Funded By

MEDECINS SANS FRONTIERES

OPERATING CENTER GENEVA
CENTERE OPÉRATIONNEL De GENEVE

PROJECT TITLE: Pediatrics Rehabilitation and Extension Project in Al-Qaedah Hospital

PROJECT LOCATION: Dhi As-Sufal District, Ibb Governorate, Yemen

Date:

FEBRUARY, 2026

MEDECINS SANS FRONTIERES

PROJECT TITLE :
KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :
Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

FILE NAME : YE120_KILO_Pediatrics Extension_Ixa.dwg

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N° Date Issue

PED
Projected state

BUDGET CODE SUB-PROJ. YE120.C014

Sheet N° :

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Date : 12 / 03 / 2026

ARCHITECTURAL

DRAWINGS

MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

FILE NAME : YE120_KILO_Pediatrics Extension_Ixa.dwg

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MEDECINS SANS FRONTIERES

N° Date Issue

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YE120.C014

Sheet N° :

scale : .....

Date : 12 / 03 / 2026

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MEDECINS SANS FRONTIERES

PROJECT TITLE :
KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :
Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :
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FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

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YE120.C014

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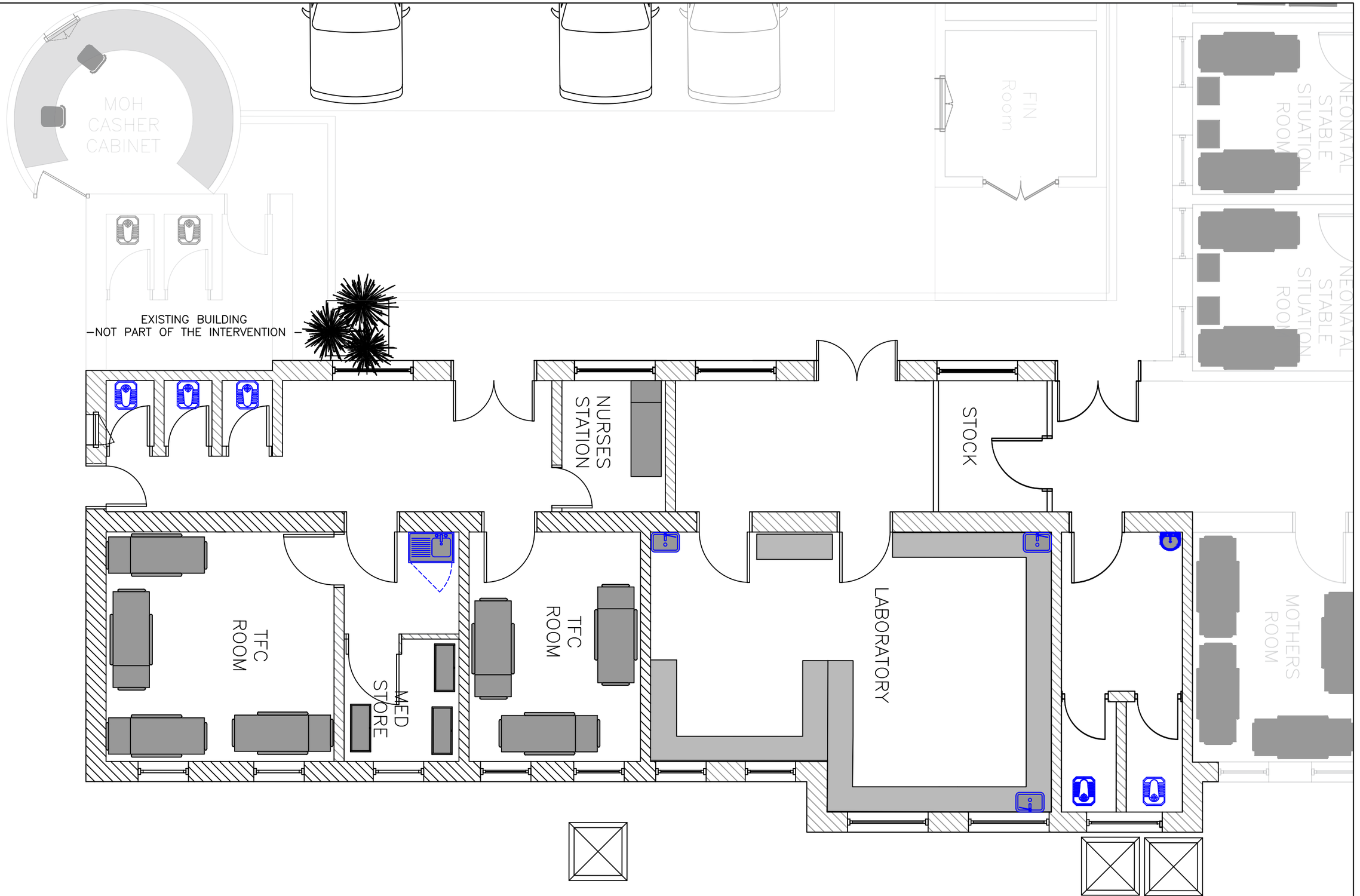

MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

Existing Floor Plan

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

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N° Date Issue

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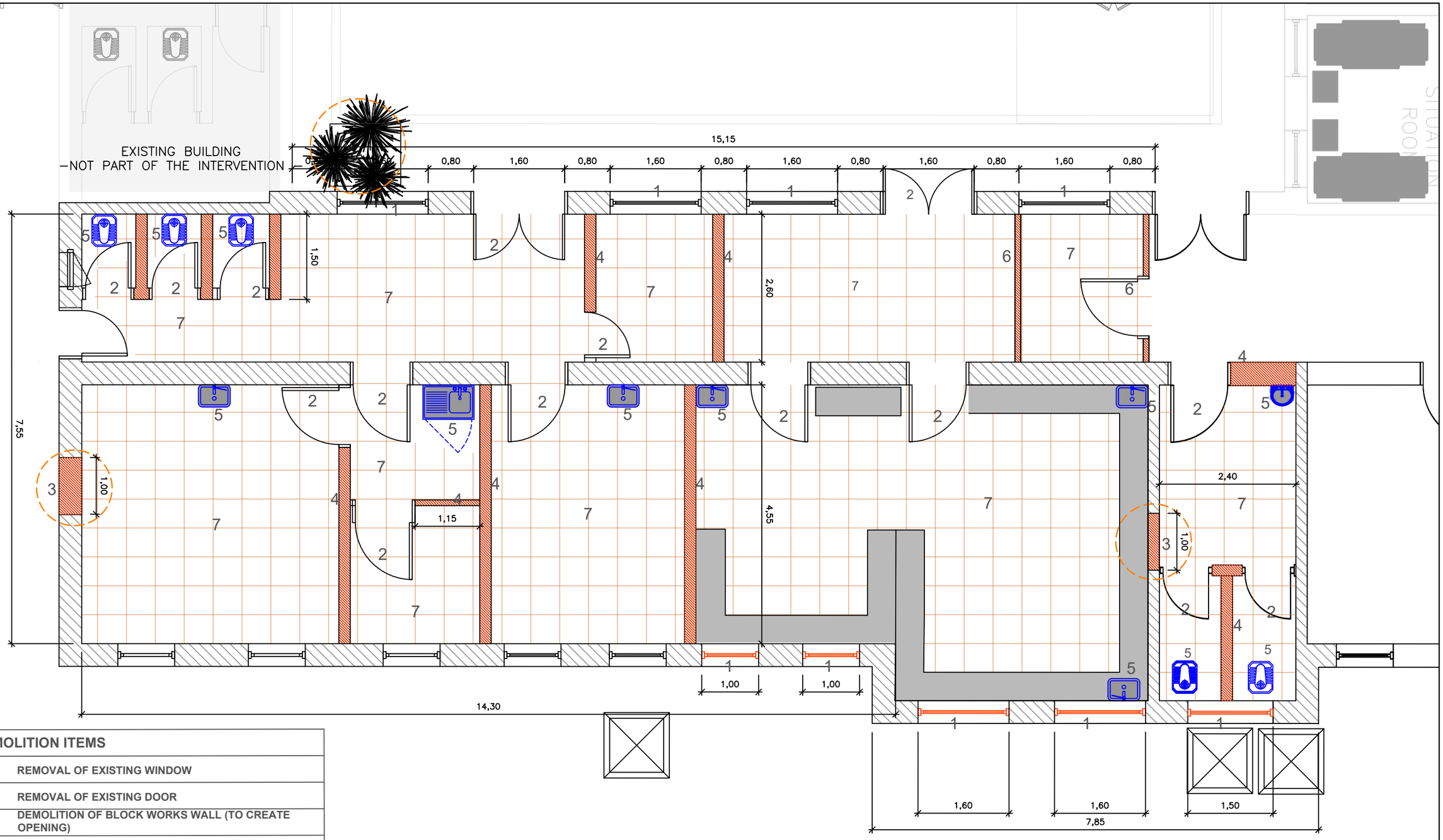

DEMOLITION ITEMS

1	REMOVAL OF EXISTING WINDOW
2	REMOVAL OF EXISTING DOOR
3	DEMOLITION OF BLOCK WORKS WALL (TO CREATE OPENING)
4	DEMOLITION OF BLOCK WORKS WALL
5	REMOVAL OF WASH ITEM (WASHING POINT - LATRINE - MANHOLE)
6	REMOVAL OF ALUMINUM PARTITION
7	REMOVAL OF FLOOR TILES

MEDECINS SANS FRONTIERES

PROJECT TITLE :
KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :
Pediatrics Rehabilitation and Extension Project

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DRAWING TITLE :
Demolition Plan

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Sheet N° :
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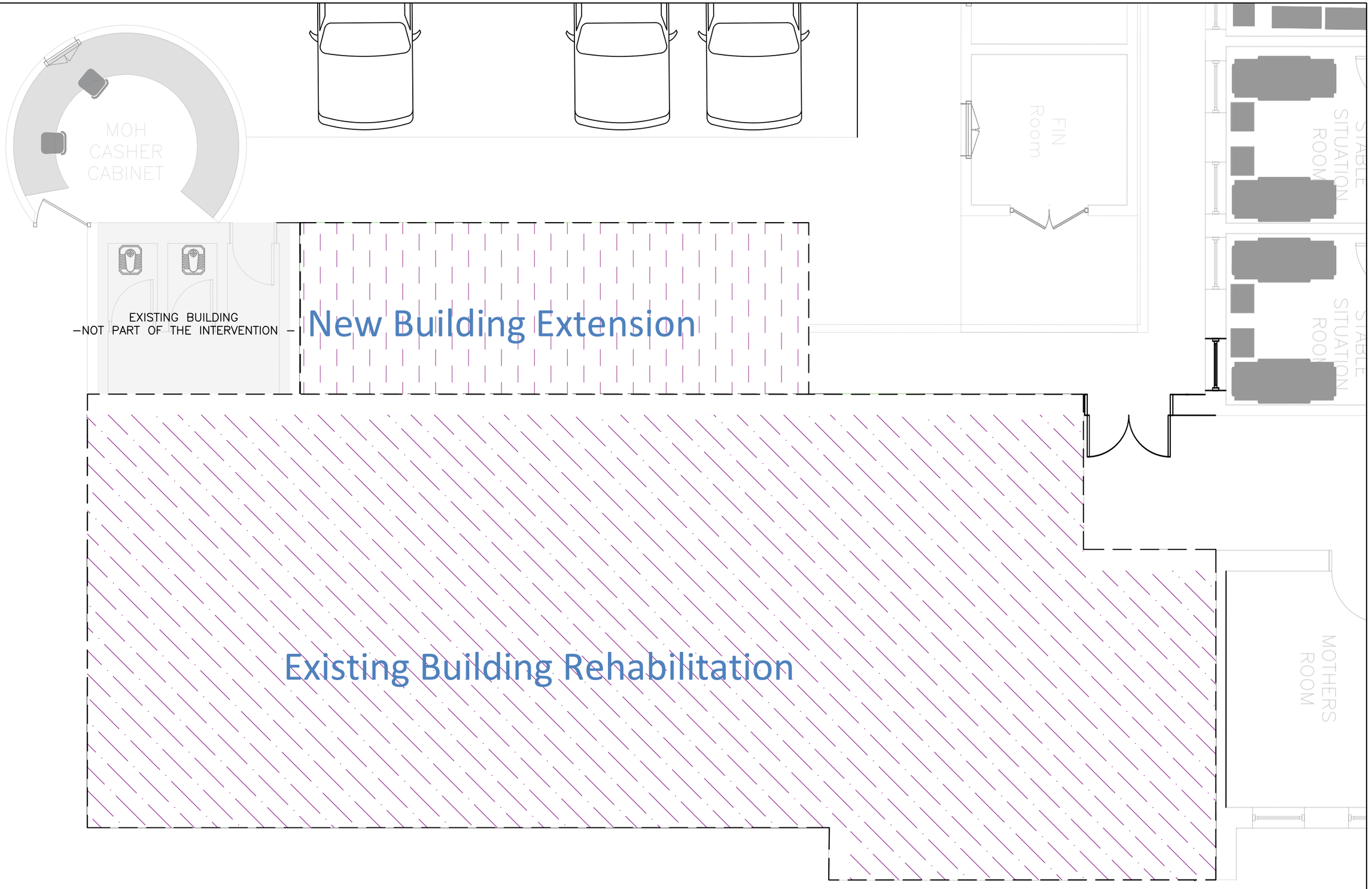

MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

New Pediatrics Full Intervention

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

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N° Date Issue

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YE120 C014

Sheet N° :

Arch-004

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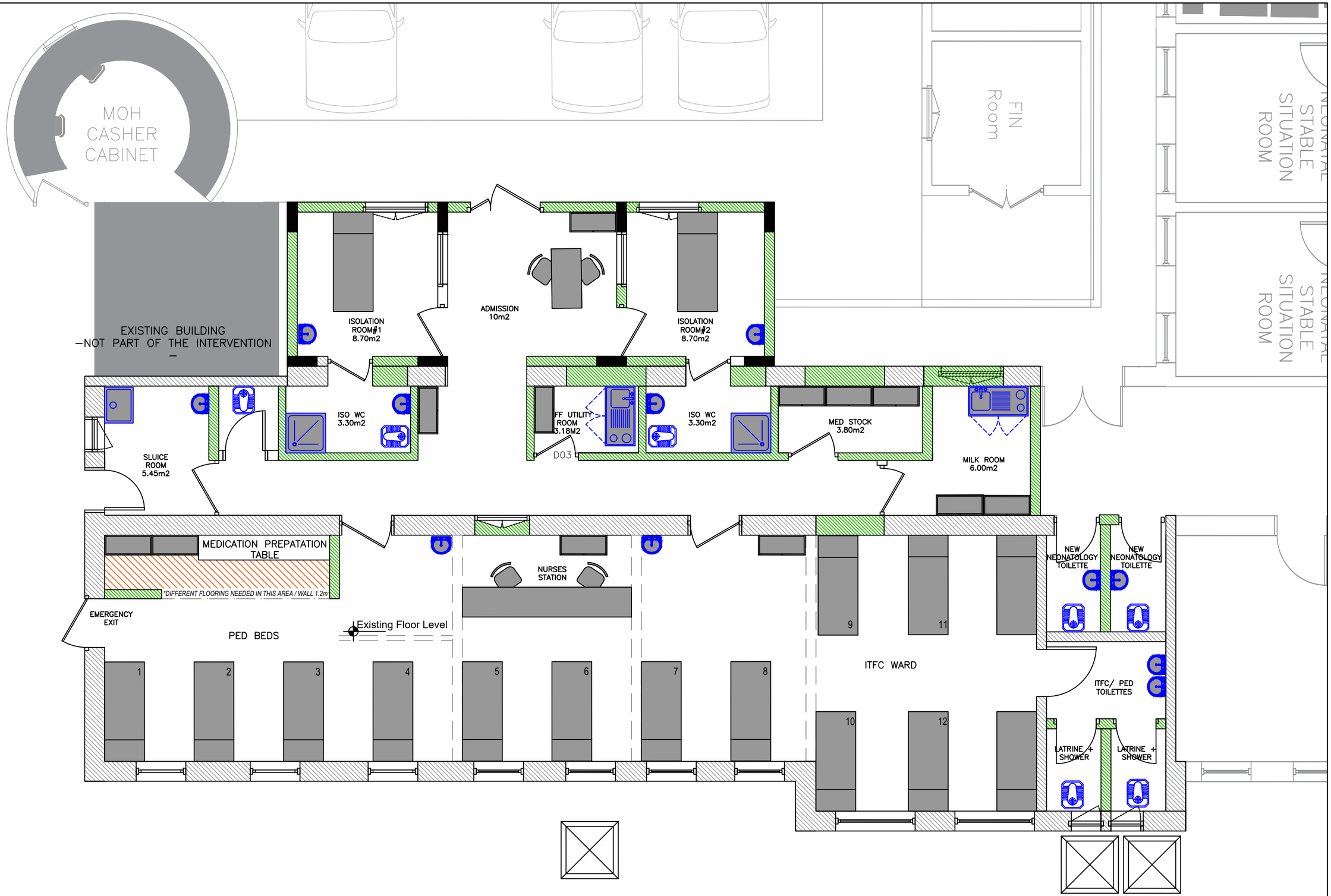
Date : 12 / 03 / 2026



MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

New Pediatrics Full Intervention

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

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MEDECINS SANS FRONTIERES

N°	Date	Issue

BUDGET CODE SUB–PROJ. YE120 C014

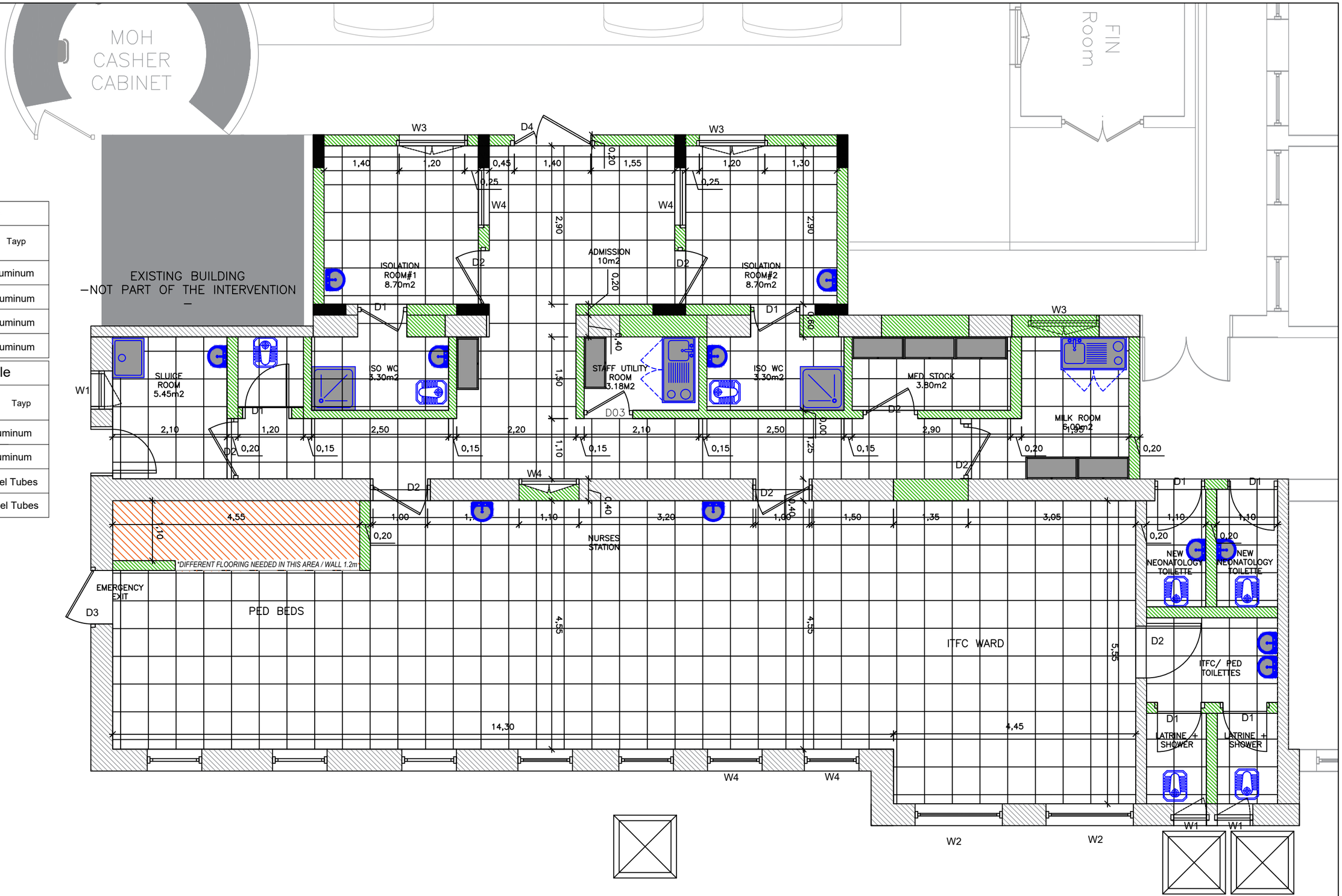
Sheet N° : **Arch-003**

scale : .....

Date : 24 / 03 / 2026

Window Table				
Title	No	Dim (cm)		Tayp
		W	h	
W1	2	60	100	Aluminum
W2	2	160	160	Aluminum
W3	3	120	150	Aluminum
W4	5	100	160	Aluminum

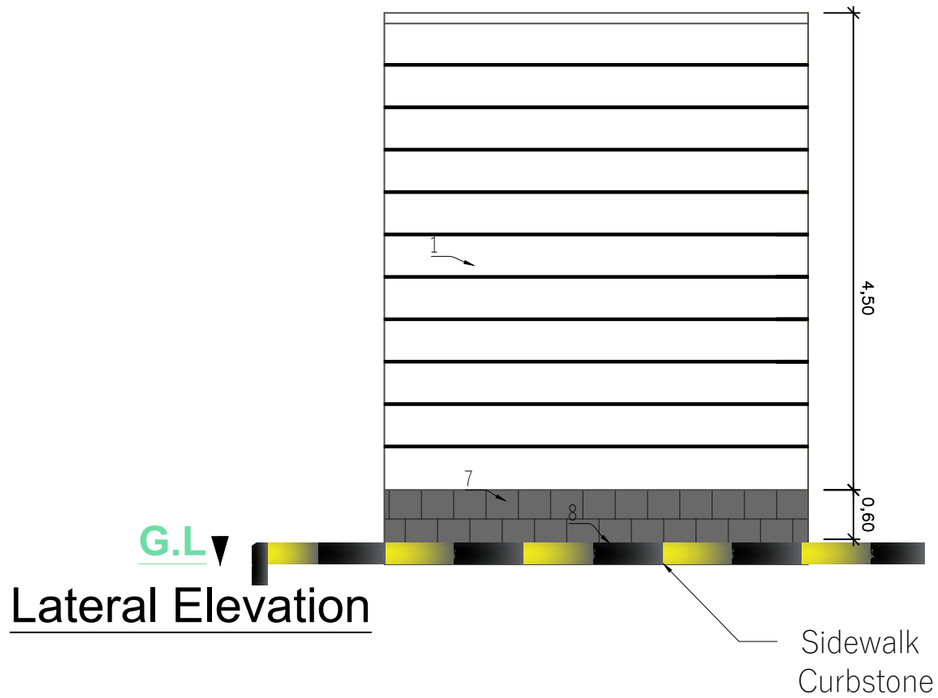
Door Table				
Title	No	Dim (mm)		Tayp
		W	h	
D1	7	80	200	Aluminum
D2	9	100	200	Aluminum
D3	1	80	200	Steel Tubes
D4	1	140	200	Steel Tubes



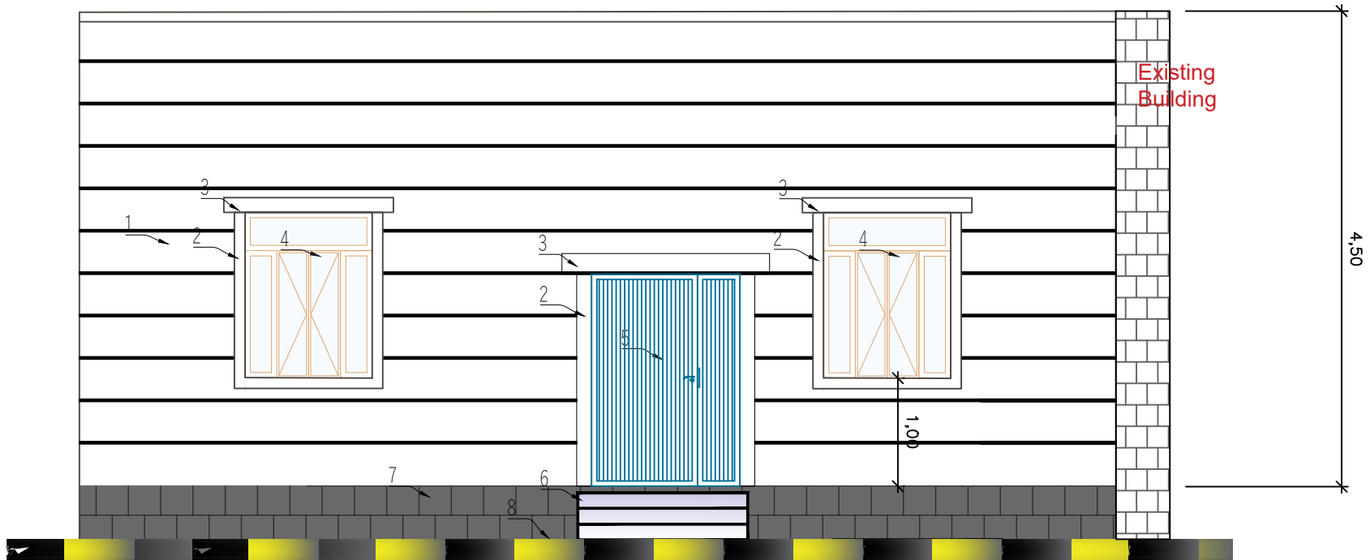
MEDECINS SANS FRONTIERES	PROJECT TITLE : **KILO HOSPITAL Ibb -Yemen**	YE120 C000	BUILDING NAME : **Pediatrics Rehabilitation and Extension Project**	DRAWING TITLE : **Doors & Windows Plan**	HQ stamp : FOR BID ONLY	N° Date Issue	BUDGET CODE 'SUB-PROJ. YE120.C014
			CODE CAM : CNSTR | HMAT | XXX	FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg			Sheet N° : **Arch-005** scale : ..... Date : 24 / 03 / 2026

Facade cladding :

1. Cement Plastering 2.5cm + Acrylic Paints
2. Cement Plastering "with 5cm raised" + Acrylic Paints
3. RC beam "with 15cm raised" +Plastering+Acrylic Paints
4. Aluminum Window (white Type)
5. Galvanized Tubes Steel Door
6. Stairs
7. Habash Stones Building
8. Protection Sidewalk



Lateral Elevation



FACADE

MEDECINS SANS FRONTIERES

PROJECT TITLE :
KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :
Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :
Facades

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

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YE120.C014

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Arch-006

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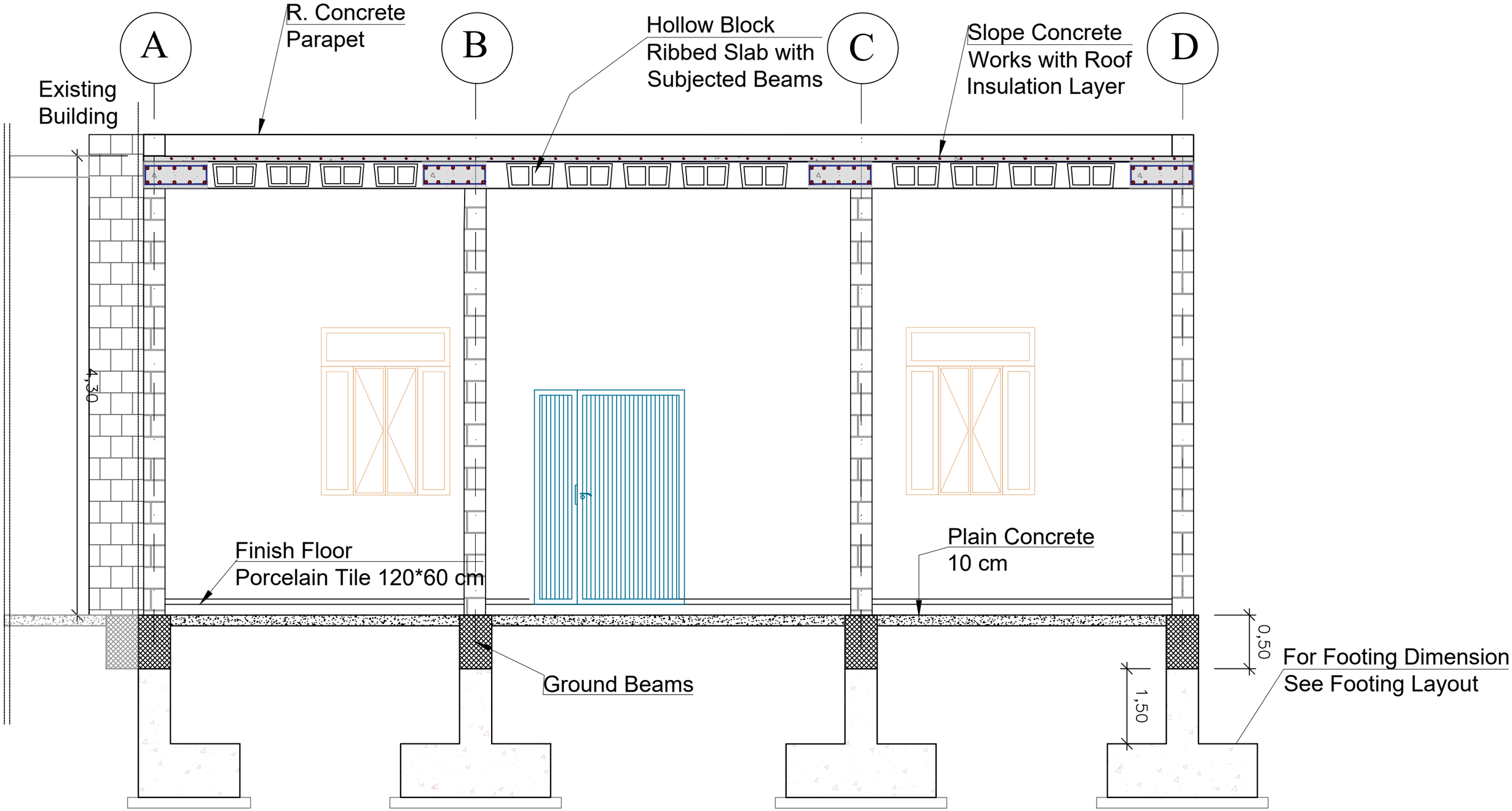

MEDECINS SANS FRONTIERES

PROJECT TITLE :
KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :
Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :
Sections

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

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Date : 12 / 03 / 2026

STRUCTURAL

DRAWINGS

MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

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DRAWING TITLE :

FILE NAME : YE120_KILO_Pediatrics Extension_Ixa.dwg

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MEDECINS SANS FRONTIERES

PROJECT TITLE :
KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :
Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :
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FILE NAME : YE120_KILO_Pediatrics Extension_Ixa.dwg

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MEDECINS SANS FRONTIERES

N° Date Issue

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YE120.C014

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Date : 12 / 03 / 2026

General notes

1- The building is designed with the following operational live loads :

Type of load	Value
Deed Loads	3.00 KN/M2
live loads	3.00 KN/M2

2- designed using US code specifications (ACI-318-2001).

3- Concrete foundations are designed considering the design bearing capacity of soil is (180KN/m^2) and contractor's responsibility to ensure this.

4- The building is not designed to resistance earthquakes.

Reinforced concrete notes :

1- the materials used must comply with the specifications of the American code (ACI-318-2001)

2- The concrete cube strength after 28 days from the date of pouring for all structural elements in the building is as stated in the following table:

structural elements	the concrete cube strength F'c MPA
foundations	30
columns	35
beams & slabs	30

Minimum concrete cover for reinforcement in structural elements as shown in the table:

structural elements	concrete cover (mm)
1- foundations	50-70
2- columns	30-40
3- beams	25
4- slabs	20

4- The dimensions of the structural elements do not include the thickness of the finishes on all four sides .

5- The depth of the beam includes the thickness of the slab.

6- Pipes and ducts should not be passed through reinforced concrete without the approval of the design engineer .

Reinforcement steel notes

1- The stress of the reinforcement steel used for structural elements as shown in the table .

structural elements	Yield stress of reinforcing steel Fy MPA	Notes
foundations	280 MPa	G40
columns	280 MPa	G40
beams & slabs	280 MPa	G40

Floor notes (beams and slabs) :

1- The depth of the beam includes the thickness of the upper slab, which has a thickness of 10 cm .

2- The thickness of the hollow bloke slab with its reinforcement as shown in the detail .

3- The bent up is done in the beams as shown in the beams detail .

4- The compressive strength of reinforced concrete after 28 days should not be less 300Kg/cm2 . .

5- The tensile strength of the reinforcement steel should not be less than 2800Kg/cm2 .

6- It is necessary to use clean reinforce steel free of rust.

7- The necessity of using mechanical vibrators during casting for all concrete elements .

8- Watering is done twice a day for two weeks for all concrete elements,

9- The building materials used must be clean and free from any foreign substances .

10- The owner or contractor is not allowed to make any modifications whatsoever without consulting the design engineer first .

11- Thickenings are used in areas crowded with reinforcement bars .

12- The stirrups are connected in the beams from all four sides .

13- Beams with a width greater than 60 cm are implemented with double stirrups .

14- The wooden framework is removed after three weeks of casting .

Foundations and columns notes :

1- The soil bearing capacity is the responsibility of the designer is 18t/m2 and the contractor to ensure.

2- The foundations are designed to support only three floors.

3- Excavation is done to the level of the soil suitable for foundation .

4- A regular concrete bed is made under the foundations with a thickness of 10 cm and exceeds the dimensions of the foundations by 10 cm on each side.

5- The iron of the brush and cover cables is considered part of the reinforcing iron

6- The compressive strength of reinforced concrete after 28 days should not be less 350Kg/cm2 for columns and 300Kg/cm2 for foundations . .

7- The tensile strength of the reinforcement steel should not be less than 2800Kg/cm2 for all structural elements

8- It is necessary to use clean reinforce steel free of rust. .

9- The foundations, nick's columns and ground beam must be painted with hot asphalt in three coats.

10- The necessity of using mechanical vibrators during casting for all concrete elements .

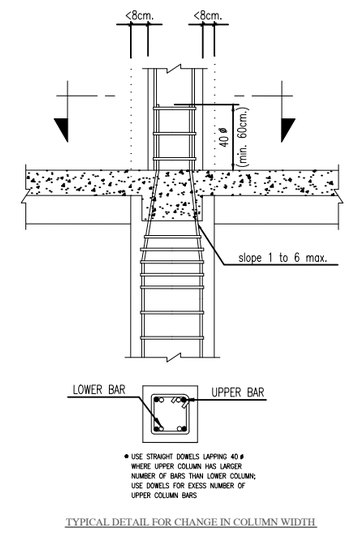
11- Watering is done twice a day for two weeks for all concrete elements, using burlap for the columns.

12- The building materials used must be clean and free from any foreign substances .

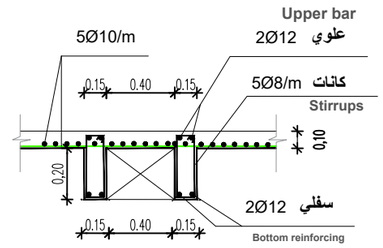
13- The architectural dimensions are matched with the structural dimensions before implementation, and the center of the columns and the separate foundations erected on them must be consistent.

14- The owner or contractor has no right to make any modifications, whatever they may be, without consulting the design engineer.

15- The design engineer does not bear any responsibility in case of non-supervision.



TYPICAL DETAIL FOR CHANGE IN COLUMN WIDTH



ribbed slab details

MEDECINS SANS FRONTIERES

PROJECT TITLE : KILO HOSPITAL Ibb -Yemen

YE120 C000

BUILDING NAME : Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE : General Notes

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

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ملاحظـــات عامة

-1 تم تصميم المنشأه بأعتبار الأحمال الحية التشغيلية والميتة كالتالي :

نوع الحمل	القيمة
الأحمال الميتة	3.00 KN/M2
الأحمال الحية	3.00 KN/M2

-2 تم التصميم بإستخدام مواصفات الكود الأمريكي (ACI-318-2001)

-3 تم تصميم القواعد بإعتبار سعة تحمل التربة التصميمية (180KN/m2) .

-4 لم يتم تصميم المبنى على مقاومة الزلازل .

ملاحظـــات للخرسانة المسلحة

-1 يجب أن تكون المواد المستخدمة مطابقة لمواصفات الكود الامريكي (ACI-318-2001)

-2 مقاومة المكعب الخرسانة بعد 28 يوم من تاريخ الصب لكافة العناصر الأنشائية في المبنى كما هو وارد في الجدول التالي :

العنصر الأنشائي	مقاومة المكعب الخرساني F'c MPA
القواعد	30
أعمدة	35
الجسور والبلاطات	30

-3 أقل غطاء خرساني لحديد التسليح في العناصر الأنشائية كما هو موضح في الجدول التالي :

العنصر الأنشائي	الغطاء الخرساني (mm)
1- القواعد	50-70
2- أعمدة	30-40
3- الجسور	25
4- البلاطات	20

-4 أبعاد العناصر الأنشائية لا تشمل سماكة التشطيبات

-5 عمق الجسر يشمل سماكة البلاطة

-6 المواسير والقنوات يجب أن لا تمرر داخل الخرسانة المسلحة دون موافقة المهندس المصمم

ملاحظـــات لحديد التسليح

-1 أجهاد الخضوع لحديد التسليح المستخدم للعناصر الأنشائية كما هو موضح في الجدول التالي :

العنصر الأنشائي	إجهاد الخضوع لحديد التسليح Fy MPA	ملاحظات
القواعد	280 MPa	G40
الأعمدة	280 MPa	G40
الجسور والبلاطات	280 MPa	G40

* ملاحظات :- الاسقف - الاعصاب والجسور

(1) ارتفاع الجسر يشمل ارتفاع البلاطة العلوية التي سماكتها 10 سم.

(2) سماكة بلاطة السقف الهوردي مع تسليحها كماهو موضح في التفصيلة .

(3) يتم التكسيح في الجسور كماهو موضح في تفصيلة الجسور .

(4) مقاومة الخرسانة المسلحة بعد 28 يوم يجب ان لا تقل عن 300Kg/cm2 .

(5) مقاومة حديد التسليح على الشد يجب لا تقل عن 2800Kg/cm2 .

(6) يلزم استخدام حديد نظيف خالي من الصدآ .

(7) ضرورة استخدام الهزاز الميكانيكي عند الصب لجميع العناصر الخرسانية .

(8) يتم الرش بالماء مرتين باليوم لمدة اسبوعين لجميع العناصر الخرسانية .

(9) يجب ان تكون مواد البناء المستخدمة نظيفة وخالية من اي مواد غريبة .

(10) لا يحق للمالك او المقاول عمل اي تعديلات مهما كانت الا بعد الرجوع للمهندس المصمم.

(11) يتم استخدام الثخانات في المناطق المزدحمة بحديد التسليح .

(12) يتم ربط الكانات في الجسور من جميع الجهات الاربع

(13) يتم استخدام الثخانات في المناطق المزدحمة بحديد التسليح .

(14) الجسور التي عرضها أكبر من 60 سم ينفذ لها كانات مزدوجة محيطية ومزدوجة .

(15) تنزع الشدة الخشبية بعد ثلاثة اسابيع من الصب .

*ملاحظات:- القواعد والاعمدة

(1) قابلية تحمل التربة المصمم عليها 18t/m2 وعلى المقاول مسؤلية التأكد من ذلك .

(2) صممت الاساسات لتتحمل ثلاثة ادوار فقط .

(3) يتم الحفر حتى عمق الصالح للتأسيس .

(4) يتم عمل فرشة من الخرسانة العادية تحت القواعد بسماكة 10 سم وتزيد ابعاد القواعد بمقدار 10 سم من كل جانب .

(5) حديد كوابيل الفرش والغطا يعتبر من ضمن حديد التسليح .

(6) مقاومة الخرسانة المسلحة بعد 28 يوم يجب ان لا تقل عن 350Kg/cm2 في الاعمدة و 300Kg/cm2 في القواعد .

(7) يجب ان لا تقل مقاومة حديد التسليح على الشد عن 2800Kg/cm2 في جميع العناصر الانشائية

(8) يلزم استخدام حديد نظيف خالي من الصدآ .

(9) يلزم دهان القواعد والرقاب والميد بلأسفلت الحار ثلاثة اوجة .

(10) ضرورة استخدام الهزاز الميكانيكي عند الصب لجميع العناصر الخرسانية .

(11) يتم الرش بالماءمرتين باليوم لمدة اسبوعين لجميع العناصر الخرسانية مع استخدام الخيش للاعمدة .

(12) يجب ان تكون مواد البناء المستخدمة نظيفة وخالية من اي مواد غريبة .

(13) يتم مطابقة الابعاد المعمارية مع الانشائية قبل التنفيذ وعلى أن ينطبق سنتر الاعمدة والقواعد المنفصلة المقامة عليها.

(14) لا يحق للمالك او المقاول عمل اي تعديلات مهما كانت الا بعد الرجوع للمهندس المصمم.

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BUDGET CODE 'SUB-PROJ. YE120_C014

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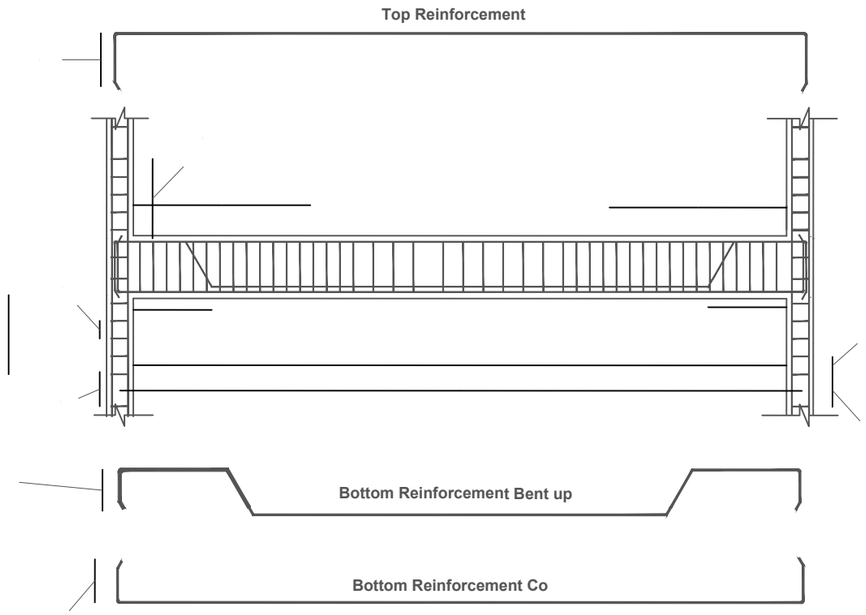
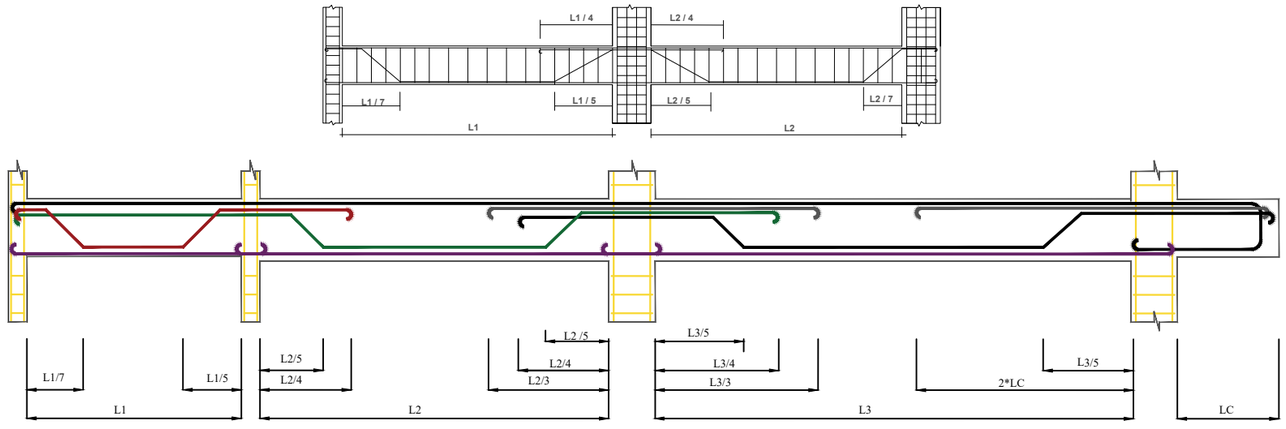
- Dimensions shown on framing plans indicate the width and the total depth including the thickness of the slab .
- In all beams of depth exceeding 600 mm. two bars ϕ8 mm must be placed at distances not exceeding 30 cm.

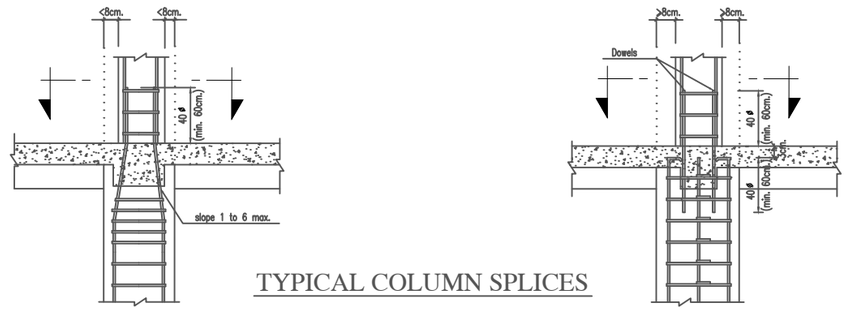


TYPICAL DETAIL OF SIMPLE BEAMS



General section showing details reinforcement and distance of bent up of beam

- Columns are designed to carry four floors .
- Stirrups used are as shown on Dwgs. If however not mentioned, they shall be taken as ϕ8 @ 15 cm.



TYPICAL COLUMN SPLICES

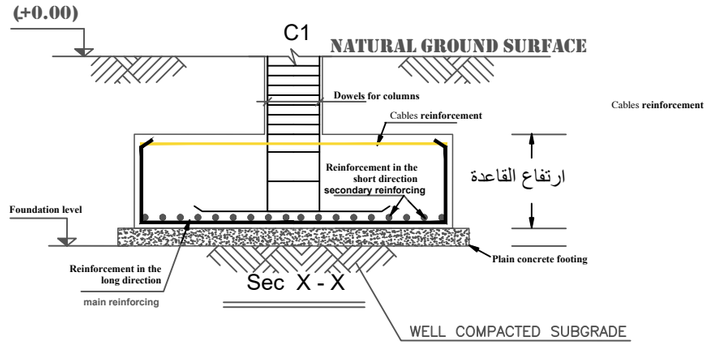
TYPE 1

TYPE 2

- USE STRAIGHT DOWELS LAPPING 40 WHERE UPPER COLUMN HAS LARGER NUMBER OF BARS THAN LOWER COLUMN; USE DOWELS FOR EXESS NUMBER OF UPPER COLUMN BARS

TYPICAL DETAIL FOR CHANGE IN COLUMN WIDTH

- FOUNDATION
  - The foundation levels from the natural ground surface are shown on Dwgs
  - The soil report and foundation recommendations are to be considered .



TYPICAL DETAIL OF FOOTINGS

MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

General Notes

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

HQ stamp : FOR BID ONLY

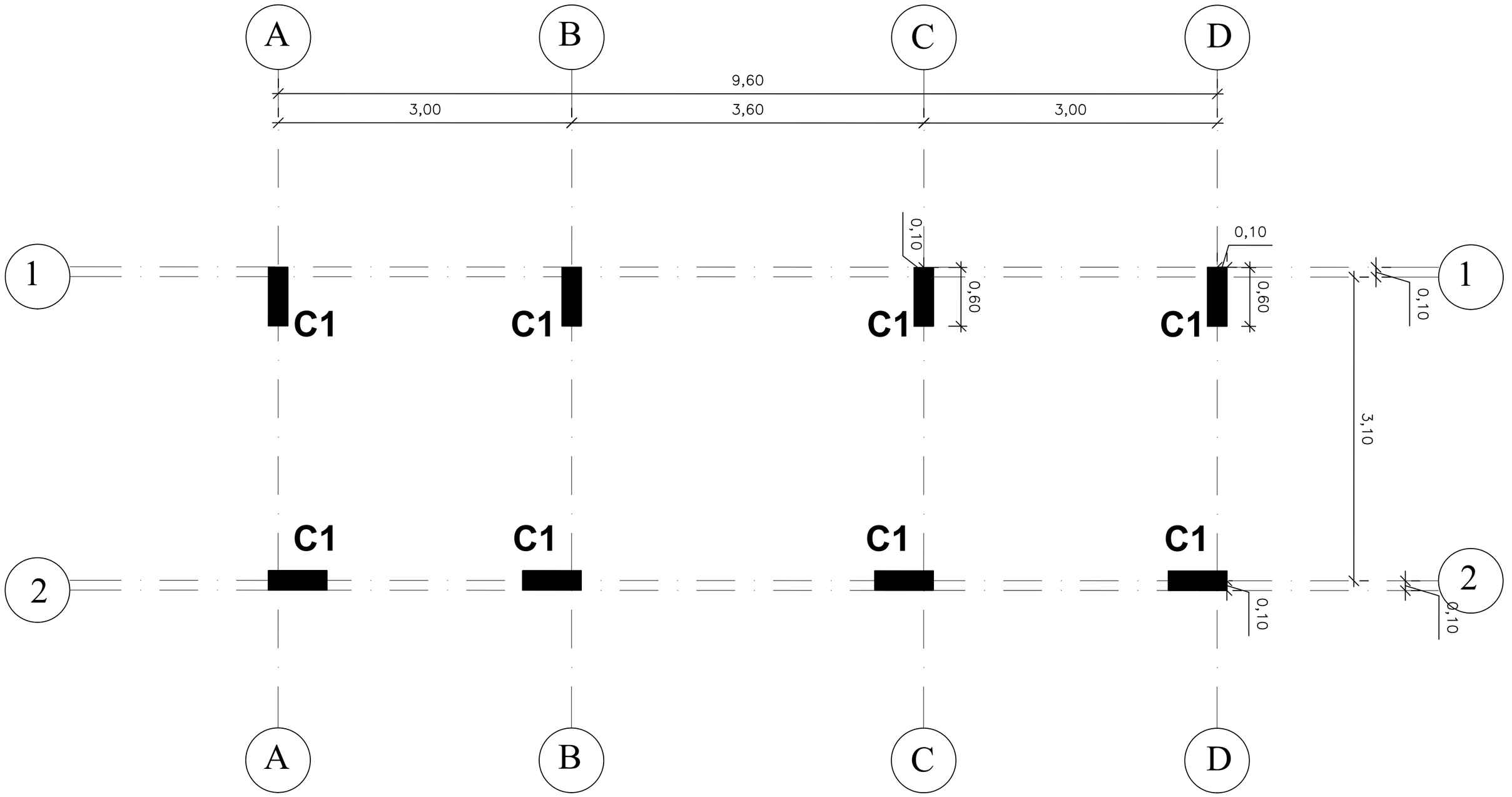
N°	Date	Issue

BUDGET CODE SUB-PROJ. YE120.C014

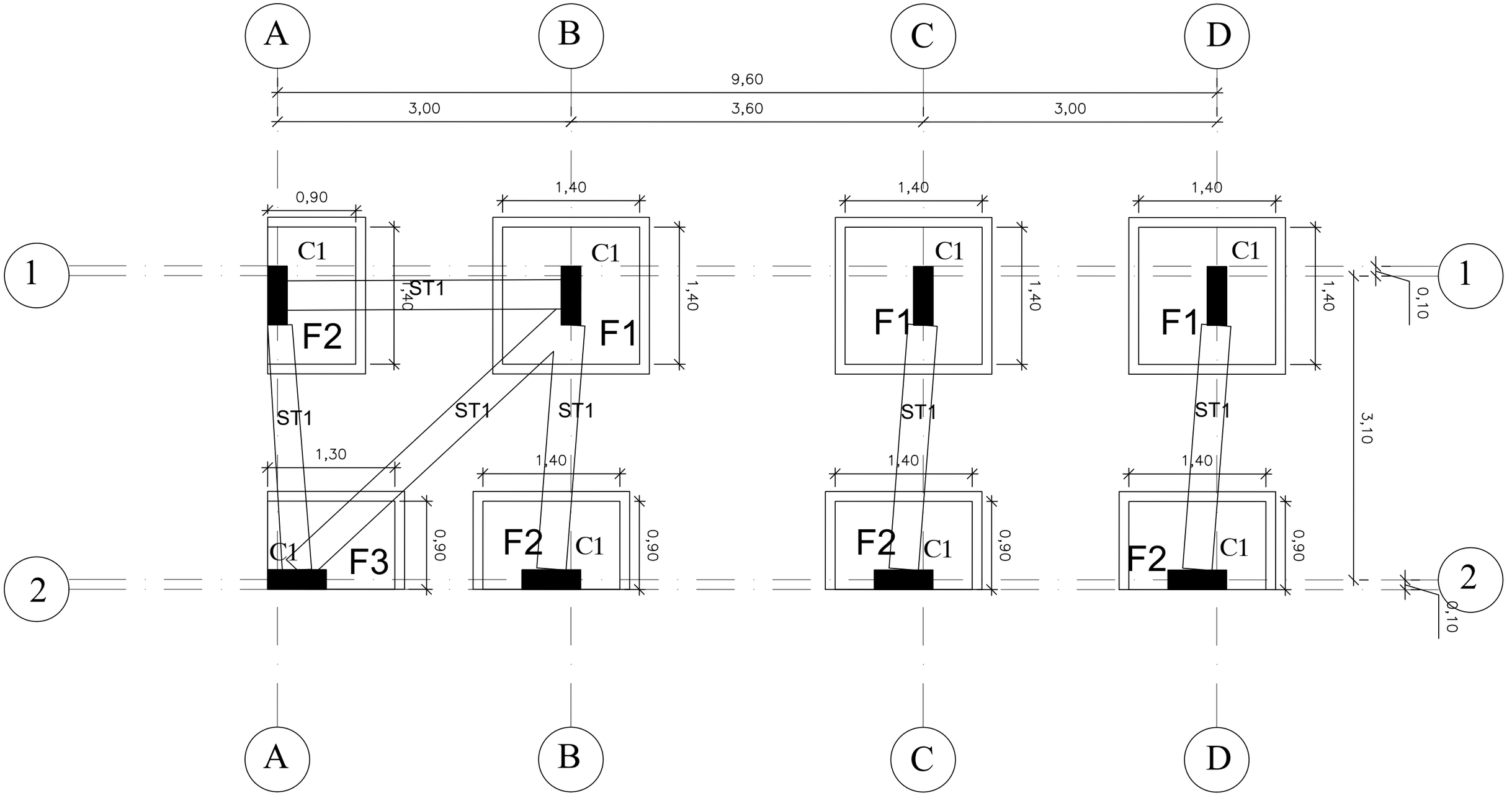
Sheet N° : **STR-003**

scale : .....

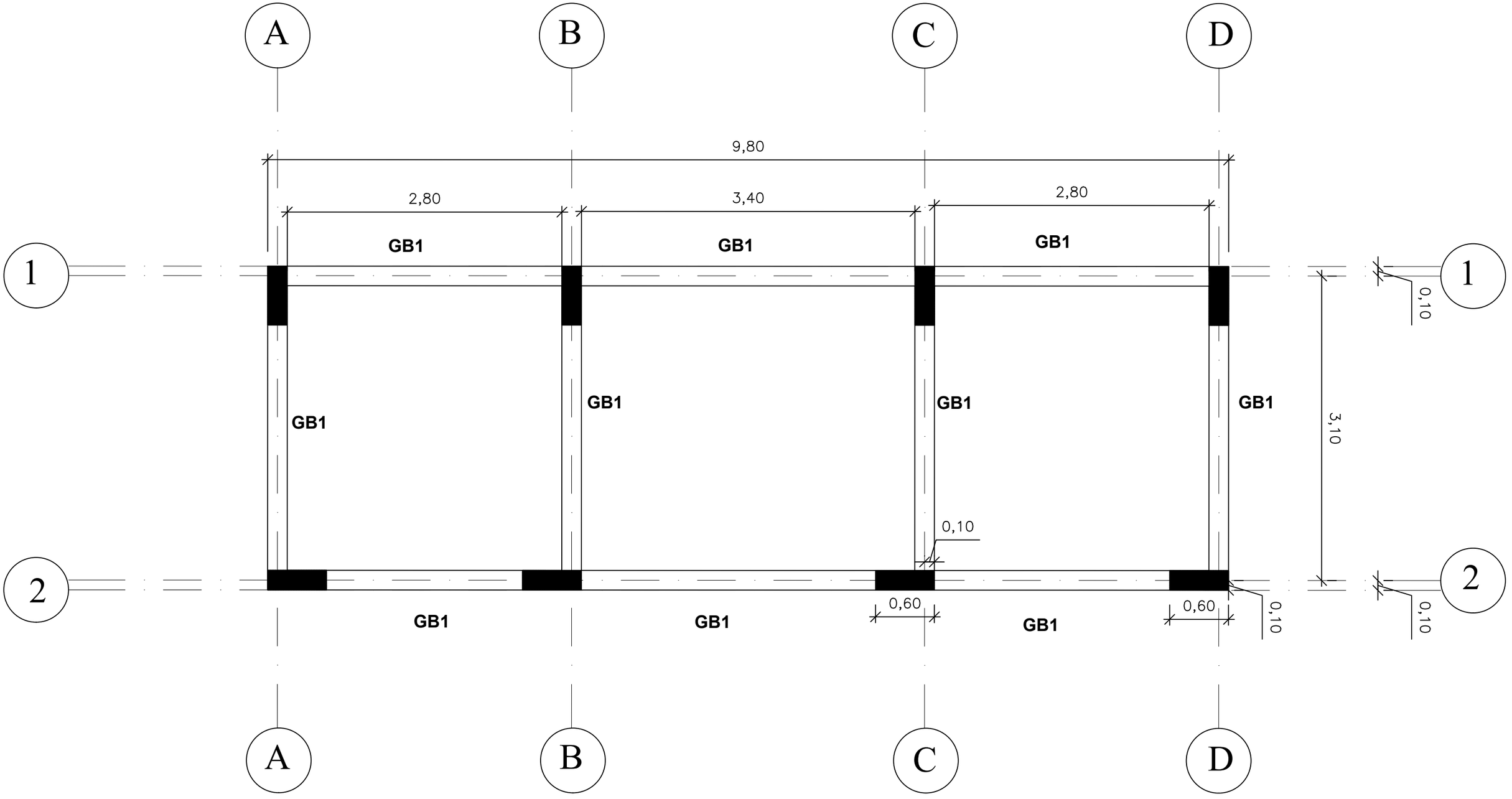
Date : 12 / 03 / 2026



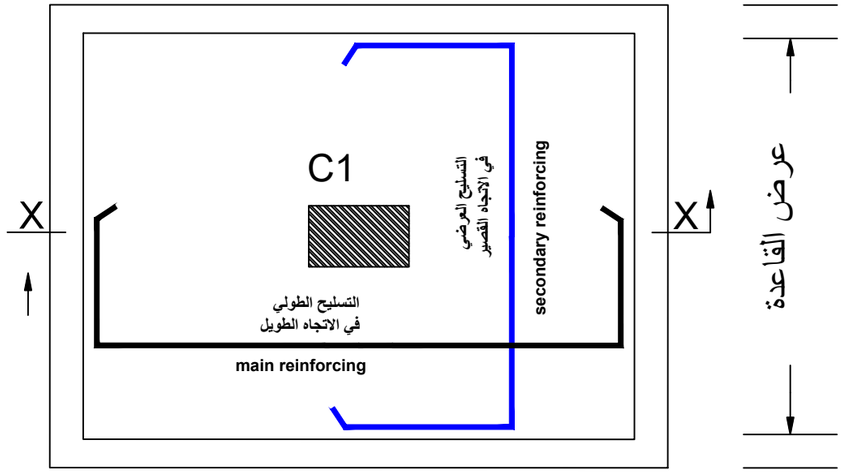
MEDECINS SANS FRONTIERES	PROJECT TITLE : **KILO HOSPITAL Ibb -Yemen**	YE120 C000	BUILDING NAME : **Pediatrics Rehabilitation and Extension Project** CODE CAM : CNSTR | HMAT | XXX	DRAWING TITLE : **Plan of Columns Axes** FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg	HQ stamp : FOR BID ONLY	N° Date Issue	BUDGET CODE SUB-PROJ. YE120.C014 Sheet N° : **STR-004** scale : ..... Date : 12 / 03 / 2026



MEDECINS SANS FRONTIERES	PROJECT TITLE : **KILO HOSPITAL Ibb -Yemen**	YE120 C000	BUILDING NAME : **Pediatrics Rehabilitation and Extension Project** CODE CAM : CNSTR | HMAT | XXX	DRAWING TITLE : **Plan of Foundations &Columns** FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg	HQ stamp : FOR BID ONLY	N° Date Issue	BUDGET CODE |SUB–PROJ. YE120.C014 / Sheet N° : **STR-005** scale : ..... Date : 12 / 03 / 2026



MEDECINS SANS FRONTIERES	PROJECT TITLE : **KILO HOSPITAL Ibb -Yemen**	YE120 C000	BUILDING NAME : **Pediatrics Rehabilitation and Extension Project**	DRAWING TITLE : **Plan of Ground Beams with Columns**	HQ stamp : FOR BID ONLY	N° Date Issue	BUDGET CODE \SUB–PROJ. YE120.C014
			CODE CAM : CNSTR | HMAT | XXX	FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg			Sheet N° : **STR-006** scale : ..... Date : 12 / 03 / 2026



طول القاعدة

F المسقط الافقي للقاعدة المنفصلة

TYPICAL DETAIL OF FOOTINGS

ابعاد وتسليح القواعد	Dimension & Reinforcing of Foundation

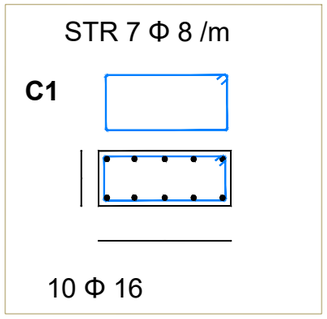
code	الخرسانه العاديه Unreinforcement concrete			الخرسانه المسلحة Reinforcement concrete			التسليح Reinforcing		حديد الكوابيل Cables reinforcement		العـــدد	مـلاحظـــات
	length (m)	width (m)	High (m)	length (m)	width (m)	High (m)	main reinforcing	secondary reinforcing	main reinforcing	secondary reinforcing	Foundation No	Notes
F1	1.60	1.60	0.10	1.40	1.40	0.50	6ø16/m	6ø16/m	2ø16	2ø16	3	
F2	1.60	1.10	0.10	1.40	0.90	0.50	6ø16/m	6ø16/m	2ø16	2ø16	4	
F3	1.50	1.10	0.10	1.30	0.90	0.50	6ø16/m	6ø16/m	2ø16	2ø16	1	

Schedule of Ground Beams reinforcing — جداول تسليح الميد

code	الابعـــاد Dimensions		التسليح السفلي Bottom reinforcing		التسليح العلوي	حديد الكانات	مـلاحظـــات
	width (cm)	Depth (cm)	Bottom bar	Bent up bar	Upper bar	Stirrups	Notes
GB1	20	50	2ø16	2ø16	2ø16	7ø8/m	

الملاحظات للقواعد المنفصلة

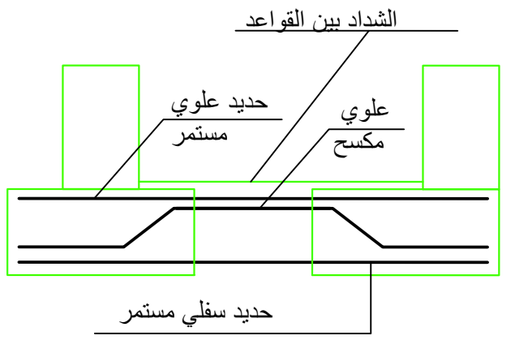
- تنفذ خرسانة عادية اسفل القواعد سمك 10سم وتبرز 10سم من جميع الجوانب
- حديد الكوابيل محسوب من الحديد الكلي



جداول تسليح الاعمدة

Ground Columns — أعمدة الدور الارضي

code	Dimensions الابعـاد		الحديد الرئيسي	حديد الكانات	العدد
	width (cm)	length (cm)	main reinforcing	Stirrups	NO
C1	20	60	10ø16	7ø8/m	8



جدول تسليح الشداد

الرقم	العرض cm	الإرتفاع cm	حديد سفلي	حديدالتسليح العلوي		الكانات
			سفلي مستمر	علوي مستمر	علوي مكسح	
ST1	40	60	4 Ø 16	6 Ø 16	2 Ø 16	2*8 Ø 8/m

MEDECINS SANS FRONTIERES

PROJECT TITLE : **KILO HOSPITAL Ibb -Yemen**

YE120 C000

BUILDING NAME : **Pediatrics Rehabilitation and Extension Project**

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE : **Reinforcement Schedules**

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

HQ stamp : FOR BID ONLY

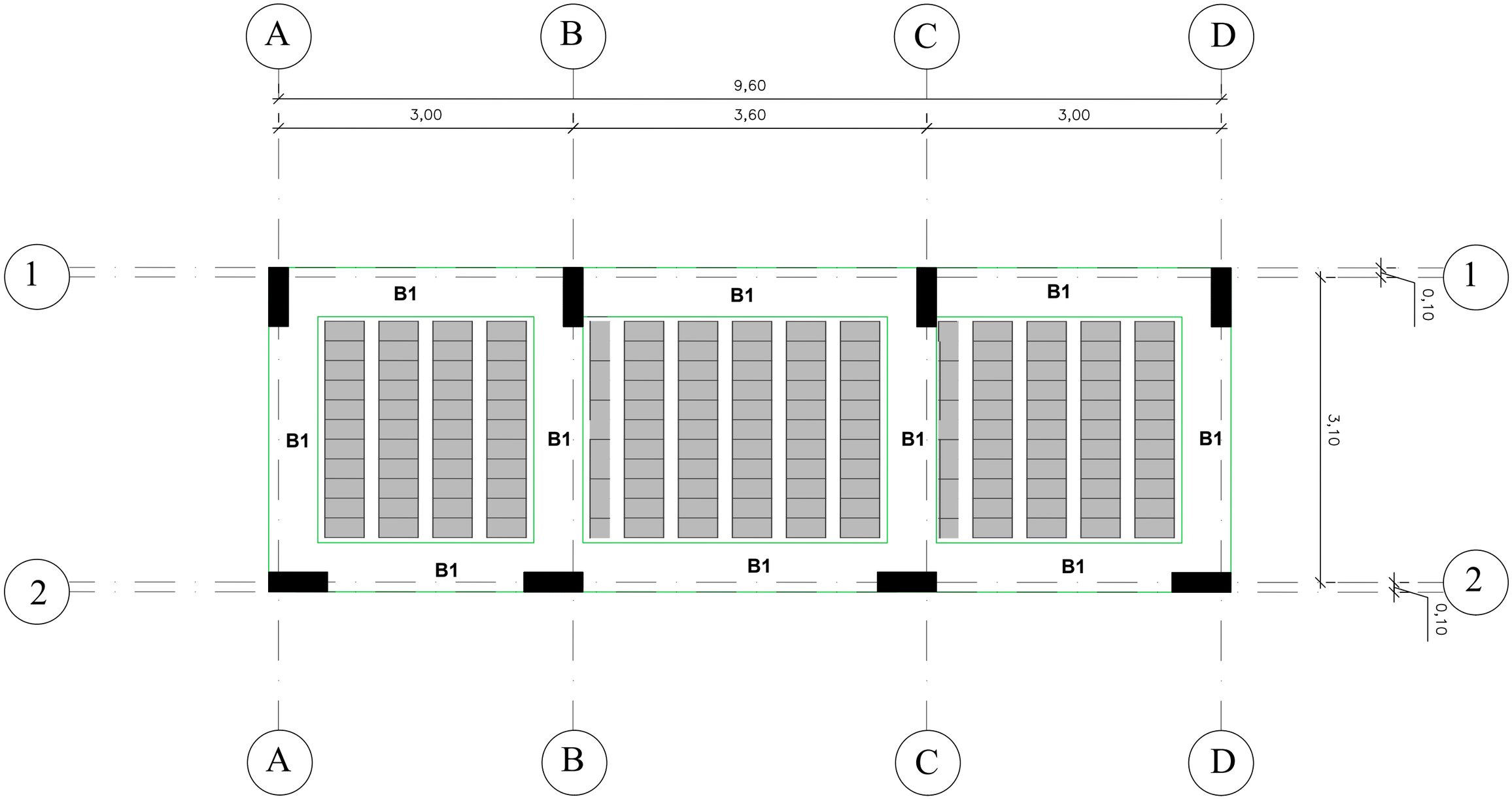
N° Date Issue

BUDGET CODE SUB-PROJ. YE120.C014

Sheet N° : **STR-007**

scale : .....

Date : 12 / 03 / 2026



MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

Plan of Roof Reinforcement

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

HQ stamp : FOR BID ONLY

N°	Date	Issue

BUDGET CODE SUB-PROJ. YE120.C014

Sheet N° : **STR-008**

scale : .....

Date : 12 / 03 / 2026

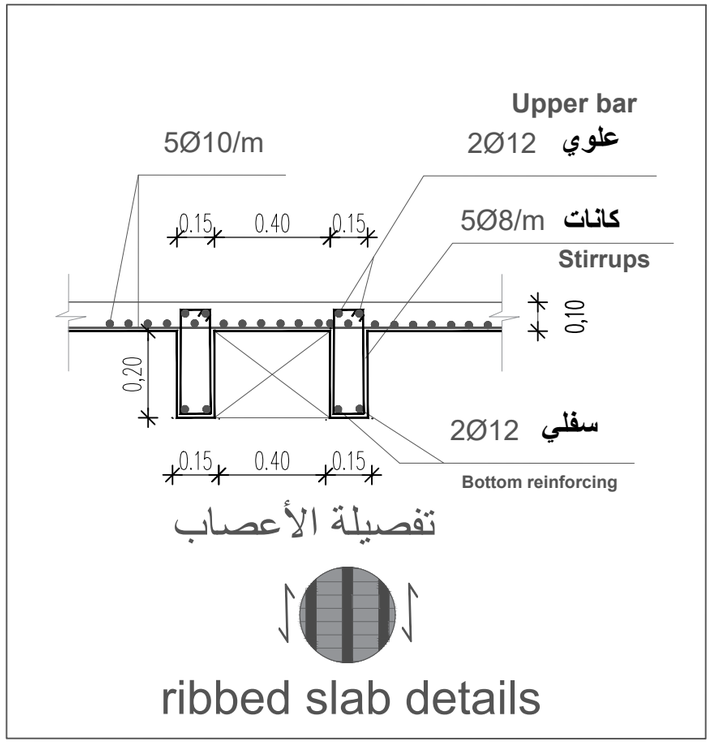
Schedule of Roof Reinforcement
الجدول الإنشائي لتسليح السقف

code	H (cm) ارتفاع الجسر مع البلاطة	B (cm) عرض	Bottom Reinforcement		Top Reinforcement	Stirrups	الكانات		جديد الكابولي الاضافي علوي	
			Bottom السفلي مستمر	Bent up سفلي المكسح	التسليح العلوي	عند المساند	في الوسط			
B1	30	50	3Ø16	2Ø16	3Ø16	8Ø8/m	7Ø8/m		———	

البلاطة العلوية سمك 10 سم وتسليح 5Ø10/m فرش وغطاء

عرض العصب 15 سم وبتسليح 2Ø12 سفلي و 2Ø12 علوي وكانات قطر 8 ملم لكل 20 سم

ضرورة استمرارية الأعصاب كما في المسقط



تفصيلة الأعصاب

ribbed slab details

* ملاحظات :-

(1) ارتفاع الجسر يشمل ارتفاع البلاطة العلوية التي سماكتها 10 سم.

(2) سماكة بلاطة السقف الهوردي مع تسليحها كماهو موضح في التفصيلة .

(3) يتم التكسيح في الجسور كماهو موضح في تفصيلة الجسور .

(4) مقاومة الخرسانة المسلحة بعد 28 يوم يجب ان لا تقل عن 300Kg/cm2 .

(5) مقاومة حديد التسليح على الشد يجب لا تقل عن 2800Kg/cm2 .

(6) يلزم استخدام حديد نظيف خالي من الصدأ .

(7) ضرورة استخدام الهزاز الميكانيكي عند الصب لجميع العناصر الخرسانية .

(8) يتم الرش بالماء مرتين باليوم لمدة اسبوعين لجميع العناصر الخرسانية .

(9) يجب ان تكون مواد البناء المستخدمة نظيفة وخالية من اي مواد غريبة .

(10) لا يحق للمالك او المقاول عمل اي تعديلات مهما كانت الا بعد الرجوع للمهندس المصمم.

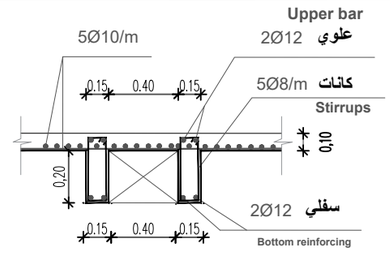
(11) يتم استخدام الثخانات في المناطق المزدحمة بحديد التسليح .

(12) يتم ربط الكانات في الجسور من جميع الجهات الاربع

(13) يتم استخدام الثخانات في المناطق المزدحمة بحديد التسليح .

(14) الجسور التي عرضها أكبر من 60 سم ينفذ لها كانات مزدوجة محيطية ومزدوجة .

(15) تنزع الشدة الخشبية بعد ثلاثة اسابيع من الصب .



تفصيلة الأعصاب

MEDECINS SANS FRONTIERES	PROJECT TITLE : KILO HOSPITAL Ibb -Yemen	YE120 C000	BUILDING NAME : Pediatrics Rehabilitation and Extension Project	DRAWING TITLE : Schedule of Roof Reinforcement	HQ stamp : FOR BID ONLY	N° Date Issue	BUDGET CODE |SUB–PROJ. YE120_C014
			CODE CAM : CNSTR | HMAT | XXX	FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg			Sheet N° : STR-009 scale : ..... Date : 12 / 03 / 2026

PLUMBING DRAWINGS

MEDECINS SANS FRONTIERES – C:\Users\YE101Diagcoc\MSF\Construction – YE120_C014_Kilo_PediatricsDepartment\YE120_C014_ConstructionCycle\3.2_Technical_design\YE120_KILO_Pediatrics Extension_lxa.dwg, PLU(1), 12 03 2026 – 09:33

MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

HQ stamp :

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MEDECINS SANS FRONTIERES

N° Date Issue

PED

Projected state

BUDGET CODE SUB-PROJ. YE120.C014

Sheet N° :

PLU-000

scale : ..... 1/175 if printed on A3

Date : 12 / 03 / 2026

MH-05(60x60cm)
CL = +0.00 m
IL = As per existing sewage line
DEPTH = As per existing pipeline

MH-04(60x60cm)
CL = +0.00 m
IL = As per existing sewage line
DEPTH = As per existing pipeline

MOH CASHER CABINET

EXISTING BUILDING
–NOT PART OF THE INTERVENTION
–

MH-03(60x60cm)
CL = +0.00 m
IL = As per existing sewage line
DEPTH = As per existing pipeline

MH-02 (60x60cm)
CL = +0.00 m
IL = As per existing sewage line
DEPTH = As per existing pipeline

FIN Room

FIN Room

ADMISSION
10m2

ISOLATION ROOM#1
8.70m2

ISOLATION ROOM#2
8.70m2

RWP

Ø100mm WP U/G

MH-01 (60x60cm)
CL = +0.00 m
IL = As per existing sewage line
DEPTH = As per existing pipeline

FD

ISO WC
3.30m2

STAFF UTILITY ROOM
3.18M2

ISO WC
3.30m2

MED STOCK
3.80m2

MILK ROOM
6.00m2

EXISTING MANHOLE

SLUICE ROOM

MH-06(60x60cm)
CL = +0.00 m
IL = As per existing sewage line
DEPTH = As per existing pipeline

EMERGENCY

Ø100mm WP U/G
Connect to Existing Manhole

EXISTING MANHOLE

NEW NEONATOLOGY TOILETTE

NEW NEONATOLOGY TOILETTE

ITEM / PED TOILETTES

LATRINE + SHOWER

LATRINE + SHOWER

MH-07 (60x60cm)
CL = +0.00 m
IL = As per existing sewage line
DEPTH = As per existing pipeline

MEDECINS SANS FRONTIERES	PROJECT TITLE : **KILO HOSPITAL Ibb -Yemen**	YE120 C000	BUILDING NAME : **Pediatrics Rehabilitation and Extension Project**	DRAWING TITLE : **Plan of Sanitation Network**	HQ stamp : FOR BID ONLY	N° Date Issue	BUDGET CODE \SUB–PROJ. YE120,C014
			CODE CAM : CNSTR | HMAT | XXX	FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg			Sheet N° : **PLU-01** scale : ..... Date : 16 / 03 / 2026

CASHER CABINET

EXISTING BUILDING —NOT PART OF THE INTERVENTION

SOLAR WATER HEATER INSTALLED IN ROOFTOP

2000 liters WATER TANK IN ROOFTOP

2000 liters WATER TANK IN ROOFTOP

ISSION 10m2

ISOLATION ROOM#2 8.70m2

Ø25mm CWS RISER FROM U/T

Ø25mm CWS RISER FROM U/T

ø40mm

ø40mm

ø40mm

ø40mm

ISO WC 3.30m2

STAFF UTILITY ROOM 3.18M2

ISO WC 3.30m2

MED STOCK 3.80m2

SLUICE ROOM 5.45m2

MILK ROOM 6.00m2

NEW NEONATOLOGY TOILETTE

NEW NEONATOLOGY TOILETTE

ITFC/ PED TOILETTES

LATRINE + SHOWER

LATRINE + SHOWER

EMERGENCY EXIT

MEDECINS SANS FRONTIERES

PROJECT TITLE :

KILO HOSPITAL
Ibb -Yemen

YE120 C000

BUILDING NAME :

Pediatrics Rehabilitation and Extension Project

CODE CAM : CNSTR | HMAT | XXX

DRAWING TITLE :

Water Feeding and Distribution

FILE NAME : YE120_KILO_Pediatrics Extension_lxa.dwg

HQ stamp :

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MEDECINS SANS FRONTIERES

N°	Date	Issue

BUDGET CODE 'SUB-PROJ.

YE120.C014

Sheet N° :

PLU-02

scale : .....

Date : 16 / 03 / 2026

ELECTRICAL

LAYOUTS

MEDECINS SANS FRONTIERES
OPERATING CENTER GENEVA
CENTRE OPÉRATIONNEL DE GENÈVE

HQ stamp / Tampon du Siège :

FOR BID ONLY

N°Issue / N°Publication Date

Sheet N° / Feuille N°: E0

Scale / Échelle :

Date : 24 / 03 / 2026

Project Title / Titre du Projet :

Pediatric Extension-kilo project

Building Name / Nom du Bâtiment :

PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin :

COVER

Drawn by / Dessiné par :

Verified by / Vérifié par :

Construction Phase :

DESIGN

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixa.dwg

P.No.	SHEET NO.	TITLE
1	E0	COVER
2	E1	ELECTRICAL LIST OF DRAWINGS
3	E2	ELECTRICAL GENERAL NOTES
4	E3	ELECTRICAL GENERAL NOTES
5	E4	ELECTRICAL GENERAL NOTES
6	E5	ELECTRICAL LEGEND
7	E6	ELECTRICAL DETAILS
8	E7	ELECTRICAL DETAILS
9	E8	ELECTRICAL DETAILS
10	E9	ELECTRICAL DETAILS
11	E10	ELECTRICAL DETAILS
12	E11	LIGHTING SYSTEM
13	E12	NORMAL POWER AND UPS SYSTEM
14	E13	NORMAL POWER VENTILATION SYSTEM
15	E14	SMOKE DETECTOR SYSTEM
16	E15	FIRE DISTINGUISHES LOCATIONS
17	E16	GROUNDING SYSTEM
18	E17	MAIN POWER CABLE PATH TO THE BUILDING
19	E18	ELECTRICAL SINGLE LINE DIAGRAM N-DB
20	E19	ELECTRICAL VENTILATION SINGLE LINE DIAGRAM

MEDECINS SANS FRONTIERES
OPERATING CENTER GENEVA
CENTRE OPÉRATIONNEL DE GENÈVE

HQ stamp / Tampon du Siège :

FOR BID ONLY

N°Issue / N°Publication Date

Sheet N° / Feuille N°: E1

Scale / Échelle :

Date : 24 / 03 / 2026

Project Title / Titre du Projet :

Pediatric Extension-kilo project

Building Name / Nom du Bâtiment :

PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin :

ELECTRICAL LIST OF DRAWINGS

Drawn by / Dessiné par :

Verified by / Vérifié par :

Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixo.dwg

NOTES:

1. Very important notes ,they must be read completely before starting work
2. The implementation of electrical works must be strictly adhered to according to the plans and specifications prepared by the electrical engineer and the instructions of the supervising engineer.
3. Pipes and tubes must be fixed with special fasteners and cement mortar must be added to them to cover them after installation.
4. The extensions and pipes of the different panels and systems must be independent of each other and in different colors to distinguish between them ,and the neutral line should not be included between the systems.
5. Power socket extensions must be independent of lighting extensions.
6. Pipe extensions must not conflict with any other extensions ,and the necessary precautions must be taken to protect them from moisture or water leakage.
7. The height of the centers of the key boxes above the level of the tiles must be 110 to 130cm , their horizontal distance from the edges of the doors must be 15–20cm , and the height of the sockets for offices must be 40 to 60cm and in residential apartments 80–90cm ,and for kitchens and bathrooms not less be 15–20cm ,and the height of the sockets for offices must be 40to 60cm and in residential apartments 80–90cm , and for kitchens and bathrooms not less than 140 – 120cm.
8. Care must be taken when extending wires and cables and pulling lines so that they are not exposed to any damage ,injury ,or damage to the insulators ,and that pulling should be done after completing the plastering work , and that they should not be strongly tightened ,and that numbering should be done immediately after pulling.
9. The technician must take measurements for the roof foundation work from the edge of the walls ,not the columns ,if the columns are prominent.
10. Cable and wire sections must be approved from the load tables for electrical panels ,each circuit according to what is registered for it.
11. All sockets ,panels ,cable trays and junction boxes must be grounded and connected to the grounding pins in electrical panels.
12. The ends of the pipes must be tightly closed so that the mortar or concrete does not leak into them and hinder pulling the wires later.
13. Pipes must be fixed with tie wires so that they do not bend during casting or rise above the level of the casting on the ceilings.
14. It prevents the orange pipe from breaking at a vertical angle ,and if there is a need to do so ,it is necessary to use a plastic pull box to change the direction.
15. The distance of pulling wires must not exceed 9meters without a pulling section ,box ,or distribution or pulling box.
16. Take care to insert the pipes into the wall for a distance of 2cm so that they can be easily covered with mortar.
17. It is necessary to cover the cans with paper or something so that they are not exposed to the cement mortar when plastering later.
18. The design of electrical circuits should be taken into account in accordance with engineering standards ,such that a maximum of 8to 12points are connected to each circuit , so that the circuit load does not exceed the limit required according to the standard specifications.
19. Telephone ,satellite ,network ,electricity ,lighting ,fire ,and camera pipes are pulled out individually ,using a separate pipe network ,and as far away from the electricity pipes as possible.
20. It is preferable to use white pipes with colored ends for light current wires ,and sockets and lighting should be drawn with black pipes.
21. The end of each wire or end of any circuit must either end in a box ,box ,or partition .It is prohibited to leave the end of the wires and pipes protruding on the walls ,especially at points of external or wall lighting or lighting of mirrors.
22. All electrical sockets ,electrical panels ,ducts ,cable trays ,and any metal parts or electrical devices in the project must be grounded.
23. Leave a suitable length of electrical wires (about 20cm)in the box and another suitable length in the drum.
24. When you want to connect two or more copper wires ,it is necessary to use the plastic suits and prevent the connection to the dishes.
25. It is necessary to pull the wires in an organized and consistent manner according to the colors and distribute them in the panel in the same way with numbering for all electrical circuits and wires.
26. Installation of covers ,switches and lighting shall be done after painting work.
27. Do not use plastic wires to hang devices and lamps ,but rather use iron chains or ties.
28. It is necessary to conduct a full load test and operate the air conditioners ,lighting ,and every electrical device upon completion of the installation.

MEDECINS SANS FRONTIERES
OPERATING CENTER GENEVA
CENTRE OPÉRATIONNEL DE GENÈVE

HQ stamp / Tampon du Siège :

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N°Issue / N°Publication Date

Sheet N° / Feuille N°: E2

Scale / Échelle :

Date : 24 / 03 / 2026

Project Title / Titre du Projet :

Pediatric Extension-kilo project

Building Name / Nom du Bâtiment :

PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin :

ELECTRICAL GENERAL NOTES

Drawn by / Dessiné par :

Verified by / Vérifié par :

Construction Phase :

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GENERAL NOTES:

01– THE ELECTRICAL DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, MECHANICAL AND INTERIOR DESIGN DRAWINGS AND SPECIFICATIONS.
02– DO NOT SCALE FROM THE ELECTRICAL DRAWING LAYOUTS, WORK ACCORDING TO ARCHITECTURAL AND ELECTRICAL DETAILS.
03– CONDUIT SIZES SHALL BE SELECTED IN ACCORDANCE WITH THE RELEVANT B.S REGULATIONS AND LOCAL REGULATIONS.
04– MINIMUM CONDUIT SIZE TO BEØ20MM.
05– ALL OUTLETS, SWITCHES, BOXES, ISOLATING SWITCHES AND FITTINGS IN PLANT ROOMS AND/OR EXPOSED TO EXTERNAL ENVIRONMENT SHALL BE WEATHER PROOF.
06– ALL SOCKET OUTLETS SHALL BE 3–PIN SWITCHED COMBINED TYPE WITH INDICATION LAMP UNLESS OTHERWISE INDICATED.
07– ALL SOCKET OUTLETS SHALL BE MINIMUM OF 13 AMPERE RATED UNLESS OTHERWISE INDICATED.
08– ALL CONCEALED RISING CONDUITS SHALL RUN IN THE WALLS OR COLUMNS, CONDUITS SHALL NOT RUN IN PLASTER, ALL RECESSED CONDUITS SHALL BE PVC TYPE ALL SURFACE/ EXPOSED CONDUITS SHALL BE GI TYPE.
09– EXACT LOCATION OF ALL MECHANICAL / HVAC EQUIPMENT AND ASSOCIATED DISCONNECTING SWITCHES AND OUTLETS SHALL BE COORDINATED WITH THE MECHANICAL DRAWINGS.
10– CONTRACTOR SHALL ESTABLISH EXACT LOCATION OF LIGHTING FIXTURES, SMOKE DETECTORS, CABLE TRAYS, CABLE ROUTES, CONDUIT ROUTES ...ETC. IN FULL COORDINATION WITH OTHER SERVICES AND TO THE ENGINEER APPROVAL.
11– LOCATION OF EARTH ELECTRODES AND DOWN CONDUCTORS SHALL BE COORDINATED WITH MANHOLES & SERVICES FOR OTHER TRADES.
12– ALL LIGHT FIXTURES SHALL BE SUPPLIED COMPLETE WITH CONTROL GEAR INCLUDING POWER FACTOR CAPACITORS WHERE NECESSARY AND LAMP WHETHER EXPLICITLY MENTIONED OR NOT.
13– LIGHTING FIXTURE IN MECHANICAL ROOMS, SUBSTATION, GENERATOR ROOM ... ETC. THE MINIMUM SIZE ALLOWED BY THE CODES AND MAY BE PURPOSELY OVERSIZED TO CONDUIT ...ETC. AND BE SUSPENDED WHERE REQUIRED.
14– CONDUIT SIZES CALLED OUT ON THE DRAWINGS ARE NOT NECESSARILY BASED ON THE MINIMUM SIZE ALLOWED BY THE CODES AND MAY BE PURPOSELY OVERSIZED TO AVOID EXCESS CONDUIT HEATING AND VOLTAGE DROP.
15– ALL CIRCUITS SHALL INCLUDE AN INSULATED GREEN GROUNDING CONDUCTOR. THIS CONDUCTOR SHALL BE CARRIED IN ALL RACEWAYS INCLUDING THOSE INSTALLED FOR SWITCH LUGS AND SHALL BE CONNECTED TO THE DEVICE, LUMINARIES, SOCKET OUTLET OR EQUIPMENT HOUSING USING A SUITABLE GROUNDING LUG.
16– THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL JUNCTION BOXES REQUIRED FOR EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS.
17– ALL FLUSH MOUNTED PANELS IN THE PROJECT SHALL HAVE THE REQUIRED NUMBER OF Ø 25MM CONDUITS EXTENDED TO ABOVE AN ACCESSIBLE CEILING FOR FUTURE USE.
18– LIGHT FITTINGS SHALL NOT ACCOMMODATE THE LAMPS MORE THAN THE WATTAGE SHOWN ON THE DRAWINGS OR SCHEDULES.
19– THE CONTRACTOR SHALL CONFIRM EXACT COUNTER HEIGHTS, EQUIPMENT LOCATIONS FOR POWER AND COMMUNICATION DEVICES.
20– ALL PANELS SHALL HAVE TYPED UP CIRCUIT DIRECTORIES REFLECTING THE CIRCUIT ARRANGEMENT AS IT IS ACTUALLY INSTALLED.
21– ALL RECESSED SPEAKERS LUMINARIES IN FIRE RATED CEILING SHALL BE INSTALLED SO AS TO MAINTAIN THE INTEGRITY OF THE FIRE RATING.
22– THE CONTRACTOR SHALL OBTAIN APPROVAL FROM ENGINEER BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS OR FIRE RATED WALL AND SLABS.
23– THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND TECHNICAL BROCHURES FOR ALL LUMINARIES, EQUIPMENT AND DEVICES COVERED BY THIS CONTRACT FOR APPROVAL PRIOR TO ORDERING. SHOP DRAWINGS SHALL BEAR THE CONTRACTOR STAMP AND SIGNATURE INDICATING THAT THEY HAVE BEEN CHECKED AND ARE TO THE BEST OF THEIR KNOWLEDGE , IN COMPLIANCE WITH THE CONTRACT DOCUMENTS.
24– THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SUPPORTS FOR CHEQUERED PLATES AND CABLES AS REQUIRED TO PERFORM THE INSTALLATION AT THE SPECIFIED STANDARDS.
25– ACBS SHALL HAVE A MINIMUM SYMMETRICAL INTERRUPTING CAPACITY OF 44KA FOR 3 SECOND. MCCBS SHALL HAVE THE REQUIRED MINIMUM INTERRUPTING CAPACITY FROM WHICH PANEL IT WAS USE/INSTALL.
26– EARTHING OF ALL EQUIPMENT SHALL BE IN ACCORDANCE WITH THE RELEVANT B.S REQUIREMENTS.
27– CABLE TRAYS SHALL HAVE EARTH CONTINUITY BY 6MM2 COPPER WIRE.
28– ALL EQUIPMENT, WATER COOLERS, CONTROL PANELS AND ISOLATORS SHALL BE CONNECTED TO THE RING EARTH SYSTEM.
29– ALL DUTY AND STANDBY PUMPS SHALL BE INTERLOCKED BETWEEN STARTERS.
30– ALL MINIATURE CIRCUIT BREAKERS SHALL HAVE A MINIMUM INTERRUPTING CAPACITY OF 10KA IN 3 SECONDS.
31– ALL ELCBS SHALL HAVE A MINIMUM INTERRUPTING CAPACITY OF 10KA IN 3 SECONDS.
32– THE SIZE OF ALL THE CABLE TRAYS/TRUNKS TO BE CALCULATED AND COORDINATED WITH ALL THE OTHER TRADES AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO ERECTION. THE RESERVE SPARE CAPACITY SHALL NOT BE LESS THAN 25%.
33– THE DISTANCE BETWEEN CABLES SHALL BE 2D,WHERE D IS OVERALL DIAMETER OF LARGER CABLE.
34– ALL ELECTRICAL WORKS AND MATERIALS SHALL BE COMPLYING WITH ELECTRICAL AUTHORITY WIRING REGULATIONS AND LOCAL CODES, CONSTRUCTION SPECIFICATION AND TENDER DOCUMENTS SPECIFICATIONS.
35– ALL PENETRATIONS / OPENING THROUGH WALLS AND FLOORS SHALL BE PROPERLY SEALED WITH APPROVED FIRE SEALENT MATERIAL.
36– ALL ELECTRICAL INSTALLATIONS IN MECHANICAL & ELECTRICAL PLANT ROOMS SHALL BE CARRIED– OUT USING G.I CONDUITS / SURFACE EXPOSED MOUNTED.
37– THE MOUNTING HEIGHTS OF ALL SWITCHES WILL BE AT 1250MM, SOCKETS WILL BE AT 450MM, AND THE TOP OF DISTRIBUTION PANEL BOARDS WILL BE AT 1800MM.
38– ALL ELECTRICAL WIRING INSTALLATIONS SHALL BE CARRIED–OUT AS PER APPROVED WORK SHOP DRAWINGS AND GENERALLY IN ACCORDANCE TO THE FOLLOWING GUIDELINES; IN AREAS COVERED WITH FALSE CEILING: EXPOSED CONDUITS ABOVE FALSE CEILING CONNECTED TO THE NEAREST TRUNKING OR CABLE TRAYS.
39– IN AREAS NOT COVERED WITH FALSE CEILING: ALL CONDUITS SHALL BE RECESSED IN CONCRETE SLABS. IN TECHNICAL PLANTS: ALL EXPOSED CONDUITS GALVANIZED STEEL. FOR WALL MOUNTED INSTALLATIONS : ALL CONDUITS IN WALLS SHALL BE RECESSED FOR FLOOR BOXES. RECESSED IN GROUND INSTALLATIONS : ALL CONDUITS SHALL BE RECESSED UNDER TILES.

FOR NURSE CALL SYSTEM LAYOUTS

01– USE GI TRUNKING OR PVC / GI 25MM Ø CONDUITS WIRING FROM JUNCTION BOX TO OUTLET POINT.
02– CONTRACTOR TO SHOW ALL CABLE TRAY/TRUNKING ROUTES IN COORDINATION WITH OTHER SERVICES.
03– SPACE 25%CAPACITY SHALL BE CONSIDERED WHILE SIZING THE CABLE TRAY TRUNKING FOR FUTURE USE.
04– COORDINATE WITH MEDICAL CONSULTANT LOADED DRAWINGS FOR EXACT LOCATIONS & HEIGHTS OF ALL SYSTEM'S DEVICES.
05– NURSE CALL SYSTEM CABLES TYPE AND SIZES SHALL BE PROVIDED AS PER THE SYSTEM'S MANUFACTURER RECOMMENDATIONS AND SHALL ACHIEVE THE SPECIFIED SYSTEM TECHNICAL PERFORMANCE.
06– TV SYSTEM SHALL BE CARRIED OUT BY A SPECIALIST SUPPLIER APPROVED BY THE ENGINEER.

FOR POWER SYSTEM LAYOUTS

01– EXACT LOCATION OF OUTLETS, ISOLATORS , DOUBLE POLE SWITCHES, ETC SHALL BE FULLY COORDINATED WITH OTHER SERVICES, MEDICAL CONSULTANT LOADED DRAWINGS & MECHANICAL SERVICES DRAWINGS.
02– CONTRACTOR TO SHOW ALL CABLE TRAY/TRUNKING ROUTES IN COORDINATION WITH OTHER SERVICES.
03– UNLESS OTHERWISE INDICATED, ALL INSTALLATIONS SHALL BE CARRIED –OUT USING RIGID PVC CONDUITS RECESSED IN SLABS AND WALLS.
04– USE GI TRUNKING/ Ø 25MM, PVC / GI CONDUITS WIRING FROM JUNCTION BOX TO OUTLET POINT.
05– 25% SPACE CAPACITY SHALL BE CONSIDERED WHILE SIZING THE CABLE TRAY & TRUNKING FOR FUTURE USE.
06– COORDINATE WITH MEDICAL COSULTANT LOADED DRAWINGS FOR EXACT LOCATIONS & HEIGHTS OF ALL SYSTEM'S DEVICES.
07– ALL SURFACE MOUNTED ELECTRICAL INSTALLATIONS INSIDE THE ELECTRICAL AND MECHANICAL PLANT ROOMS SHALL BE CARRIED OUT USING G.I. CONDUITS.

FIRE ALARM SYSTEM NOTES

01– ALL FIRE DETECTION AND ALARM SYSTEMS INSTALLATIONS SHALL BE CARRIED OUT USING FIRE RATED CABLES.
02– ALL INSTALLATIONS DETAILS SHALL BE IN ACCORDANCE TO THE ELECTRICAL TYPICAL DETAILS.
03– EXACT LOCATIONS OF THE DUCT MOUNTED SMOKE DETECTORS, CONTROL AND INTERFACE MODULES OF THE MECHANICAL EQUIPMENTS SHALL BE COORDINATED WITH THE MECHANICAL DRAWINGS.
04– FIXATION HEIGHT SHALL BE AS FOLLOWS: –
a. FIRE ALARM MANUAL CALL POINTS SHALL BE INSTALLED AT 1250MM F.F.L.
b. INDOOR SIREN SHALL BE INSTALLED AT 2200MM F.F.L.
c. OUTDOOR SIREN SHALL BE INSTALLED AT 3000MM F.F.L.
05– INTERFACE MODULES, FAULT, AND LINE ISOLATORS REQUIRED FOR DETECTION DEVICES ZONES/ LOOPS, AND INDOOR / OUTDOOR SIRENS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE SYSTEM'S MANUFACTURER REQUIREMENTS AT NO EXTRA COST. FAULT ISOLATOR SHALL BE PROVIDED EVERY 20 DEVICES, START AND END OF THE DETECTION LOOP AS PER NFPA & LOCAL CIVIL DEFENSE DEPARTMENT REQUIREMENTS
06– FIRE DETECTION AND ALARM SYSTEMS CABLES SIZE SHALL BE PROVIDED IN ACCORDANCE WITH NFPA72,THE SYSTEM'S MANUFACTURER, AND VOLTAGE DROP CALCULATIONS.
07– IN CASE OF FIRE ACKNOWLEDGE MASSAGE BY THE SPACE / ZONE OR RETURN DUCT MOUNTED DETECTORS, THE INTERFACE MODULE SHALL SHUT DOWN THE AHU SUPPLY FAN.
08– EXACT LOCATIONS OF THE FIRE DETECTION AND ALARM SYSTEM DEVICES SHALL BE COORDINATED WITH THE INTERIOR DESIGN DRAWINGS & REFLECTED CEILING PLANS.
09– CEILING VOIDS SMOKE DETECTORS (ABOVE FALSE CEILING) WITH REMOTE LED INDICATORS (UNDER FALSE CEILING) SHALL BE PROVIDED IN ALL SPACES/CORRIDORS WHERE CEILING VOID HEIGHT EXCEEDS 800MM. FINAL LOCATIONS AND NUMBERS SHALL BE AGREED WITH ENGINEER.
10– FIRE DETECTION & ALARM SYSTEM , SHALL BE CARRIED OUT INACCORDANCE A WITH NFPA & LOCAL CIVIL DEFENSE DEPARTMENT REQUIREMENTS.

FOR POWER DISTRIBUTION BOARDS AND RISER

01– POWER SUPPLY FEEDER CABLE/S SIZES SHOWN IN THE DRAWINGS MAY BE HIGHER IN SIZE THAN THEIR SUPPLY SIDE/ LOAD SIDE MSB/S, SMB/S, DB/S, MCCB/ISOLATOR TERMINAL CAPACITY. STRANDS OF WIRES SHALL NOT BE CUT IN ANY CASE TO ACCOMODATE CABLES TO ANY TERMINALS AT THE TIME OF TERMINATION. THE ELECTRICAL CONTRACTOR SHALL ALLOW FOR THE FOLLOWING TO FECILITATE TERMINATION OF HIGHER SIZE CABLES.
a. SPREADER LINKS OF APPROVED SIZE OF ADEQUATE, APPROPRIATE AND APPLICABLE SIZE SHALL BE USED, AND THE ENCLOSURE SHALL BE SIZED ACCORDINGLY.
b. ALTERNATIVELY USE OF REDUCTION BOXE/S, BUSBAR JUNCTION BOXE/S OF APPROVED SIZE TO BE CONSIDERED FOR TERMINATING HIGHER SIZE CABLES.IN ANY CASE THE DERATED AMPERE RATING OF REDUCED SIZES OF CABLE/S BETWEEN SUCH REDUCTION/BUS BAR BOXES AND LOAD SIDE SMB/S, DB/S,ISOLATOR OR EQUIPMENT SHALL NOT BE LESS THAN THE AMPERE RATING OF THE RESPECTIVE SUPPLY SIDE MCCB.
02– TIME/CURRENT CHARACTERISTICS OF MCCB, IN SUPPLY SIDE/LOAD SIDE PANELS TO BE WELL CO–ORDINATED FOR TRIPPING CHARACTERISTICS/DESCRIMINATION.
03– ALL SUB–MAIN SWITCH BOARDS (SMB/S), MOTOR CONTROL, CENTRE/S (MCCBS) SHALL BE OF 'FORM 2B' SEPARATION.
04– EXACT LOCATION OF ALL EQUIPMENT / PANELS AND THEIR RESPECTIVE ISOLATORS NEED TO BE CO ORDINATED WITH ALL OTHER SERVICES AND TO ENGINEER'S APPROVAL.
05– ALL OUTGOING FEEDERS SIZES FOR MECHANICAL EQUIPMENTS TO BE AS PER SPECIFICATION /DRAWINGS AND AS PER FINAL SELECTION OF ALL APPLICABLE EQUIPMENT AND FINAL LOCATION.
06– ALLOW FOR CASCADING ALL MOTOR STARTER FEEDERS WITH 15–30 SEC TIME LAG.
07– ALLOW FOR BMS POINTS IN MECHANICAL EQUIPMENT / LIFTS / TRAVELLATORS, AS APPLICABLE.
08– MCCBS TO HAVE ADJUSTABLE TRIP SETTINGS AND THESE TRIP SETTINGS TO BE ADJUSTED AND SET AT SITE TO ENGINEERS APPROVAL.
09– ALLOW FOR 30MA ELCB FOR APPLICABLE CONTROL PANELS FOR ALL WET EQUIPMENT.
10– THE EXACT ROUTING, SPACE CONSTRAINTS, SPACE REQUIREMENT, AND REQUIRED CLEARENCES SHALL BE WELL CONSIDERED AND CO–ORDINATED WITH RESPECT TO OTHER ADJACENT PANELS AND ALL OTHER SERVICES. OBTAIN DUE APPROVAL FROM THE ENGINEER IN THIS REGARD PRIOR TO COMMENCEMENT OF MANUFACTURE OF THE BUS DUCT.
11– ALLOW FOR REDUCED VOLTAGE STARTERS FOR MOTORS AS PER SPECIFICATION.

FOR GROUNDING SYSTEM LAYOUTS

01– WHETHER IT IS SHOWN ON THE DRAWINGS OR NOT ALL EXTERNS METALLIC PARTS SHALL BE CONNECTED TO EQUIPMENT THE NEAREST BONDING EQUIPOTENTIAL CONDUCTOR USING A MINIMUM OF Ø 6MM2 COPPER CONDUCTOR.–EARTHING & BONDING SYSTEMS
02 SHALL BE CARRIED OUT IN ACCORDANCE WITH THE PROJECTS DOCUMENTS AND BS STANDARS
03 SOIL CONDITIONS SHALL BE CHECKED TO ENSURE PROPER EARTHING EARTH RESISTANT SHALL NOT EXCEED 1 OHM.

FOR LIGHTING SYSTEM LAYOUTS

01– UNLESS OTHERWISE INDICATED, ALL INSTALLATIONS SHALL BE CARRIED –OUT USING RIGID PVC CONDUITS RECESSED IN SLABS AND WALLS.
02– FOR DETAILS OF LIGHTING FIXTURES, REFER TO FIXTURE LEGEND.
03– EXACT LOCATION OF LIGHTING FIXTURES SHALL BE COORDINATED WITH THE REFLECTED CEILING LAYOUTS,INTERIOR DESIGN DRAWINGS, AND MEDICAL CONSULTANT LOADED DRAWINGS.
04– EXACT LOCATION OF THE LIGHTING SWITCHES AND WALL MOUNTED FIXTURES SHALL BE COORDINATED WITH THE INTERIOR DESIGN DRAWINGS, AND MEDICAL CONSULTANT LOADED DRAWINGS.
05– ALL SURFACE MOUNTED ELECTRICAL INSTALLATIONS INSIDE THE ELECTRICAL AND MECHANICAL PLANT ROOMS SHALL BE CARRIED OUT USING G.I. CONDUITS.
06– TYPICAL SWITCHING CONTROL FOR ALL PATIENTS' ROOMS.

FOR LOW CURRENT SYSTEMS LAYOUTS

01– USE GI TRUNKING OR PVC / GI 25MM Ø CONDUITS FOR TELEPHONE & DATA SYSTEM WIRING.
02– CONTRACTOR TO SHOW ALL CABLE TRAY/TRUNKING ROUTES IN COORDINATION WITH OTHER SERVICES.
03– 25% SPACE CAPACITY SHALL BE CONSIDERED WHILE SIZING THE CABLE TRAY & TRUNKING FOR FUTURE USE.
04– 4 PAIR CAT.6 CABLE SHALL BE LAID FROM IDF TO EACH OUTLET POINTS.
05– COORDINATE WITH MEDICAL COSULTANT LOADED DRAWINGS FOR EXACT LOCATIONS & HEIGHTS OF TELEPHONE & DATA OUTLETS.
06– CONTRACTOR SHALL SUBMIT COMPLETE SCHEMATIC WIRING DIAGRAM, EQUIPMENT DETAILS ... ETC. FOR ALL SYSTEMS TO ENGINEERS APPROVAL.
07– ALL SURFACE MOUNTED ELECTRICAL INSTALLATIONS INSIDE THE ELECTRICAL AND MECHANICAL PLANT ROOMS SHALL BE CARRIED OUT USING G.I. CONDUITS.
08– FOR CARD ACCESS CONTROL AND MAGNETIC CONTACT EXACT LOCATIONS COORDINATE WITH ARCHITECTURAL DOORS DETAILS.
09– SPEAKERS RATINGS AND LOCATIONS SHALL BE CHECKED AND VERIFIED BY THE SOUND SYSTEM SUPPLIER TO ENSURE PROPER AND OPTIMUM SOUND PRESSURE LEVELS AND DISTRIBUTION ARE ACHIEVED.
10– COORDINATE WITH A/V SYSTEM SUPPLIER FOR THE DETAIL OF THE INSTALLATIONS REQUIREMENTS.
11– COORDINATE THE A/V SYSTEM DEVICES WITH THE INTERIOR DESIGN.

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MOUNTING HEIGHT OF DEVICES AND EQUIPMENT	
unless otherwise indicated, devices and equipment shall be installed at the following heights, measured in cms. from f.f.l., to the center line of device or equipment. items marked thus (*) shall be refered to general notes 2.1 to 2.12 & 3.1–3.5 for additional remarks: IEC 60364	
lighting point above mirror in toilb01–et–mu	RAL 180 cms. or as peR I.D. requirement
LIGHTING SWITCHES	125 cms.
FANS SWITCHES	125 cms.
13 AMPERE SOCKET OUTLET	45 cms.
F.C.U SOCKET OUTLET	Ceiling
20 AMPERE DP SWITCH FOR AC UNIT	Adjacent to A/C
20 AMPERE DP SWITCH FOR WATER HEATER	125 cms.
13 AMPERE SO IN KITCHEN ABOVE WORK TOP	25cm above worktop
ROOM THERMOSTATS	160 cms.
FIRE ALARM BREAKE GLASS	125 cms.
FIRE ALARM BELL	220 cms.
TELEPHONE/TV CONNECTION BOX	100 cms.
DATA/SOUND CONNECTION BOX	100 cms.
TELEPHONE SOCKET OUTLETS	45 cms.
DATA SOCKET OUTLETS	45 cms.
TV SOCKET OUTLETS	120 cms.
POWER SOCKET OUTLETS FOR TV	120 cms.
TOP OF DISTRIBUTION BOARD	180 cms.
TOP OF addressable fire alarm control panel	180 cms.
CONTACTOR CONTROL PUSHBUTTON	140 cms.
FLEX OUTLET	45 cms.
OUTLET BOX FOR CONTROL DEVICE	140 cms.

minimum requirement of conduit sizes shall be as tabulated below:				
cable size	conduit size			
conductor size	20mm	25mm	32mm	no. & diameter of wires
	MAX No. of cables			
1.5 mm2	11	18	30	1/1.13
2.5 mm2	8	14	23	1/1.78
2.5 mm2	7	12	20	7/0.67
4.0 mm2	5	9	15	7/0.85
6.0 mm2	4	7	12	7/1.04
10.0 mm2	3	4	7	7/1.35
16.0 mm2	2	3	5	7/1.70
25.0 mm2	–	2	4	7/2.14
35.0 mm2	–	–	2	19/1.53
50.0 mm2	–	–	2	19/1.78

mini coross sectional area of protective conductor	
cross sectional area of phase conductor (s) mm2	mini coross sectional area of the corresponding protective conductor ECC or (SP) mm2
S ≤ 16	S
16 < S ≤ 35	16
S > 35	S/2

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LEGEND LIGHTING DEVICE SYSTEM

SYMBOL	DISCRIPTION
	SURFACE MOUNTED IN CEILING LED LIGHTING FIXTURE, ALUMINUM HOUSING, POLYSTYRENE OPTICAL COVER ,OPAL LENS FINISH , WITH 2700LM, 30W, IP-22, CRI>80, 4000K.(L1)
	LED1 SURFACE MOUNTED IN CEILING LED DOWN LIGHT LIGHTING FIXTURE, WITH DIE CASTALUMINUM HOUSING & POLYCARBONATE REFLECTOR, SYSTEM FLUX 1530lm, 18W, 840 NUETRAL WHITE, IP-40.(L2)
	WALL- MOUNTED LED LIGHTING LUMINARIES, WALL MOUNTED OUTDOOR , 220V, 50Hz,20 WATT, 1600 LM, IP65.(L3)
EXIT	CEILING MOUNTED EXIT SIGN LUMINARIES WITH 1X8W, LED LAMP AND WITH DOUBLE SIDED PICTOGRAM IP44, DIRECTION AS SHOWN IN DRAWING (L5)
	ANTI-MOSQUITOES DEVICE, 20W.
	5W LED WELL MOUNTED LIGHTING LUMINAIRE USED FOR MIRROR, OPAL DIFFUSER, 90LM/W, IP56, CRI>80, 6500K.
EM	6W LED WELL MOUNTED LIGHTING LUMINAIRE, WITH BUILT IN BATTERY USED FOR EMERGNCEY.
	WALL MOUNTED DECORATIVE LIGHTING UNIT WITH 100 W. LINEAR HALOGEN LAMP (IP-65)(L4).
	PHOTOCELL SENSOR,IP65.
	LIGHTING SWITCH, ONE WAY, ONE GANGE, 240V.
	LIGHTING SWITCH, ONE WAY, TWO GANGE, 240V.
	LIGHTING SWITCH, TWO WAY, ONE GANGE, 240V.
	LIGHTING SWITCH, TWO WAY, TWO GANGE, 240V.
	LIGHTING SWITCH, TWO WAY, THREE GANGE, 240V.
	BACK BOX.
	MAIN DISTRIBUTION BOARD FOR NORMAL ELEC.POWER SYSTEM.

LEGEND HVAC POWER SYSTEM

SYMBOL	DISCRIPTION
	A.C SPLIT INTERNAL UNIT.
A/C 16A	16A-220V,WALL MOUNTED SWITCHED WITHE RED INDECATOR 1300MM A.F.F.L.WITH GALVANIZED STEEL SQUARE BOX.
	16A EARTHED ,SHUTTERED AND SWITCHED SINGLE POWER SOCKET OUTLET.
	DISTRIBUTION BOARD FOR AC .

LEGEND VENTILATION / FAN SYSTEM

SYMBOL	DISCRIPTION
	CEILING FRESH AIR FAN OUTLET.
	FAN SWITCH.
	WALL MOUNTED FRESH AIR FAN OUTLET.
	SINGLE GANG ONE-WAY FAN SWITCH.
	BACK BOX.
	AXIAL WALL/ GLASS MOUNTED EXHAUST FANS FRESH AIR FAN OUTLET.
	INLINE FAN (DUCTED).
	SINGLE PHASE DISCONNECT SWITCH, 220V, 50HZ
	MAIN DISTRIBUTION BOARD FOR NORMAL ELEC.POWER SYSTEM.

LEGEND POWER SYSTEM

SYMBOL	DISCRIPTION
	13A EARTHED , SHUTTERED, SWITCHED ONE GANG UPS SOCKET OUTLET- UK Type.
	16A EARTHED , SHUTTERED, UPS SOCKET OUTLET- EU Type.
	13A EARTHED , SHUTTERED, SWITCHED ONE GANG NORMAL SOCKET OUTLET- UK Type.
	63A 3-PHASE INDUSTRIAL TYPE SOCKET OUTLET, 5PIN, SWITCHED, COMPLETE WITH PLUG, IP-55(380V,50HZ,5PIN).
A/C 20A	20A-220V,WALL MOUNTED SWITCHED WITHE RED INDECATOR 1300MM A.F.F.L.WITH GALVANIZED STEEL SQUARE BOX.
IP65	16A EARTHED , SHUTTERED, SWITCHED ONE GANG NORMAL SOCKET OUTLET.
	20A EARTHED , SHUTTERED AND SWITCHED SINGLE POWER SOCKET OUTLET.
	BACK BOX.
	DISTRIBUTION BOARD FOR UPS ELEC.POWER SYSTEM.
	DISTRIBUTION BOARD FOR NORMAL ELEC.POWER SYSTEM.
	DISTRIBUTION BOARD FOR X-RAY_UPS.
	MAIN DISTRIBUTION BOARD MDB.

w.p =weather proof
X =Number of sockets

LEGEND EARTHING SYSTEM

SYMBOL	DISCRIPTION
E	EARTHING POINT GROUNDING SYSTEM EARTHING ROD 2.4M (L) 16MM(DIA) COMPLETE WITH CONCRETE EARTH PIT.
	(1X16)mm2 BARE CU.CABLE FOR EARTHING.
	EARTH BAR.

LEGEND FIRE ALARM

SYMBOL	DISCRIPTION
S	SMOKE DETECTOR.
H	HEAT DETECTOR.
B	MANUAL CALL POINT / BREAK GLASS
	BELL / SOUNDER WITH STROBE
FACP	CONVENTIONAL FIRE ALARM CONTROL PANEL

LEGEND FIRE EXTINGUISHER

SYMBOL	DISCRIPTION
	DRY POWDER FIRE EXTINGUISHER 6KG CAPACITY.
CO2	CO2 FIRE EXTINGUISHER 6KG CAPACITY.

LEGEND DISTRIBUTION PANEL

SYMBOL	DISCRIPTION
UPS	UPS
	DISTRIBUTION BOARD FOR UPS ELEC.POWER SYSTEM.
	DISTRIBUTION BOARD FOR NORMAL ELEC.POWER SYSTEM.
	DISTRIBUTION BOARD FOR AC .
	DISTRIBUTION BOARD FOR X-RAY_UPS.
	MAIN DISTRIBUTION BOARD MDB.
A.T.S	AUTOMATIC TRANSFER SWITSH
	UNDERGROUND.
	MANHOLE.

LEGEND BLOOD REF ALARM CIRCUIT

SYMBOL	DISCRIPTION
UPS	UPS , 350 W
	NORMALLY CLOSE Point are already in the refrigerator
	Lighting and sound horn alarm device

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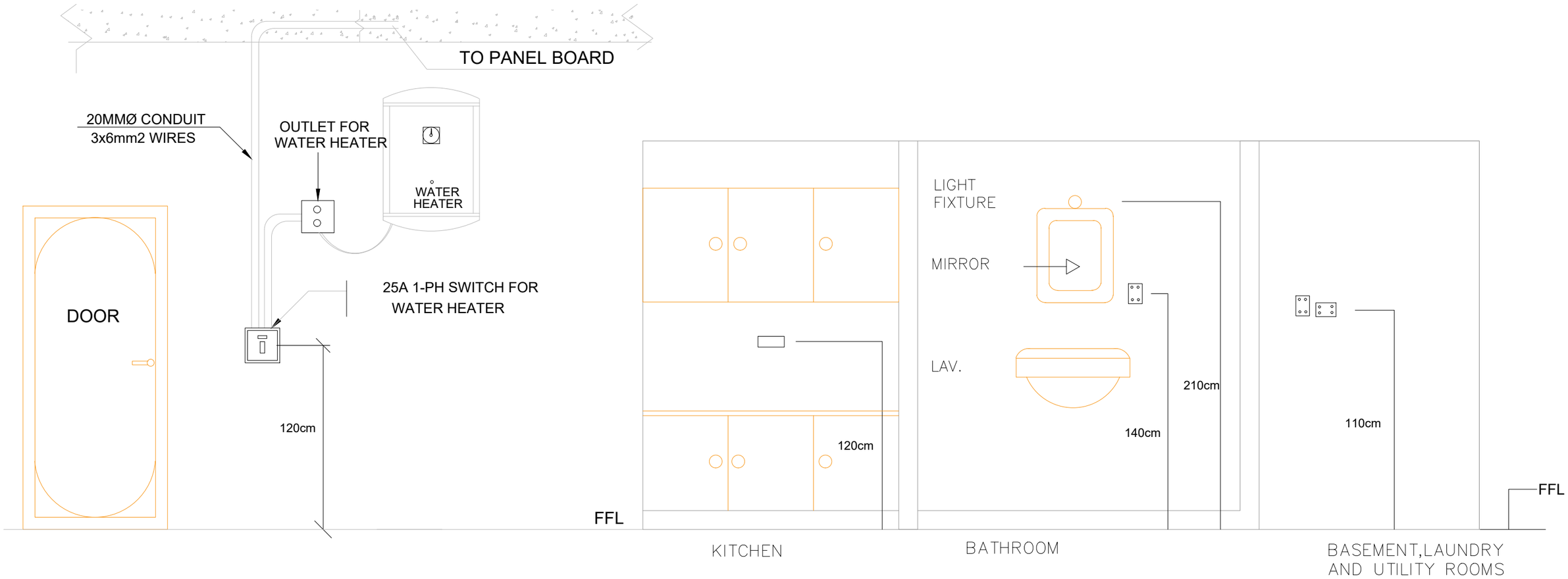

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Sheet N° / Feuille N°: E6

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Date : 24 / 03 / 2026

Project Title / Titre du Projet : PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment : PEDIATRIC

ID Project / Code Projet :

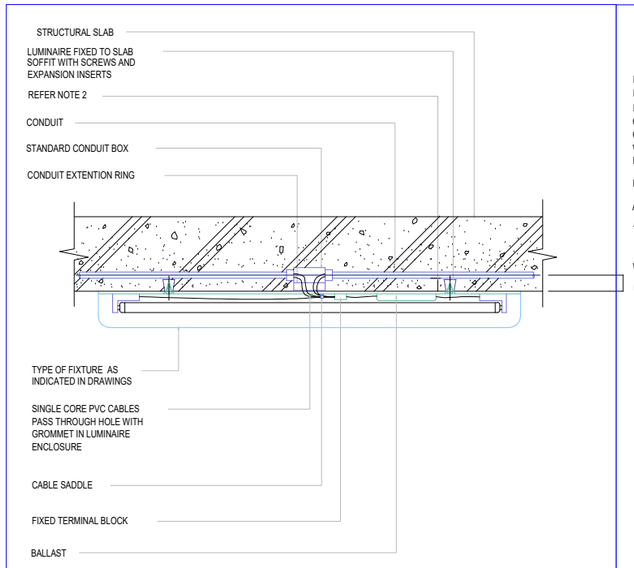
Drawing Title / Titre du Dessin : ELECTRICAL DETAILS

Drawn by / Dessiné par :

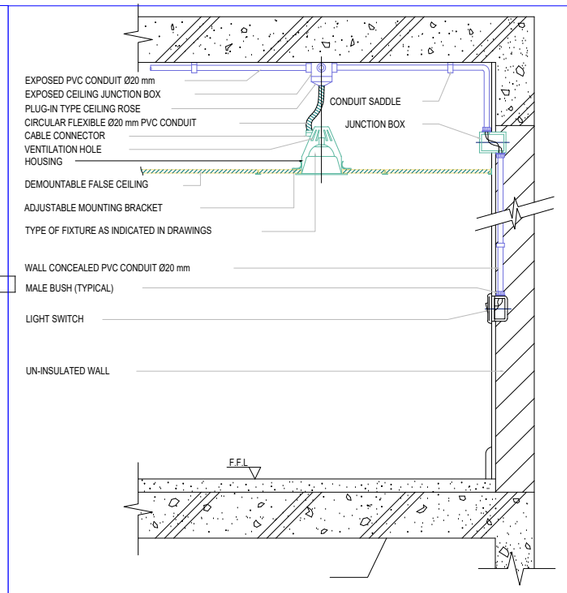
Verified by / Vérifié par :

Construction Phase :

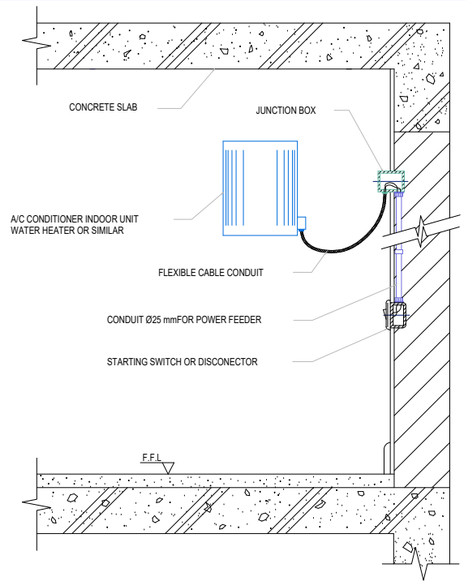
File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_lxa.dwg



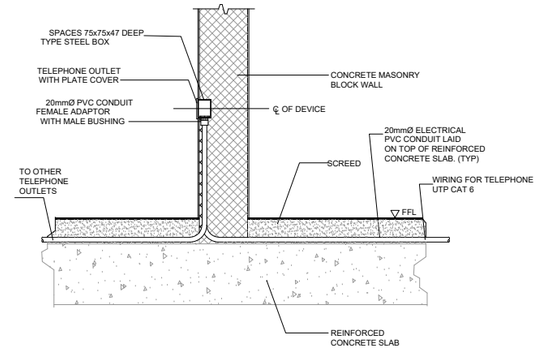
SURFACE MOUNTED FLUORESCENT FIXTURE



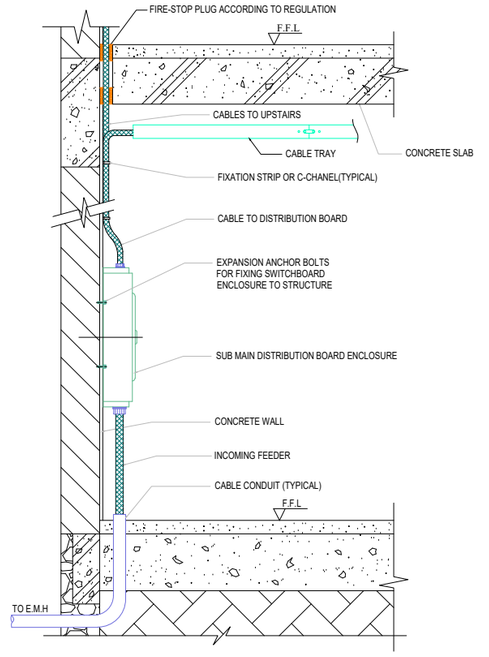
RECESSED MOUNTED DOWN LIGHT FIXTURE



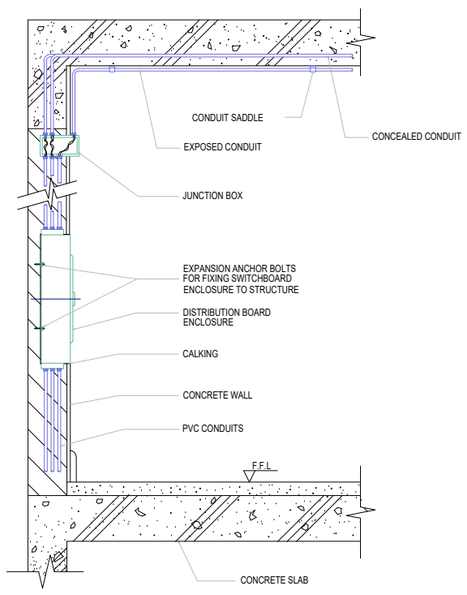
OVER HEAD MOUNTED EQUIPMENT WIRING CONNECTION



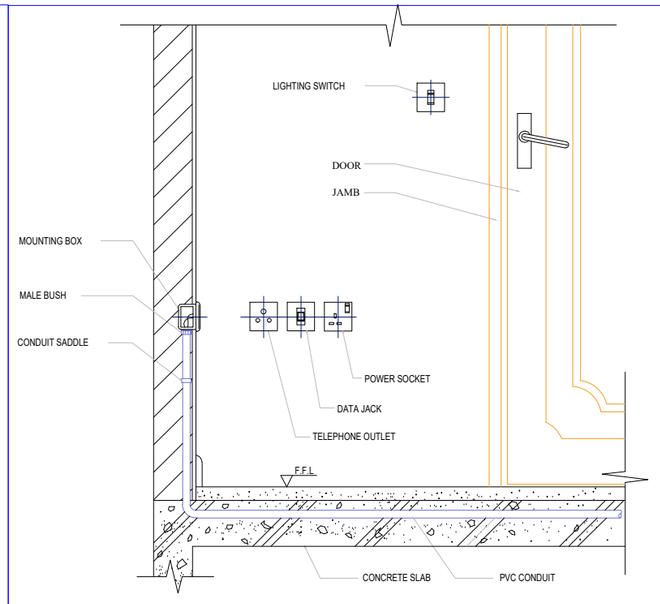
TYPICAL TELEPHONE OUTLET INSTALLATION DETAILS



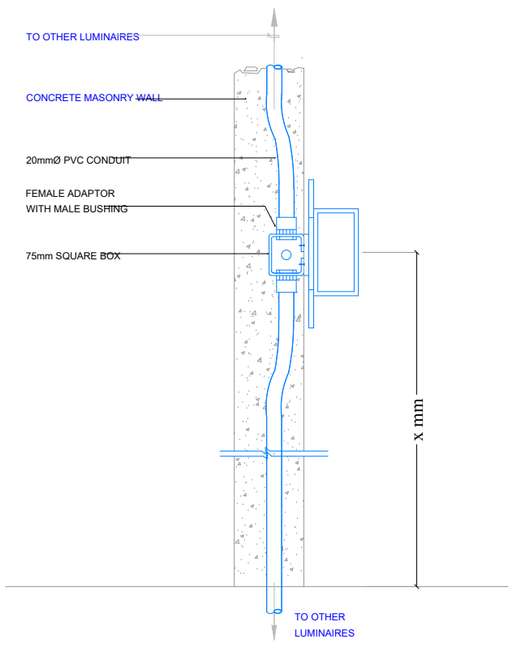
SURFACE MOUNTED SUB MAIN DISTRIBUTION BOARD



RECESSED MOUNTED DISTRIBUTION BOARD



SWITCH AND SOCKET OUTLET



WALL MOUNTED LUMINAIRE

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Project Title / Titre du Projet :

PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment :

PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin :

ELECTRICAL DETAILS

Drawn by / Dessiné par :

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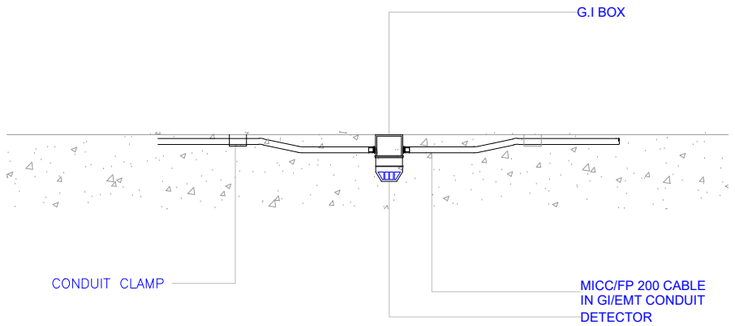
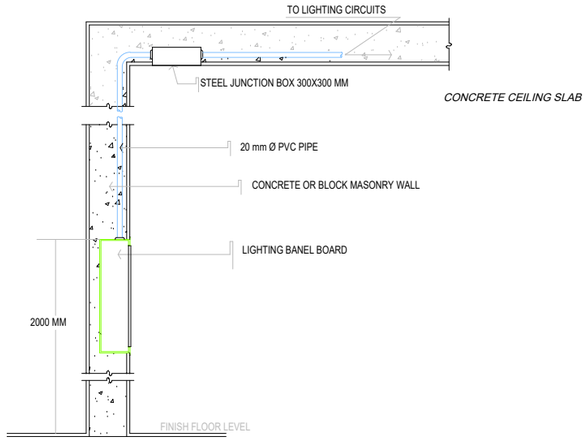
Construction Phase :

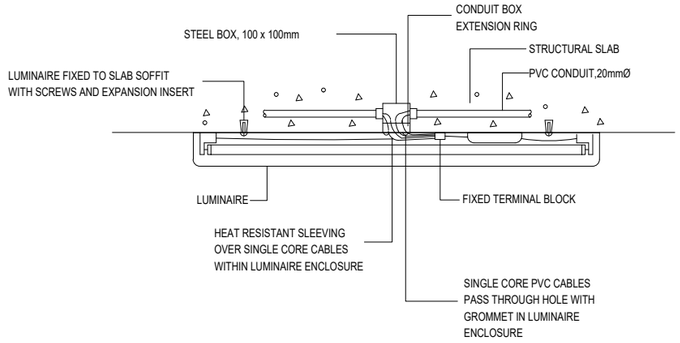
File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixa.dwg



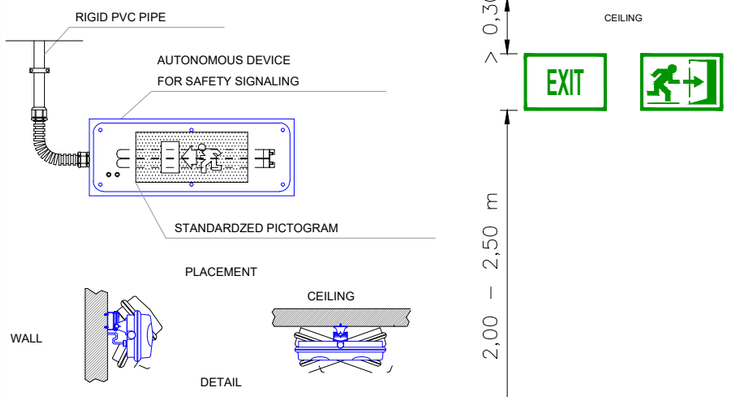
FIRE DETECTOR INSTALLATION IN CEILING SLAB

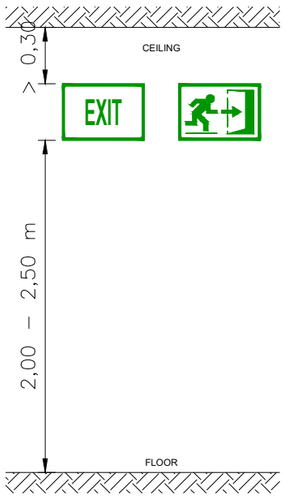


LIGHTIG CIRCUITS HOME RUN DETAILS

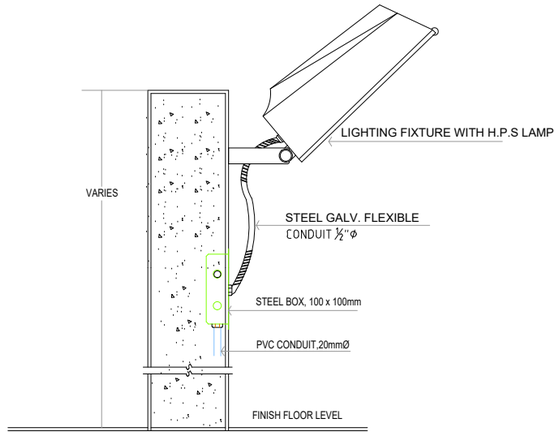


SURFACE MOUNTED LUMINAIRE

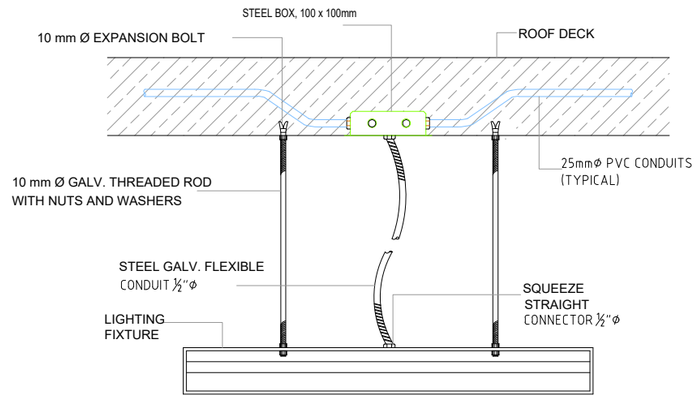




EMERGENCY LIGHTS



WALL MOUNTED LUMINAIRE



PENDANT TYPE LUMINAIRE

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MSF

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Project Title / Titre du Projet :

PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment :

PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin :

ELECTRICAL DETAILS

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Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixa.dwg

How to use Fire Extinguisher

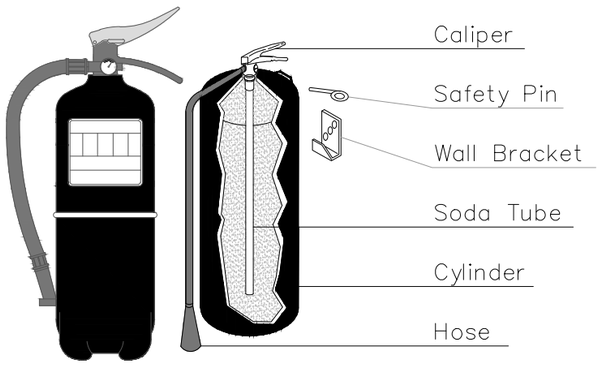
P — PULL THE PIN

A — AIM LOW AT THE BASE OF FLAME

S — SQUEEZE THE HANDLE

S — SWEEP SIDE TO SIDE

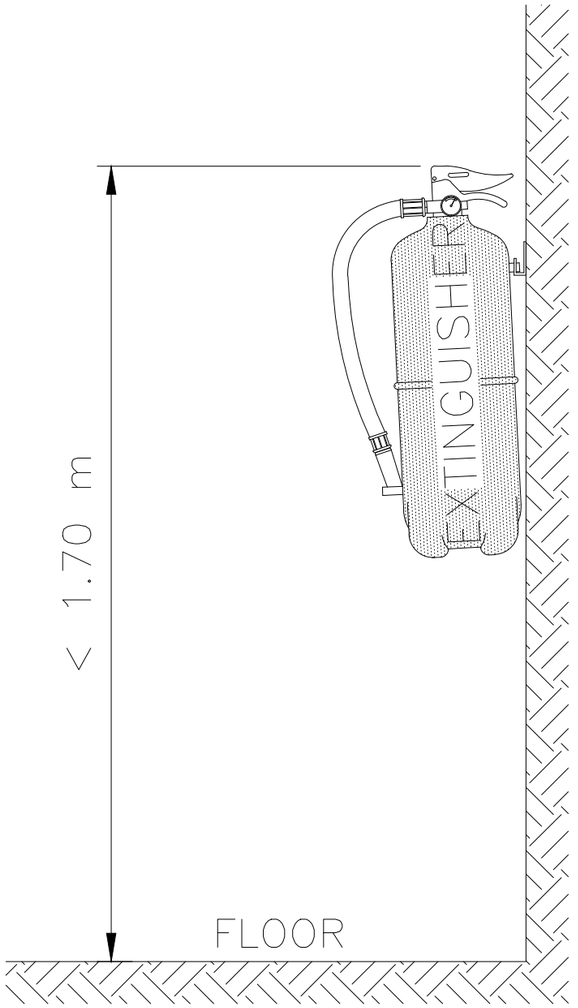
MANUAL EXTINGUISHER



Manual fire extinguisher manufactured according to technical standards, with sheet steel, built–in pressure, painted and silk–screened with instructions for use, type, load capacity, useful life and discharge time.

Provided with fixing hardware, check pressure gauge, safety pin, discharge lever and diffuser hose to direct the jet.

MANUAL FIRE EXTINGUISHER PLACEMENT DETAIL



MEDECINS SANS FRONTIERES
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CENTRE OPÉRATIONNEL DE GENÈVE

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Project Title / Titre du Projet : PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment : PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin : ELECTRICAL DETAILS

Drawn by / Dessiné par :

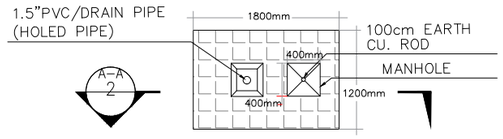
Verified by / Vérifié par :

Construction Phase :

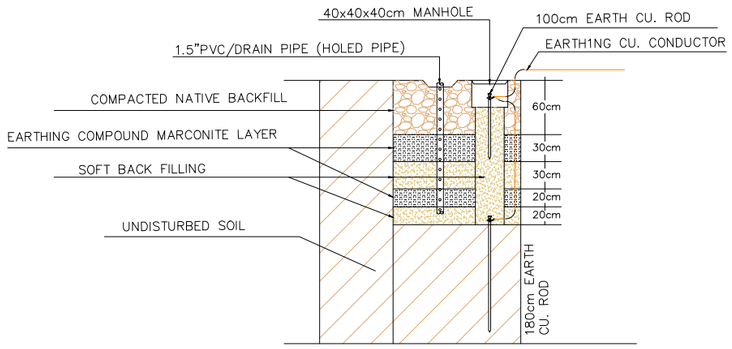
File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixa.dwg

TYPE E1

This Type Used for Panels

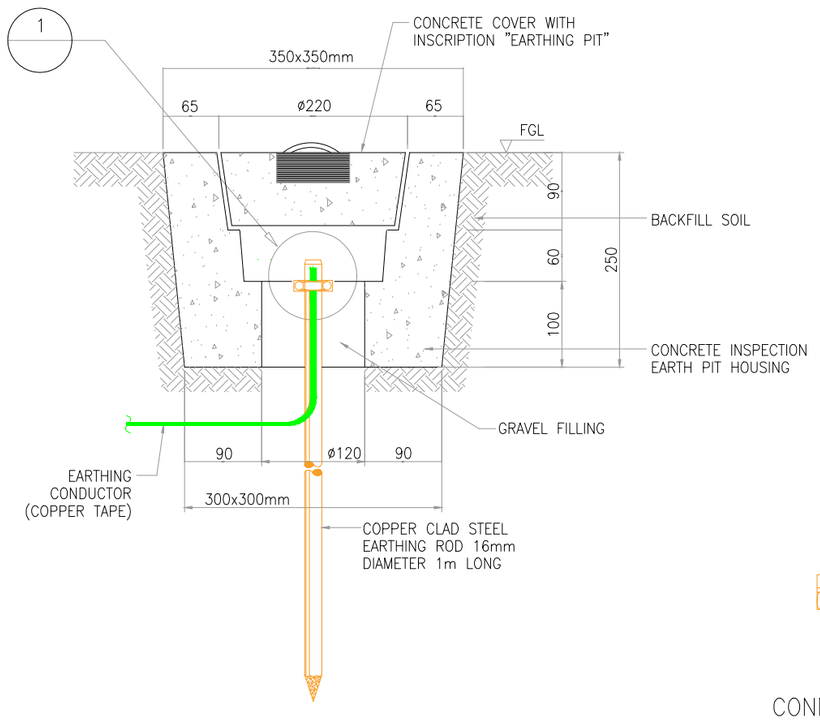


1 TYPICAL PLANE DETAILS FOR EARTHING PIT (TYPE E1)

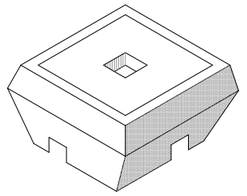


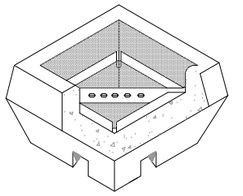
2 SECTION A-A
SCALE

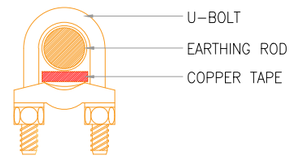
TYPICAL DETAIL



INSPECTION PIT DETAIL







CONNECTION OF ROD
TO CONDUCTOR 1

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Building Name / Nom du Bâtiment : PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin : ELECTRICAL DETAILS

Drawn by / Dessiné par :

Verified by / Vérifié par :

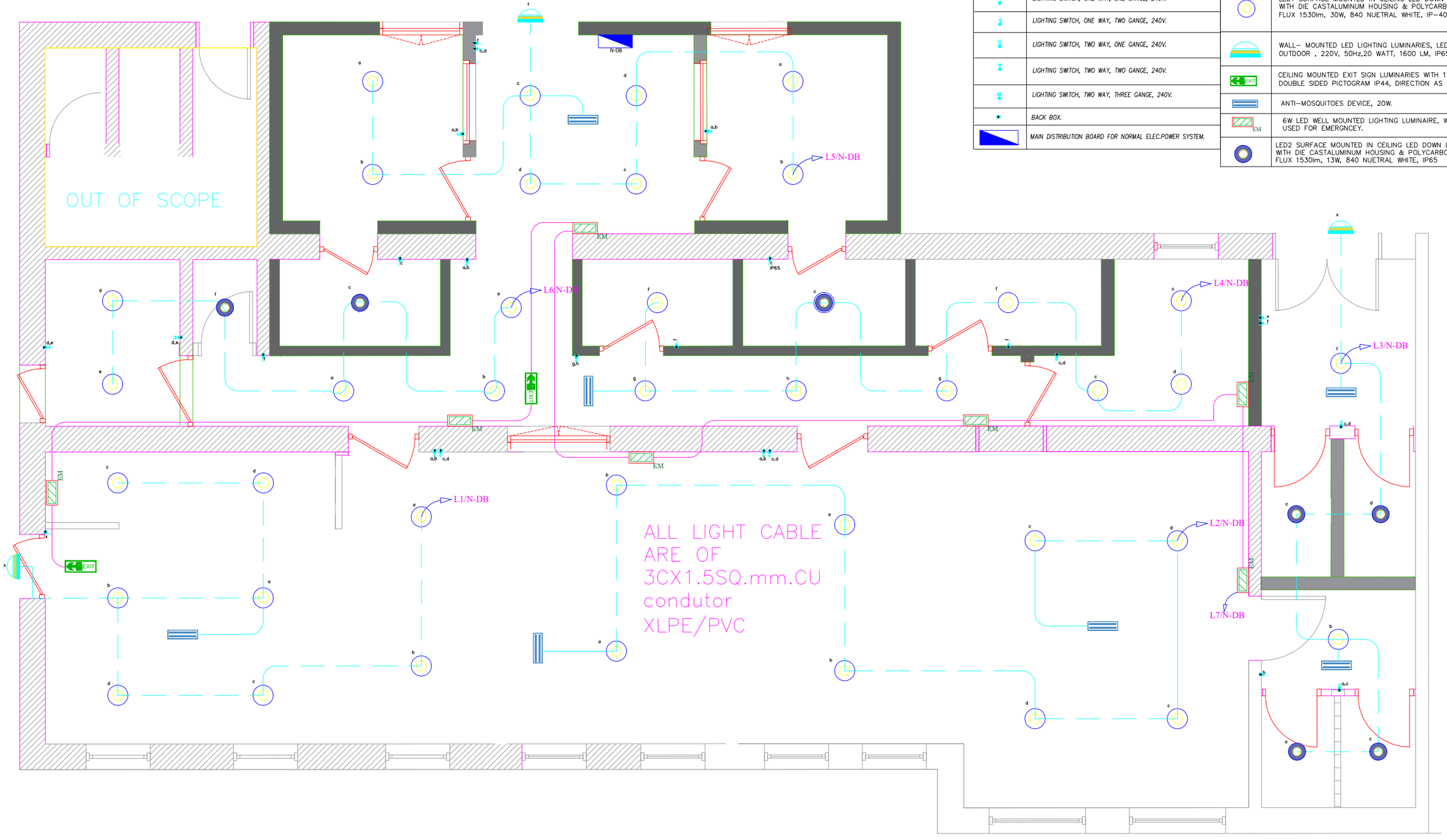
Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixa.dwg

LEGEND LIGHTING DEVICE SYSTEM

	LIGHTING SWITCH, ONE WAY, ONE GANGE, 240V.
	LIGHTING SWITCH, ONE WAY, TWO GANGE, 240V.
	LIGHTING SWITCH, TWO WAY, ONE GANGE, 240V.
	LIGHTING SWITCH, TWO WAY, TWO GANGE, 240V.
	LIGHTING SWITCH, TWO WAY, THREE GANGE, 240V.
	BACK BOX.
	MAIN DISTRIBUTION BOARD FOR NORMAL ELEC.POWER SYSTEM.

SYMBOL	DISCRIPTION
	LED1 SURFACE MOUNTED IN CEILING LED DOWN LIGHT LIGHTING FIXTURE, WITH DIE CASTALUMINUM HOUSING & POLYCARBONATE REFLECTOR, SYSTEM FLUX 1530lm, 30W, 840 NUETRAL WHITE, IP-40.(L2)
	WALL- MOUNTED LED LIGHTING LUMINARIES, LED-01 WALL MOUNTED OUTDOOR , 220V, 50Hz,20 WATT, 1600 LM, IP65.(L3)
EXIT	CEILING MOUNTED EXIT SIGN LUMINARIES WITH 1X8W, LED LAMP AND WITH DOUBLE SIDED PICTOGRAM IP44, DIRECTION AS SHOWN IN DRAWING (L5)
	ANTI-MOSQUITOES DEVICE, 20W.
EM	6W LED WELL MOUNTED LIGHTING LUMINAIRE, WITH BUILT IN BATTERY USED FOR EMERGNCEY.
	LED2 SURFACE MOUNTED IN CEILING LED DOWN LIGHT LIGHTING FIXTURE, WITH DIE CASTALUMINUM HOUSING & POLYCARBONATE REFLECTOR, SYSTEM FLUX 1530lm, 13W, 840 NUETRAL WHITE, IP65



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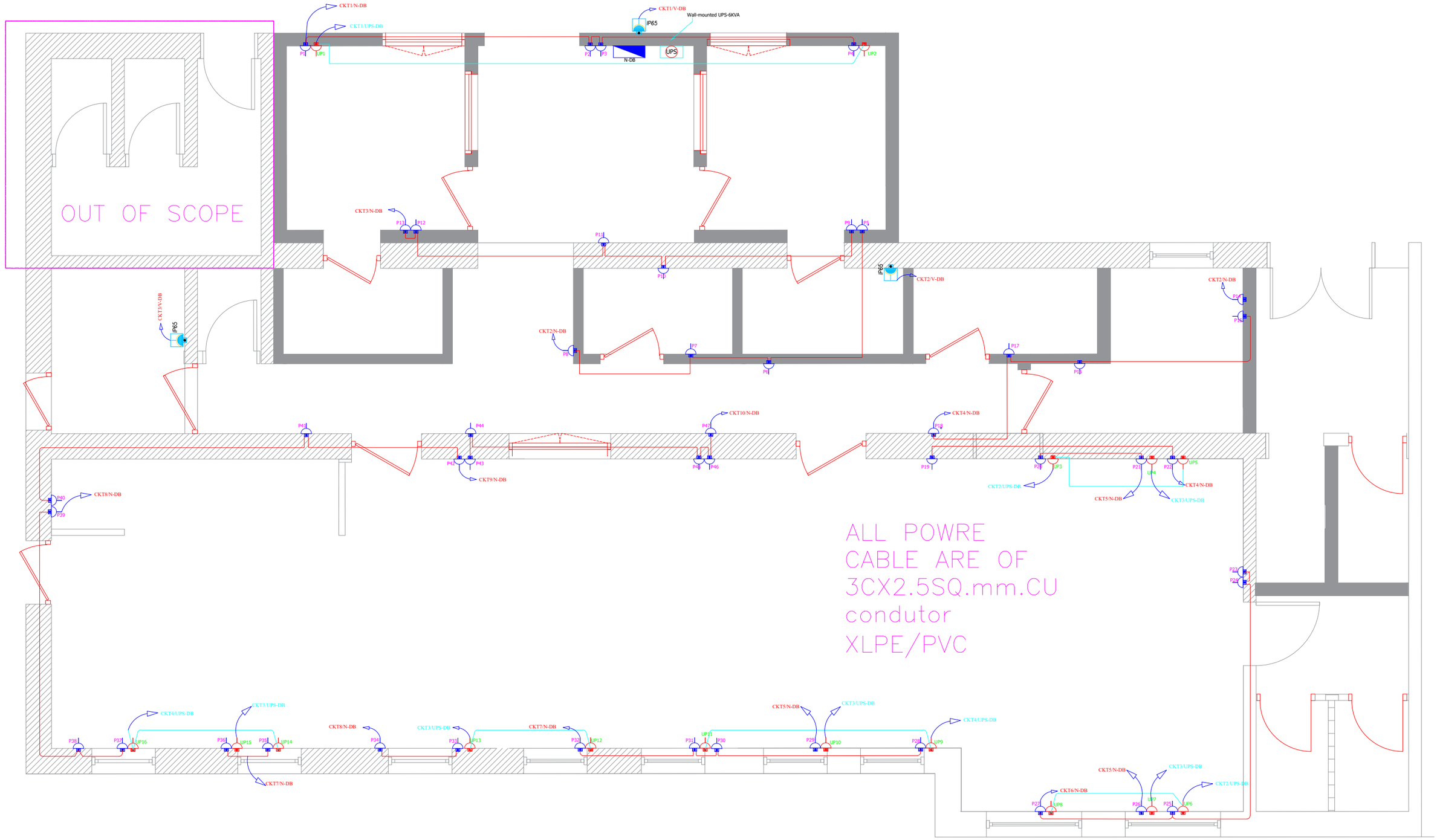

MEDECINS SANS FRONTIERES
OPERATING CENTER GENEVA
CENTRE OPÉRATIONNEL DE GENÈVE

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Project Title / Titre du Projet : PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment : PEDIATRIC

ID Project / Code Projet :

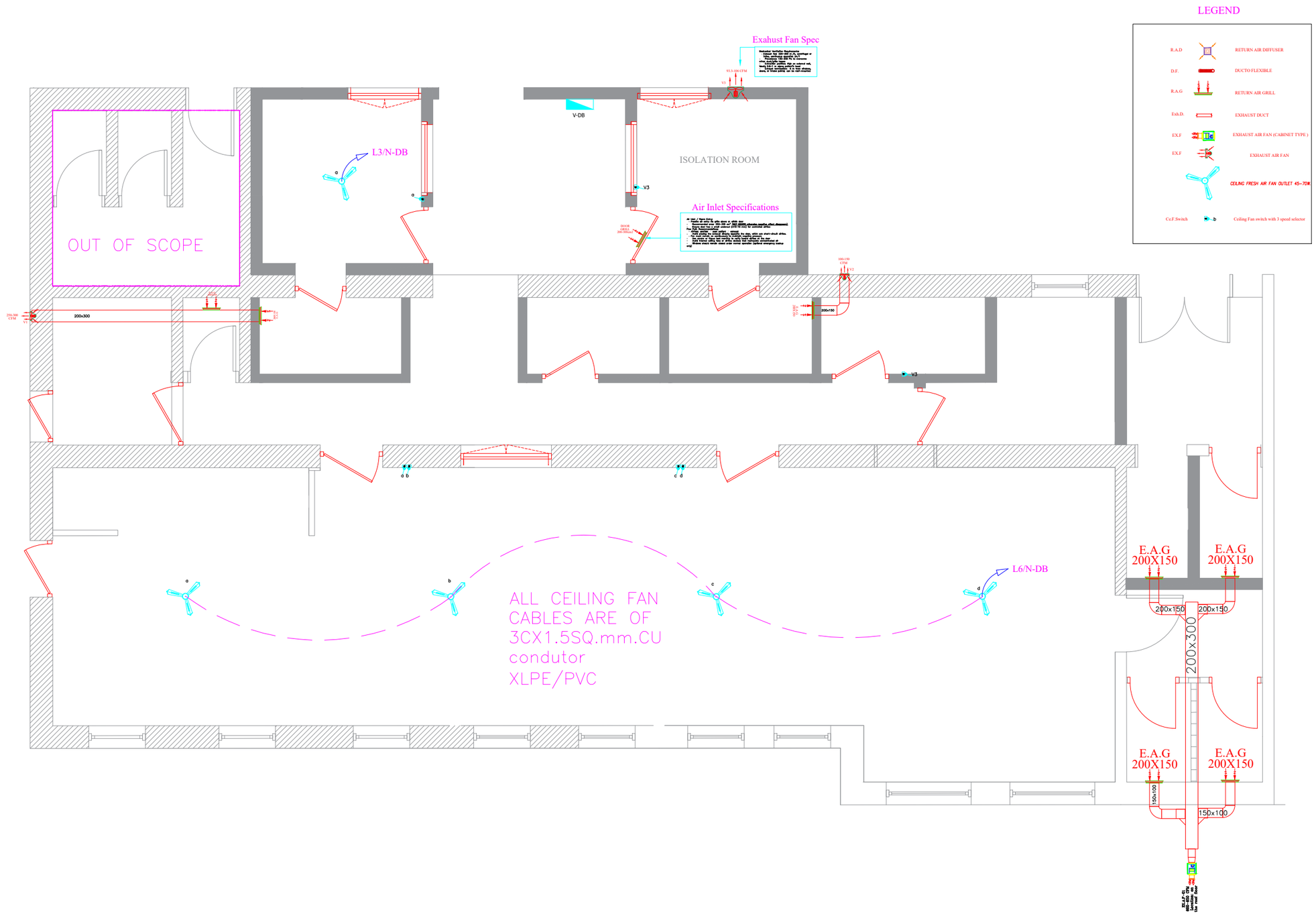
Drawing Title / Titre du Dessin : ELECTRICAL NORMAL AND UPS POWER SYSTEM

Drawn by / Dessiné par :

Verified by / Vérifié par :

Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixo.dwg



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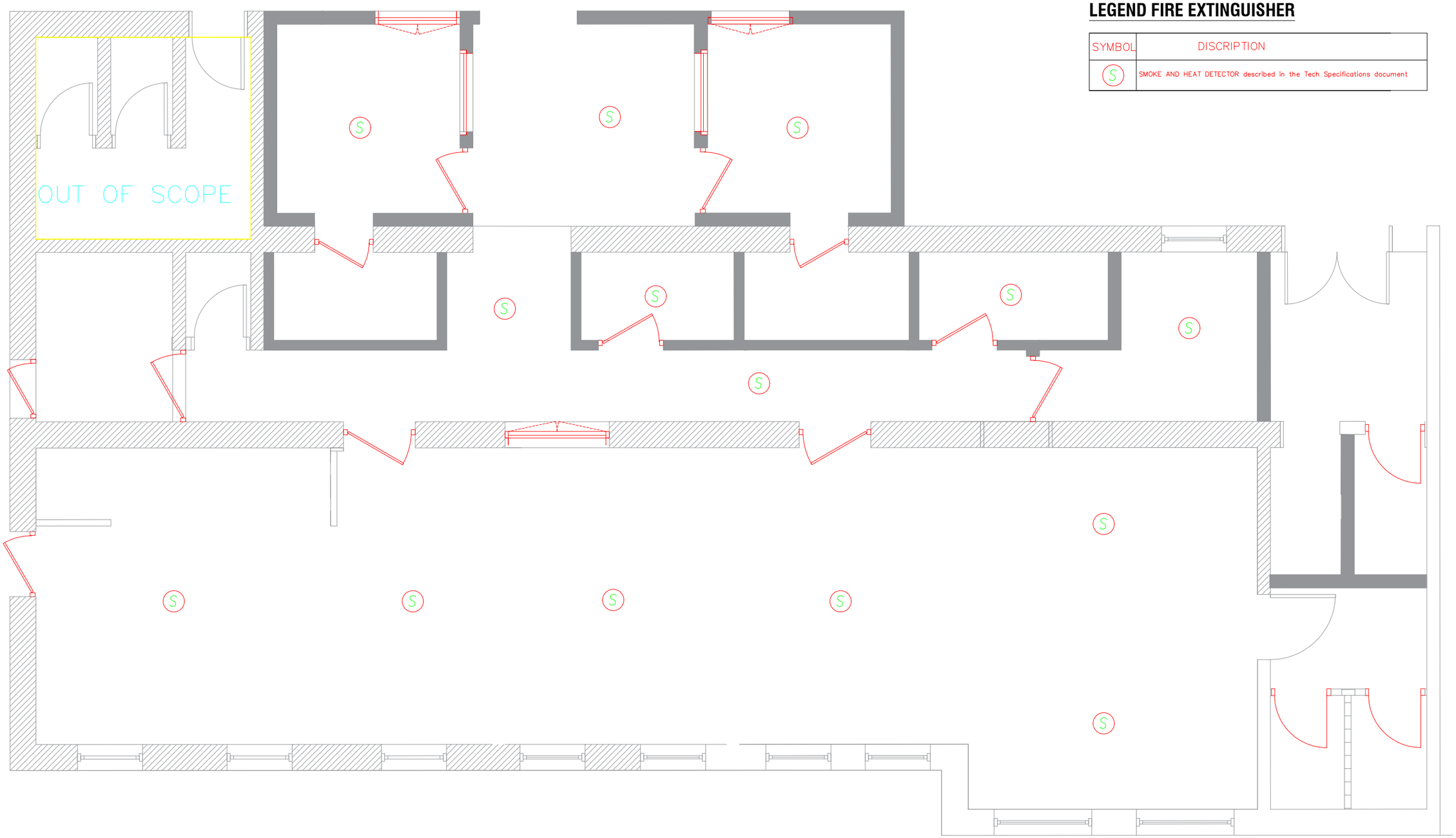
LEGEND FIRE EXTINGUISHER

SYMBOL	DISCRIPTION
S	SMOKE AND HEAT DETECTOR described in the Tech Specifications document



MEDECINS SANS FRONTIERES
OPERATING CENTER GENEVA
CENTRE OPÉRATIONNEL DE GENÈVE

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Scale / Échelle :

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Project Title / Titre du Projet : PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment : PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin : SMOKE &HEAT DETECTORS

Drawn by / Dessiné par :

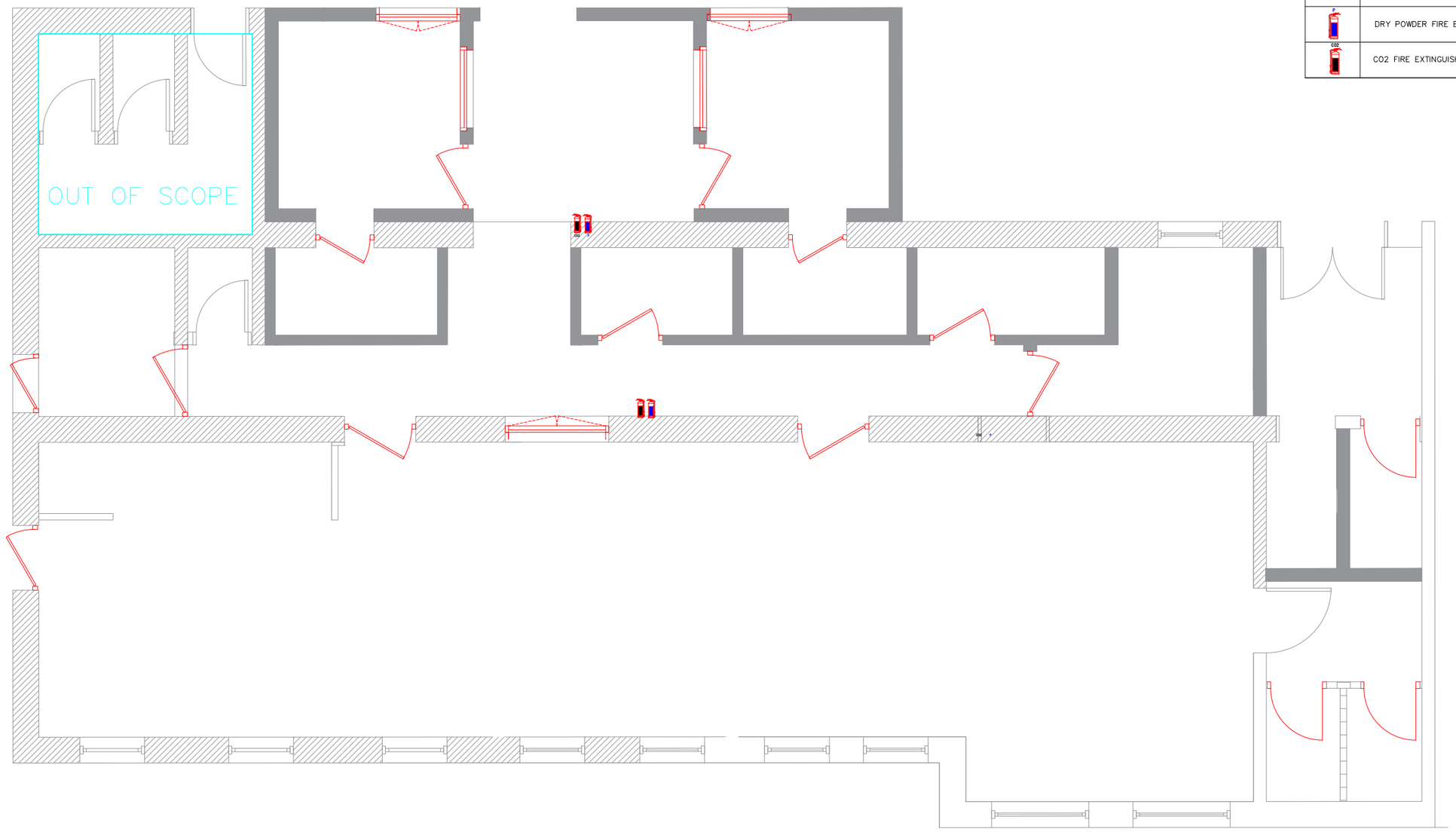
Verified by / Vérifié par :

Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixa.dwg

LEGEND FIRE EXTINGUISHER

SYMBOL	DISCRIPTION
	DRY POWDER FIRE EXTINGUISHER 6KG CAPACITY.
	CO2 FIRE EXTINGUISHER 6KG CAPACITY.



MEDECINS SANS FRONTIERES
OPERATING CENTER GENEVA
CENTRE OPÉRATIONNEL DE GENÈVE

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Date : 24 / 03 / 2026

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PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment :

PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin :

FIRE DISTINGUISHERS

Drawn by / Dessiné par :

Verified by / Vérifié par :

Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_lxa.dwg

The 'ground' earthing :
a.Earthing stake (rod, pole) X profile galvanized steel 2–3 m deep
b.Earthing belt around the building
c.Building foundations/ bars / steel mesh / Basement

All elements should be 35 mm² copper

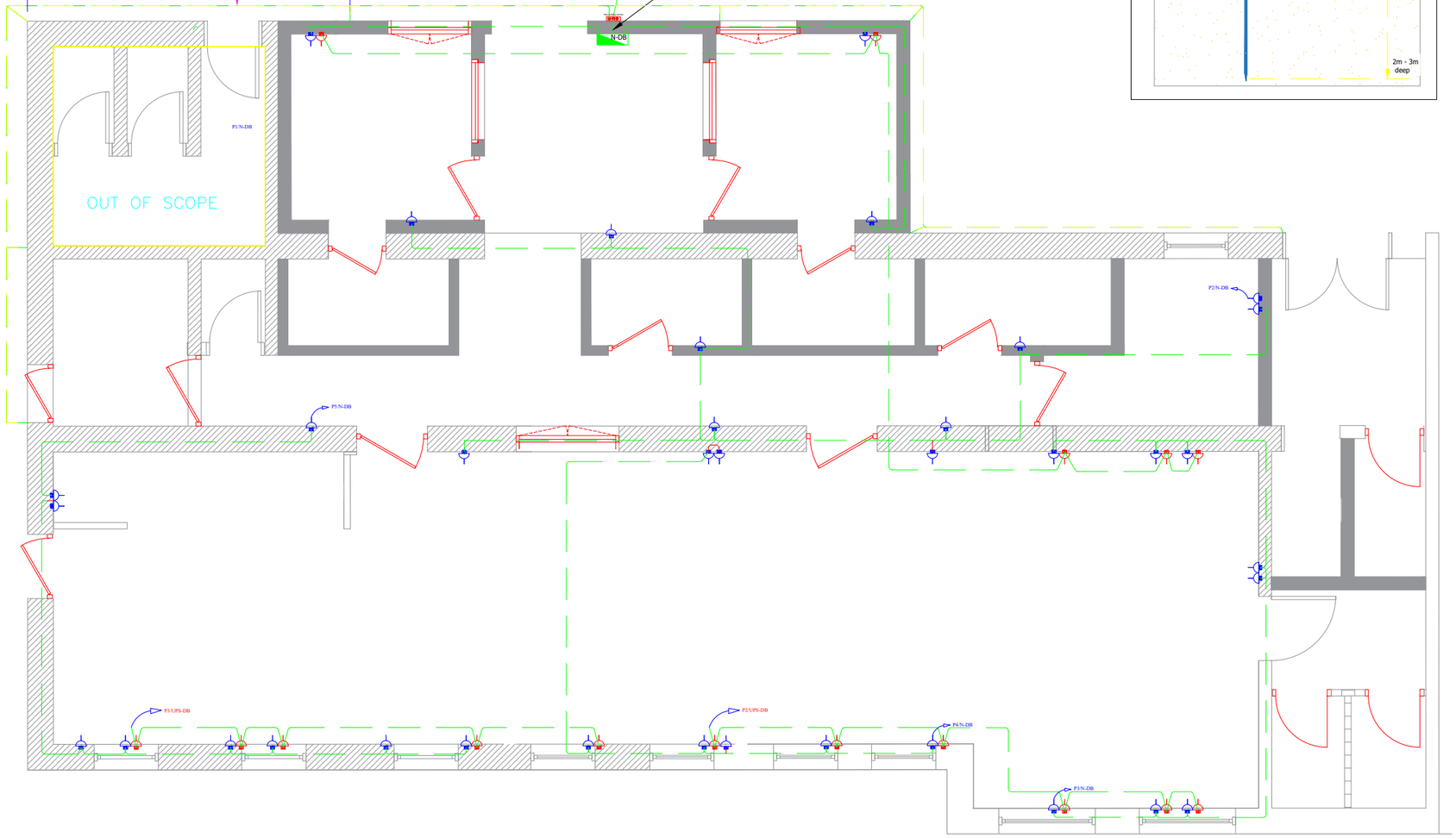
E

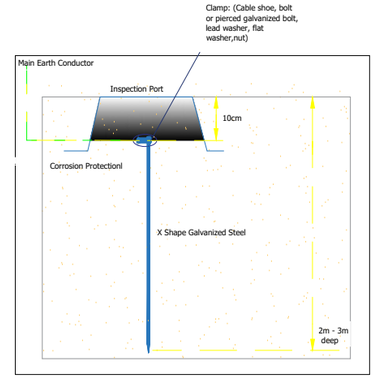
(TYPE-E1)

Resistance to be < 5ohm

This Distance to be max 3 meter& Min section 25mm2 connection to the SPD,T2 inside the MDB

5,05





LEGEND EARTHING SYSTEM

SYMBOL	DISCRIPTION
E	EARTHING POINT GROUNDING SYSTEM EARTHING ROD 2.4M (L) 16MM(DIA) COMPLETE WITH CONCRETE EARTH PIT.
	(1X35)mm2 BARE CU.CABLE FOR EARTHING.
	EARTH BAR.

MEDECINS SANS FRONTIERES
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Scale / Échelle :

Date : 24 / 03 / 2026

Project Title / Titre du Projet : PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment : PEDIATRIC

ID Project / Code Projet :

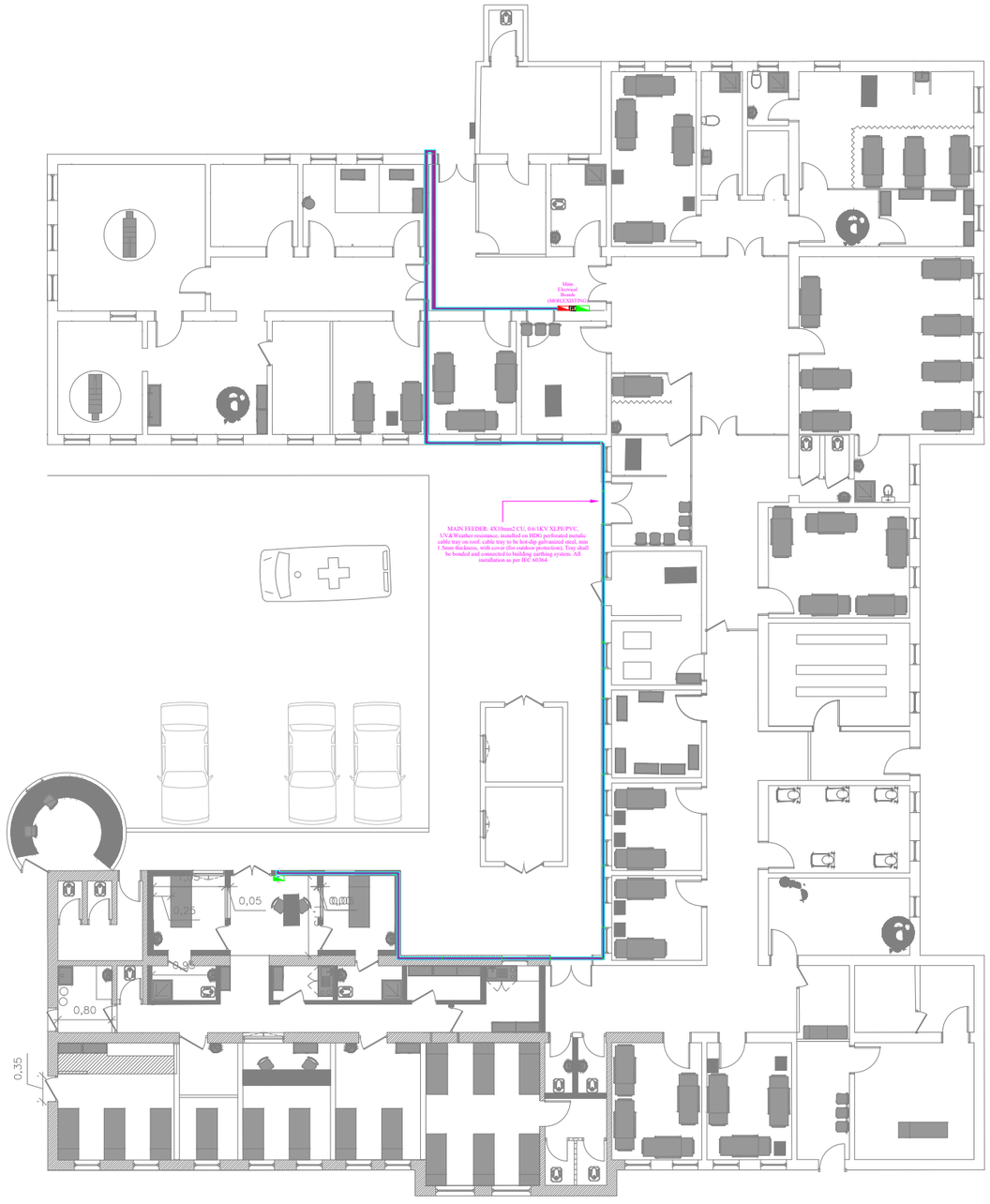
Drawing Title / Titre du Dessin : ELECTRICAL GROUNDING SYSTEM

Drawn by / Dessiné par :

Verified by / Vérifié par :

Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixo.dwg



LEGEND

- ON Roof Cable Tra, 5x10cm
- Solar System Panel Board
- Power Distribution Board
- Existing Change Over between Solar and Generator

MEDECINS SANS FRONTIERES
OPERATING CENTER GENEVA
CENTRE OPÉRATIONNEL DE GENÈVE

HQ stamp / Tampon du Siège :

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MEDECINS SANS FRONTIERES

N°Issue / N°Publication Date

Sheet N° / Feuille N°: E17

Scale / Échelle :

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PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment :

PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin :

ELECTRICAL MAIN POWER CABLE PATH

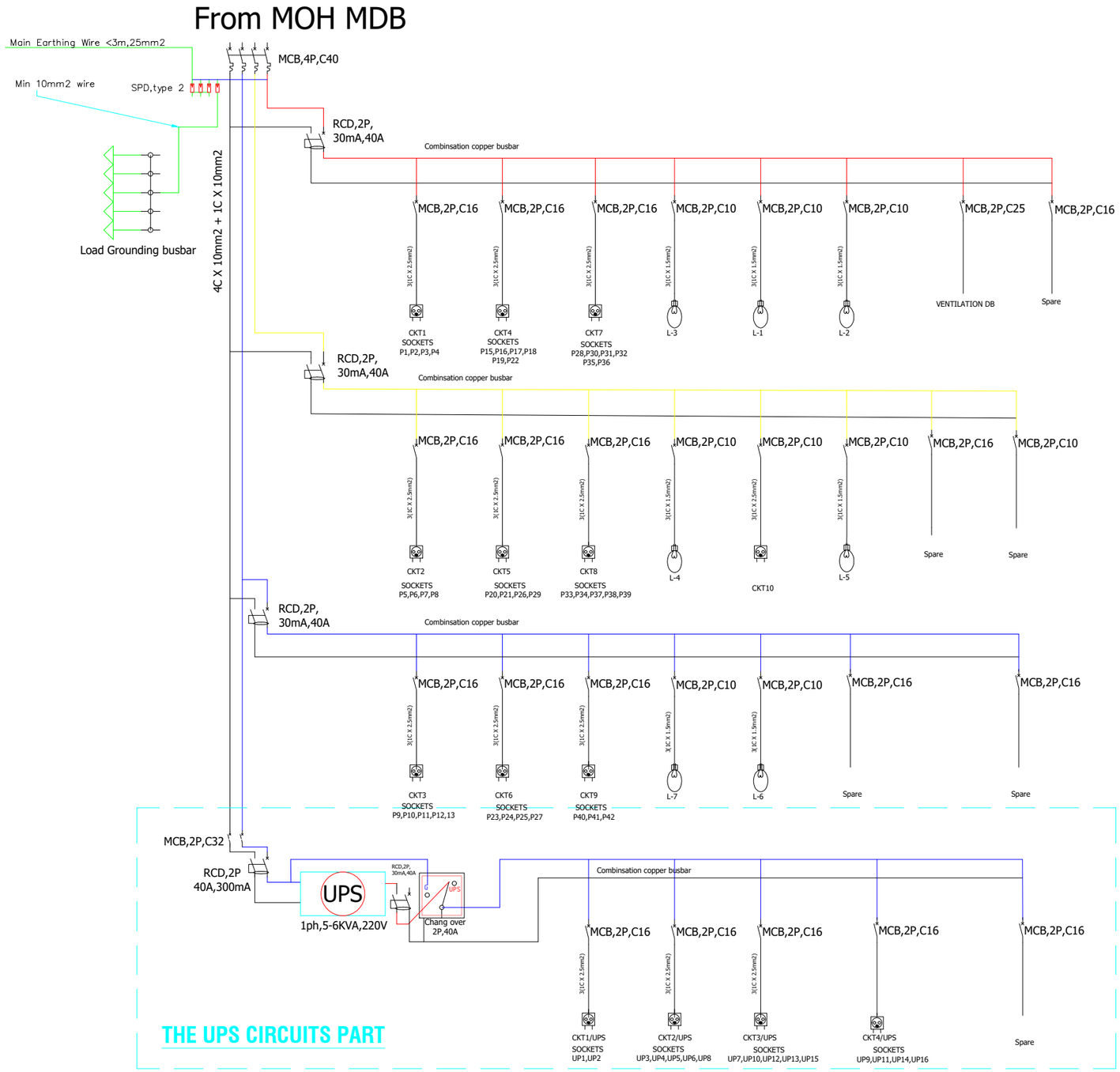
Drawn by / Dessiné par :

Verified by / Vérifié par :

Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixo.dwg

N-DB



LEGEND SLD

ITEM SYMBOLE	DESCRIPTION
	2P,MCB
	2P,RCCB
	4P,MCB
	4P,RCCB
	SPD,type 2
	Ground busbar
	Nuetral Busbar
	LED Lights
	Fans
	Socket Outlets
	Water Heater
	A.C split
	Waching Maching
	Exhaust Fan(Ducted)
	Electrical Heater

MEDECINS SANS FRONTIERES
OPERATING CENTER GENEVA
CENTRE OPÉRATIONNEL DE GENÈVE

HQ stamp / Tampon du Siège :

FOR BID ONLY

N°Issue / N°Publication Date

Sheet N° / Feuille N°: E18

Scale / Échelle :

Date : 24 / 03 / 2026

Project Title / Titre du Projet : PEDIATRIC EXTENSION KILO PROJECT

Building Name / Nom du Bâtiment : PEDIATRIC

ID Project / Code Projet :

Drawing Title / Titre du Dessin : SINGLE LINE DIAGRAM N-DB

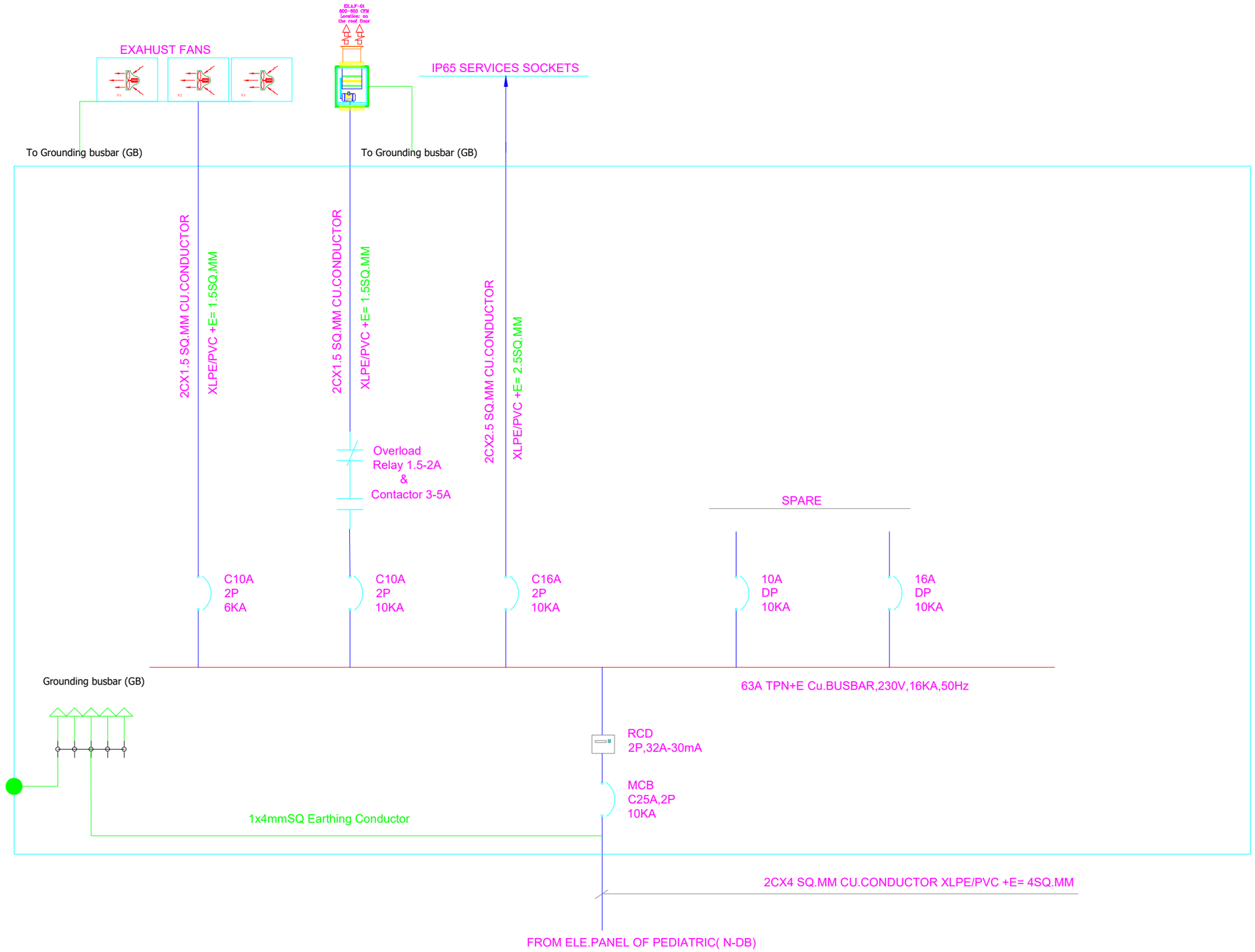
Drawn by / Dessiné par :

Verified by / Vérifié par :

Construction Phase :

File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_lxa.dwg

V-DB



SINGLE PH.VENTILATION V-DB
IP65 IF OUTDOOR INSTALLATION

MEDECINS SANS FRONTIERES OPERATING CENTER GENEVA CENTRE OPÉRATIONNEL DE GENÈVE	HQ stamp / Tampon du Siège : FOR BID ONLY	N°Issue / N°Publication Date	Sheet N° / Feuille N°: E19 Scale / Échelle : Date : 24 / 03 / 2026	Project Title / Titre du Projet : PEDIATRIC EXTENSION KILO PROJECT	Building Name / Nom du Bâtiment : PEDIATRIC	ID Project / Code Projet : Drawing Title / Titre du Dessin : ELECTRICAL BOARD OF VENTILATION File name / Nom du Dossier : YE120_KILO_Pediatrics Extension_Ixa.dwg	Drawn by / Dessiné par : Verified by / Vérifié par : Construction Phase :