

INSARIEH - 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 Insarieh grouping, which consists of four municipalities: Sarafand, Loubieh, Saksakieh, and Insarieh (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 four 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 - bunker 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:

1. 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#48, Insarieh) that will host the composting station including:

1. The topographic surveys during the project implementation, when needed.
2. Rehabilitation of the access road leading to the project's site.
3. The construction of cyclopean concrete walls for the existing canal adjacent to the site.
4. 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:

1. The earth works and land's preparation including excavation works, base coarse layer, etc.
2. The reinforced concrete works of blocks A & 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, B 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. Composting units' mechanical and electrical networks.
8. Landscaping works including the asphaltting of the external yards, etc.

2. Equipment:

Once the construction phase is completed, DAWERR will provide and install:

1. One Waste Water treatment unit.
2. One screening machine to screen the compost produced.
3. One generator for the electrical power supply.
4. Solar Photovoltaic (PV) system for the Electrical power supply.

INSARIEH 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	BASEMENT FLOOR GENERAL PLAN	1/100
A-04	GROUND FLOOR GENERAL PLAN	1/100
A-05	TOP OF ROOF GENERAL PLAN	1/100
A-06	SECTIONS AA & BB	1/100
A-07	ELEVATIONS	1/100
A-08	INDUSTRIAL PRODUCTION LINE AND EQUIPMENT - B1	1/100
A-09	INDUSTRIAL PRODUCTION LINE AND EQUIPMENT - GF	1/100



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2-ALL DIMENSIONS ARE IN CENTIMETERS UNLESS OTHERWISE INDICATED.
3-ALL LEVELS ARE IN METERS.

KEY PLAN:

REV.	DATE	MODIFICATION	DRAWN	DESIGNED	CHECKED	APPROVED
0	14/04/2023	INTERMEDIARY DESIGN	RM	RM	RH	RH

LOT:
INSARIEH

Project Name
COMPOSTING STATION
INSARIEH

DRAWING TITLE:
PROJECT BRIEF & LIST
OF DRAWINGS

DRAWING NUMBER
A01

SCALE : N.T.S. DATE : 14/04/2023

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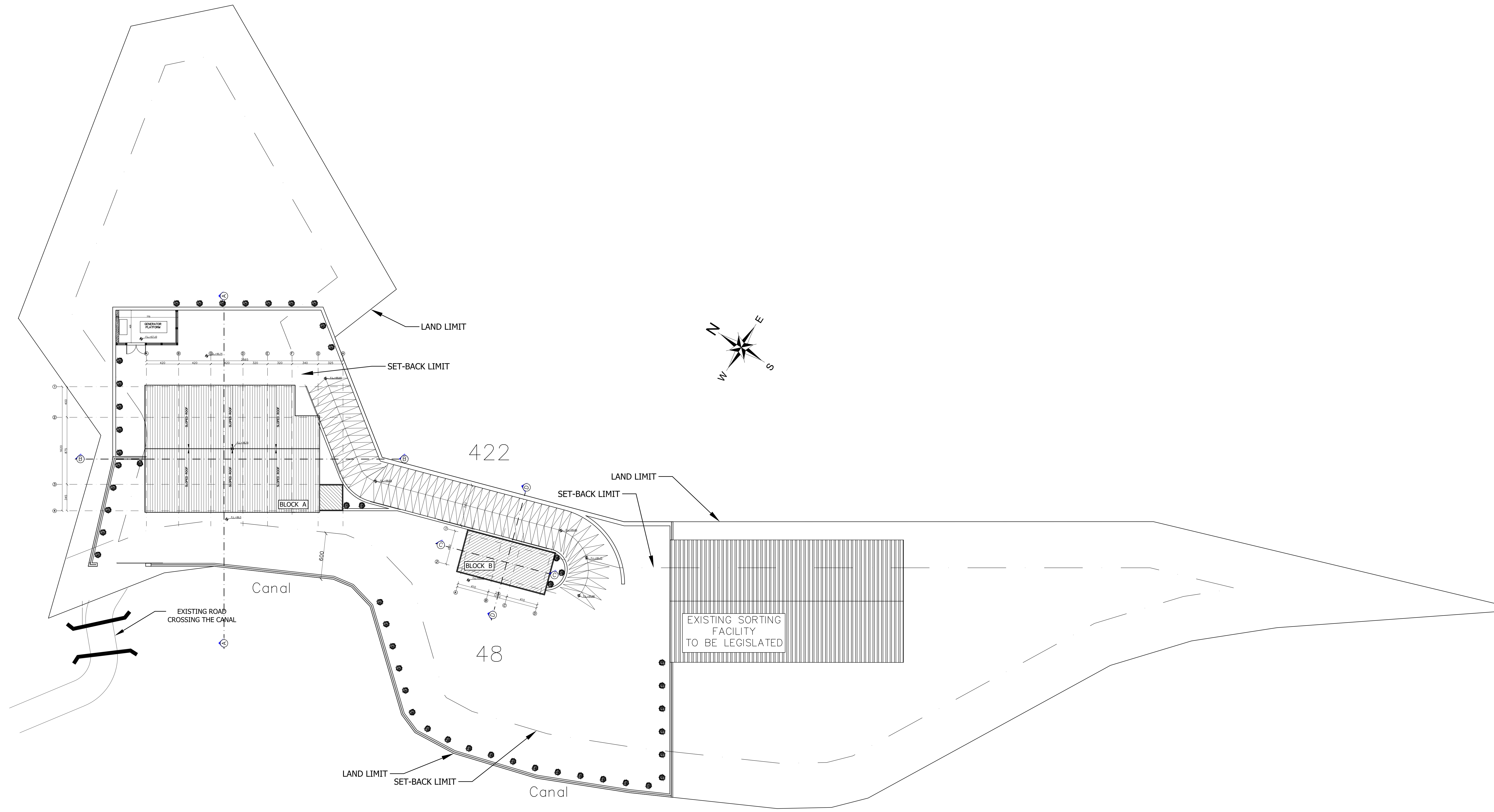
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INSARIEH

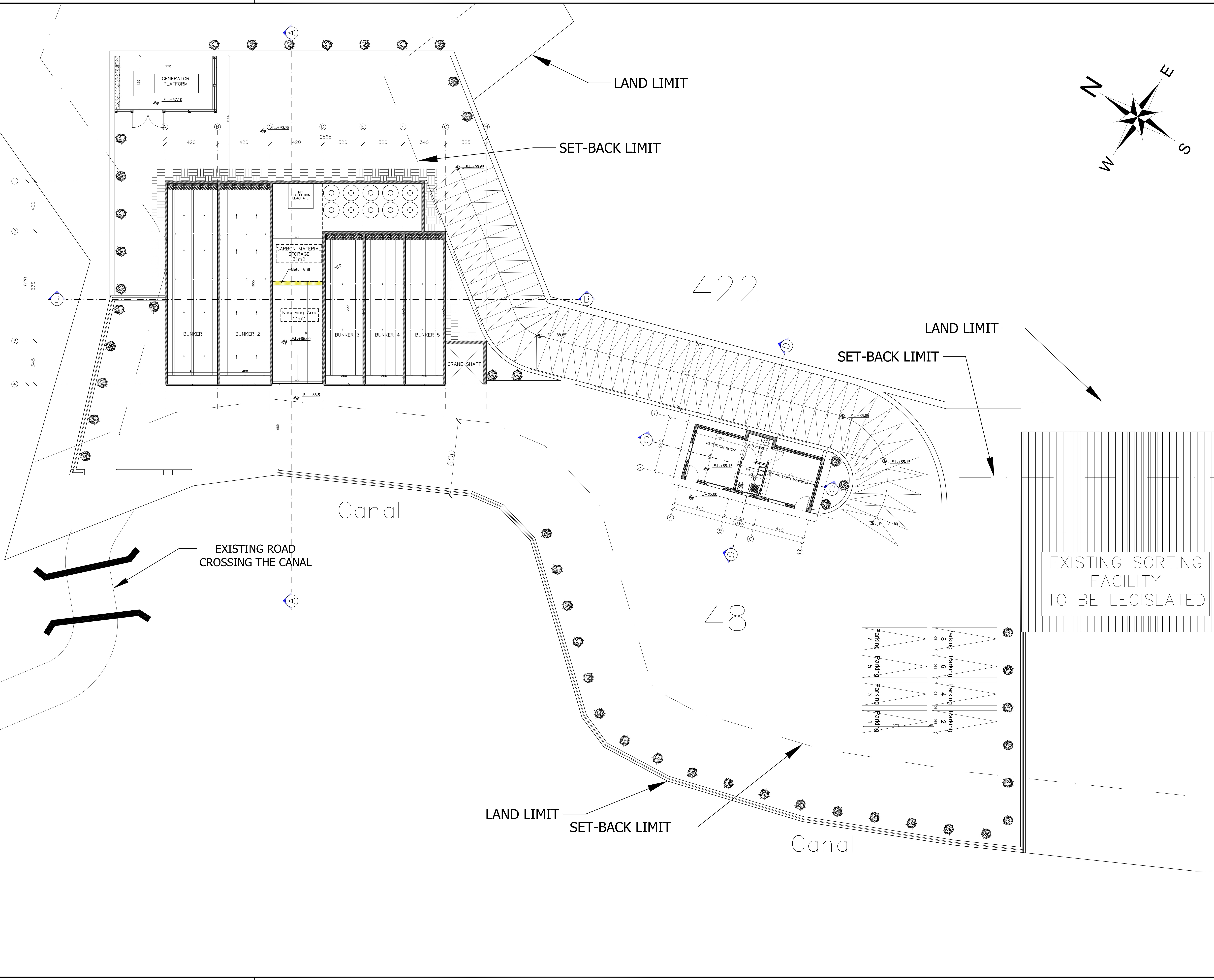
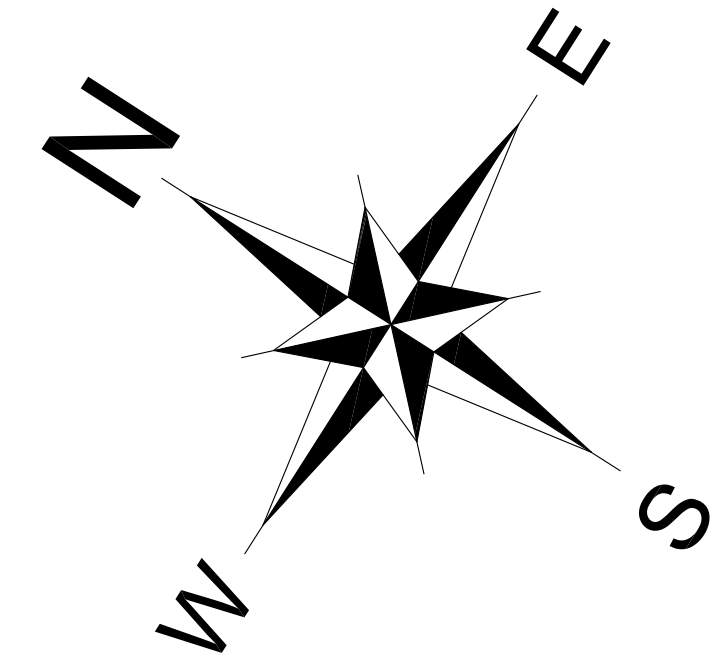
Project Name
**COMPOSTING STATION
INSARIEH**

DRAWING TITLE:
MASS PLAN

DRAWING NUMBER **A02**

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





ACTIVITY:
DAWERR

PILOT:
INSARIEH MUNICIPALITY

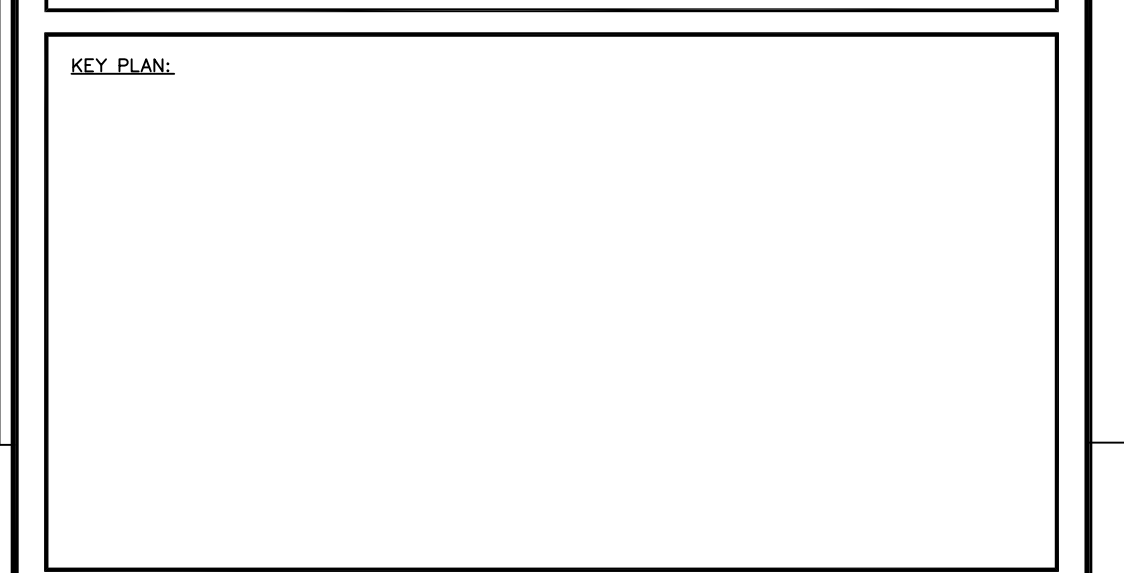
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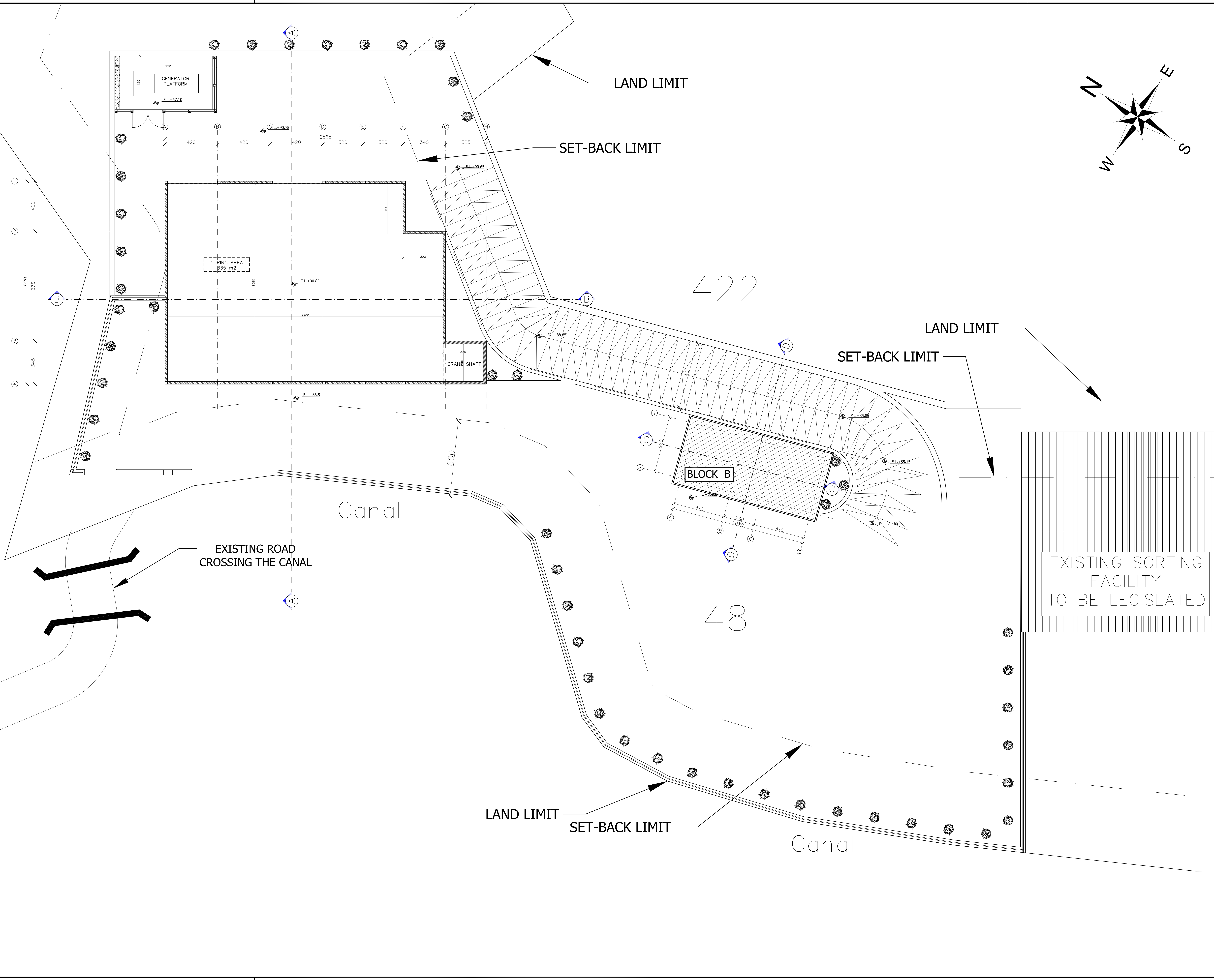
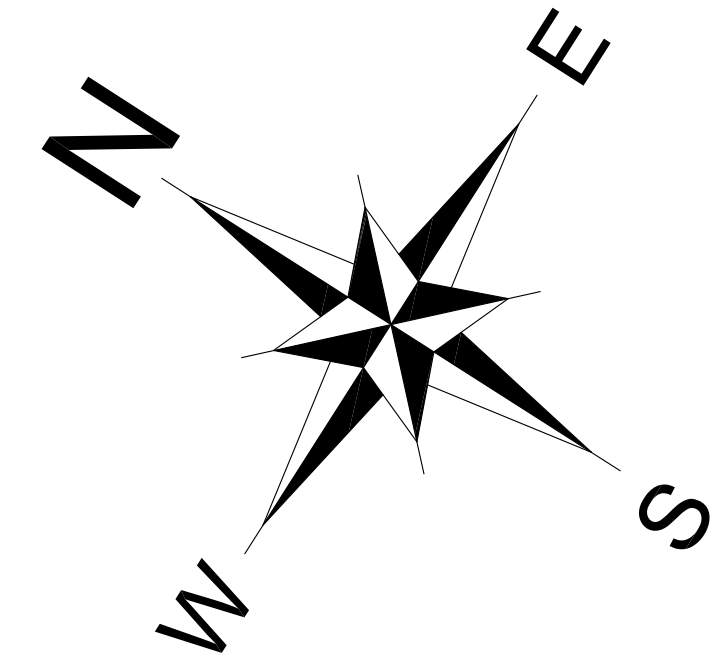
LOT:
INSARIEH

Project Name
**COMPOSTING STATION
INSARIEH**

DRAWING TITLE:
**BASEMENT FLOOR
GENERAL PLAN**

DRAWING NUMBER **A03**

SCALE : 1/100 DATE : 14/04/2023



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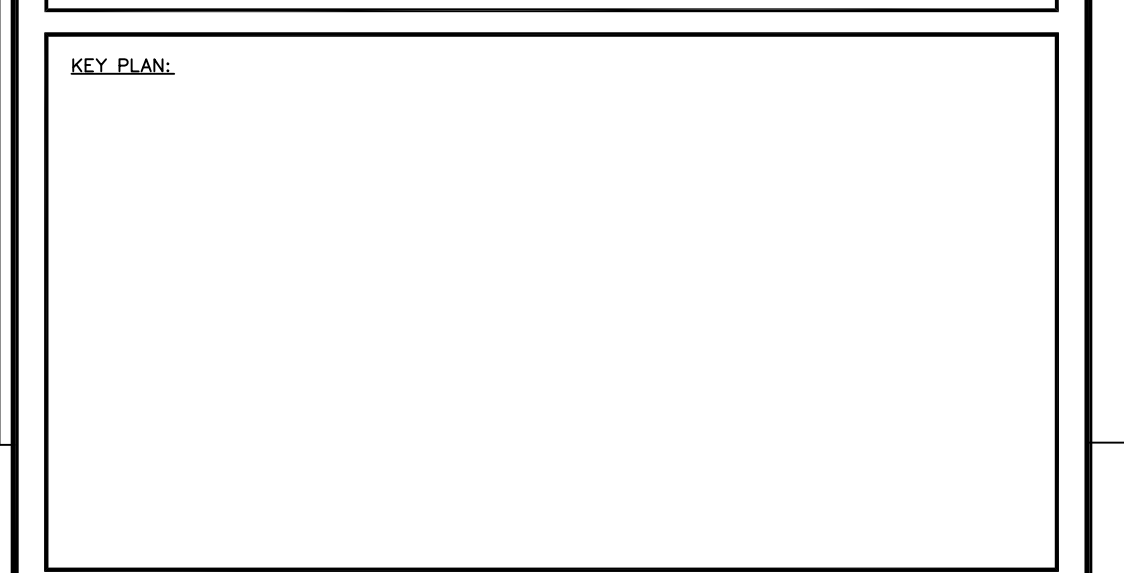
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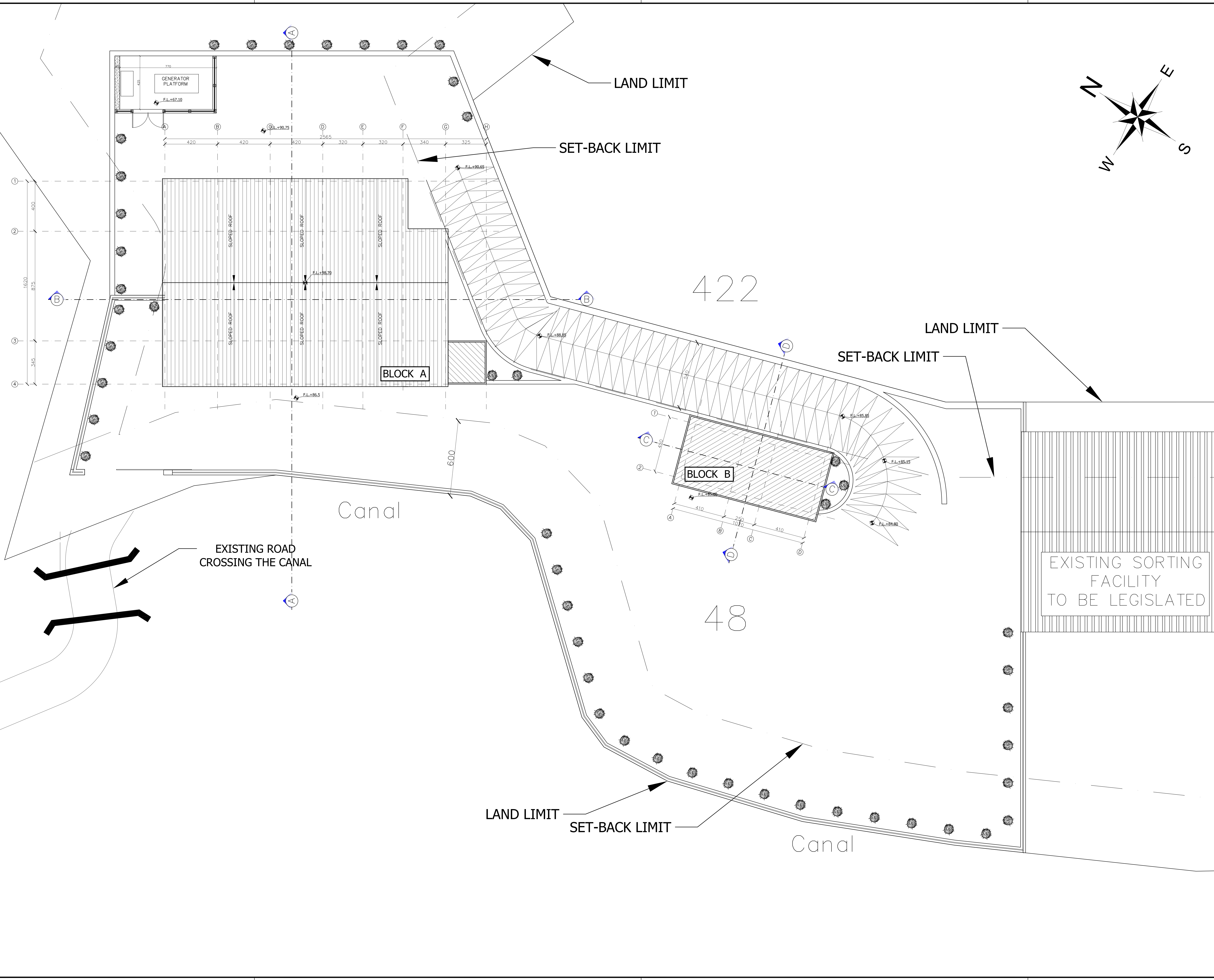
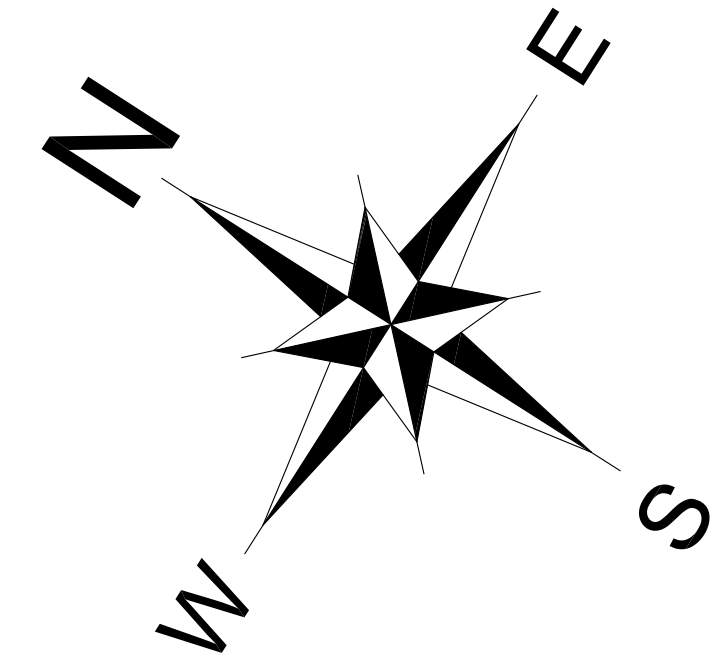
LOT:
INSARIEH

Project Name
**COMPOSTING STATION
INSARIEH**

DRAWING TITLE:
**GROUND FLOOR
GENERAL PLAN**

DRAWING NUMBER **A04**

SCALE : 1/100 DATE : 14/04/2023



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DRAWING TITLE:
**TOP OF ROOF
GENERAL PLAN**

DRAWING NUMBER
A05

SCALE : 1/100 DATE : 14/04/2023

BLOCK A



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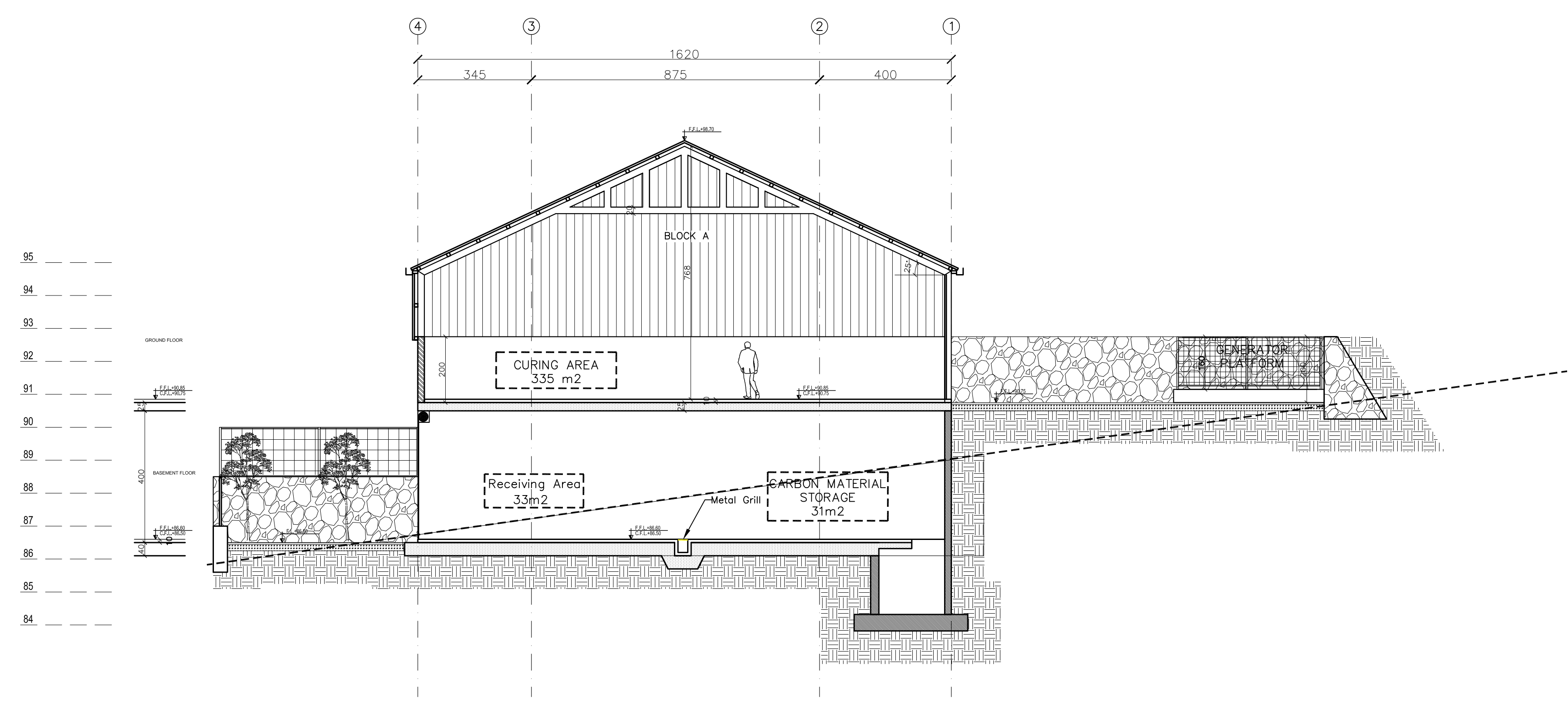
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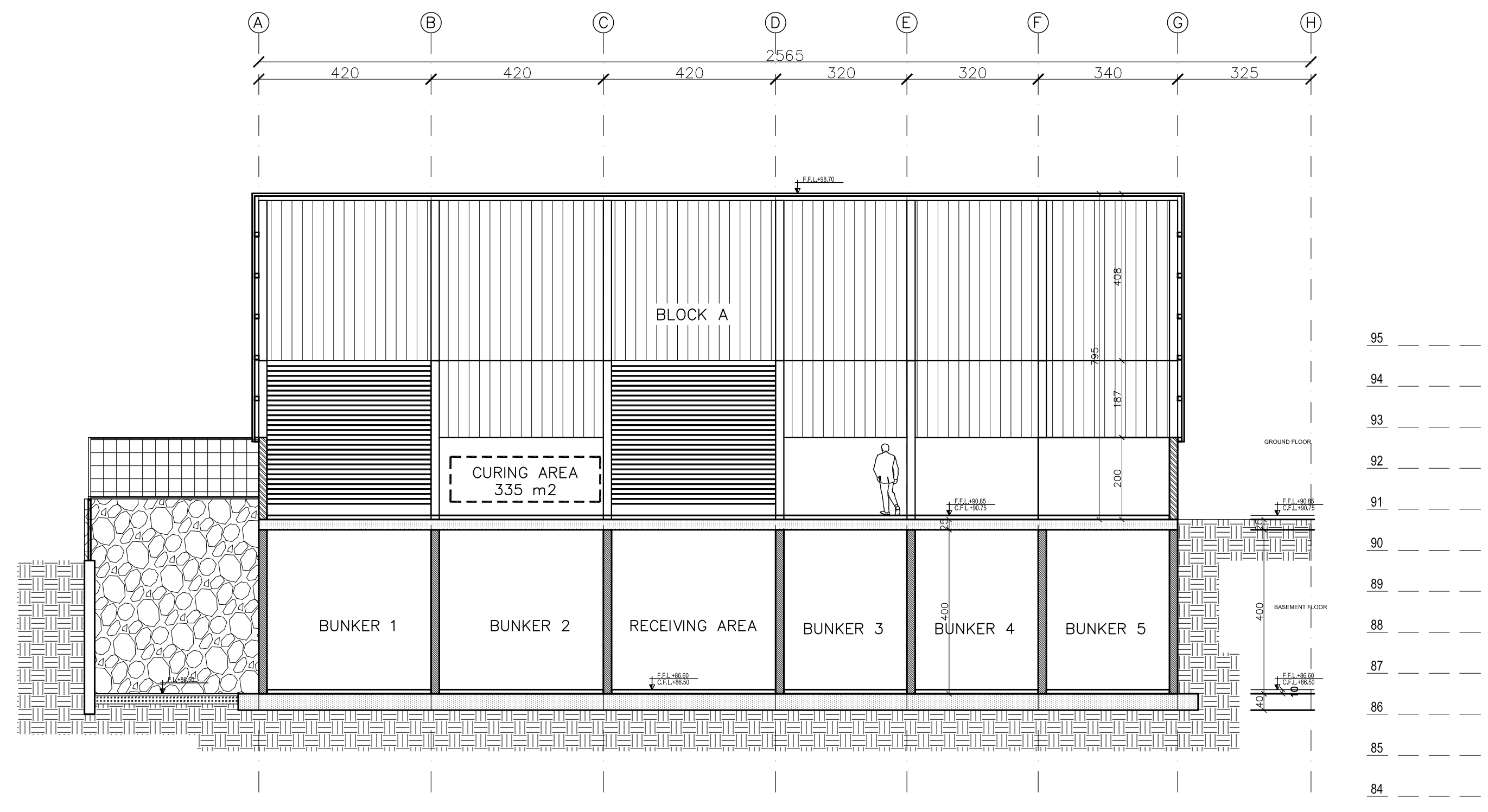
DRAWING TITLE:
**SECTIONS
AA & BB**

DRAWING NUMBER
A06

SCALE : 1/100 DATE : 14/04/2023

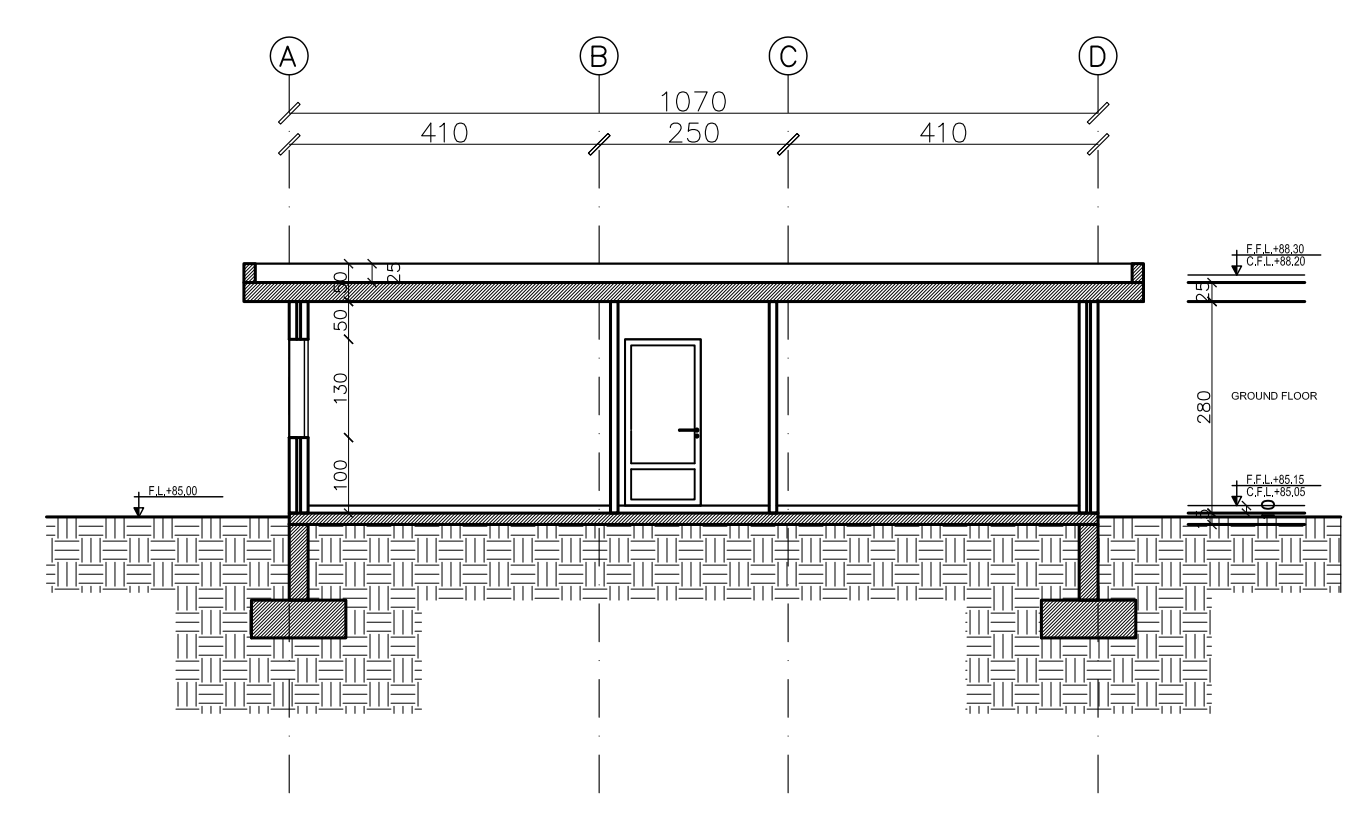


SECTION AA

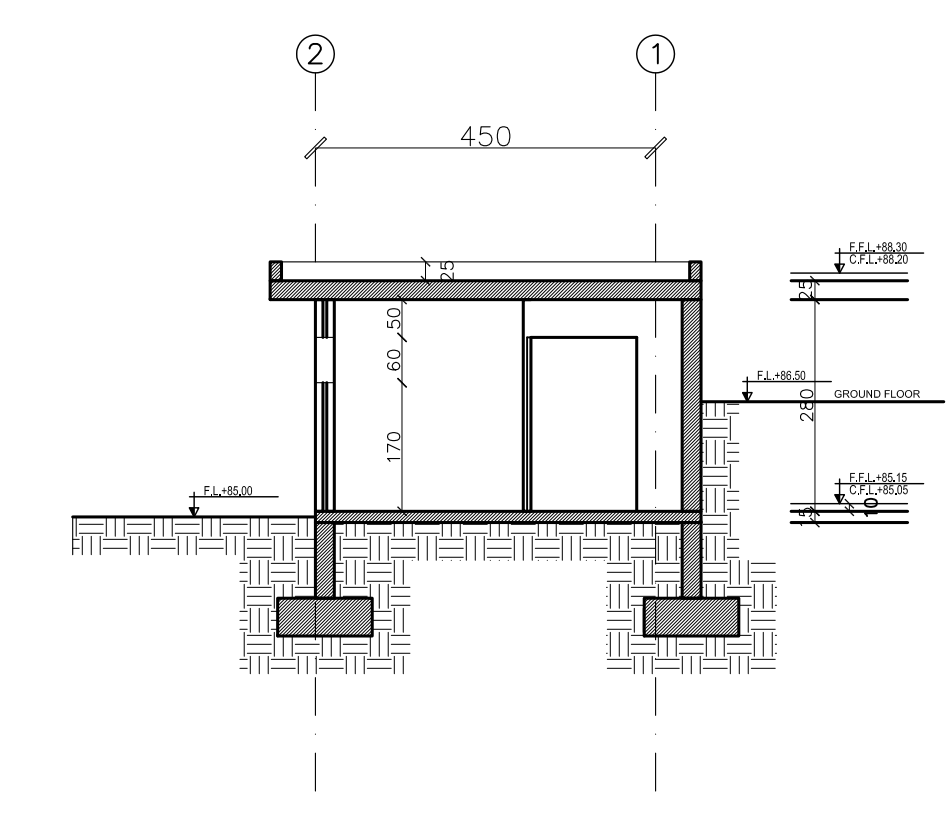


SECTION BB

BLOCK B



SECTION CC



SECTION DD

BLOCK A



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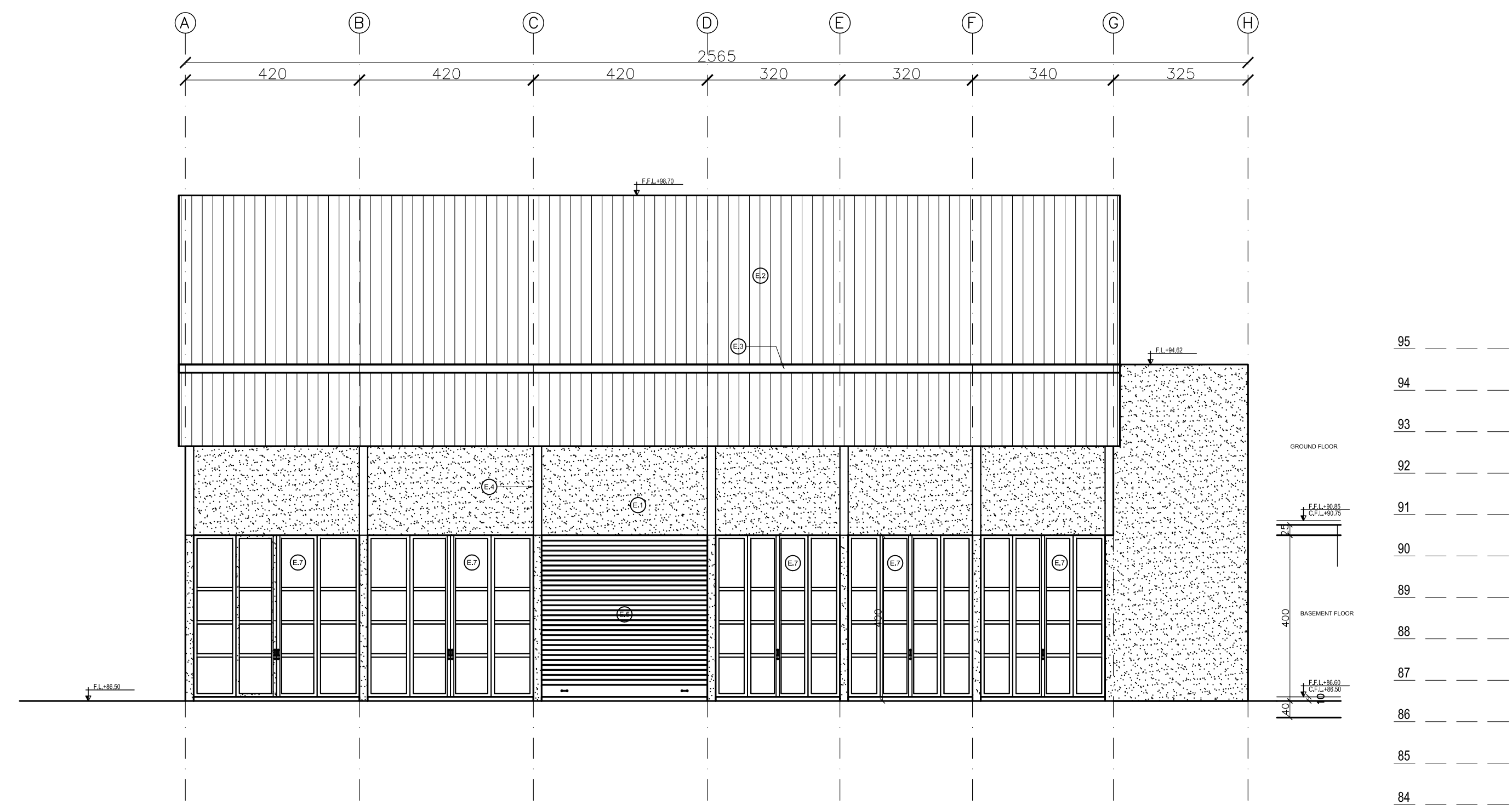
LOT:
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Project Name
**COMPOSTING STATION
INSARIEH**

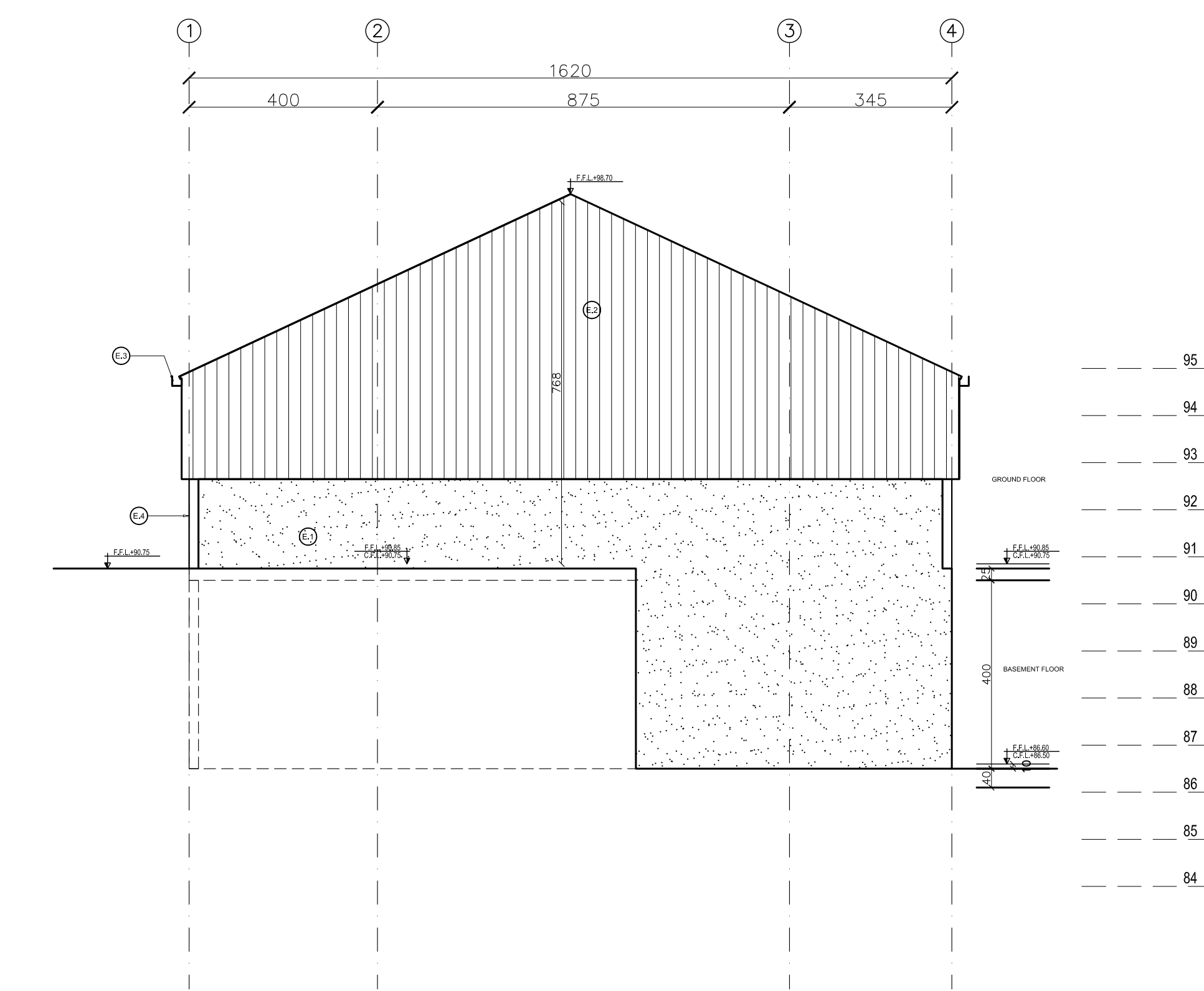
DRAWING TITLE:
ELEVATIONS

DRAWING NUMBER **A07**

SCALE : 1/100 DATE : 14/04/2023

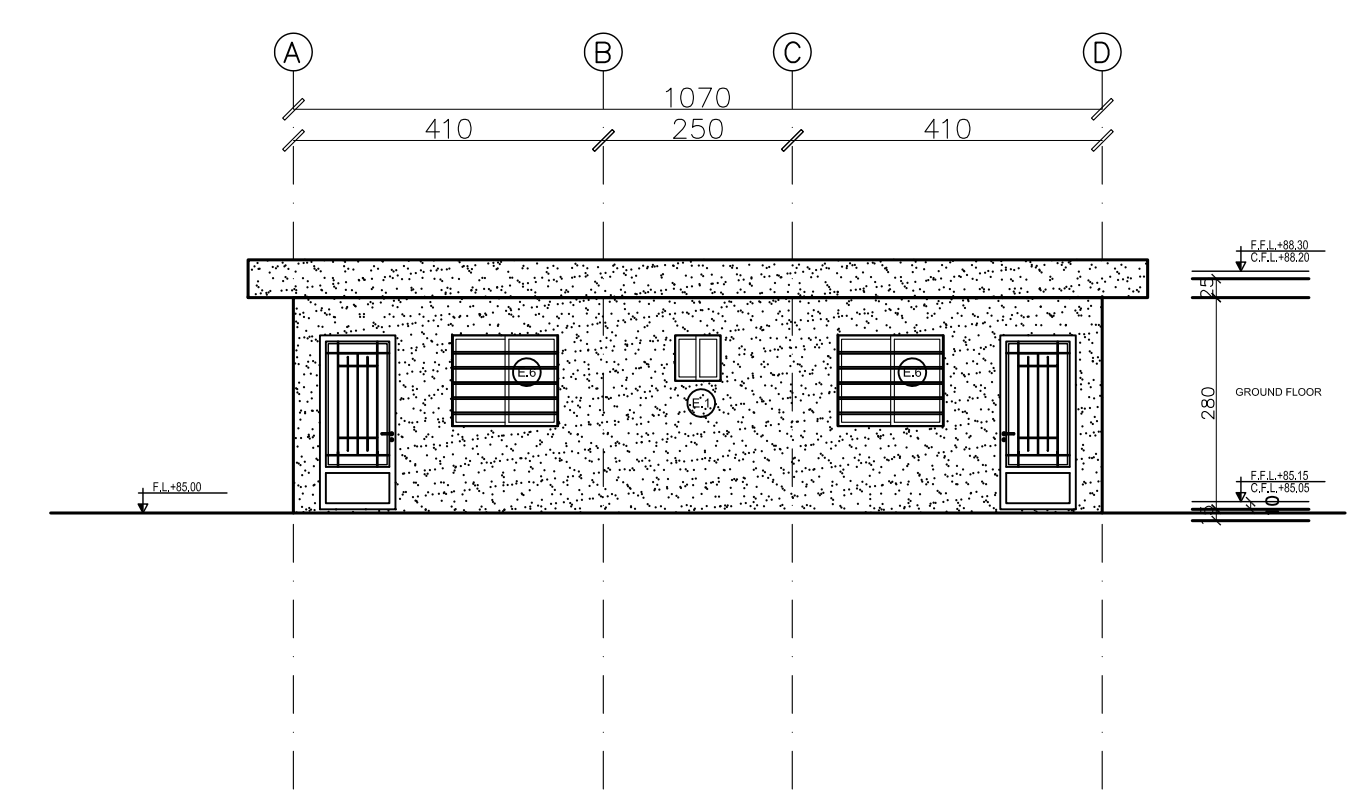


WEST ELEVATON

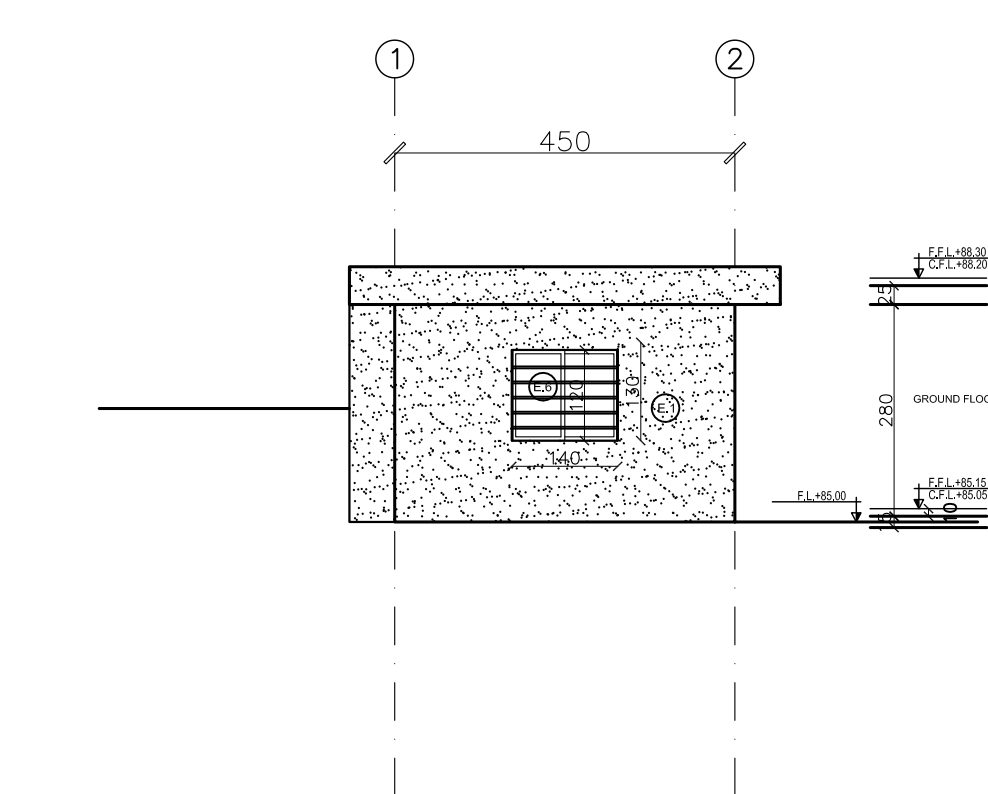


NORTH ELEVATON

BLOCK B



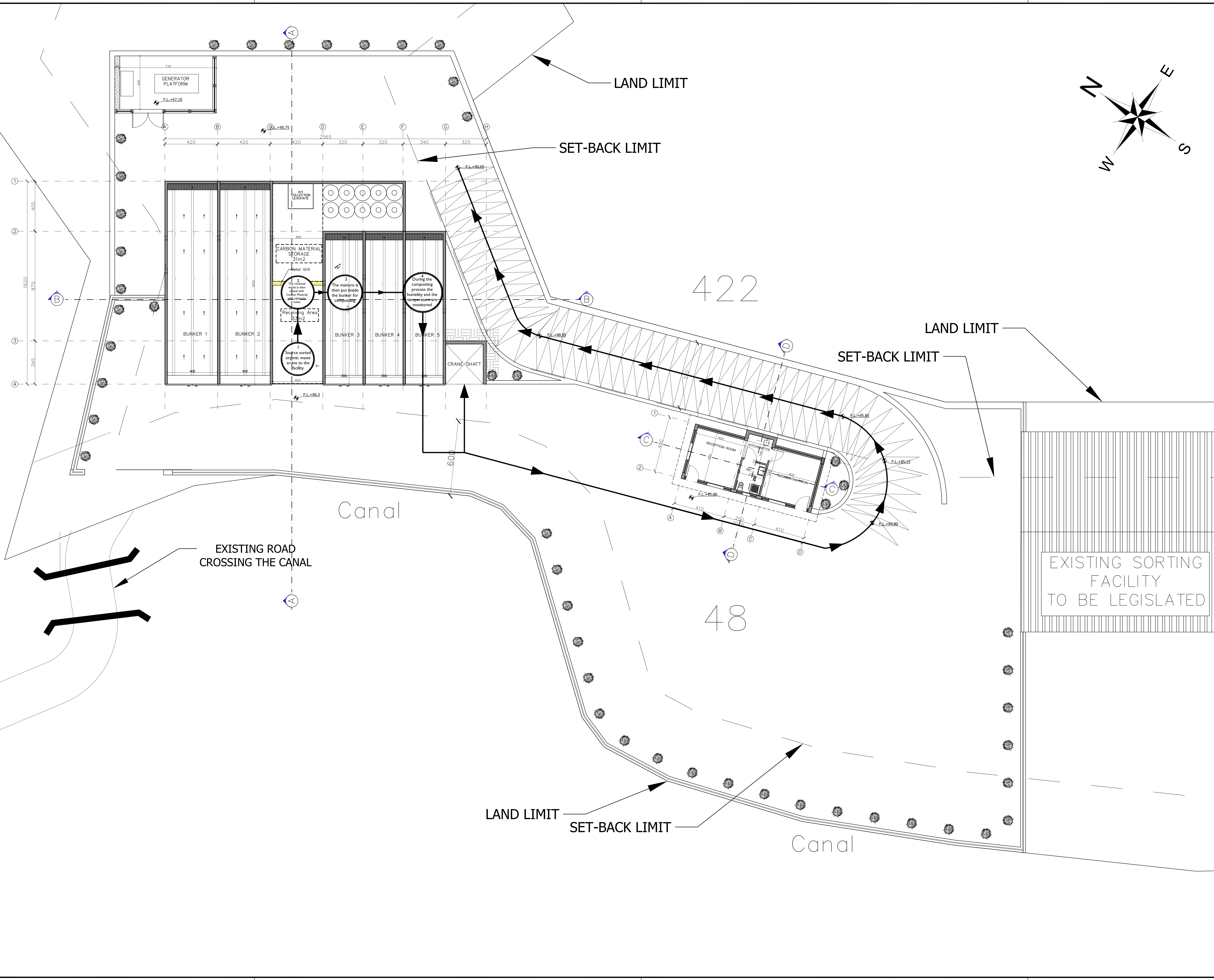
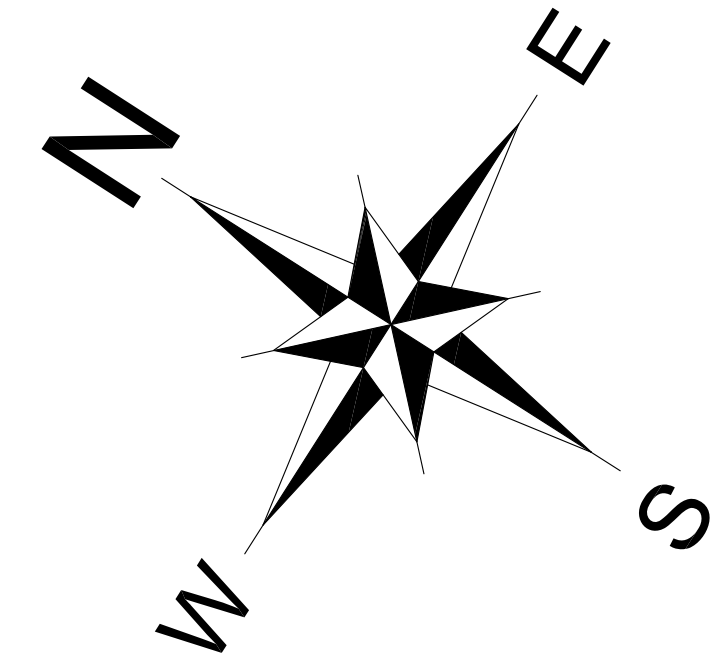
WEST ELEVATON



NORTH ELEVATON

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
- E.4 STEEL COLUMN - REFER TO THE STRUCTURAL DRAWINGS FOR PAINTING DETAILS
- E.5 ROLLING SHUTTER STEEL DOOR
- E.6 ALUMINUM WINDOW WITH STEEL PROTECTION



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KEY PLAN:
EXISTING SORTING FACILITY TO BE LEGISLATED

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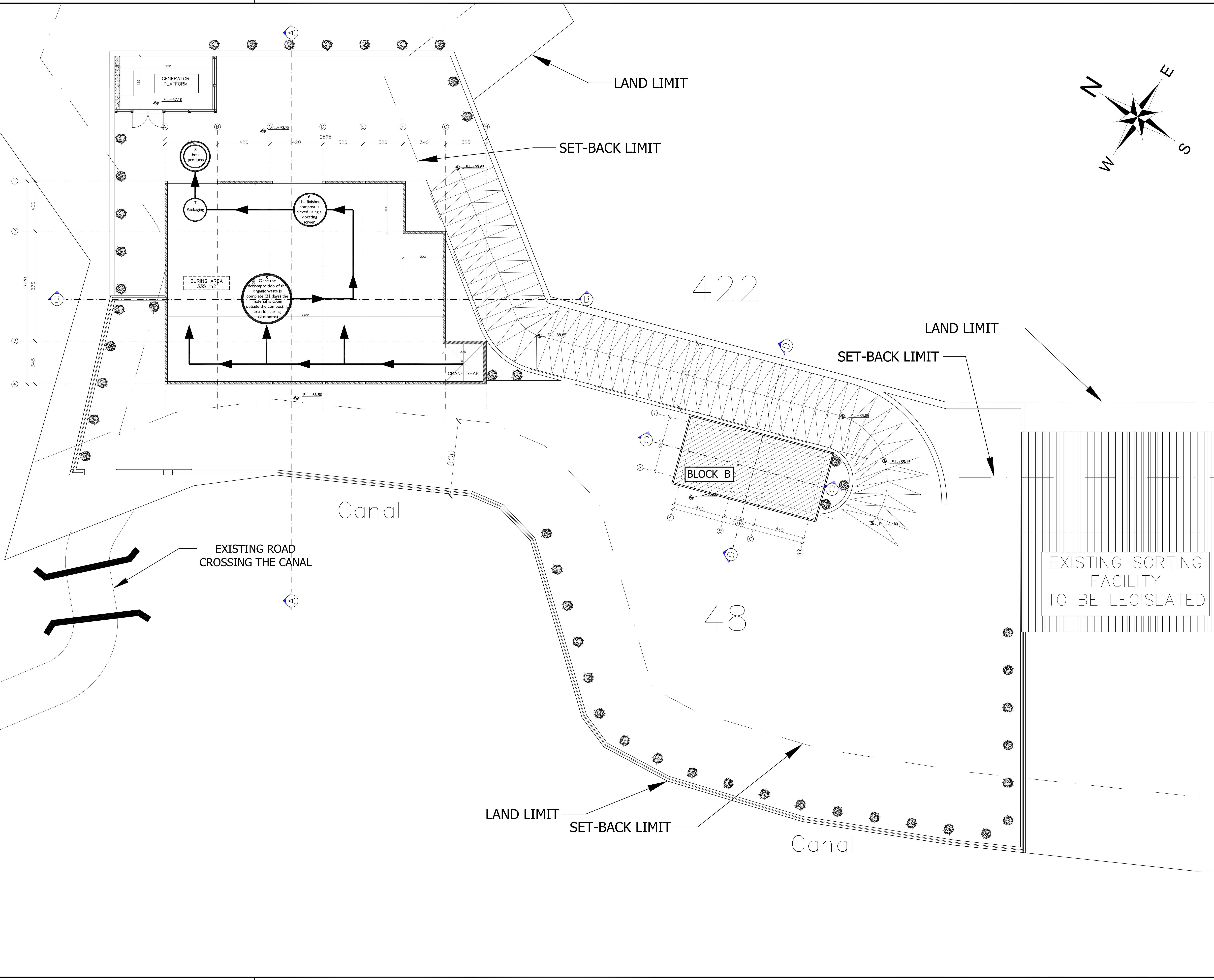
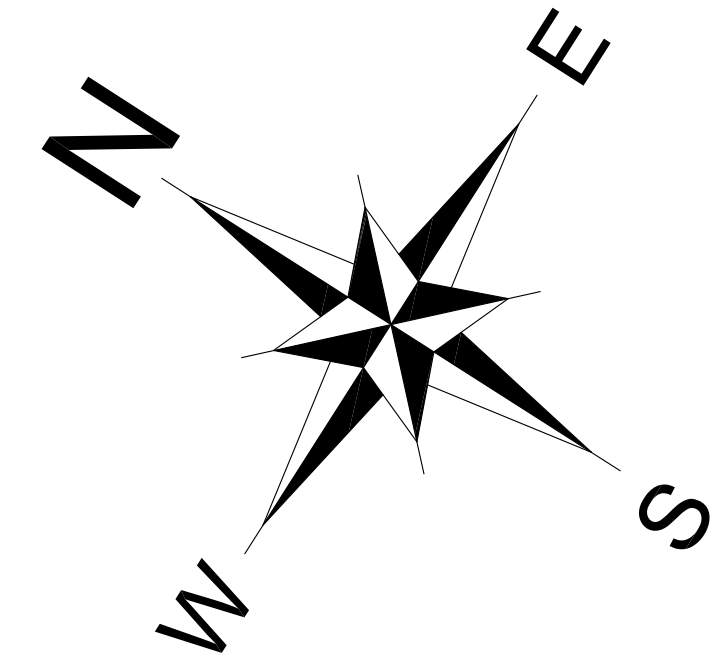
LOT:
INSARIEH

Project Name
COMPOSTING STATION INSARIEH

DRAWING TITLE:
INDUSTRIAL PRODUCTION LINE-B1

DRAWING NUMBER
A08

SCALE : 1/100 DATE : 14/04/2023



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LOT:
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Project Name
**COMPOSTING STATION
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DRAWING TITLE:
**INDUSTRIAL
PRODUCTION LINE –GF**

DRAWING NUMBER
A09

SCALE : 1/100 DATE : 14/04/2023