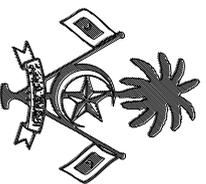


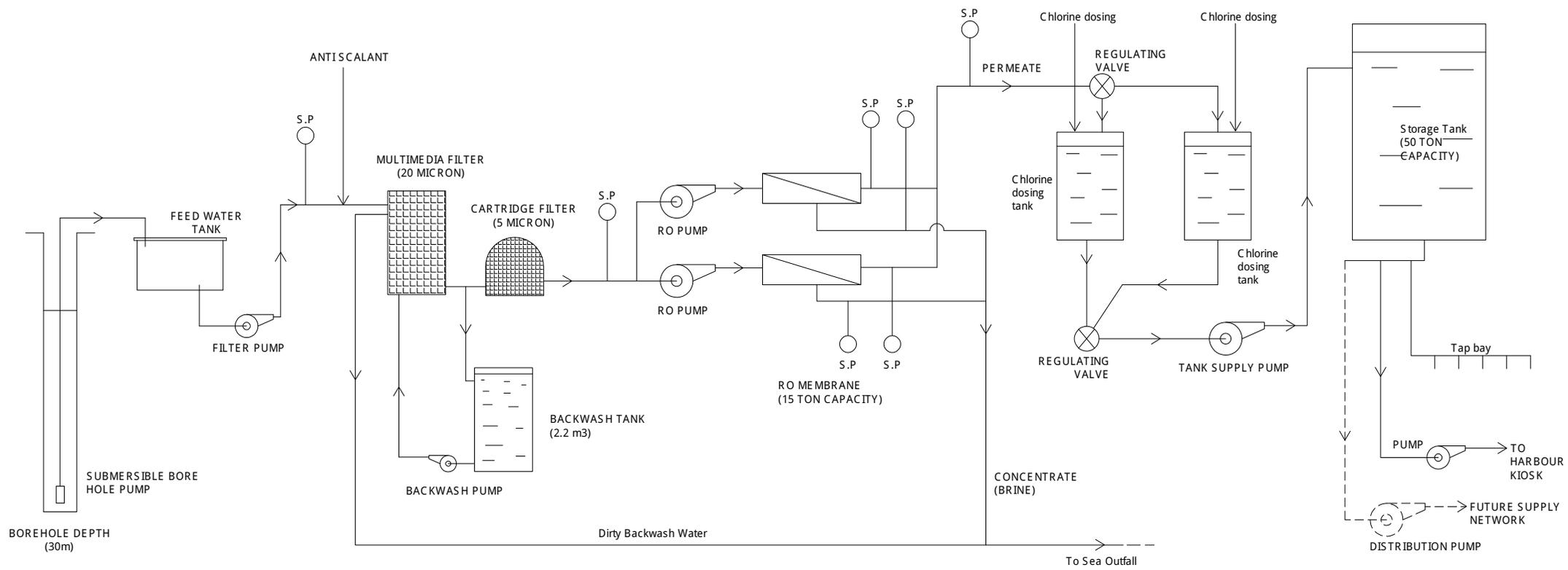
PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT

# RO PLANT BUILDING AND WATER SUPPLY FACILITY - PACKAGE I



WATER SUPPLY COMPONENT  
OFID PROJECT  
MINISTRY OF ENVIRONMENT AND ENERGY

HANDHUVAREE HINGUN MALE 20-01  
REPUBLIC OF MALDIVES



S.P. = Sampling Point

# RO PLANT SCHEMATIC ARRANGEMENT

## OFID 14 ISLAND WATER SUPPLY PROJECT - PACKAGE 1



PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT

# H.DH KUMUNDHOO RO PLANT BUILDING AND WATER SUPPLY FACILITY



WATER SUPPLY COMPONENT  
OFID PROJECT  
MINISTRY OF ENVIRONMENT AND ENERGY

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HANDHUVAREE HINGUN MALE' 20-01  
REPUBLIC OF MALDIVES



RO PLANT  
BUILDING AND  
STORAGE TANK

TAP BAY

BRINE OUTFALL PIPE (652m)

-6m  
(240m from shoreline)

SUPPLY PIPE TO  
HARBOUR KIOSK

HARBOUR KIOSK

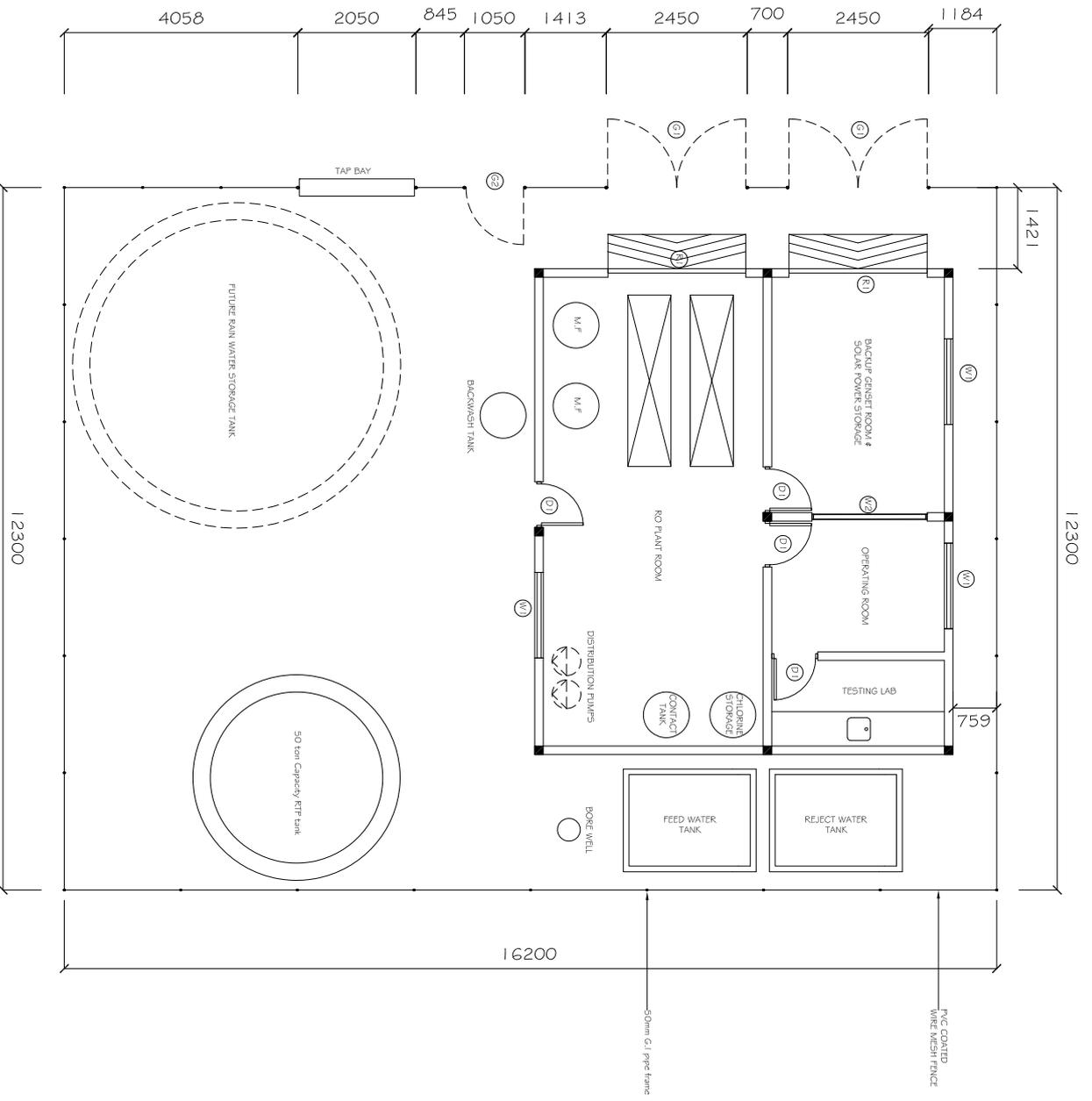
# RO PLANT BUILDING AND CRITICAL DEVELOPMENTS

H.DH KUMUNDHOO

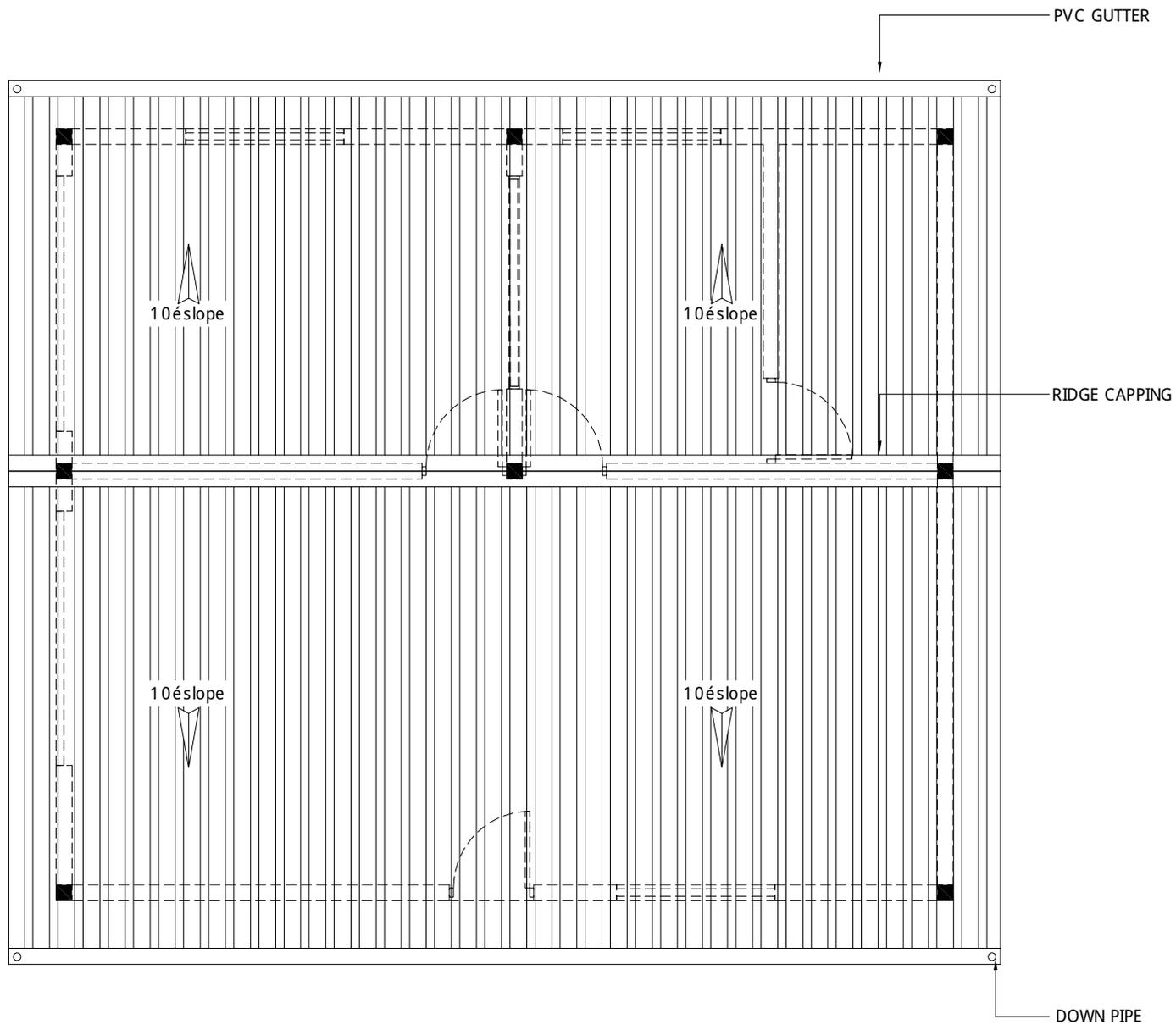
Google



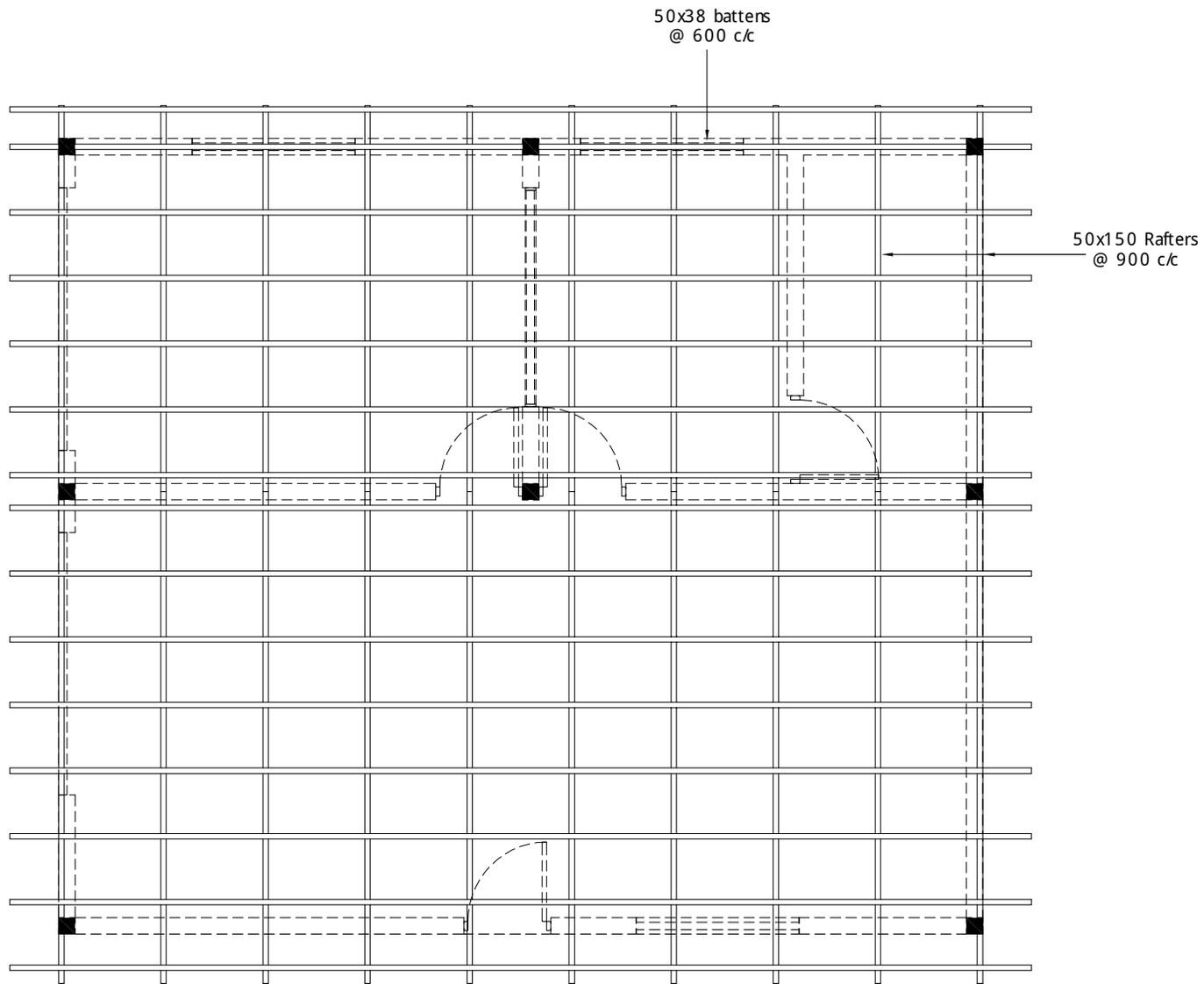
WATER SUPPLY AND STORAGE FACILITY SITE & BUILDING  
 HAA DHAALU KUMUNDHOO





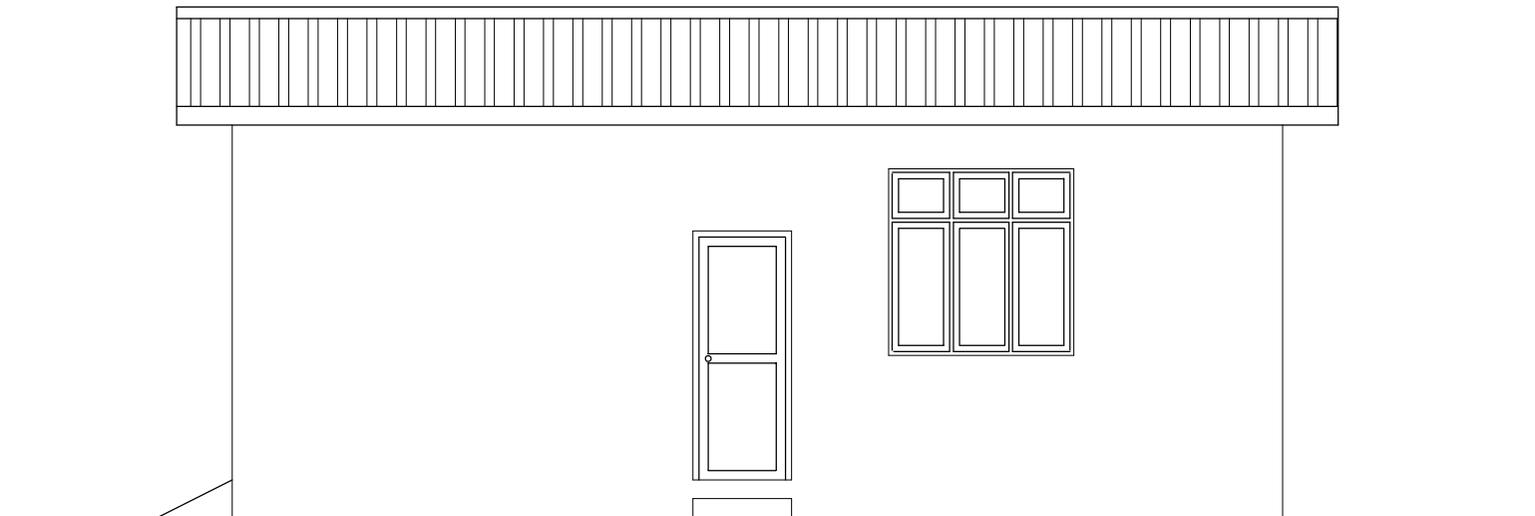


RO PLANT BUILDING  
 ROOF PLAN H.DH KUMUNDHOO

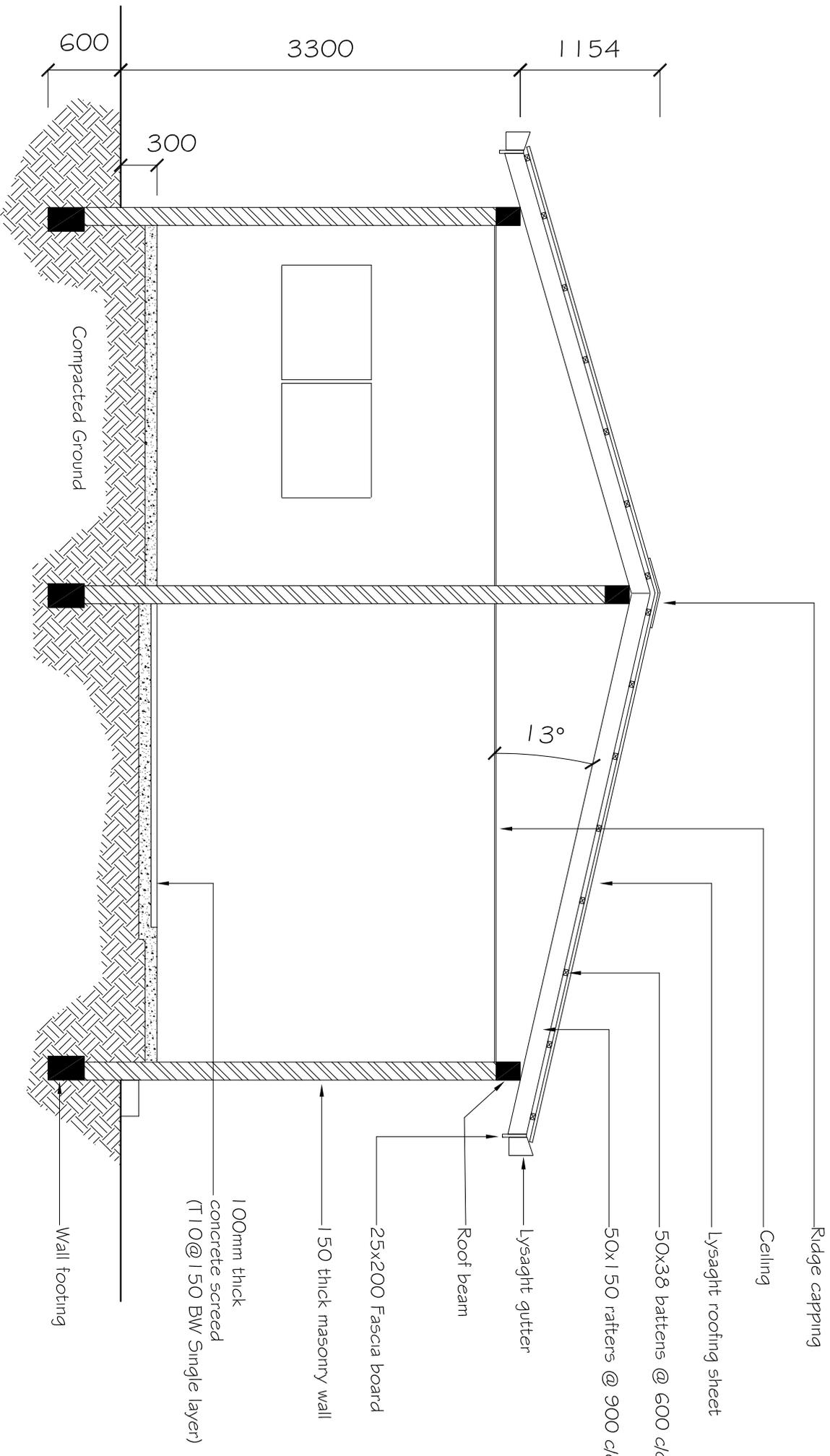


RO PLANT BUILDING  
ROOF STRUCTURE

H.DH KUMUNDHOO



RO PLANT BUILDING  
FRONT ELEVATION      H.DH KUMUNDHOO



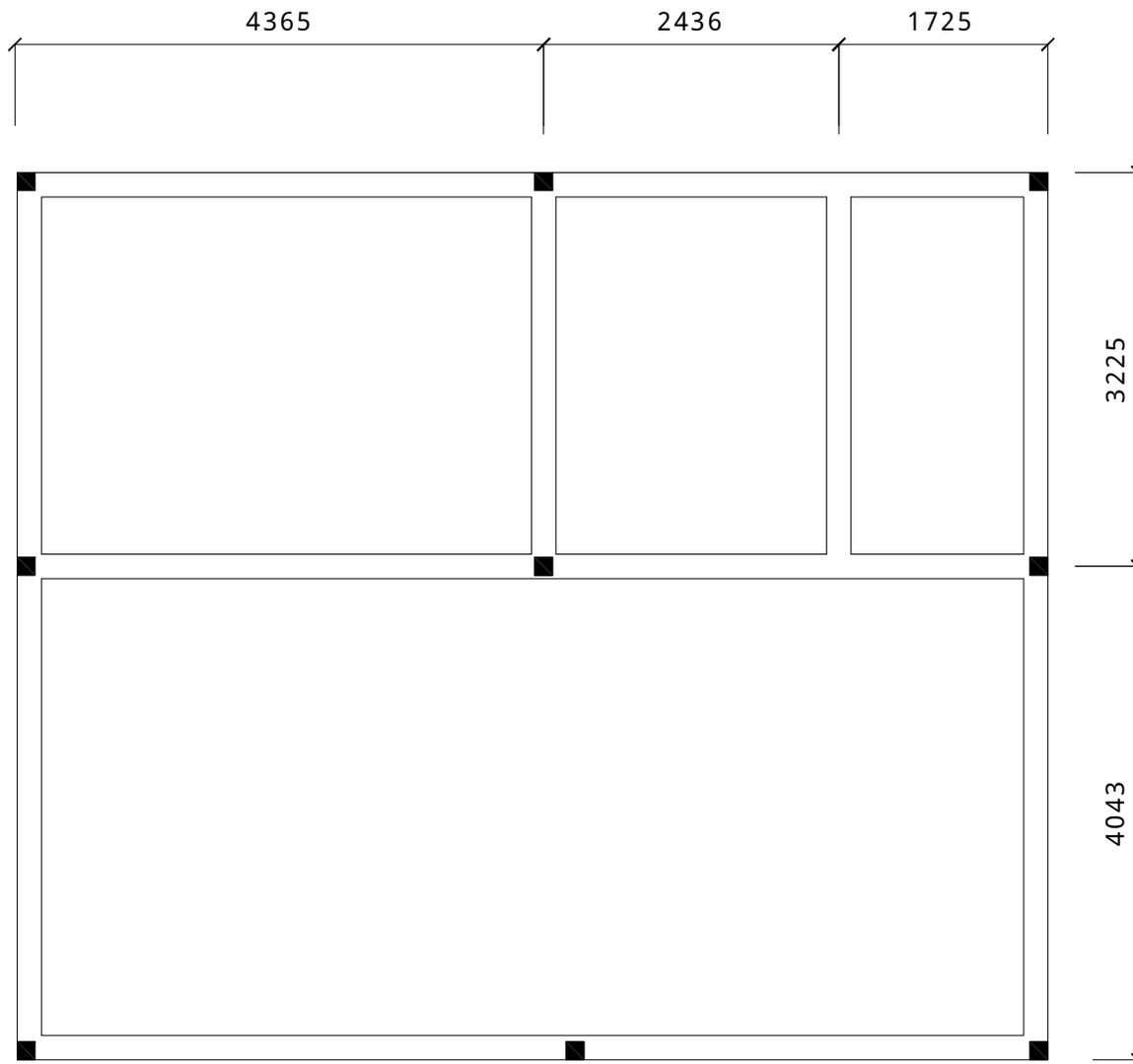
RO PLANT BUILDING  
SECTION X-X H.DH.KUMUNDHOO

PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT  
OPTIC FUND FOR INTERNATIONAL DEVELOPMENT

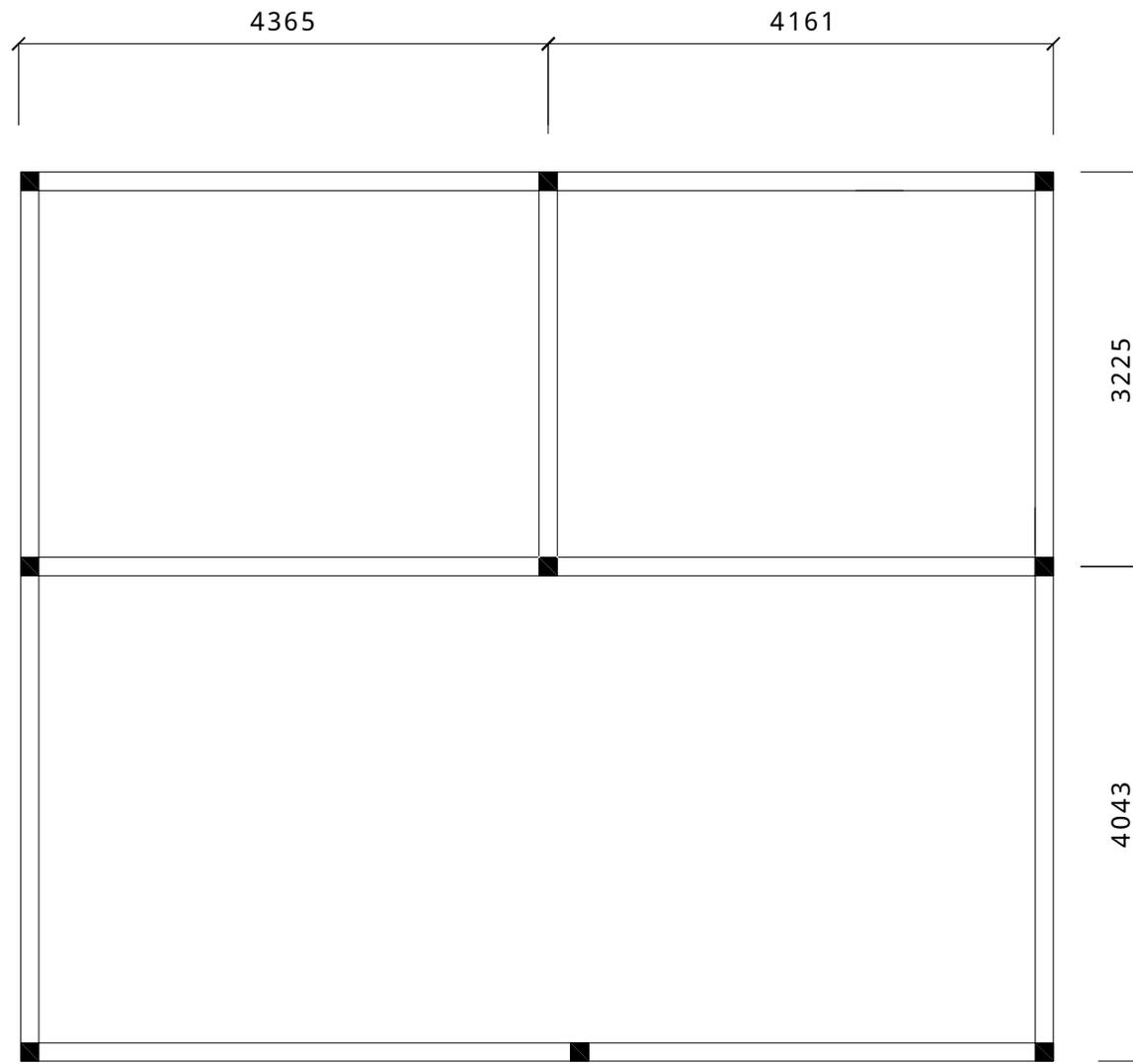
PROJECT:  
14 ISLAND WATER SUPPLY PROJECT

SCALE: AS SHOWN  
DATE: MAR 2017

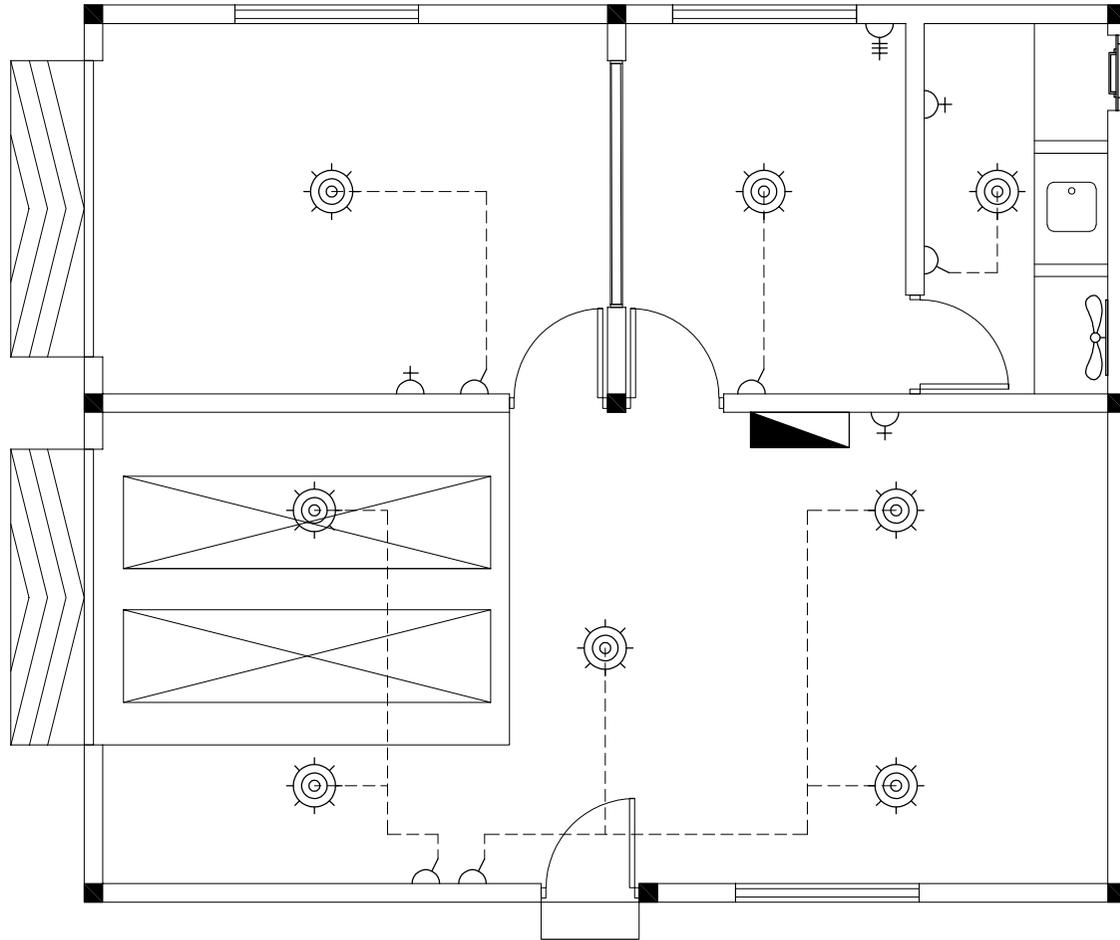
SOIL WATER MANAGEMENT COMPANY  
OPTIC PROJECT  
MINISTRY OF SANITATION AND HEALTH  
SRI LANKA  
NO. 20/1, SANGARATHODU ROAD, SANGARATHODU, SRI LANKA



RO PLANT BUILDING  
 WALL FOOTING PLAN H.DH KUMUNDHOO

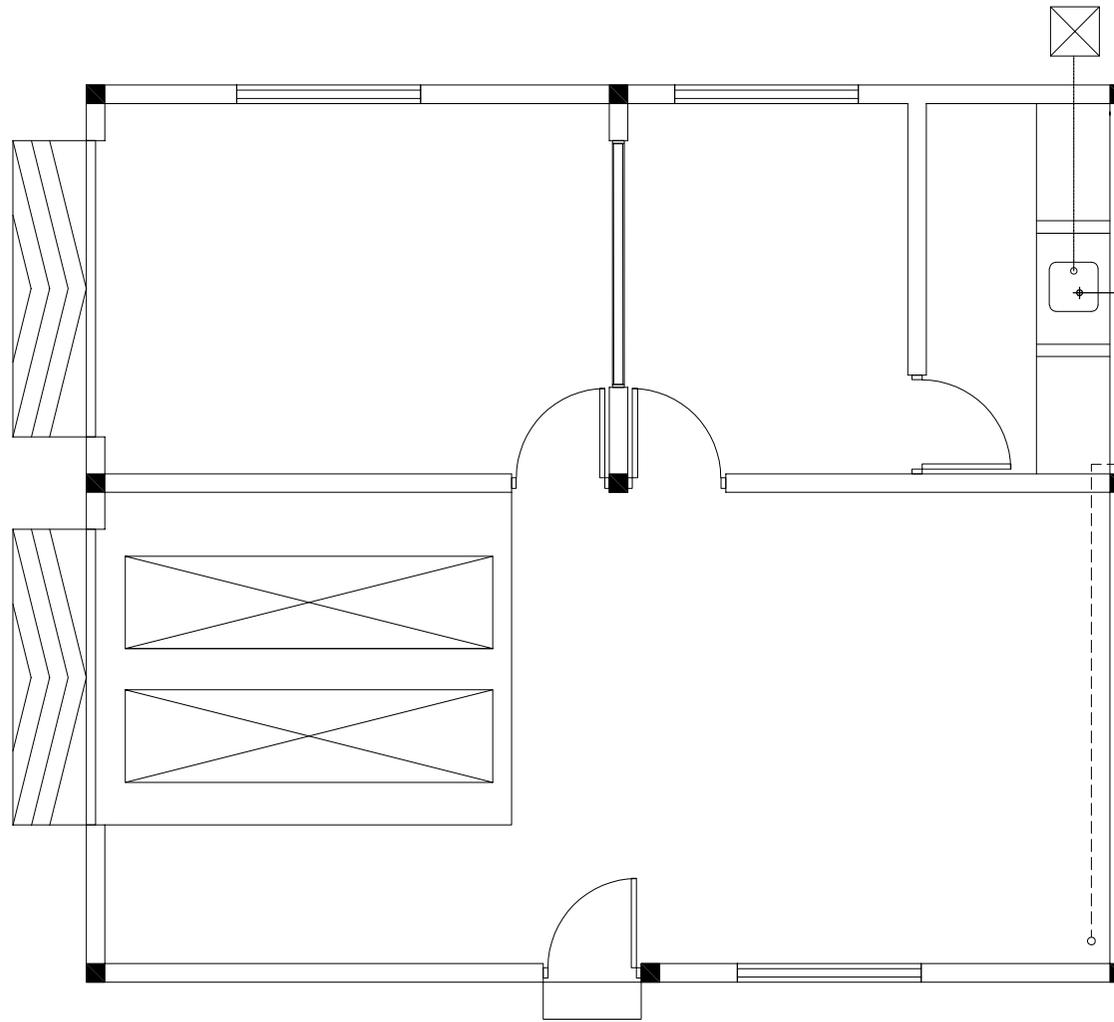


RO PLANT BUILDING  
 ROOF BEAM PLAN H.DH KUMUNDHOO



- DISTRIBUTION BOARD
- 100W ENERGY SAVING LIGHT
- POWER SOCKET [0.4m ABOVE GROUND]
- POWER SOCKET [0.4m BELOW CEILING]
- SINGLE GANG SWITCH
- WALL MOUNT EXHAUST FAN
- WALL MOUNT FAN

RO PLANT BUILDING  
ELECTRICAL LAYOUT H.DH KUMUNDHOO



- ⊕ — PVC Sink Tap
- ⊗ — Soak pit
- 25mm PVC Pipe
- 50mm PVC Train Pipe

RO PLANT BUILDING  
 PLUMBING LAYOUT H.DH KUMUNDHOO

PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT

# H.DH MAKUNUDHOO RO PLANT BUILDING AND WATER SUPPLY FACILITY



WATER SUPPLY COMPONENT  
OFID PROJECT  
MINISTRY OF ENVIRONMENT AND ENERGY

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HANDHUVAREE HINGUN MALÉ 20-01  
REPUBLIC OF MALDIVES



Police station

WATER KIOSK

SUPPLY PIPE TO KIOSK

Masjidh Al Thaqwa

RO PLANT BUILDING  
+ STORAGE TANK

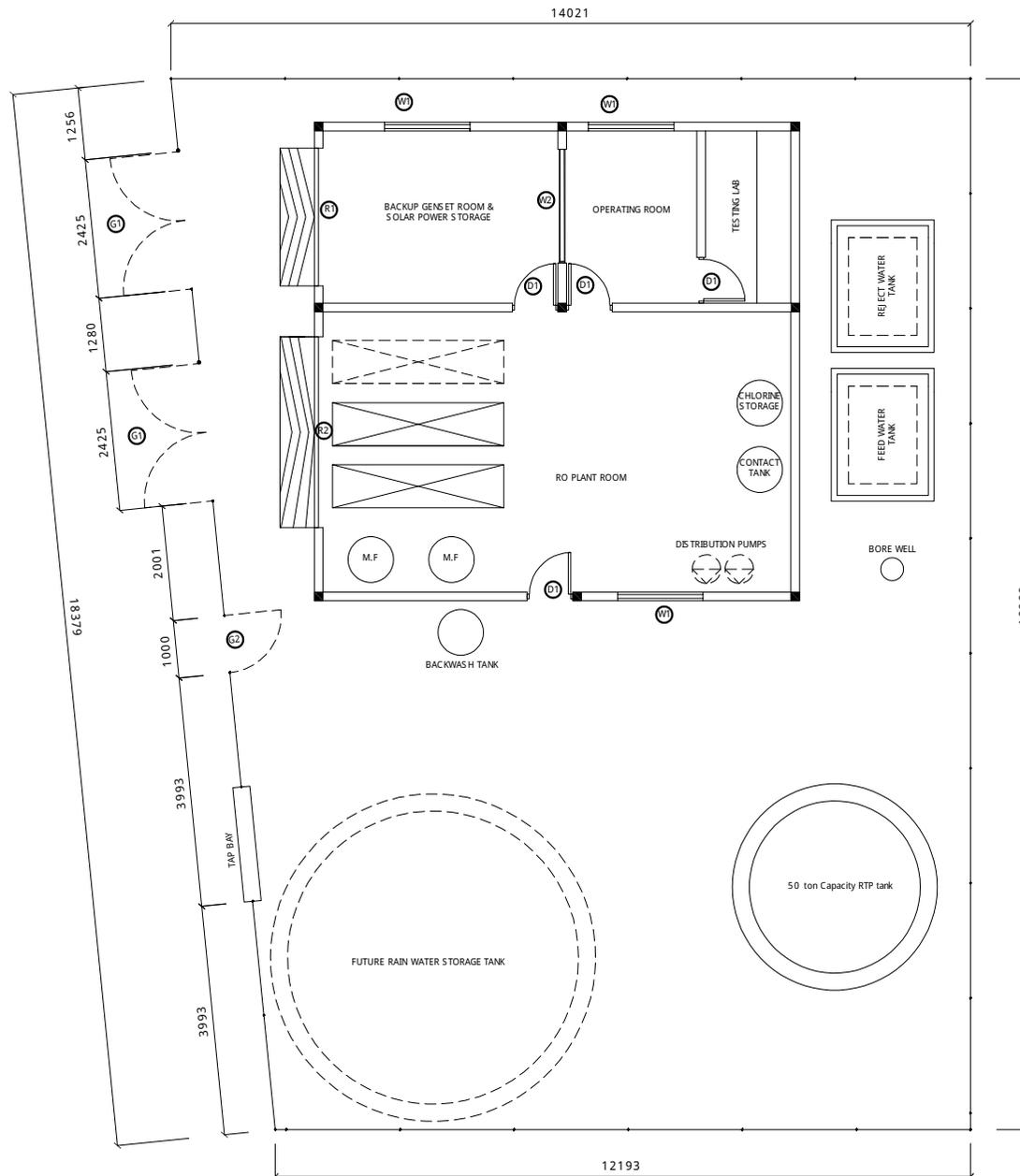
TAP BAY

BRINE OUTFALL

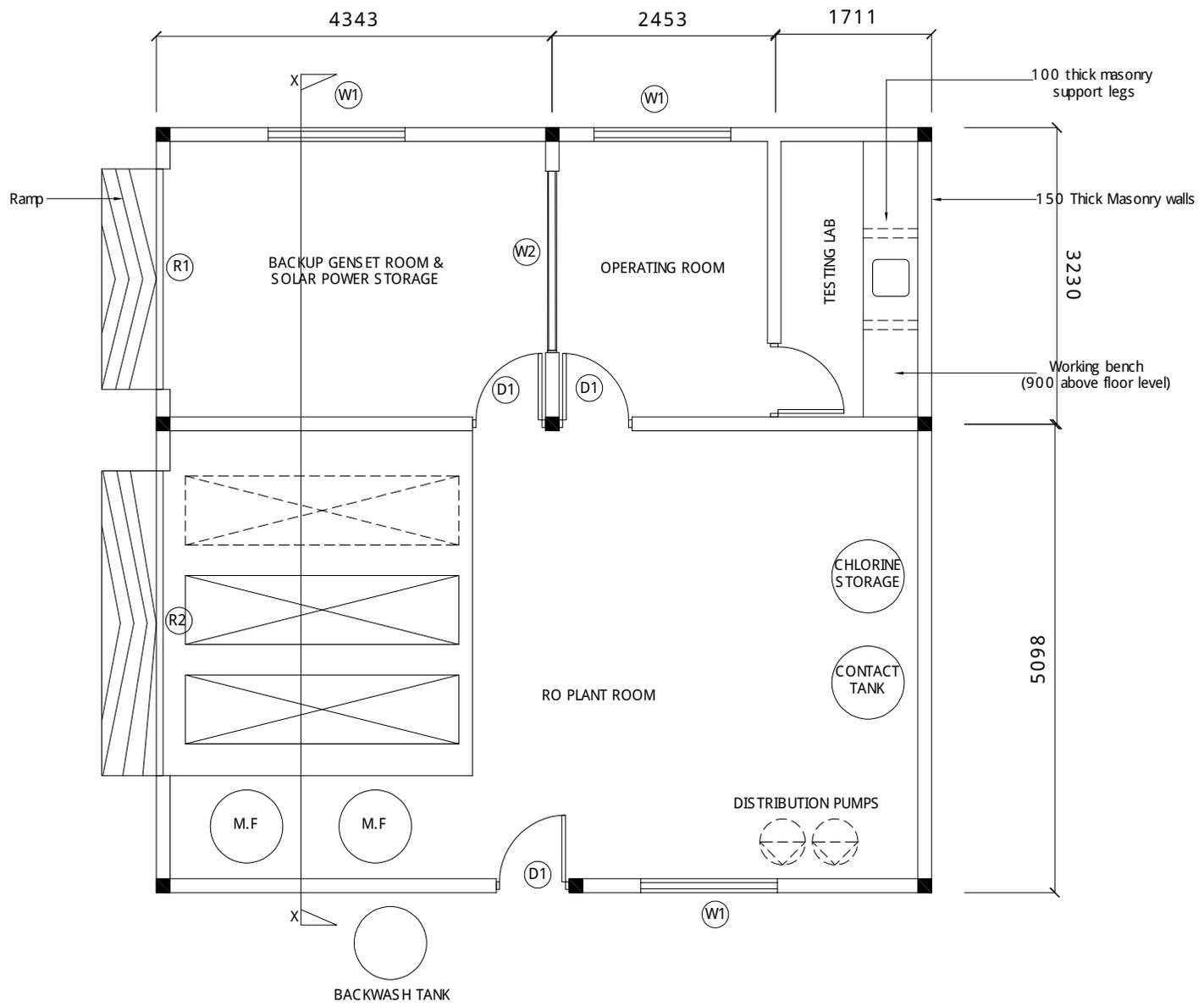
(82m from  
shoreline)

RO PLANT BUILDING AND CRITICAL  
DEVELOPMENTS

H.DH MAKUNUDHOO

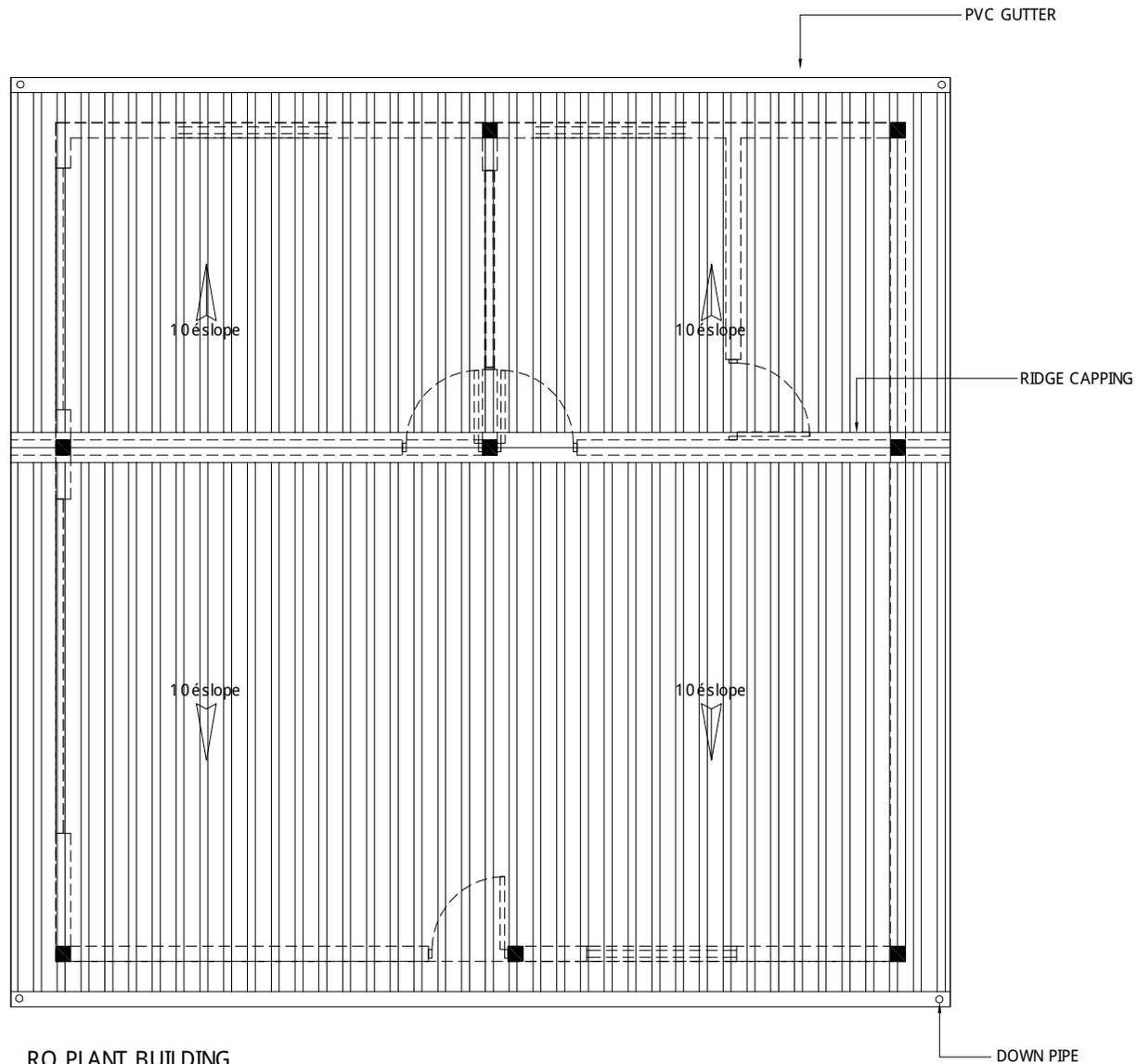


WATER SUPPLY AND STORAGE FACILITY SITE & BUILDING SITE PLAN  
 SITE PLAN HAA DHAALU MAKUNUDHOO

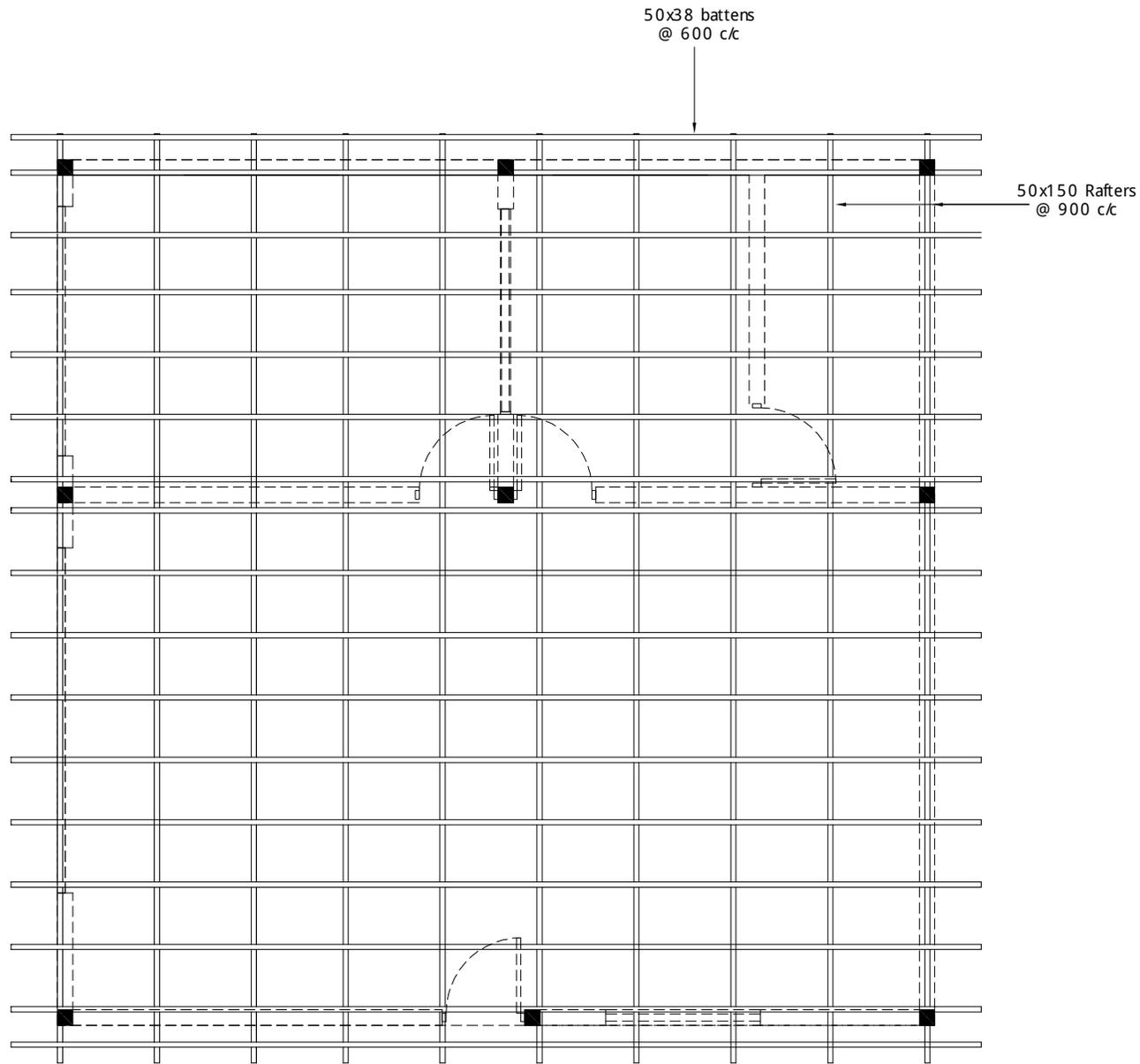


RO PLANT BUILDING  
 FLOOR PLAN HAA DHAALU MAKUNUDHOO

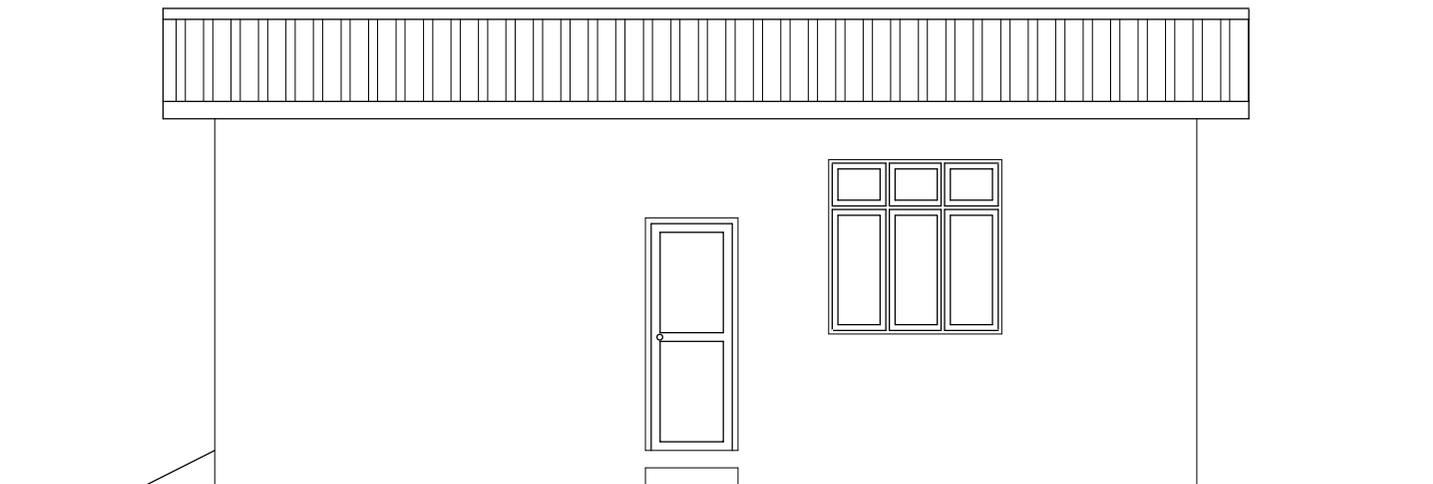




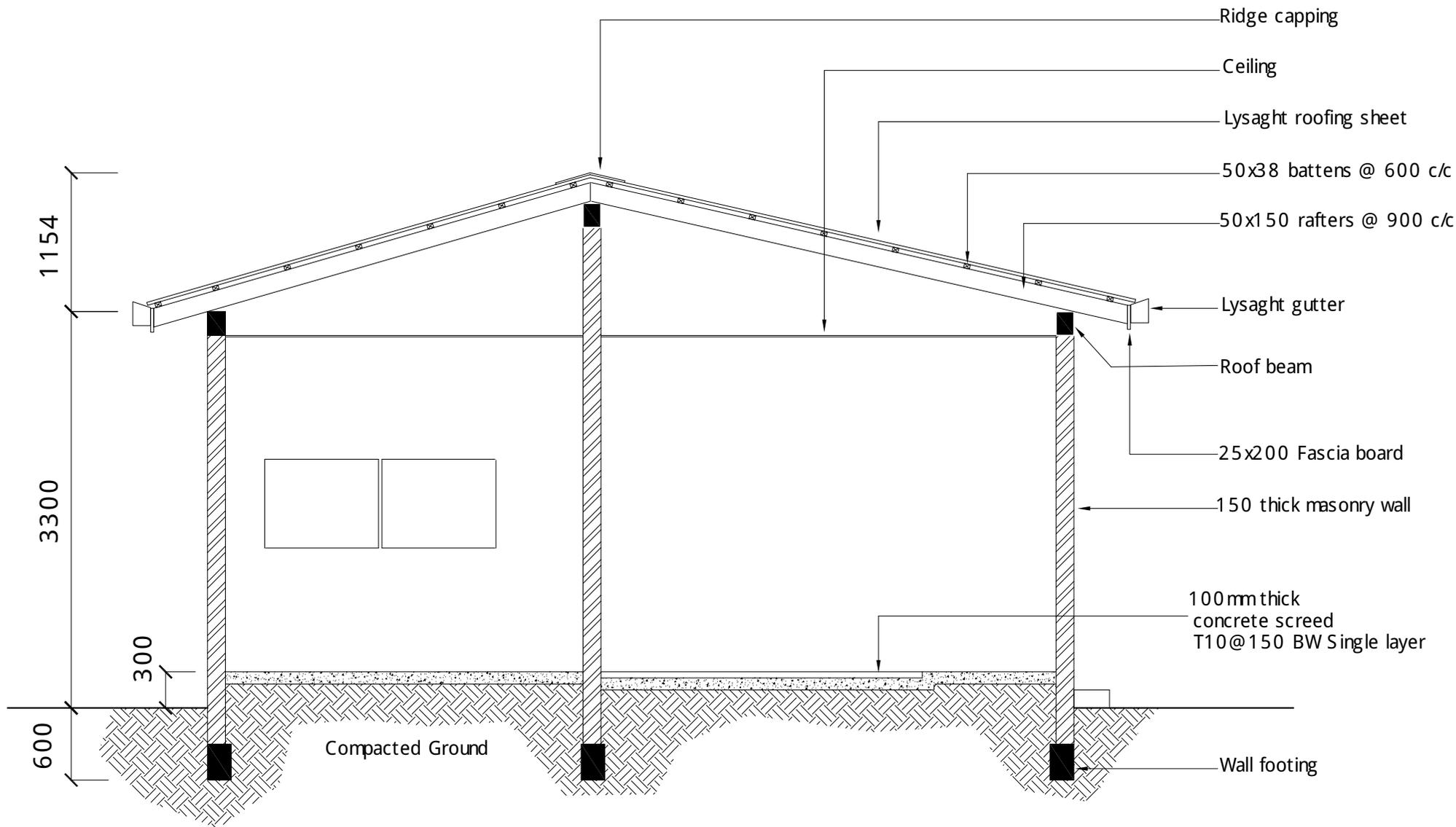
RO PLANT BUILDING  
 ROOF PLAN HAA DHAALU MAKUNUDHOO



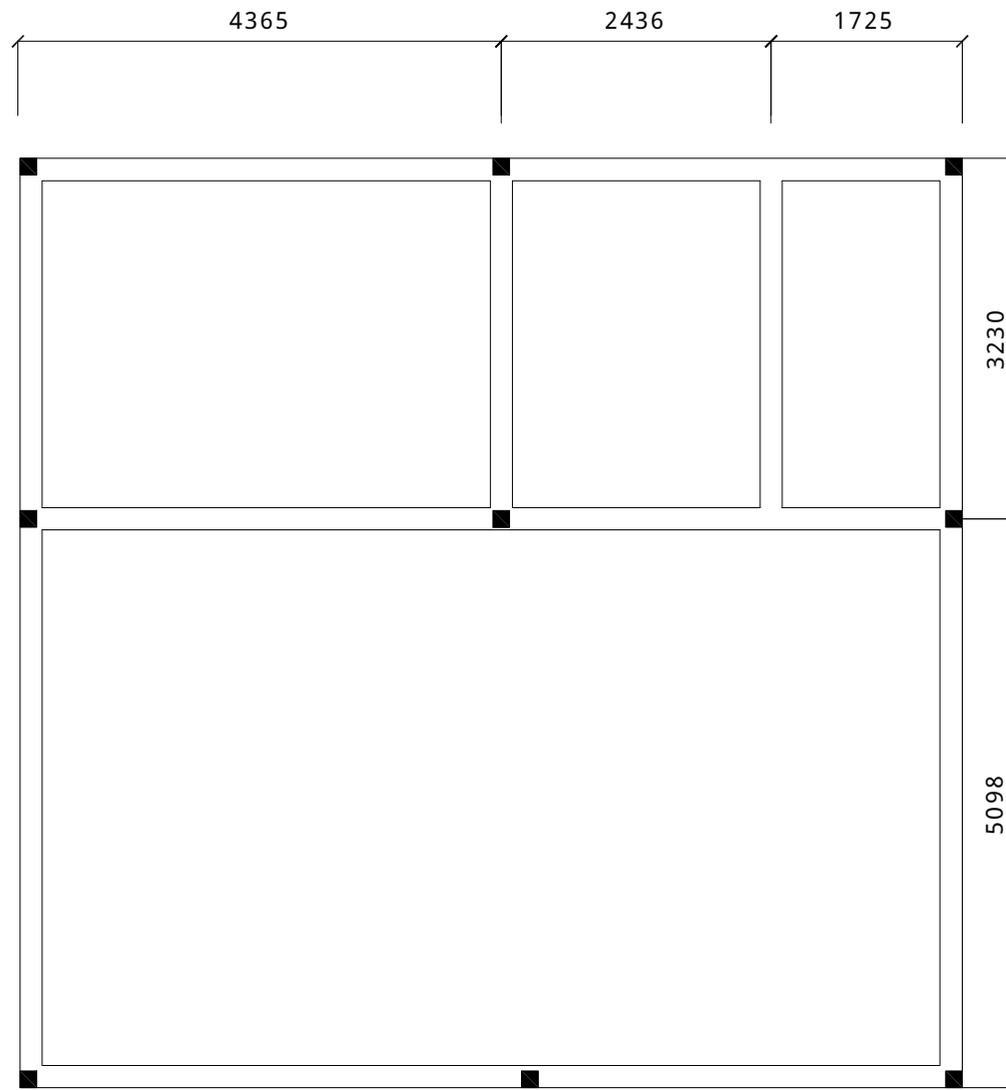
RO PLANT BUILDING  
ROOF STRUCTURE HAA DHAALU MAKUNUDHOO



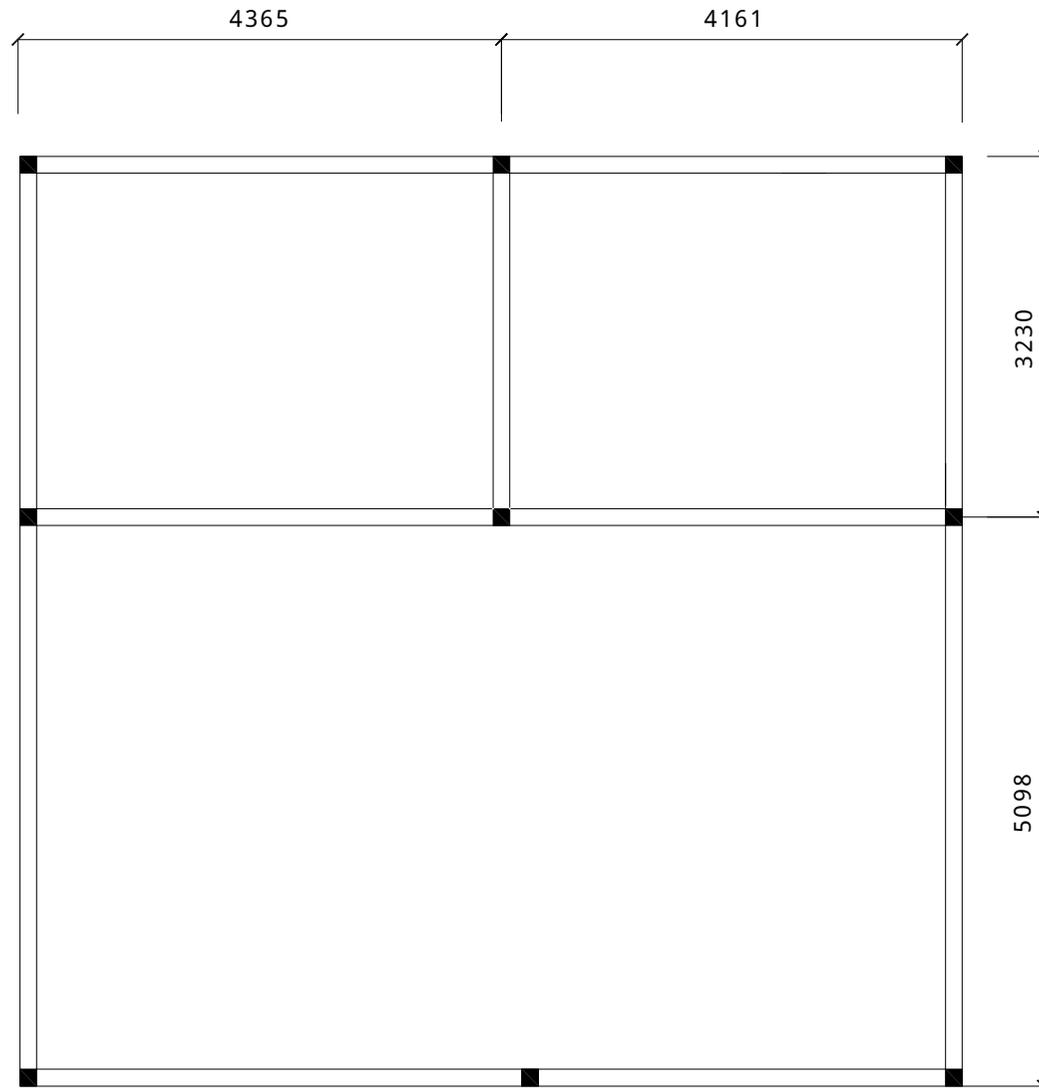
RO PLANT BUILDING  
FRONT ELEVATION HAA DHAALU MAKUNUDHOO



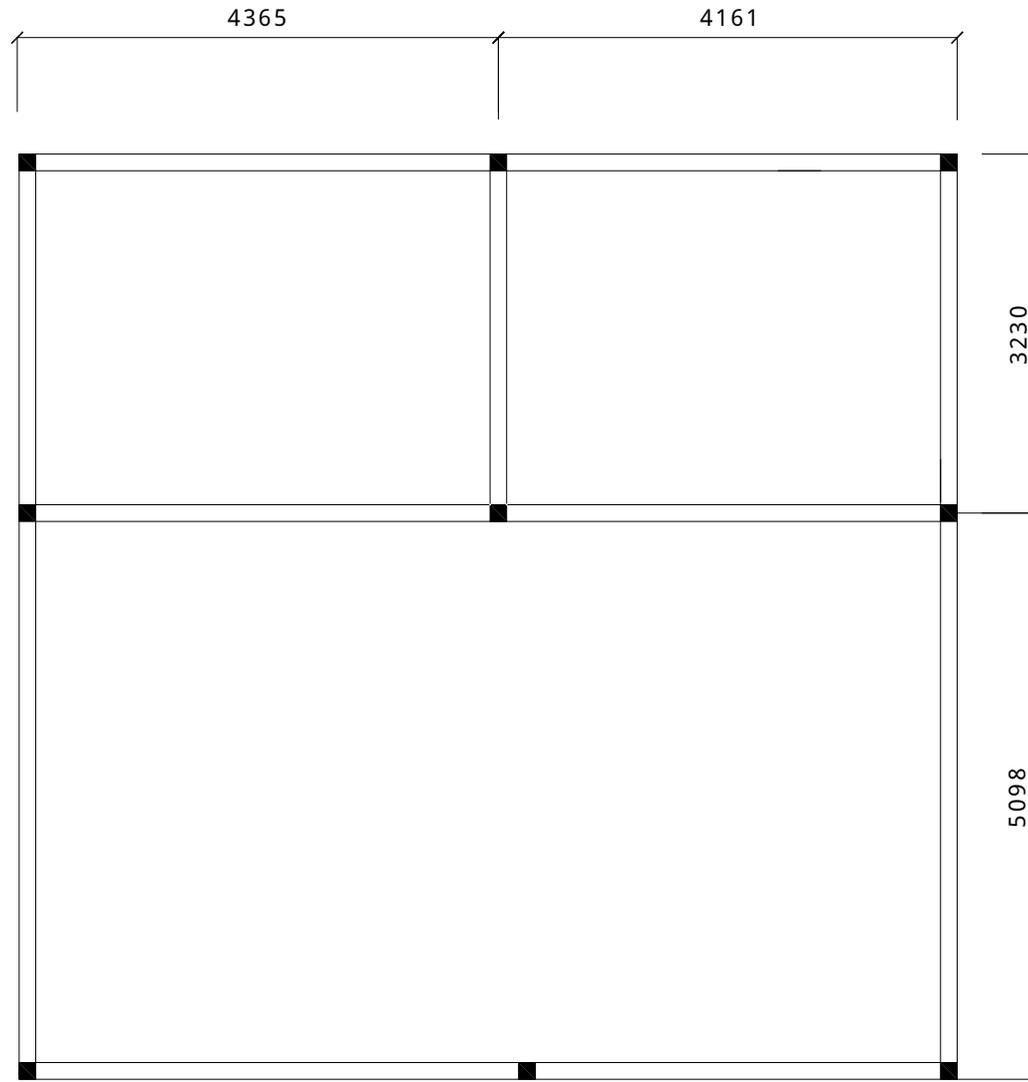
RO PLANT BUILDING  
SECTION X-X HAA DHAALU MAKUNUDHOO



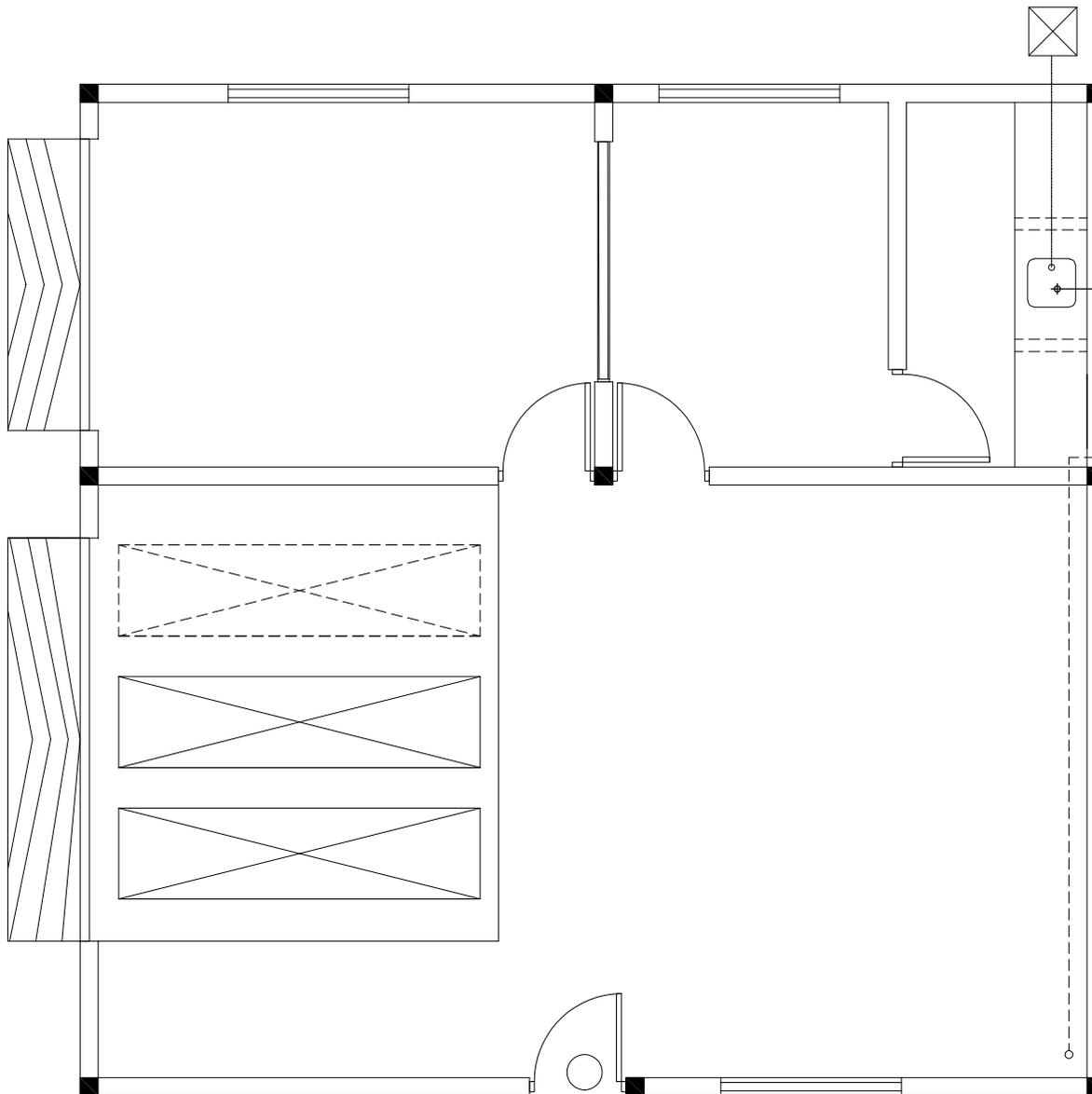
RO PLANT BUILDING  
 WALL FOOTING PLAN      HAA DHAALU MAKUNUDHOO



RO PLANT BUILDING  
 ROOF BEAM PLAN HAA DHAALU MAKUNUDHOO

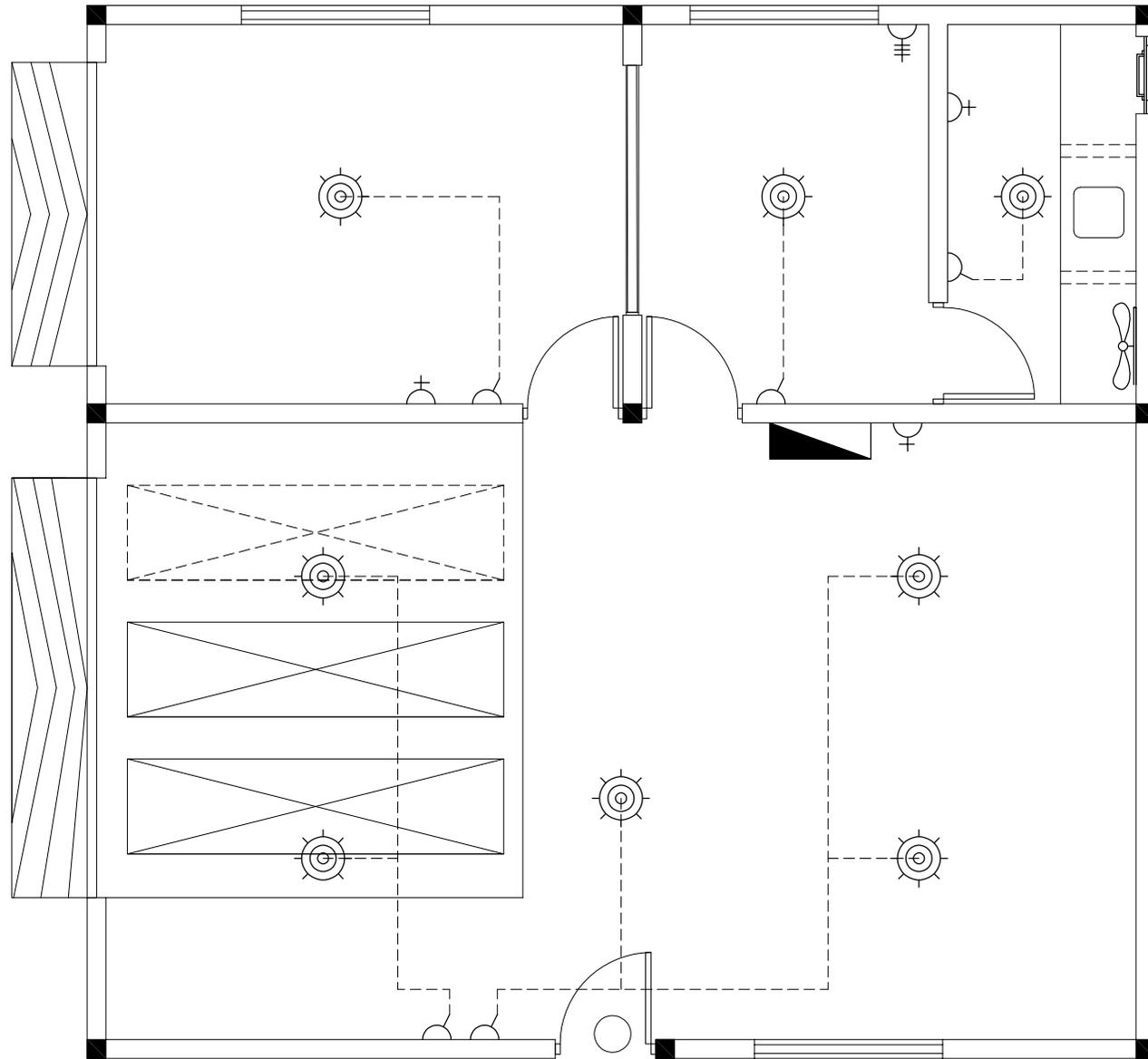


RO PLANT BUILDING  
 ROOF BEAM PLAN HAA DHAALU MAKUNUDHOO



- ⊕ PVC Sink Tap
- ⊠ Soak pit
- 25mm PVC Pipe
- 50mm PVC Train Pipe

RO PLANT BUILDING  
 PLUMBING LAYOUT H.DH MAKUNUDHOO



- DISTRIBUTION BOARD 
- 100W ENERGY SAVING LIGHT 
- POWER SOCKET [0.4m ABOVE GROUND] 
- POWER SOCKET [0.4m BELOW CEILING] 
- SINGLE GANG SWITCH 
- WALL MOUNT EXHAUST FAN 
- WALL MOUNT FAN 

RO PLANT BUILDING  
ELECTRICAL LAYOUT

H.DH MAKUNUDHOO

PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT

# H.DH NOLHIVARAM RO PLANT BUILDING AND WATER SUPPLY FACILITY



WATER SUPPLY COMPONENT  
OFID PROJECT  
MINISTRY OF ENVIRONMENT AND ENERGY

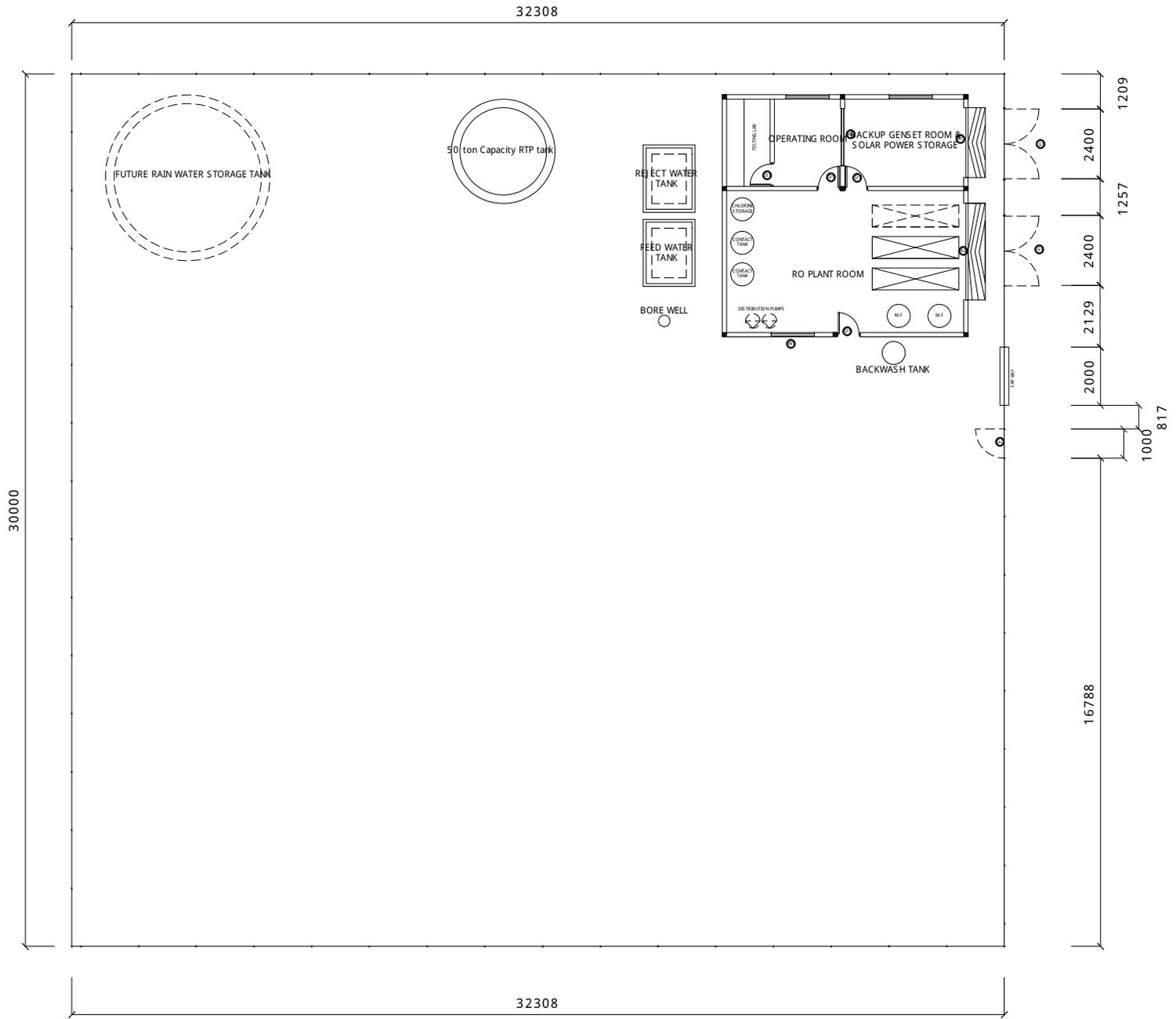
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REPUBLIC OF MALDIVES



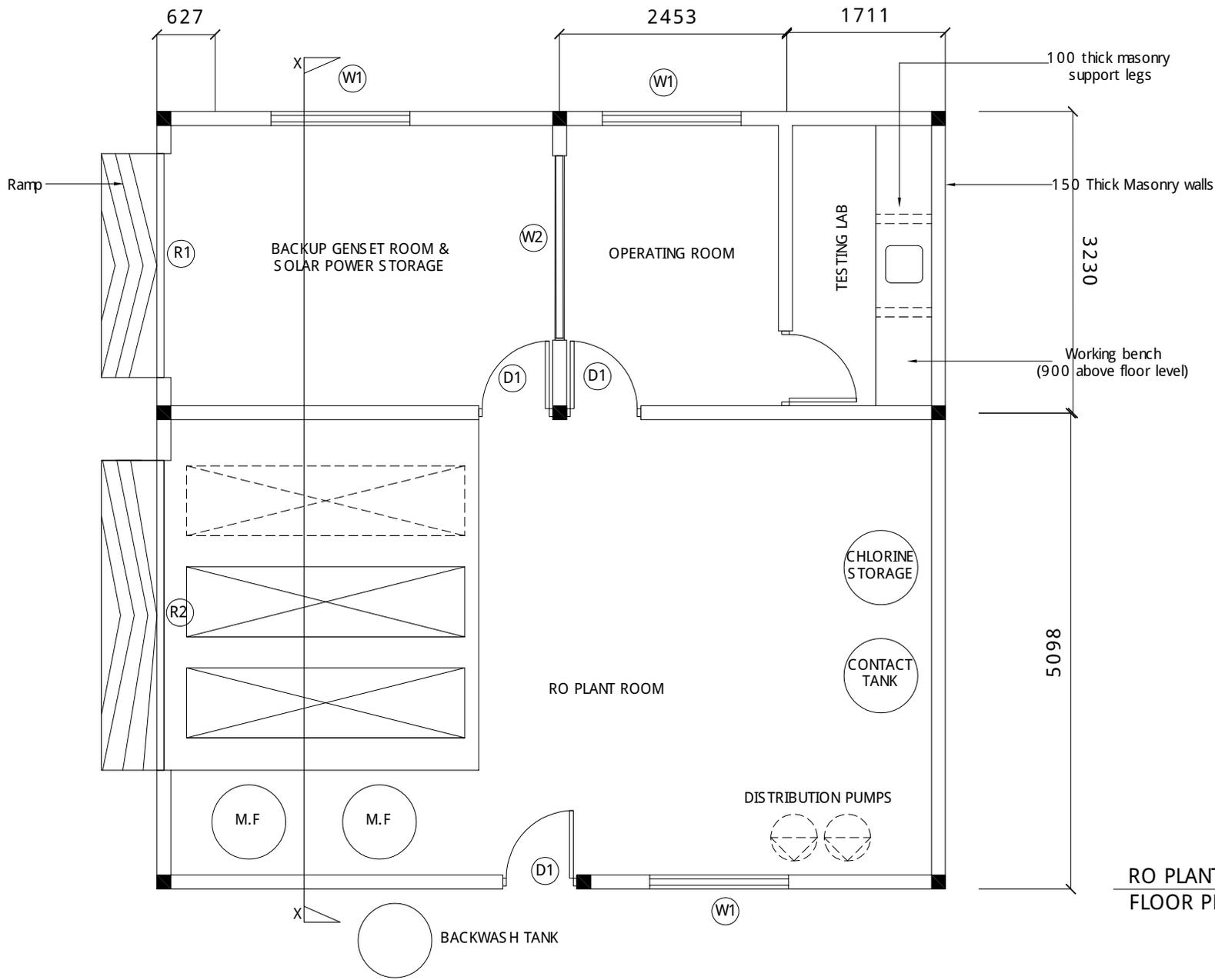
**RO PLANT BUILDING AND CRITICAL DEVELOPMENTS**

**H.DH NOLHIVARAM**

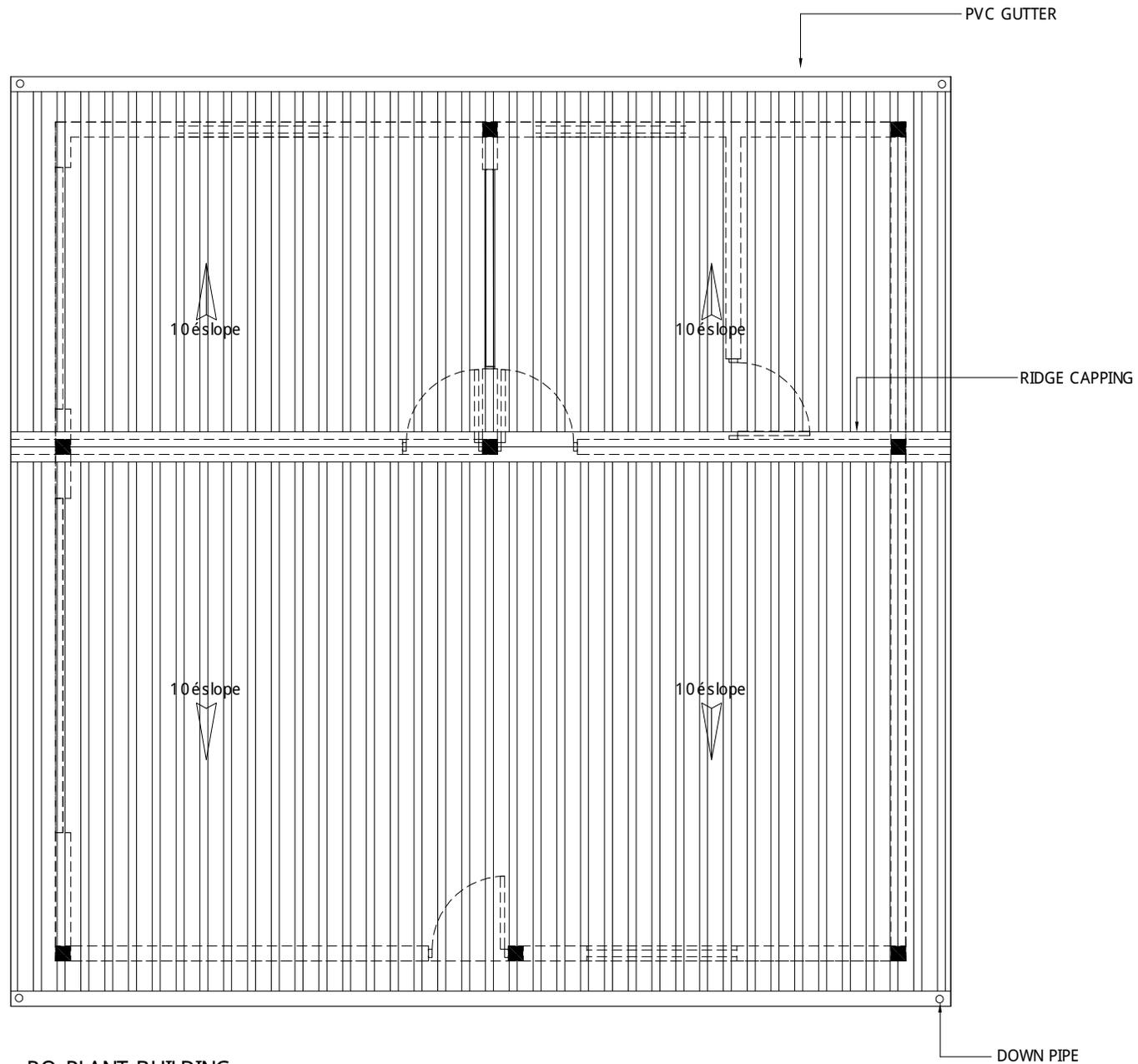


WATER SUPPLY AND STORAGE FACILITY SITE & BUILDING SITE PLAN  
HAA DHAALU NOLHIVARAM  
SITE PLAN

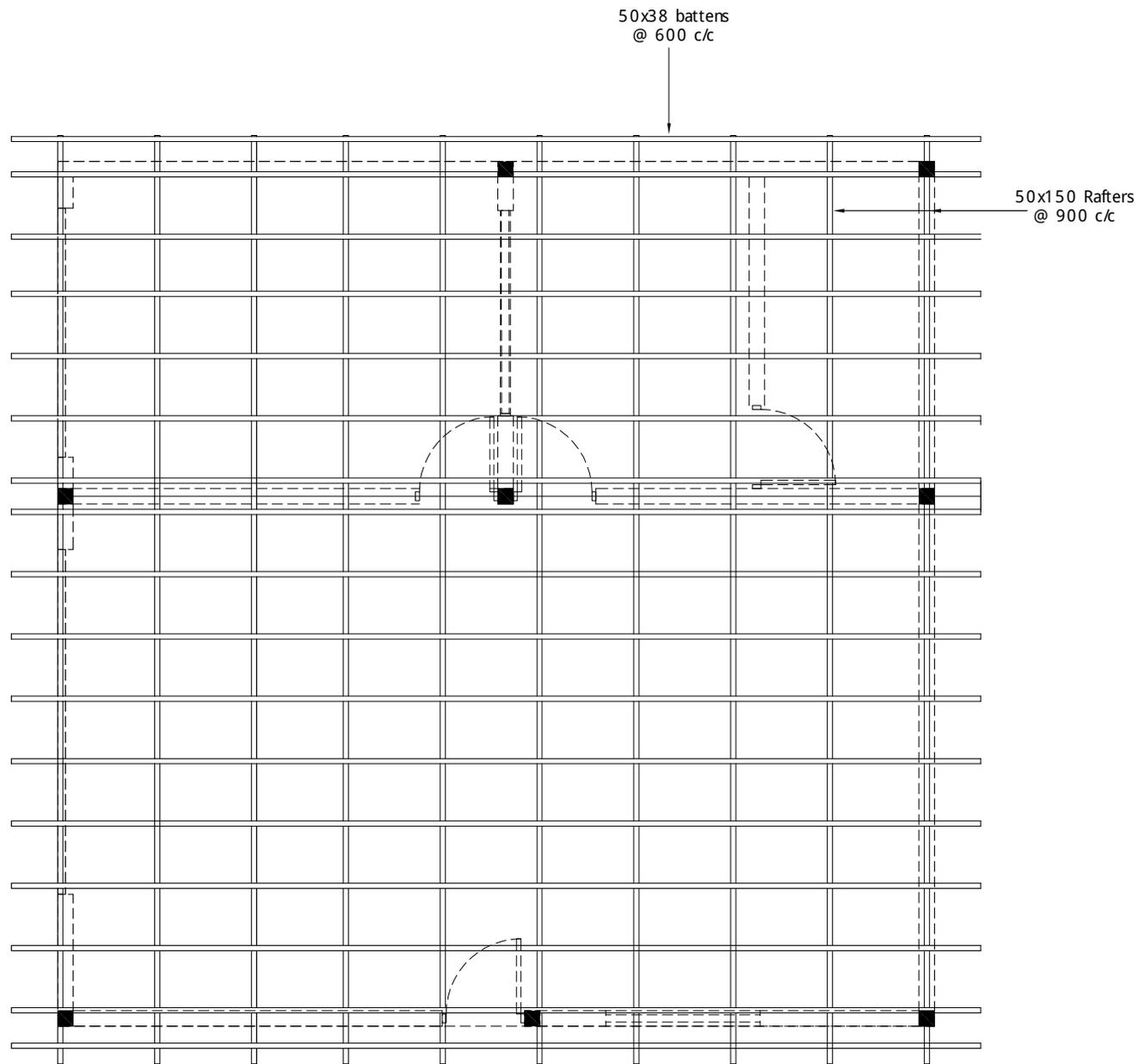




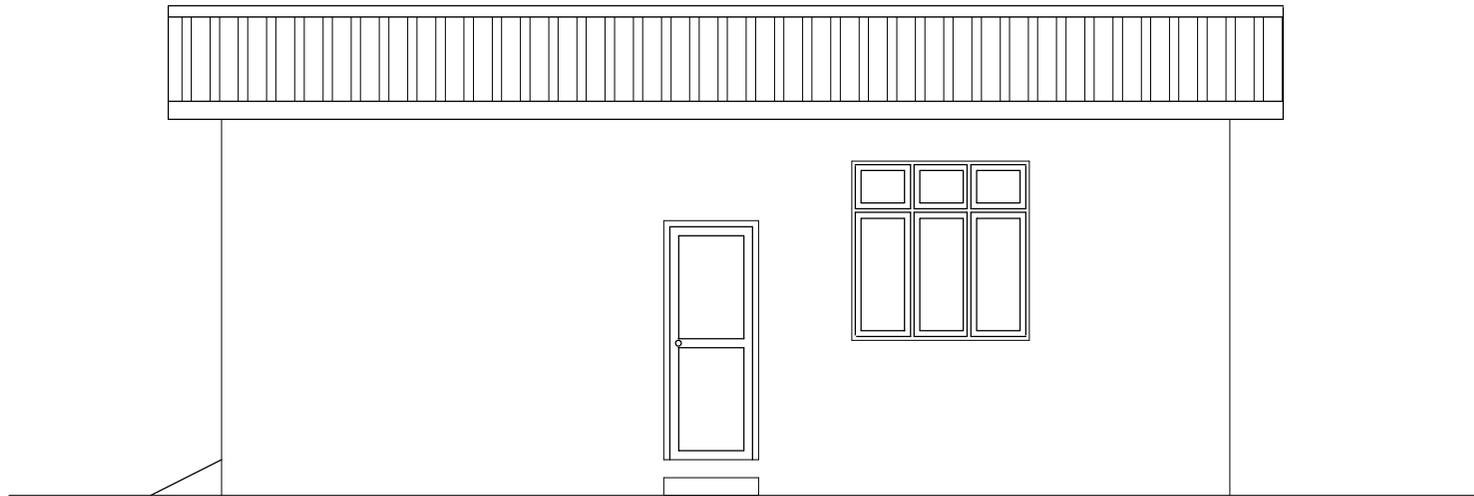
RO PLANT BUILDING  
FLOOR PLAN H.DH NOLHIVARAM



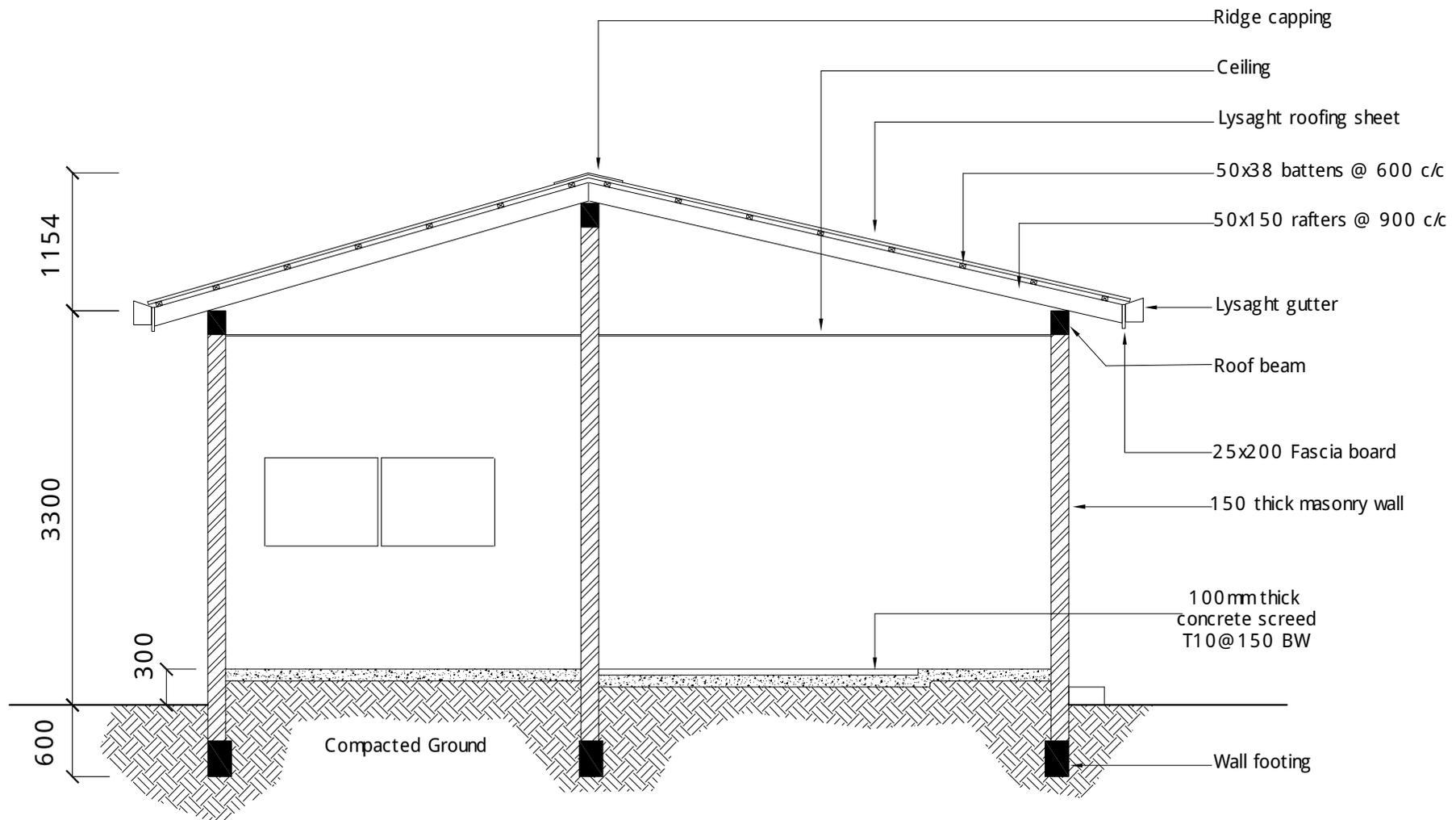
RO PLANT BUILDING  
 ROOF PLAN H.DH NOLHIVARAM



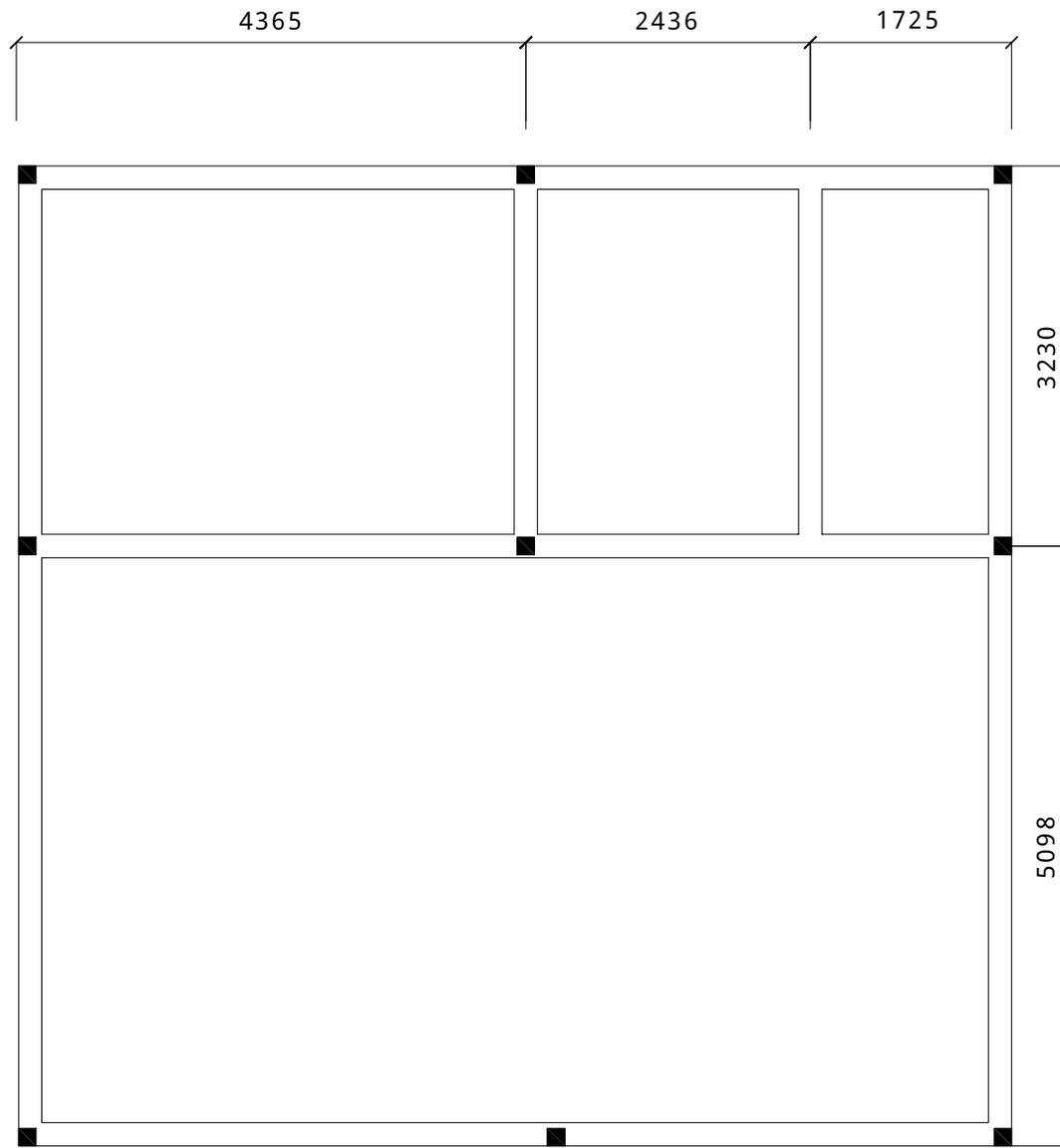
RO PLANT BUILDING  
ROOF STRUCTURE H.DH NOLHIVARAM



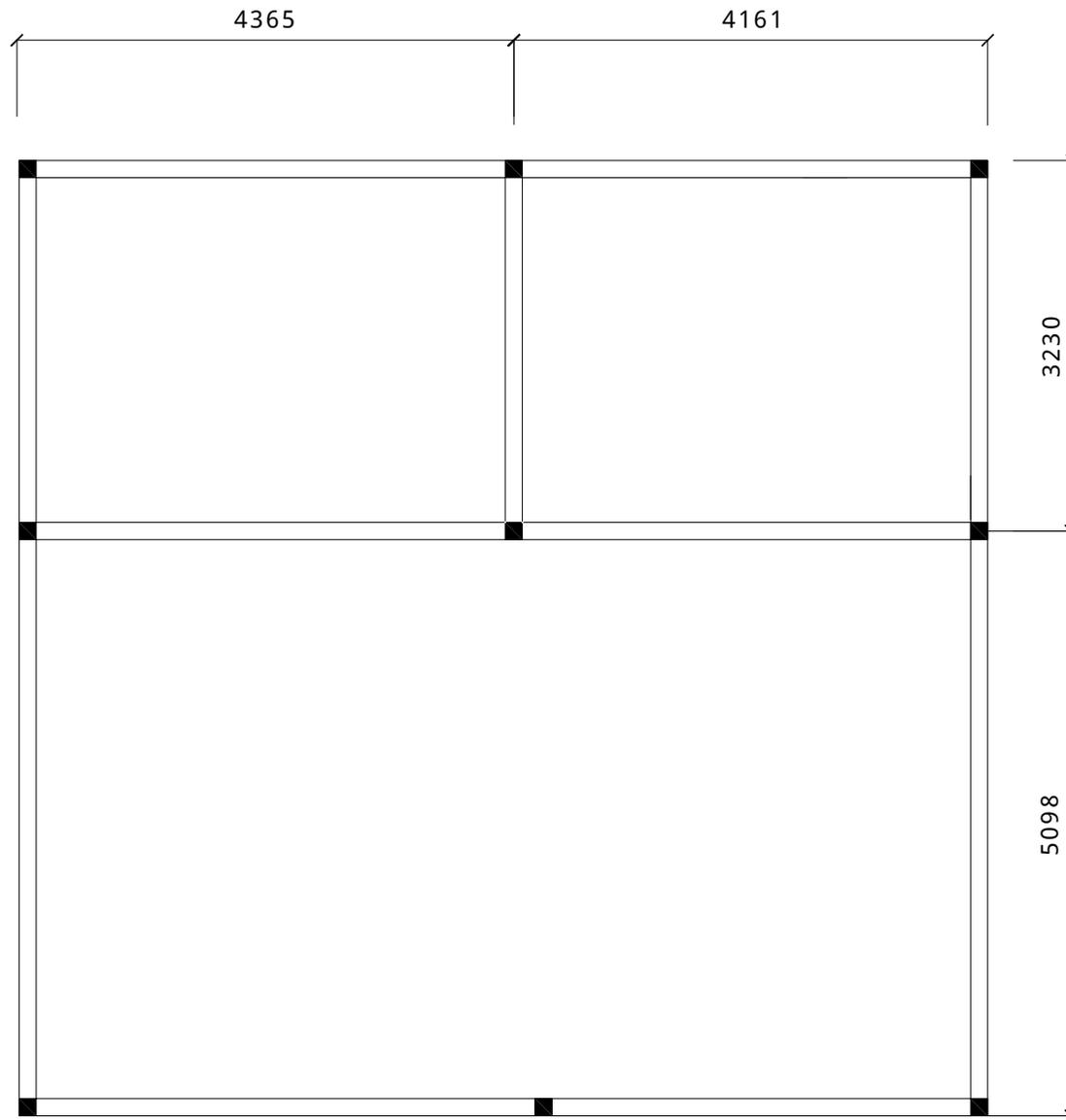
RO PLANT BUILDING  
FRONT ELEVATION H.DH NOLHIVARAM



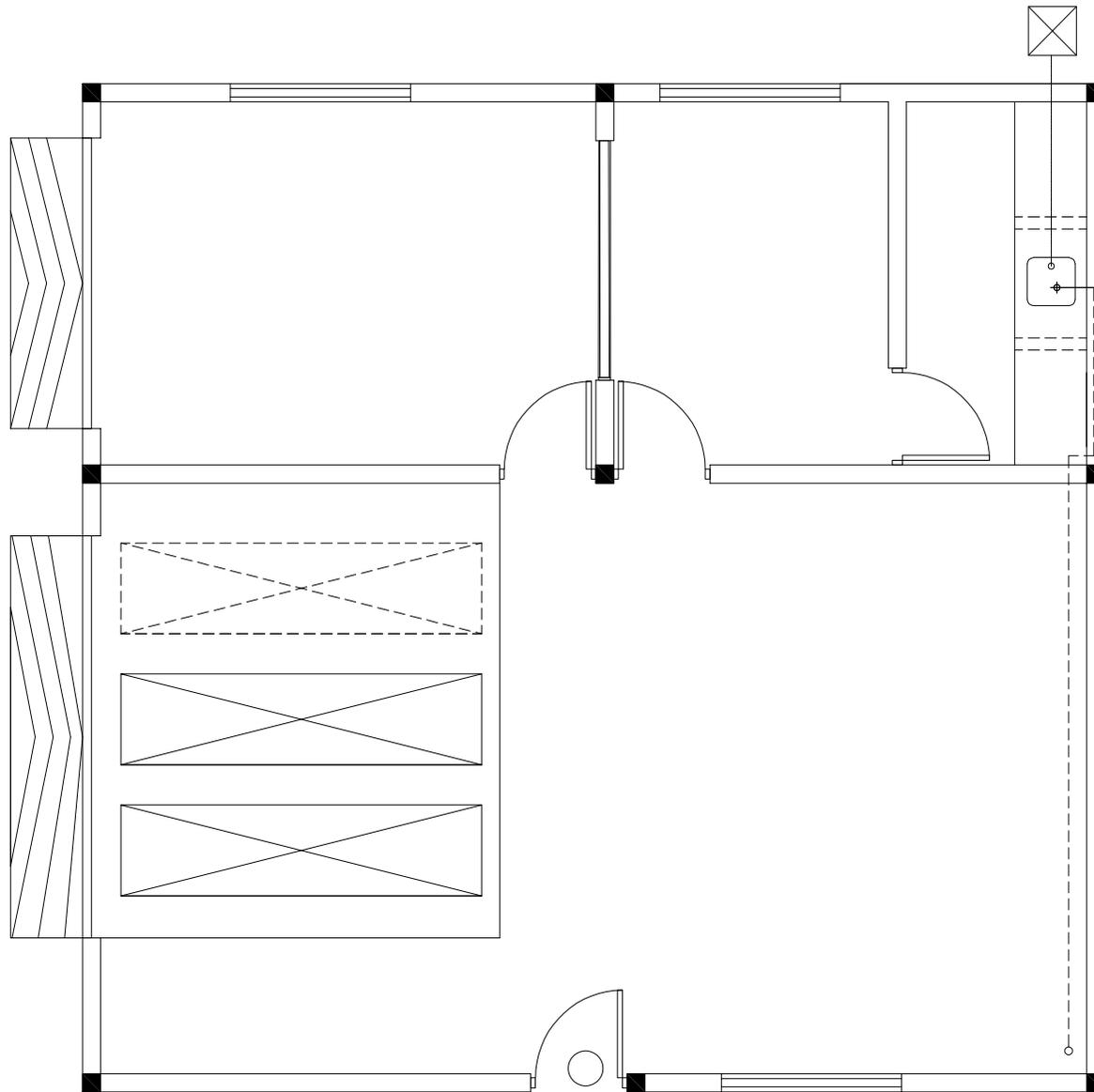
RO PLANT BUILDING  
SECTION X-X H.DH NOLHIVARAM



RO PLANT BUILDING  
 WALL FOOTING PLAN H.DH NOLHIVARAM

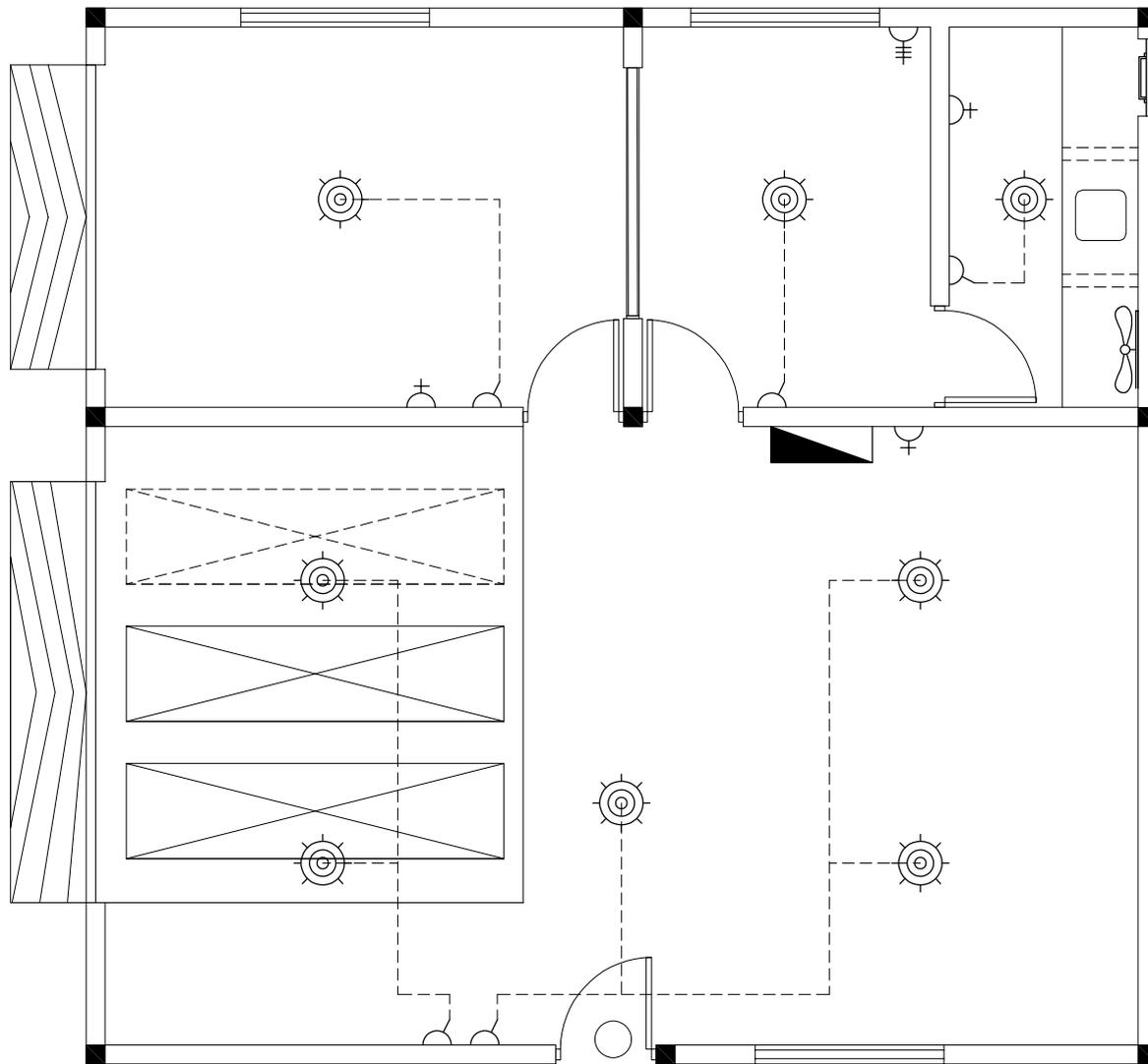


RO PLANT BUILDING  
 ROOF BEAM PLAN H.DH NOLHIVARAM



- ⊕ — PVC Sink Tap
- ⊠ — Soak pit
- 25mm PVC Pipe
- 50mm PVC Train Pipe

RO PLANT BUILDING  
 PLUMBING LAYOUT H.DH NOLHIVARAM



- DISTRIBUTION BOARD 
- 100W ENERGY SAVING LIGHT 
- POWER SOCKET [0.4m ABOVE GROUND] 
- POWER SOCKET [0.4m BELOW CEILING] 
- SINGLE GANG SWITCH 
- WALL MOUNT EXHAUST FAN 
- WALL MOUNT FAN 

**RO PLANT BUILDING**  
**ELECTRICAL LAYOUT H.DH NOLHIVARAM**

PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT

# H.DH VAIKARADHOO RO PLANT BUILDING AND WATER SUPPLY FACILITY



WATER SUPPLY COMPONENT  
OFID PROJECT  
MINISTRY OF ENVIRONMENT AND ENERGY

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HANDHUVAREE HINGUN MALE' 20-01  
REPUBLIC OF MALDIVES



HARBOUR KIOSK

SUPPLY PIPE TO  
HARBOUR KIOSK

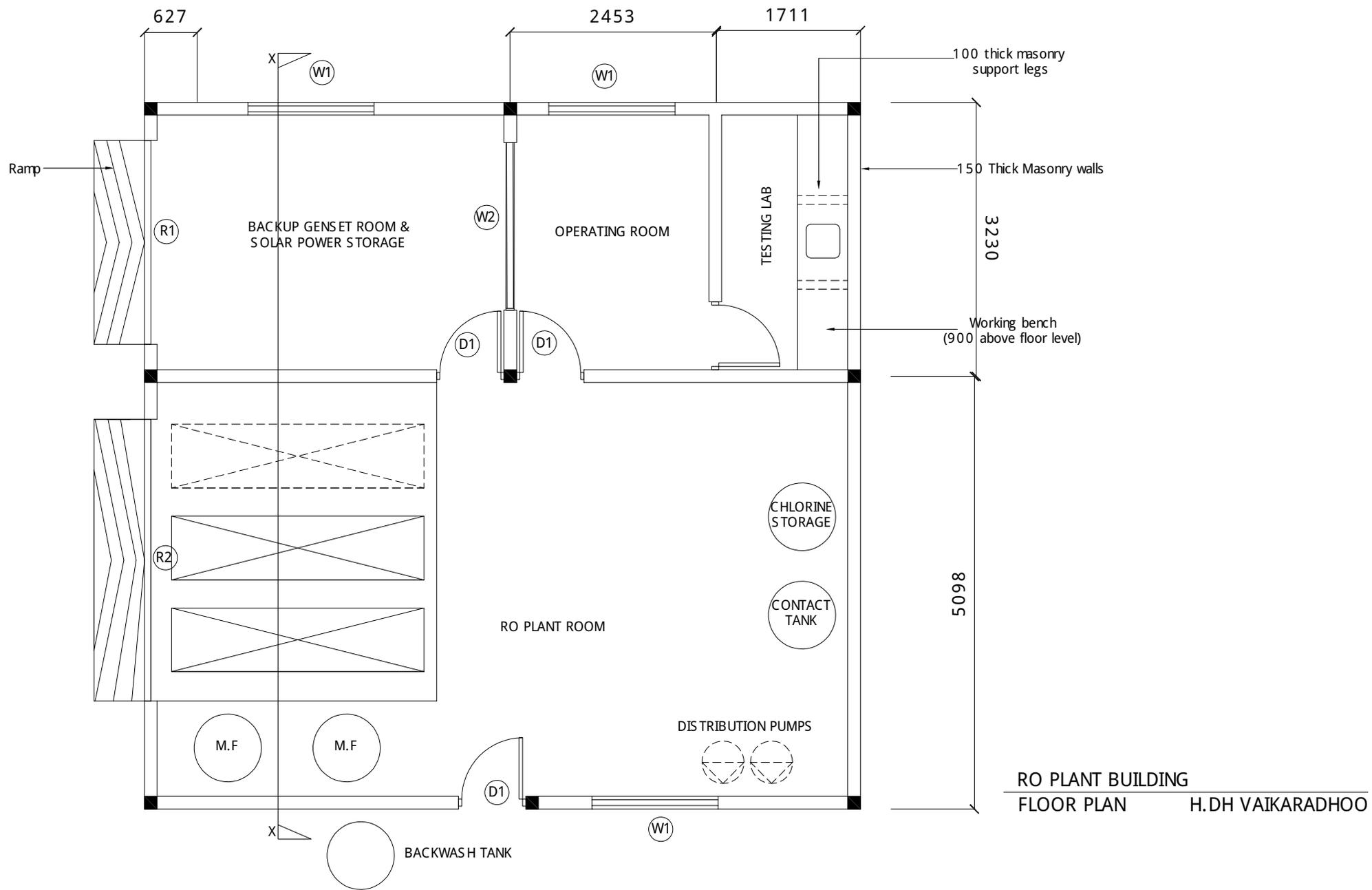
RO PLANT BUILDING  
AND STORAGE TANK

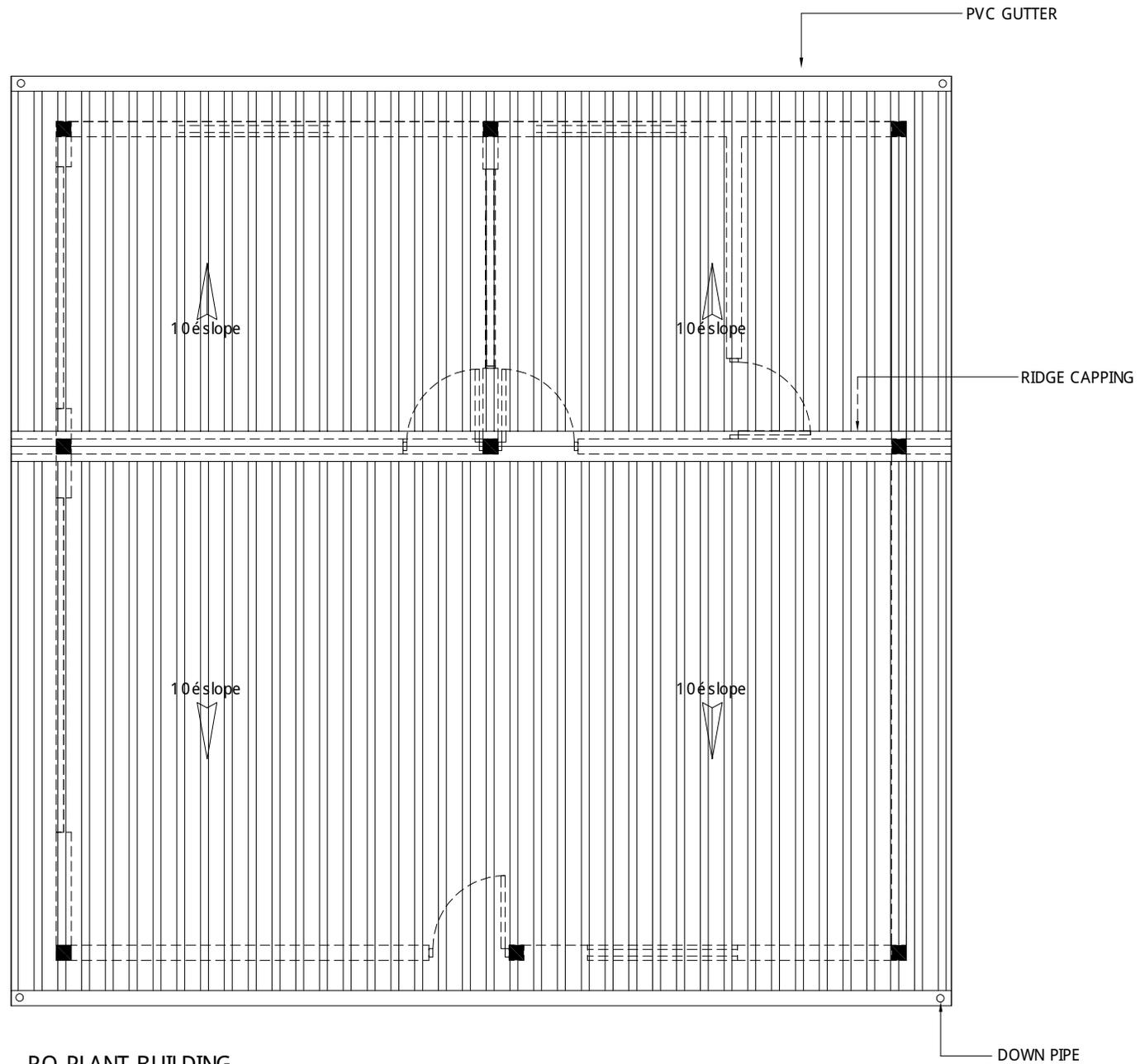
TAP BAY

(-2m)  
(94m from shoreline)  
BRINE OUTFALL  
PIPE

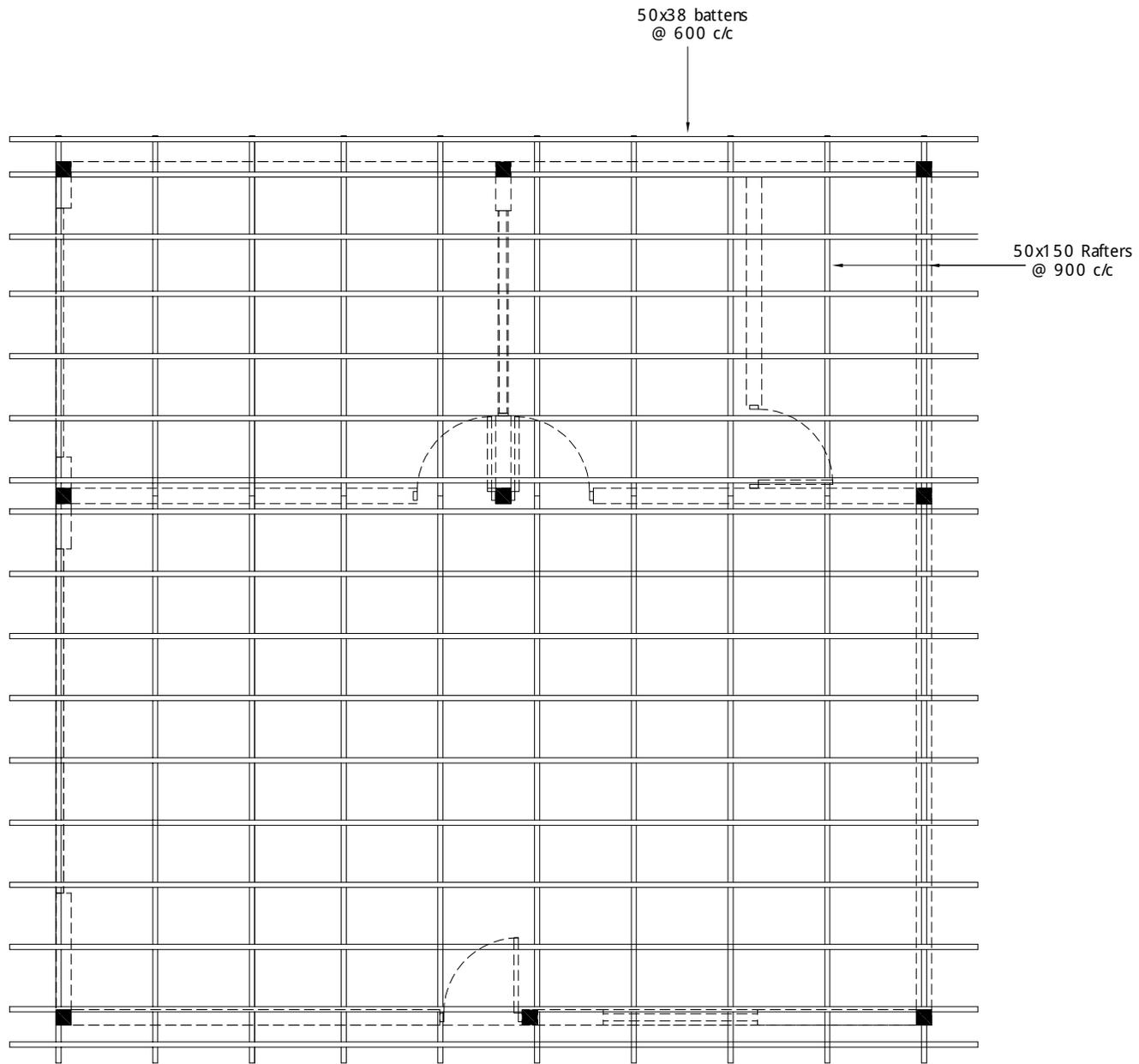
PROPOSED LOCATIONS FOR RO PLANT BUILDING  
H.DH VAIKARADHOO





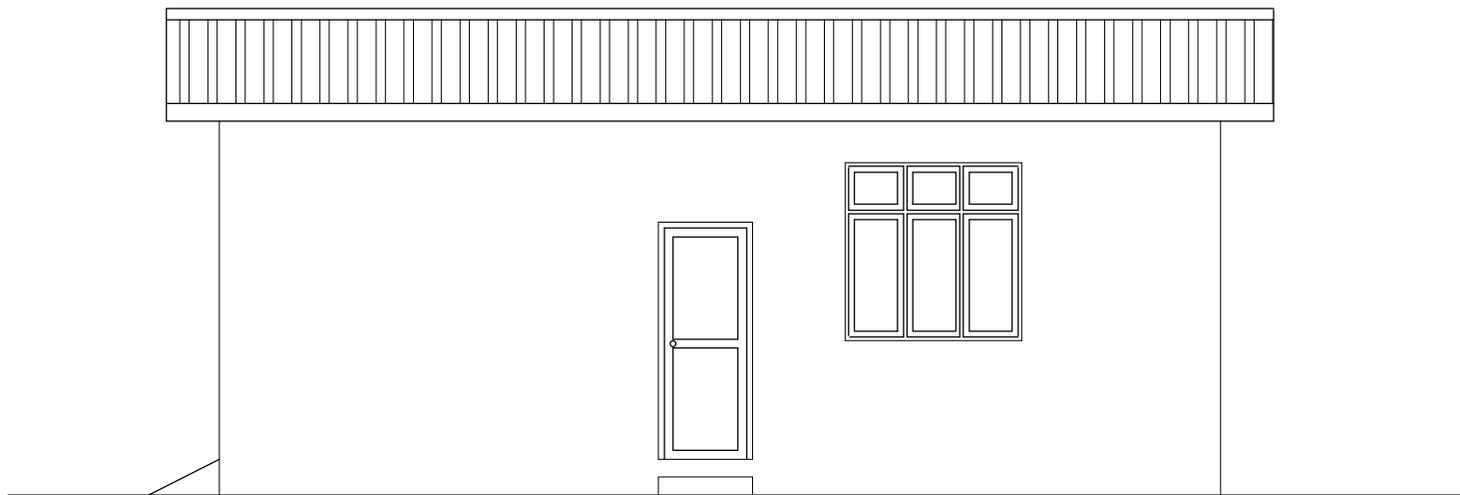


RO PLANT BUILDING  
 ROOF PLAN H.DH VAIKARADHOO

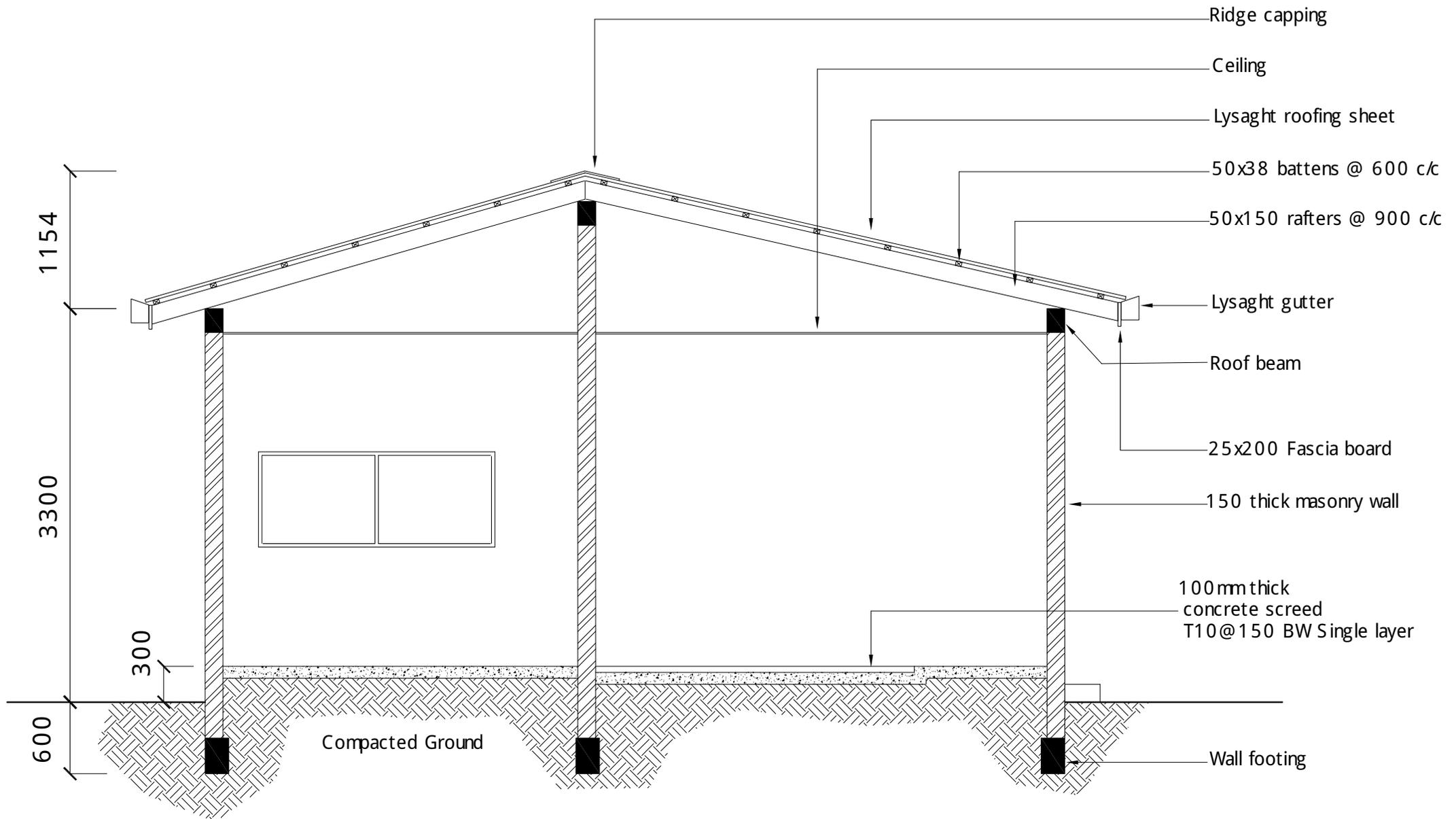


RO PLANT BUILDING  
ROOF STRUCTURE

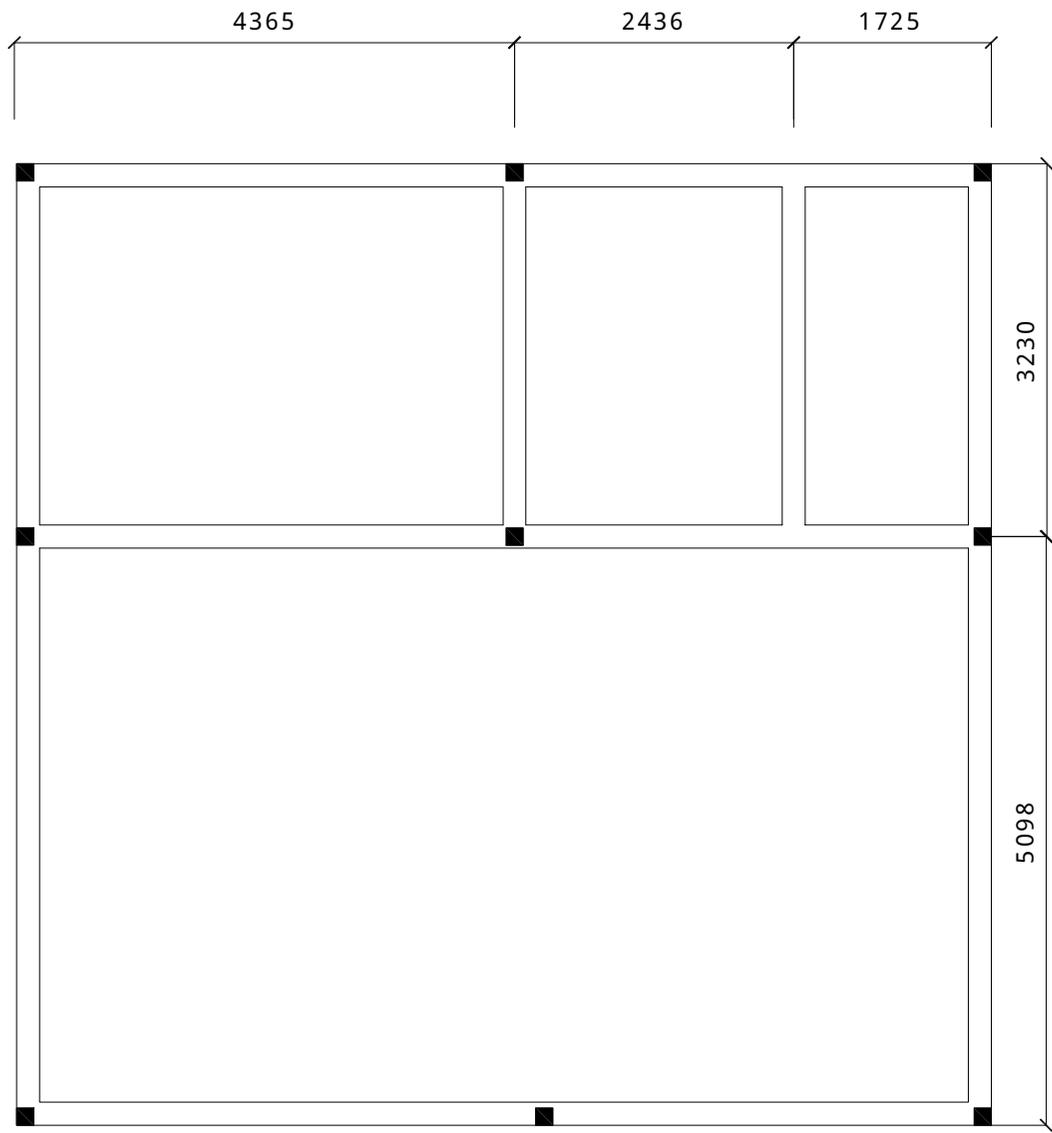
H.DH VAIKARADHOO



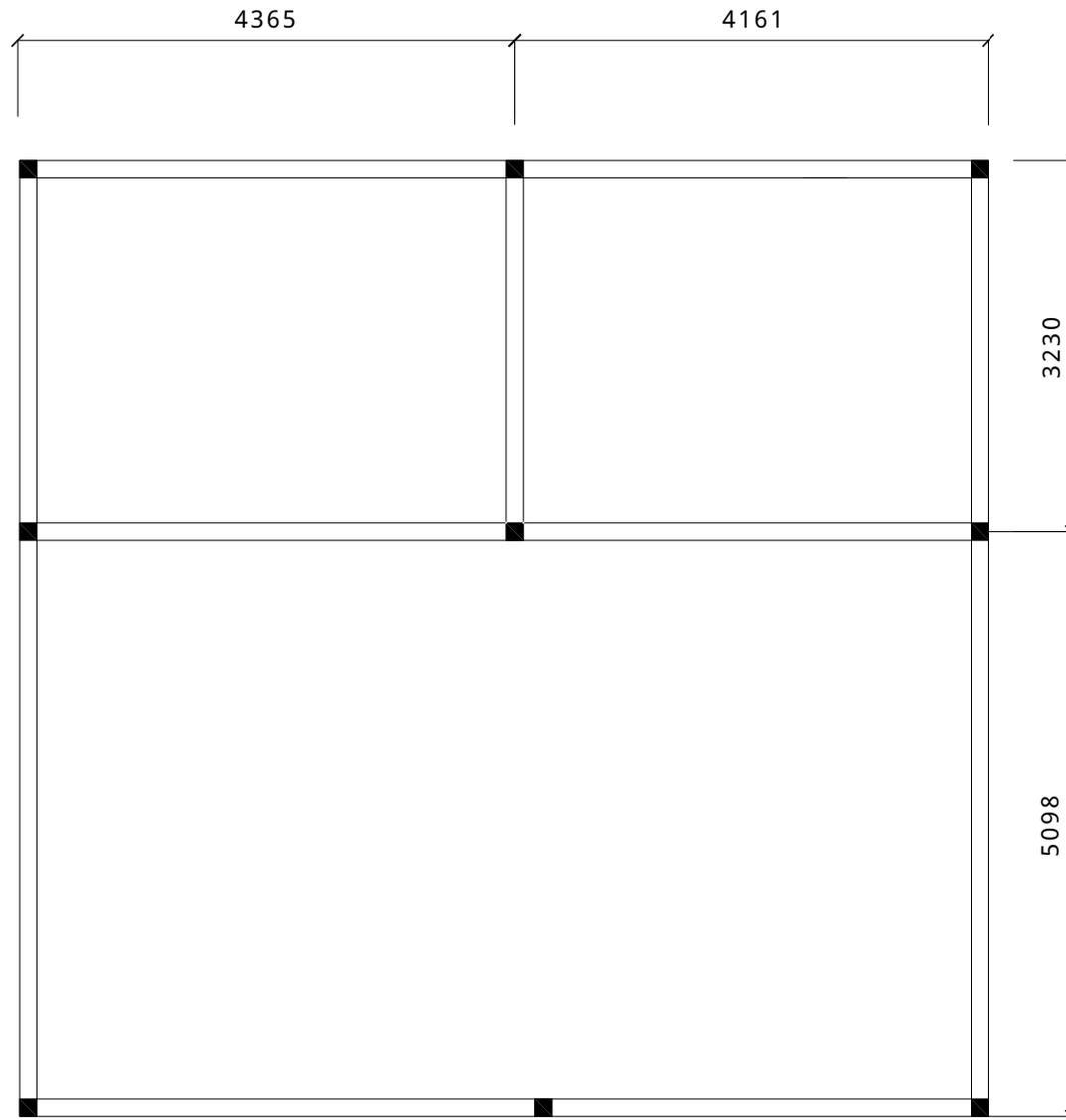
RO PLANT BUILDING  
FRONT ELEVATION H.DH VAIKARADHOO



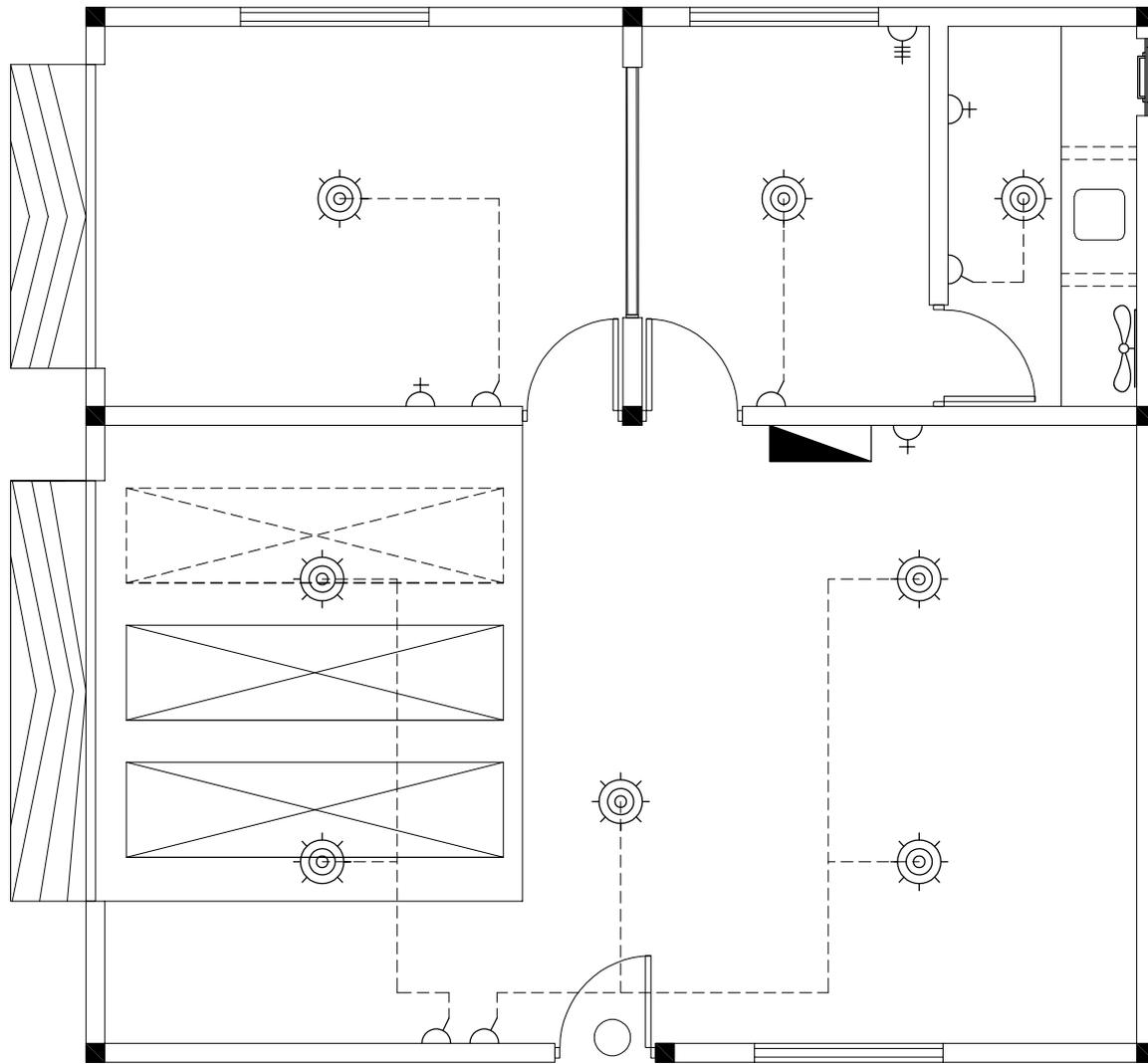
RO PLANT BUILDING  
SECTION X-X H.DH VAIKARADHOO



RO PLANT BUILDING  
 WALL FOOTING PLAN H.DH VAIKARADHOO

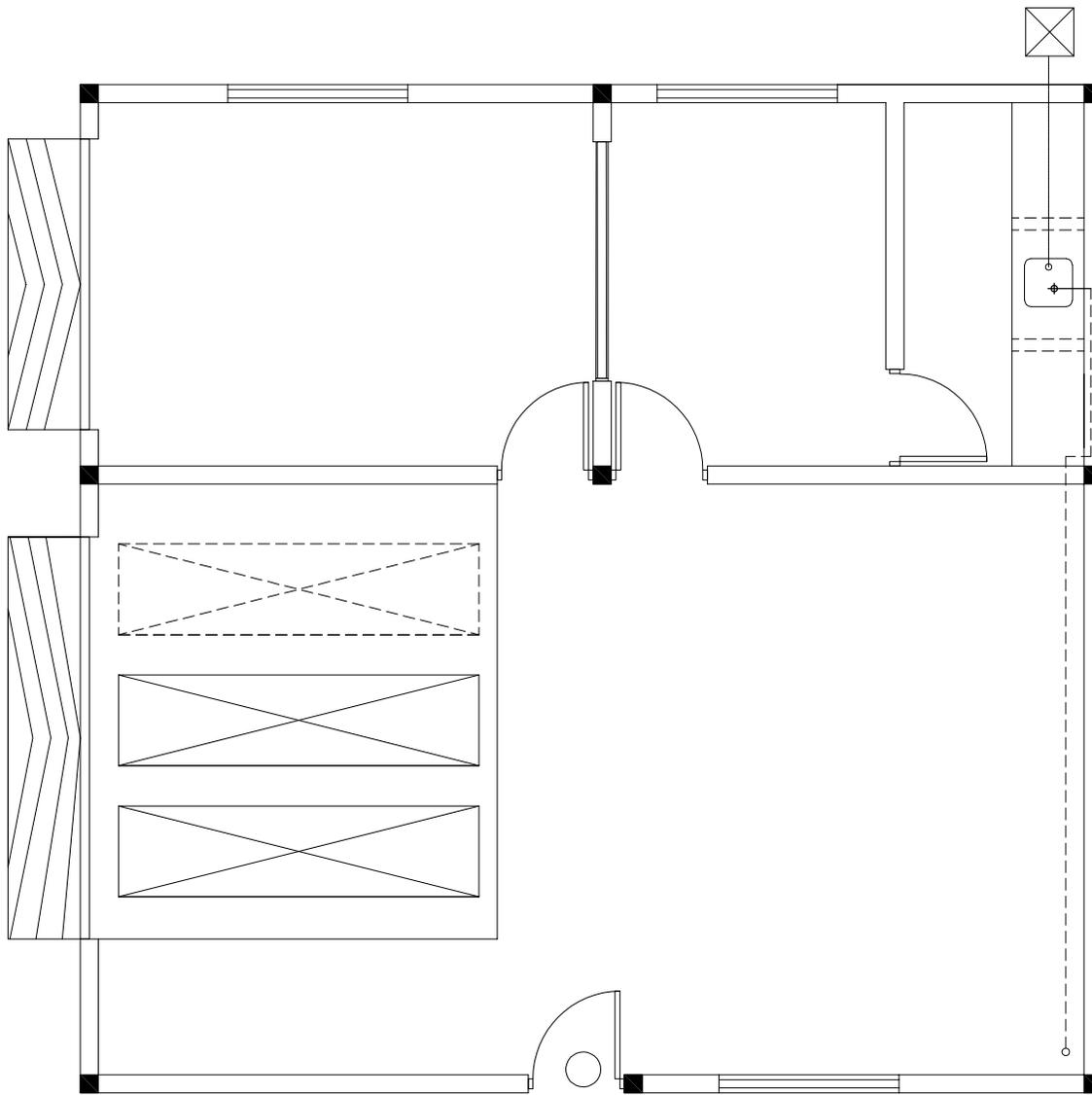


RO PLANT BUILDING  
 ROOF BEAM PLAN H.DH VAIKARADHOO



- DISTRIBUTION BOARD 
- 100W ENERGY SAVING LIGHT 
- POWER SOCKET [0.4m ABOVE GROUND] 
- POWER SOCKET [0.4m BELOW CEILING] 
- SINGLE GANG SWITCH 
- WALL MOUNT EXHAUST FAN 
- WALL MOUNT FAN 

RO PLANT BUILDING  
ELECTRICAL LAYOUT H.DH VAIKARADHOO



- ⊕ PVC Sink Tap
- ⊗ Soak pit
- 25mm PVC Pipe
- 50mm PVC Train Pipe

RO PLANT BUILDING  
PLUMBING LAYOUT

H.DH VAIKARADHOO

PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT

# N. HOLHUDHOO RO PLANT BUILDING AND WATER SUPPLY FACILITY



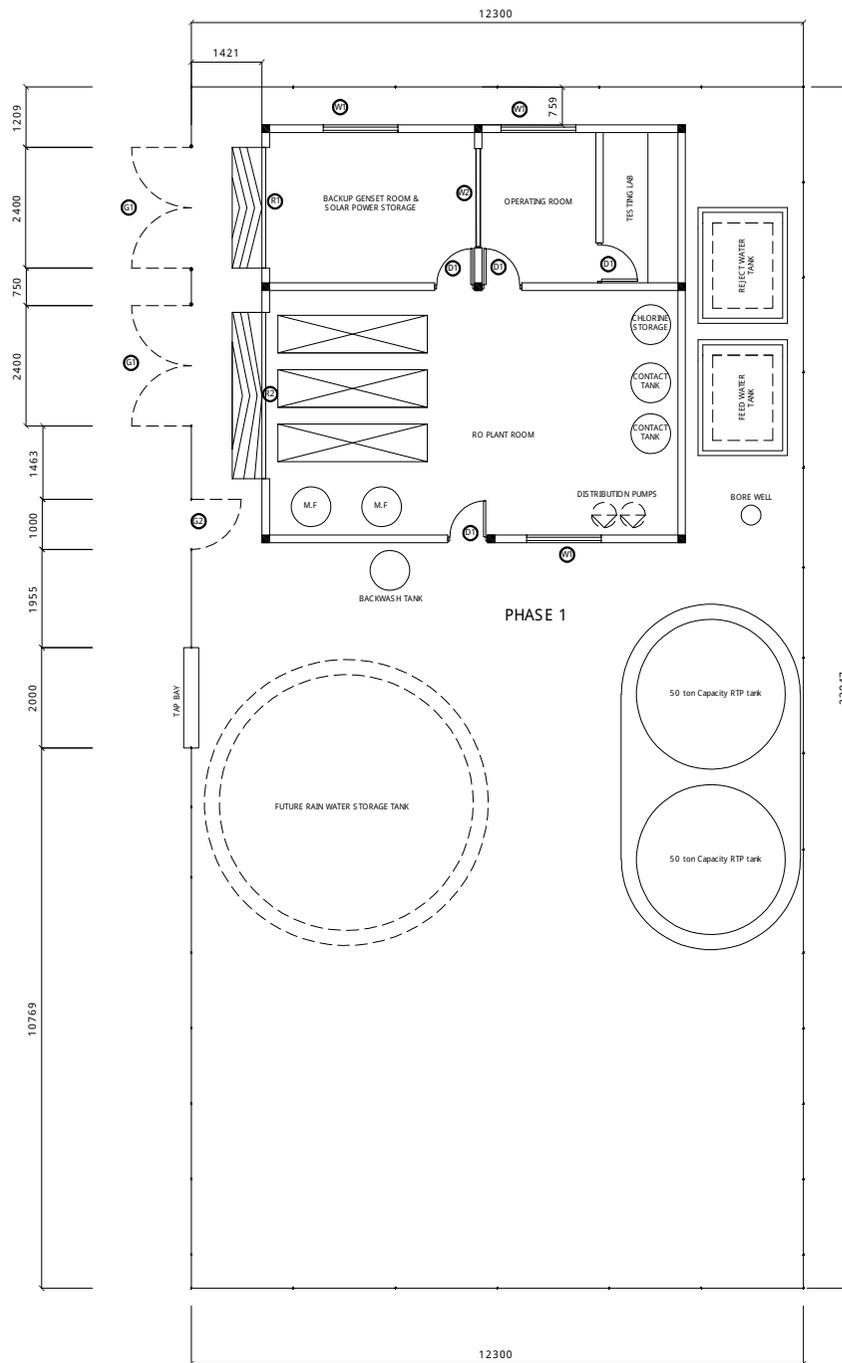
WATER SUPPLY COMPONENT  
OFID PROJECT  
MINISTRY OF ENVIRONMENT AND ENERGY

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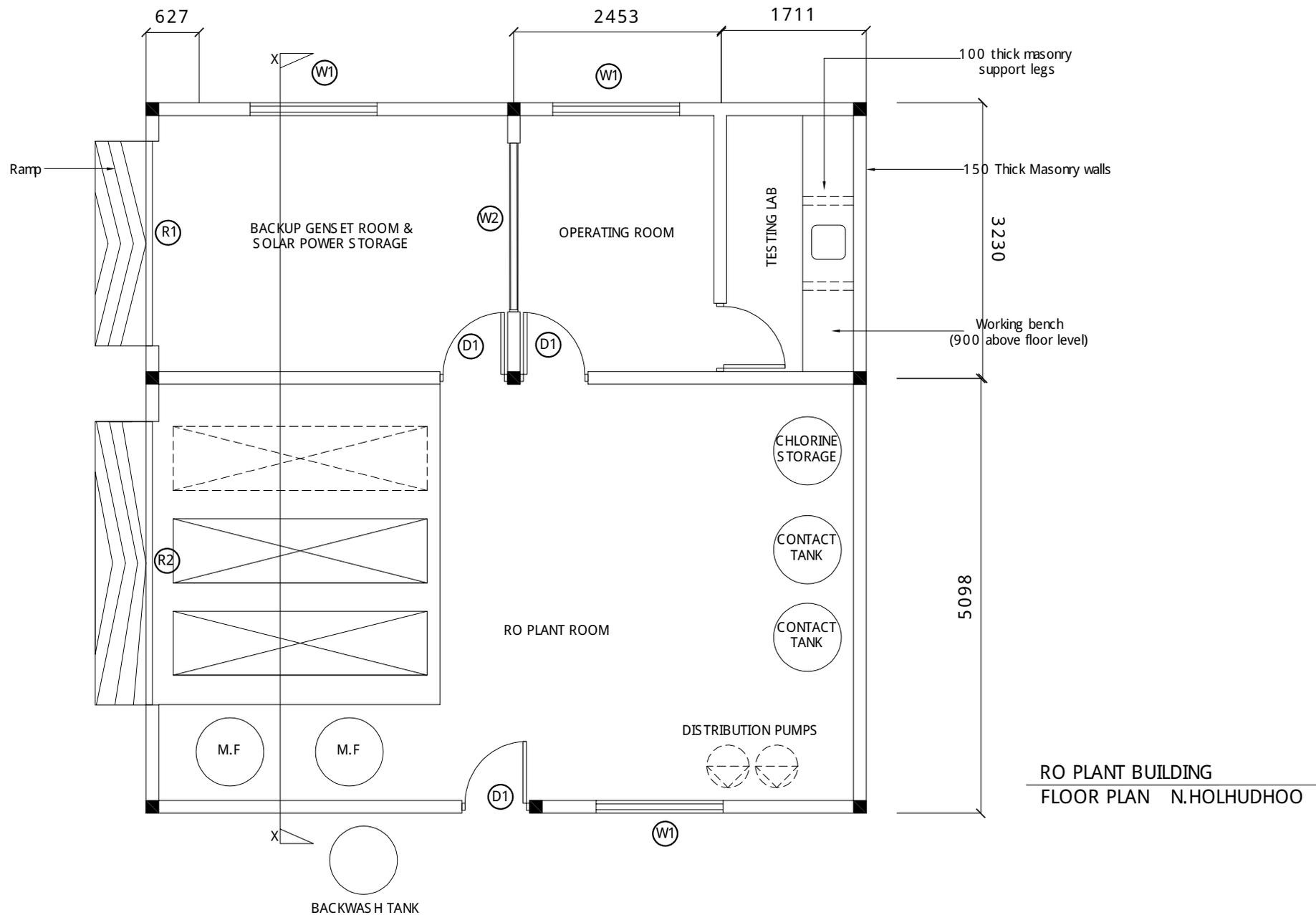
HANDHUVAREE HINGUN MALE 20-01  
REPUBLIC OF MALDIVES

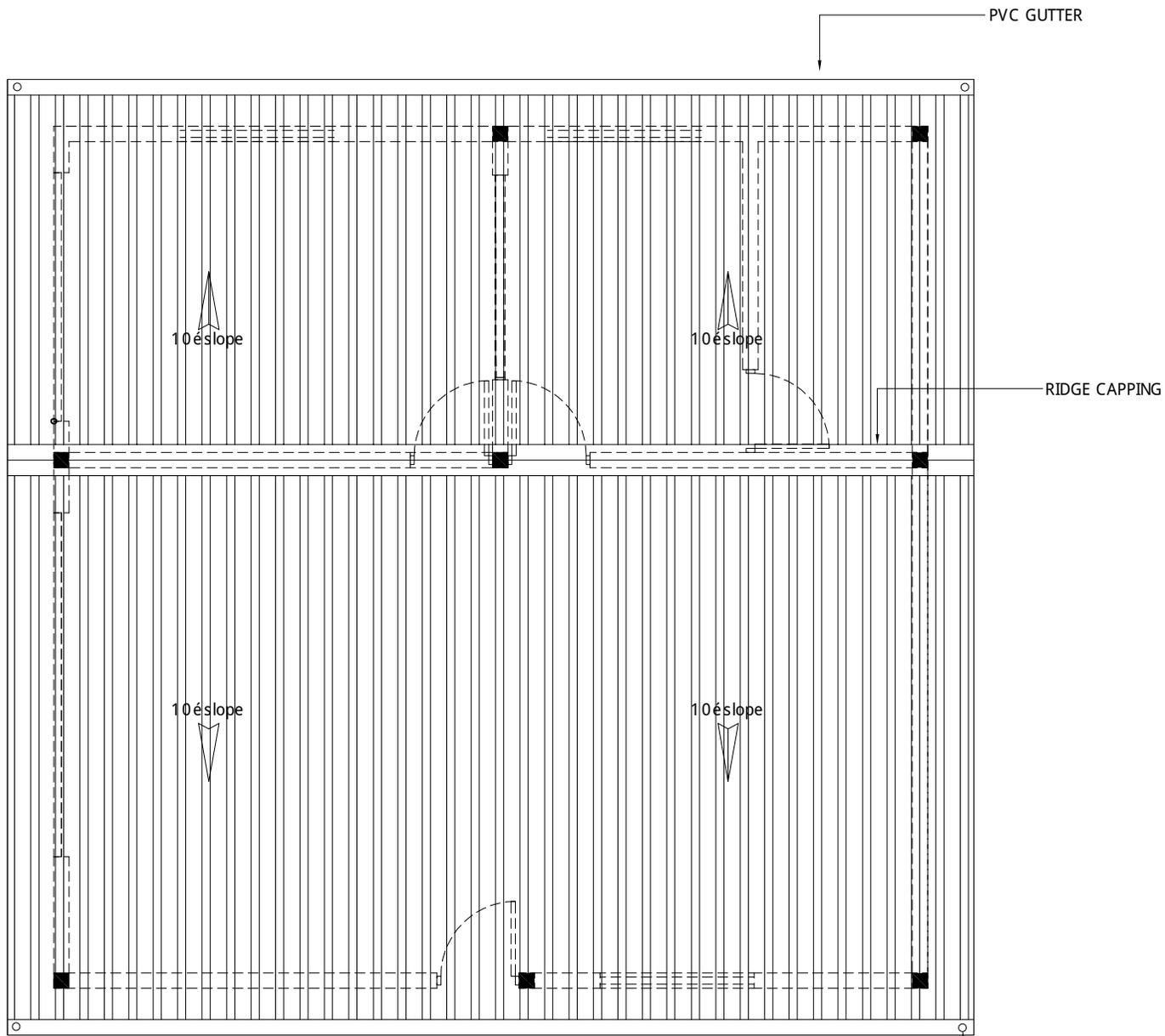


RO PLANT BUILDING AND CRITICAL DEVELOPMENTS  
N. HOLHUDHOO

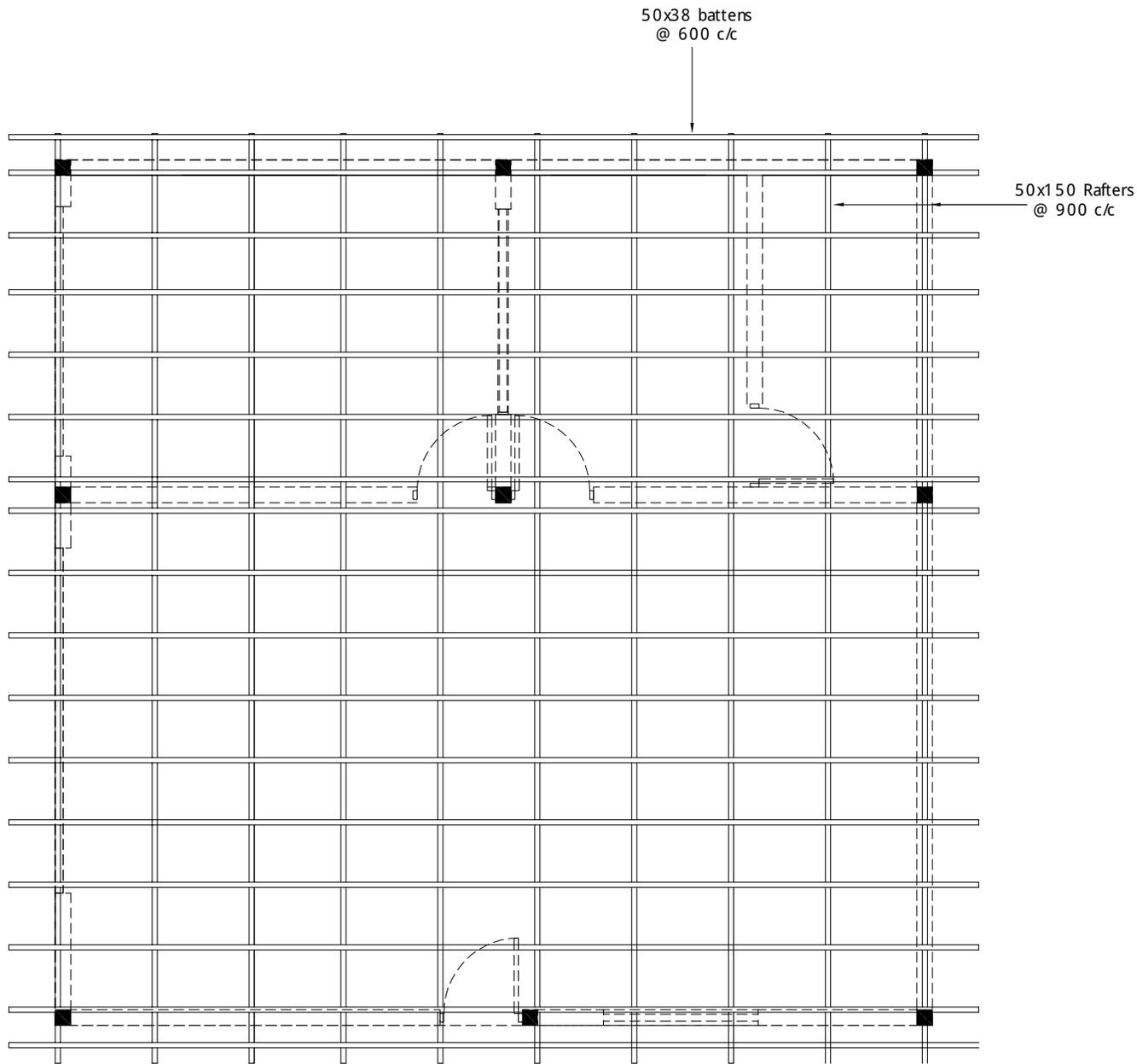


WATER SUPPLY AND STORAGE FACILITY SITE & BUILDING SITE PLAN  
NOONU HOLHUDHOO

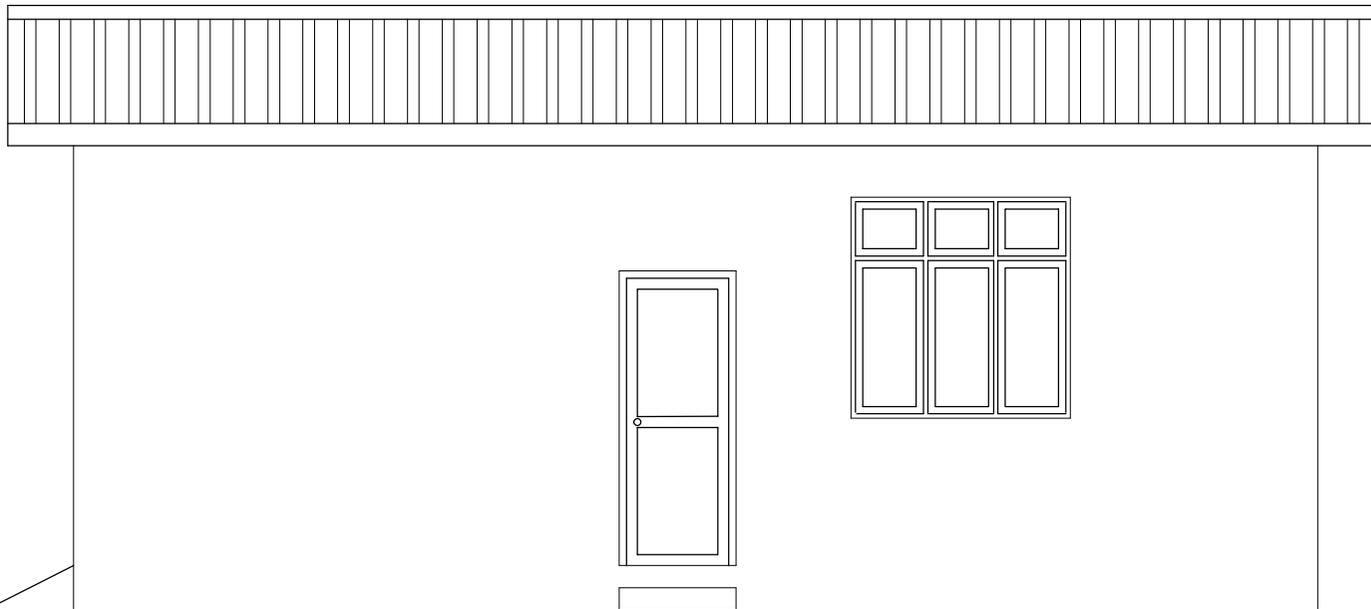




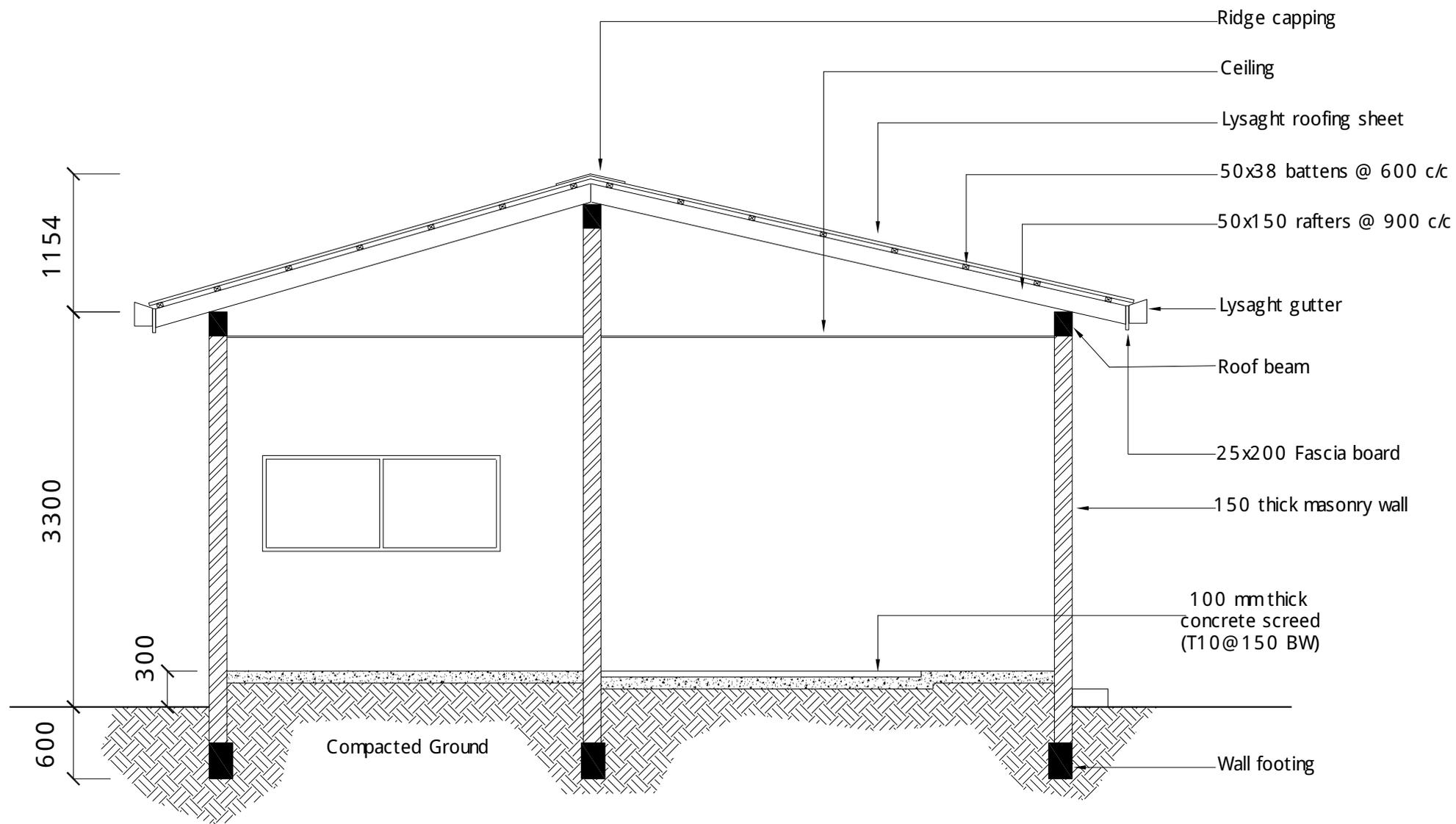
RO PLANT BUILDING  
 ROOF PLAN N.HOLHUDHOO



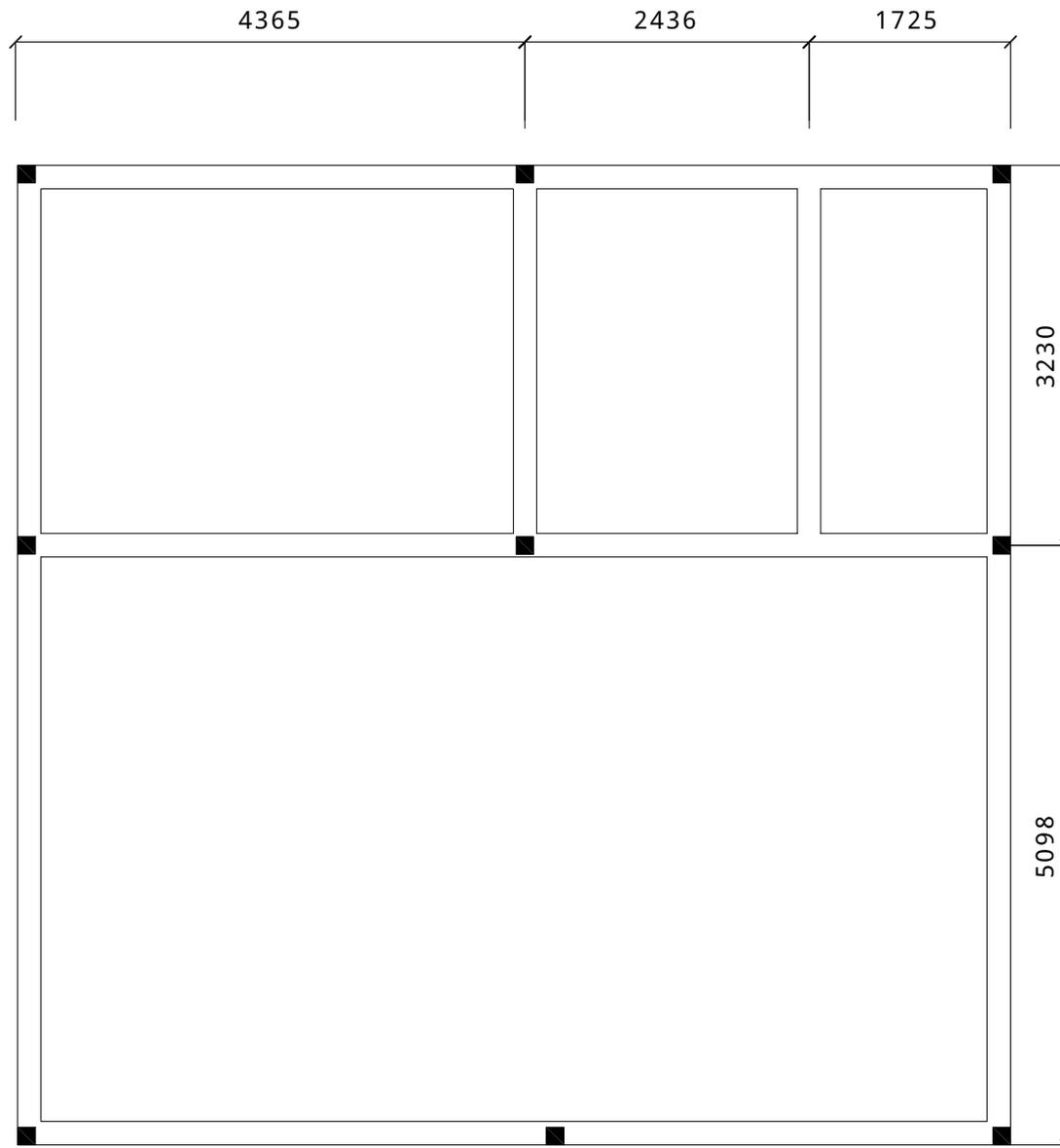
RO PLANT BUILDING N.HOLHUDHOO  
ROOF STRUCTURE



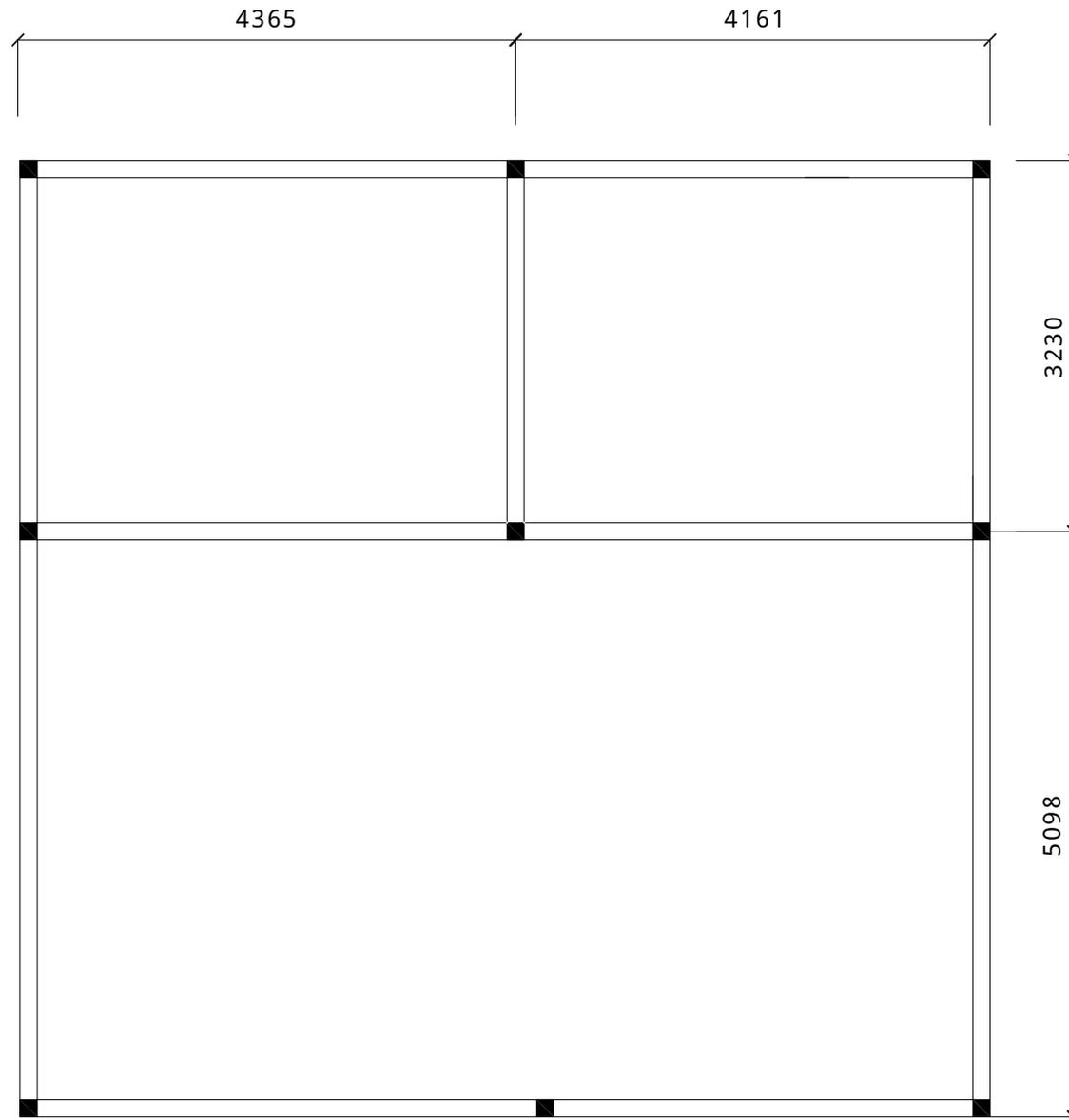
RO PLANT BUILDING  
FRONT ELEVATION N.HOLHUDHOO



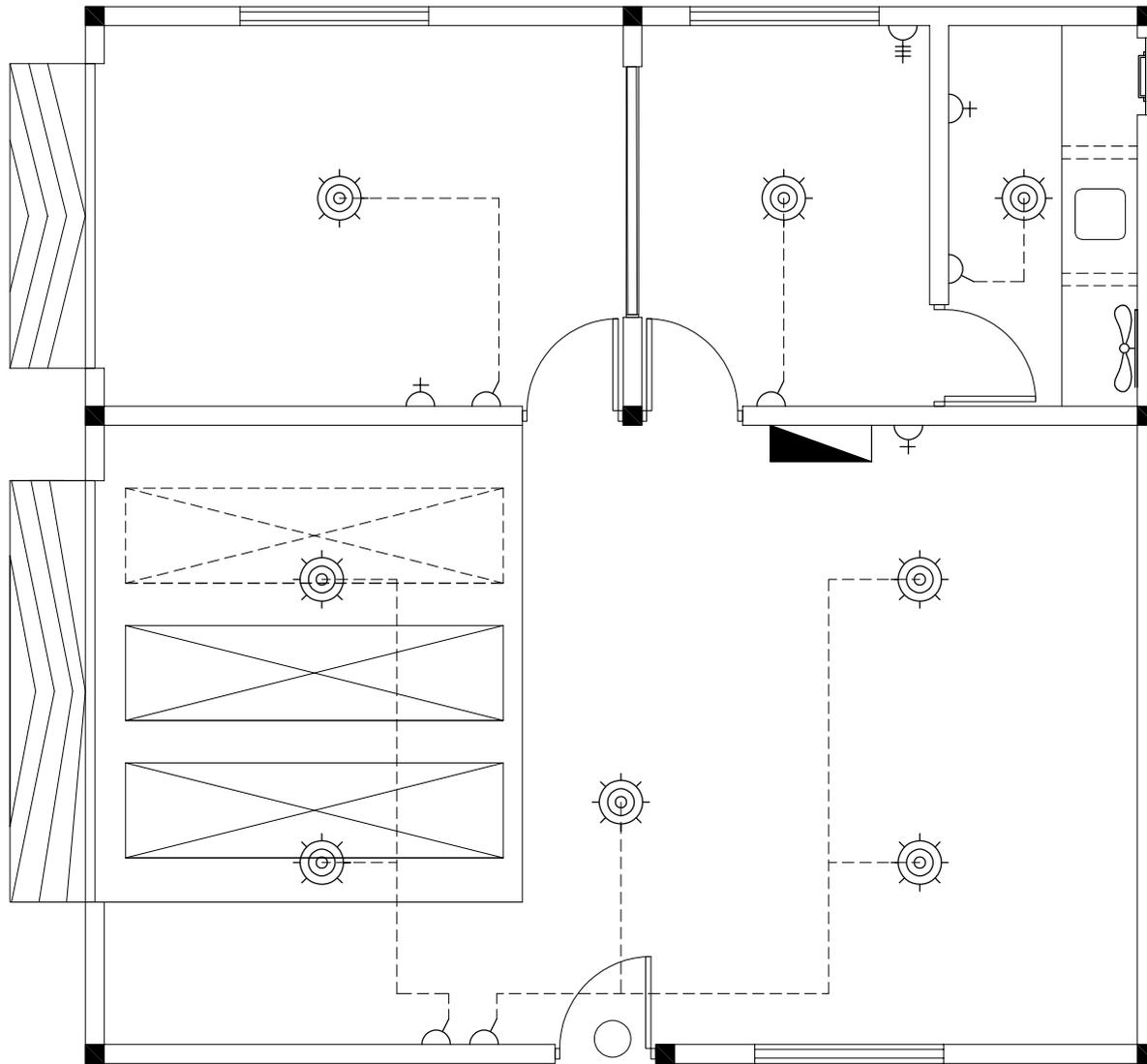
RO PLANT BUILDING  
SECTION X-X N.HOLHUDHOO



RO PLANT BUILDING  
 WALL FOOTING PLAN N.HOLHUDHOO

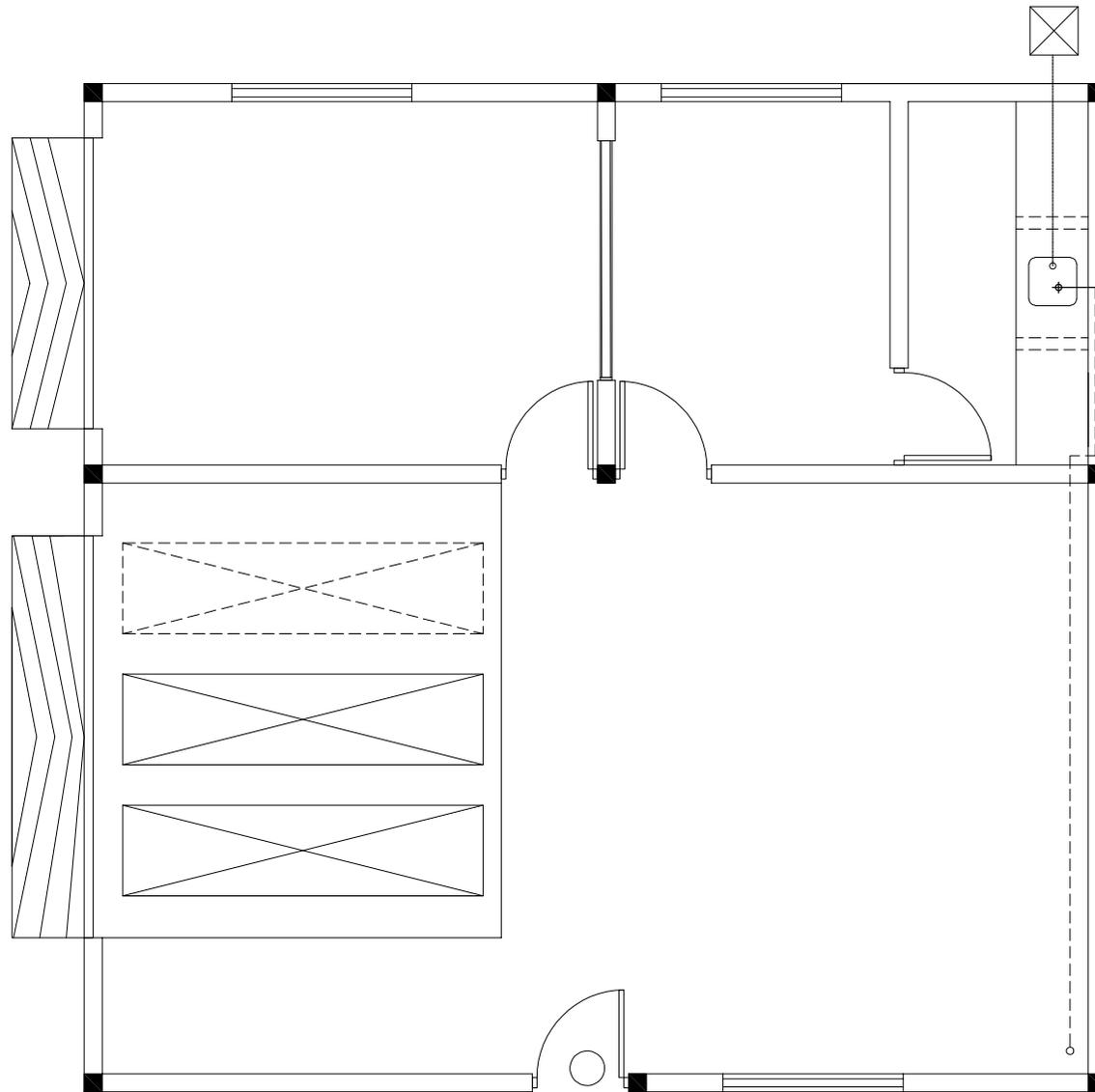


RO PLANT BUILDING  
 ROOF BEAM PLAN N.HOLHUDHOO



- DISTRIBUTION BOARD 
- 100W ENERGY SAVING LIGHT 
- POWER SOCKET [0.4m ABOVE GROUND] 
- POWER SOCKET [0.4m BELOW CEILING] 
- SINGLE GANG SWITCH 
- WALL MOUNT EXHAUST FAN 
- WALL MOUNT FAN 

RO PLANT BUILDING  
ELECTRICAL LAYOUT N. HOLHUDHOO



- ⊕ — PVC Sink Tap
- ⊗ — Soak pit
- 25mm PVC Pipe
- 50mm PVC Train Pipe

RO PLANT BUILDING  
 PLUMBING LAYOUT N.HOLHUDHOO

PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT

# R. INGURAI DHOO RO PLANT BUILDING AND WATER SUPPLY FACILITY



WATER SUPPLY COMPONENT  
OFID PROJECT  
MINISTRY OF ENVIRONMENT AND ENERGY

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HANDHUVAREE HINGUN MALE' 20-01  
REPUBLIC OF MALDIVES



HARBOUR KIOSK

SUPPLY PIPE TO HARBOUR KIOSK

RO PLANT BUILDING AND STORAGE TANK

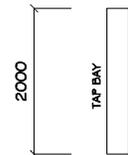
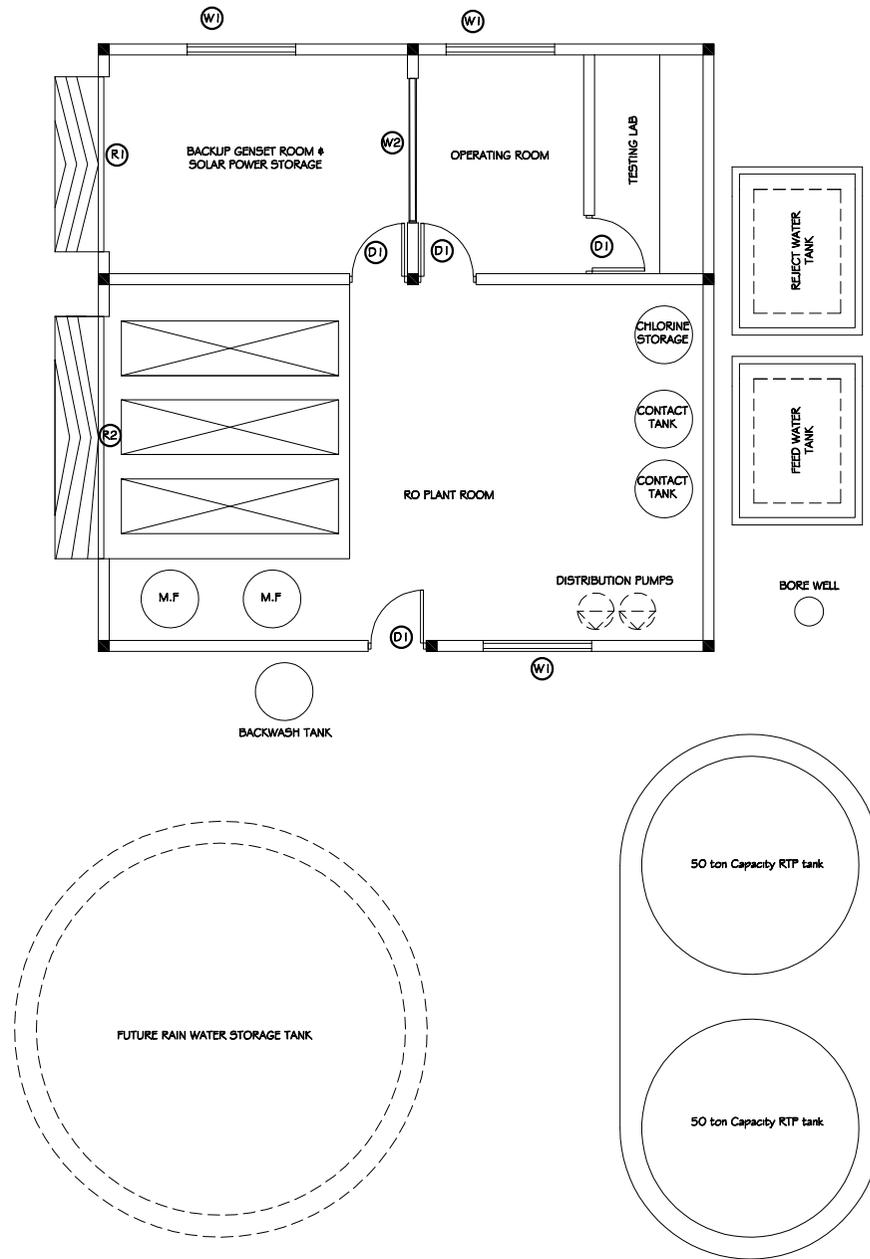
TAP BAY

BRINE OUTFALL PIPE (122m)

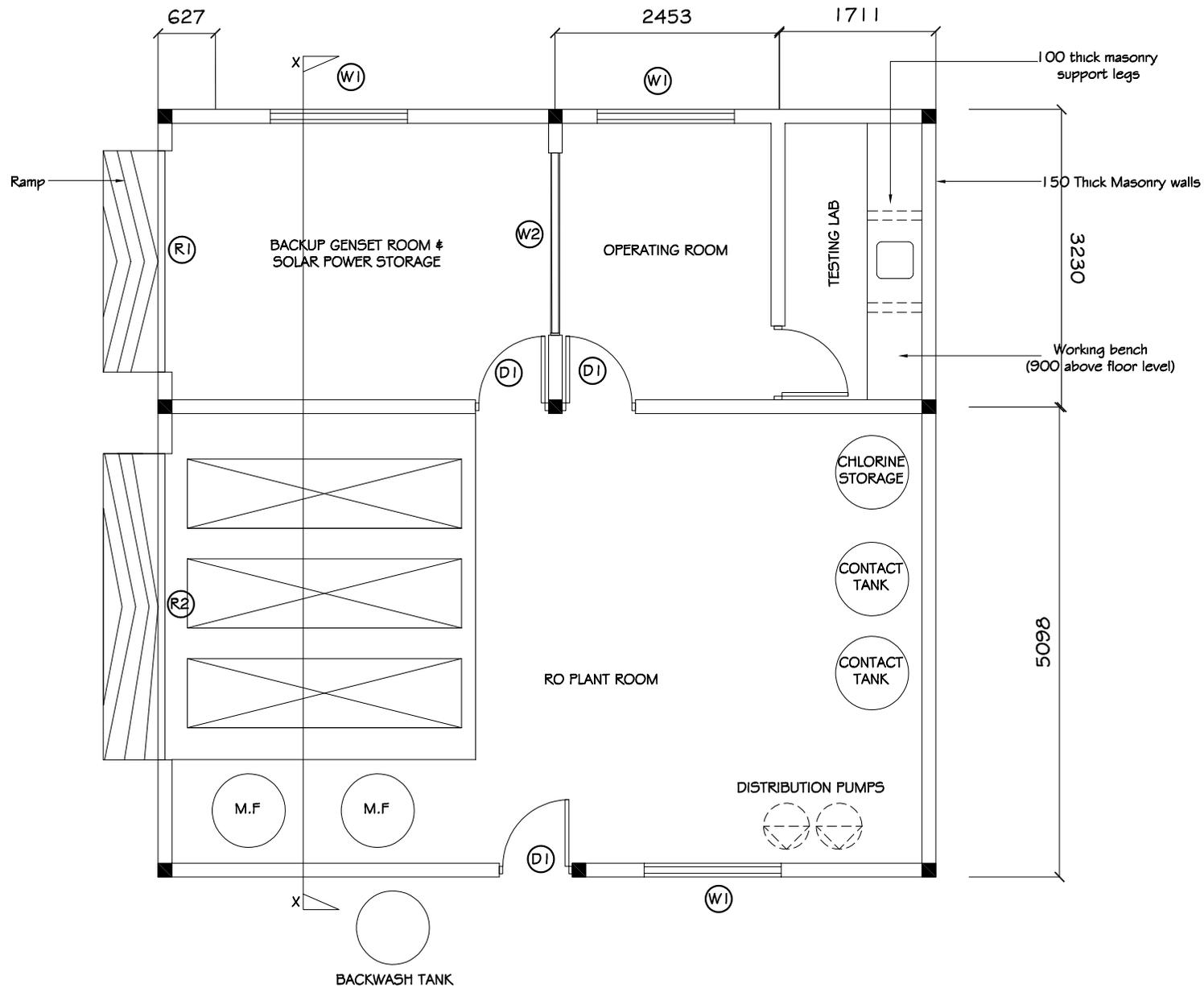
(-2m from MSL 50m from shoreline)

Google

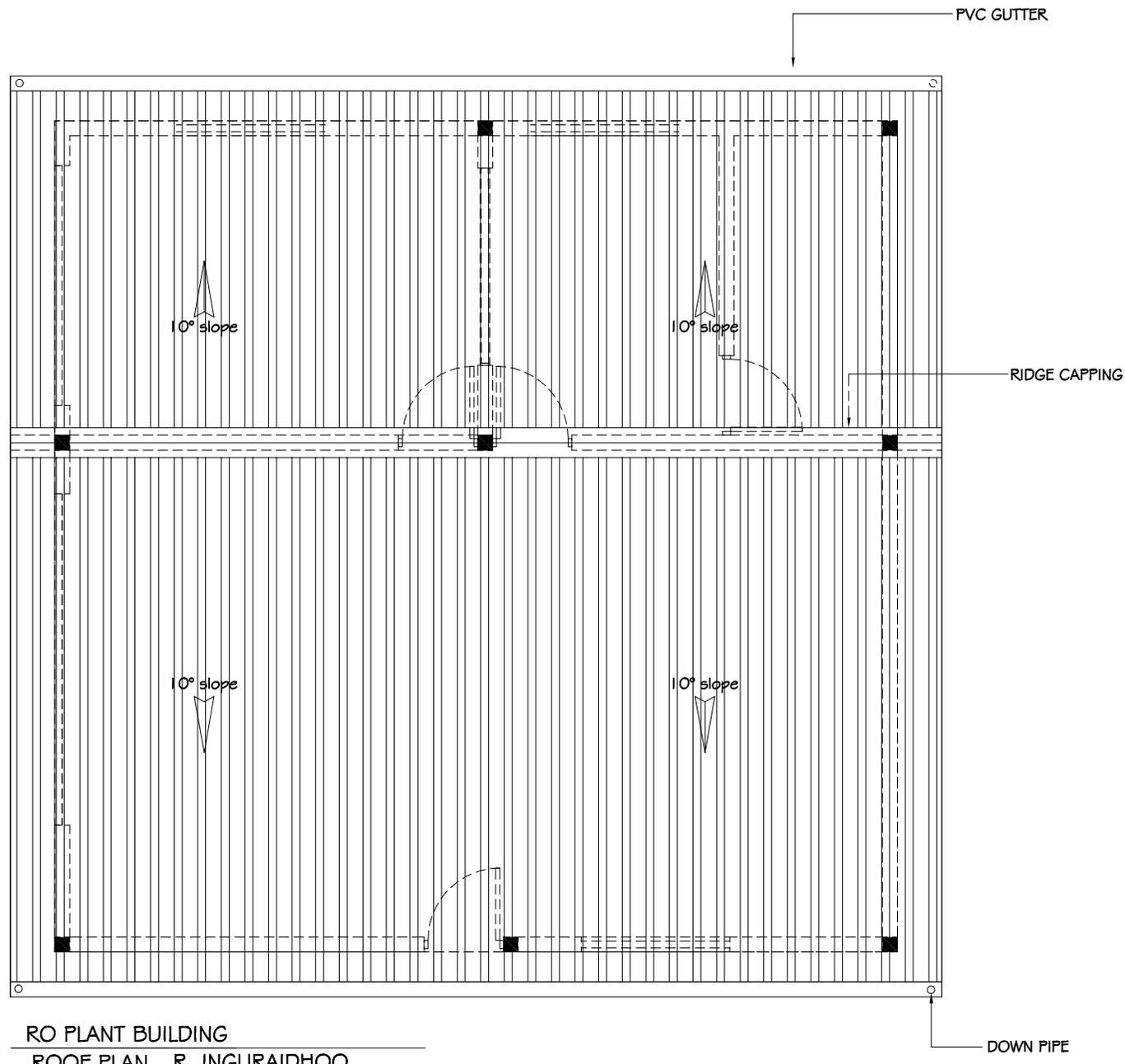
RO PLANT BUILDING AND CRITICAL DEVELOPMENTS  
R. INGURAIIDHOO



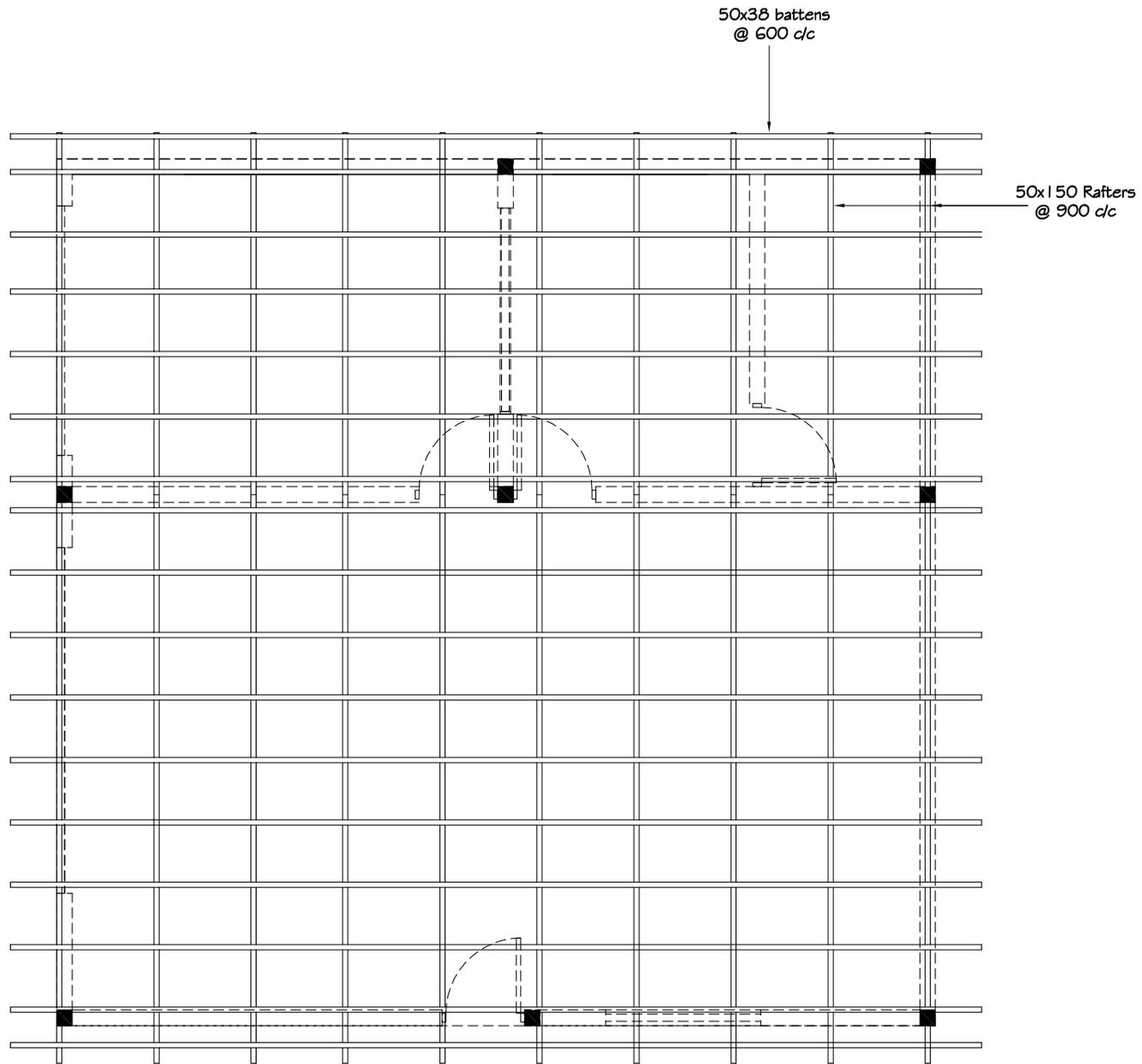
WATER SUPPLY AND STORAGE FACILITY SITE & BUILDING SITE PLAN  
RAA INGURAI DHOO



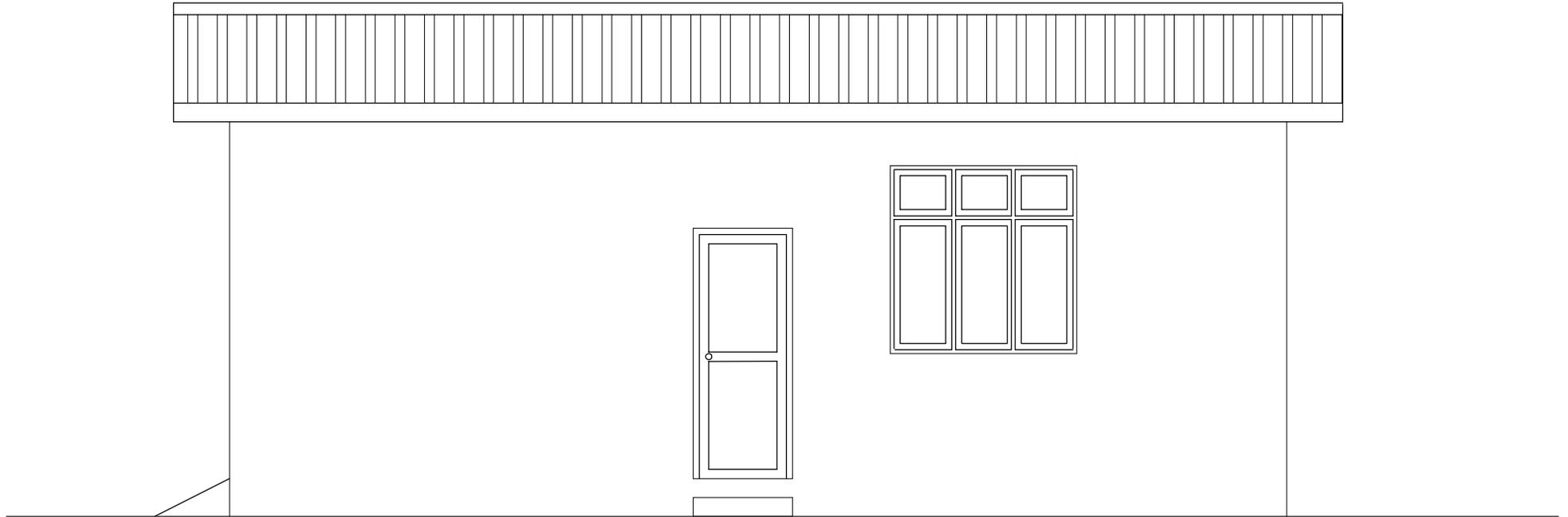
RO PLANT BUILDING  
FLOOR PLAN R. INGURAIIDHOO



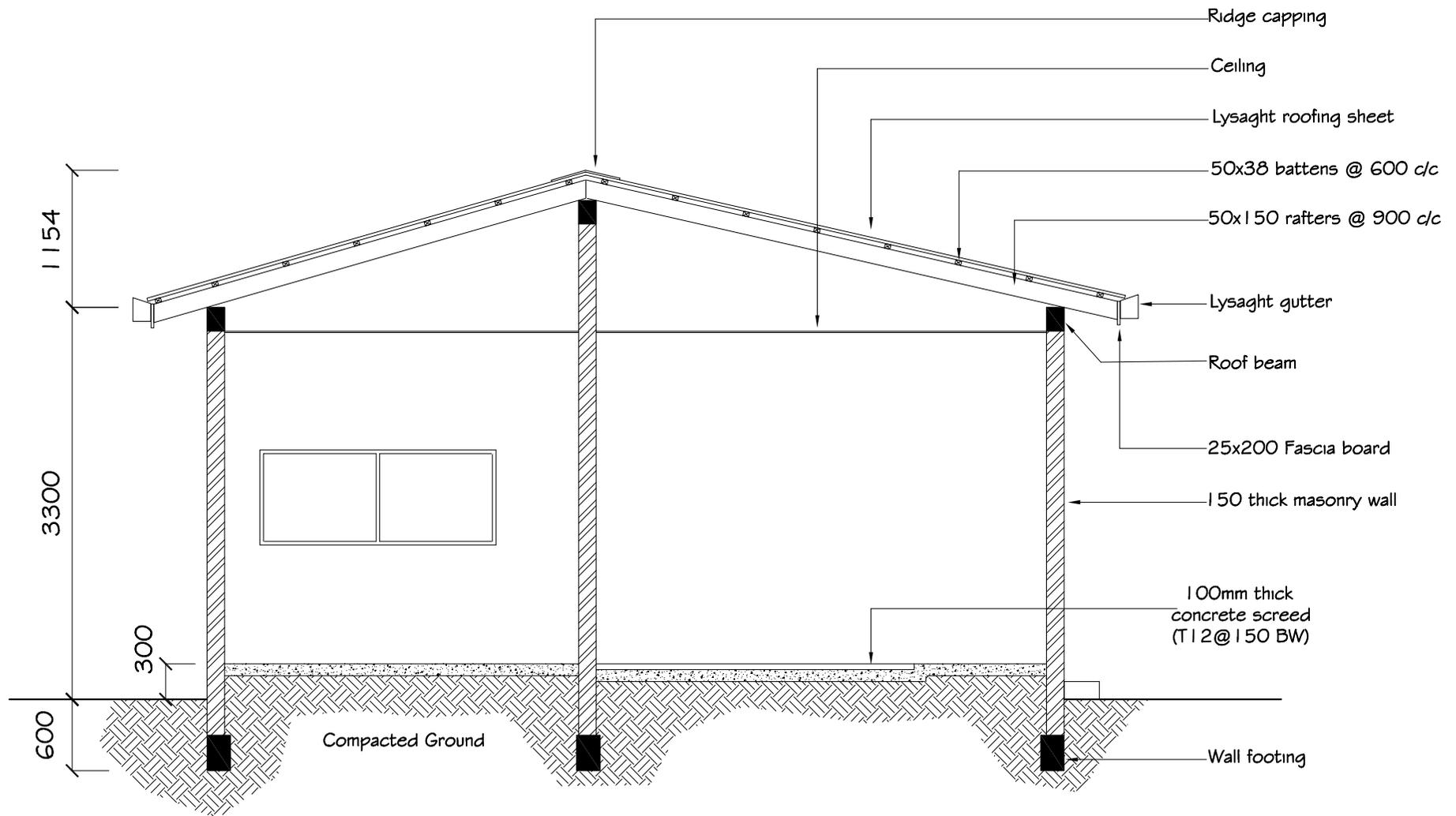
RO PLANT BUILDING  
 ROOF PLAN R. INGURAI DHOO



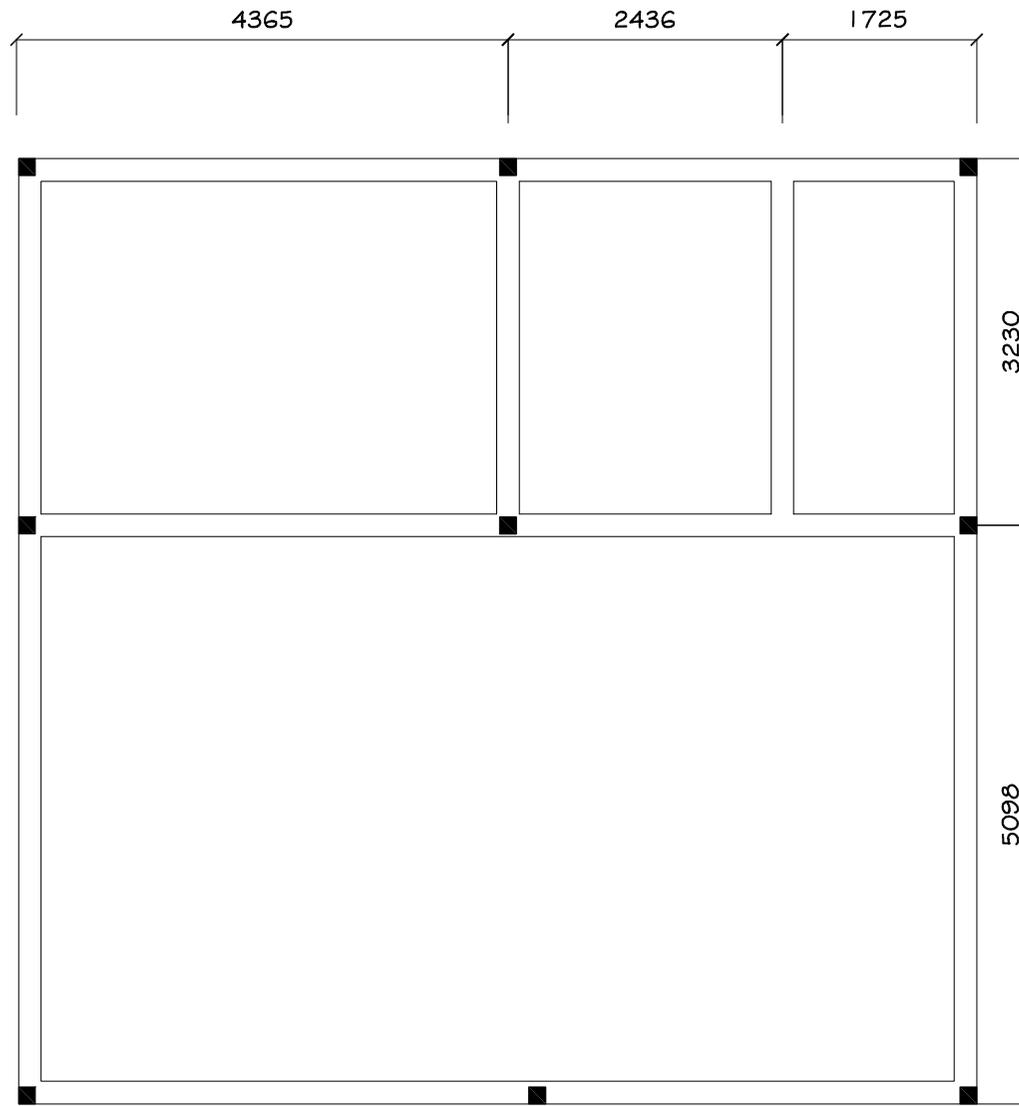
RO PLANT BUILDING  
ROOF STRUCTURE R. INGURAI DHOO



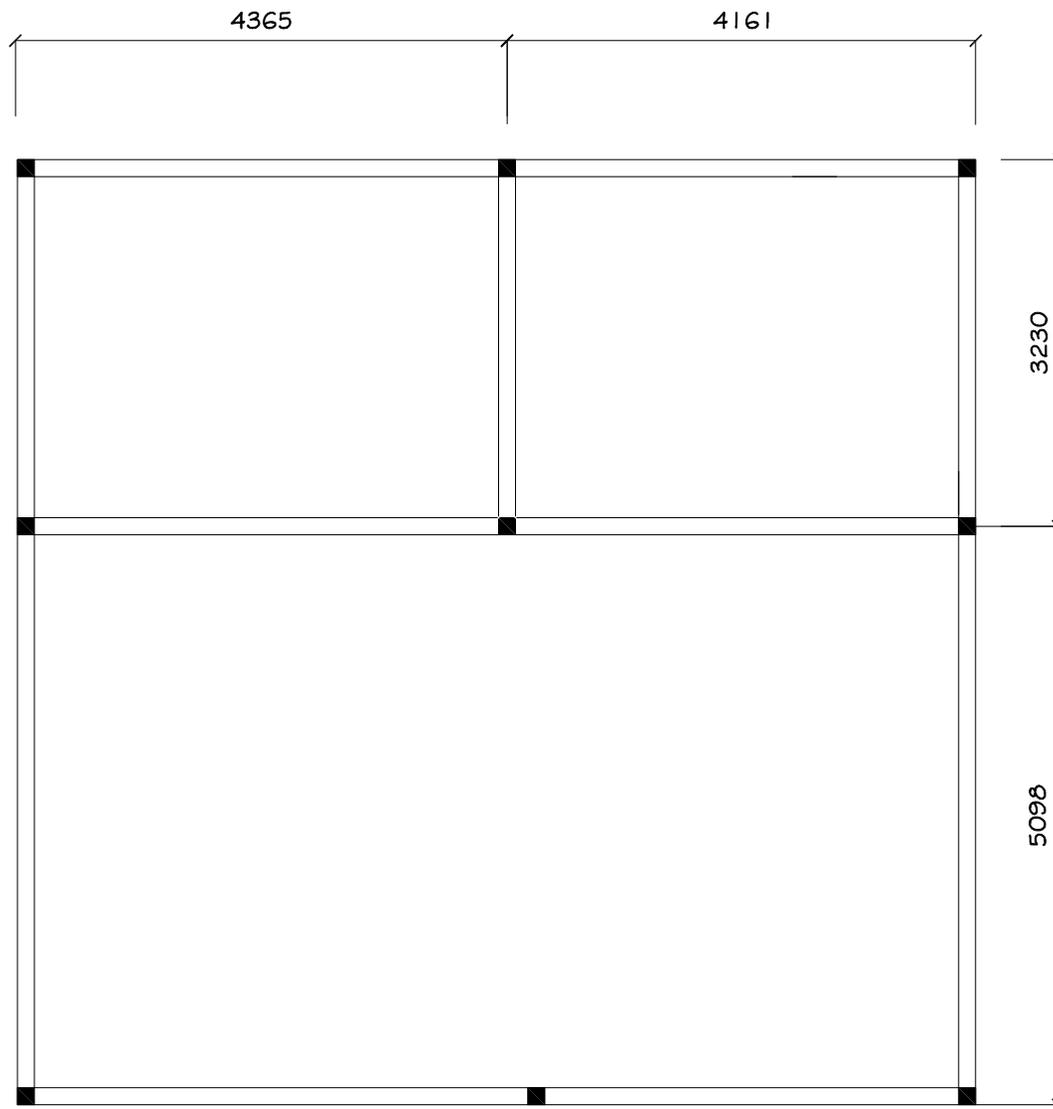
RO PLANT BUILDING  
FRONT ELEVATION R. INGURAI DHOO



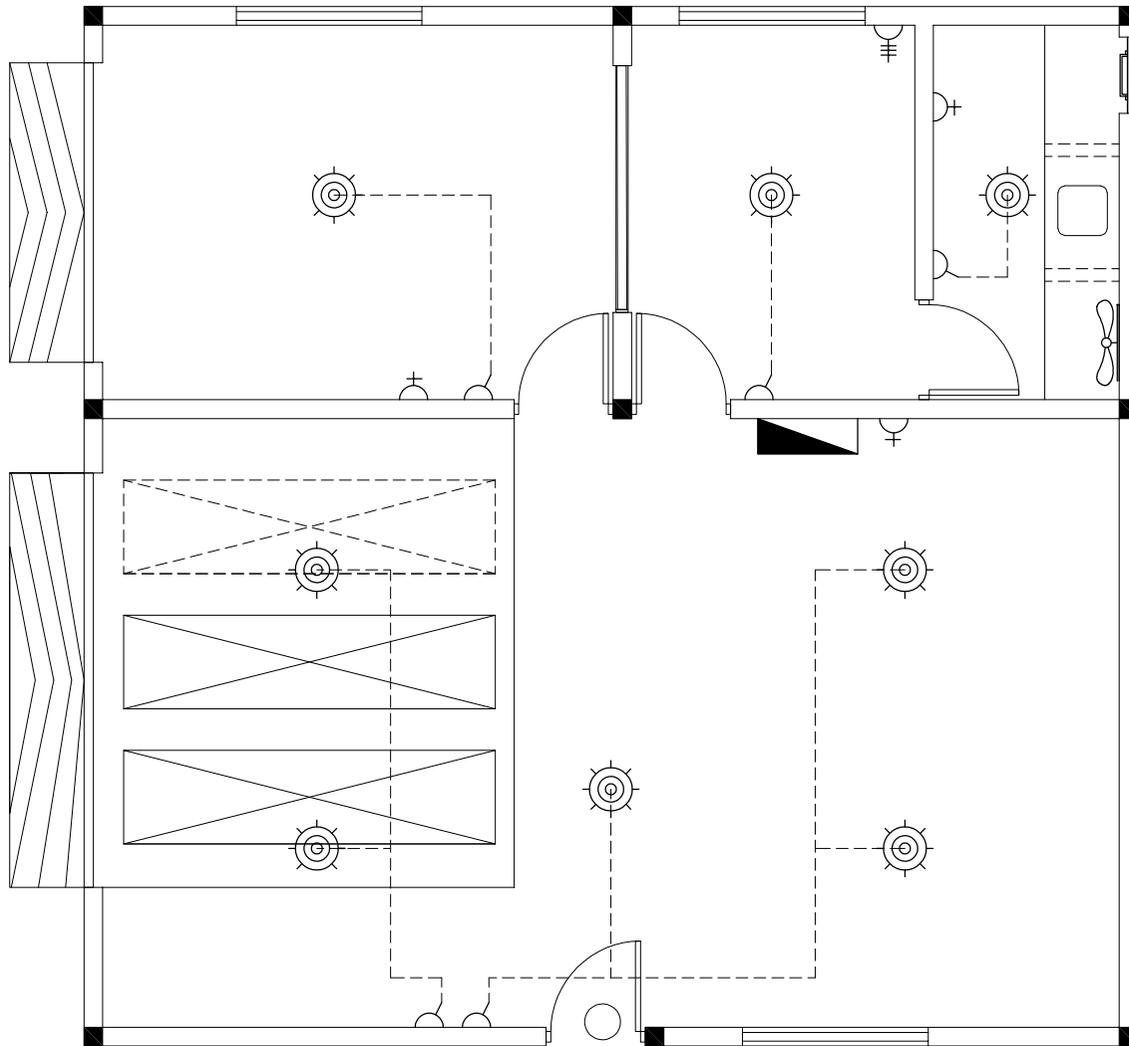
RO PLANT BUILDING  
SECTION X-X R. INGURAI DHOO



RO PLANT BUILDING  
 WALL FOOTING PLAN. INGURAI DHOO



RO PLANT BUILDING  
 ROOF BEAM PLAN R. INGURAIIDHOO



DISTRIBUTION BOARD



100W ENERGY SAVING LIGHT



POWER SOCKET  
[0.4m ABOVE GROUND]



POWER SOCKET  
[0.4m BELOW CEILING]



SINGLE GANG SWITCH



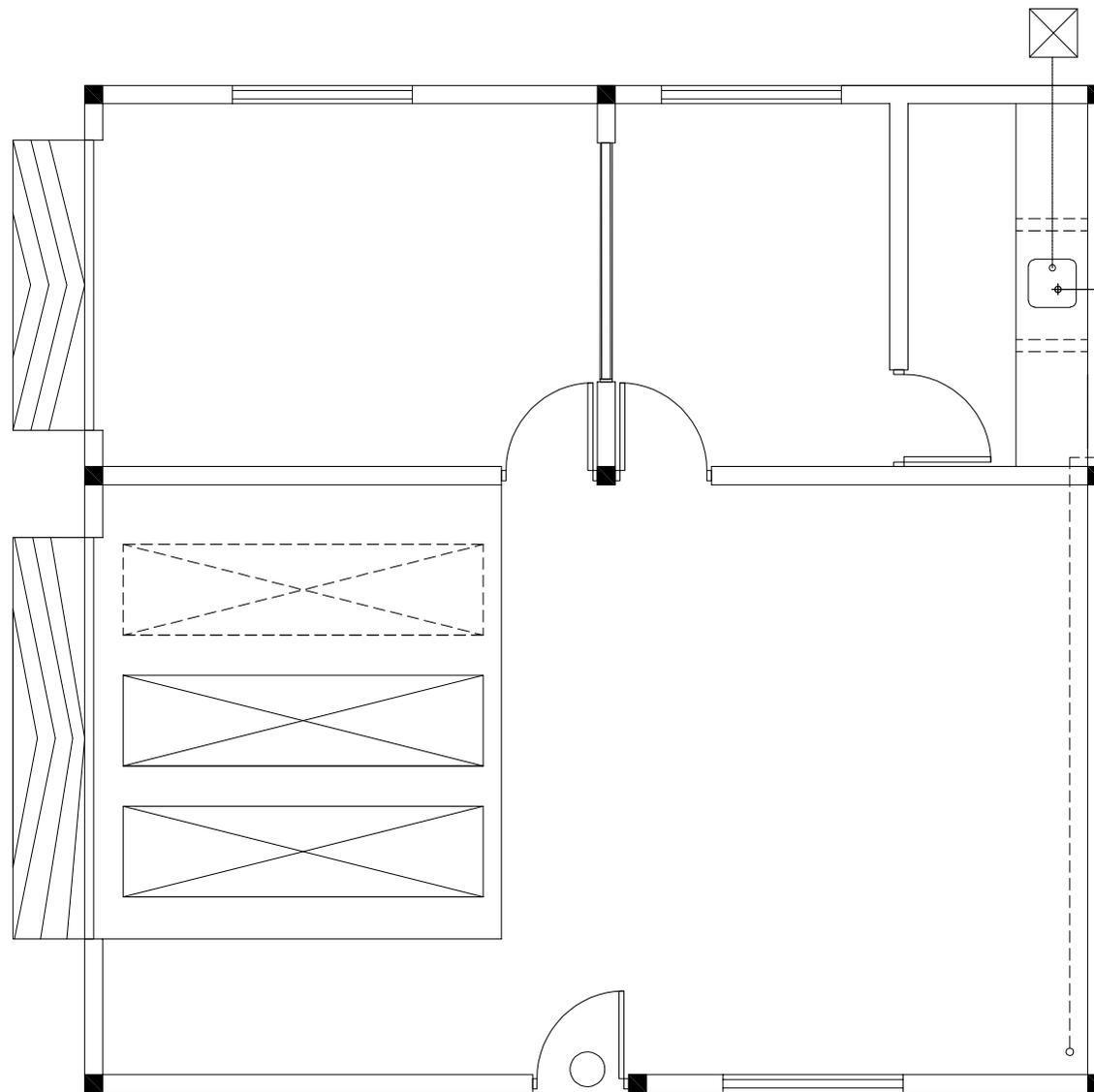
WALL MOUNT EXHAUST FAN



WALL MOUNT FAN



RO PLANT BUILDING  
ELECTRICAL LAYOUT R. INGURAI DHOO



- ⊕ — PVC Sink Tap
- ⊗ — Soak pit
- 25mm PVC Pipe
- 50mm PVC Train Pipe

RO PLANT BUILDING  
PLUMBING LAYOUT R. INGURAI DHOO

PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT

# R. MAAKURATHU RO PLANT BUILDING AND WATER SUPPLY FACILITY



WATER SUPPLY COMPONENT  
OFID PROJECT  
MINISTRY OF ENVIRONMENT AND ENERGY

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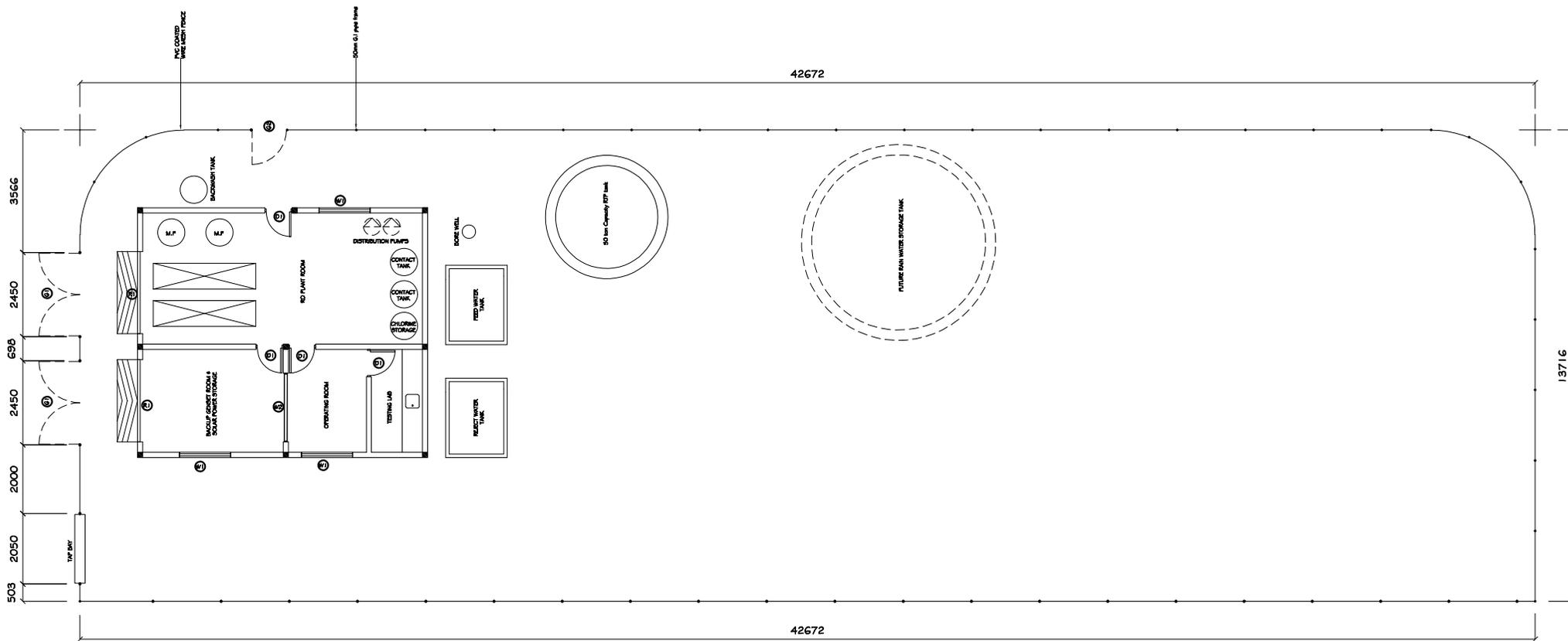
HANDHUVAREE HINGUN MALE' 20-01  
REPUBLIC OF MALDIVES



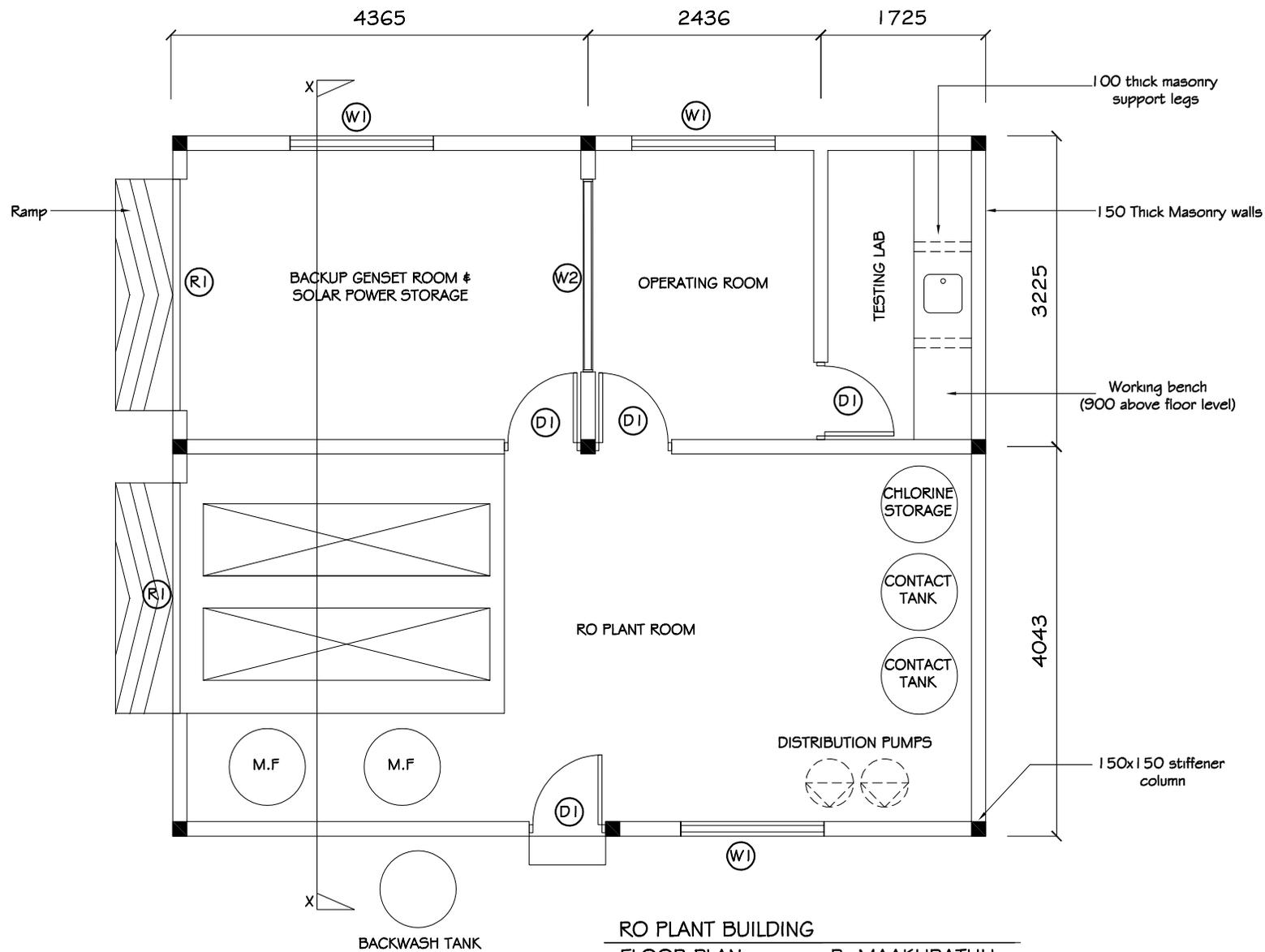
**RO PLANT BUILDING AND CRITICAL DEVELOPMENTS**

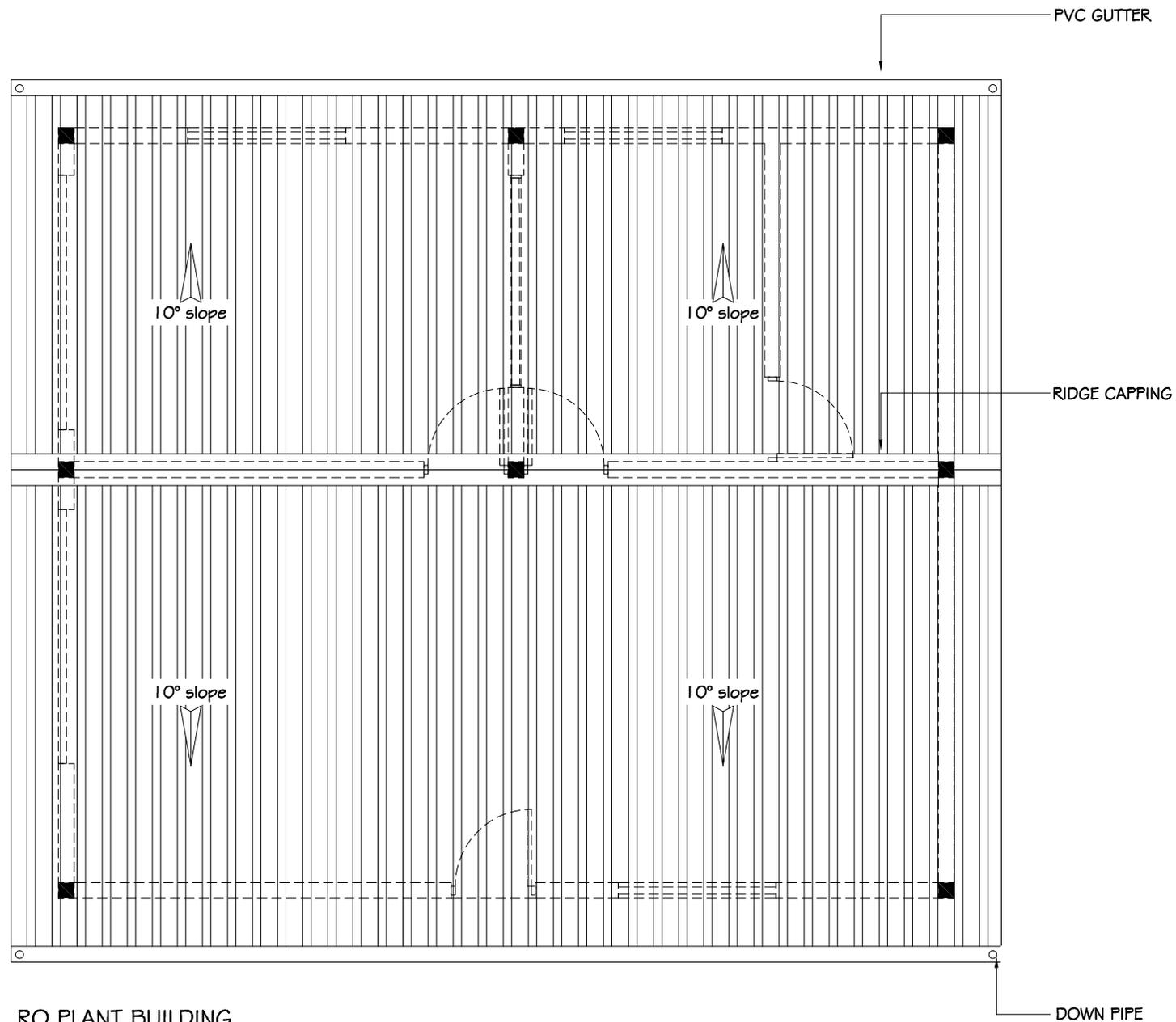
**R. MAAKURATHU**

Google

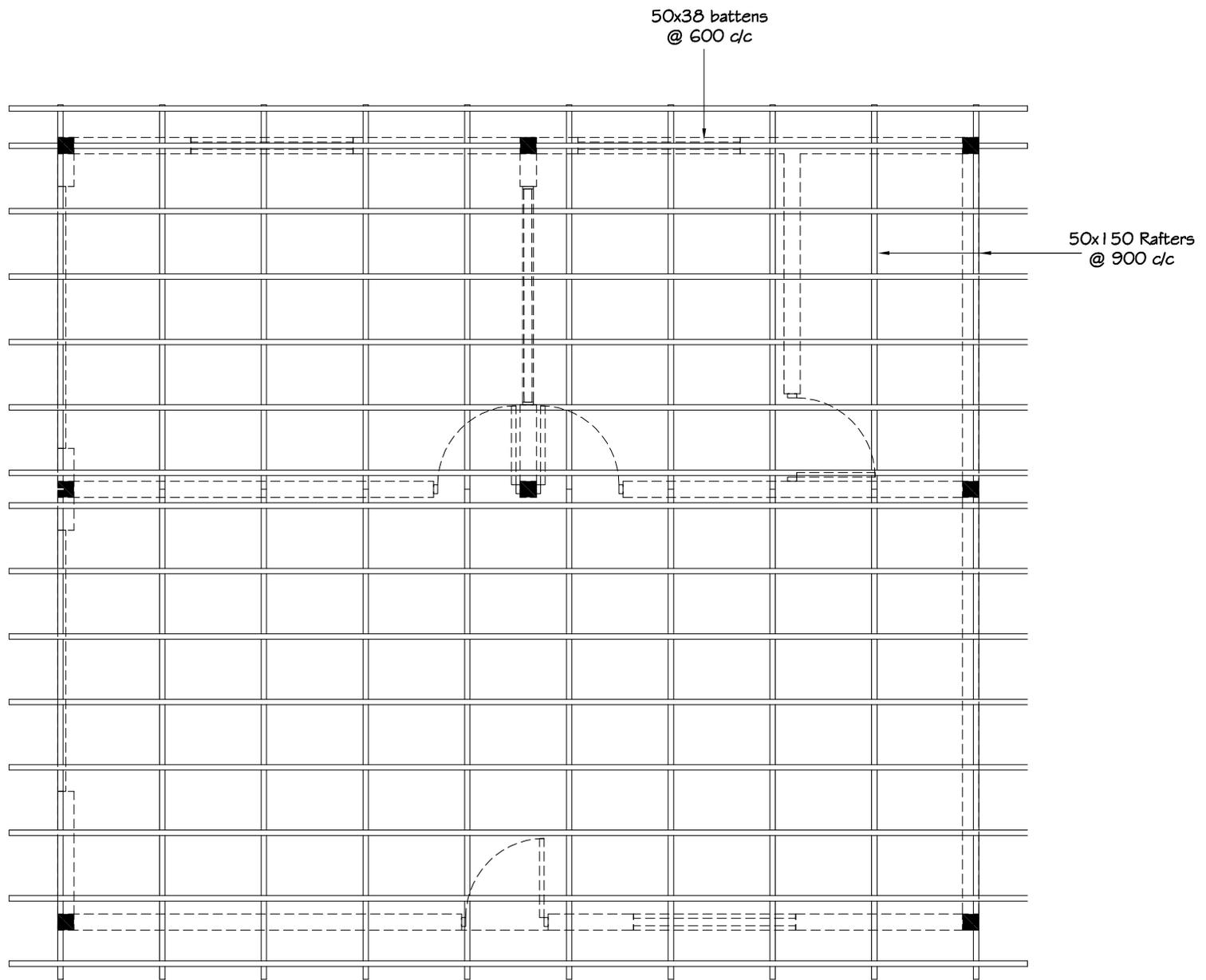


WATER SUPPLY AND STORAGE FACILITY SITE & BUILDING  
 RAA MAAKURATHU

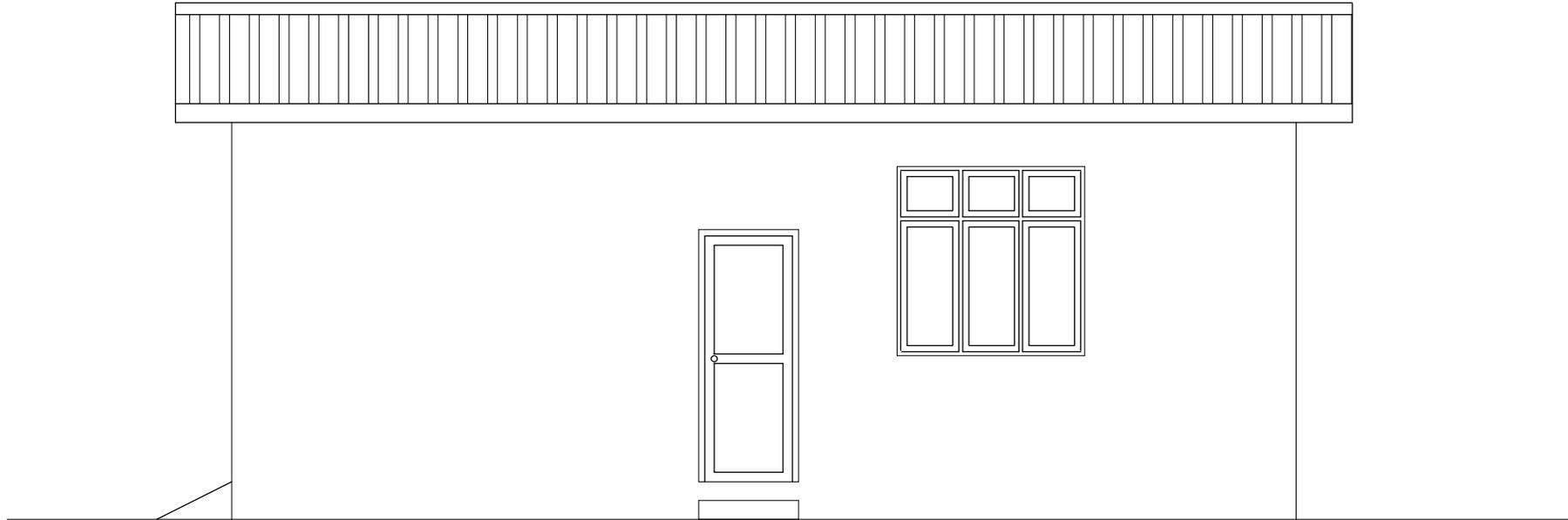




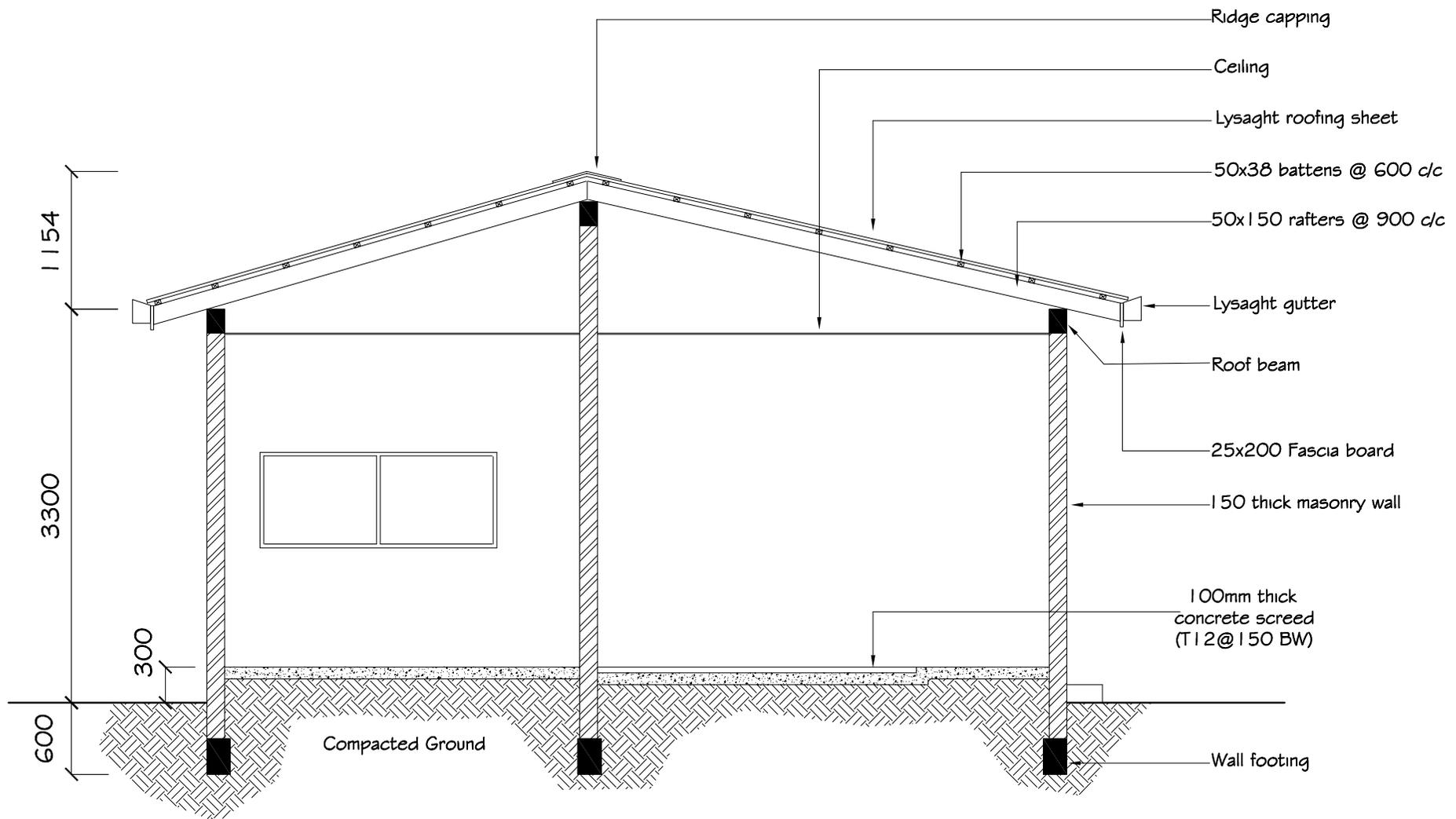
RO PLANT BUILDING  
 ROOF PLAN R. MAAKURATHU



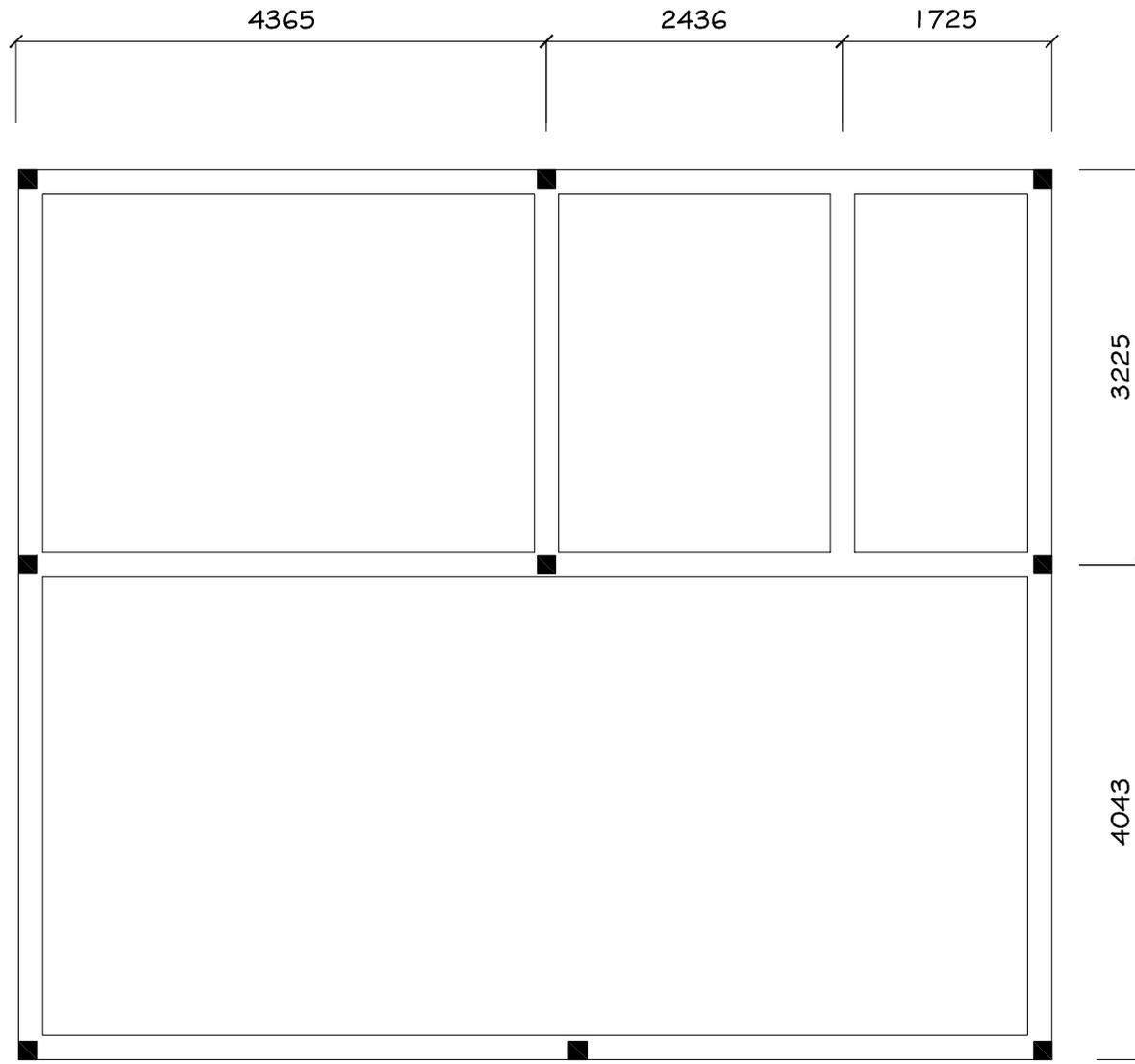
RO PLANT BUILDING  
ROOF STRUCTURE R. MAAKURATHU



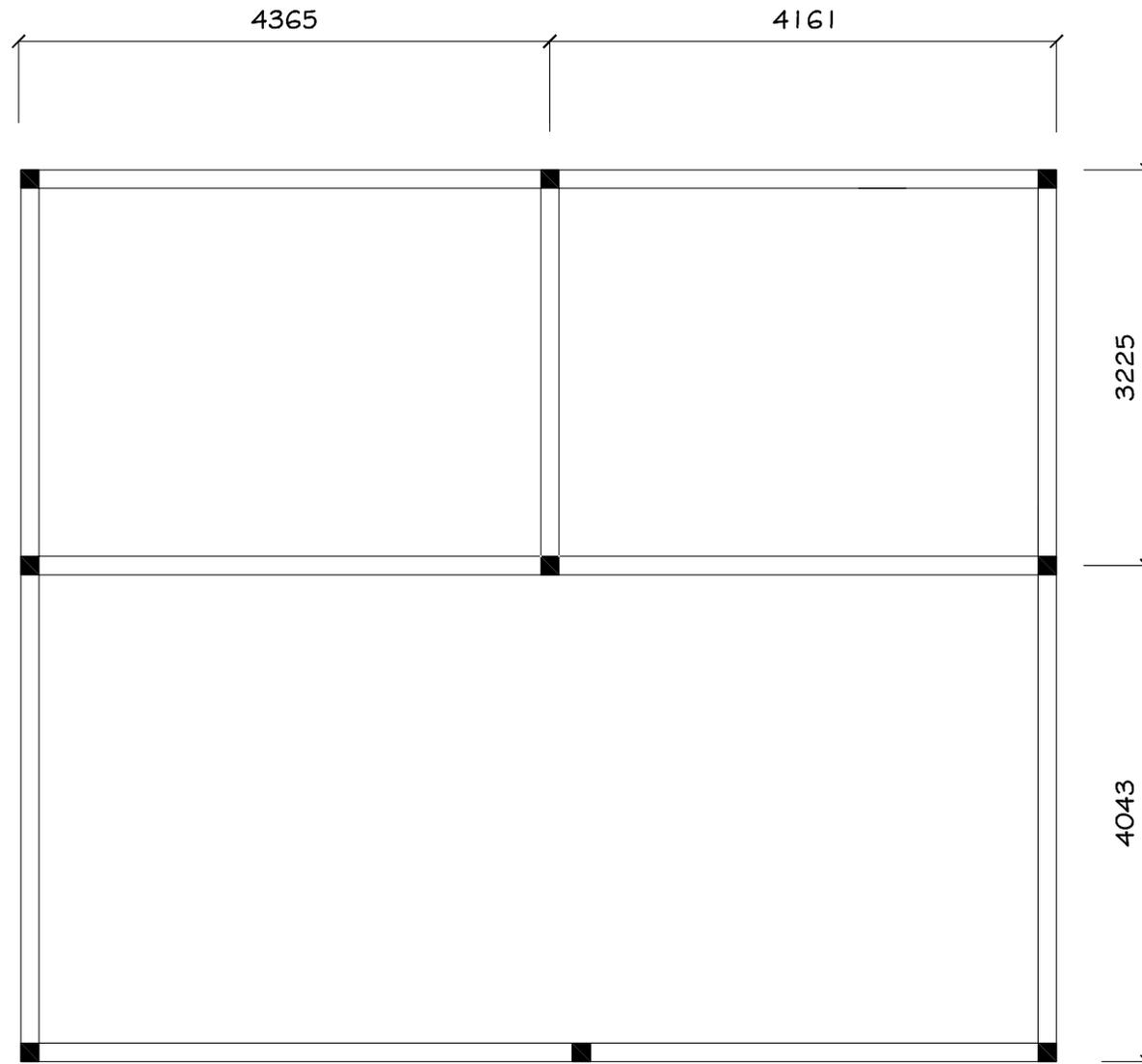
RO PLANT BUILDING  
FRONT ELEVATION R. MAAKURATHU



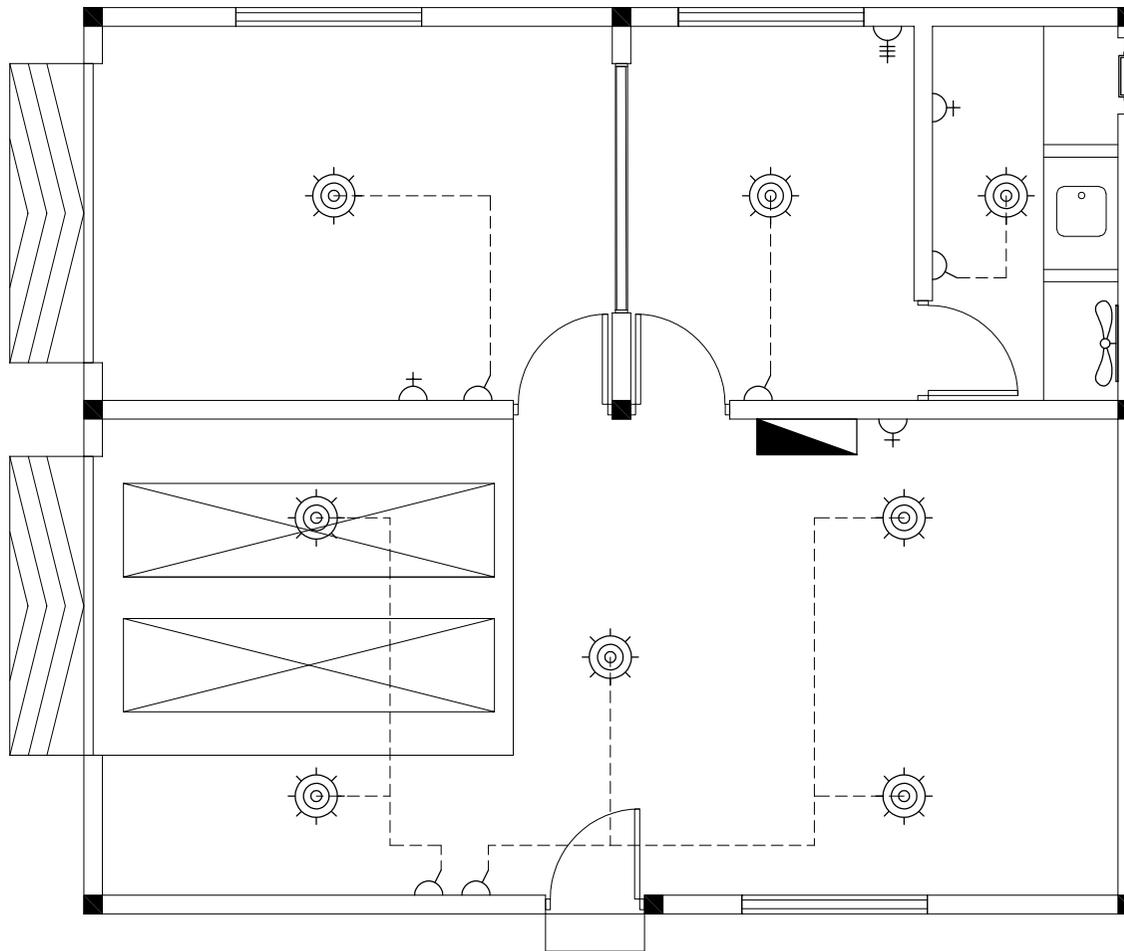
RO PLANT BUILDING  
SECTION X-X R. MAAKURATHU



RO PLANT BUILDING  
 WALL FOOTING PLAN R. MAAKURATHU



RO PLANT BUILDING  
 ROOF BEAM PLAN R. MAAKURATHU



DISTRIBUTION BOARD



100W ENERGY SAVING LIGHT



POWER SOCKET  
[0.4m ABOVE GROUND]



POWER SOCKET  
[0.4m BELOW CEILING]



SINGLE GANG SWITCH



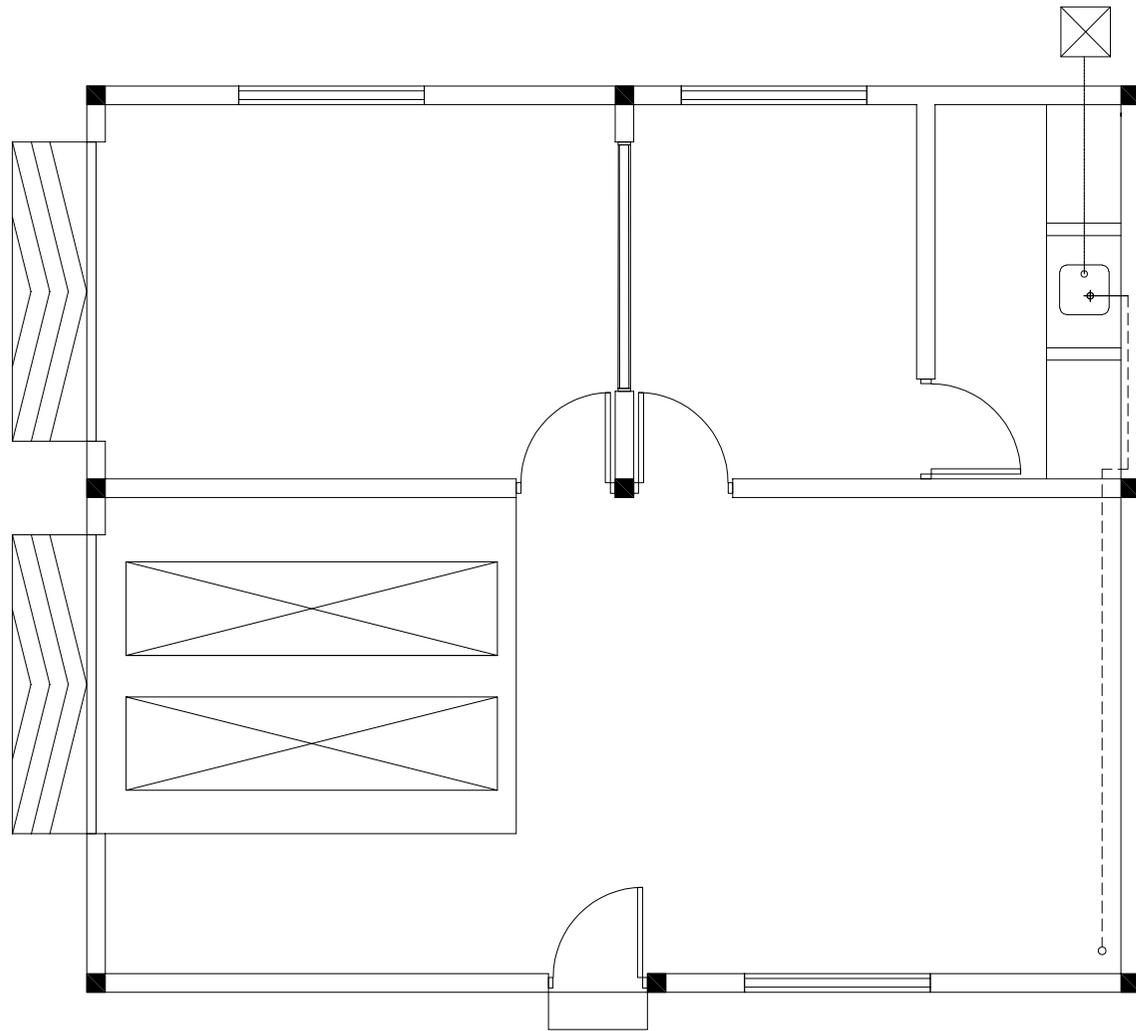
WALL MOUNT EXHAUST FAN



WALL MOUNT FAN



RO PLANT BUILDING  
ELECTRICAL LAYOUT R. MAAKURATHU



- ⊕ — PVC Sink Tap
- ⊗ — Soak pit
- 25mm PVC Pipe
- 50mm PVC Train Pipe

RO PLANT BUILDING  
 PLUMBING LAYOUT R. MAAKURATHU

# COMMON DRAWINGS

PROVISION OF WATER SUPPLY SANITATION AND SOLID  
WASTE MANAGEMENT PROJECT

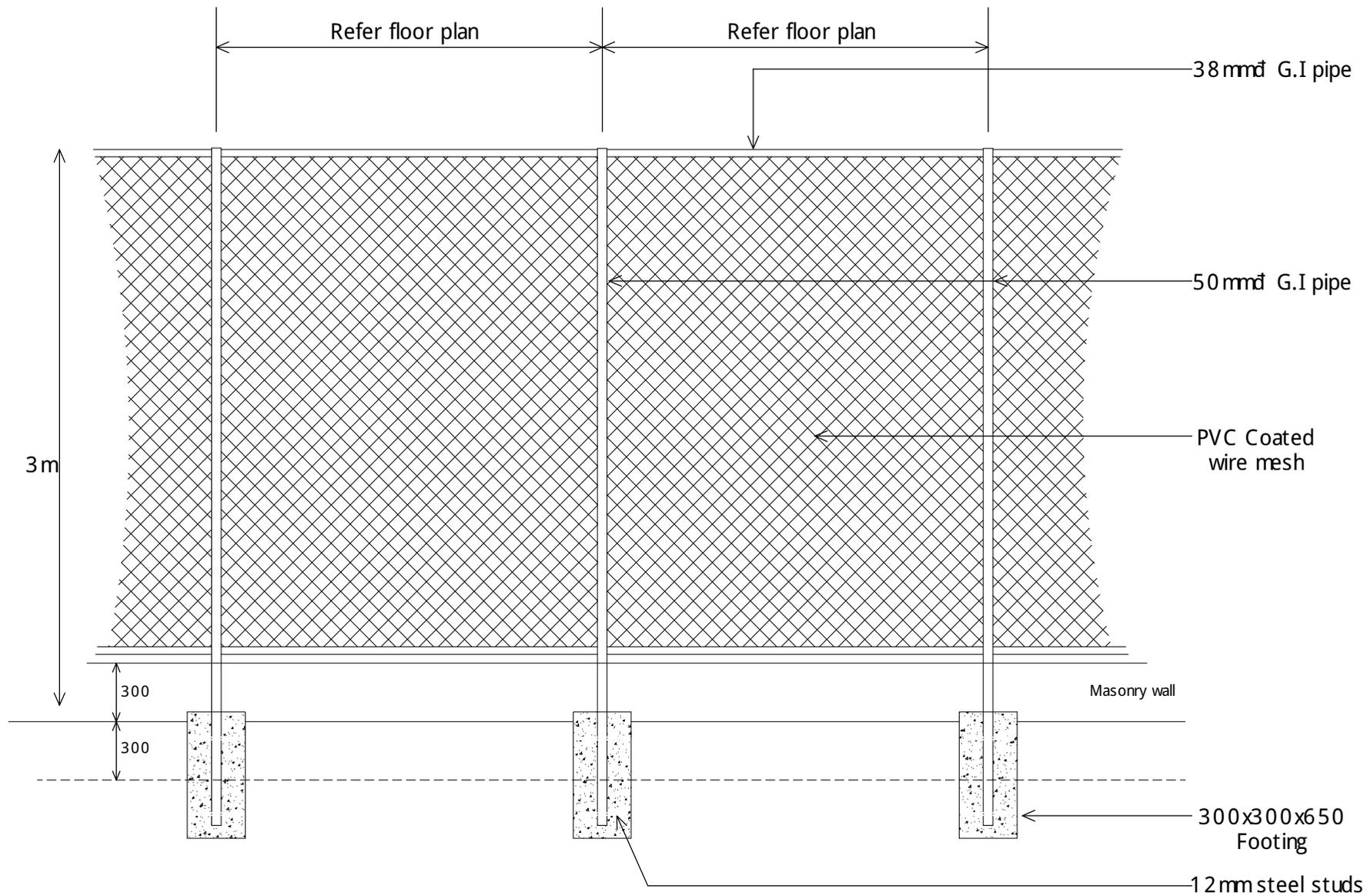
OPEC FUND FOR INTERNATIONAL DEVELOPMENT

PROJECT:  
14 ISLAND WATER SUPPLY PROJECT

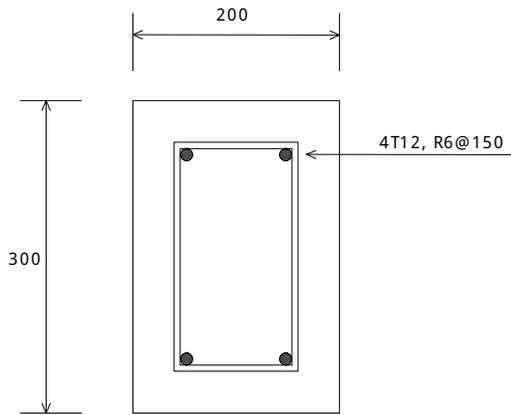
SCALE: AS SHOWN

DATE: MAR 2017

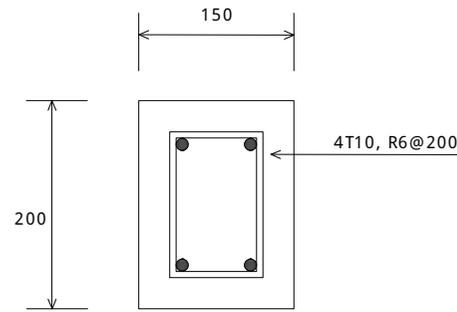




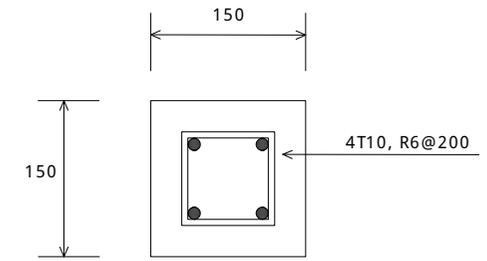
## RO PLANT SITE PERIMETER FENCE



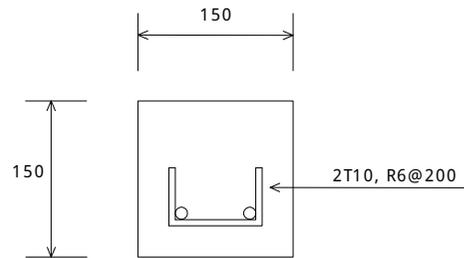
WALL FOOTING



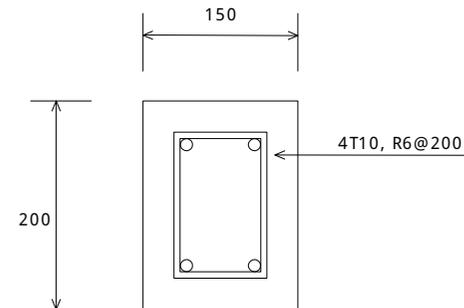
ROOF BEAM



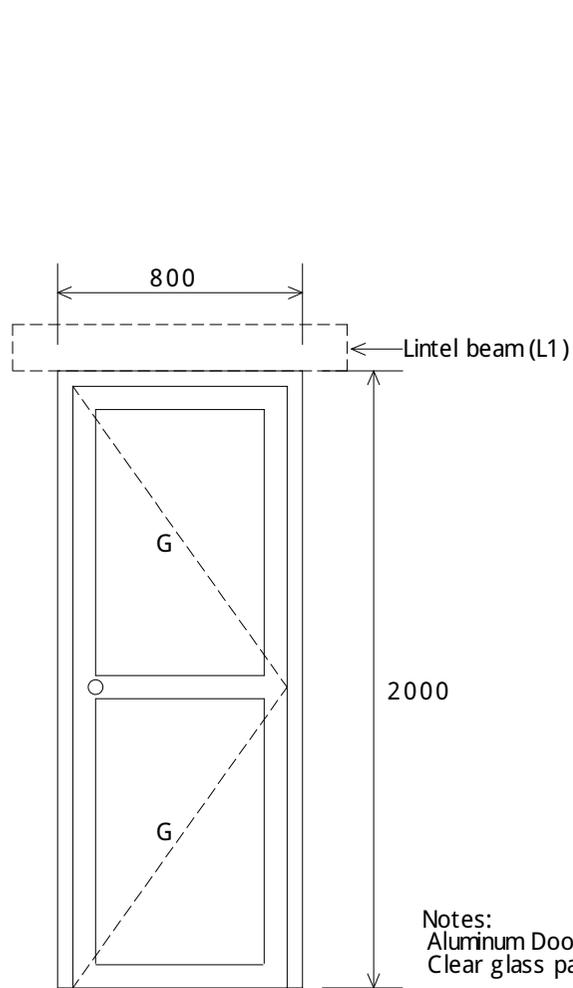
STIFFENER COLUMN



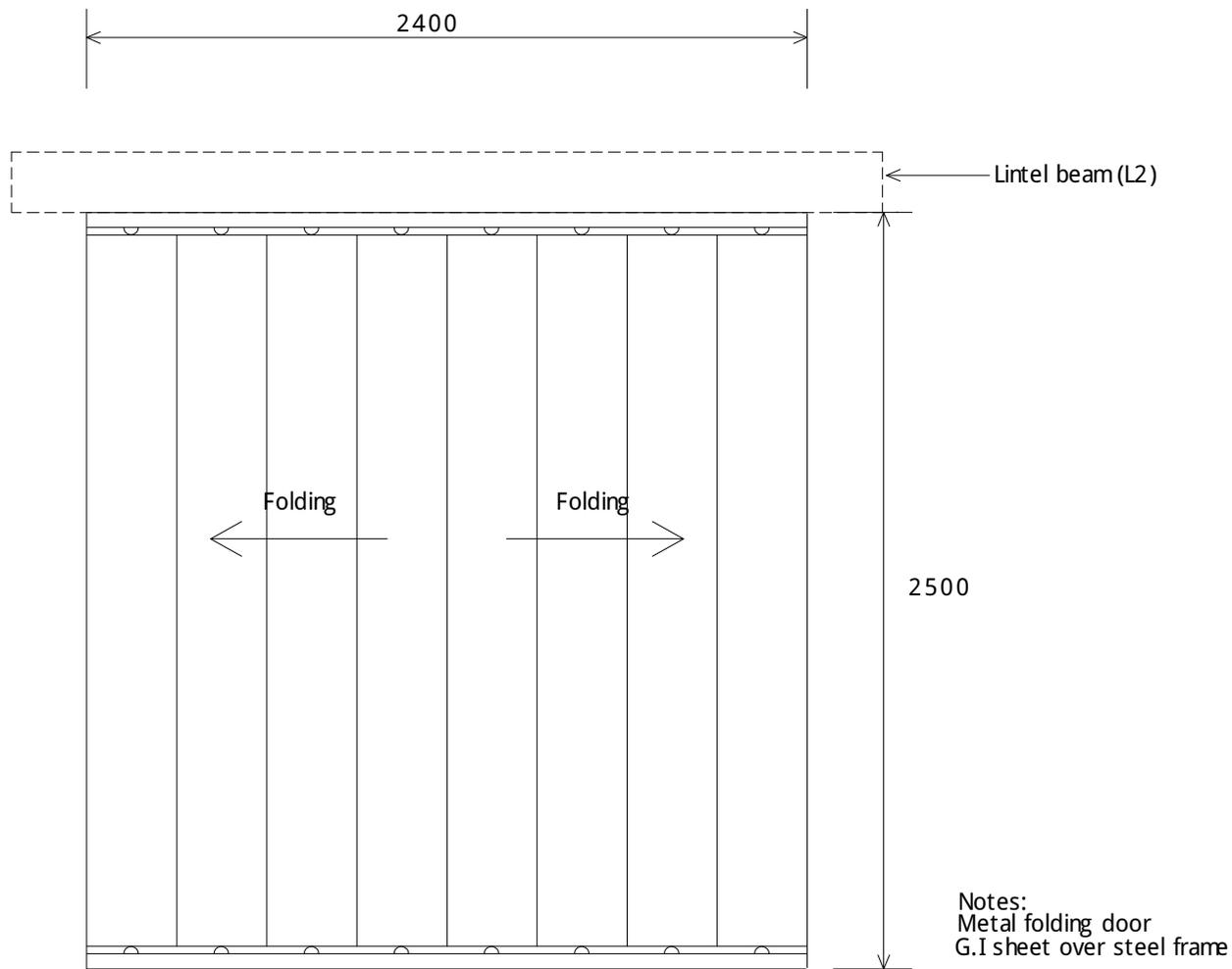
LINTEL BEAM - L1



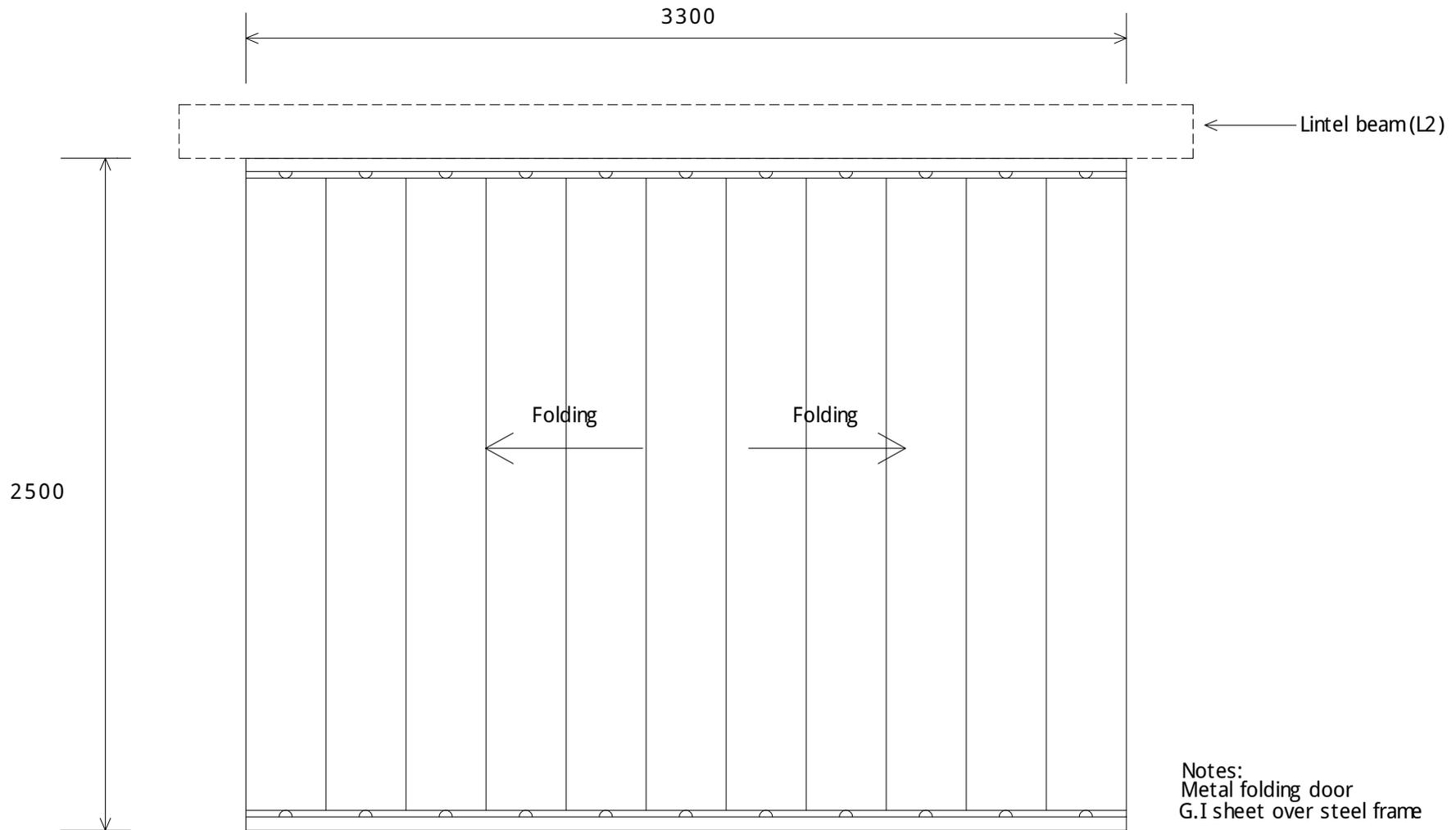
LINTEL BEAM - L2



DOOR D1

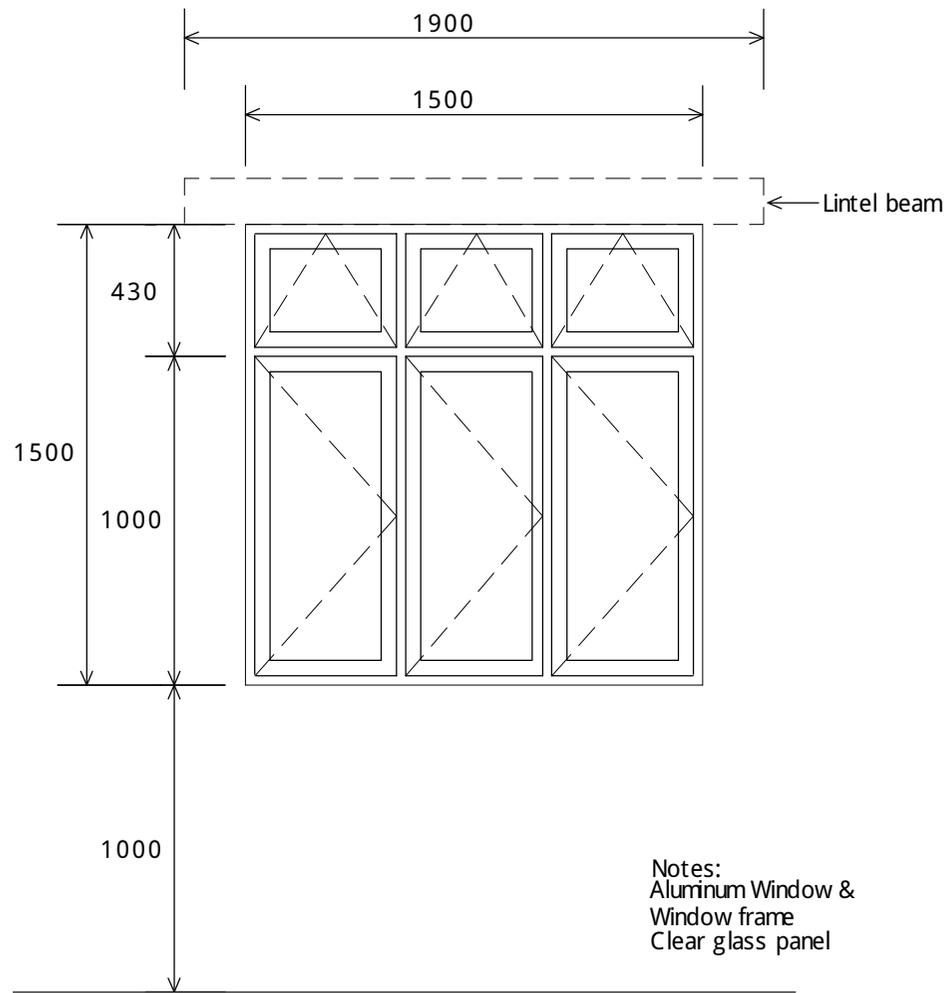


DOOR R1



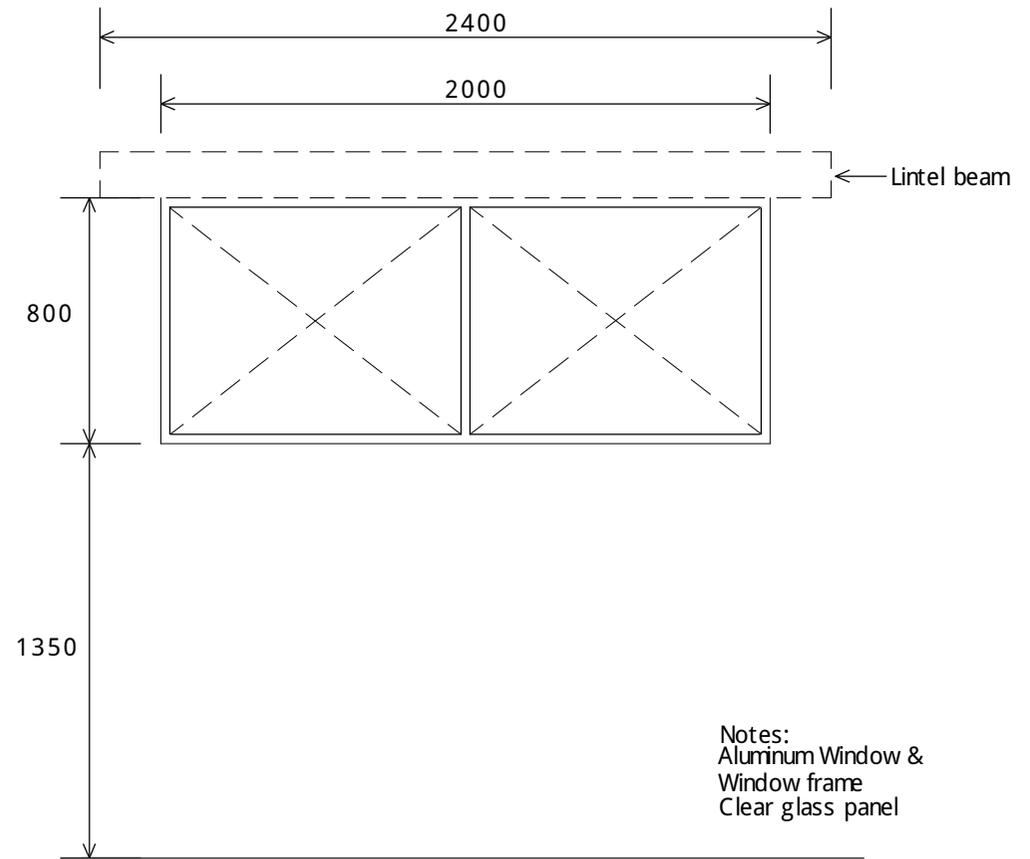
DOOR R2

Notes:  
 Metal folding door  
 G.I sheet over steel frame



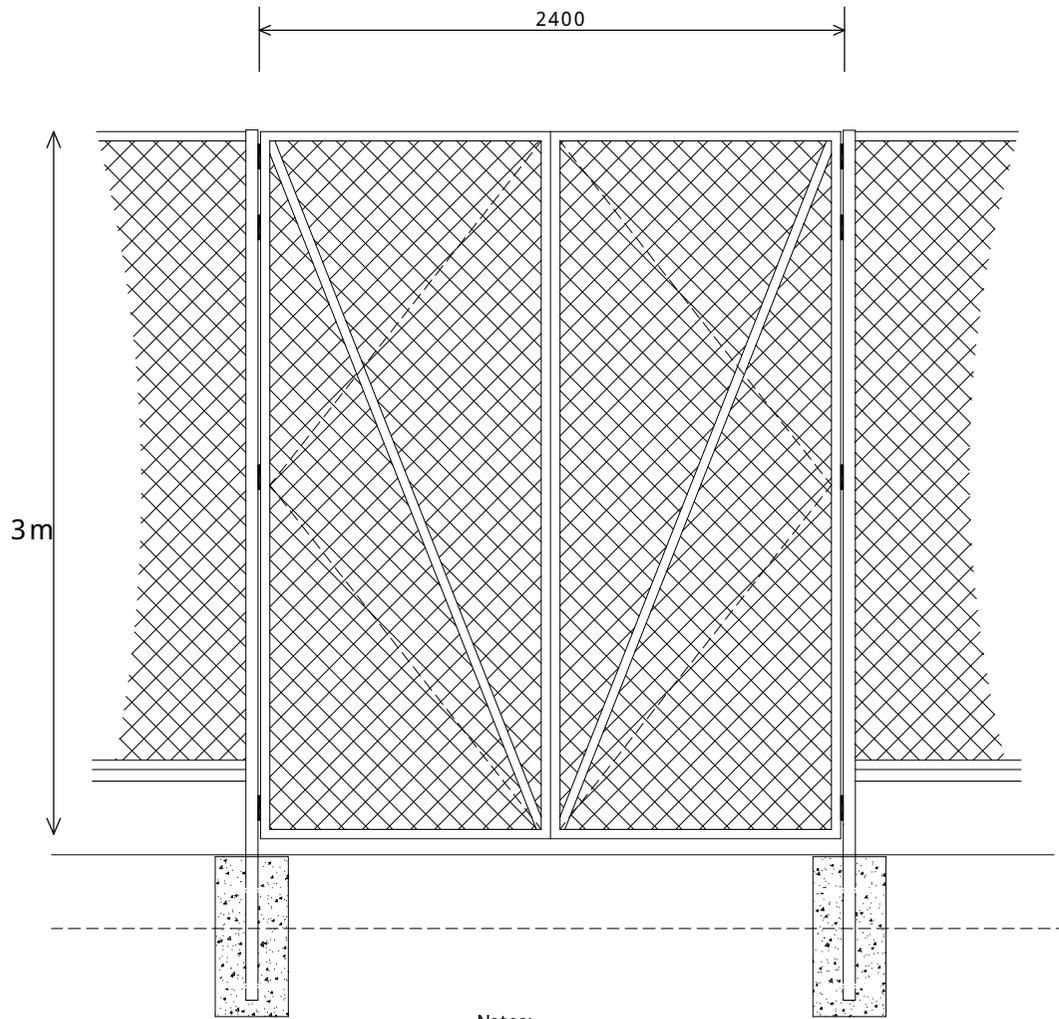
Notes:  
Aluminum Window &  
Window frame  
Clear glass panel

WINDOW W1



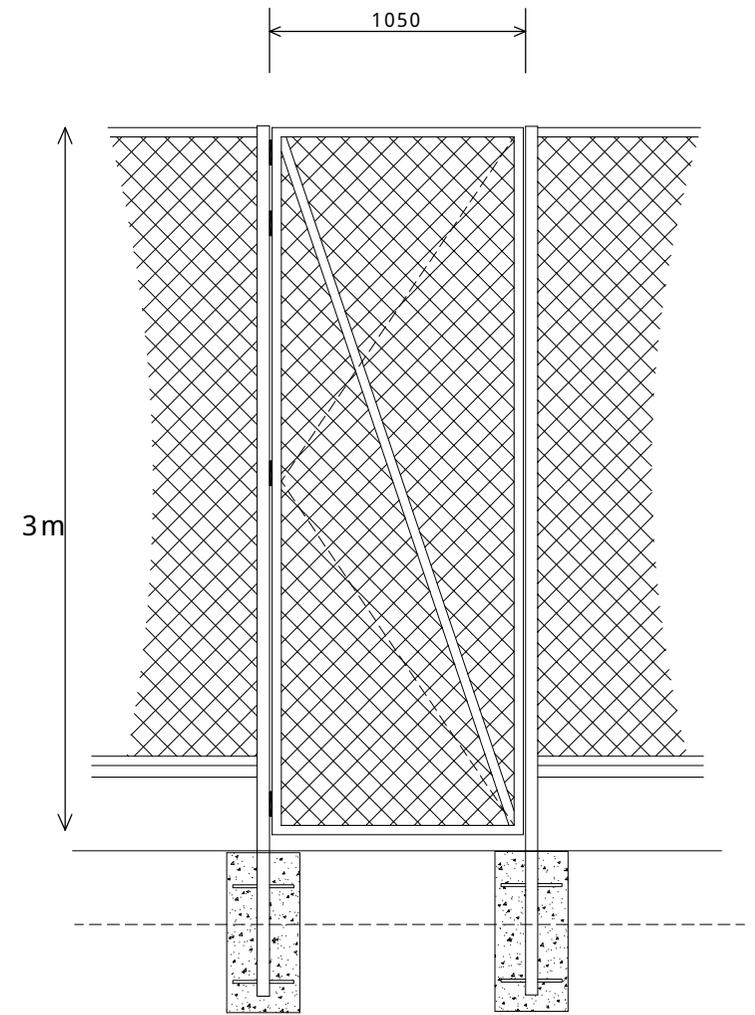
Notes:  
Aluminum Window &  
Window frame  
Clear glass panel

WINDOW W2



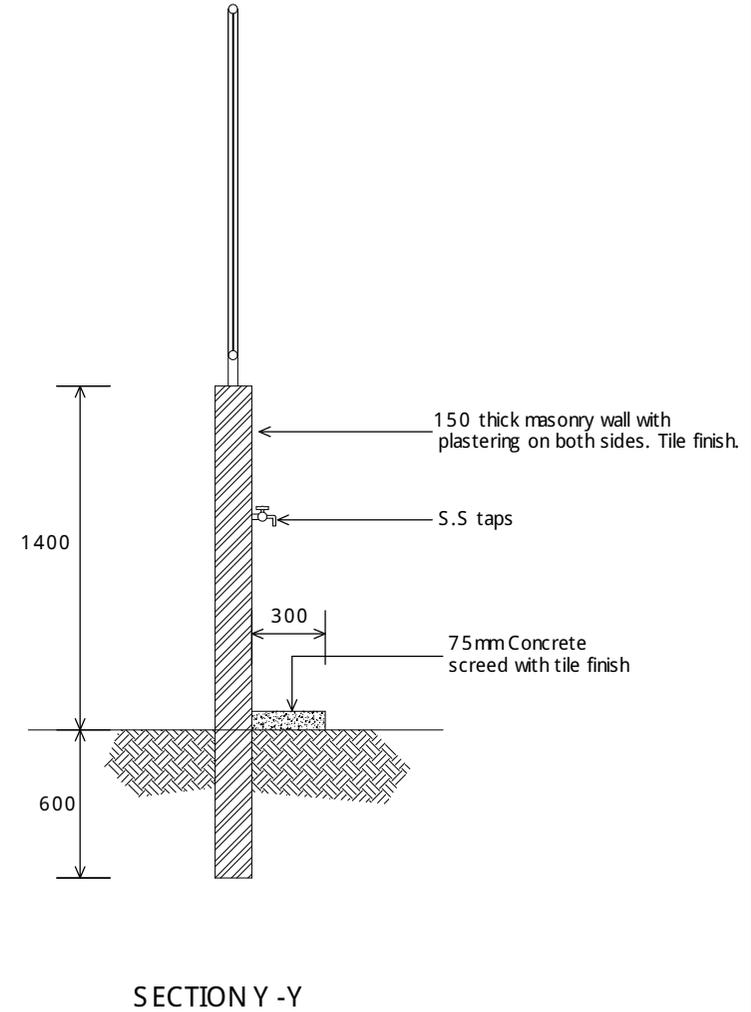
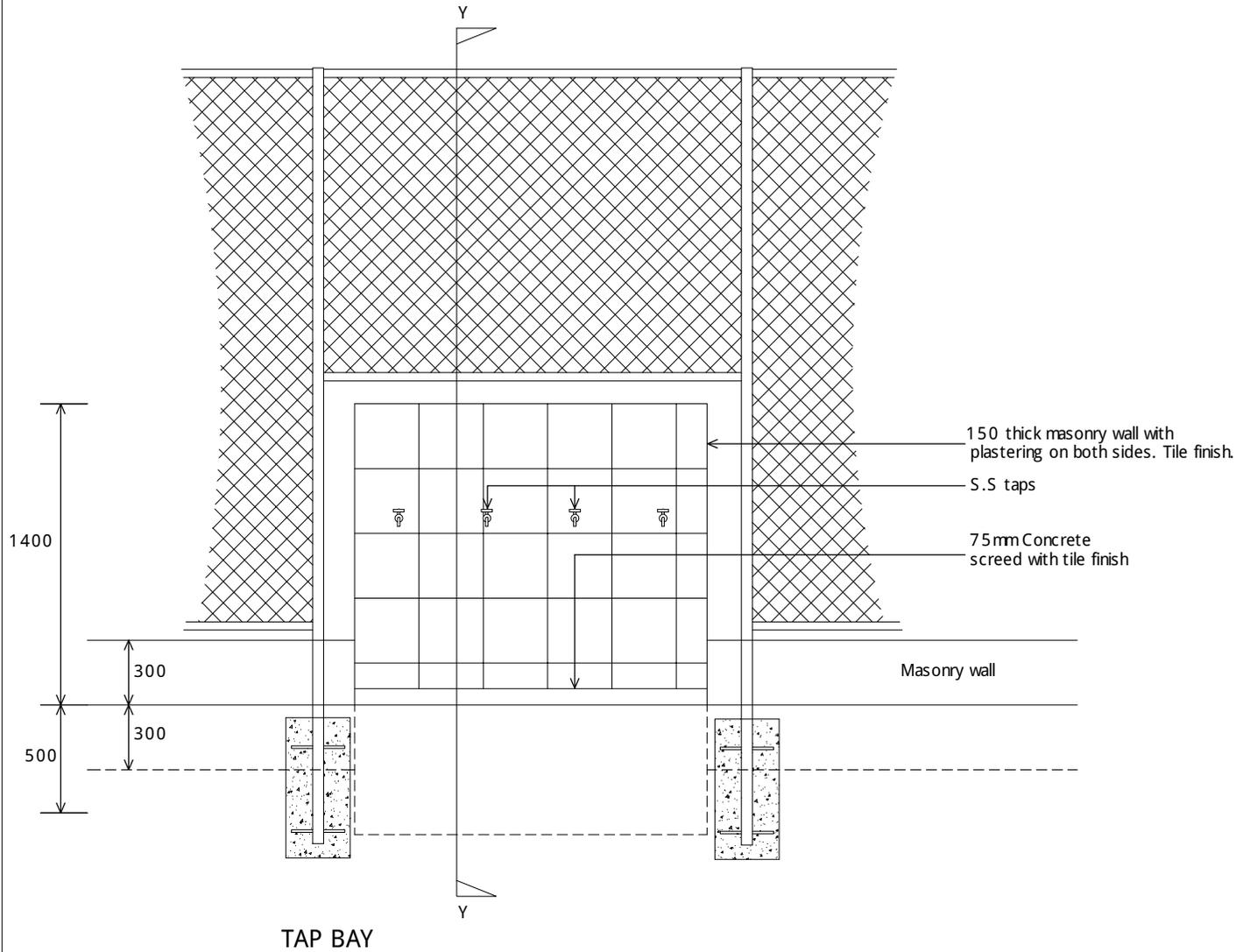
Notes:  
 Door made from 38 mm $\phi$  G.I Pipe  
 Door covered with PVC coated wire mesh  
 Hinges and locking mechanism to be provided

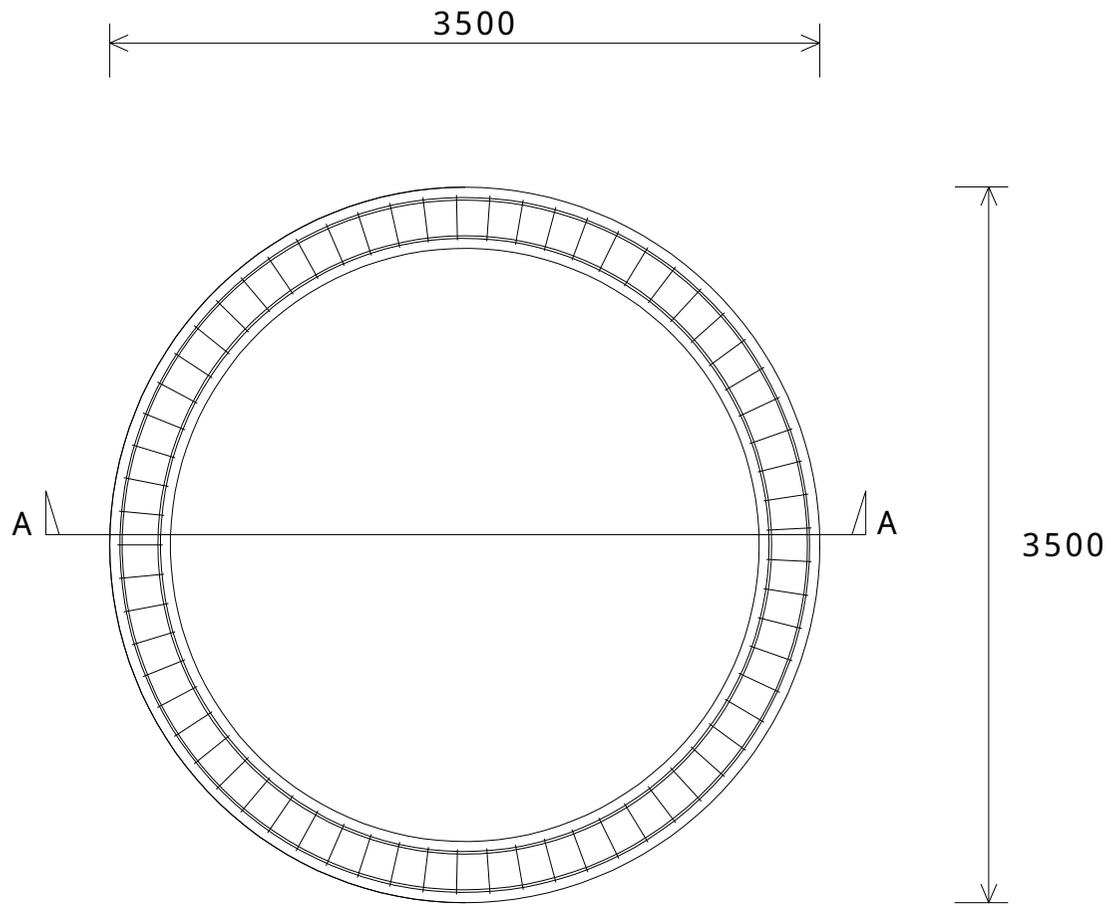
DOOR G1



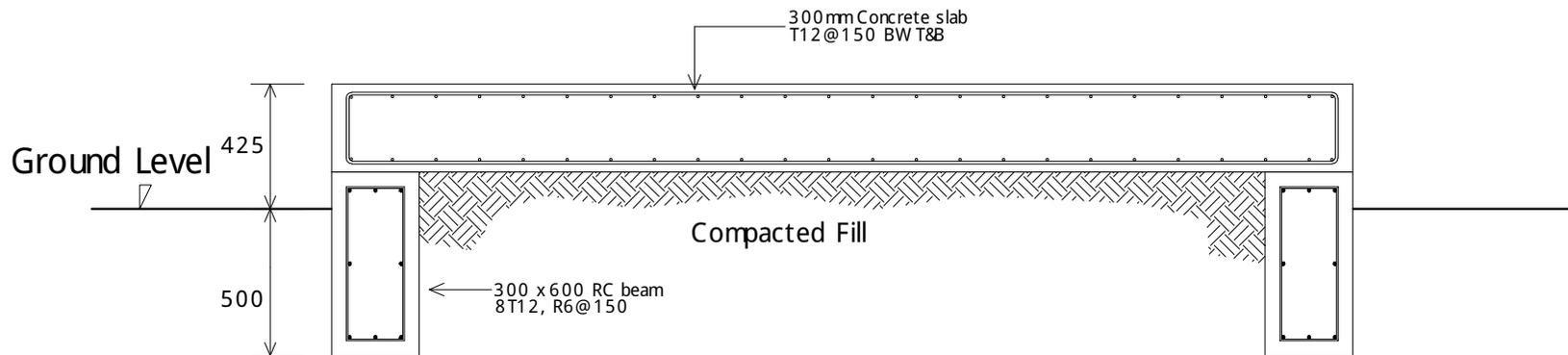
Notes:  
 Door made from 38 mm $\phi$  G.I Pipe  
 Door covered with PVC coated wire mesh  
 Hinges and locking mechanism to be provided

DOOR G2

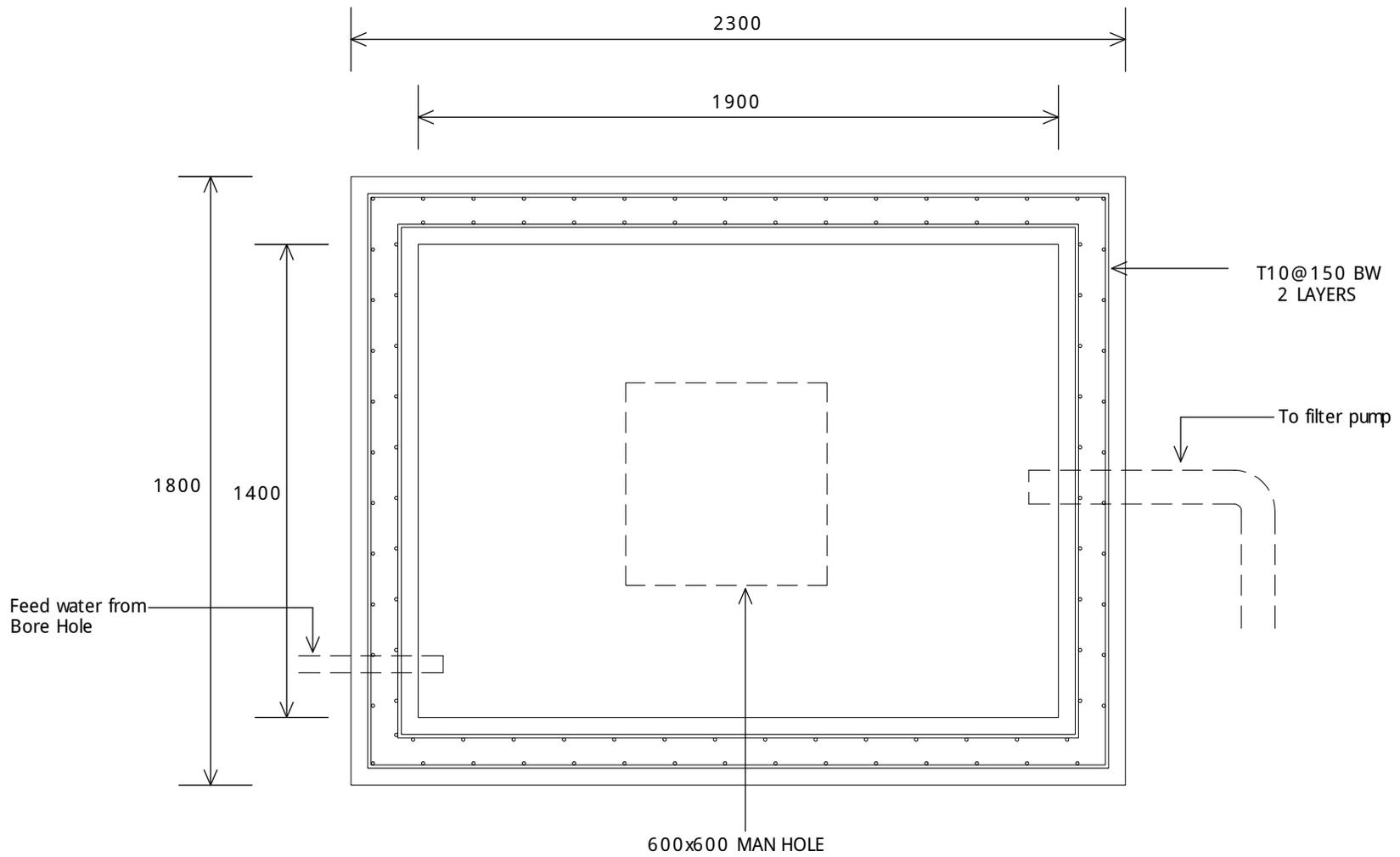




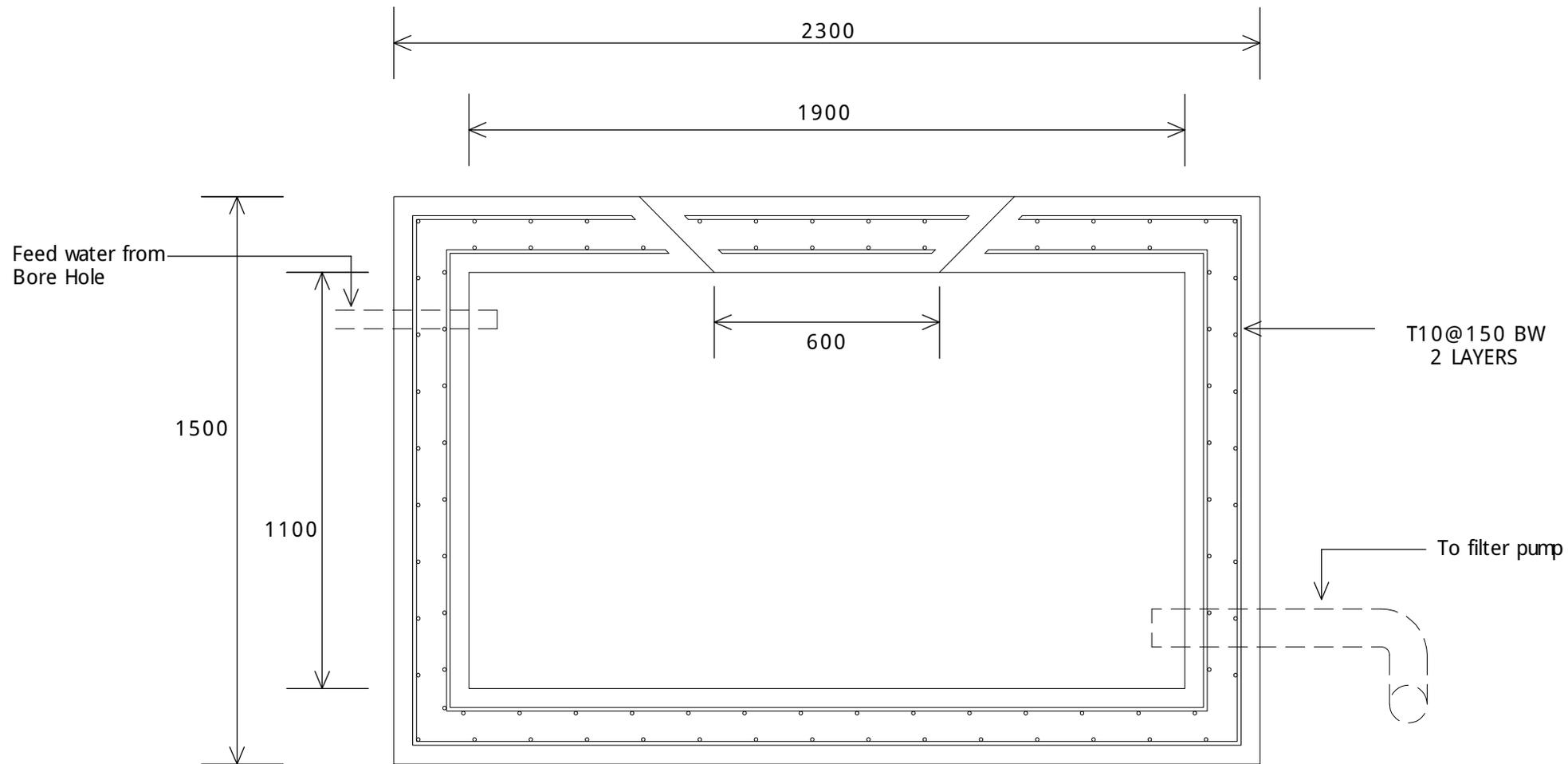
STORAGE TANK FOUNDATION  
PLAN



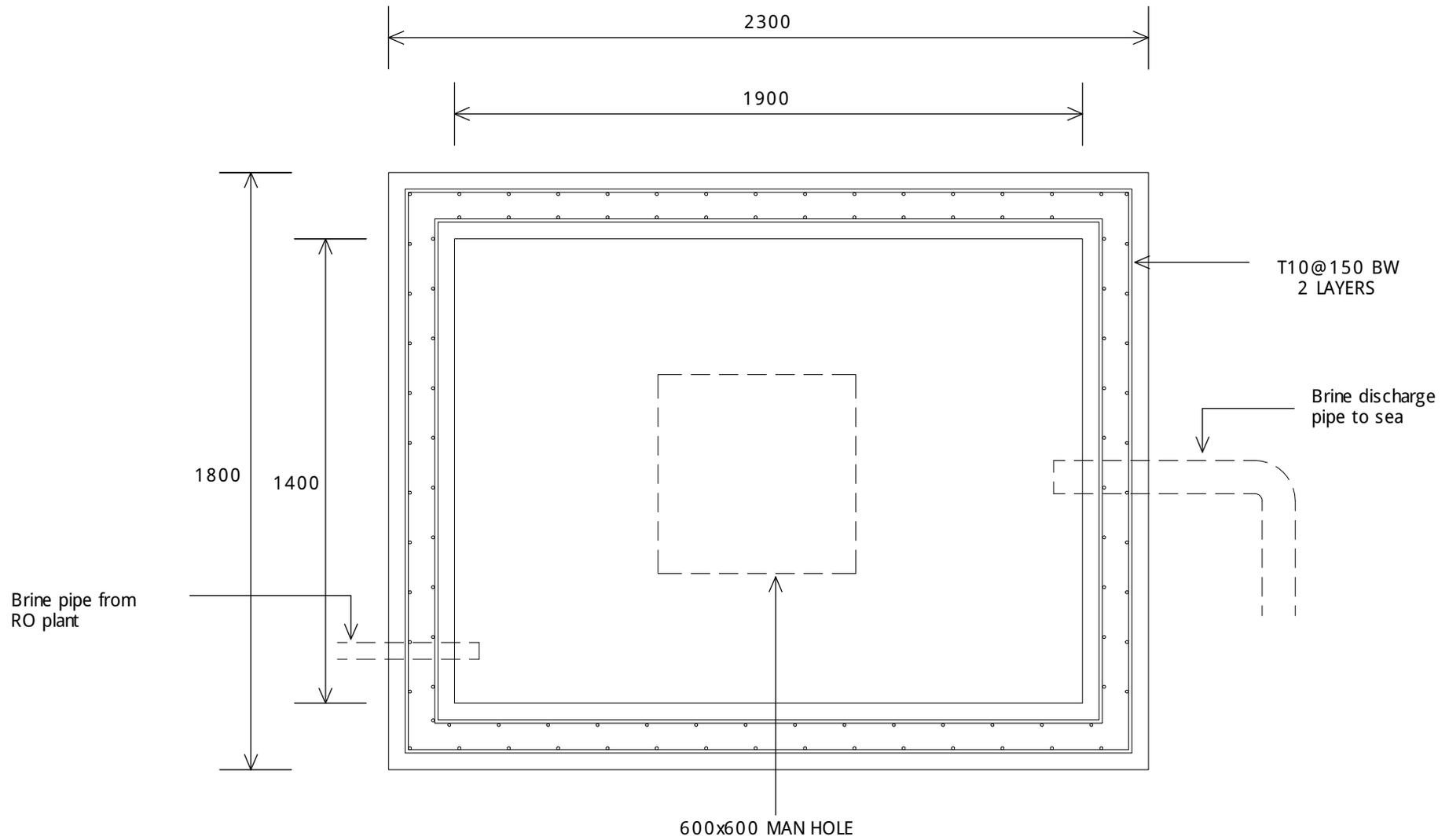
**STORAGE TANK FOUNDATION**  
**SECTION A-A**



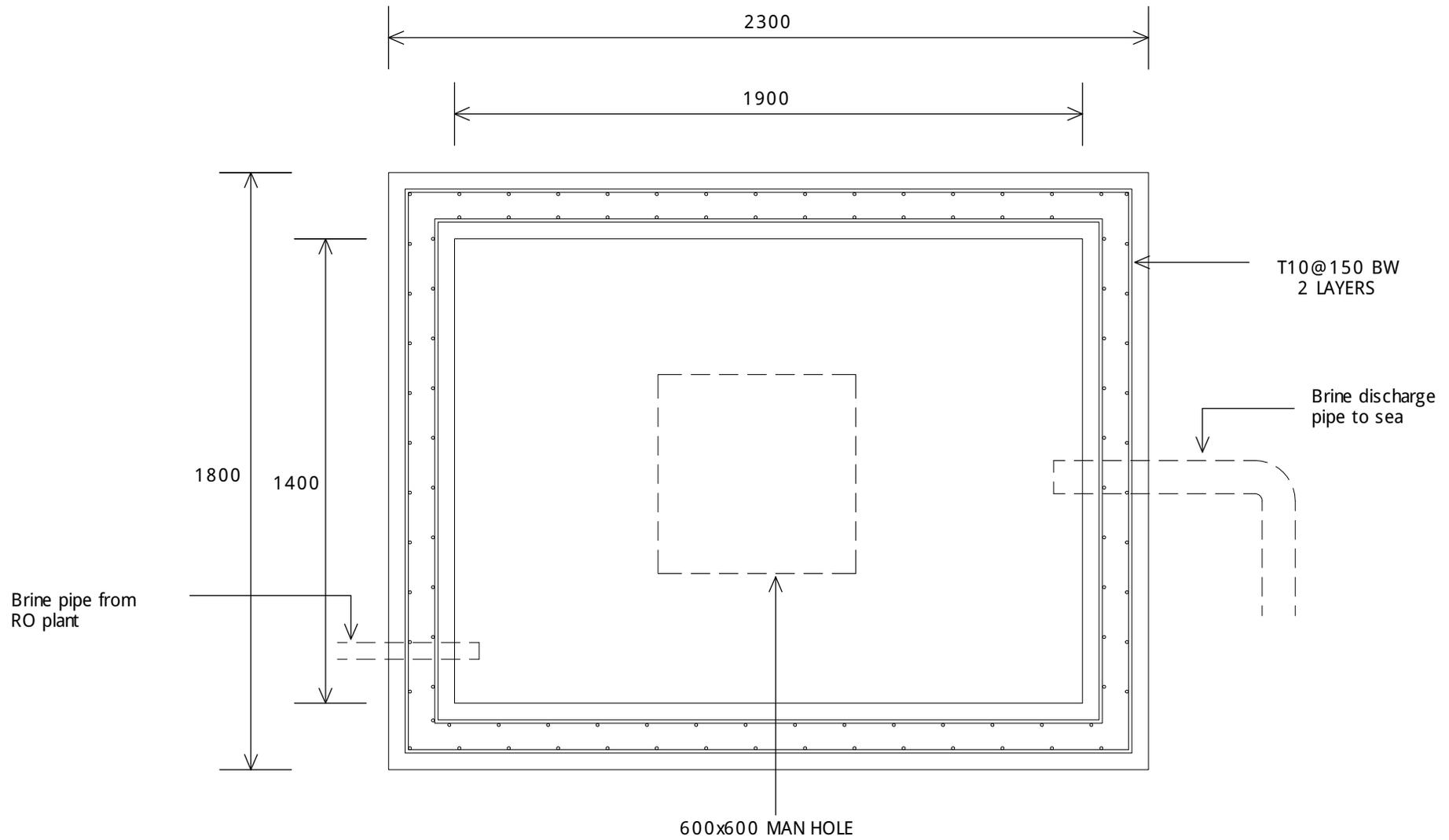
**FEED WATER TANK**  
**PLAN**



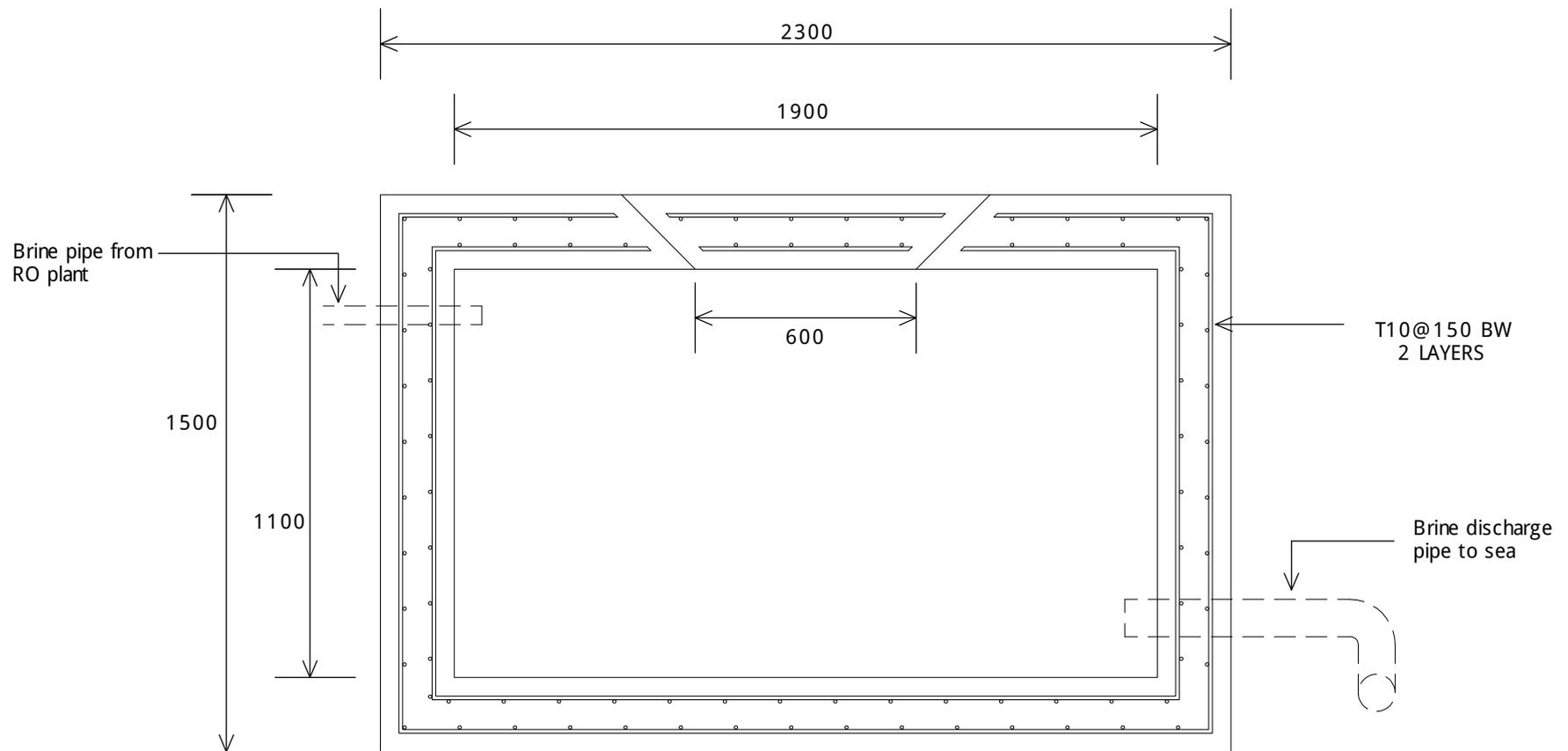
**FEED WATER TANK  
SECTION**



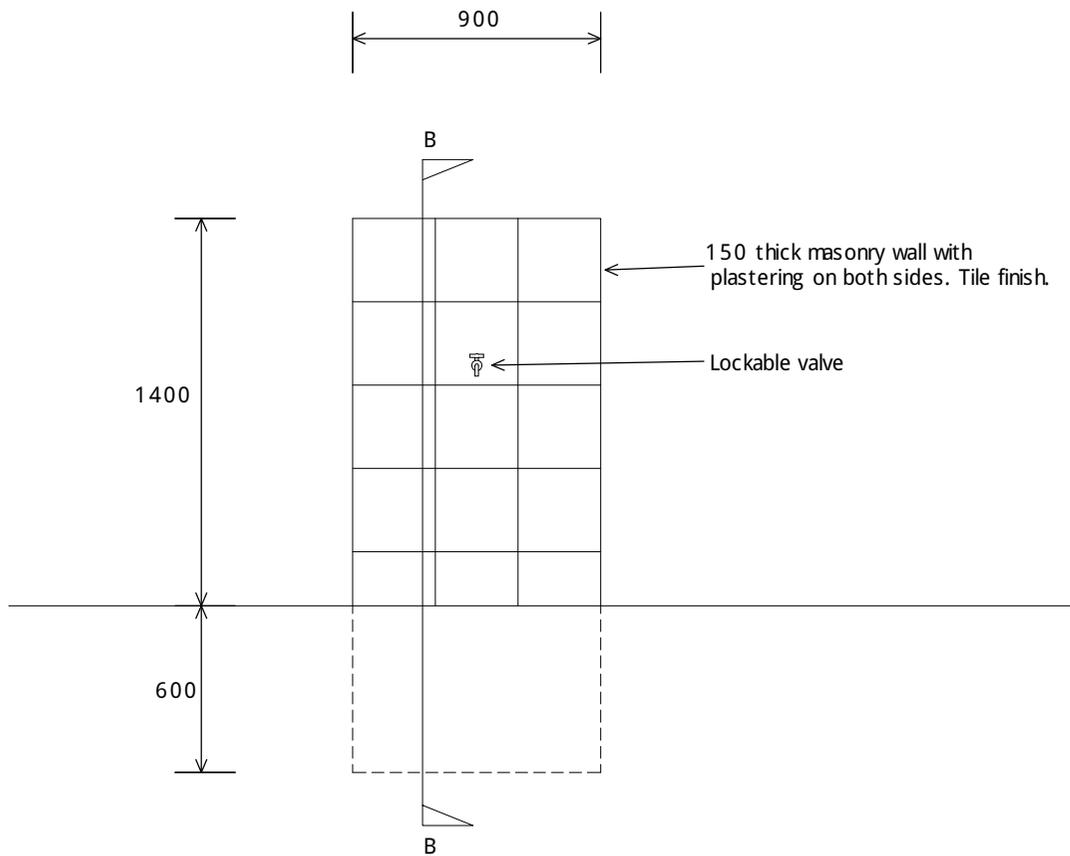
REJECT WATER TANK  
PLAN



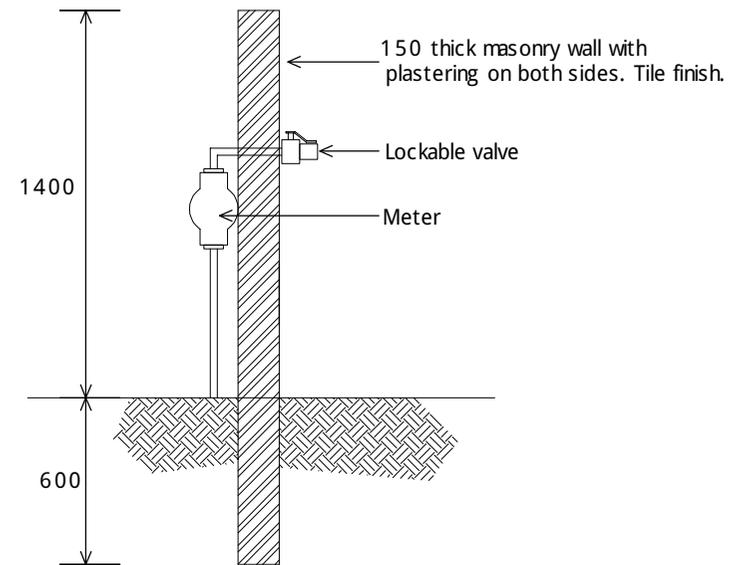
**REJECT WATER TANK  
PLAN**



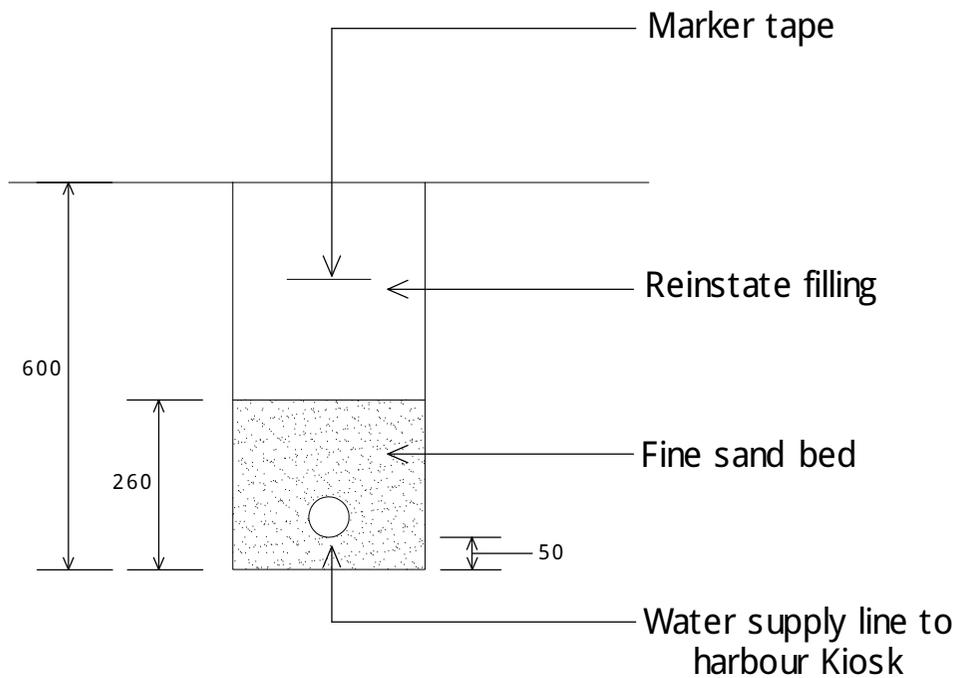
REJECT WATER TANK  
SECTION



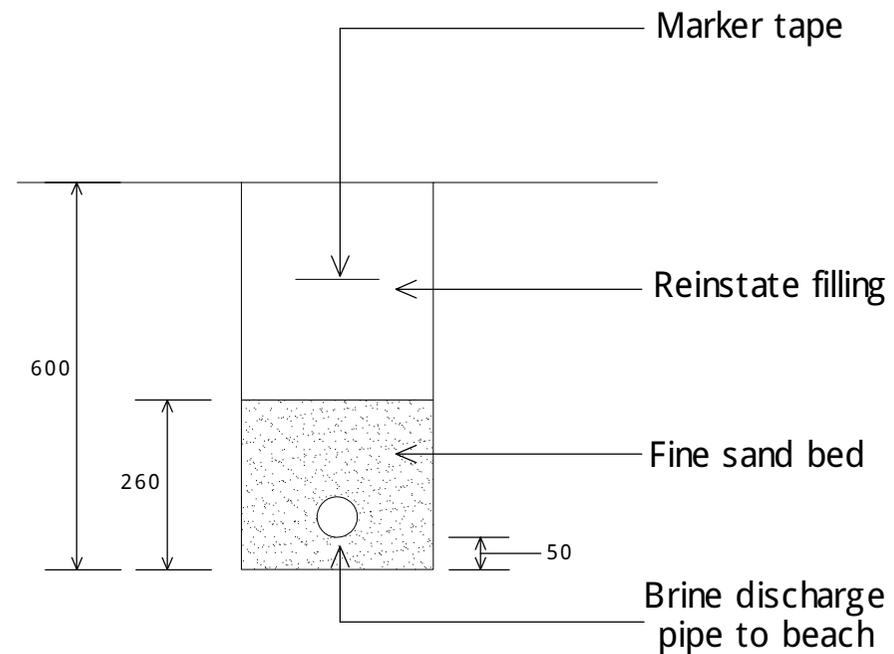
HARBOUR KIOSK



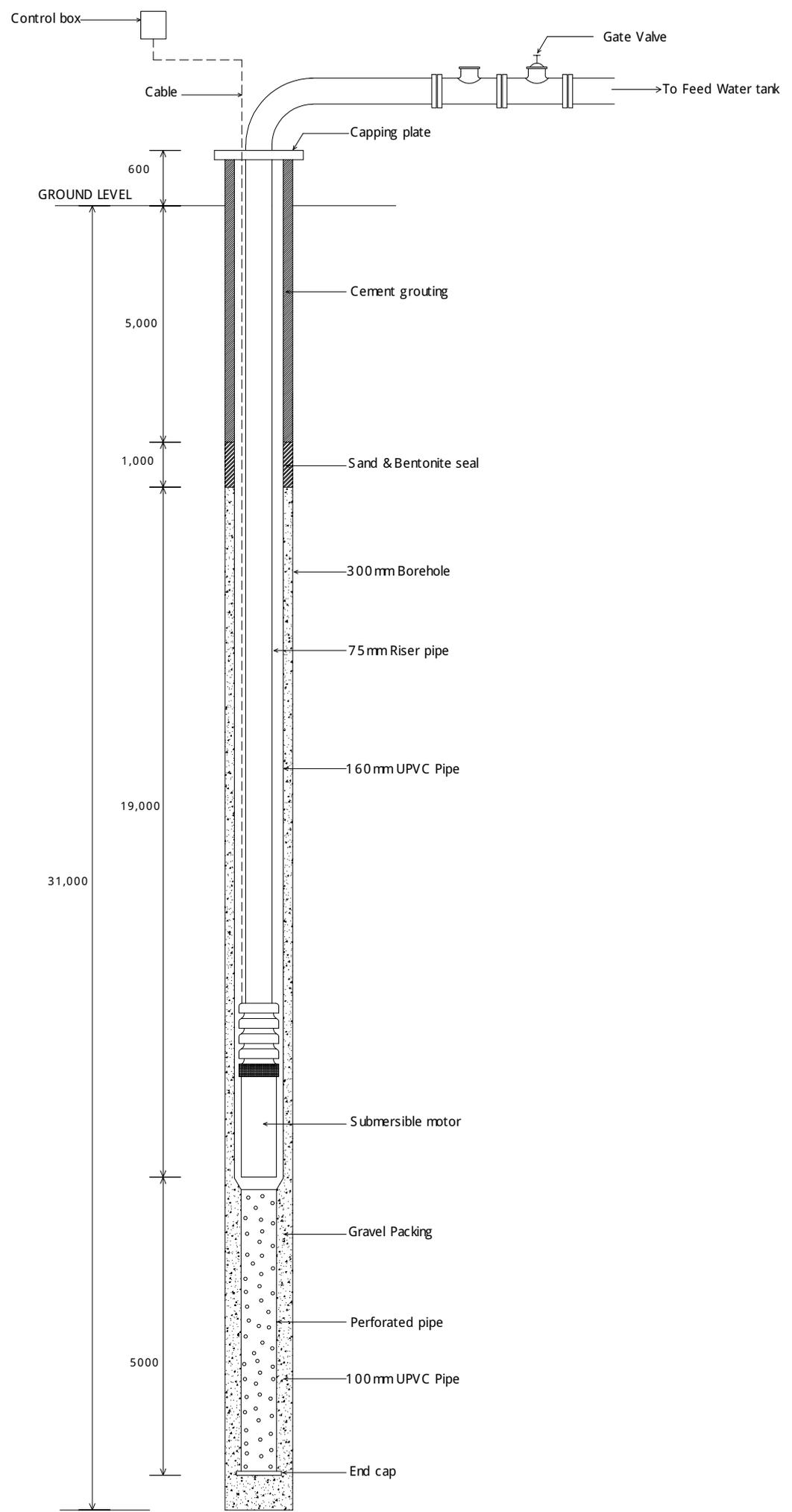
HARBOUR KIOSK  
SECTION B - B



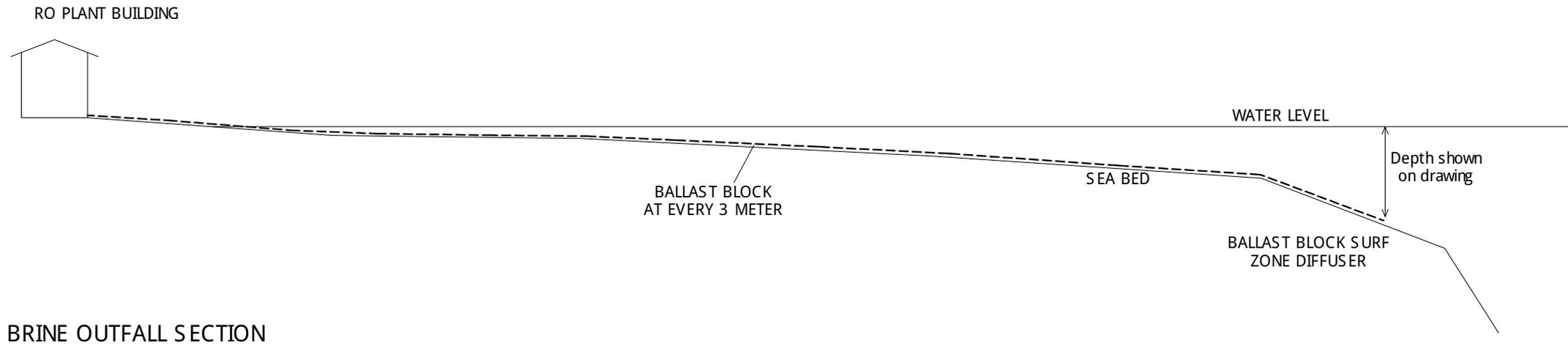
PIPE TRENCH DETAIL FOR HARBOUR KIOSK

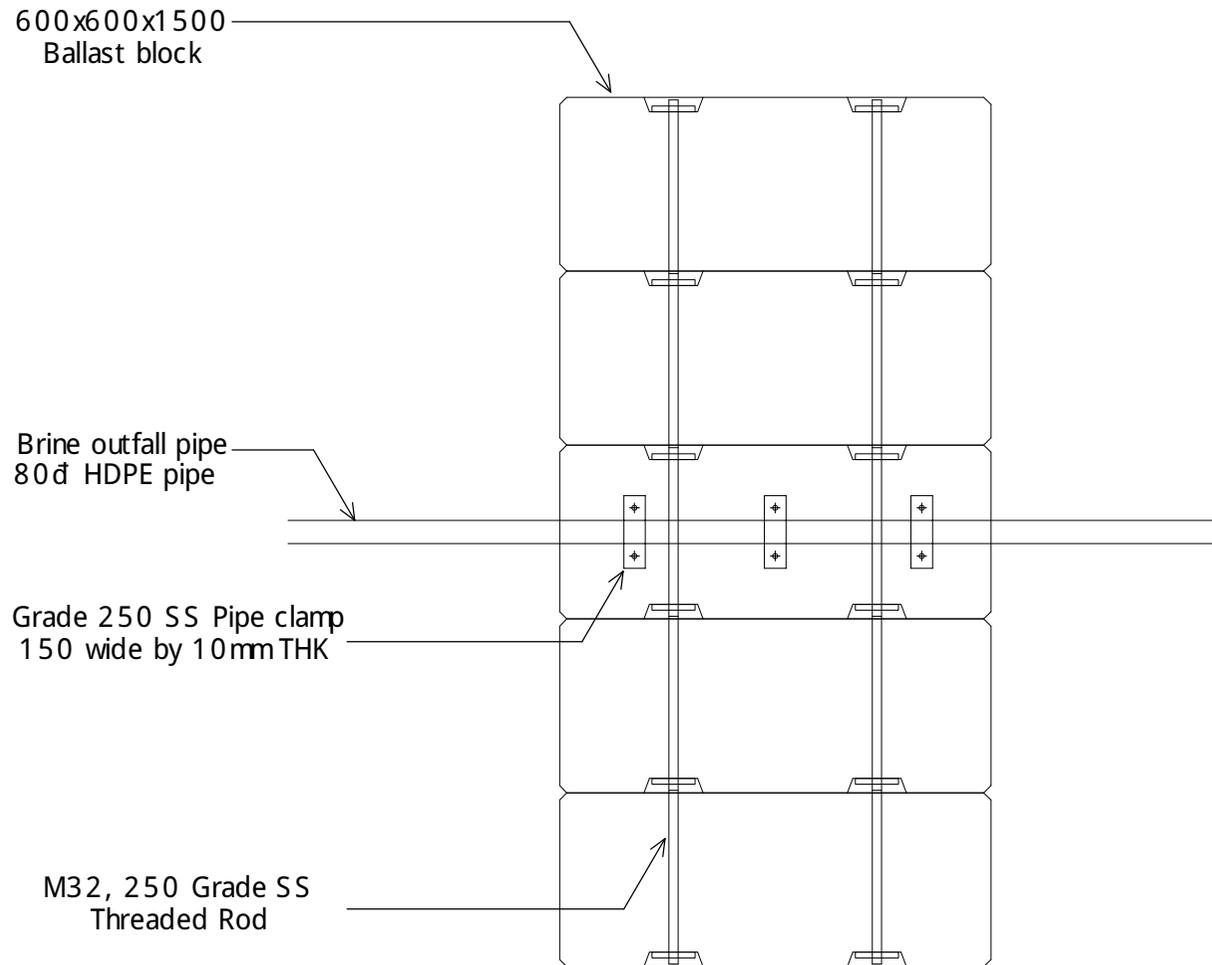


PIPE TRENCH DETAIL FOR BRINE DISCHARGE PIPE

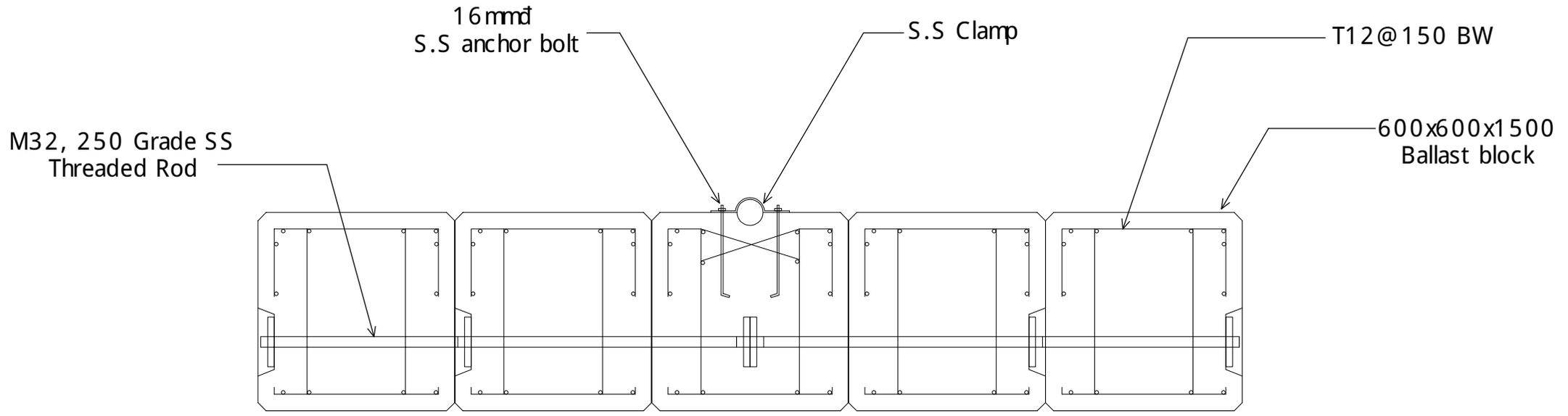


**BORE WELL DETAIL**

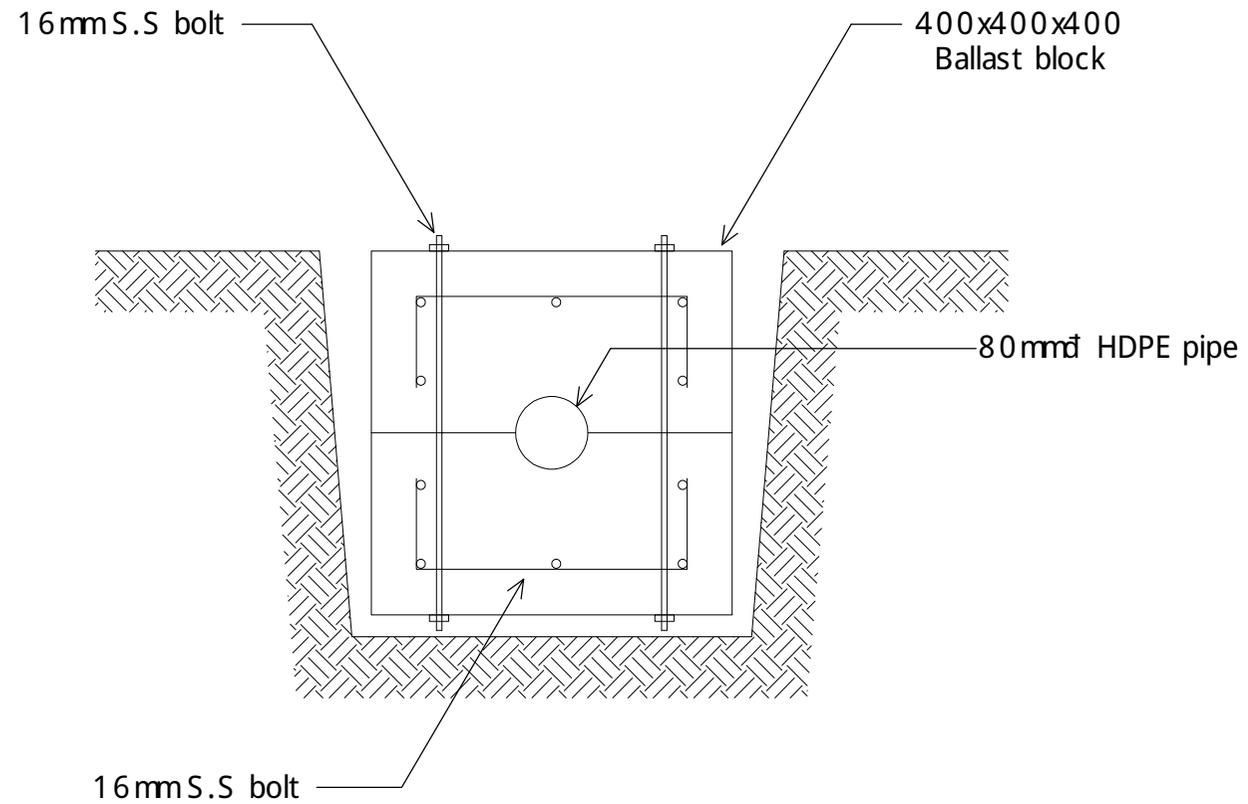




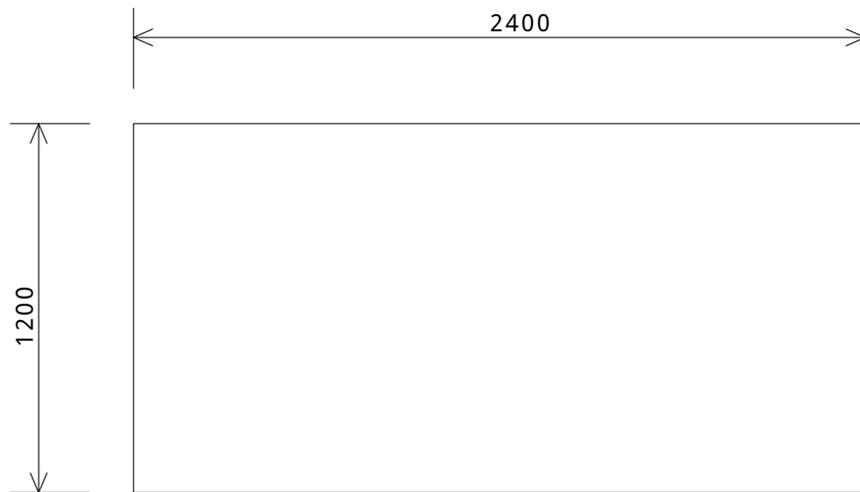
**BALLAST BLOCK - PLAN**  
**SURF ZONE DIFFUSER**



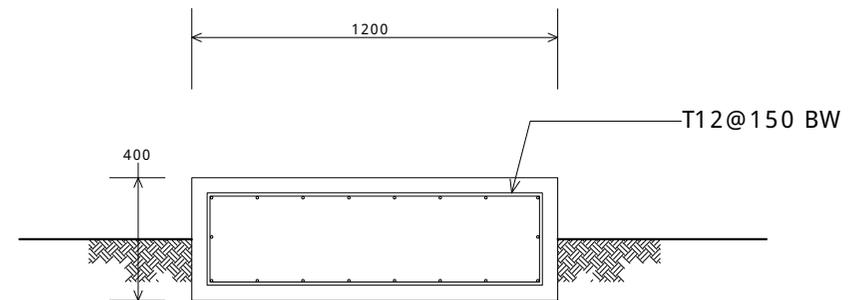
**BALLAST BLOCK - SECTION**  
**SURF ZONE DIFFUSER**



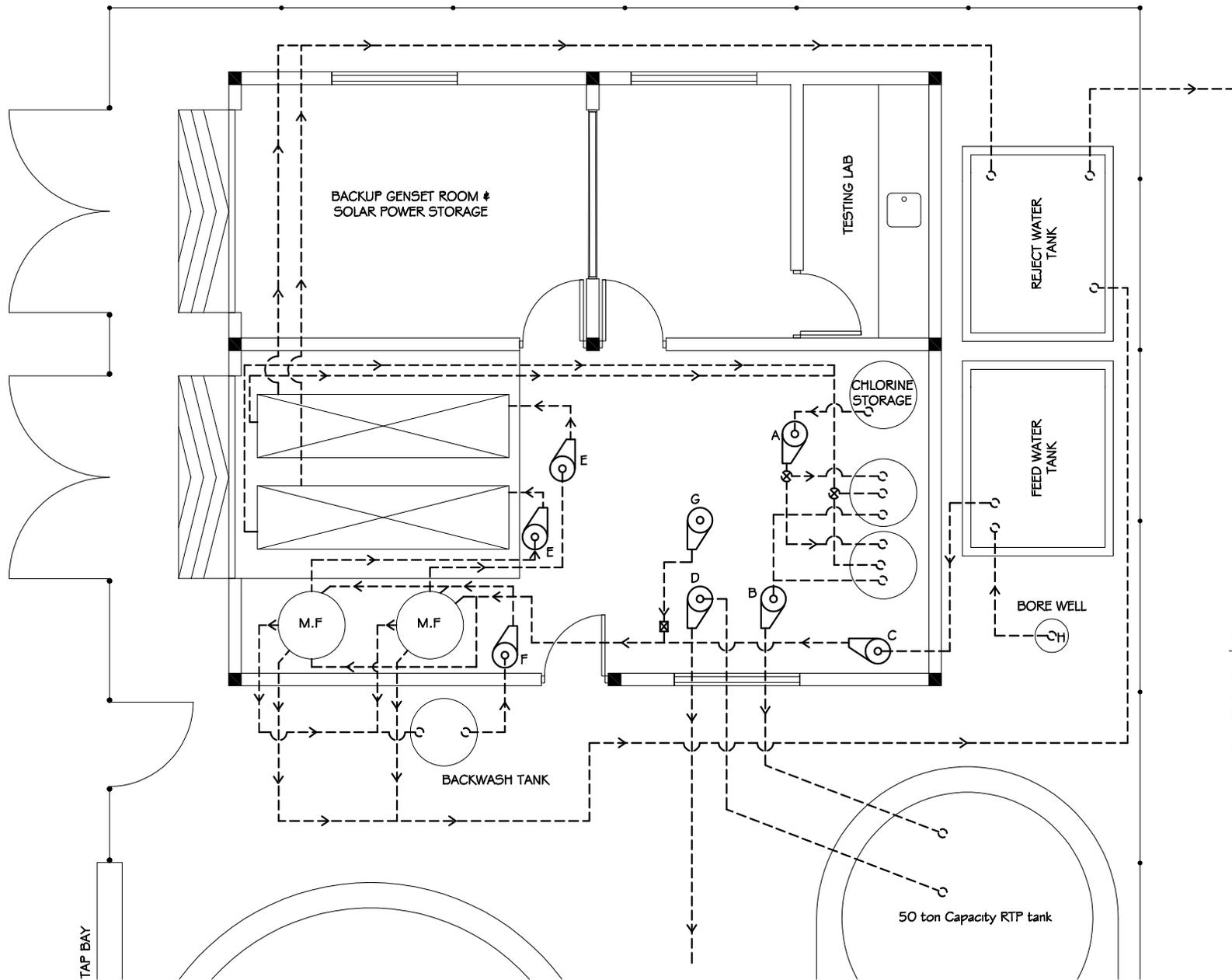
## BALLAST BLOCK NEARS HORE



BACKWASH TANK FOUNDATION  
PLAN



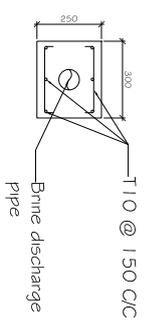
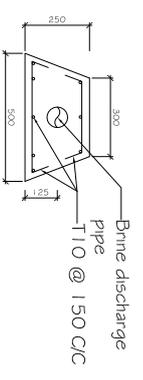
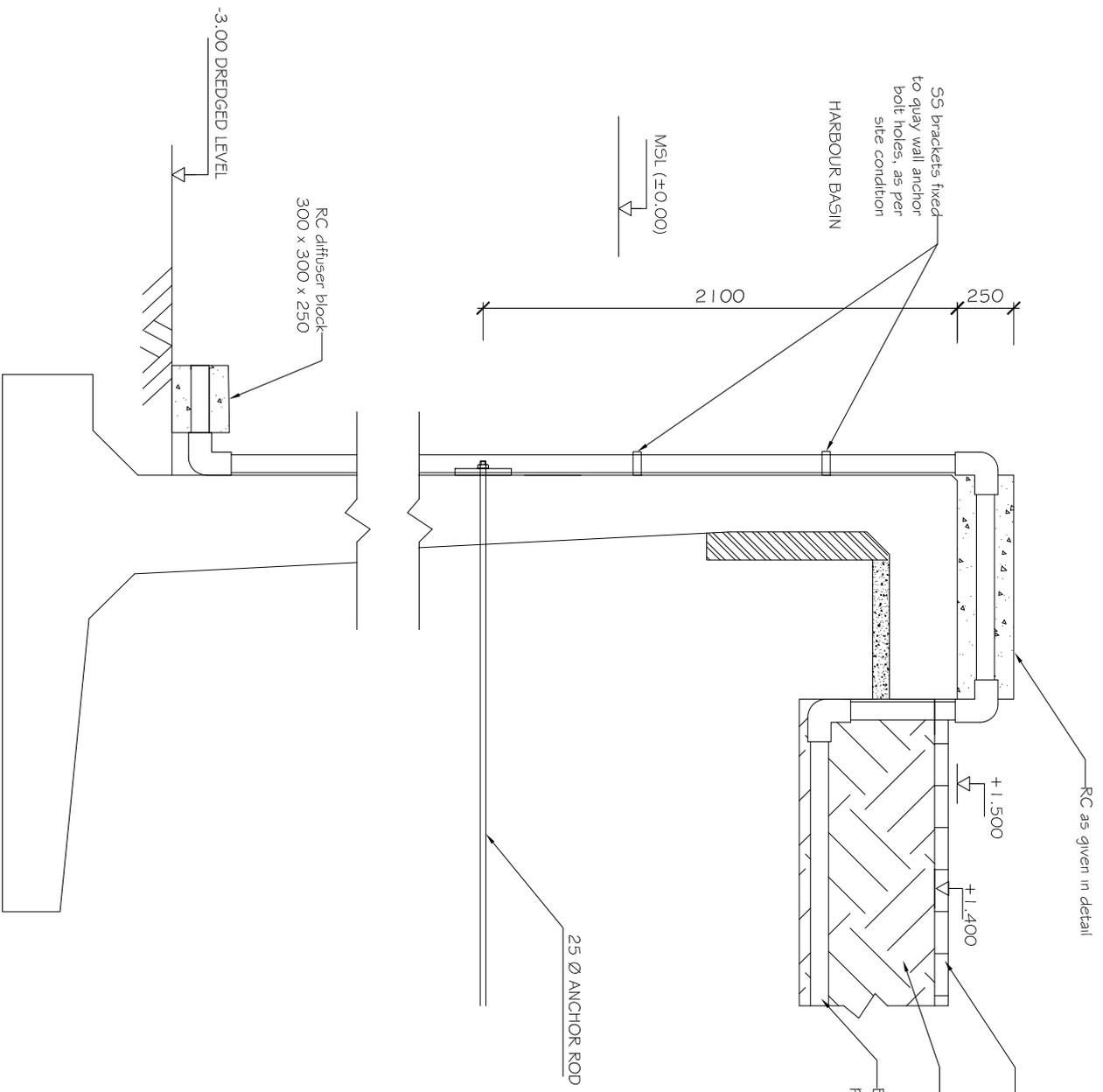
BACKWASH TANK FOUNDATION  
SECTION



- PUMP CLASSIFICATION**
- A = Chlorine dosing pump
  - B = Tank supply pump
  - C = Filter pump
  - D = Harbour Kiosk pump
  - E = RO High pressure pump
  - F = Backwash pump
  - G = Antiscalant pump
  - H = Borehole pump

**PIPE AND PUMP ARRANGEMENT INSIDE RO PLANT BUILDING  
TYPICAL LAYOUT**





# BRINE PIPE HARBOUR DISCHARGE DETAILS

PROVISION OF WATER SUPPLY SANITATION AND SOLID WASTE MANAGEMENT PROJECT  
 OPTIC FUND FOR INTERNATIONAL DEVELOPMENT

PROJECT:  
 I 4 ISLAND WATER SUPPLY PROJECT

SCALE: AS SHOWN  
 DATE: MAR 2017

