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Project Title:

# Sudan Integrated Social Sector Infrastructure Rehabilitation Project ( SISSIR )

## Rehabilitation of Rabak Hospital

# Drawings Album



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Project Title:  
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Rehabilitation Project  
( SISSIR )  
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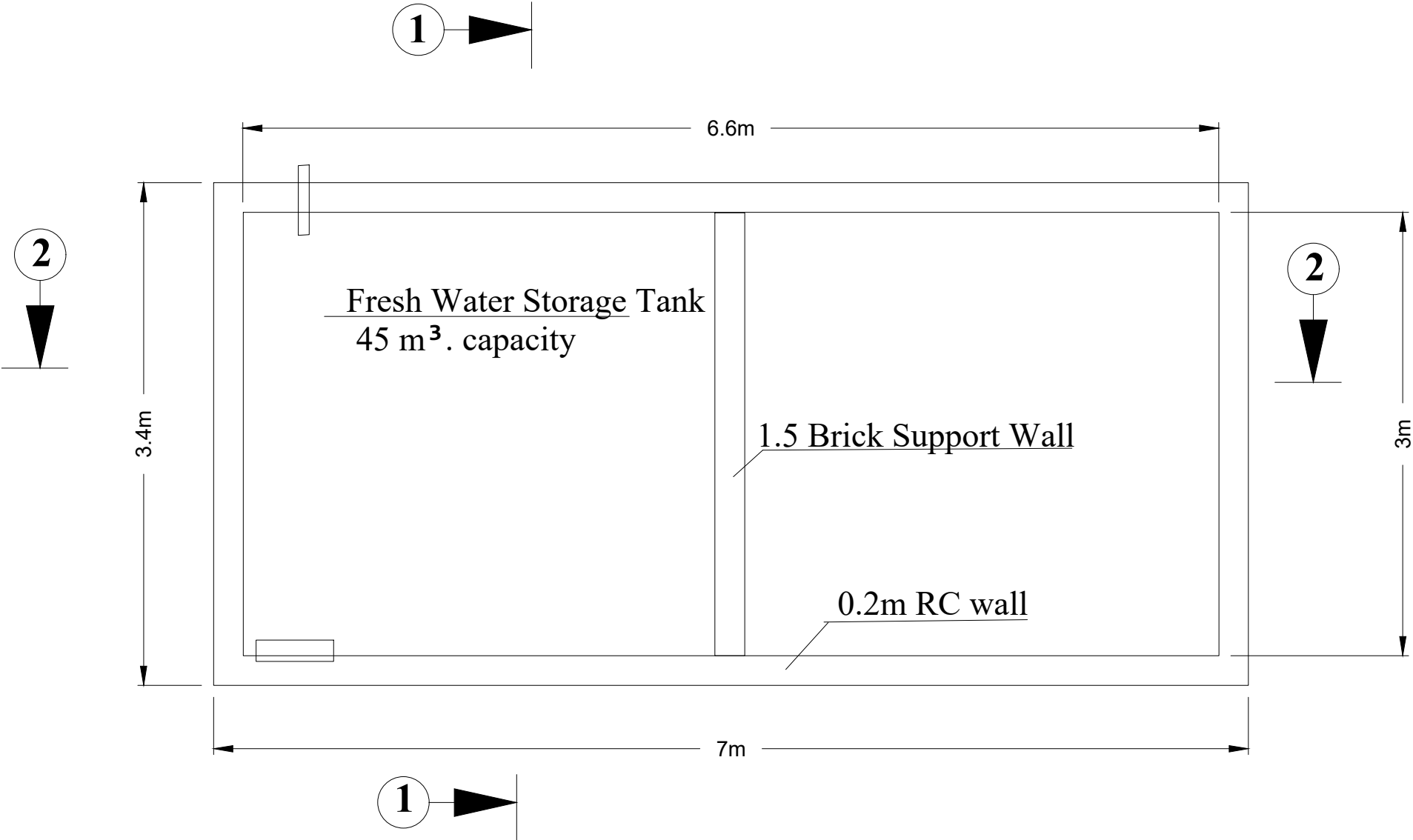
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Designed by. : Mohamed Hamza  
Reviewed by : Eng. Mohamed I. Khalil  
Approved by: Eng. FATHI MOHAMMED

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| Drawing Titel. | Signboard | SHEET NO. 00 |  |  |
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Water Storage Tank Plan Details



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Reviewed by : Eng. Mohamed I. Khalil IOM

Approved by: Eng. FATHI MOHAMMED IOM

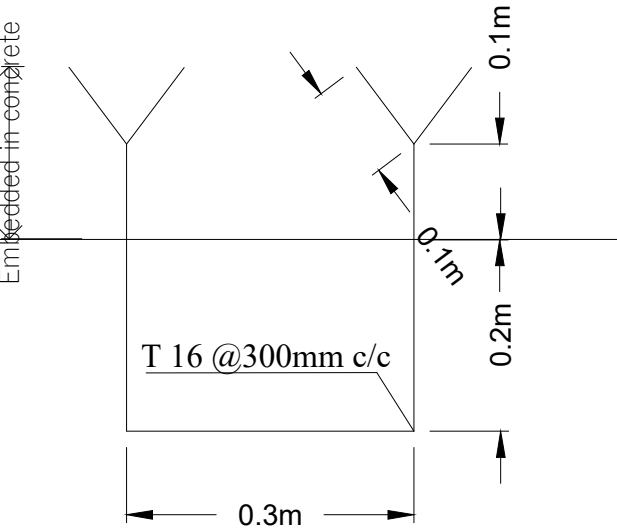
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| Drawing Titel.                                              |  | SHEET<br>NO.<br>02 |  |  |
| Fresh Water Storage Tank Plan Details<br>for Rabak Hospital |  |                    |  |  |



STORAGE Tank DETAILS

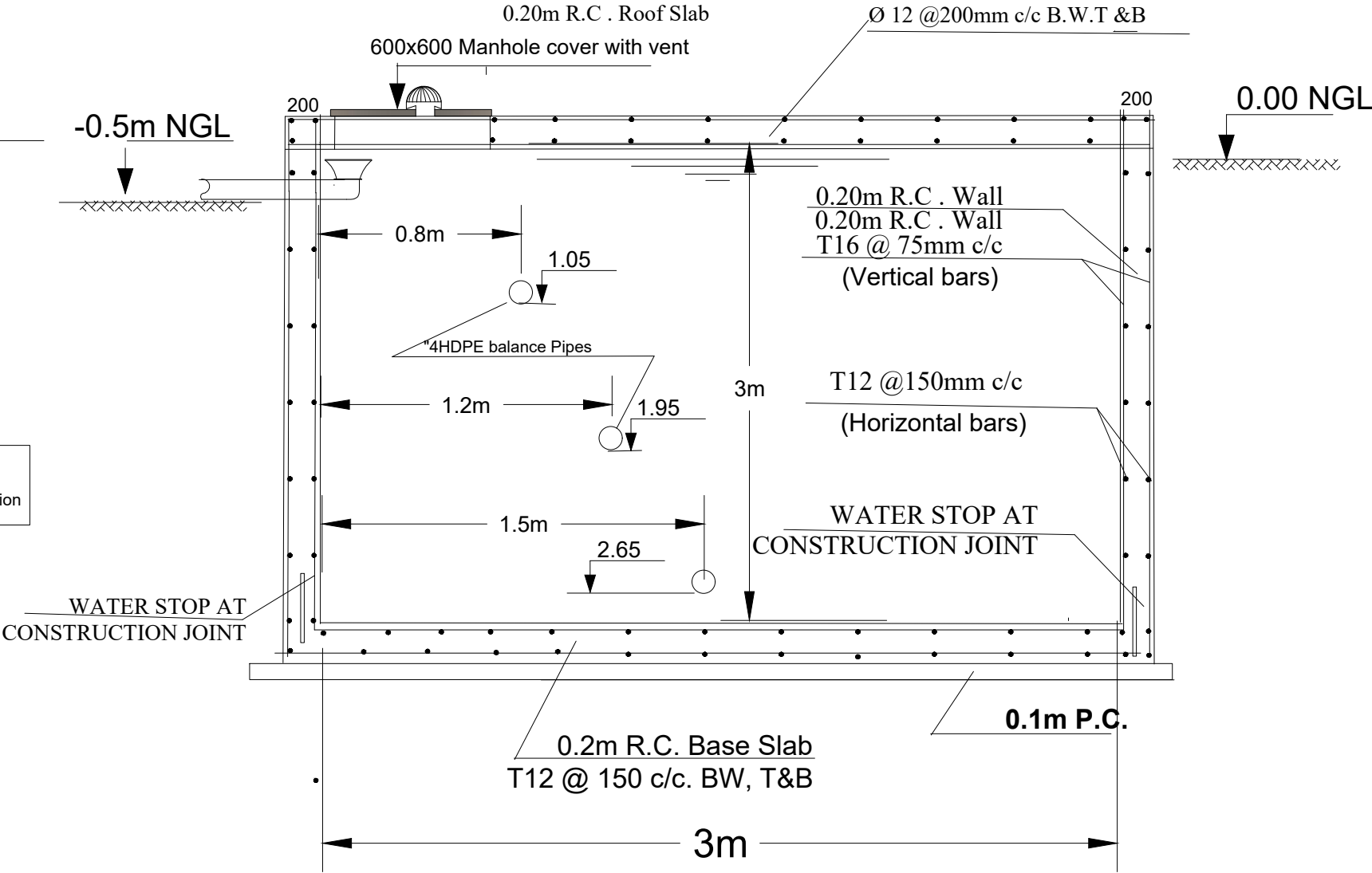
Fresh Water Storage Tank and Reinforcement Details  
Section 1-1

Steel Ladder Details



Note

Steel Ø16 Ladder coating with good quality primer paint before delivery, followed by a further two coats of paint at site after erection



Notes :

- 1 - The Thickness of the Base Slab and Walls = 200 mm
- 1 - The Thickness of the Cover Slab = 150 mm
- 2 - Yeild Strength For Steel  $F_y = 410 \text{ N/mm}$  .
- 3 - Compressive Crushing Strength For Concrete  $F_{cu} = 35 \text{ N/mm}$  .
- 4 - Cover For Main Reinf = 50 mm.
- 5 - All The Spacings between bars in mms .
- 6 - Lap Length of Reinf. in Tension & Compression=55 x Diameter .
- 7 - Concrete should be waterproofn using mix ratio of 1:1.5:3 or add sika additive .

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Reviewed by : Eng. Mohamed I. Khalil IOM

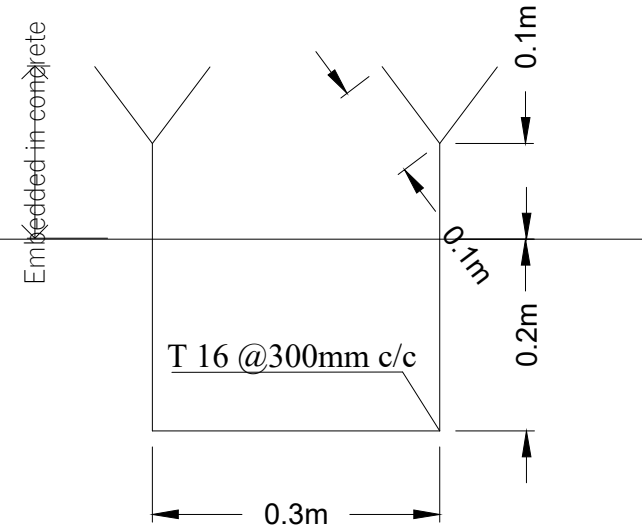
Approved by: Eng. FATHI MOHAMMED IOM

Drawing Title: Fresh Water Storage Tank Reinforcement Details  
SECTION 1-1 for Rabak Hospital

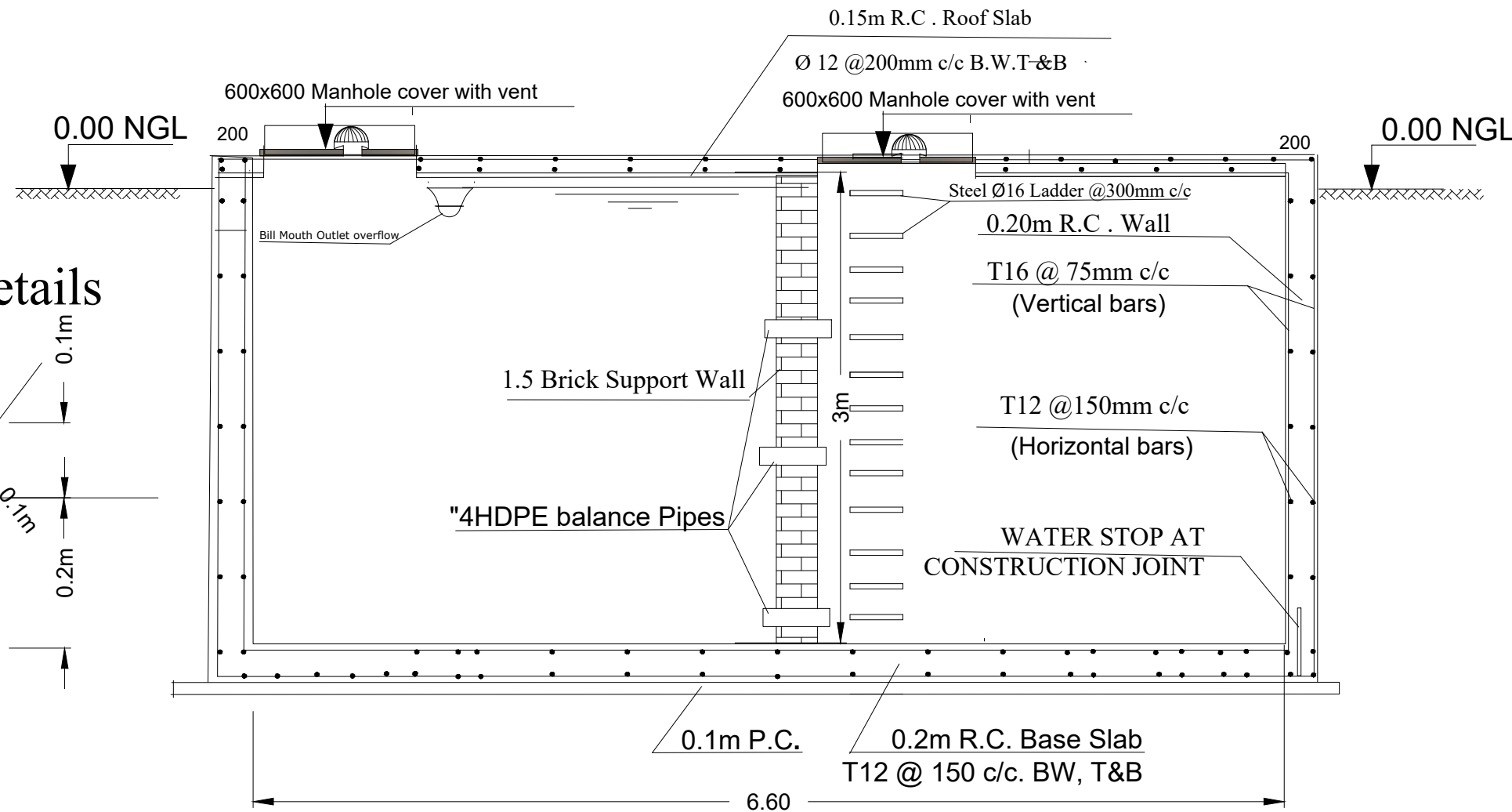
SHEET NO. 03

## Tank SECTION AND DETAILS

Fresh Water Storage Tank and Reinforcement Details  
Section 2-2



Steel Ø16 Ladder coating with good quality primer paint before delivery, followed by a further two coats of paint at site after erection



- 1 - The Thickness of the Base Slab and Walls = 200 mm
- 1 - The Thickness of the Cover Slab = 150 mm
- 2 - Yield Strength For Steel  $F_y = 410 \text{ N/mm}^2$ .
- 3 - Compressive Crushing Strength For Concrete  $F_{cu} = 35 \text{ N/mm}^2$ .
- 4 - Cover For Main Reinf = 50 mm.
- 5 - All The Spacings between bars in mms.
- 6 - Lap Length of Reinf. in Tension & Compression =  $55 \times \text{Diameter}$ .
- 7 - Concrete should be waterproofed using mix ratio of 1:1.5:3 or add sika additive.



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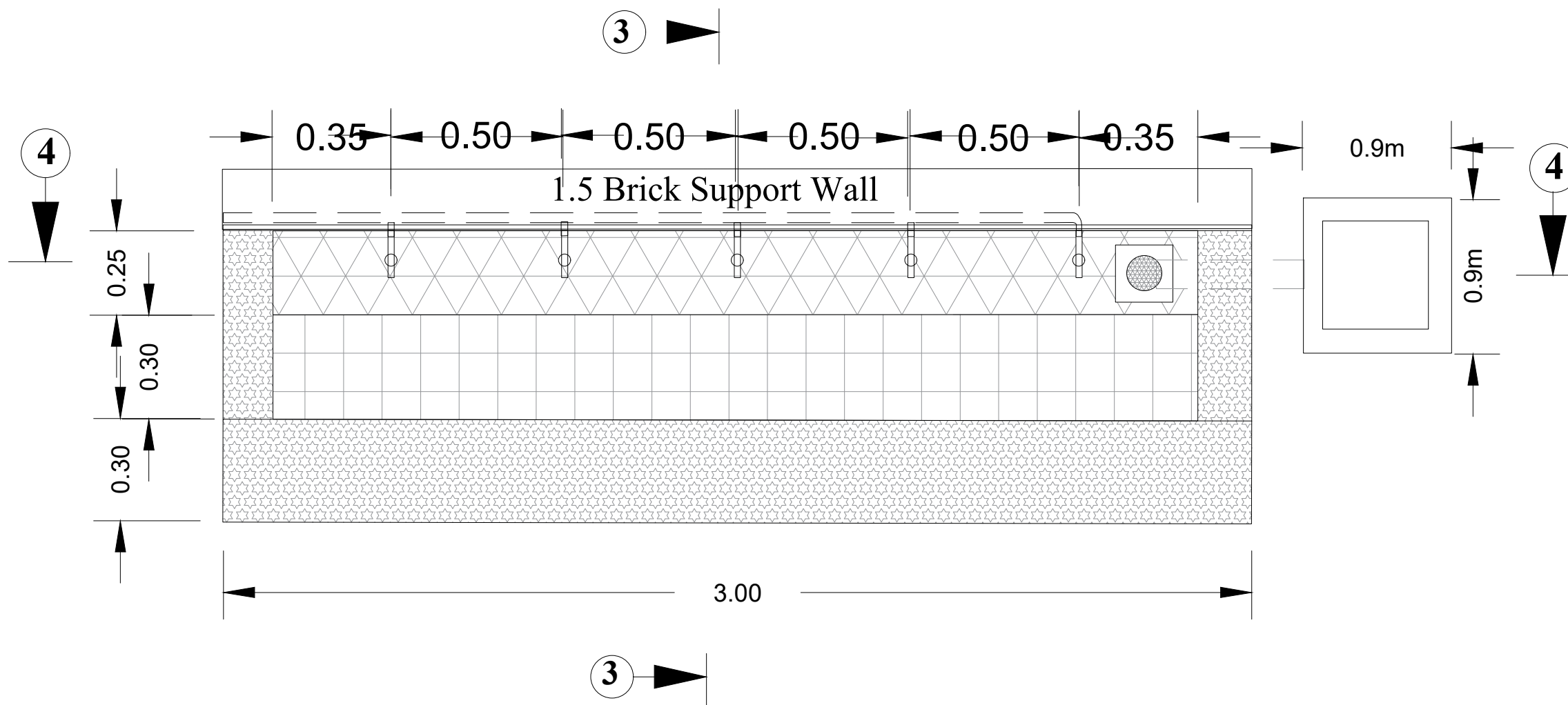
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Approved by.: Eng. FATHI MOHAMMED IOM

Drawing Titel.  
Fresh Water Storage Tank Reinforcement Details  
SECTION 2-2 for Rabak Hospital

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| SHEET<br>NO.<br>04 |  |
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# PLAN



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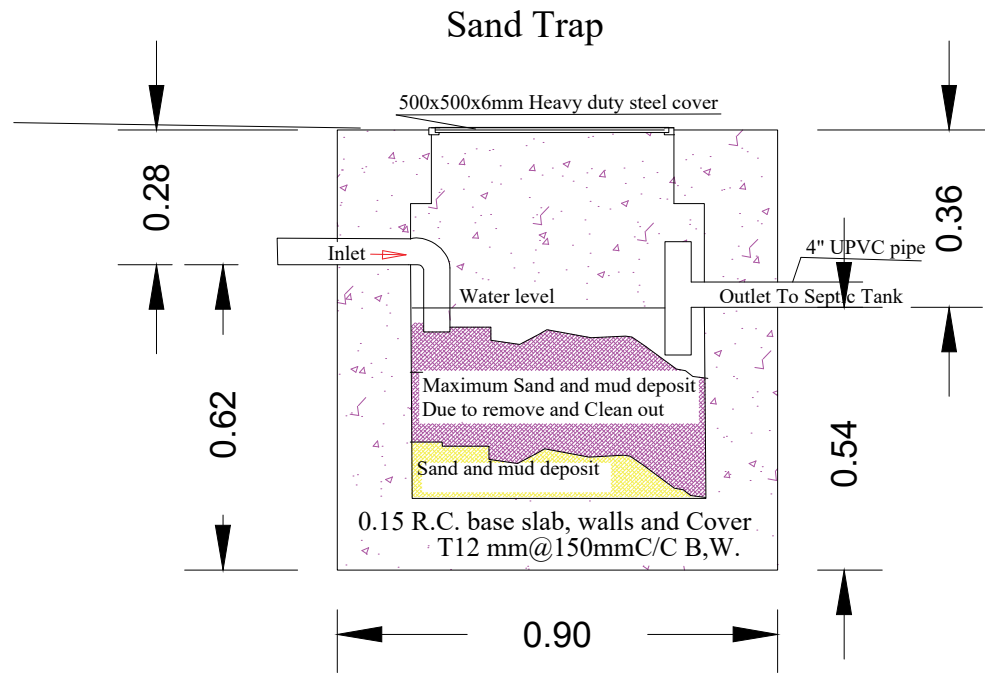
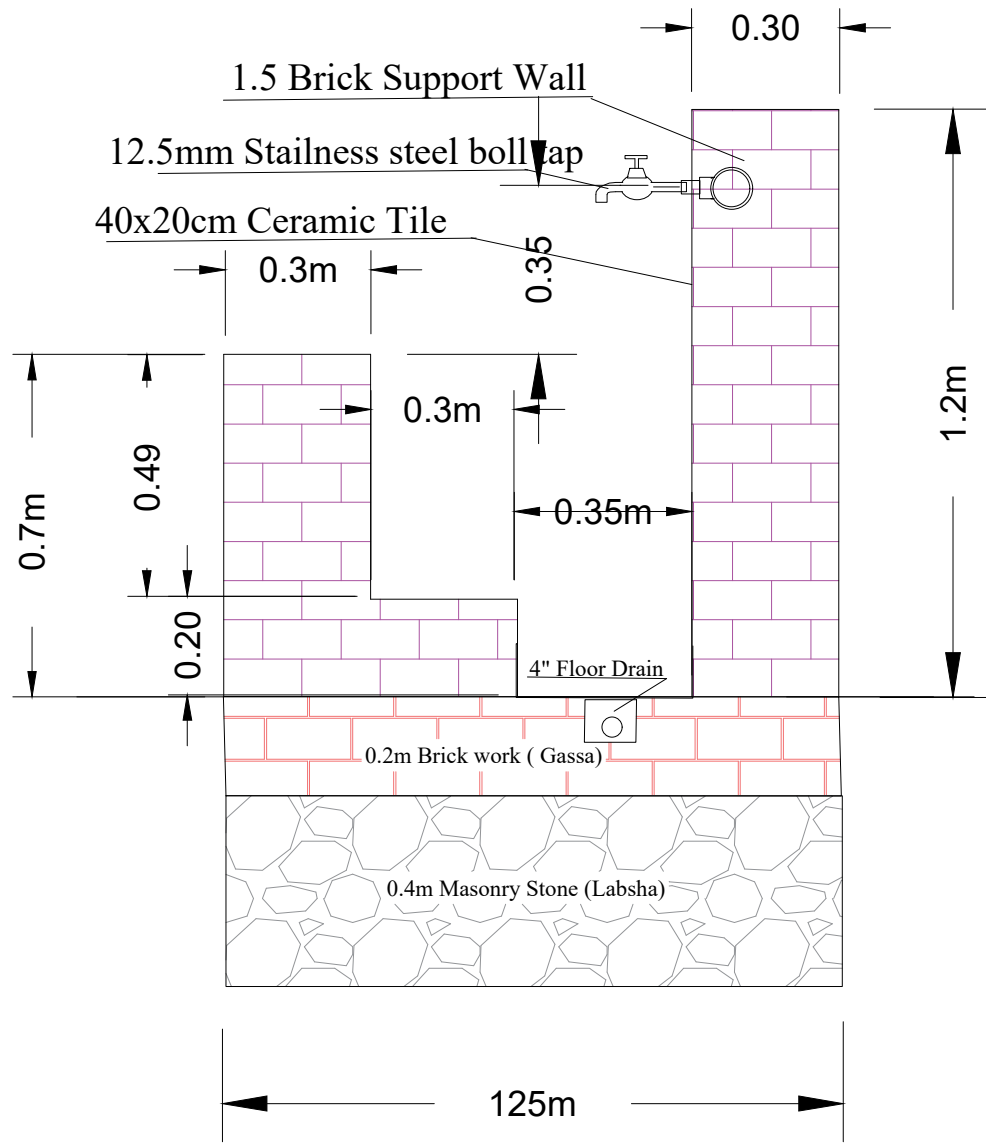
Reviewed by : Eng. Mohamed I. Khalil IOM

Approved by.: Eng. FATHI MOHAMMED IOM

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| Drawing Titel. | Ablution Plan Details for Rabak Hospital | SHEET NO. 05 |
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Section 3-3 and Sand Trab Details

D10



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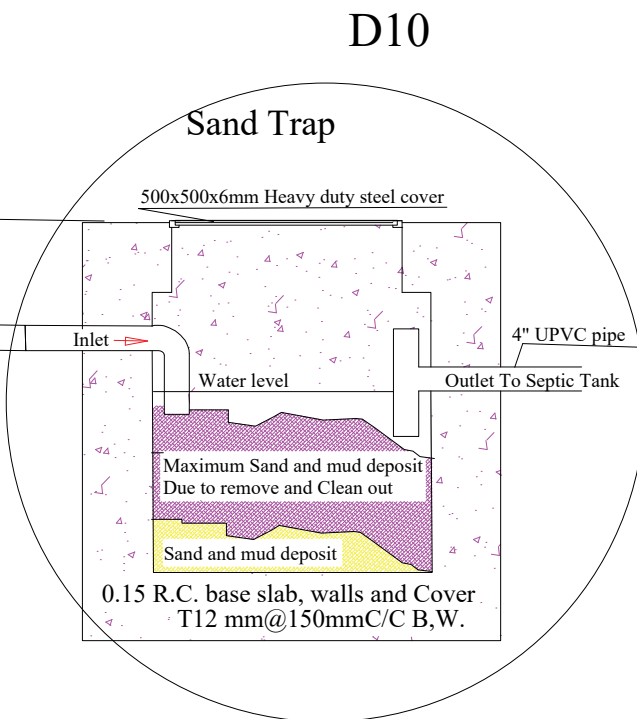
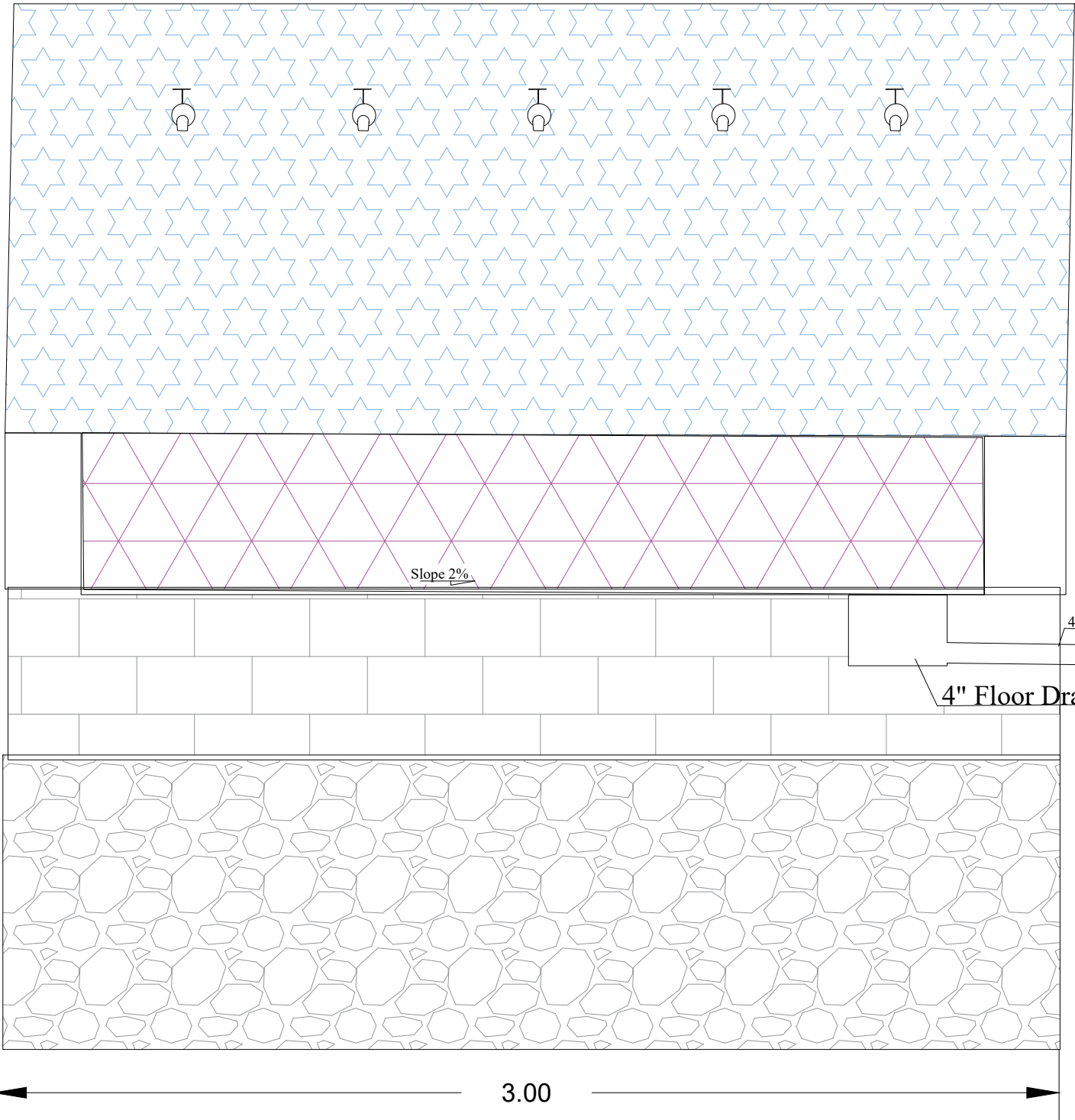
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| Checked by :                                                         |  |  |                 |
| Reviewed by : Eng. Mohamed I. Khalil IOM                             |  |  |                 |
| Approved by: Eng. FATHI MOHAMMED IOM                                 |  |  |                 |
| Drawing Titel.<br>Ablution Section 1-1 Details<br>for Rabak Hospital |  |  | SHEET NO.<br>06 |



Ablution section 4-4 Details



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Reviewed by : Eng. Mohamed I. Khalil IOM

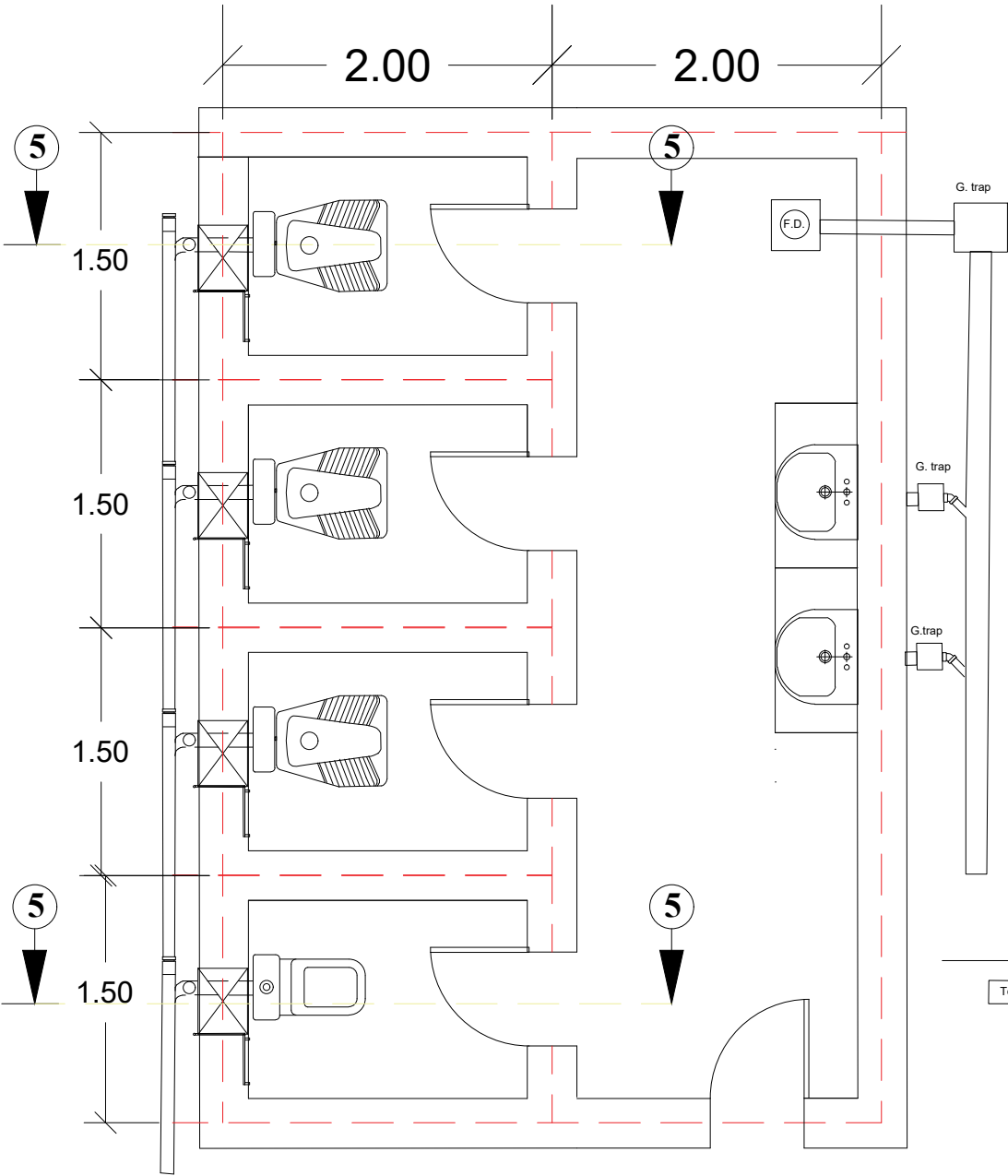
Approved by: Eng. FATHI MOHAMMED IOM

Drawing Titel.  
Ablution section 4-4 Details  
for Rabak Hospital

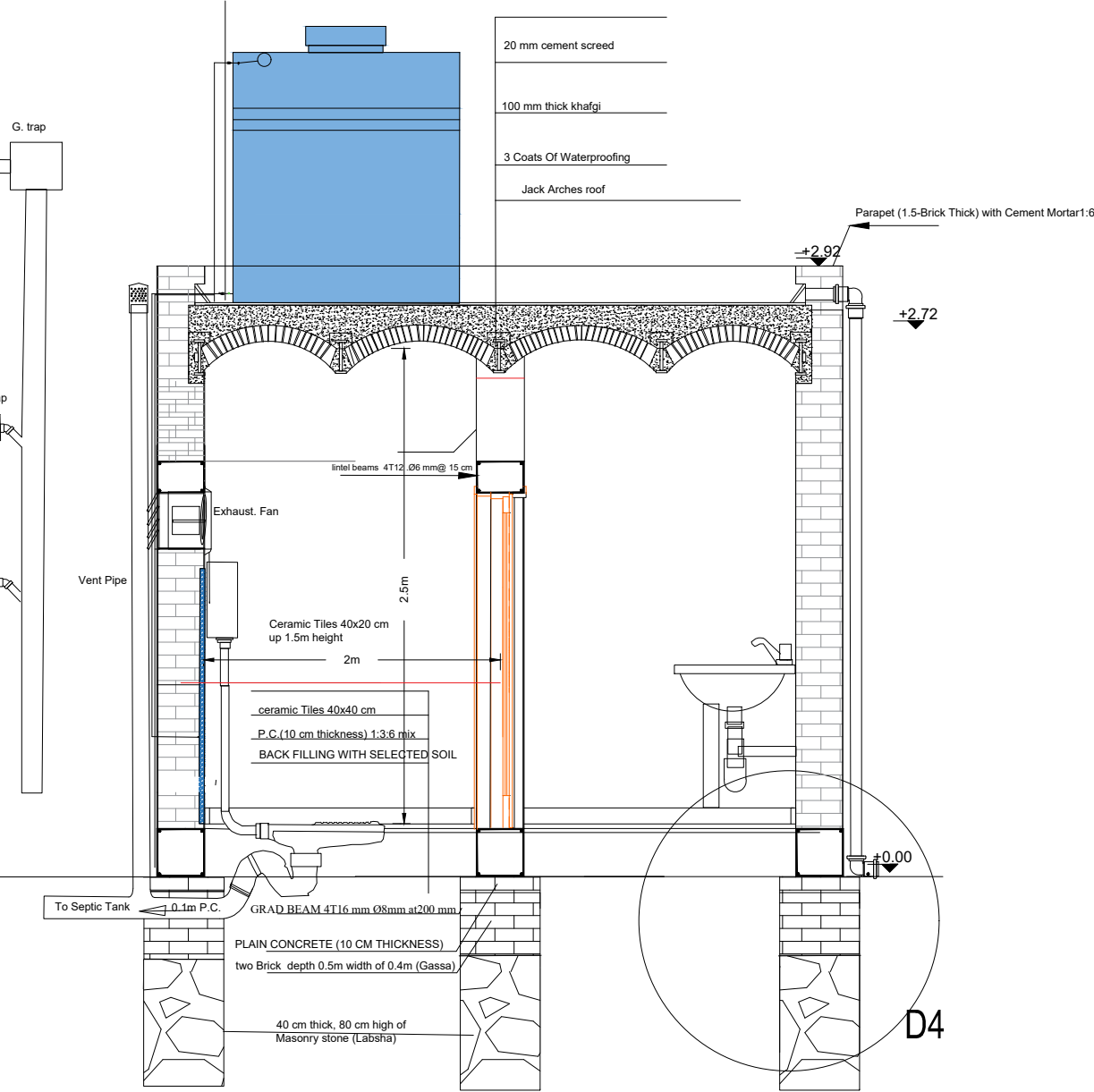
SHEET  
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07



Plan of 4 Toilet Type Details



Section5-5 for Arabic Toilet Type Details



Note

|  |                    |
|--|--------------------|
|  | Existing Structure |
|  | New Structure      |

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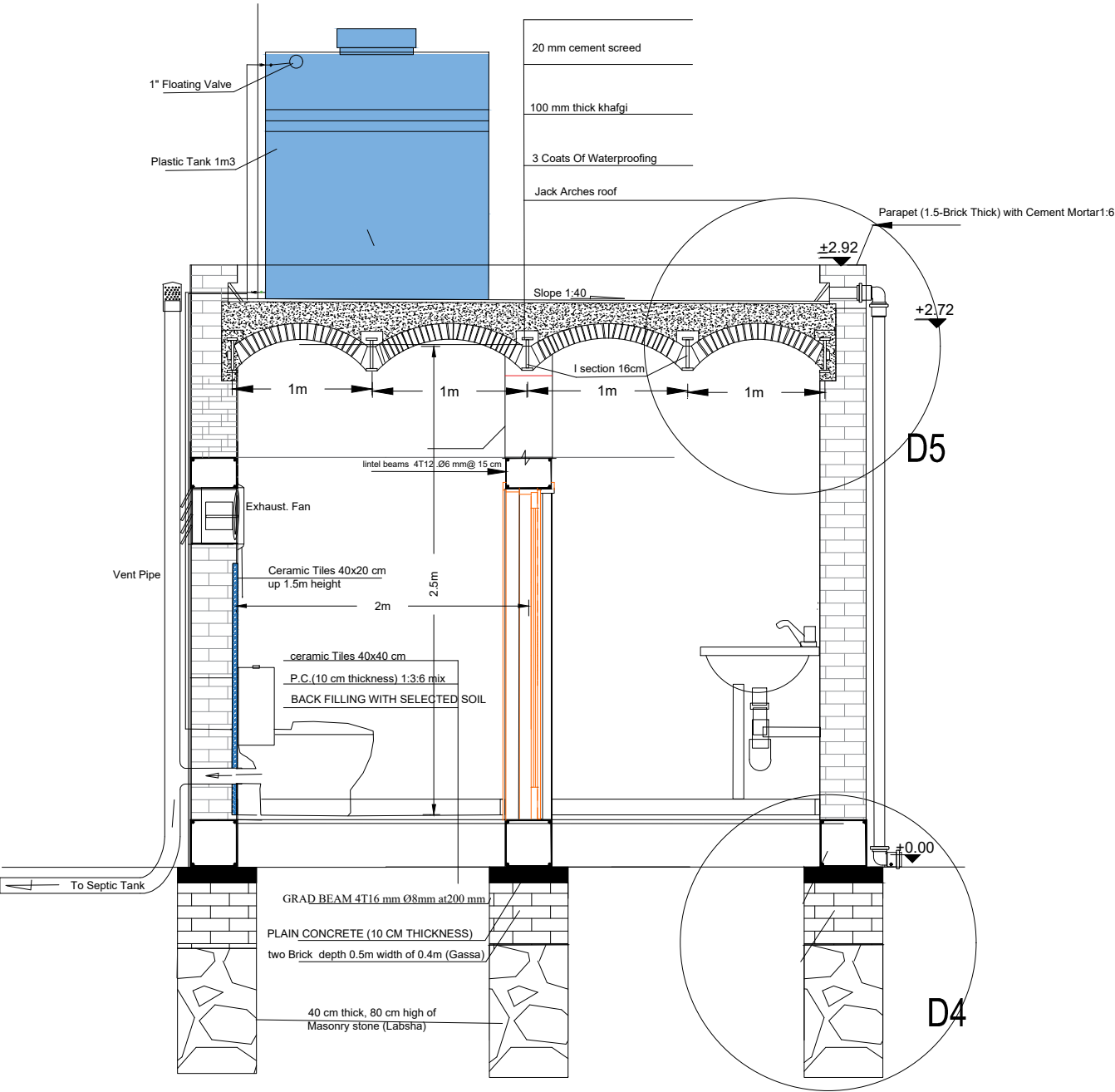


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| Designed by.                         |                                                              |
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| Reviewed by : Eng. Mohamed I. Khalil | IOM                                                          |
| Approved by: Eng. FATHI MOHAMMED     | IOM                                                          |
| Drawing Titel.                       | Four Toilets PLAN and SECTION 5-5 Details for Rabak Hospital |
| SHEET NO.                            | 08                                                           |

Section5-5 for Arabic Toilet Type Details

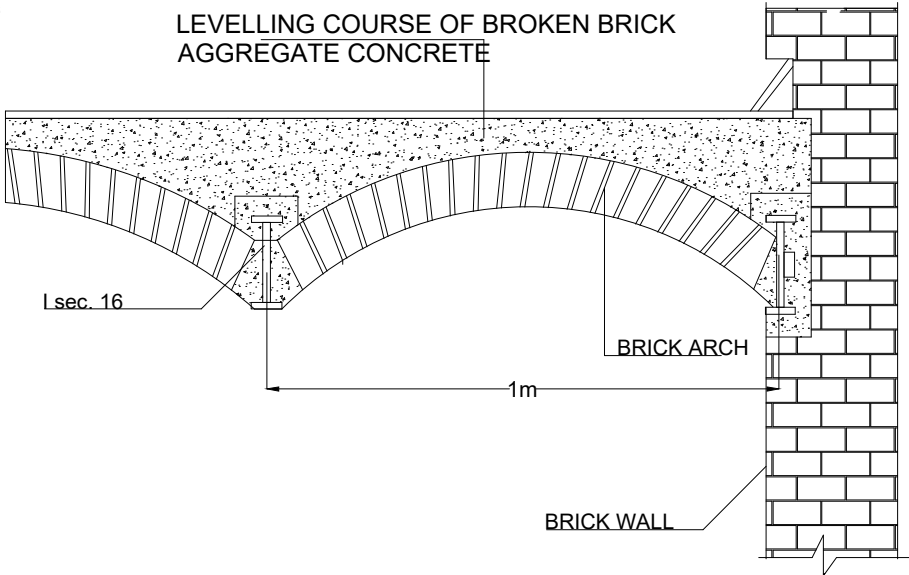


Note

|  |                    |
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|  | Existing Structure |
|  | New Structure      |

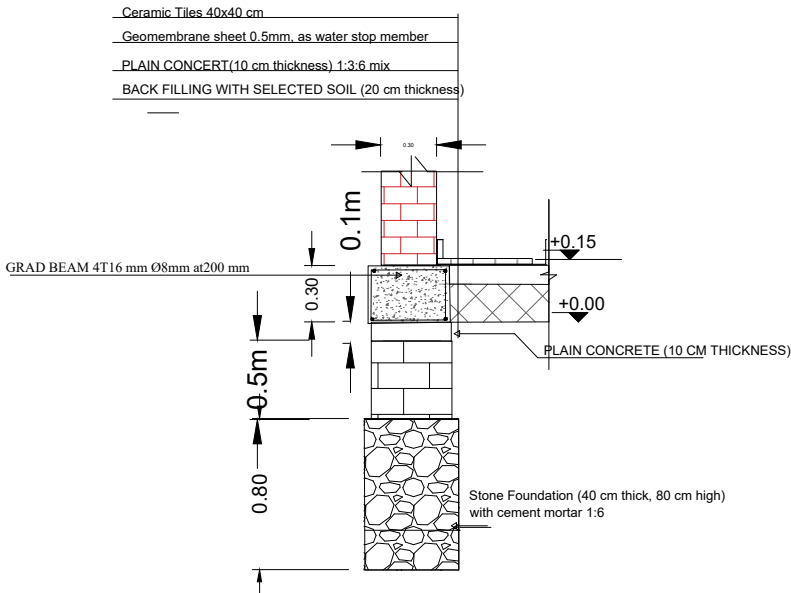
DETAILS OF JACK ARCH ROOFING SYSTEM

D5



FOUNDATION DETAILS SECTION 6-6

D4



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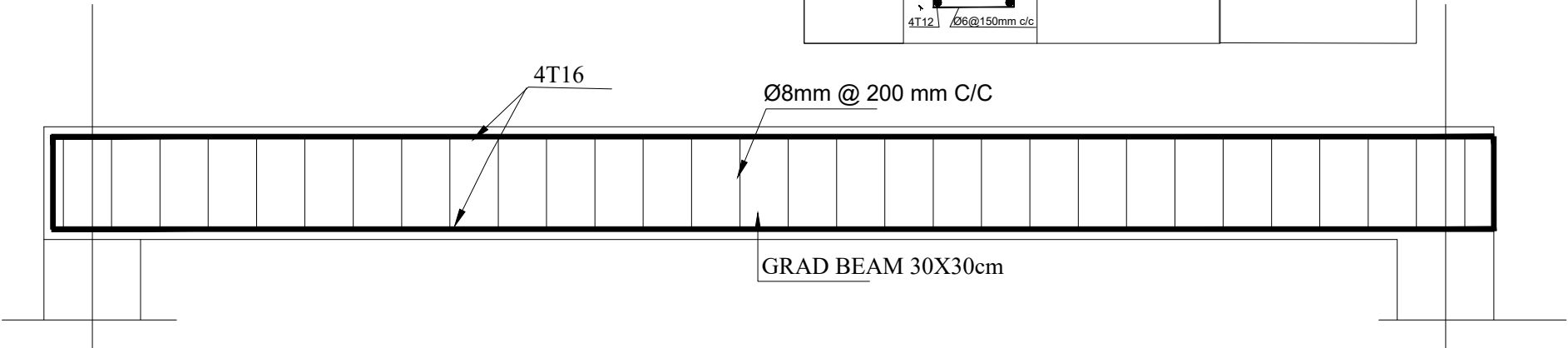
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| Designed by. :                                             |       |              |          |
| Checked by :                                               |       |              |          |
| Reviewed by : Eng. Mohamed I. Khalil IOM                   |       |              |          |
| Approved by: Eng. FATHI MOHAMMED IOM                       |       |              |          |
| Drawing Titel.                                             |       | SHEET<br>NO. |          |
| Four Toilets SECTION 6-6 and Details<br>for Rabak Hospital |       |              |          |
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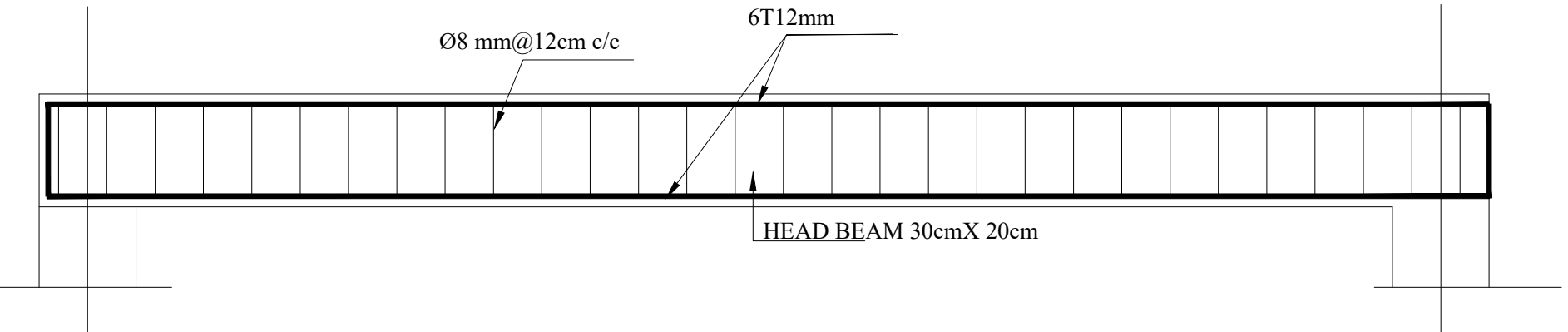
Notes :

- 1 - Yeild Strength For Steel  $F_y = 410 \text{ N/mm}$  .
- 2 - Compressive Crushing Strength For Concrete  $F_{cu} = 35 \text{ N/mm}$  .
- 3 - Cover For Main Reinf. = 30 mm - 25mm.
- 4 - All The Spacings between bars in mms .
- 5 - Lap Length of Reinf. in Tension & Compression= $55 \times \text{Diameter}$  .

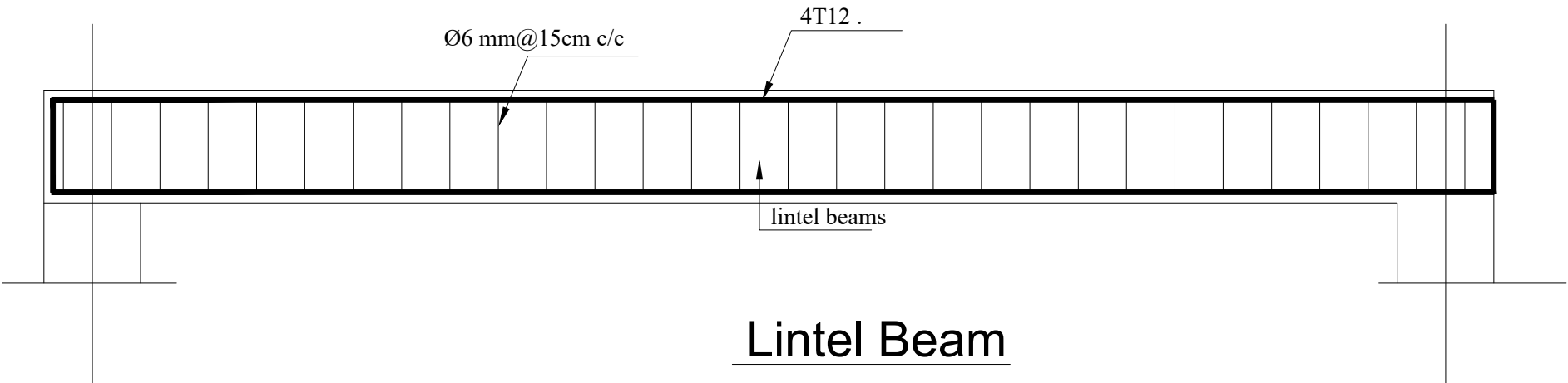
| BEAM DETAILS TABLE |        |                   |                         |
|--------------------|--------|-------------------|-------------------------|
| LEVEL<br>TYPE      | DETAIL | LEVEL             | TOP & BOTTOM COVER      |
| Grade Beam         |        | FROM 0.00 TO 0.30 | Top 30mm<br>Bottom 30mm |
| Head Beam          |        | FROM 2.80 TO 3.00 | Top 25mm<br>Bottom 25mm |
| Lintel Beam        |        | FROM 2.10 TO 2.30 | Top 25mm<br>Bottom 25mm |



GRAD BEAM



Head Beam



Lintel Beam

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| Designed by.                                                                     |       |             |              |
| Checked by                                                                       |       |             |              |
| Reviewed by : Eng. Mohamed I. Khalil IOM                                         |       |             |              |
| Approved by: Eng. FATHI MOHAMMED IOM                                             |       |             |              |
| Drawing Titel.                                                                   |       |             |              |
| BEAM SHEET (CROSS SECTION AND DETAILS) FOR FOUR TOILETS ROOMS FOR RABAK HOSPITAL |       |             | SHEET NO. 10 |

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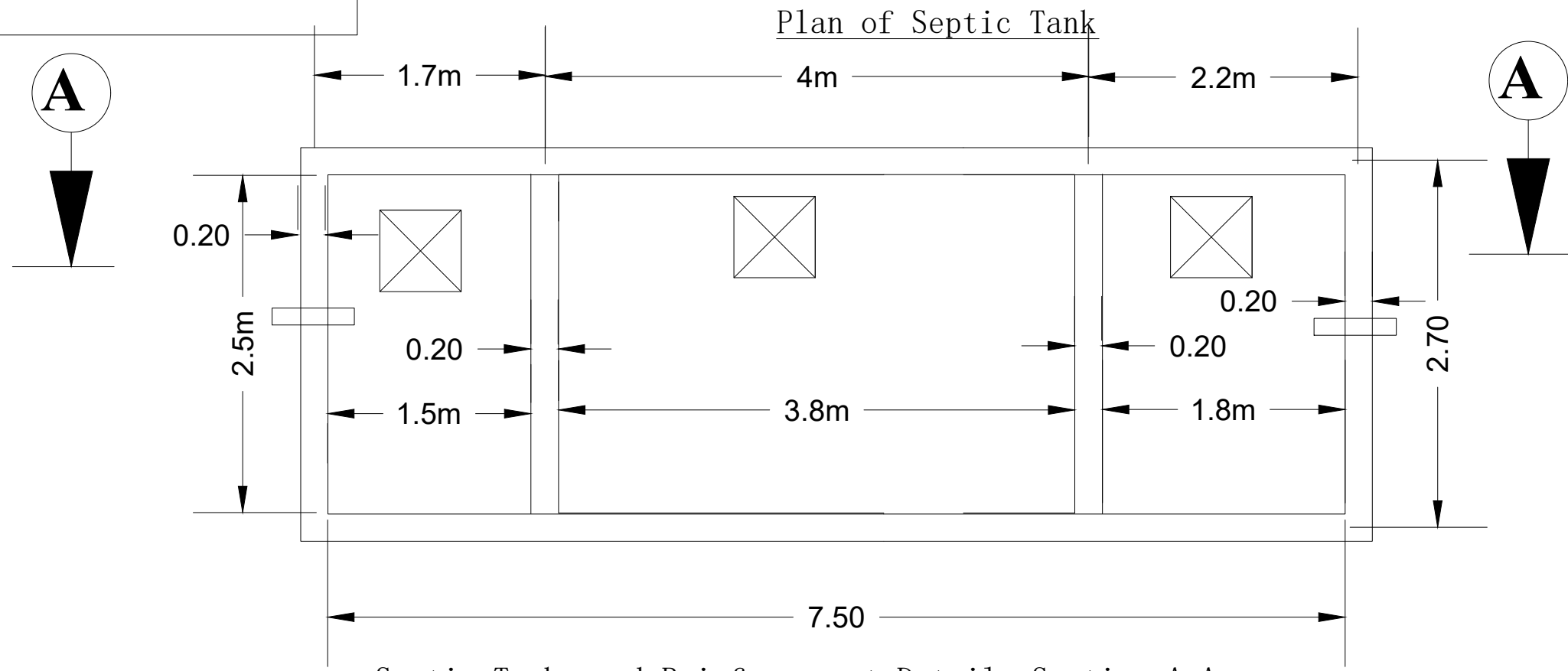
Reviewed by : Eng. Mohamed I. Khalil IOM

Approved by: Eng. FATHI MOHAMMED IOM

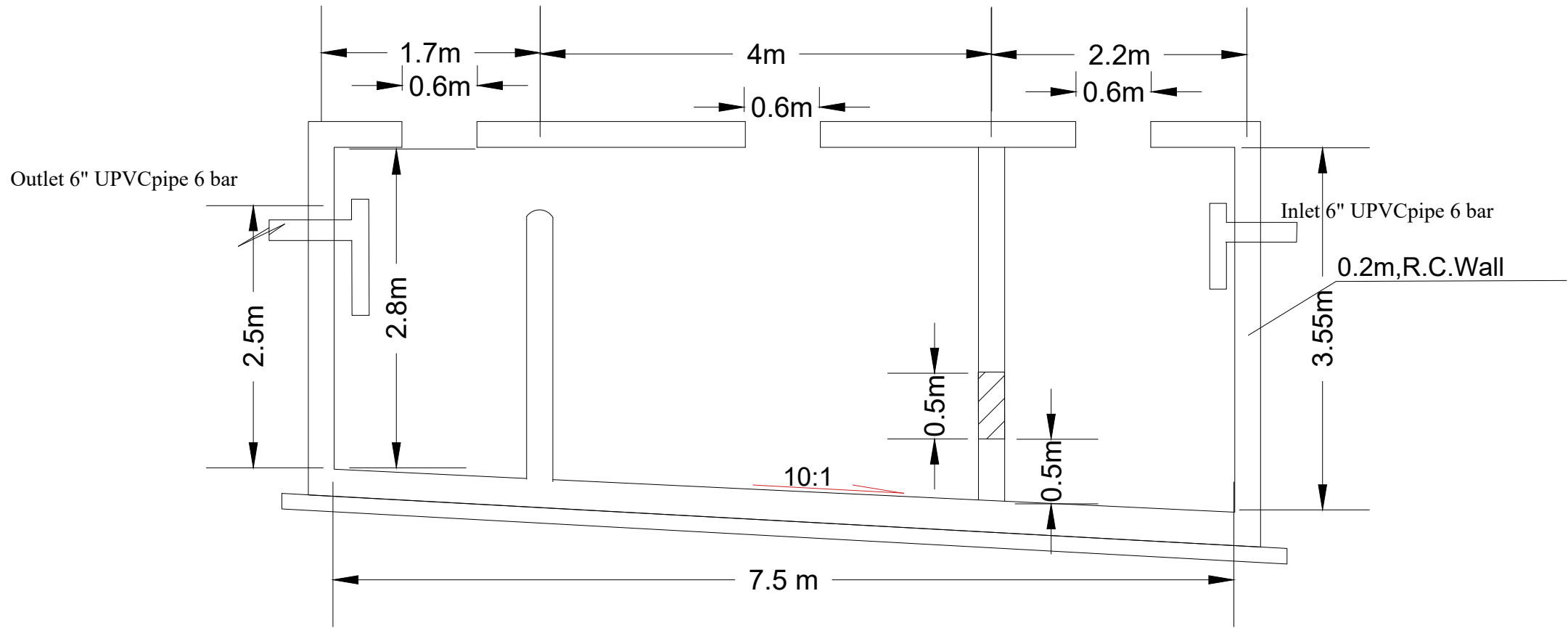
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| Drawing Titel.                                     |  |
| Plan and Section of Septic Tank for Rabak Hospital |  |

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| 11        |  |

PLAN OF SEPTIC TANK



Septic Tank and Reinforcement Details Section A-A



PLAN OF SEPTIC TANK

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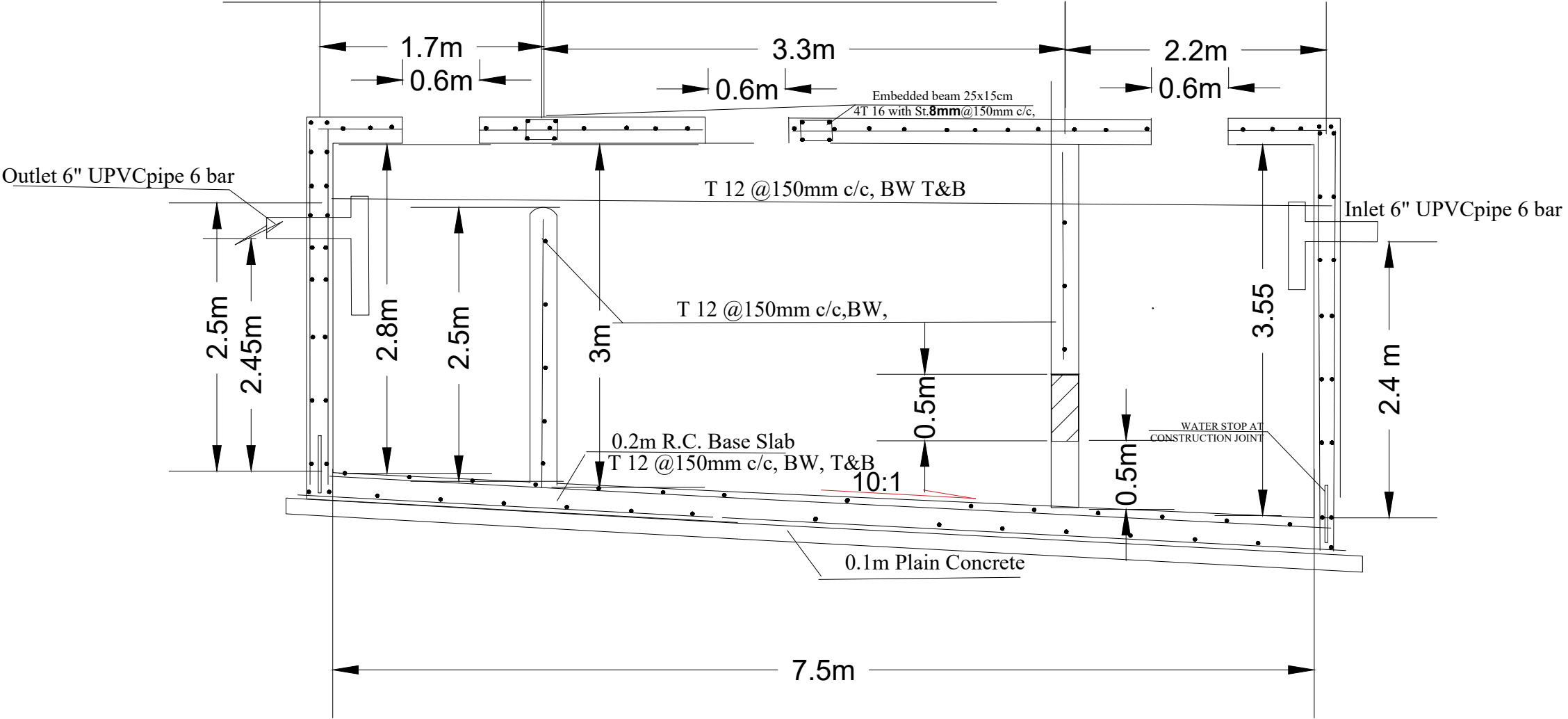
Checked by :

Reviewed by : Eng. Mohamed I. Khalil IOM

Approved by: Eng. FATHI MOHAMMED IOM

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| Drawing Titel. | SEPTIC Tank section A-A Reinforcement Details for Rabak Hospital | SHEET NO. 12 |
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SEPTIC Tank section A-A Reinforcement Details



Notes :

- 1 - The Thickness of the Base Plate = 400 mm
- 1 - The Thickness of the Slab & Walls = 300 mm
- 2 - Yeild Strength For Steel  $F_y = 410 \text{ N/mm}^2$  .
- 3 - Compressive Crushing Strength For Concrete  $F_{cu} = 35 \text{ N/mm}^2$  .
- 4 - Cover For Main Reinf = 50 mm.
- 5 - All The Spacings between bars in mms .
- 6 - Lap Length of Reinf. in Tension & Compression=55 x Diameter .