PROCUREMENT OF

CONSTRUCTION WORKS FOR THE PROPOSED KIBERA INVESTMENT DELIVERING SAFE WATER (K.I.D.S.) PROJECT

CONTRACT NO.: SHOFCO-KIBRA-LOT2-2022

VOLUME IV: BOOK OF DRAWINGS

JULY 2022
<table>
<thead>
<tr>
<th>PAGE</th>
<th>DRAWING NUMBER</th>
<th>DESCRIPTION</th>
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<td>STANDARD WATER KIOSK TYPE 1</td>
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PIPELINE NETWORK
1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read off and not scaled.
3. All dimensions to be read and confirmed before construction begins and any discrepancy reported to Engineer.

NOTES:

CLIENT:
SHINING HOPE FOR COMMUNITIES (SHOFCO)

PROJECT:
KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT
WATER SUPPLY PROJECT IN KIBRA INFORMAL SETTLEMENT

KEY:
PIPELINE

DRAWING DETAILS:
JUNE 2022

LAYOUT - LINDI & LAINI SABA DISTRIBUTION PIPELINE

CLIENT:
SHOFCO

ENGINEER:
M.K.
M.K.

As Shown

PROJECT:
KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT
WATER SUPPLY PROJECT IN KIBRA INFORMAL SETTLEMENT

NOTES:

1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read off and not scaled.
3. All dimensions to be read and confirmed before construction begins and any discrepancy reported to Engineer.
NOTES:
1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read off and not scaled.
3. All dimensions to be read and confirmed before construction begins and any discrepancy reported to Engineer.
LAINI SABA NETWORK
LINDI NETWORK
MAKINA NETWORK
NOTES:
1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read and confirmed before construction begins and any discrepancy reported to Engineer.
3. All hatches in valve shown as size level.

CLIENT:
SHINING HOPE FOR COMMUNITIES (SHOFCO)

PROJECT:
KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT
WATER SUPPLY PROJECT IN KIBRA INFORMAL SETTLEMENT

DRAWN/BUILT
BRANCH TO ELITE VISIONARY

MAPPING DETAILS
Designed by: SHOFCO/KBR/00
Drawn by: SHOFCO/KBR/00

Sheet No: 1 of 1
Drawing No: SHOFCO/KBR/00-1

19
NOTES:
1. All dimensions are in millimeters unless specified otherwise.
2. All references to be read and confirmed before construction begins and any discrepancy reported to Engineer.
3. All levels are in meters above sea level.

CLIENT
SHOFCO/KBR/00

PROJECT
KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT
WATER SUPPLY PROJECT IN KIBRA INFORMAL SETTLEMENT

ENGINEER

DRAWING TITLE:
MAKINA TANK - CALVARY

DESIGNER:

DRAWN:

CHECKED:

REV.

DATE:
JUNE 2013

SHEET No.: 2 of 2
DRAWING No.: SHOFCO/KBR/004-4
SUBRA NETWORK
Guy wire to steel plate connection

305 x 165 x 40 kg/m UB

400 x 400 x 10 mm thick base plate
4 No. 20 mm Ø holding down
RAG bolts 300 mm long

20 mm thick welded anchors

Brooklets at 1 m intervals

Clamp

Stiffener

Shackle

GUY WIRE-STEEL PLATE CONNECTION DETAIL

BASE PLATE DETAIL

Scale 1 : 20

NOTES:
1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read and confirmed before construction begins and any amendments required to.Engineer in site.
3. Furcation depths to be determined on site but to be agreed and approved by Engineer on site.
4. All anchors are to be class 232.
5. All steel reinforcement to BS4449.
6. Framework to be fire proofed.
7. Drain unit foundation and drives to be extended at least 1000 mm from concrete.
8. Foundation blocks are to be cured with approved curing chemical with at least 10 week guarantee.
9. All works are subject to Engineer's approval before use.

CLIENT

SHOFCO

SHINING HOPE FOR COMMUNITIES (SHOFCO)

PROJECT:

KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT

WATER SUPPLY PROJECT IN KIBRA INFORMAL SETTLEMENT

ENGINEER:

hPS

Professional Consultants

DRAWING TITLE

SUPPORT COLUMNS

DRAWING NUMBER

Sheet No: 1 of 1

DRAWING NO: SHOFCO/KBR/009

Scale: 1:20
ELEVATED WATER TANKS
NOTES:

1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read and confirmed before construction begins and any changes reported to engineer.
3. Foundation depth to be determined on site for final analysis and approved by engineer on site.
4. All working to be done in 2005.
5. All materials and workmanship to be Grade A.
6. All work to be approved before final inspection.
7. All materials to be ordered prior to final inspection.
8. Apply one coat of primer on all materials.
9. Apply two coats of blue aluminium paint or as per specifications.
10. All work to be done in 2005.
11. All work to be done in one coat.
12. All work to be done in two coats.
13. All work to be done in one coat.
14. All work to be done in two coats.

CLIENT:

SHOFCO

PROJECT:

KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT

WATER SUPPLY PROJECT IN KIBRA INFORMAL SETTLEMENT

ENGINEER:

ahPS

DRAWING TITLE:

ELEVATED 40m³ STEEL TANK - MARINA & LINDI

DRAWING DETAILS

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DRAWING No.: SHOFCO/COMB/001-1
WATER KIOSK
NOTES:
1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read and confirmed before construction starts and any discrepancy reported to Engineer.
3. Foundation details to be obtained from site and to be executed as per instructions of Engineer.
4. All concrete works to be done using 25/30 mix.
5. All reinforcement to be in accordance with IS 432.
6. Formwork to be tie-wrapped.
7. Frames under foundations and drainages to be wall-constructed in at least 150mm thick beams.
8. Foundation trenches and concrete slabs to be treated with approved antiseptic chemical with at least 10 year guarantees.
9. All materials are subject to Engineer’s approval before use.

Cliente: SHOFCO
PROYECTO:
KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT
WATER SUPPLY PROJECT IN KIBRA INFORMAL SETTLEMENT

DISEÑO:
STANDARD WATER KIDS TYPE 1 (FRONT ELEVATION)

DISEÑO DE DIBUJO: Designed by: M.N.
DIBUJO: Drawn by: M.N.
REVISADO POR: Approved by: D.N., K.D.,

Escala: Date: APRIL 2015
Hoja: Sheet No: 2 of 16
Nº de Dibujo: SHOFCO WP2015/028
Steel frame surrounding tank to prevent from theft to detail

DN25 GI overflow pipe fixed as approved

Water Drip to detail

50x100x3mm steel RHS spaced at 300 cm c/c to form a square platform of 2000x2000mm

1000-3000 litre capacity plastic water tank

100x100x3mm steel square sections fixed to columns.
100mm thick R.C slab with bituminous felt cover laid to fall minimum gradient 1:5

100mm thick Concrete Class 20/20 Slab on Fabric Mesh Ref. A42 on 100G 3:1 on 50mm thick murram/muck dust bedding on 225mm thick well-compacted hand-packed hardcore

800x600x50mm P.C.C paving slab on stabilized and compacted sand base

200mm thick sub-base on 600x200 R.C strip footing to Engineer’s detail

SECTION X-X
Scale 1:25(A3)

WATER Drip DETAIL
Scale 1:25

NOTES:
1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read and confirmed before construction begins and any discrepancy reported to Engineer.
3. Foundation depths to be confirmed by geotechnical report and approved by Engineer or site.
4. All concrete works to be class 20/20.
5. All steel reinforcement to be BS4449.
6. Reinforcement to be labelled.
7. Drainage and pipework to be approved by the Engineer.
8. Foundation trenches and concrete works to be signed off by approved and licensed cheerful with at least 10 years’ experience.
9. All materials and work to be certified by the Engineer before acceptance.

CLIENT
SHOOFING HOPE FOR COMMUNITIES (SHOFCO)

PROJECT:
KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT
WATER SUPPLY PROJECT IN KIBERA INFORMAL SETTLEMENT

ENGINEER
HPS Professional Consultants

DRAWING TITLE
STANDARD WATER KIDS (SECTION X-X)

DRAWING DETAILS
Designed by
Drawn by
Reviewed by
Approved by

Scale
Date
Sheet No
Drawing No
49
NOTES:
1. All dimensions are in millimeters unless otherwise stated.
2. All dimensions to be checked and confirmed under construction stages and any discrepancies reported to Engineer.
3. Foundation details to be determined on site by Engineer and approved by Engineer in writing.
4. All concrete work to be done by 2031.
5. All materials to be delivered to site.
6. Forklift to be furnished.
7. Steel used for buildings to be tensioned in at least 12mm thick concrete.
8. Foundation trenches and concrete works to be inspected with approved and certified chemist at least 12 years guarantee.
9. All materials are subject to Engineer's approval at the time of use.
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Length of bar is estimated to be 12,000mm

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Length of bar is estimated to be 12,000mm
### Item 1: Beams

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Length of bar is estimated to be 12,000mm

### Item 2: Slab

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Length of bar is estimated to be 12,000mm

**NOTES:**
1. All dimensions are in mm unless specified otherwise.
2. All dimensions to be read and confirmed before concrete is placed and any discrepancy reported to the engineer.
3. Foundation depth is to be determined on site by the engineer and approved by the engineer in writing.
4. All concrete work to be class 20/25.
5. All backfilling to be 600mm.
6. Foundation trenches and service works to be treated with Portland cement concrete with at least 50 year guarantee.
7. All materials are subject to the Engineer’s approval/issue.
NOTES:
1. All dimensions are in millimeters unless specified otherwise.
2. All dimensions to be read and confirmed before construction.
3. Foundation details to be confirmed on-site and approved by Engineer in-charge.
4. Foundation trenches and concrete works to be treated with approved anti-termite chemical with at least 10 year guarantee.
5. All materials are subject to Engineer's approval before use.
NOTES:
1. All dimensions are in millimetres unless specified otherwise.
2. All dimensions to be read and confirmed before construction begins and any necessary adjustments made.
3. Foundation works to be determined on site but to be hand quarried and approved by Engineer on site.
4. All concrete works to be cube tested.
5. All steel reinforcement to BS4449.
6. Framework to be fire-rated.
7. Pure water to be supplied and all materials to be delivered on site.
8. Foundation works to be finished before work begins.
9. Site hoarding and access works to be requested and approved by Engineer in advance at least 10 days prior.
10. All materials are subject to Engineer's approval before use.

CLIENT
SHARING HOPES FOR COMMUNITIES (SHOFCO)

PROJECT:
KIBERA INVESTMENT DELIVERING SAFE WATER (KIDS) PROJECT
WATER SUPPLY PROJECT IN KIBRA INFORMAL SETTLEMENT

ENGINEER:

DRAWING TITLE:
STANDARD WATER KIOSK TYPE 1 (WINDOW DETAILS)

SIGNATURES:

Drawn by: [Signature]
M.A.

Checked by: [Signature]
M.A.

Approved by: [Signature]
Eng. L. Sálvez

Scale: 1:20
Date: [Date]

As Shown: [Sheet No.]
Sheet No.: 14 of 19

Drawing No.: SHOFCO/KIDS/WATER/1
50 x 25 x 2mm RHS steel vertical member
8000 litres water tank position
50 x 25 x 2mm RHS steel horizontal member at the top
50 x 25 x 2mm RHS steel horizontal member top and bottom
50 x 25 x 2mm RHS steel horizontal member at the top
50 x 25 x 2mm RHS steel vertical member
8000 litres water tank position
50 x 25 x 2mm RHS steel horizontal member

NB the cage to be used on both 8000ltrs and 5000ltrs tanks

STEEL CAGE DETAIL

TOP VIEW

SIDE VIEW X-X