

COMBINED ARMS COLLECTIVE TRAINING FACILITY (CACTF)

Rev.	Date	Description

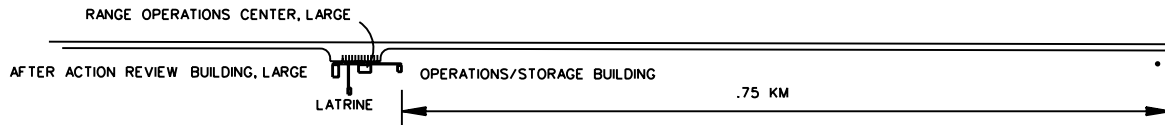
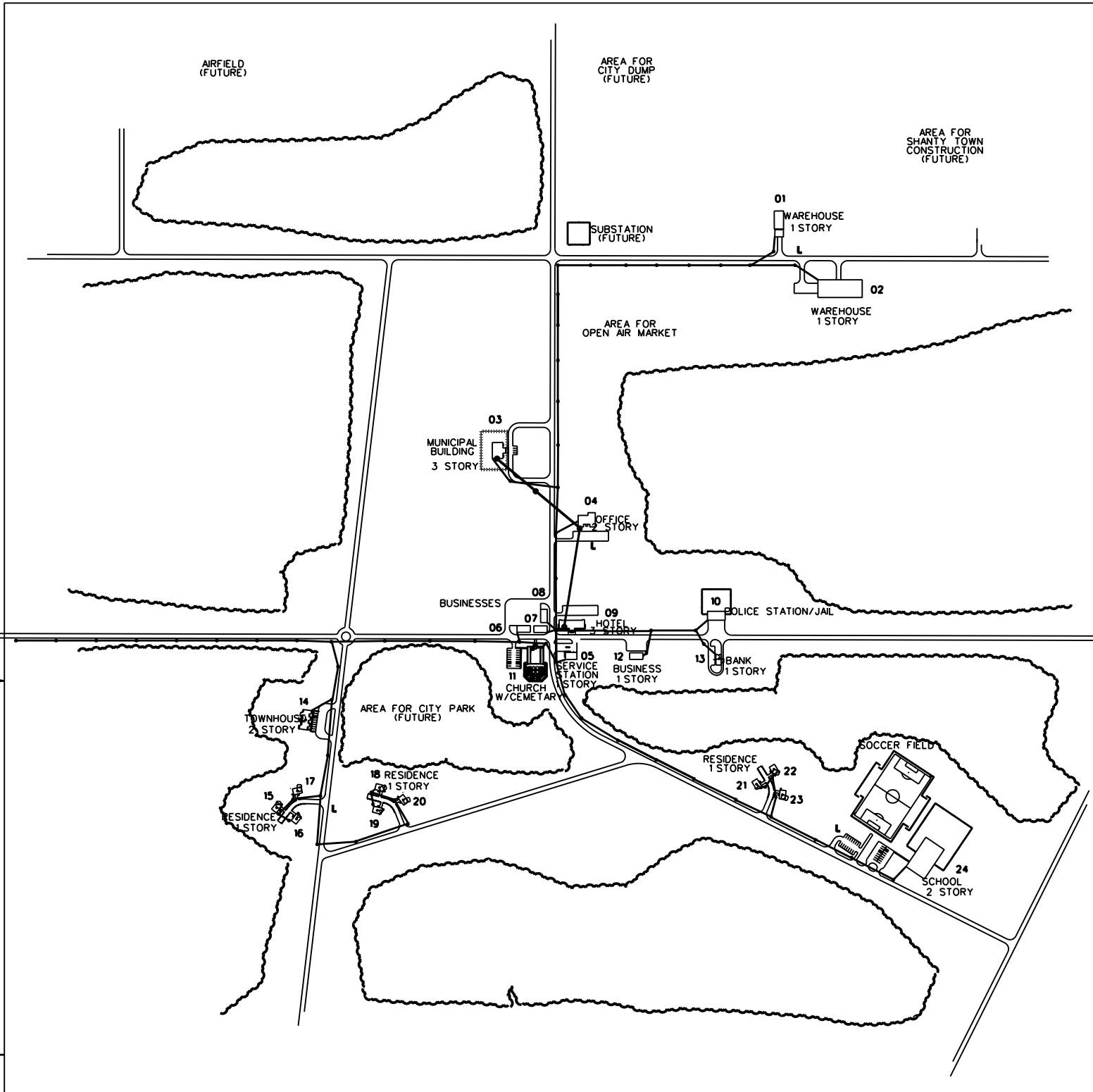
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1 JUL 2008		
U. S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE HUNTSVILLE, ALABAMA		

RANGE AND TRAINING LAND PROGRAM STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY SITE LAYOUT

Sheet reference number: CTF-C-01
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RECOMMENDED TRAINING BUILDINGS

- 1 School
- 1 Church/cemetery
- 1 Police station/Jail
- 1 Hotel
- 9 Residences
- 4 Businesses
- 1 Townhouse
- 1 Bank
- 2 Warehouses
- 1 Government Building
- 1 Office
- 1 Service Station



LEGEND

- 01 BLDG. NUMBER
- FENCE/WALL
- WALL
- TUNNEL/SEWER SYSTEM
- ~ TREE LINE
- UTILITY POLE
- L LATRINE
- FALSE OVERHEAD POWER LINE

SITE LAYOUT

INDEX

- CTF-01 SITE LAYOUT
- CTF-02 GENERAL NOTES
- CTF-03 WAREHOUSE
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- CTF-09 POLICE STATION/JAIL
- CTF-10 CHURCH
- CTF-11 1 STORY BUSINESS
- CTF-12 BANK
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GENERAL NOTES

REFERENCE CRITERIA

The design and construction must comply with applicable codes and standards including: technical instruction TI 800-01, "Design Criteria"; Department of the Army regulations, technical manuals, handbooks, standards, and specifications; UBC, NEMA, ANSI, UL, ASTM, and NFPA standards, as required.

FUNCTIONAL REQUIREMENTS

All dimensions not labeled are in millimeters. Gutters, downspouts and splash blocks should be provided where required by climatic conditions. Covered entries and ice guards may be necessary in northern climates.

Concrete Masonary Units shown on the drawings are for illustrative purposes only. This represents one type of several construction methods that could be considered in design of buildings.

All buildings are designed to be accessed only by able-bodied personnel and do not require ADA compliance unless dictated by local criteria.


Openings in the walls are to simulate windows. There are no operable windows in the training area.

Lightning Protection is not required for these building.

FIRE PROTECTION

Fire Protection is not required per fire codes for these buildings. Consult local Fire Marshall for compliance with local laws.

ELECTRICAL SYMBOLS AND NOTES

 CAMERA OUTLET AND CAMERA HANGER LOCATION (CAMERAS ARE PROVIDED BY OTHERS) - OUTLETS AND ENCLOSURES SHALL BE WEATHERPROOF - NEMA L5-20R AND NEMA 4X RJ45 JACK

 TARGET OUTLET LOCATION (TARGETS ARE PROVIDED BY OTHERS) - OUTLETS AND ENCLOSURES SHALL BE WEATHERPROOF - NEMA L14-20R AND NEMA L5-20R AND TWO NEMA 4X RJ45 JACKS

 PERMANENT SPEAKER OUTLET LOCATION (SPEAKERS ARE PROVIDED BY OTHERS) - OUTLETS AND ENCLOSURES SHALL BE WEATHERPROOF - NEMA L5-20R AND NEMA 4X RJ45 JACK

PERMANENTLY LABEL THE OUTLETS (IE, T-XA OR C-XB OR S-XC) T-TARGET, C-CAMERA, S-SPEAKER, X-ROOM NO.. A.B.C-OUTLET IDENTIFIERS

All buildings shall be served by 120/240V 1 phase, 3-wire secondary power. Rigid Steel conduit shall extend a minimum of 1524 mm (5') outside the building for power and communication circuits entering and leaving the building. Voltage drop shall comply with NEC standards and Army technical manuals. Grounding will be installed in accordance with NFPA 70, the NEC, and other applicable standards.

The panel board shall be 120/240V single phase with transient voltage surge suppression (TVSS), mounted inside building electrical room. Power and data to targets, cameras and speakers and any lighting or maintenance outlets shall be provided.

Illumination levels will be designed in accordance with IES. Interior lighting shall consist of fluorescent lamps with protective lens or guards at 10 to 30 foot-candles. Exterior lighting shall be provided with separate switching located near points of egress.

The electrical system shall comply with NFPA 70 and NFPA 101. Exit signs will be provided in accordance with NFPA 101.

Cat6 network cable is run from each data outlet in the objective buildings to a data termination rack (DTR) in the electrical room and terminated. Fiber optic cable will originate from the ROC and possibly pass through a hub training building and terminate on the DTR patch panel. The network switching devices for control of the cameras/targets/speakers will be provided by others.

For each exterior camera near the training buildings, 6 strands of fiber optic cabling originating in the ROC shall be hubbed from the electrical room of the nearest applicable building. The network switching devices for camera control will be provided by others.



Rev.	Description

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Submitted by:	STD 178-23-01	
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RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
GENERAL NOTES

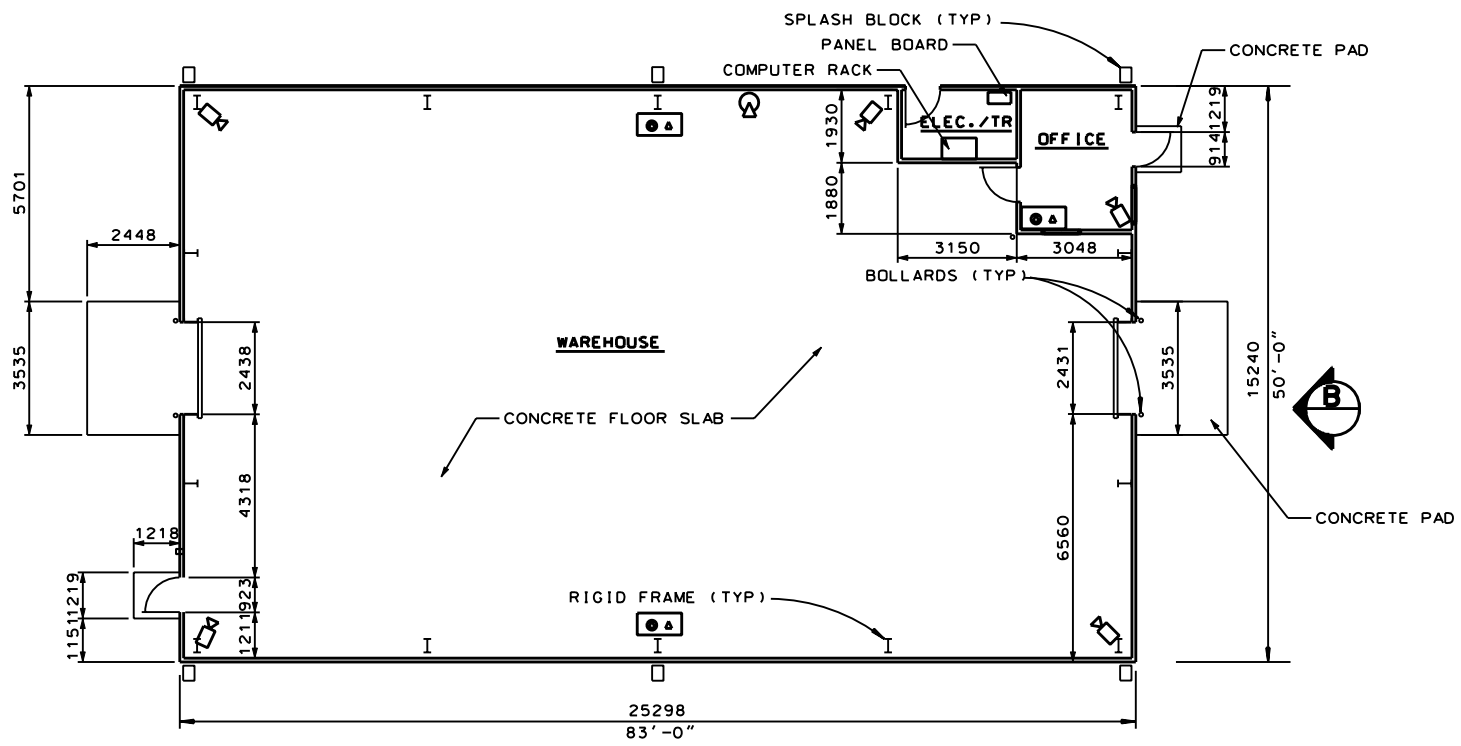
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Rev.	Date	Description

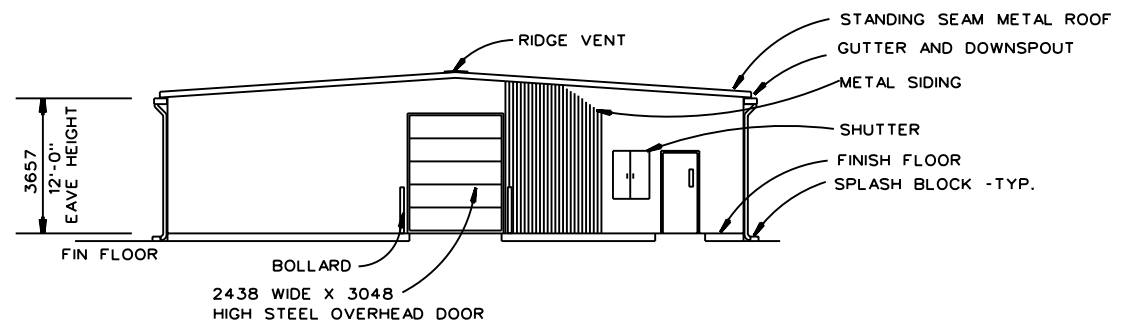
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RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
WAREHOUSE
PLANS AND ELEVATIONS

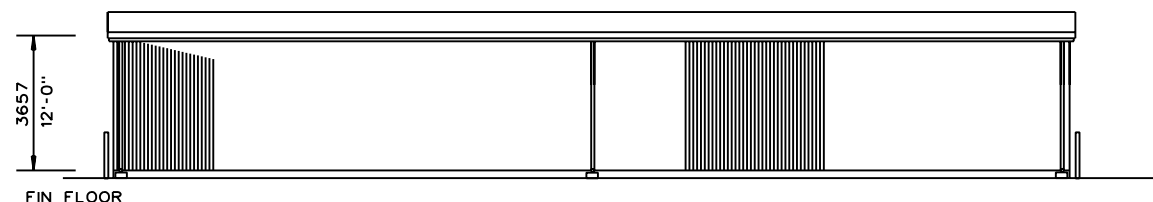
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CTF-03



FLOOR PLAN
SCALE: 1:50
3855415 50 CM (4,150 50 FT)



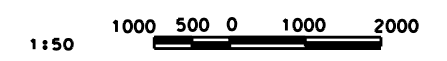
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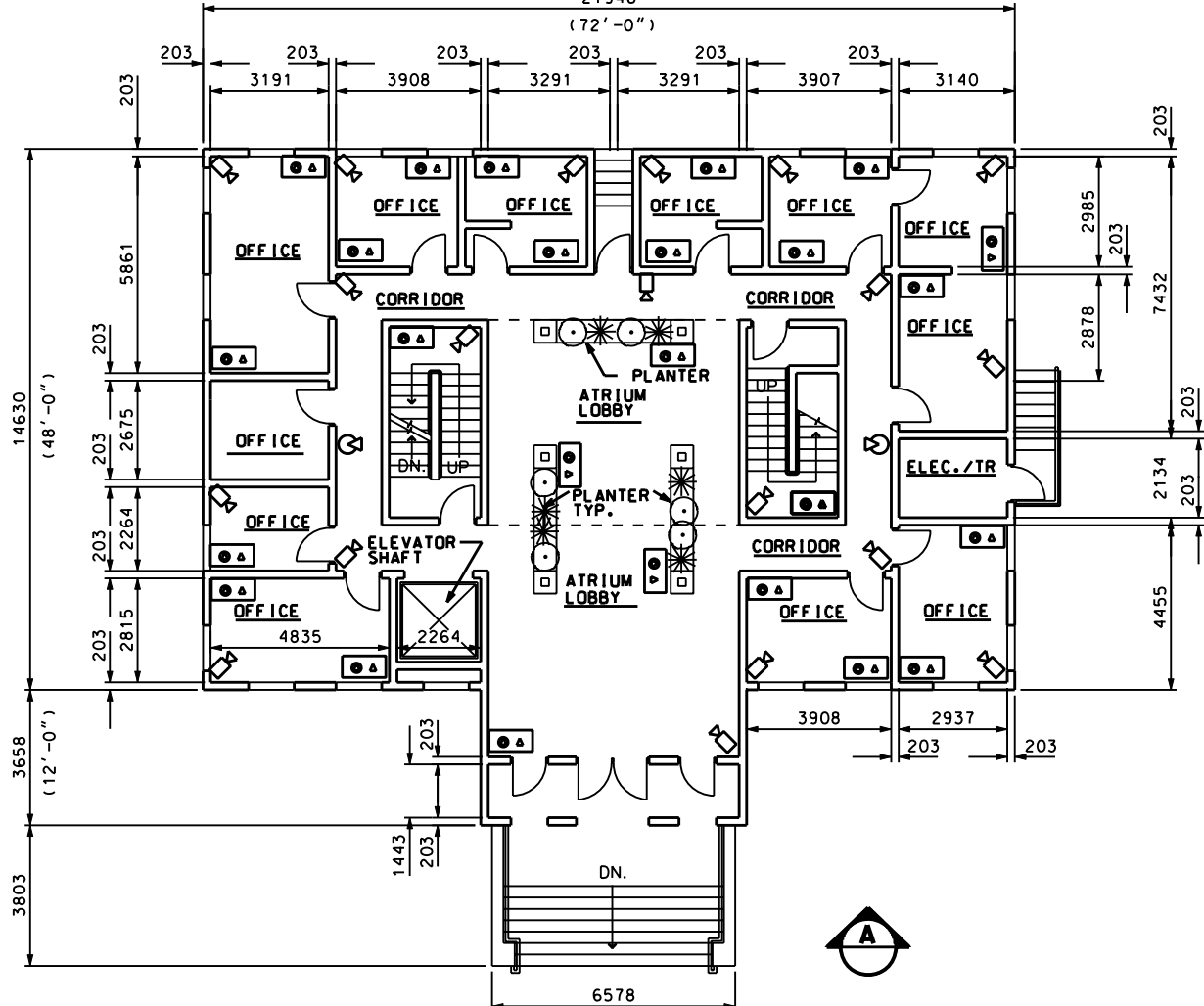
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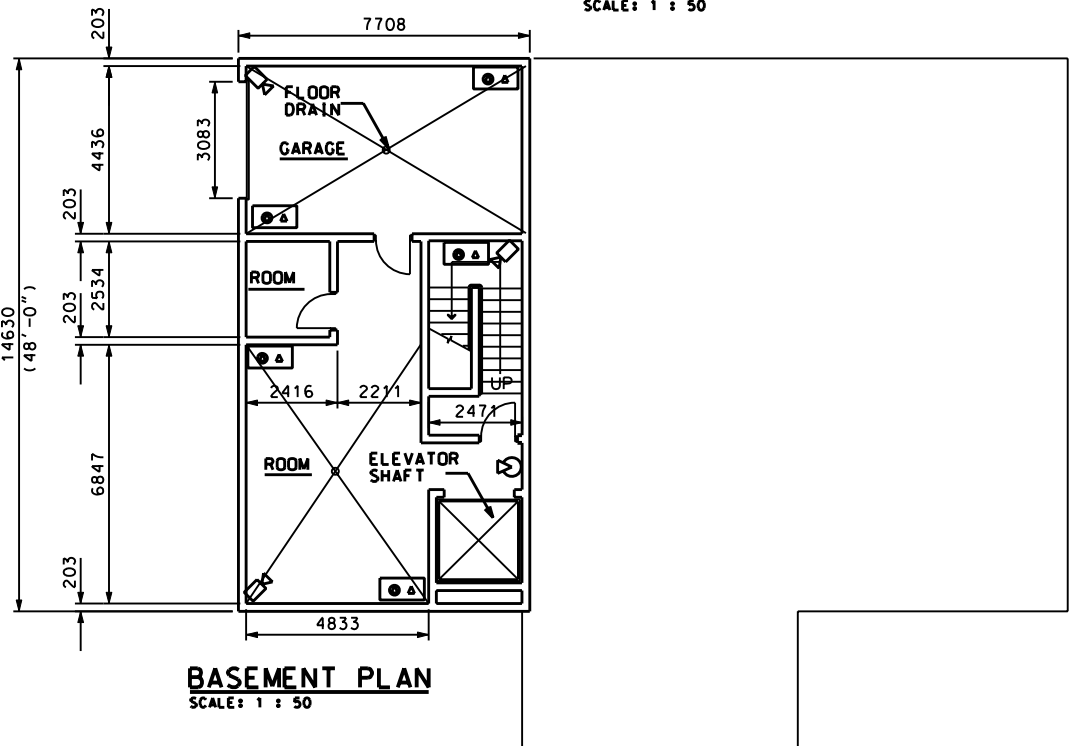
- SEE CTF-02 FOR OUTLET SYMBOL LEGEND. ALL OUTLETS AND ENCLOSURES SHALL BE WEATHERPROOF.
- ALL INTERIOR WALLS SHOULD BE LINED WITH PLYWOOD FOR TRAINING PURPOSES. PLYWOOD SHOULD GO UP TO 10'-0" AFF.



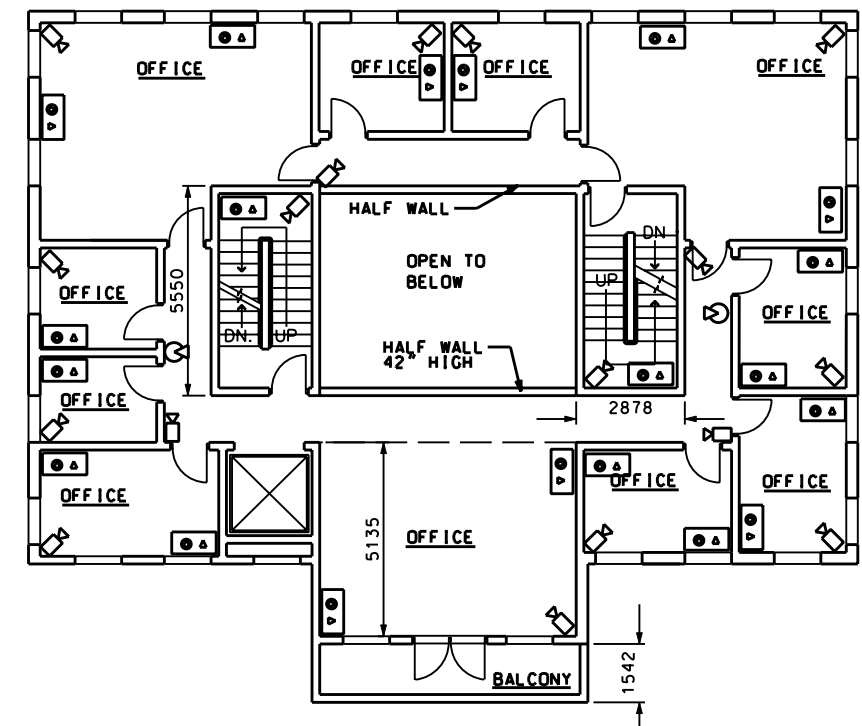
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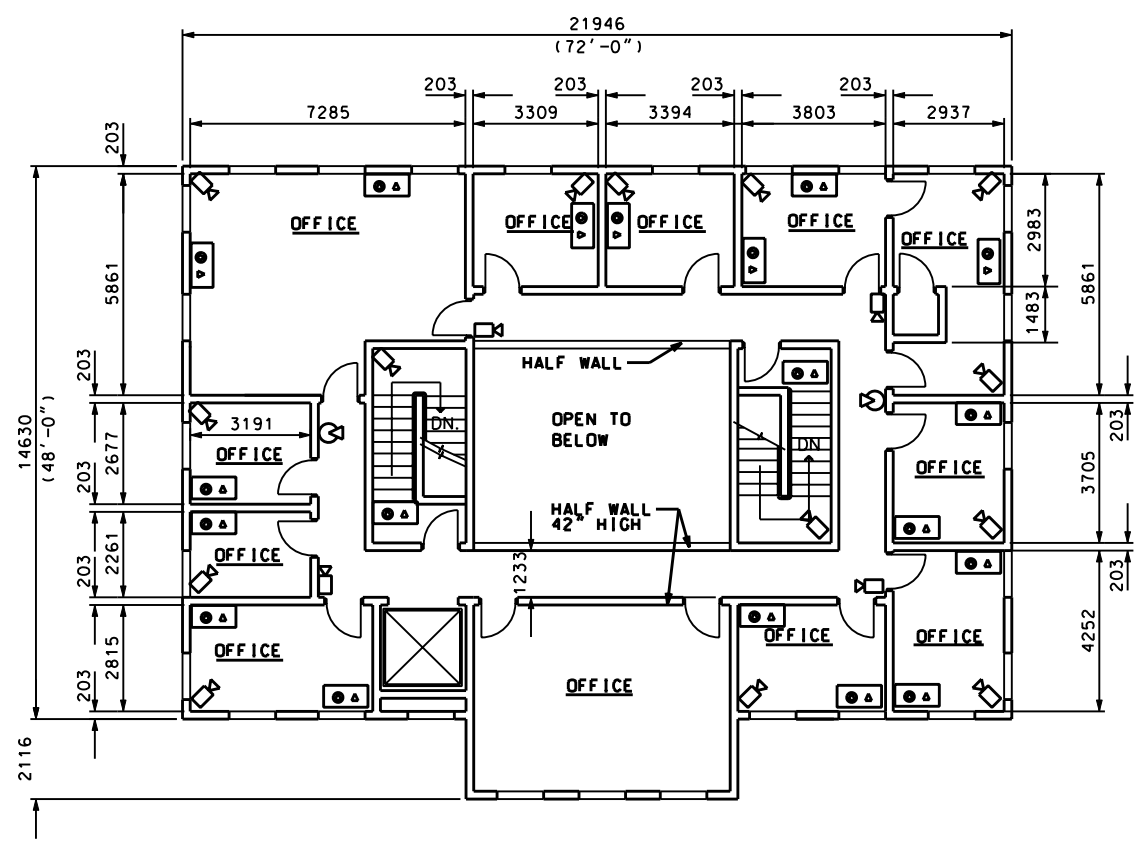
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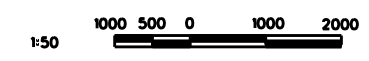
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SECOND FLOOR PLAN
SCALE: 1 : 50



THIRD FLOOR PLAN
SCALE: 1 : 50



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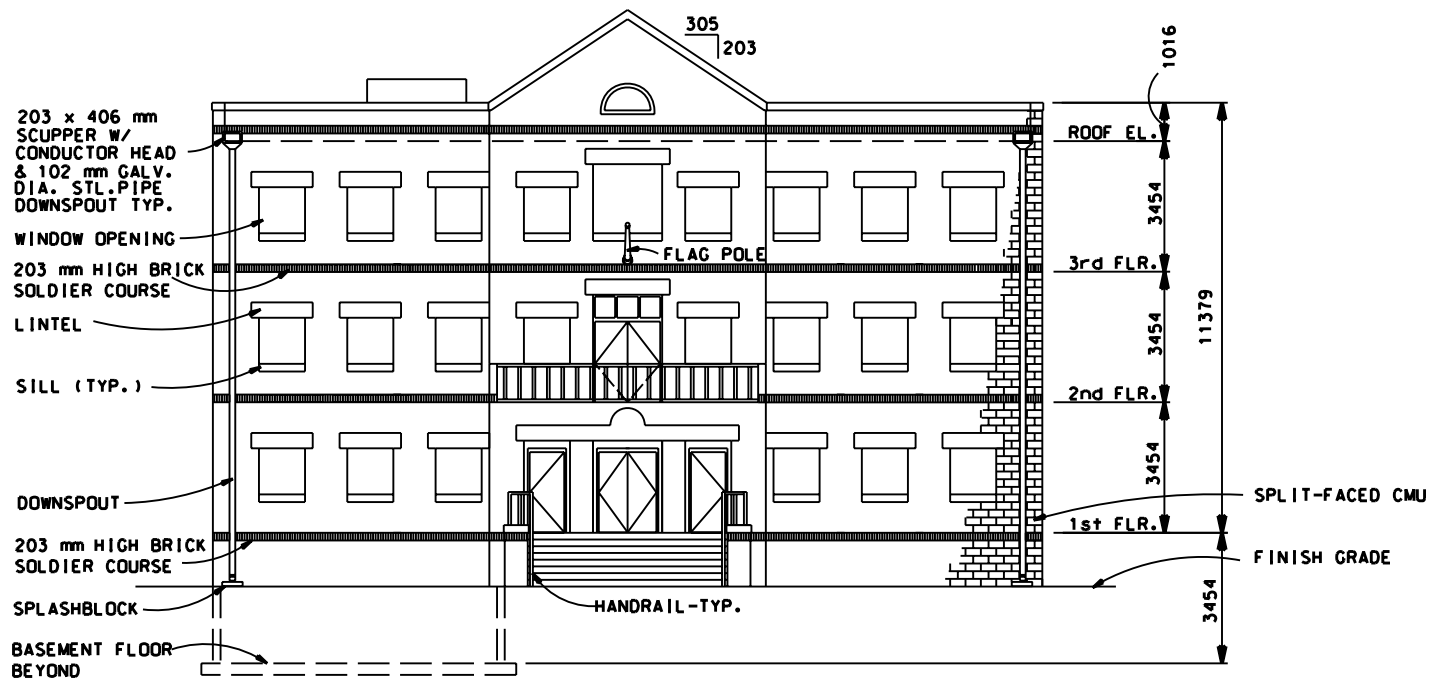
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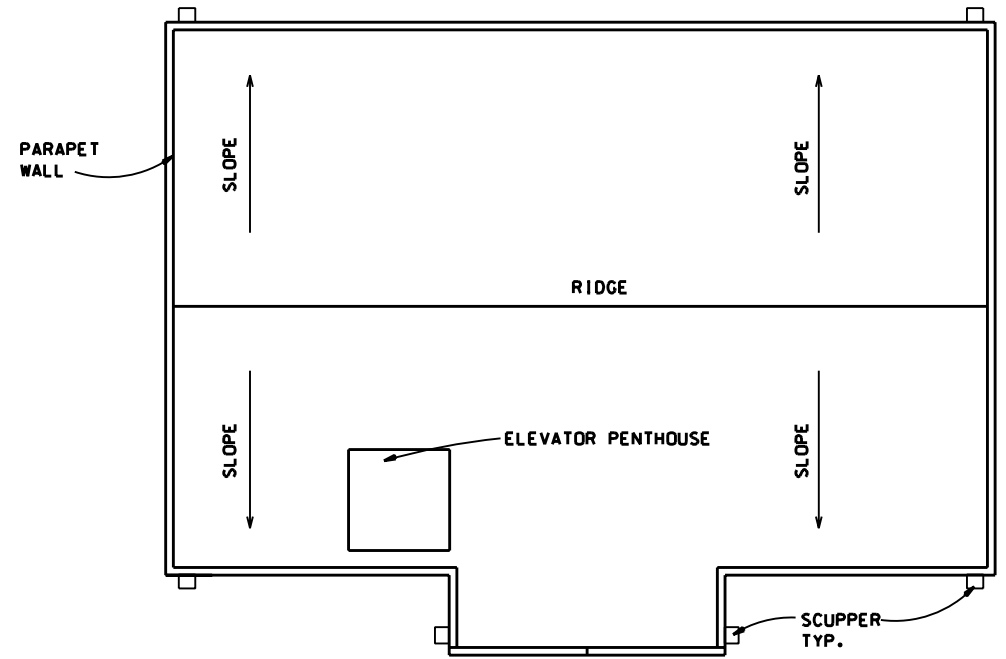
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RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
MUNICIPAL BUILDING PLANS

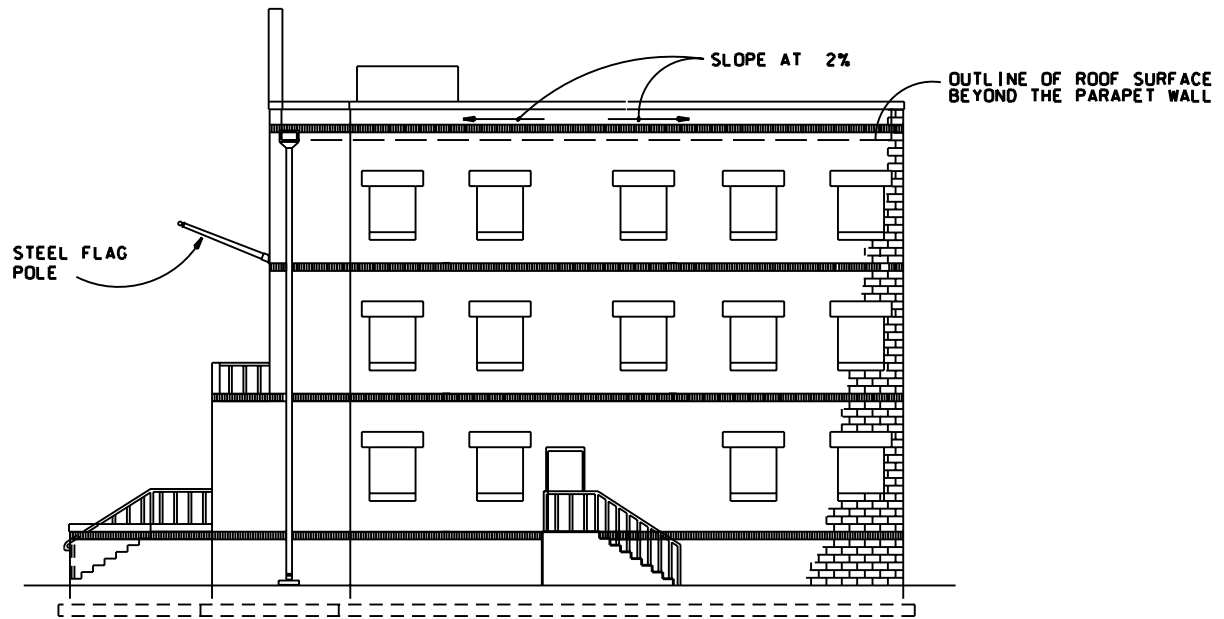
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ELEVATION A
SCALE: 1:50



ROOF PLAN
SCALE: 1:50



ELEVATION B
SCALE: 1:50

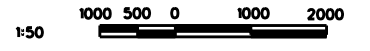
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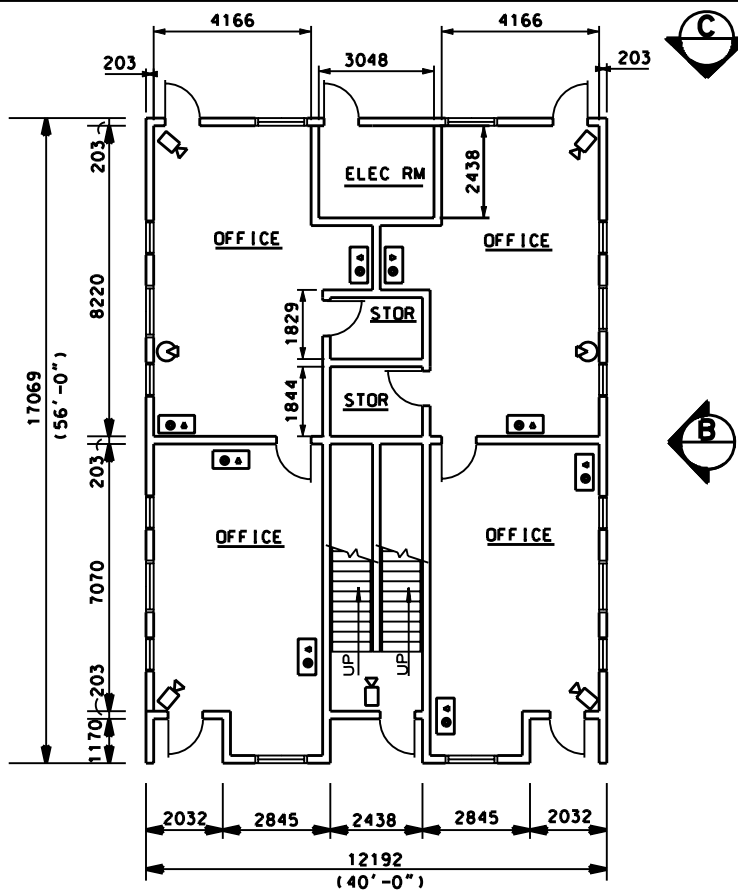
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RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
MUNICIPAL BUILDING
ELEVATIONS



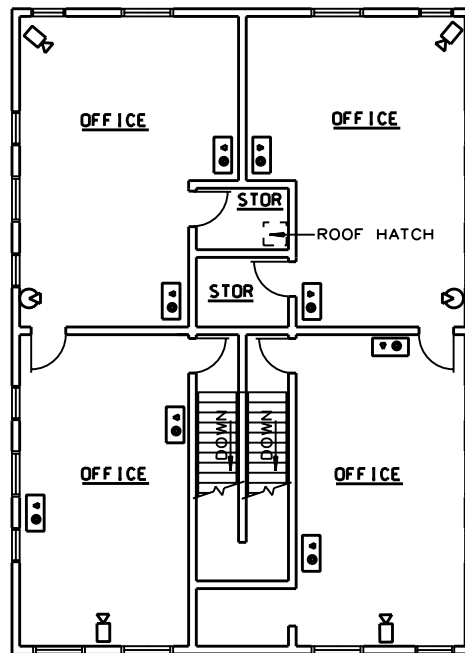
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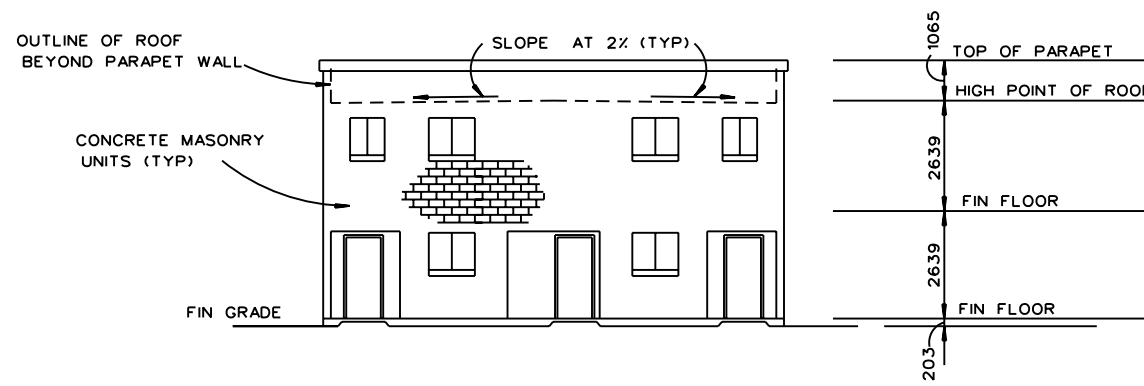
FIRST FLOOR PLAN

SCALE: 1: 50



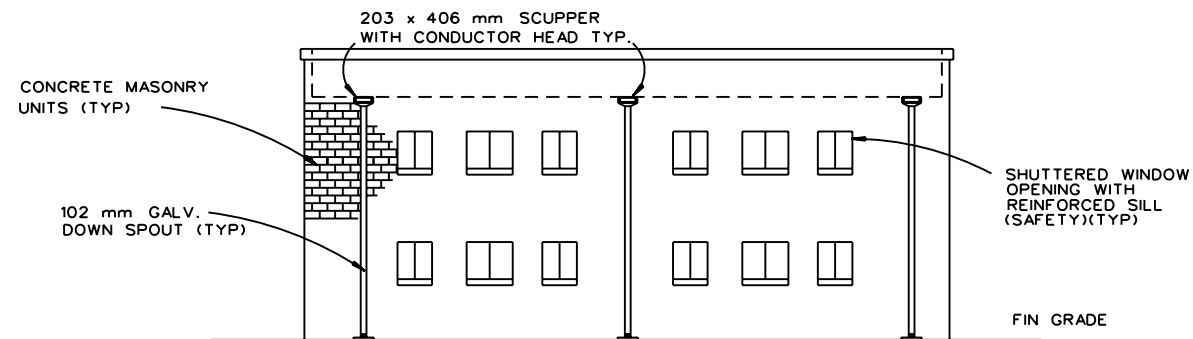
SECOND FLOOR PLAN

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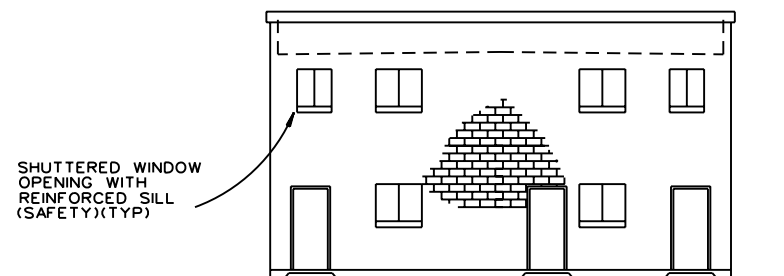
ELEVATION A

SCALE: N.T.S



ELEVATION B

SCALE: N.T.S



ELEVATION C

SCALE: N.T.S



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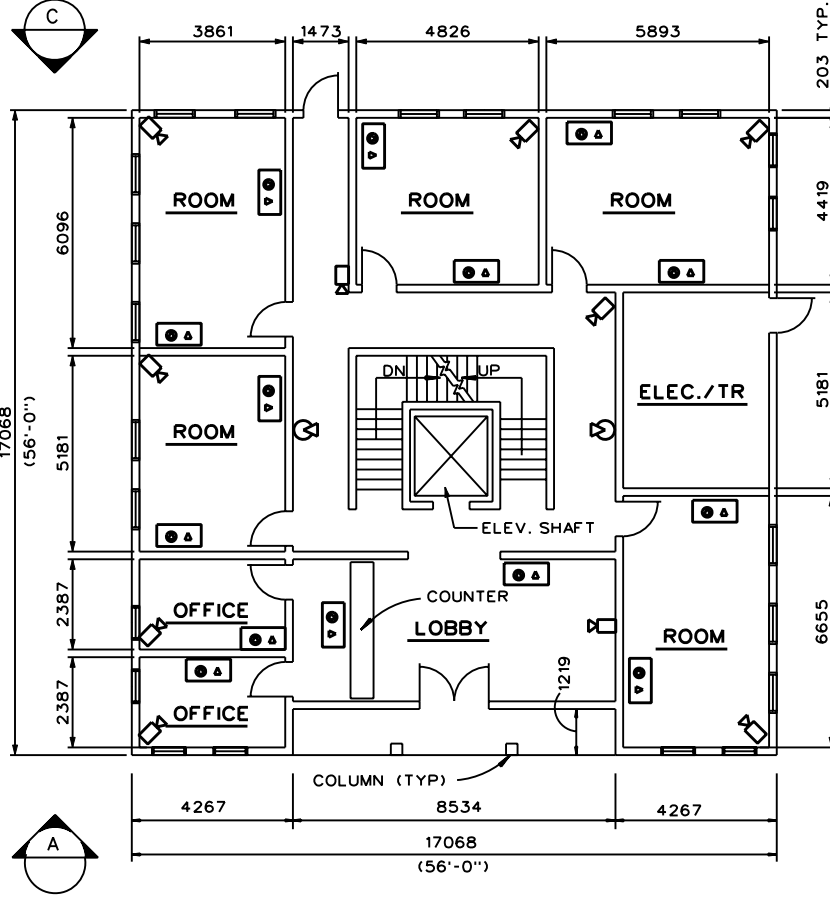


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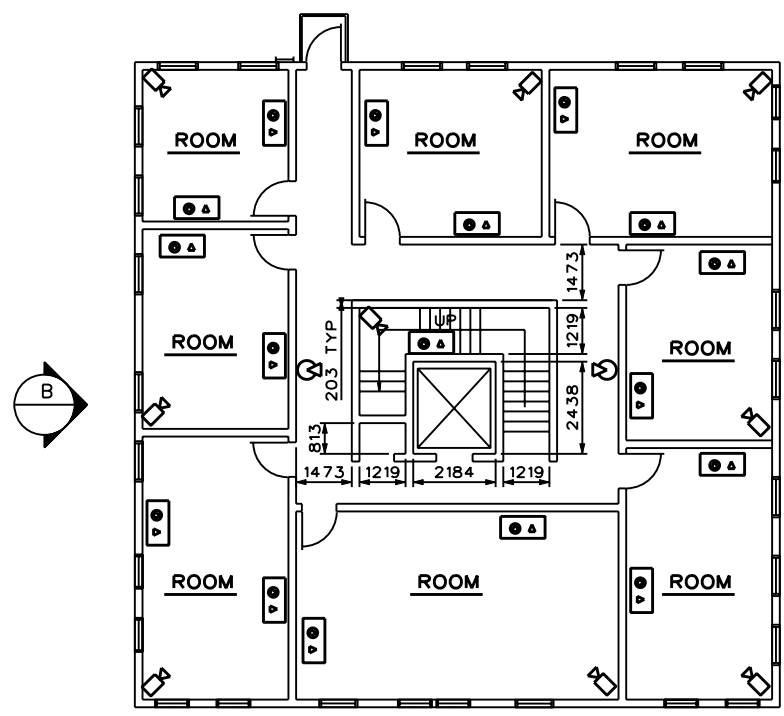
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RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
2 STORY OFFICE
PLANS AND ELEVATIONS

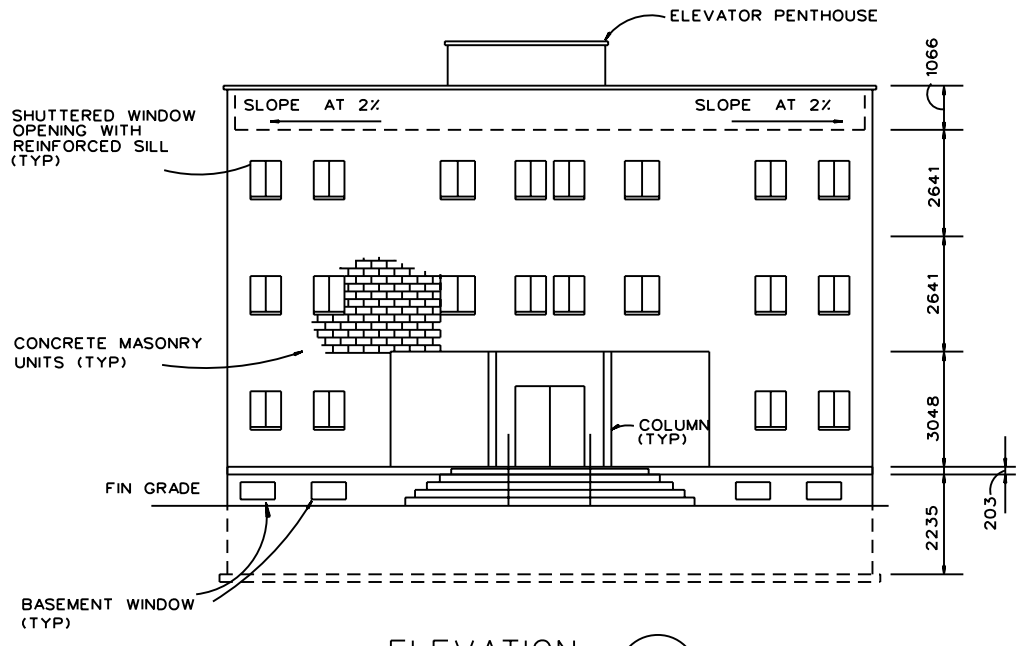
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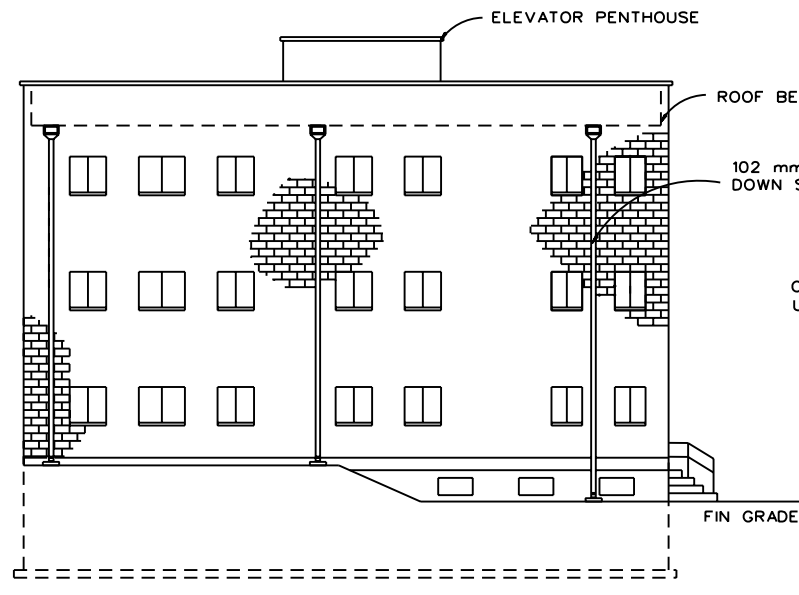
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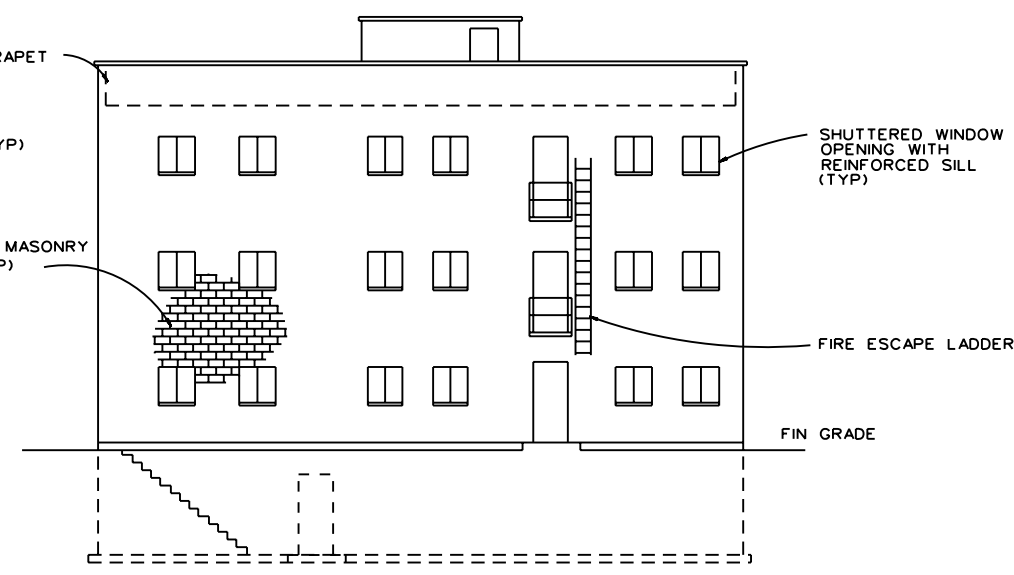
SECOND & THIRD FLOOR PLAN
SCALE: 1:50



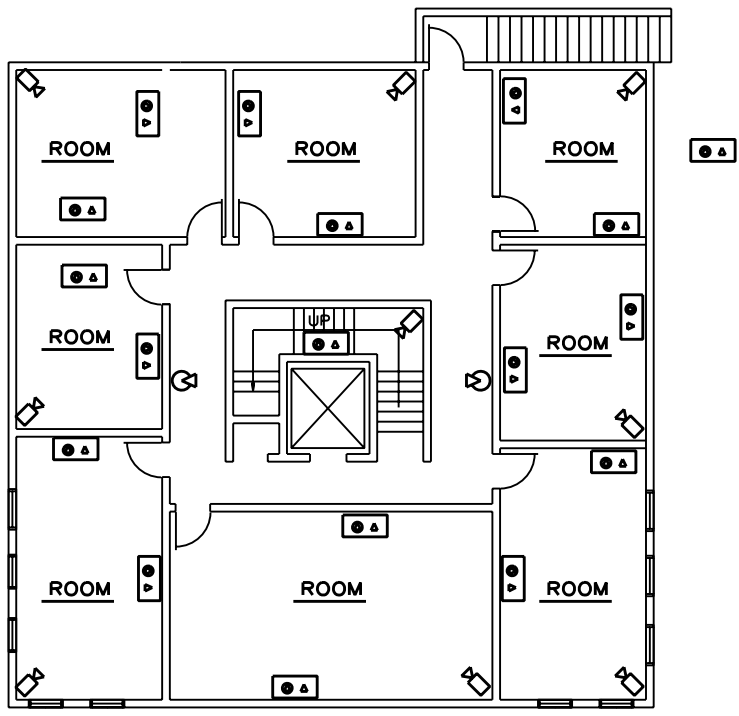
ELEVATION A
SCALE: 1:50



ELEVATION B
SCALE: 1:50



ELEVATION C
SCALE: 1:50



BASEMENT PLAN
SCALE: 1:50

1:50 1000 500 0 1000 2000

ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

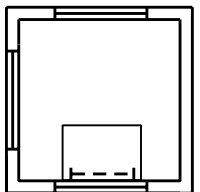
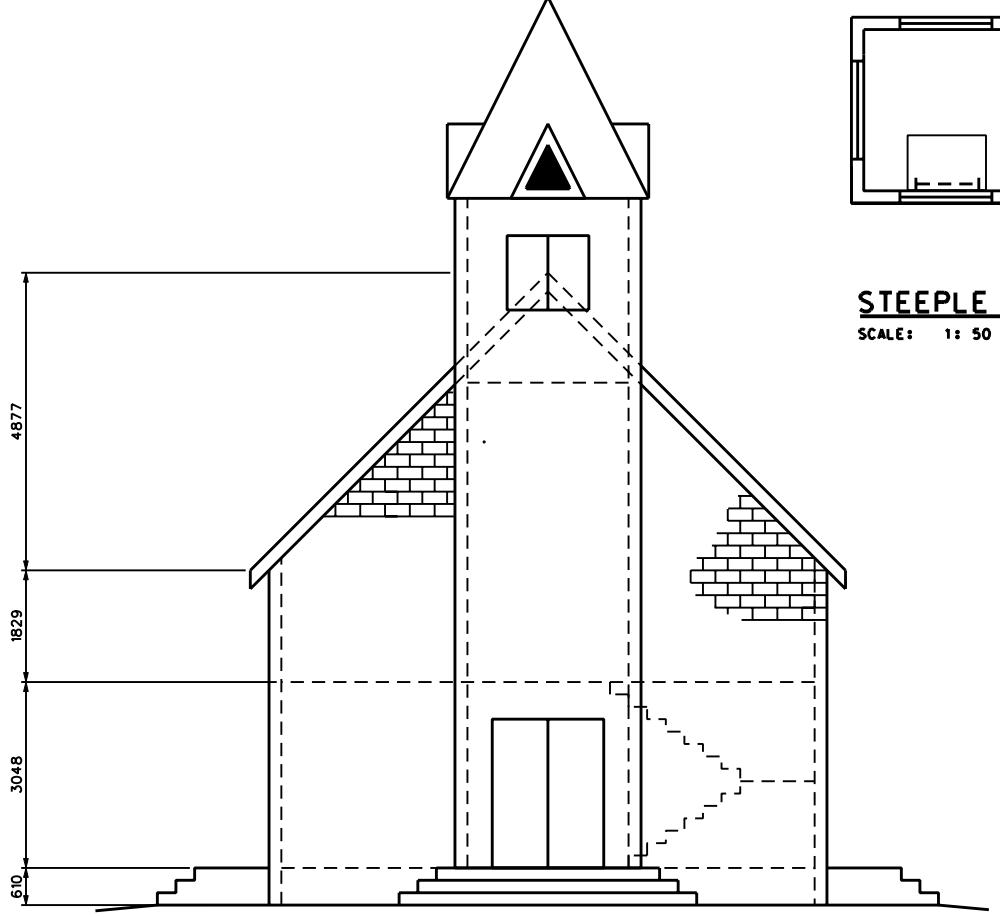
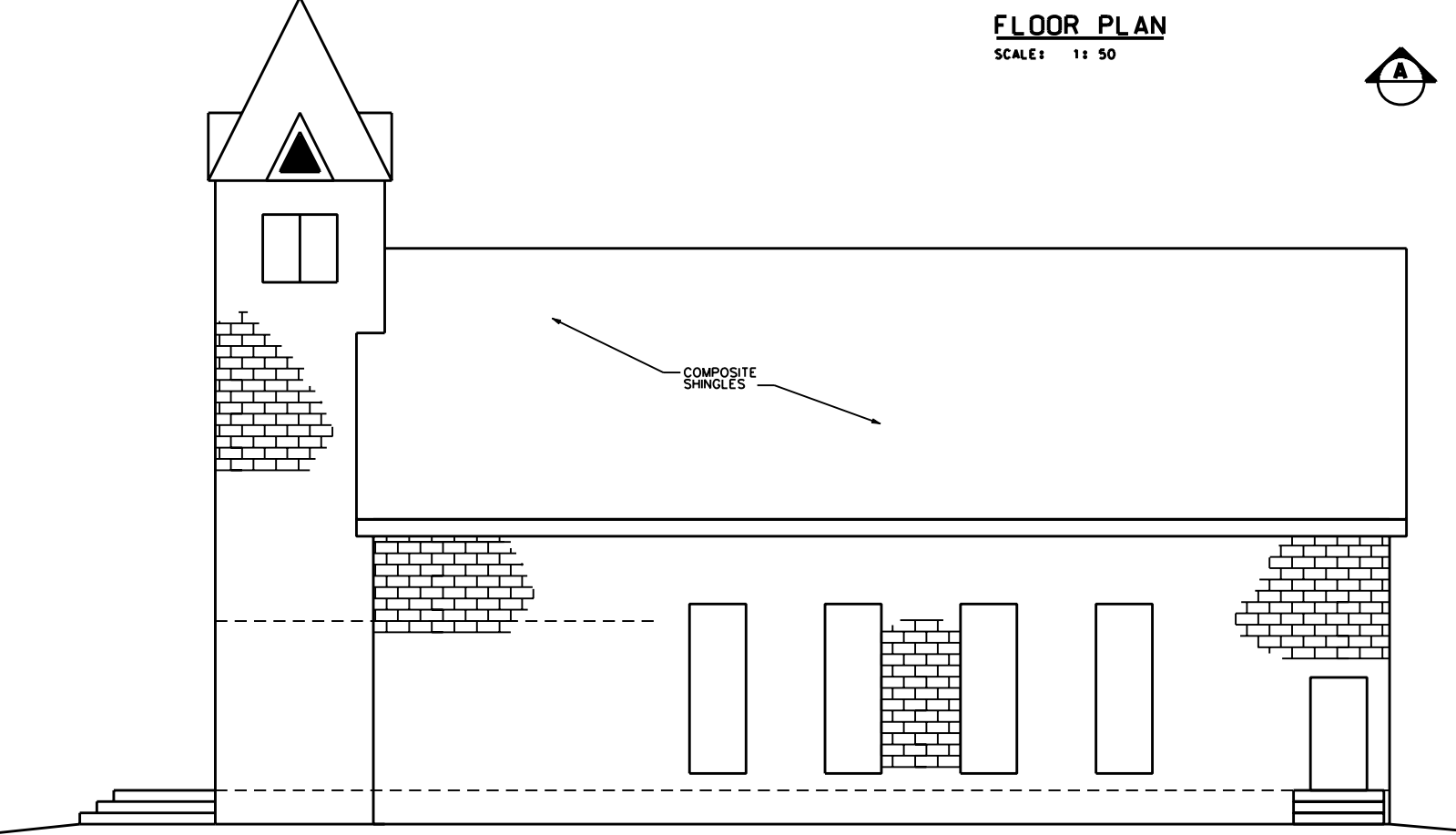
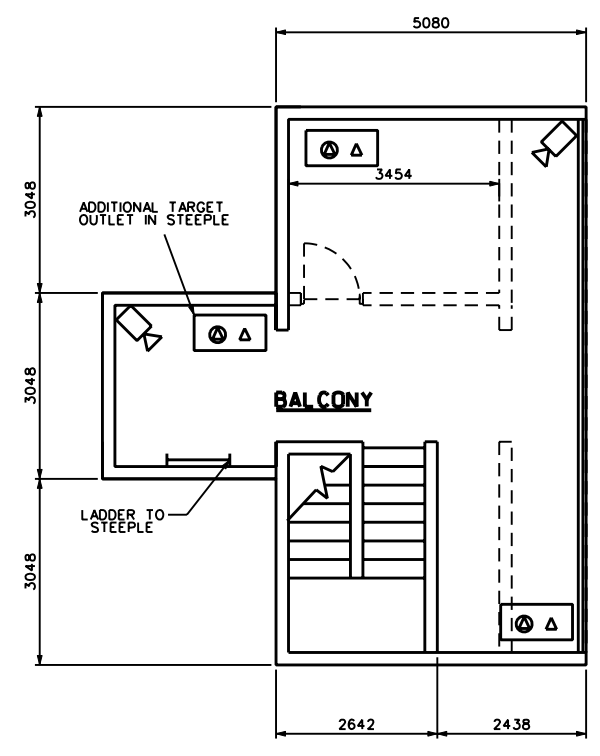
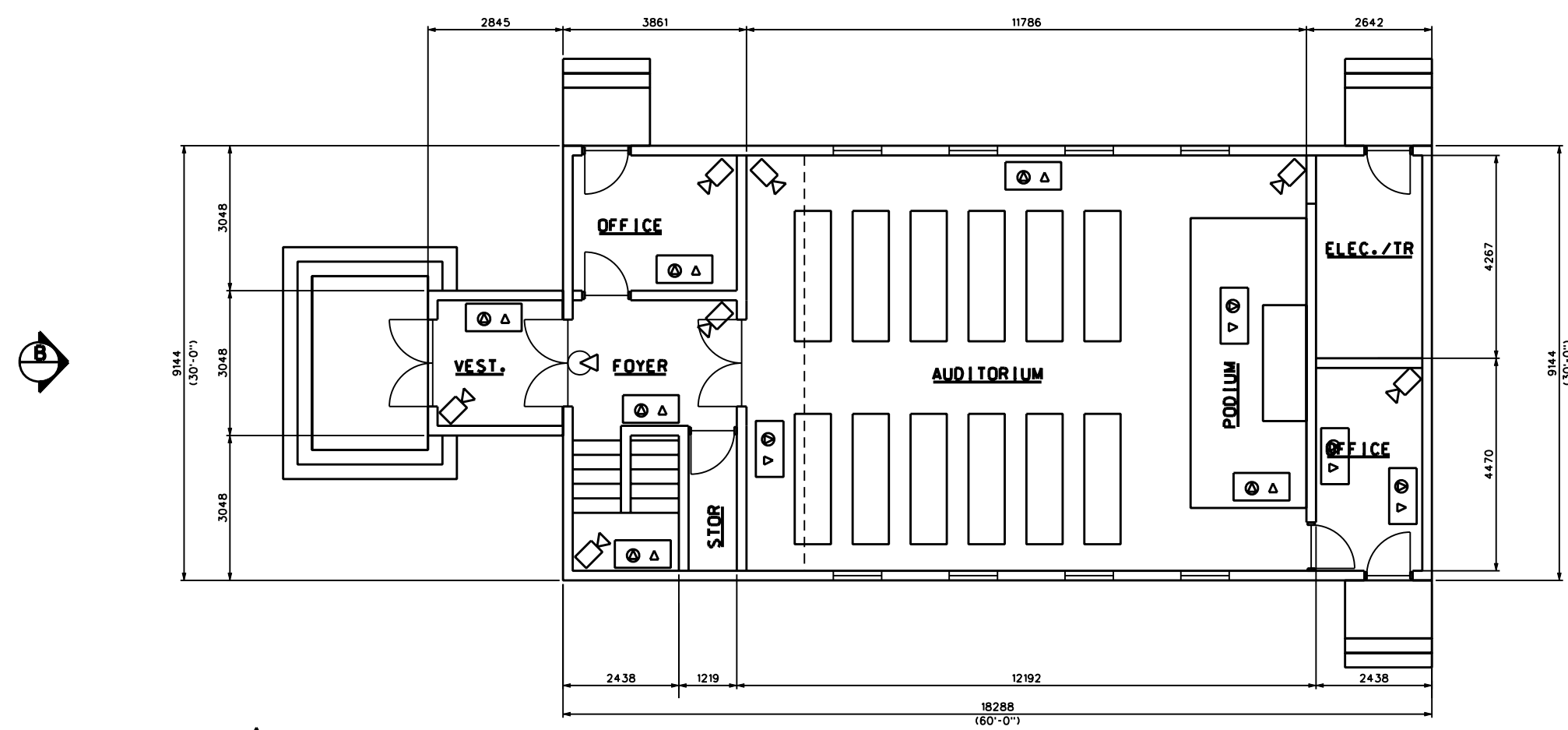
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1 JUL 2008

RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
3 STORY HOTEL
PLANS AND ELEVATIONS



STEEPLE PLAN
SCALE: 1: 50

1:50 1000 500 0 1000 2000
ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

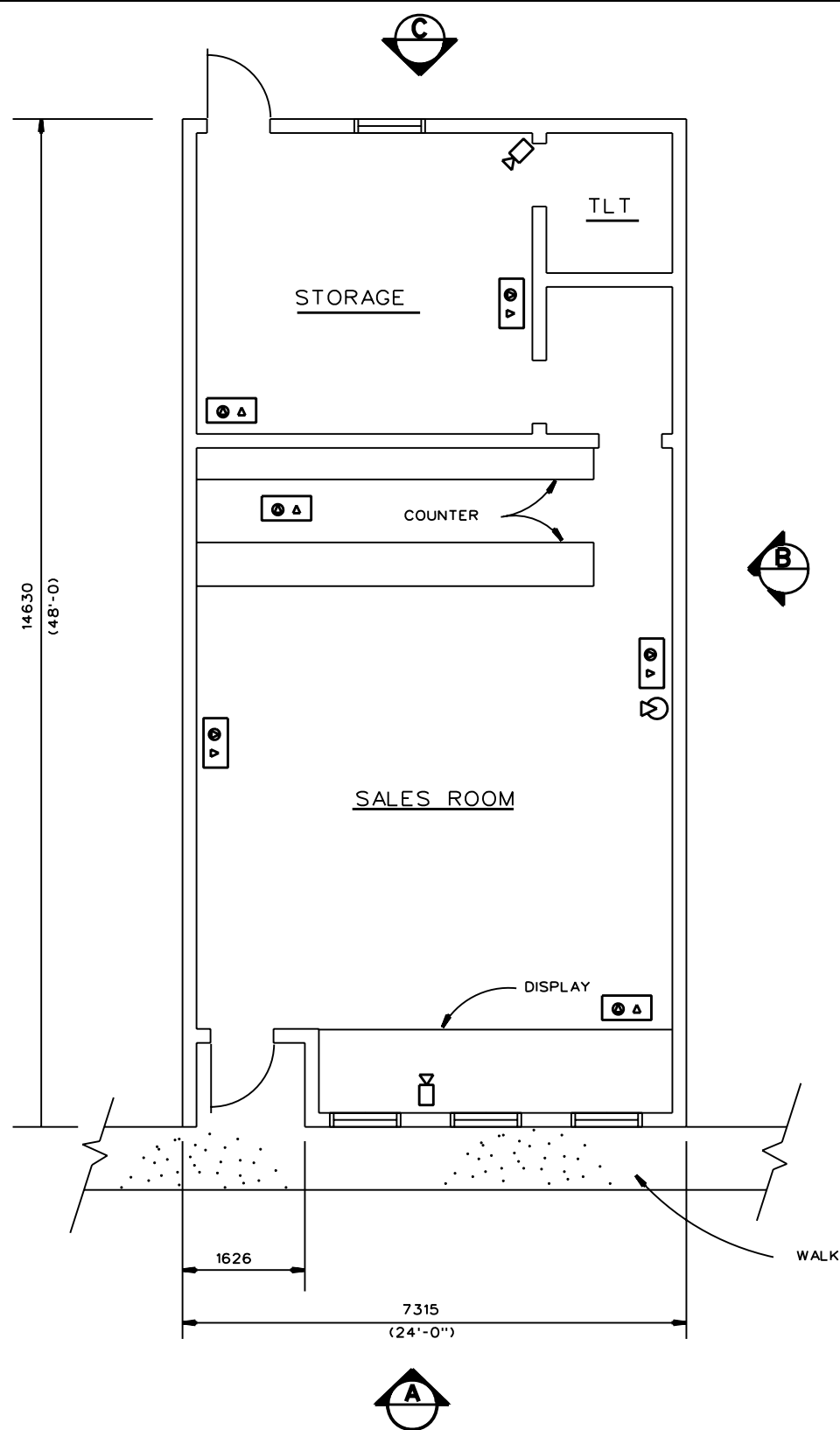
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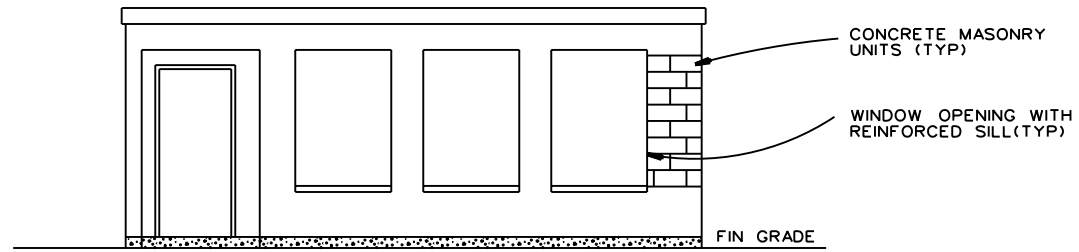
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RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
CHURCH
PLANS AND ELEVATIONS

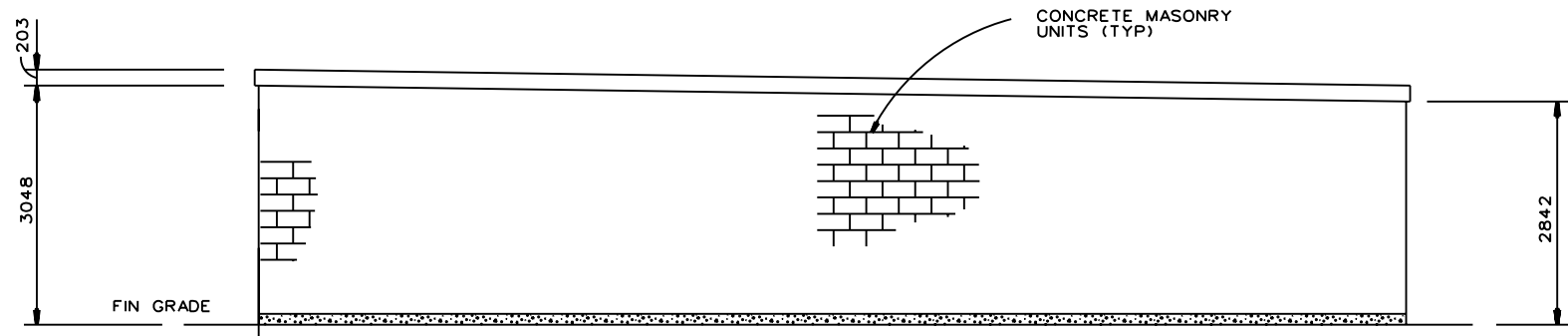
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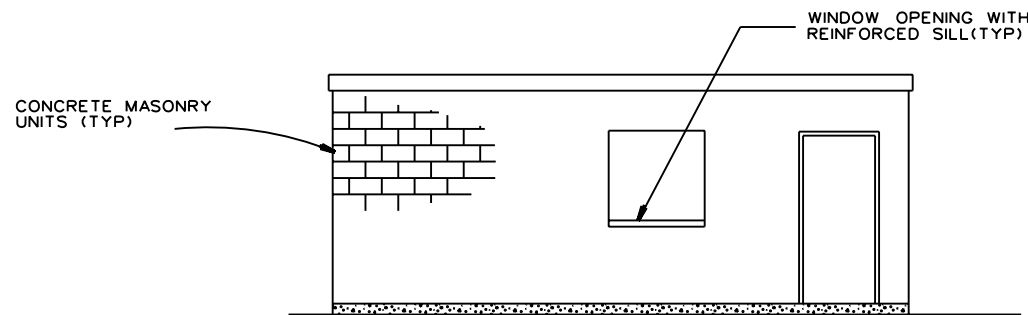
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ELEVATION A
SCALE: N.T.S



ELEVATION B
SCALE: N.T.S

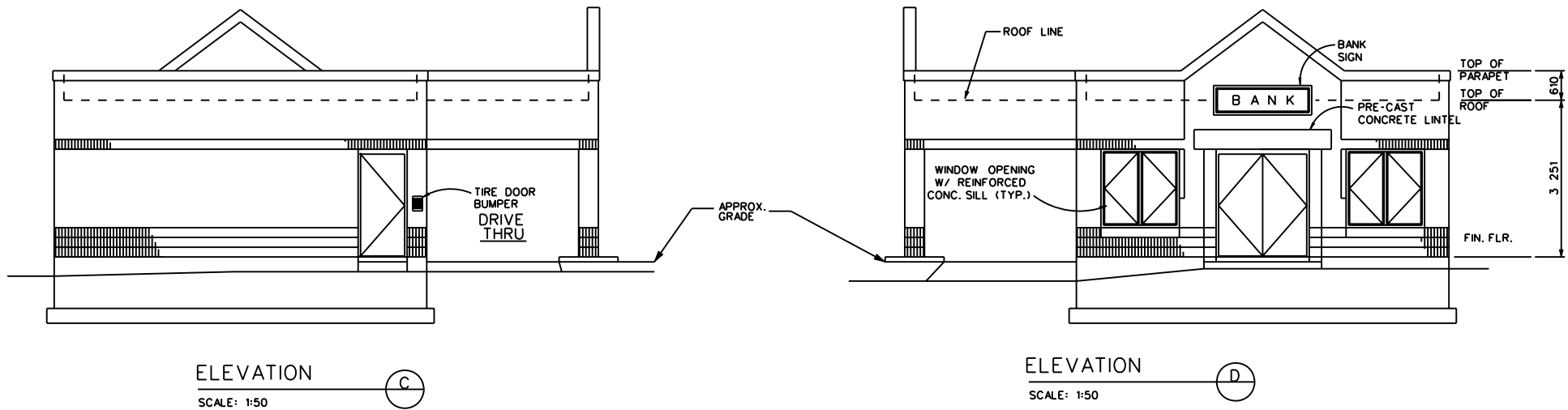
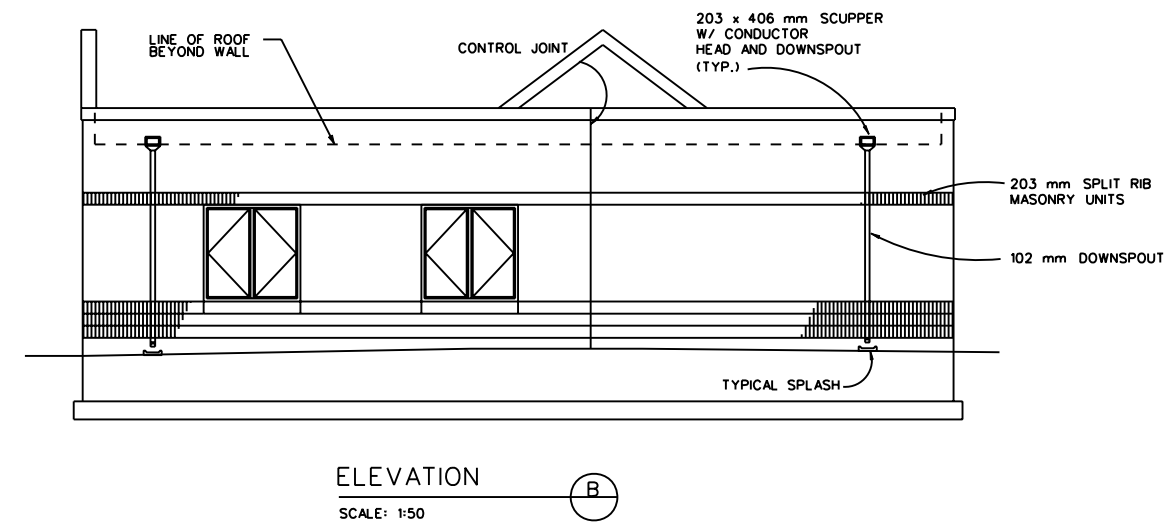
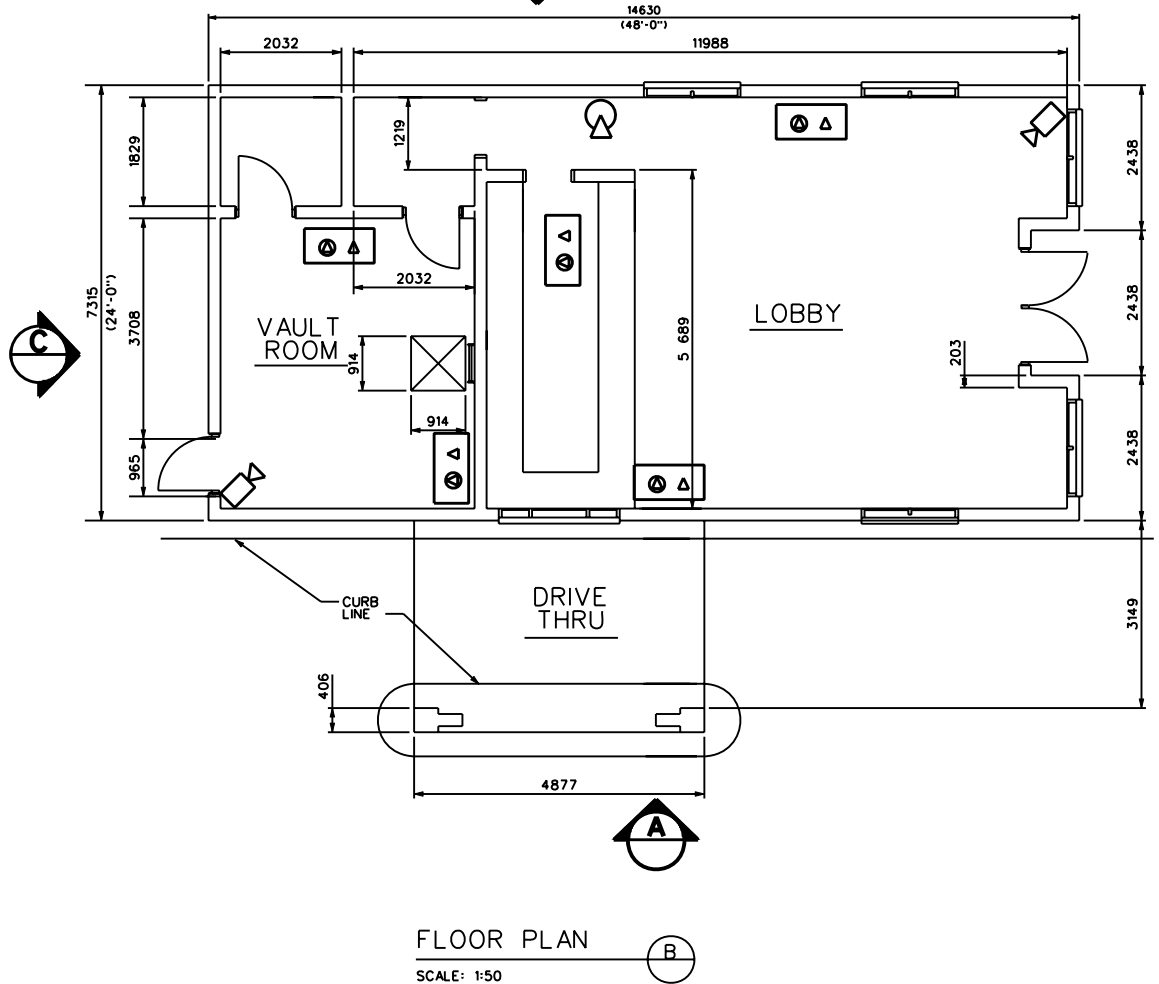
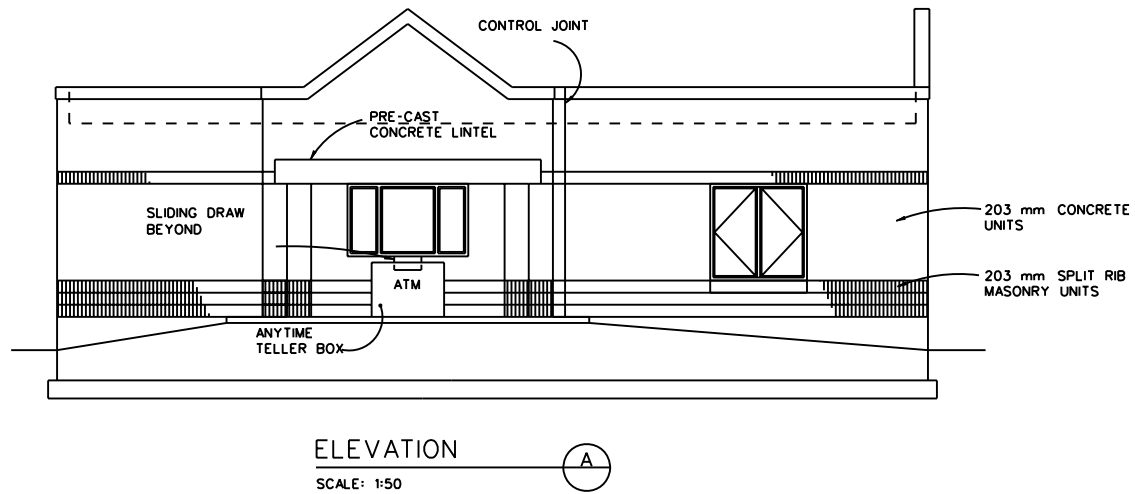


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Rev. #	Date	Description

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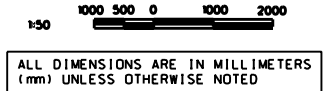
RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
1 STORY BUSINESS PLANS AND ELEVATIONS

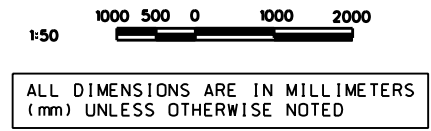
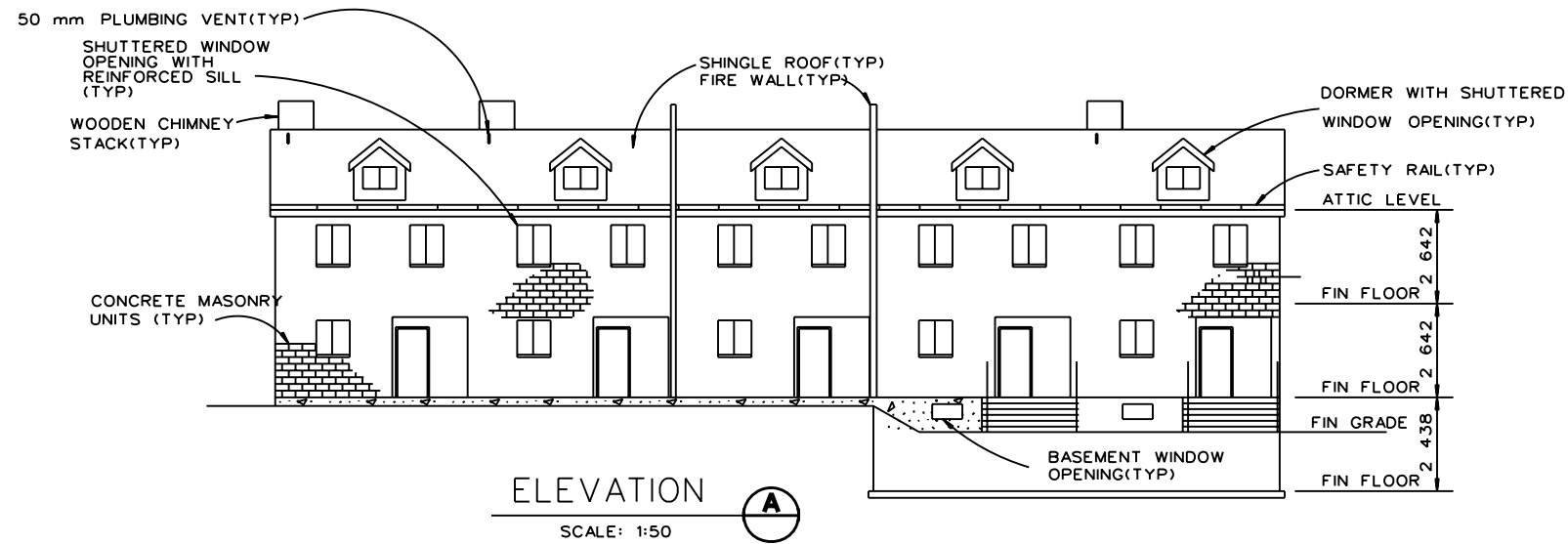
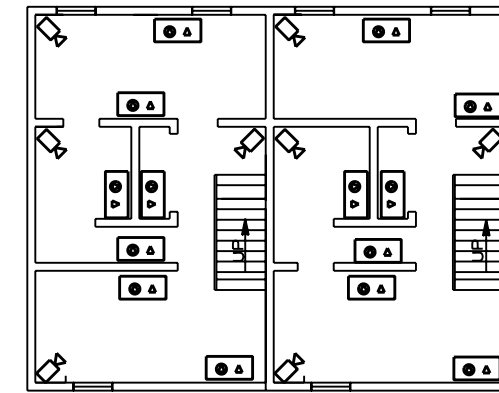
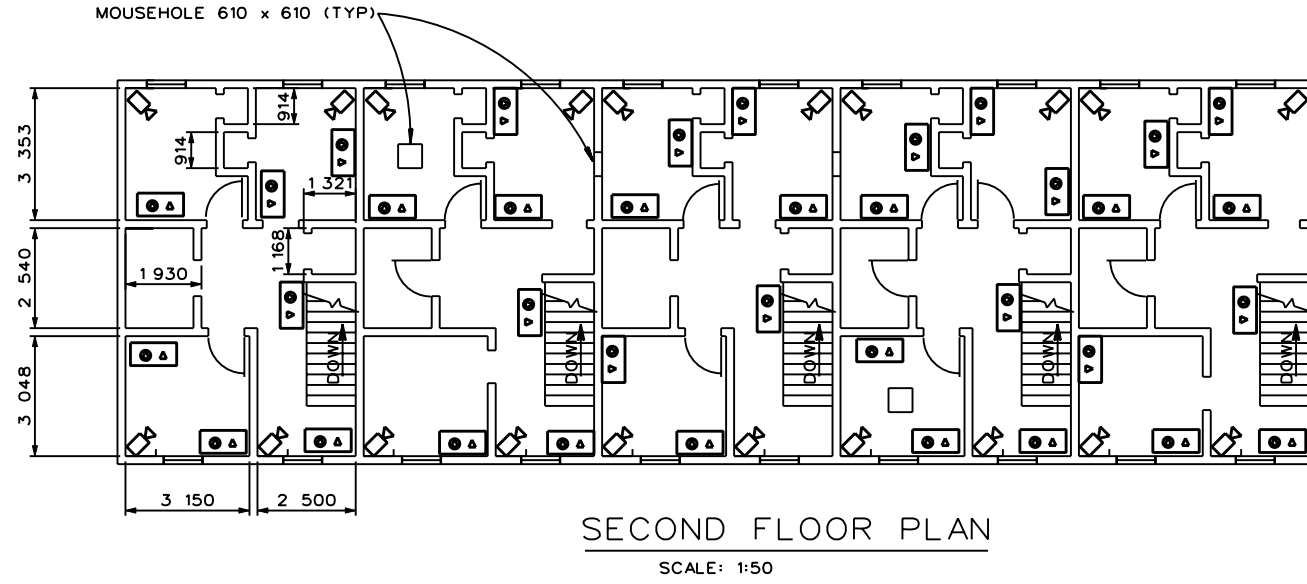
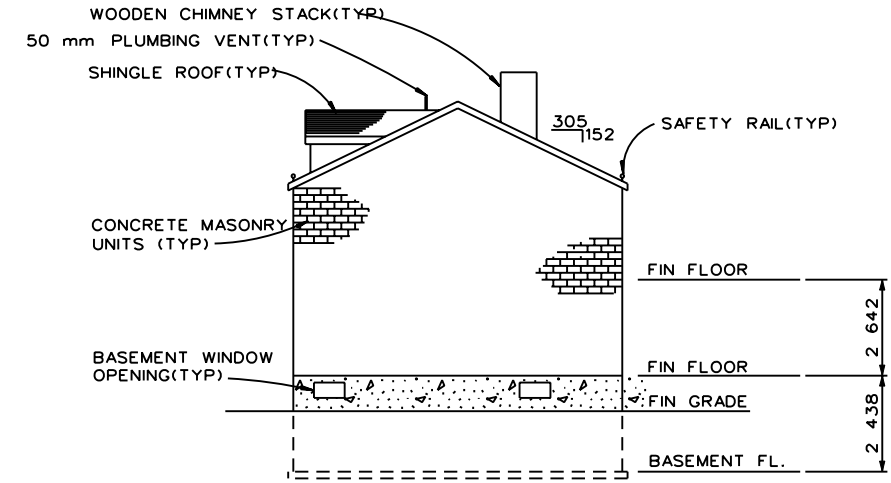
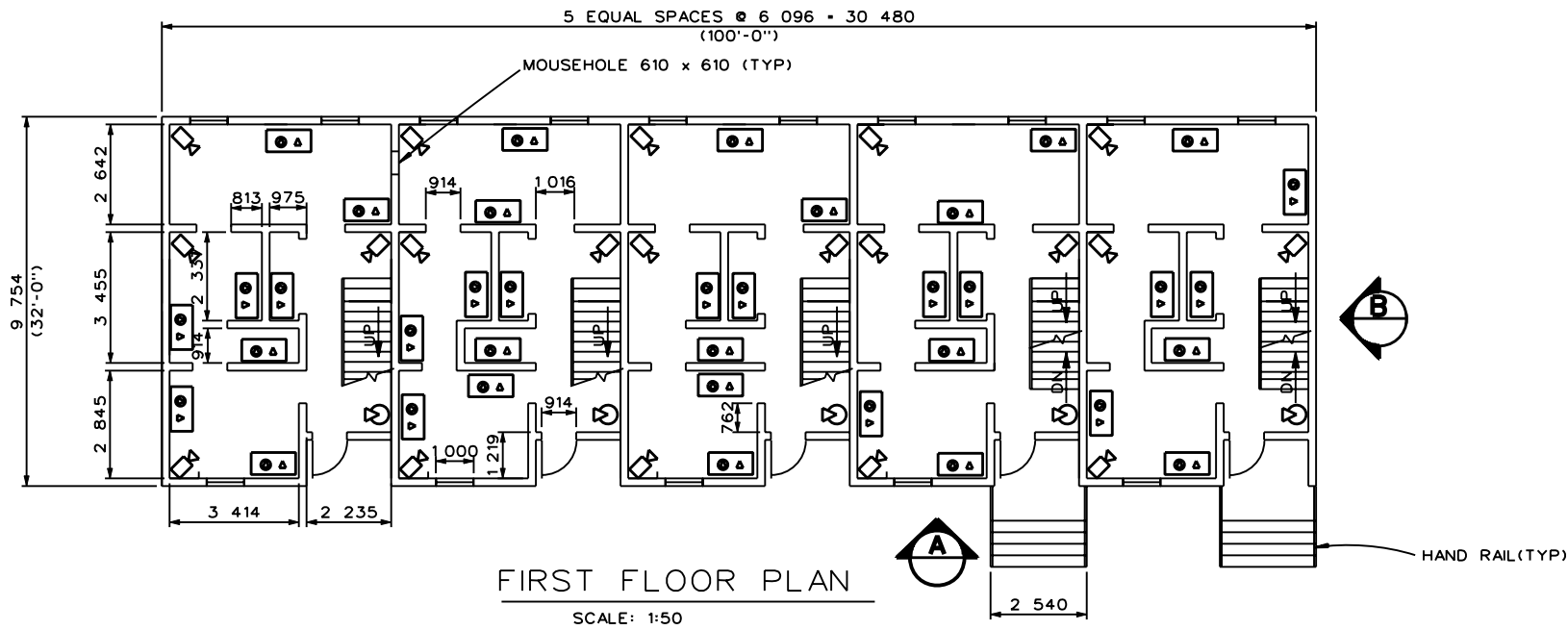


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1 JUL 2008		

RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
BANK
PLANS AND ELEVATIONS



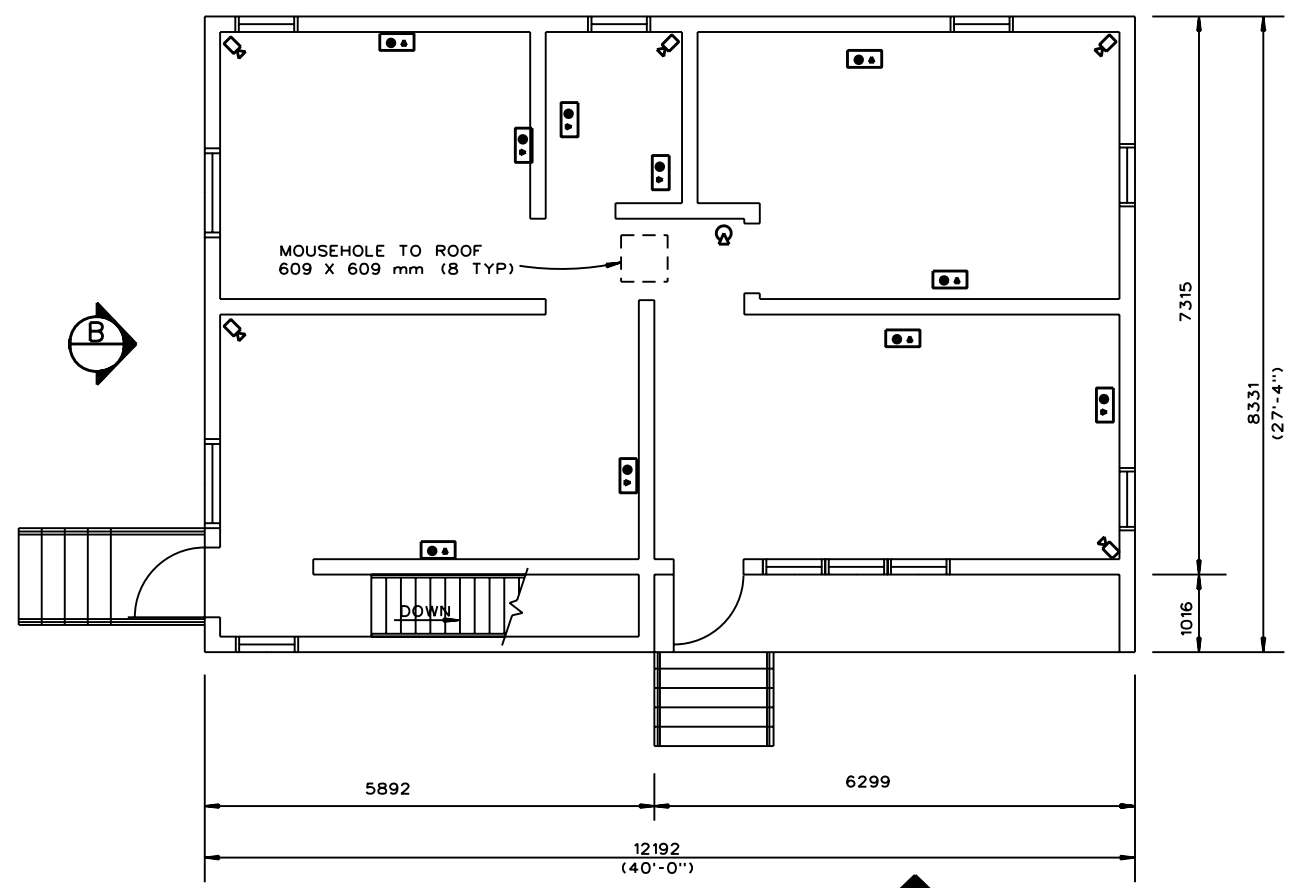


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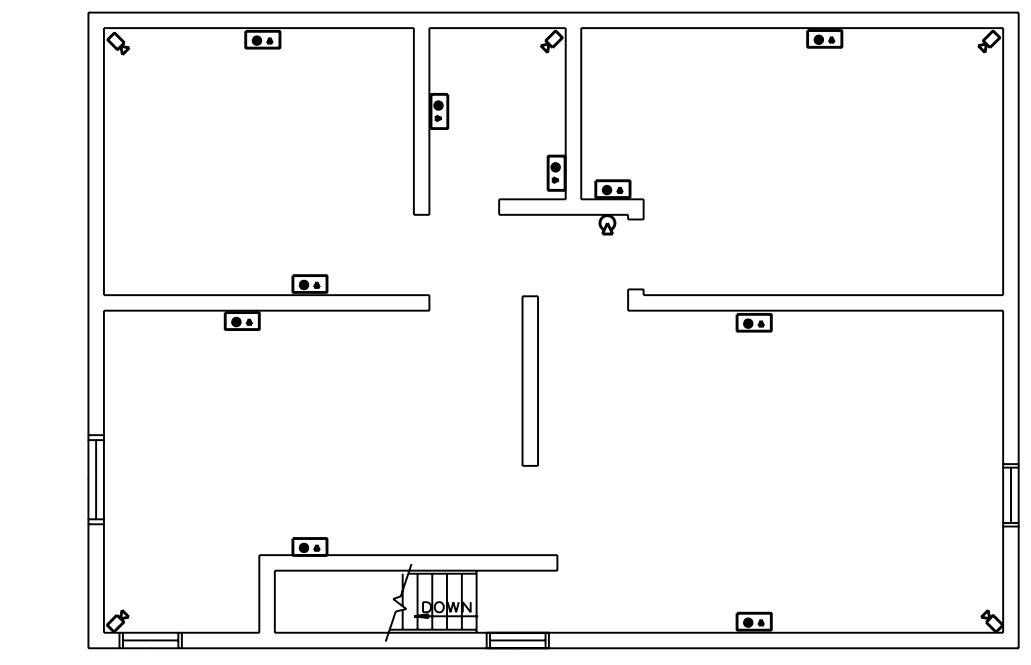
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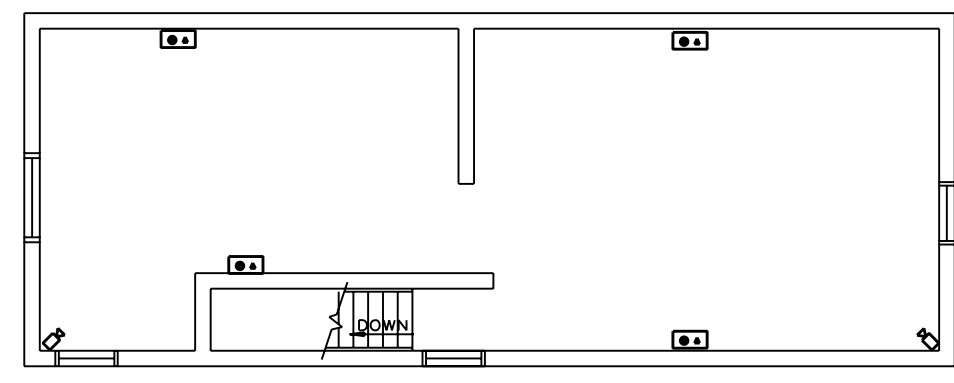
RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
TOWNSHIP
PLANS AND ELEVATIONS



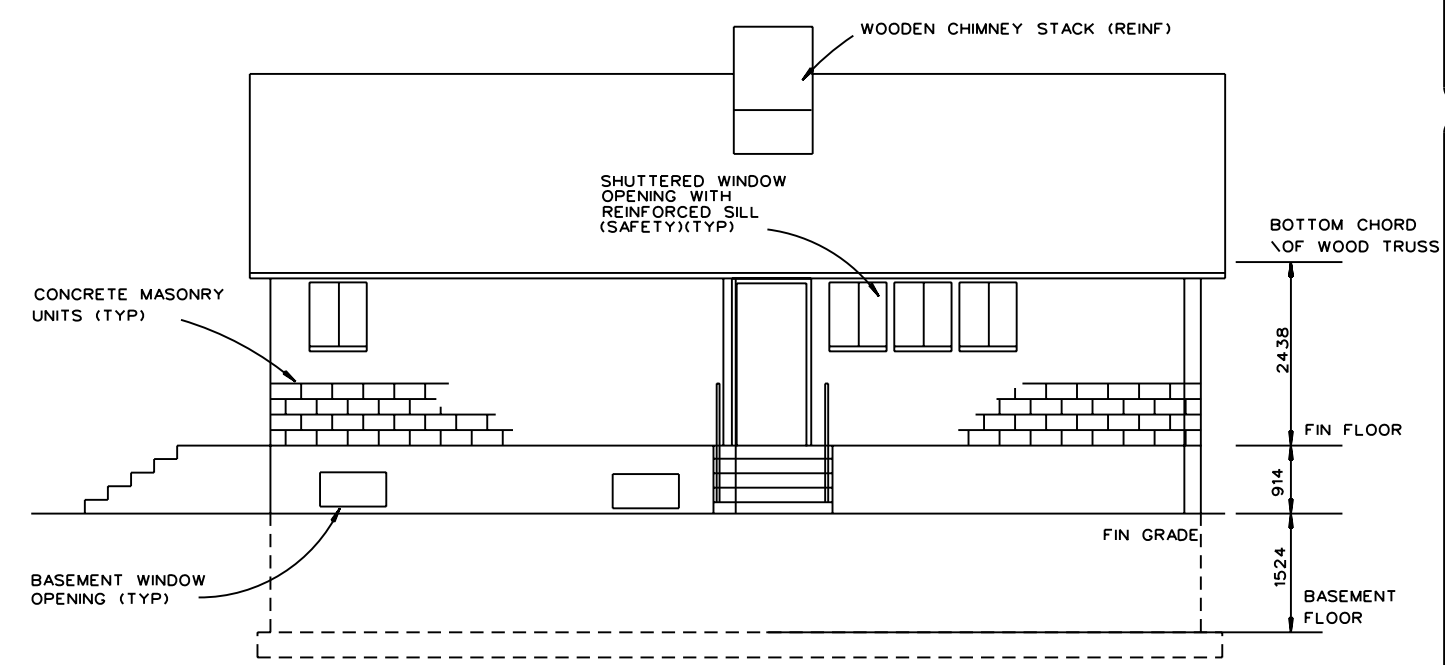
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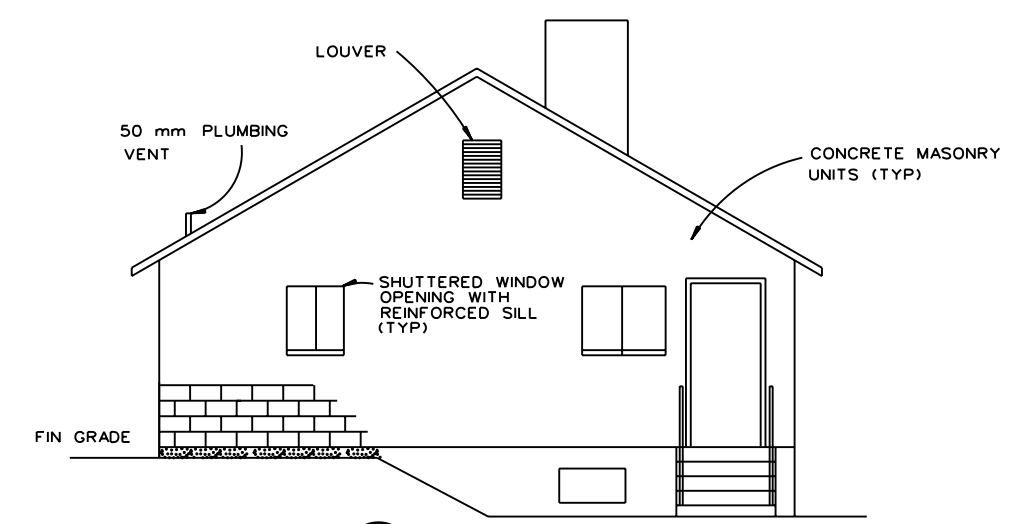
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OPTIONAL PARTIAL BASEMENT
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Rev.	Date	Description

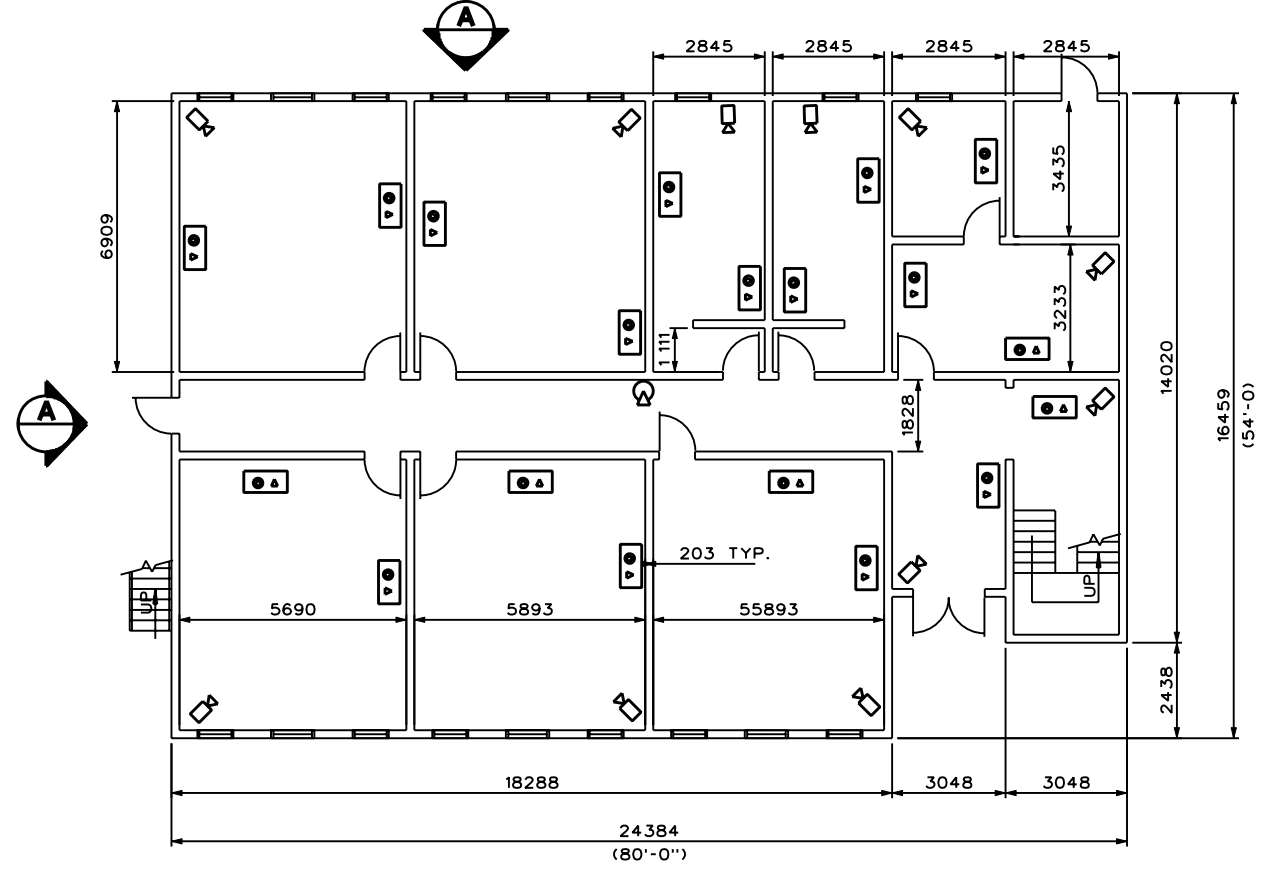
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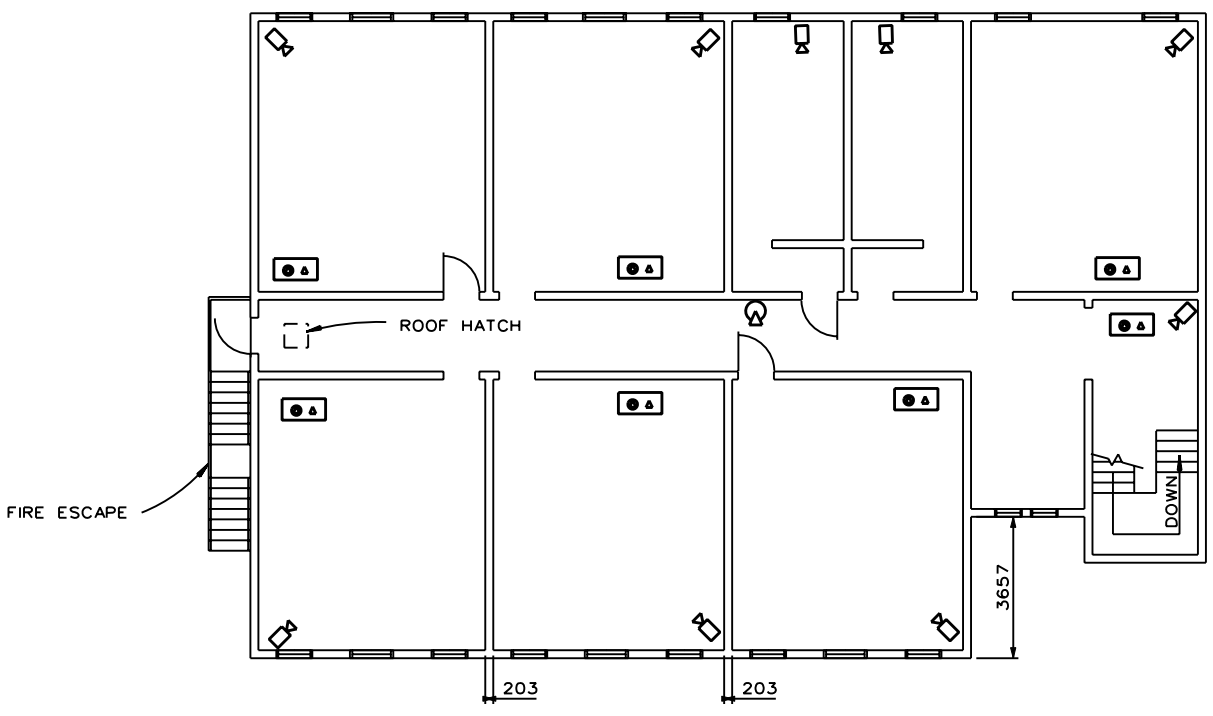
RANGE AND TRAINING LAND PROGRAM
STANDARD DESIGN MANUAL
COLLECTIVE TRAINING FACILITY
RESIDENCE
PLANS AND ELEVATIONS

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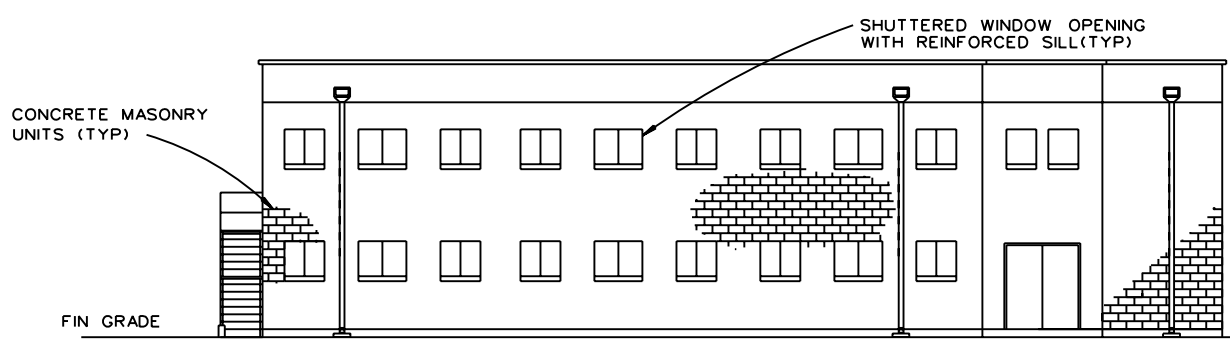
ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED



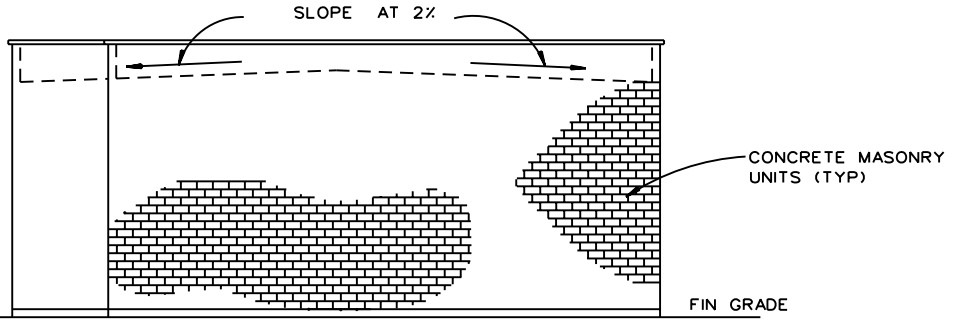
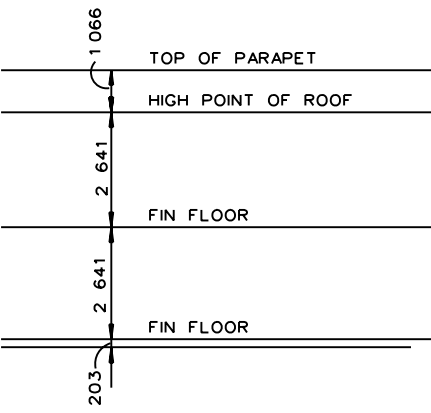
FIRST FLOOR PLAN
SCALE: N.T.S.



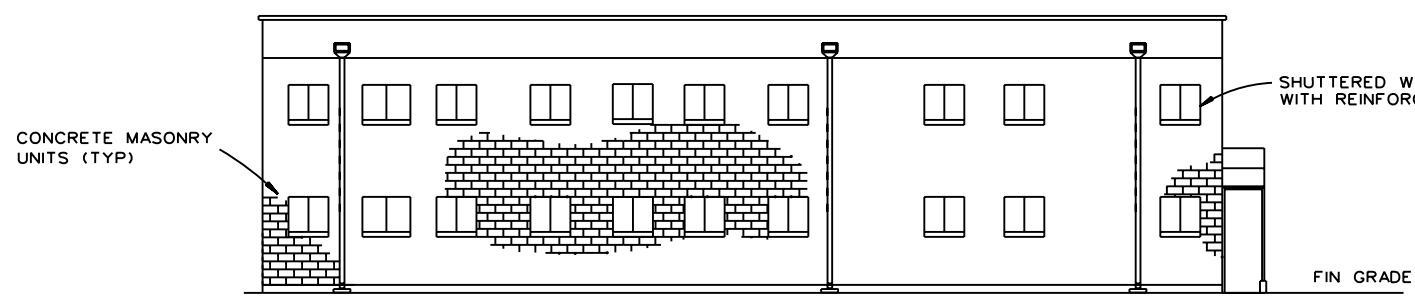
SECOND FLOOR PLAN
SCALE: N.T.S.



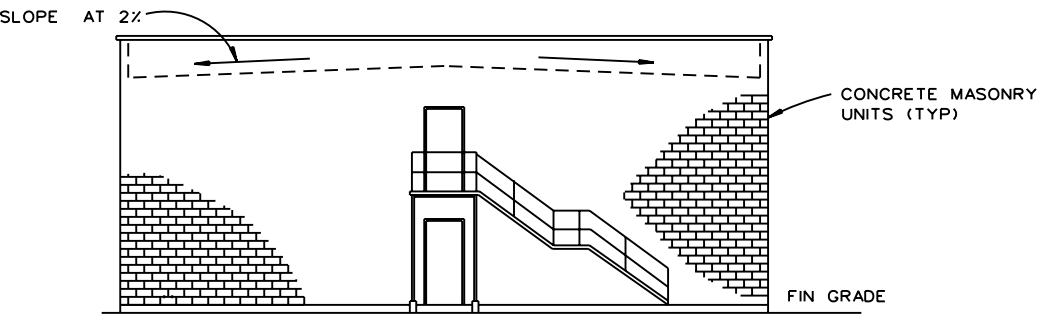
ELEVATION A
SCALE: 1:50



ELEVATION B
SCALE: 1:50



ELEVATION C
SCALE: 1:50



ELEVATION D
SCALE: 1:50

ALL DIMENSIONS ARE IN MILLIMETERS (mm) UNLESS OTHERWISE NOTED

Rev.	Date	Description

Date:	Rev.:
Designed by:	Design file no.:
Drawn by:	Drawn code:
Reviewed by:	File name: \$TID033.DOC
Submitted by:	Plot date:
	Plot scale:

U. S. ARMY ENGINEERING AND SUPPORT CENTER, HUNTSVILLE HUNTSVILLE, ALABAMA
1 JUL 2008

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