



**TRADEMARK AFRICA**

**PROVISION OF CONSULTANCY SERVICES FOR NEEDS ASSESSMENT, SCOPE DEFINITION AND BILL  
OF QUANTITIES (BOQS) PREPARATIONS FOR A COMMON USER FACILITY AT THE HCD PACK HOUSE  
IN KIBWEZI**

**[ TENDER No.: PRQ20241414]**

**VOLUME 2 OF 3**

**BOOK OF DRAWINGS**

**[JANUARY 2025]**



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**ASGL - 001**

# ARCHITECTURAL DRAWINGS

**Client:**



**TRADEMARK AFRICA**

P.O BOX313-00-606

NAIROBI, KENYA.

**Consultant:**



**APEX SYSTEMS CONSULTING GROUP LTD,**

P.O BOX 38900-00100,

NAIROBO, KENYA.

# PROPOSED KIBWEZI WAREHOUSE

ARCHITECTURAL DRAWING LIST		
	DRG No.	DESCRIPTION
1	L(-- )00	DRAWING LIST
2	L(01)01	SITE PLAN
	WAREHOUSE	
3	L(01)02	WAREHOUSE GROUND FLOOR PLAN
4	L(01)03	WAREHOUSE SECTION
5	L(27)01	WAREHOUSE ROOF PLAN
6	L(01)04 - L(01)07	WAREHOUSE ELEVATIONS
	WASHROOM	
7	L(01)08	WASHROOM GROUND FLOOR PLAN
8	L(01)09	WASHROOM SECTION
9	L(01)10 - L(01)13	WASHROOM ELEVATIONS
	GATEHOUSE	
10	L(01)14	GATEHOUSE GROUND FLOOR PLAN
11	L(01)15 - L(01)16	GATEHOUSE ELEVATIONS

Rev.	By	Description	Sign	Date
CONSULTANT				
APEX SYSTEMS Consulting Group Ltd. Gate 1, Makanda Drive Along Lang'ata South Road, Karen P.O. Box 38900-00100, Nairobi GPO Tel:020-2738032/34, Fax:020-2730072. E-MAIL: info@apexsystemscg.com				
CLIENT TRADEMARK AFRICA, 2 <sup>ND</sup> FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O. BOX 313-00606, NAIROBI, KENYA				
DEVELOPMENT PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.				
DRAWING TITLE ARCHITECTURAL DRAWING LIST				
SCALES	DATE	DRAWN	CHECKED	
	17/01/25	FSZ	AMM	
PROJECT NO.	DRAWING NO.		REVISION	
SE/002/2025	SE/002/2025/002		01	

SITE PLAN

L(01)01

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16,159

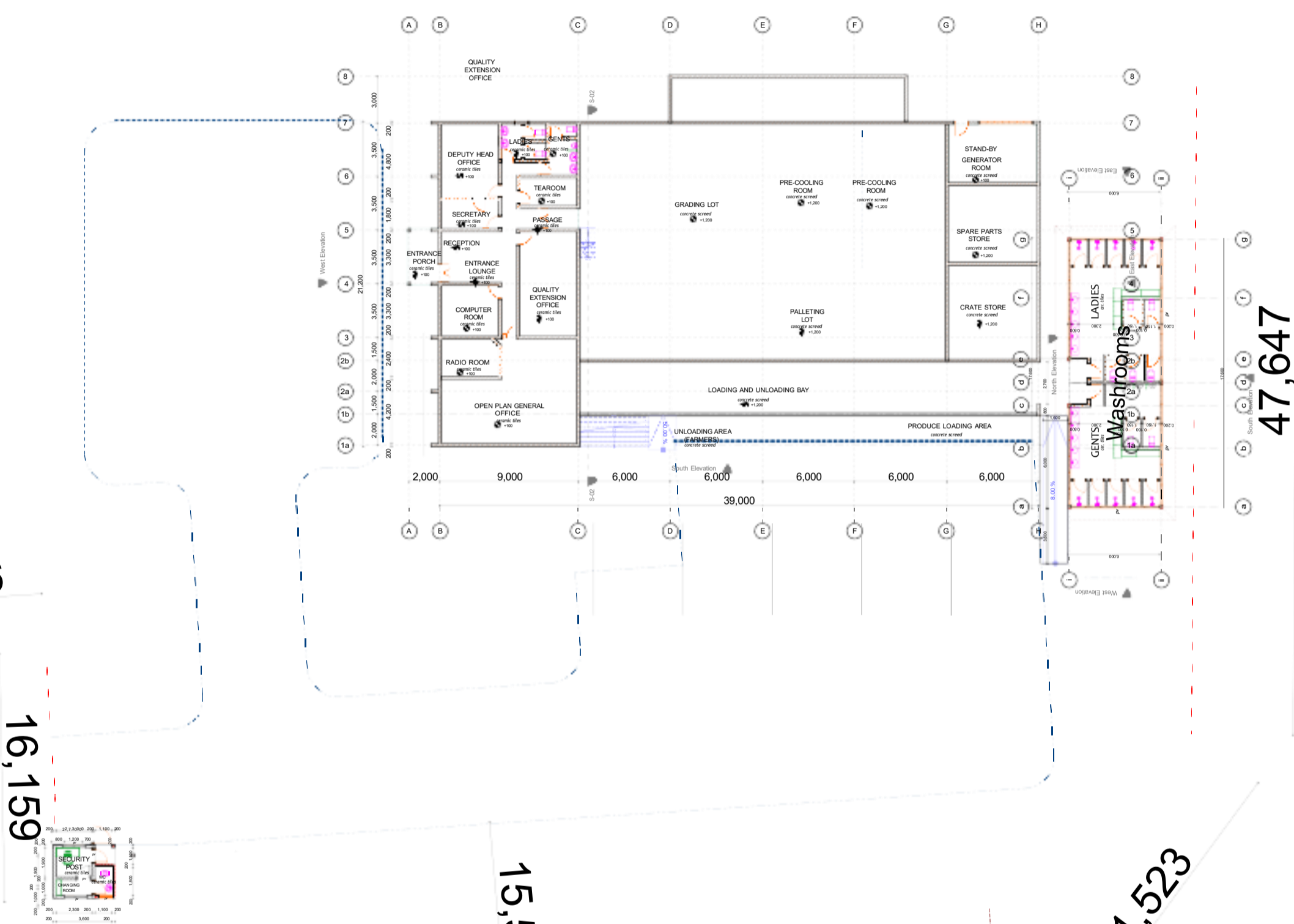
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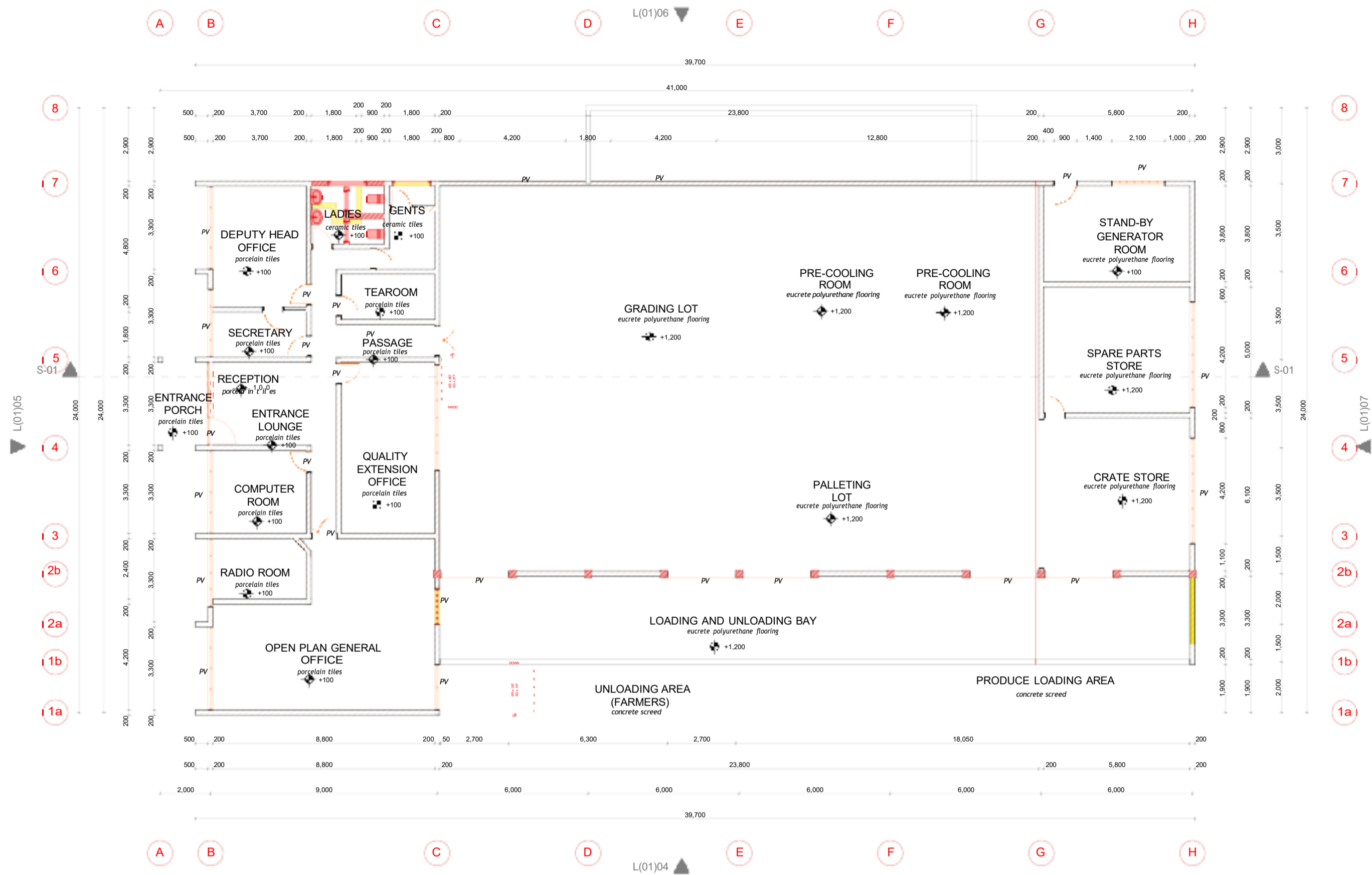
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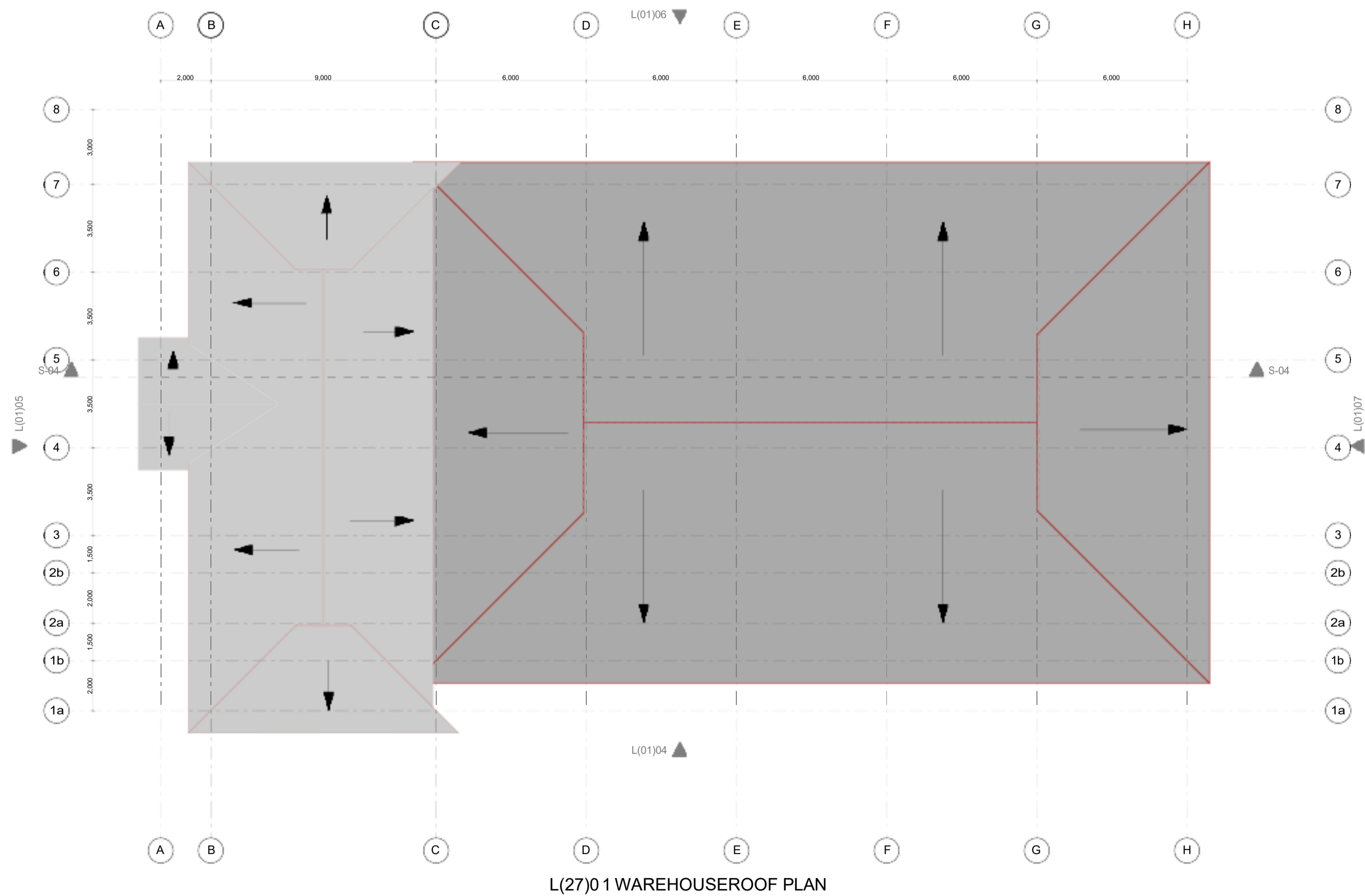
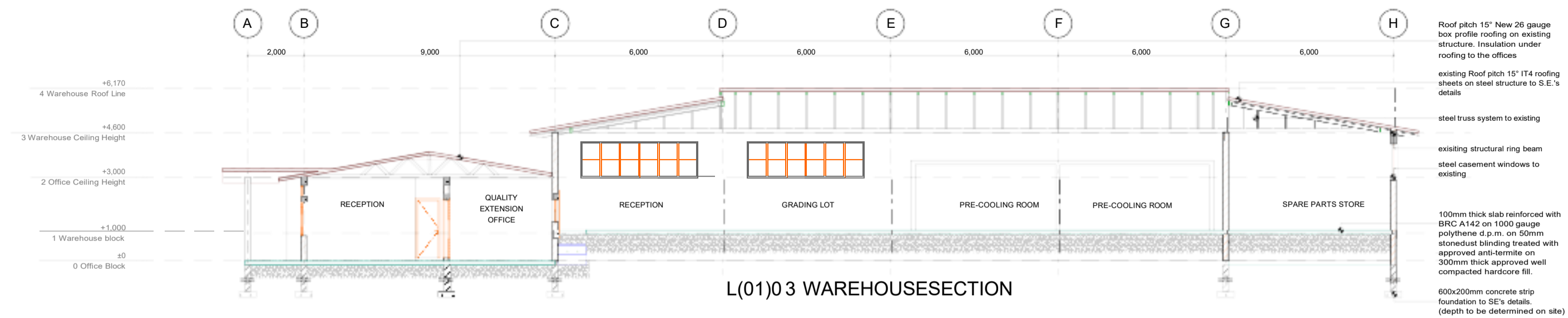
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DEVELOPMENT					
PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.					
DRAWING TITLE					
PROPOSED SITE PLAN					
SCALES		DATE	DRAWN	CHECKED	
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PROJECT NO.		DRAWING NO.		REVISION	
SE/002/2025		SE/002/2025/002		01	



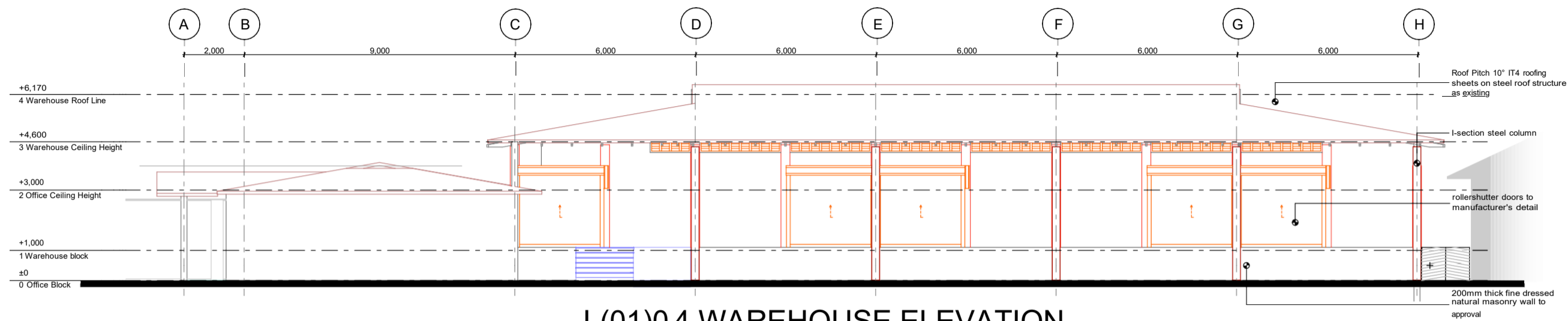
L(01)02 WAREHOUSE GROUND FLOOR PLAN

ASGCL - 005

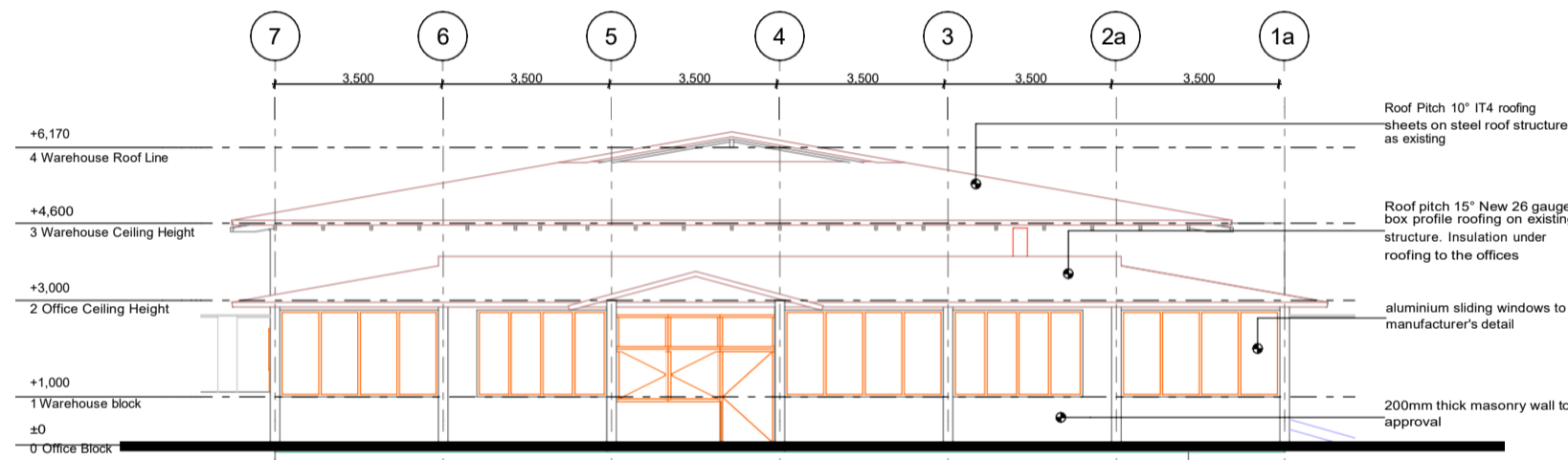
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DEVELOPMENT					
PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.					
DRAWING TITLE					
WAREHOUSE CHANGE PLANS					
SCALES		DATE	DRAWN	CHECKED	
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PROJECT NO.		DRAWING NO.		REVISION	
SE/002/2025		SE/002/2025/002		01	



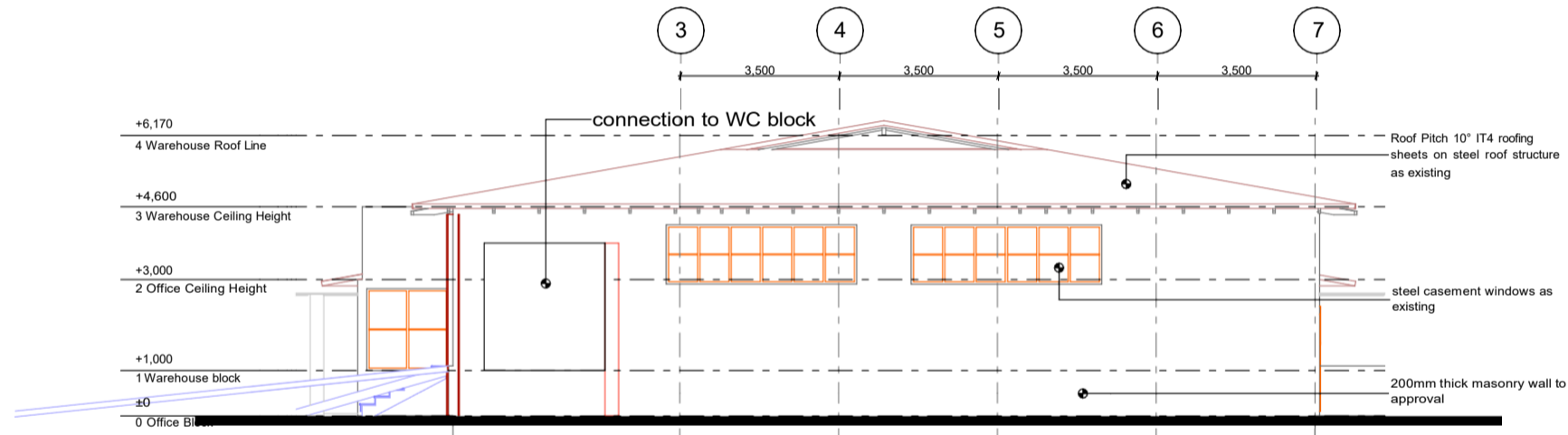
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<u>DEVELOPMENT</u> PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.				
<u>DRAWING TITLE</u> WAREHOUSE ROOF PLAN AND SECTION DRAWINGS				
<u>SCALES</u>	<u>DATE</u>	<u>DRAWN</u>	<u>CHECKED</u>	
1:100	17/01/25	FSZ	AMM	
<u>PROJECT NO.</u>	<u>DRAWING NO.</u>	<u>REVISION</u>		
SE/002/2025	SE/002/2025/002	01		



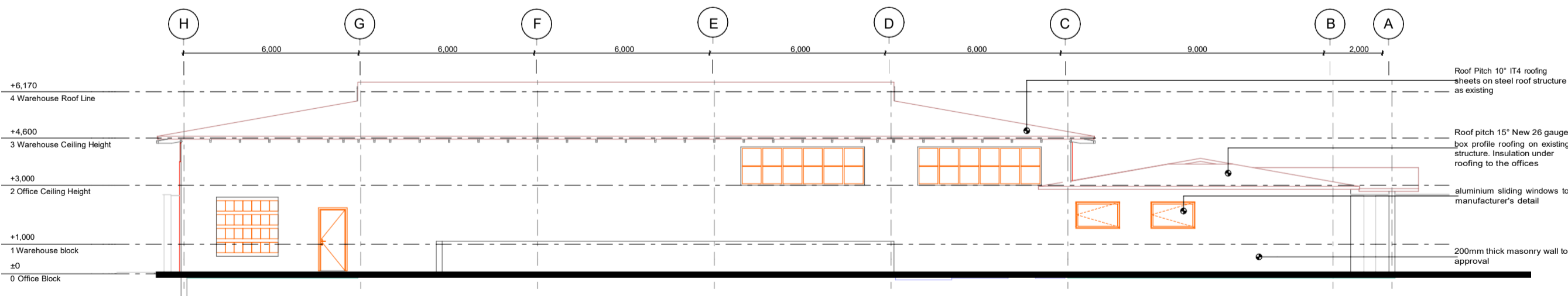
L(01)04 WAREHOUSE ELEVATION



L(01)05 WAREHOUSE ELEVATION

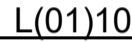
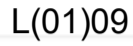


L(01)07 WAREHOUSE ELEVATION



L(01)06 WAREHOUSE ELEVATION

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DEVELOPMENT PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.					
DRAWING TITLE WAREHOUSE ELEVATION DRAWINGS					
SCALES	DATE	DRAWN	CHECKED		
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PROJECT NO.	DRAWING NO.			REVISION	
SE/002/2025	SE/002/2025/002			01	



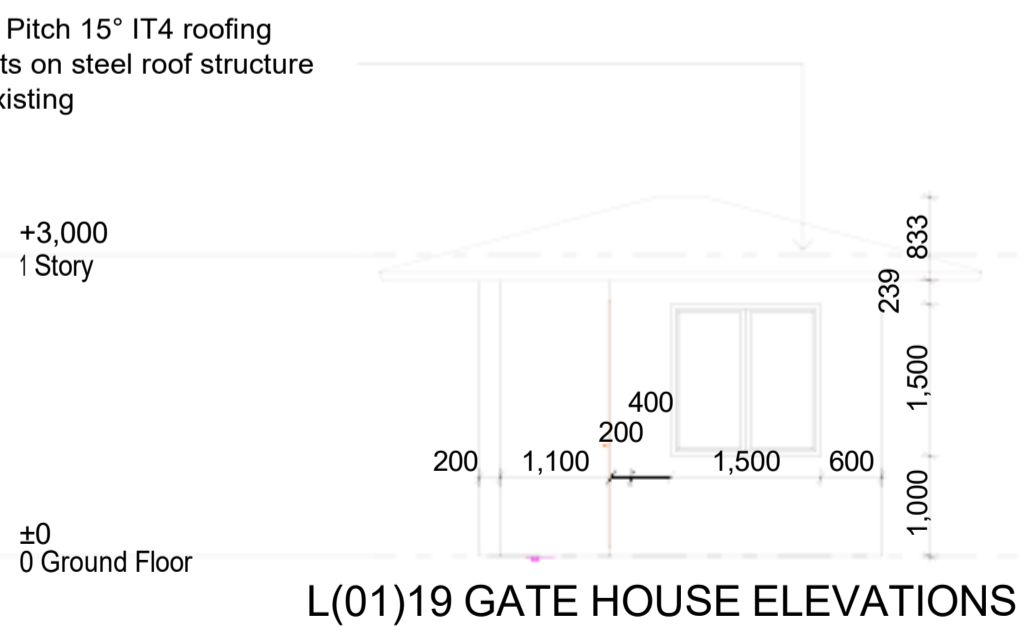
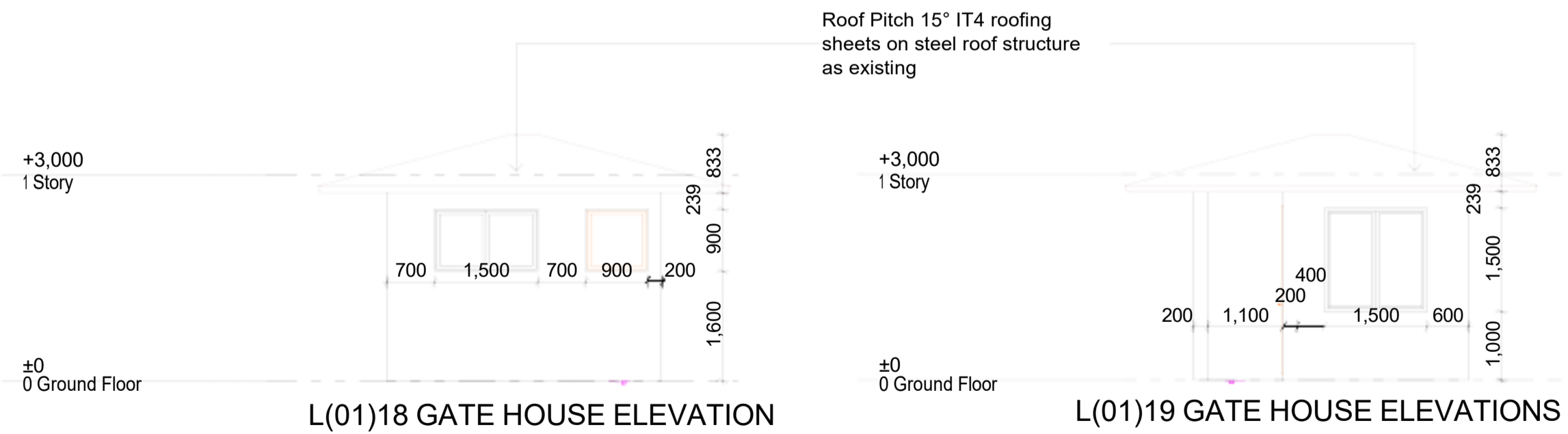
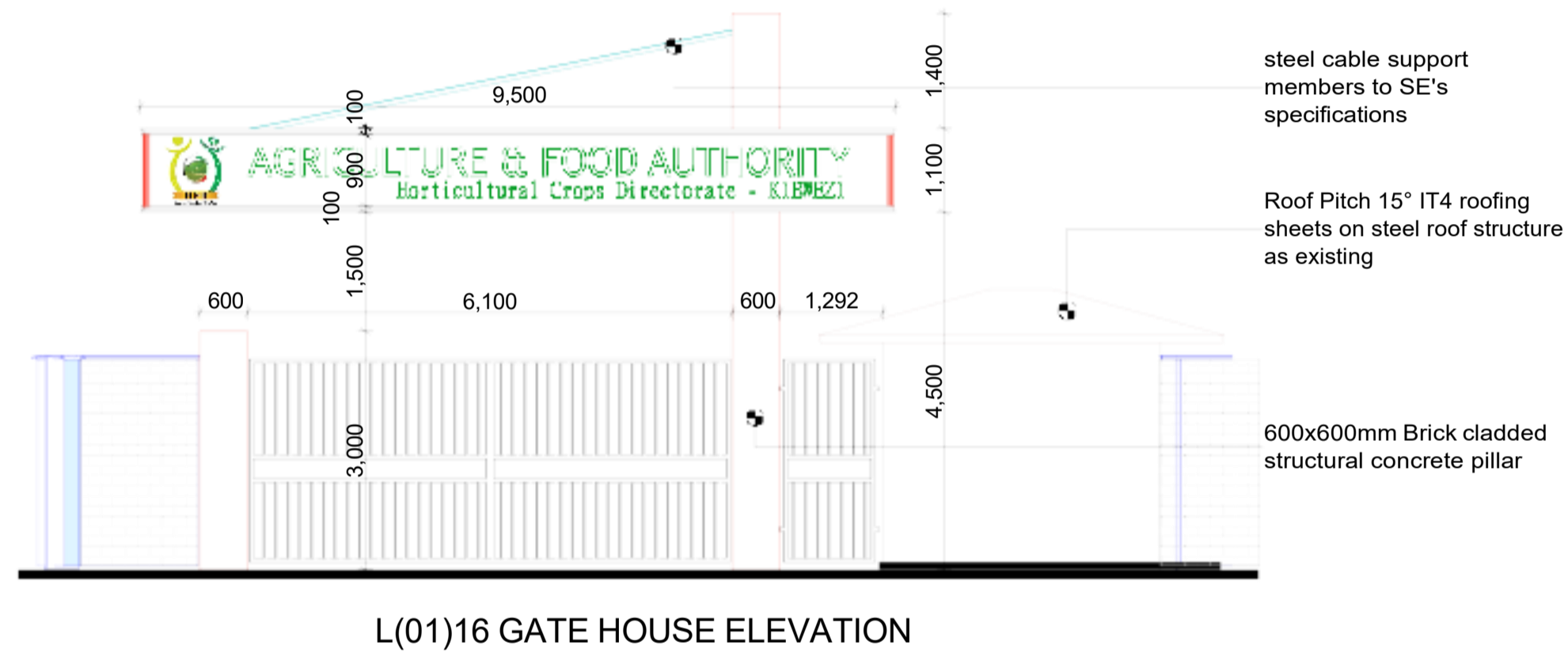
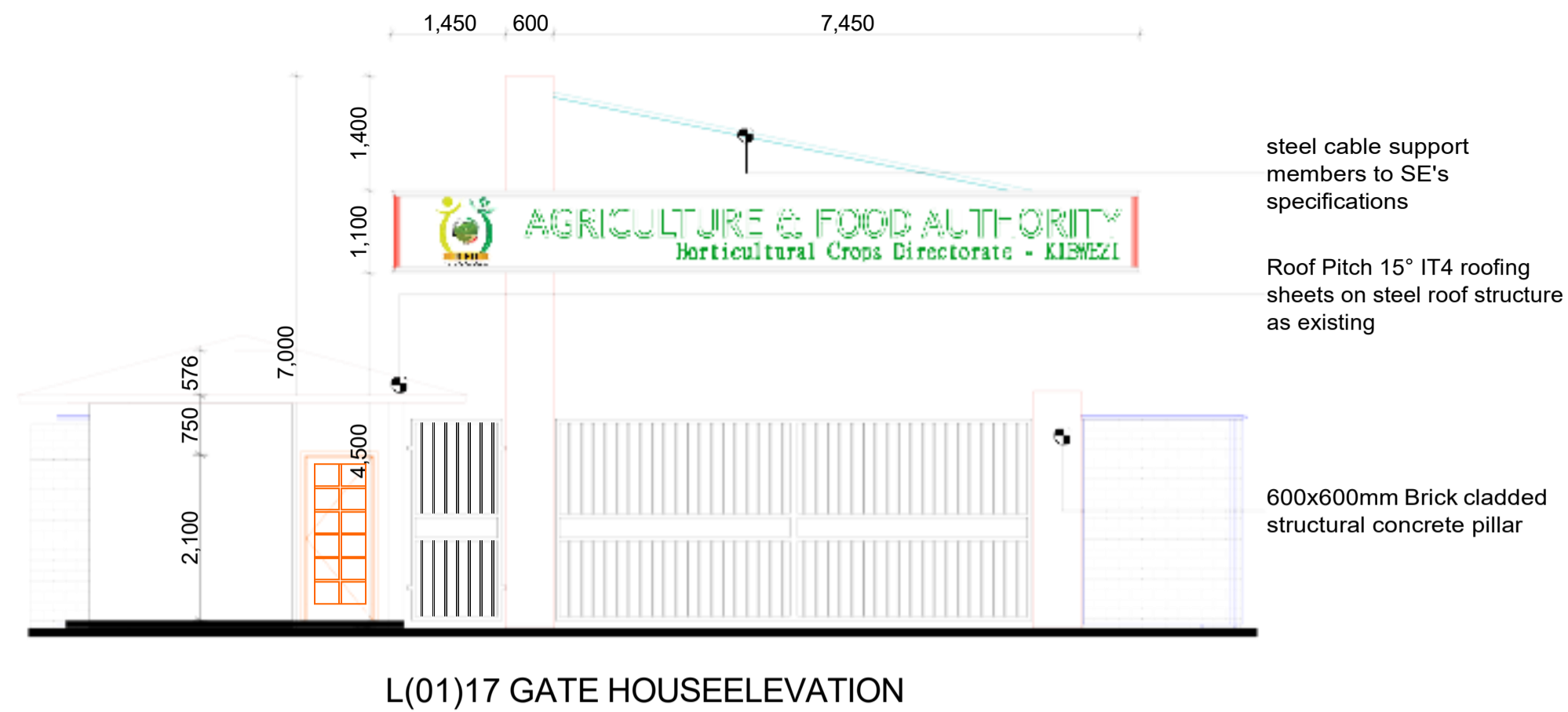
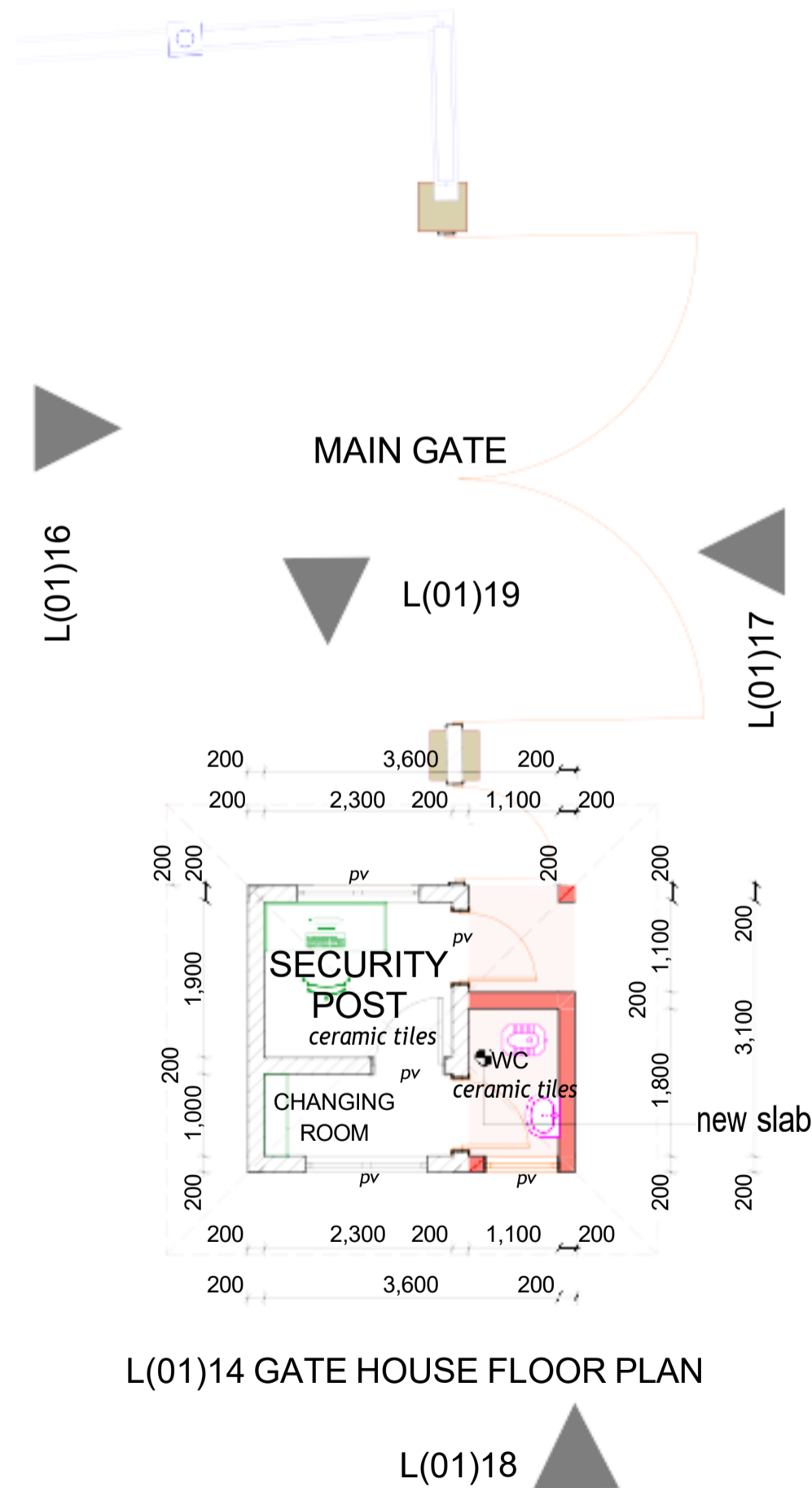
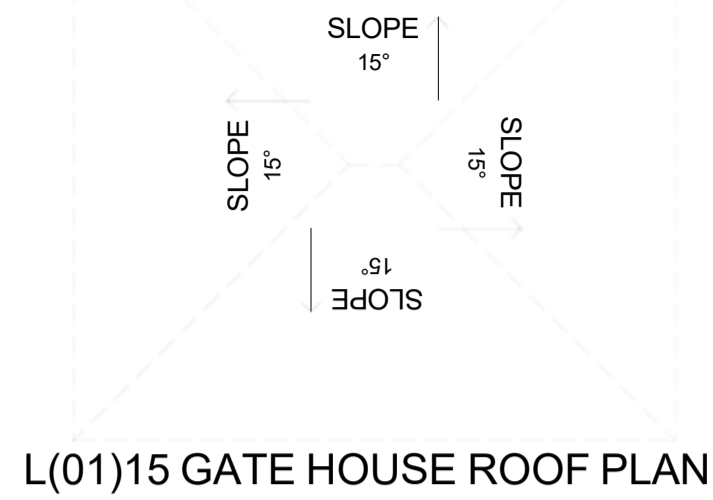
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CLIENT  
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NAIROBI, KENYA

DRAWING TITLE

PROPOSED WASHROOM BLOCK PLAN, SECTION AND ELEVATION DRAWINGS

<u>SCALES</u> AS SHOWN	<u>DATE</u> 17/01/25	<u>DRAWN</u> FSZ	<u>CHECKED</u> AMM
<u>PROJECT NO.</u> SE/002/2025	<u>DRAWING NO.</u> SE/002/2025/002	<u>REVISION</u> 01	



Rev.	By	Description	Sign	Date

**CONSULTANT**

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**Consulting Group Ltd.**  
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P. O. BOX 313-00606,  
NAIROBI, KENYA  
DEVELOPMENT  
PROPOSED REHABILITATION OF KIBWEZI  
PACKHOUSE.

DRAWING TITLE  
GATE HOUSE PLAN AND ELEVATION DRAWINGS

<u>SCALES</u>	<u>DATE</u>	<u>DRAWN</u>	<u>CHECKED</u>
1:50	17/01/25	FSZ	AMM
<u>PROJECT NO.</u>	<u>DRAWING NO.</u>	<u>REVISION</u>	
SE/002/2025	SE/002/2025/002	01	

FINISHES SCHEDULE

SECTION	DESCRIPTION	NUMBER	AREA	FLOOR FINISH	WALL FINISH	CEILING FINISH
OFFICE WING	GENERAL OFFICE	01	50u²	floucvlait Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
	ENTRANCE LOUNGE	01	1»u²	floucvlait Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
	REKIO ROOM	01	%. 7u²	floucvlait Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
	CONFERENCE ROOM	01	1?. ?u²	floucvlait Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
	QUANTIFICATION OFFICE	01	?5u²	floucvlait Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
	HEATING SYSTEM	01	6. 7u²	floucvlait Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
	KEYBOARD HEATING OFFICE	01	17. %u²	floucvlait Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
	SECRETARY	01	6. 7u²	floucvlait Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
	HIGHWAYS	01	16u²	Cvuauc Hilvs	flaitt ata fllastvu	6coustic Cvilit: flatvls
WAREHOUSE WING	GRADING WORK	01	?%4u²	Cotcuvtv Scuvva	flaitt ata fllastvu	-
	COOLING ROOMS	0?	40u²	Cotcuvtv Scuvva	flaitt ata fllastvu	-
	SHEDWORK GENERAL ROOM	01	??u²	Cotcuvtv Scuvva	flaitt ata fllastvu	-
	STREET LIGHTS SHORE	01	?@u²	Cotcuvtv Scuvva	flaitt ata fllastvu	-
	CORNER SHORE	01	»5. »u²	Cotcuvtv Scuvva	flaitt ata fllastvu	-
WATER MAIN WING	LOADING WORK OFFLOADING WORK	01	104. »u²	Cotcuvtv Scuvva	flaitt ata fllastvu	-
	GENS SYSTEM	01	@@. %u²	Hvuazzo Floou	»0x»0 "kitv tilvs	-
	HOUSE	01	4. 4u²	Hvuazzo Floou	flaitt ata fllastvu	-
HOUSE	HOUSE	01	?. »u²	Hvuazzo Floou	»0x»0 "kitv tilvs	-

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DEVELOPMENT PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.				
DRAWING TITLE FINISHES SCHEDULE				
SCALES	DATE	DRAWN	CHECKED	
N/A	17/01/25	FSZ	AMM	
PROJECT NO.	DRAWING NO.	REVISION		
SE/002/2025	SE/002/2025/002	01		

# STRUCTURAL DRAWINGS

**Client:**



**TRADEMARK AFRICA**

P.O BOX313-00-606

NAIROBI, KENYA.

**Consultant:**



**APEX SYSTEMS CONSULTING GROUP LTD,**

P.O BOX 38900-00100,

NAIROBO, KENYA.

GENERAL NOTES

- 1. DIMENSIONS IN mm, LEVELS IN METRES.
- 2. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THE DRAWING.
- 3. ALL STRUCTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH THESE NOTES UNLESS OTHERWISE SPECIFIED.

CONCRETE:

- 1. REINFORCED CONCRETE TO BE GRADE 40 TO BS 8110.
- 2. BLINDING CONCRETE TO BE GRADE 15 TO B.S 8110.
- 3. MAXIMUM AGGREGATE SIZE IS 20MM.
- 4. MAXIMUM FREE WATER/CEMENT RATIO IS 0.5.
- 5. FOUNDATIONS TO BE APPROVED BY THE ENGINEER BEFORE BLINDING.
- 6. MASONRY SHALL EITHER BE PRECAST MASONRY TO B.S 6073 PART 1 OR NATURAL STONE.
- 7. FOUNDATIONS DEPTH TO BE DETERMINED ON SITE.
- 8. COVER TO MAIN REINFORCEMENT SHALL BE :  
FOUNDATIONS-----50mm ALL FACES  
COLUMNS-----40mm ALL FACES  
SLABS----- 20mm TOP AND BOTTOM  
GROUND FL. BMS.- 50mm ALL FACES  
COLS. BELOW FDN.- 50mm ALL FACES  
OTHER BEAMS (FB/RB)-20mm ALL FACES
- 9. HOOP IRON TO BE PLACED ON EVERY OTHER COURSE AND BONDED TO THE REINFORCED CONCRETE COLUMNS.
- 10. ALL STRUCTURAL DRAWINGS TO BE READ IN CONJUNCTION WITH THESE NOTES UNLESS OTHERWISE SPECIFIED.
- 11. DAMP PROOF COURSES TO BS 743, SEALANTS MASTICS & OTHER MATERIALS FOR EXPANSION JOINTS TO BS 3712 & 4254
- 12. REINFORCEMENT LAP LENGTHS ARE TO BE:  
TENSION REINFORCEMENT- 50 TIMES DIAMETER OF SMALLER LAPPED BAR  
COMPRESSION REINFORCEMENT- 50 TIMES DIAMETER OF SMALLER LAPPED BAR
- 13. MORTAR IS TO BE 1:4 CEMENT:SAND.

ABBREVIATIONS:

- EF .....BARS IN EACH FACE OF THE WALL.
- FF .....BARS IN FAR FACE OF THE WALL.
- NF .....BARS IN NEAR FACE OF THE WALL.
- UB..... U - SHAPED BARS.
- T1 ..... TOP BARS 1ST LAYER
- T2 ..... TOP BARS 2ND LAYER
- B1 .....BOTTOM BARS 1ST LAYER
- B2 .....BOTTOM BARS 2ND LAYER
- D ..... RIBBED TWISTED HIGH TENSILE BARS
- R ..... ROUND MILD BARS
- RC .....REINFORCED CONCRETE

STEEL WORKS

- 1. STRUCTURAL STEELWORKS TO BE IN ACCORDANCE WITH B.S 5950.
- 2. WELDING TO BE IN ACCORDANCE WITH B.S 5135
- 3. STEEL QUALITY SHALL BE GRADE43C TO B.S 4360
- 4. BOLTS QUALITY SHALL BE GRADE 46 TO B.S 4360
- 5. STEEL PIPES TO B.S 534 ; R.H.S TO B.S 4360
- 6. ALL STEELWORKS TO BE PRIMED WITH RED OXIDE BEFORE FIXING.
- 7. REINFORCEMENT BARS TO COMPLY WITH B.S 4461

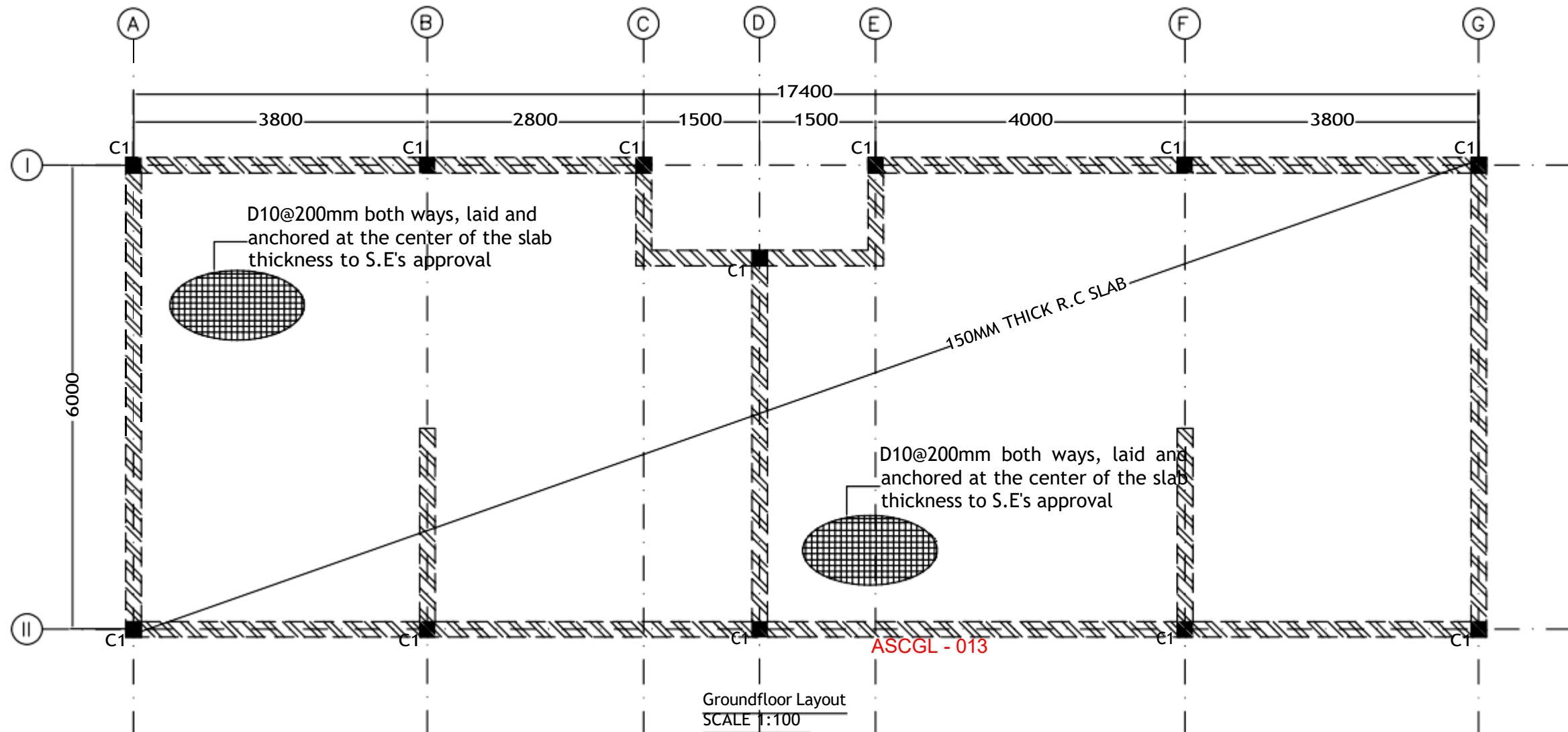
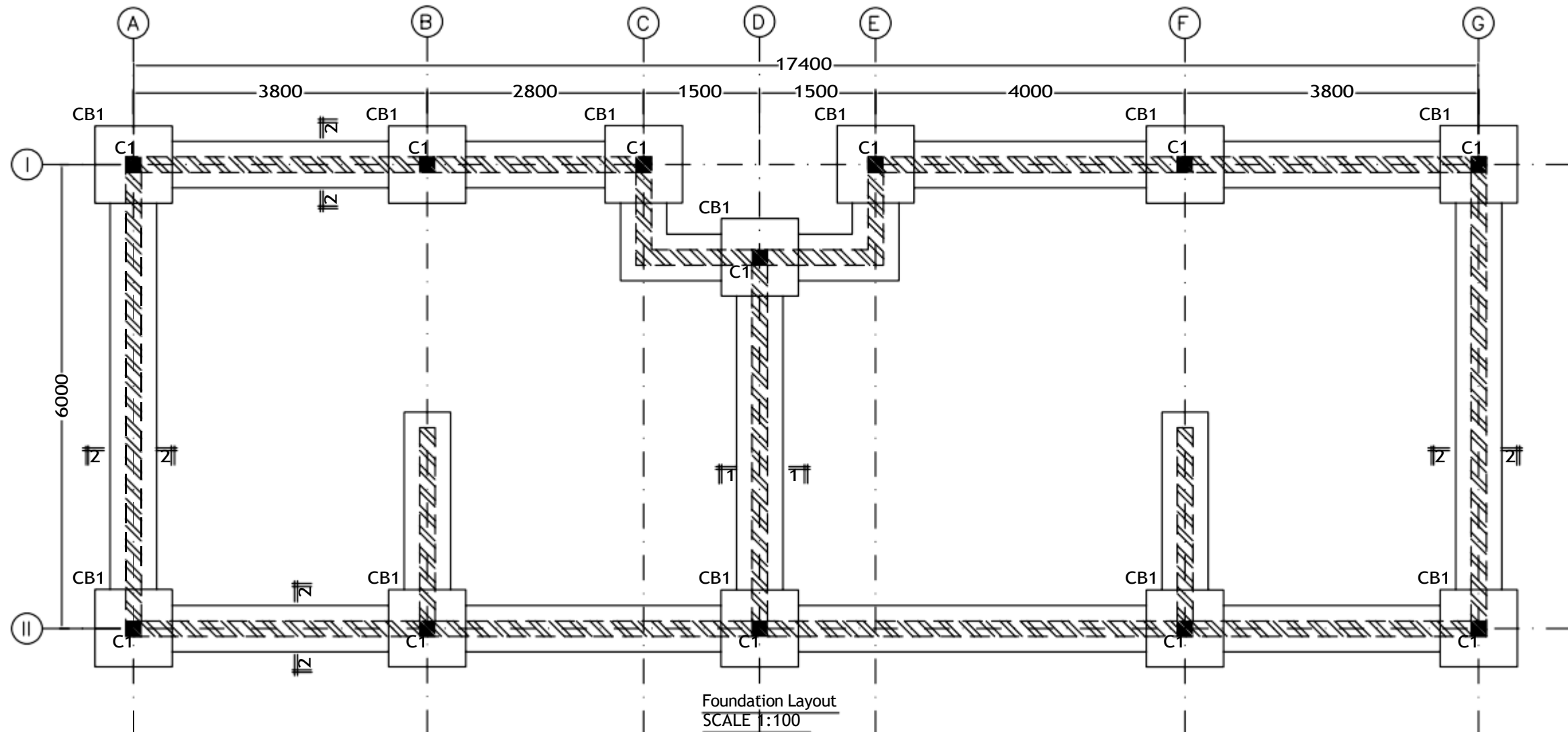
CIVIL WORKS:

- 1. THIS DRAWING IS TO BE READ WITH THE MAIN LAYOUT DRAWINGS & ARCHITECTURAL DRAWINGS
- 2. ALL DIMENSIONS AND SETTING-OUT DATA SHALL BE IN ACCORDANCE WITH THE SITE PLAN ; AND ARE TO BE READ NOT SCALED.
- 3. COMPACTION PLANT TO BE APPROVED BY THE ENGINEER.
- 4. ALL PRECAST CONCRETE PIPES AND FITTINGS TO BE JOINTED AND TESTED ACCORDING TO BS 5911.
- 5. KERBS AND CHANNELS TO BE NATURALLY COLOURED PRECAST CONCRETE.
- 7. RAIN WATER PIPES FROM THE GULLY TRAPS TO THE INSPECTION CHAMBERS AND INSPECTION CHAMBERS TO THE TRUNK STORM WATER DRAIN SHALL OF SIZE 100 & 150 mm uPVC PIPES IN CONCRETE SURROUND RESPECTIVELY.
- 8. GULLY TRAPS AND INSPECTION CHAMBERS SHALL BE OF SIZE 150x150 & 450x600mm INTERNALLY RESPECTIVELY.

TIMBER WORKS:

- 1. ALL TIMBER TO BE SAWN CYPRESS OF 2ND STRENGTH. GRADE ( KENYA EXPORT OF TIMBER RULES ) SEASONED TO AN EQUILIBRIUM CONTENT OF BETWEEN 9 & 15%
- 2. ALL TIMBER TO BE PRESERVATIVE TREATED IN ACCORDANCE WITH THE M.O.P.W GENERAL SPECIFICATION FOR BUILDING WORKS ( 1976 )
- 3. ALL NAILS TO BE ORDINARY ROUND WIRE NAILS 65mm LONG x 3.4mm DIAMETER.

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CLIENT				
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DEVELOPMENT				
PROPOSED WASHROOM BLOCK FOR KIBWEZI PACKHOUSE				
DRAWING TITLE				
NOTES				
SCALES	DATE	DRAWN	CHECKED	
AS SHOWN	17/01/25	FSZ	AMM	
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SE/002/2025	SE/002/2025/001			01



#### FOUNDATION NOTES:

- Excavations for foundations shall be carried out by mechanical means, except for the last 200mm of excavation, which is to be carried out by manual methods.
- Assumed safe bearing pressure below pad and strip foundation is 500 kn/m<sup>2</sup> at the depth shown on the drawings, should a suitable bearing layer not be found at the depth shown the excavation shall be continued down to a depth deemed suitable by the engineer.
- Back filling of the excavations shall be with approved granular material, shown on the drawings.
- Formation levels of foundations shall be determined by the engineer based upon existing road levels, water table level, Services requirements, and shall be subject to a minimum depth as shown on this drawing. Should the formation levels of two or more foundations adjacent to each other be different, the difference in level is to be made up by concrete grade 20 (i.e. the area shall be excavated to the formation level of the lower foundation and a thicker blinding used for the foundation having the higher formation level.)
- Floor finish on cement screed on 150mm thick r.c. slab  
On 1000-gauge polythene Sheeting on murrum blinding on 300mm well compacted hardcore strip foundation depth to be determined on site.
- 600X200mm strip foundation, depth to be determined on site

#### NOTES

- Reinforced concrete to be grade 25(1:1.5:3)
- Blinding concrete to be grade 15(1:3:6) to B.S 8110.
- Maximum aggregate size is 20mm.
- Maximum free water/cement ratio is 0.5.
- Reinforcement to be approved by the Engineer before concreting.
- Masonry shall either be pre-cast masonry to B.S 6073 part 1 or natural stone.
- Cover to main reinforcement shall be:  
Columns -----30 mm all faces  
Slabs ----- 25 mm top and bottom  
Ground fl. Beams. - 50 mm all faces  
Other beams (fb/rb)-25 mm all faces
- Hoop iron to be placed on every other course and bonded to the reinforced concrete
- All structural drawings to be read in conjunction with these notes unless otherwise specified.
- Damp proof courses to BS 743, sealant mastics & other materials for expansion joints to BS 3712 & 4254
- Reinforcement lap lengths are to be:  
tension reinforcement-50 times diameter of smaller lapped bar,  
compression reinforcement-50 times diameter of smaller
- Mortar is to be 1:4 cement: sand.

Rev. By Description Sign Date

CONSULTANT

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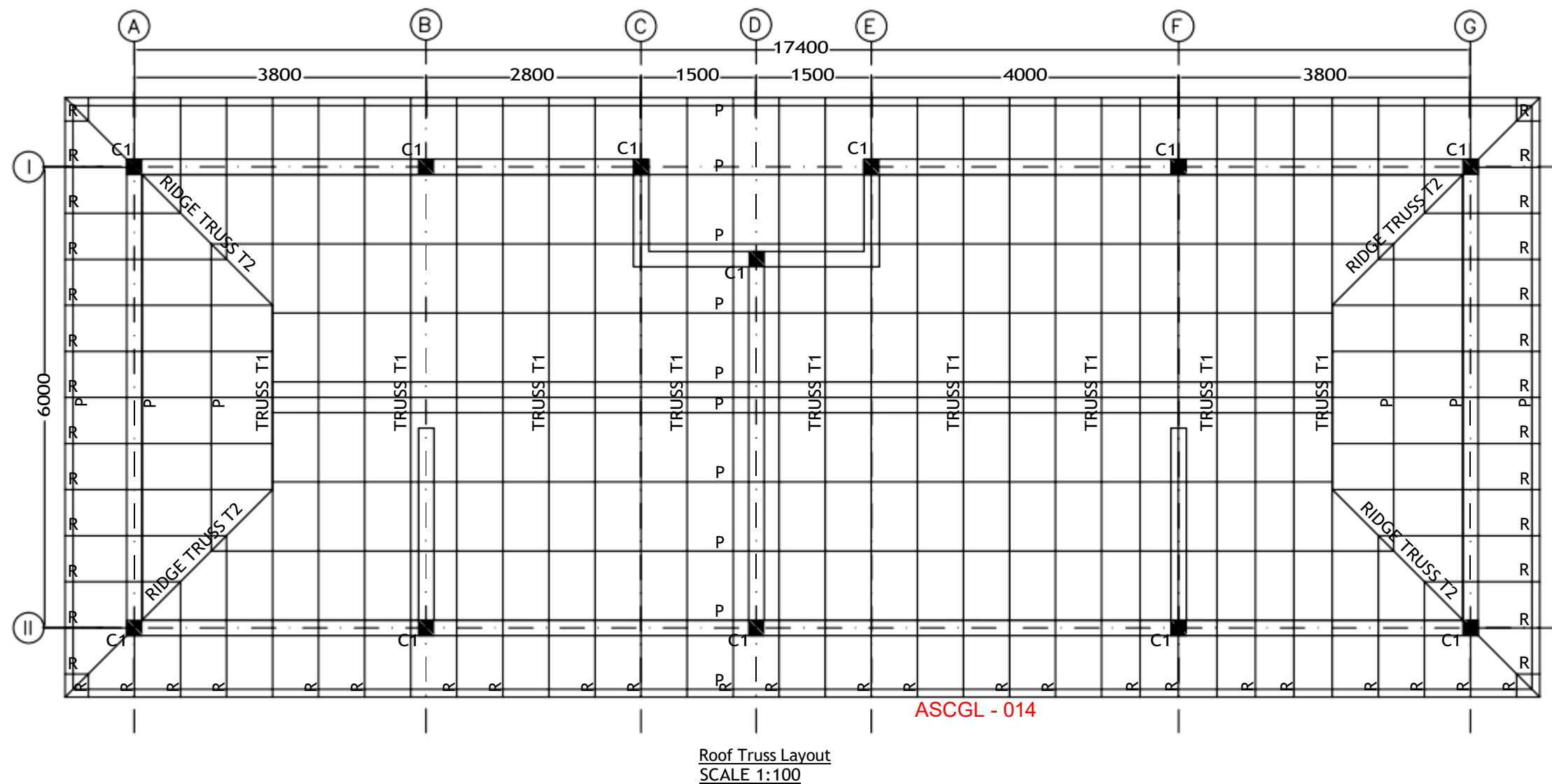
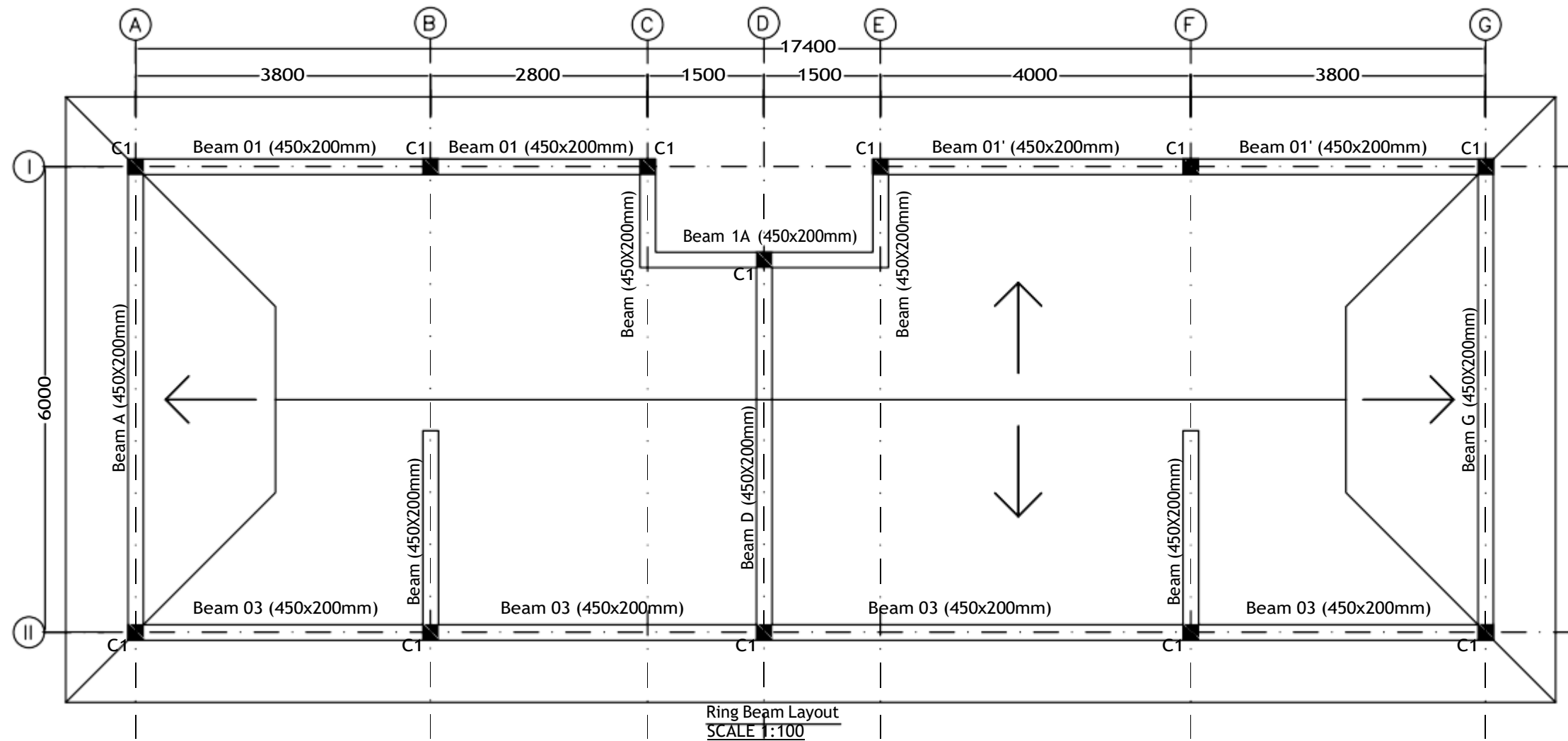
DEVELOPMENT

PROPOSED WASHROOM BLOCK FOR KIBWEZI  
PACKHOUSE

DRAWING TITLE

FOUNDATION AND GROUND FLOOR LAYOUTS

SCALES	DATE	DRAWN	CHECKED
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Slabs ----- 25 mm top and bottom  
Ground fl. Beams - 50 mm all faces  
Other beams (fb/rb)-25 mm all faces
8. Hoop iron to be placed on every other course and bonded to the reinforced concrete
9. All structural drawings to be read in conjunction with these notes unless otherwise specified.
10. Damp proof courses to BS 743, sealant mastics & other materials for expansion joints to BS 3712 & 4254
11. Reinforcement lap lengths are to be:  
tension reinforcement-50 times diameter of smaller lapped bar,  
compression reinforcement-50 times diameter of smaller
12. Mortar is to be 1:4 cement: sand.

#### ROOF NOTES.

1. Timber rafters spaced @max 600mm c/c.
2. Timber Trusses spaced @max 1800mm C/C
3. Timber purlins size 150x50mm
4. Timber rafters size 150x50mm
5. Timber Trusses top & bottom chord size 150x50mm
6. Timber Struts & ties size 150 x 50 mm
7. Timber Wall Plate size 150 x 50mm
8. Roof Pitch 25°
9. King Post Size 150 x 50 mm

#### LEGEND

P-Purlin

R-Rafter

TR-Truss

Rev.	By	Description	Sign	Date

#### CONSULTANT

**APEX SYSTEMS**  
Consulting Group Ltd.  
Gate 1, Makanda Drive Along Lang'ata South Road,  
Karen  
P.O. Box 38900-00100, Nairobi GPO  
Tel: 020-2738032/34, Fax: 020-2730072.  
E-MAIL: info@apexsystemscg.com

#### CLIENT

TRADEMARK AFRICA,  
2<sup>ND</sup> FLR, FIDELITY INSURANCE CENTRE, WESTLANDS,  
P.O. BOX 313-00606,  
NAIROBI, KENYA

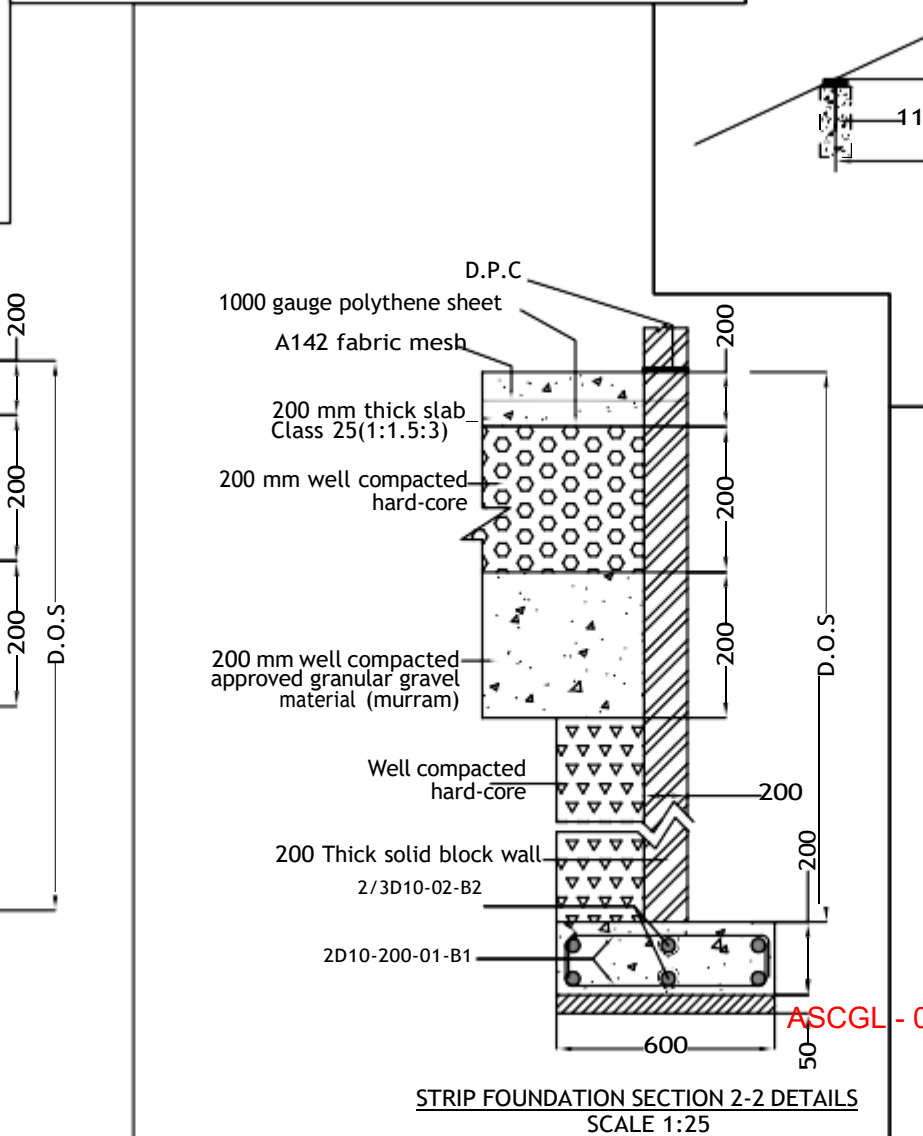
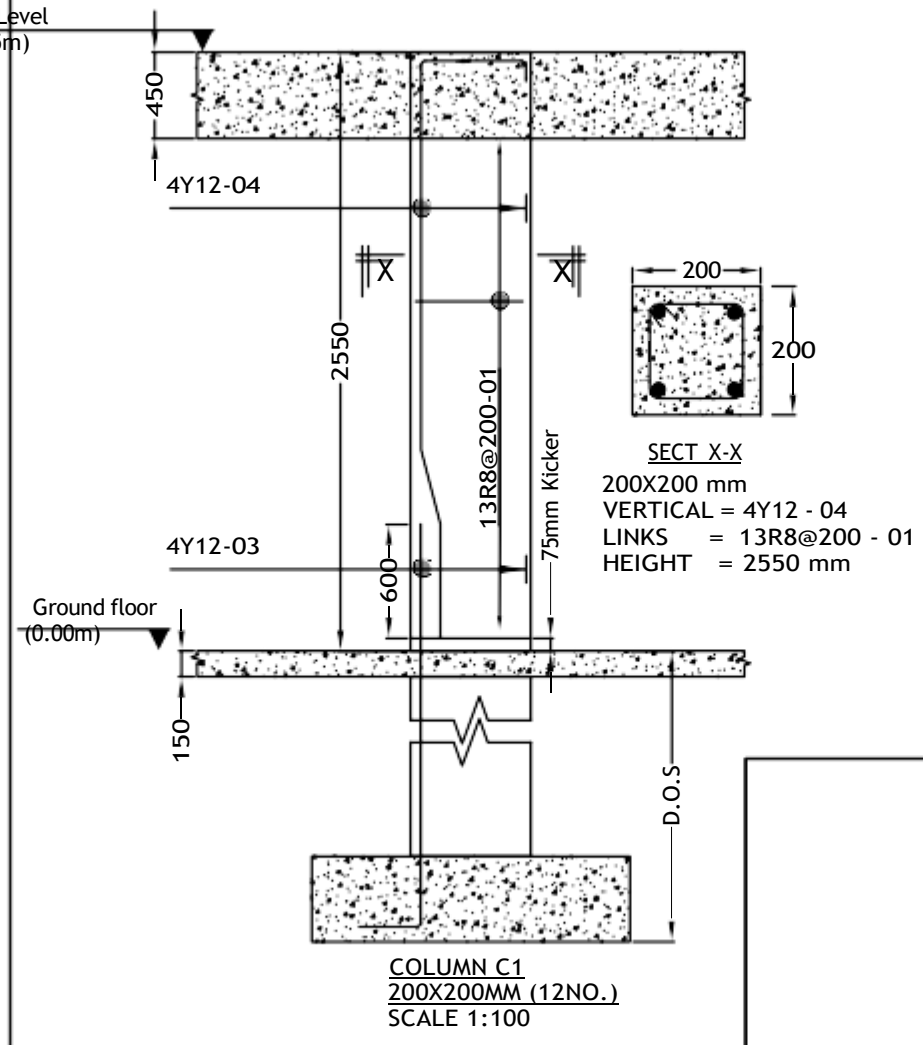
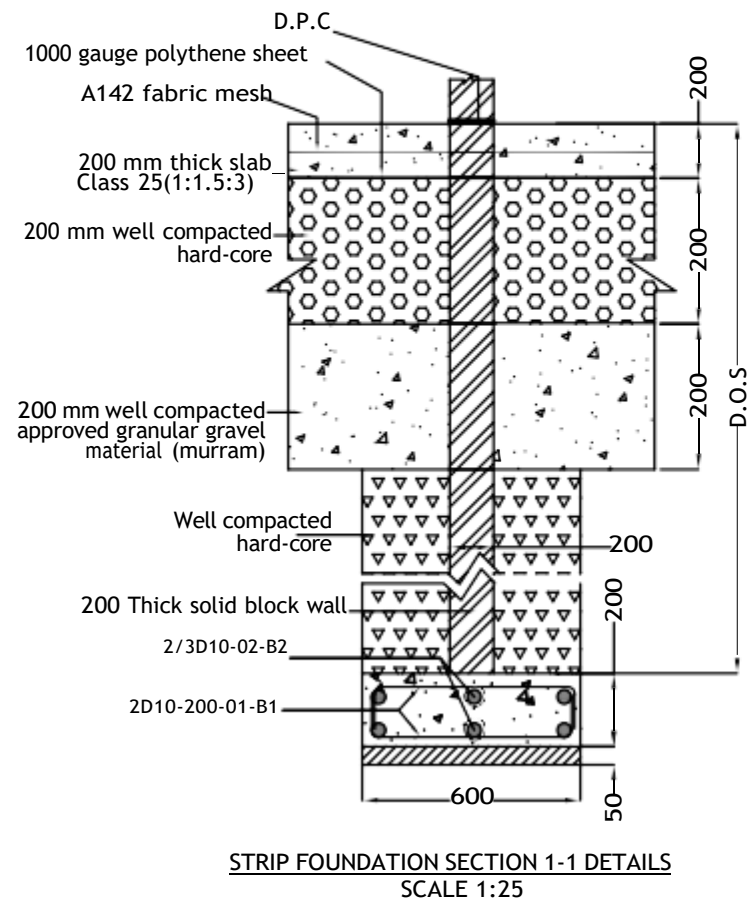
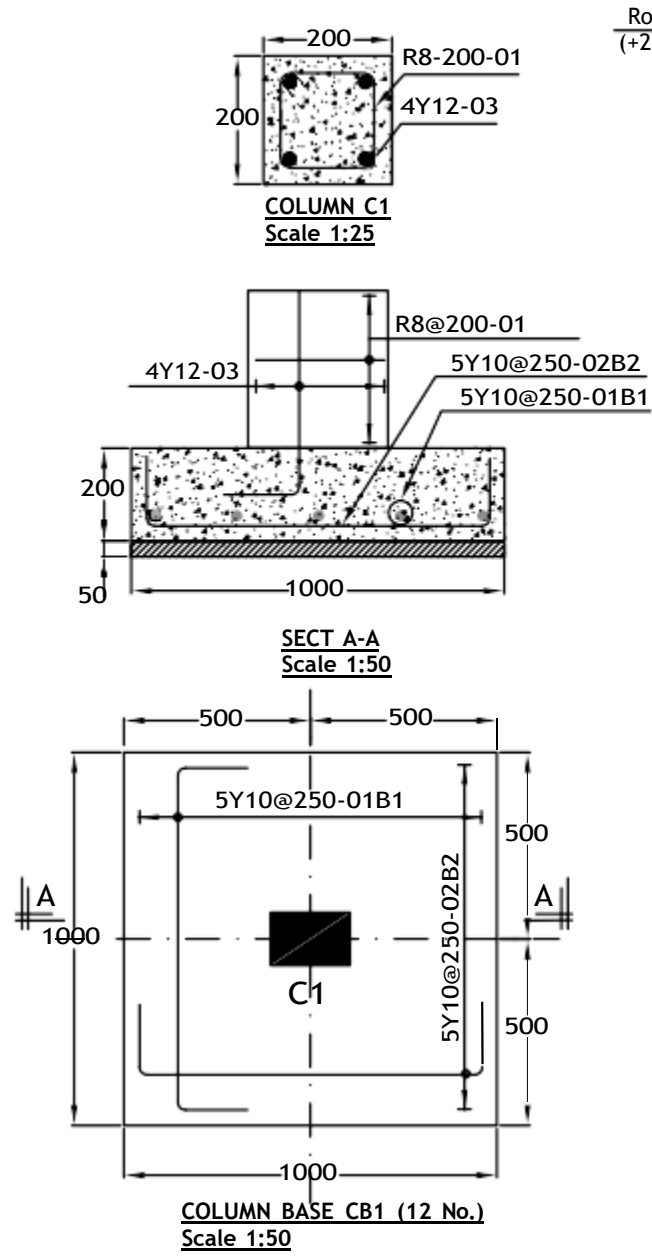
#### DEVELOPMENT

PROPOSED WASHROOM BLOCK FOR KIBWEZI  
PACKHOUSE

#### DRAWING TITLE

RING BEAM AND ROOF TRUSS LAYOUT

SCALES	DATE	DRAWN	CHECKED
AS SHOWN	17/01/25	FSZ	AMM
PROJECT NO.	DRAWING NO.	REVISION	
SE/002/2025	SE/002/2025/003	01	



SCHEDULE OF COLUMNS		
Column Type	Column Size	No.of Columns
C 1	200 X 200 mm	12

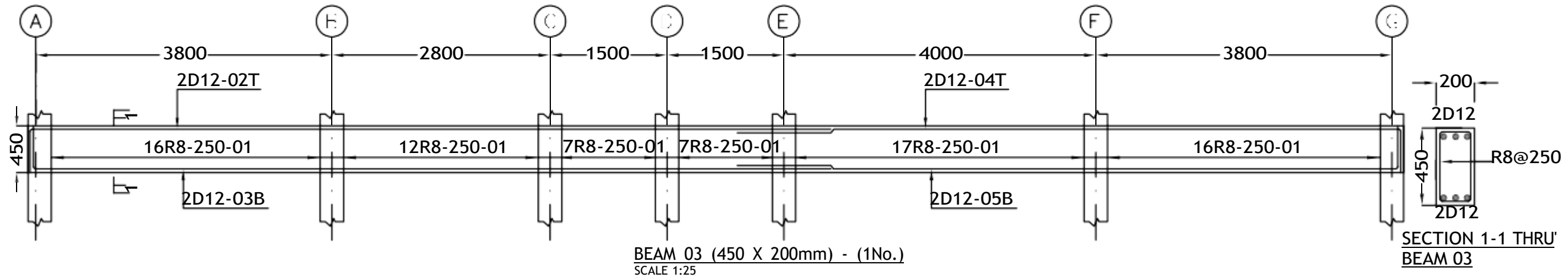
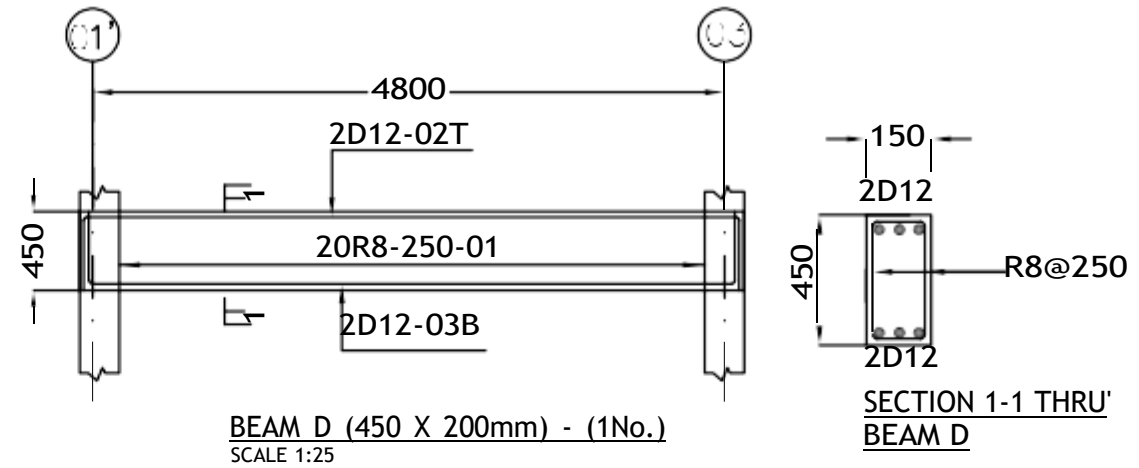
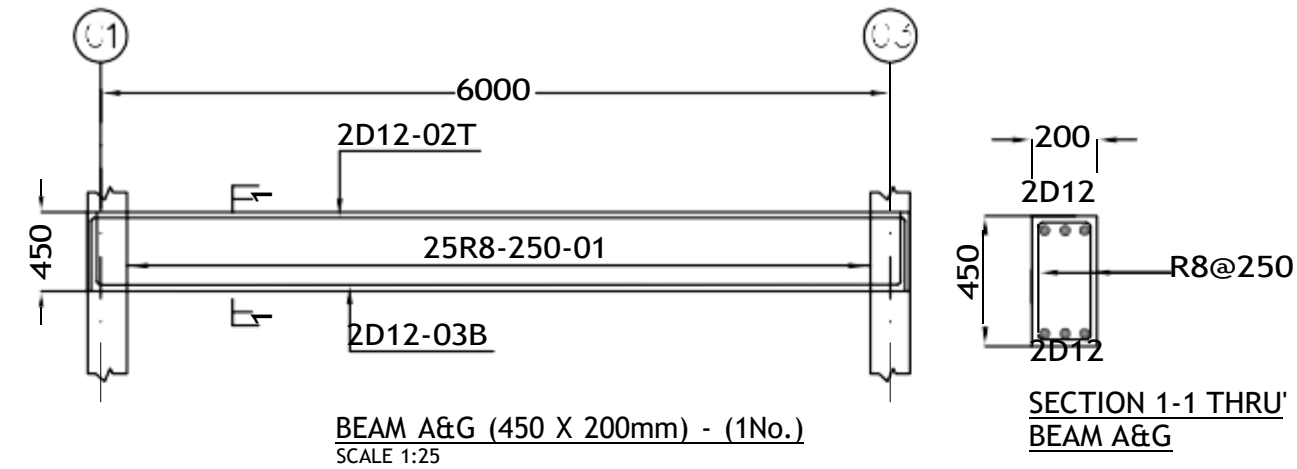
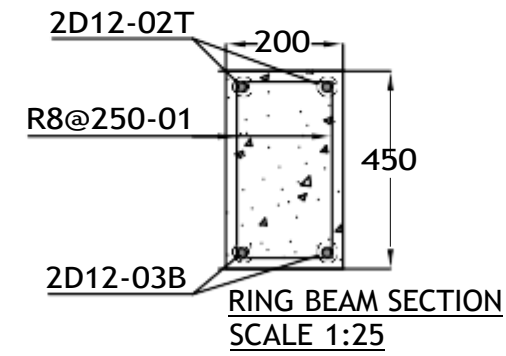
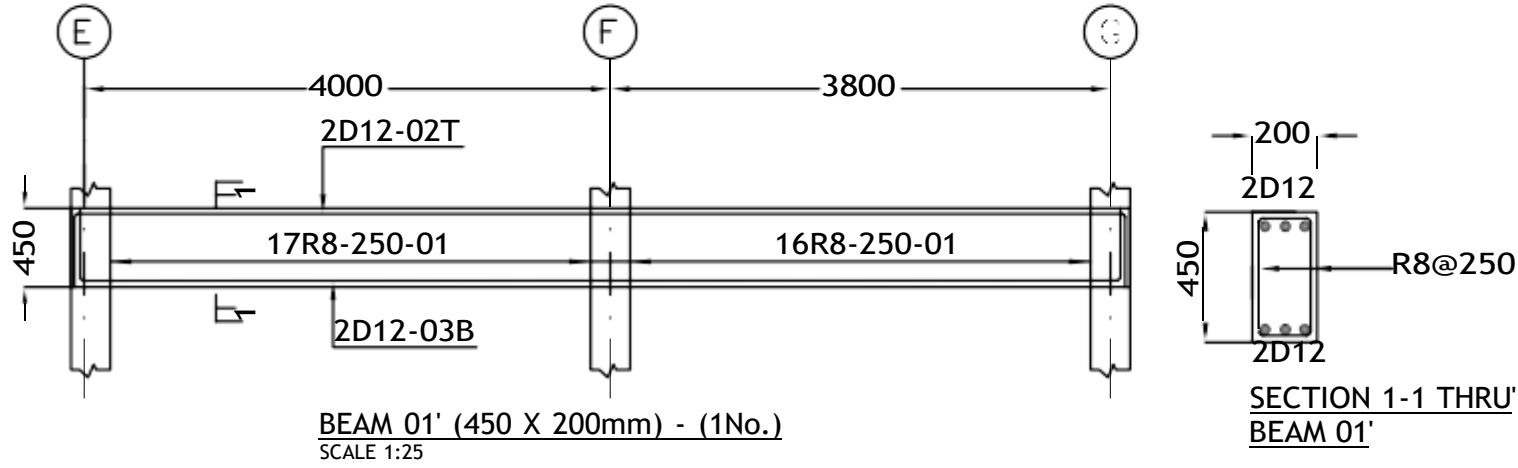
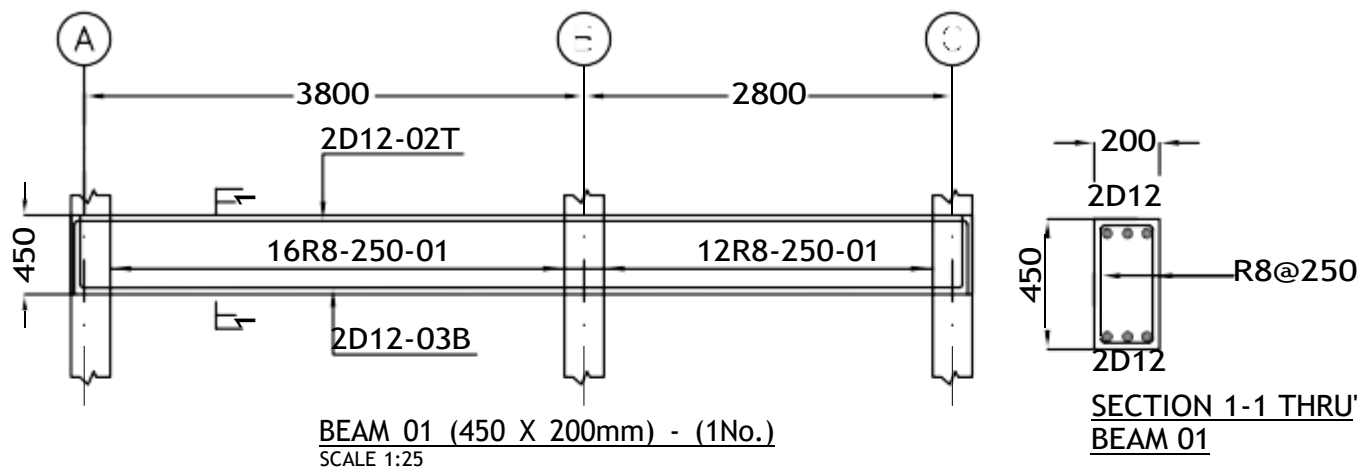
SCHEDULE OF COLUMN BASES		
Column Type	Column Base Size	No.of Column Bases
CB 1	1000 X1000 X 200mm	12

- NOTES**
- Reinforced concrete to be grade 25(1:1.5:3)
  - Blinding concrete to be grade 15(1:3:6) to B.S 8110.
  - Maximum aggregate size is 20mm.
  - Maximum free water/cement ratio is 0.5.
  - Reinforcement to be approved by the Engineer before concreting.
  - Masonry shall either be pre-cast masonry to B.S 6073 part 1 or natural stone.
  - Cover to main reinforcement shall be:  
Columns -----30 mm all faces  
Slabs ----- 25 mm top and bottom  
Ground fl. Beams. - 50 mm all faces  
Other beams (fb/rb)-25 mm all faces
  - Hoop iron to be placed on every other course and bonded to the reinforced concrete
  - All structural drawings to be read in conjunction with these notes unless otherwise specified.
  - Damp proof courses to BS 743, sealant mastics & other materials for expansion joints to BS 3712 & 4254
  - Reinforcement lap lengths are to be:  
tension reinforcement-50 times diameter of smaller lapped bar,  
compression reinforcement-50 times diameter of smaller
  - Mortar is to be 1:4 cement: sand.

- ROOF NOTES.**
- Timber rafters spaced @max 600mm c/c.
  - Timber Trusses spaced @max 1800mm C/C
  - Timber purlins size 150x50mm
  - Timber rafters size 150x50mm
  - Timber Trusses top & bottom chord size 150x50mm
  - Timber Struts & ties size 150 x 50 mm
  - Timber Wall Plate size 150 x 50mm
  - Roof Pitch 25°
  - King Post Size 150 x 50 mm


- LEGEND**
- P-Purlin
  - R-Rafter
  - TR-Truss

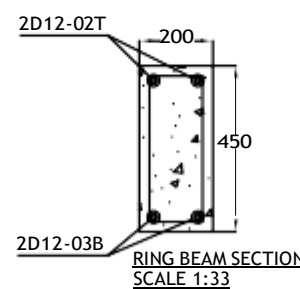
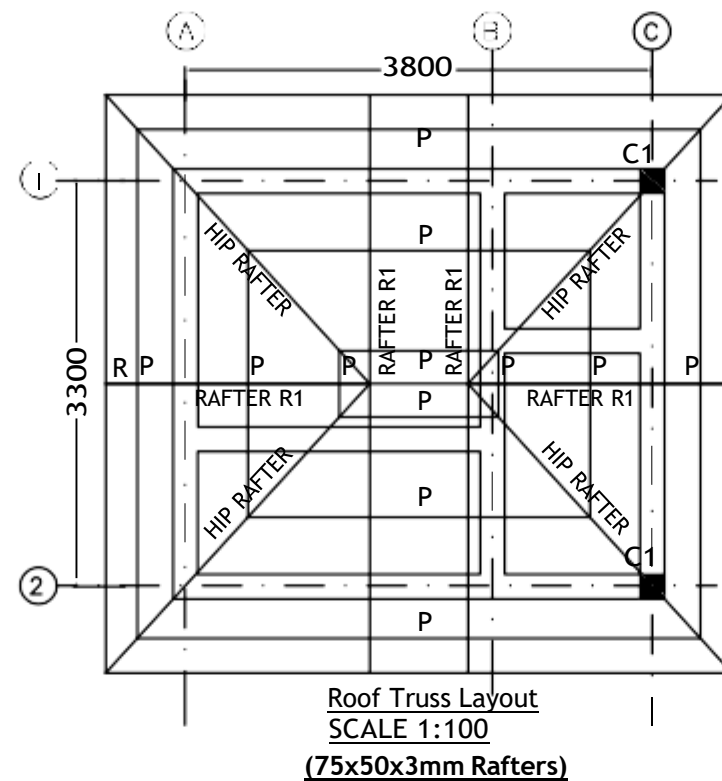
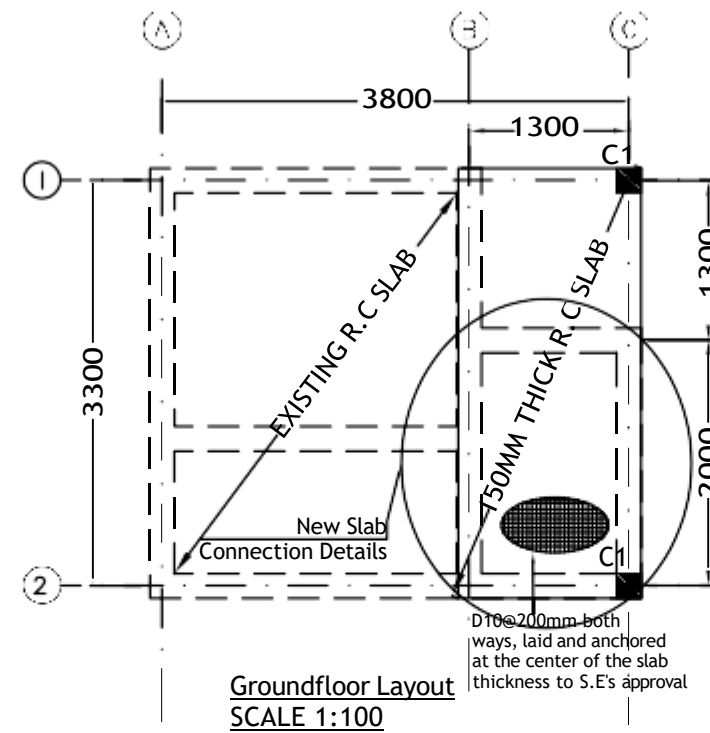
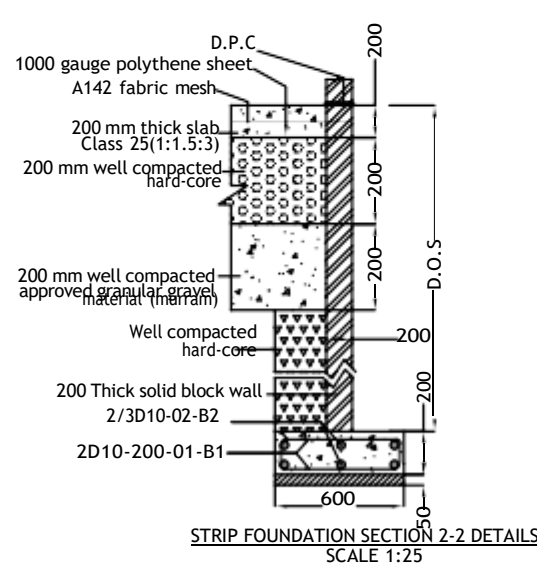
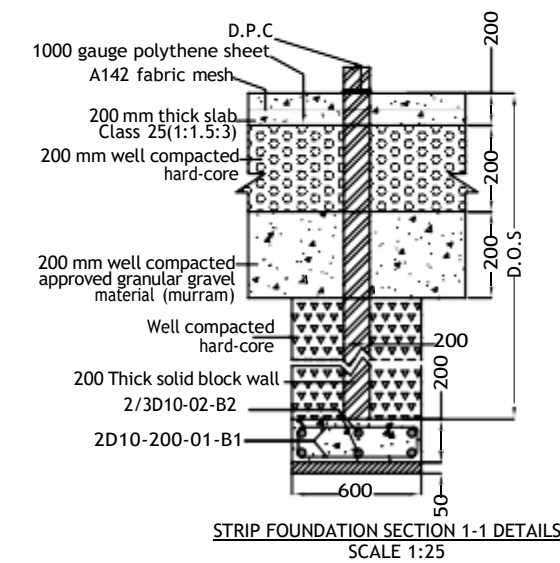
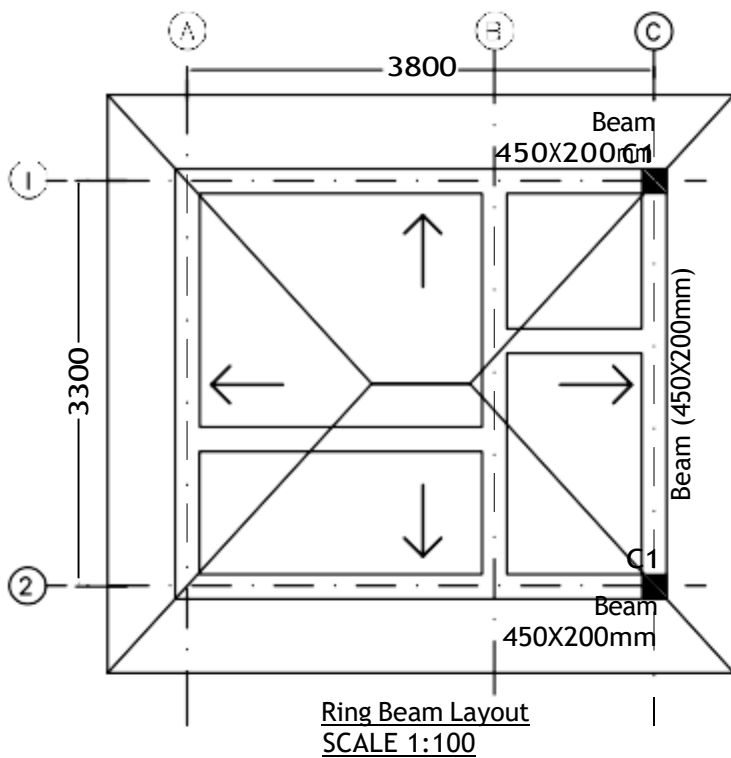
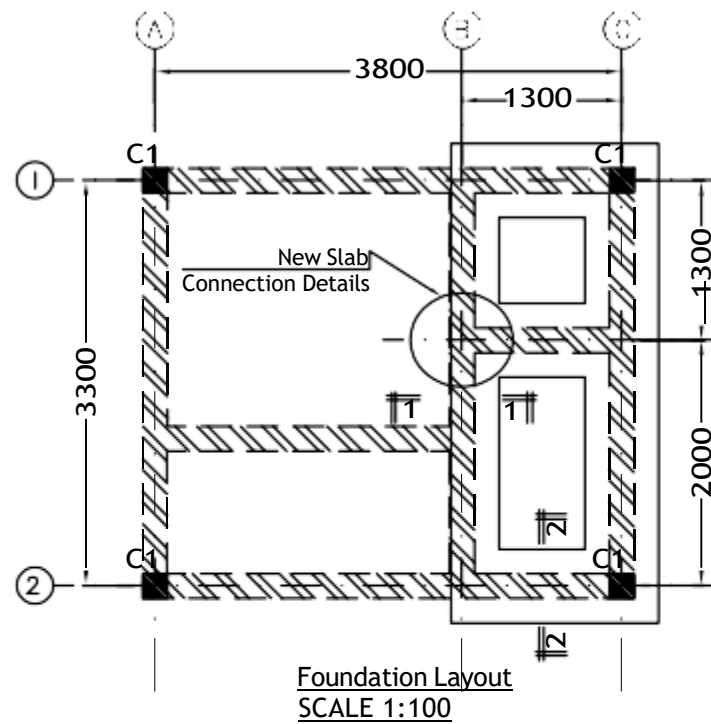
Rev.	By	Description	Sign	Date
CONSULTANT				
<p>APEX SYSTEMS Consulting Group Ltd. Gate 1, Makanda Drive Along Lang'ata South Road, Karen P.O. Box 38900-00100, Nairobi GPO Tel:020-2738032/34. Fax:020-2730072. E-MAIL: info@apexsystemsco.com</p>				
CLIENT				
<p>TRADEMARK AFRICA, 2<sup>ND</sup> FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O. BOX 313-00606, NAIROBI, KENYA</p>				
DEVELOPMENT				
<p>PROPOSED WASHROOM BLOCK FOR KIBWEZI PACKHOUSE</p>				
DRAWING TITLE				
<p>COLUMN, COLUMN BASE, STRIP FOOTING AND TRUSS DETAILS</p>				
SCALES	DATE	DRAWN	CHECKED	
AS SHOWN	17/01/25	FSZ	AMM	
PROJECT NO.	DRAWING NO.		REVISION	
SE/002/2025	SE/002/2025/004			01



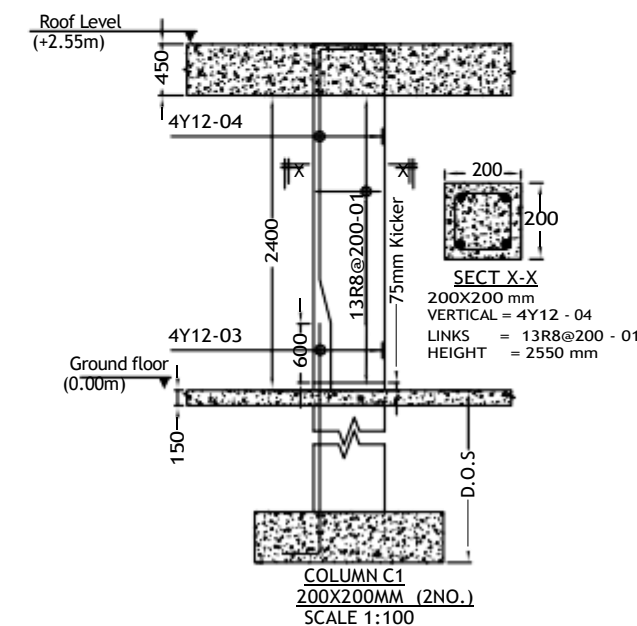
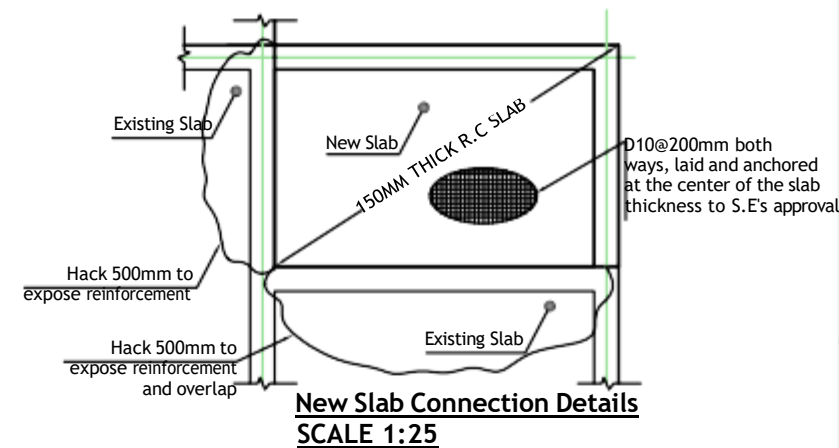
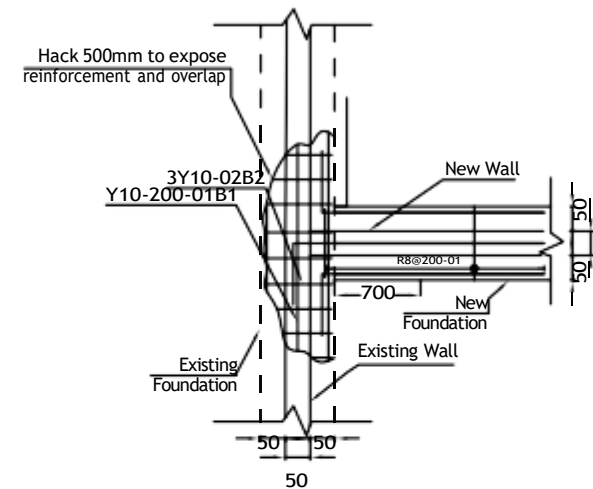
ASCG - 016

- NOTES**
1. Reinforced concrete to be grade 25(1:1.5:3)
  2. Blinding concrete to be grade 15(1:3:6) to B.S 8110.
  3. Maximum aggregate size is 20mm.
  4. Maximum free water/cement ratio is 0.5.
  5. Reinforcement to be approved by the Engineer before concreting.
  6. Masonry shall either be pre-cast masonry to B.S 6073 part 1 or natural stone.
  7. Cover to main reinforcement shall be:  
Columns -----30 mm all faces  
Slabs -----25 mm top and bottom  
Ground fl. Beams -----30 mm all faces  
Other beams (fb/rb)-25 mm all faces
  8. Hoop iron to be placed on every other course and bonded to the reinforced concrete
  9. All structural drawings to be read in conjunction with these notes unless otherwise specified.
  10. Damp proof courses to BS 743, sealant mastics & other materials for expansion joints to BS 3712 & 4254
  11. Reinforcement lap lengths are to be:  
tension reinforcement-50 times diameter of smaller lapped bar,  
compression reinforcement-50 times diameter of smaller
  12. Mortar is to be 1:4 cement: sand.

Rev.	By	Description	Sign	Date
CONSULTANT				
 <b>APEX SYSTEMS</b> Consulting Group Ltd. Gate 1, Makanda Drive Along Lang'ata South Road, Karen P.O. Box 38900-00100, Nairobi GPO Tel: 020-2738032/34, Fax: 020-2730072. E-MAIL: info@apexsystemscg.com				
CLIENT				
TRADEMARK AFRICA, 2 <sup>ND</sup> FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O. BOX 313-00606, NAIROBI, KENYA				
DEVELOPMENT				
PROPOSED WASHROOM BLOCK FOR KIBWEZI PACKHOUSE				
DRAWING TITLE				
RING BEAM DETAILS				
SCALES	DATE	DRAWN	CHECKED	
AS SHOWN	17/01/25	FSZ	AMM	
PROJECT NO.	DRAWING NO.		REVISION	
SE/002/2025	SE/002/2025/005		01	



ASCGL - 017



#### FOUNDATION NOTES:

- Excavations for foundations shall be carried out by mechanical means, except for the last 200mm of excavation, which is to be carried out by manual methods.
- Assumed safe bearing pressure below pad and strip foundation is 500 kn/m<sup>2</sup> at the depth shown on the drawings, should a suitable bearing layer not be found at the depth shown the excavation shall be continued down to a depth deemed suitable by the engineer.
- Back filling of the excavations shall be with approved granular material, shown on the drawings.
- Formation levels of foundations shall be determined by the engineer based upon existing road levels, water table level, Services requirements, and shall be subject to a minimum depth as shown on this drawing. Should the formation levels of two or more foundations adjacent to each other be different, the difference in level is to be made up by concrete grade 20 (i.e. the area shall be excavated to the formation level of the lower foundation and a thicker blinding used for the foundation having the higher formation level.)
- Floor finish on cement screed on 150mm thick r.c. slab On 1000-gauge polythene sheeting on murrum blinding on 300mm well compacted hardcore strip foundation depth to be determined on site.
- 600X200mm strip foundation, depth to be determined on site

#### NOTES

- Reinforced concrete to be grade 25(1:1.5:3)
- Blinding concrete to be grade 15(1:3:6) to B.S 8110.
- Maximum aggregate size is 20mm.
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compression reinforcement-50 times diameter of smaller
- Mortar is to be 1:4 cement: sand.

Rev.	By	Description	Sign	Date

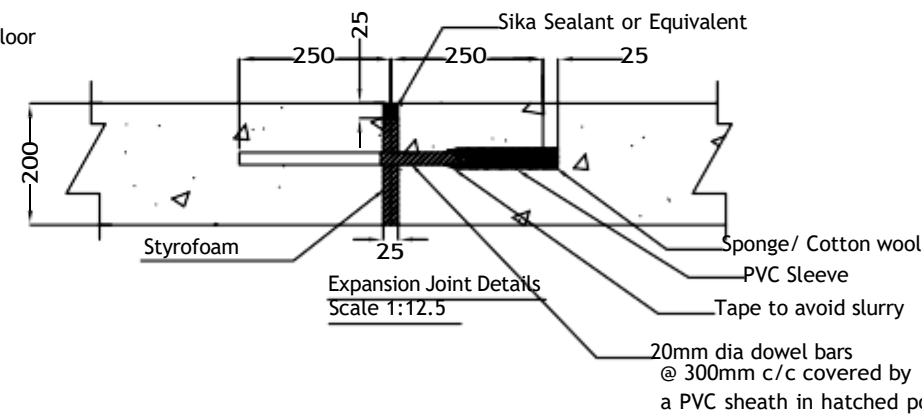
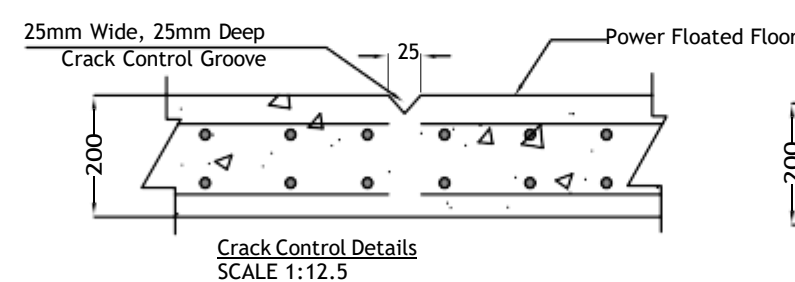
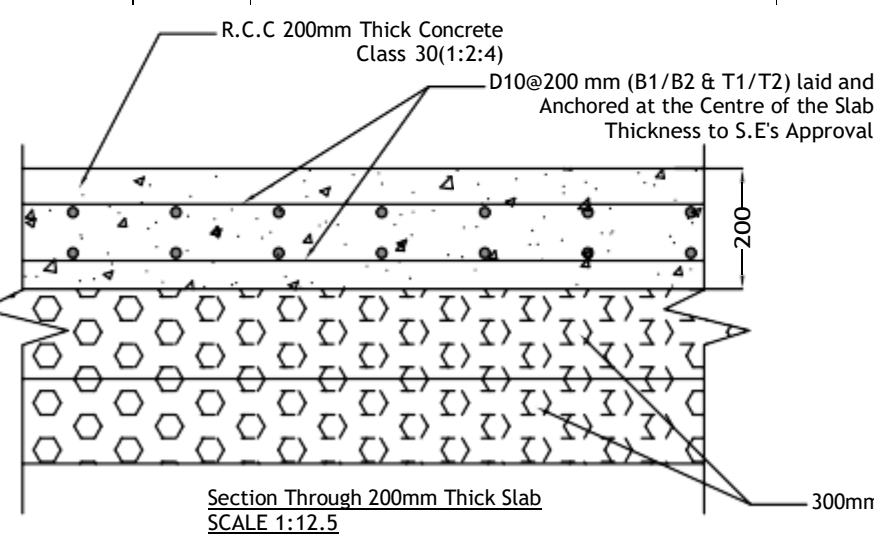
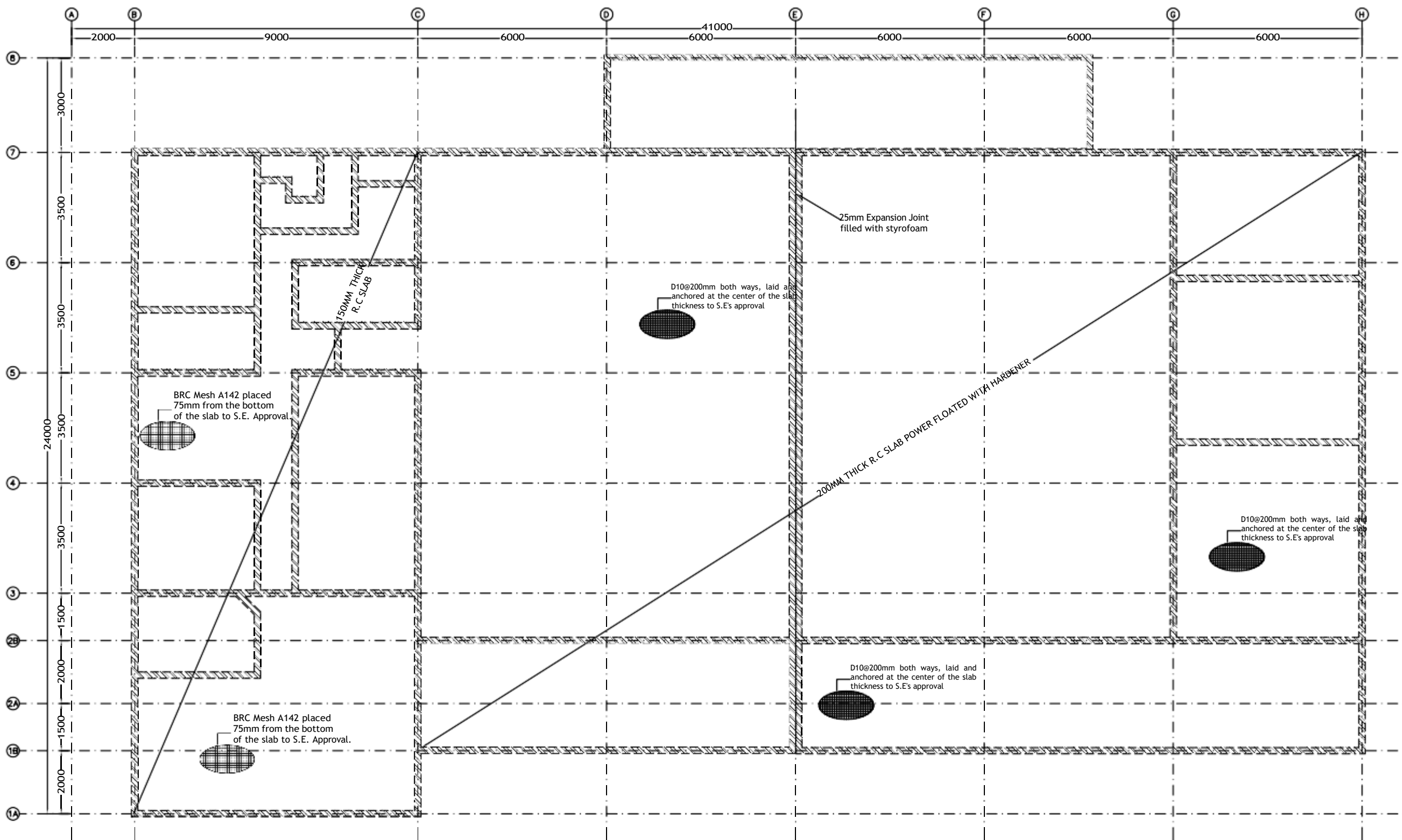
<b>CONSULTANT</b>				
 <b>APEX SYSTEMS</b> Consulting Group Ltd. Gate 1, Makanda Drive Along Lang'ata South Road, Karen P.O. Box 38900-00100, Nairobi GPO Tel: 020-2738032/34, Fax: 020-2730072. E-MAIL: info@apexsystemsco.com				

<b>CLIENT</b>				
<b>TRADEMARK AFRICA,</b> <b>PROPOSED GATEHOUSE EXTENSION FOR KIBWEZI</b> <b>PACKHOUSE</b> P.O. BOX 313-00606, NAIROBI, KENYA				

<b>DEVELOPMENT</b>				
<b>PROPOSED GATEHOUSE EXTENSION FOR KIBWEZI</b>				

<b>DRAWING TITLE</b>				
<b>FOUNDATION, GROUND FLOOR &amp; ROOF LAYOUTS</b>				

SCALES	DATE	DRAWN	CHECKED
AS SHOWN	17/01/25	FSZ	AMM
PROJECT NO.	DRAWING NO.	REVISION	
SE/002/2025	SE/002/2025/006	01	



ASCGL - 018

- NOTES**
1. Reinforced concrete to be grade 25(1:1.5:3)
  2. Blinding concrete to be grade 15(1:3:6) to B.S 8110.
  3. Maximum aggregate size is 20mm.
  4. Maximum free water/cement ratio is 0.5.
  5. Reinforcement to be approved by the Engineer before concreting.
  6. Masonry shall either be pre-cast masonry to B.S 6073 part 1 or natural stone.
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  9. All structural drawings to be read in conjunction with these notes unless otherwise specified.
  10. Damp proof courses to BS 743, sealant mastics & other materials for expansion joints to BS 3712 & 4254
  11. Reinforcement lap lengths are to be:  
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compression reinforcement-50 times diameter of smaller
  12. Mortar is to be 1:4 cement: sand.

Rev.	By	Description	Sign	Date
CONSULTANT				
APEX SYSTEMS Consulting Group Ltd. Gate 1, Makanda Drive Along Lang'ata South Road, Karen P.O. Box 38900-00100, Nairobi GPO Tel:020-2738032/34, Fax:020-2730072. E-MAIL: info@apexsystemsco.com				
CLIENT				
TRADEMARK AFRICA, 2 <sup>ND</sup> FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O. BOX 313-00606, NAIROBI, KENYA				
DEVELOPMENT				
PROPOSED RENOVATION OF KIBWEZI PACKHOUSE FLOOR				
DRAWING TITLE				
GROUND FLOOR SLAB LAYOUT AND DETAILS				
SCALES	DATE	DRAWN	CHECKED	
AS SHOWN	17/01/25	FSZ	AMM	
PROJECT NO.	DRAWING NO.		REVISION	
SE/002/2025	SE/002/2025/007		01	

# MECHANICAL DRAWINGS

**Client:**



**TRADEMARK AFRICA**

P.O BOX313-00-606

NAIROBI, KENYA.

**Consultant:**



**APEX SYSTEMS CONSULTING GROUP LTD.**

P.O BOX 38900-00100,

NAIROBO, KENYA.

PROPOSED KIBWEZI WAREHOUSE

DRAWING LIST		
	DRG No.	DESCRIPTION
1	M-0001	DRAWING LIST
2	M-0002	MECHANICAL SCHEDULE OF SYMBOLS
	M-PL-000	<b><u>PLUMBING AND FIRE FIGHTING</u></b>
3	M-PL-01	SITE PLAN EXTERNAL WATER RETICULATION LAYOUT
4	M-PL-02	WAREHOUSE BLOCK -GROUND FLOOR PLUMBING AND FIRE FIGHTING LAYOUT
5	M-PL-03	WASHROOM BLOCK - PLUMBING LAYOUT
	M-DR-000	<b><u>FOUL DRAINAGE</u></b>
6	M-DR-01	SITE PLAN EXTERNAL FOUL DRAINAGE LAYOUT
7	M-DR-02	WAREHOUSE BLOCK-GROUND FLOOR FOUL AND STORM DRAINAGE LAYOUT
8	M-DR-03	WASHROOM BLOCK- FOUL AND STORM DRAINAGE LAYOUT
	M-MV-000	<b><u>MECHANICAL VENTILATION</u></b>
9	M-MV-01	WAREHOUSE BLOCK-MECHANICAL VENTILATION LAYOUT
10	M-MV-02	WASHROOM BLOCK-WASHROOM EXTRACT LAYOUT
	M-GH-000	<b><u>GATE HOUSE BLOCK</u></b>
11	M-GHS-01	MECHANICAL SERVICES LAYOUT
	M-PL-300	<b><u>PLUMBING SCHEMATICS</u></b>
12	M-PL-SCH	PLUMBING SCHEMATIC LAYOUT
	M-ID-000	<b><u>MECHANICAL INSTALATION DETAILS</u></b>
13	M-IDL-00	MECHANICAL INSTALLATION DETAILS LAYOUT

NOTES

1. All dimensions are in millimeters unless otherwise stated

2. The diameters of the pipes indicated refers to the internal diameters only

3. All Water pipes to be PPRC PN 20 Conforming the current European Standards for PPRC installations.

4. PPRC pipe joints to be by polyfussion or electrical coupling.

5. All valves to be of brass/bronze heavy duty pattern construction as 'peglar'

6. Water Pipes under floor slab, drive ways, walkways, car parks, to be sleeved in heavy duty C or GMS as instructed

7. Exposed hot water pipes to be lagged with minimum 50mm thick fibre glass

8. All drainage pipes above ground to be uPVC 'grey' while those below to be uPVC golden brown

9. All drainage pipes below floor slab, driveways, walkways, car parks to be encased in 150mm concrete surround well cured

10. All pipe-work to run in wall chase, under floor slab, under work tops in ceiling etc. Exposed pipes shall not be acceptable

11. Overflow pipes to discharge at 150mm beyond the wall

12. Stack pipes to rise 600mm above the roof.

01.	Architectural	12/05/2025
No.	Revision/Issue	Date

PROJECT

PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

CONSULTANT



**APEX SYSTEMS**  
Consulting Group Ltd  
Gate 1, Makanda Drive Along  
Leig'eta South Road, Karen  
P.O.Box 38900-00100, Nairobi GPO  
Tel:020-2738032/34.  
Fax:020-2730072  
E-MAIL: info@apexsystemscg.com

PROJECT MANAGERS

TITLE

DRAWING LIST

CLIENT

TRADEMARK AFRICA, 2nd FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-0001




















Date: JAN 2025

Drawn by: W.N.F

Scale: 1:100 A1

Checked by: K.O

Approved by: K.O

PROPOSED KIBWEZI WAREHOUSE			
SCHEDULE OF SYMBOLS		SYMBOLS	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	FIRE EXTINGUISHER - 5 KG/CO <sub>2</sub>	OFP	OVERFLOW PIPE
	FIRE EXTINGUISHER - 9 LITRE W/CO <sub>2</sub>	MWS	MAINS WATER SUPPLY
	FIRE EXTINGUISHER - 9 LITRE AFF FOAM (AFFF)	HWC	HOT WATER CYLINDER
	FIRE EXTINGUISHER - 9 KG DRY CHEMICAL POWDER (DP)		BALL VALVE
	FIRE BLANKET		NON-RETURN VALVE (CHECK VALVE)
	MANUAL BELL	G.M.S	GALVANIZED MILD STEEL
	FIRE HOSE REEL	S.W.G	STANDARD WIRE GAUGE
	ISOLATING VALVE (GATE VALVE)	HWS	HOT WATER SUPPLY
	VALVE CHAMBER	PWM	PRESSURIZED WATER MAIN
	FIRE HOSEREEL SERVICE	AV	AUTOMATIC AIR VALVE
	FIRE HYDRANT SERVICE	AZV	AUTOMATIC ZONING VALVE
	PLUMBING COLD WATER	F/A	FROM ABOVE
	PLUMBING HOT WATER	F/B	FROM BELOW
	HOT WATER RETURN LINE		
	WATER BOOSTER PUMP	T/A	TO ABOVE
FAB	FIRE ALARM BELL	T/B	TO BELOW
PPR	POLYPROPYLENE RANDOM PIPES	H/L	HIGH LEVEL
	FIRE HYDRANT	FE	FIRE EXTINGUISHER
	VERTICAL DROP TO BELOW		

NOTES

1. All dimensions are in millimeters unless otherwise stated

2. The diameters of the pipes indicated refers to the internal diameters only

3. All Water pipes to be PPRC PN 20 Conforming the current European Standards for PPRC installations.

4. PPRC pipe joints to be by polyfussion or electrical coupling.

5. All valves to be of brass/bronze heavy duty pattern construction as 'peglar'

6. Water Pipes under floor slab, drive ways, walkways, car parks, to be sleeved in heavy duty C or GMS as instructed

7. Exposed hot water pipes to be lagged with minimum 50mm thick fibre glass

8. All drainage pipes above ground to be uPVC 'grey' while those below to be uPVC golden brown

9. All drainage pipes below floor slab, driveways, walkways, car parks to be encased in 150mm concrete surround well cured

10. All pipe-work to run in wall chase, under floor slab, under work tops in ceiling etc. Exposed pipes shall not be acceptable

11. Overflow pipes to discharge at 150mm beyond the wall


12. Stack pipes to rise 600mm above the roof.

01.	Architectural	12/05/2025
No.	Revision/Issue	Date

PROJECT

PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

CONSULTANT



APEX SYSTEMS

Consulting Group Ltd.

Gate 1, Makanda Drive Along

Leip'eta South Road, Karen

P.O.Box 38900-00100, Nairobi GPO

Tel:020-2738032/34.

Fax:020-2730072.

E-MAIL: info@apexsystemscg.com

PROJECT MANAGERS

TITLE

MECHANICAL SCHEDULE OF SYMBOLS

CLIENT

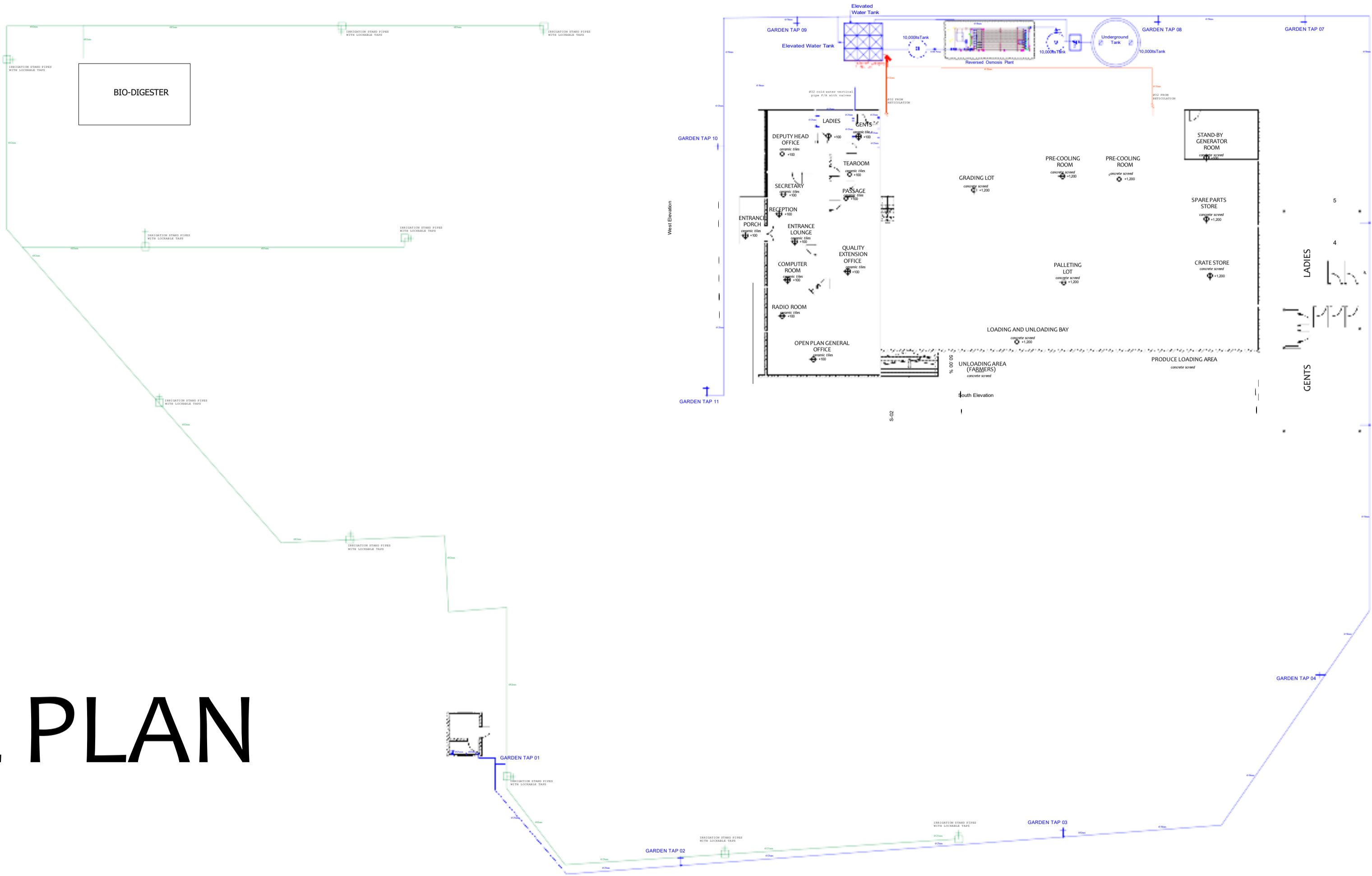
TRADEMARK AFRICA, 2nd FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-0002

Date:	JAN 2025	Drawn by: W.N.F
		Checked by: K.O
Scales:	1:100 All	Approved by: K.O

ASGL - 021

SITE PLAN



NOTES

- 1. All dimensions are in millimeters unless otherwise stated
- 2. The diameters of the pipes indicated refers to the internal diameters only
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- 10. All pipe-work to run in wall chase, under floor slab, under work tops in ceiling etc. Exposed pipes shall not be acceptable
- 11. Overflow pipes to discharge at 150mm beyond the wall
- 12. Stack pipes to rise 600mm above the roof.

01.	Architectural	12/05/2025
No.	Revision/Issue	Date

**PROJECT**  
PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

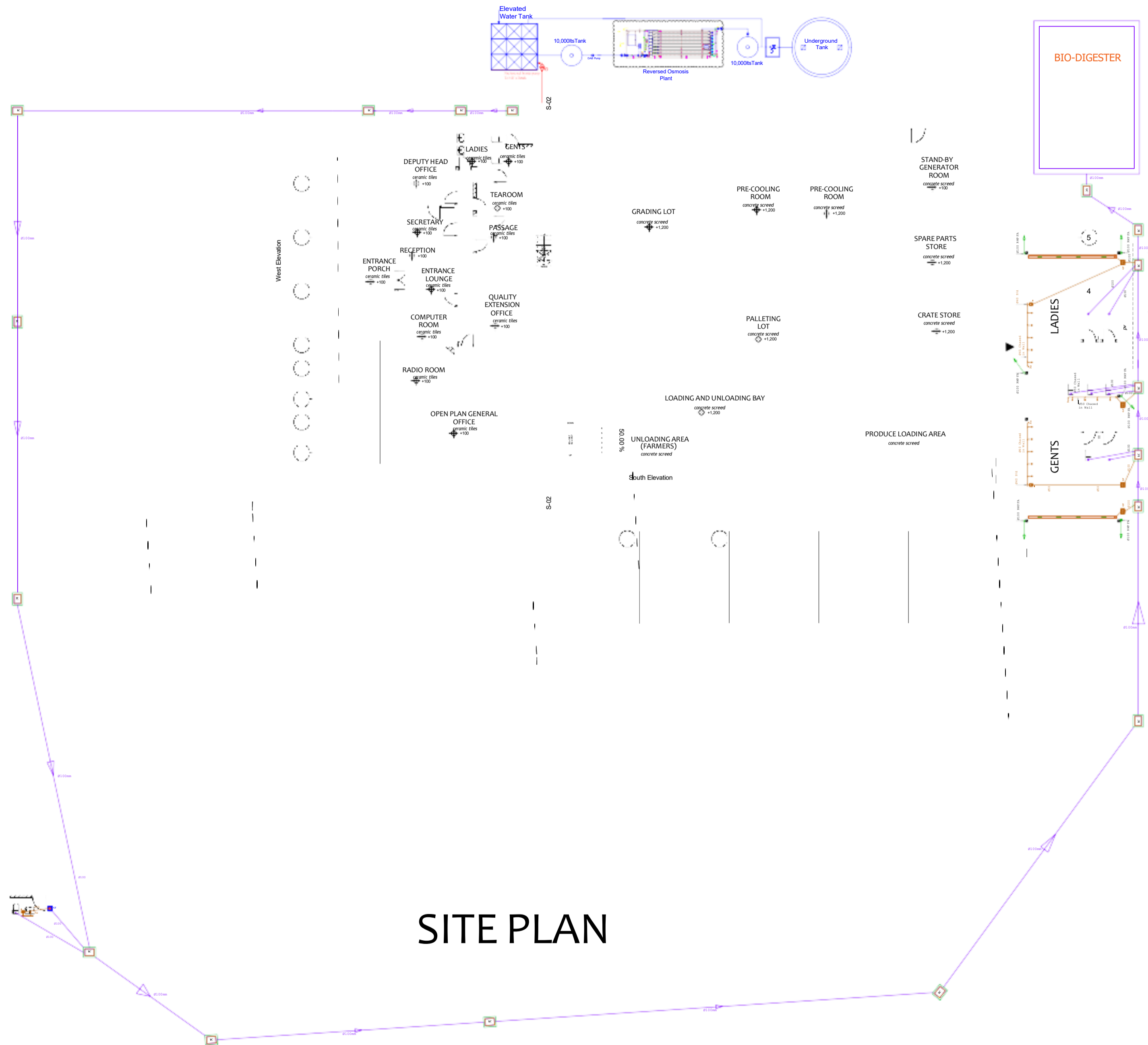
**CONSULTANT**  
**APEX SYSTEMS**  
Consulting Group Ltd  
Gate 1, Makanda Drive Along  
Langata South Road, Karen  
P.O.Box 38900-00100, Nairobi GPO  
Tel: 020-2738032/34.  
Fax: 020-2730072.  
E-MAIL: info@apexsystemscg.com

**PROJECT MANAGERS**

**TITLE**  
SITE PLAN  
EXTERNAL RETICULATION LAYOUT

**CLIENT**  
TRADEMARK AFRICA, 2nd FLR, FIDELITY  
INSURANCE CENTRE, WESTLANDS,  
P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-PL-01		
Date:	JAN 2025	Drawn by: W.N.F
		Checked by: K.O
Scale:	1:100 A1	Approved by: K.O



NOTES

1. All dimensions are in millimeters unless otherwise stated

2. The diameters of the pipes indicated refers to the internal diameters only

3. All Water pipes to be PPRC PN 20 Conforming the current European Standards for PPRC installations.

4. PPRC pipe joints to be by polyfusion or electrical coupling.

5. All valves to be of brass/bronze heavy duty pattern construction as 'peglar'

6. Water Pipes under floor slab, drive ways, walkways, car parks, to be sleeved in heavy duty C or GMS as instructed

7. Exposed hot water pipes to be lagged with minimum 50mm thick fibre glass

8. All drainage pipes above ground to be uPVC 'grey' while those below to be uPVC golden brown

9. All drainage pipes below floor slab, driveways, walkways, car parks to be encased in 150mm concrete surround well cured

10. All pipe-work to run in wall chase, under floor slab, under work tops in ceiling etc. Exposed pipes shall not be acceptable

11. Overflow pipes to discharge at 150mm beyond the wall


12. Stack pipes to rise 600mm above the roof.

01.	Architectural	12/05/2025
No.	Revision/Issue	Date

PROJECT

PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

CONSULTANT



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Fax:020-2730072  
E-MAIL: info@apexsystemscg.com

PROJECT MANAGERS

TITLE

SITE PLAN  
EXTERNAL FOUL DRAINAGE LAYOUT

CLIENT

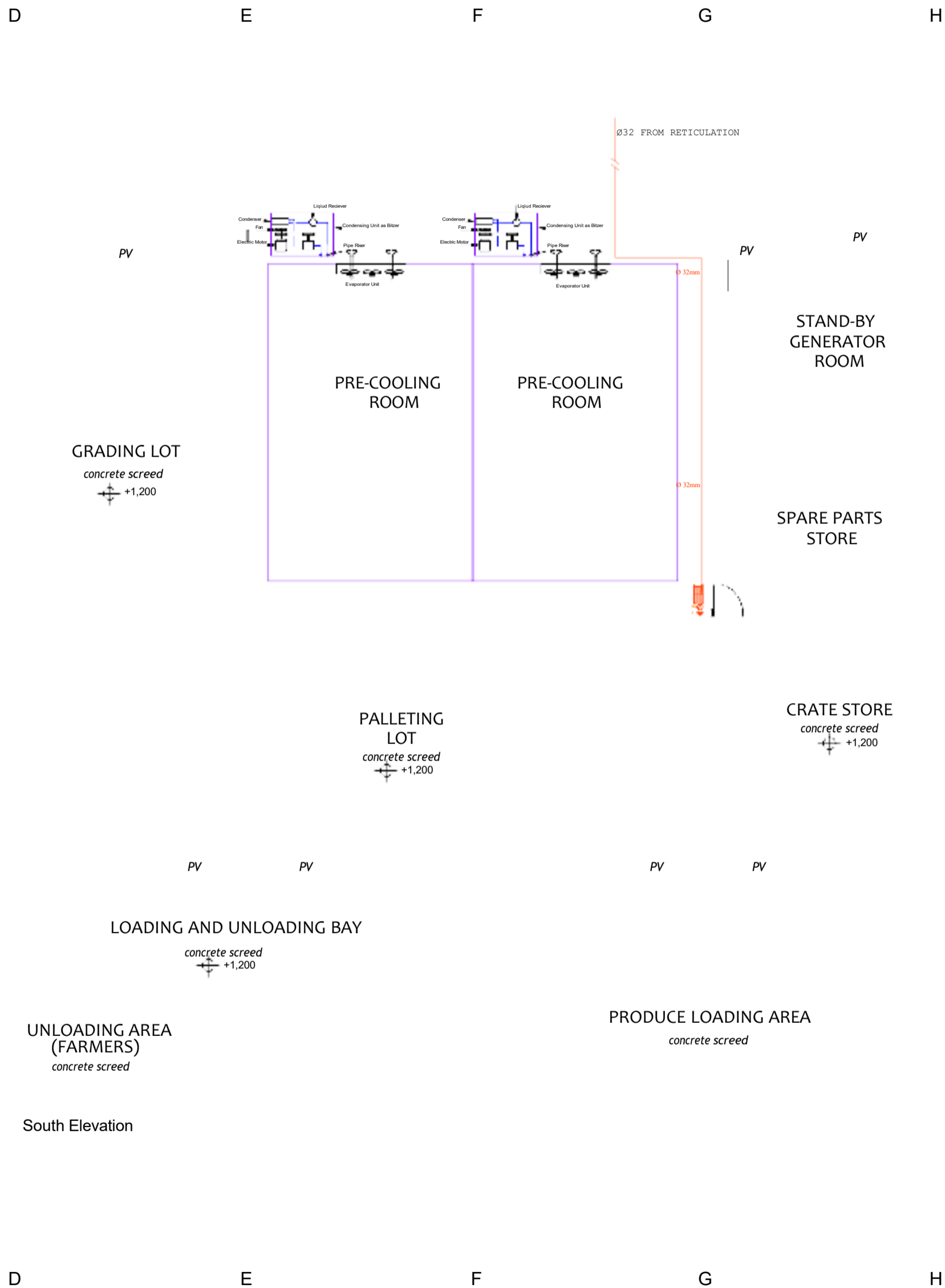
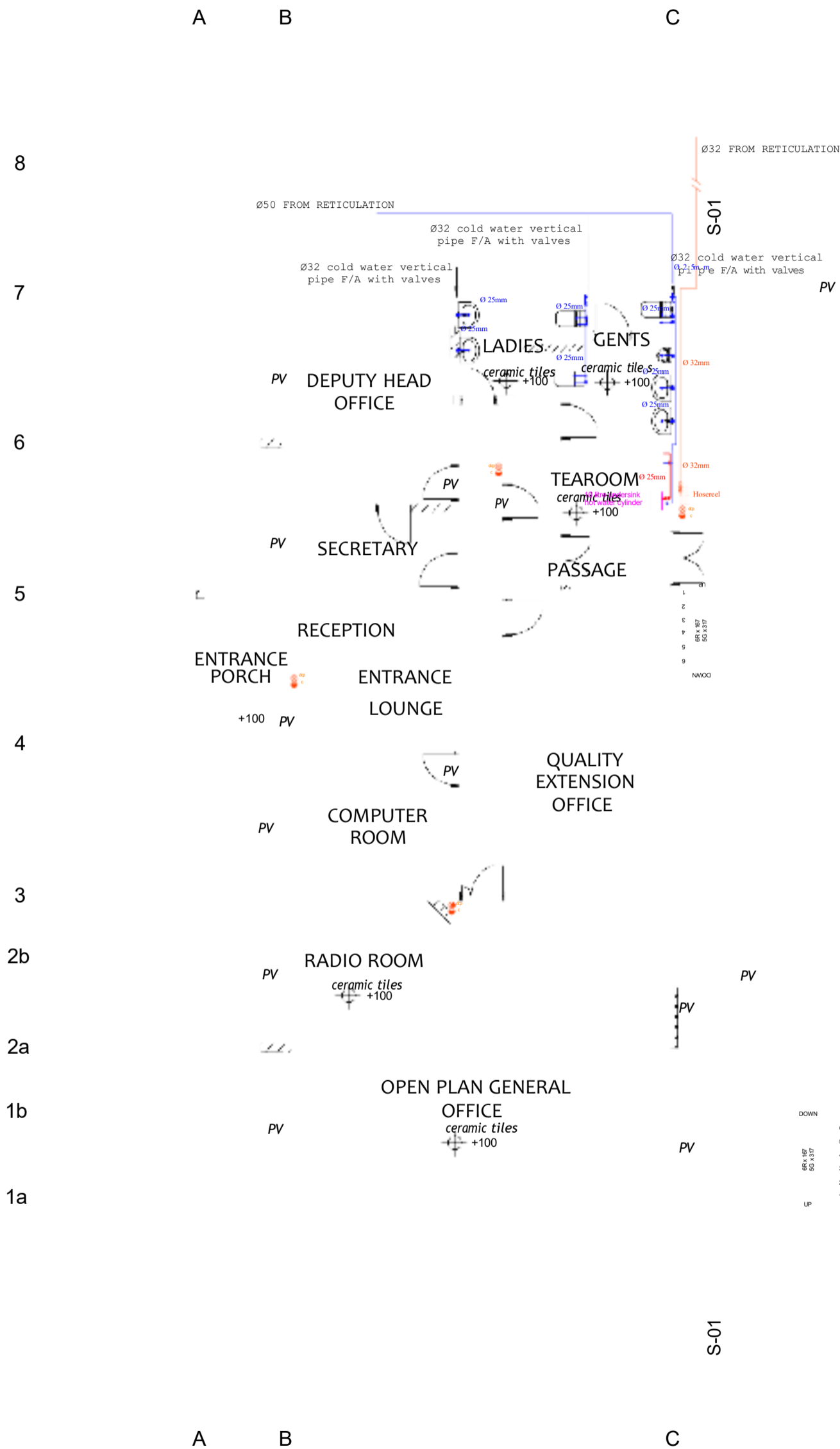
TRADEMARK AFRICA, 2nd FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No.

M-DR-01

Date:	JAN 2025	Drawn by:	W.N.F
		Checked by:	K.O
Scale:	1:100 A1	Approved by:	K.O

ASGCL - 023



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- Stack pipes to rise 600mm above the roof.

No.	Revision/Issue	Date
01.	Architectural	12/05/2025

PROJECT

PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

CONSULTANT

**APEX SYSTEMS**  
Consulting Group Ltd  
Gate 1, Makanda Drive Along Lang'ata South Road, Karen P.O.Box 38900-00100, Nairobi GPO Tel:020-2738032/34. Fax:020-2730072. E-MAIL: info@apexsystemscg.com

PROJECT MANAGERS

TITLE

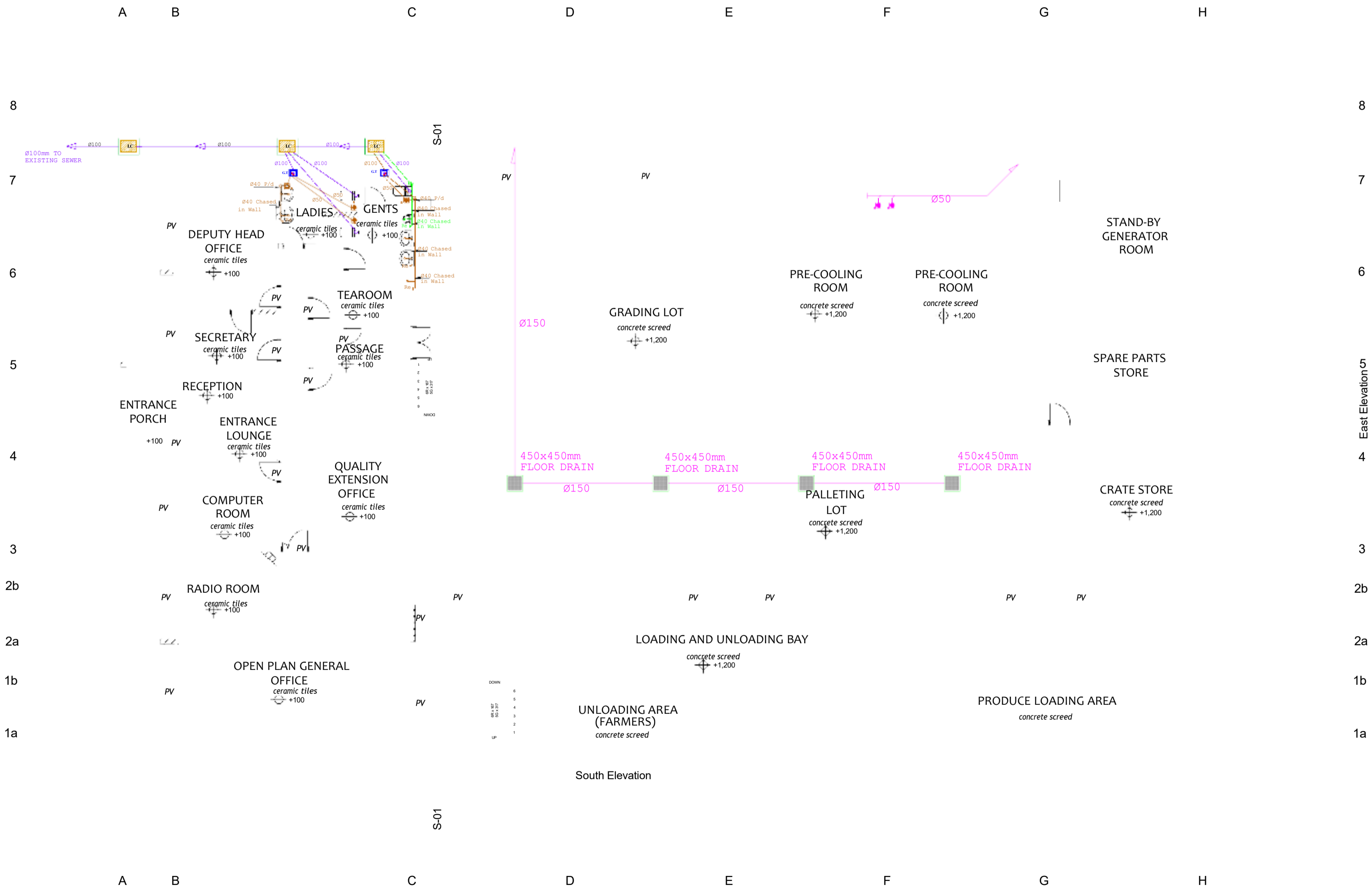
WAREHOUSE BLOCK  
GROUND FLOOR PLUMBING AND FIRE FIGHTING LAYOUT

CLIENT

TRADEMARK AFRICA, 2nd FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-PL-02

Date:	JAN 2025	Drawn by: W.N.F
		Checked by: K.O
Scale:	1:100 A1	Approved by: K.O



**NOTES**

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01.	Architectural	12/05/2025
No.	Revision/Issue	Date

**PROJECT**

PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

**CONSULTANT**

**APEX SYSTEMS**  
Consulting Group Ltd.  
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Leip'eta South Road, Karen  
P.O.Box 38900-00100, Nairobi GPO  
Tel:020-2738032/34.  
Fax:020-2730072.  
E-MAIL: info@apexsystemsco.com

**PROJECT MANAGERS**

**TITLE**

WAREHOUSE BLOCK  
GROUND FLOOR FOUL AND STORM  
DRAINAGE LAYOUT

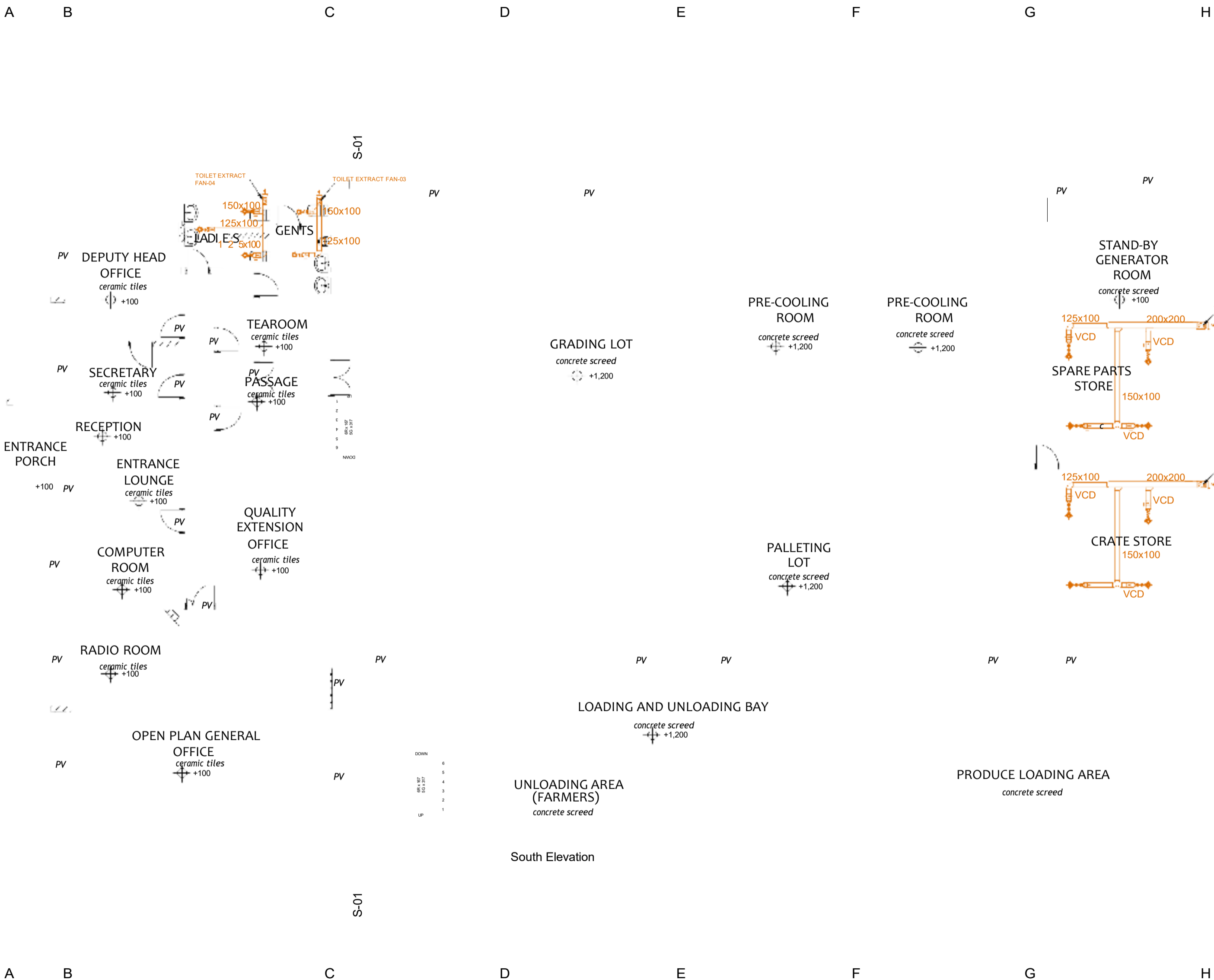
**CLIENT**

TRADEMARK AFRICA, 2nd FLR, FIDELITY  
INSURANCE CENTRE, WESTLANDS,  
P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-DR-02

Date:	JAN 2025	Drawn by:	W.N.F
		Checked by:	K.O
Scales:	1:100 A1	Approved by:	K.O

8  
7  
6  
5  
4  
3  
2b  
2a  
1b  
1a



South Elevation

8  
7  
6  
5  
4  
3  
2b  
2a  
1b  
1a

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01.	Architectural	12/05/2025
No.	Revision/Issue	Date

**PROJECT**

PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

**CONSULTANT**

**APEX SYSTEMS**  
Consulting Group Ltd  
Gate 1, Makanda Drive Along  
Leip'ata South Road, Karen  
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Tel: 020-2738032/34.  
Fax: 020-2730072  
E-MAIL: info@apexsystemsco.com

**PROJECT MANAGERS**

**TITLE**

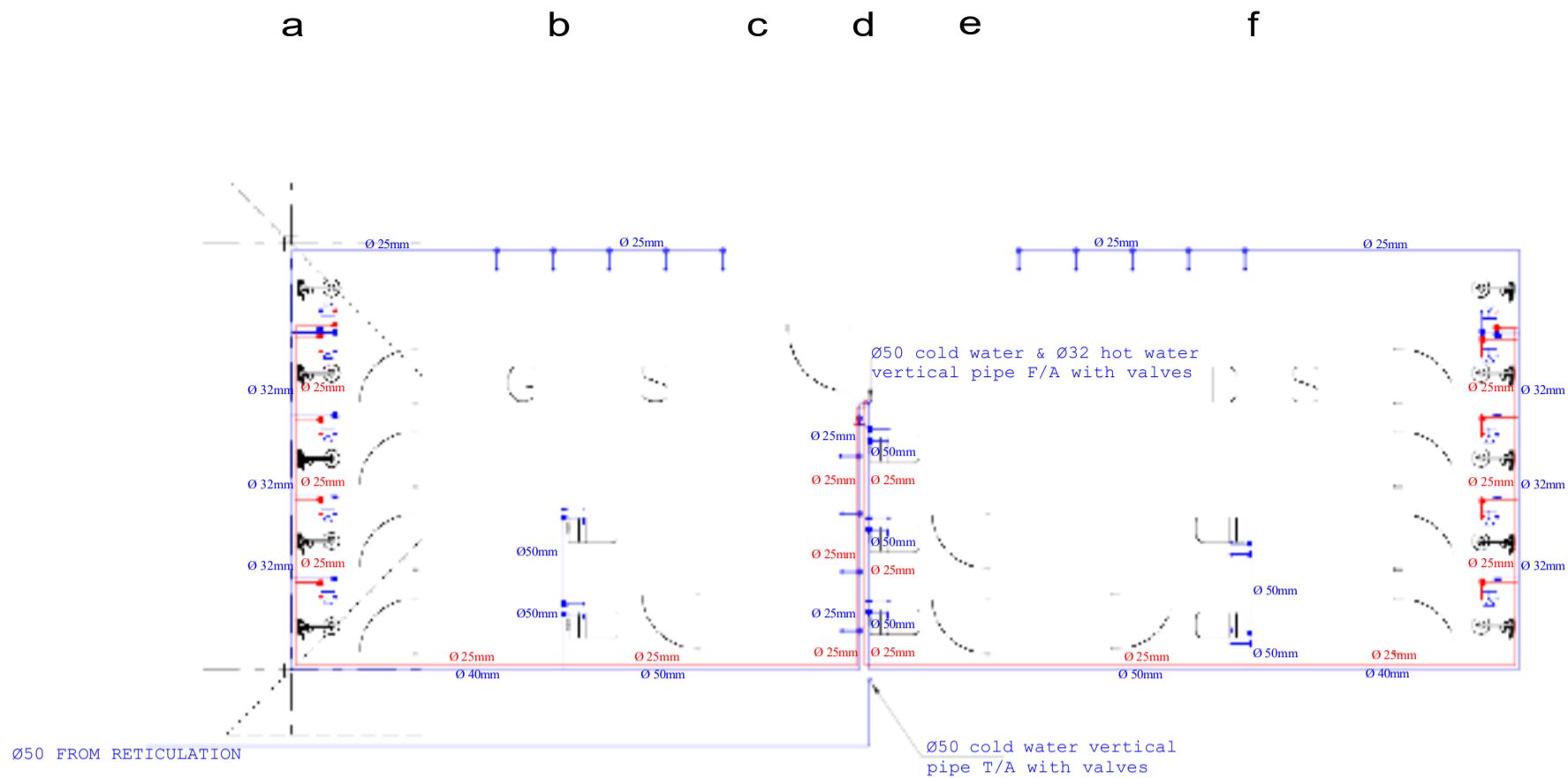
WAREHOUSE BLOCK  
GROUND FLOOR MECHANICAL  
VENTILATION LAYOUT

**CLIENT**

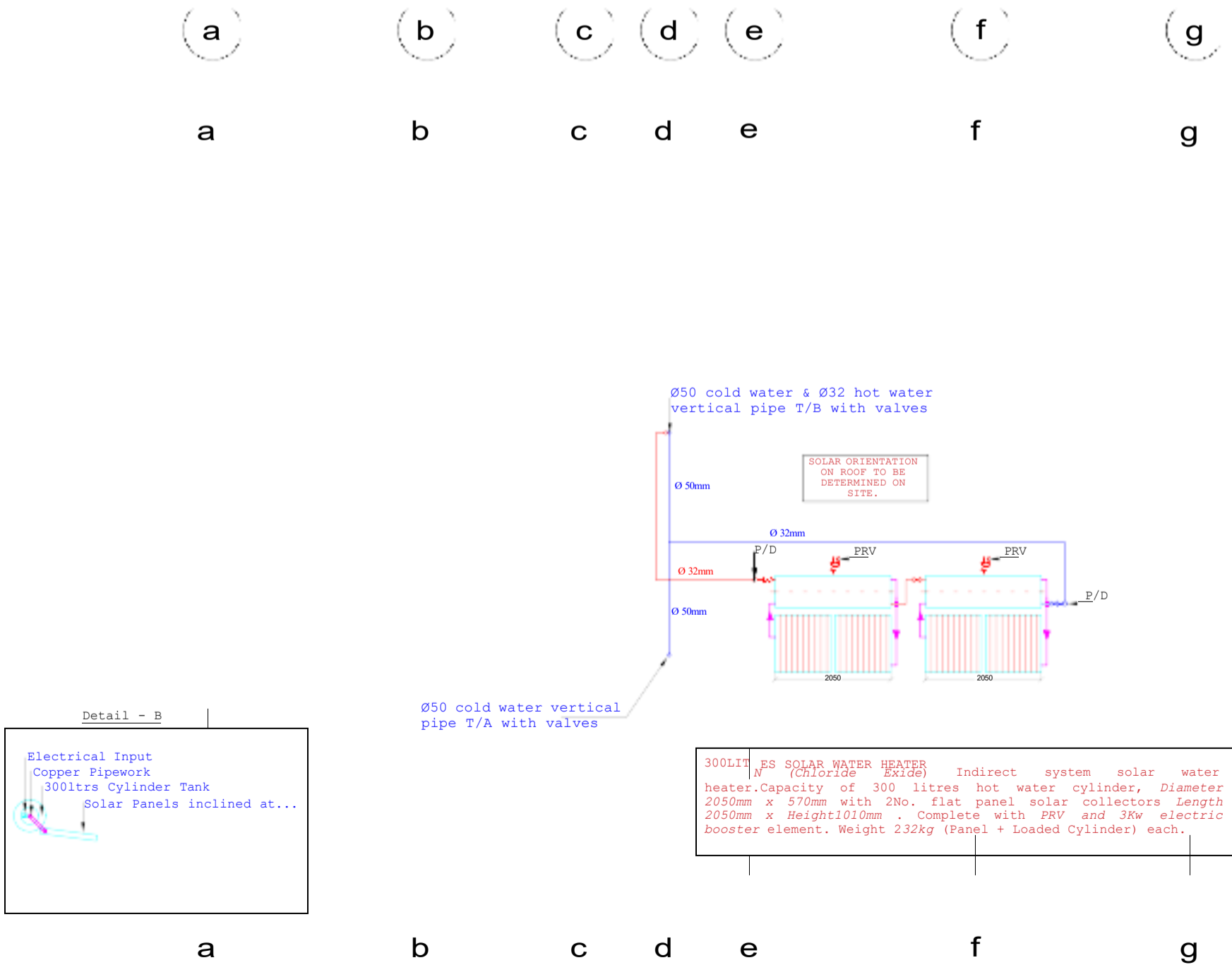
TRADEMARK AFRICA, 2nd FLR, FIDELITY  
INSURANCE CENTRE, WESTLANDS,  
P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-MV-01

Date:	JAN 2025	Drawn by:	W.N.F
		Checked by:	K.O
Scale:	1:100 A1	Approved by:	K.O



Ground Floor



NOTES

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12. Stack pipes to rise 600mm above the roof.

01.	Architectural	12/05/2025
No.	Revision/Issue	Date

**PROJECT**  
PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

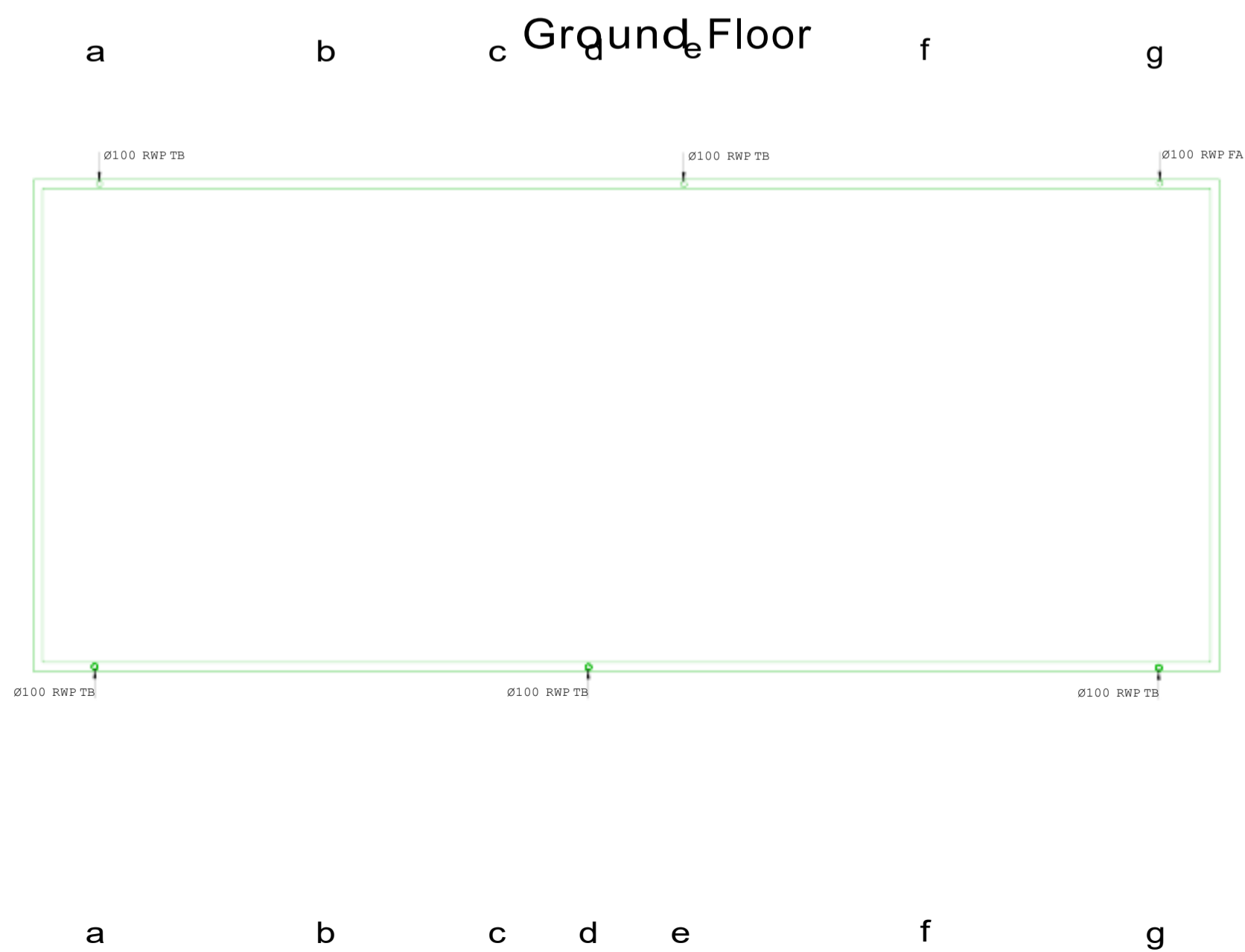
**CONSULTANT**  
**APEX SYSTEMS**  
Consulting Group Ltd  
Gate 1, Makanda Drive Along Langata South Road, Karen P.O.Box 38900-00100, Nairobi GPO Tel: 020-2738032/34. Fax: 020-2730072. E-MAIL: info@apexsystemsco.com

**PROJECT MANAGERS**

**TITLE**  
WASHROOM BLOCK  
PLUMBING LAYOUT

**CLIENT**  
TRADEMARK AFRICA, 2nd FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O.BOX 313-00606, NAIROBI, KENYA

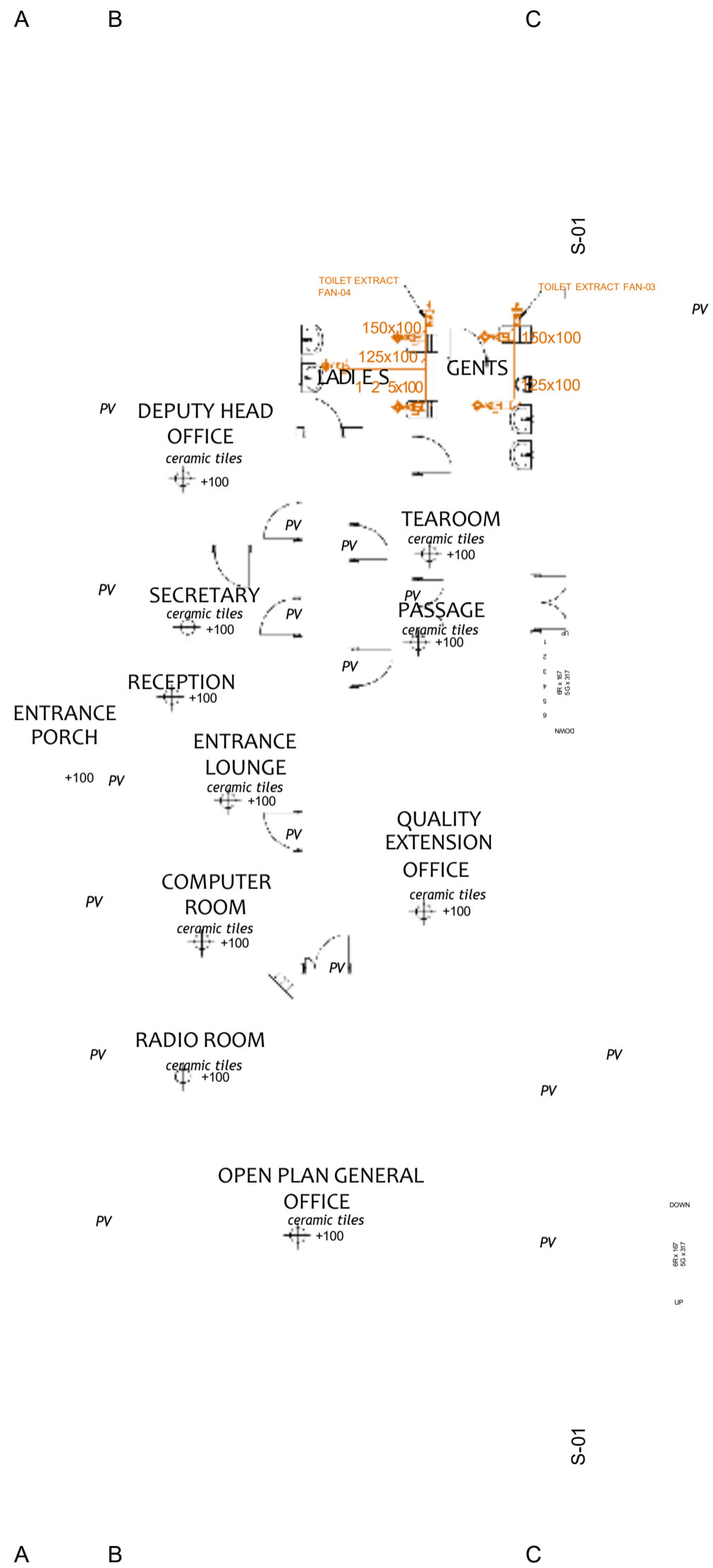
Drg. No. M-PL-03  
Date: JAN 2025 Drawn by: W.N.F  
Checked by: K.O  
Scale: 1:100 A1 Approved by: K.O



- |     |                |            |
|-----|----------------|------------|
|     |                |            |
|     |                |            |
|     |                |            |
| 01. | Architectural  | 12/05/2025 |
| No. | Revision/Issue | Date       |

Date:	JAN 2025	Drawn by: W.N.F
		Checked by: K.O
Scale:	1:100 A1	Approved by: K.O

8  
7  
6  
5  
4  
3  
2b  
2a  
1b  
1a



South Elevation

8  
7  
6  
5  
4  
3  
2b  
2a  
1b  
1a

**NOTES**

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11. Overflow pipes to discharge at 150mm beyond the wall
12. Stack pipes to rise 600mm above the roof.

01.	Architectural	12/05/2025
No.	Revision/Issue	Date

**PROJECT**

PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

**CONSULTANT**

**APEX SYSTEMS**  
Consulting Group Ltd.  
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Lang'ata South Road, Karen  
P.O.Box 38900-00100, Nairobi GPO  
Tel:020-2738052/34.  
Fax:020-2730072.  
E-MAIL: info@apexsystemscg.com

**PROJECT MANAGERS**

**TITLE**

WAREHOUSE BLOCK  
EXTRACT LAYOUT

**CLIENT**

TRADEMARK AFRICA, 2nd FLR, FIDELITY  
INSURANCE CENTRE, WESTLANDS,  
P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-MV-01

Date:	JAN 2025	Drawn by:	W.N.F
		Checked by:	K.O
Scale:	1:100 A1	Approved by:	K.O

i

ii

a

b

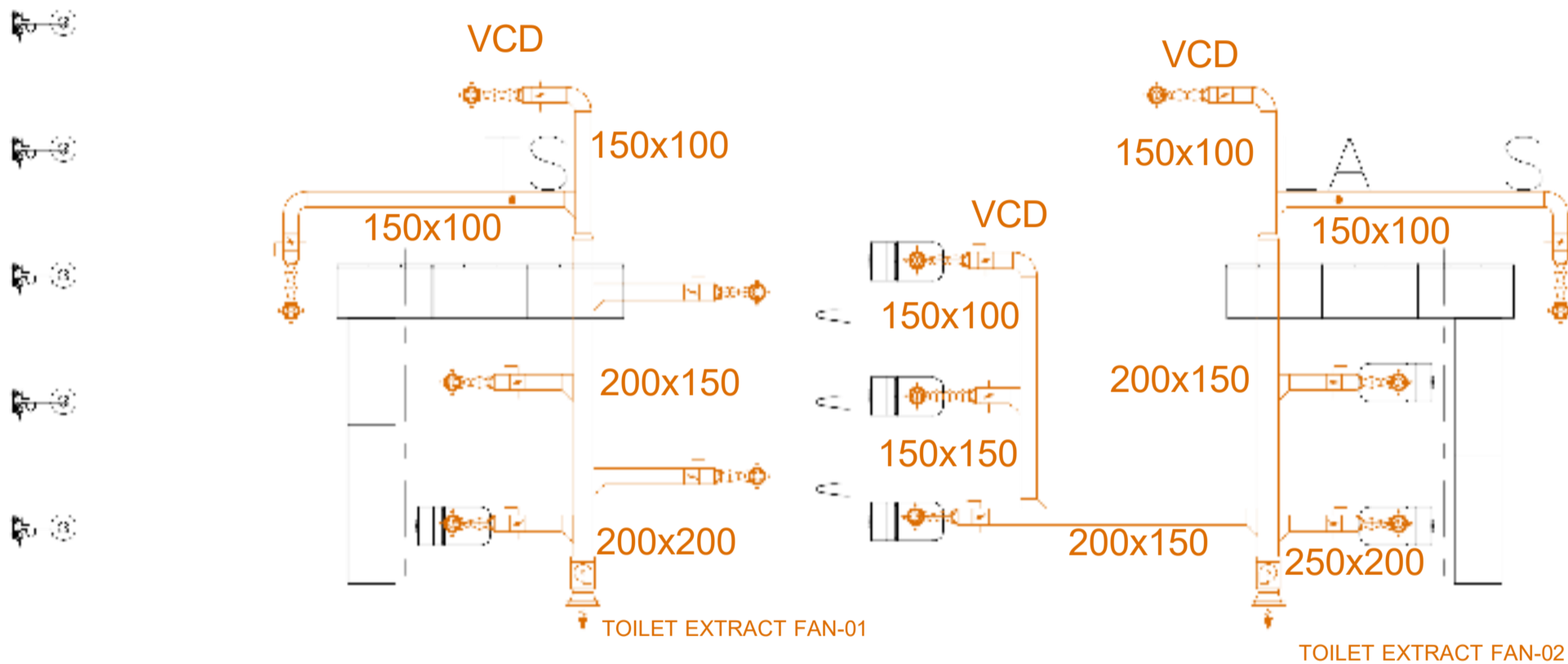
c

d

e

f

g



Ground Floor

a

b

c

d

e

f

g

NOTES

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01.	Architectural	12/05/2025
No.	Revision/Issue	Date

**PROJECT**  
PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

**CONSULTANT**  
**APEX SYSTEMS**  
Consulting Group Ltd  
Gate 1, Makanda Drive Along  
Lang'ata South Road, Karen  
P.O.Box 38900-00100, Nairobi GPO  
Tel:020-2738032/34.  
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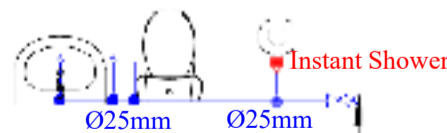
**PROJECT MANAGERS**

**TITLE**  
WASHROOM BLOCK  
WASHROOM EXTRACT LAYOUT

**CLIENT**  
TRADEMARK AFRICA, 2nd FLR, FIDELITY  
INSURANCE CENTRE, WESTLANDS,  
P.O.BOX 313-00606, NAIROBI, KENYA

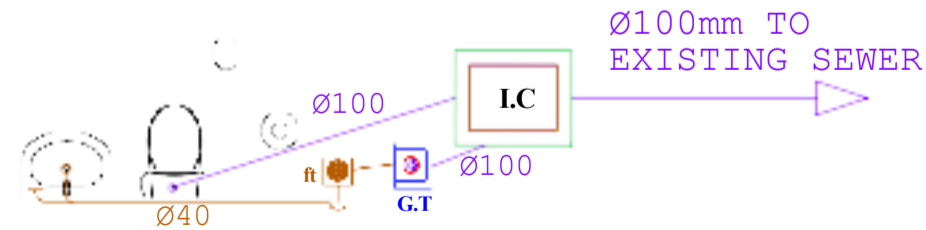
Drg. No. M-MV-02		
Date:	JAN 2025	Drawn by: W.N.F
		Checked by: K.O
Scale:	1:100 A1	Approved by: K.O

S CUR  
POS  
RCC



Ø25 cold water vertical  
pipe P/R with valves

S CUR  
POS  
RCC



#### NOTES

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01.	Architectural	12/05/2025
No.	Revision/Issue	Date

#### PROJECT

PROPOSED REHABILITATION OF  
KIBWEZI PACKHOUSE.

#### CONSULTANT

**APEX SYSTEMS**  
Consulting Group Ltd.  
Gate 1, Makanda Drive Along  
Lang'ata South Road, Karen  
P.O.Box 38900-00100, Nairobi GPO  
Tel:020-2738032/34.  
Fax:020-2730072.  
E-MAIL: info@apexsystemscg.com

#### PROJECT MANAGERS

**TITLE**  
GATE HOUSE MECHANICAL  
SERVICES LAYOUT

**CLIENT**  
TRADEMARK AFRICA, 2nd FLR, FIDELITY  
INSURANCE CENTRE, WESTLANDS,  
P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-GHS-01

Date:	JAN 2025	Drawn by:	W.N.F
		Checked by:	K.O
Scale:	1:100 A1	Approved by:	K.O

PLUMBING SCHEMATIC

ABBREVIATIONS	
OVP	OVER FLOW PIPE
IV	ISOLATION VALVE
NRV	NON-RETURN VALVE
DV	DRAIN VALVE
SDR	STANDARD DIMENSIONAL RATIO
<div></div>	WATER TANK AREA

Ø32 INCOMING MUNICIPAL MAINS WATER SUPPLY

Ø32

UNDERGROUND TANK

Domestic Boosting pumps (Duty & Standby)

Elevated cold water storage tank,

Ø40

Ø50

Ø50

Ø40

Ø50

Fire Hose Reels  
Pressure Boosting pumps  
Duty & Standby  
Ø40

Ø50

Ø50 COLD WATER SUPPLY TO WAREHOUSE-ADMIN FLOOR WET AREAS

Ø50 COLD WATER SUPPLY TO WASHROOM-WET AREAS

Ø40 WATER TO OVERHEAD TANKS (PRESSURIZED)

Ø50

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01.	Architectural	12/05/2025
No.	Revision/Issue	Date

PROJECT
PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

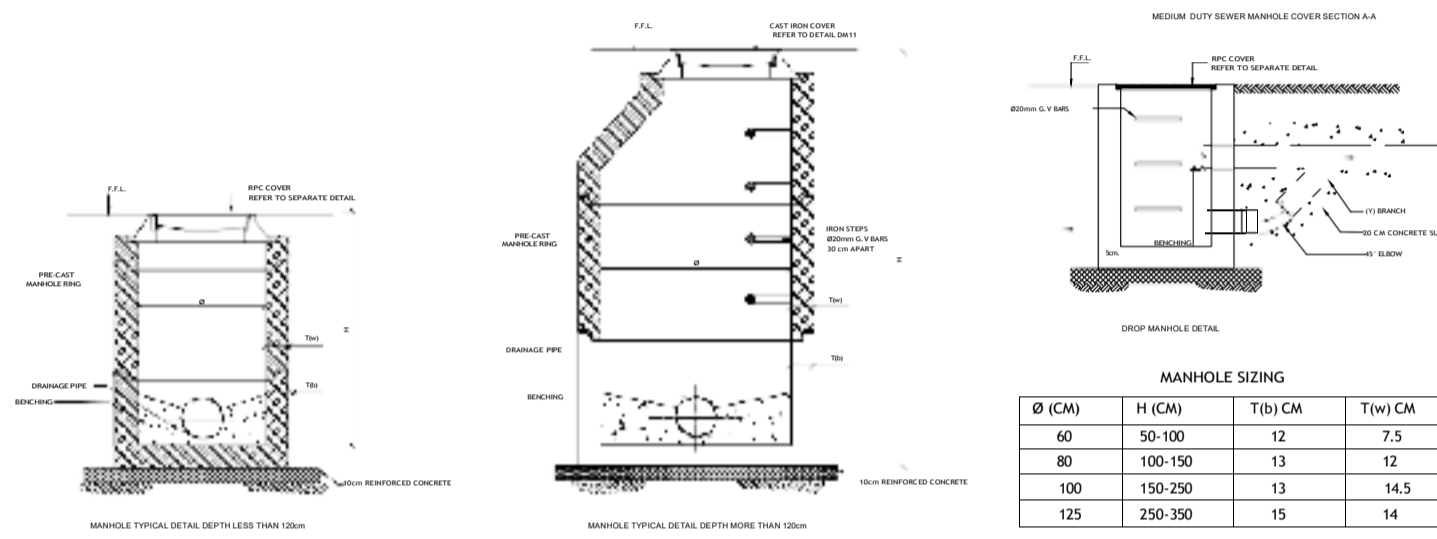
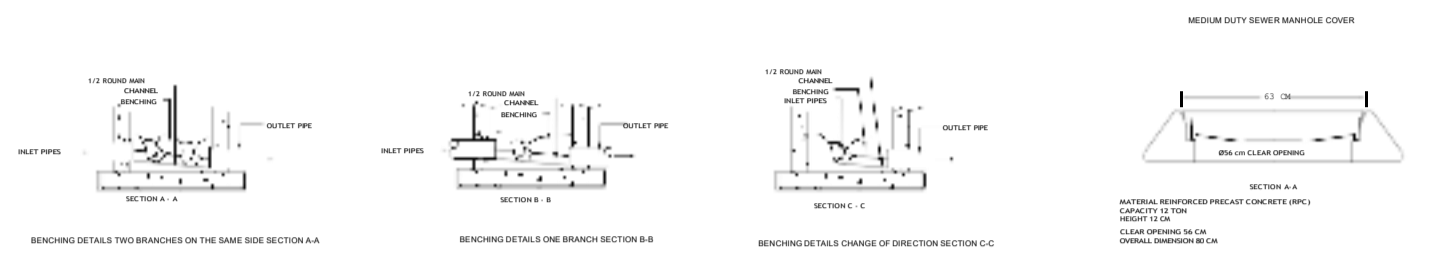
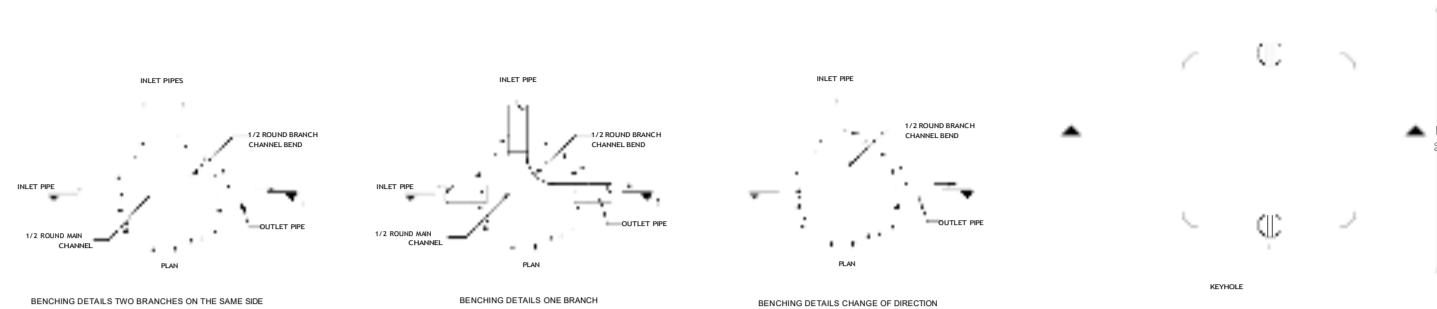
CONSULTANT
<b>APEX SYSTEMS</b> Consulting Group Ltd. Gate 1, Makanda Drive Along Leig'ata South Road, Karen P.O.Box 38900-00100, Nairobi GPO Tel:020-2738032/34. Fax:020-2730072. E-MAIL: info@apexsystemsco.com

PROJECT MANAGERS

TITLE
PLUMBING SCHEMATIC LAYOUT

CLIENT
TRADEMARK AFRICA, 2 <sup>nd</sup> FLR, FIDELITY INSURANCE CENTRE, WESTLANDS, P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-PL-SCH		
Date:	JAN 2025	Drawn by: W.N.F
		Checked by: K.O
Scale:	NTS	Approved by: K.O



SEWAGE MANHOLES DETAILS

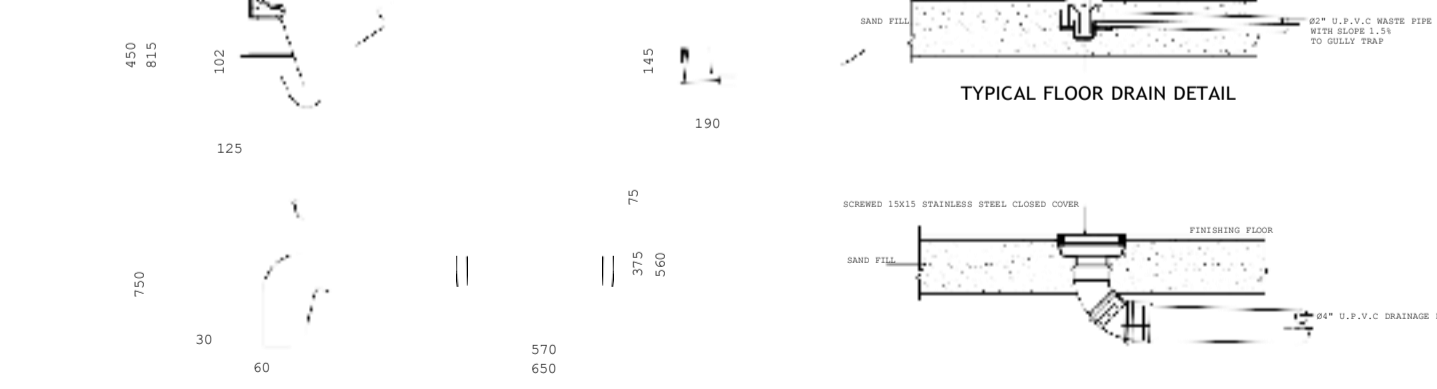
MANHOLE SIZING			
Ø (CM)	H (CM)	T(b) CM	T(w) CM
60	50-100	12	7.5
80	100-150	13	12
100	150-250	13	14.5
125	250-350	15	14



WESTERN WATER CLOSET DETAILS

VANITY LAVATORY DETAIL

TYPICAL DETAIL OF SHOWER TRAY



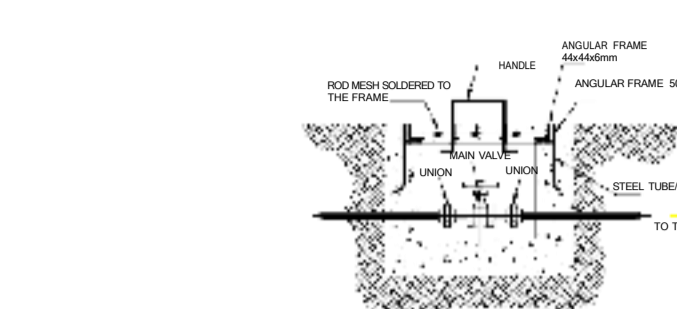
TYPICAL FLOOR DRAIN DETAIL

TYPICAL CLEAN OUT DETAIL

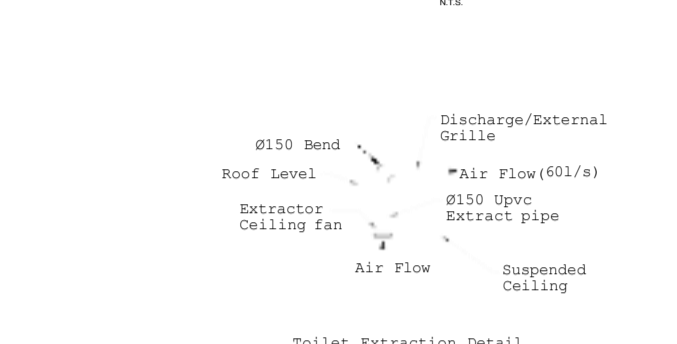
CEILING EXHAUST FAN DETAILS

EXTERNAL EXHAUST LOUVER DETAILS

SPLIT UNIT CONNECTION DETAILS



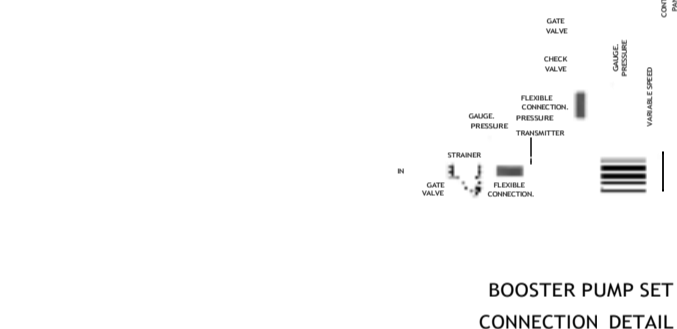
VALVE BOX DETAIL



TOILET EXTRACTION DETAIL



BOOSTER PUMP SET CONNECTION DETAIL



TYPICAL PIPE SUPPORTS



GULLY TRAP CHAMBER



ABC TYPE FIRE EXTINGUISHER INSTALLATION DETAIL



CO2 TYPE FIRE EXTINGUISHER INSTALLATION DETAIL



TYPICAL CLEAN OUT DETAIL

CEILING EXHAUST FAN DETAILS

EXTERNAL EXHAUST LOUVER DETAILS



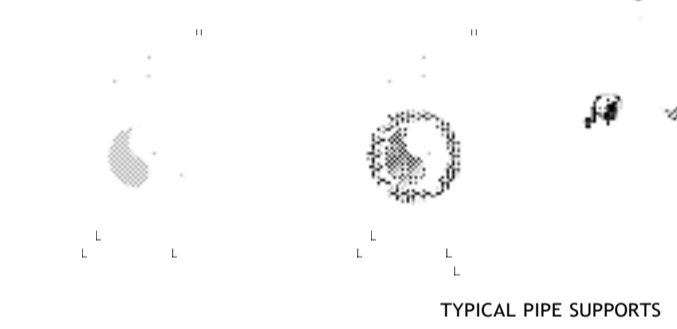
INSPECTION CHAMBER & MANHOLE PLAN DETAILS FOR DEPTH UPTO 1500



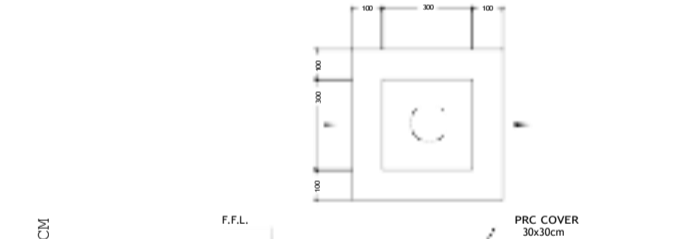
CONNECTION OF uPVC PIPE TO MANHOLE



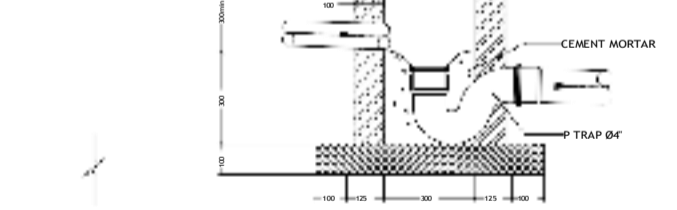
TYPICAL PIPE SUPPORTS



GULLY TRAP CHAMBER



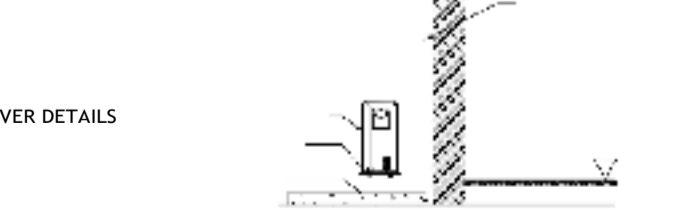
ABC TYPE FIRE EXTINGUISHER INSTALLATION DETAIL



CO2 TYPE FIRE EXTINGUISHER INSTALLATION DETAIL



TYPICAL CLEAN OUT DETAIL



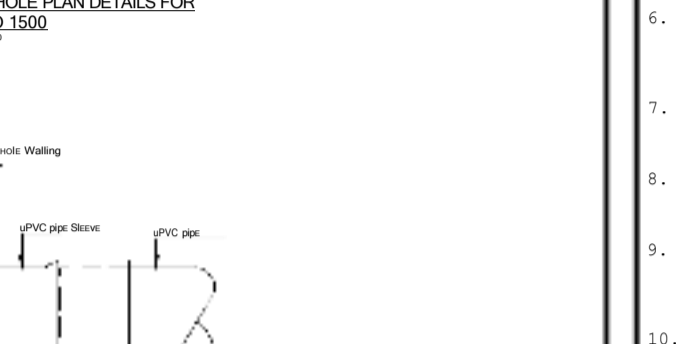
CEILING EXHAUST FAN DETAILS

EXTERNAL EXHAUST LOUVER DETAILS

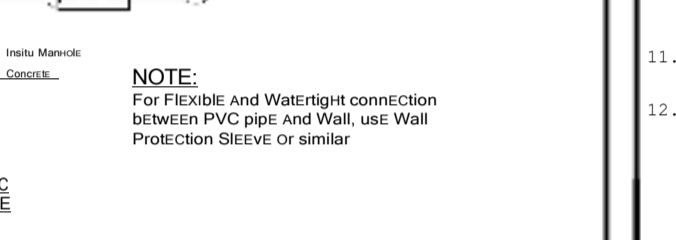
SPLIT UNIT CONNECTION DETAILS



INSPECTION CHAMBER & MANHOLE PLAN DETAILS FOR DEPTH UPTO 1500



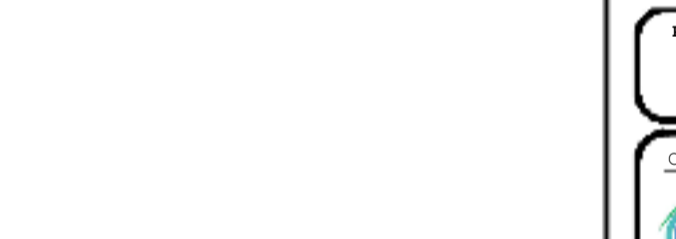
CONNECTION OF uPVC PIPE TO MANHOLE



TYPICAL PIPE SUPPORTS



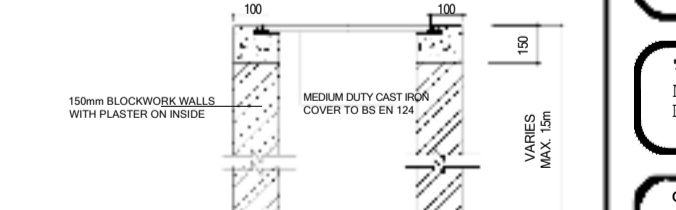
GULLY TRAP CHAMBER



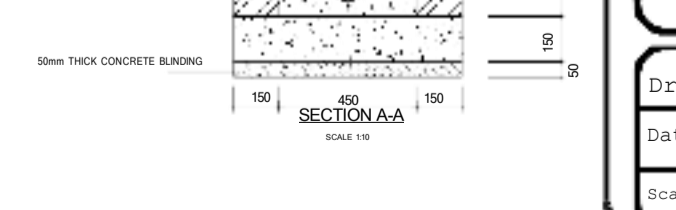
ABC TYPE FIRE EXTINGUISHER INSTALLATION DETAIL



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TYPICAL CLEAN OUT DETAIL



CEILING EXHAUST FAN DETAILS

EXTERNAL EXHAUST LOUVER DETAILS

SPLIT UNIT CONNECTION DETAILS

NOTES

- All dimensions are in millimeters unless otherwise stated
- The diameters of the pipes indicated refers to the internal diameters only
- All Water pipes to be PPRC PN 20 Conforming the current European Standards for PPRC installations.
- PPRC pipe joints to be by polyfusion or electrical coupling.
- All valves to be of brass/bronze heavy duty pattern construction as 'peglar'
- Water Pipes under floor slab, drive ways, walkways, car parks, to be sleeved in heavy duty C or GMS as instructed
- Exposed hot water pipes to be lagged with minimum 50mm thick fibre glass
- All drainage pipes above ground to be uPVC 'grey' while those below to be uPVC golden brown
- All drainage pipes below floor slab, driveways, walkways, car parks to be encased in 150mm concrete surround well cured
- All pipe-work to run in wall chase, under floor slab, under work tops in ceiling etc. Exposed pipes shall not be acceptable
- Overflow pipes to discharge at 150mm beyond the wall
- Stack pipes to rise 600mm above the roof.

01.	Architectural	12/05/2025
No.	Revision/Issue	Date

PROJECT  
PROPOSED REHABILITATION OF KIBWEZI PACKHOUSE.

CONSULTANT  
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PROJECT MANAGERS

TITLE  
MECHANICAL INSTALLATION  
DETAILS LAYOUT

CLIENT  
TRADEMARK AFRICA, 2nd FLR, FIDELITY  
INSURANCE CENTRE, WESTLANDS,  
P.O.BOX 313-00606, NAIROBI, KENYA

Drg. No. M-IDL-000  
Date: JAN 2025  
Scale: NTS  
Drawn by: W.N.F  
Checked by: K.O  
Approved by: K.O