ANFEH - COMPOSTING STATION

PROJECT BRIEF

INTRODUCTION:

The Diverting Waste by Encouraging Reuse and Recycling Activity (DAWERR) is a five-year activity funded by the United States Agency for International Development (USAID) that aims to establish sustainable solid waste diversion and valorization solutions in collaboration with municipalities in various rural areas of Lebanon, thereby improving the social, environmental, and economic well-being of Lebanese citizens. To address the challenges and harness the opportunities in Lebanon's SWM sector, DAWERR is implementing a phased research and development (R&D) approach to execute its activities.

In DAWERR's second phase and building on the lessons learned from the pilot, DAWERR is supporting three groupings of municipalities consisting of 3 to 4 municipalities across Lebanon. Among the three groupings, DAWERR is targeting the Anfeh grouping, which consists of three municipalities: Bechmezine, Kfarhazir, Fih and Anfeh (Hosting the composting station), and their local communities to develop sustainable composting value chains for organic waste, including source separation, collection, and composting of organic waste through the construction of small-scale, low-tech (with spare parts available in the local market), low-cost (capital and O&M) composting stations and strengthening existing value chains for recyclable materials with the aim to divert solid waste from landfills and promote waste valorization.

DAWERR is facilitating a collaboration model between the three municipalities and is providing targeted technical, financial, and business support to design, implement, and manage a joint comprehensive Solid Waste Management (SWM) solution.

SUMMARY OF CONSTRUCTION ACTIVITIES AND PROVISION OF EQUIPMENT

DAWERR will construct a composting station - container composter, and conduct training to the Municipality/Operator to operate and maintain the station and ensure its sustainability beyond the life of the Activity as follows:

I. Construction Activities:

a. Municipality Contribution:

The municipality will be responsible for obtaining the necessary permits and approvals for the composting station (including establishment permit and construction permit) from the related authorities and will contribute to the construction works in the selected plot/site (plot#3715, Anfeh) that will host the composting station including:

- I. The topographic surveys during the project implementation, when needed.
- 2. Planting trees all around the project's fence.

Municipality work contribution will be implemented under the design and supervision of DAWERR consultant engineer.

b. **DAWERR Contribution**:

DAWERR will be responsible for the following:

- I. The earth works and land's preparation including excavation works, base coarse layer, etc.
- 2. The reinforced concrete works for block A, and the platforms under block B including blinding concrete, foundations, tie beams, channels and pits, slab on grade, columns, retaining walls, cover slabs, etc.
- 3. The steel works including: the construction of Block A steel hangar, The steel fence, the project's gates, etc.
- 4. Finishing for the Block A including partition, plastering, painting, water-proofing, doors, windows, tiling, etc.
- 5. Electrical installation including power, lighting and low current, networks, earthing, etc.
- 6. Mechanical installation including drainage and water supply networks, sanitary fixtures for the reception's toilet, etc.
- 7. Landscaping works including the asphalting of the external yards, etc.

. Provision of Equipment:

Once the construction phase is completed, DAWERR will provide and install the following equipment through other contractors:

- Three container composter 40' (Blocks B) with all its related equipment.
- One Waste Water treatment unit.
- One screening machine to screen the compost produced.
- One generator for the electrical power supply.
- Solar Photovoltaic (PV) system for the Electrical power supply.

ANFEH COMPOSTING FACILITY LIST OF ARCHITECTURAL INTERMEDIARY DESIGN DRAWINGS

Sheet Number	SHEET TITLE	SCALE
A-01	PROJECT BRIEF & LIST OF DRAWINGS	N.T.S.
A-02	MASS PLAN	1/200
A-03	GROUND FLOOR GENERAL PLAN	1/100
A-04	TOP OF ROOF GENERAL PLAN	1/100
A-05	SECTIONS AA & BB	1/100
A-06	ELEVATIONS	1/100
A-07	INDUSTRIAL PRODUCTION LINE AND EQUIPMENT	1/100



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DAWERR

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GENERAL NOTES

3-ALL LEVELS ARE IN METERS

1-THIS DRAWING IS NOT TO BE SCALED, ONLY WRITTEN DIMENSIONS ARE TO BE FOLI 2-ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED.

KFY PI AN:

0 12/05/2023 INTERMEDIARY DESIGN RM RM RH RH

REV. DATE MODIFICATION DRAWN DESIGNED CHECKED APPROVED

LOT:

ANFEH 3715

<u>Project Name</u>

COMPOSTING STATTION ANFEH

DRAWING TITLE:

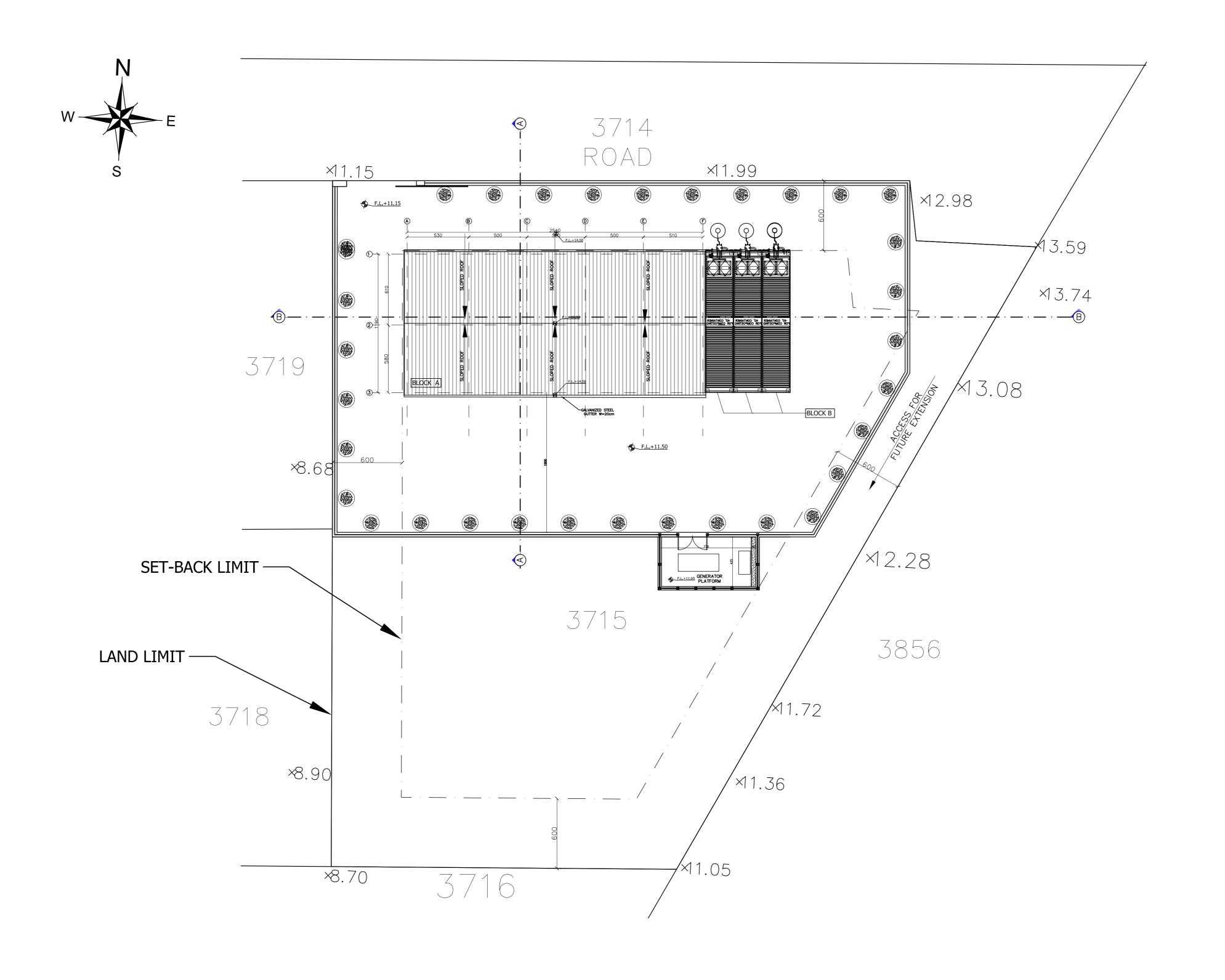
PROJECT BRIEF & LIST OF DRAWINGS

A01

DRAWING NUMBER

SCALE : 1/100 DATE :

DATE: 12/05/2023





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KEY PLAN:

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<u>Project Name</u>

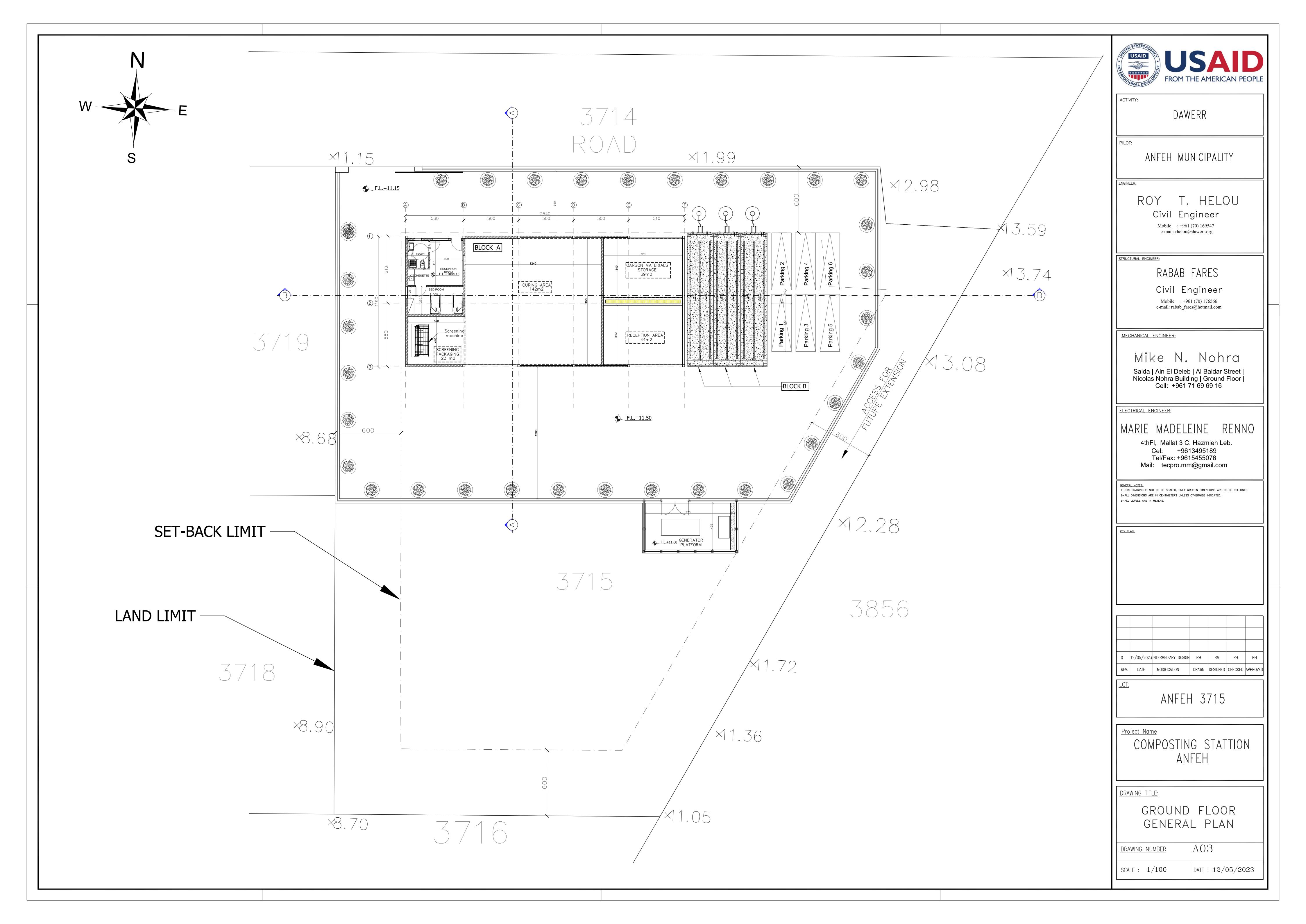
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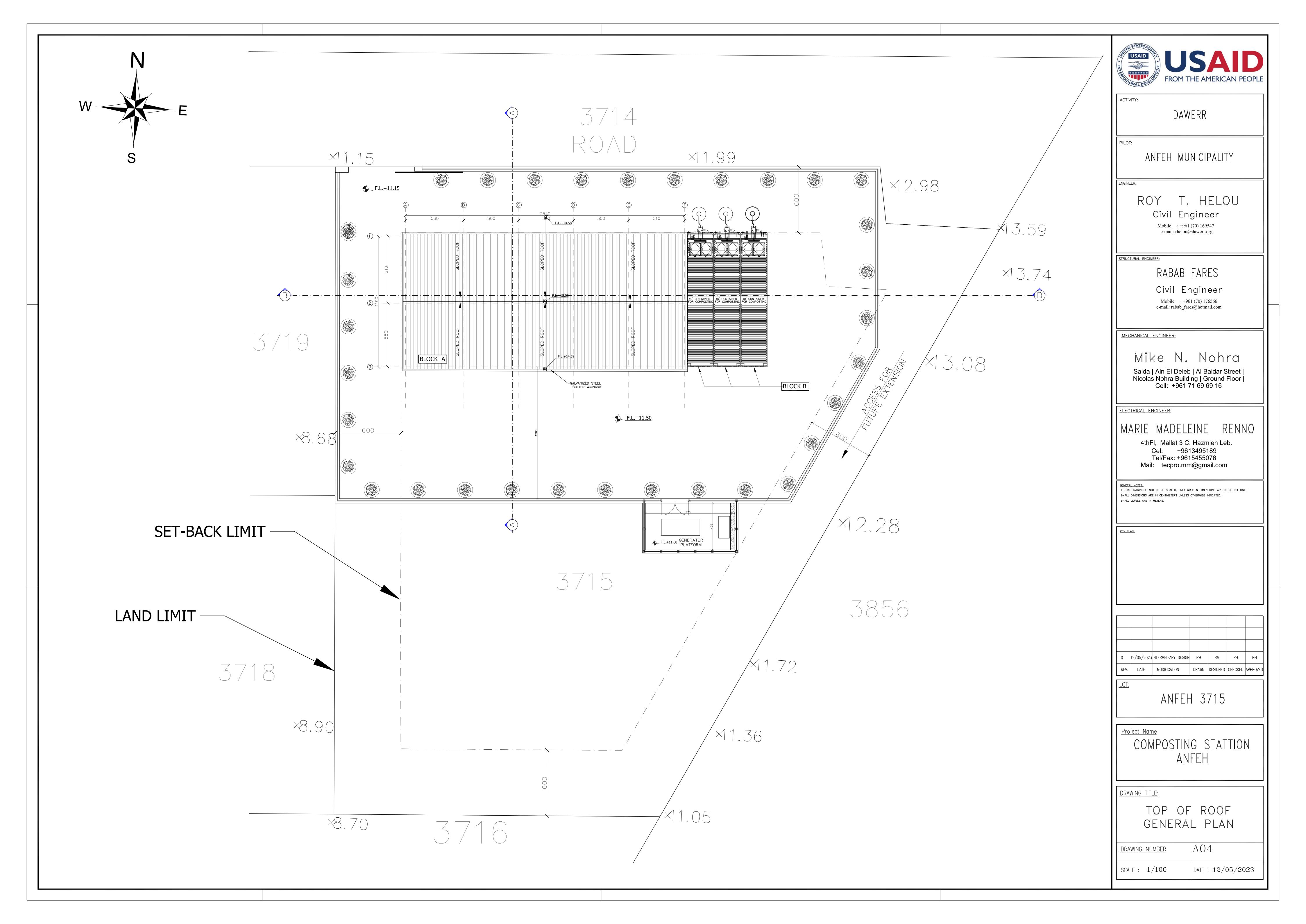
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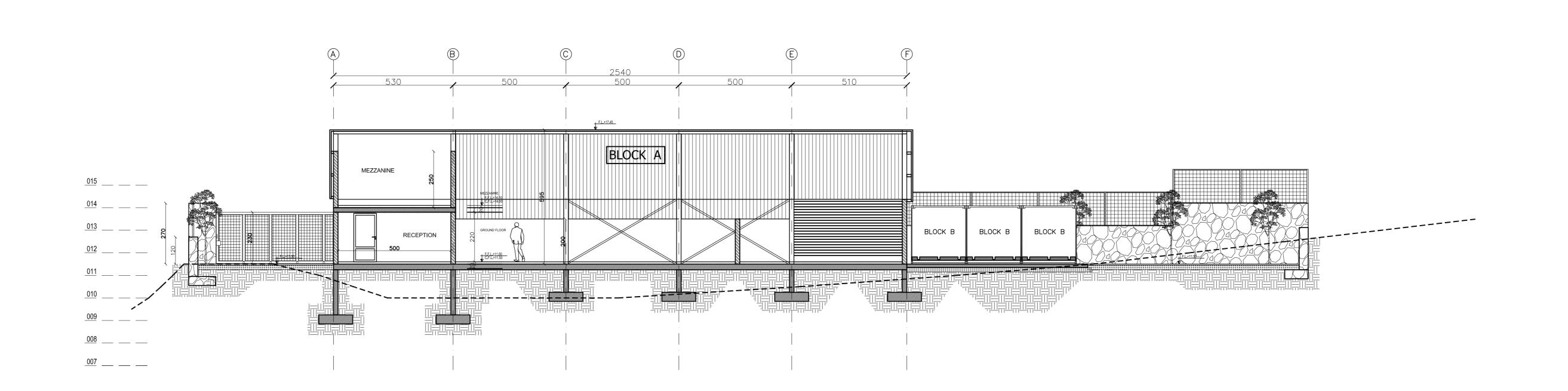
MASS PLAN

DRAWING NUMBER A02

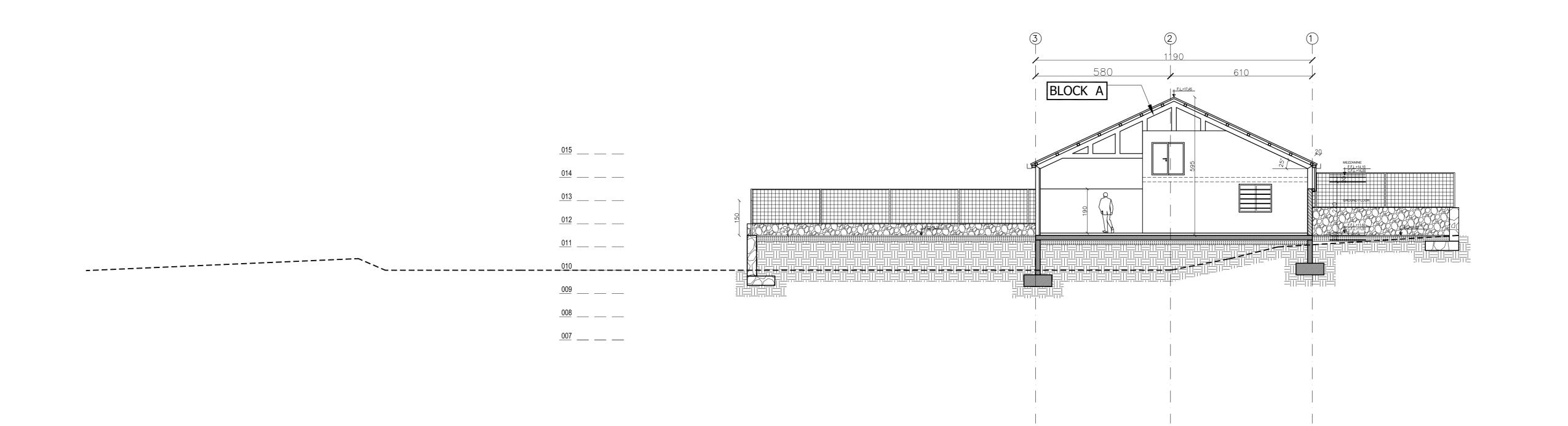
SCALE: 1/200 DATE: 12/05/2023







SECTION AA



SECTION BB



<u>ACTIVIT</u>

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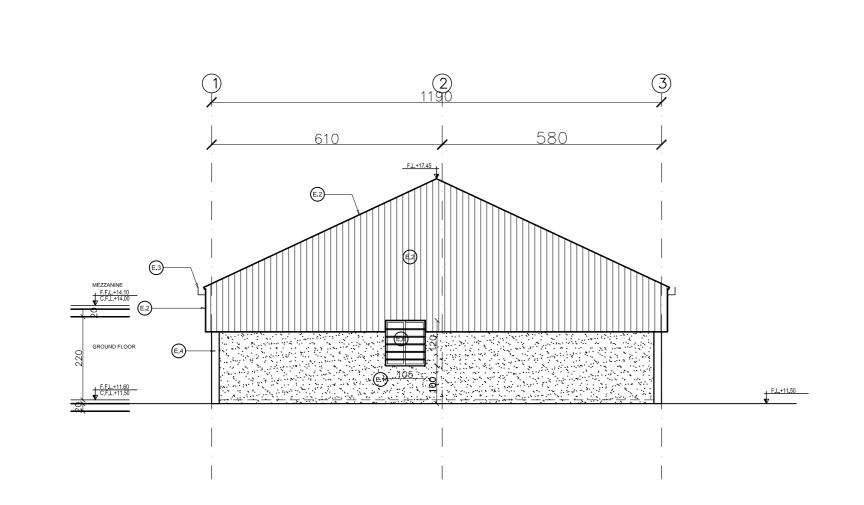
<u>DRAWING TITLE:</u>

SECTIONS AA & BB

drawing number AO5

AUU

SCALE: 1/100 DATE: 12/05/2023



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ANFEH 3715

<u>Project Name</u>

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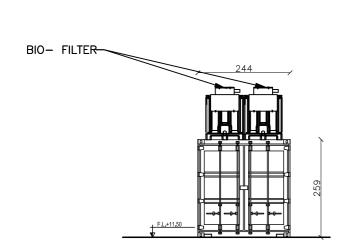
DRAWING TITLE:

ELEVATIONS

A06 DRAWING NUMBER

SCALE : 1/100 DATE: 12/05/2023

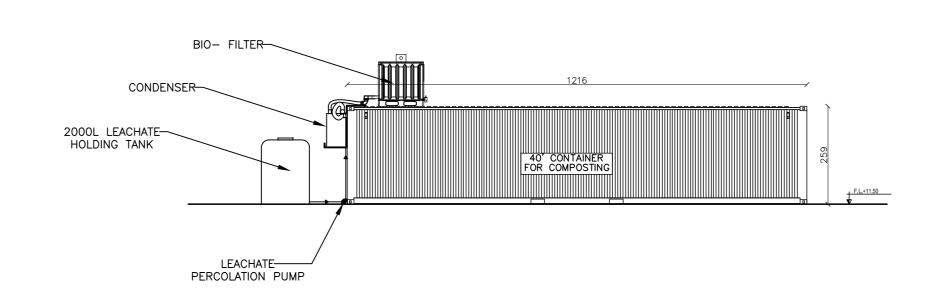
BLOCK A NORTH ELEVATION



BLOCK B: 40' CONTAINER FOR COMPOSTING MAIN ELEVATION

BLOCK A

WEST ELEVATION



BLOCK B: 40' CONTAINER FOR COMPOSTING

EXTERNAL FINISHES LEGEND

(E.1) MONOCOUCHE PAINT ON CEMENT SAND PLASTERED LAYER

(E.2) CORRUGATED G.I. SHEET

E.3 GALVANIZED STEEL SHEETS
GUTTER 2.5MM THICK

STEEL COLUMN - REFER TO THE STRUCTURAL DRAWINGS FOR PAINTING DETAILS

(E.5) ROLLING SHUTTER STEEL DOOR

SIDE ELEVATION

(E.6) ALUMINUM WINDOW WITH STEEL PROTECTION

