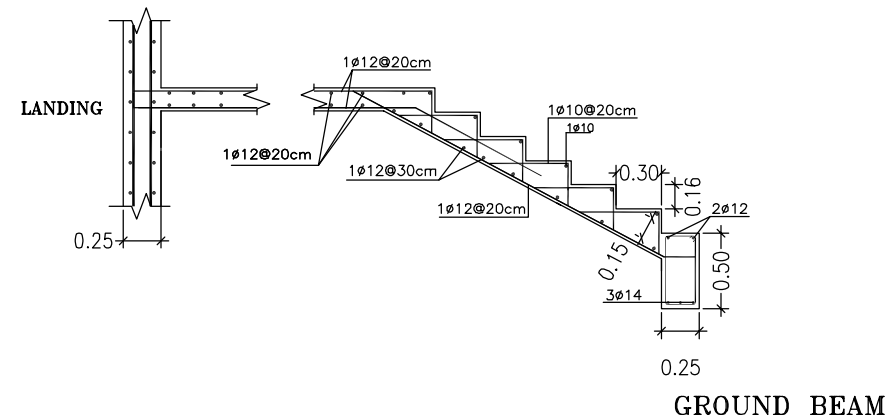
GENERAL DETAILS OF STAIR
SCALE: 1:50



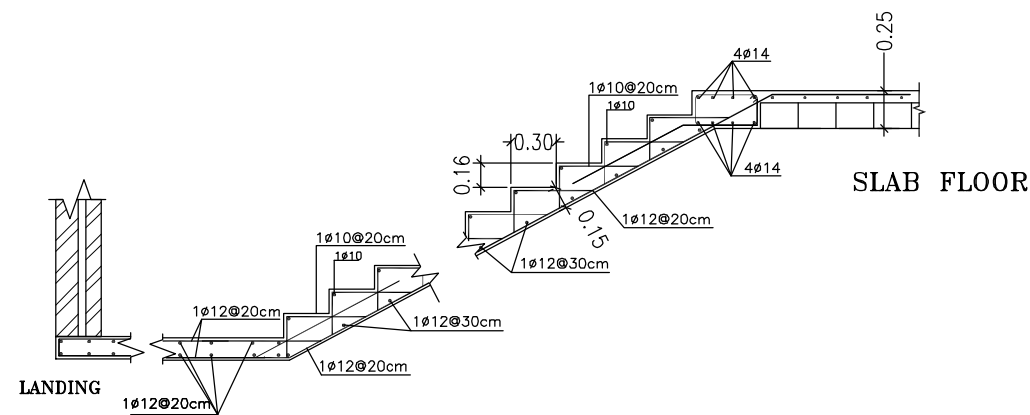
GENERAL DETAILS OF ESCAP STAIR
SCALE: 1:50



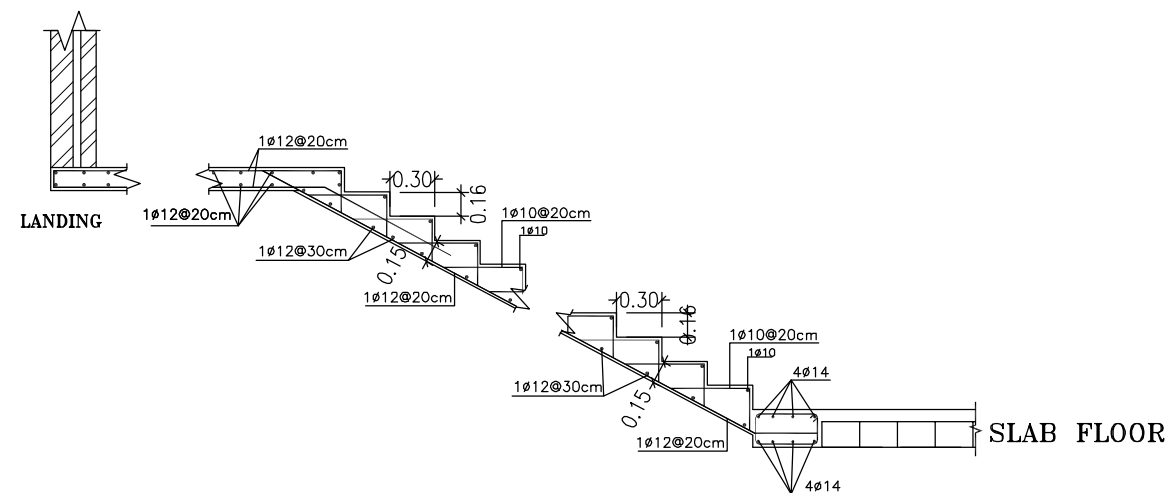
GENERAL DETAILS FROM GROUND BEAM TO LANDING
SCALE: 1:50



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

STRUCTURAL DETAILS FOR STAIRS
SCALE: AS SHOWN

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EMPLOYER:



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PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

STRUCTURAL DETAILS FOR STAIRS

DRAWING NO.: RE-S-020

DATE: APRIL 2011 SCALE: AS SHOWN

EMPLOYER:



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(UNDP/PAPP)

CLIENT



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

CONSULTANT

مركز الهندسة والتخطيط
center for engineering and planning



MECHANICAL DRAWINGS

EMPLOYER:



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CLIENT



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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

CONSULTANT

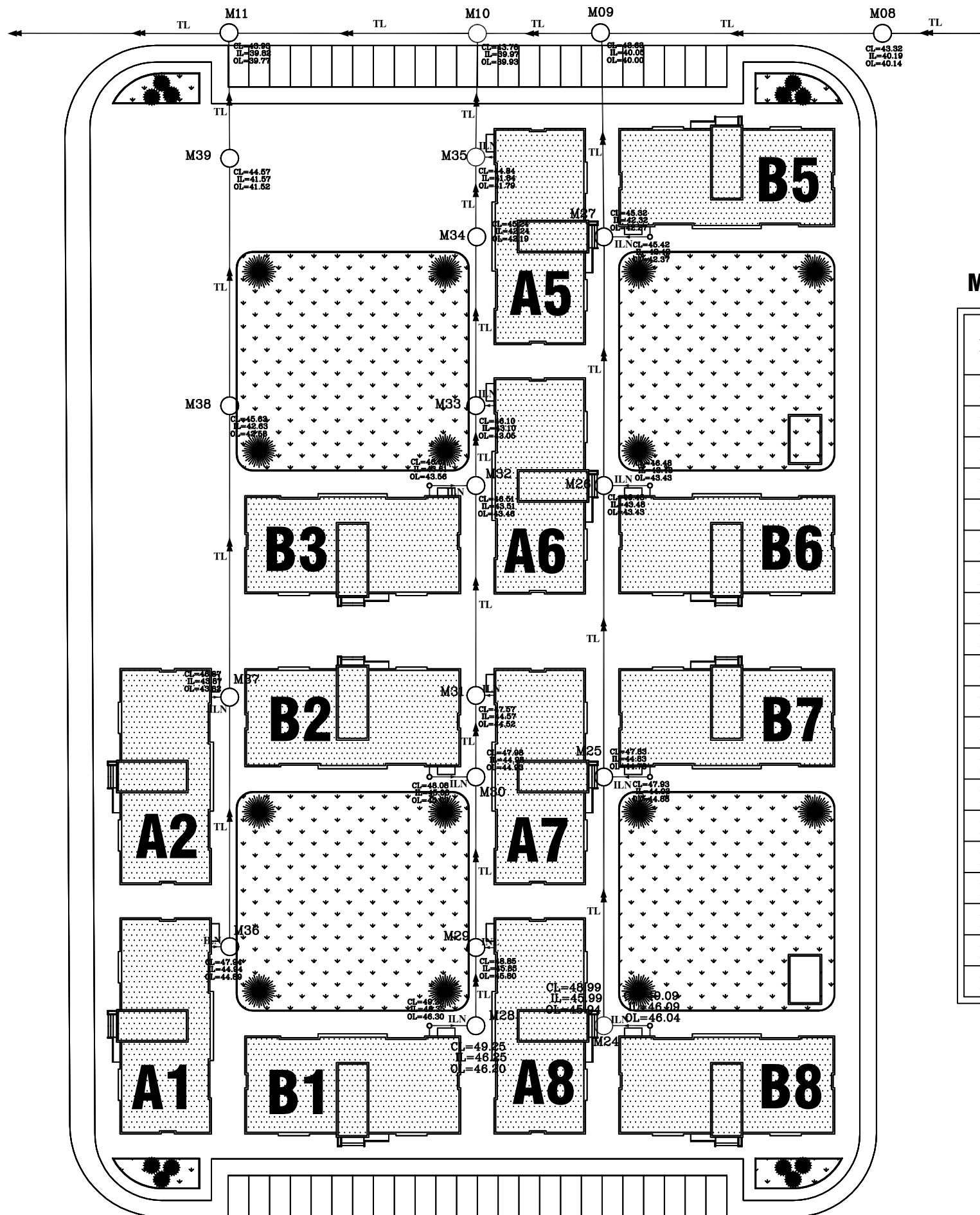
مركز الهندسة والتخطيط
center for engineering and planning



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

NOTES :-

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

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:



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BUILDING NAME:

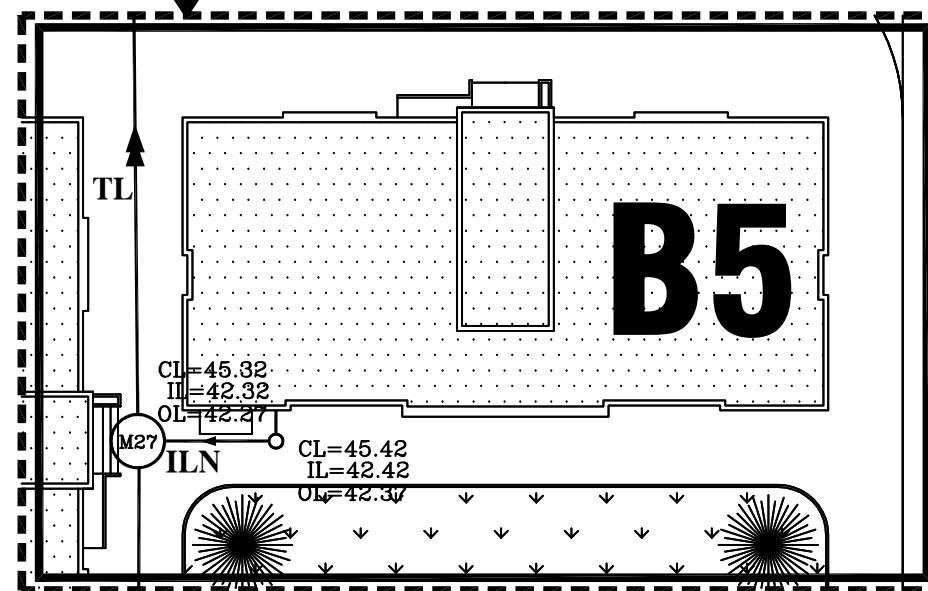
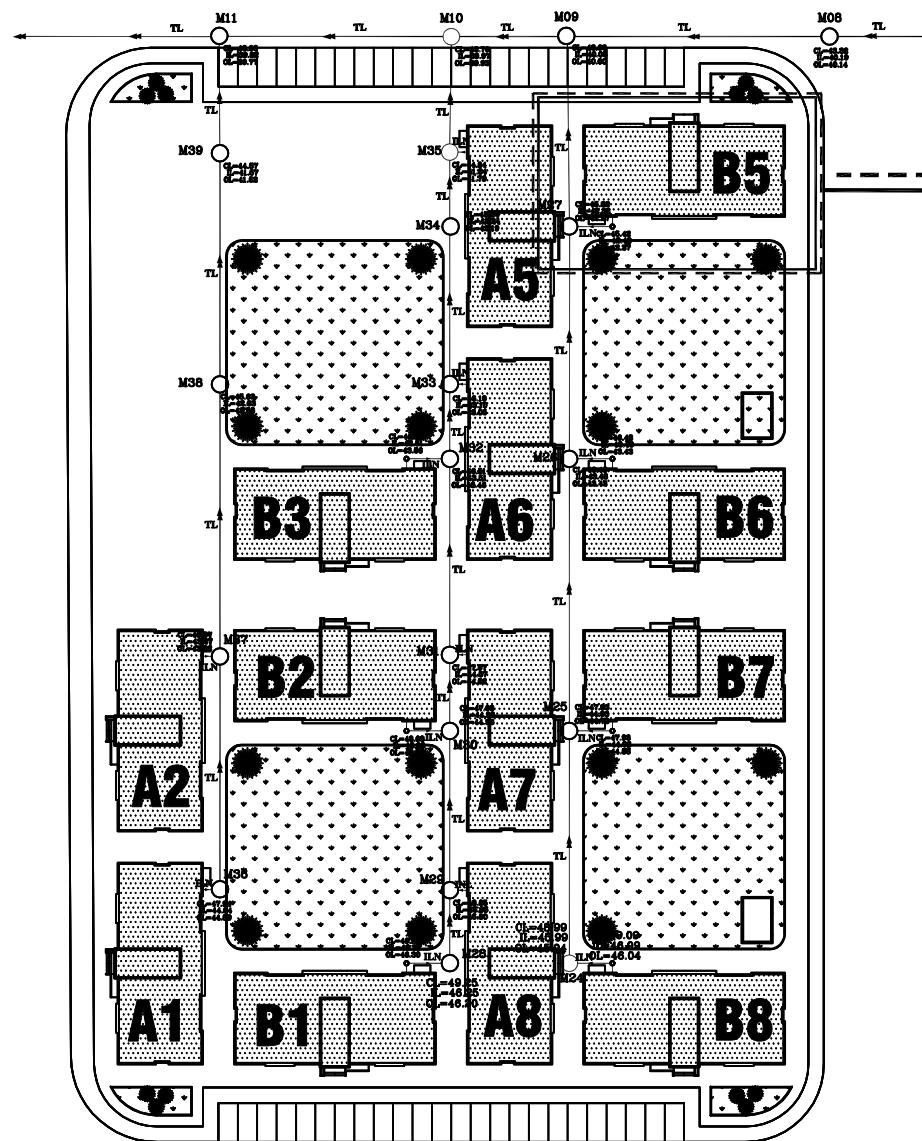
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

SANITARY NETWORK FOR
HOUSING UNITS

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	M30
Sewer Manhole On Profile	
House	
Mosque	
School	
TREE	
Grass	

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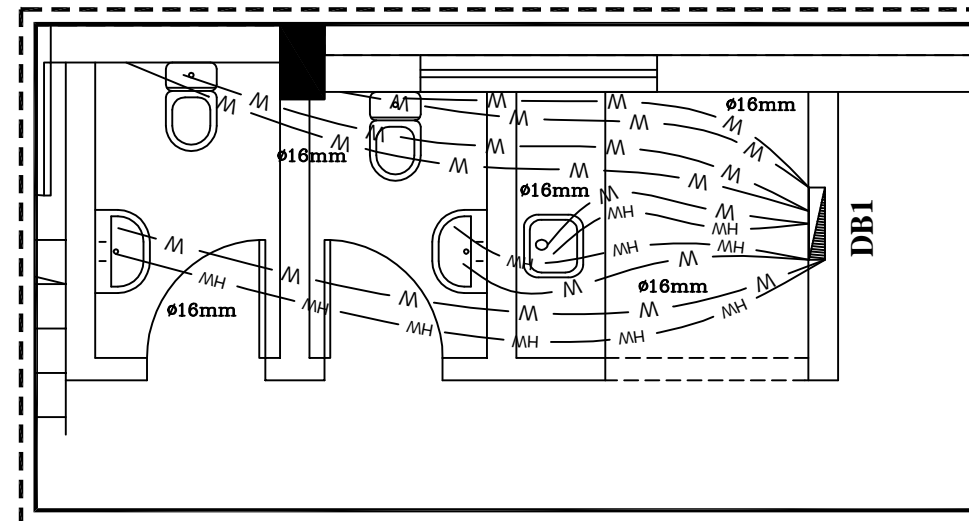
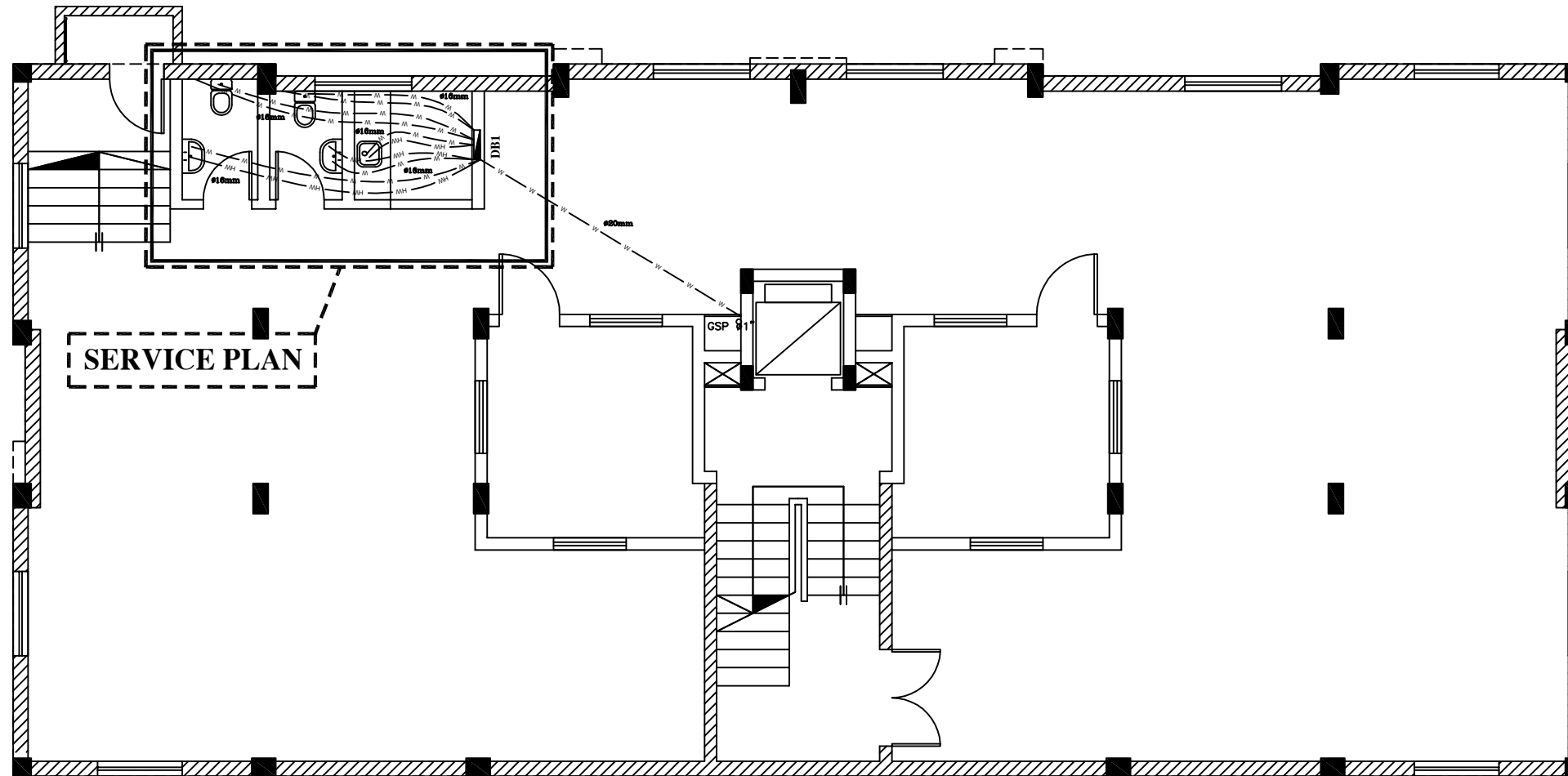
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

SEWER PIPE FOR THE BUILDING

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

DATE: APRIL 2011 SCALE: AS SHOWN



WATER NETWORK FOR SERVICE PLAN

SCALE 1:50

WATER NETWORK FOR UNDERGROUND FLOOR

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(G.S.P.) GALVANIZED STEEL PIPE

(DB) WATER DISTRIBUTION BOARD

— W — COLD WATER

— HW — HOT WATER

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

center for engineering and planning

BUILDING NAME:

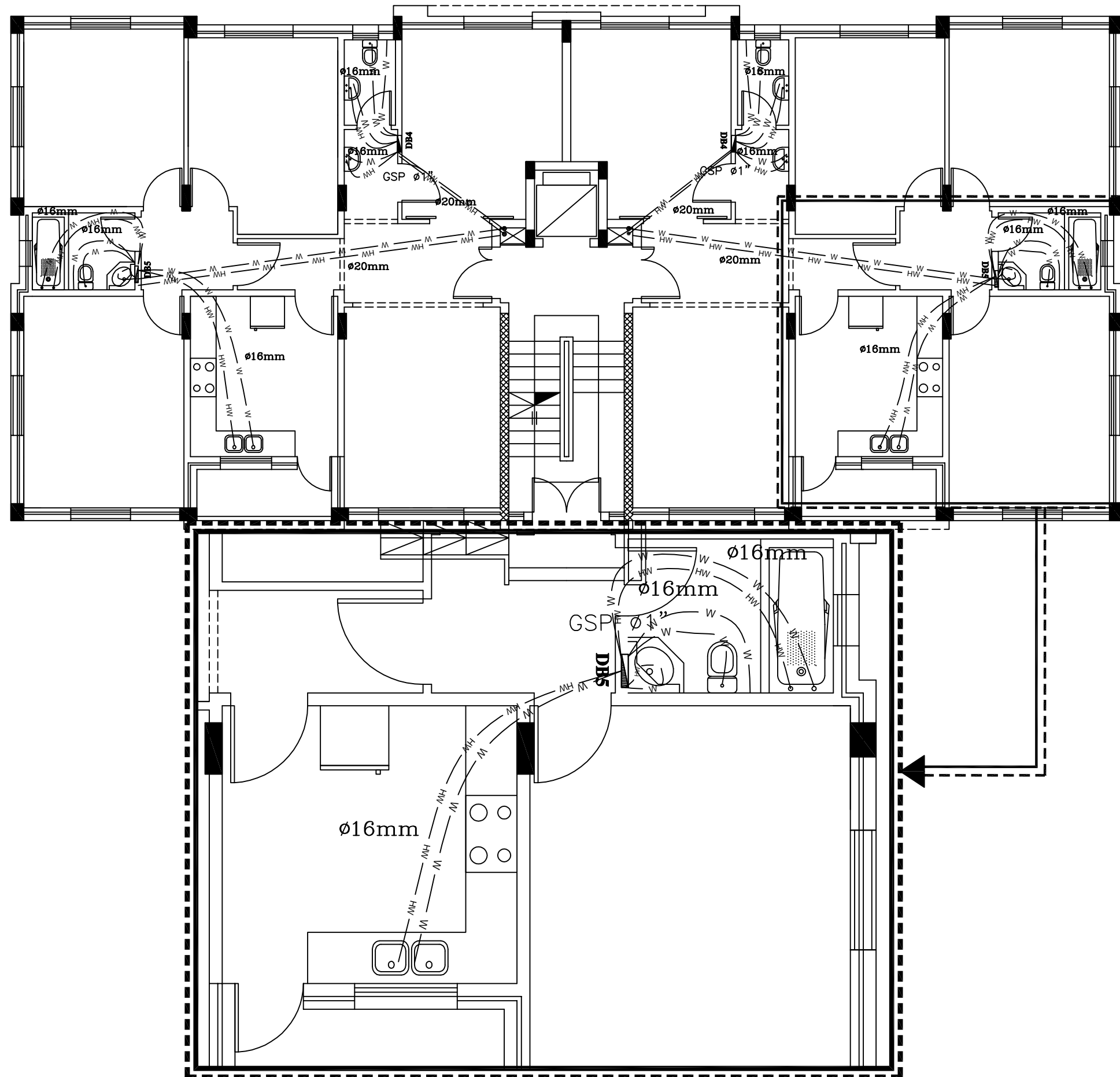
RESIDENTIAL BUILDING NO. (B5)

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 :-

- ALL DIMENSIONS ARE IN CM & M. EXCEPT WHERE OTHERWISE SHOWN OR NOTED
- CONTRACTOR SHALL SUBMIT THE MANUFACTURES, CATALOGES, DIMENSIONS, DETAILS AND CONNECTION 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 DISCRAPENCY 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
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 08)

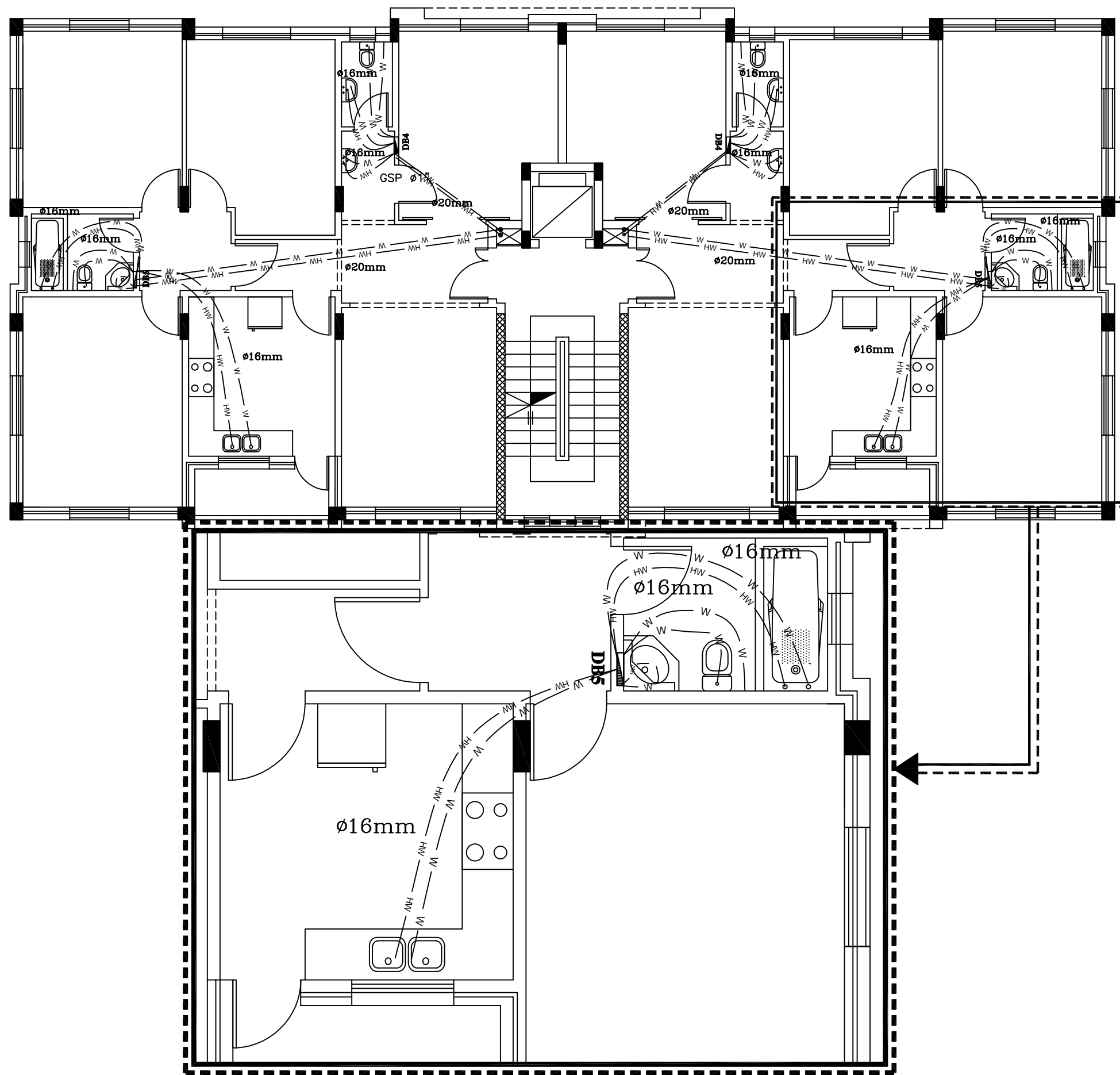
CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

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 :-

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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
MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:

THE UNITED NATIONS DEVELOPMENT PROGRAMME
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

center for engineering and planning

BUILDING NAME:

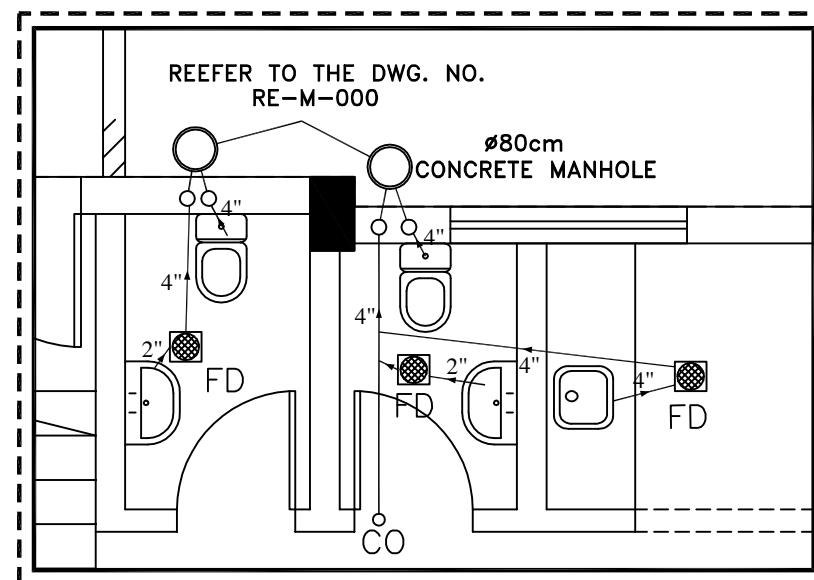
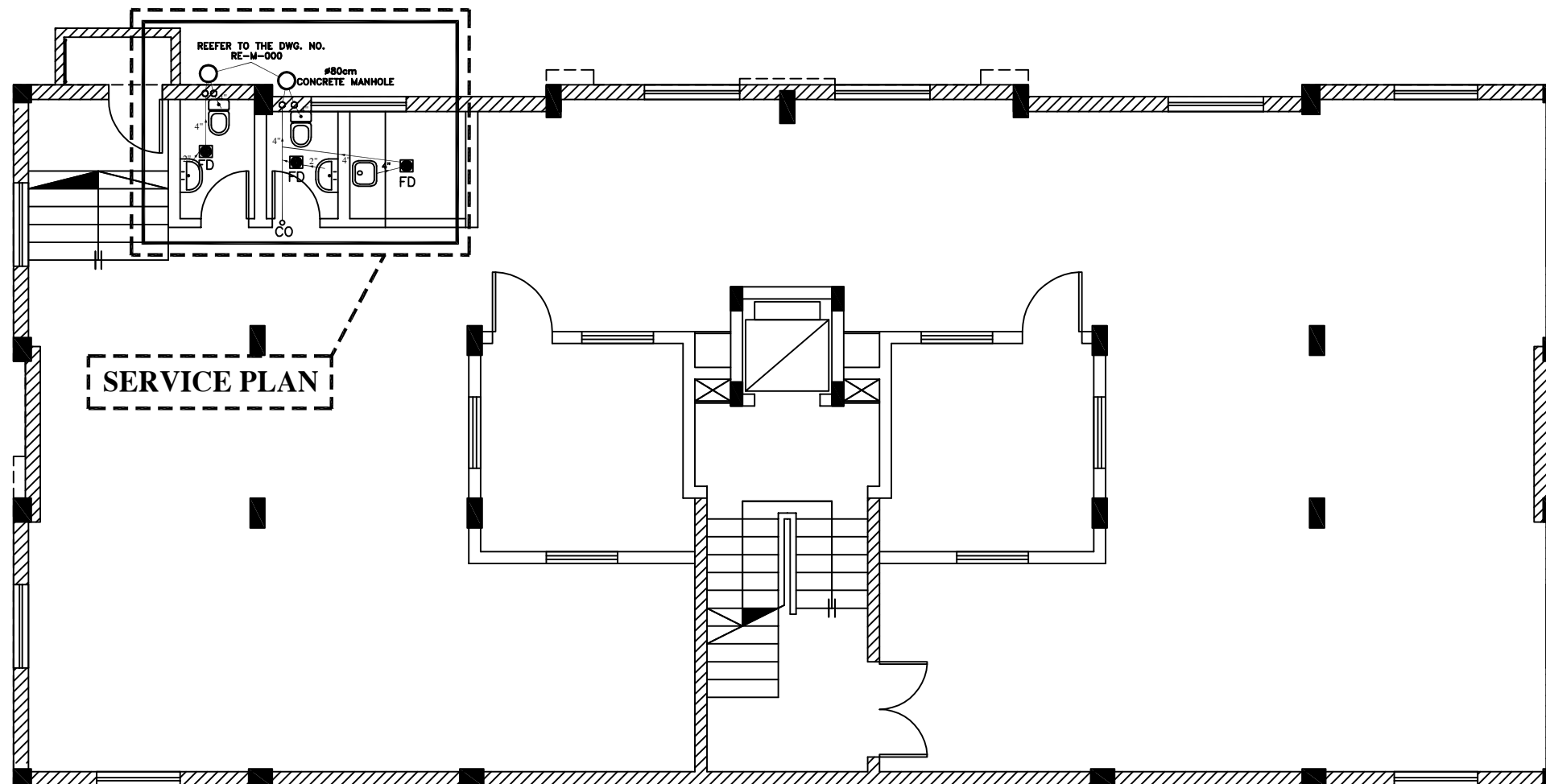
RESIDENTIAL BUILDING NO. (B5)

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 :-

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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

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 08)

CONSULTANT:

مركز الهندسة والتخطيط

center for engineering and planning



BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

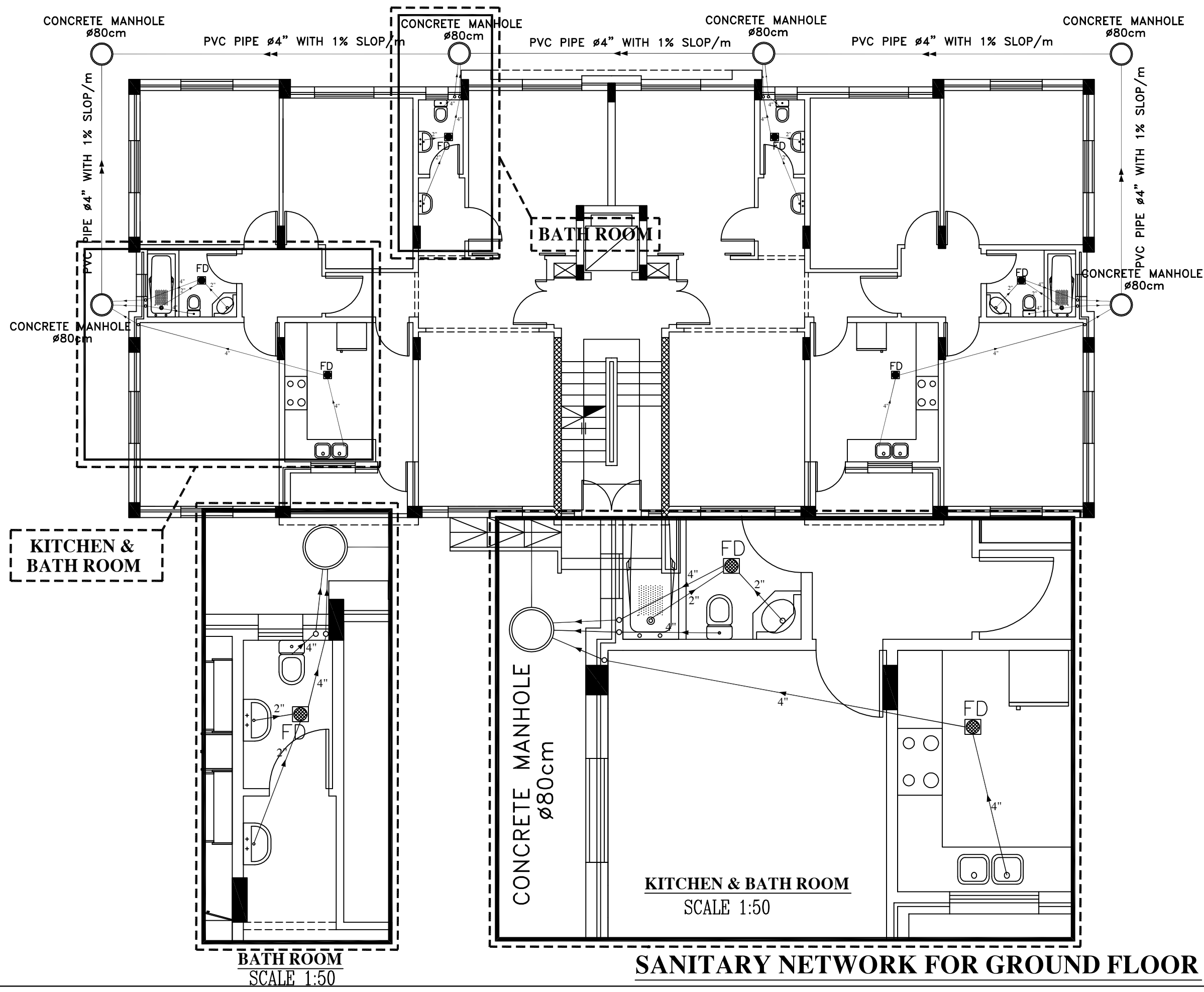
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SANITARY NETWORK FOR
UNDERGROUND FLOOR

DRAWING NO.: RE-M-005

DATE: APRIL 2011

SCALE: NOT TO SCALE



- NOTES :-**
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(FD) FLOOR DRAIN

FOR TENDER ONLY

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PROJECT TITLE:
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
SANITARY NETWORK FOR
GROUND FLOOR

DRAWING NO.: RE-M-006

DATE: APRIL 2011 **SCALE:** NOT TO SCALE

NOTES :-

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(FD) FLOOR DRAIN

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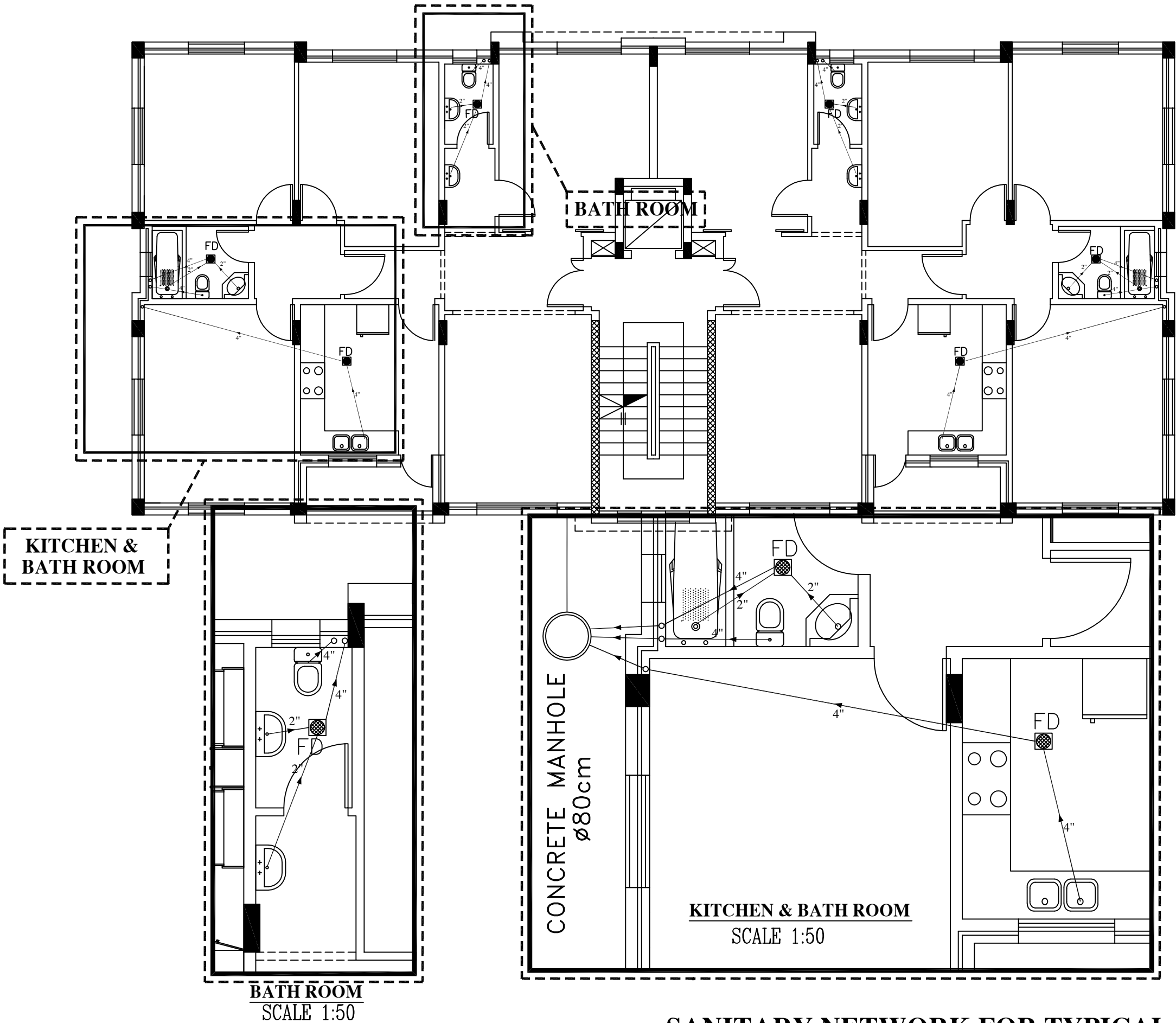
CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

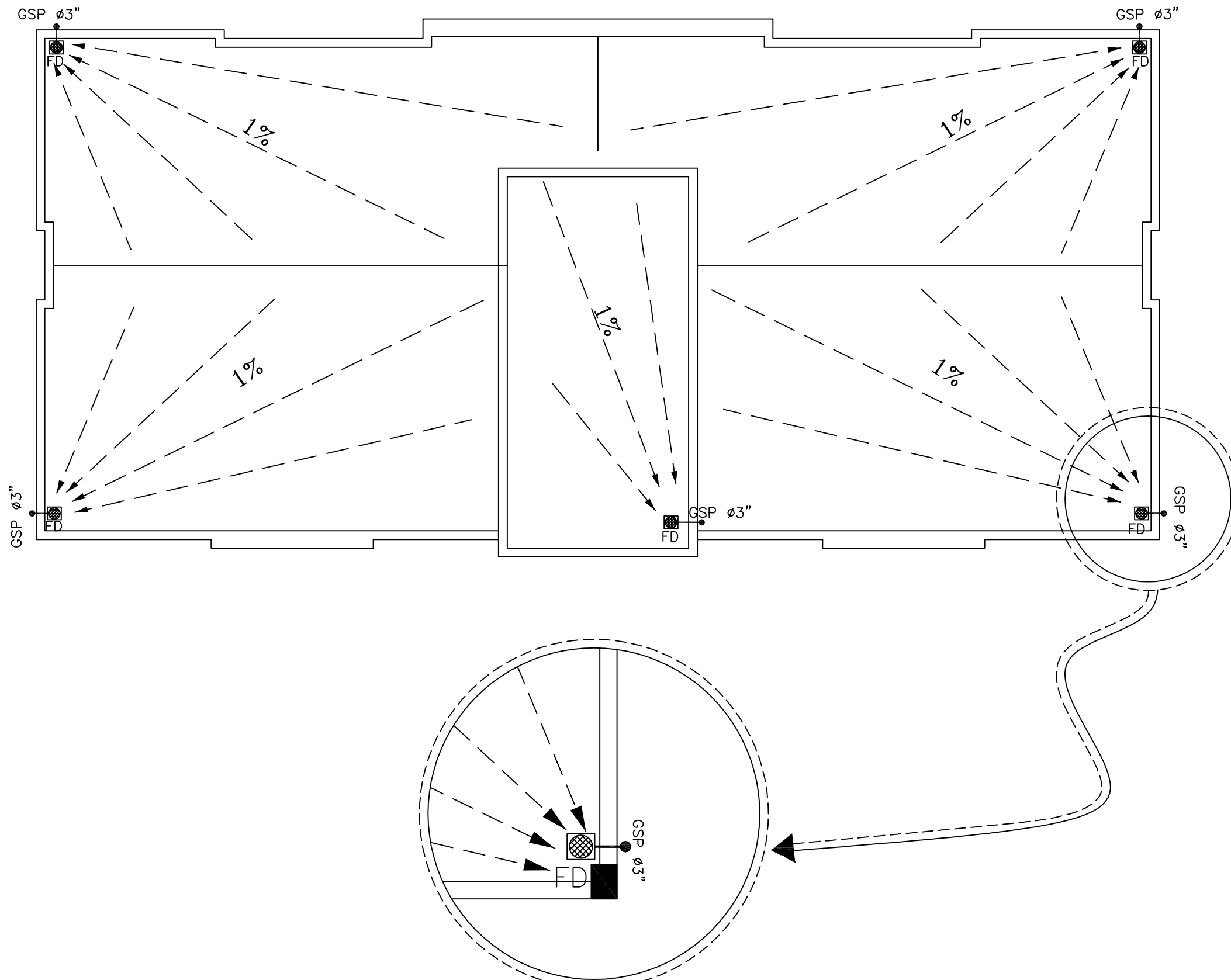
DRAWING TITLE:
SANITARY NETWORK FOR
TYPICAL FLOOR

DRAWING NO.: RE-M-007

DATE: APRIL 2011 SCALE: NOT TO SCALE



SANITARY NETWORK FOR TYPICAL FLOOR



RAIN WATER
SCALE 1:50

RAIN WATER FOR ROOF PLAN

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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PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

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

CLIENT:
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

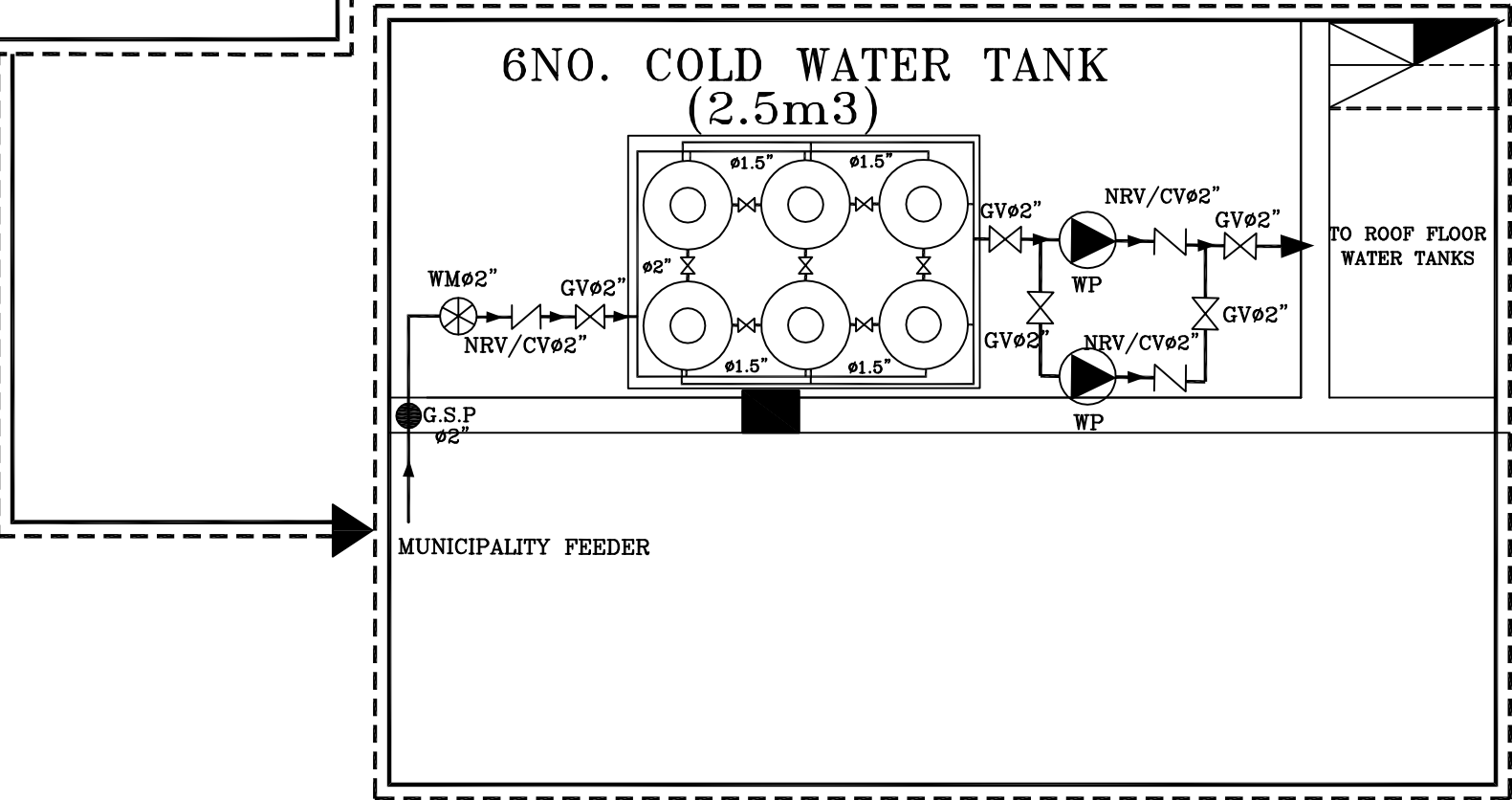
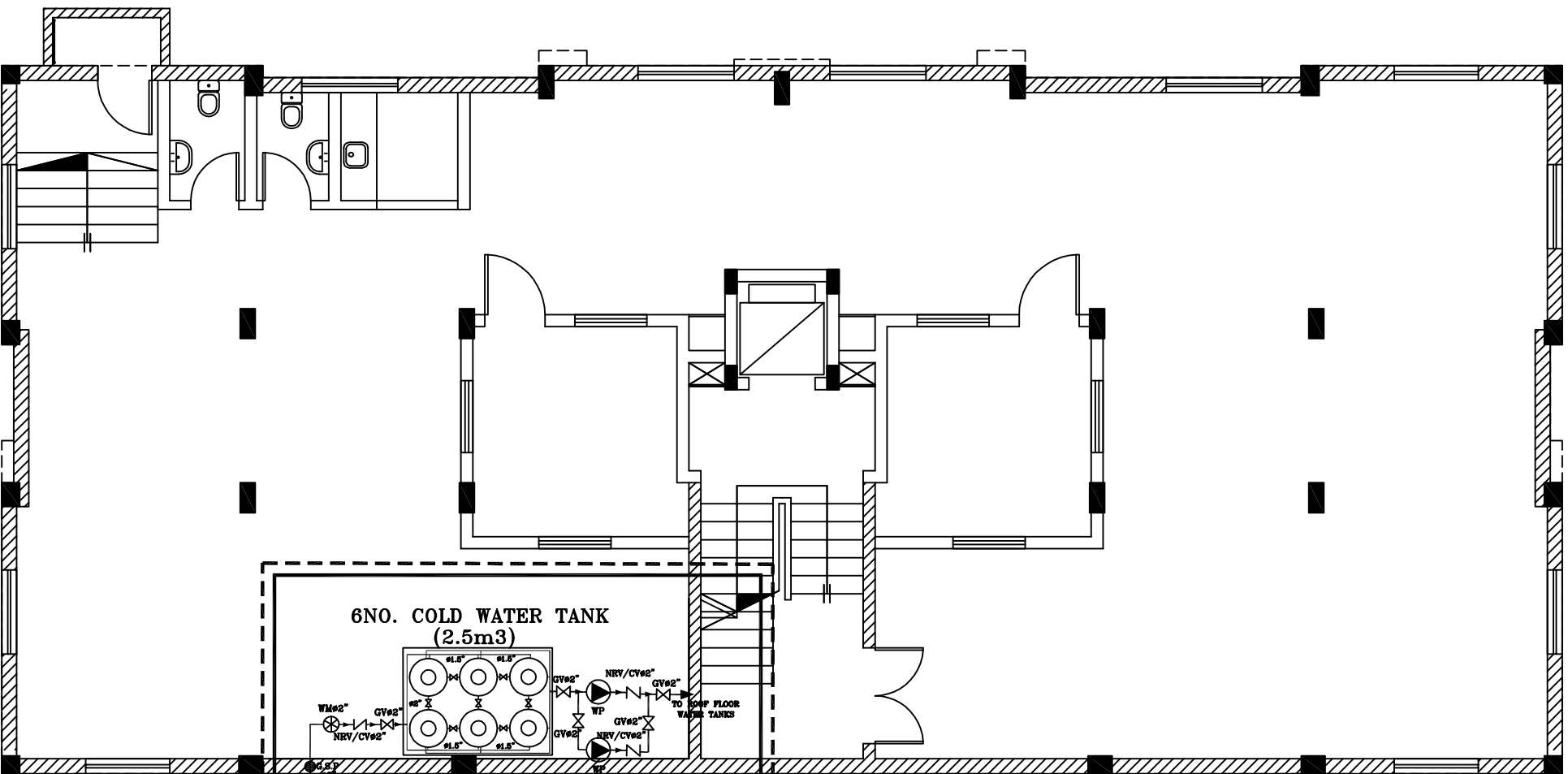
CONSULTANT:
 center for engineering and planning

BUILDING NAME:
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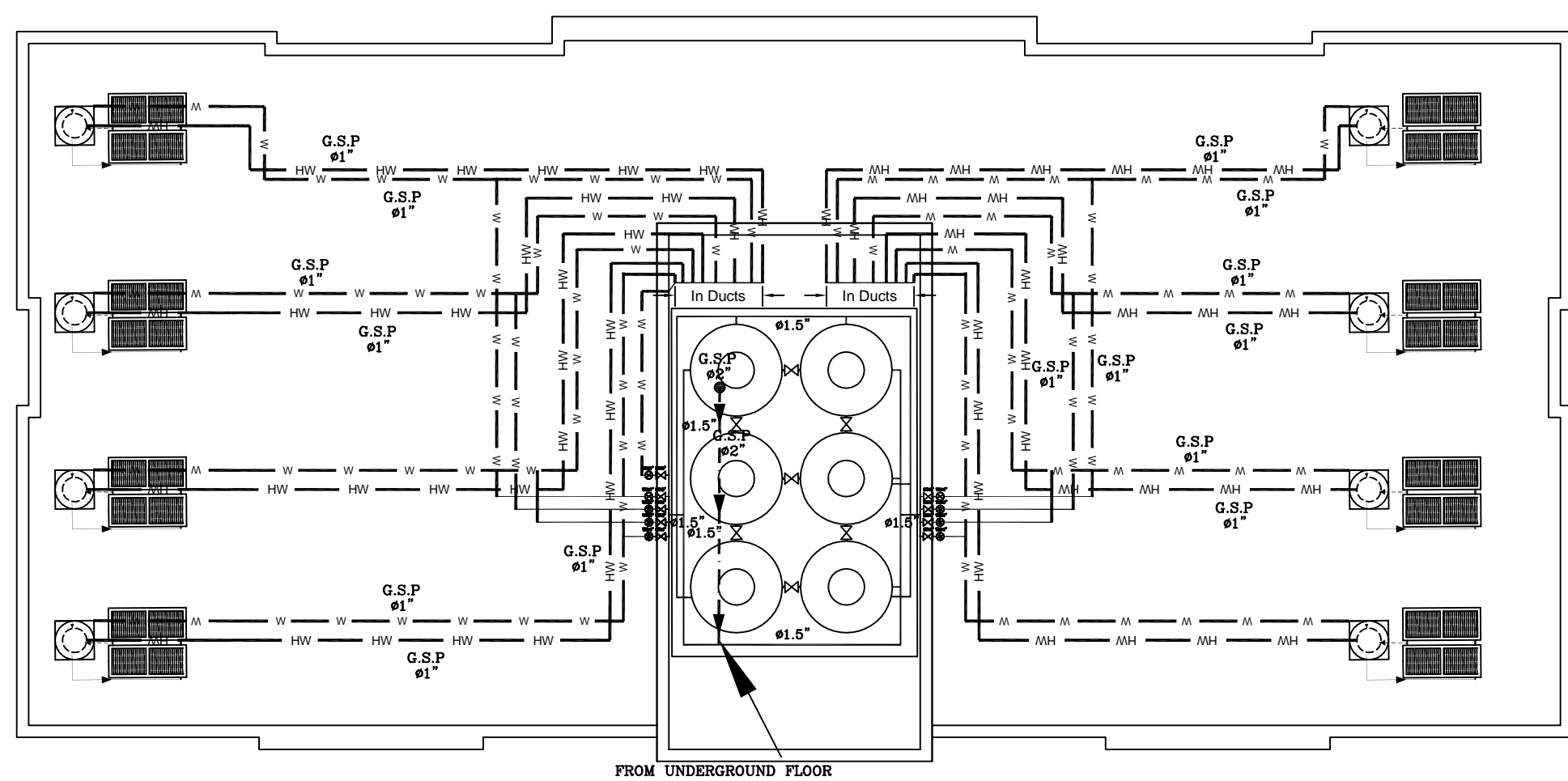
DRAWING TITLE:
WATER NETWORK FOR
UNDERGROUND FLOOR

DRAWING NO.: RE-M-009

DATE: APRIL 2011 SCALE: NOT TO SCALE



WATER NETWORK FOR UNDERGROUND FLOOR





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(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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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
WATER NETWORK FOR ROOF FLOOR

DRAWING NO.: RE-M-010

DATE: APRIL 2011 **SCALE:** NOT TO SCALE

WATER NETWORK FOR ROOF FLOOR

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

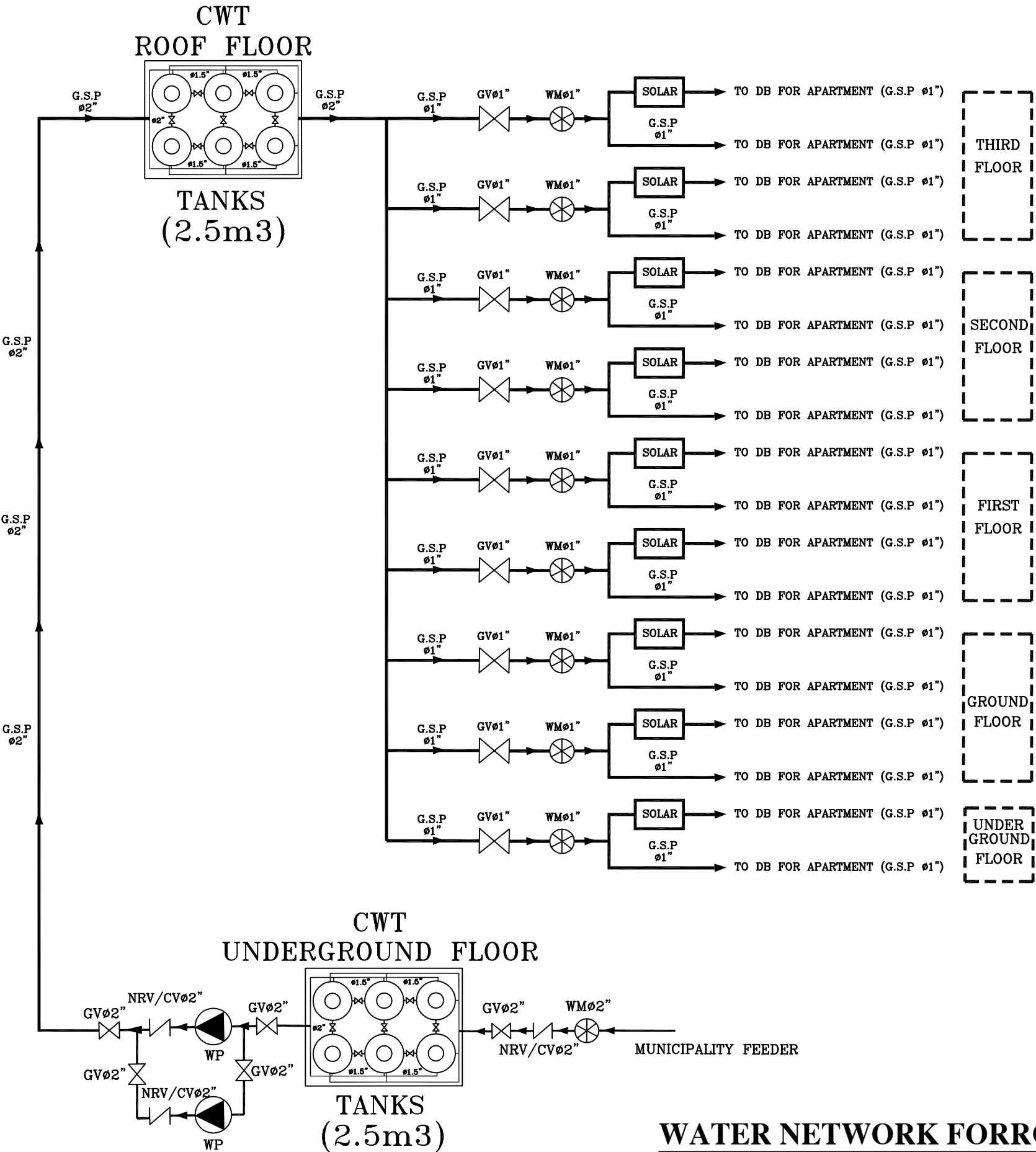
CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

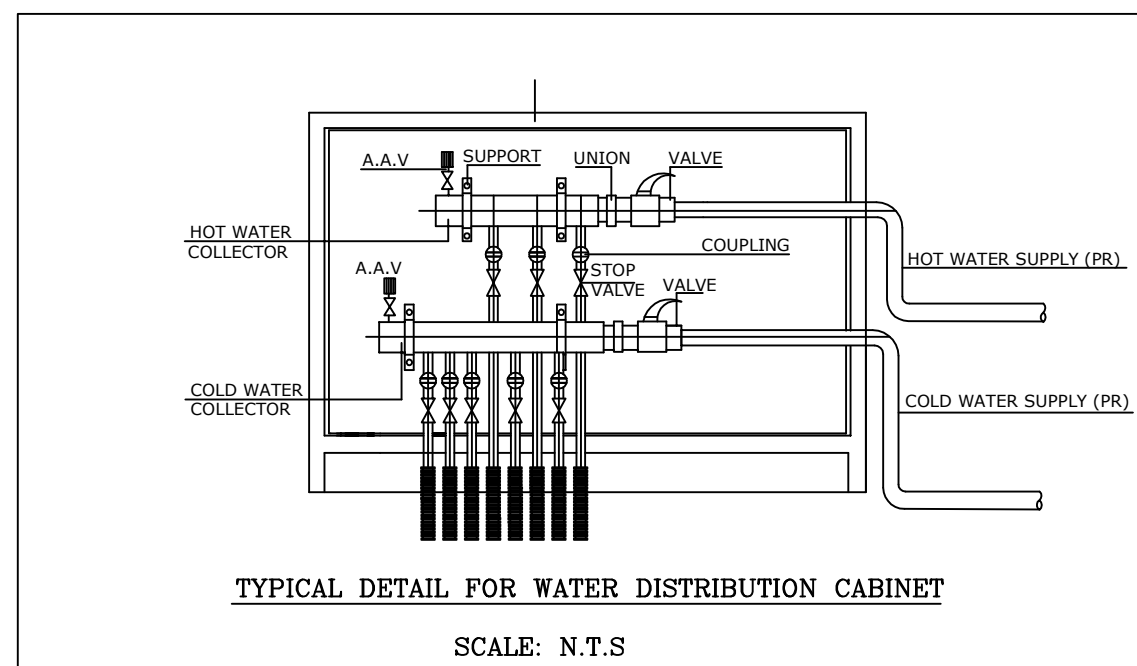
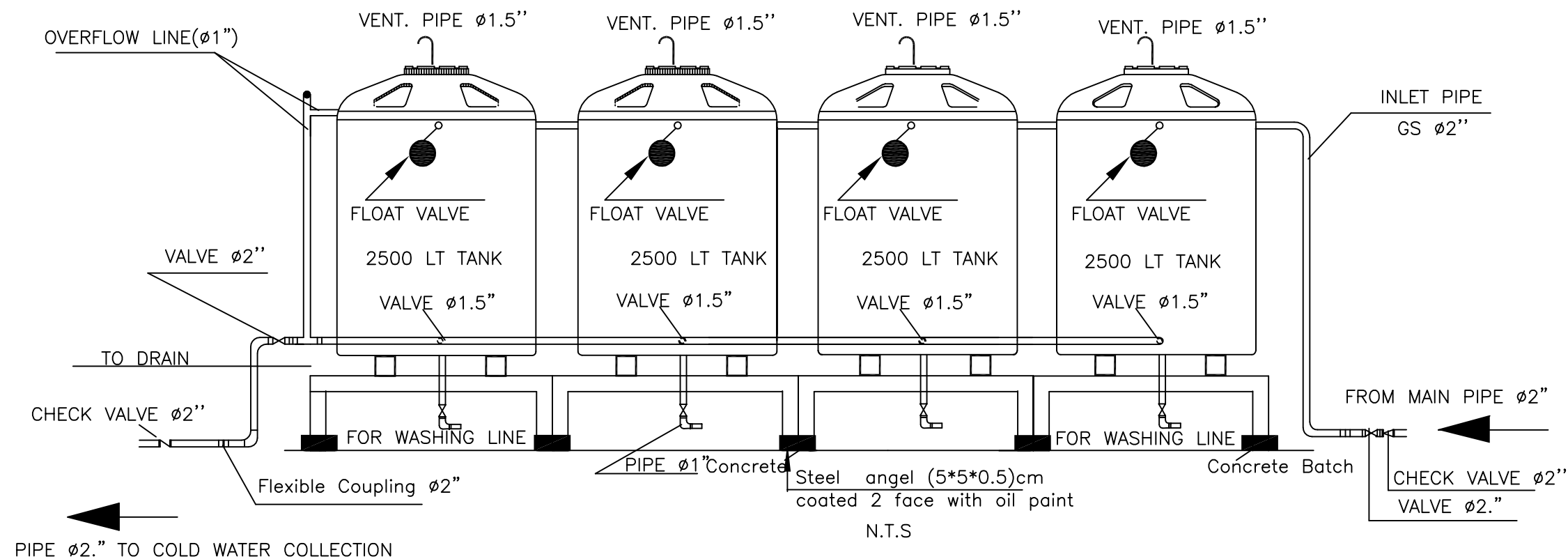
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WATER NETWORK FOR ROOF FLOOR

DRAWING NO.: RE-M-011

DATE: APRIL 2011 SCALE: NOT TO SCALE



WATER NETWORK FOR ROOF FLOOR

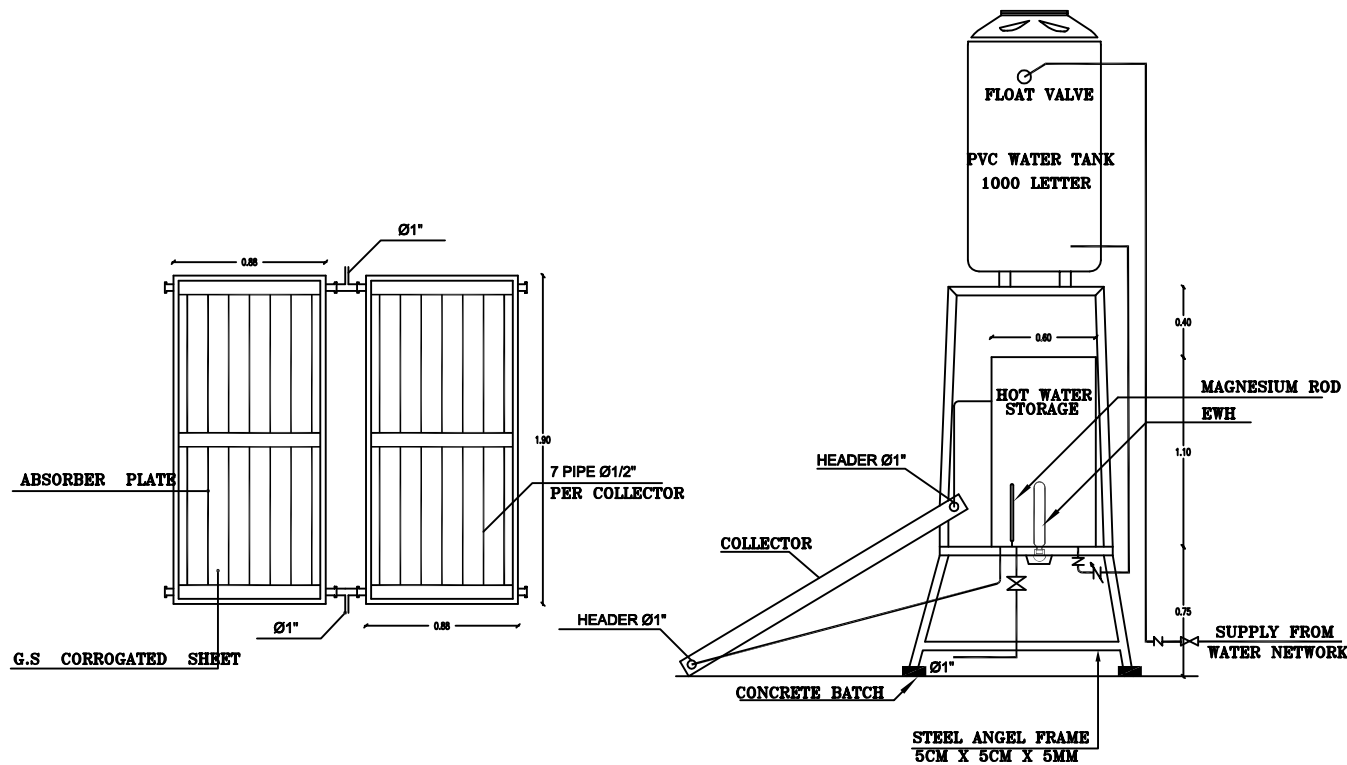


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DATE: APRIL 2011	SCALE:
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NOTES :-

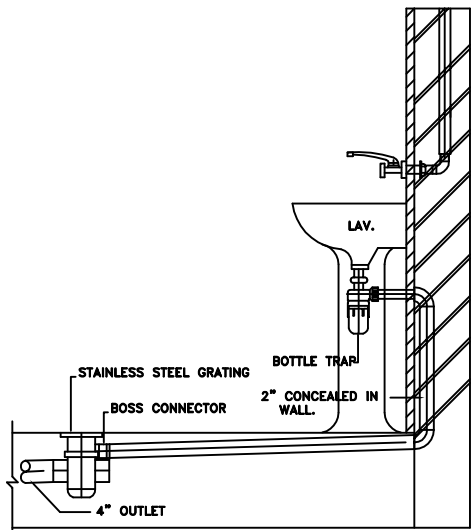
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COLLECTOR PLAN

SOLAR COLLECTOR DIAGRAM

COLLECTOR DETAILS



TYPICAL PIPING IN SCREED AND FLOOR DRAIN CONNECTIONS

GENRAL DETAILS FOR MECHANICAL(2/2)

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
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
GENRAL 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
	DITTO BUT WATER PROOF IP 65 .
	2-GANG LIGHTING SWITCH, ONE WAY 16A
	DITTO BUT WATER PROOF IP 65 .
	3-GANG LIGHTING SWITCH, ONE WAY 16A
	DITTO BUT WATER PROOF IP 65 .
	2-WAY LIGHTING SWITCH, 16A
	DITTO BUT WATER PROOF IP 65 .
	PUSHBUTTON LIGHTING SWITCH, ONE WAY 10A

NOTES :-

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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 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

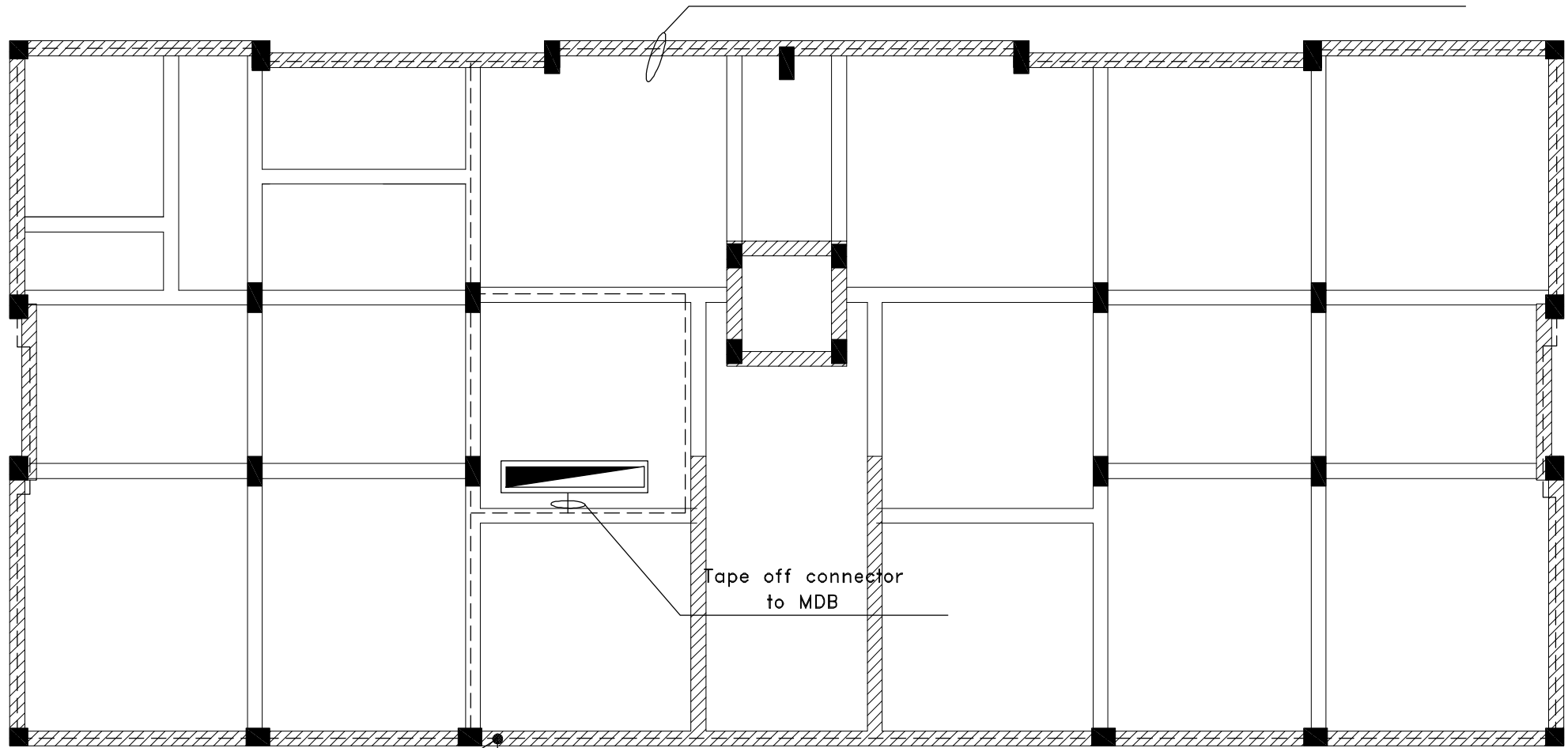
DRAWING TITLE:
Legend

DRAWING NO.: RES-E-001

DATE:APRIL 2011 SCALE: 1:xxx

NOTES :-

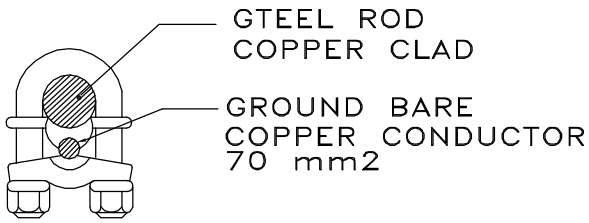
35X3 MM GALVANIZED STEEL SHEET WELDED
TO GROUND BEAM REINFORCEMENT STEEL



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

EARTHING PIT
Ø 60cm

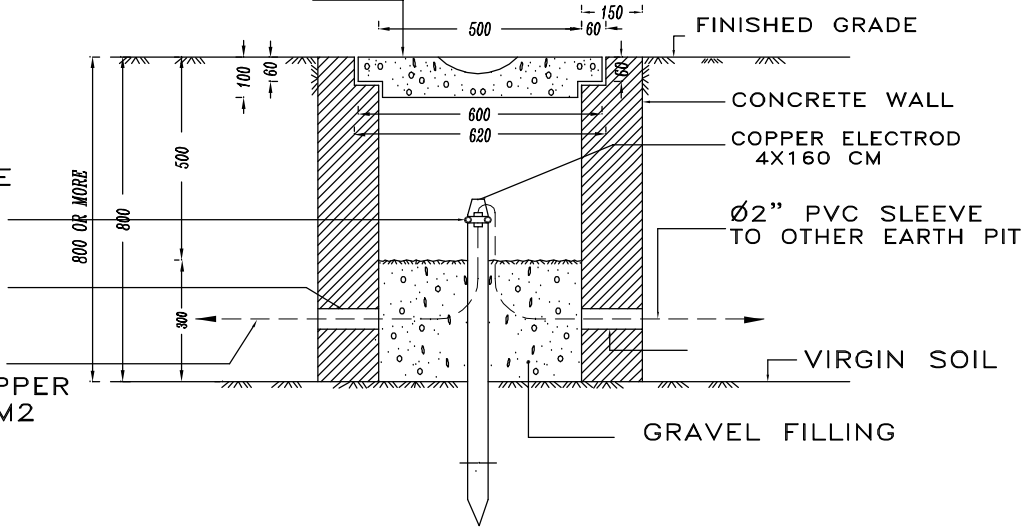
5 TON CONCRETE COVER



U - BOLTED TYPE
CONNECTOR SEE
DETAIL BELOW

Ø2" PVC SLEEVE

GROUND BARE COPPER
CONDUCTOR 50 MM2



Earthing Pit

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center for engineering and planning

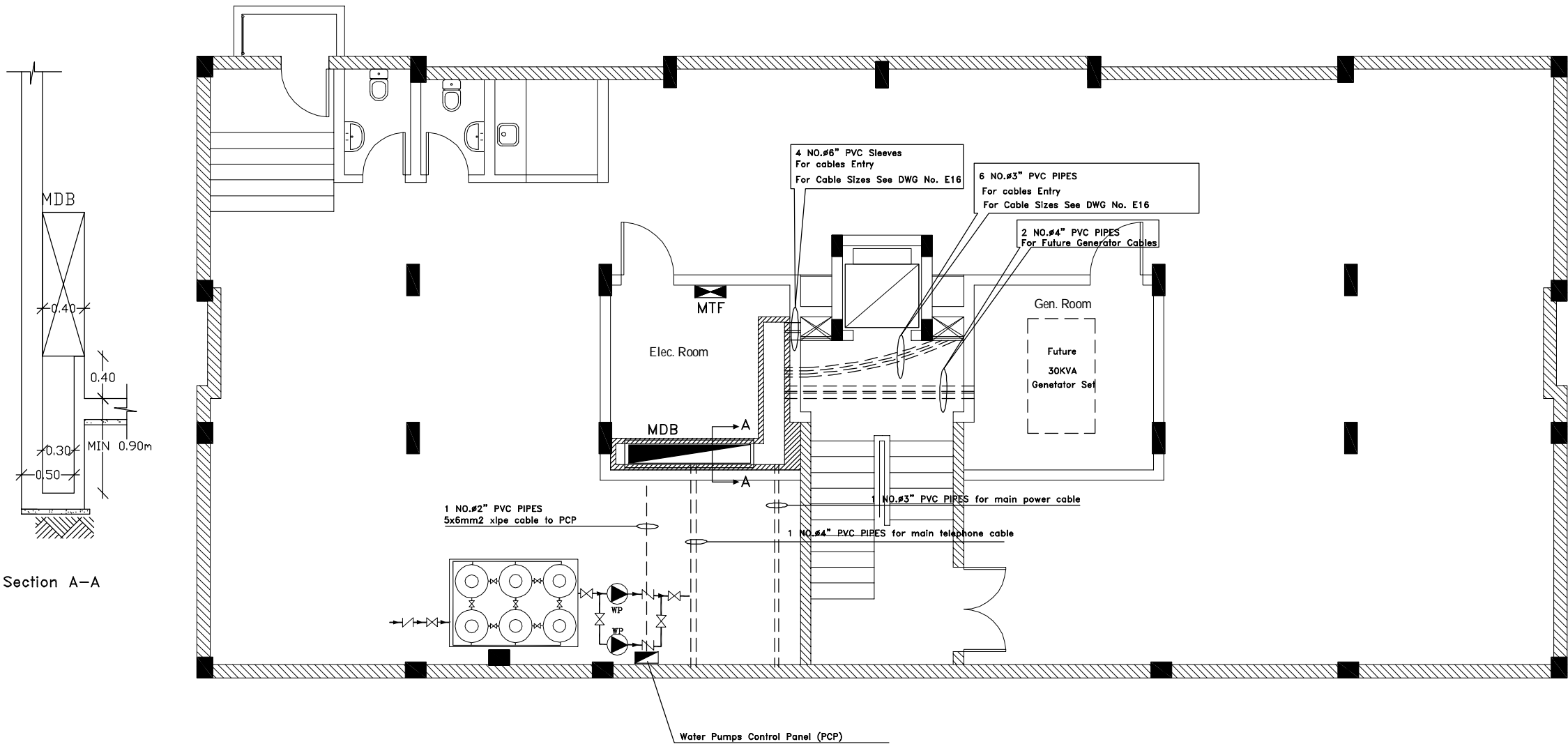
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Grounding System

DRAWING NO.: RE-E-002

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



Section A-A

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

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center for engineering and planning

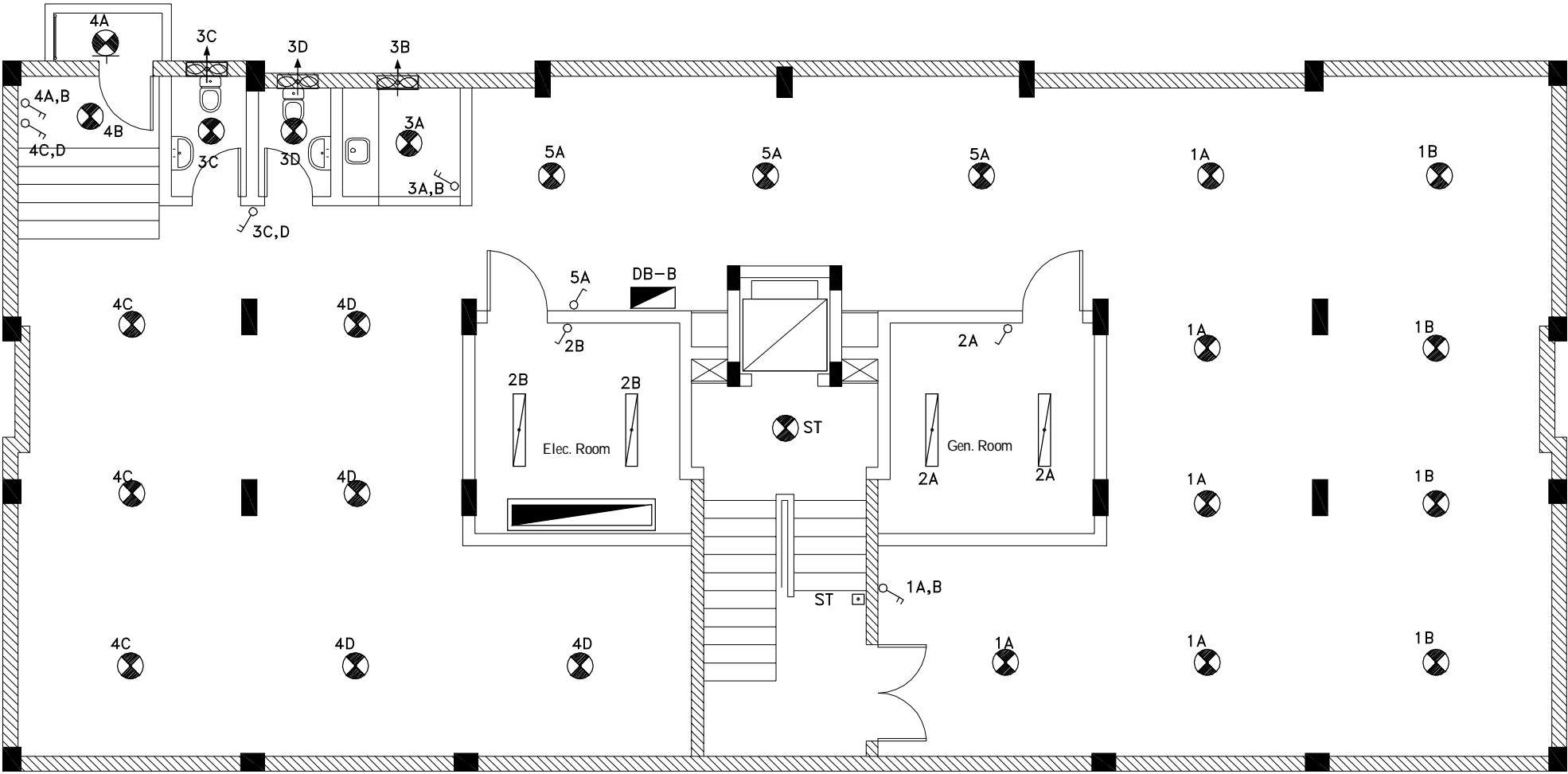
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Underground Floor
Electrical Arrangements

DRAWING NO.: RE-E-003

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

NOTES :-



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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

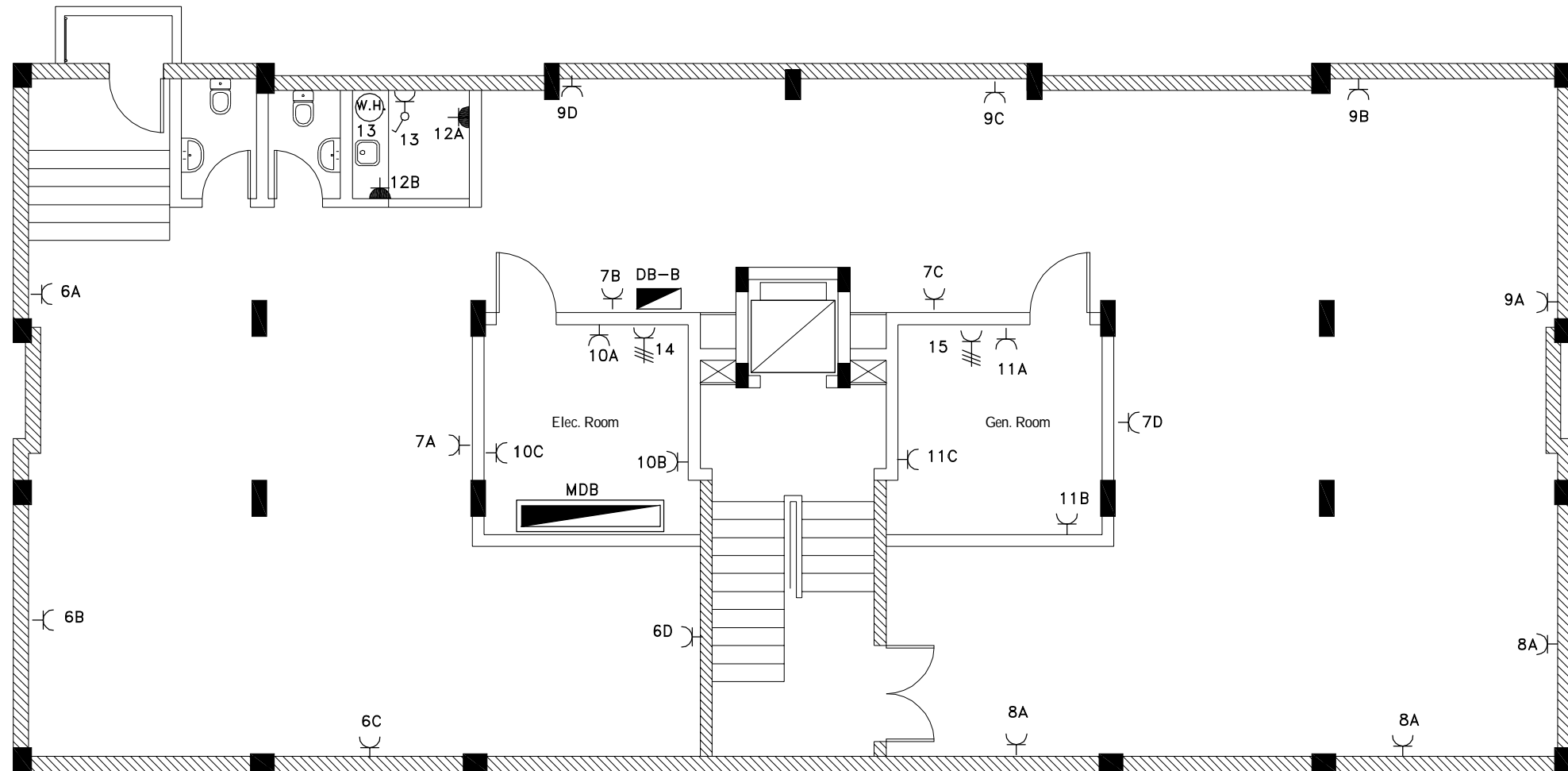
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Underground Floor
Lighting Fittings Layout

DRAWING NO.: RE-E-004

DATE: APRIL 2011 | SCALE: 1:100



NOTES :-

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
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center for engineering and planning

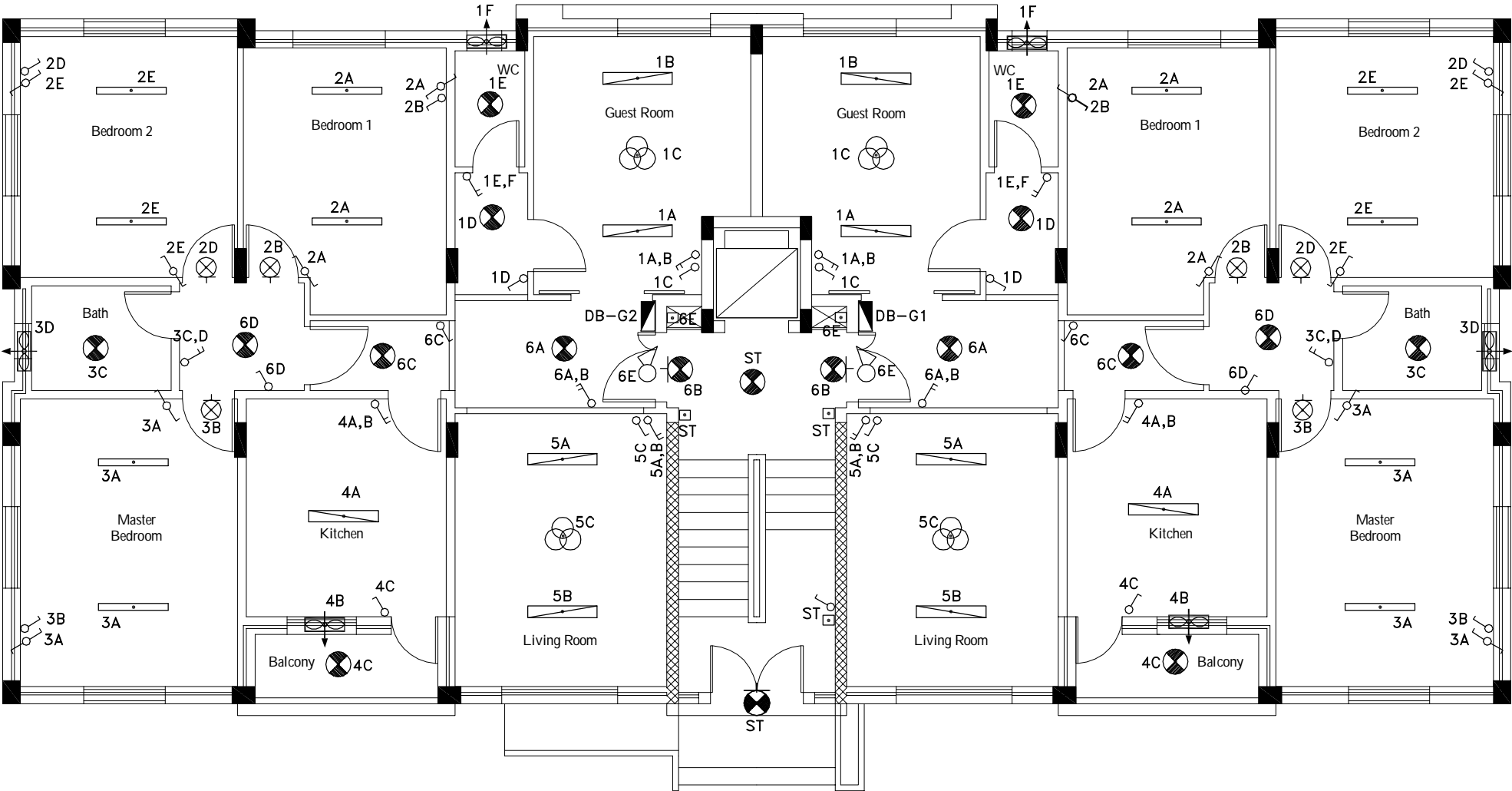
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Underground Floor
Power Fittings Layout

DRAWING NO.: RE-E-005

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
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center for engineering and planning

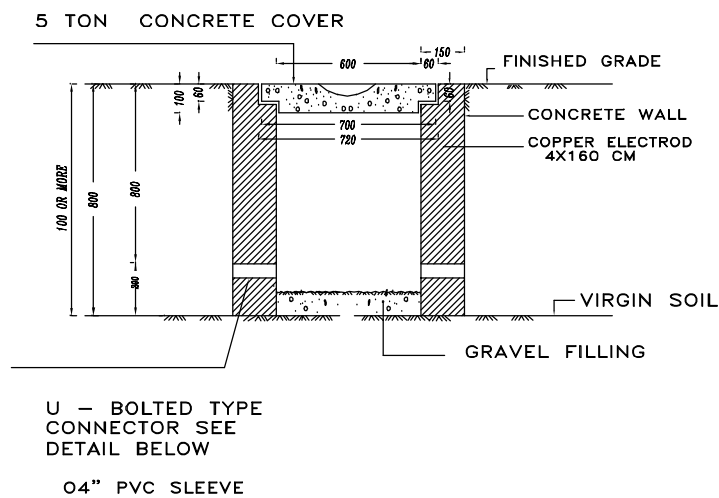
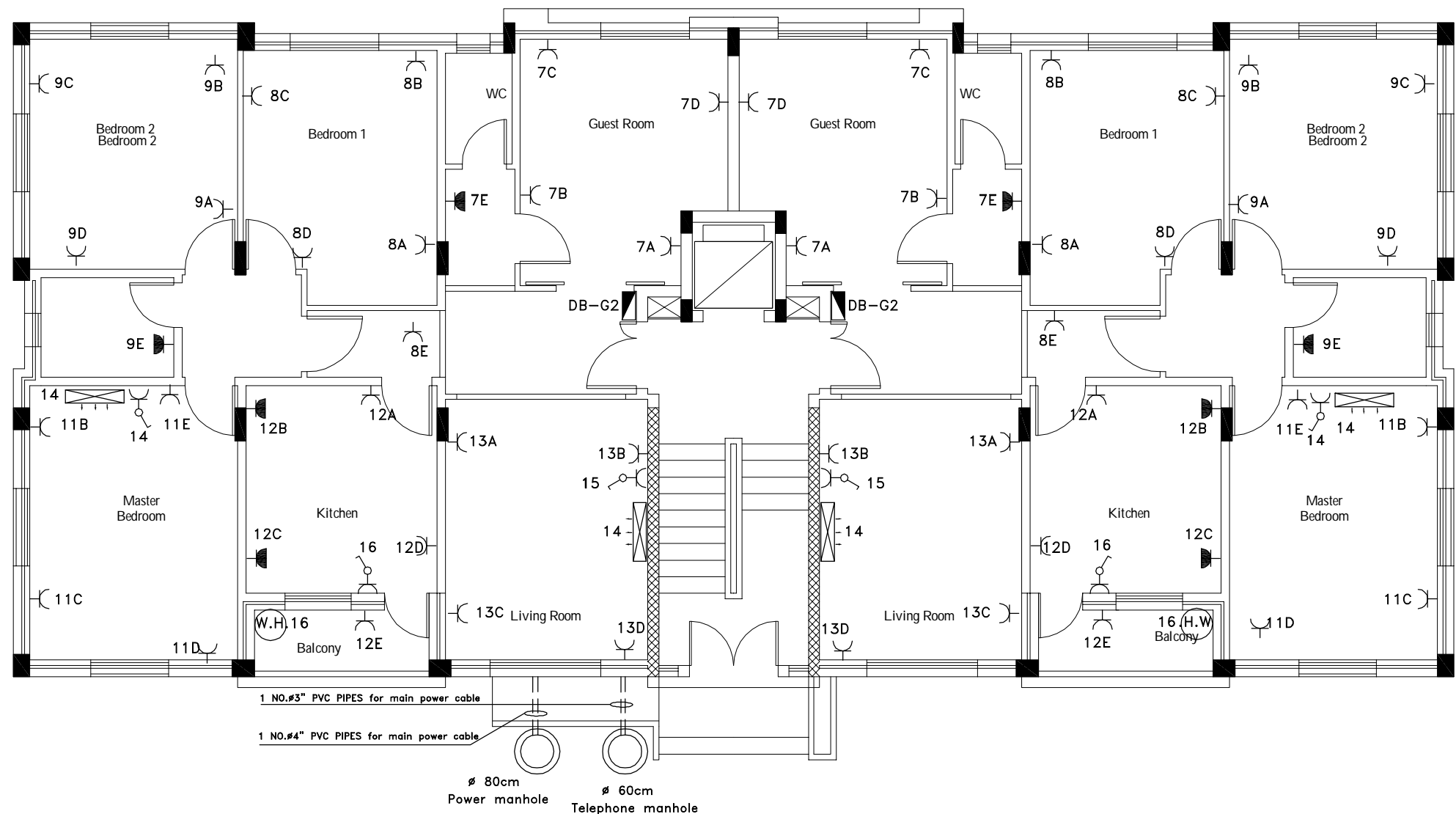
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Ground Floor
Lighting Fittings Layout

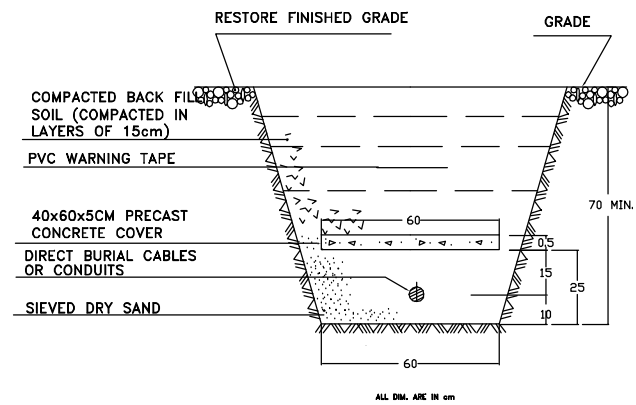
DRAWING NO.: RE-E-006

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



Power Manhole Details



TRENCH FOR ELECTRICAL CABLES

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

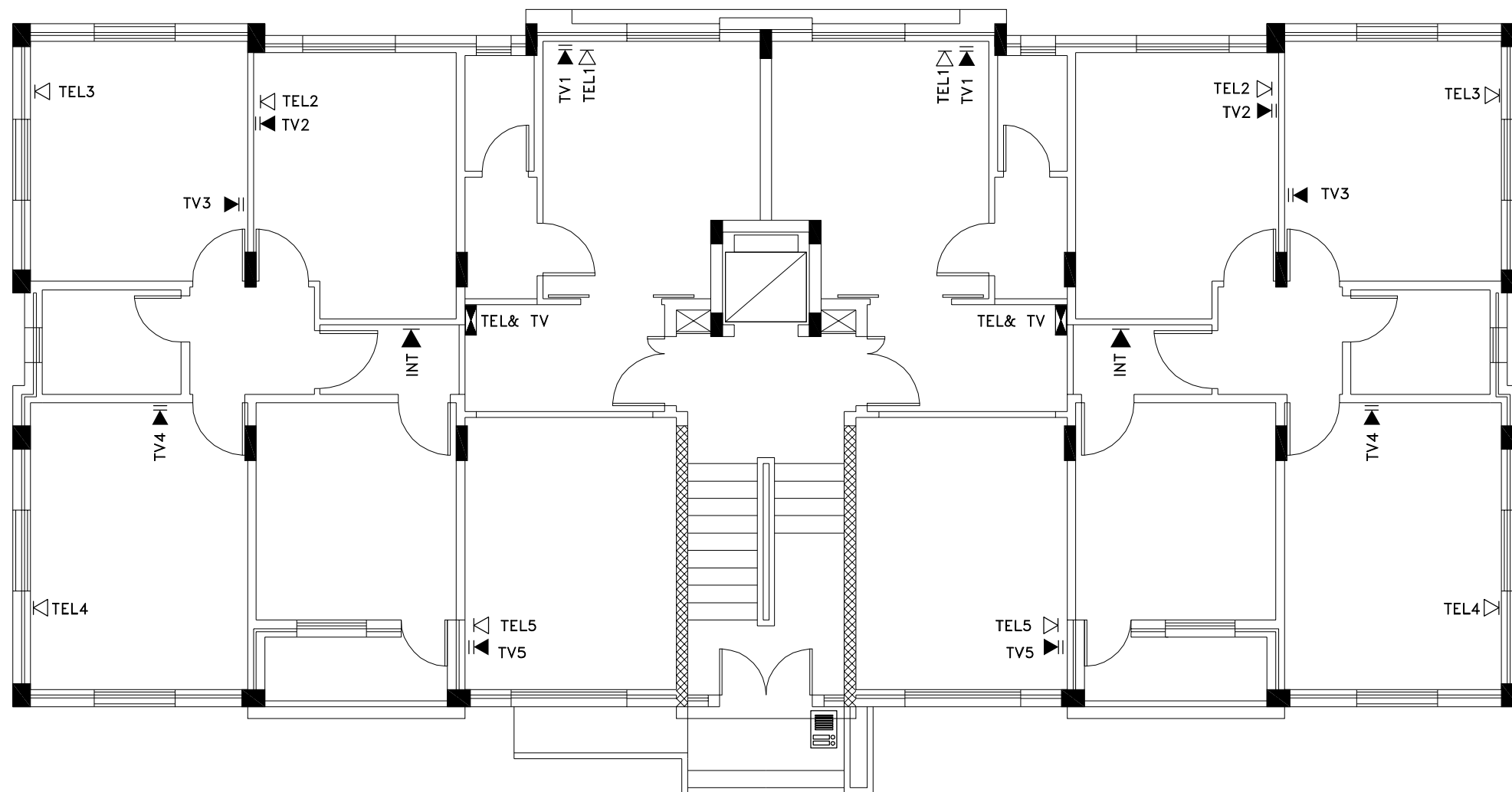
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Ground Floor
Power Fittings Layout

DRAWING NO.: RE-E-007


DATE: APRIL 2011 SCALE: 1:100





NOTES :-

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PROJECT TITLE:

CONSTRUCTION OF 100 HOUSING UNITS TO
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:


مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

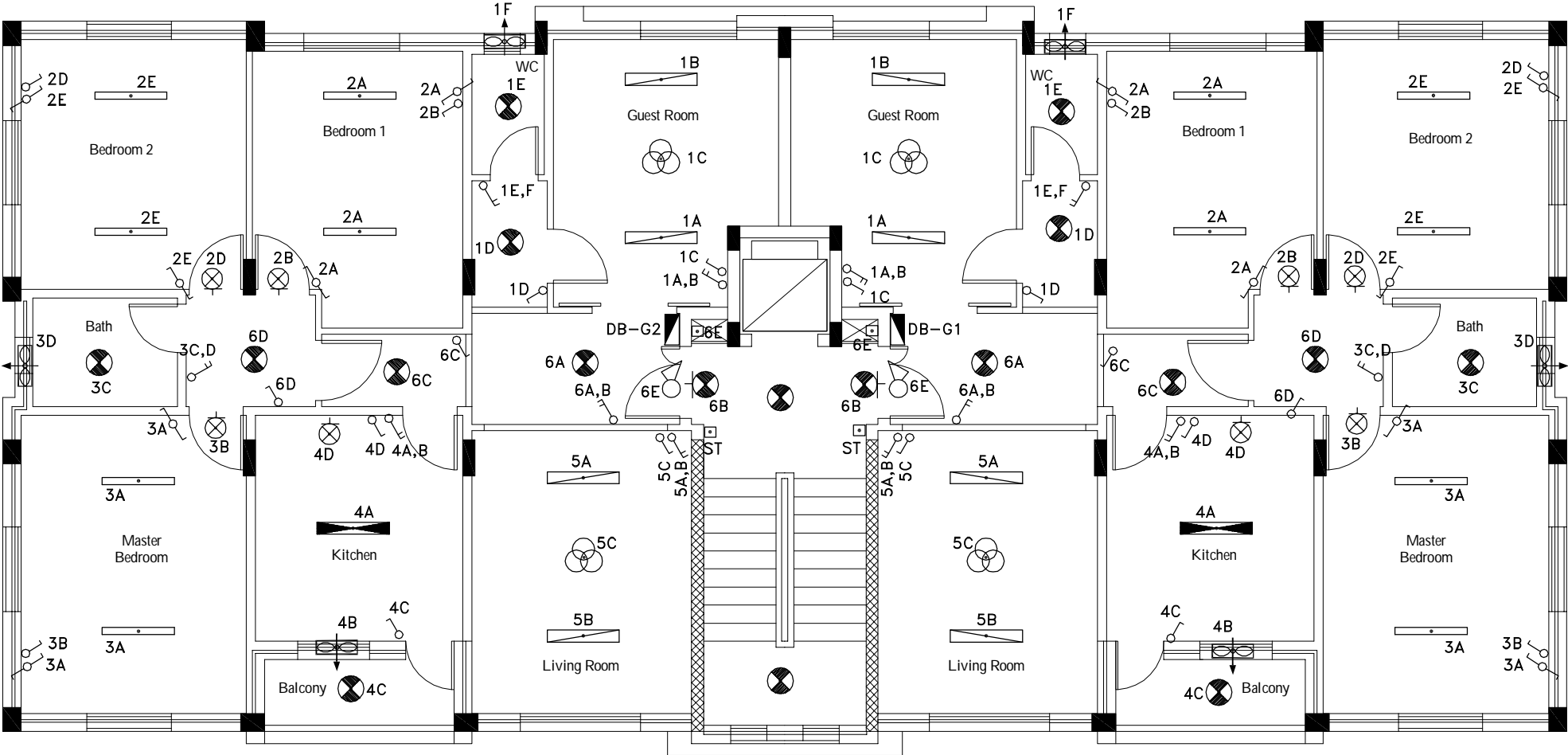
DRAWING TITLE:

Ground Floor
Telephone & TV Fittings Layout

DRAWING NO.: RE-E-008

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



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PROJECT TITLE:
CONSTRUCTION OF 100 HOUSING UNITS TO
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
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center for engineering and planning

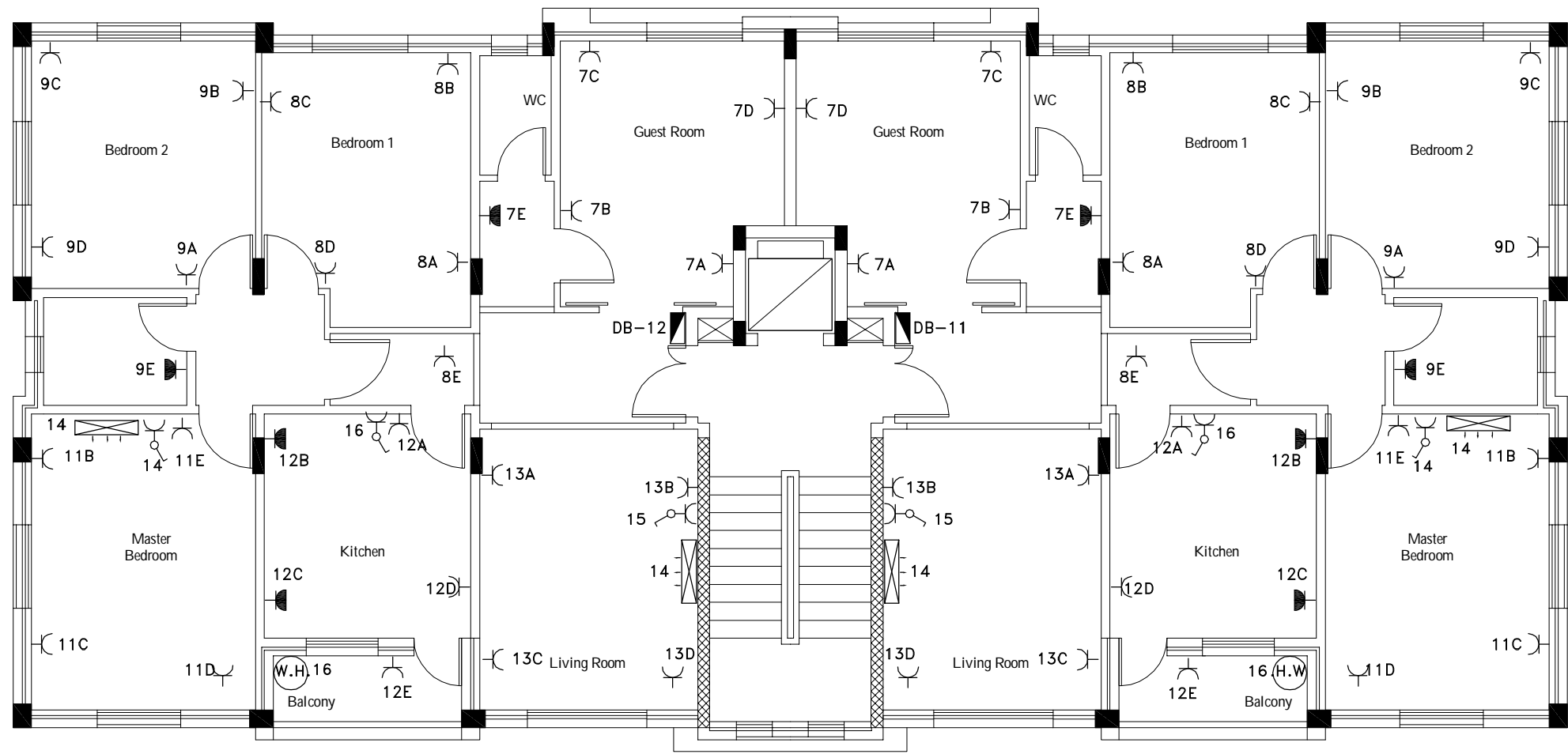
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Typical Floor
Lighting Fittings Layout

DRAWING NO.: RE-E-009

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



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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 08)

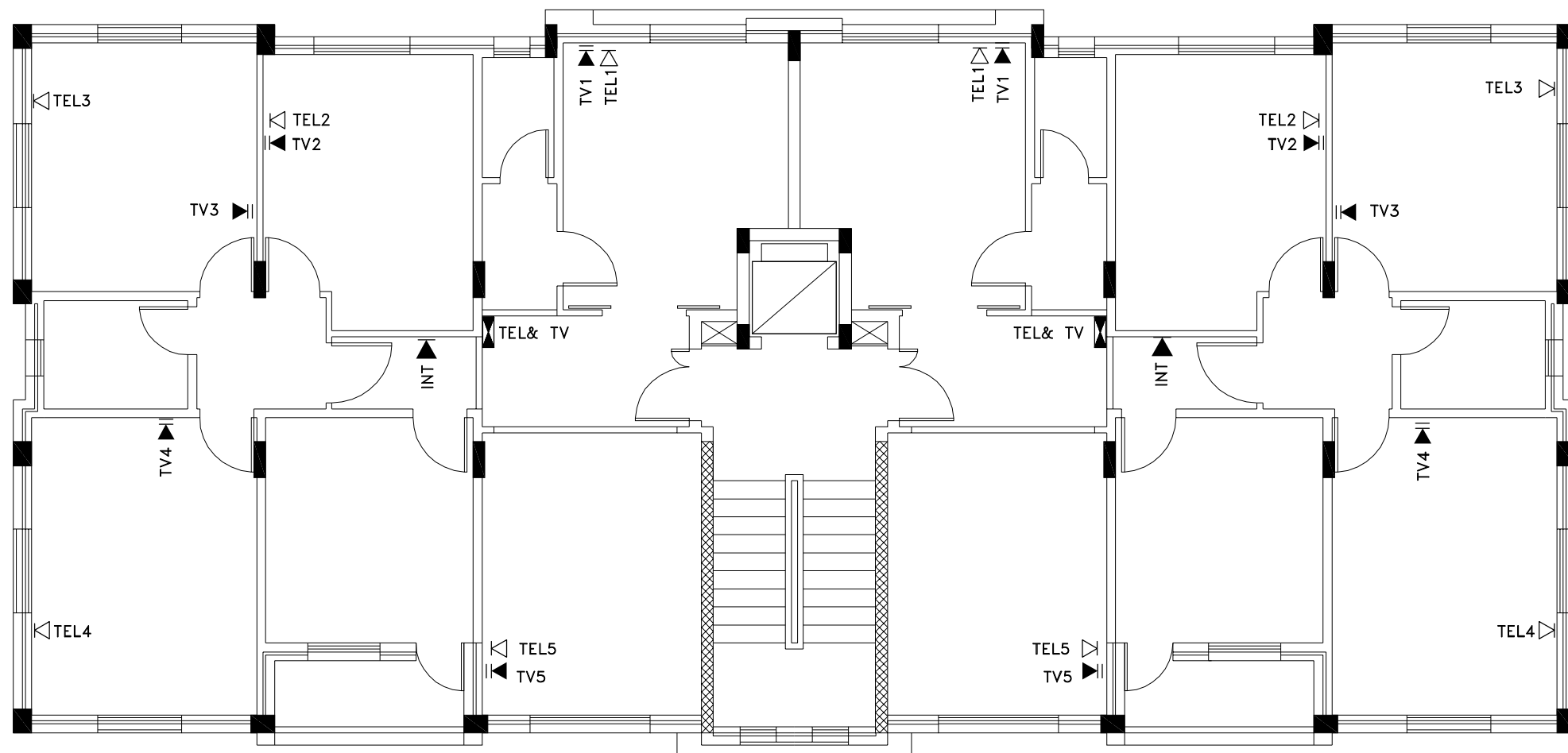
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Typical Floor
Power Fittings Layout

DRAWING NO.: RE-E-010

DATE: APRIL 2011 SCALE: 1:100



NOTES :-

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

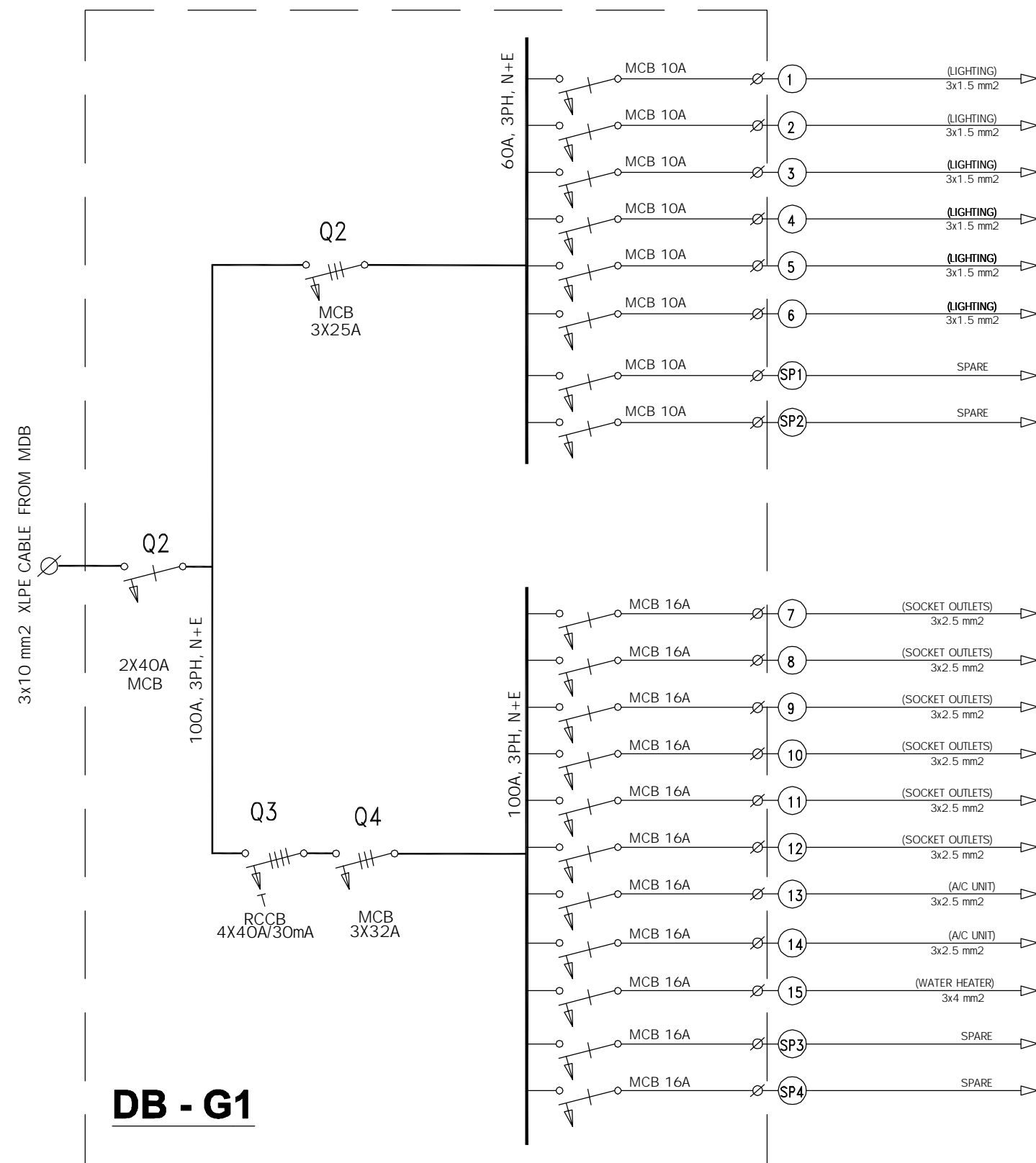
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

Typical Floor
Telephone & TV Fittings Layout

DRAWING NO.: RE-E-011

DATE: APRIL 2011 SCALE: 1:100



NOTES :-

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

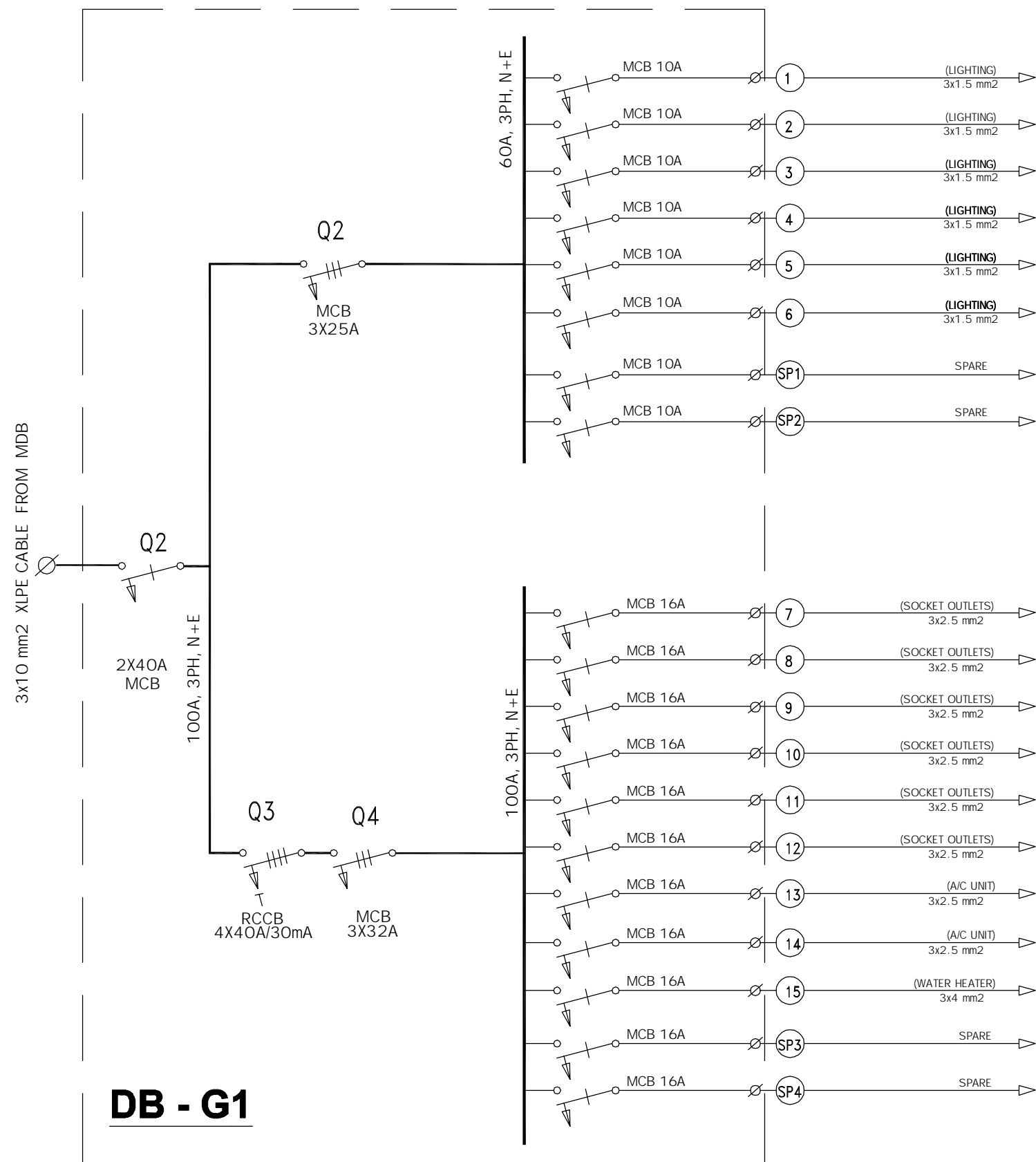
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

Typical Flat Panel
DB-G1 Single Line Power Diagram

DRAWING NO.: RE-E-012

DATE: APRIL 2011 SCALE: 1:xxx



NOTES :-

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

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center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

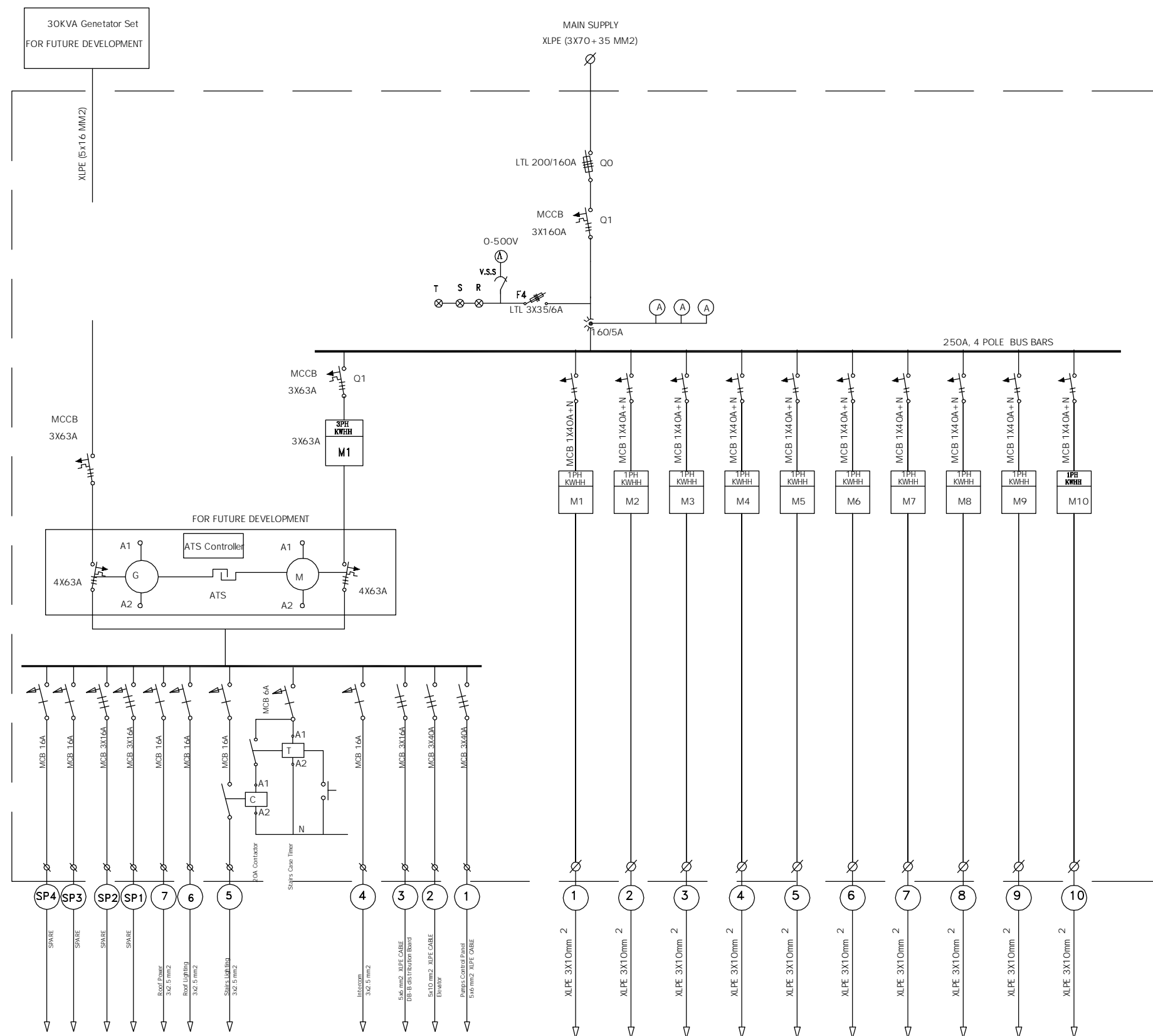
DRAWING TITLE:

Under Ground Floor
DB-B Single Line Power Diagram

DRAWING NO.: RE-E-013


DATE: APRIL 2011 SCALE: 1:xxx

NOTES :-




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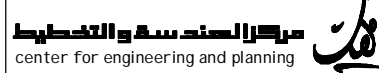
EMPLOYER:



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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 08)

CONSULTANT:**BUILDING NAME:**

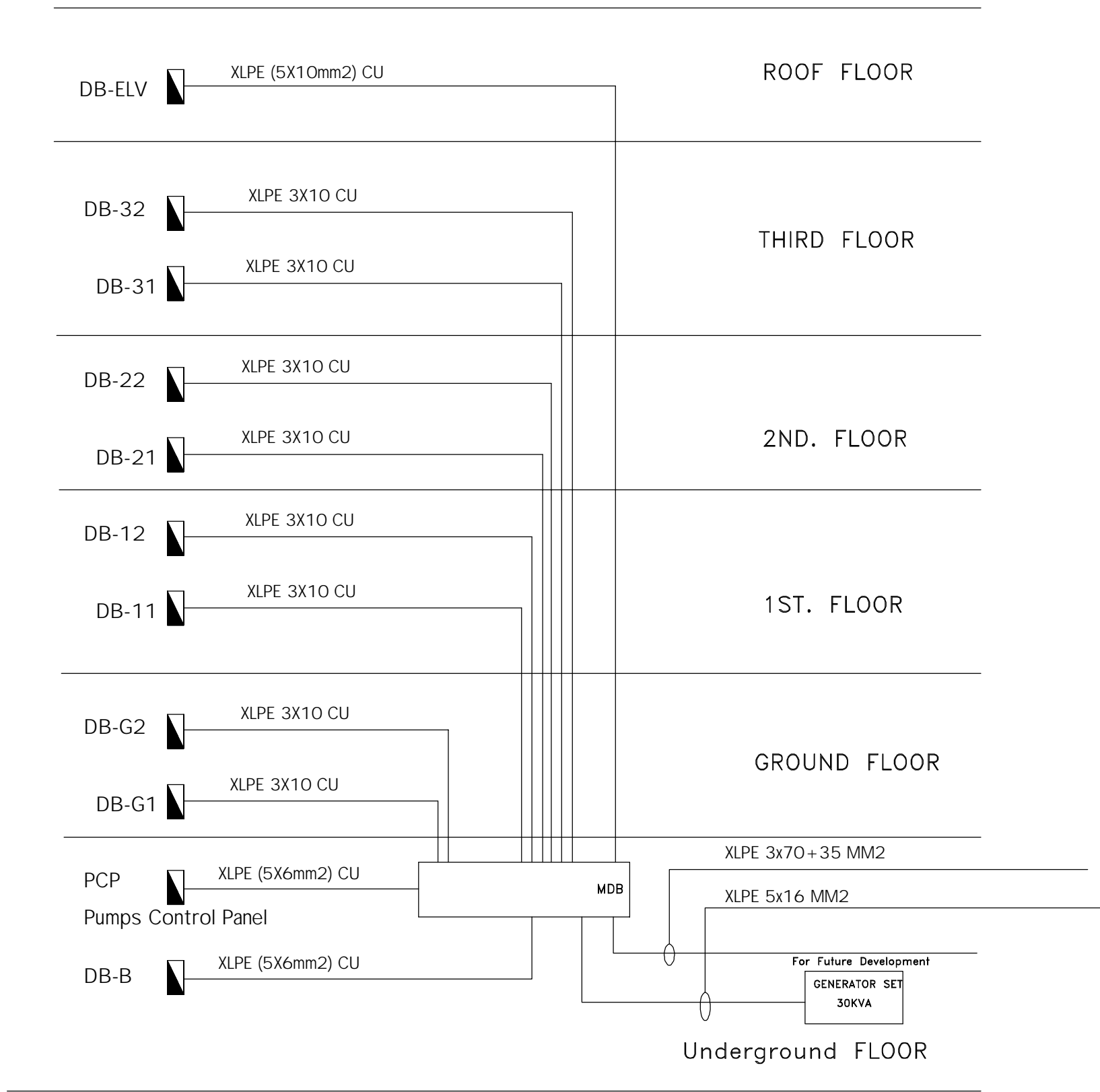
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

Under Ground Floor
MDB Main Distribution Board

DRAWING NO.: RE-E-014

DATE: APRIL 2011	SCALE: 1:xxx
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
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center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
Power Cables Riser Diagram

DRAWING NO.: RE-E-015

DATE: APRIL 2011 SCALE: 1:xxx

NOTES :-

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

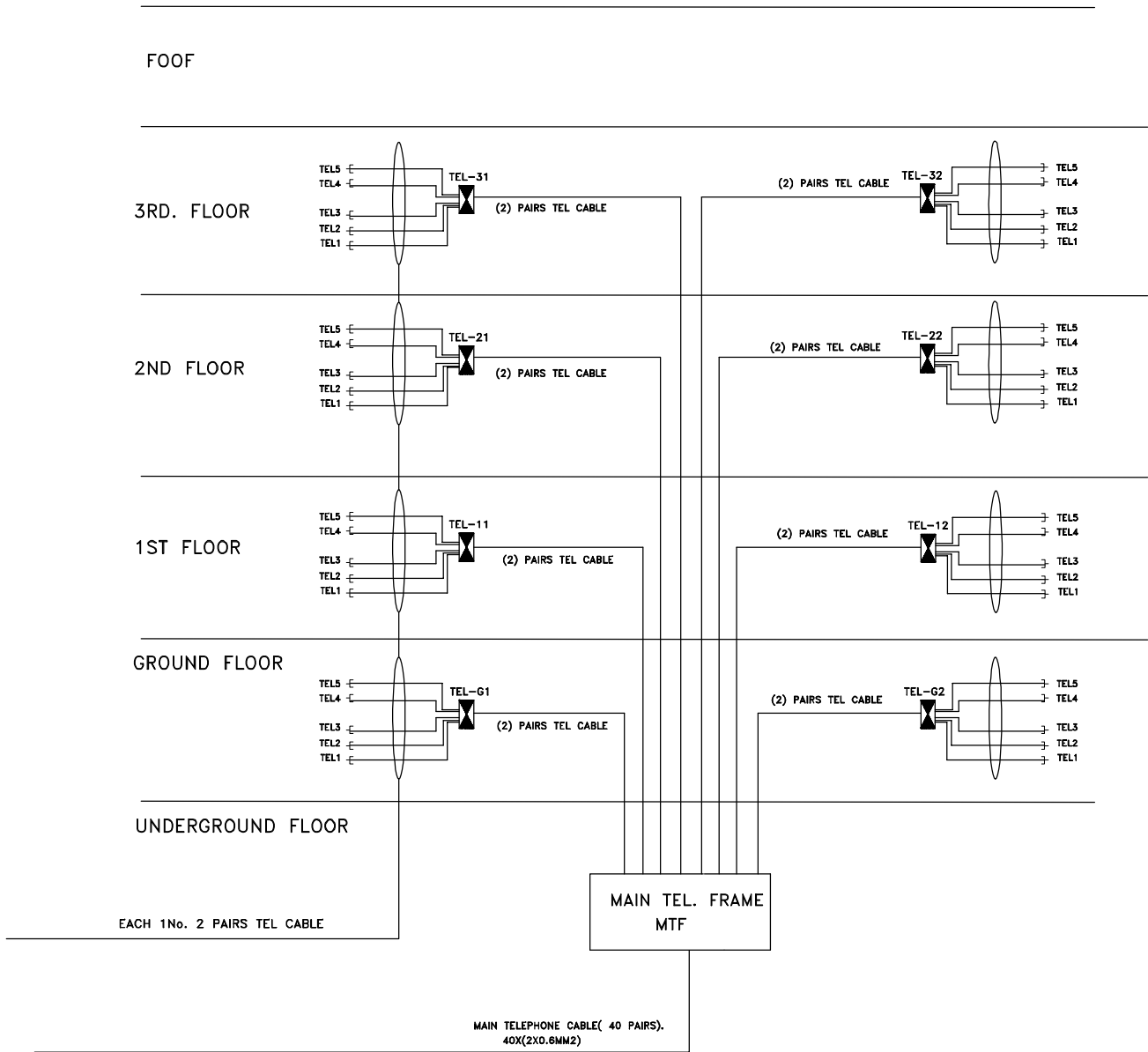
CONSULTANT:
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BUILDING NAME:
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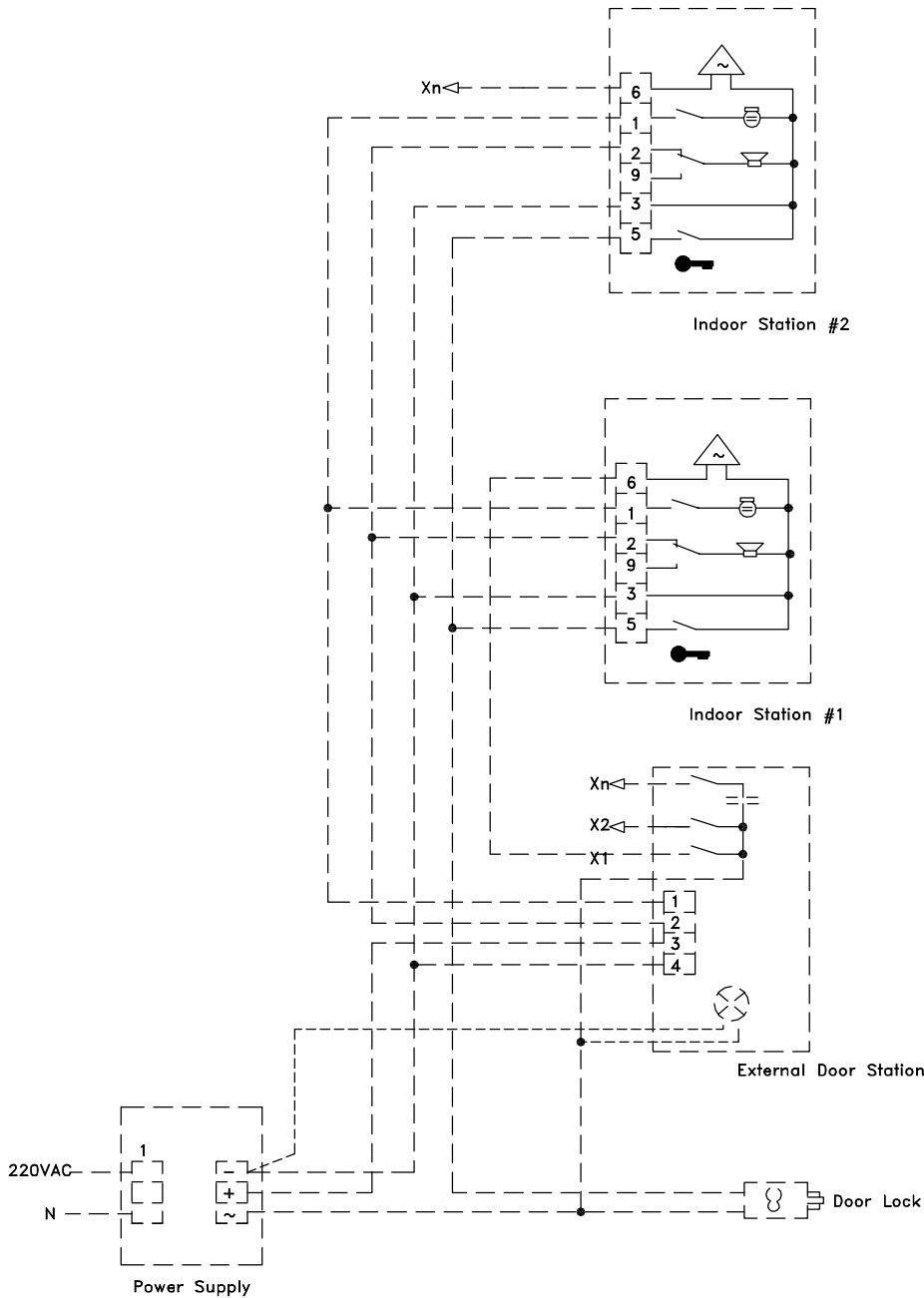
DRAWING TITLE:
Telephone Cables Riser Diagram
Intercom Sstem Wiring Diagram

DRAWING NO.: RE-E-016

DATE: APRIL 2011 SCALE: 1:xxx



Tel. System Riser Diagram



InDiagramtercom System Wiring

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CLIENT



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CONSULTANT

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GENERAL DETAILS

EMPLOYER:

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

CLIENT

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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

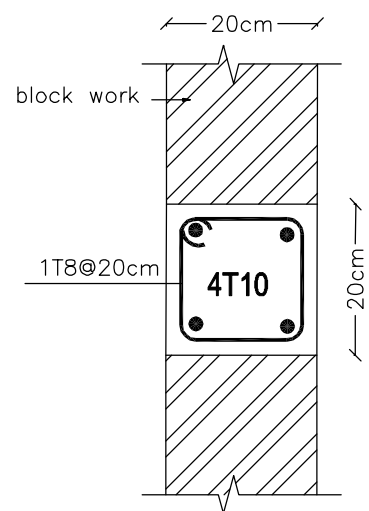
CONSULTANT

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center for engineering and planning



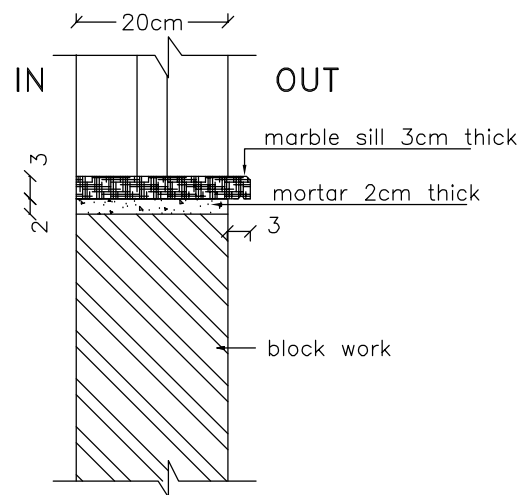
LIST OF DRAWINGS

S/NO.	DRAWING NAME	DRG. NO.
GENERAL DETAILS		
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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



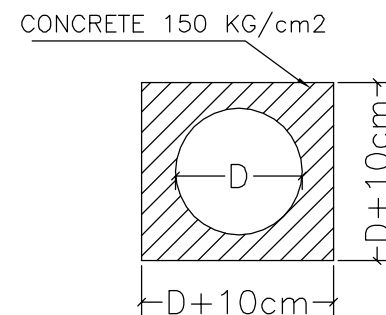
LINTEL DETAIL

SCALE 1 : 10



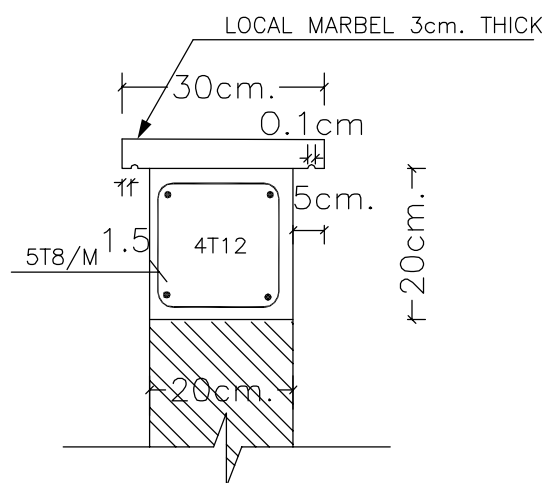
WINDOW SILL DETAIL

SCALE 1 : 10



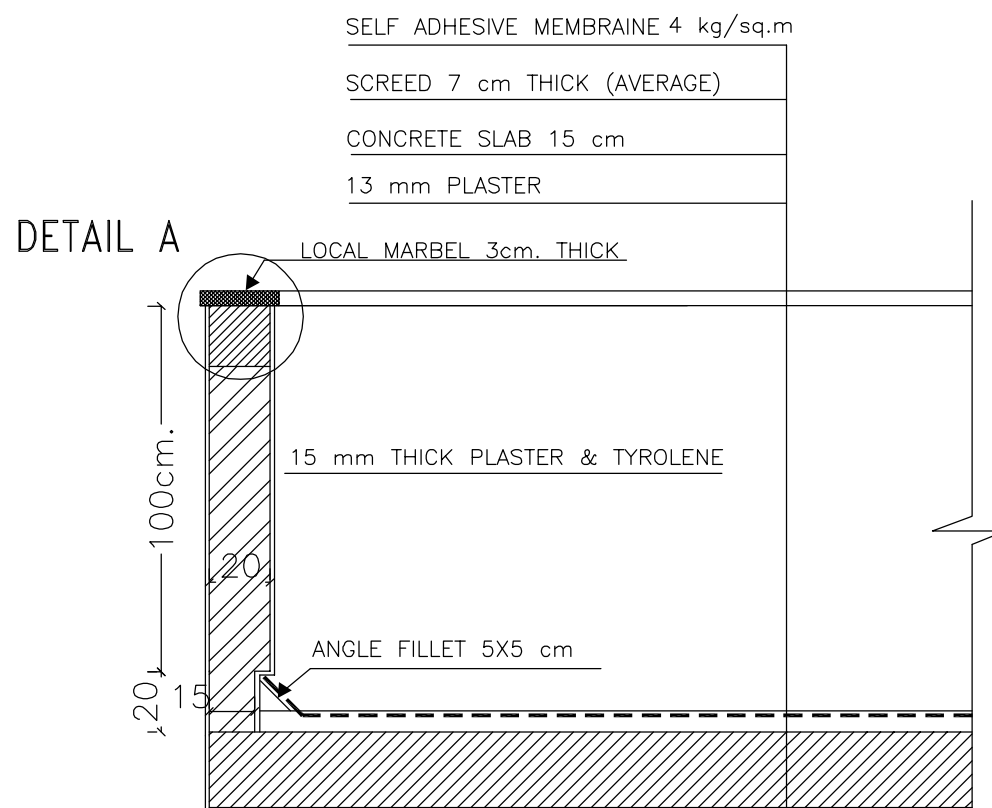
ENCASEMENT FOR PIPE LINES

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.

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:



مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

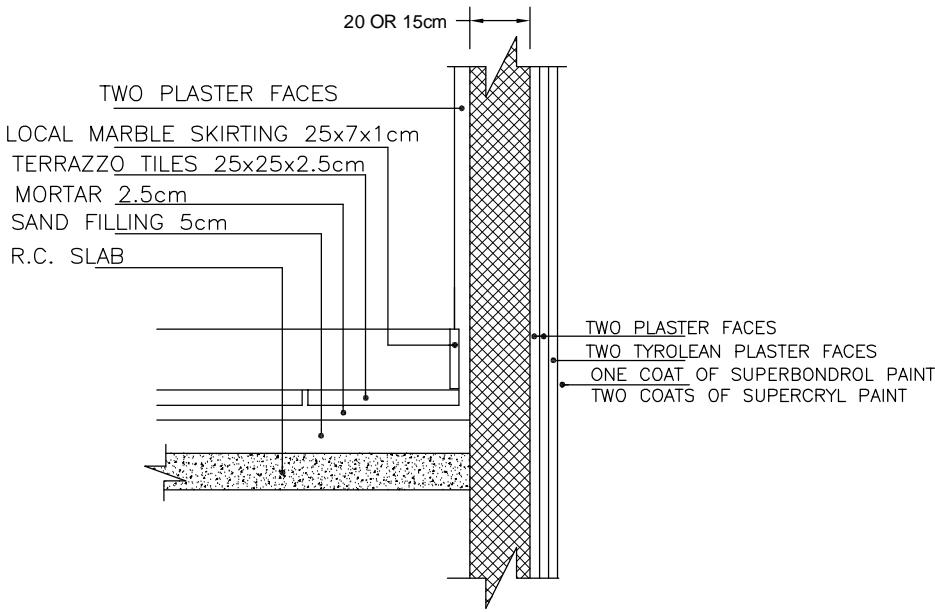
RESIDENTIAL BUILDING NO. (B5)

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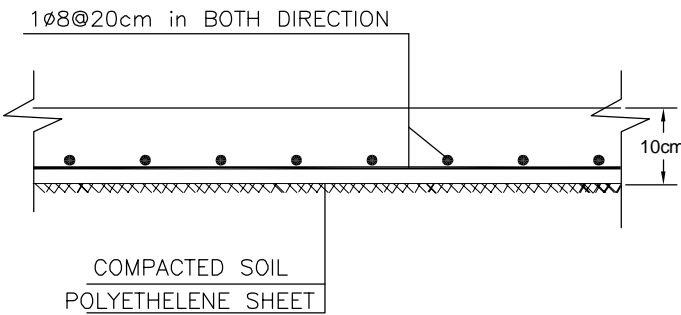
GENERAL DETAILS (1)

DRAWING NO.: RE-GD-001

DATE: APRIL 2011 SCALE:

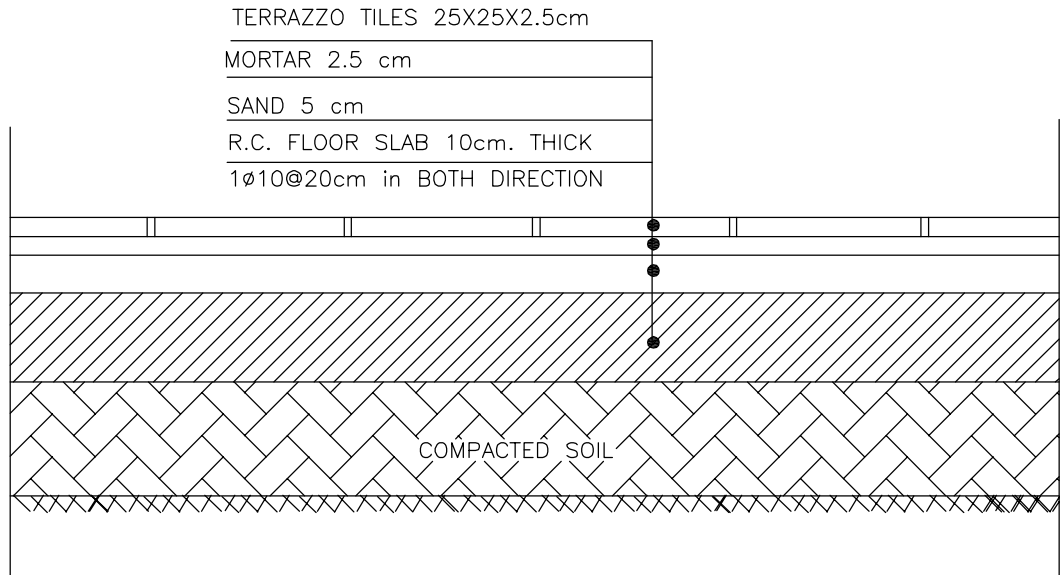


FINISH FOR PLASTERING



REINFORCED GROUND FLOOR SLAB

SCALE 1:10



FINISH GROUND & TYPICAL FLOOR SLAB


SCALE 1:10

NOTES :-

- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE START WORKS.
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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 08)

CONSULTANT:

 مرکز الهندسة والتخطيط

center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:

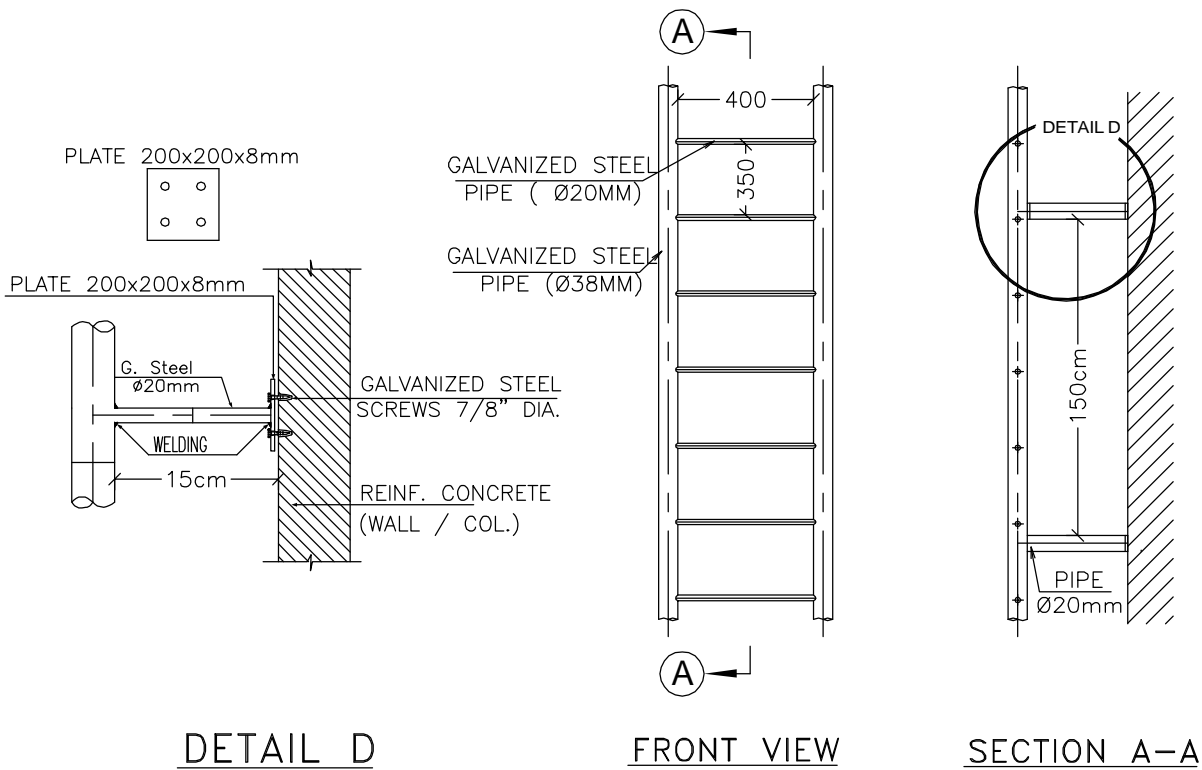
GENERAL DETAILS (2)

DRAWING NO.: RE-GD-002

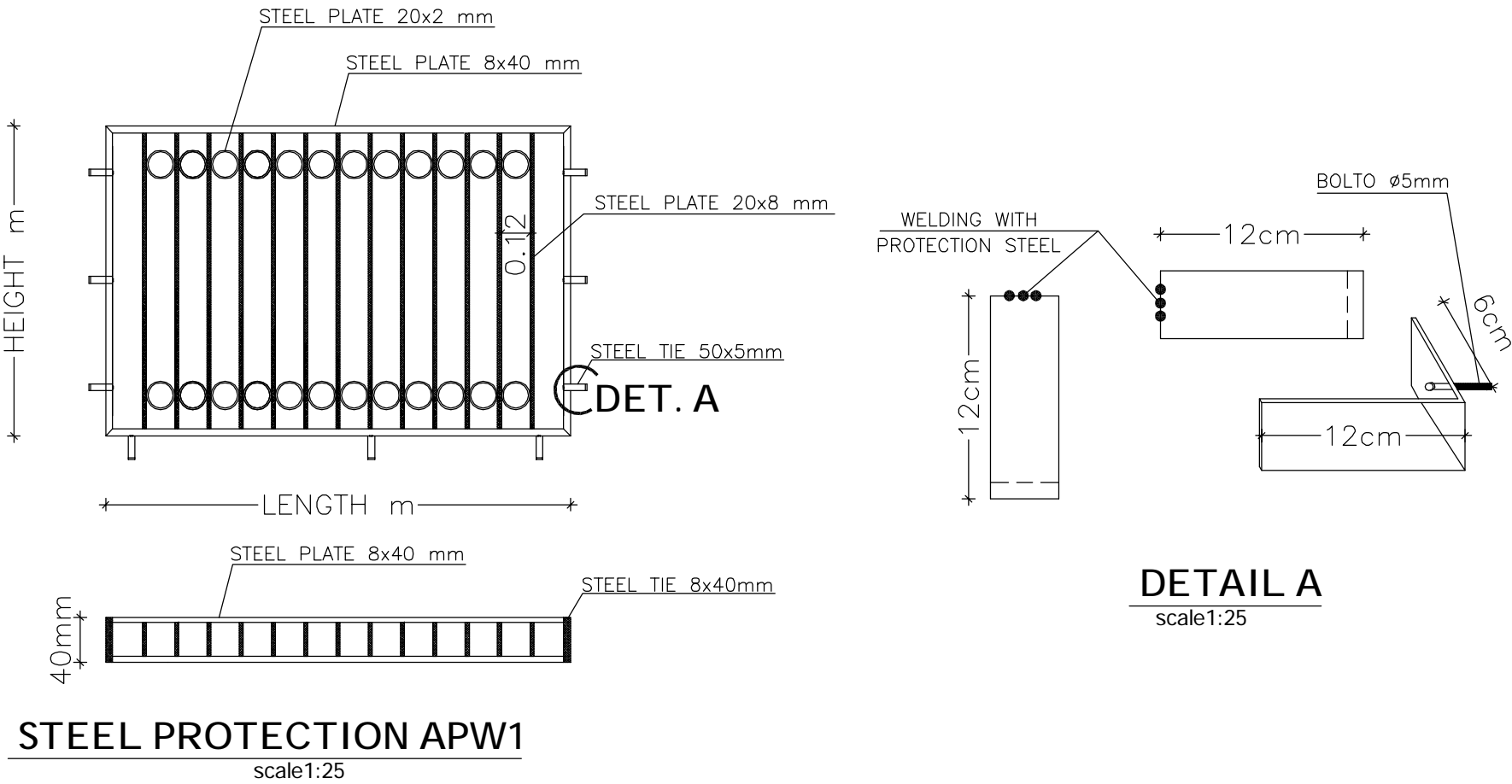
DATE: APRIL 2011 SCALE:

NOTES :-

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LADDER DETAIL FOR BUILDINGS
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
PALESTINIAN PEOPLE
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

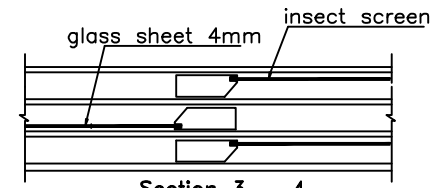
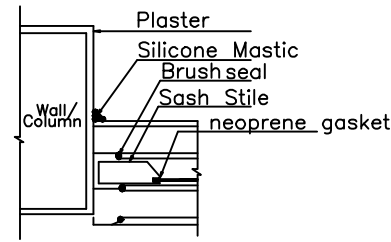
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

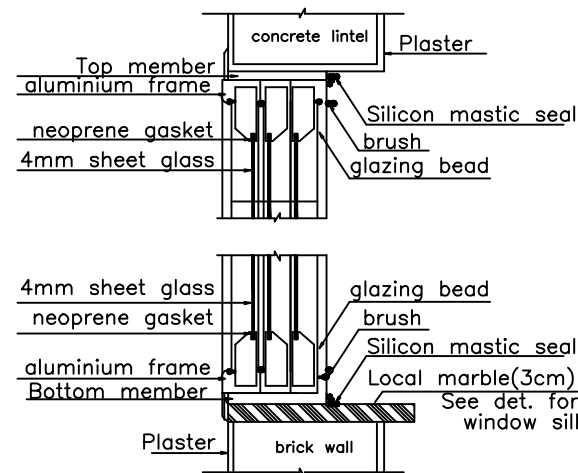
DRAWING TITLE:
GENERAL DETAILS (3)

DRAWING NO.: RE-GD-003

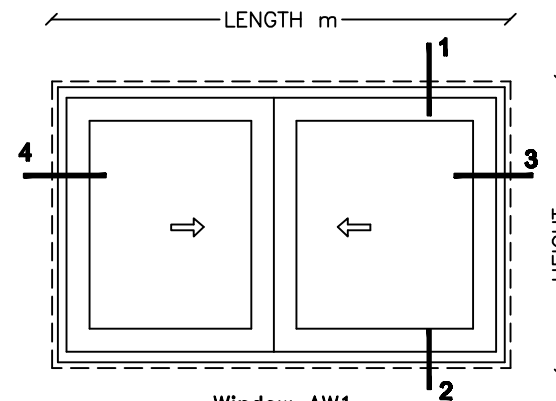
DATE: APRIL 2011 SCALE:



Section 3 - 4
Scale 1:10

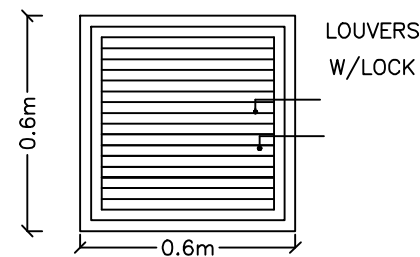


SECTION 1:2
Scale 1:10



Window AW1
Scale 1:25

TYPICAL DETAILED FOR WINDOW



DETAILED FOR WINDOW LOUVER

scale 1:20

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center for engineering and planning

BUILDING NAME:

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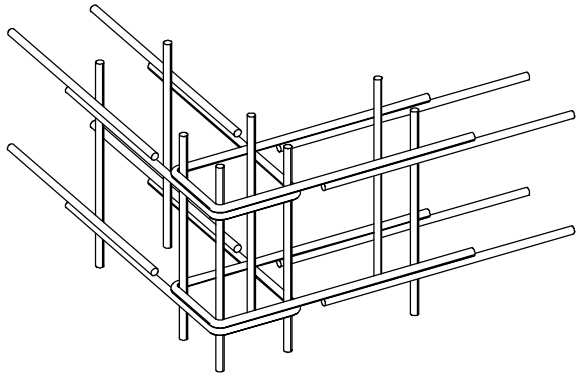
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GENERAL DETAILS (4)

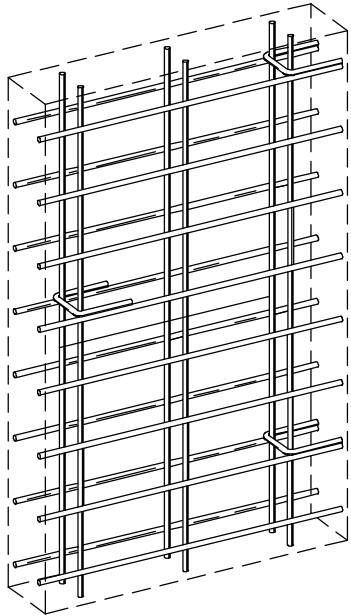
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DATE: APRIL 2011

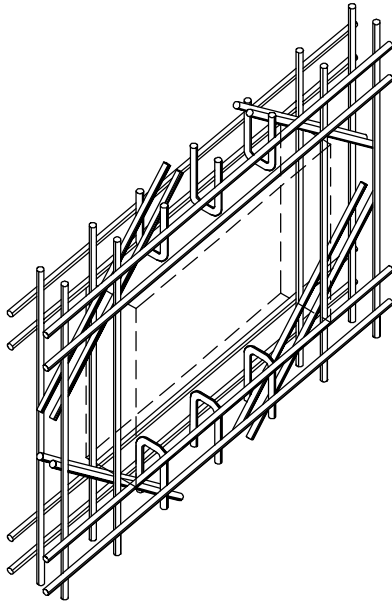
SCALE:



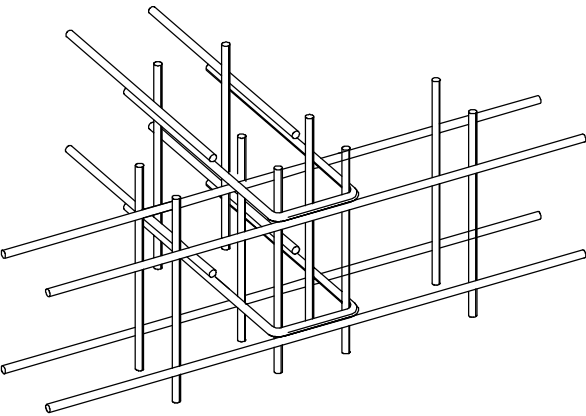
FOR ALL WALLS , WALL BEAMS AND DEEP BEAMS
USE U BARS FOR ENDS AND CORNERS
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



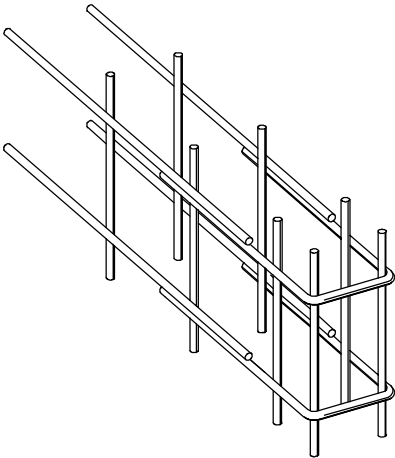
FOR ALL WALLS(SHEAR WALLS & RETAINING WALLS)
USE $\phi 12$ U TIE SPACERS STAGGERED AT 150 CM INTERVALS
VERTICALLY & HORIZONTALLY.



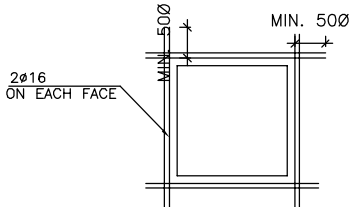
FOR ALL WALL OPENINGS
FIX DIAGONAL $2\phi 14$ BARS IN BOTH FACES, AT EACH CORNER.
(TO BE USED UNLESS SHOWN OTHERWISE ON THE DRAWINGS)



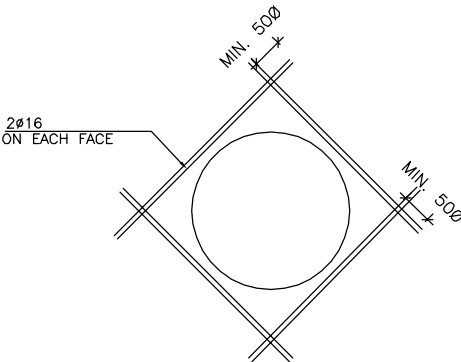
FOR ALL WALLS :
USE U BARS FOR INTERSECTIONS OFF WALLS
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



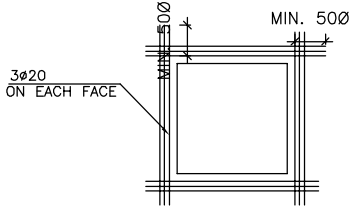
FOR ALL WALLS:
USE U BARS FOR ENDS OF WALLS
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



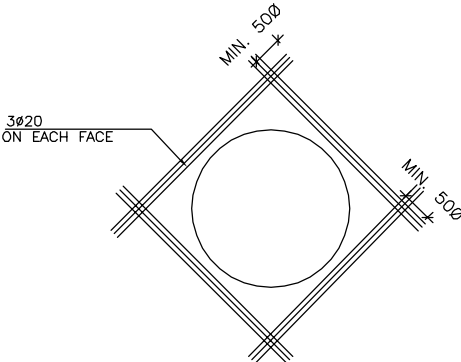
RECTANGULAR OPENING $\leq 500\text{mm}$



CIRCULAR OPENING $\leq 500\text{mm}$



RECTANGULAR OPENING $> 500\text{mm}$



CIRCULAR OPENING $> 500\text{mm}$

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

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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 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

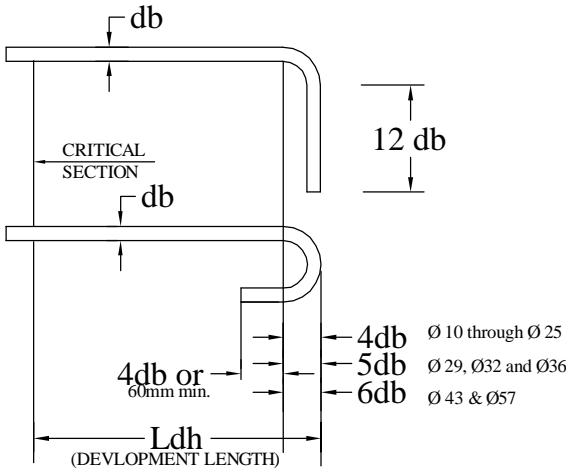
DRAWING TITLE:
GENERAL DETAILS (5)

DRAWING NO.: RE-GD-005

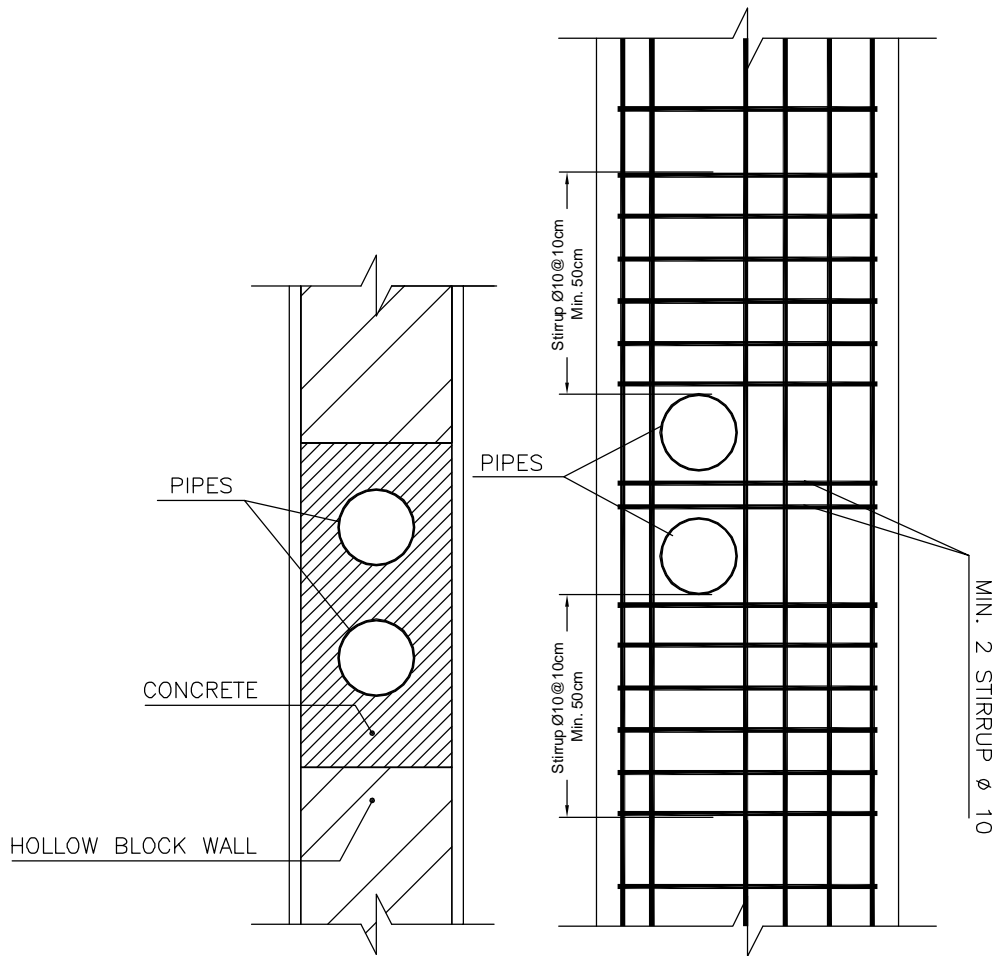
DATE: APRIL 2011 SCALE:

LINTELS DETAILS.

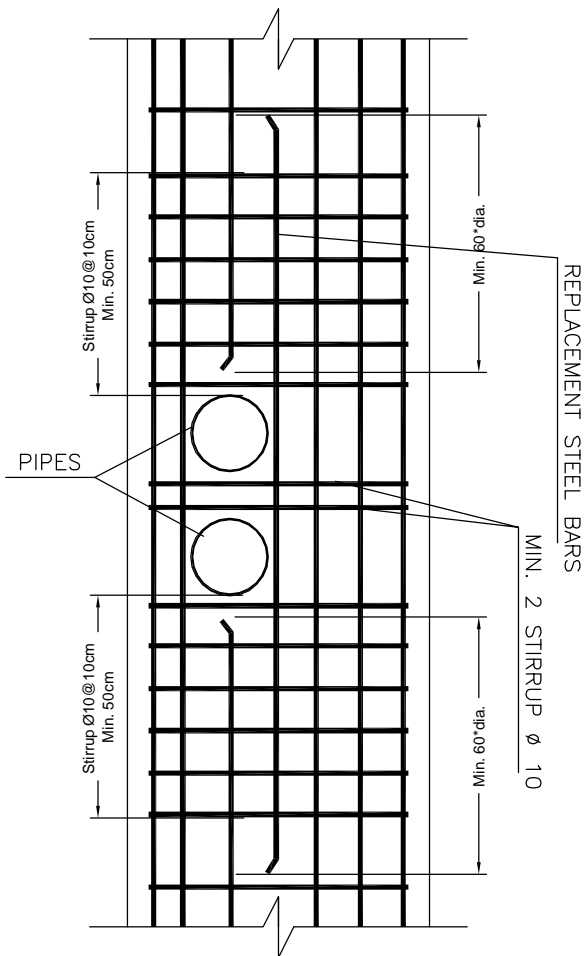
SCHEDULE OF LINTELS REINFORCEMENT								
LINTEL WIDTH =b CLEAR SPAN	b=10cm.		b=15cm.		b=20cm./30cm.		DEPTH= d	STIRRUPS
	TOP REINF.	BOTTOM REINF.	TOP REINF.	BOTTOM REINF.	TOP REINF.	BOTTOM REINF.		
< 200	1T12	1T14	2T12	2T12	2T12	2T14	20	1Ø8@200mm
200–300	1T12	1T14	2T12	2T14	2T12	2T16	25	1Ø8@200mm
301–400	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)



PLUMPMG DETAILS
IN THE WALLS



GENERAL DETAIL (2)

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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
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PROJECT TITLE:
CONSTRUCTION OF 100 HOUSING UNITS TO
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

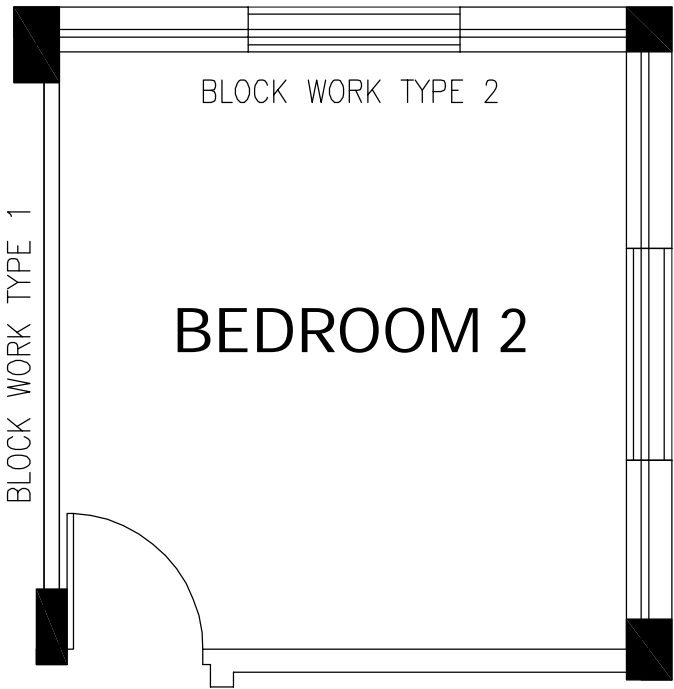
DRAWING TITLE:
GENERAL DETAILS (6)

DRAWING NO.: RE-GD-006

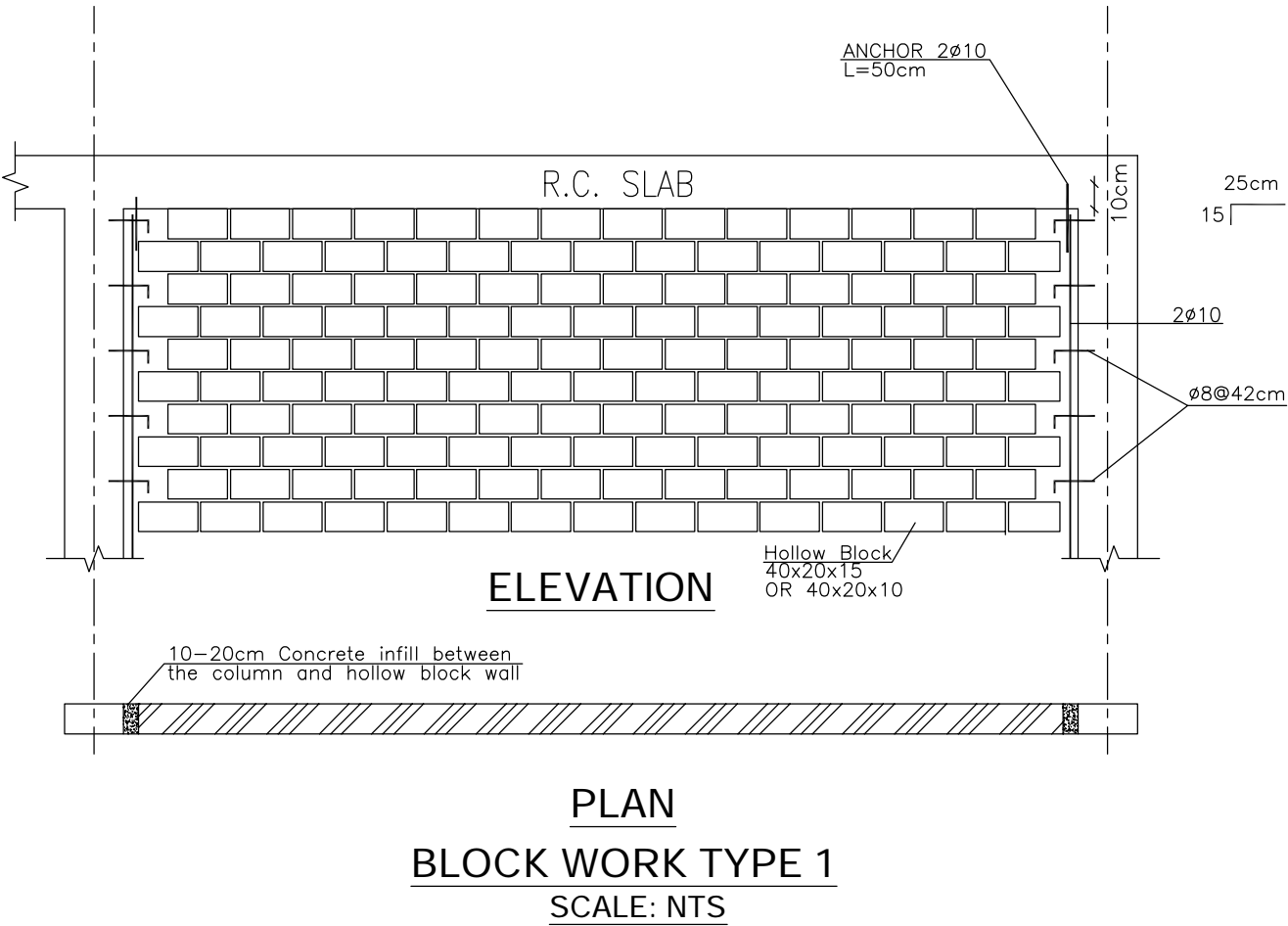
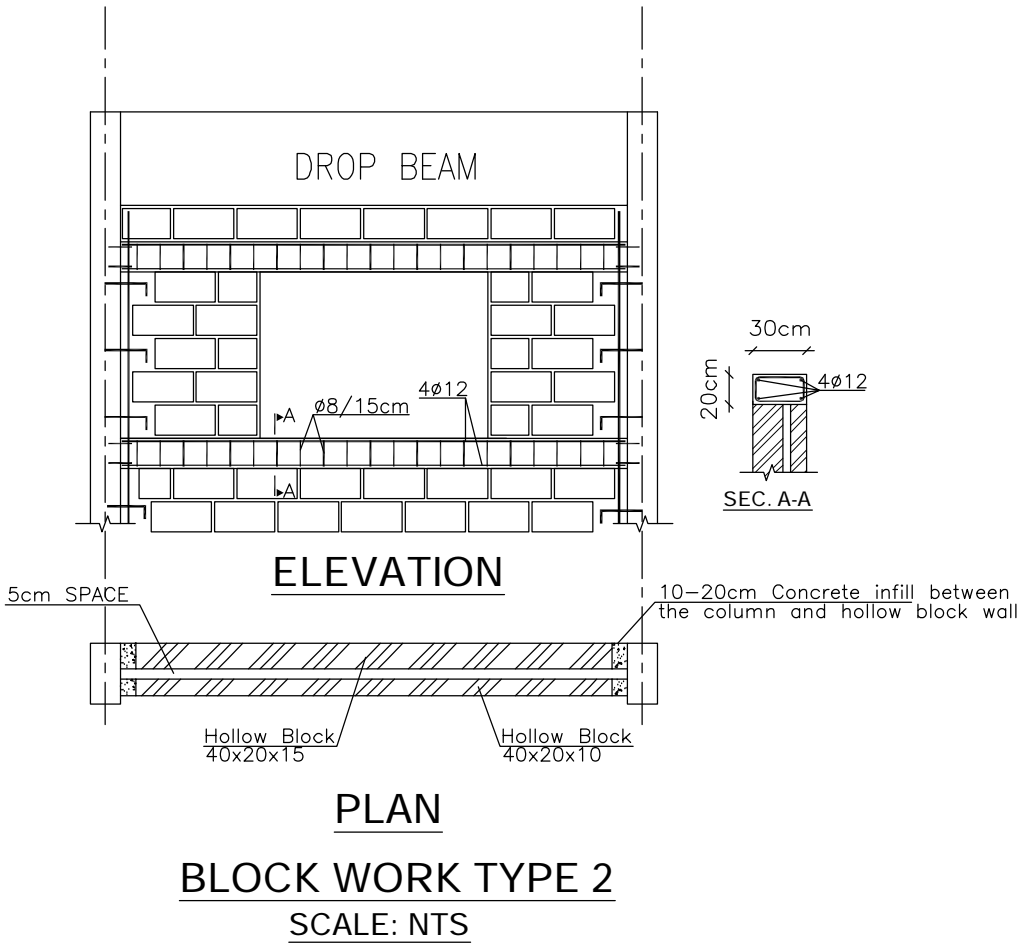
DATE: APRIL 2011 SCALE:

NOTES :-

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TYPICAL BLOCK WORK TYPES IN
SCALE: 1:100



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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 08)

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مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B5)

DRAWING TITLE:
GENERAL DETAILS (7)

DRAWING NO.: RE-GD-007


DATE: APRIL 2011 SCALE:



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

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

**CONSTRUCTION OF 100 HOUSING UNITS TO
RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES
IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)**

—

مركز الهندسة والتخطيط
center for engineering and planning

RESIDENTIAL BUILDING NO. (B5)

GENERAL DETAILS (8)

DRAWING NO.: RE-GD-007

DATE: APRIL 2011	SCALE:
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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. 08
RESIDENTIAL BUILDING
TYPE B (B6)



PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

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



ARCHITECTURAL 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

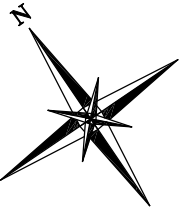


LIST OF DRAWINGS

S/NO.	DRAWING NAME	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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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

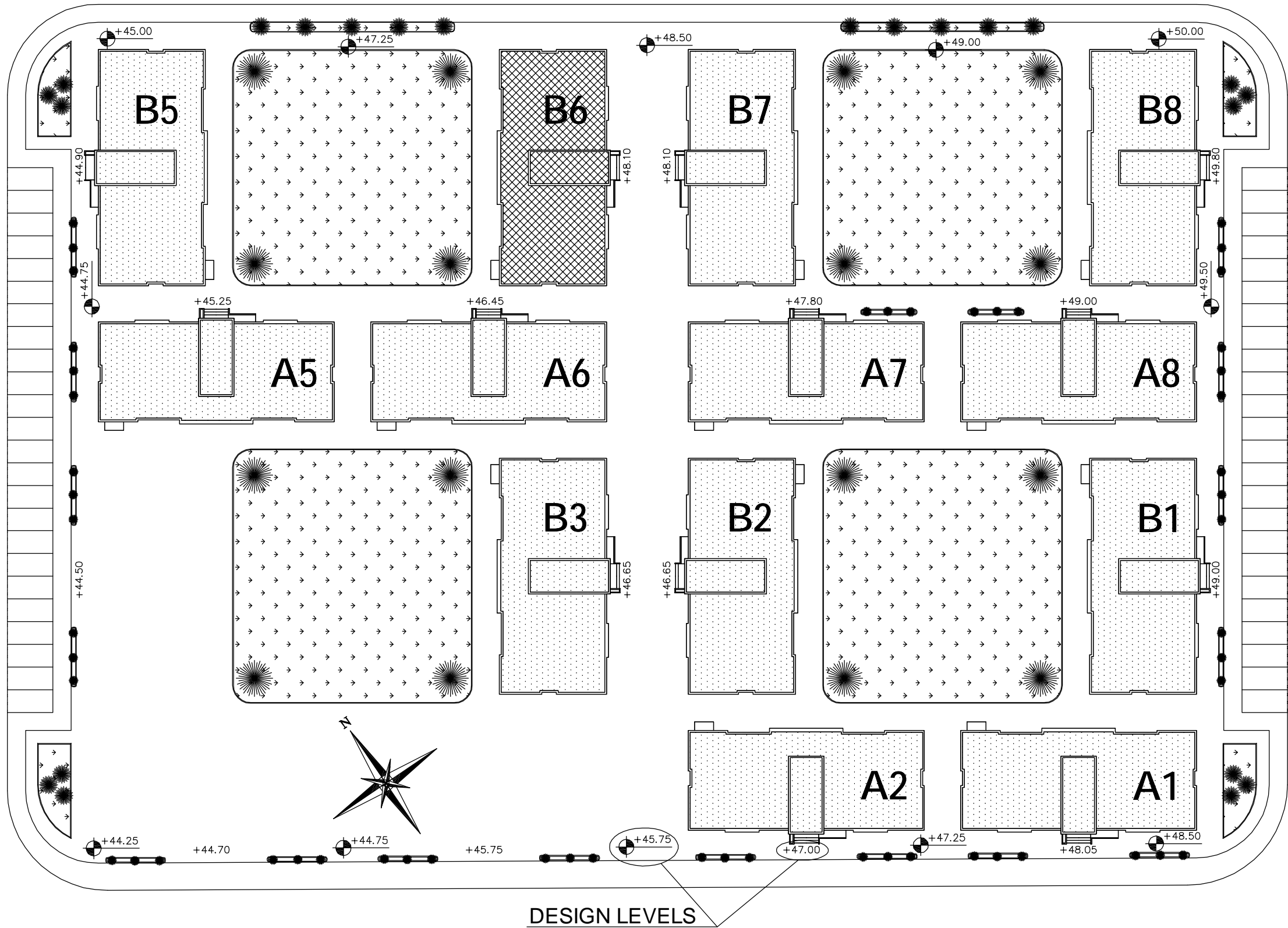
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

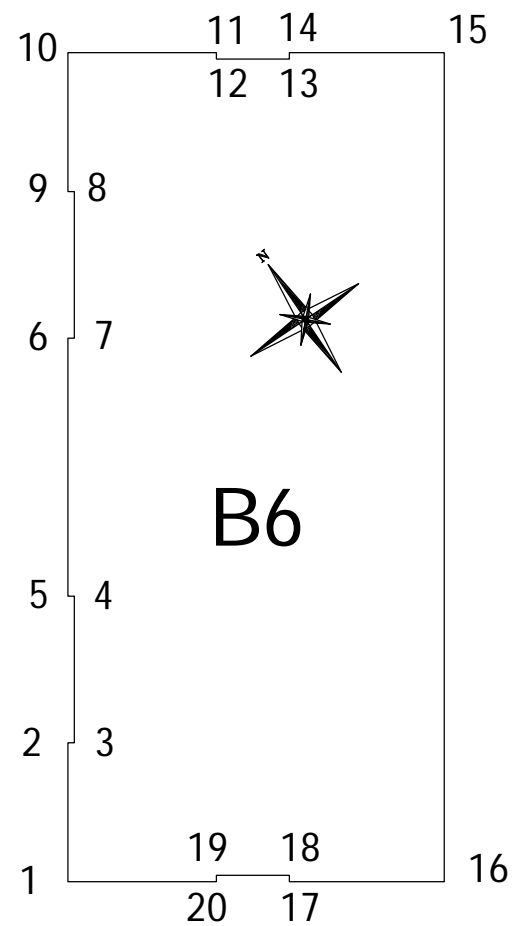
DRAWING TITLE:
GENERAL LAYOUT, LOCATION AND
DESIGN LEVEL OF THE BUILDING

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

DATE: APRIL 2011 SCALE: 1:500



GENERAL LAYOUT, LOCATION AND DESIGN LEVEL OF THE BUILDING



BUILDING NO. B6


Piont	X	Y
1	100596.0382	107350.1723
2	100598.5148	107353.7484
3	100598.6792	107353.6345
4	100601.2982	107357.4162
5	100601.1337	107357.5301
6	100605.7454	107364.1891
7	100605.9098	107364.0753
8	100608.5288	107367.8569
9	100608.3643	107367.9708
10	100610.8410	107371.5470
11	100614.6637	107368.8995
12	100614.5499	107368.7351
13	100616.4407	107367.4256
14	100616.5546	107367.5901
15	100620.5418	107364.8288
16	100605.7390	107343.4541
17	100601.7518	107346.2514
18	100601.8657	107346.3798
19	100599.9748	107347.6893
20	100599.8610	107347.5248


COORDINATES FOR THE BUILDING

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PROGRAMME OF ASSISTANCE TO THE
UN PALESTINIAN PEOPLE
D/P (UNDP/PAPP)

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

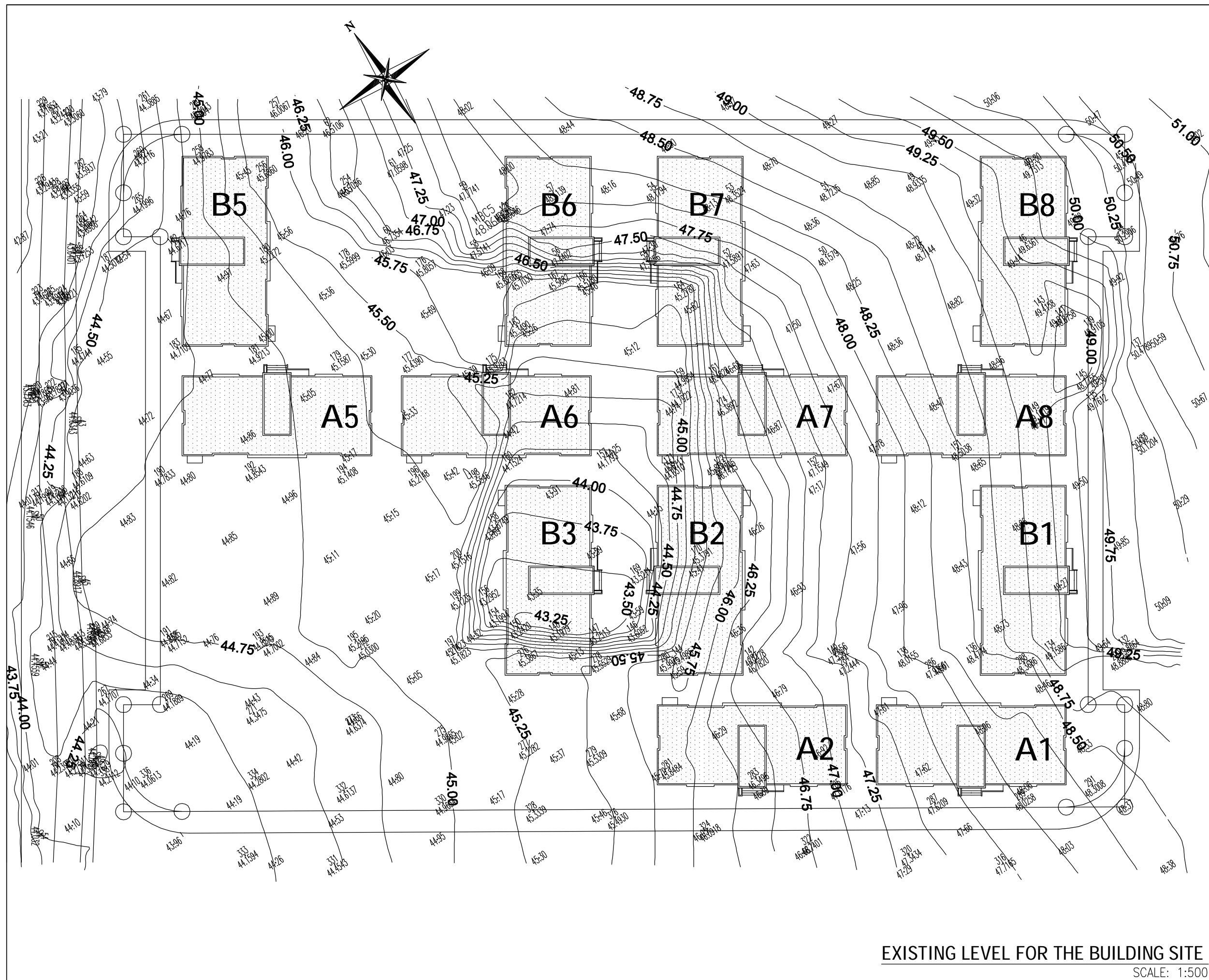
CONSULTANT:
 center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
COORDINATES FOR THE BUILDING

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

DATE: APRIL 2011 | SCALE: NTS





SCALE: 1:500

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EMPLOYER:
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PROJECT TITLE:
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

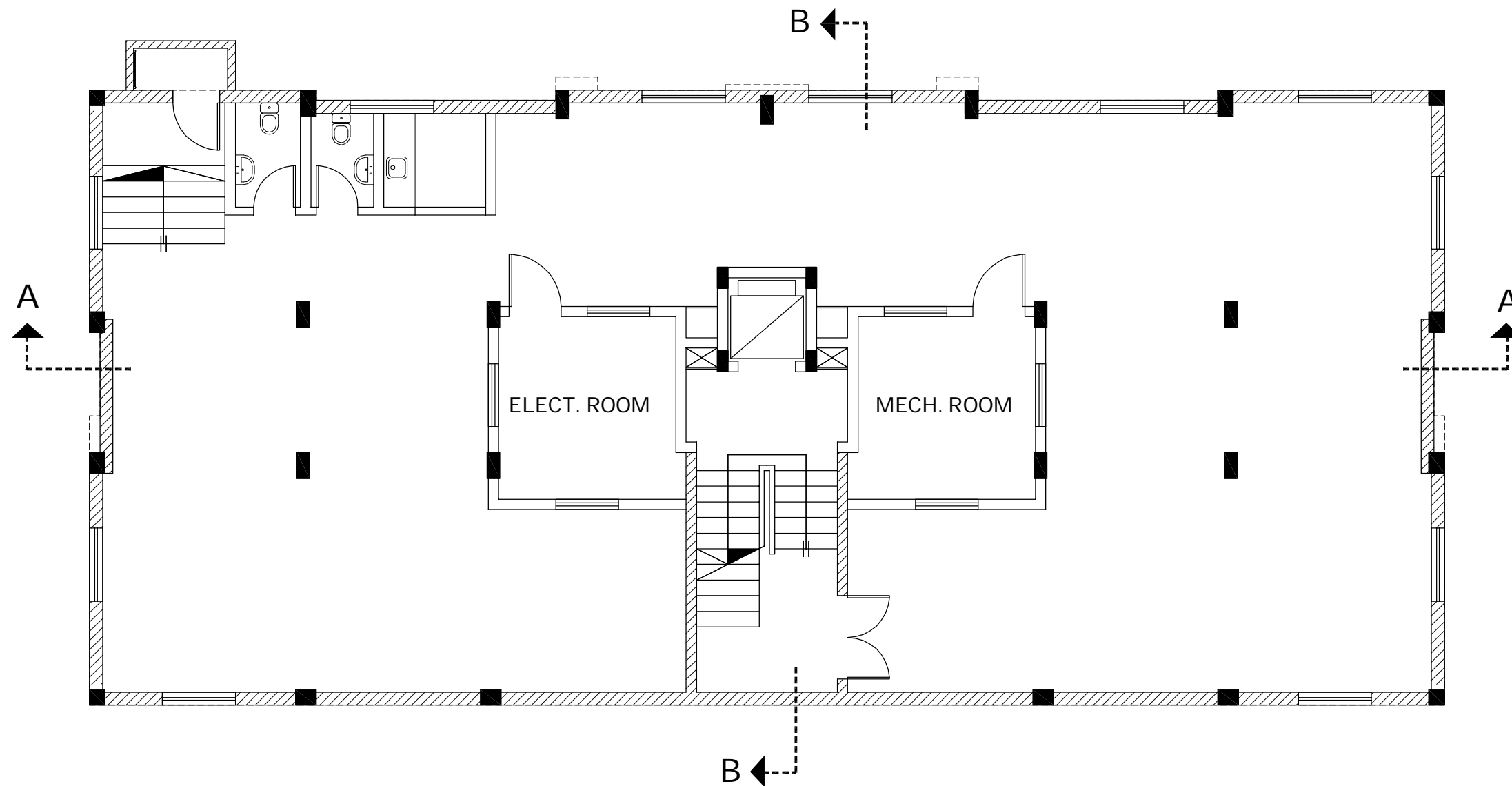
CONSULTANT:
 **مركز الهندسة والتخطيط**
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
EXISTING LEVEL FOR RESIDENTIAL

DRAWING NO.: RE-A-003

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



FURNITURE FOR UNDERGROUND FLOOR

SCALE: 1:100

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DRAWING TITLE:

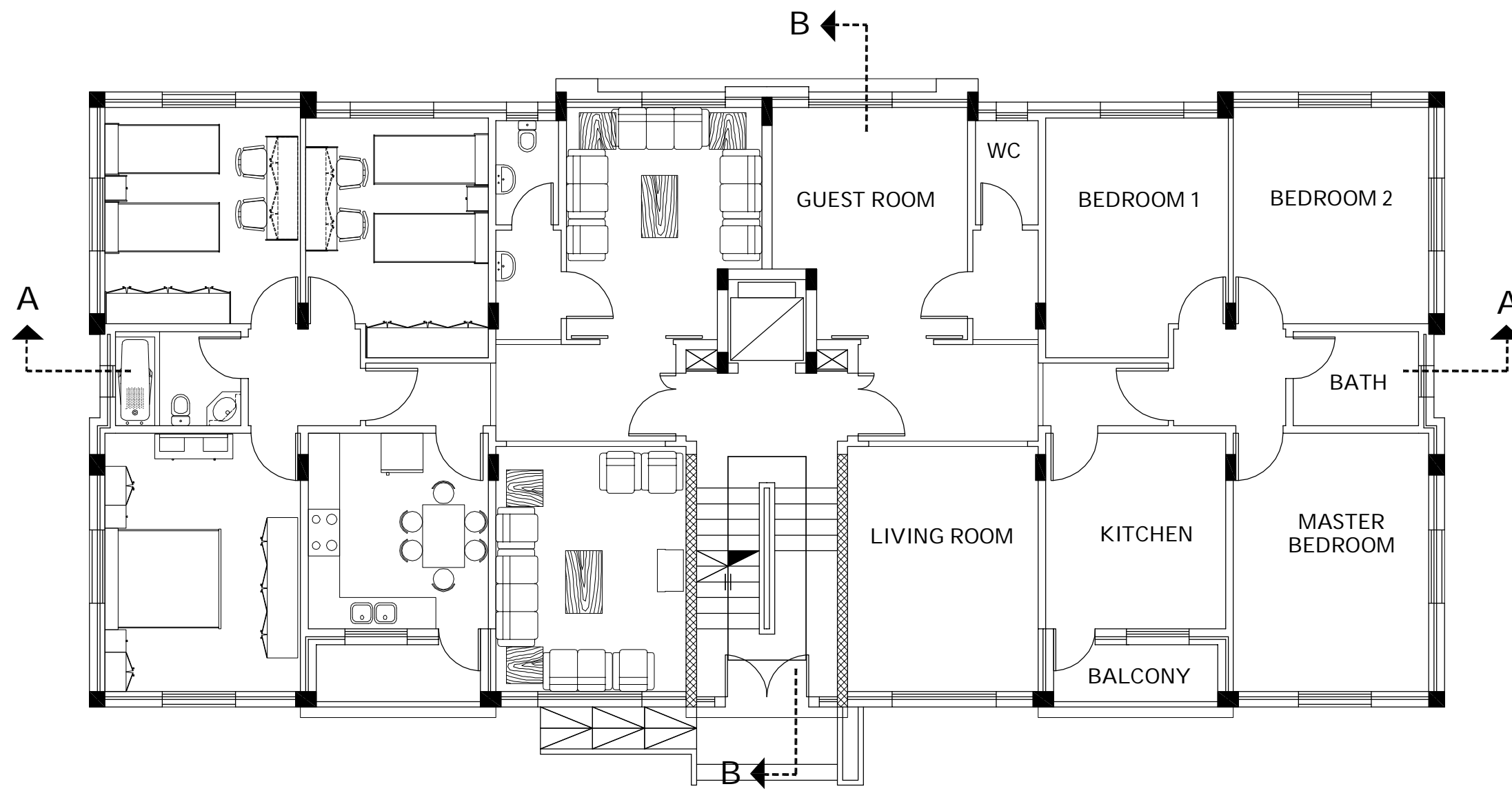
FURNITURE FOR UNDERGROUND FLOOR

DRAWING NO.:

RE-A-004

DATE: APRIL 2011

SCALE: 1:100



FURNITURE FOR GROUND FLOOR
SCALE: 1:100

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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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

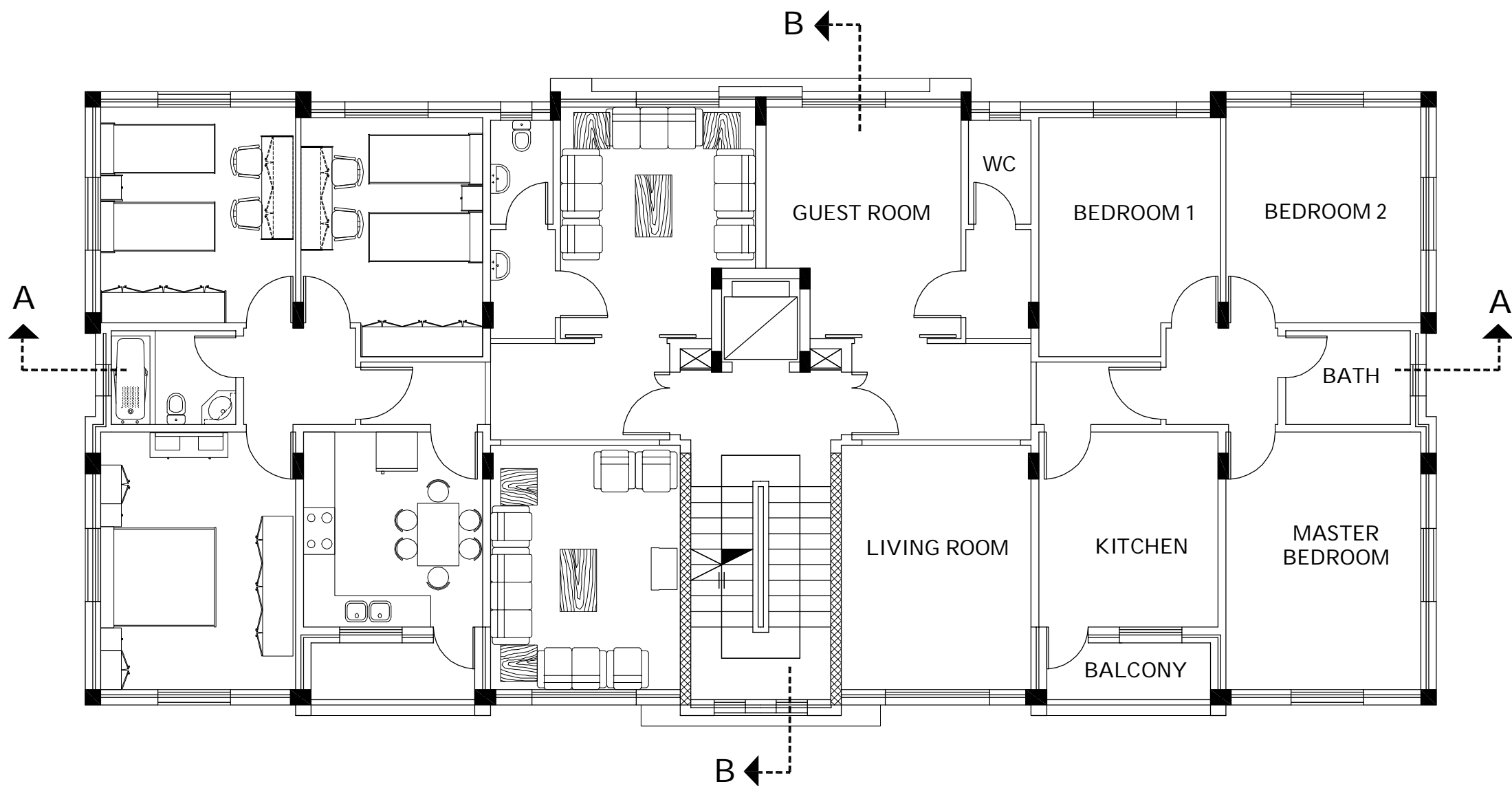
FURNITURE FOR GROUND FLOOR

DRAWING NO.:

RE-A-005

DATE: APRIL 2011

SCALE: 1:100



NOTES :-

- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE STARTING ANY WORKS.
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- 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
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CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

FURNITURE FOR TYPICAL FLOOR

DRAWING NO.:

RE-A-006

DATE: APRIL 2011

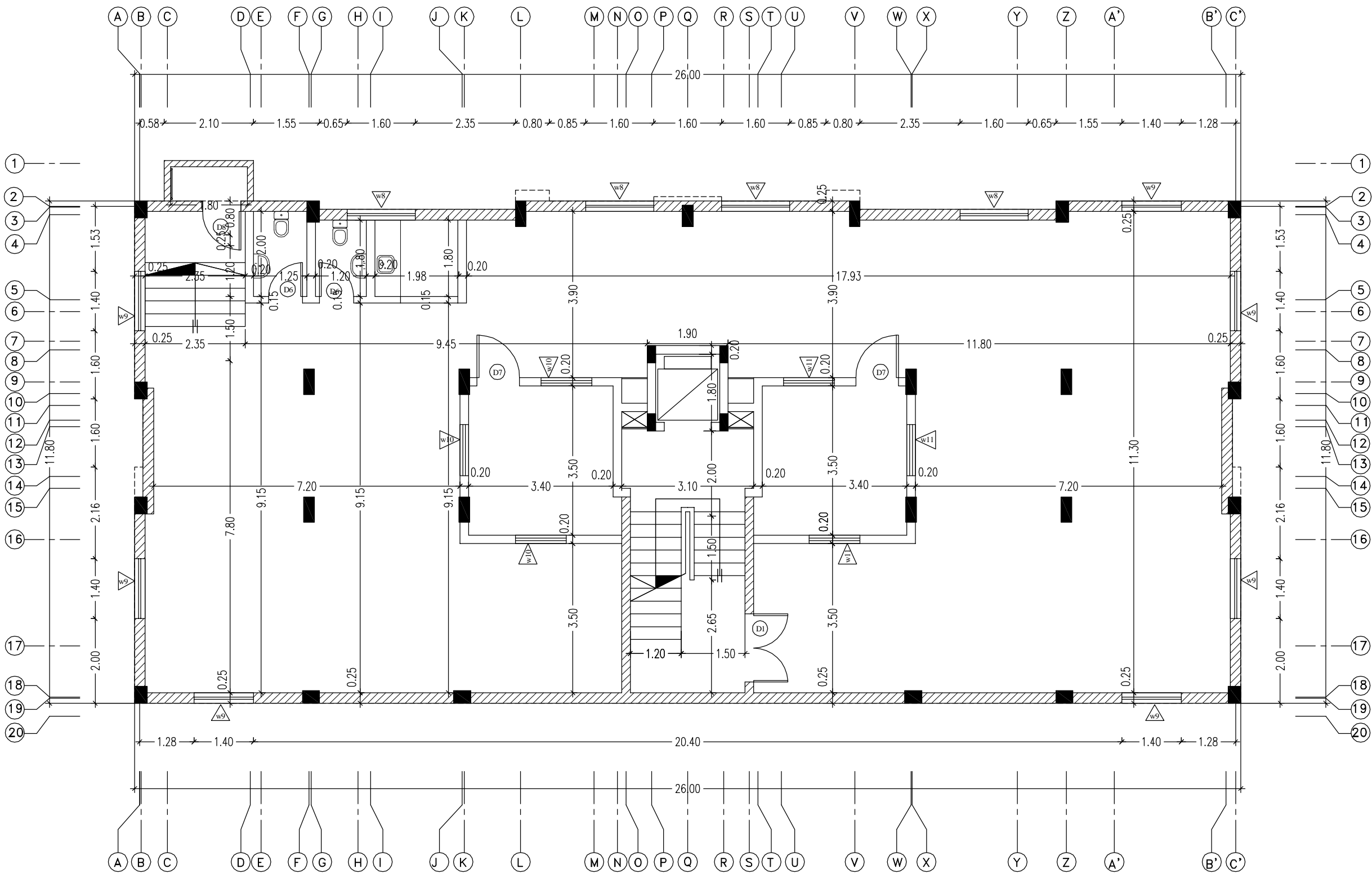
SCALE: 1:100

FURNITURE FOR TYPICAL FLOOR

SCALE: 1:100

NOTES :-

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UNDERGROUND FLOOR PLAN

SCALE: 1:100

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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CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

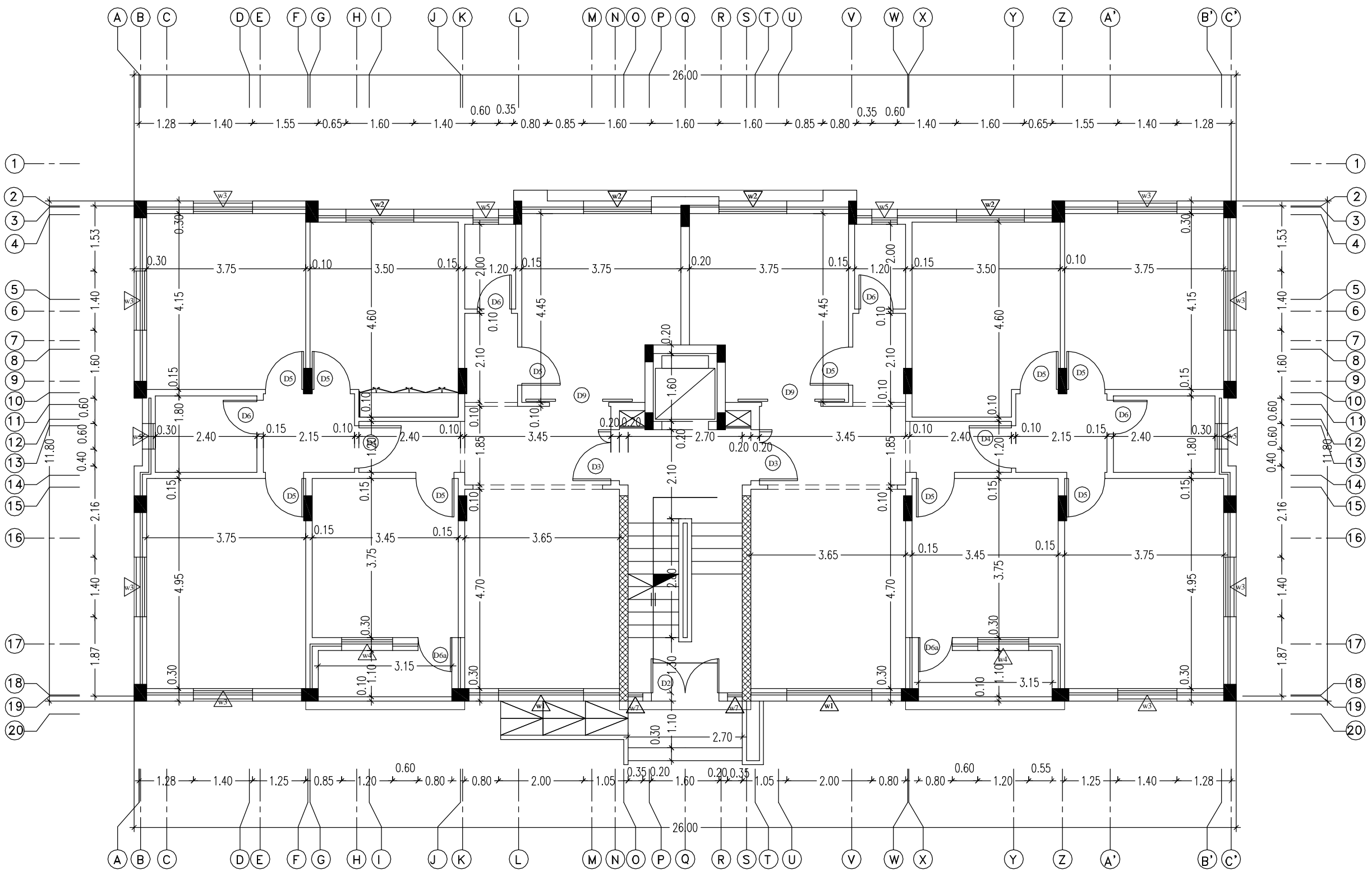
DRAWING TITLE:
UNDERGROUND FLOOR PLAN

DRAWING NO.: RE-A-07

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


NOTES :-


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GROUND FLOOR PLAN
SCALE: 1:100

FOR TENDER ONLY

CLIENT:
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EMPLOYER:
 THE UNITED NATIONS DEVELOPMENT PROGRAMME
PROGRAMME OF ASSISTANCE TO THE
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CONSULTANT:
 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

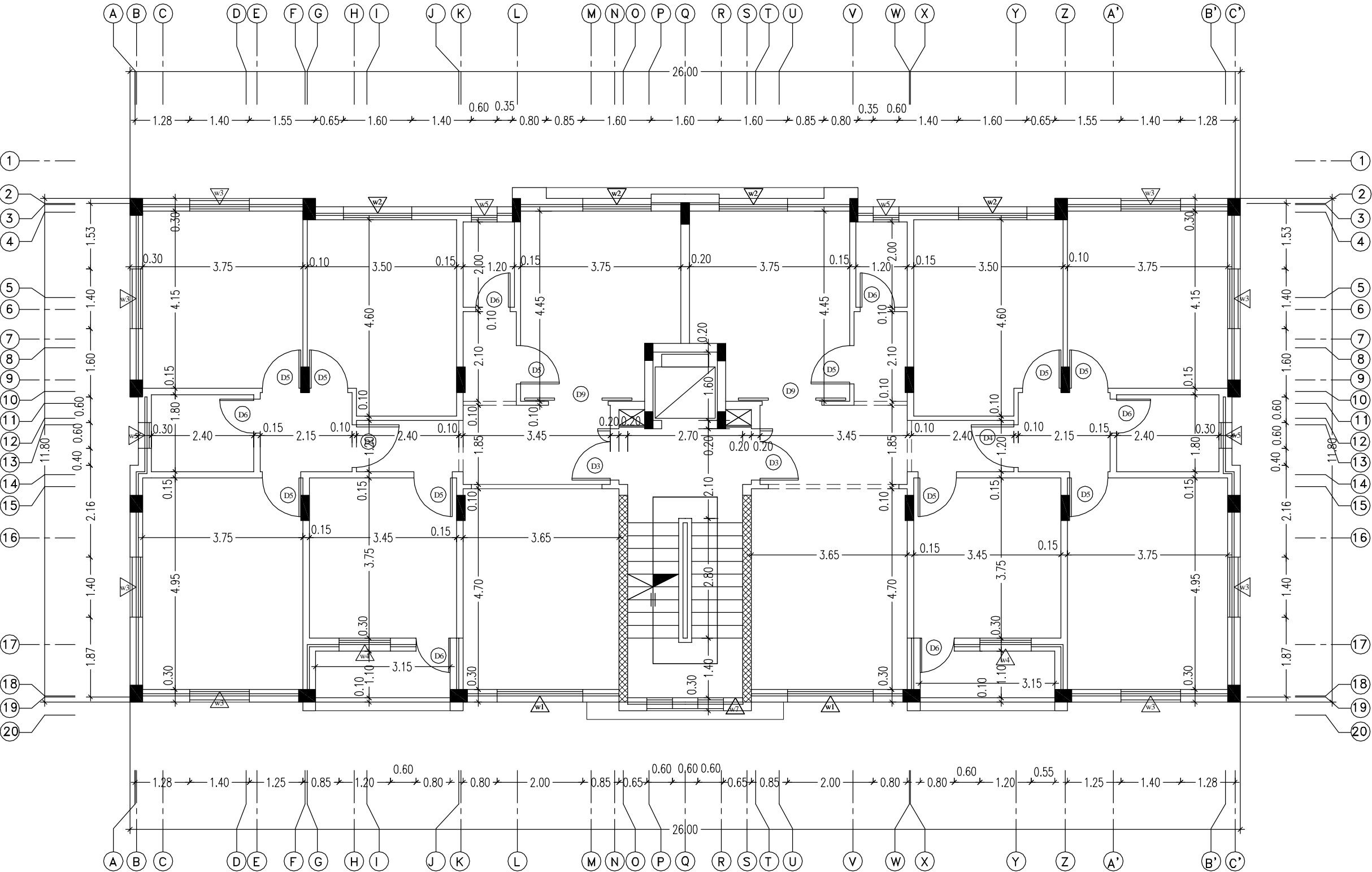
DRAWING TITLE:
GROUND FLOOR PLAN

DRAWING NO.: RE-A-008

DATE: APRIL 2011 SCALE: 1:100

NOTES :-

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TYPICAL FLOOR PLAN

SCALE: 1:100

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 NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
TYPICAL FLOOR PLAN

DRAWING NO.: RE-A-009

DATE: APRIL 2011 SCALE: 1:100

NOTES :-

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PROJECT TITLE:
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

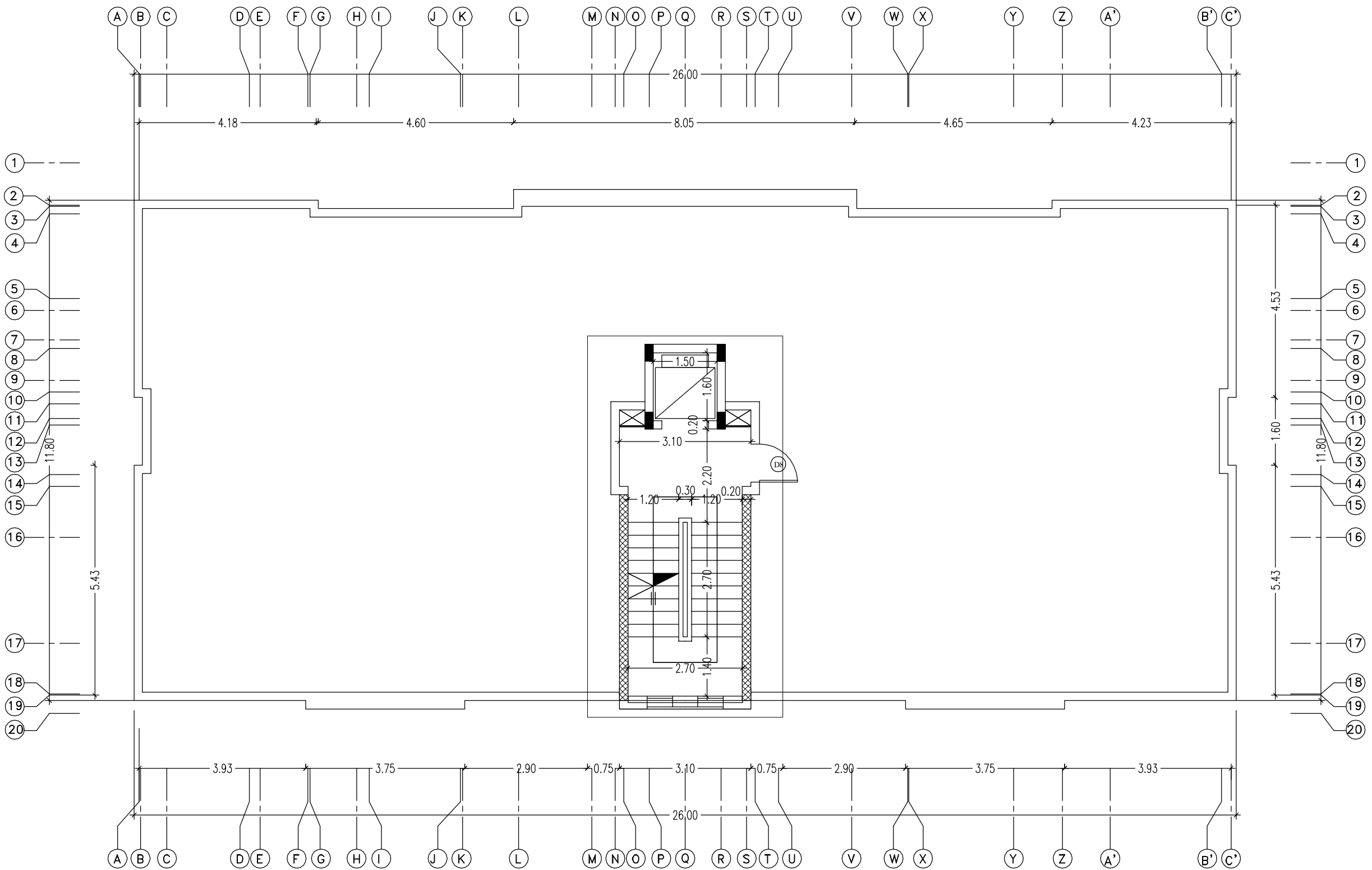
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
ROOF PLAN

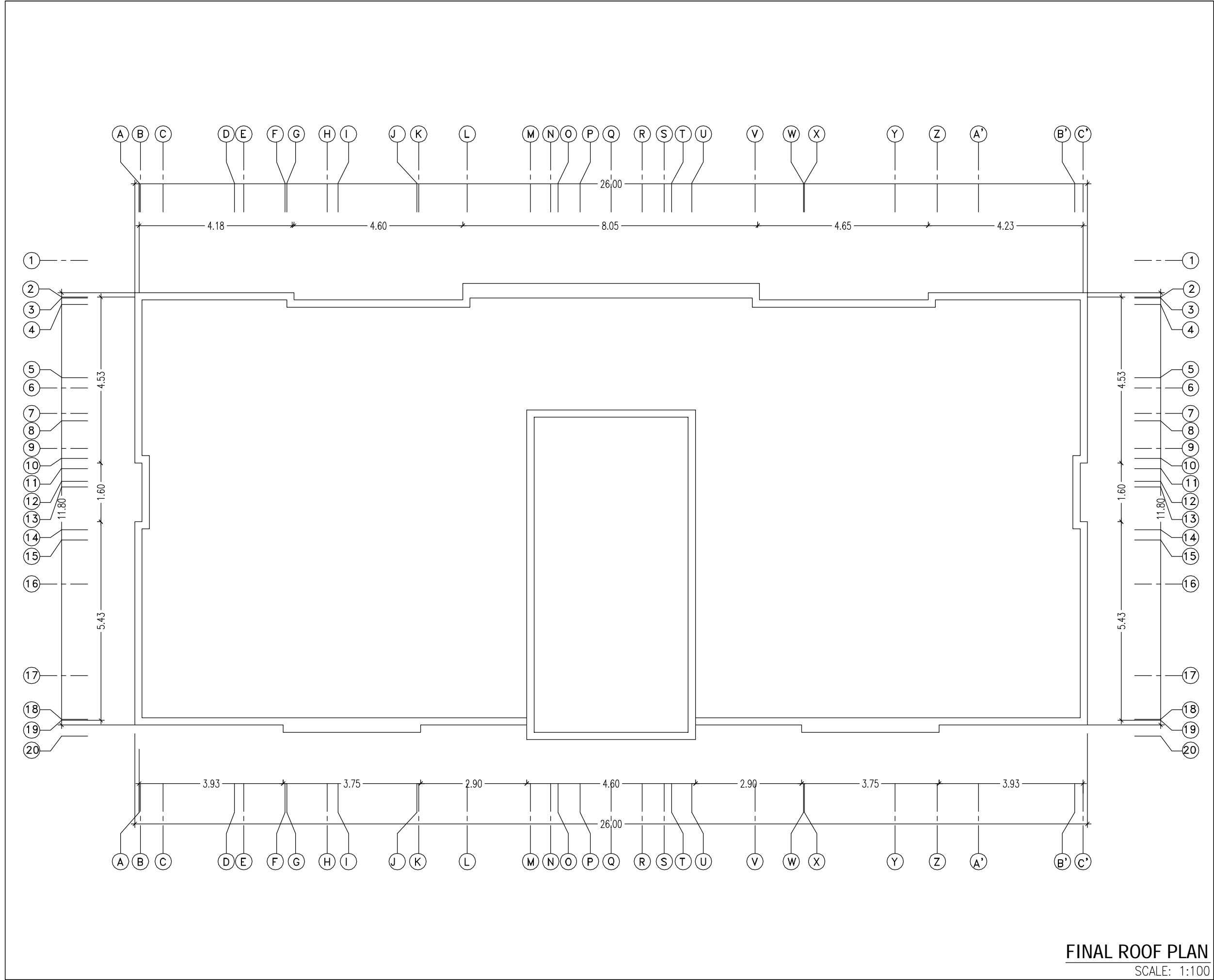
DRAWING NO.: RE-A-010

DATE: APRIL 2011 SCALE: 1:100



ROOF FLOOR PLAN


SCALE: 1:100




NOTES :-


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 THE UNITED NATIONS DEVELOPMENT PROGRAMME
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PROJECT TITLE:
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

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

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
FINAL ROOF PLAN

DRAWING NO.: RE-A-011

DATE: APRIL 2011 | SCALE: 1:100

NOTES :-

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ممرينا أبيض ①

ممرينا بيج ②

ممرينا أزرق فاتح ③

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

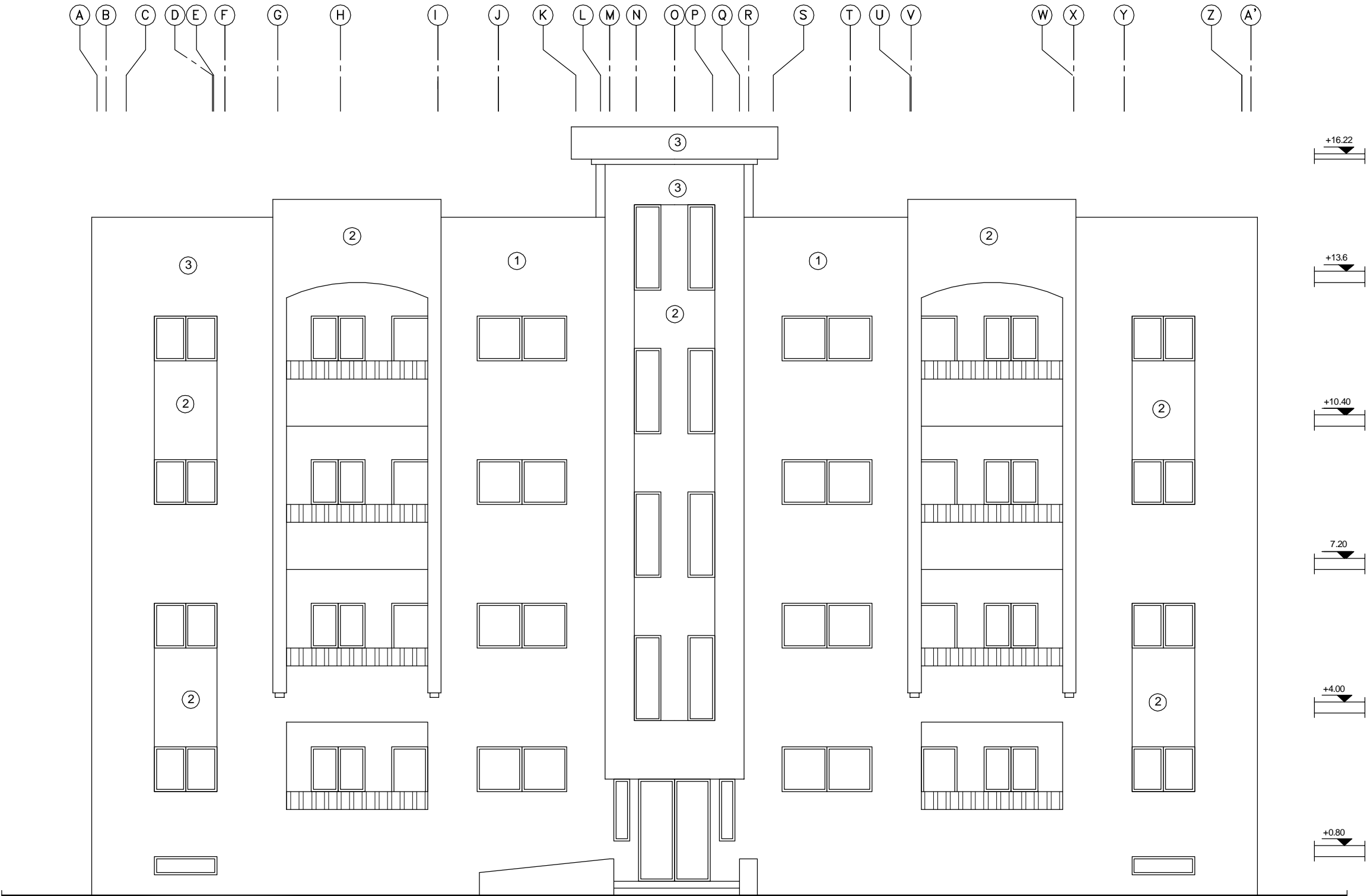
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
TYPICAL FRONT ELEVATION

DRAWING NO.: RE-A-012

DATE: APRIL 2011 SCALE: 1:100



FRONT ELEVATION

SCALE: 1:100

NOTES :-

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① مرمينا أبيض

② مرمينا بيج

③ مرمينا أزرق فاتح

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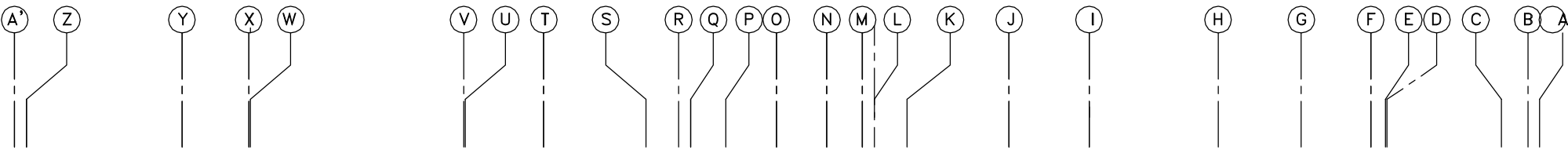
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
TYPICAL BACK ELEVATION

DRAWING NO.: RE-A-013

DATE: APRIL 2011 SCALE: 1:100



+16.22

+13.6

+10.40

7.20

+4.00

+0.80

BACK ELEVATION

SCALE: 1:100

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① مرمينا أبيض

② مرمينا بيج


③ مرمينا أزرق فاتح

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

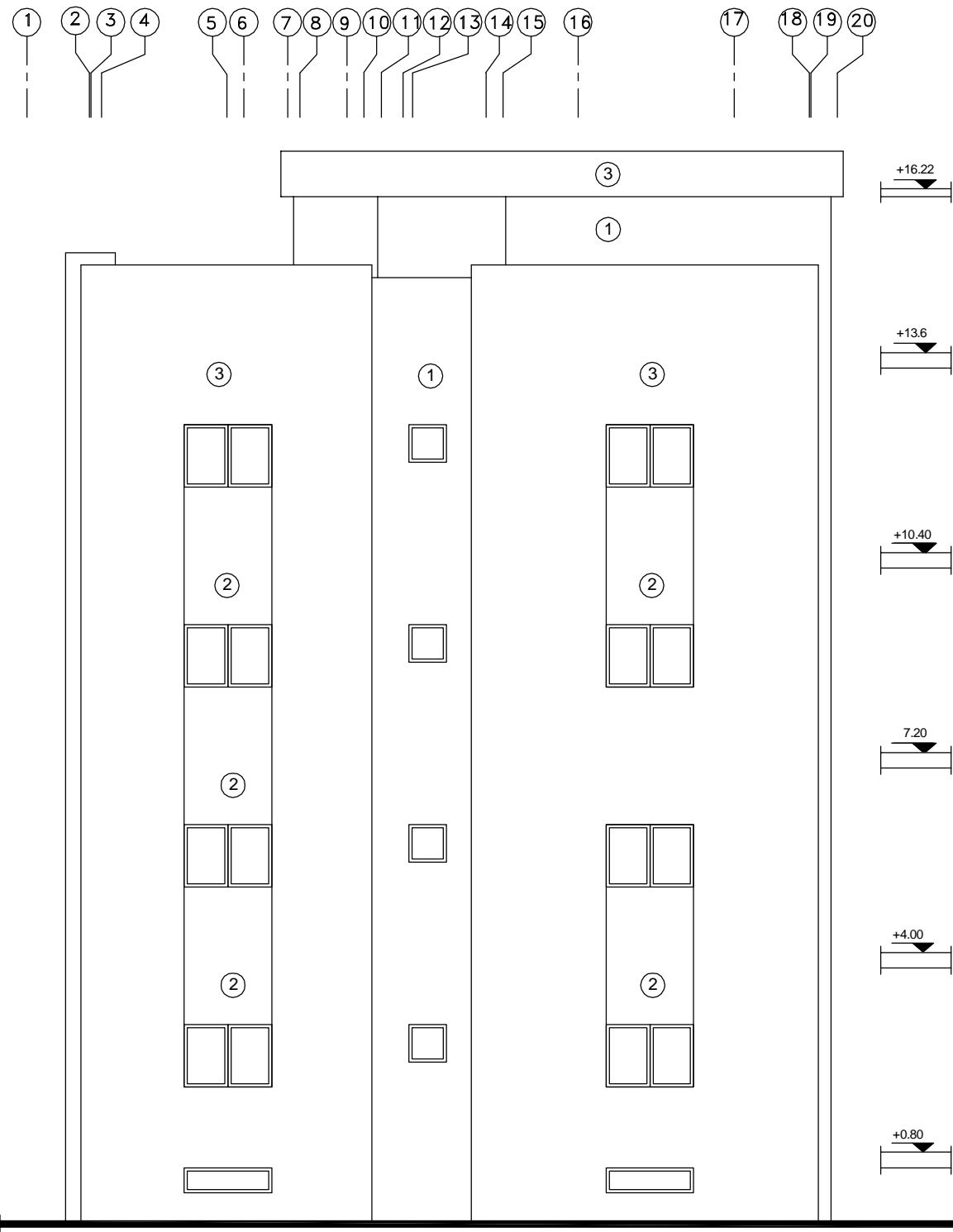
CONSULTANT:
 مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

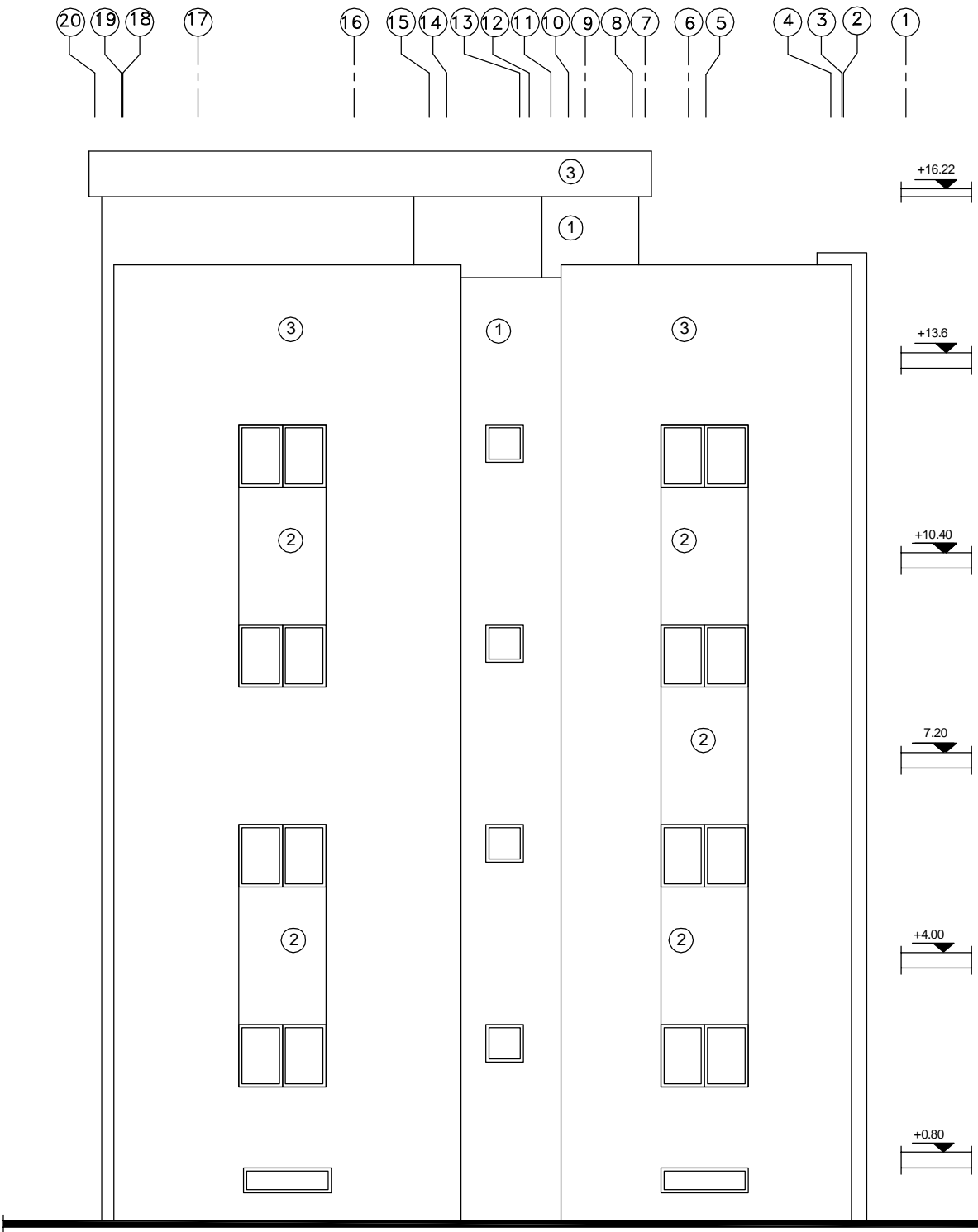
DRAWING TITLE:
SIDE ELEVATIONS, TYPE B

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

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
TYPICAL LONGITUDINAL SECTION

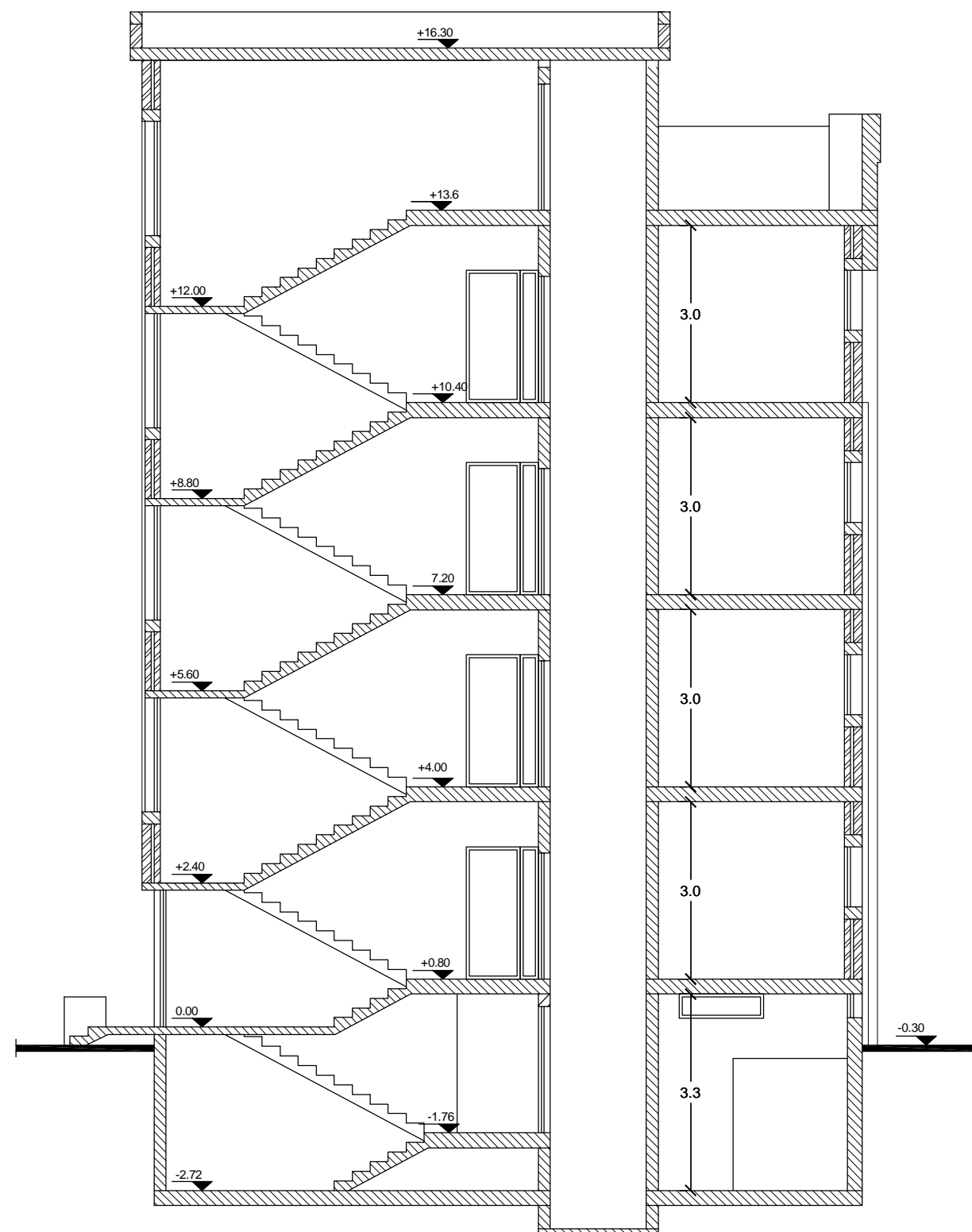
DRAWING NO.: RE-A-015

DATE: APRIL 2011 SCALE: 1:100



LONGITUDINAL SECTION A-A

SCALE: 1:100





CROSS SECTION B-B
SCALE: 1:100

NOTES :-

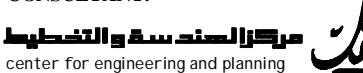
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PROGRAMME OF ASSISTANCE TO THE
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DP (UNDP/PAPP)

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
 center for engineering and planning

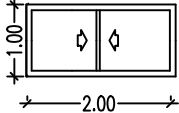
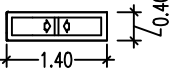
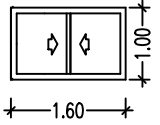
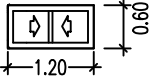
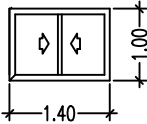
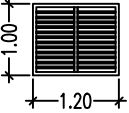
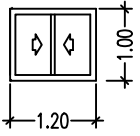

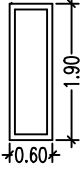

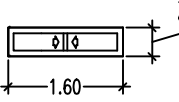
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
CROSS SECTIONS

DRAWING NO.: RE-A-016

DATE: APRIL 2011 SCALE: 1:100

جدول الشبائيك

رقم الشباك	الفتحة الانشائية	المادة	نظام الفتح	رقم الشباك	الفتحة الانشائية	المادة	نظام الفتح
W1		المنيوم	سحاب	W9		المنيوم	سحاب شباك الهدوم
W2		المنيوم	سحاب	W10		المنيوم	سحاب
W3		المنيوم	سحاب	W11		حديد	لوفر
W4		المنيوم	سحاب				
W5		المنيوم	قلاّب				
W6		المنيوم	قلاّب شباك الدرج				
W7		المنيوم	قلاّب شباك بجوار مدخل الصارة				
W8		المنيوم	سحاب شباك الهدوم				

جدول الابواب

رقم الباب	الفتحة الانشائية		المادة	نظام الفتح وعدد الضلف
	العرض	الارتفاع		
D1	160	230	حديد	مفصلي ضلفتين
D2	160	230	حديد	مفصلي ضلفتين
D3	120	230	خشب	مفصلي ضلفتين
D4	100	230	خشب	مفصلي ضلفة واحدة
D5	90	230	خشب	مفصلي ضلفة واحدة
D6	80	230	خشب	مفصلي ضلفة واحدة
D6a	80	230	حديد	مفصلي ضلفة واحدة
D7	100	230	حديد	مفصلي ضلفة واحدة
D8	90	230	حديد	مفصلي ضلفة واحدة
D9	140	230	خشب	سحاب ضلفتين

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 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 08)

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

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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 :-

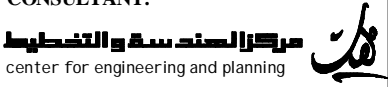
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
 مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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	●	●	●	●	●	●	●	●	●	●
البانيل	كسر رخام	1	●	●	●		●	●			●	●
	رخام أو جرانيت	2									●	
الحوائط الخارجية	● قضارة + رشقة شبريز											


FINISHES TABLE
SCALE: NOT TO SCALE

NOTES :-


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- 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
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 08)

CONSULTANT:
 مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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

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BUILDING NAME:
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DRAWING TITLE:
FINISHES TABLE (3/3)

DRAWING NO.: RE-A-020

DATE: APRIL 2011 | SCALE: NTS

NOTES :-

- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE STARTING ANY WORKS.
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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.**

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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 NO.: PAL 10-00070416 (PACKAGE 08)

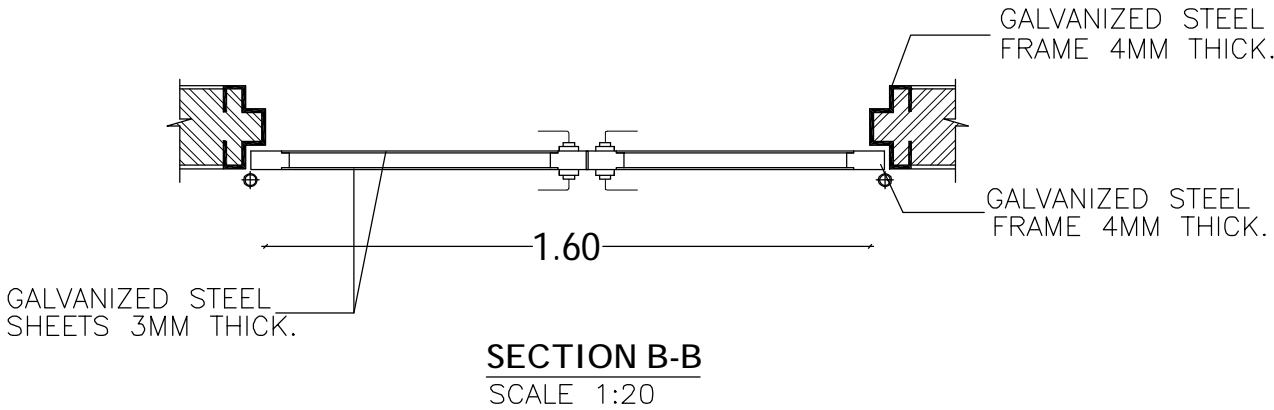
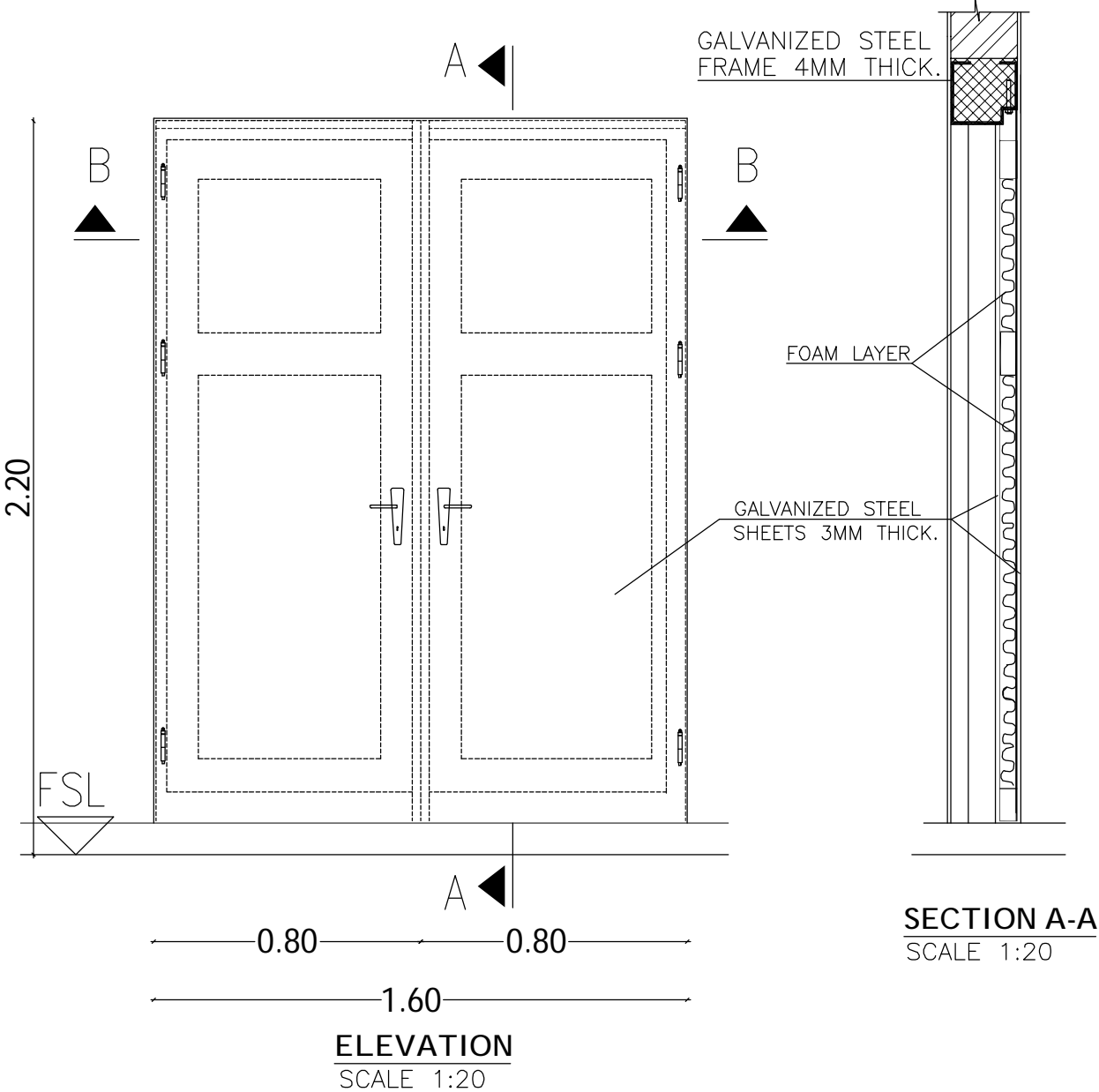
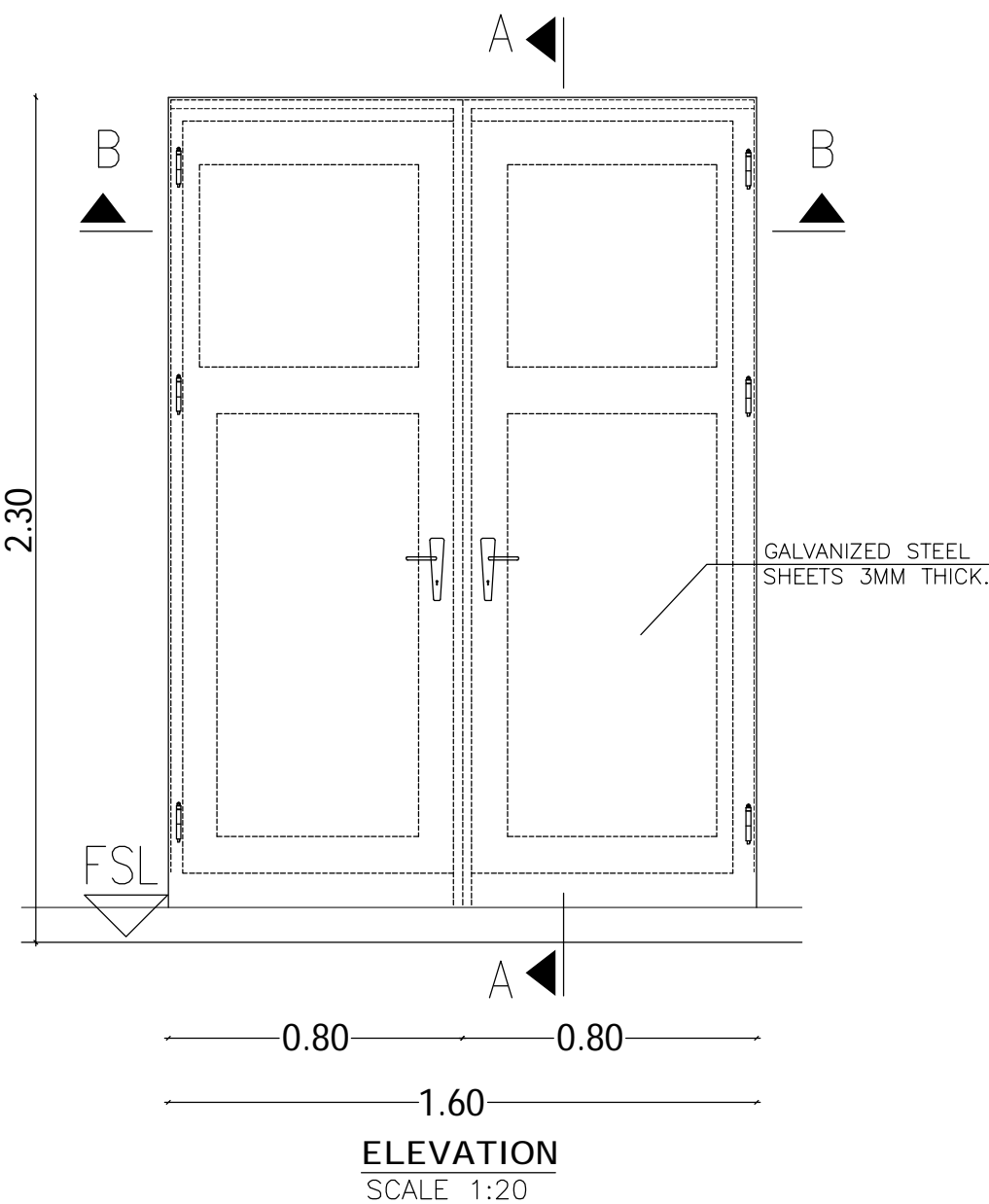
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

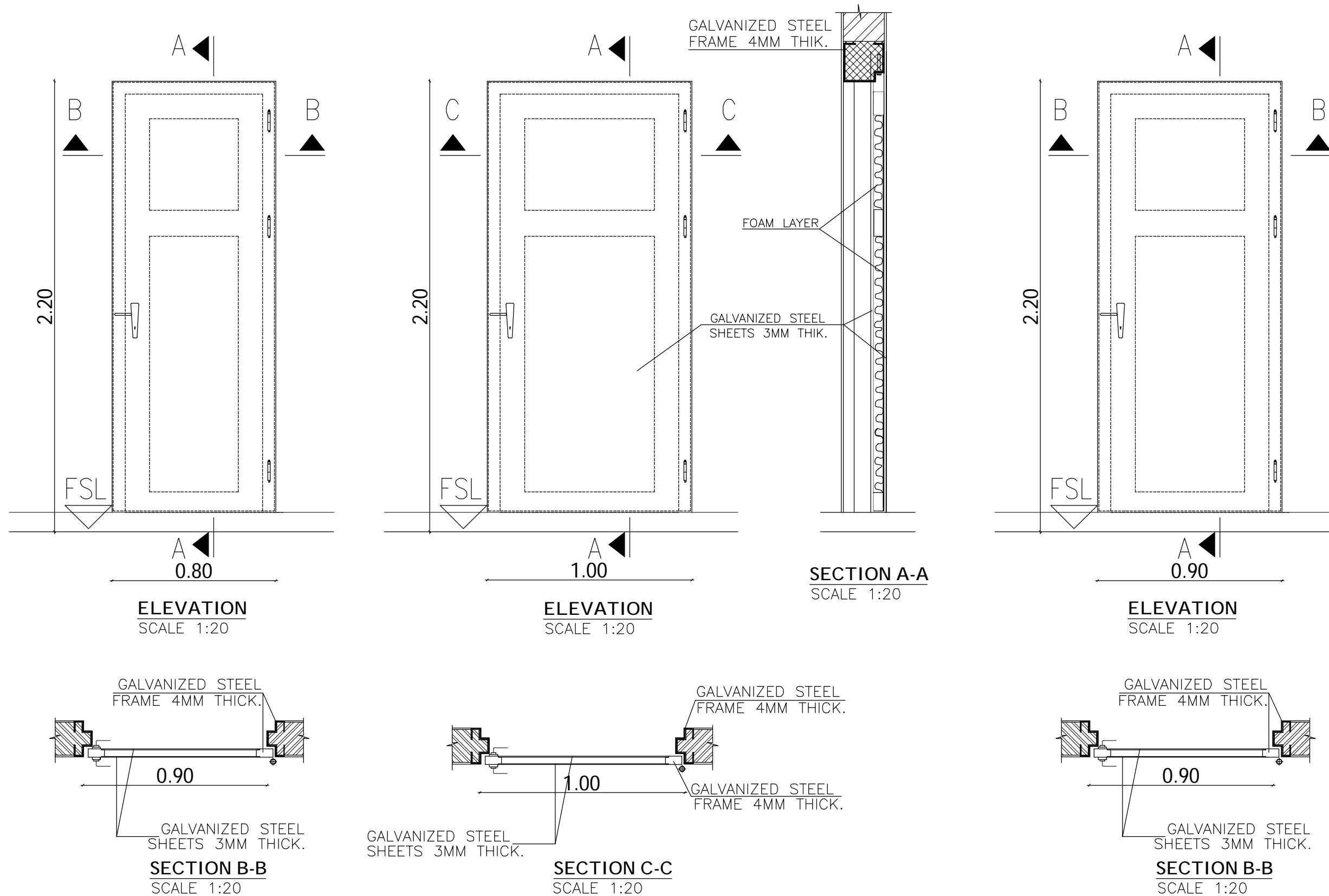
DRAWING TITLE:
METAL DOOR DETAILS(1/2)

DRAWING NO.: RE-A-021

DATE: APRIL 2011 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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****SAMPLES OF ALL MATERIALS MUST BE APPROVED THE ENGINEER BEFORE STARTING THE WORK.**

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

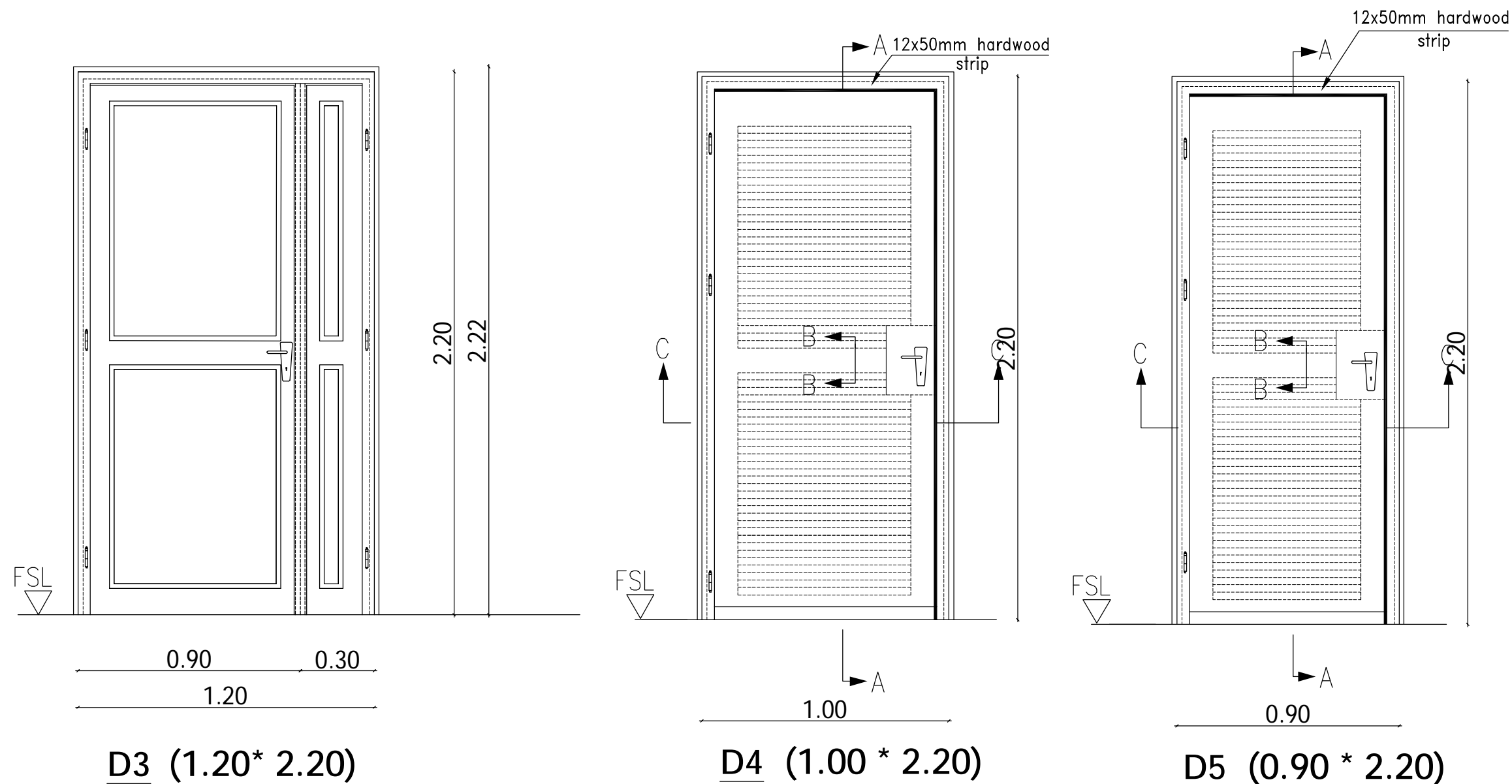
RESIDENTIAL BUILDING NO. (B6)

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 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.**

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

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

BUILDING NAME:

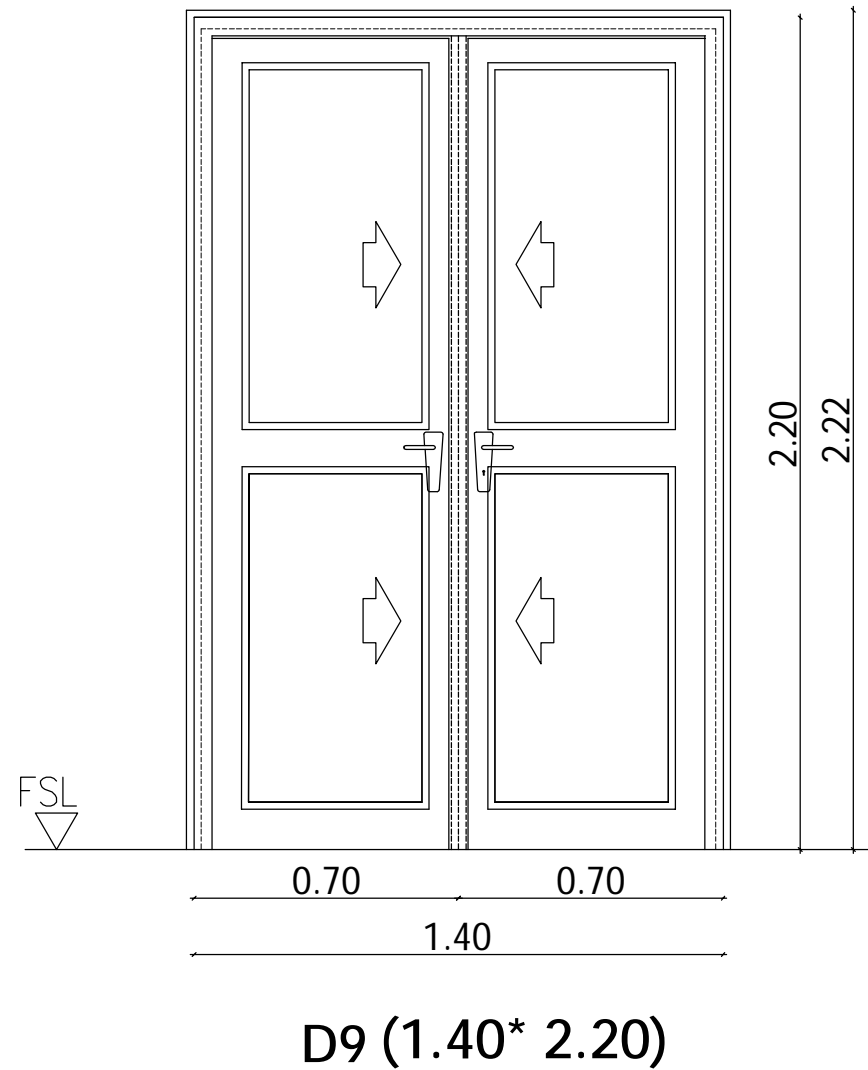
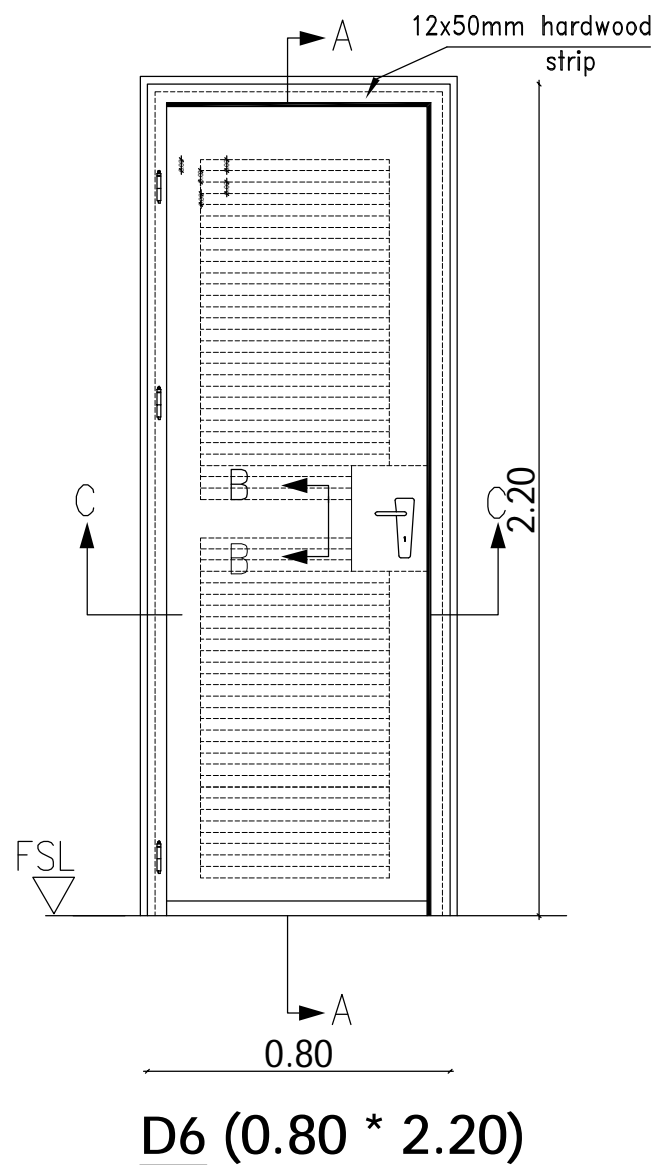
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

WOODEN DOOR DETAILS(1/2)

DRAWING NO.: RE-A-023

DATE: APRIL 2011 | SCALE: 1:20



WOODEN DOOR DETAILS
SCALE: 1:20

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- 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.
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- THE DOOR LOCK IS "SWITCH UNION" (BEST QUALITY).

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DRAWING TITLE:

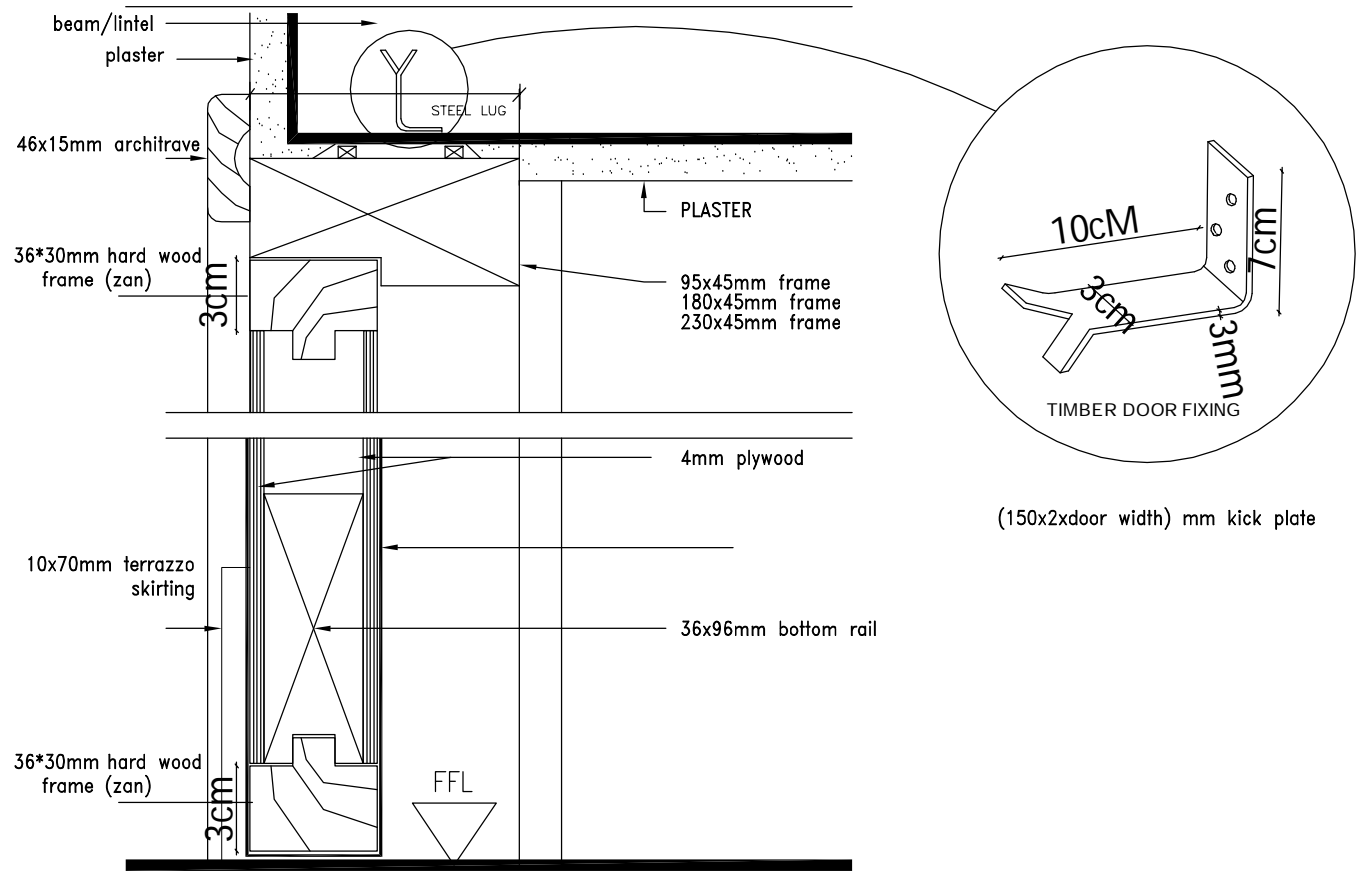
WOODEN DOOR DETAILS(2/2)

DRAWING NO.: RE-A-024

DATE: APRIL 2011 SCALE: 1:20

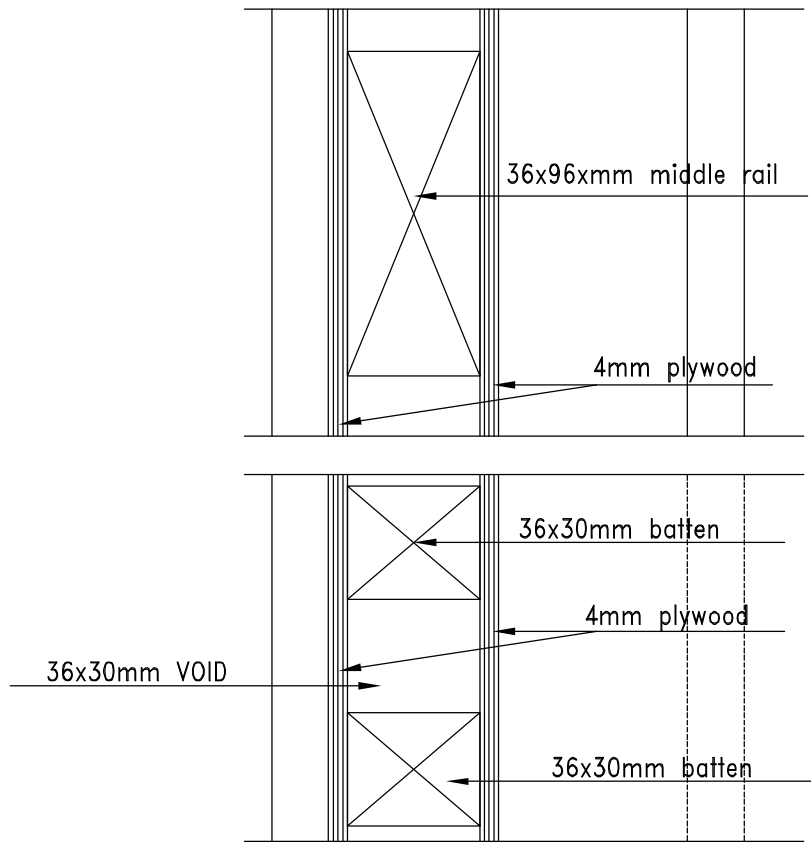
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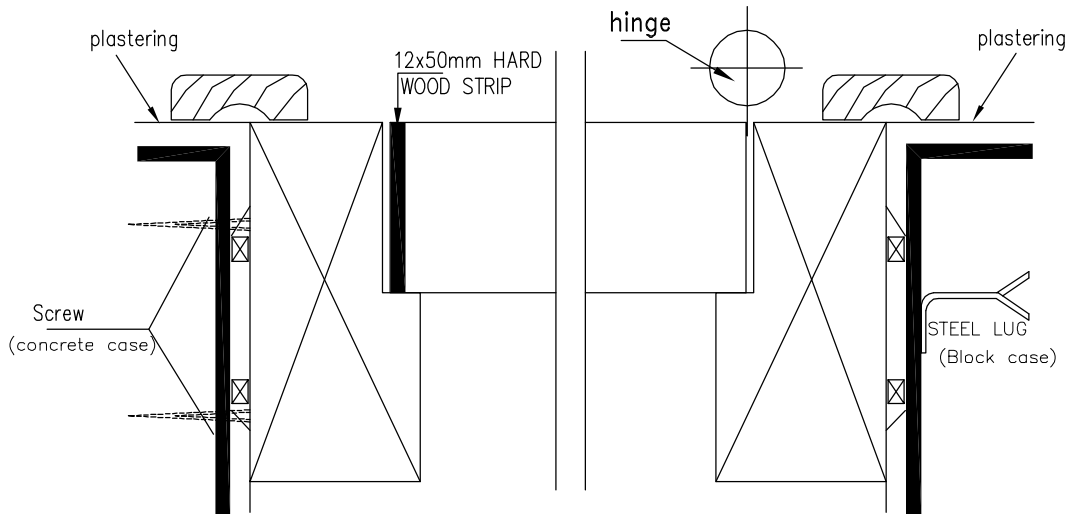


(150x2xdoor width) mm kick plate

SECTION A-A



SECTION B-B



SECTION C - C

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BUILDING NAME:

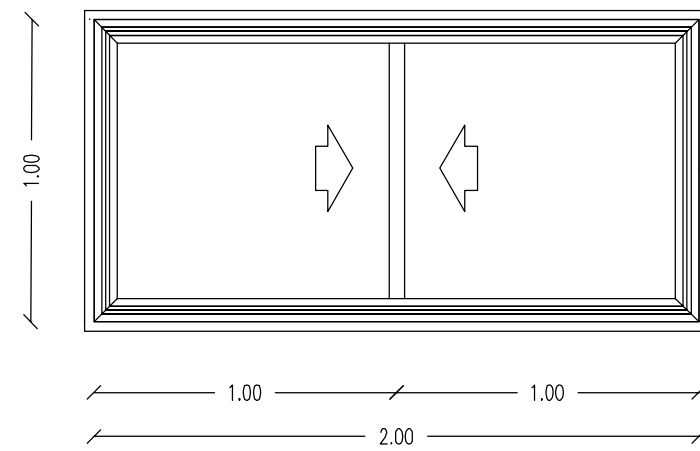
RESIDENTIAL BUILDING NO. (B6)

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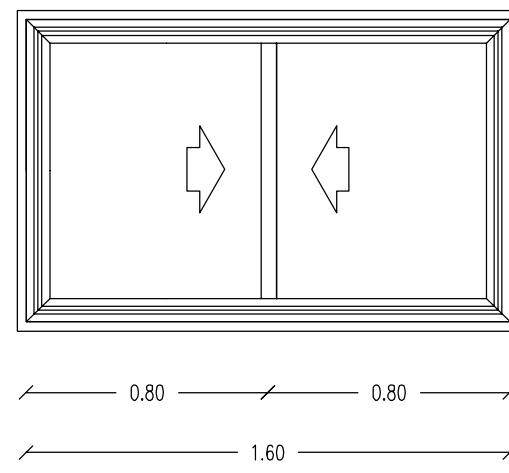
WINDOWS ELEVATION

DRAWING NO.: RE-A-025

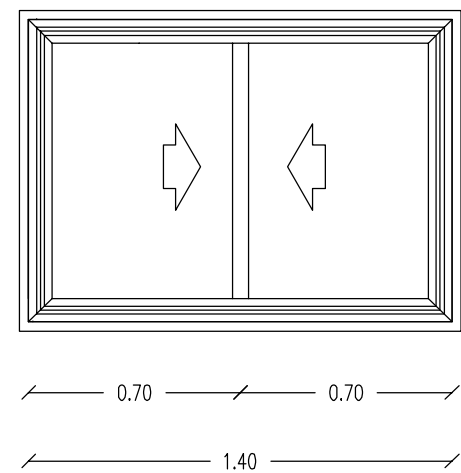
DATE: APRIL 2011 SCALE: NTS



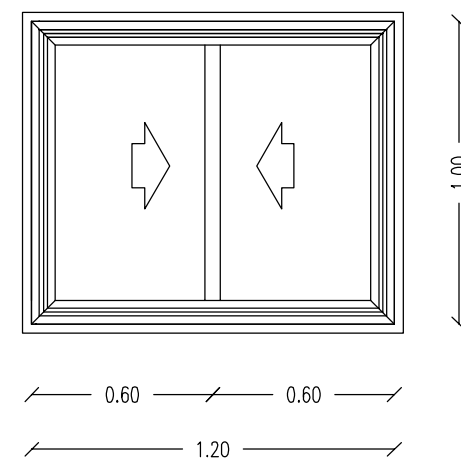
W1 (2.0*1.0M)



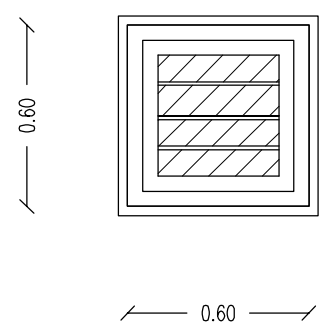
W2 (1.6*1.0M)



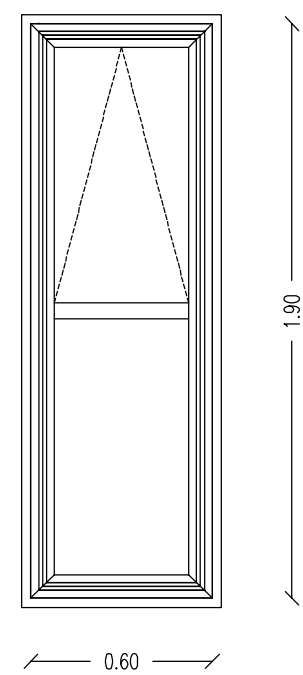
W3 (1.4*1.0M)



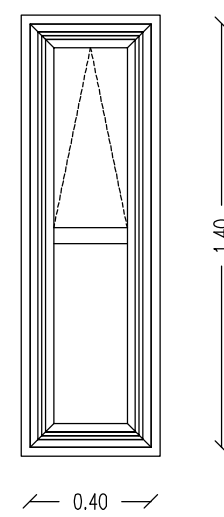
W4 (1.2*1.0M)



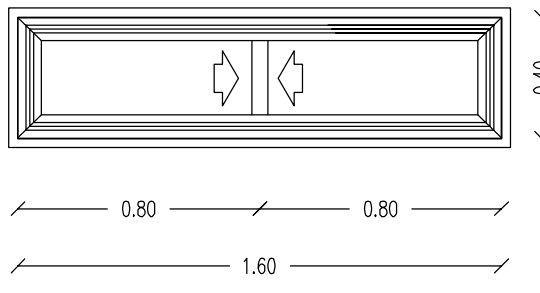
W5 (0.6*0.6M)



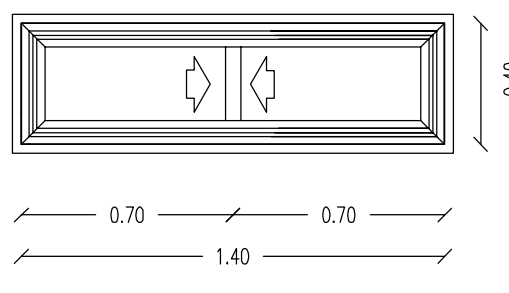
W6 (0.6*1.9M)



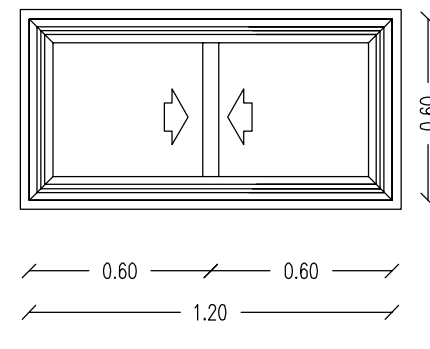
W7 (0.4*1.4M)



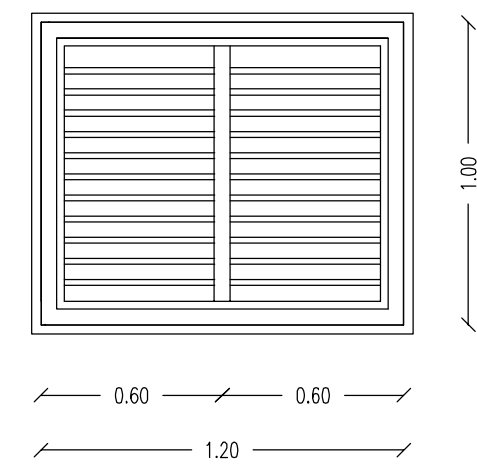
W8 (1.6*0.4M)



W9 (1.4*0.4M)



W10 (1.2*0.6M)



W11 (1.2*1.0M)

WINDOWS ELEVATION
SCALE: 1:25

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

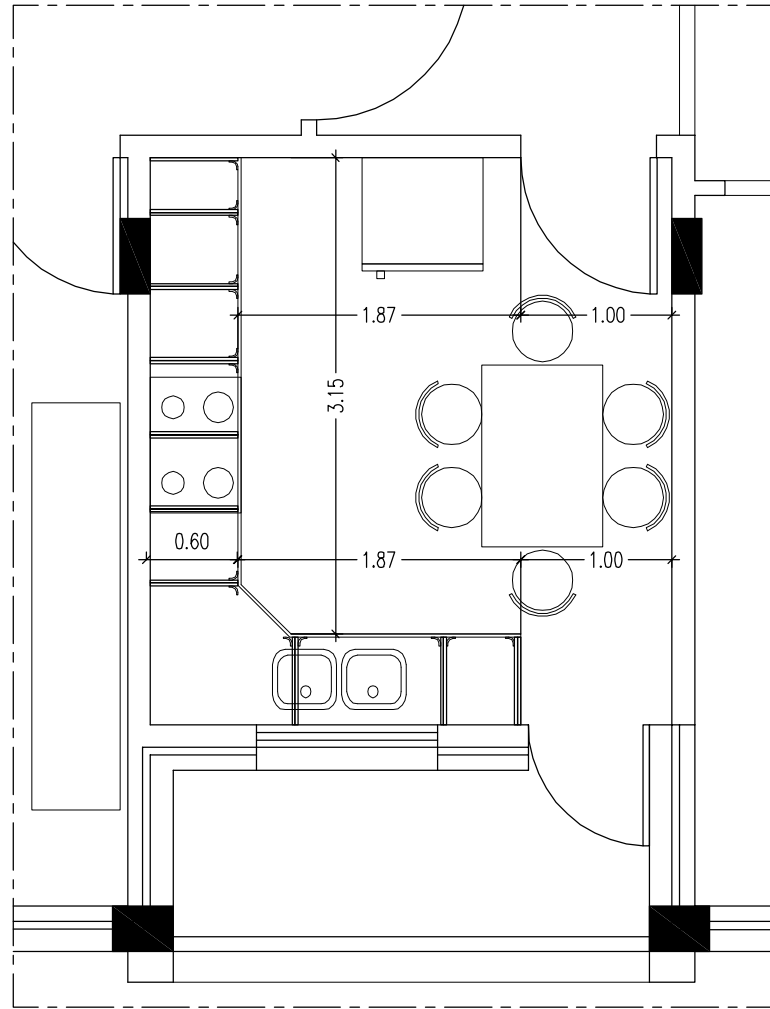
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

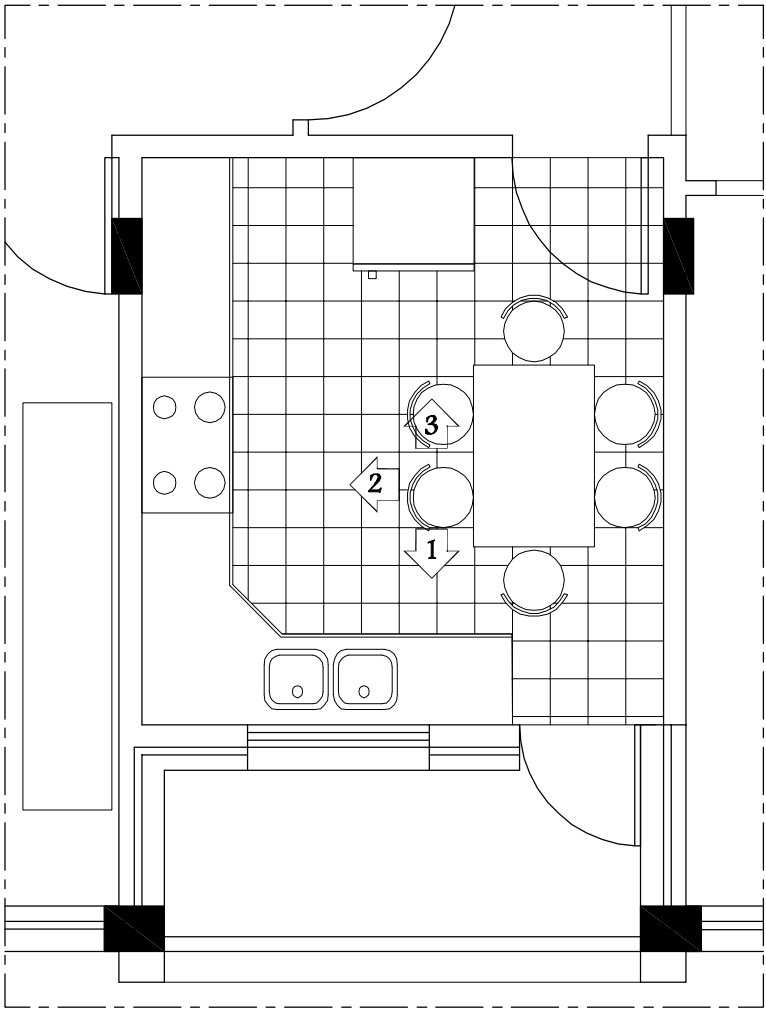
DRAWING TITLE:
WINDOWS ELEVATION

DRAWING NO.: RE-A-026

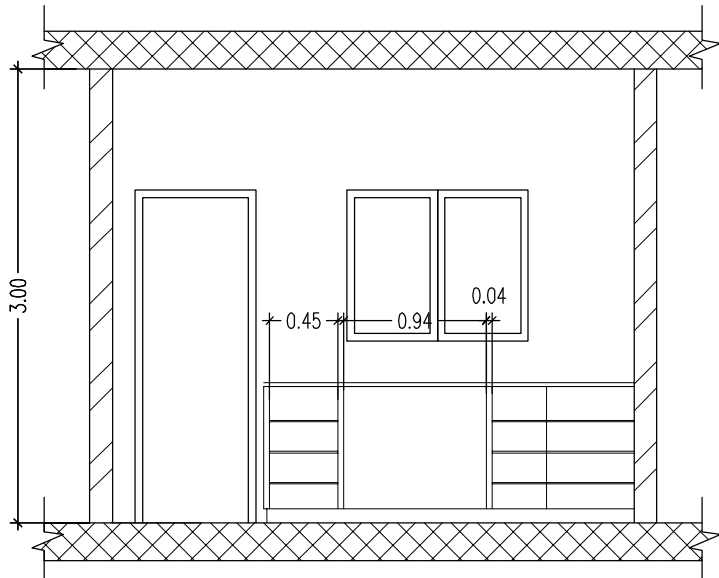
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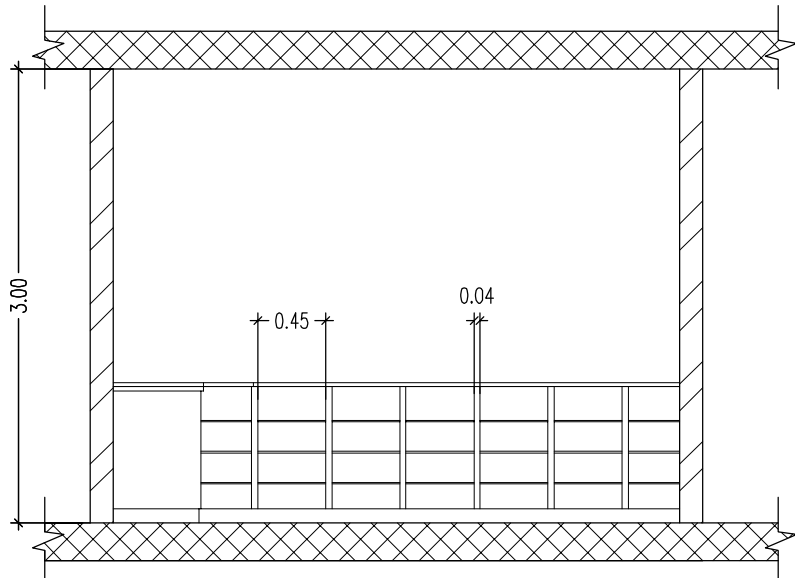
KITCHEN PLAN & DIMENSIONS
SCALE 1:50



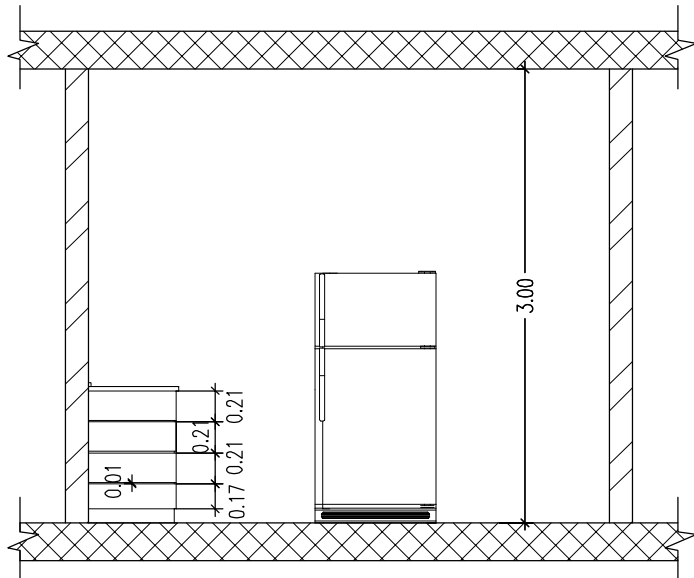
KITCHEN PLAN
SCALE 1:50



ELEVATION 1
SCALE 1:50



ELEVATION 2
SCALE 1:50



ELEVATION 3
SCALE 1:50

KITCHEN DETALIS
SCALE: 1:50

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CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
KITCHEN DETAILS

DRAWING NO.: RE-A-027

DATE: APRIL 2011 SCALE: 1:50

EMPLOYER:



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CLIENT



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CONSULTANT

مركز الهندسة والتخطيط
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STRUCTURAL DRAWINGS

EMPLOYER:



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CLIENT



PALESTINIAN NATIONAL AUTHORITY
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CONSULTANT

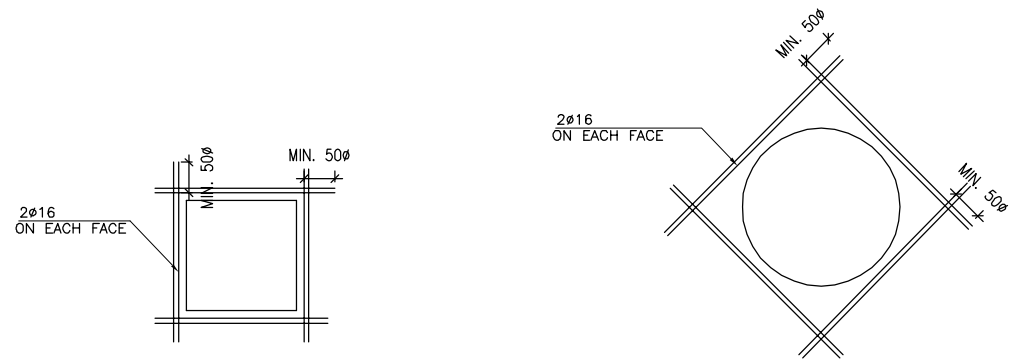
مركز الهندسة والتخطيط
center for engineering and planning



LIST OF DRAWINGS

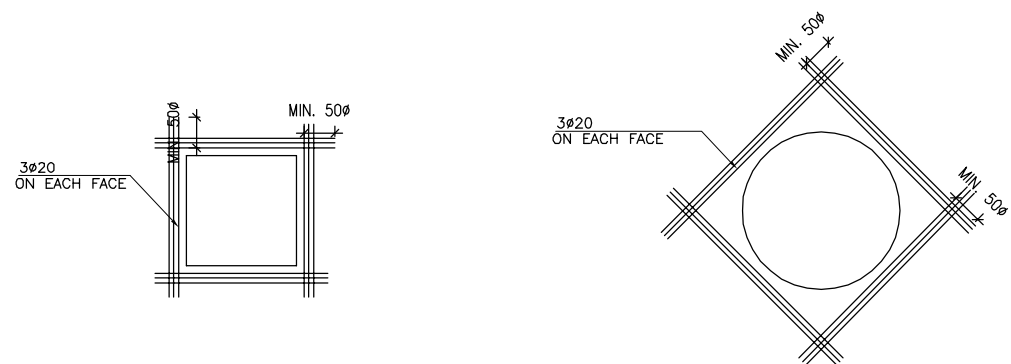
S/NO.	DRAWING NAME	DWG. NO.
STRUCTURAL DRAWING		
01/21	GENERAL STRUCTURAL DETAILS	RE-S-000
02/21	COLUMN AXES	RE-S-001
03/21	GENERAL LAYOUT AND DIMENSIONS FOR FOOTINGS	RE-S-002
04/21	FOOTING DETAILS (1/2)	RE-S-003
05/21	FOUNDATIONS DETAILS (2/2)	RE-S-004
06/21	BASEMENT WALL & SHEAR WALL DETAILS	RE-S-005
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

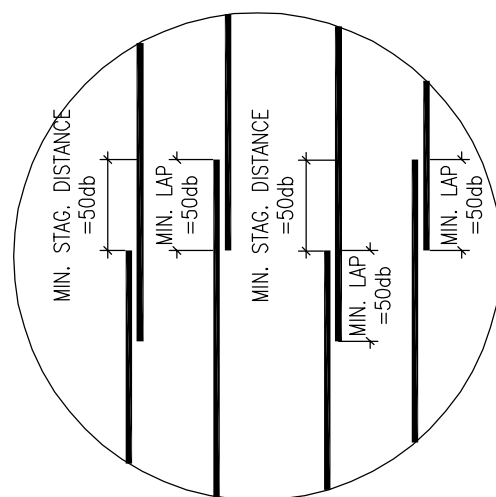
CIRCULAR OPENING < 500mm



RECTANGULAR OPENING > 500mm

CIRCULAR OPENING > 500mm

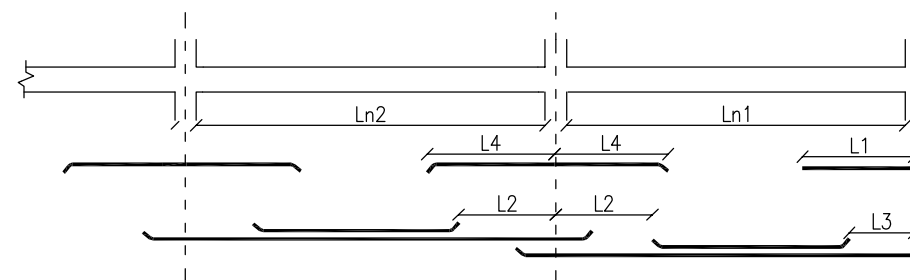
DETAIL AROUND OPENING IN R.C. WALL & SLAB (UNLESS SHOWN OTHERWISE ON DRAWINGS)



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

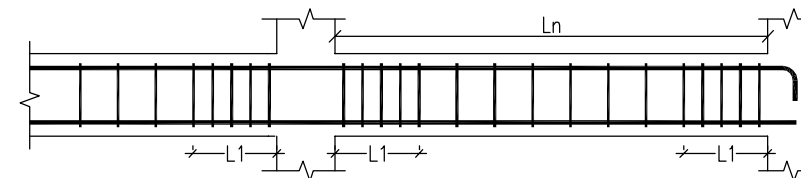
- BARS CUTOFF IN BEAMS:

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.

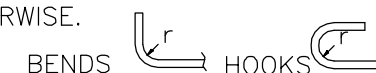
BARS CUTOFF IN BEAMS



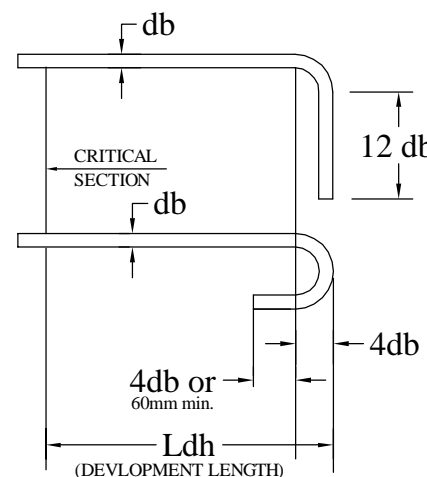
- $L1 = Ln/6$

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/m².

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 08)

CONSULTANT:



مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

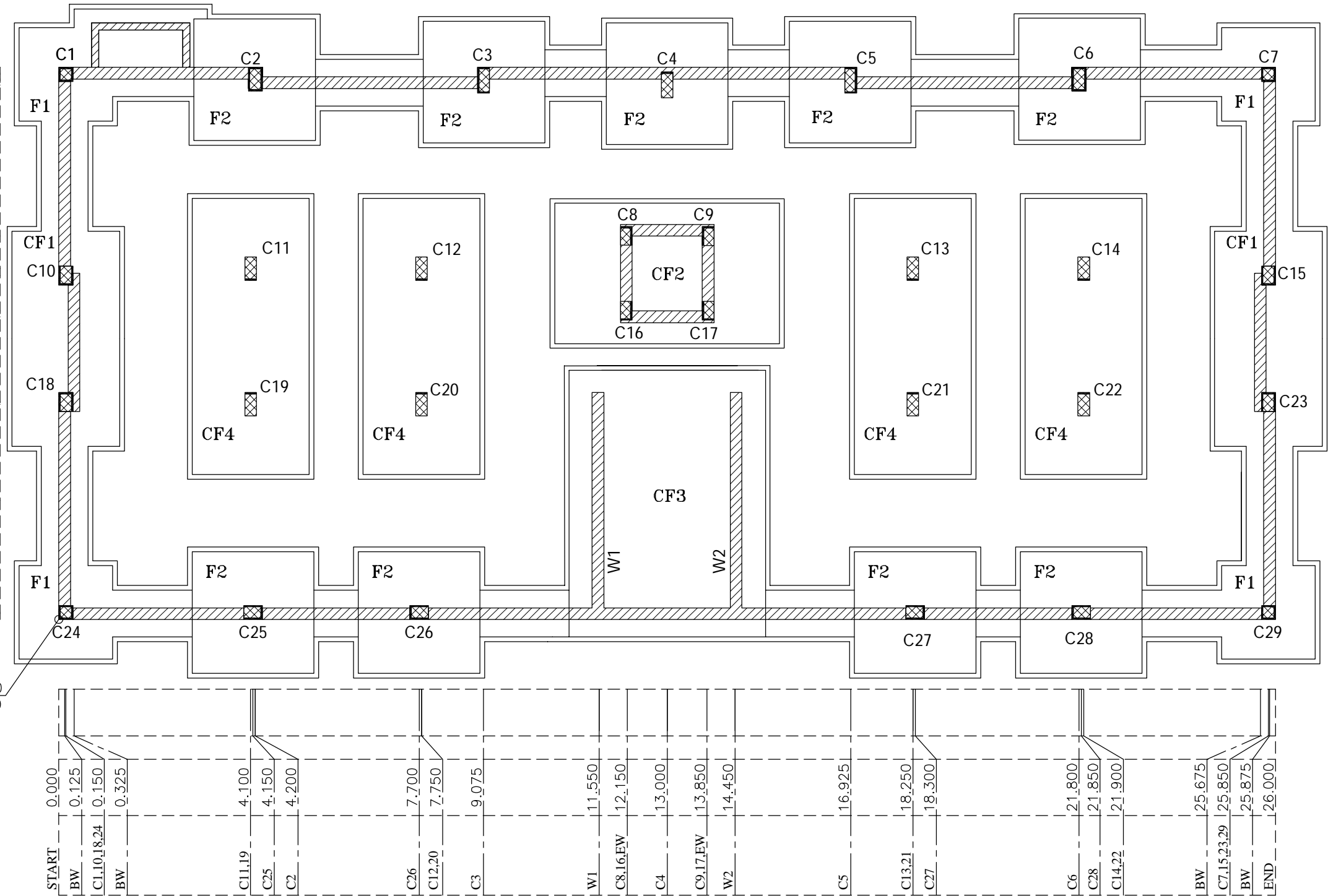
GENERAL STRUCTURAL DETAILS

DRAWING NO.: RE-S-000

DATE: APRIL 2011 SCALE: AS SHOWN

END	11.800
BW	11.675
C1,7	11.650
C2,6	11.550
C3,5	11.525
BW	11.475
C4	11.425
C8,9	8.322
C8,9	8.200
C11,12,13,14	7.500
C10,15	7.350
C16,17	6.600
EW	6.472
C18,23	4.650
C19,20,21,22	4.600
W1,2	2.550
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.


SCALE 1:100


NOTES :-

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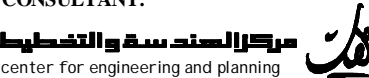
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 - FOR SLABS =2.5 cm

- 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/m².

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

EMPLOYER:
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PROGRAMME OF ASSISTANCE TO THE
PALESTINIAN PEOPLE
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
 center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
COLUMN AXES

DRAWING NO.: RE-S-001

DATE: MARCH 2011 SCALE: 1:100

NOTES :-

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 - 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
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مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

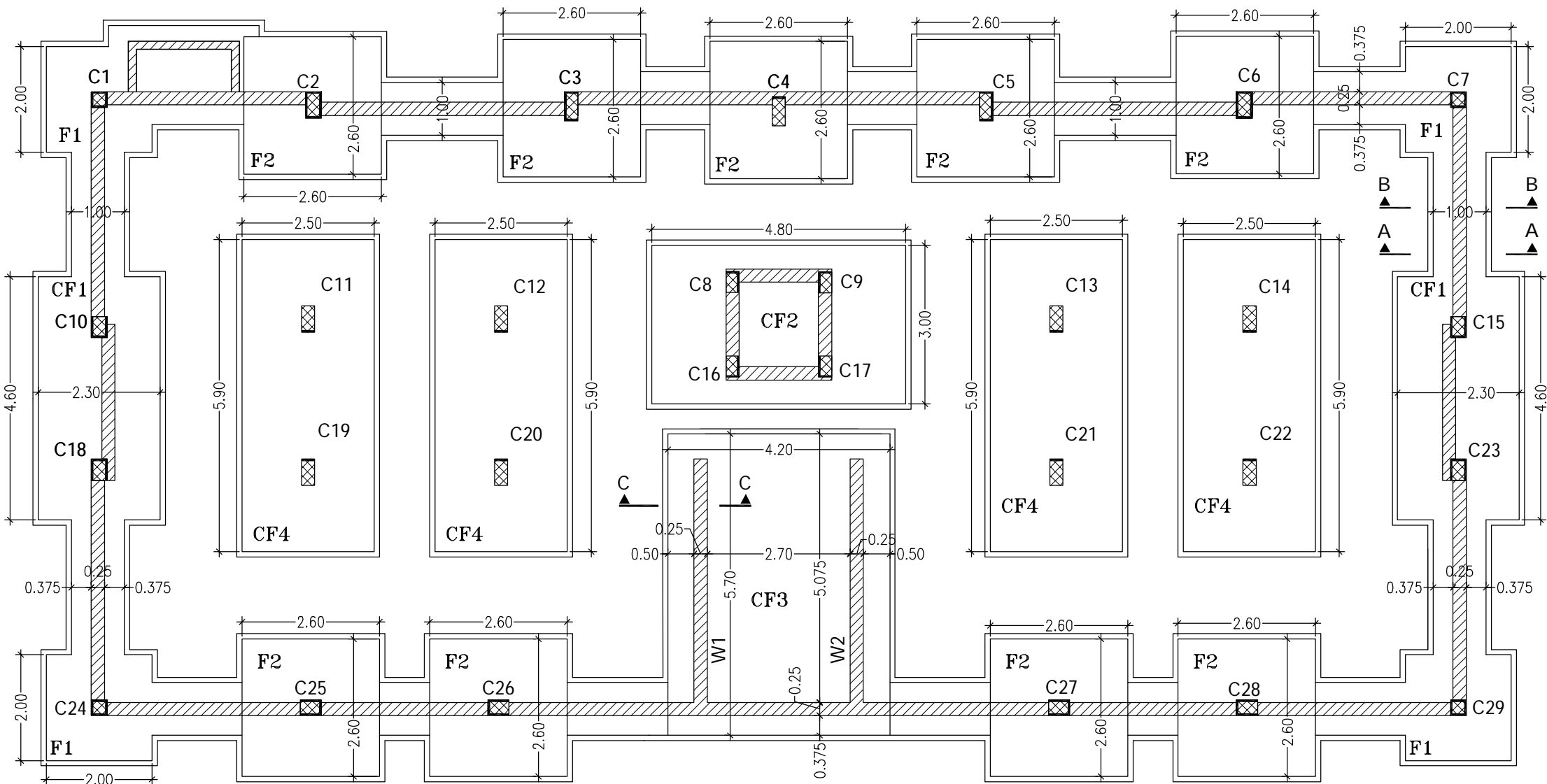
RESIDENTIAL BUILDING NO. (B6)

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

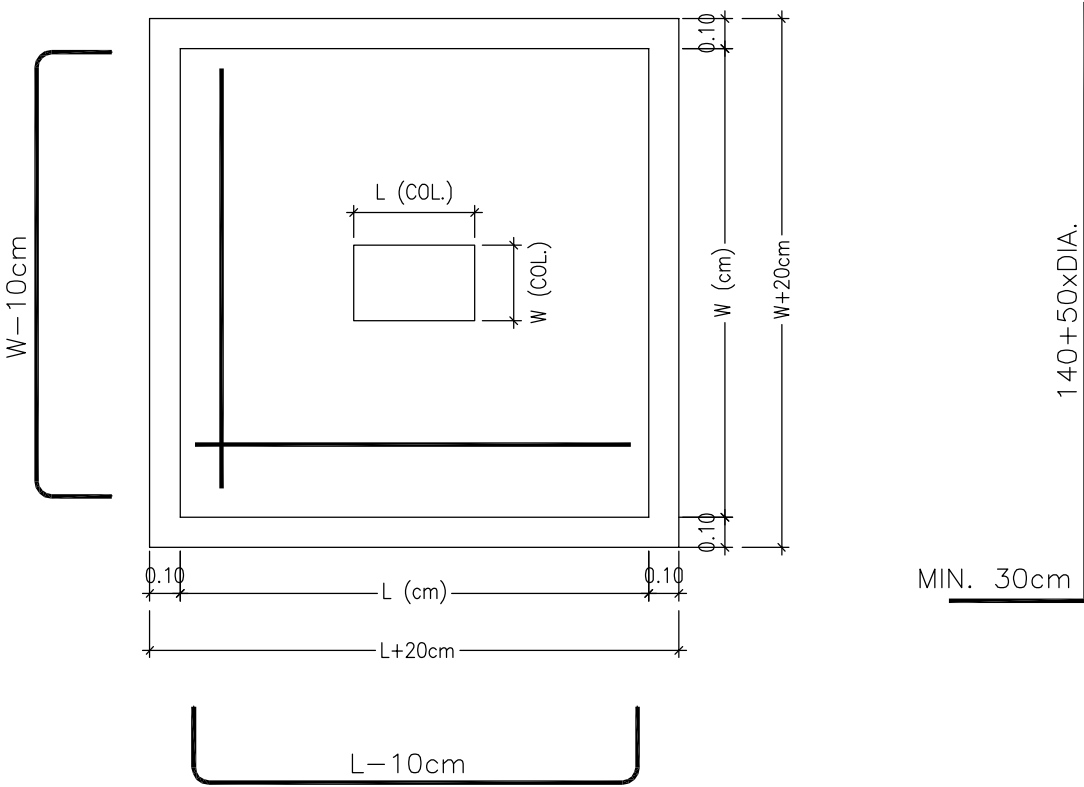
DIRECTIONS OF COLUMN SIZE CHANGE

GENERAL LAYOUT AND DIMENSIONS FOR FOOTINGS

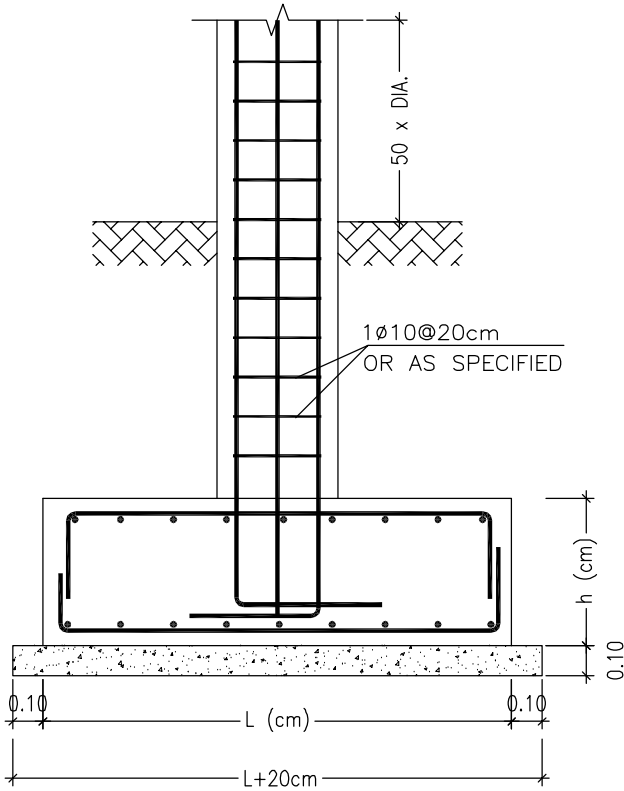
SCALE 1:100

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 200 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/250m 300 T.L=310cm



TYPICAL DETAILS FOR ISOLATED FOOTING



FOUNDATIONS DETAILS (1/2)

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) 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
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- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
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- 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
PALESTINIAN PEOPLE
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PROJECT TITLE:
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

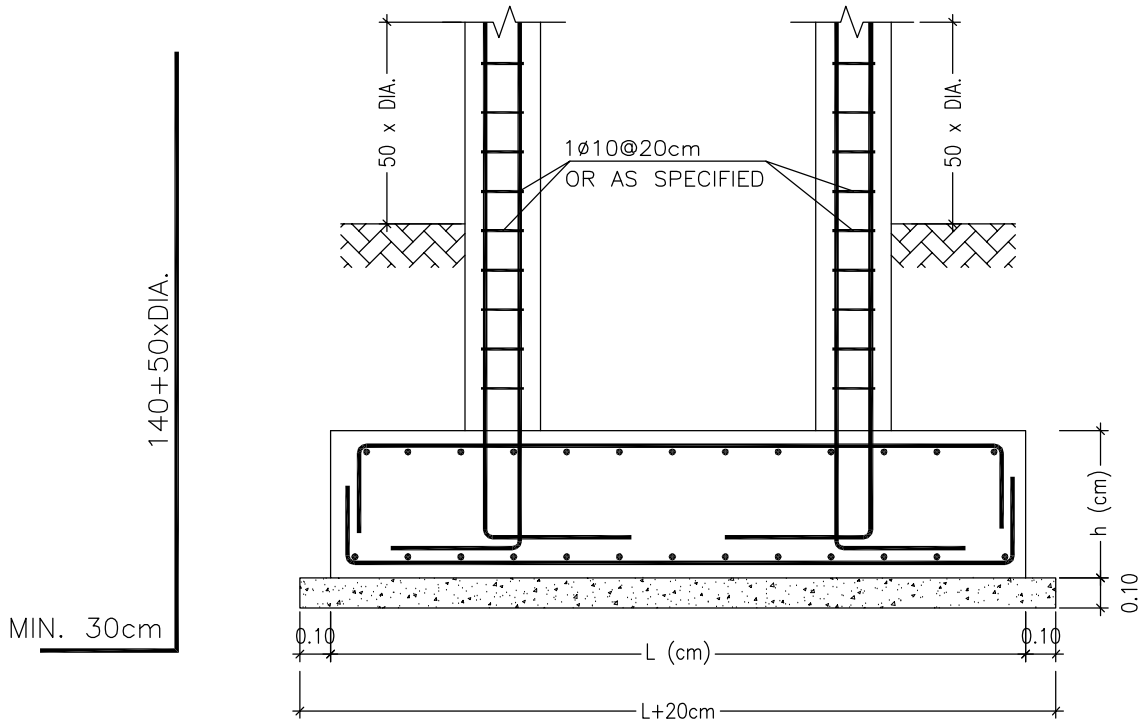
DRAWING TITLE:
FOOTING DETAILS (1/2)

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.</div> 20 L OR W-10cm
CF2	8,9,16,17	1	480	300	30	1∅12@20cm	1∅12@20cm	15 <div>TOP BOT.</div> 15 L OR W-10cm
CF3	W1,W2	1	570	420	50	1∅12@10cm	1∅12@10cm	30 <div>TOP BOT.</div> 30 L OR W-10cm
CF4	11,19,12,20 13,21,14,22	4	590	250	50	1∅12@10cm	1∅12@10cm	30 <div>TOP BOT.</div> 30 L OR W-10cm



TYPICAL DETAILS FOR COMPINED FOOTING

FOUNDATIONS DETAILS (2/2)

SCALE: AS SHOWN

NOTES :-

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center for engineering and planning

BUILDING NAME:

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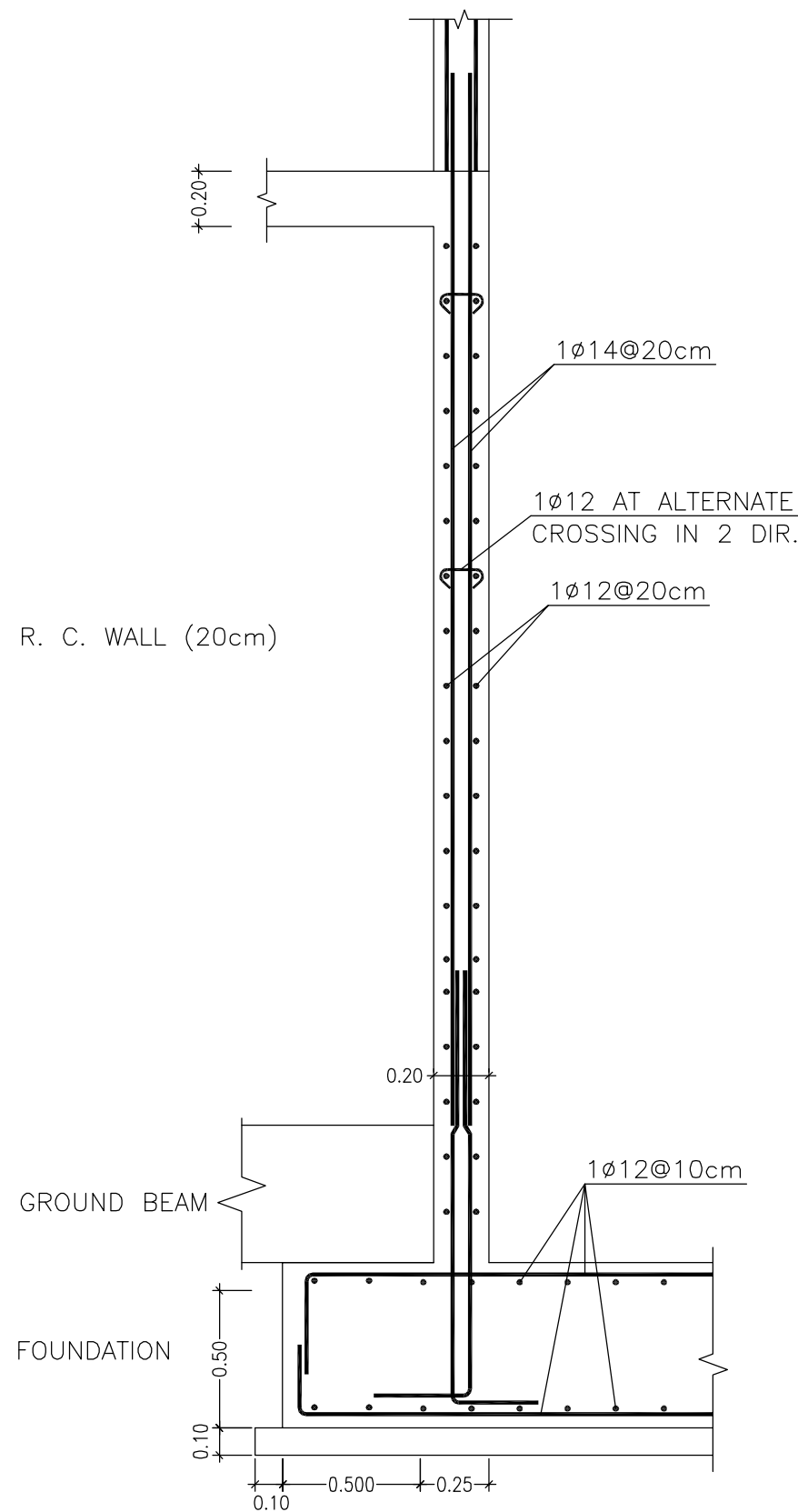
DRAWING TITLE:

FOUNDATIONS DETAILS (2/2)

DRAWING NO.: RE-S-004

DATE: APRIL 2011

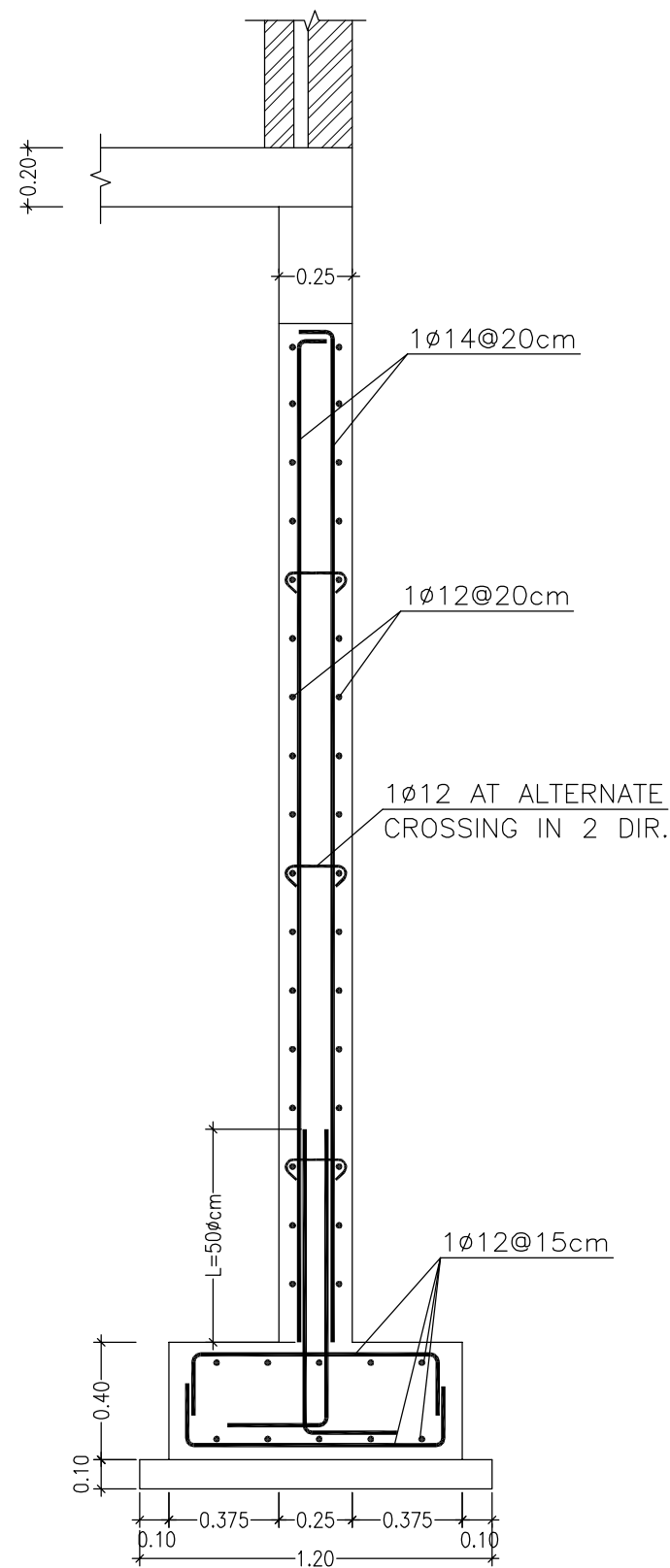
SCALE: AS SHOWN



SEC. C-C

SHEAR WALL DETAILS

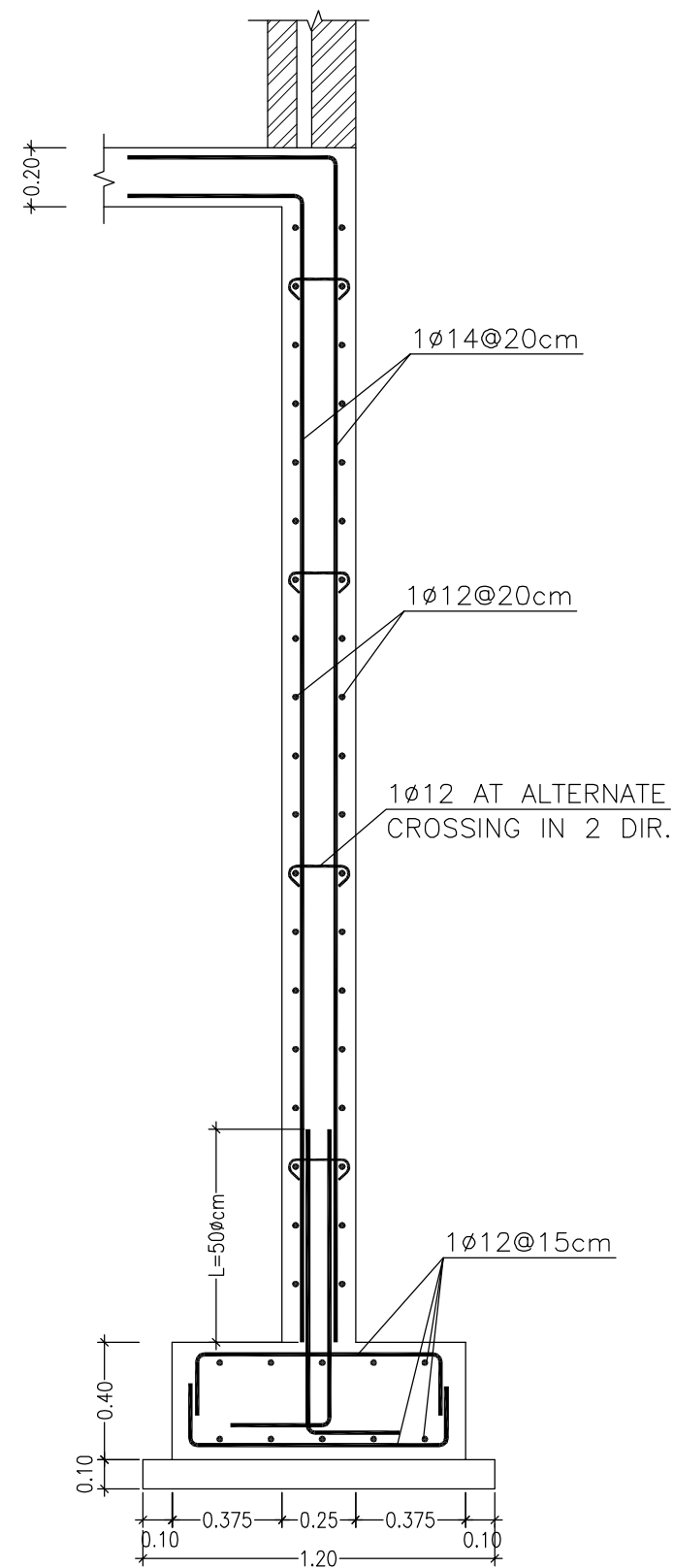
SCALE 1:25



SEC. B-B

BASEMENT WALL DETAILS

SCALE 1:25



SEC. A-A

BASEMENT WALL & SHEAR WALL DETAILS

SCALE: AS SHOWN

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- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS: 150 kN/m².

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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CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

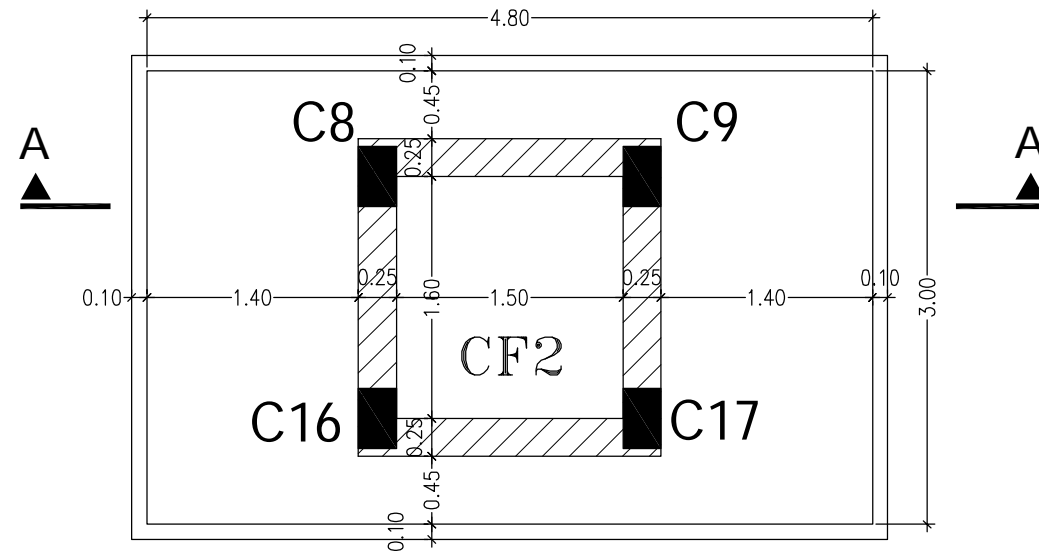
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

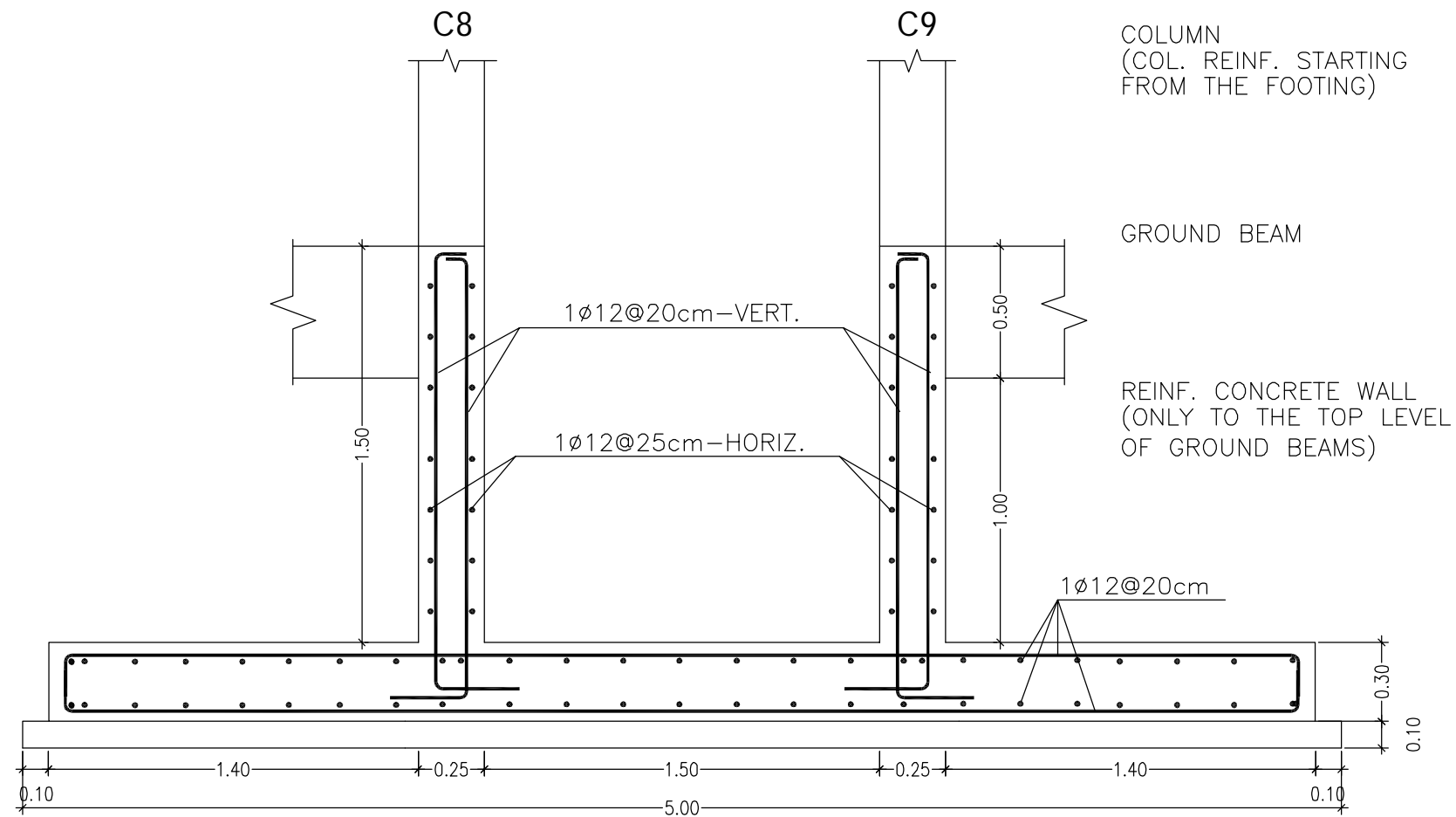
BASEMENT WALL & SHEAR WALL
DETAILS

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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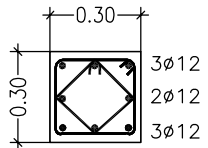
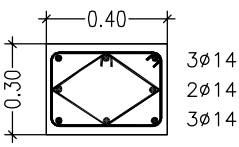
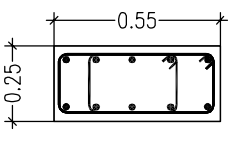
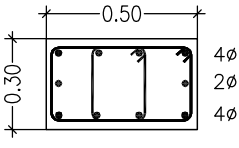
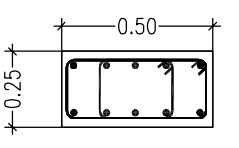
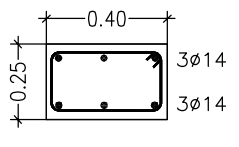
RESIDENTIAL BUILDING NO. (B6)

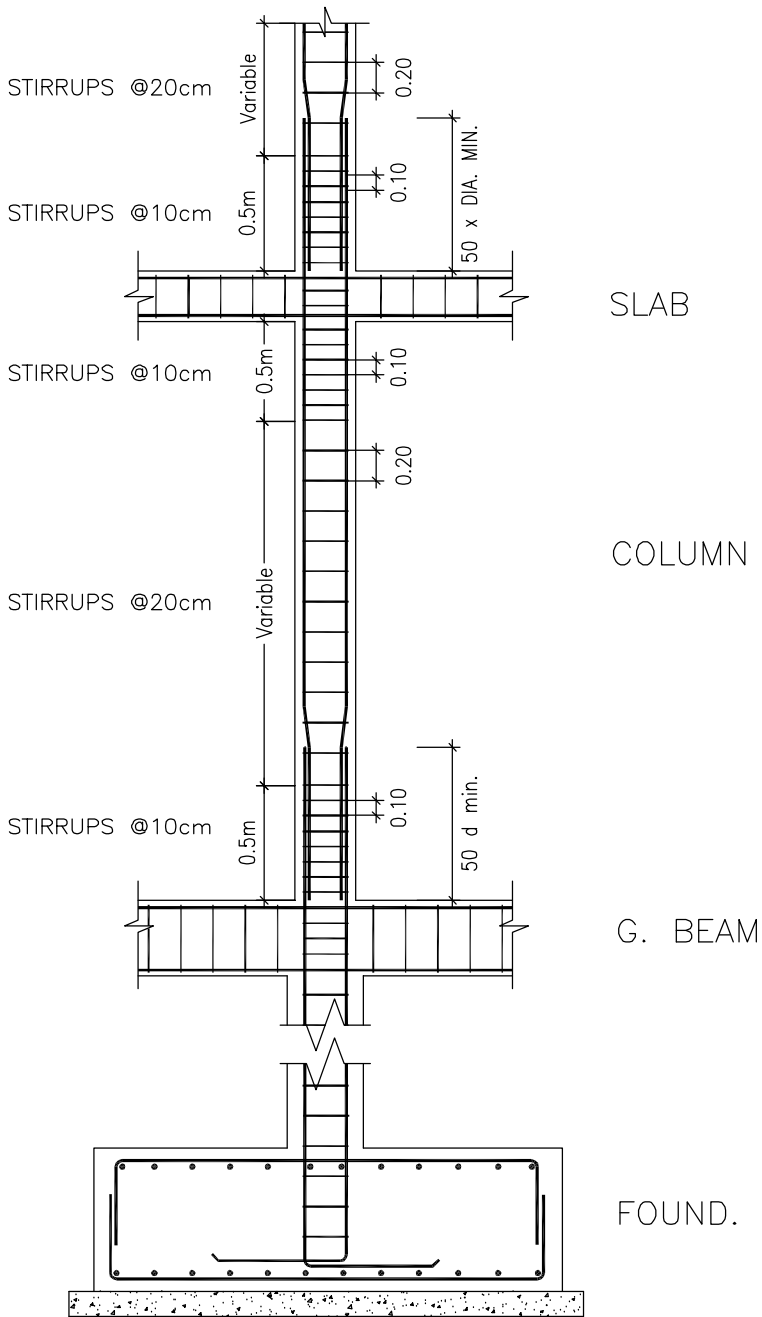
DRAWING TITLE:

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 :-

IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE START WORKS.

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) $F_y=420$ 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/m².

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 08)

CONSULTANT:

مركز الهندسة والتخطيط

center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

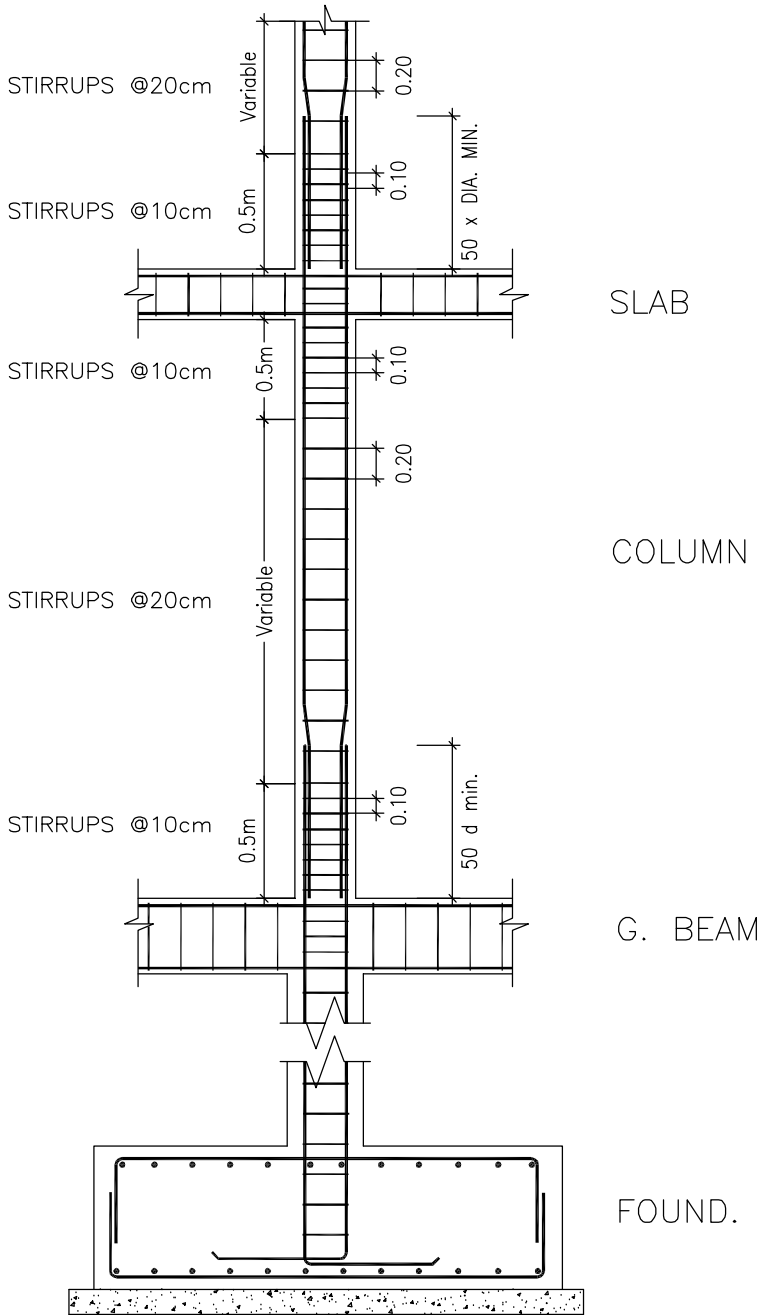
COLUMNS DETAILS (1/4)

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.
- 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/m².

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 08)

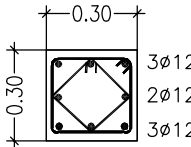
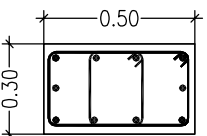
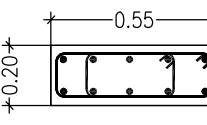
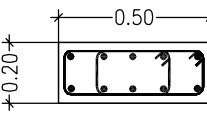
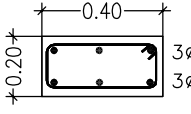
CONSULTANT:
 مرکز الهندسة والتخطيط
center for engineering and planning

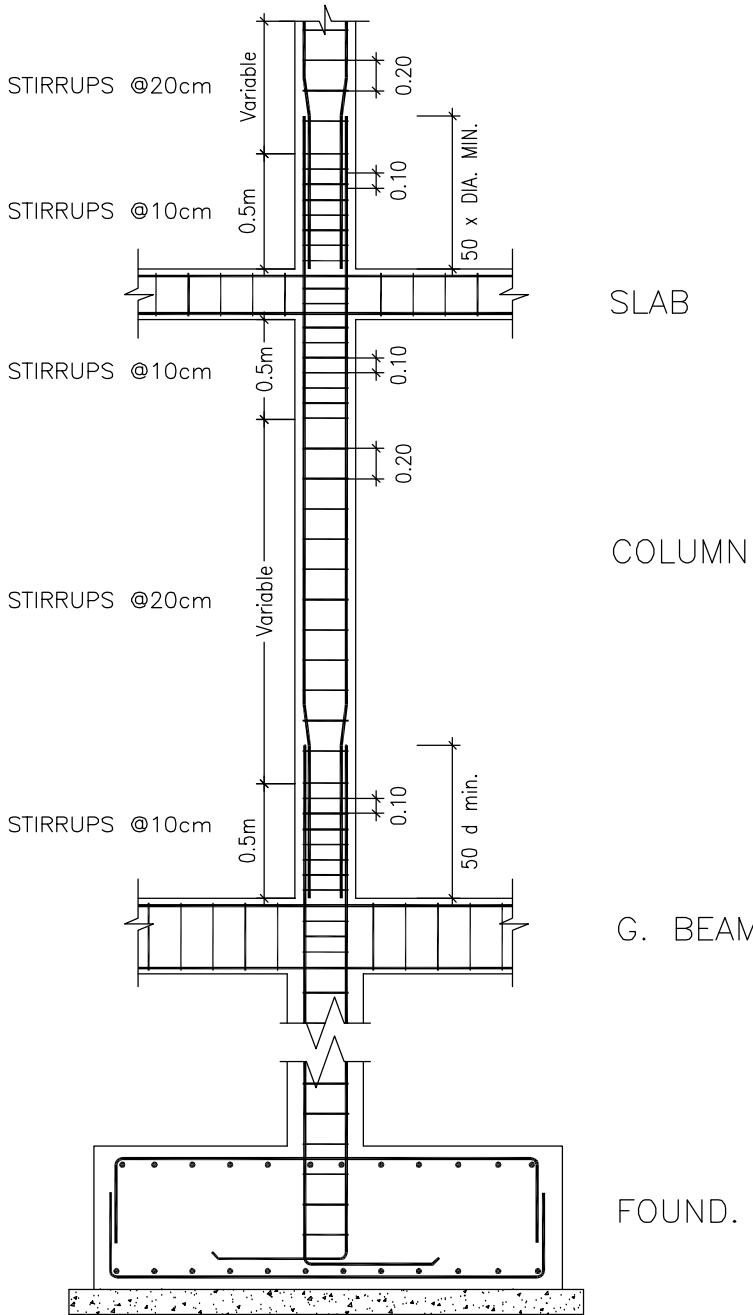
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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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- 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: 200 KN/m².

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 08)

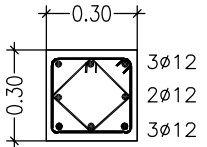
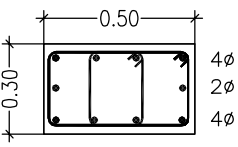
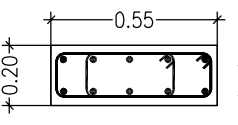
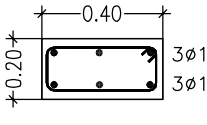
CONSULTANT:
 مرکز الهندسة والتخطيط
center for engineering and planning

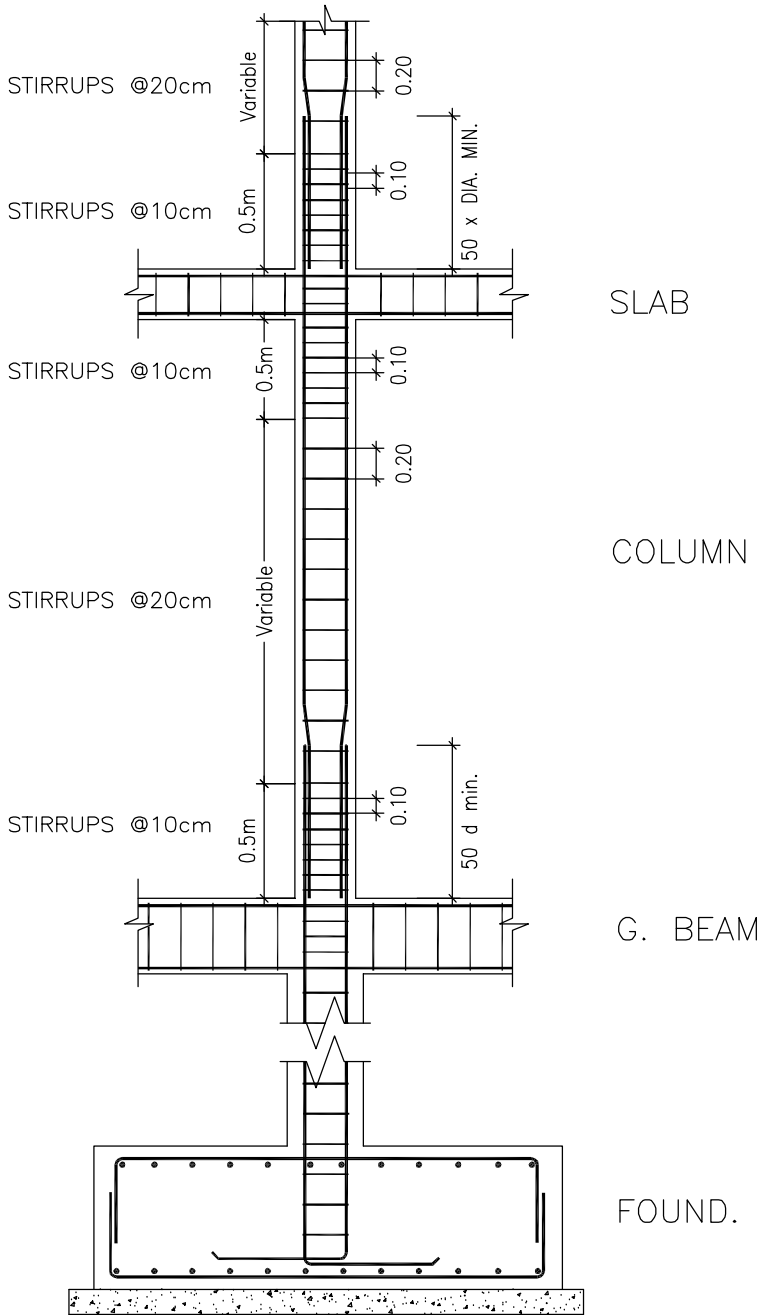
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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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- 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
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- T.L. : TOTAL LENGTH.
- FOUNDATIONS & COLUMNS ARE DESIGNED FOR UNDERGROUND, GROUND, & 3 STORIES.
- SOIL BEARING CAPACITY IS: 200 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
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 08)

CONSULTANT:
 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
COLUMNS DETAILS (4/4)

DRAWING NO.: RE-S-010

DATE: APRIL 2011 SCALE: AS SHOWN

NOTES :-

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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:
 - 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/m².

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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
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(UNDP/PAPP)

PROJECT TITLE:

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

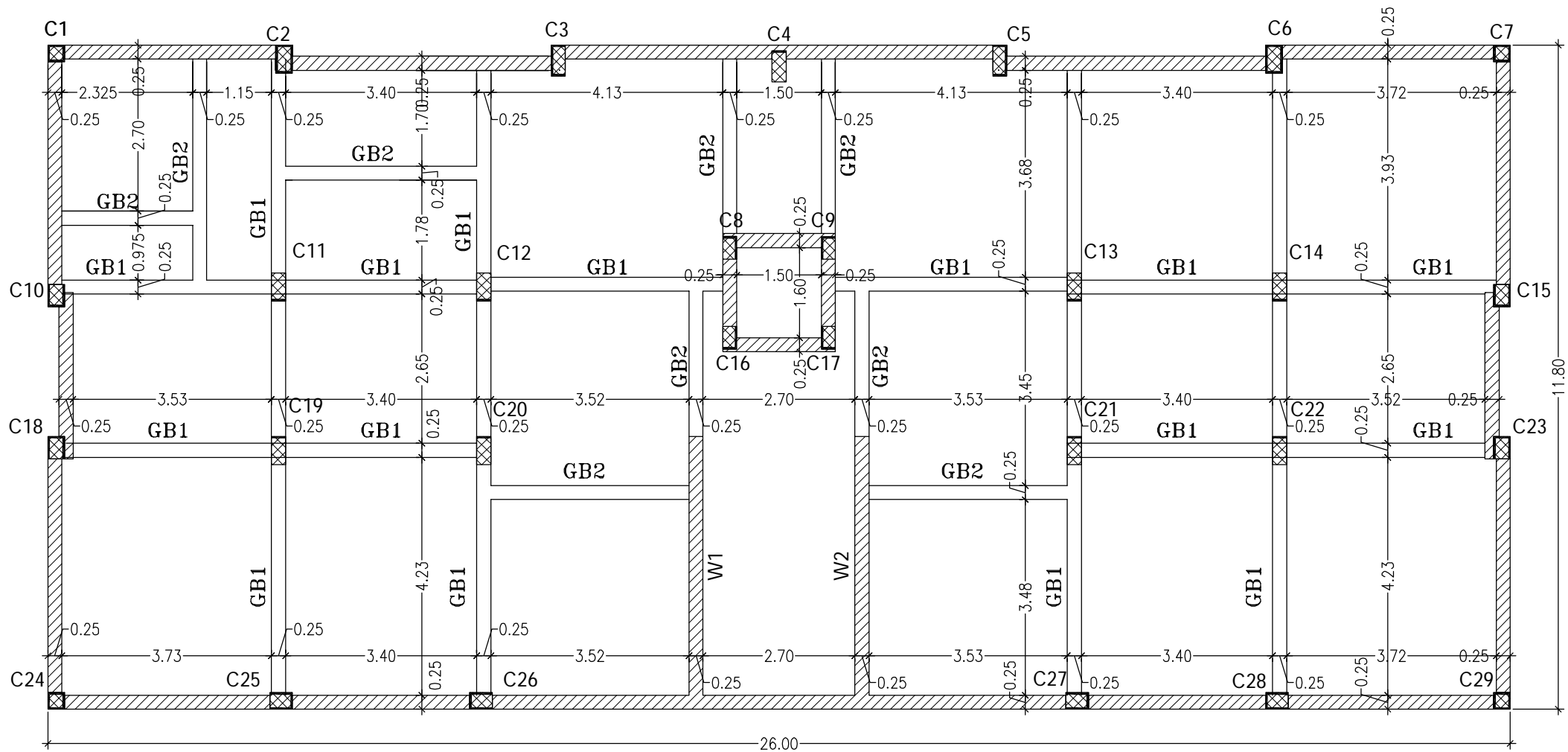
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

GROUND BEAMS DETAILS

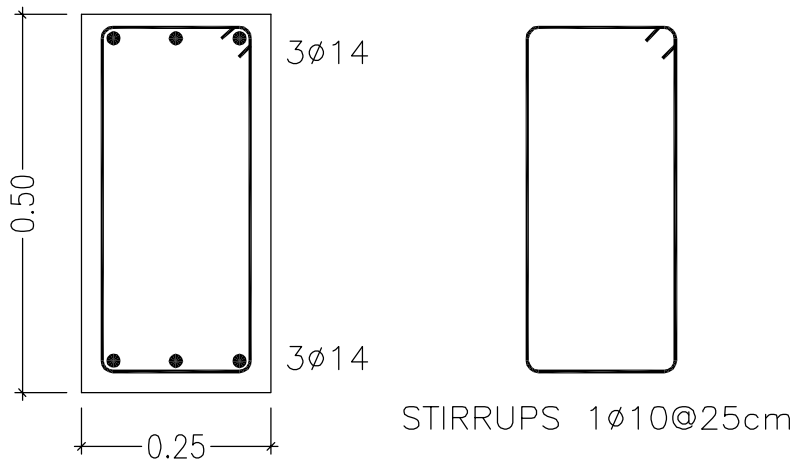
DRAWING NO.: RE-S-011

DATE: APRIL 2011 SCALE: AS SHOWN



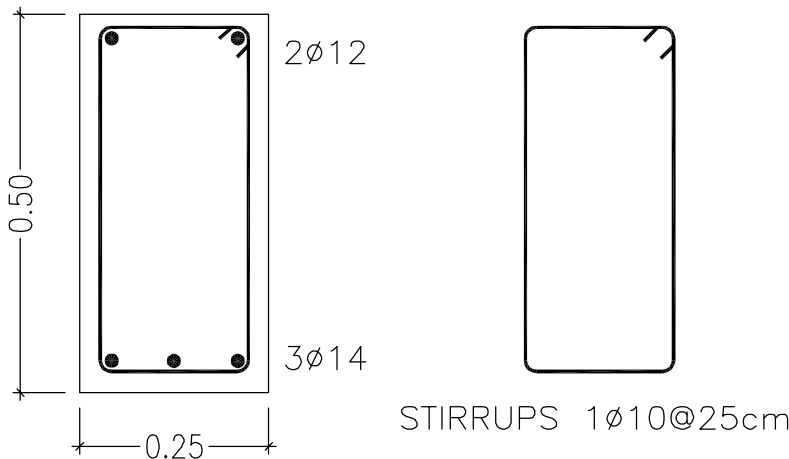
GROUND BEAMS LAYOUT

SCALE 1:100



GROUND BEAMS DETAILS (GB1)

SCALE 1:10



GROUND BEAMS DETAILS (GB2)

SCALE 1:10

GROUND BEAMS DETAILS

SCALE: AS SHOWN

NOTES :-

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 - FOR R.C. FOOTINGS =30 MPa
 - FOR R.C. LINTELS =25 MPa
 - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
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 - FOR SLABS =2.5 cm
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- T.L. : TOTAL LENGTH.
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- SOIL BEARING CAPACITY IS: 200 KN/m².

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 08)

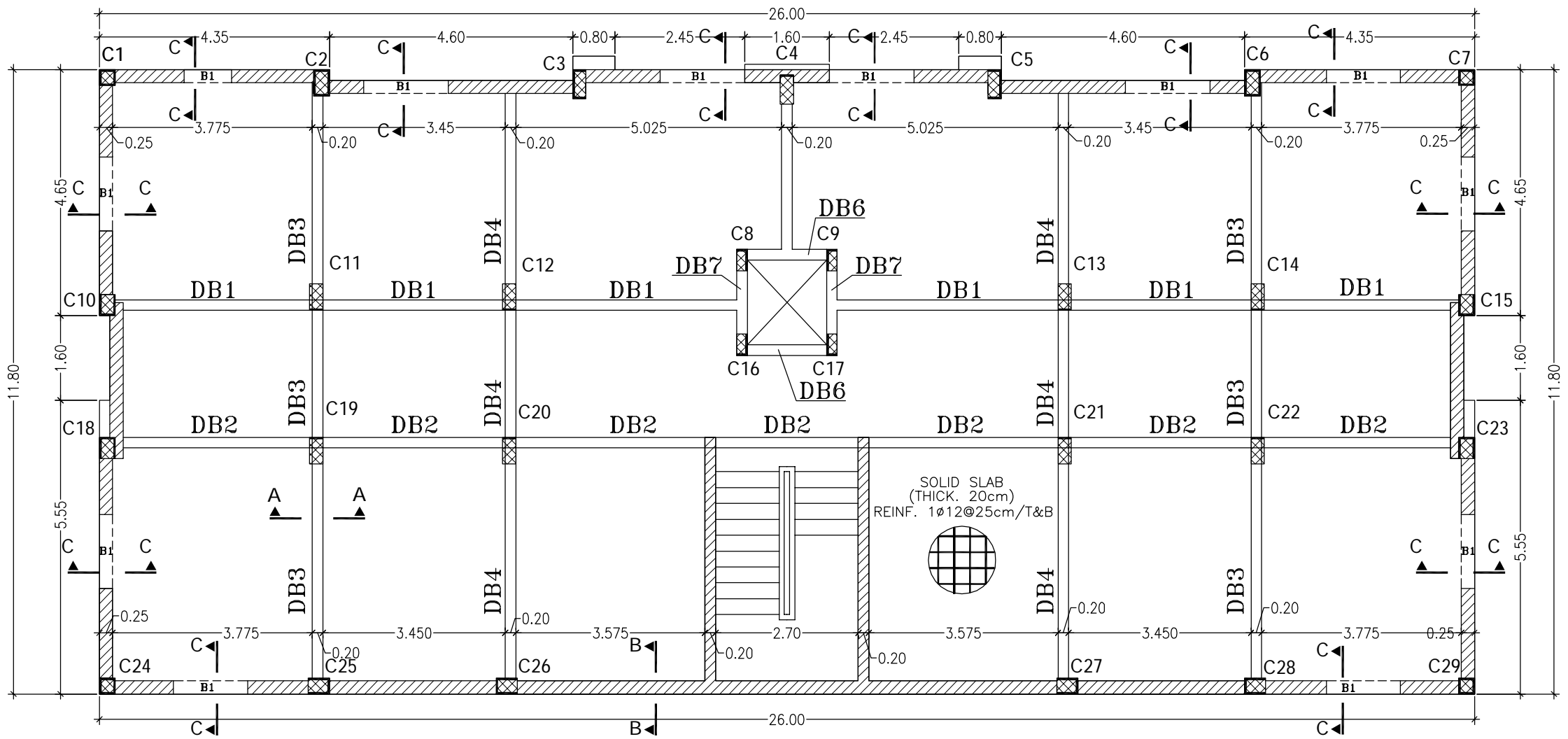
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

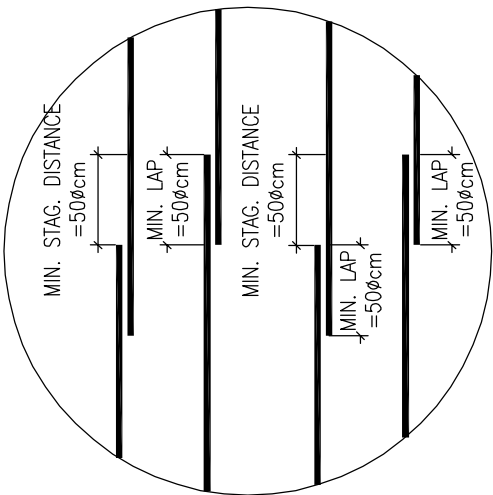
DRAWING TITLE:
BASEMENT SLAB DETAILS

DRAWING NO.: RE-S-012

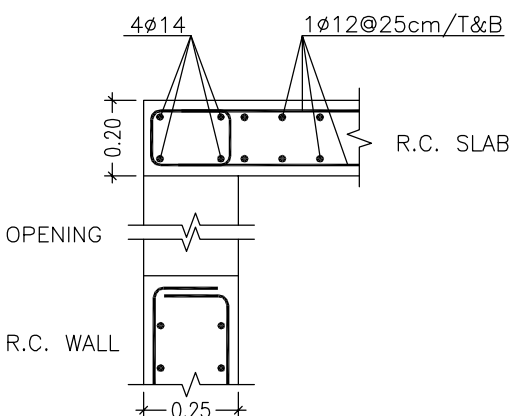
DATE: APRIL 2011 SCALE: AS SHOWN



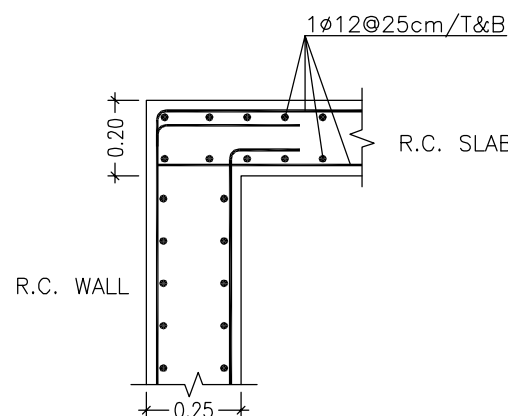
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SCALE 1:100



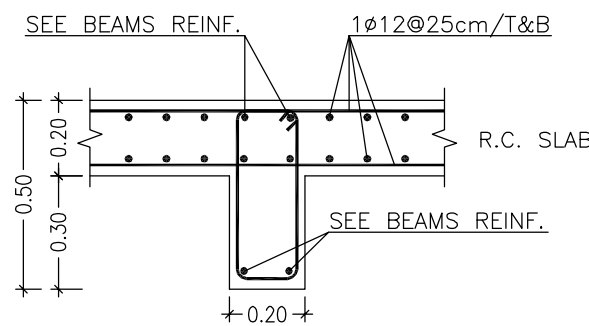
STAGGERING REINFORCEMENT DETAILS
NOT TO SCALE



SECTION C-C (B1)
SCALE 1:20

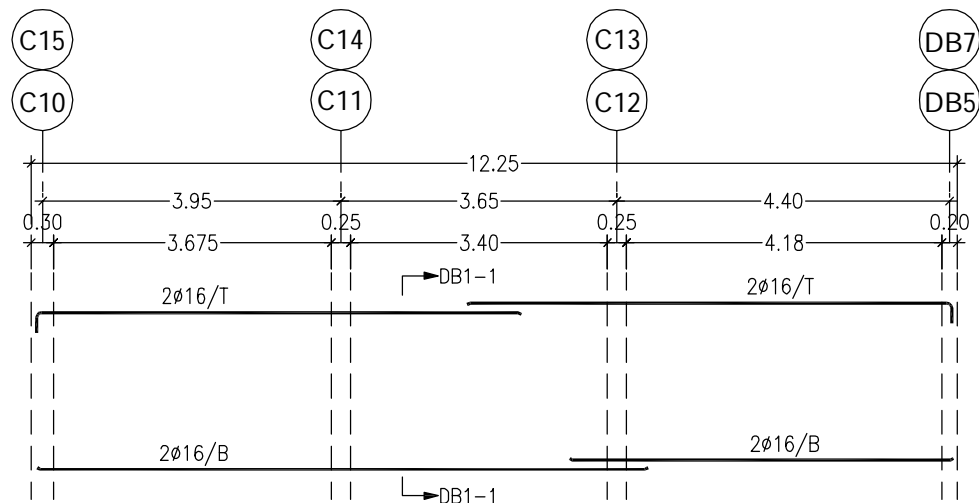


SECTION B-B
SCALE 1:20



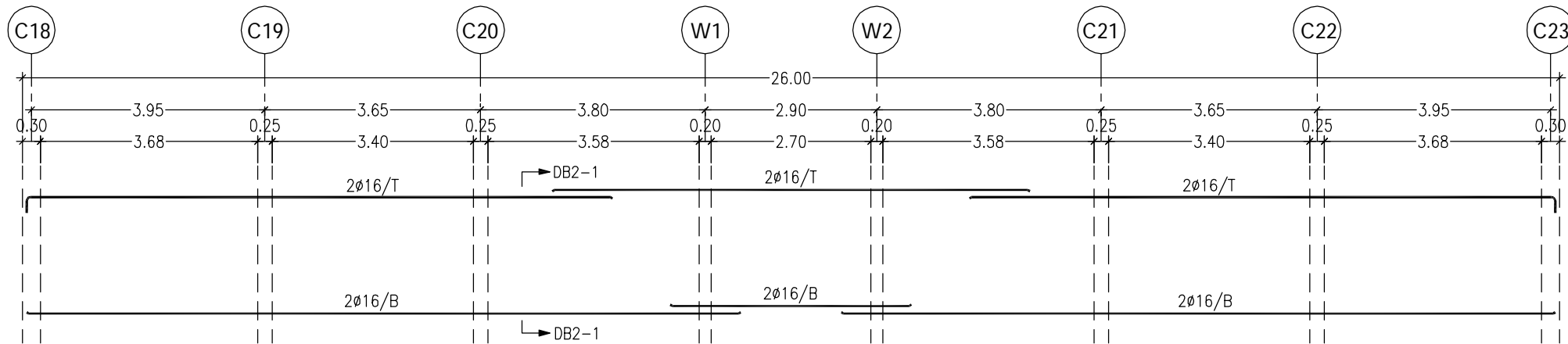
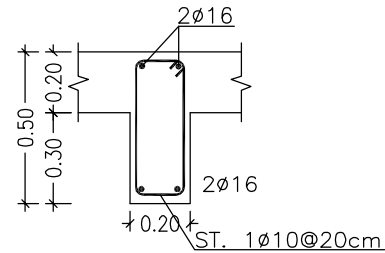
SECTION A-A
SCALE 1:20

BASEMENT SLAB DETAILS
SCALE: AS SHOWN



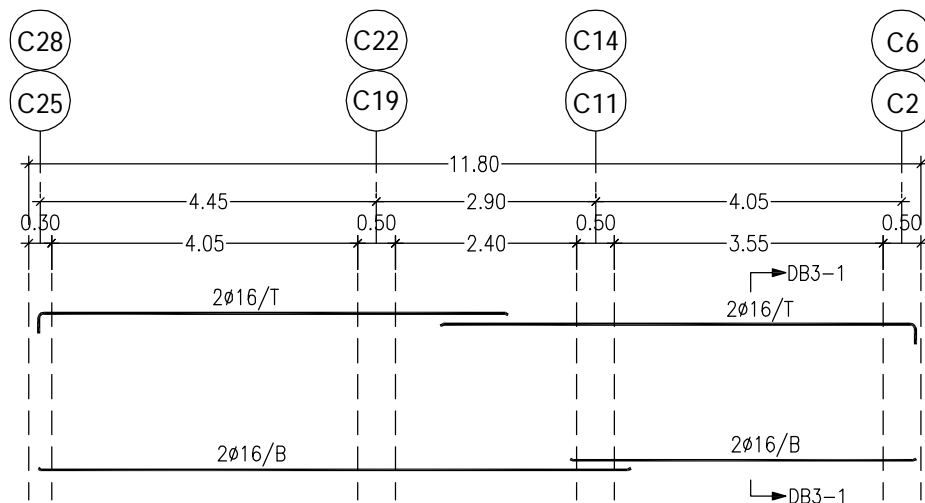
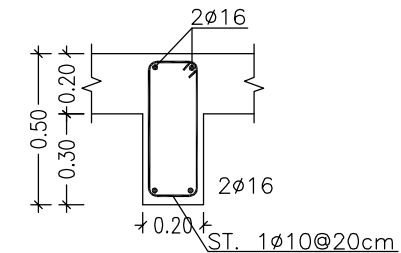
REINF. FOR BEAM NO. (DB1)
SCALE: 1:100

SECTION: DB1-1
SCALE: 1:25



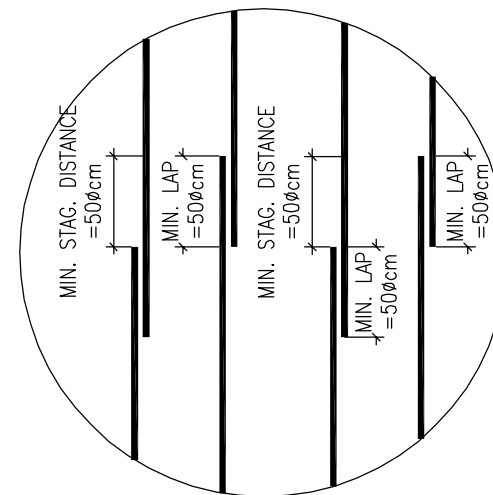
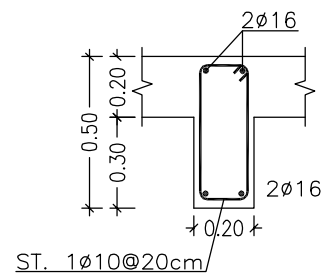
REINF. FOR BEAM NO. (DB2)
SCALE: 1:100

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

NOTES :-


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- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
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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/m².

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 08)

CONSULTANT:

 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

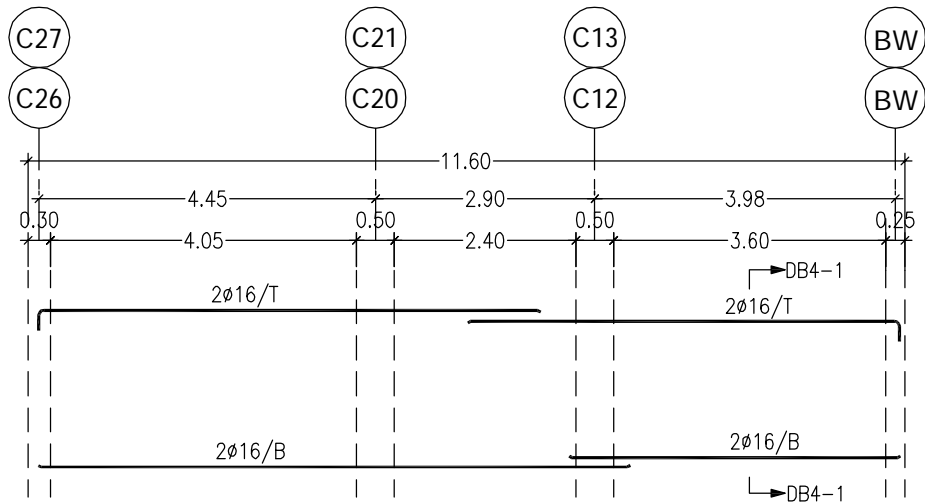
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

BEAMS DETAILS OF
BASEMENT SLAB (1/2)

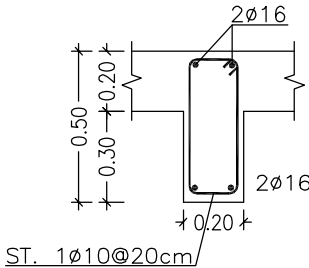
DRAWING NO.: RE-S-013

DATE: APRIL 2011 SCALE: AS SHOWN



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

SECTION: DB4-1
SCALE: 1:25



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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- 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/m².

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 08)

CONSULTANT:
 مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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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 - FOR R.C. LINTELS =25 MPa
 - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
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PROGRAMME OF ASSISTANCE TO THE
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

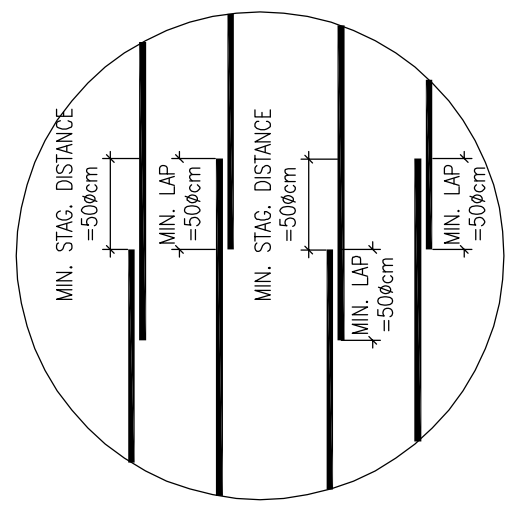
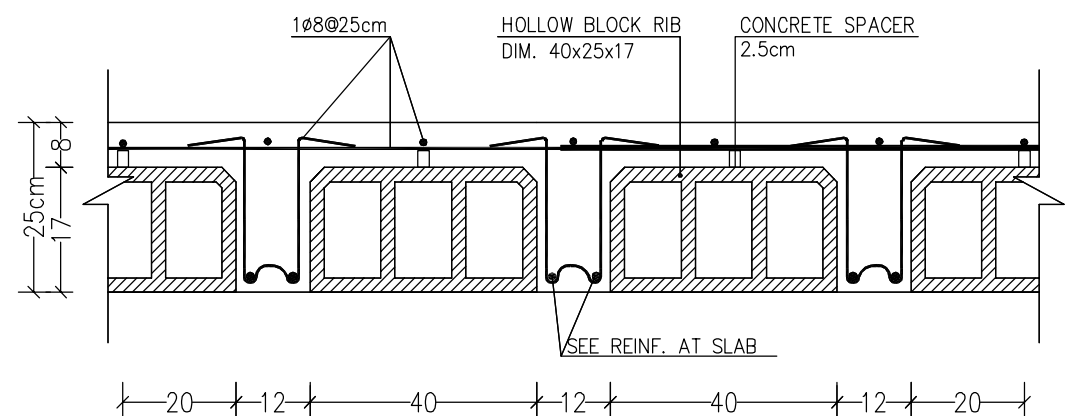
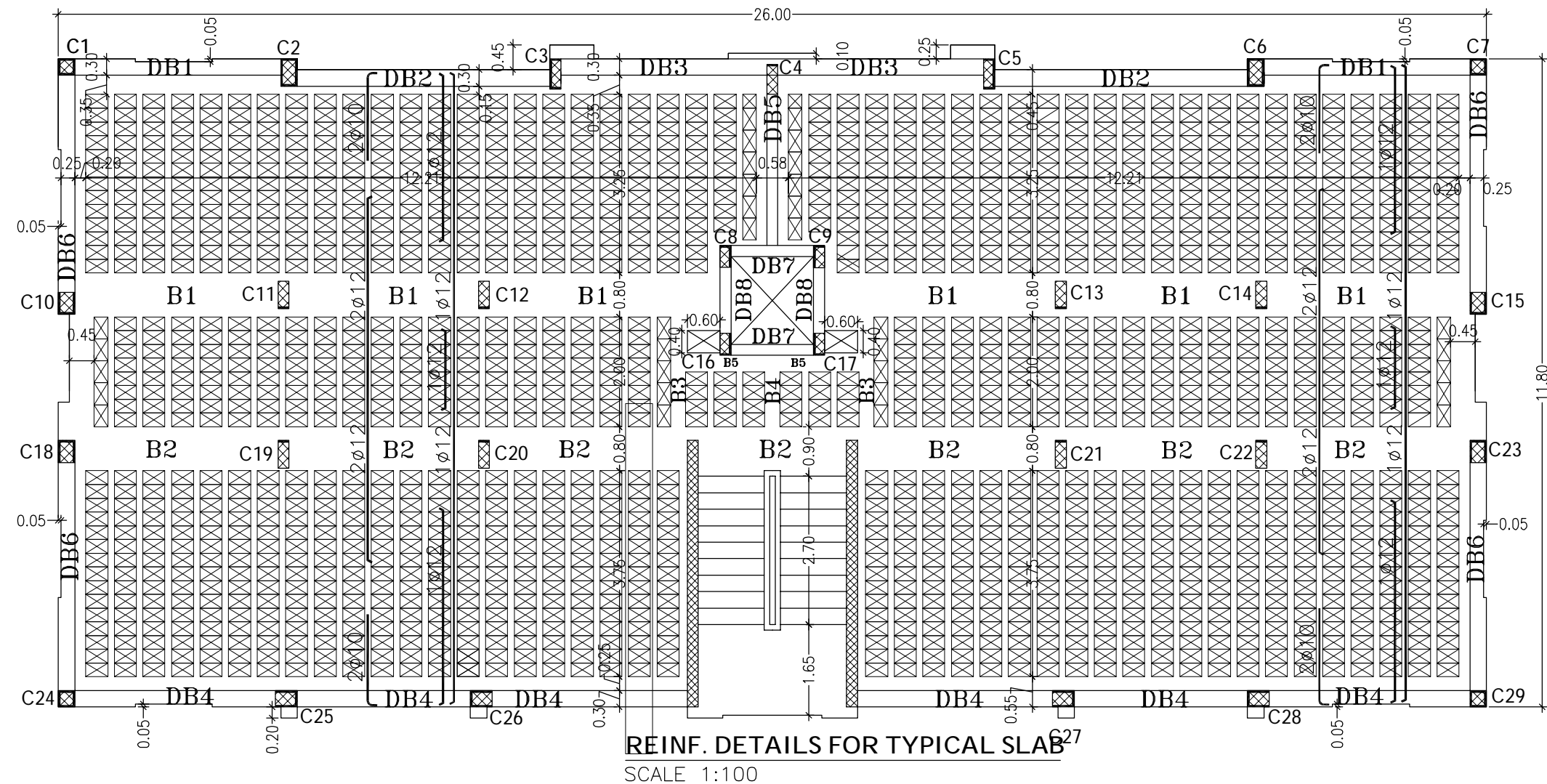
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

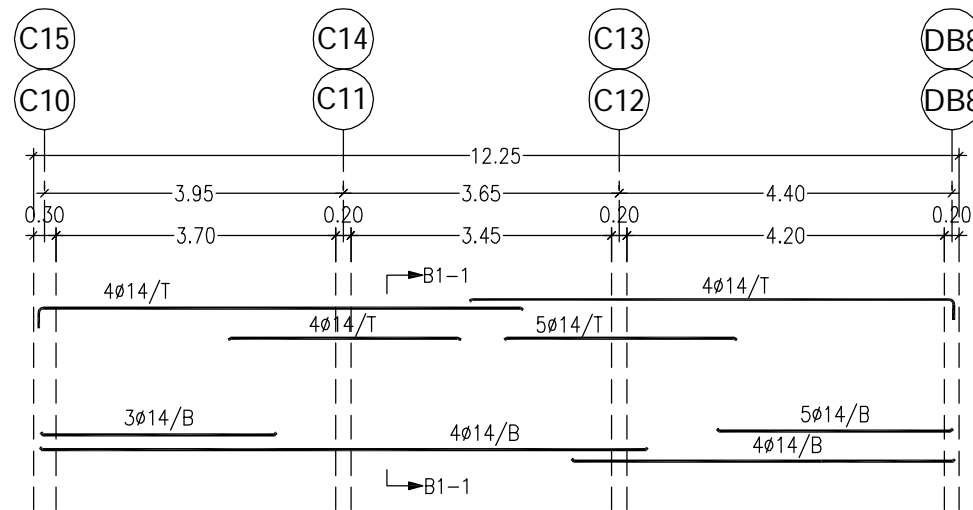
TYPICAL SLAB DETAILS

DRAWING NO.: RE-S-015

DATE: APRIL 2011 SCALE: AS SHOWN

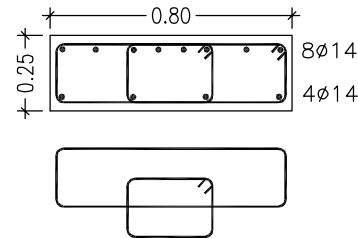


TYPICAL SLAB DETAILS
SCALE: AS SHOWN

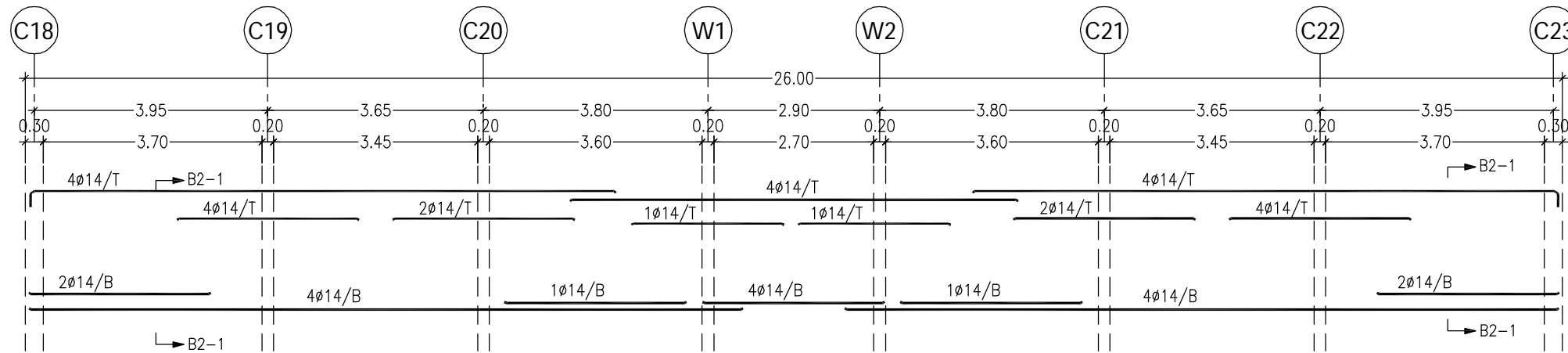


REINF. FOR BEAM NO. (B1)
SCALE: 1:100

SECTION: B1-1
SCALE: 1:25

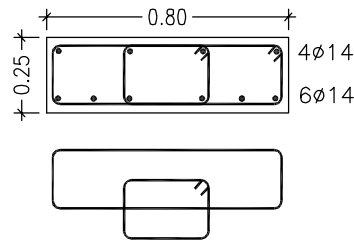


ST. 2Ø10@10cm-ENDS
ST. 2Ø10@20cm-MIDDLE

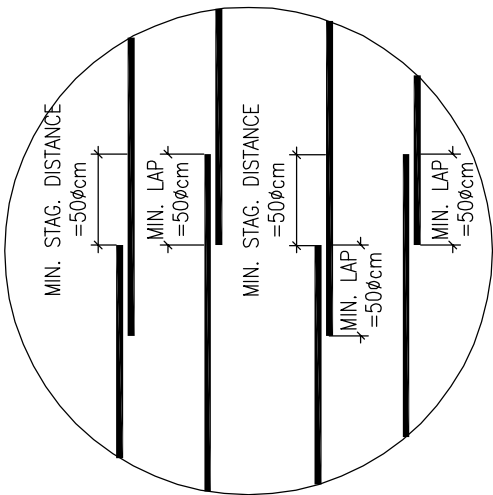


REINF. FOR BEAM NO. (B2)
SCALE: 1:100

SECTION: B2-1
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

NOTES :-

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 - FOR R.C. FOOTINGS =30 MPa
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 - FOR PLAIN CONCRET =20 MPa
- STEEL COVERS:
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 - FOR WALLS =5.0 cm
 - FOR SLABS =2.5 cm
- MIN. LAP FOR STEEL BAR = 60cm OR 50 x DIA. BAR WHICH IS GREATER.
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- SOIL BEARING CAPACITY IS: 200 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
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 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

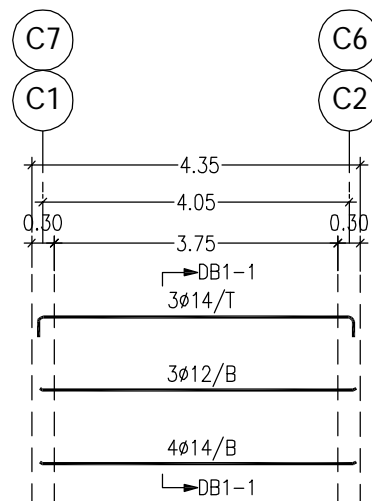
RESIDENTIAL BUILDING NO. (B6)

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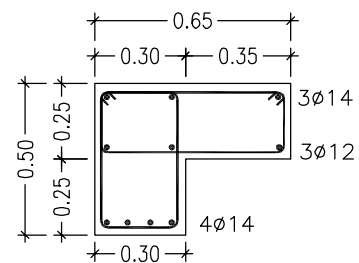
BEAMS DETAILS OF
TYPICAL SLAB (2/3)

DRAWING NO.: RE-S-017

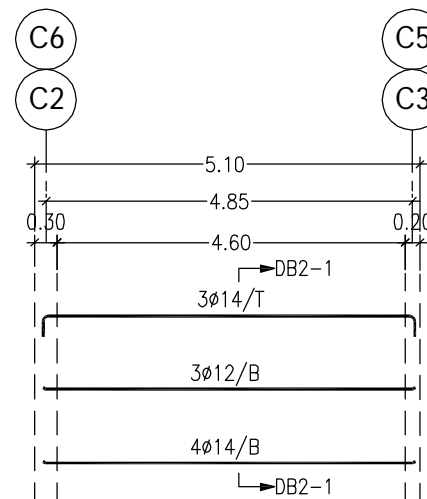
DATE: APRIL 2011 SCALE: AS SHOWN



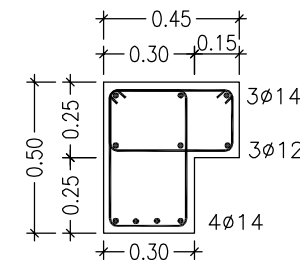
SECTION: DB1-1
SCALE: 1:25



ST. 2ø10@20cm



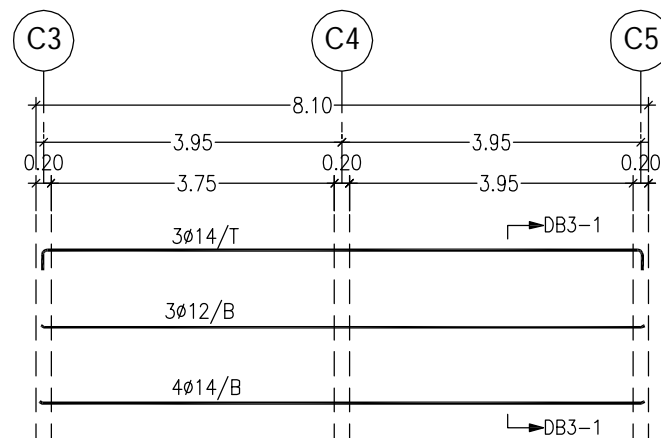
SECTION: DB2-1
SCALE: 1:25



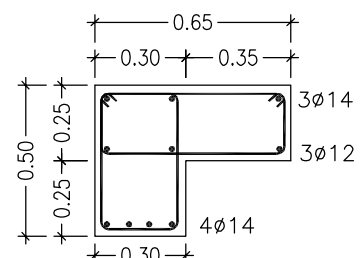
ST. 2ø10@20cm

REINF. FOR BEAM NO. (DB1)

SCALE: 1:100



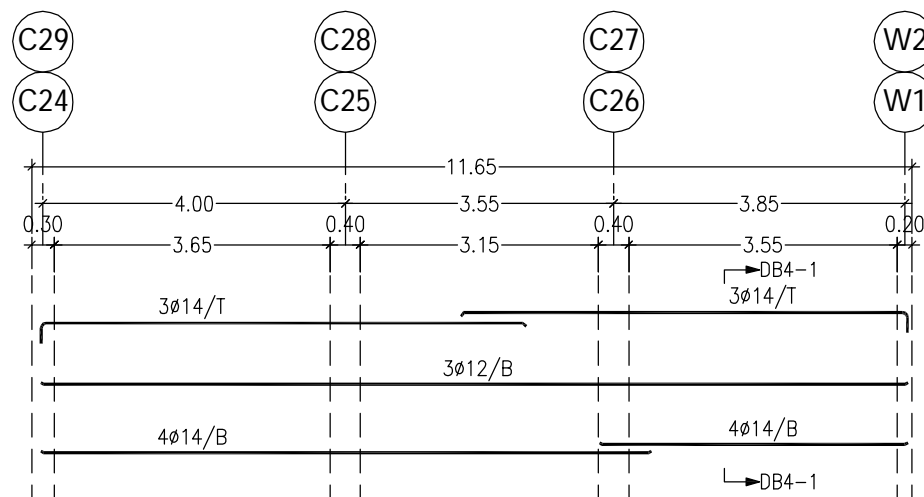
SECTION: DB3-1
SCALE: 1:25



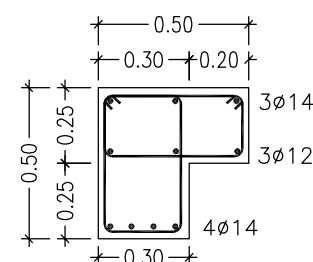
ST. 2ø10@20cm

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

NOTES :-


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- STEEL COVERS:
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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 08)

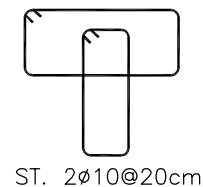
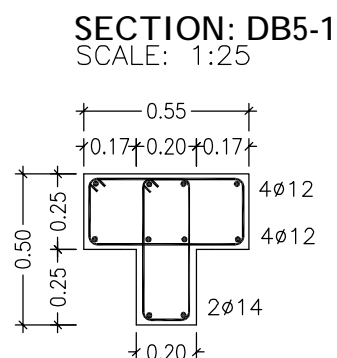
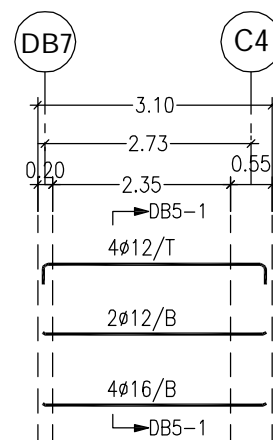
CONSULTANT:
 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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

DRAWING NO.: RE-S-018

DATE: APRIL 2011 | SCALE: AS SHOWN



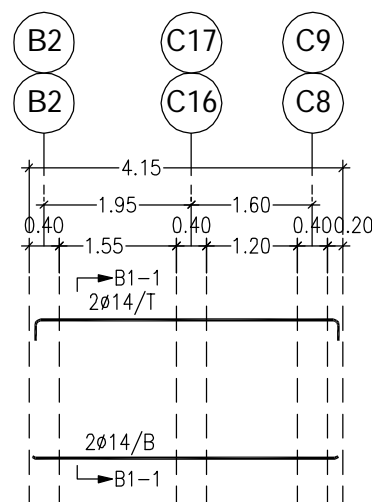
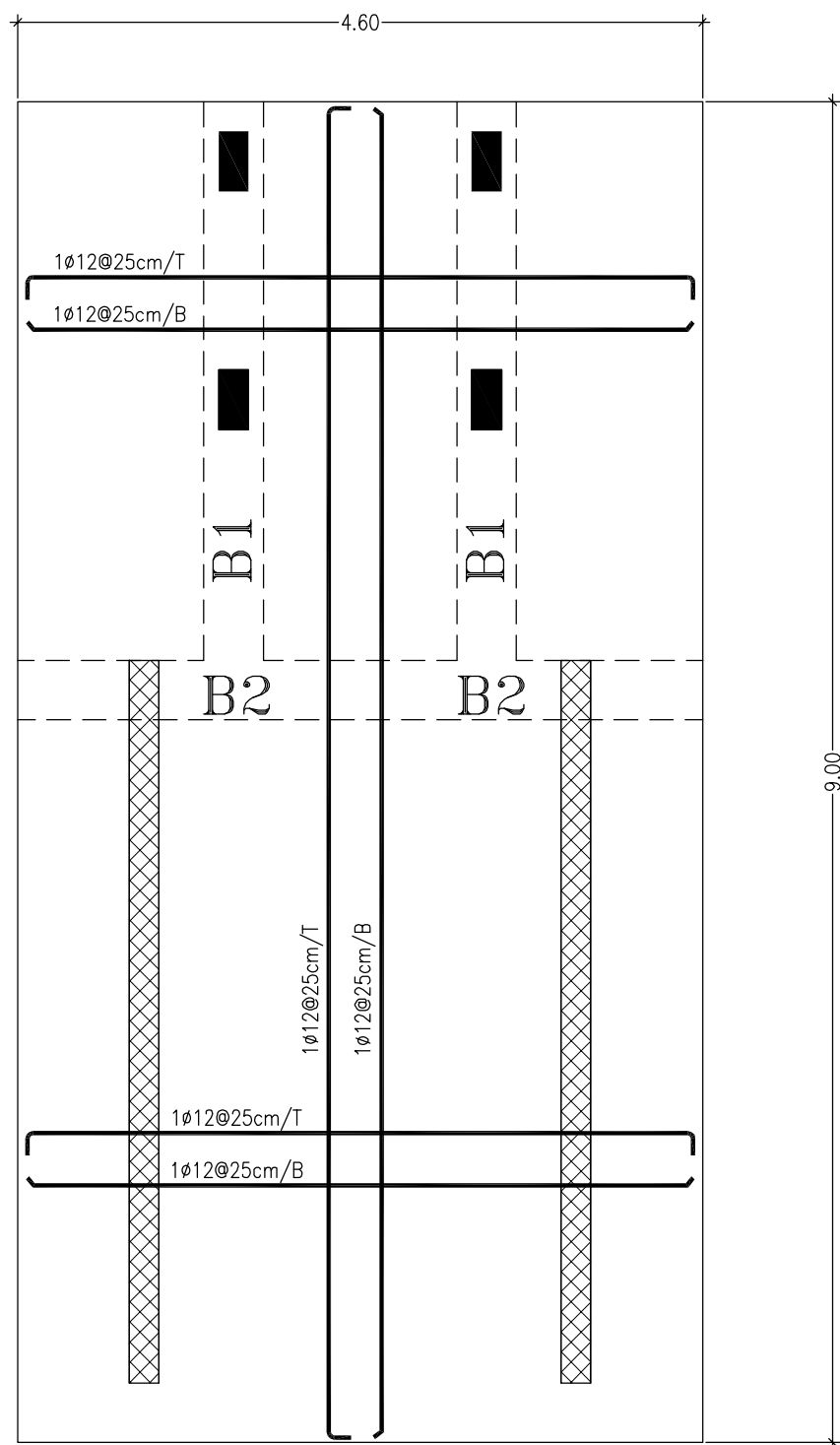
REINF. FOR BEAM NO. (DB5)
SCALE: 1:100

BEAMS REINFORCEMENT TABLE
FOR TYPICAL SLAB

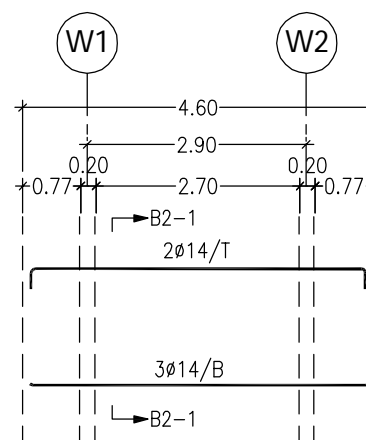
NO.	DIM		BOTTOM REINF.	TOP REINF.	STIRRUPS
	W.	H.			
DB6	30	50	4φ16	2φ12	1φ10/20cm
DB7	20	40	2φ14	2φ12	1φ10/20cm
DB8	20	40	2φ14	2φ12	1φ10/20cm
B3	25	25	2φ12	2φ12	1φ10/20cm
B4	25	25	2φ12	2φ12	1φ10/20cm
B5	30	25	2φ14	2φ12	1φ10/20cm

BEAMS DETAILS OF TYPICAL SLAB (3/3)

SCALE: AS SHOWN

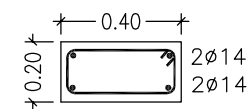


REINF. FOR BEAM NO. (B1)
SCALE: 1:100



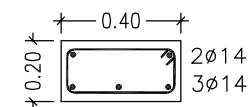
REINF. FOR BEAM NO. (B2)
SCALE: 1:100

SECTION: B1-1
SCALE: 1:25



ST. 1Ø10@7.5cm-ENDS
ST. 1Ø10@15cm-MIDDLE

SECTION: B2-1
SCALE: 1:25



ST. 1Ø10@7.5cm-ENDS
ST. 1Ø10@15cm-MIDDLE

STAIRS ROOF SLAB DETAILS
SCALE: AS SHOWN

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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:
 - 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/m².

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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

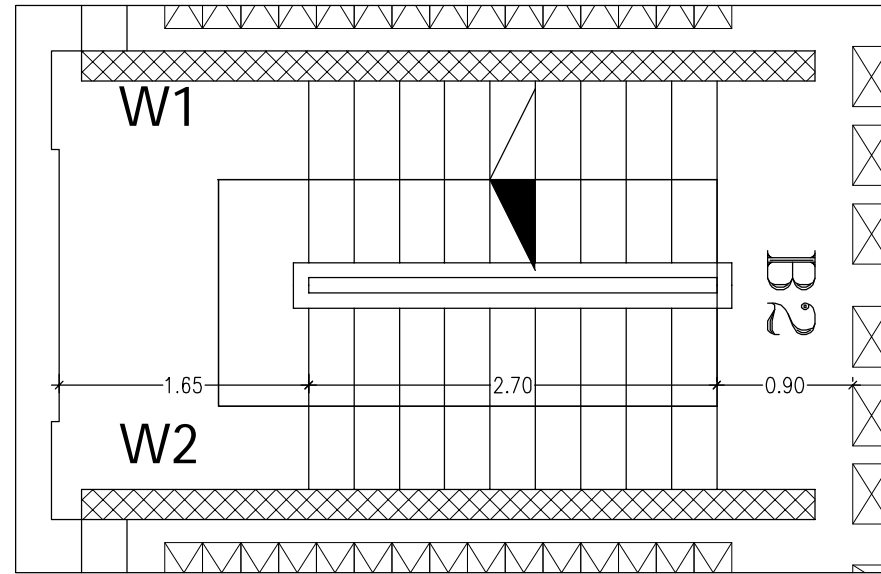
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

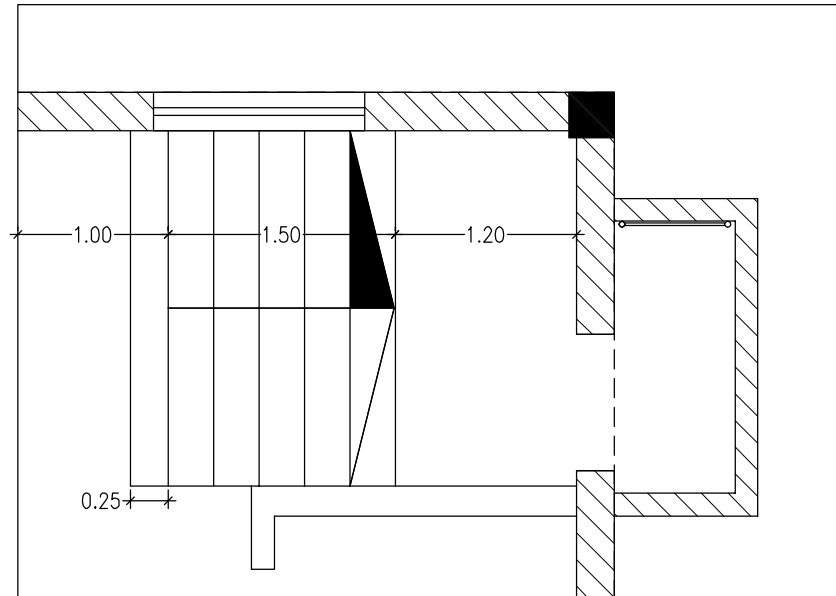
STAIRS ROOF SLAB DETAILS

DRAWING NO.: RE-S-019

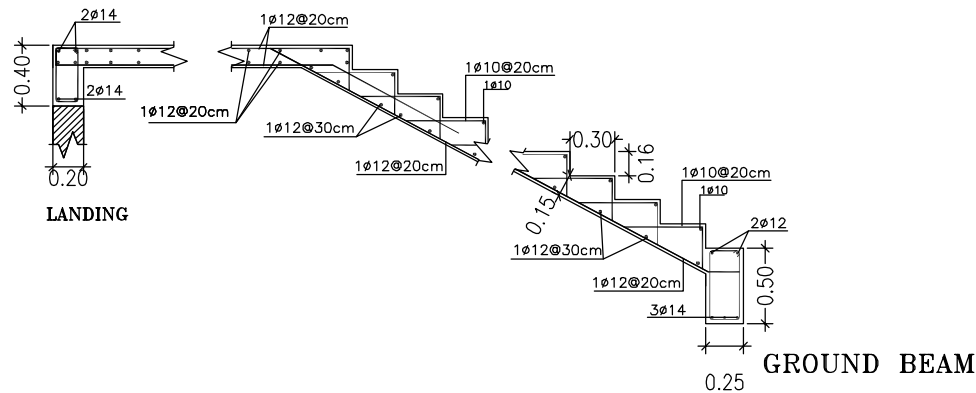
DATE: APRIL 2011 SCALE: AS SHOWN



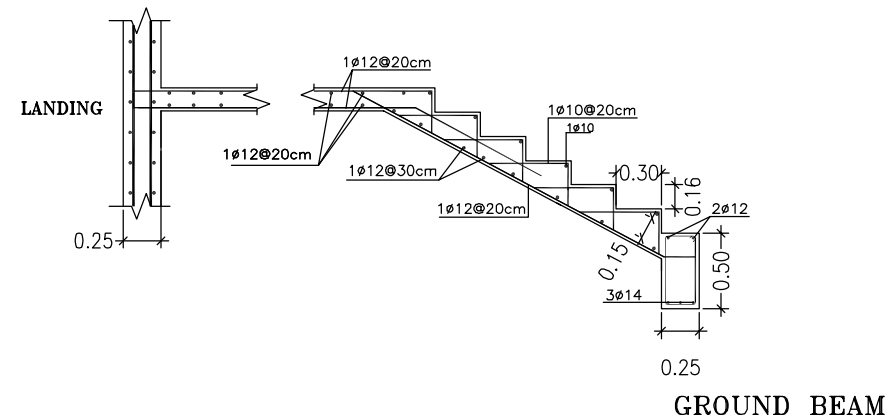
GENERAL DETAILS OF STAIR
SCALE: 1:50



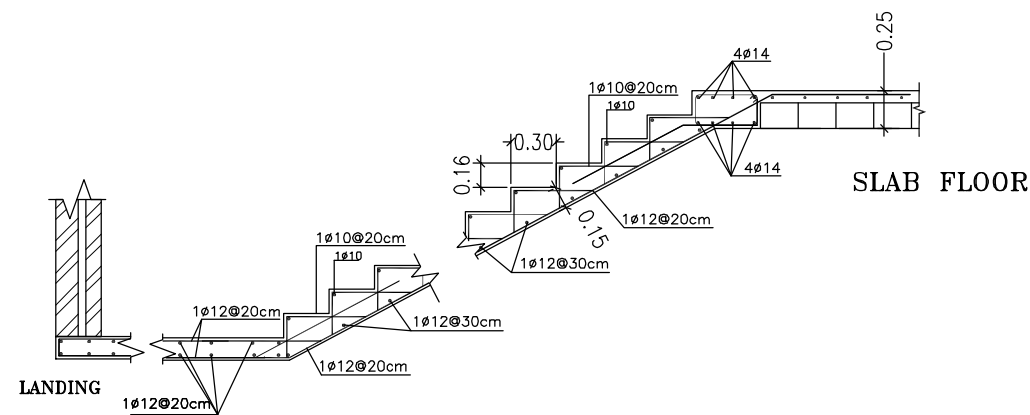
GENERAL DETAILS OF ESCAP STAIR
SCALE: 1:50



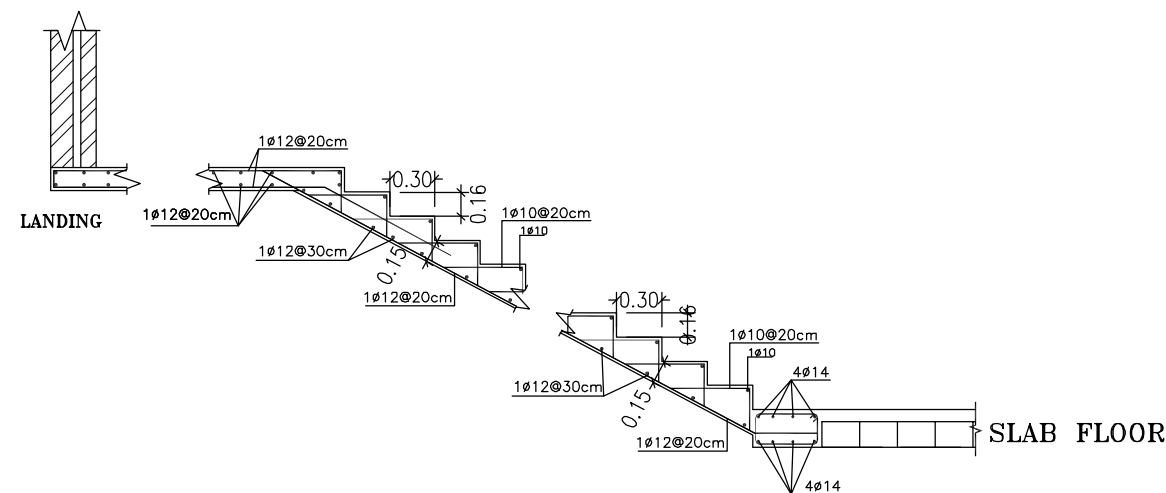
GENERAL DETAILS FROM GROUND BEAM TO LANDING
SCALE: 1:50



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

STRUCTURAL DETAILS FOR STAIRS
SCALE: AS SHOWN

NOTES :-

- IT IS THE CONTRACTOR RESPONSIBILITY TO PREPARE AND SUBMIT WORKSHOP DRAWINGS FOR ENGINEER BEFORE START WORKS.
- 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) $F_y=420$ 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/m².

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 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

STRUCTURAL DETAILS FOR STAIRS

DRAWING NO.: RE-S-020

DATE: APRIL 2011 SCALE: AS SHOWN

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



MECHANICAL 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

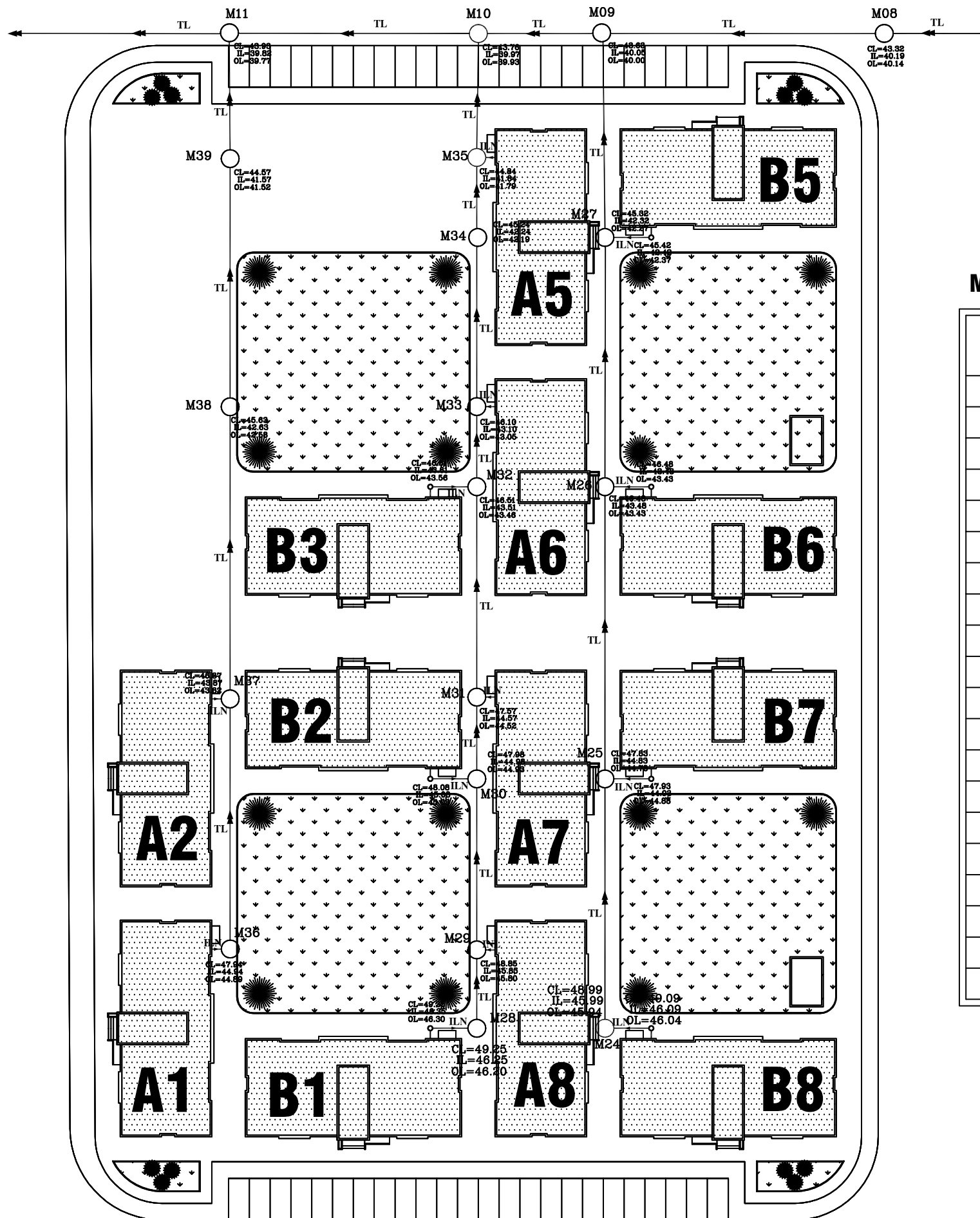
مركز الهندسة والتخطيط
center for engineering and planning



LIST OF DRAWINGS 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

NOTES :-

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

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 08)

CONSULTANT:



center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

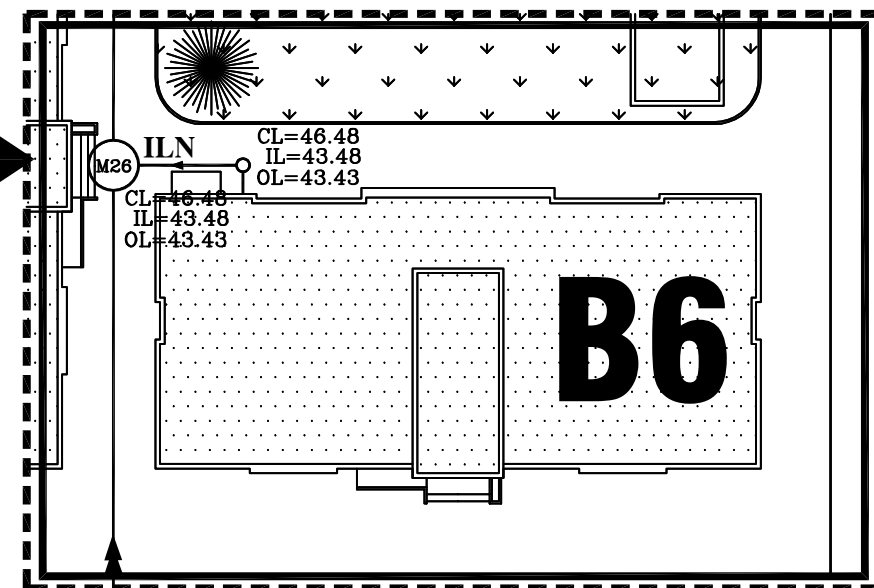
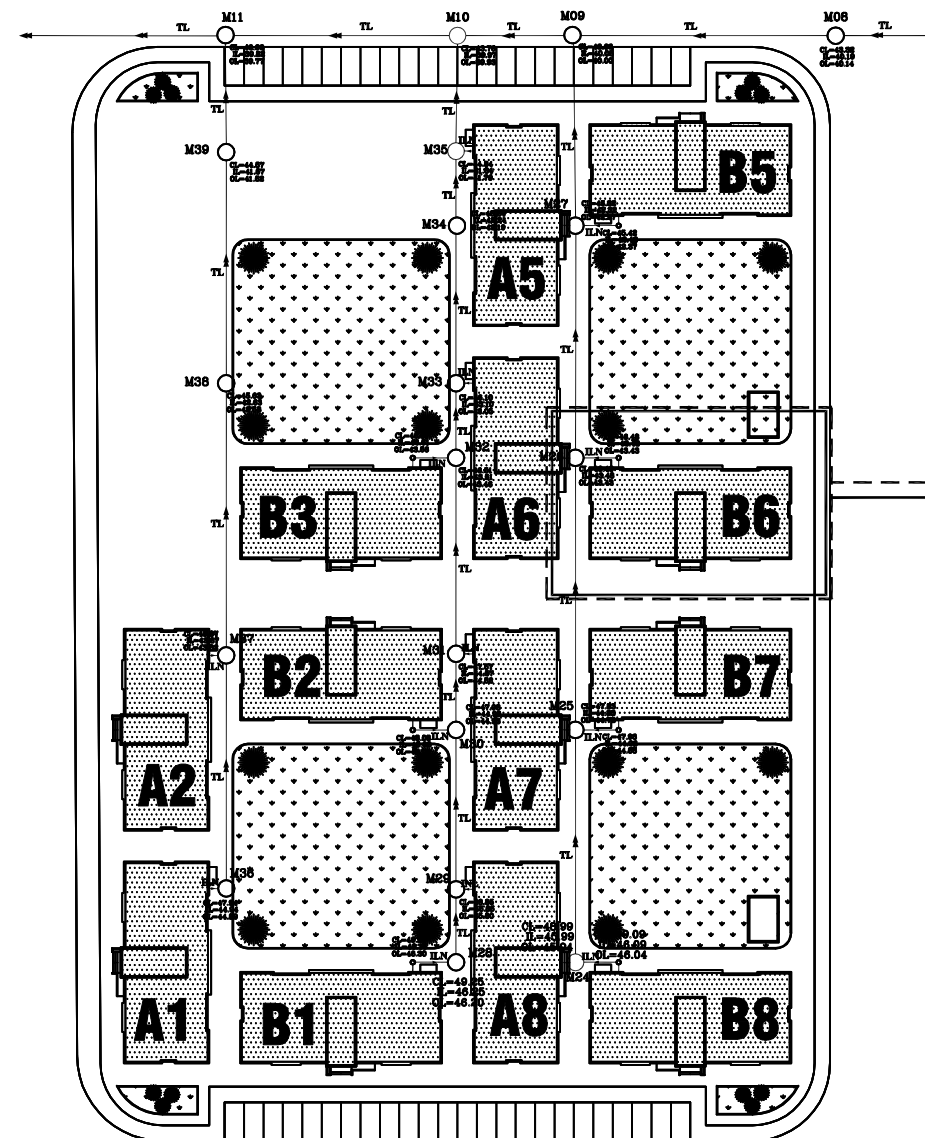
SANITARY NETWORK FOR

HOUSING UNITS

DRAWING NO.: RE-M-000

DATE: APRIL 2011

SCALE: NOT TO SCALE




NOTES :-


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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

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:
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 PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

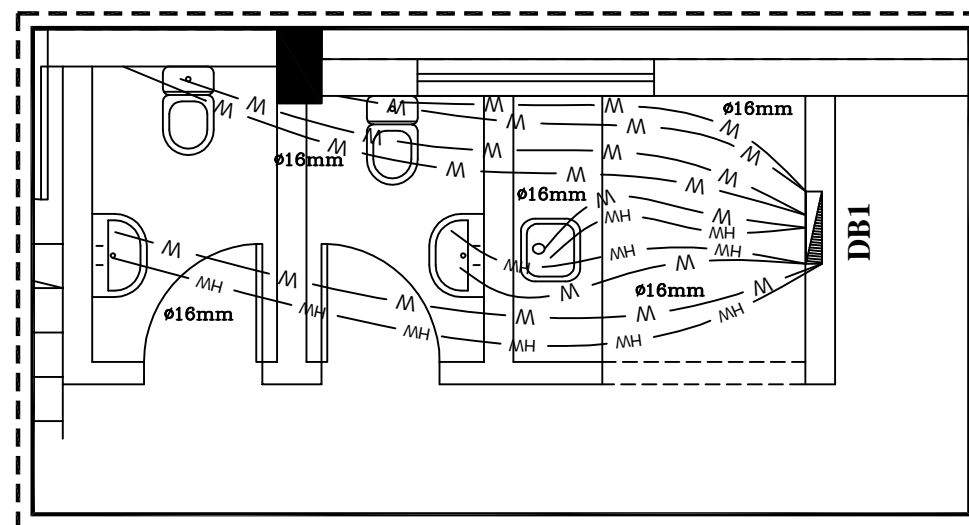
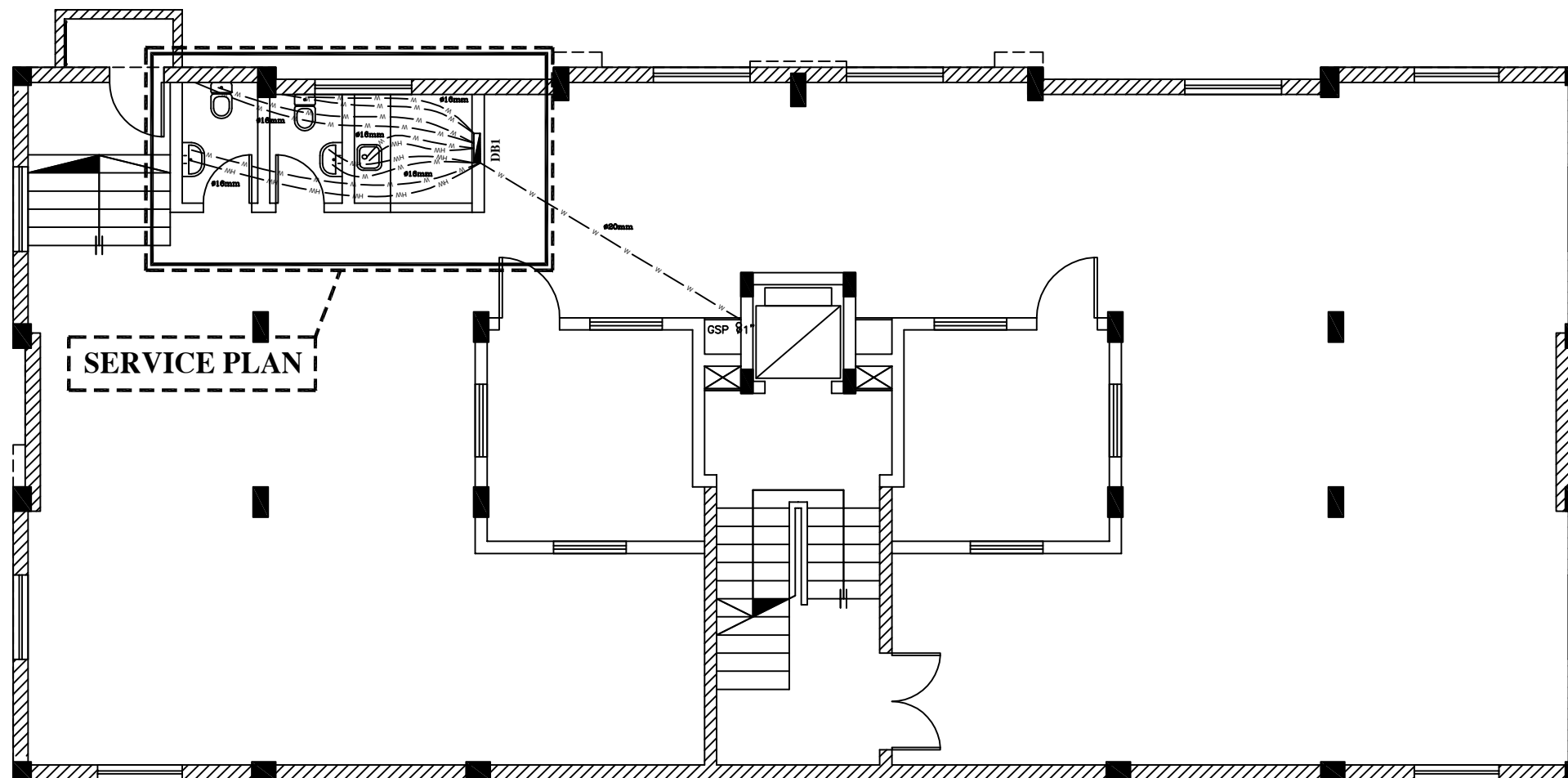
CONSULTANT:
 center for engineering and planning

BUILDING NAME:
 RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
 SEWER PIPE FOR THE BUILDING

DRAWING NO.: RE-M-001

DATE: APRIL 2011 SCALE: AS SHOWN



WATER NETWORK FOR SERVICE PLAN

SCALE 1:50

WATER NETWORK FOR UNDERGROUND FLOOR

NOTES :-

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(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
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

center for engineering and planning

BUILDING NAME:

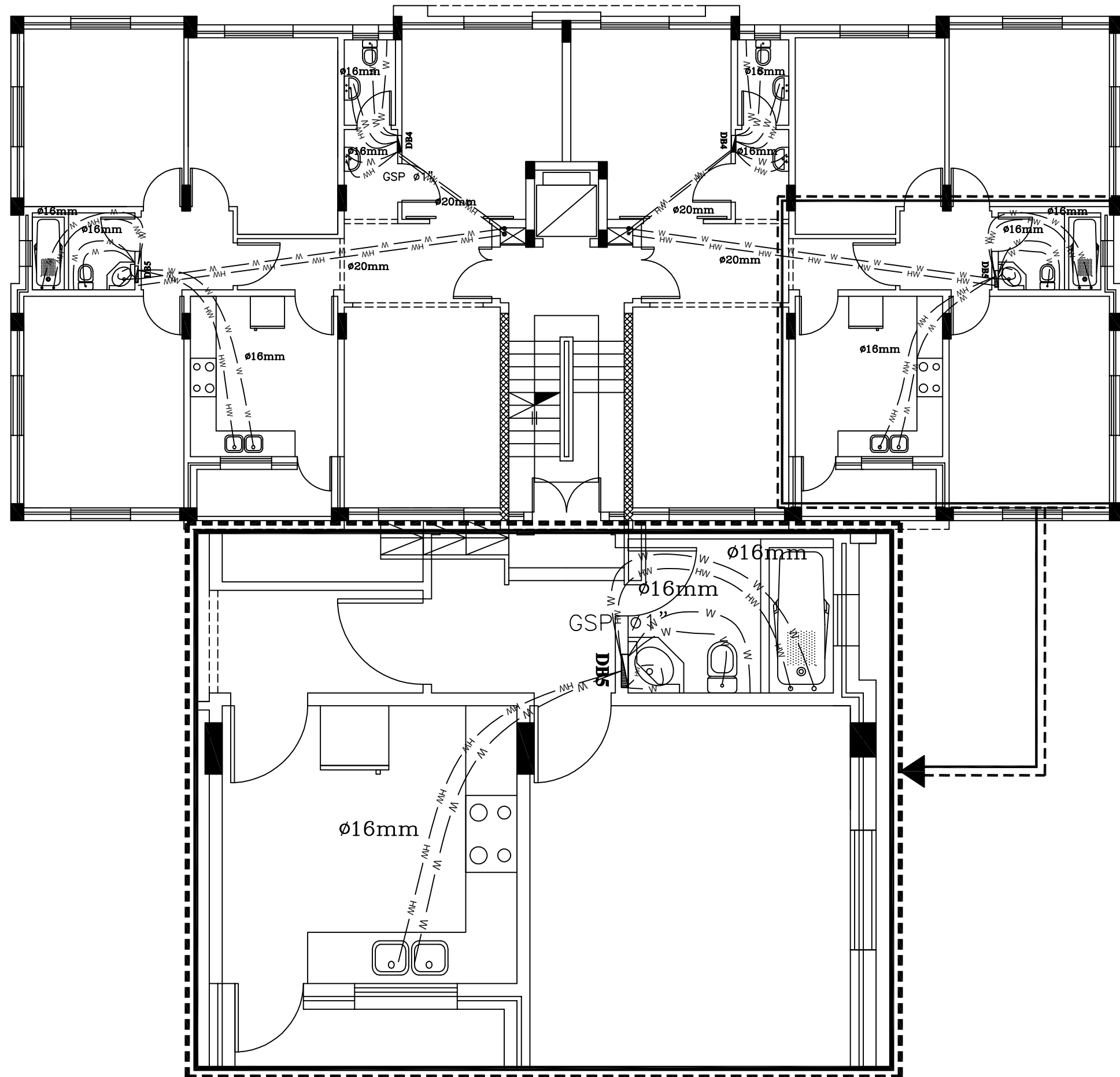
RESIDENTIAL BUILDING NO. (B6)

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 :-

- ALL DIMENSIONS ARE IN CM & M. EXCEPT WHERE OTHERWISE SHOWN OR NOTED
- CONTRACTOR SHALL SUBMIT THE MANUFACTURES, CATALOGES, DIMENSIONS, DETAILS AND CONNECTION FOR ALL MECHANICAL WORKS THAT SHOULD BE COMPATIBLE WITH THE SIZE OF BUILDING AND CHAMBERS
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- IF THERE IS ANY DISCRAPENCY 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
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 08)

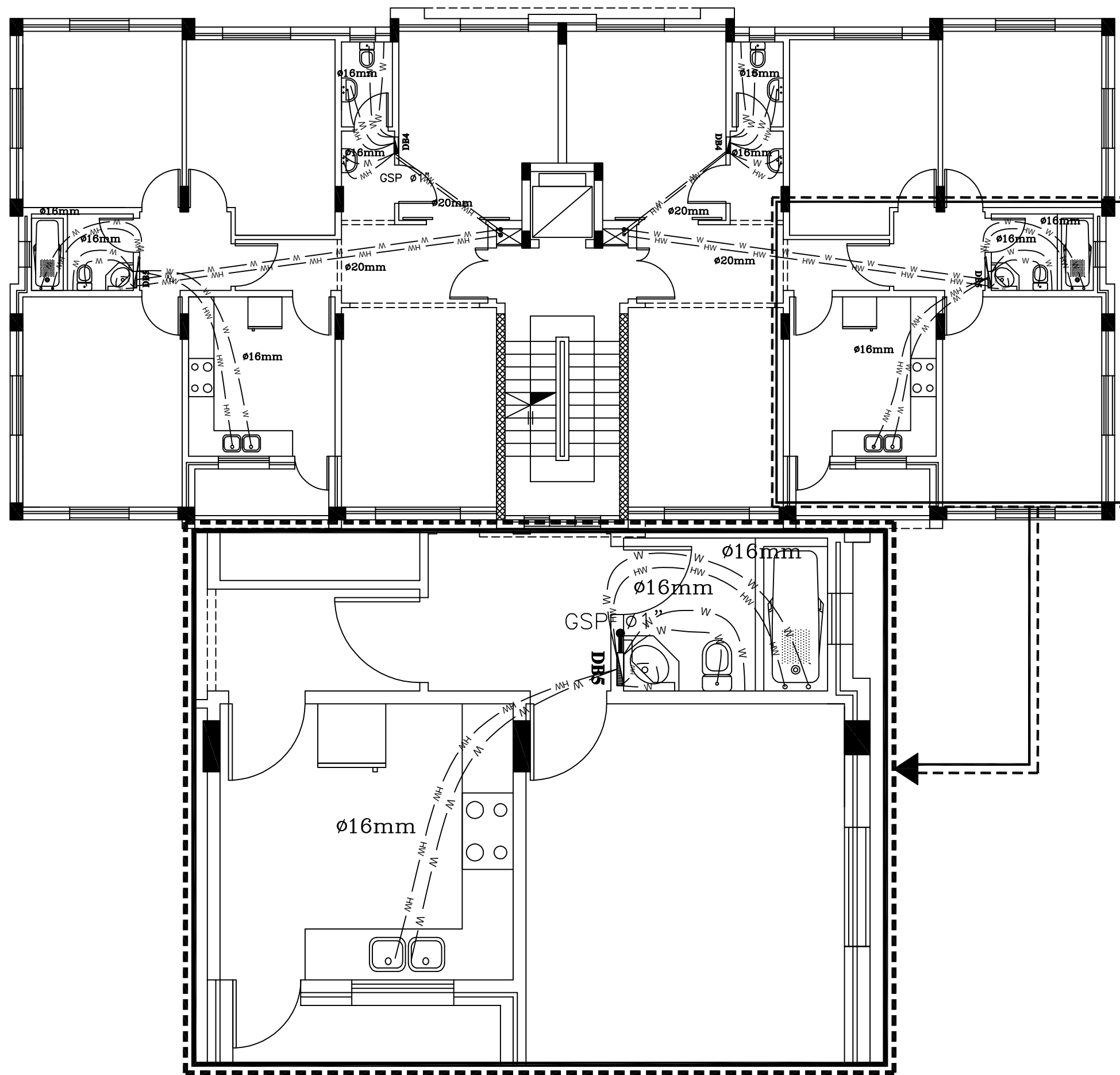
CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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 NOTED
- CONTRACTOR SHALL SUBMIT THE MANUFACTURES, CATALOGES, DIMENSIONS, DETAILS AND CONNECTION FOR ALL MECHANICAL WORKS THAT SHOULD BE COMPATIBLE WITH THE SIZE OF BUILDING AND CHAMBERS
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(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
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PROJECT TITLE:
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

center for engineering and planning

BUILDING NAME:

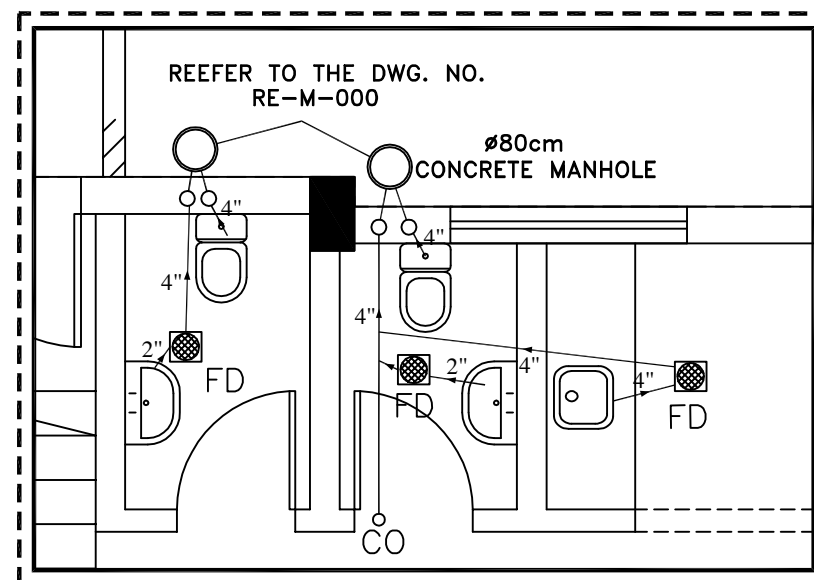
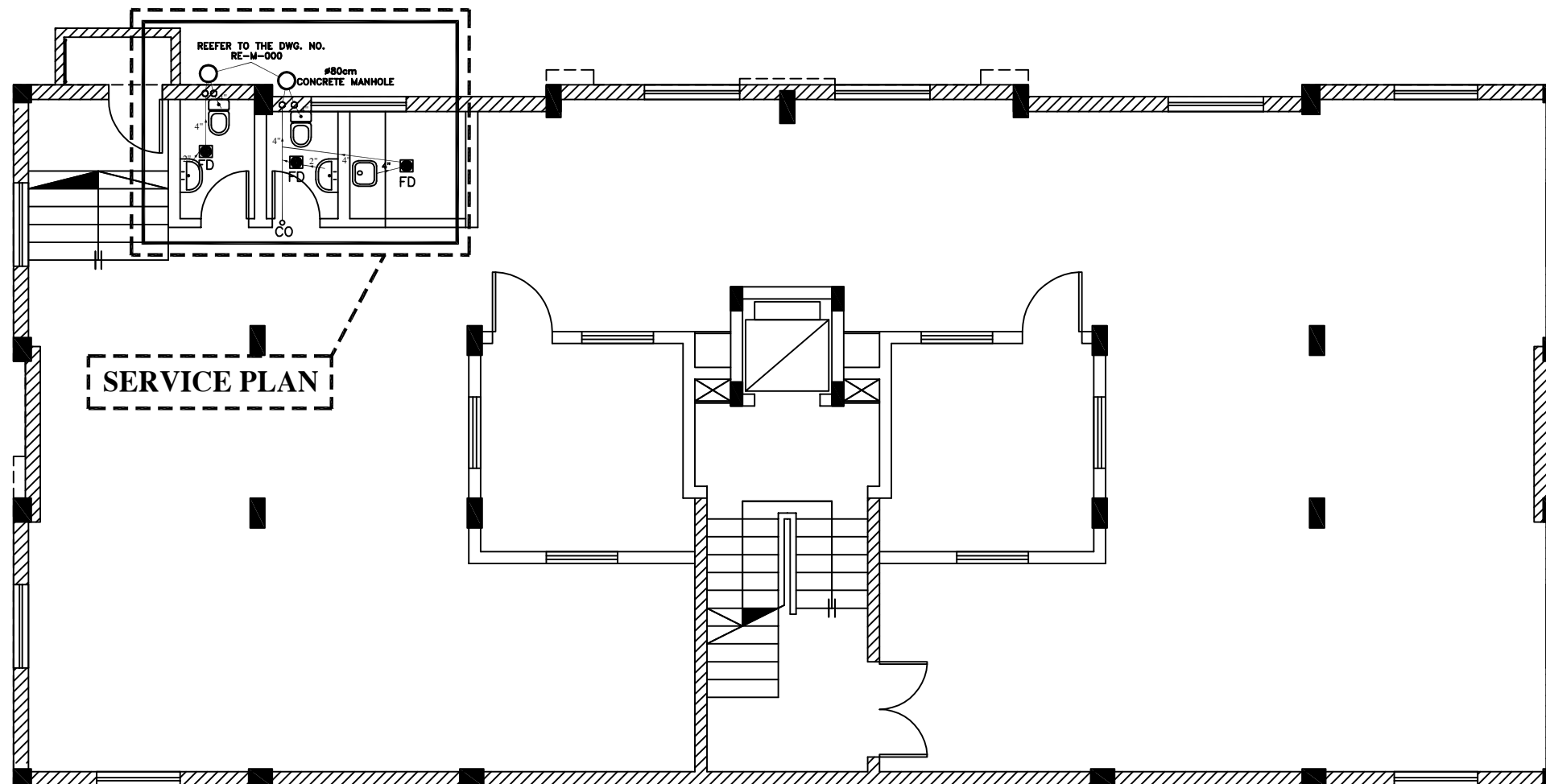
RESIDENTIAL BUILDING NO. (B6)

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 :-

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(FD) FLOOR DRAIN

FOR TENDER ONLY

CLIENT:



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THE UNITED NATIONS DEVELOPMENT PROGRAMME
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

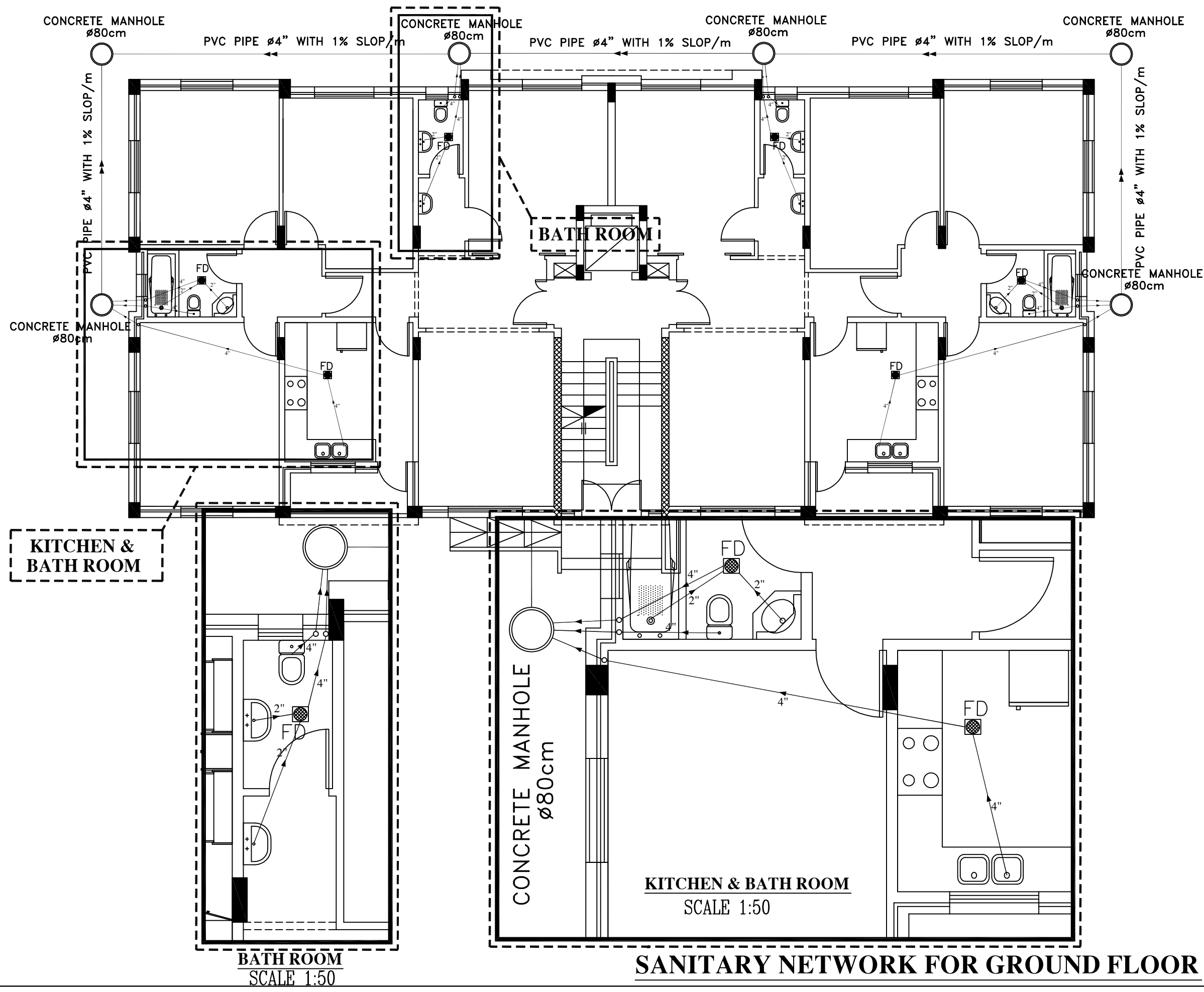
DRAWING TITLE:

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

FOR TENDER ONLY

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
SANITARY NETWORK FOR
GROUND FLOOR

DRAWING NO.: RE-M-006

DATE: APRIL 2011 **SCALE:** NOT TO SCALE

NOTES :-

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(FD) FLOOR DRAIN

FOR TENDER ONLY

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EMPLOYER:
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PROJECT TITLE:
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

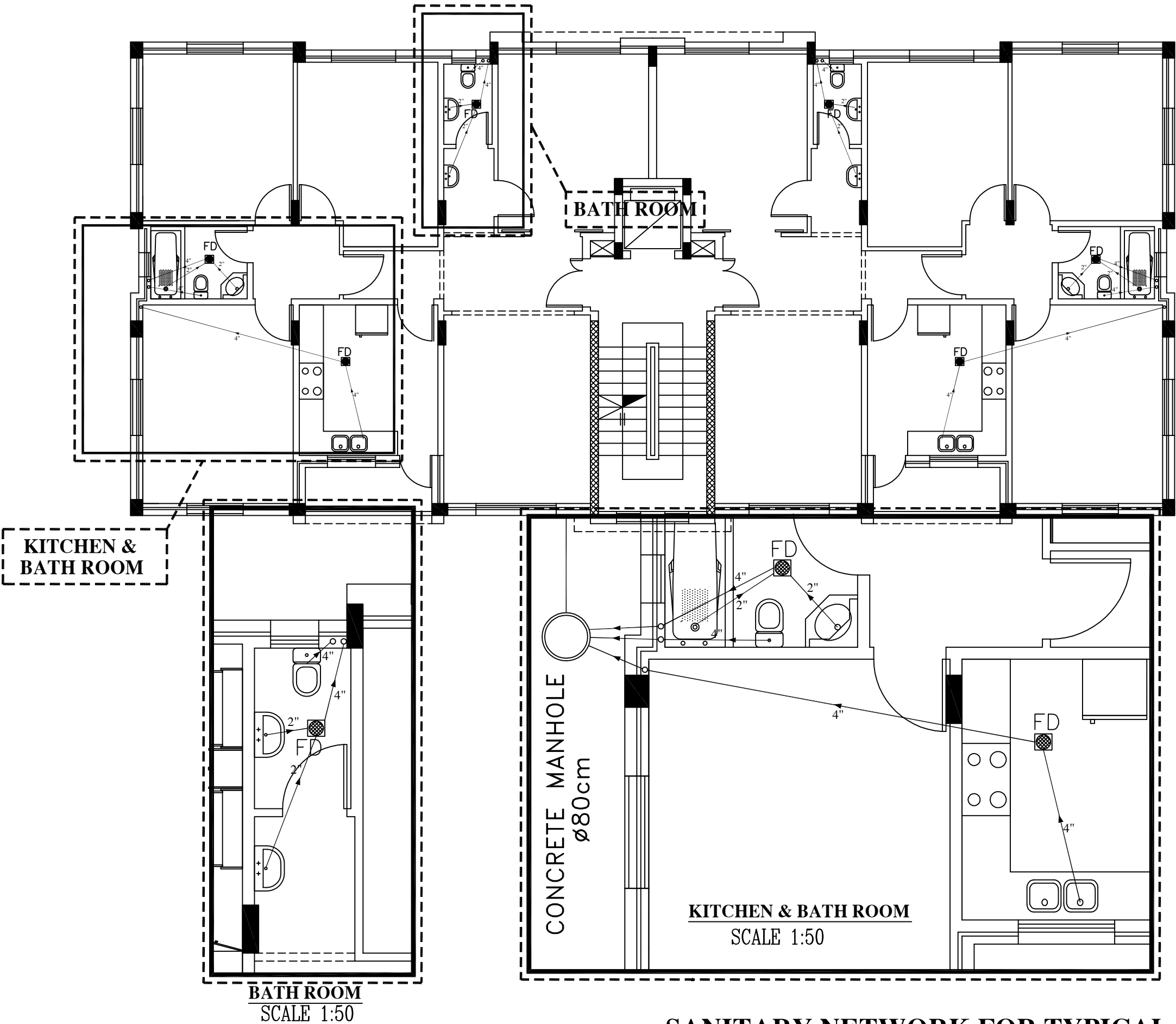
CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

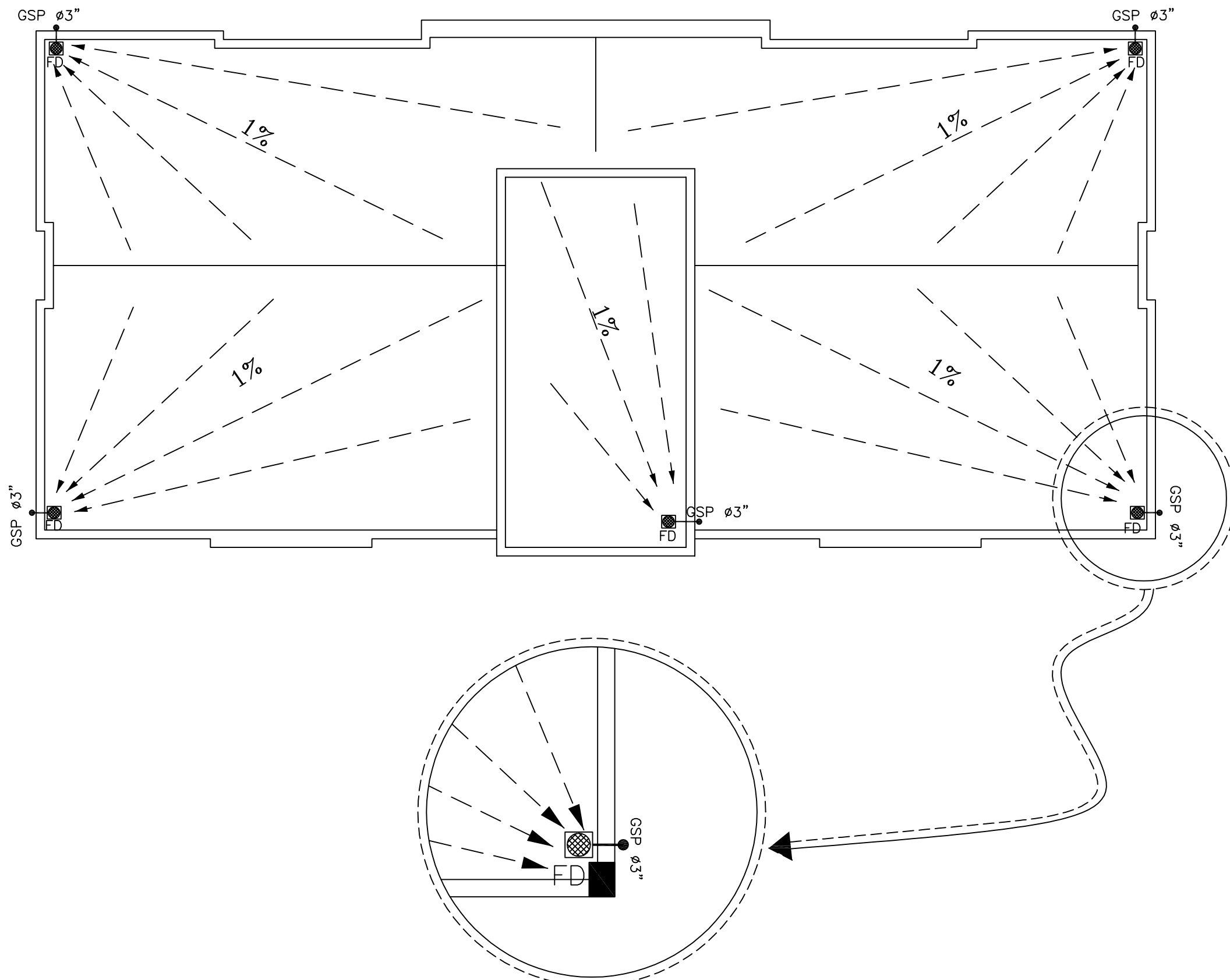
DRAWING TITLE:
SANITARY NETWORK FOR
TYPICAL FLOOR

DRAWING NO.: RE-M-007

DATE: APRIL 2011 SCALE: NOT TO SCALE



SANITARY NETWORK FOR TYPICAL FLOOR



RAIN WATER
SCALE 1:50


RAIN WATER FOR ROOF PLAN


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
PALESTINIAN PEOPLE
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PROJECT TITLE:
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
 center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)





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

CLIENT:
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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

EMPLOYER:
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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 08)

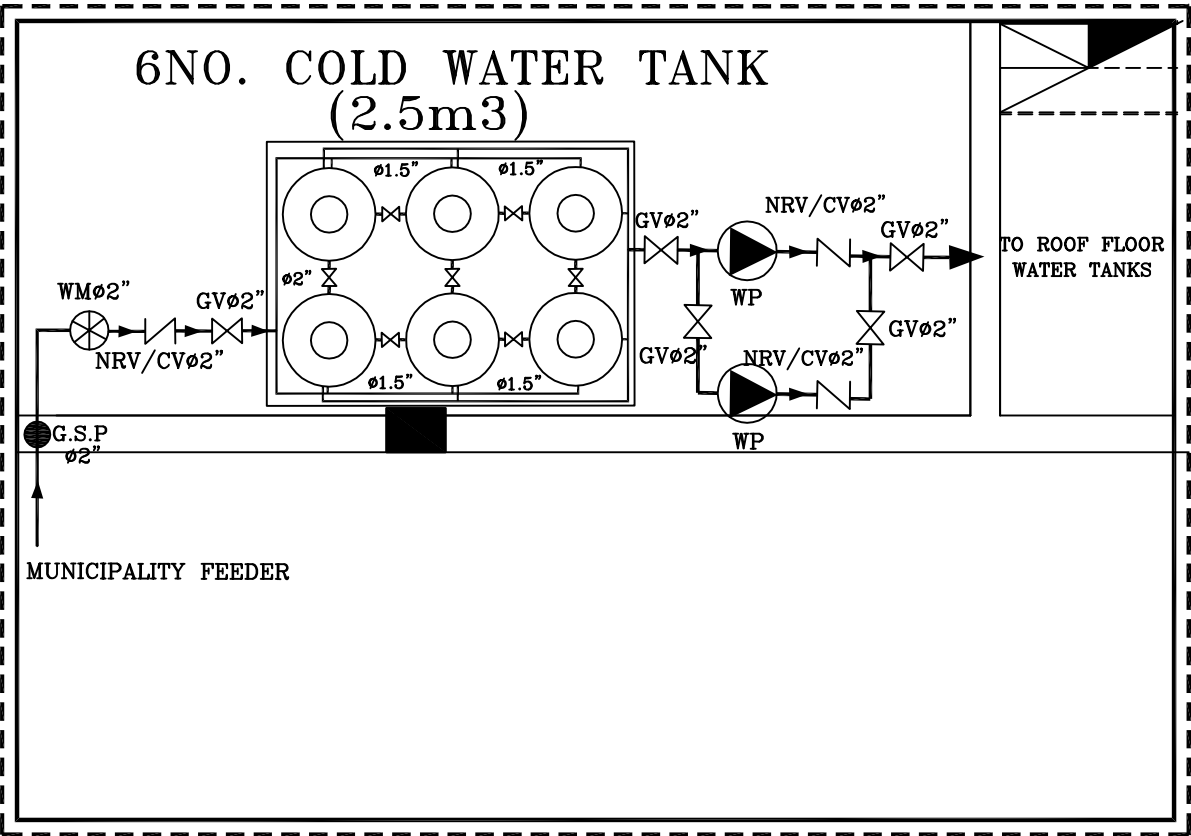
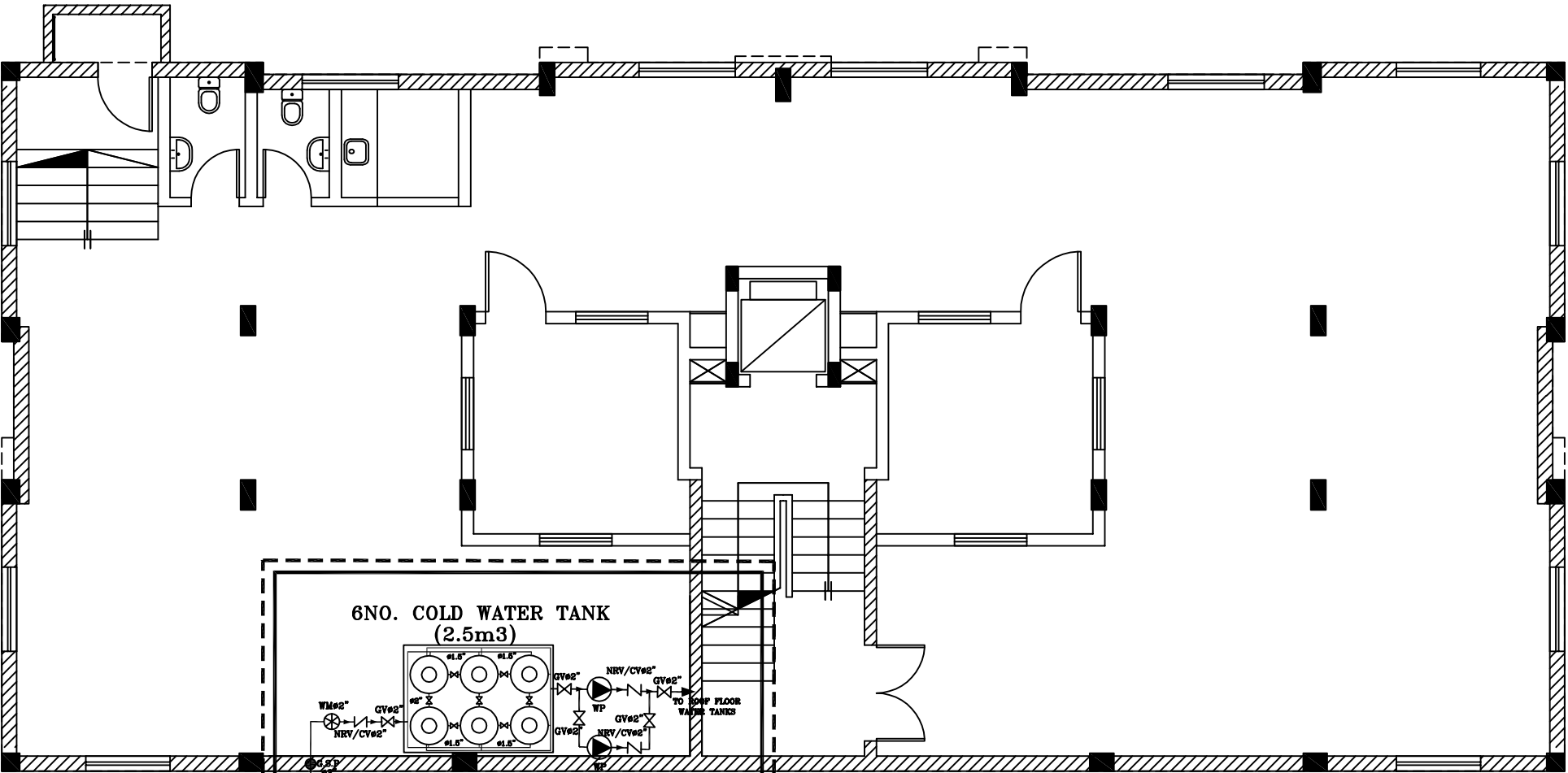
CONSULTANT:
 center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
WATER NETWORK FOR
UNDERGROUND FLOOR

DRAWING NO.: RE-M-009

DATE: APRIL 2011 SCALE: NOT TO SCALE

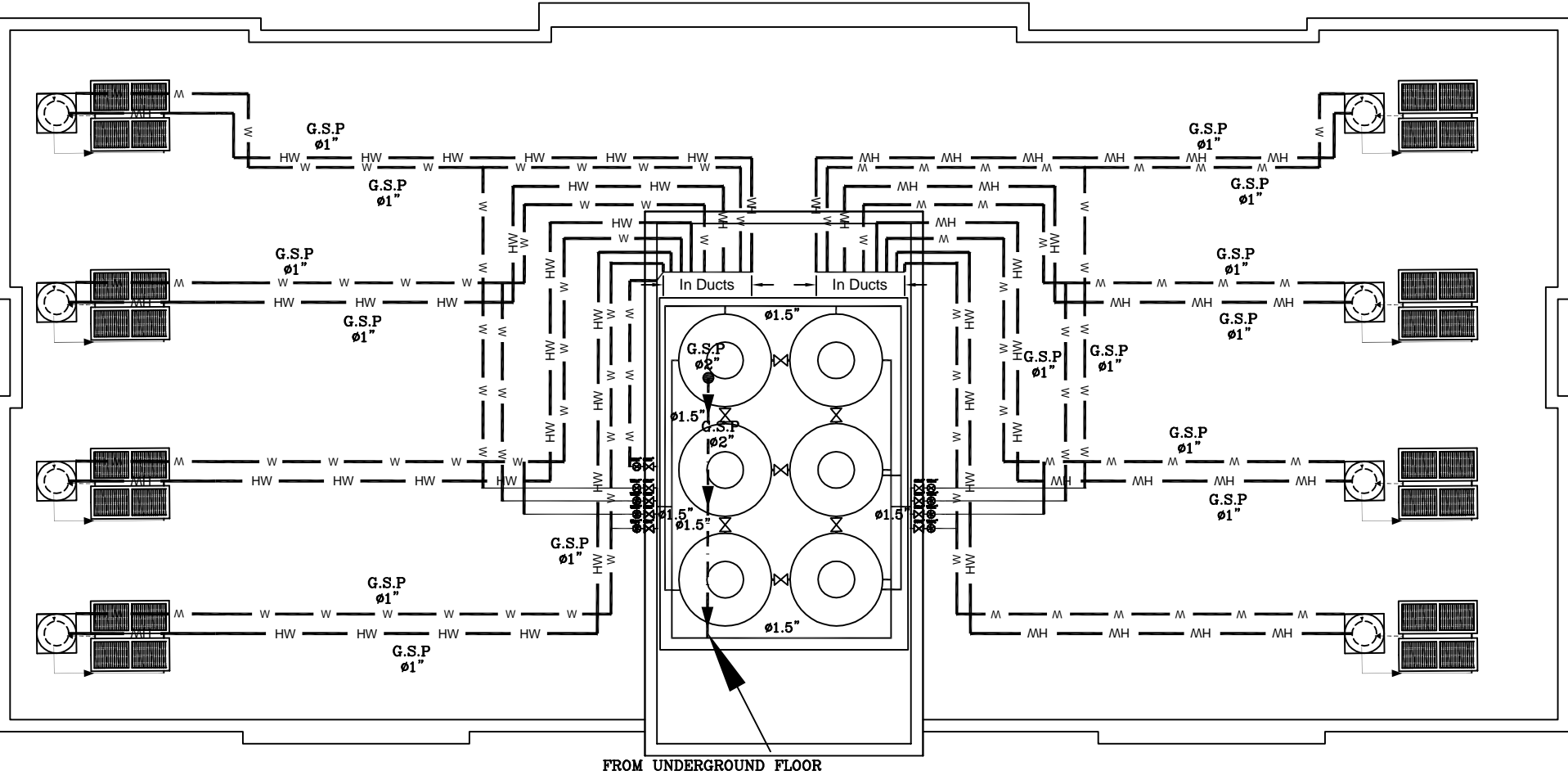


WATER NETWORK FOR UNDERGROUND FLOOR

NOTES :-

- ALL DIMENSIONS ARE IN CM & M. EXCEPT WHERE OTHERWISE SHOWN OR NOTED
- CONTRACTOR SHALL SUBMIT THE MANUFACTURES, CATALOGES, DIMENSIONS, DETAILS AND CONNECTION 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 DISCRAPENCY IN DRAWINGS THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE

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



NOT TO SCALE

WATER NETWORK FOR ROOF FLOOR

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

PROJECT TITLE:
CONSTRUCTION OF 100 HOUSING UNITS TO
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)





DRAWING TITLE:
WATER NETWORK FOR ROOF FLOOR

DRAWING NO.: RE-M-010


DATE: APRIL 2011 SCALE: NOT TO SCALE


NOTES :-

- ALL DIMENSIONS ARE IN CM & M. EXCEPT WHERE OTHERWISE SHOWN OR NOTED
-CONTRACTOR SHALL SUBMIT THE MANUFACTURES, CATALOGES, DIMENSIONS, DETAILS AND CONNECTION FOR ALL MECHANICAL WORKS THAT SHOULD BE COMPATIBLE WITH THE SIZE OF BUILDING AND CHAMBERS
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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

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EMPLOYER:
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UN PALESTINIAN PEOPLE
DIP (UNDP/PAPP)

PROJECT TITLE:
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

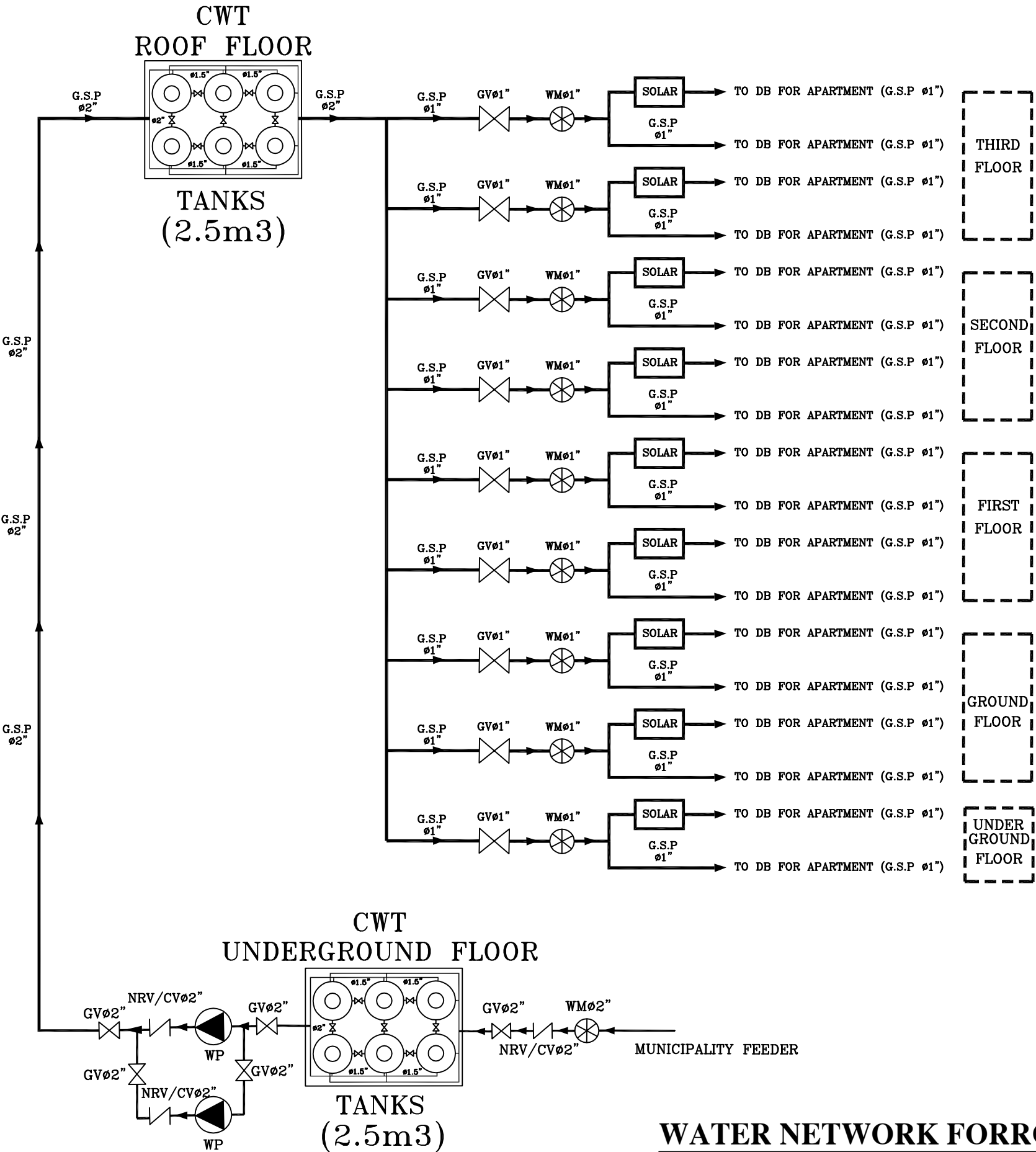
CONSULTANT:
 center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
WATER NETWORK FOR ROOF FLOOR

DRAWING NO.: RE-M-011

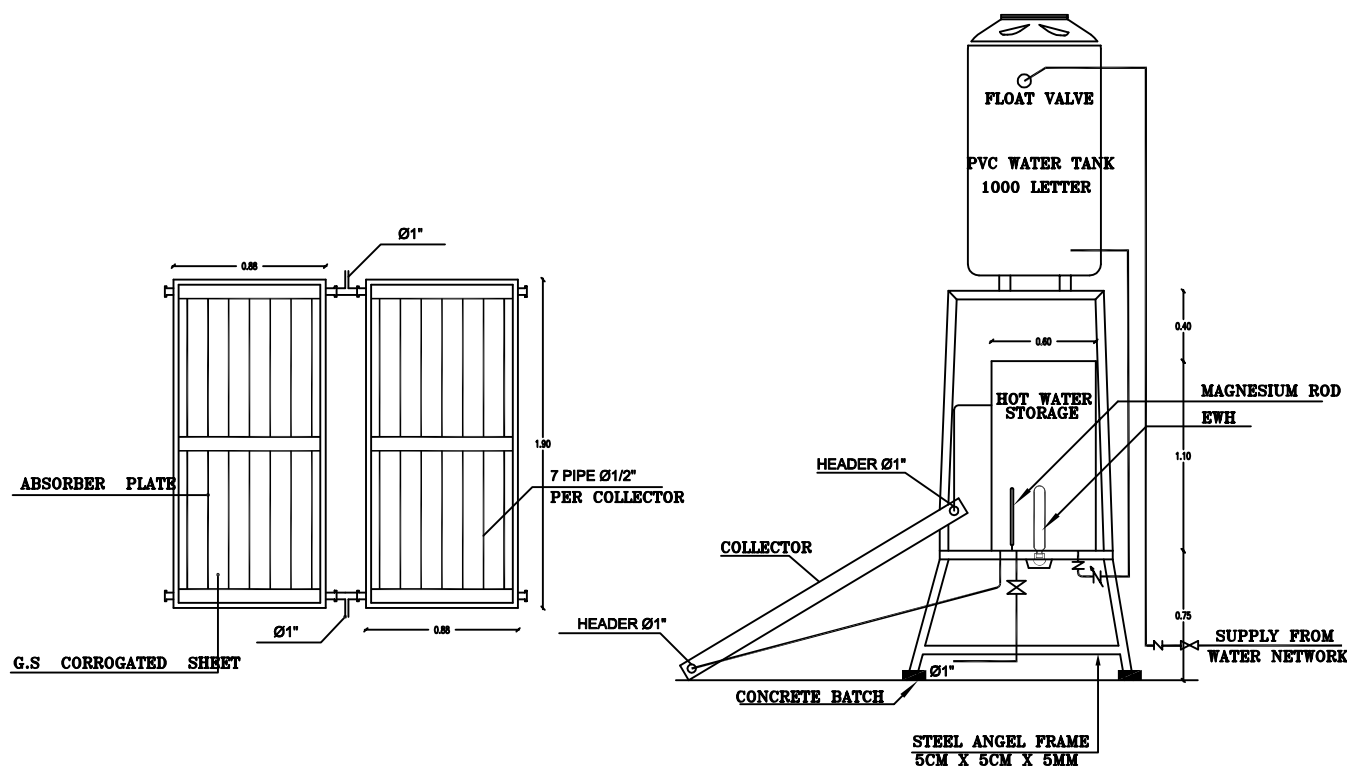
DATE: APRIL 2011 SCALE: NOT TO SCALE



WATER NETWORK FOR ROOF FLOOR

NOTES :-

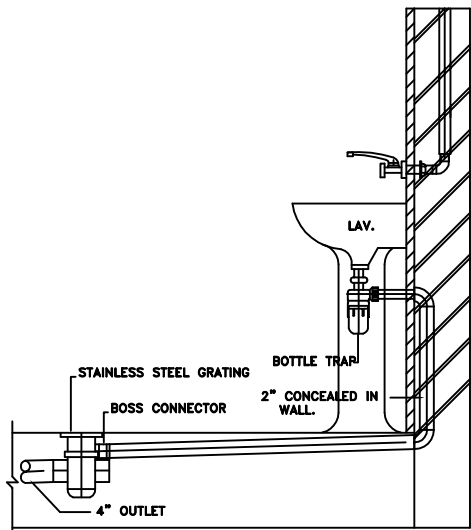
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COLLECTOR PLAN

SOLAR COLLECTOR DIAGRAM

COLLECTOR DETAILS



TYPICAL PIPING IN SCREED AND FLOOR DRAIN CONNECTIONS

GENRAL DETAILS FOR MECHANICAL(2/2)

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
GENRAL DETAILS FOR MECHANICAL(2/2)

DRAWING NO.: RE-GD-013

DATE: APRIL 2011 SCALE:

EMPLOYER:



THE UNITED NATIONS DEVELOPMENT PROGRAMME
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PALESTINIAN PEOPLE
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ELECTRICAL DRAWINGS

EMPLOYER:



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CLIENT



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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
	DITTO BUT WATER PROOF IP 65 .
	2-GANG LIGHTING SWITCH, ONE WAY 16A
	DITTO BUT WATER PROOF IP 65 .
	3-GANG LIGHTING SWITCH, ONE WAY 16A
	DITTO BUT WATER PROOF IP 65 .
	2-WAY LIGHTING SWITCH, 16A
	DITTO BUT WATER PROOF IP 65 .
	PUSHBUTTON LIGHTING SWITCH, ONE WAY 10A

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 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

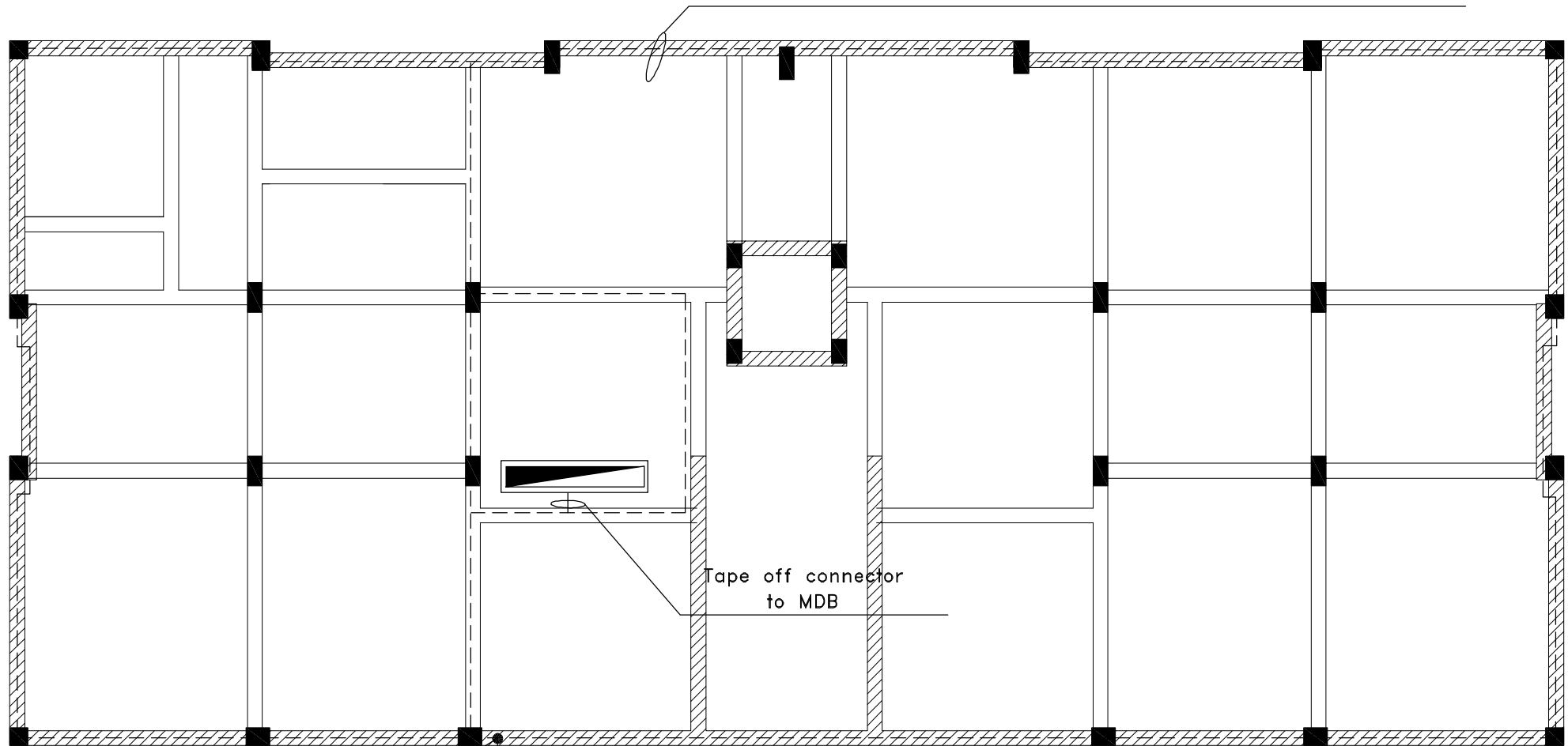
DRAWING TITLE:
Legend

DRAWING NO.: RES-E-001

DATE:APRIL 2011 SCALE: 1:xxx

NOTES :-

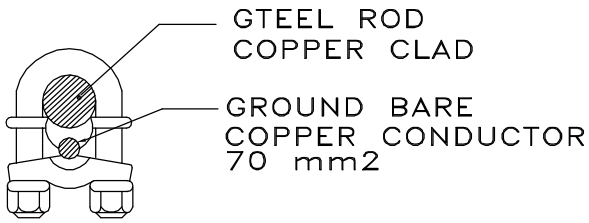
35X3 MM GALVANIZED STEEL SHEET WELDED
TO GROUND BEAM REINFORCEMENT STEEL



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

EARTHING PIT
Ø 60cm

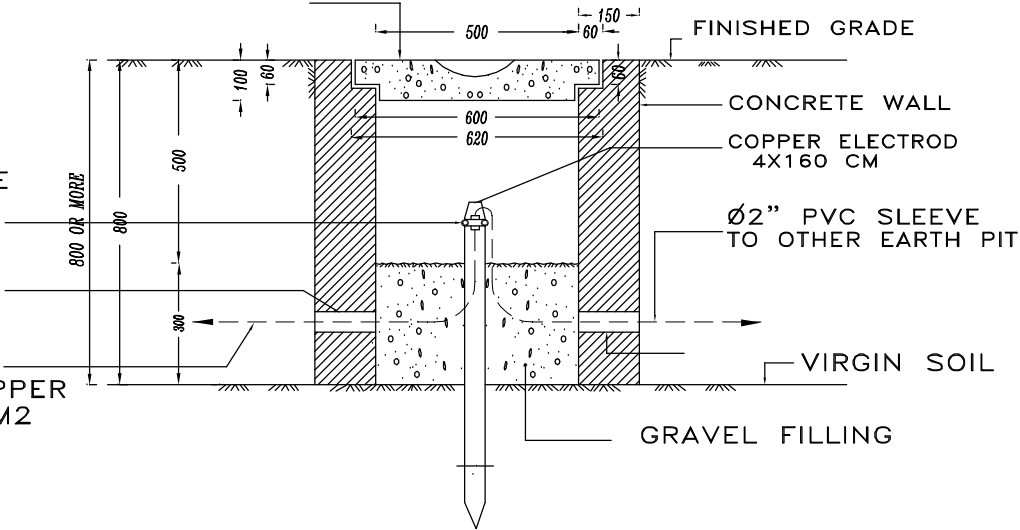
5 TON CONCRETE COVER



U - BOLTED TYPE
CONNECTOR SEE
DETAIL BELOW

Ø2" PVC SLEEVE

GROUND BARE COPPER
CONDUCTOR 50 MM2



Earthing Pit

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CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Grounding System

DRAWING NO.: RE-E-002

DATE: APRIL 2011 SCALE: 1:100

NOTES :-

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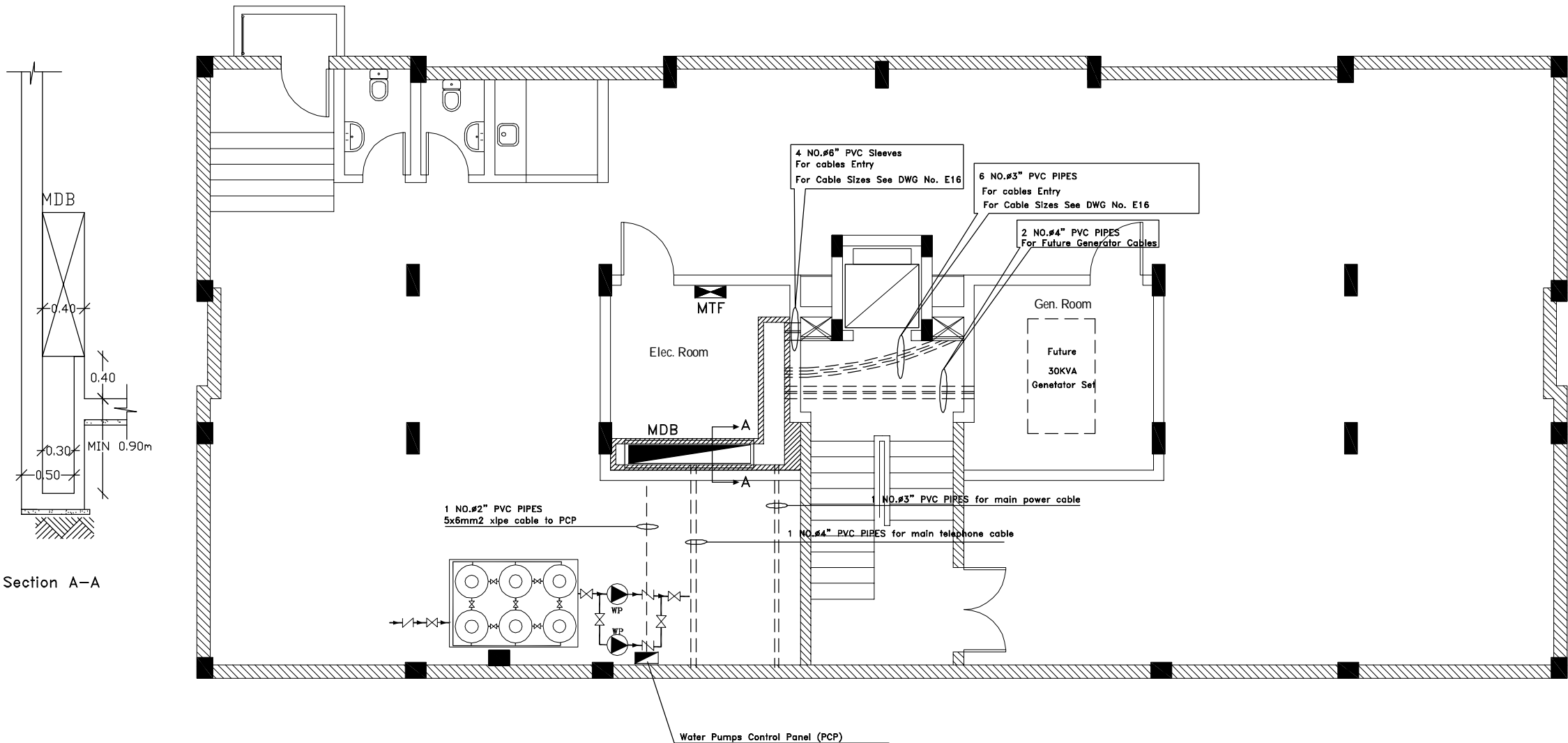
CONSULTANT:
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center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Underground Floor
Electrical Arrangements

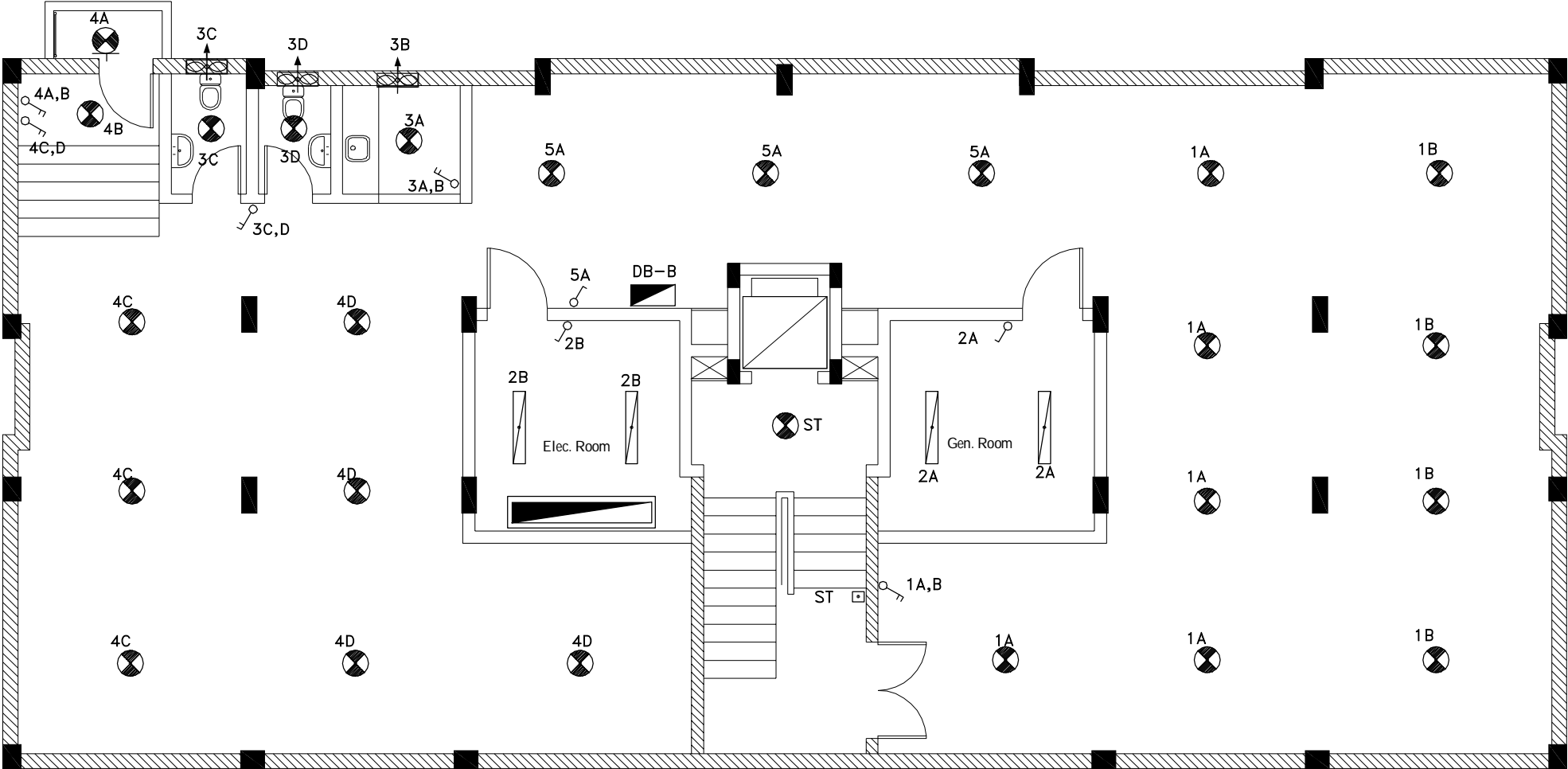
DRAWING NO.: RE-E-003

DATE: APRIL 2011 SCALE: 1:100



Section A-A

NOTES :-



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PROJECT TITLE:
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

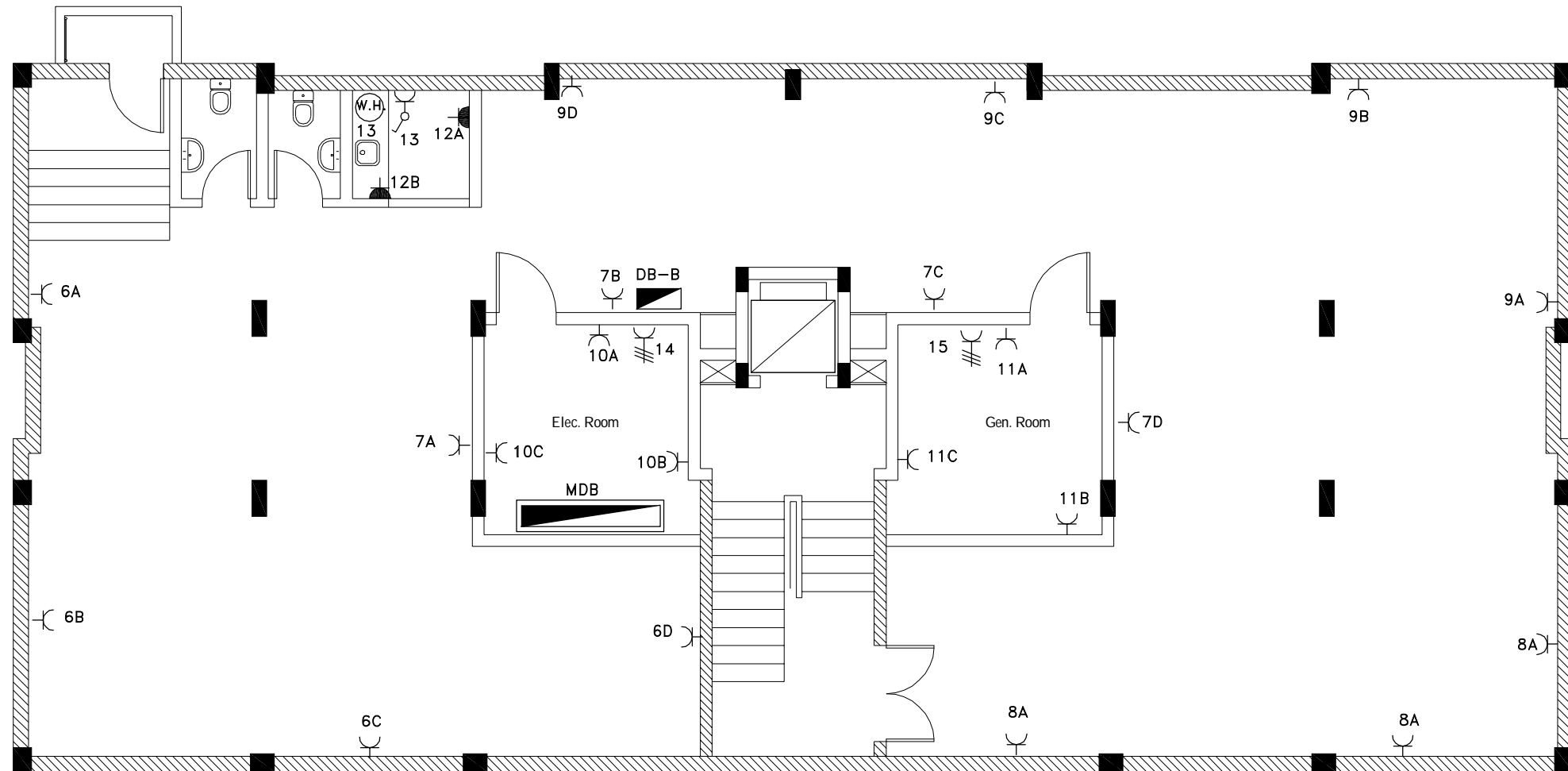
CONSULTANT:
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center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Underground Floor
Lighting Fittings Layout

DRAWING NO.: RE-E-004

DATE: APRIL 2011 | SCALE: 1:100



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CONSULTANT:
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center for engineering and planning

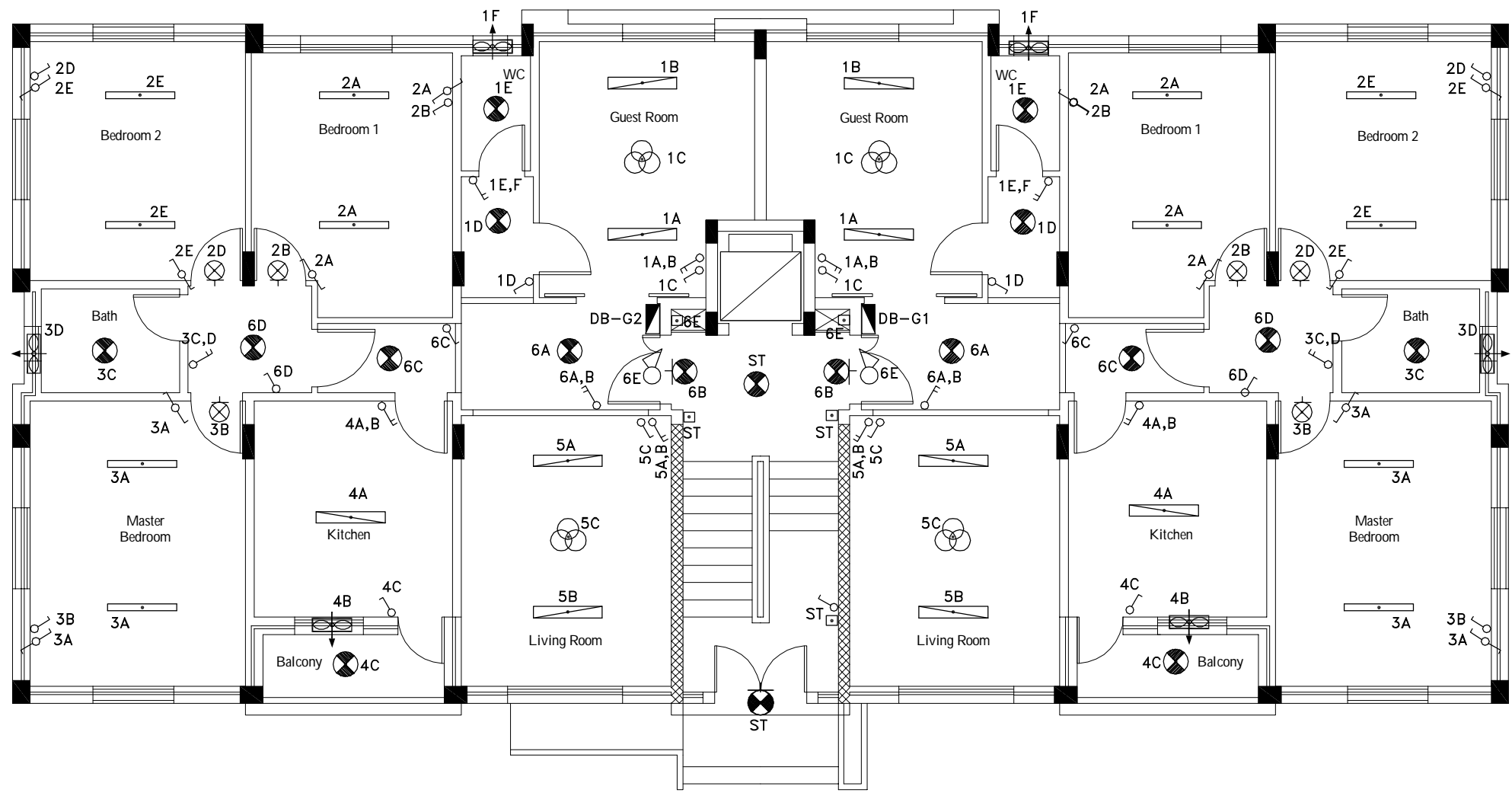
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Underground Floor
Power Fittings Layout

DRAWING NO.: RE-E-005

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
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center for engineering and planning

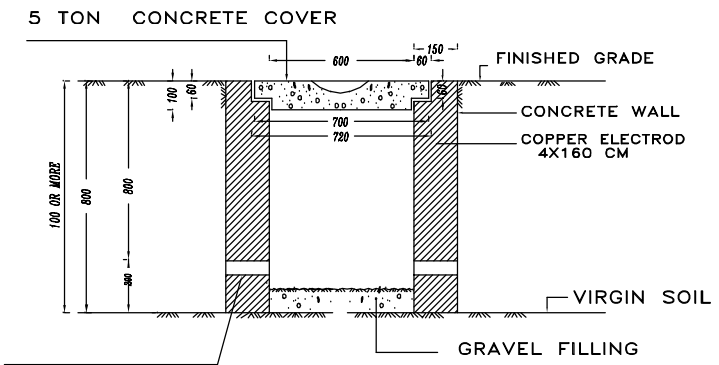
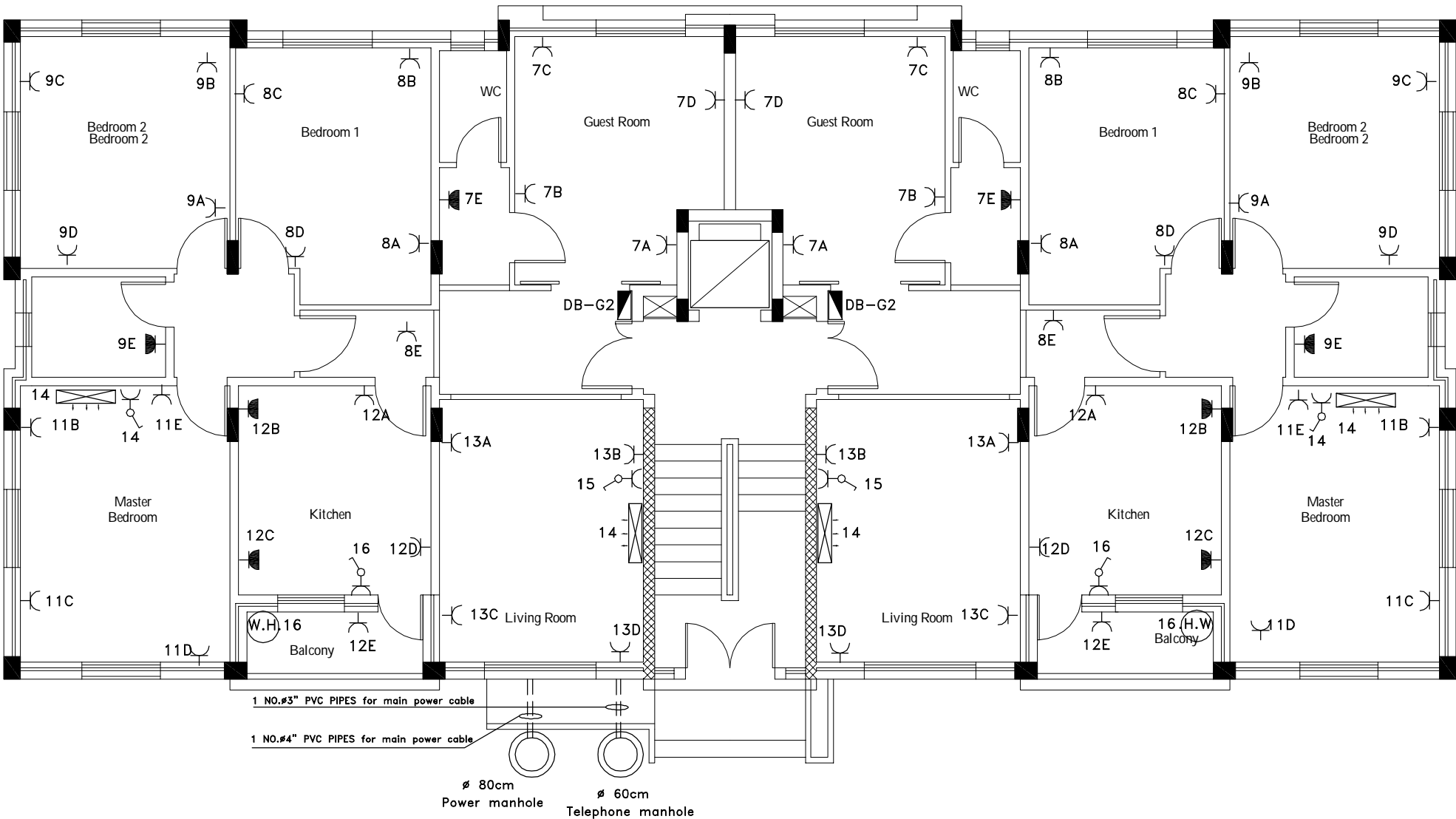
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Ground Floor
Lighting Fittings Layout

DRAWING NO.: RE-E-006

DATE: APRIL 2011 SCALE: 1:100

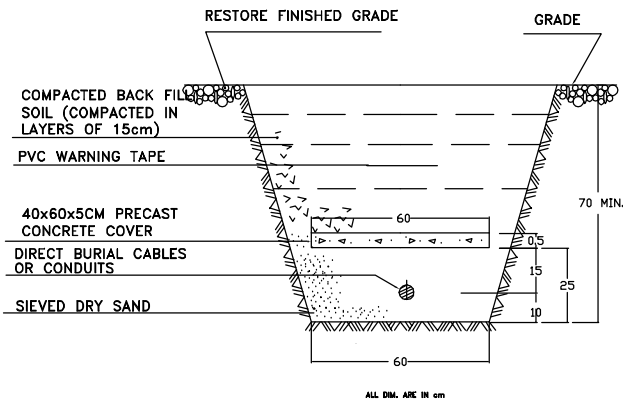
NOTES :-



U - BOLTED TYPE
CONNECTOR SEE
DETAIL BELOW


04" PVC SLEEVE


Power Manhole Details




TRENCH FOR ELECTRICAL CABLES

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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

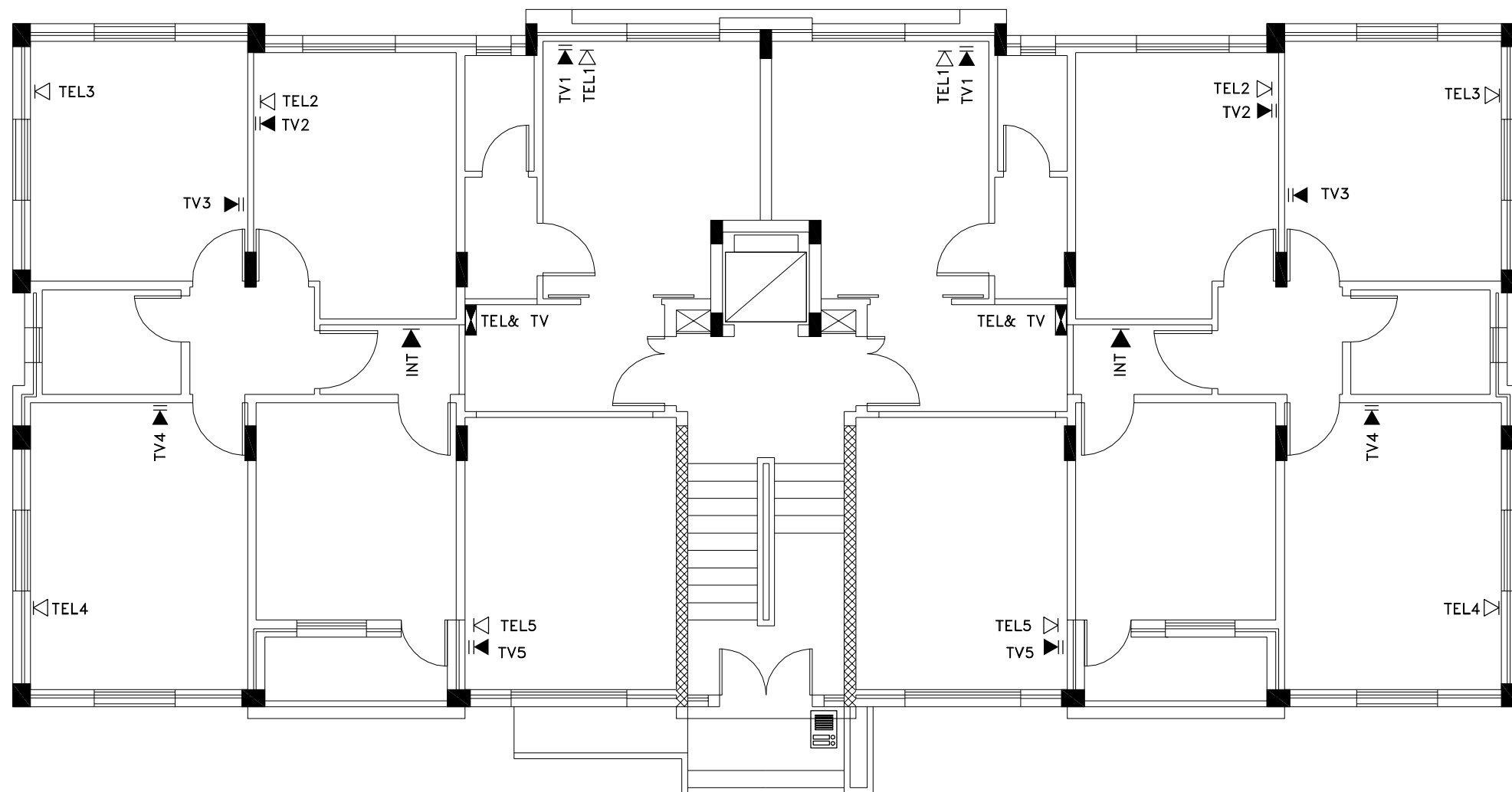
CONSULTANT:
 مرکز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Ground Floor
Power Fittings Layout

DRAWING NO.: RE-E-007


DATE: APRIL 2011 SCALE: 1:100





NOTES :-

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PROGRAMME OF ASSISTANCE TO THE
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(UNDP/PAPP)

PROJECT TITLE:

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

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

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

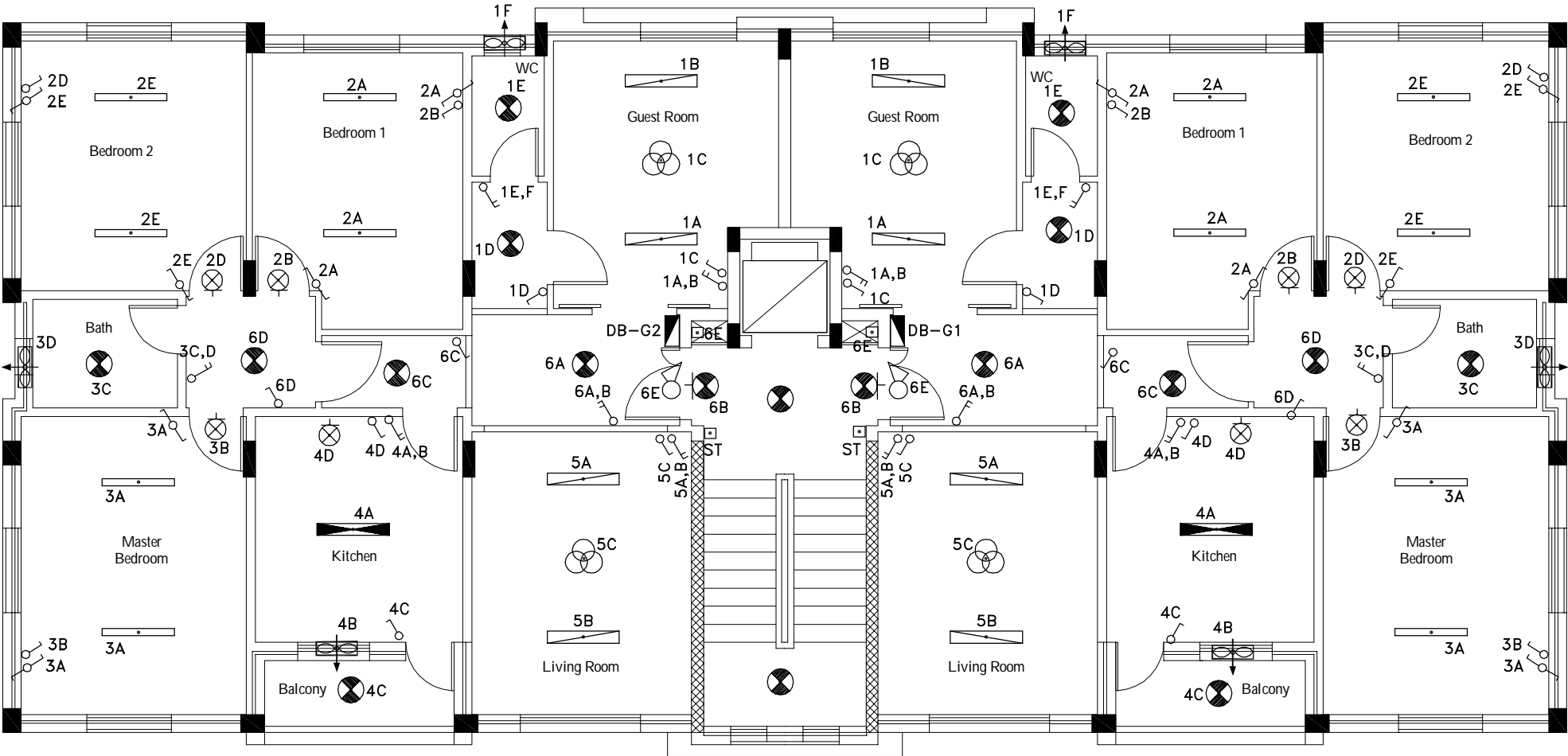
DRAWING TITLE:

Ground Floor
Telephone & TV Fittings Layout

DRAWING NO.: RE-E-008

DATE: APRIL 2011 SCALE: 1:100

NOTES :-



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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

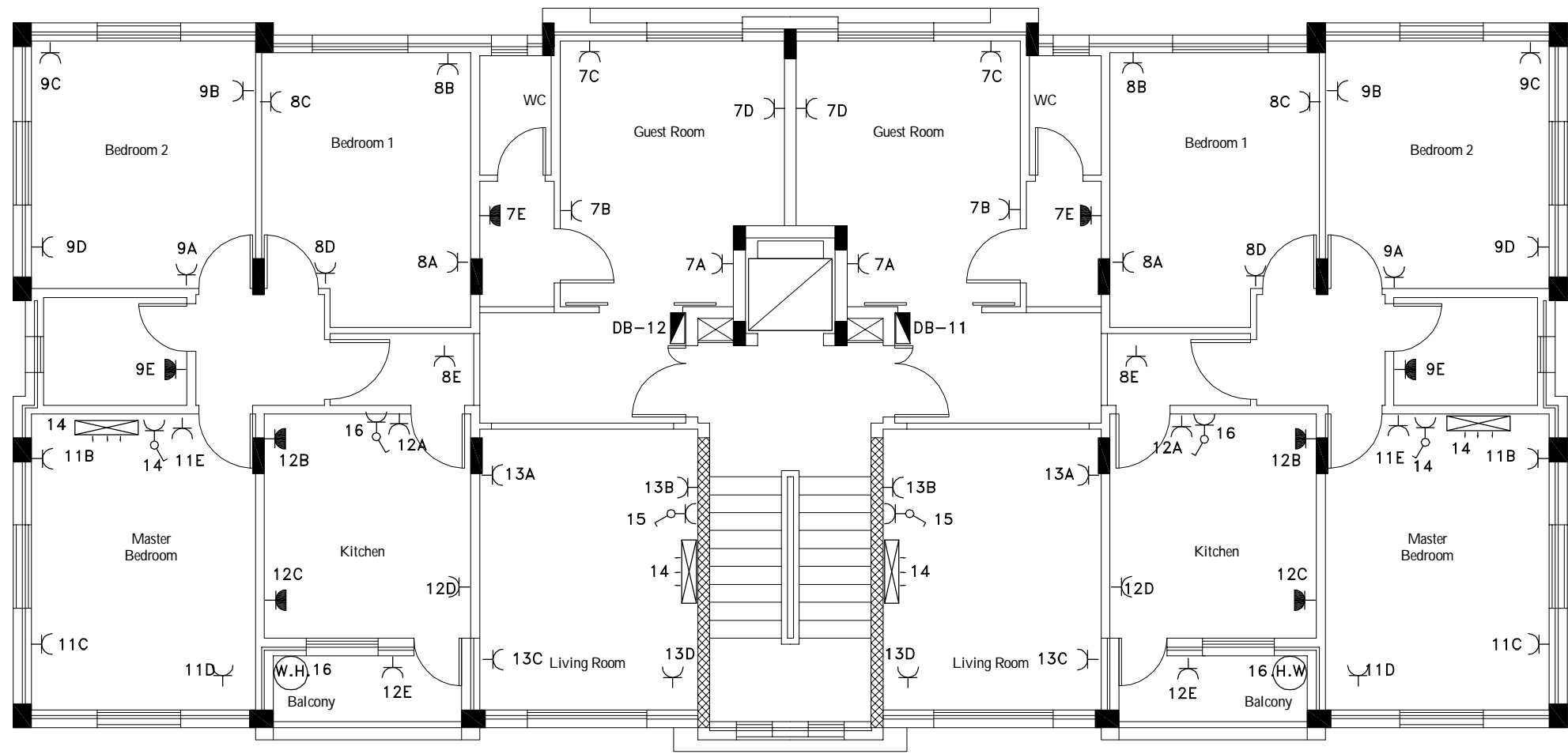
BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

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 08)

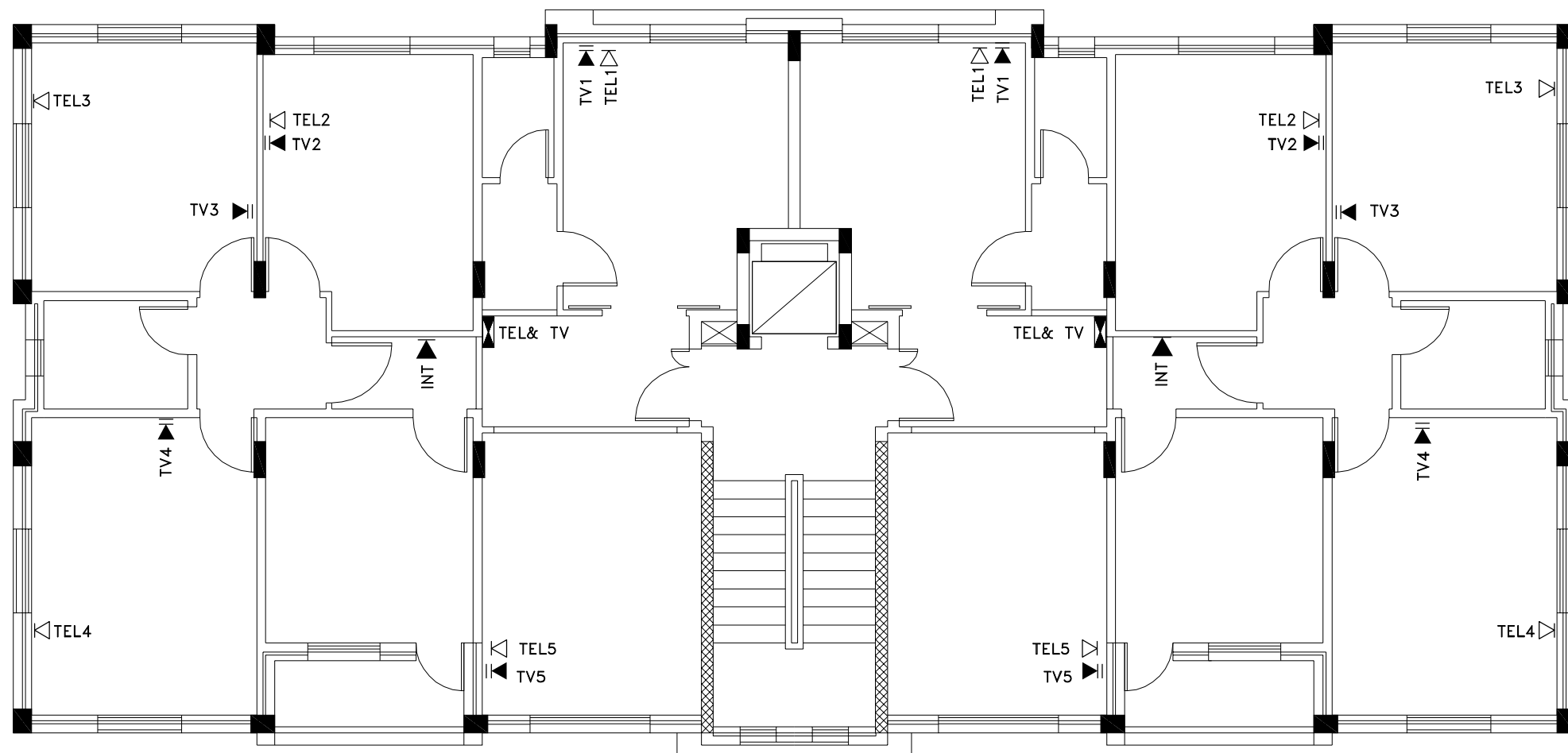
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Typical Floor
Power Fittings Layout

DRAWING NO.: RE-E-010


DATE: APRIL 2011 SCALE: 1:100





NOTES :-

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EMPLOYER:

 THE UNITED NATIONS DEVELOPMENT PROGRAMME
PROGRAMME OF ASSISTANCE TO THE
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PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:


مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

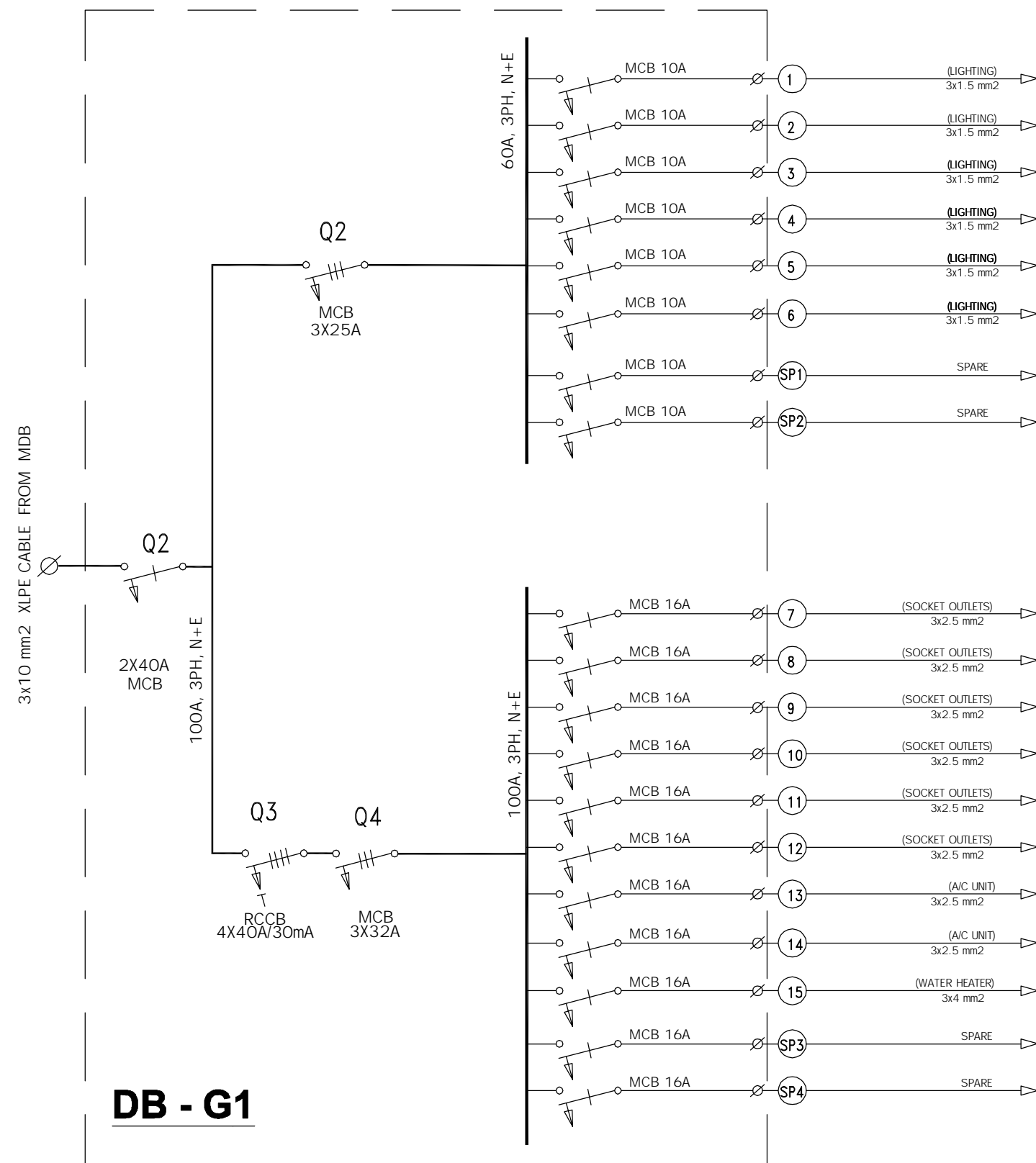
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

Typical Floor
Telephone & TV Fittings Layout

DRAWING NO.: RE-E-011

DATE: APRIL 2011 SCALE: 1:100



NOTES :-

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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 NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

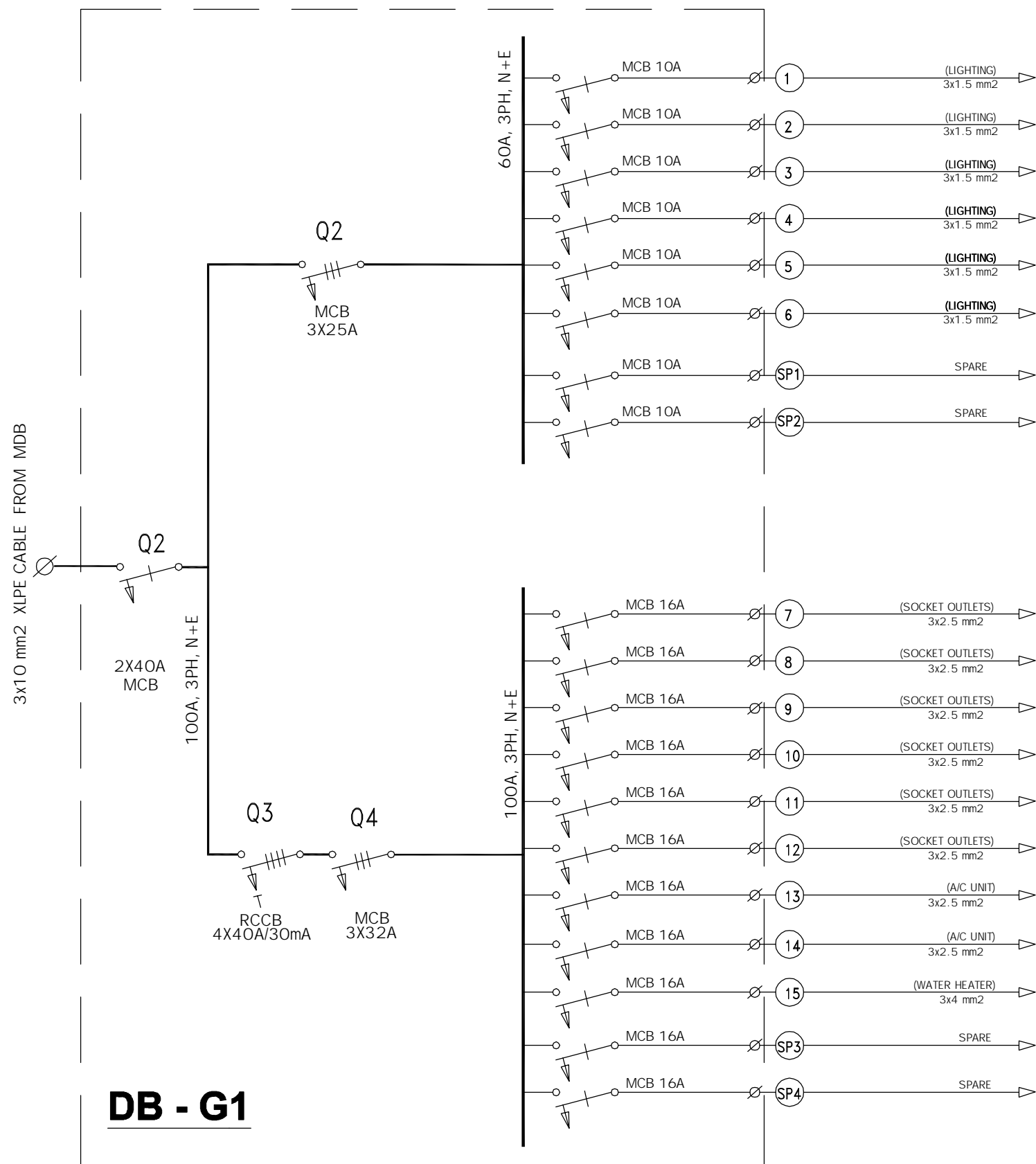
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

Typical Flat Panel
DB-G1 Single Line Power Diagram

DRAWING NO.: RE-E-012

DATE: APRIL 2011 SCALE: 1:xxx



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CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

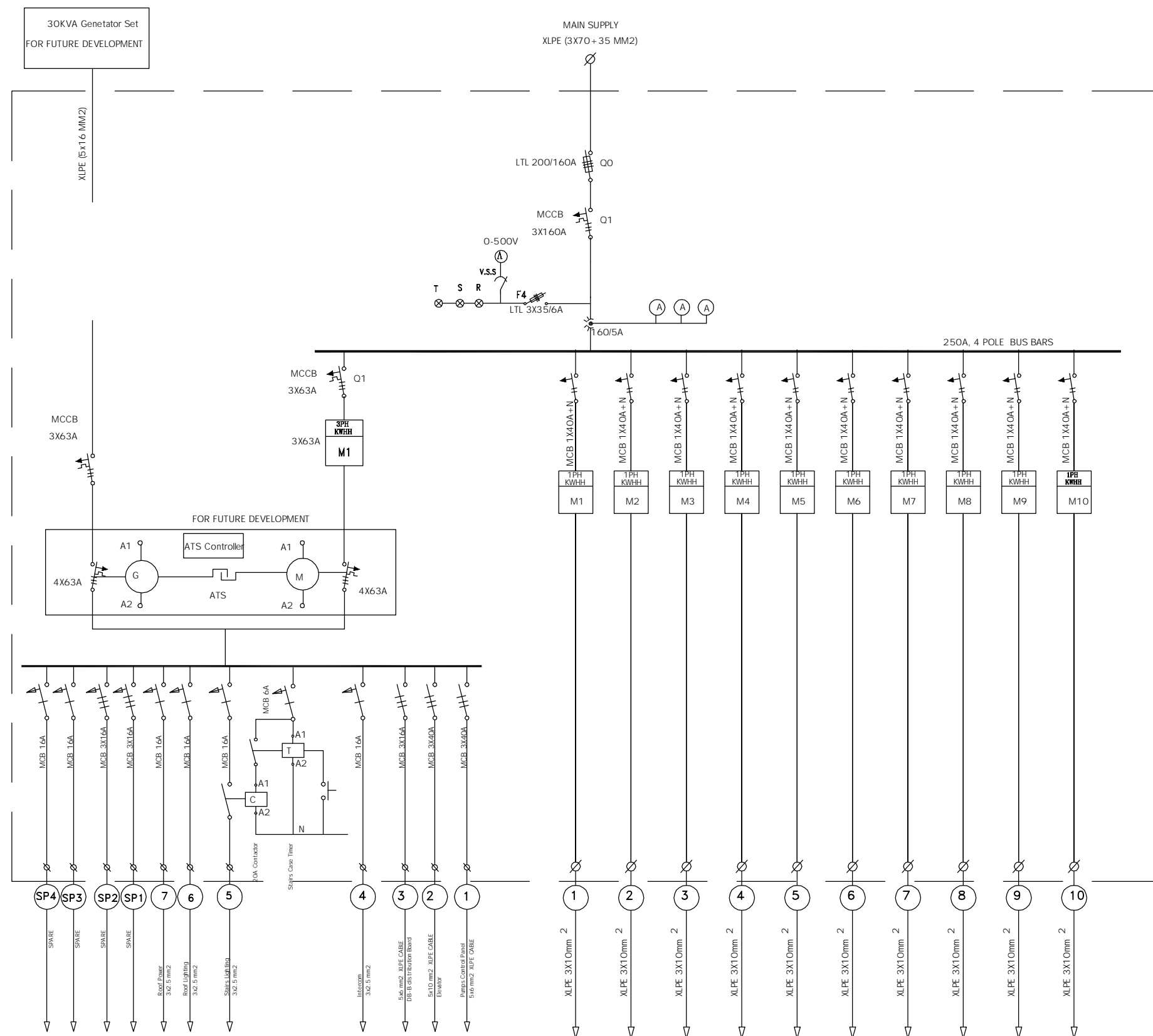
DRAWING TITLE:

Under Ground Floor
DB-B Single Line Power Diagram


DRAWING NO.: RE-E-013

DATE: APRIL 2011 SCALE: 1:xxx


NOTES :-



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EMPLOYER:

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

<p>PROJECT TITLE:</p> <p>CONSTRUCTION OF 100 HOUSING UNITS TO RE-HOUSE THE AFFECTED PALESTINIAN FAMILIES IN GAZA STRIP</p> <p>PROJECT NO.: PAL 10-00070416 (PACKAGE 08)</p>
--

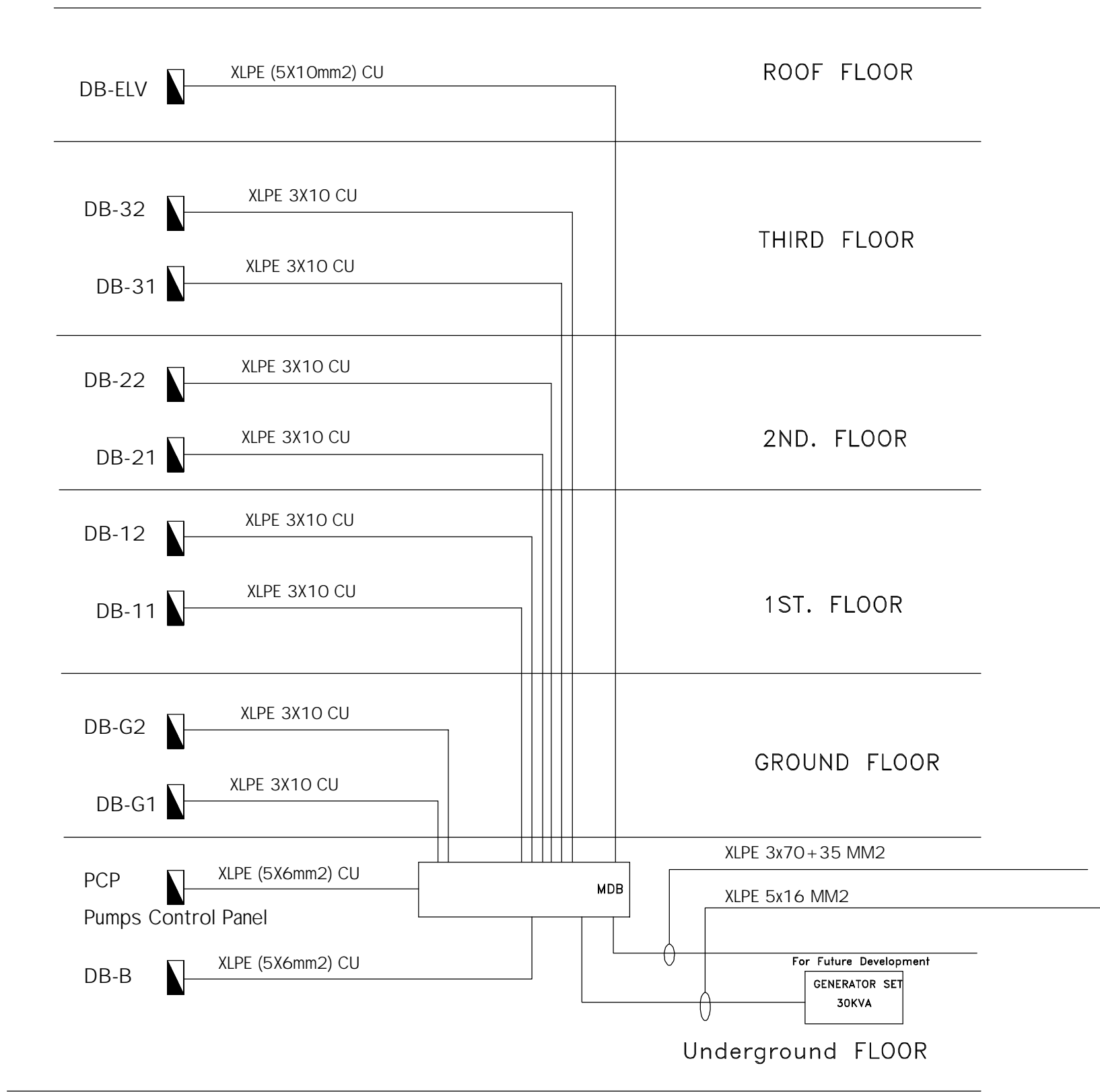
CONSULTANT:
مركز الهندسة والتخطيط
 center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Under Ground Floor
MDB Main Distribution Board


DRAWING NO.: RE-E-014



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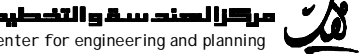
NOTES :-

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MINISTRY OF PUBLIC WORKS & HOUSING (MPWH)

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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
Power Cables Riser Diagram

DRAWING NO.: RE-E-015

DATE: APRIL 2011 **SCALE:** 1:xxx

NOTES :-

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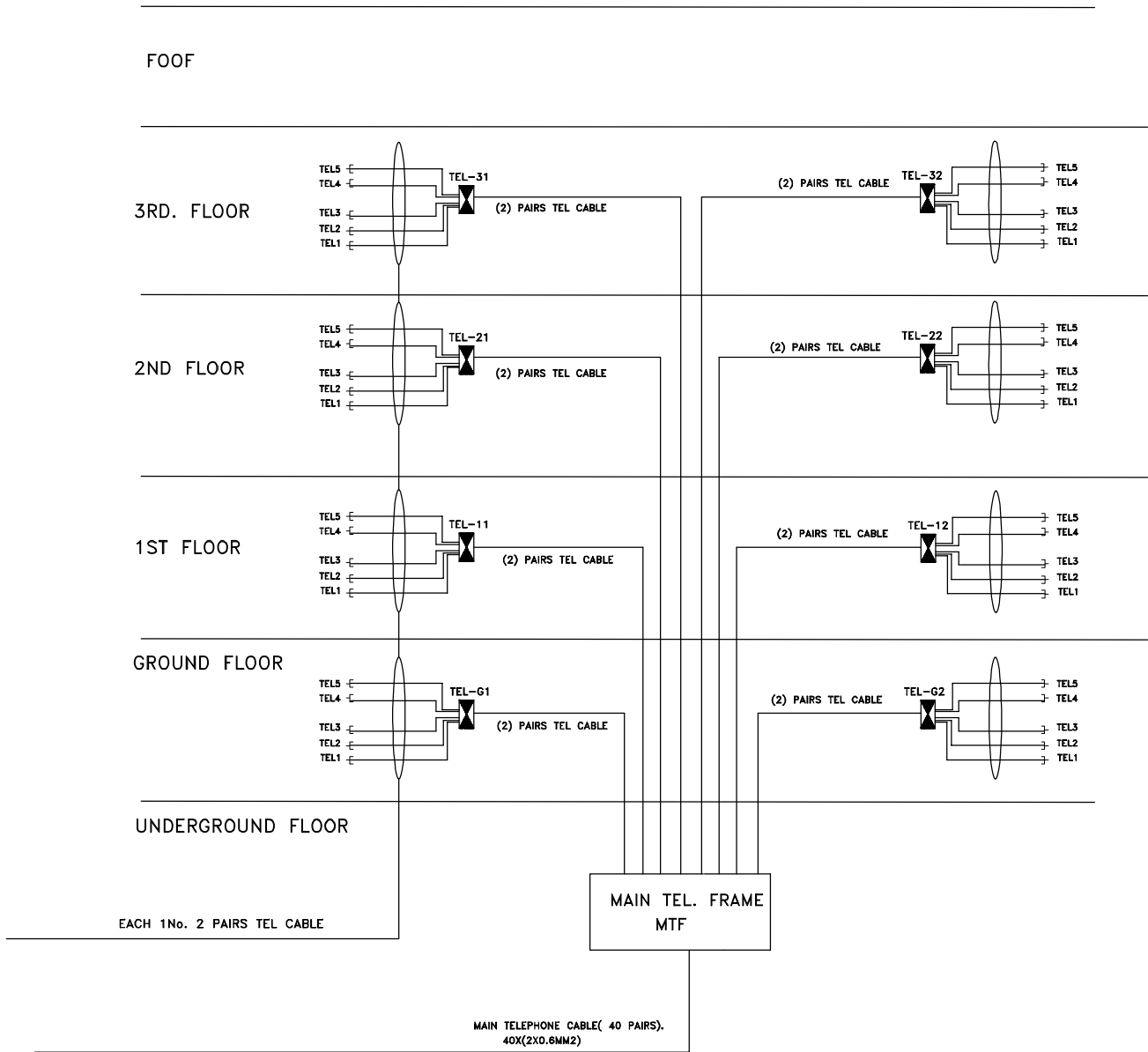
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

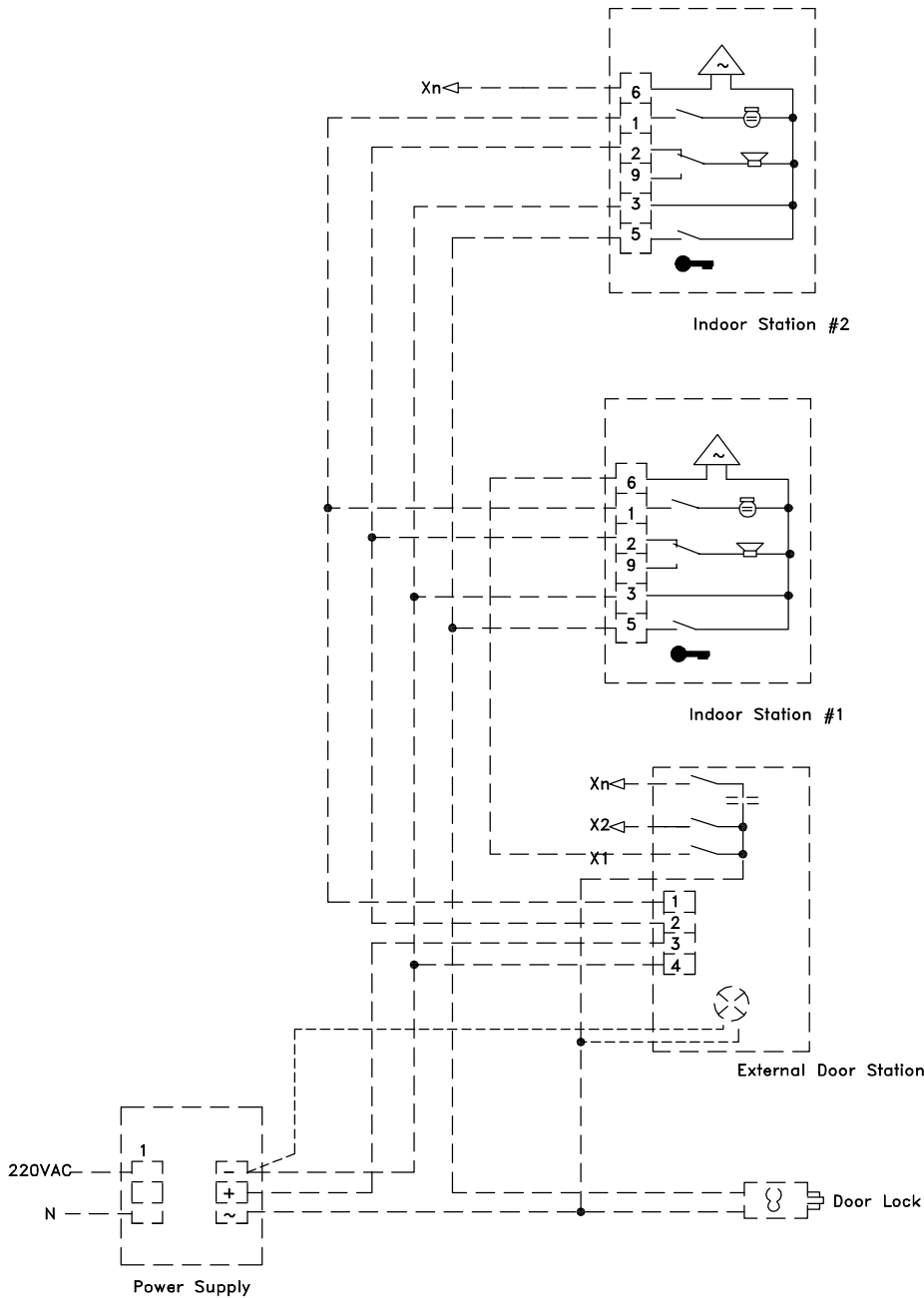
DRAWING TITLE:
Telephone Cables Riser Diagram
Intercom Sstem Wiring Diagram

DRAWING NO.: RE-E-016

DATE: APRIL 2011 SCALE: 1:xxx



Tel. System Riser Diagram



InDiagramtercom System Wiring

EMPLOYER:



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PALESTINIAN PEOPLE
(UNDP/PAPP)

CLIENT



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CONSULTANT

مركز الهندسة والتخطيط
center for engineering and planning



GENERAL DETAILS

EMPLOYER:

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PALESTINIAN PEOPLE
(UNDP/PAPP)

CLIENT

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

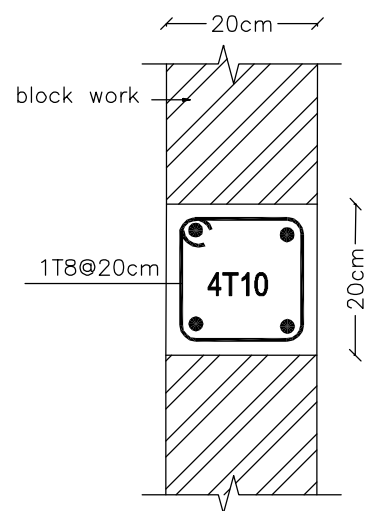
CONSULTANT

مركز الهندسة والتخطيط
center for engineering and planning



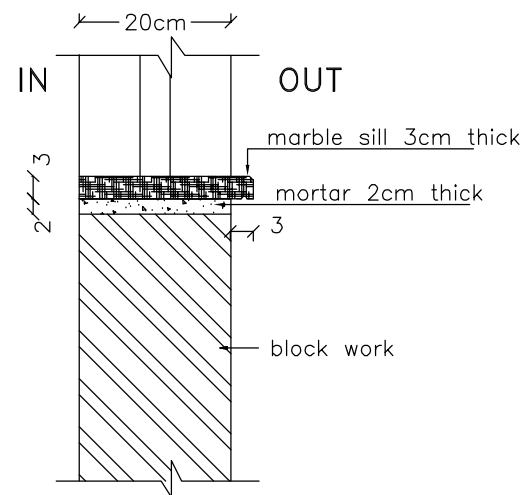
LIST OF DRAWINGS

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



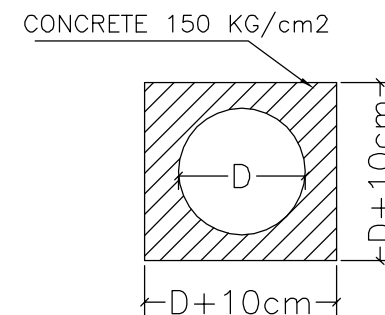
LINTEL DETAIL

SCALE 1 : 10



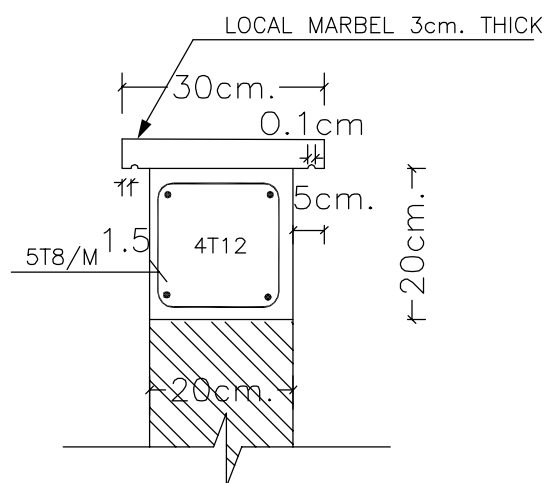
WINDOW SILL DETAIL

SCALE 1 : 10



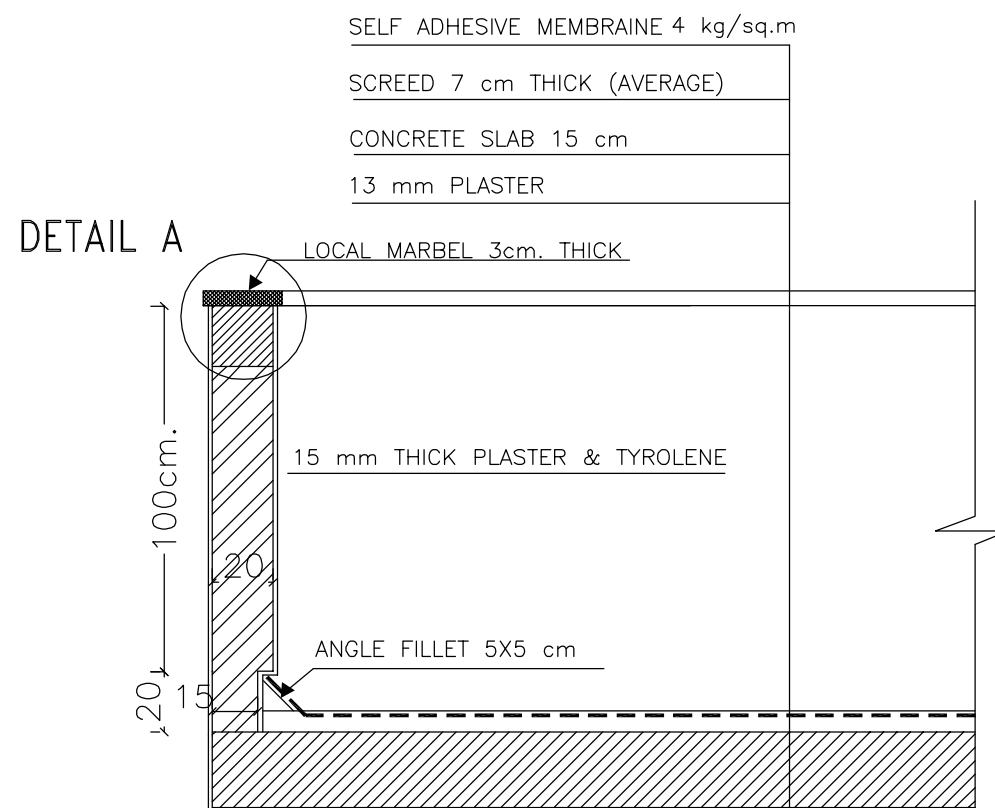
ENCASEMENT FOR PIPE LINES

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.
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EMPLOYER:



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PROGRAMME OF ASSISTANCE TO THE
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IN GAZA STRIP
PROJECT NO.: PAL 10-00070416 (PACKAGE 08)

CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

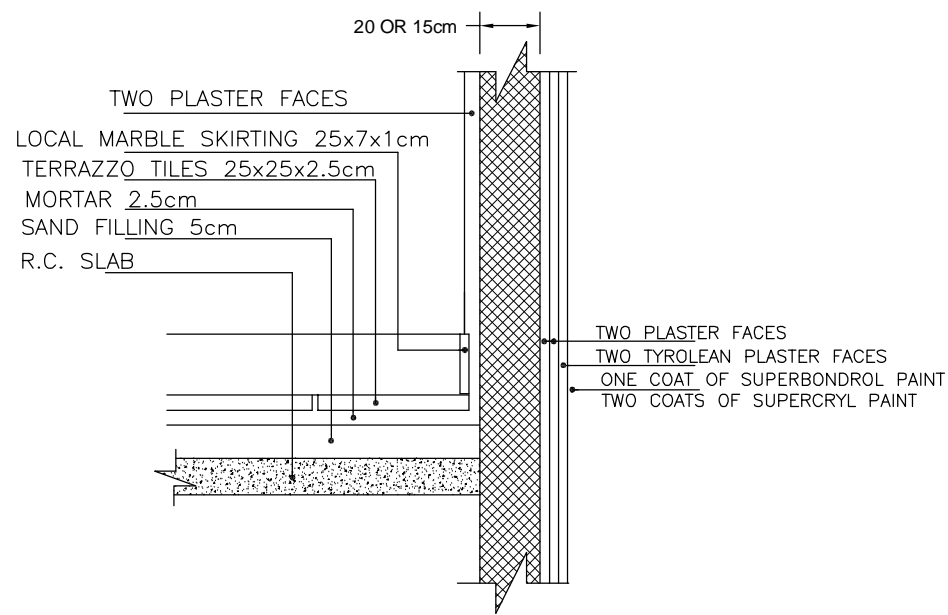
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

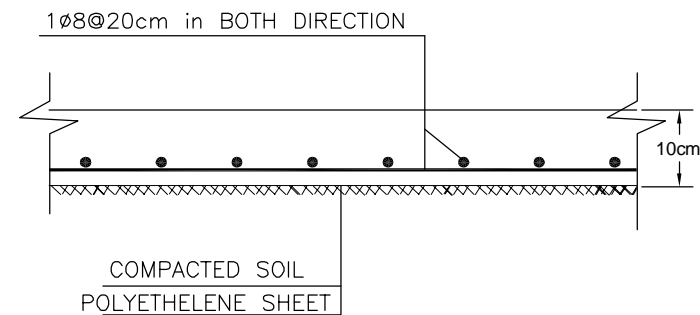
GENERAL DETAILS (1)

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

DATE: APRIL 2011 SCALE:

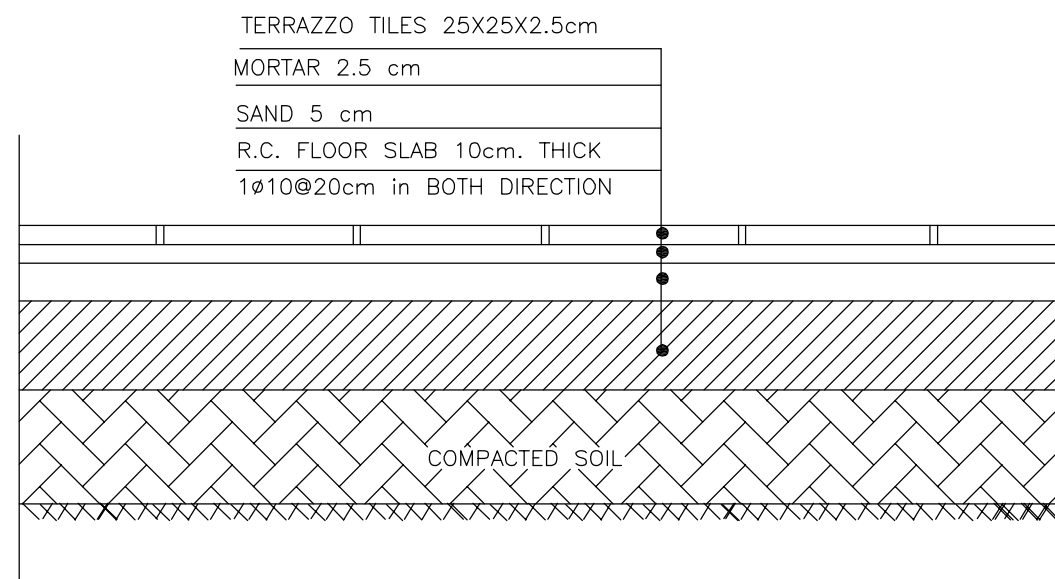


FINISH FOR PLASTERING



REINFORCED GROUND FLOOR SLAB

SCALE 1:10



FINISH GROUND & TYPICAL FLOOR SLAB

SCALE 1:10

NOTES :-

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center for engineering and planning

BUILDING NAME:

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DRAWING TITLE:

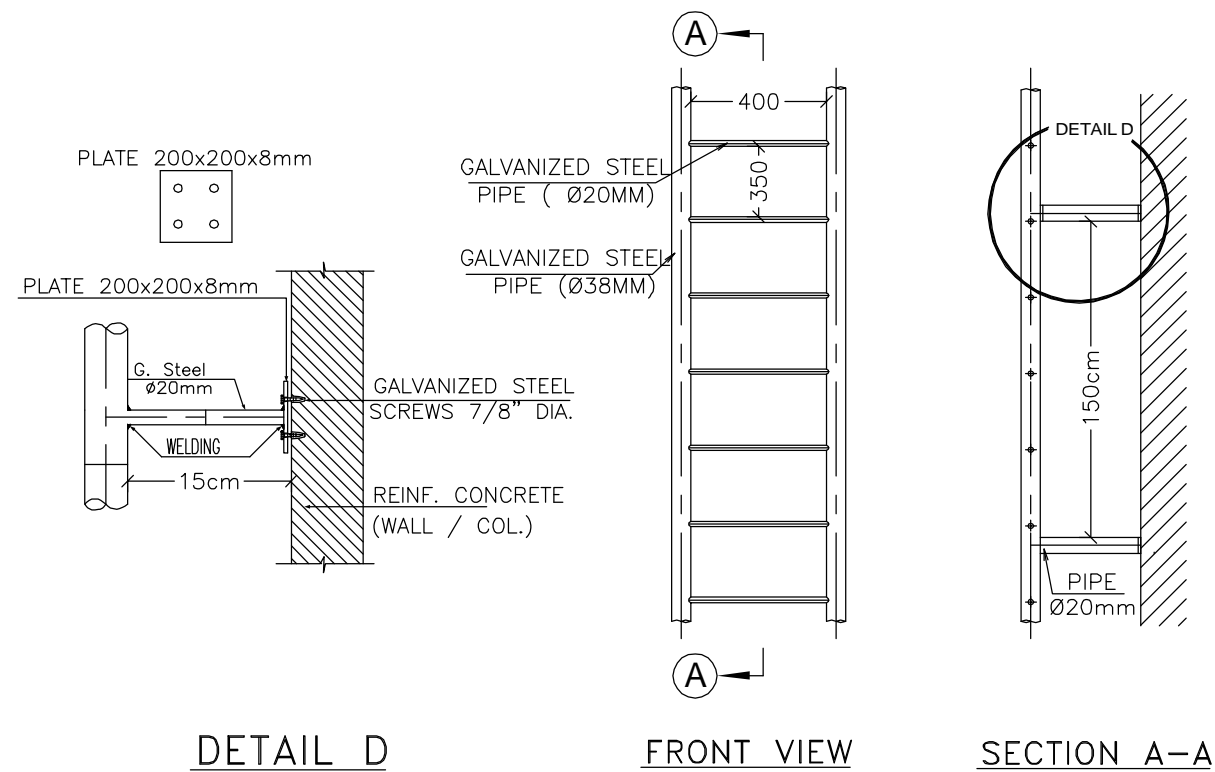
GENERAL DETAILS (2)

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

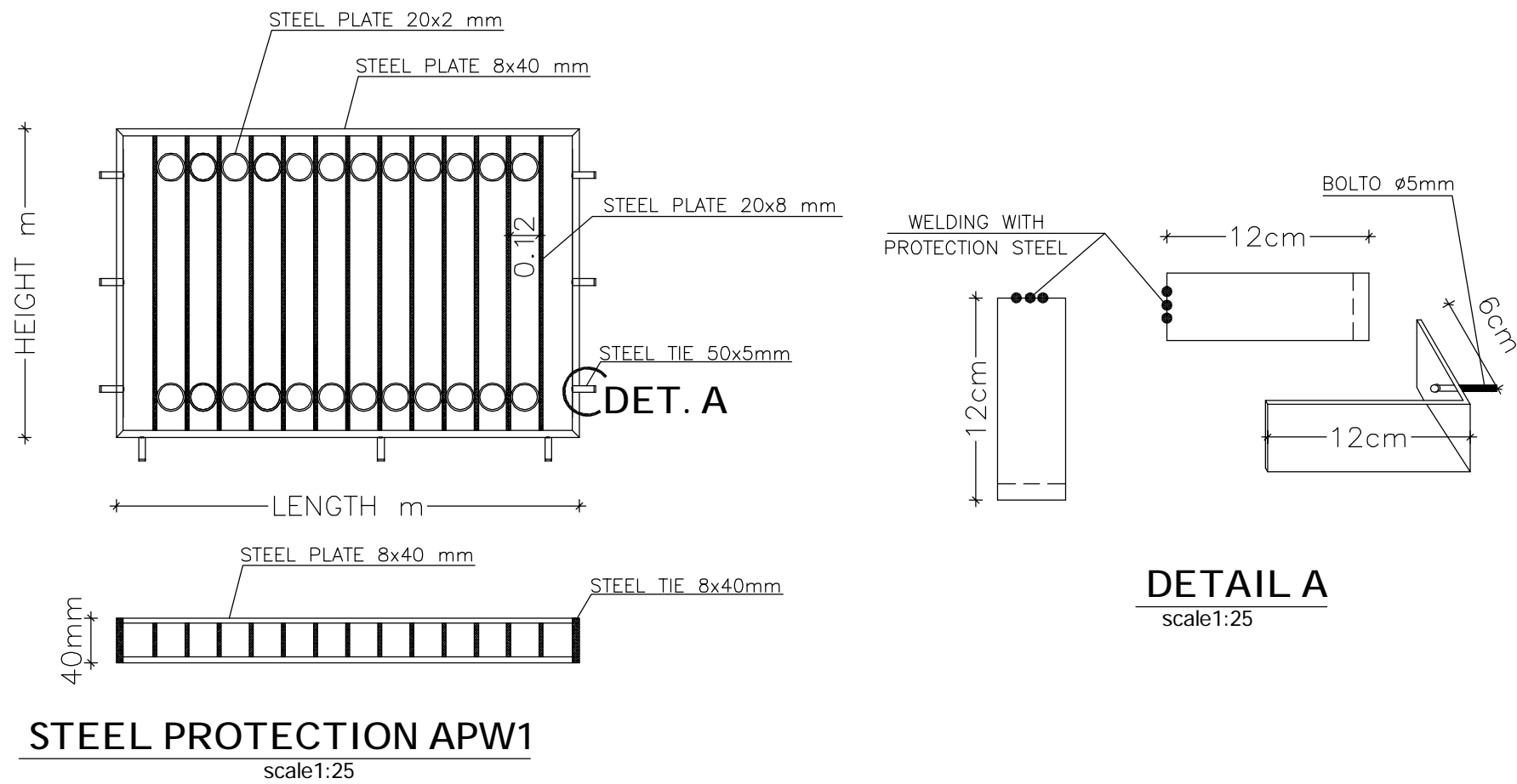
DATE: APRIL 2011 | SCALE:

NOTES :-

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LADDER DETAIL FOR BUILDINGS
NOT TO SCALE



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

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

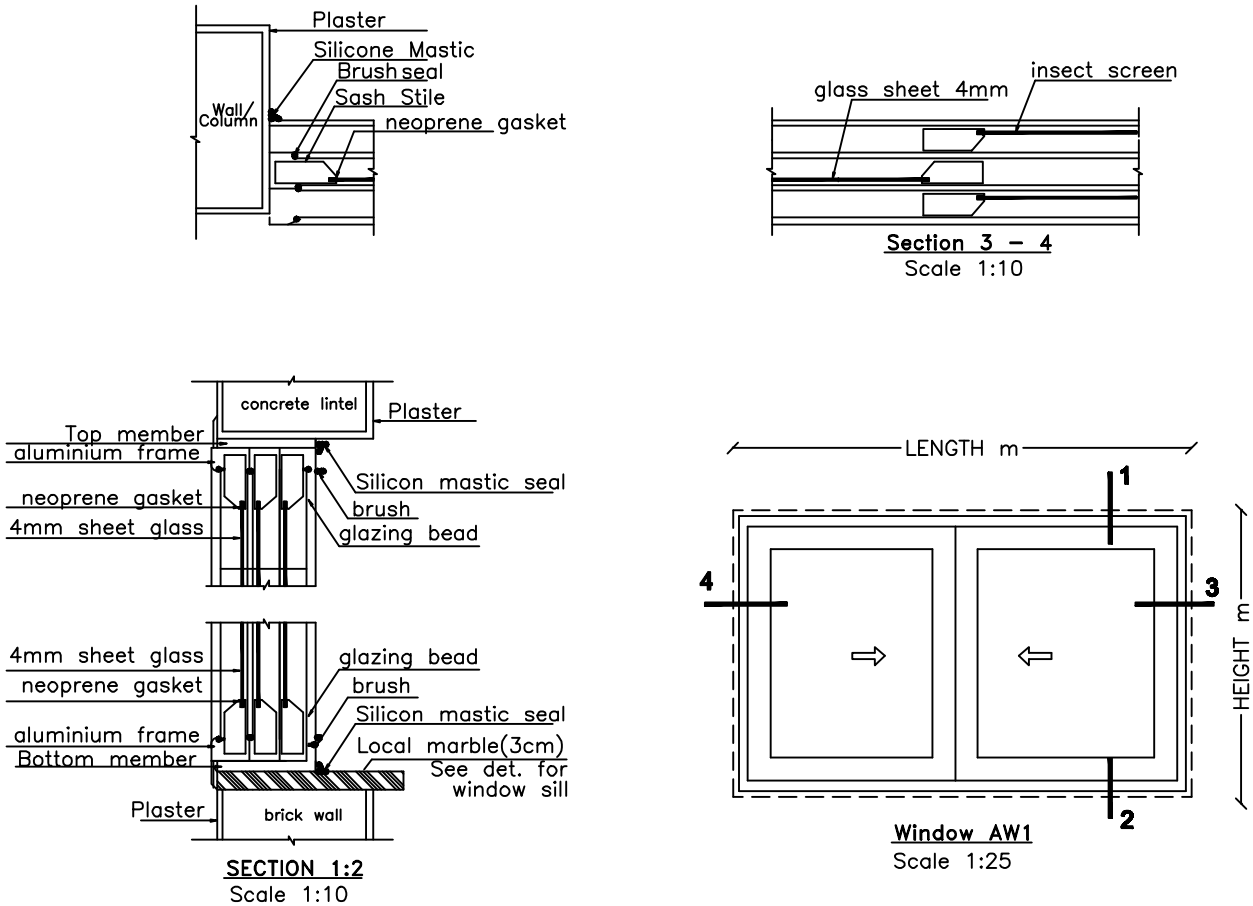
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GENERAL DETAILS (3)

DRAWING NO.: RE-GD-003

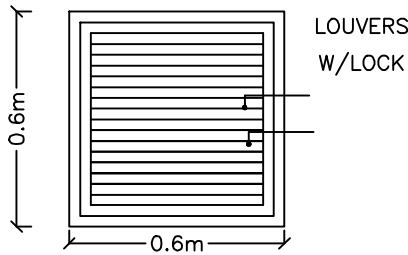
DATE: APRIL 2011 | SCALE:

NOTES :-

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TYPICAL DETAILED FOR WINDOW



DETAILED FOR WINDOW LOUVER

scale 1:20

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EMPLOYER:
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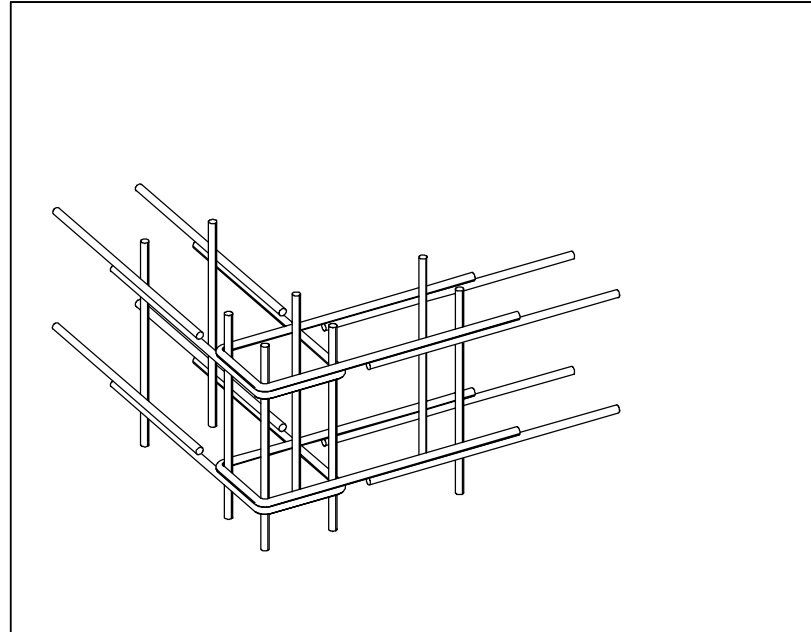
CONSULTANT:
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

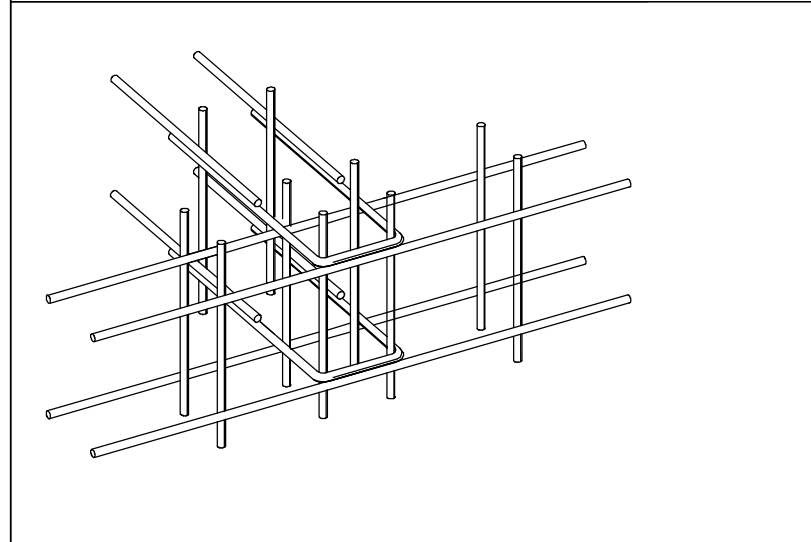
DRAWING TITLE:
GENERAL DETAILS (4)

DRAWING NO.: RE-GB-004

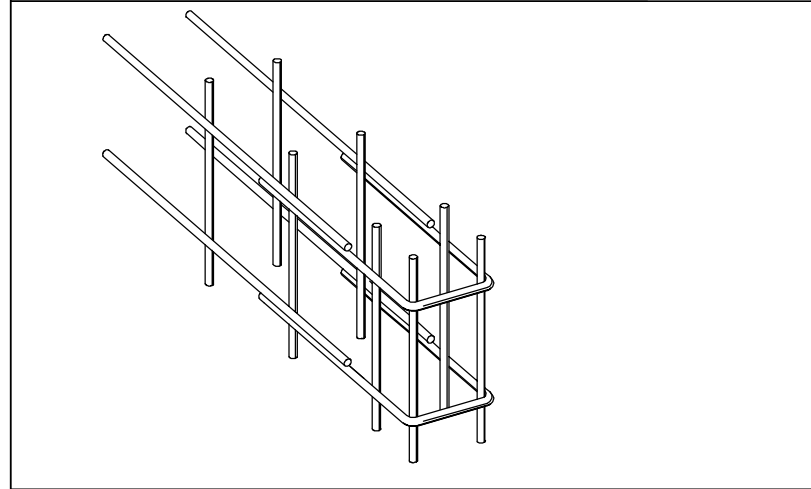
DATE: APRIL 2011 SCALE:



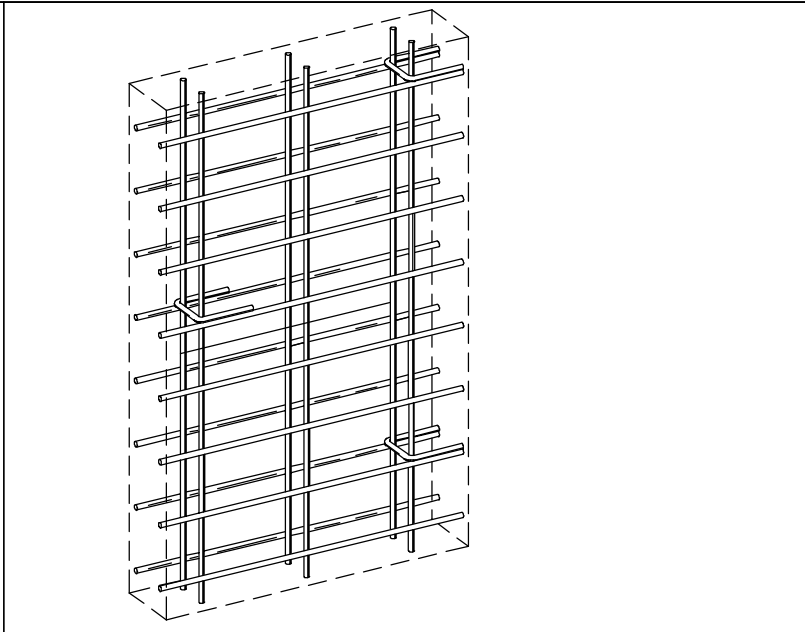
FOR ALL WALLS , WALL BEAMS AND DEEP BEAMS
USE U BARS FOR ENDS AND CORNERS
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



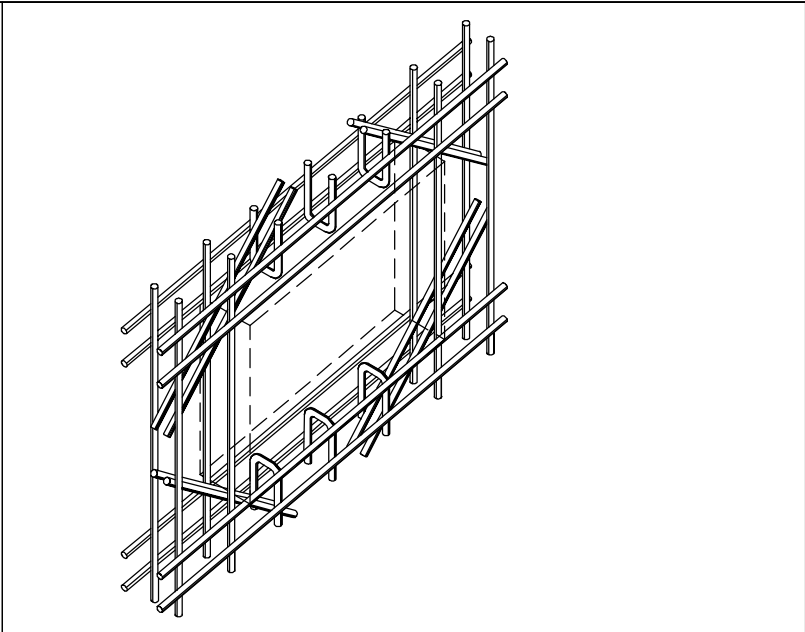
FOR ALL WALLS :
USE U BARS FOR INTERSECTIONS OFF WALLS
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



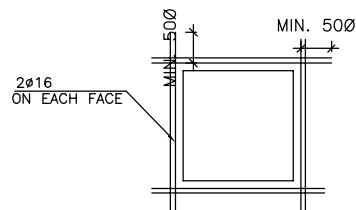
FOR ALL WALLS:
USE U BARS FOR ENDS OF WALLS
BAR DIAMETER AND SPACING SAME AS WALL REINFORCMENT



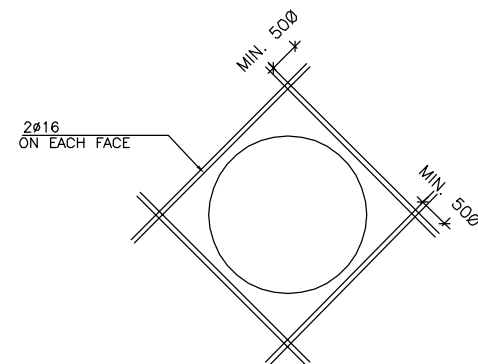
FOR ALL WALLS(SHEAR WALLS & RETAINING WALLS)
USE $\phi 12$ U TIE SPACERS STAGGERED AT 150 CM INTERVALS
VERTICALLY & HORIZONTALLY.



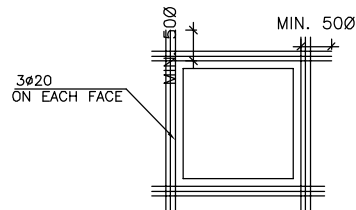
FOR ALL WALL OPENINGS
FIX DIAGONAL $2\phi 14$ BARS IN BOTH FACES, AT EACH CORNER.
(TO BE USED UNLESS SHOWN OTHERWISE ON THE DRAWINGS)



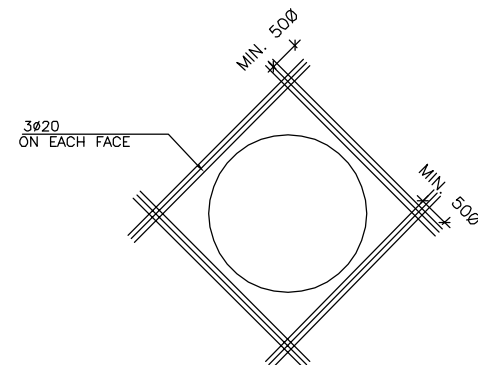
RECTANGULAR OPENING $\leq 500\text{mm}$



CIRCULAR OPENING $\leq 500\text{mm}$



RECTANGULAR OPENING $> 500\text{mm}$



CIRCULAR OPENING $> 500\text{mm}$

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

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CONSULTANT:

مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:

RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:

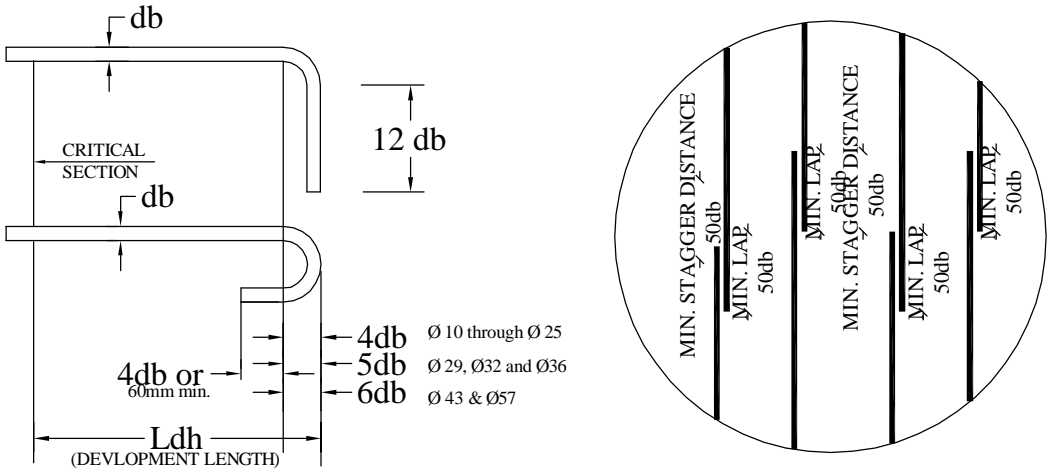
GENERAL DETAILS (5)

DRAWING NO.: **RE-GD-005**

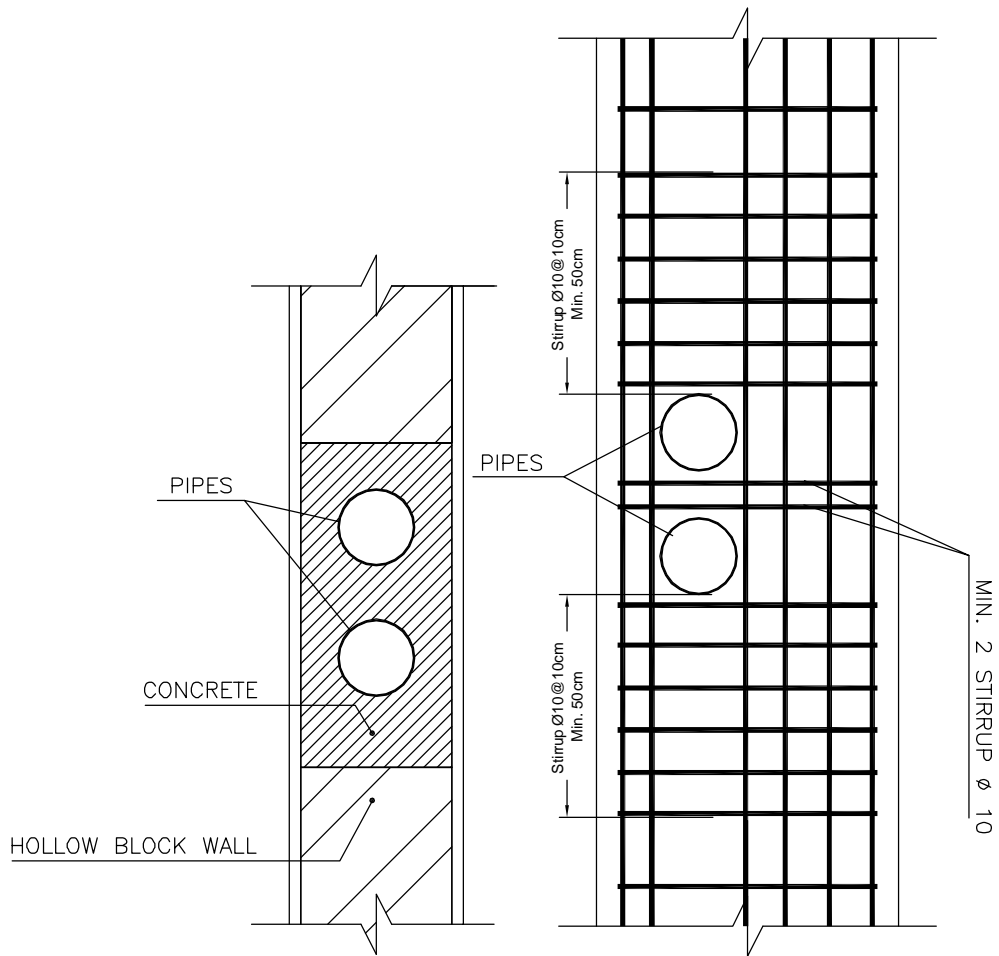
DATE: APRIL 2011 SCALE:

LINTELS DETAILS.

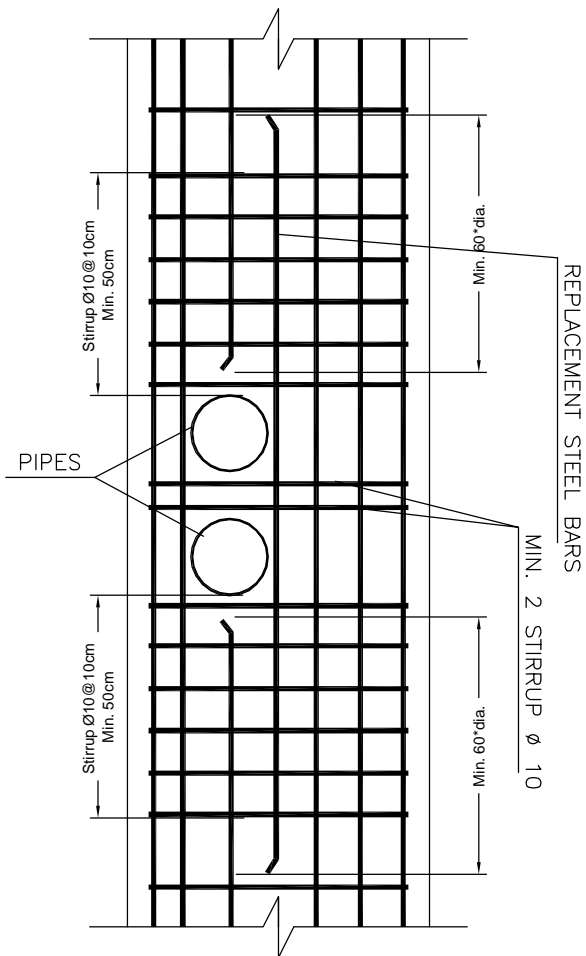
SCHEDULE OF LINTELS REINFORCEMENT								
LINTEL WIDTH =b CLEAR SPAN	b=10cm.		b=15cm.		b=20cm./30cm.		DEPTH= d	STIRRUPS
	TOP REINF.	BOTTOM REINF.	TOP REINF.	BOTTOM REINF.	TOP REINF.	BOTTOM REINF.		
< 200	1T12	1T14	2T12	2T12	2T12	2T14	20	1Ø8@200mm
200–300	1T12	1T14	2T12	2T14	2T12	2T16	25	1Ø8@200mm
301–400	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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EMPLOYER:
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مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
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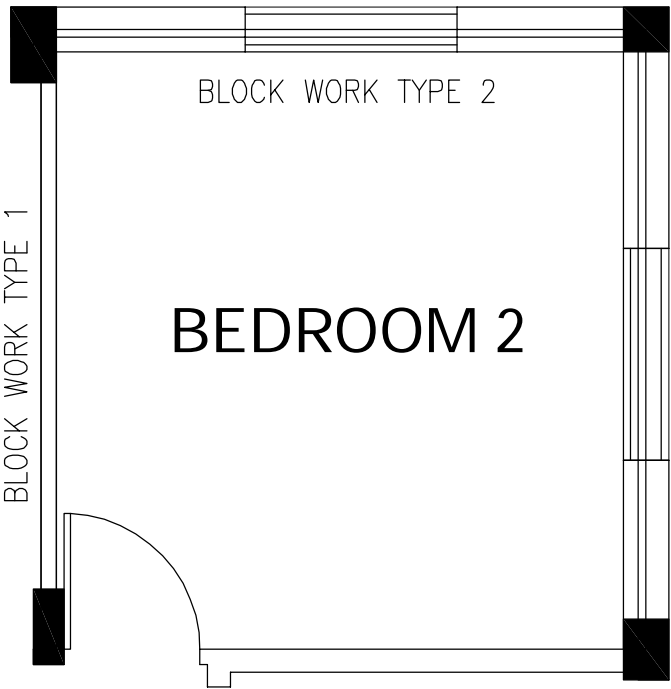
DRAWING TITLE:
GENERAL DETAILS (6)

DRAWING NO.: RE-GD-006

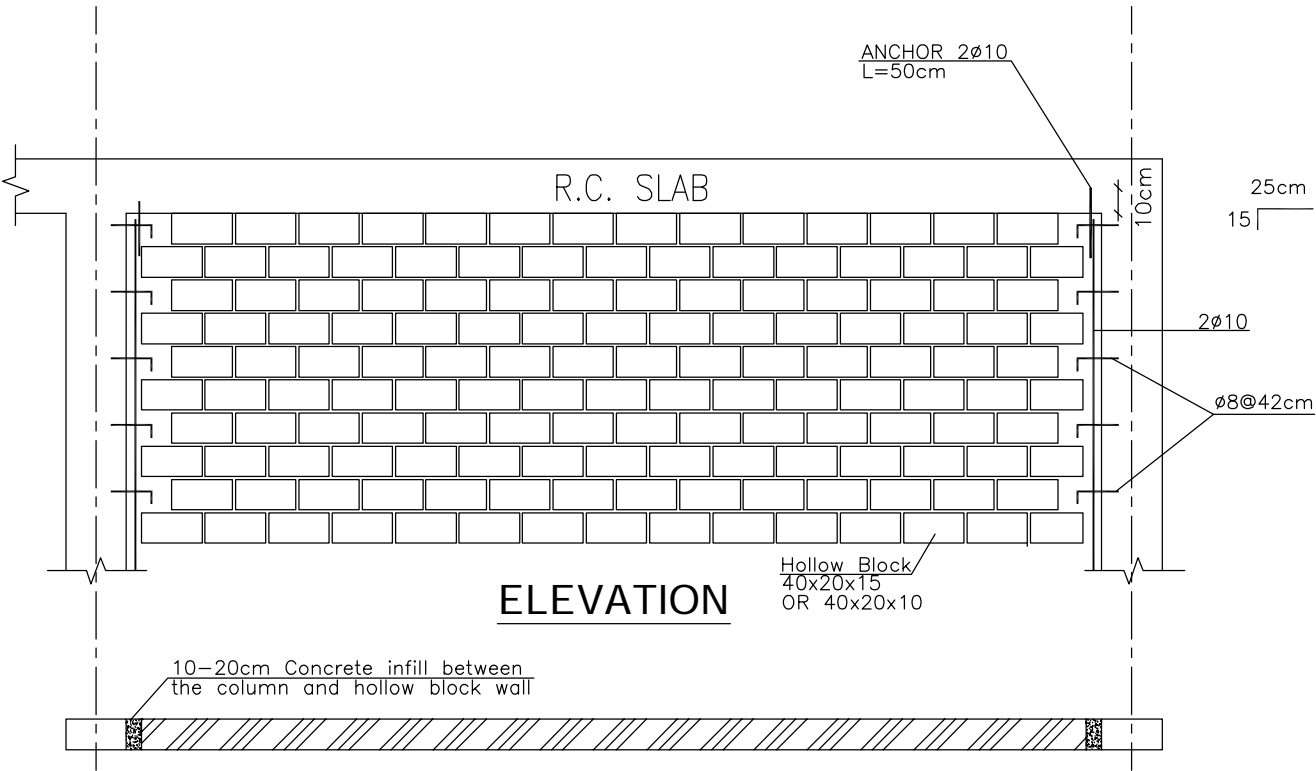
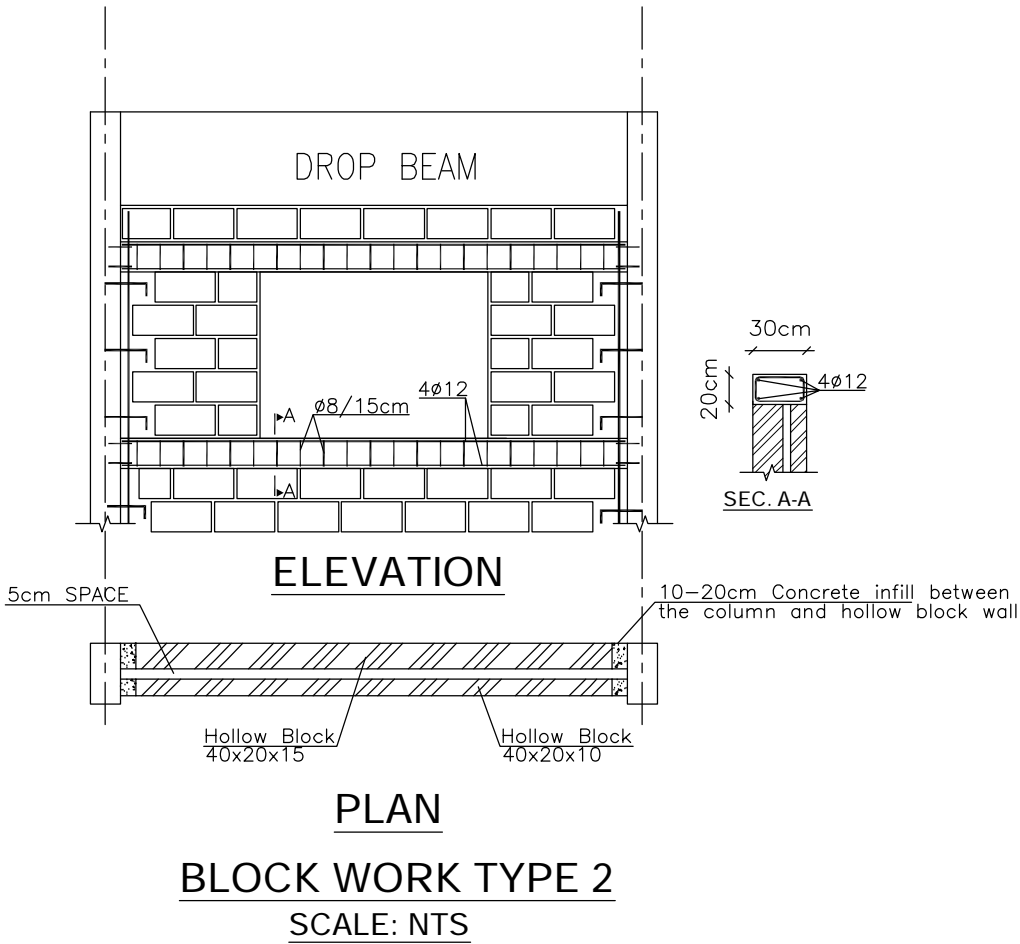
DATE: APRIL 2011 SCALE:

NOTES :-

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- IF THERE IS ANY DISCREPANCY IN DRAWINGS, THE CONTRACTOR MUST CONSIDER IT IN HIS PRICE.
- ALL DIMENSIONS ARE IN METERS EXCEPT WHERE OTHERWISE SHOWN.



TYPICAL BLOCK WORK TYPES IN
SCALE: 1:100



PLAN
BLOCK WORK TYPE 1
SCALE: NTS

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 08)

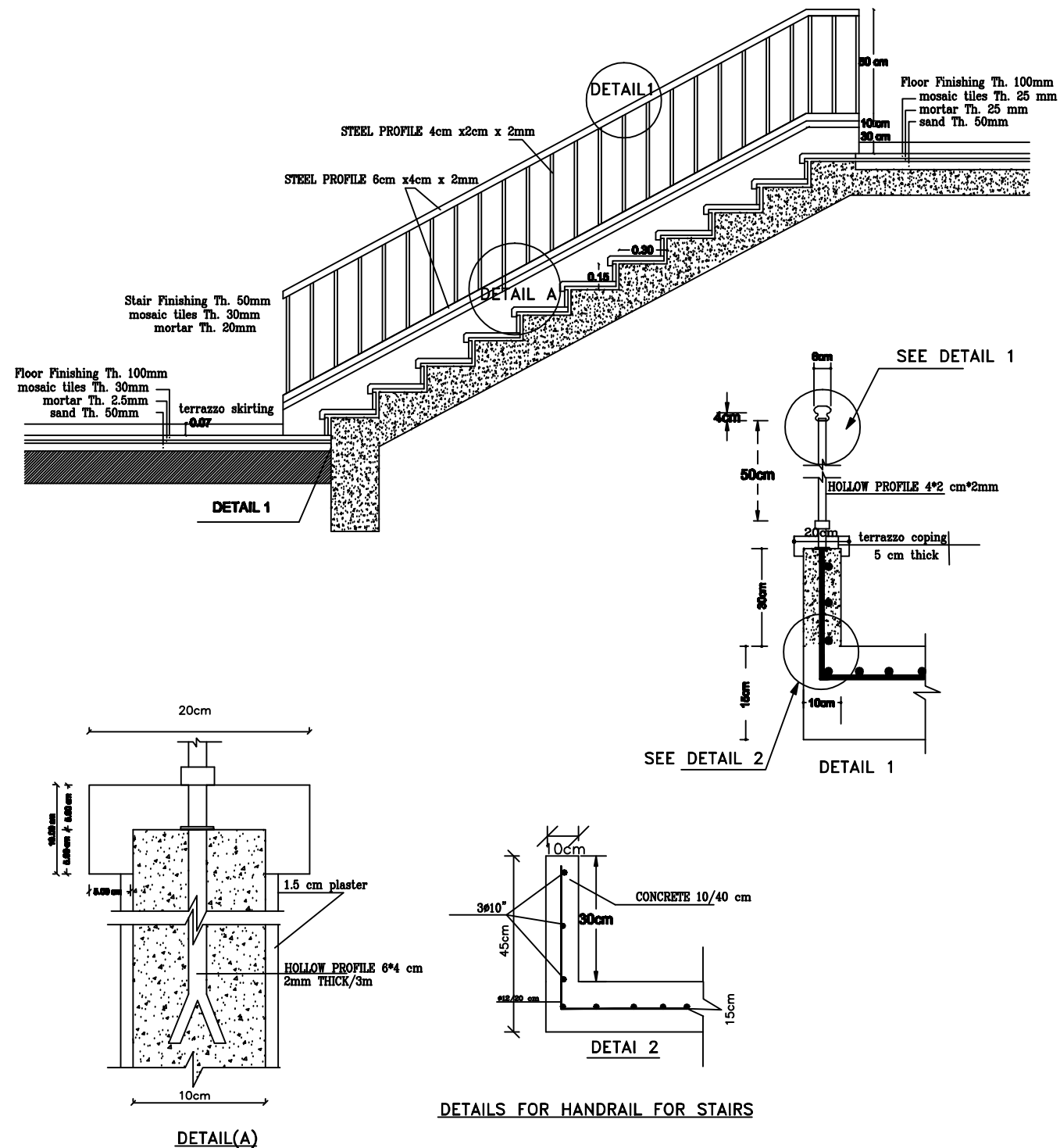
CONSULTANT:
مركز الهندسة والتخطيط
center for engineering and planning

BUILDING NAME:
RESIDENTIAL BUILDING NO. (B6)

DRAWING TITLE:
GENERAL DETAILS (7)

DRAWING NO.: RE-GD-007

DATE: APRIL 2011 SCALE:




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

EMPLOYER:
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 PROGRAMME OF ASSISTANCE TO THE
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BUILDING NAME:
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DRAWING TITLE:
 GENERAL DETAILS (8)

DRAWING NO.: RE-GB-007

DATE: APRIL 2011 SCALE: