Water Tank - Plan

Water tank in Barika

Scale 1:100
flanged ductail Outlet as a bill quantity diameter

PVC pipe size 50 mm diameter

flanged ductail Overflow pipe as a bill quantity diameter

flanged ductail wash out pipe size as a bill quantity diameter

flanged ductail pipe size as a bill quantity diameter

flanged ductail pipe size as a bill quantity diameter

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Reinforced Concrete Tank

pipeline layout for the new water tank

Water tank in Barika

Sheet size: A3

Drawing Title: pipeline layout for the new water tank

Community Revitalization Programme CFP

Design Engineer: Water directory

Name: K. B

Date: Mar. 2017

Supervising/QC Engineer: Sulaimaniya suburbs

International Organization for Migration - IRAQ

Design Architect

Government Representative

Project Officer

Programme Manager
Reinforcement Top and bottom
20mm @15cm c/c
Both direction Top and bottom Layers

Section A-A
Scale 1:25

Columns Details

<table>
<thead>
<tr>
<th>Type</th>
<th>No</th>
<th>Size (cm)</th>
<th>Main Steel</th>
<th>Ties</th>
<th>Shape</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1</td>
<td>8</td>
<td>40*40</td>
<td>8Ø 25 mm</td>
<td>2Ø 10 mm @25cm c/c</td>
<td></td>
</tr>
<tr>
<td>C2</td>
<td>1</td>
<td>50*50</td>
<td>8Ø 25 mm</td>
<td>2Ø 10 mm @25cm c/c</td>
<td></td>
</tr>
</tbody>
</table>

Braces : 40 * 40cm @ levels 4m and 8m from footing
3Ø 20 mm continuous
Ø 10 mm @20cm c/c all span

Braces
Ø 10mm@20cm c/c
3Ø 20mm Cont

Scale 1/20

Scale 1/30

Footing Mat Thickness
70cm
Minimum allowable bearing
Capacity is (10) ton/m²
At all corners additional bars 5 No Ø16mm
At top both directions length (2m)

Add ø12mm at 40cm c/c
Ø12 @40cm

Opening 70*70 cm for inspection

3 Nos Ø20mm @ 500mm R.C Walls

12 @ 40cm c/c Both directions (one bent one straight)

Add ø12mm @ 40cm c/c

21 ø 20cm c/c Both directions (one bent one straight)

2 No. 20mm @ bottom

0.45
5.50
0.30
0.15
0.15
0.40

Roof Opening
Scale 1:20

Water directory Sulaimaniya suburbs
Mar. 2017

Name: K. B
Signature: K. B
Date: Mar. 2017
Drawing Title: Slab Reinforcement detail of the Roof
Sheet NO.: S 03

Water tank in Barika
Walls Reinforcement:

- **Horizontal bars**: 12mm @15cm c/c both faces
- **Vertical bars**: 16mm @15cm c/c both faces

**Note:** All corners must be chamfered external and internal

**Scale 1:50**

*Section 1-1*

**Scale 1:20**

**Slab steel**

- 6Ø20mm all around the opening

**Horizontal wall bent detail**

**Scale 1:50**

**Opening in the walls**

- 0.70 * 1.50

**Slab**

2Ø20mm
L = 2m

**Opening**

**Water tank in Barika**
Internal Wall
see Wall
Renforcement

2 Ø25mm
Continuous

Stirrups Ø10mm
@15cm c/c

7 Ø25mm
Continuous

Beam B2 Section d-d
Scale 1:25

External Walls
(See Wall Reinforcement)

2 Ø25mm Continuous

Stirrups Ø10mm
@15cm c/c

6 Ø25mm Continuous
All Length

Beam B1 Section c-c
Scale 1:25

Water tank in Barika
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Note: Braces: 40 * 40cm @ levels 4m and 8m from footing

Scale: 1:50

Braces

Scale: 1:20

Water tank in Barika
4.00
4.00
Side beams
40 * 80 cm
Brases 40 * 40 cm
All other Cols
40 * 40 cm
Mid col
50 * 50 cm

Steel Rail
Mat footing
Lean concrete

Tank Piping
Scale 1:100

Opening

B1
Mid beams
50 * 80 cm

B2
Mid beams
50 * 80 cm

Steel steps
@25mm@30cm @
with protection half ring

Earth level at least

Mat footing
Lean concrete