PUBLIC WORKS CONTRACT
for the Development of Semi-Public Spaces in East Jerusalem'
Reference No.: PZA170421T-10029

Funded by:

Belgium
partner in development

This Project is Funded by
EUROPEAN UNION

Designed By:

31°47 Design Studio, Jerusalem

February 2023
OUTDOOR-CAMPUS DEVELOPMENT
AL-QUDS UNIVERSITY

Bet El Hanina—Jerusalem

ARCHITECTURAL DRAWINGS
[All Dimensions Are in Cm.
All Levels Are In Meter.
Any Missing or Unclear Detail And All Fastening Systems For All Elements Shall be
Approved by The Supervisor.

Notes

Legend:

RC CONCRETE FOR COLUMNS
CEMENT TILE
HOLLOW BLOCKS
REINFORCEMENT CONCRETE LEVEL
LEVEL SIGN IN PLAN
REFERENCE DETAIL SHEET NUMBER
FLOOR FINISH LEVEL (F.F.L.)

Legend:

RC CONCRETE FOR WALLS
CONCRETE
HOLLOW BLOCKS
STONE WALL
REFERENCE DETAIL SHEET NUMBER
REFERENCE DETAIL SHEET NUMBER
WINDOW NUMBER
DOOR NUMBER
REFERENCE SHEET NUMBER
SECTION NUMBER

F.F.L.: FINISH FLOOR LEVEL
R.C.L.: REN. CONCRETE LEVEL

Water Cooler

(1) All Dimensions Are In Cm.
(2) All Levels Are In Meter.
(3) Any Missing or Unclear Detail And All Fastening Systems For All Elements Shall be
Approved by The Supervisor.

REVISIONS

NO.
DRAWING
DATE

C

CODE
FUNCTION
AREA
ROOM
ROOM ID

Address
Tel.
email
Fax:

ASPHALT

Project Title:
PUBLIC WORKS CONTRACT
for the Development of Semi-Public Spaces in East Jerusalem
Reference No.:
PZA170421T-10029

Feb 2023

Designed by:
M.Arch. Ibrahim Alhindi
3147 Design Studio

Funded By:
Belgium - Belgian Development Agency

Contracting Authority:
Enabel - Belgian Development Agency

EUROPEAN UNION

This Project is Funded by
Notes:

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- All levels are in m.
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Legend:

- RC CONCRETE FOR COLUMNS
- CEMENT TILE
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- REINFORCEMENT CONCRETE LEVEL
- LEVEL SIGN IN PLAN
- REFERENCE DETAIL SHEET NUMBER
- FLOOR FINISH LEVEL (F.F.L.)
- TERRAZZO TILE
- LOCAL MARBLE

Designed by:
[Signature]

Checked by:
[Signature]

Approved by:
[Signature]

Date:
[Date]

Scale:
1:100

Drawing No:
A09

Coordinate Manager:
[Name]

Contracting Authority:
Enabel - Belgian Development Agency

Funded By:
[Logo]

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3147 Design Studio

A09
OUTDOOR-CAMPUS DEVELOPMENT
AL-QUDS UNIVERSITY

Beit Hanina—Jerusalem

ELECTRICAL & MECHANICAL DRAWINGS
OUTDOOR-CAMPUS DEVELOPMENT
AL-QUDS UNIVERSITY

Beit Hanina - Jerusalem

MECHANICAL DRAWINGS
PUBLIC WORKS CONTRACT
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February 2023
OUTDOOR - CAMPUS DEVELOPMENT
AL-QUDS UNIVERSITY
Beit Hanina–Jerusalem

BOOK OF DETAILS
TYPICAL VERTICAL SECTION THROUGH METAL DOORS
TYPICAL DETAIL OF CONNECTION BETWEEN INDOOR AND OUTDOOR AT DOOR OPENINGS

1:100

OUT
DOUBLE GLAZER
STEEL DOOR

CERAMIC TILES, 8 MM THICK
MORTAR 2CM
SAND FILL
E.C. SLAB
SLOPE TO DRAIN
FFL.

PORCELAIN TILES, 8 MM THICK
MORTAR 2CM
SAND FILL
E.C. SLAB

Legend:
- RC CONCRETE FOR WALLS
- CONCRETE
- HOLLOW BLOCKS
- STONE WALL
- MORTAR 2CM
- SAND FILL
- E.C. SLAB
- MASTIC SEAM ANT
- WATER COOLER

Notes:
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2. All levels are in meter.
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Contracting Authority:

Funded By:

Project Title:
PUBLIC WORKS CONTRACT for the Development of Semi-Public Spaces in East Jerusalem

Reference No.:
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Designed by:

Drawn - Belgian Development Agency

Enabel - Belgian Development Agency

ASPHALT

S.L.: SEA LEVEL

REFERENCES

COORD.
FUNCTION
AREA
ROOM
ROOM ID
NAME
NAME
NAME

Address
Tel.
email
Fax:
06  **TYPICAL STONE RAMP — SECTION**
Scale 1:25

07  **TYPICAL STONE STAIRS — SECTION**
Scale 1:20
Notes:
1. All Dimensions Are In Cm.
2. All levels Are In Meter
3. Any missing or unclear detail and all fastening systems for all elements shall be approved by the supervisor.

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- CEMENT TILE
- HOLLOW BLOCKS
- REINFORCEMENT CONCRETE LEVEL
- LEVEL SIGN IN PLAN
- REFERENCE DETAIL SHEET NUMBER
- FLOOR FINISH LEVEL (F.F.L.)
- TERRAZZO TILE
- LOCAL MARBLE

Drawing No: 09

ARTIFICIAL GRASS - SECTION

Scale 1:10

ARTIFICIAL GRASS - PERSPECTIVE

NOT TO SCALE
RC CONCRETE FOR COLUMNS
CEMENT TILE
HOLLOW BLOCKS
REINFORCEMENT CONCRETE LEVEL
LEVEL SIGN IN PLAN
REFERENCE DETAIL SHEET NUMBER
FLOOR FINISH LEVEL (F.F.L.)

Legend:
LOCAL MARBLE

Designed by:
Checked by:
Approved by:

NAME
Date:
Scale:
Drawing No:

Coordinate Manager:

Notes
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Water Cooler

Legend:
RC CONCRETE FOR WALLS
CONCRETE
HOLLOW BLOCKS
STONE WALL
REFERENCE DETAIL SHEET NUMBER
REFERENCE DETAIL SHEET NUMBER
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SECTION NUMBER

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Enabel - Belgian Development Agency

Contracting Authority:

Funded By:

Project Title:
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Reference No.:
PZA170421T-10029

Jan 2023

Designed by:
M.Arch. Ibrahim Alhindi

D09

ARC CONCRETE BENCH
LENGTH: 235 Cm
WIDTH: 55 Cm
HEIGHT: 44 Cm
WEIGHT: 1500 Kg

RECTANGULAR CONCRETE BENCH
LENGTH: 170 Cm
WIDTH: 52 Cm
HEIGHT: 45 Cm
WEIGHT: 425 Kg

Mounting with anchors
1:100 SCALE

CIRCULATION ELEMENT CONTAINER - SECTION A-A

STREEL STAIRS

Notes:
1. All dimensions are in cm.
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Legend:
- RC CONCRETE
- CEMENT TILES
- HOLLOW BLOCKS
- REINFORCEMENT CONCRETE
- LEVEL SIGN IN PLAN
- REFERENCE DETAIL SHEET NUMBER
- FLOOR FINISH LEVEL (F.F.L.)
- TERRAZZO TILE
- LOCAL MARBLE

Designed by:

Checked by:

Approved by:

Funded by:

Contracting Authority:

Public Works Contract for the Development of Semi-Public Spaces in East Jerusalem

Reference No.:

Project Title:

Designed by:

Drawn by: M.Arch. Ibrahim Alhindi

Scale: 1:100

Water Cooler

(1) All dimensions are in cm.
(2) All levels are in meter.
(3) Any missing or unclear detail and all fastening systems for all elements shall be approved by the supervisor.
**DD15 CONTAINER A (40FT)**

**Legend:**
- **Cement Tile**
- **Concrete**
- **Hollow Blocks**
- **Stone Wall**
- **Reference Detail Sheet Number**
- **Reinforcement Concrete Level**
- **Floor Finish Level (F.F.L.)**
- **Local Marble**
- **Terrazzo Tile**

**Notes:**
1. All Dimensions Are In Cm.
2. All Levels Are In Meter.
3. Any Missing or Unclear Detail And All Fastening Systems For All Elements Shall be Approved by The Supervisor.

**Revision History:**

<table>
<thead>
<tr>
<th>No.</th>
<th>Drawing</th>
<th>Date</th>
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</thead>
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<tr>
<td>1</td>
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<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
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**Contracting Authority:**
- Enabel - Belgian Development Agency

**Funded By:**
- [Logo]

**Project Title:**
PUBLIC WORKS CONTRACT for the Development of Semi-Public Spaces in East Jerusalem

**Reference No.:** PZA170421T-10029

**Designed by:**
- M.Arch. Ibrahim Alhindi

**Reviewed by:**
- M.Arch. Ibrahim Alhindi

**Approved by:**
- M.Arch. Ibrahim Alhindi

**Scale:** 1:50
DD16 CONTAINER B (40FT/HALF)

CORRUGATED SHEETS

CONTAINER B - ELEVATION 1
Scale 1:50

CONTAINER B - ELEVATION 2
Scale 1:50

CONTAINER B - ELEVATION 3
Scale 1:50

STEEL RODS
4MM IN DIAMETER

Notes:
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(2) All Levels Are In Meter
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1:100

Steel Tube Ø 4 cm
Design data:
1- The Concrete must be of quality B300
2- Cast iron with a tensile strength of 400
3- The foundation layer must be a solid layer, and in the absence of nearby rock, a soil replacement is made by placing the base course in two layers with a thickness of 50 cm, with a compaction work of 98%.
4- A nylon layer is placed under the sub-floor
WALLS SCHEDULE

<table>
<thead>
<tr>
<th>MARK</th>
<th>DIMENSIONS</th>
<th>VERT. STEEL</th>
<th>HORZ. STEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>W1</td>
<td>20</td>
<td>V1Ø12@20/EF</td>
<td>H1Ø12@20/EF</td>
</tr>
</tbody>
</table>

W1- Details/ Scale: 1:20

20 W1 - DETAILS

Scale 1:20
Notes:
1. All dimensions are in cm.
2. All levels are in meters.
3. Any missing or unclear detail and all fastening systems for all elements shall be approved by the supervisor.

Legend:
- RC: Reinforced concrete
- CT: Cement tile
- HB: Hollow block
- RCL: Reinforced concrete level
- LSL: Local marble
- FFL: Finish floor level
- T: Terrazzo tile
- AS: Asphalt

1:100 Scale

---

**Slab on Grade Details**

**Stairs Detail**

**Foundation Table - 1**

<table>
<thead>
<tr>
<th>B (cm)</th>
<th>W (cm)</th>
<th>H (cm)</th>
<th>Short Steel (cm)</th>
<th>Long Steel (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1</td>
<td>100</td>
<td>100</td>
<td>35</td>
<td>6Ø14 L=125 85</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6Ø14 L=125 85</td>
</tr>
<tr>
<td>MAT-1</td>
<td>SEE PLAN</td>
<td>20</td>
<td>B 10Ø12/20</td>
<td>B 10Ø12/20</td>
</tr>
</tbody>
</table>

---

**Reference Sheet Number**

**Window Number**

**Door Number**

---

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**Funded By:**

**Project Title:**

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Reference No.: PZA170421T-10029

---

**Designed by:**

M.Arch. Ibrahim Alhindi

---

**Enabel - Belgian Development Agency**

Structural Design Criteria And Construction Requirements

1) Code of Practice:
- For estimating gravity vertical loads and wind loads (DL, LL, W): ACI Code
- For the design and construction requirements of structural steel buildings: AISC 360-10 Code
- For the design and construction requirements of structural concrete: ACI 318-14 Code

2) Concrete & Reinforced Concrete:
- Concrete grading and specification shall be in accordance with Palestinian Standards (PS 45,55).
- Concrete grades are:
  - B300 for Footings and Slab on Grade and Reinforced Wall

3) Reinforcing steel bars denoted by the symbol ( ), shall be deformed high grade steel having a minimum yield strength of 400 MPa.

4) Structural Steel Construction:
- Steel Sections:
  - Angle Structural Shapes: S80X80 X 8
  - H-beam Sections: S100X100 X 10, etc.
- Steel Plates: grade 50 with minimum yielding strength 345 MPa
- Structural Steel: Grade S400
- Welding:
  - Welding processes: According to American Welding Society (AWS)
  - Welding electrodes: E309/409/509

5) Protection of Substructure:
- Smoothing the surface by a motor of cement and sand
- Waterproofing the top of "Waterproof 30" with thickness 500 millimeters for each layer

6) Concrete cover to steel reinforcement:
- Minimum clear concrete cover to steel reinforcement shall be as shown on drawings.
- Where not shown, it shall be as follows:
  - Grade A: 60 mm, when applied to water in another

7) Loads:
- Wind Load is calculated based on ASC7-10 code
- According to Local Maps wind speed at site is around 27 m/sec
- Wind Pressure computed using recommended wind speed is compared with a minimum of 0.77 kN/m2
- If wind pressure computed using wind speed is below minimum then minimum value will control design
- Earthquake Load according to UBC97

8) For steel reinforcement: The contractor shall prepare full bar bending schedule and shop drawings for engineer approval.

9) For structural steel sections: The contractor shall prepare detailed shop drawings and erection drawings for engineer approval.

10) Loads:
- Gravity loads and wind loads estimation are in accordance with ASC7-10
- Design Load Combination:
  - wind combined with dead load
  - wind combined with live load
  - wind combined with earthquake load

11) Splice lengths of reinforcement bars shall be as shown on the drawings but not less than 60 bars diameters.

Table for Splice Lengths of Reinforcement Bars

<table>
<thead>
<tr>
<th>Bar Diameter</th>
<th>Splice Length (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>10</td>
<td>150</td>
</tr>
<tr>
<td>12</td>
<td>200</td>
</tr>
</tbody>
</table>

12) All reinforcing bars attaching two different structural elements shall be ended with sheath as shown on drawings but not less than the following:

...
Containers Analysis and Design Criteria

1) Introduction

The project is composed of many structural elements; one of these elements is shipping containers. Shipping containers are designed based on specific standards. In this section, standards of containers will be presented taking into consideration that contractor is supposed to supply the containers that satisfy mentioned standards.

2) Global Standard

Below tables show specifications of containers

<table>
<thead>
<tr>
<th></th>
<th>20' container</th>
<th>40' container</th>
<th>40' high-cube container</th>
<th>45' high-cube container</th>
</tr>
</thead>
<tbody>
<tr>
<td>length</td>
<td>20' 8' 13/16&quot;</td>
<td>20' 12' 11/16&quot;</td>
<td>20' 12' 11/16&quot;</td>
<td>20' 12' 11/16&quot;</td>
</tr>
<tr>
<td>width</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>height</td>
<td>8' 6&quot;</td>
<td>8' 6&quot;</td>
<td>8' 6&quot;</td>
<td>8' 6&quot;</td>
</tr>
<tr>
<td>volume</td>
<td>1,169 ft³</td>
<td>1,169 ft³</td>
<td>1,169 ft³</td>
<td>1,169 ft³</td>
</tr>
<tr>
<td>gross</td>
<td>66,139 lb</td>
<td>66,139 lb</td>
<td>66,139 lb</td>
<td>66,139 lb</td>
</tr>
<tr>
<td>empty</td>
<td>4,850 lb</td>
<td>4,850 lb</td>
<td>4,850 lb</td>
<td>4,850 lb</td>
</tr>
<tr>
<td>net</td>
<td>61,289 lb</td>
<td>61,289 lb</td>
<td>61,289 lb</td>
<td>61,289 lb</td>
</tr>
</tbody>
</table>

Shipping Containers follow ISO specifications. Figure below shows tests applied on containers to ensure strength.

Evaluation, modeling, and analysis of shipping container building structures is an article that studies effect of changes applied on containers. Figure below shows scenarios of modification that study covers:

4) Containers’ Connection Details

- Container will be connected to structural footing through base plate. The underside of the base plate has reinforcing bars (anchor bolts) of varying lengths. The anchor bolts are welded onto the underside of the plate and are cast into the concrete foundations or grout while it is still wet. Once the concrete or grout is hardened, the base plate is anchored into the foundations. There are multiple options for connecting containers to other containers or transporting devices presented in ISO 3874 (ISO3874, 1997). The connection devices lock the containers together by attaching through the top or bottom openings on corner fittings. Twist locks and latch—locks are connection devices securing two containers at the corner fittings during stacking, transporting, or lifting empty container situations. Stacking fittings or stacking cones secure containers only horizontally during stacking or transporting and are always used in conjunction with other securing devices.

- The connection devices can support lateral and gravity loads only under normal shipping operations (150 KN tensile strength and 850 KN compressive strength). Depending on the container structure's application.

[Reference: DESIGN OF A TWO STORY ISO SHIPPING CONTAINER BUILDING, Murti’s Thesis by Mohammed Alutbi, Tehran, Iran]

5) Containers’ Footing System

- Footing system supporting container’s depend on loads; since loadings are low based on the fact that the structural system is self is light; two types of footings may be applicable:
  a) Treated footings at raft
  b) Treated supporting system as slab on grade

- Cargo container homes require a foundation system just as any other residential dwelling would. While the design parameters for shipping container homes are constantly evolving due to the relatively young age of the technology, there seem to be two major methodologies in regards to a foundation system. Most cargo container homes utilize either a slab-on-grade foundation or a concrete pile foundation. A basement is possible with either of these two types of foundations, but because the cargo containers are intermodal containers (and thus can be moved easily) a basement would not be practical. Moving the containers would leave a large void that would be wasted. While a basement is possible, the scope of this paper will cover foundation systems for cargo container homes that do not have a basement.

- In this Project Mat foundation (raft) will be used beneath containers to avoid settlements issues that may occur through the life of structure.

6) Summary

- After reviewing available information about shipping containers following points may summarize how to deal with such projects:
  a) Shipping containers worldwide follow global standard; these standards ensure safe structural system against variable loading scenarios.
  b) It is common to do changes on containers; reviewing one of the articles shows that even when removing all sides the container still satisfy standards.
  c) Containers are light structures; therefore, applied loads on ground is not that much; and a supporting system of slab on grade is enough; however, Rafts of 30 cm is suggested to overcome any suspected issues of settlements.
  d) If two containers need to be connected using plates with welding will be enough (refer to point 4 for illustration).
  e) Based on previous points, it is clear that suggested changes on containers (if the provided is shipping) will still make the structure safe. However, in the next section modeling will ensure safety by applying loadings on real structure.
7) Modeling

- In this section two containers will be modeled using ETABS software, with the application of variable load cases.
- Since containers are not provided yet, the check will be for assumed specifications where these specifications will be the minimum to ensure higher safety factors.
- Figure below shows the rendered views of both models.

![Figure: Models built using ETABS](image)

- Model's assumption:
  - Columns are lines with section property of angle; the section of the side columns are RHS100x150x4.7 mm
  - Supporting beams are 5HS120x120x4.5
  - Wind load value is controlled by minimum pressure value 0.77 kN/m²
  - Earthquake loads based on UBC97 with two load cases: Eqx, and Eqy
  - Value of Ct=0.035

- Figures below show application of point loads for the both wind load case and Earthquake load cases, and the application of clock weight as a line load

![Figure: Wind Load Case 1](image) ![Figure: Wind Load Case 2](image) ![Figure: Auto-Seismic Earthquake load (x)](image) ![Figure: Auto-Seismic Earthquake load (y)](image) ![Figure: Clock weight](image)
- Figures below show response of structure to various types of loads

- Figures below show design outputs for the inspected containers

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- FLOOR FINISH LEVEL (F.F.L.)

Legend:
- LOCAL MARBLE
- TERRAZZO TILE
- ASPHALT

**Notes**
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**Contracting Authority:**
Exabel - Belgian Development Agency

**Funded By:**
Belgium

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**Designed by:**
M.Arch. Ibrahim Alhindi

**Address**

**Tel.**

**Email**

**Fax:**

**Scale:** 1:100

**Drawing No.:** S06
Structural Design of Steel Stair

1) Introduction
   In this section, design of steel structure will be illustrated.

2) Structural Modeling
   Figure below shows 3D model built using ETABS software.

   Figure: 3D Model - Steel - ETABS

   Figure below shows deformed shape of stair.

   Figure: Deformed Shape of Stair

   Figure below shows design output of Stair.

   Figure: Deformed Shape of Stair

   Figure: Deformed Shape of Stair
Structural Design of Retaining Wall

1) Introduction

In this section design of retaining wall will be illustrated, the design is done using two software; ETABS, and PROKON.

2) Design Assumptions

Following are the design assumptions:

1) Most of Wall is supported from two points; footing and upper level slab.
2) Footings are supported on hard layer; if no rock is near, a soil replacement is needed and the bearing capacity is assumed to be 2.0 kg/cm².
3) Wall is designed against over turning and against sliding.
4) Backfilling materials are supposed to be selected with unit weight of 18 kN/m³.
5) Angle of friction of the selected backfill is supposed to be 35 degree.
6) Wall is designed to support both lateral loads of backfilling material and dynamic loads for the adjacent soil layer.
7) Concrete for both footing and wall shall be 1500 (f′cu=30 Mpa; fc′=24 Mpa).

3) Structural Models

Figure below shows the model built using PROKON software.

Figure: Input Data for retaining wall
Figure: 2D Model using ETABS
Value of Lateral load is calculated using the following formula: F=k×l×γa → K=0.27 (#=35)

Figure: Design check
Figure: 2D Model using SAFE for Footing
Figure: Soil Pressure under Footing

Notes

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(1) All Dimensions Are In Cm.
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Note: C3 is the original corner column of the container before removing sides. Structural design assumed dimensions of corner column as provided in the detail. Contractor must provide the client with the actual section, and if existing section < assumed then verification will be required from contractor.

C3 Details
Scale: 1:20

C2 Details
Scale: 1:20

Figure: Illustration of possible locking mechanism
Note: SF-1 is designed for the worst case scenario; cantilever wall. Indeed Wall is supported from two points. 
Point 1: Footing
Point 2: Slab at Upper Level

Figure: Illustration of Welding Container Column To Plate
Section B-B
Scale: 1/20

Section C-C
Scale: 1/20

Details of Connection Between SHS200x200x3 and Slab
Scale: 1/20

Details of Connection MAT-1 and SF-1 [Section D-D]
Scale: 1/20

Typical Detail of End Hook

Detail of Connection Between C30-3 mm and MAT-1
Scale: 1/20

Notes:
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2. All Levels Are In Meter
3. Any Missing or Unclear Detail And All Fastening Systems For All Elements Shall be Approved by The Supervisor.

Legend:
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- CEMENT TILE
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- FLOOR FINISH LEVEL (F.F.L.)
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- LOCAL MARBLE

- RC CONCRETE FOR WALLS
- CONCRETE
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- SECTION NUMBER

F.F.L.: FINISH FLOOR LEVEL
R.C.L.: REN. CONCRETE LEVEL

(1)  All Dimensions Are In Cm.
(2)  All Levels Are In Meter
(3)  Any Missing or Unclear Detail And All Fastening Systems For All Elements Shall be Approved by The Supervisor.
Compacted BaseCoarse

SLAB ON GRADE DETAILS

RC CONCRETE FOR COLUMNS
CEMENT TILE
HOLLOW BLOCKS
REINFORCEMENT CONCRETE LEVEL
LEVEL SIGN IN PLAN
REFERENCE DETAIL SHEET NUMBER
FLOOR FINISH LEVEL (F.F.L.)
TERRAZZO TILE

Legend:
LOCAL MARBLE

(1) All Dimensions Are In Cm.
(2) All Levels Are In Meter
(3) Any Missing or Unclear Detail And All Fastening Systems For All Elements Shall be Approved by The Supervisor.

REVISIONS

Contracting Authority:
Exabel - Belgian Development Agency

Funded By:

Project Title:
PUBLIC WORKS CONTRACT
for the Development of Semi-Public Spaces in East Jerusalem

Reference No.:
PZA170421T-10029

Designed by:
Slab on Grade Layout and Details
Note: All Steel Members Connected through Welds Using E60 rods 3mm unless mentioned any other value

Note: Finish Material of Stair as per Arch. Drawings

this section will be a one unit pre-fabricated and installed as unit

Welded Structure as a unit

SHS30x30x2

RHS140x70x3

C30-3 mm thickness

Ground Beam must be laid on compacted base coarse layers Plate is attached to GB through 4 bolts 12 mm Diamater

Plate 300x300x8

Bolts 4Ø12 Depth 100 mm

Cont. Weld 4mm E60 Rods

E60 4 mm Cont. Weld

Plate 250x250x8

Bolts 4Ø14

RHS140x70x3

C30-3 mm Column

Detail of Stair Middle Part

Scale: 1/20

See MAT-1 Detail

See Details of RC Wall [W1]
Details of Container A

Note: Container A is composed of original members. Where cover will be removed in certain locations as provided in Arch. drawings.

Details of Container B

Note: Container B is composed of original members. Where cover will be removed in certain locations as provided in Arch. drawings.
Details of Container C

Figure: 3D of Container C

- SHS 100x100x3.0
- SHS 120x120x4.0
- Steel Rods 4mm in Diameter
- Note: These Rods are not considered Structural members

Legend:
- LC: Concrete Level
- RC: Reinforced Concrete Level
- RCW: Reinforced Concrete Wall
- SHS: Square Hollow Section
- HST: Hollow Steel Tube
- T: Trench
- ST: Stone Wall
- RB: Reinforced Beam
- RBW: Reinforced Beam Wall
- PB: Panel
- SC: Service Column
- Stair

Notes:
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REVISIONS

<table>
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<th>Date</th>
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Designed by: M.Arch. Ibrahim Alhindi

Funded By: Belgium - Belgian Development Agency

Project Title: PUBLIC WORKS CONTRACT for the Development of Semi-Public Spaces in East Jerusalem

Reference No.: PZA170421T-10029
Details of Container D

Container Original Column

Container Original Beam

Container Original Beam

Container Original Column

Container Original Column

Container Original Column

30 cm Mat Foundation

20 cm solid slab

Stair

Typical Detail of Hook for End bars - T&B

Corrugated Sheets

Corrugated Sheets

Corrugated Sheets

Corrugated Sheets

Corrugated Sheets

Corrugated Sheets

RC CONCRETE FOR COLUMNS

CEMENT TILE

HOLLOW BLOCKS

REINFORCEMENT CONCRETE LEVEL

LEVEL SIGN IN PLAN

REFERENCE DETAIL SHEET NUMBER

FLOOR FINISH LEVEL (F.F.L.)

TERRAZZO TILE

Legend:

LOCAL MARBLE

Designed by:

Checked by:

Approved by:

NAME

Date:

Scale:

Drawing No:

Coordinate Manager:

Notes

(1) All Dimensions Are In Cm.

(2) All Levels Are In Meter

(3) Any Missing or Unclear Detail And All

Fastening Systems For All Elements Shall be Approved by The Supervisor.

REVISIONS

NO.

DRAWING

DATE

(1)

(2)

(3)

C

Contracting Authority:

Funded By:

Project Title:

PUBLIC WORKS CONTRACT

for the Development of Semi-Public Spaces in East Jerusalem'

Reference No.:
PZA170421T-10029

Jan 2023

Designed by:

Container D Details

Container D Details