SPA WNP Ingenieurs
Layout en doorsneden

top view

Looking Plan
SCALE: 1:100

22000596.B08
Yara Sluiskil - Project CCS

&AE-0000-L-ZP 1001(EN)
N 980000
Matchline

CA91
32640
5440
34440
10500
E613
6 Bays
5440 x 10500 mm
(LxB, vendor input
Farnet)
E605
6
Substation2 (existing)
Firewater
Underground
(existing)
Potable Water
Underground
(existing)
V607
P605A
P605B
P605R
CA03
CA41
CA51
V602
Y605B
V603A
V603B
2
V606
V604
V601
T601
E609
E608
P606A
P606R
E616
Y605A
V605
E606
E611
E617
E610
S601
E612
F601
E607
&AE-0000-L-ZP 1001(EN)
E 625000
Matchline
new piperack over
existing road
(scope Yara)
CA00
CA05
7
P601A
P601R
C601 Typical Oil Unit CO2 Compressor
CA02
C601 Typical CO2 Compressor
Compressor House
1
E615
C602 Typical NH3 Compressor
E614
Compressor House Crane
Y604 Typical Oil Unit NH3 Compressor
Matchline
E 623145
&AE-0000-L-ZP 1001(EN)
LV Substation B340-002 (Linde Tag-Nr. EC03)
LV Substation B340-001 (Linde-Tag-Nr. EC02)
3
HV Substation B341 (Linde-Tag-Nr. EC01
4
85TR01
85TR04
85TR03
85TR02
85TR05
85TR06
B342 - Local Instrument Room CCS
5
Substation1 (existing)
Matchline
N 920000
&AE-0000-L-ZP 1001(EN)

Construction Areas	
CA00	Area not in LEDD scope
CA02	CO2 Compression / Refrigeration (Machine House)
CA03	Field Installation
CA05	Pipe Rack
CA41	Drying Unit
CA51	Rectification Unit
CA61	Tank Farm Unit
CA63	Ship Loading Unit
CA91	Cooling Water Unit

Equipments Process Area	
C601	CO2 Compressor Unit
C602	Refrigerant Compressor Unit
E605	Cooling Water Cooler (Air Cooler)
E606	CO2 Gas Pre-Cooler
E607	Regeneration Gas Heater
E608	CO2 Liquefier
E609	CO2 Reboiler
E610	CO2 Condenser
E611	CO2 Subcooler
E612	Vent Gas Heater
E613	Refrigerant Condenser (Air Cooler)
E614	Interstage Cooler
E615	After Cooler
E617	Export CO2 Gas Heater
F601	Particle Filter
P601 A/R	Condensate Pump
P605 A/B/R	Cooling Water Pump
P606 A/R	Refrigerant Pump
S601	Vent Gas Silencer
T601	CO2 Column
V601	Compressor Knock Out Drum
V602	Water Separator
V603 A/B	Dryer
V604	Suction Drum
V605	Refrigerant Receiver
V606	Refrigerant Economizer
V607	Cooling Water Expansion Vessel
V603	CO2 Ship Loading Station
V604	Oil Unit
V605	Air Purger

Notes:

- Reference Drawing &AE-0000-L-ZP 1012(EN), &AE-0000-L-ZP 1013(EN), &AE-0000-L-ZP 1014(EN) Equipment Arrangement CO2 Liquefaction Side Views
- Air cooler size E613 according vendor offer (Farnet)
- Size of compressor house currently defined by vendor compressor typicals (Siemens), to be finally defined after vendor selection

LEGENDA

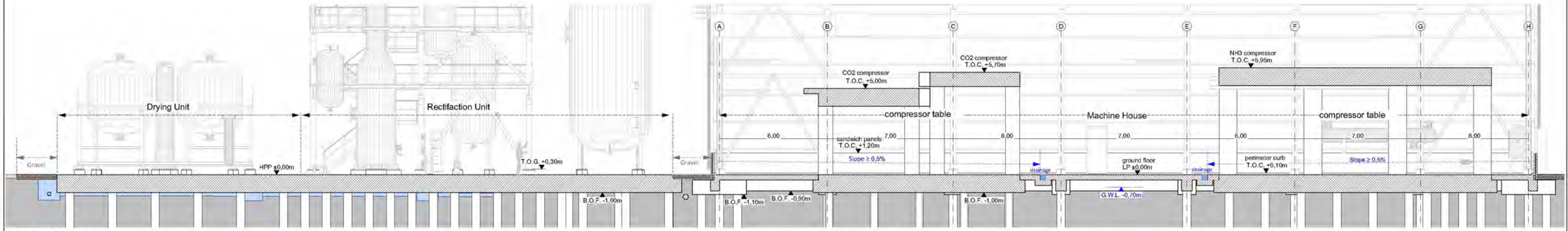
1 Nummering bouwwerken in B01

SCALE 1:100

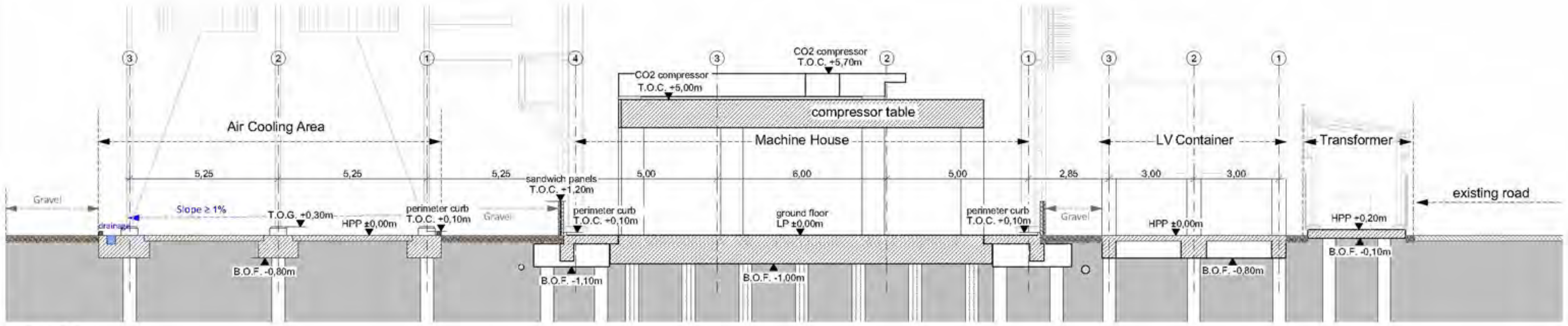
Carbon Capture Storage Plant, Sluiskil

Equipment Arrangement Drawing
CO2 Liquefaction
Overview

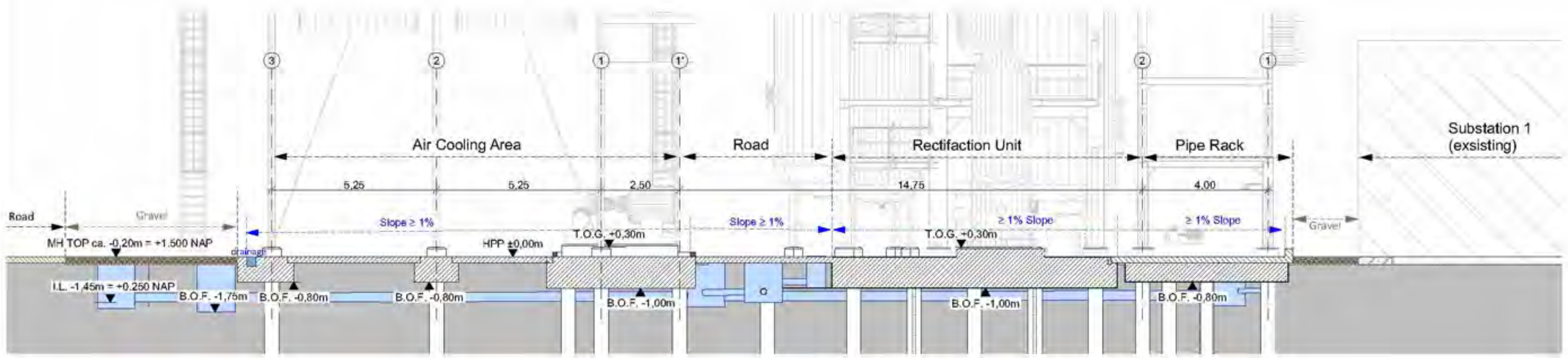
&AE-0000-L-ZP 1011(EN)
16471-P57-00010



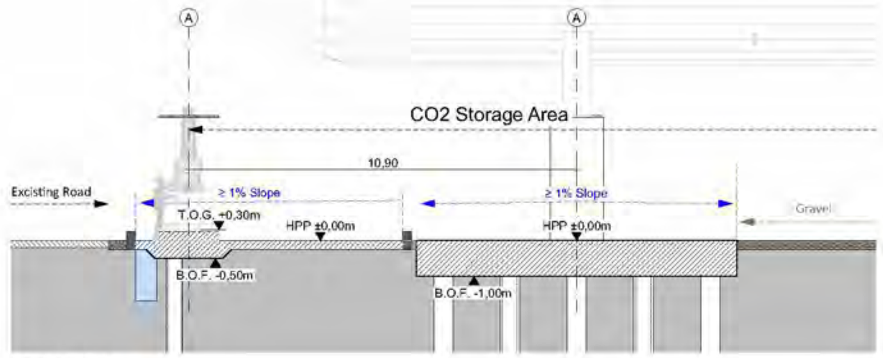
Section 1-1



Section 2-2



Section 3-3



Section 4-4

Legend

HPP	High Point Paving
HPG	High Point Gravel
NAP	Normal Amsterdam Pegel
MH	Manhole
T/B	Tob/ Bottom
TOC	Top of Concrete
TOG	Top of Grout
BOS	Bottom of Steel
BOF	Bottom of Foundation
I.L.	Invert Level
N.C.	Normally Closed
	Exsisting Road
	Exsisting Underground Facilities
	Exsisting Buildings
	Concrete Pavement
	Asphalt Road
	Walkway (Concrete Paver)
	Gravel
	Foundation Slab/ Beam
	Curb
	Concrete Pedestals (incl. Grouting)
	Precast Concrete Manhole
	Catch Basin
	Drainage Gutter
	Manhole
	Slope

0m 1m 2m 5m
Scale 1:75

GWL Ground Water Level

assumption:

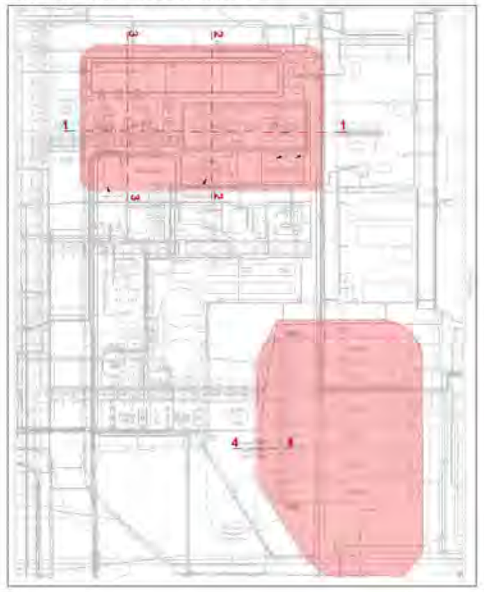
existing grade elavation is supposed to be between +1,40m and +1,50m NAP.

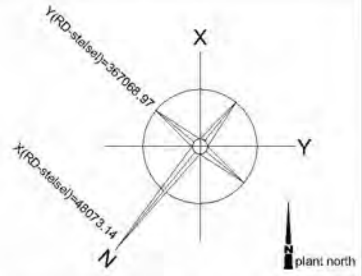
Tei-In elevation (i.L.) is supposed to be equal or lower then +0,25 NAP.

Reference Drawings

Doc. No.	Titel
&AE 0000 L-ZP 1001 (EN)	Overall Plotplan

Key Plan with Section Views





Basic Level YARA = 1.700 + NAP = +/- 0.000 Plant Reference Level (HHP)
Groundwater Level = 1.000+ NAP = -0.700 Plant Reference Level (HHP)

ISSUE	DATE	STATUS	DRAWN	ORIGINATOR	REVIEWED	APPROVED	DESCRIPTION
1.0	21.11.2022	5.1.2.e	[illegible]	5.1.2.e	5.1.2.e	5.1.2.e	Issued for Feed

Carbon Capture Storage Plant, Sluiskil

Linde | YARA

3710 AST3 | 16471
Sluiskil | CACTUS

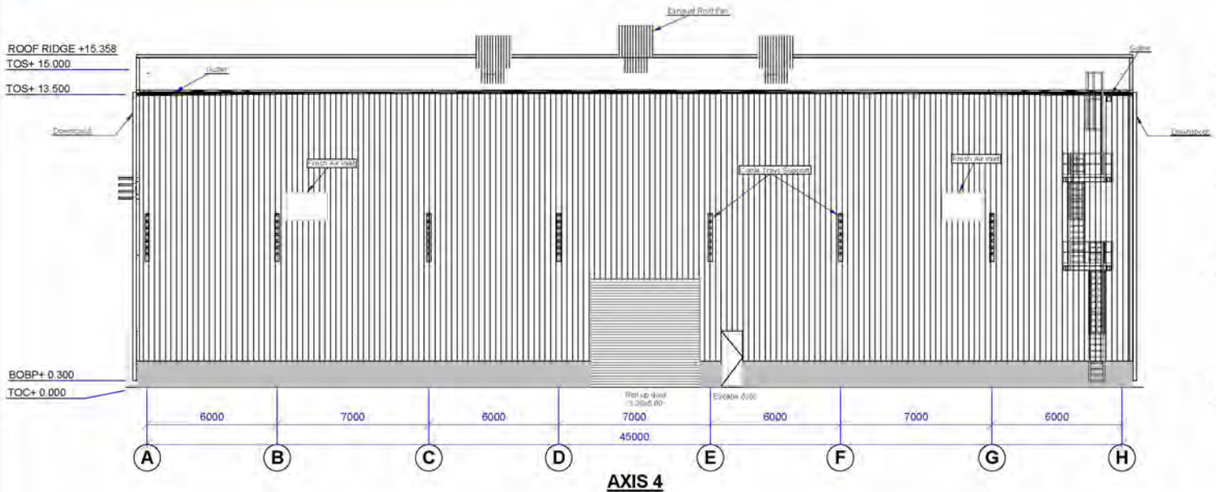
Section views - CO2 Liquification & Storage

SCALE	SIZE				SHEET
M. 1:100	A0	Linde DOC NO.	&AE 2000-C-ZA 1003 (EN)		1 of 1
		YARA DOC NO.	16471-Y60-00001	REV. D	

1. Compressorgebouw

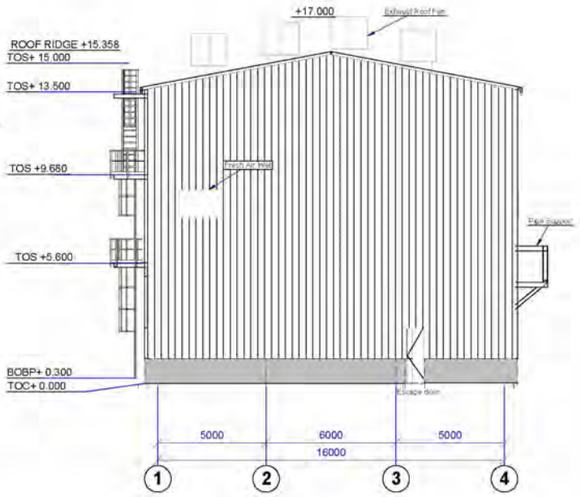
AXIS 1

Looking North
SCALE: 1:100 mm



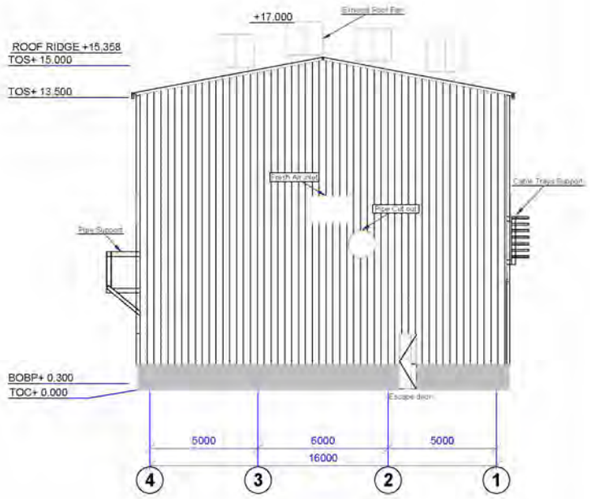
ROW H

Looking West
SCALE: 1:100 mm



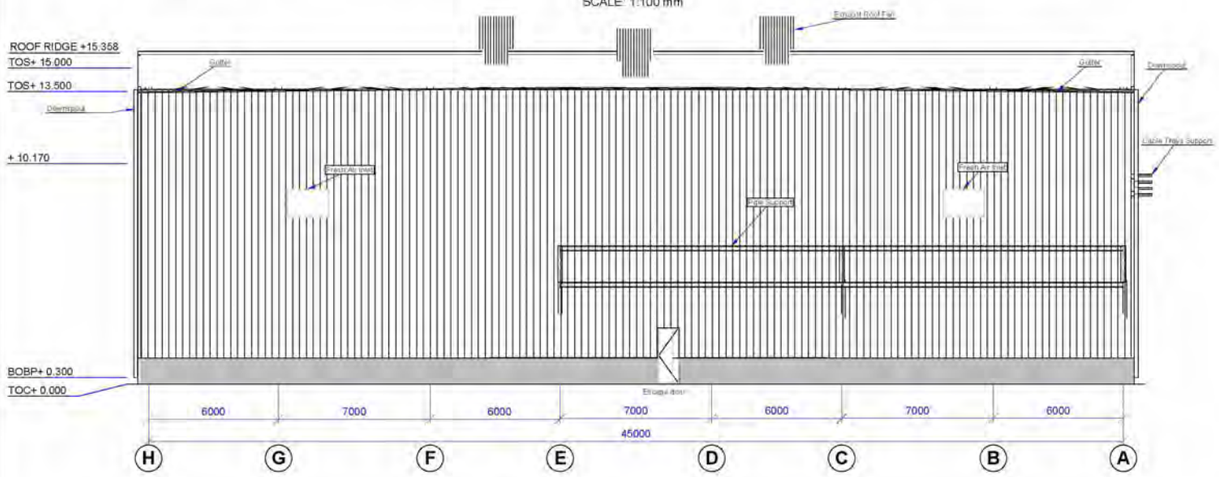
ROW A

Looking East
SCALE: 1:100 mm



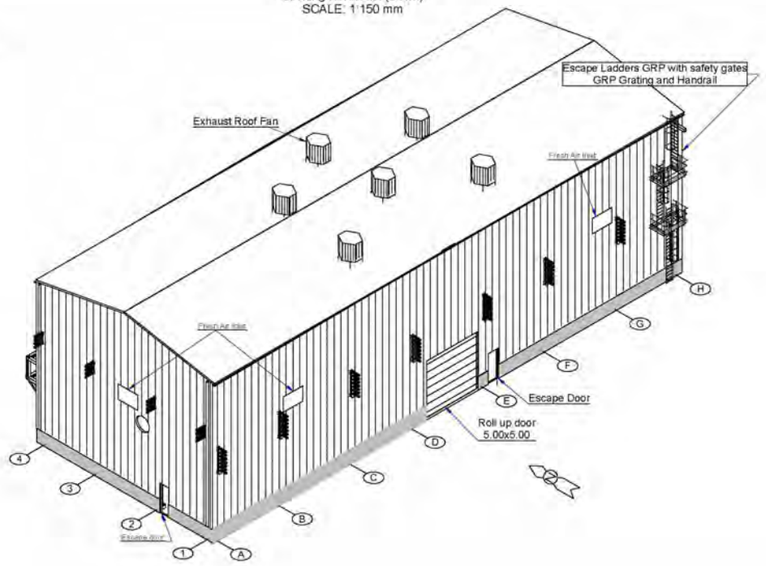
AXIS 4

Looking South
SCALE: 1:100 mm



ISOMETRIC VIEW

Looking Northeast (Down)
SCALE: 1:150 mm



ROOF VIEW

Looking Plan
SCALE: 1:100 mm

Remarks:
1. All dimensions are in mm, levels & co-ordinates are in meter.
2. All elevations are top of steel unless noted otherwise.
3. This is a feed document, and no construction shall be made based on this drawing.
4. All layout, coordinates and dimensions are indicative and shall be confirmed during detail engineering.
5. Railing height is 1200 mm in floors and staircase above 13 m above grad
6. Structure type: corrosion protected metal building, framing system with braces in longitudinal sides
7. Foundation: supported by reinforced concrete pile caps supported on piles
8. Wall cladding: insulated sandwich panels with noise protection ~ 33 dB and U value < 0,24 W/m²K
9. Roof cladding: insulated sandwich panels with noise protection ~ 33 dB and U value < 0,24 W/m²K
10. Dewatering: Gutter and downspouts made of stainless steel, downspouts are connected to sewer system
11. Ventilation system: Mechanical forced system for providing of required air exchange rate and for compensation of heat emission
12. Fall prevention on roof: Cable-based system with fall arrest systems Type C (EN 795)
13. Doors: insulated metal doors (~ 33 dB)
14. Gate: electrical roll-up gate (27 dB)

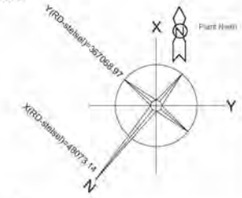
Abbreviations:
TOS Top of Steel
BOBP Bottom of Base Plate
TOC Top of Concrete

References:
&AE 0000 N-SP 1001 (EN) Steel Structure and Civil Design Basis & General Description
YARA No 16471-Y85-00001

0542/FA5490 2001 N-CS 1001 (EN) Statical Pre-Calculation for Machine House
YARA No 16471-Y16-00003

&AE 2001 N-ZC 1002 (EN) General Layout Drawings-Machine House SG 0201 Elevation and Section Views
YARA No 16471-Y58-00005

&AE 2001-C-ZA 1001 (EN) General Arrangement Drawing - Foundations Piling - CO2 Liquification
YARA No 16471-Y56-00007



+/-0,000 = 1.700 m N.A.P.

Carbon Capture Storage Plant, Sluiskil

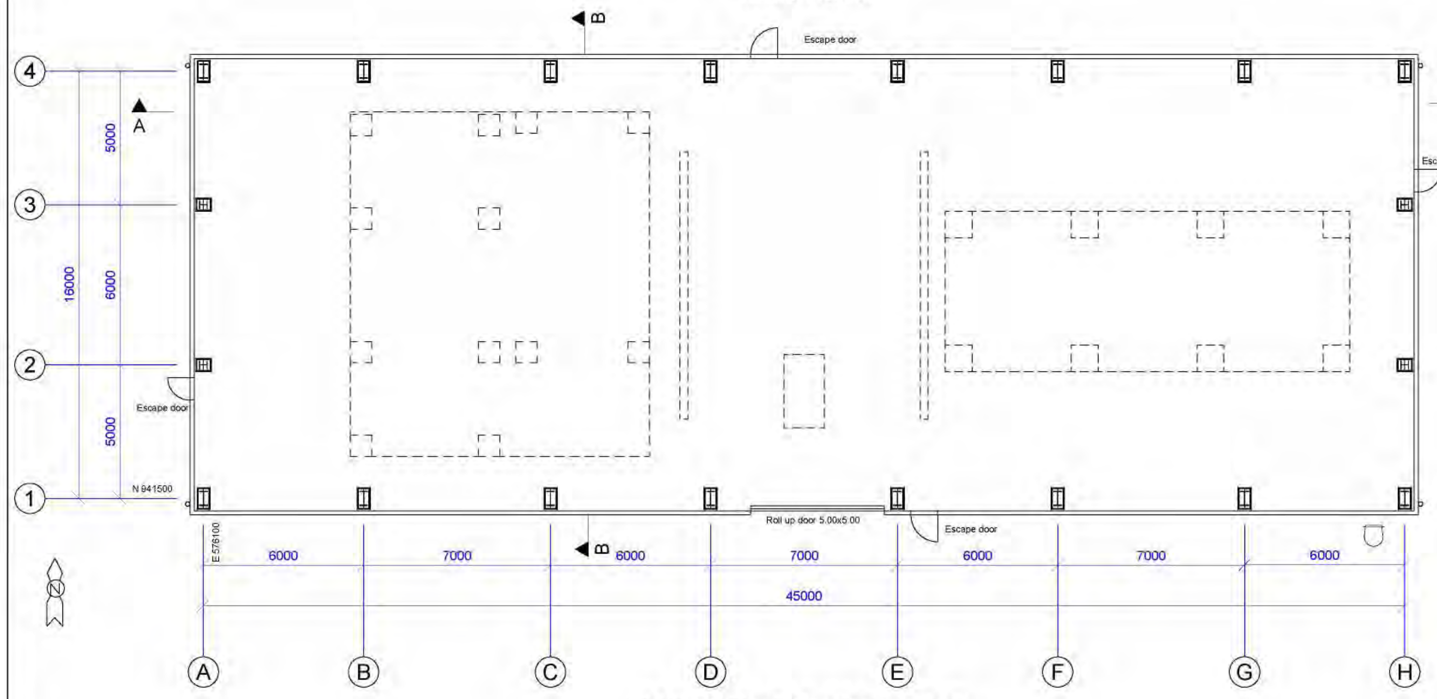
GENERAL LAYOUT DRAWINGS
MACHINE HOUSE SG 0201
Facade Views

&AE 2001 N-ZC 1001 (EN)

16471-Y56-00005

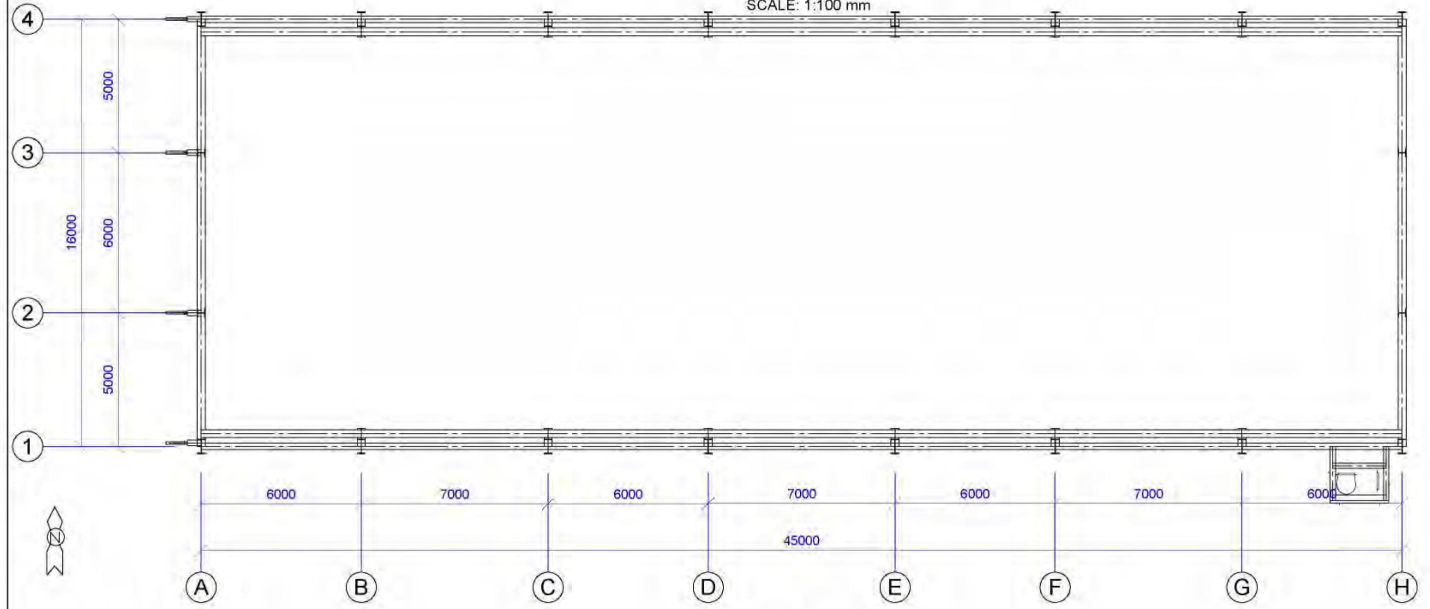
BASEPLATE OVERVIEW

Looking Plan
SCALE: 1:100 mm



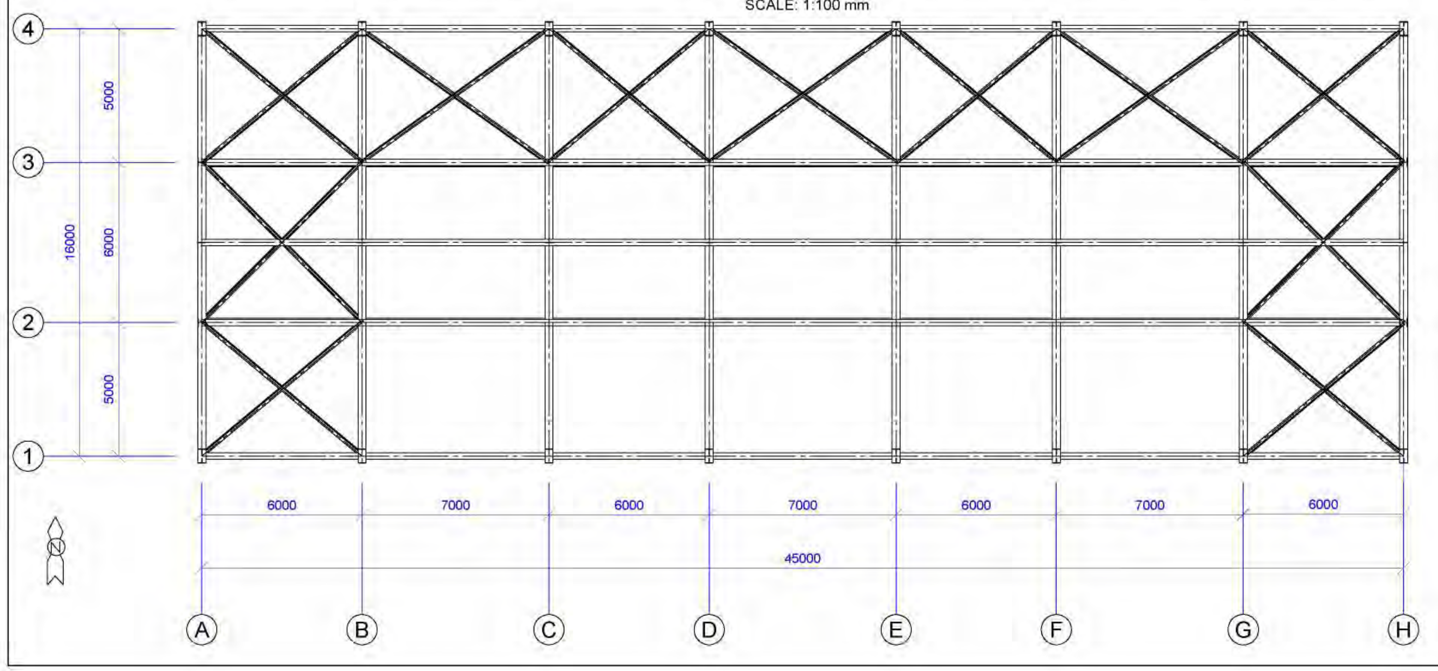
TOS OVERHEAD CRANE LEVEL

Looking Plan
SCALE: 1:100 mm



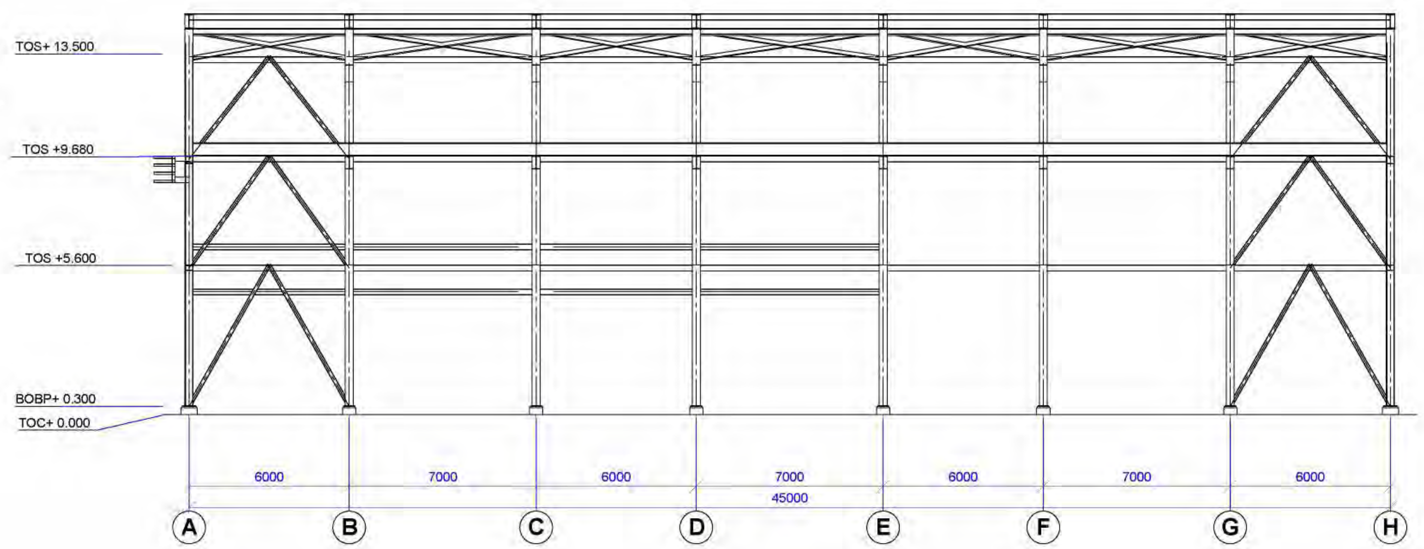
ROOF VIEW

Looking Plan
SCALE: 1:100 mm



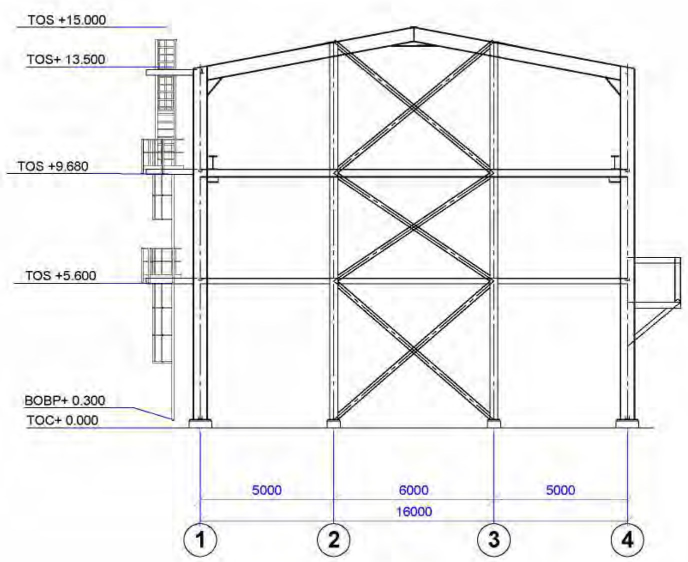
SECTION A-A

Looking North
SCALE: 1:100 mm



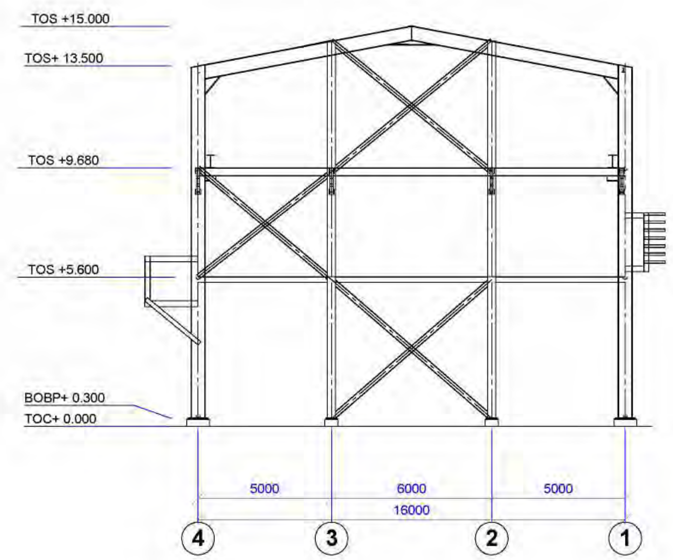
ROW H

Looking West
SCALE: 1:100 mm



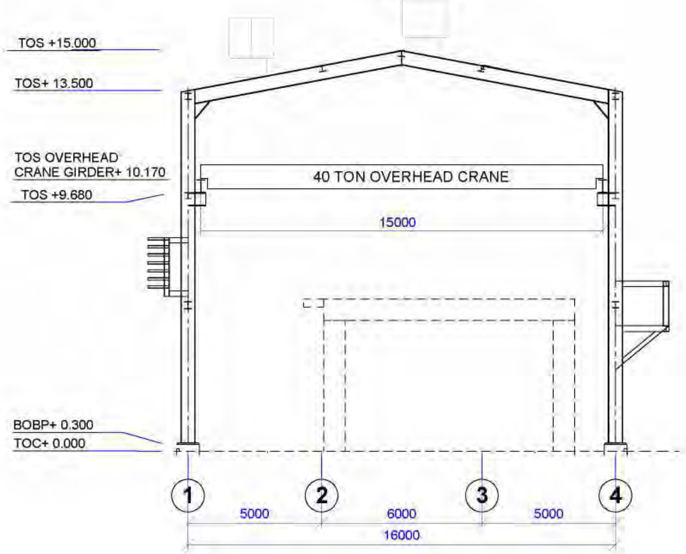
ROW A

Looking East
SCALE: 1:100 mm



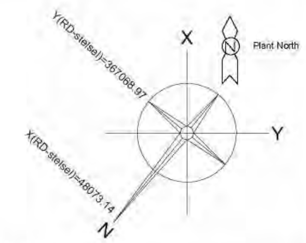
SECTION B-B

Looking West
SCALE: 1:100 mm



Remarks:

1-For general remarks, abbreviations and references, refer to drawing No &AE 2001 N-ZC 1001 (EN)
2-Main steel shown without cladding supporting elements



+/- 0.000 = 1.700 m N.A.P.

ISSUE	DATE	STATUS	DIVISION	ORIGINATOR	REVIEWED	APPROVED	DESCRIPTION
1.0	18.11.2022			5.1.2.e	5.1.2.e	5.1.2.e	Issued for FEED

PLANT DESCRIPTION
Carbon Capture Storage Plant, Sluiskil

LINDE PROJECT NO. 3710A3T8	CLIENT PROJECT NO. 16471
LINDE PROJECT CODE Sluiskil	CLIENT PROJECT CODE CACTUS

TITLE
GENERAL LAYOUT DRAWINGS
MACHINE HOUSE SG 0201
Elevation and Section Views

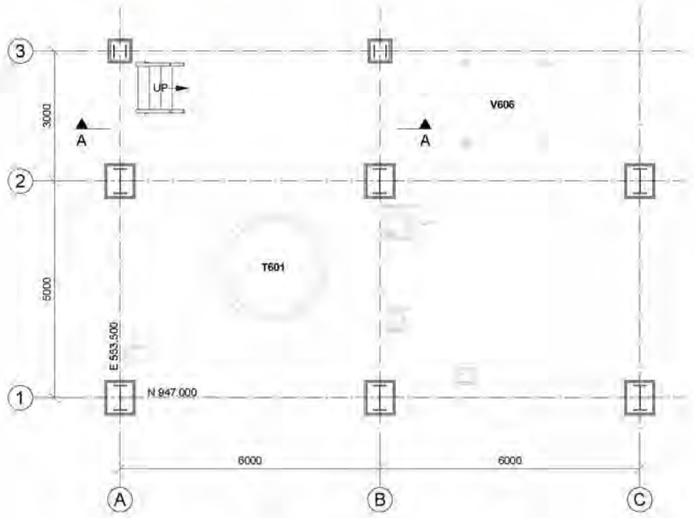
SCALE	SIZE		SHEET	SHEETS
	A0	LINDE DOC. NO. &AE 2001 N-ZC 1002 (EN) / YARA DOC. NO. 16471-Y58-00005 REV.		OF

2. CO_2 Liquifaction

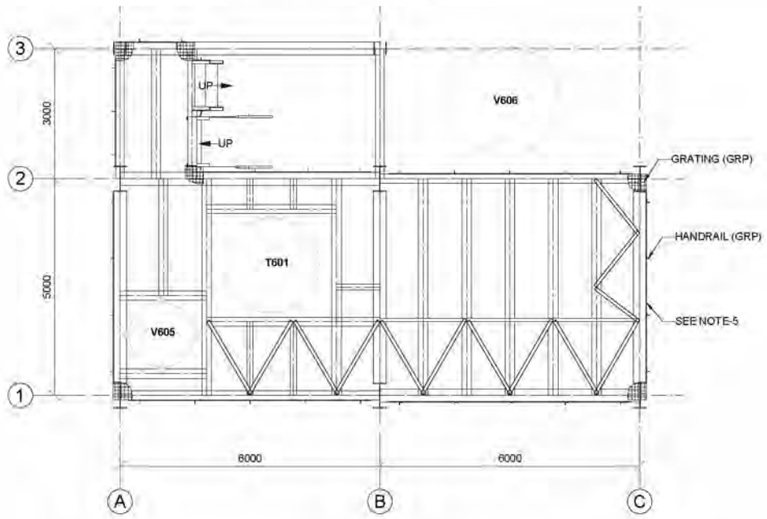
PLAN AT EL+0.300 BOBP

FOR SECTION A-A REFER DWG.NO. &AE 2001 N-ZB 1003 (EN)

PLANT NORTH

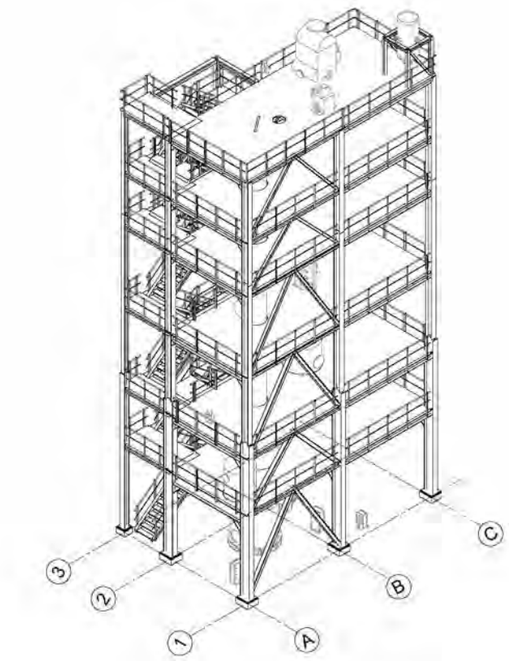


PLAN AT EL+5.000 TOS



ISOMETRIC VIEW

PLANT NORTH



NOTES:

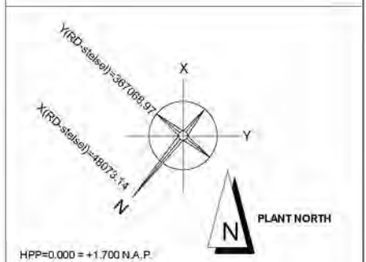
1. ALL DIMENSIONS ARE IN MM, LEVELS & CO-ORDINATES ARE IN METER.
2. ALL ELEVATIONS ARE TOP OF STEEL UNLESS NOTED OTHERWISE.
3. THIS IS A FEED DOCUMENT AND NO CONSTRUCTION SHALL BE MADE BASED ON THIS DRAWING.
4. ALL LAYOUT, CO-ORDINATES AND DIMENSIONS ARE INDICATIVE AND SHALL BE CONFIRMED DURING DETAIL ENGINEERING.
5. SECOND ESCAPE WAY VIA LADDER (GRP) WITH SAFETY GATE IS FORESEEN NEXT TO ROW C, POSITION WILL BE DEFINED IN DETAIL ENGINEERING.

REFERENCES

LINDE DOC. NO./ OWNER DOC. NO.	TITLE
&AE 2001 N-ZB 1002 (EN) / 16471-Y56-00013	STEEL STRUCTURE LAYOUT DRAWING STRUCTURE SK5101 LEVEL VIEWS PART-2
&AE 2001 N-ZB 1003 (EN) / 16471-Y56-00014	STEEL STRUCTURE LAYOUT DRAWING STRUCTURE SK5101 ELEVATIONS
0542FA4650 2001 N-CS 1002 (EN) / 16471-Y16-00009	STRUCTURAL PRE-CALCULATION FOR EQUIPMENT STRUCTURE SK 5101
&AE 2001 C-ZA 1001 (EN) / 16471-Y56-00007	GENERAL ARRANGEMENT DRAWING FOUNDATION / PILING CO_2 LIQUIFICATION
&AE 0000 N-SP 1001 (EN) / 16471-Y85-00001	STEEL STRUCTURE AND CIVIL DESIGN BASIS & GENERAL DESCRIPTION

LEGENDS

TOS	TOP OF STEEL
BOBP	BOTTOM OF BASE PLATE
HPP	HIGH PAVING POINT
N.A.P.	NORMAAL AMSTERDAMS PEIL
	MOMENT CONNECTION



HPP=0.000 = +1.700 N.A.P.

SCALE 1:50

Carbon Capture Storage Plant, Sluiskil

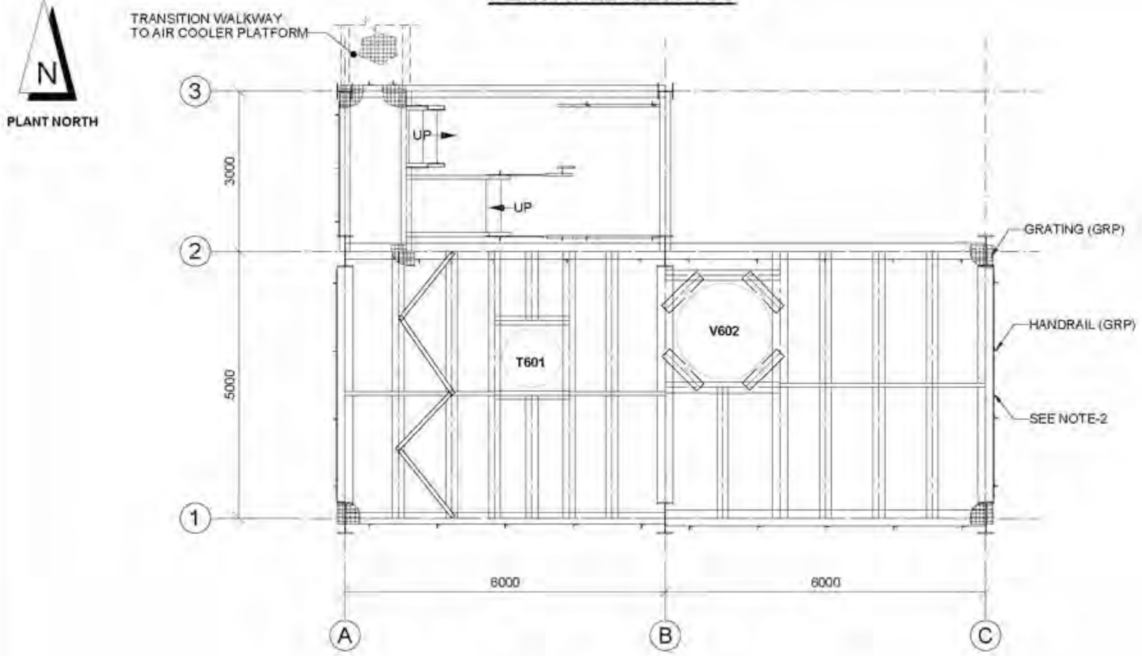
STEEL STRUCTURE LAYOUT DRAWING
STRUCTURE SK5101
ISOMETRIC VIEW & LEVEL VIEWS PART-1

SCALE 1:100 | SIZE A0 | LINDE DOC. NO. &AE 2001 N-ZB 1001 (EN) | LINDE DOC. NO. 16471-Y56-00004

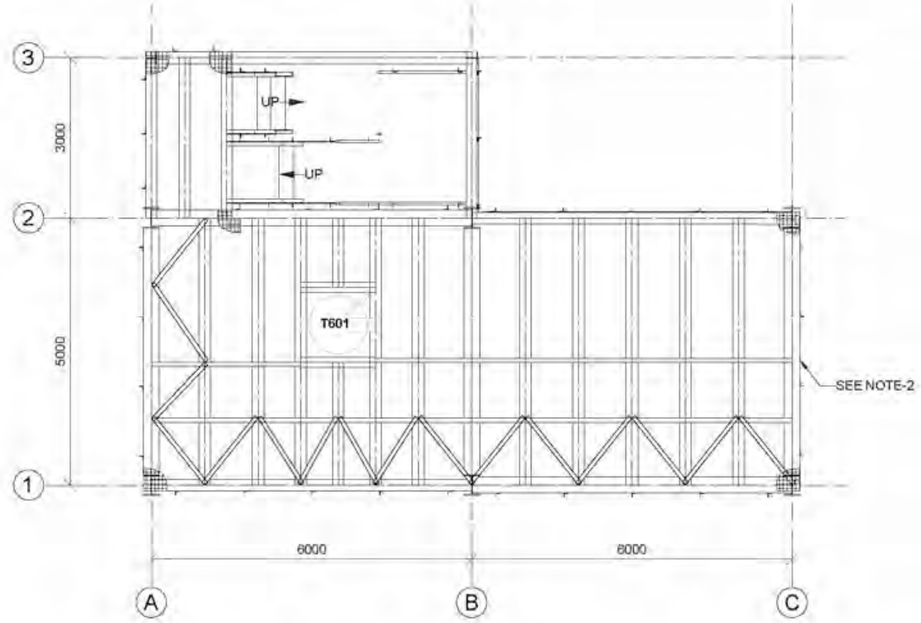
NOTES:

1. FOR GENERAL NOTES, LEGENDS AND REFERENCE DRAWINGS REFER DRAWING NO. &AE 2001 N-ZB 1001 (EN).
2. SECOND ESCAPE WAY VIA LADDER (GRP) WITH SAFETY GATE IS FORESEEN NEXT TO ROW C, POSITION WILL BE DEFINED IN DETAIL ENGINEERING.

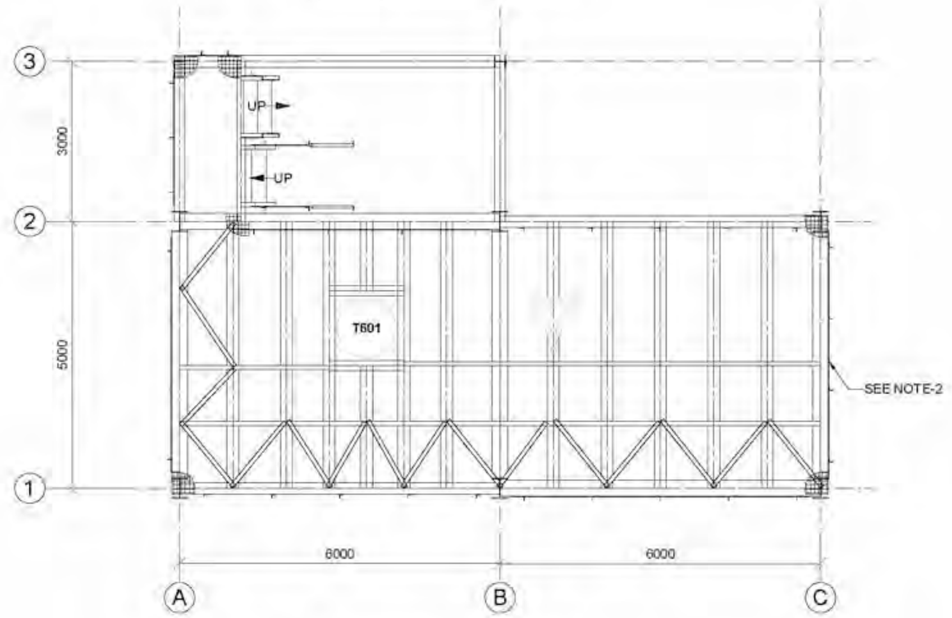
PLAN AT EL+8.200 TOS



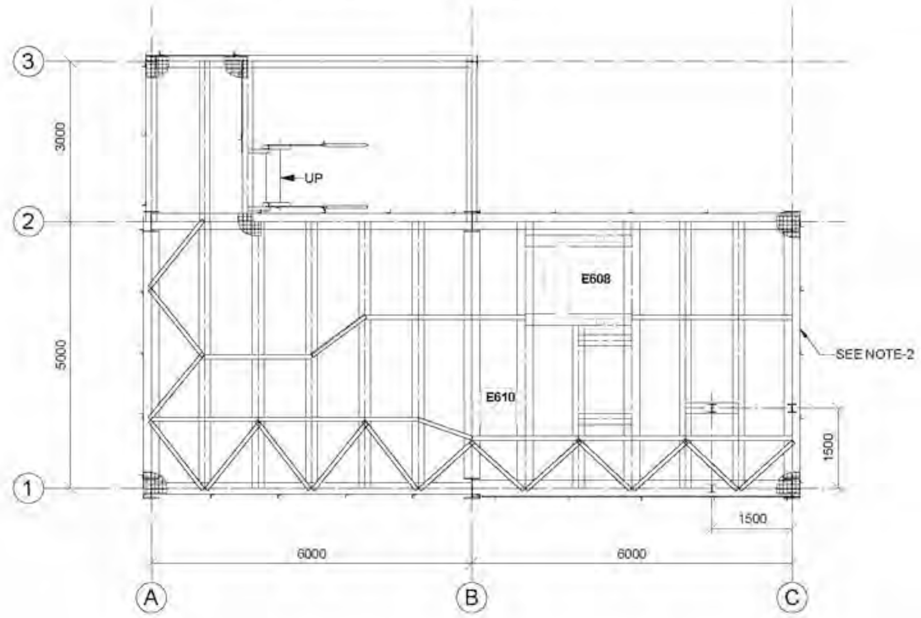
PLAN AT EL+20.400 TOS



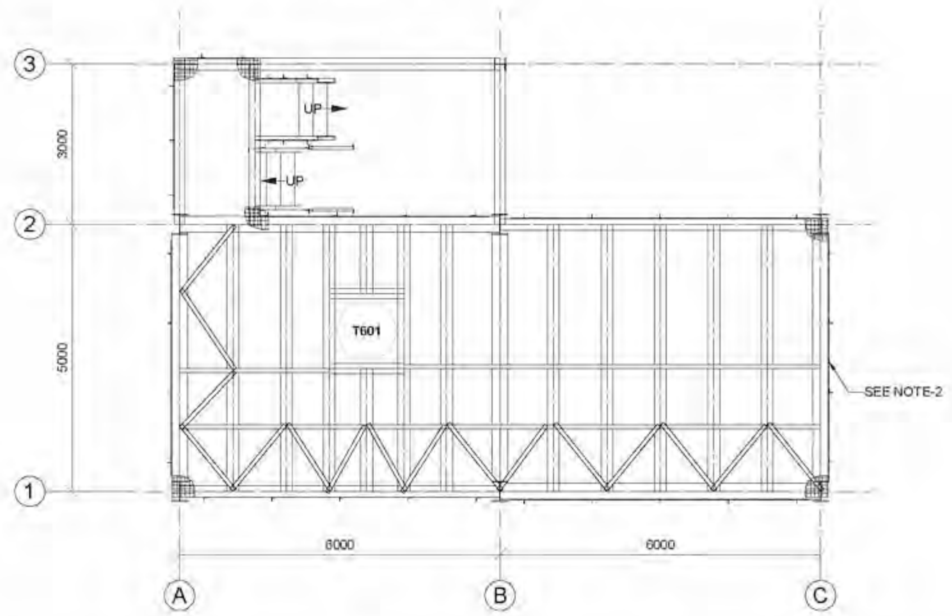
PLAN AT EL+12.800TOS



PLAN AT EL+23.800 TOS

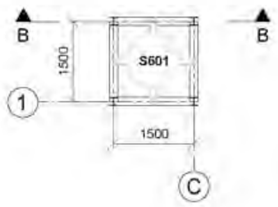


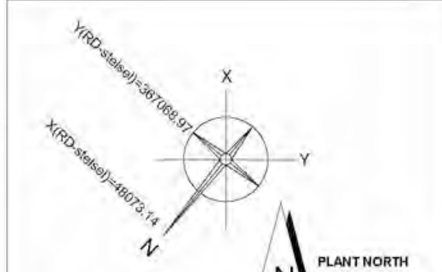
PLAN AT EL+17.400 TOS



PLAN AT EL+26.000 TOS

FOR SECTION B-B REFER DWG.NO. &AE 2001 N-ZB 1003 (EN)





HPP=0.000 = +1.700 N.A.P.

1.0	15.11.2022	5.1.2.e		5.1.2.e	5.1.2.e	5.1.2.e	ISSUED FOR FEED
ISSUE	DATE	STATUS		DRAWN BY	REVIEWED	APPROVED	DESCRIPTION

Carbon Capture Storage Plant, Sluiskil

Linde — YARA

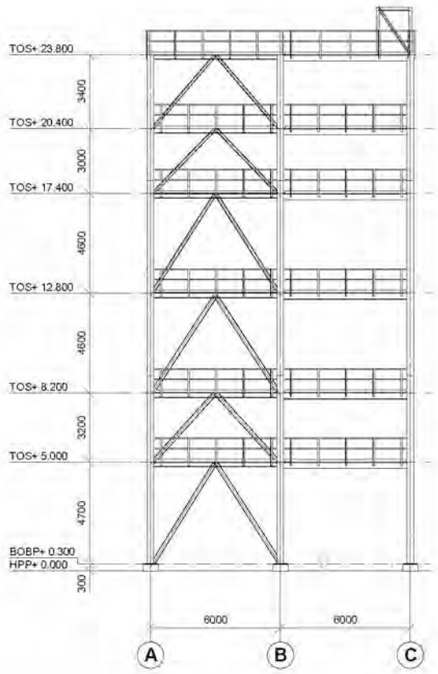
LINDE PROJECT NO. 3710AOTB — CLIENT PROJECT NO. 18471

LINDE PROJECT CODE Sluiskil — CLIENT PROJECT CODE CACTUS

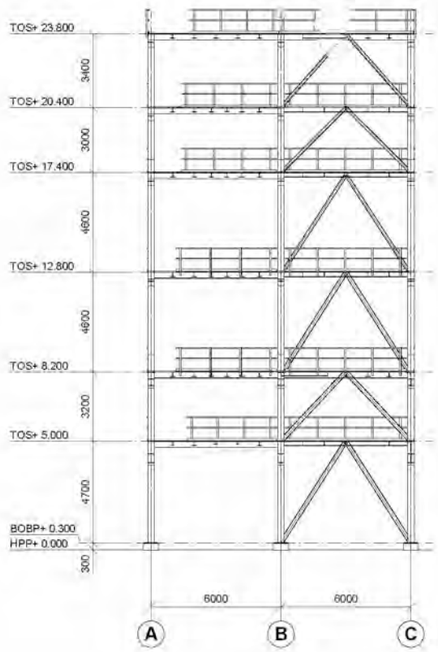
TITLE: STEEL STRUCTURE LAYOUT DRAWING
STRUCTURE SK5101
LEVEL VIEWS PART-2

SCALE 1:100 | SIZE A0 | LINDE DOC. NO. &AE 2001 N-ZB 1002 (EN) | CLIENT DOC. NO. 18471-Y58-00013 | SHEET 1 OF 1

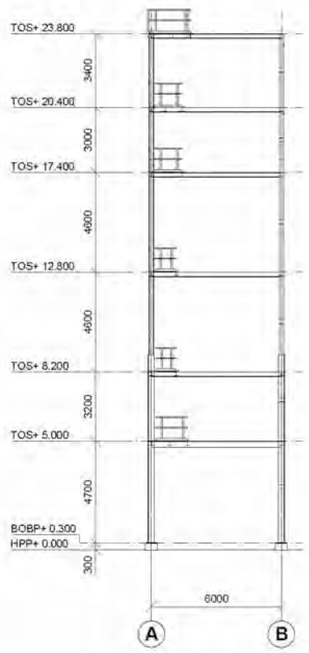
AXIS 1



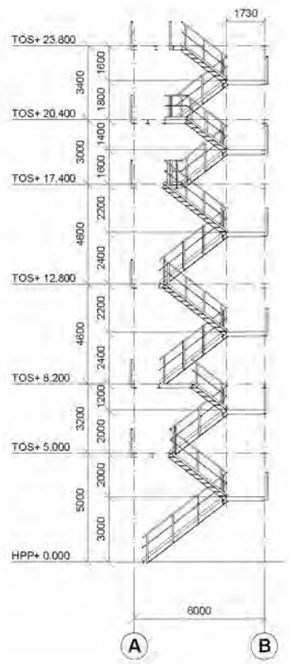
AXIS 2



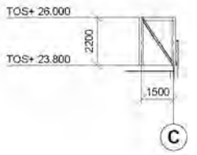
AXIS 3



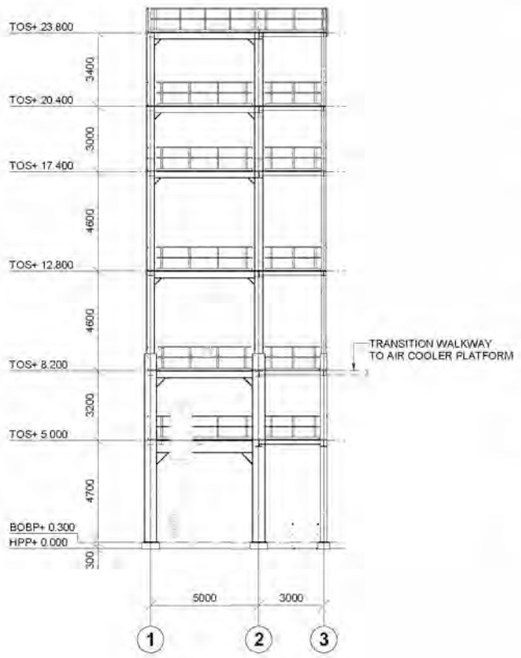
SECTION A-A



SECTION B-B



ROW A



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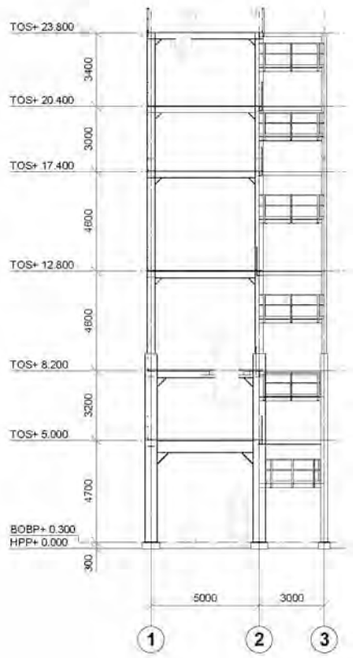

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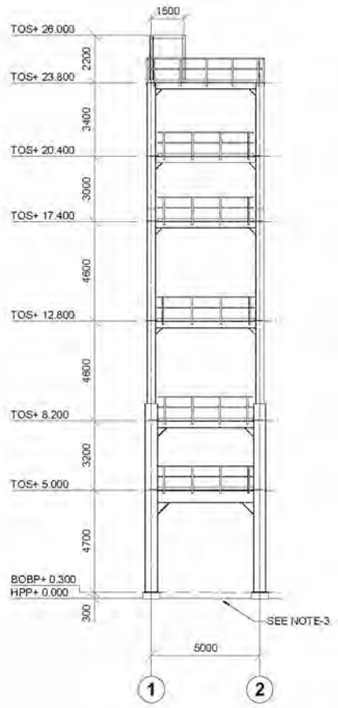


NOTES:

1. FOR GENERAL NOTES, LEGENDS AND REFERENCE DRAWINGS REFER DRAWING NO. &AE 2001 N-ZB 1001 (EN).
2. RAILING HEIGHT IS 1.2 m IN FLOORS AND STAIR CASE ABOVE 13 m FROM GRADE.
3. SECOND ESCAPE WAY VIA LADDER (GRP) WITH SAFETY GATE IS FORESEEN NEXT TO ROW C, POSITION WILL BE DEFINED IN DETAIL ENGINEERING.

HPP=0.000 = +1.700 N.A.P.

SCALE 1:100

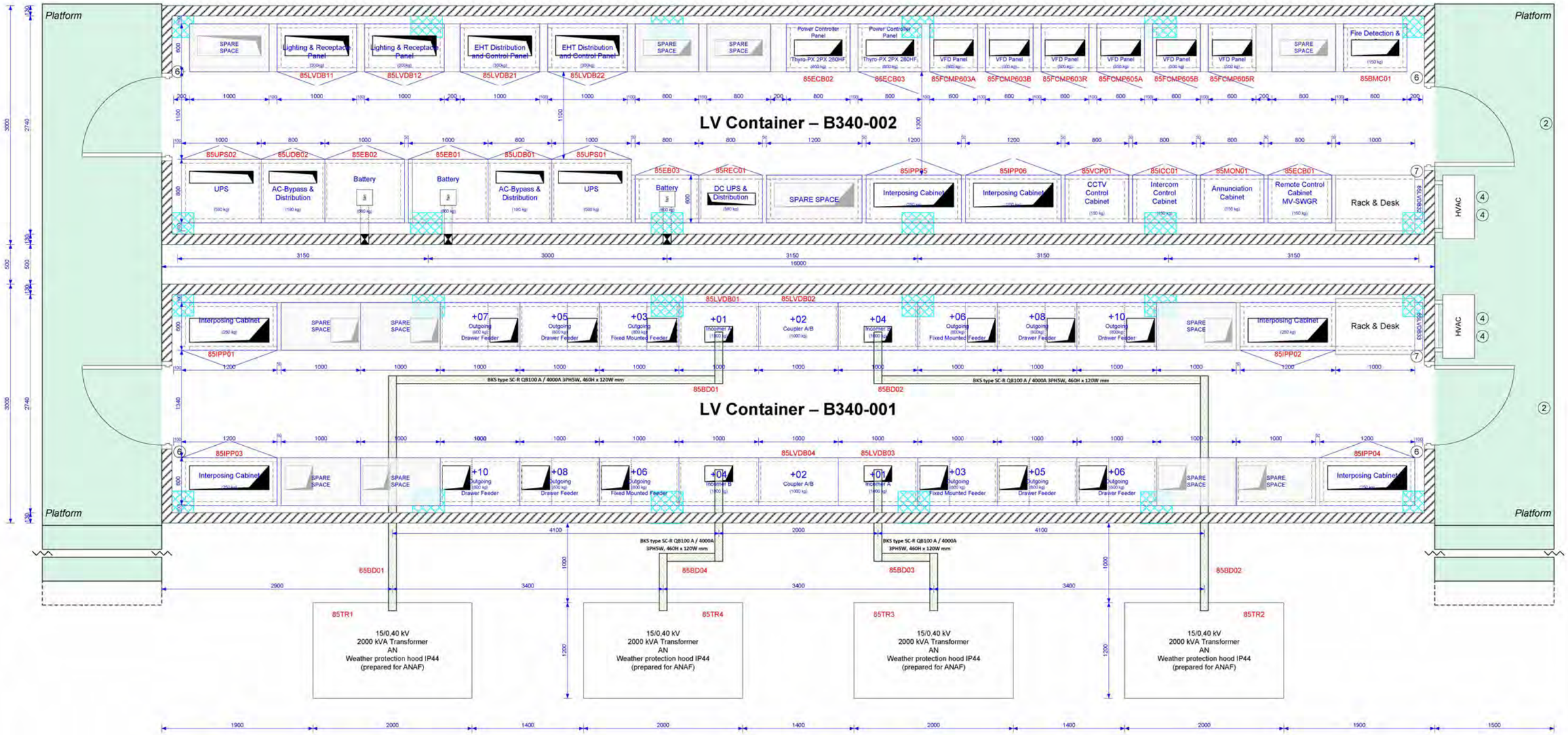
Carbon Capture Storage Plant, Sluiskil

Linde

STEEL STRUCTURE LAYOUT DRAWING
STRUCTURE SK5101
ELEVATIONS

SCALE	SIZE	LINDE KCC NO.	SHEET	SHEETS
1:100	A0	&AE 2001 N-ZP 1003 (EN-1		
		CLIENT DOC. NO. 18471-Y55-00014	1	1

3. LV onderstations



For container details see vendor drawings, for guard rail details see steel structure drawings.

Legend:

- grounding connection to external grounding grid
- socket 230V / light switch
- lighting fixture 1x36W
- lighting fixture 2x36W
- emergency lighting fixture 2x36W battery buffered
- emergency exit light battery buffered
- telephone socket
- floor opening / wall opening
- Basement Channel / Baseframe Construction

Notes:

1. floor shall be perforated for natural ventilation of transformer (if applicable)
2. handrail shall be removeable and one side shall be forklift accessable
3. door opening depends on forklift accessibility
4. HVAC units shall be redundant and removeable for transportation (if necessary)
5. Protection Cover for „Cable Cellar"
6. Wall mounted Fire Extinguisher
7. Emergency hand lamp, battery buffered with wall holder

ISSUE	DATE	STATUS	DIVISION	ORIGINATOR	REVIEWED	APPROVED	DESCRIPTION
2.0	16.09.2022	IFU	ENE				Issued for use
1.0	15.10.2021	IFU	ENE				Issued for use

PLANT DESCRIPTION

Carbon Capture Storage Plant, Sluiskil

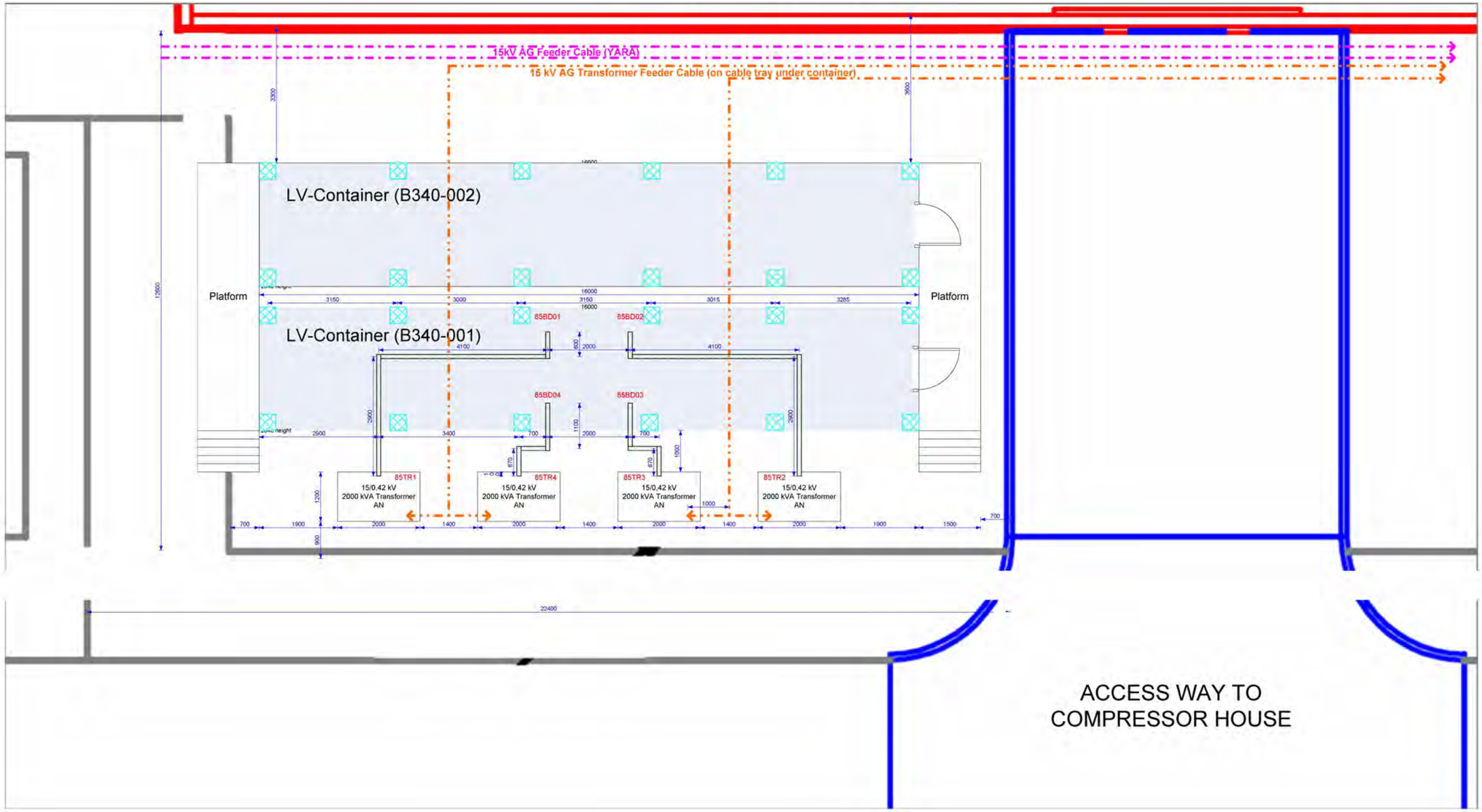
LINDE PROJECT NO.	CLIENT PROJECT NO.
3710 A3T8	**16471**
LINDE PROJECT CODE	CLIENT PROJECT CODE
Sluiskil	**CACTUS**

TITLE

General Layout Plan Containerized Substation
LV Container B340-001 & B340-002

SCALE	SIZE	FILE NAME	DOC. NO.	SHEET	SHEETS
1:25	**A1**	&AE-0000-E-ZA 4EM.0701 (EN).vwd	LINDE: **&AE-0000-E-ZA 4EM.0701 (EN)** CLIENT: **16471-E58-00001** REV. **01**	**2**	OF **3**

COMPRESSOR HOUSE



For container details see vendor drawings, for guard rail details see steel structure drawings.

Legend:

- grounding connection to external grounding grid
- socket 230V / light switch
- lighting fixture 1x36W
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- emergency lighting fixture 2x36W battery buffered
- emergency exit light battery buffered
- telephone socket
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Notes:

1. floor shall be perforated for natural ventilation of transformer (if applicable)
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ISSUE	DATE	STATUS	DIVISION	ORIGINATOR	REVIEWED	APPROVED	DESCRIPTION
2.0	16.09.2022	IFU	ENE	[illegible]	[illegible]	[illegible]	Issued for use
1.0	15.10.2021	IFU	ENE	[illegible]	[illegible]	[illegible]	Issued for use

PLANT DESCRIPTION

Carbon Capture Storage Plant, Sluiskil

Linde | YARA

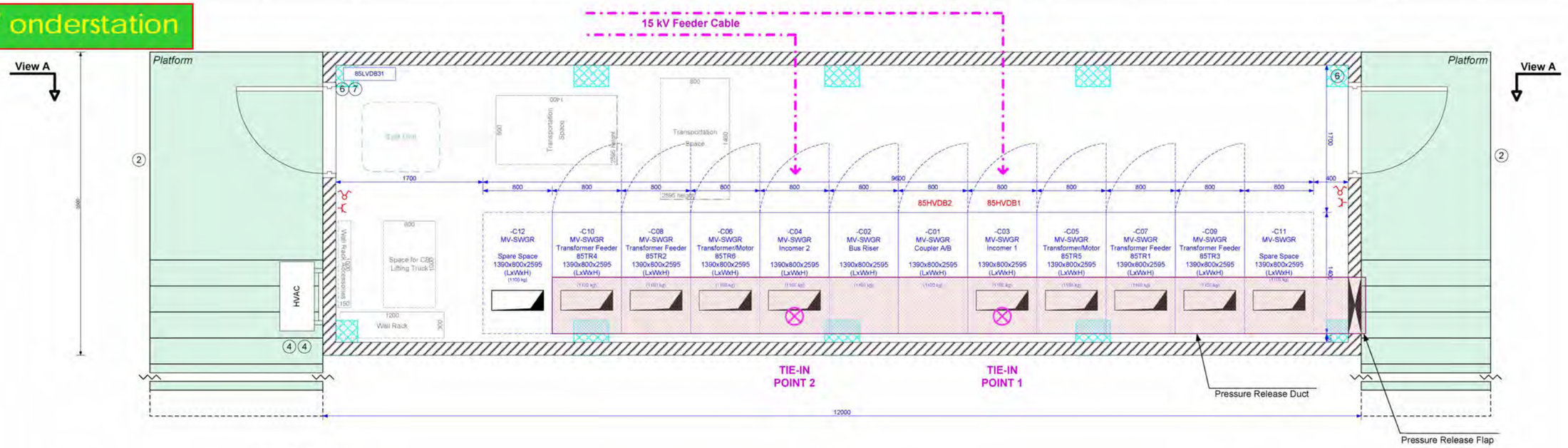
LINDE PROJECT NO. **3710 A3T8**	A1/1:50
LINDE PROJECT CODE **Sluiskil**	
CLIENT PROJECT NO. **16471**	
CLIENT PROJECT CODE **CACTUS**	

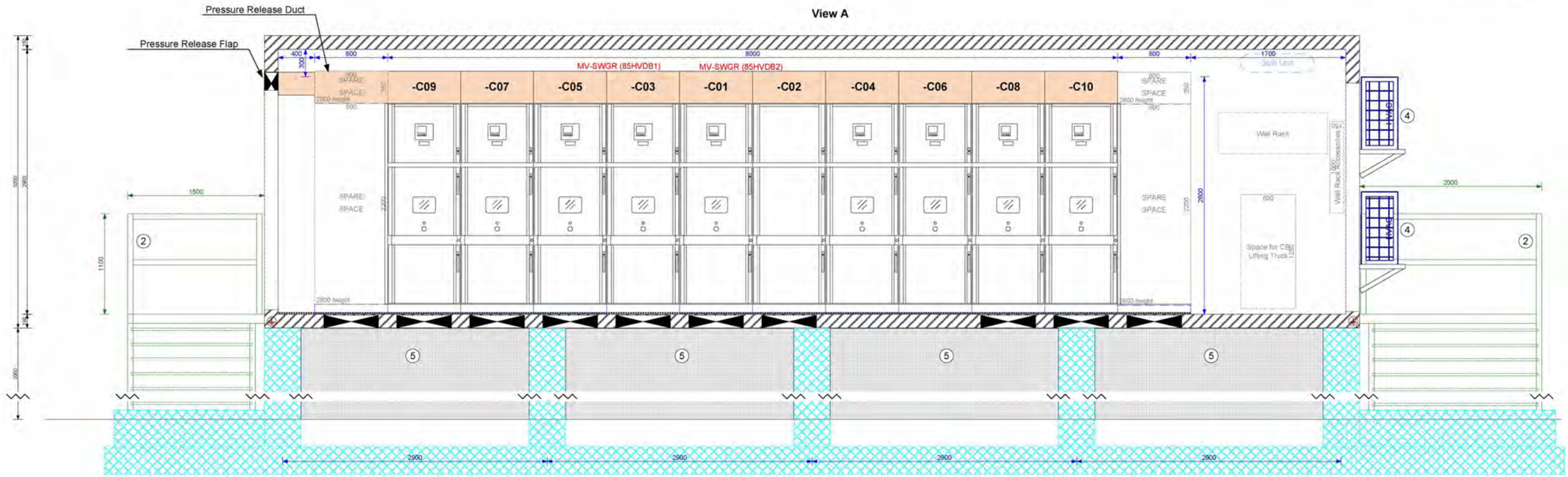
TITLE

General Layout Plan Containerized Substation
Overall Allocation LV-Containerized Substation

SCALE	SIZE	FILE NAME	DOC. NO.	SHEET	SHEETS
1:25	**A1**	&AE-0000-E-ZA 4EM.0701 (EN).vwd	LINDE: **&AE-0000-E-ZA 4EM.0701 (EN)** CLIENT: **16471-E58-00001** REV. **01**	**3**	OF **3**

4. HV onderstation





For container details see vendor drawings, for guard rail details see steel structure drawings.

Legend:

- grounding connection to external grounding grid
- socket 230V / light switch
- lighting fixture 1x36W
- lighting fixture 2x36W
- emergency lighting fixture 2x36W battery buffered
- emergency exit light battery buffered
- telephone socket
- floor opening / wall opening
- Basement Channel / Baseframe Construction

Notes:

1. floor shall be perforated for natural ventilation of transformer (if applicable)
2. handrail shall be removeable and one side shall be forklift accessable
3. door opening depends on forklift accessibility
4. HVAC units shall be redundant and removeable for transportation (if necessary)
5. Protection Cover for „Cable Cellar"
6. Wall mounted Fire Extinguisher
7. Emergency hand lamp, battery buffered with wall holder

ISSUE	DATE	STATUS	DIVISION	ORIGINATOR	REVIEWED	APPROVED	DESCRIPTION
2.0	16.09.2022	IFU	ENE	[redacted]	[redacted]	[redacted]	Issued for use
1.0	15.10.2021	IFU	ENE	[redacted]	[redacted]	[redacted]	Issued for use

PLANT DESCRIPTION

Carbon Capture Storage Plant, Sluiskil

Linde | YARA

LINDE PROJECT NO.	CLIENT PROJECT NO.
3710 A3T8	**16471**
LINDE PROJECT CODE	CLIENT PROJECT CODE
Sluiskil	**CACTUS**

TITLE

General Layout Plan Containerized Substation
MV Container B341

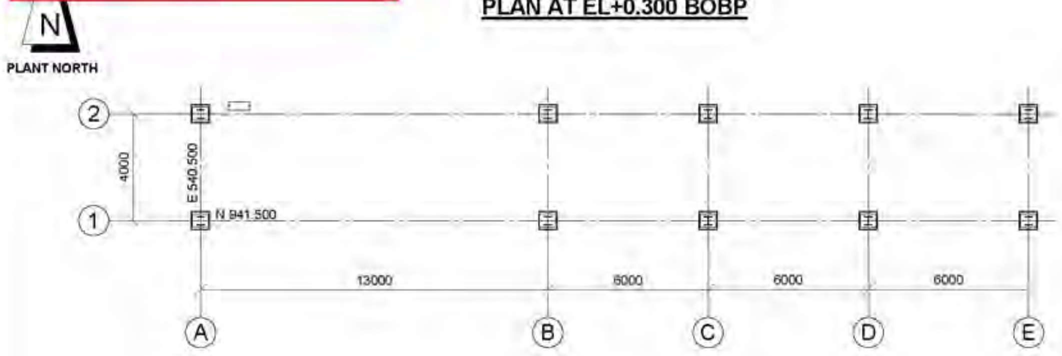
SCALE	SIZE	FILE NAME	DOC. NO.		SHEET	SHEETS
1:25	A1	&AE-0000-E-ZA 4EM.0701 (EN).vwd	LINDE:	**&AE-0000-E-ZA 4EM.0701 (EN)**	1	3
			CLIENT:	**16471-E58-00001** REV. **01**		

5. LIR 5.1.2.e

6. Luchtkoelers

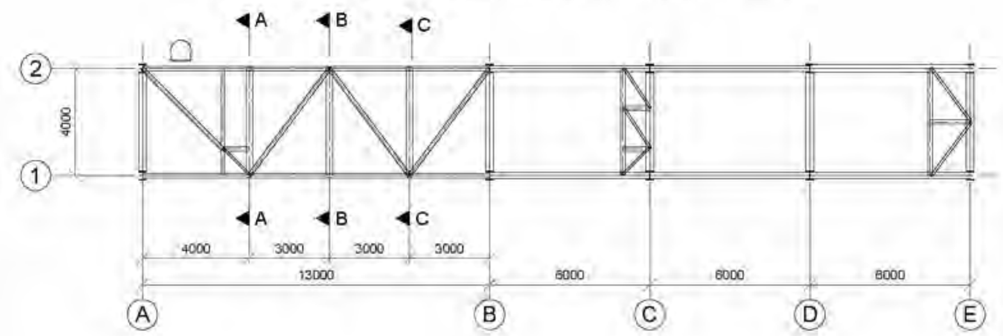
7. Piperacks

PLAN AT EL+0.300 BOBP

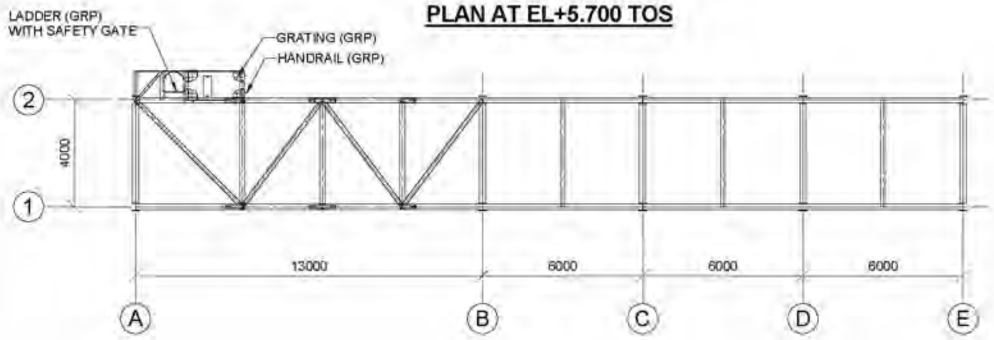


PLAN AT EL+3.200 TOS

FOR SECTION A-A, B-B & C-C REFER DWG.NO. &AE 2001 N-ZD 1002 (EN)



PLAN AT EL+5.700 TOS



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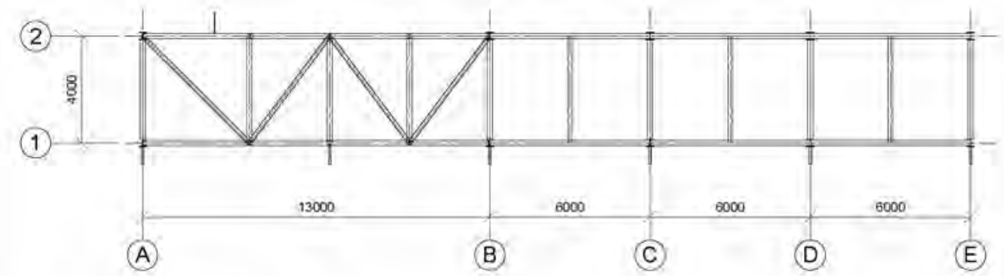
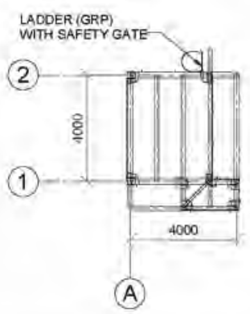
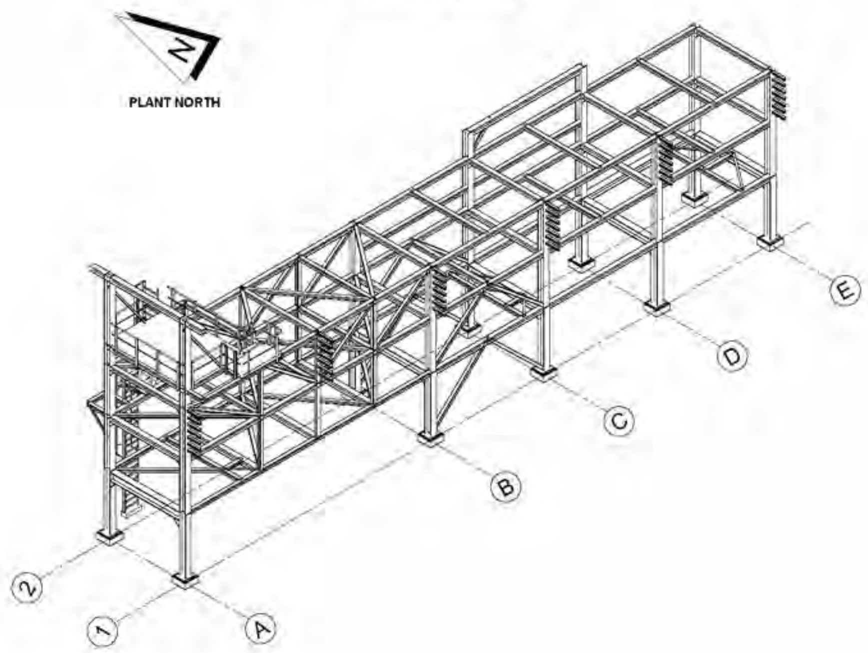


PLAN AT EL+8.900 TOS



ISOMETRIC VIEW



SCALE 1:100

NOTES:

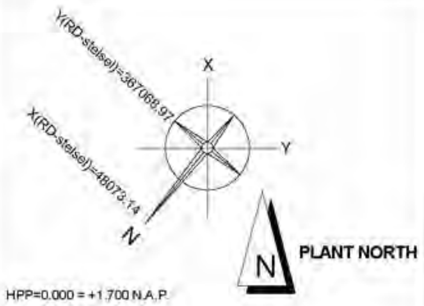
1. ALL DIMENSION ARE IN MM, LEVELS & CO-ORDINATES ARE IN METER
2. ALL ELEVATIONS ARE TOP OF STEEL UNLESS NOTED OTHERWISE
3. THIS IS A FEED DOCUMENT AND NO CONSTRUCTION SHALL BE MADE BASED ON THIS DRAWING
4. ALL LAYOUT, CO-ORDINATES AND DIMENSIONS ARE INDICATIVE AND SHALL BE CONFIRMED DURING DETAIL ENGINEERING

REFERENCES

LINDE DOC. NO / OWNER DOC. NO.	TITLE
&AE 2001 N-ZD 1002 (EN) / 16471-Y56-00012	STEEL STRUCTURE LAYOUT DRAWING PIPERACK SR0501 ELEVATIONS
&AE 2001 C-ZA 1001 (EN) / 16471-Y56-00007	GENERAL ARRANGEMENT DRAWING FOUNDATION / PILING CO2 LIQUIFICATION
&AE 0000 N-SP 1001 (EN) / 16471-Y85-00001	STEEL STRUCTURE AND CIVIL DESIGN BASIS & GENERAL DESCRIPTION

LEGENDS

TOS	TOP OF STEEL
BOBP	BOTTOM OF BASE PLATE
HPP	HIGH PAVING POINT
N.A.P	NORMAAL AMSTERDAMS PEIL
	MOMENT CONNECTION



HPP=0.000 = +1.700 N.A.P.

ISSUE	DATE	STATUS	REVISION	DRAWN/DATE	REVIEWED	APPROVED	DESCRIPTION
T.0	15.11.2022	IFD	EMPC	[redacted]	5.1.2.e [redacted]	[redacted]	ISSUED FOR FEED

Carbon Capture Storage Plant, Sluiskil

Linde

LINDE PROJECT NO	3710A019	CLIENT PROJECT NO	16471
LINDE PROJECT CODE	Sluiskil	CLIENT PROJECT CODE	CACTUS

TITLE: STEEL STRUCTURE LAYOUT DRAWING
PIPERACK SR0501
ISOMETRIC VIEW & LEVEL VIEWS

SCALE	SIZE	LINDE DOC. NO	SHEET
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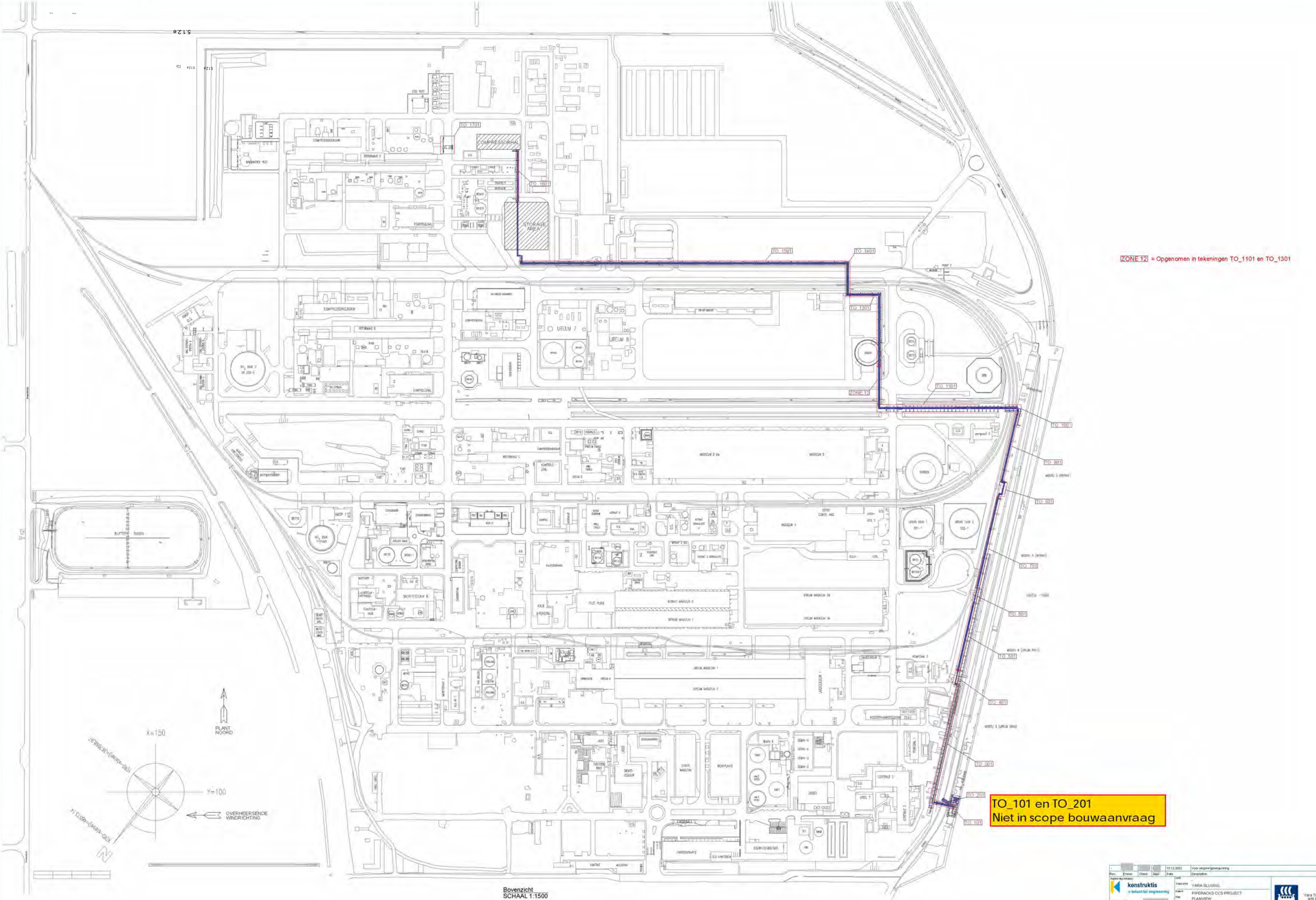


Rev.	Drawn	Check	Appr.	Date	Description
-	[redacted]	[redacted]	[redacted]	15.12.2022	Voor omgevingsvergunning

konstruktis
industrial engineering
[redacted]

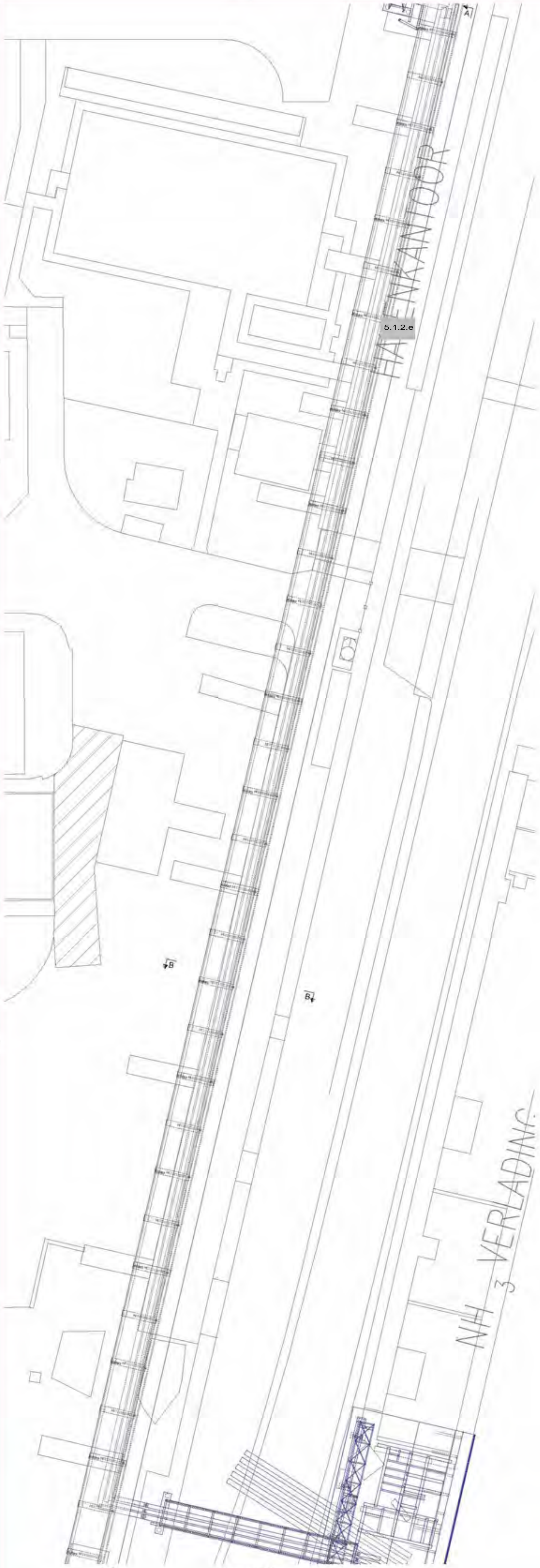
YARA SITE: YARA SLUISKIL
Project: PIPERACKS CCS PROJECT
Part: PLANVIEW
DRAWING PARTITION

YARA
Yara Technology and Projects

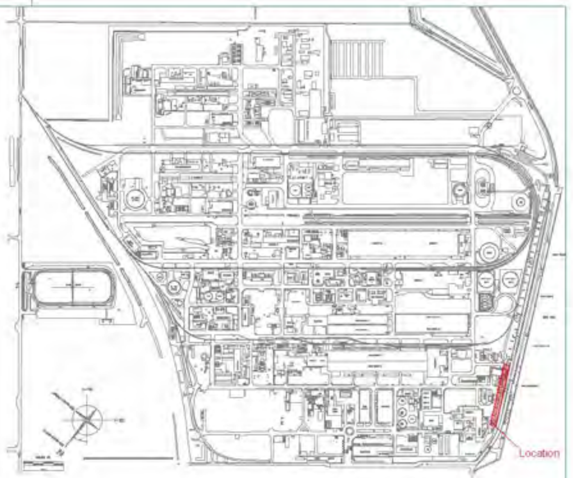
PROJECTNUMMER: 4922005
Size: A0

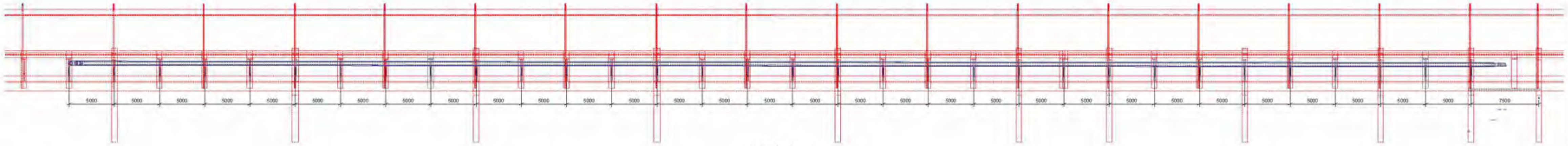
Date	Scale	Drawn	Check	Appr.	EAR No.
15.12.2022	1:1500	[redacted]	[redacted]	[redacted]	EAR NR. ?

No. TO_002

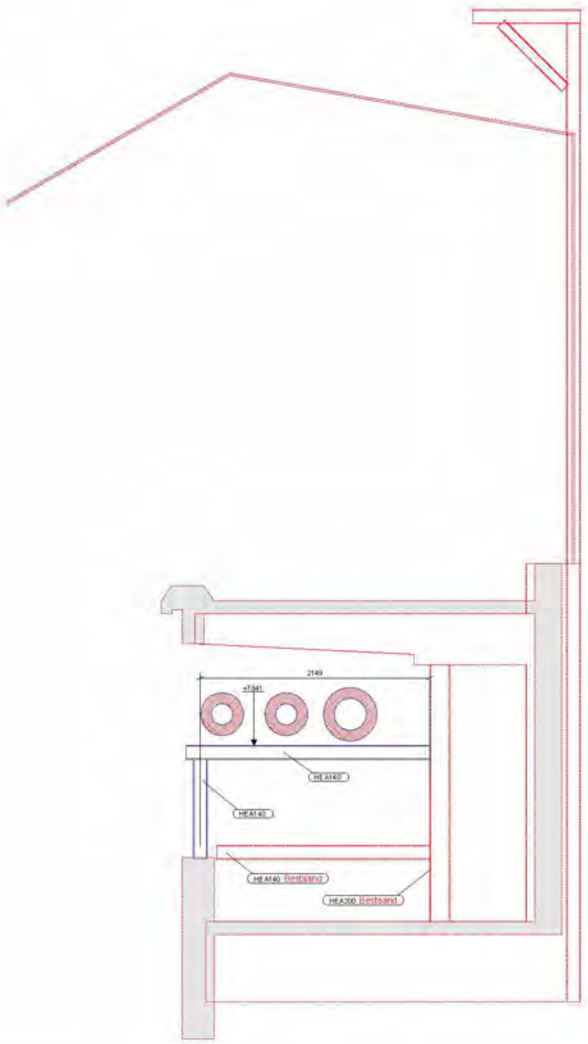


Bovenzicht
SCHAAL 1:200





DRS A - A
SCHAAL 1:200



DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:25

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
-	5.1.2.e	5.1.2.e	5.1.2.e	15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis industrial engineering 5.1.2.e

YARA SITE: YARA SLUISKIL

Project: PIPERACKS CCS PROJECT

Part: SUPPORTS KADEGALLERIJ ZONE 3

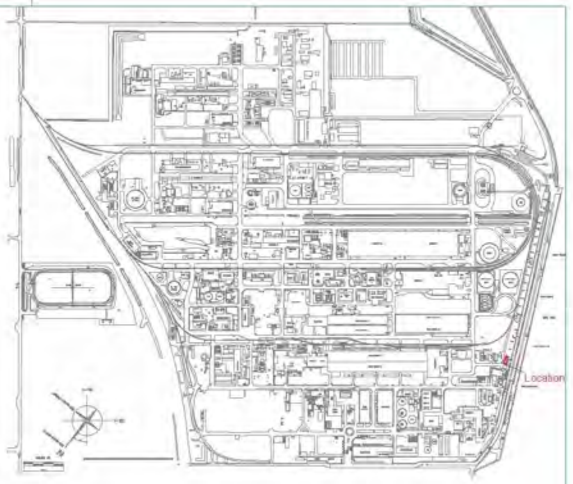
YARA Yara Technology and Projects

PROJECTNUMBER: 4922005

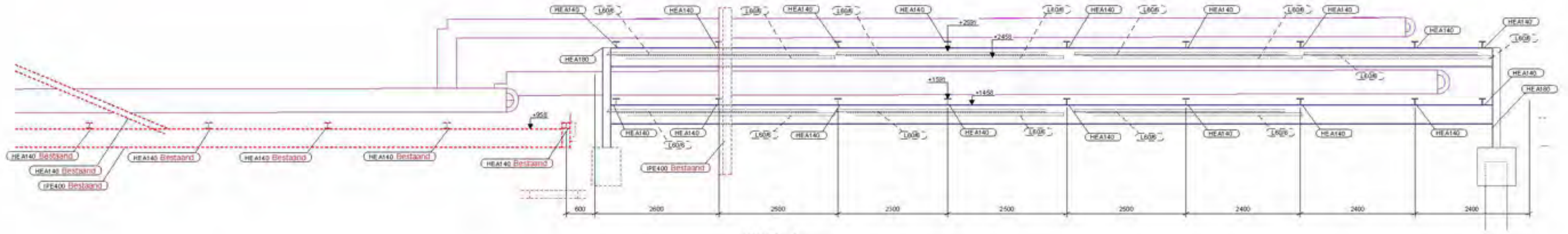
SIZE: A0

Date: 15.12.2022 Scale: 1:25 1:200 Drawn: 5.1.2.e Check: 5.1.2.e Appr.: 5.1.2.e EAR NR.: ?

No. TO_301



Bovenzicht
SCHAAL 1:50



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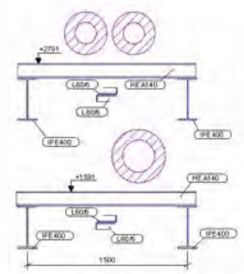


DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:25

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
-	5.1.2.e	5.1.2.e	5.1.2.e	15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis – industrial engineering 5.1.2.e

YARA SITE: YARA SLUISKIL

Project: PIPERACKS CCS PROJECT

Part: UITBREIDING PIPERACK ZONE 4

Yara Technology and Projects

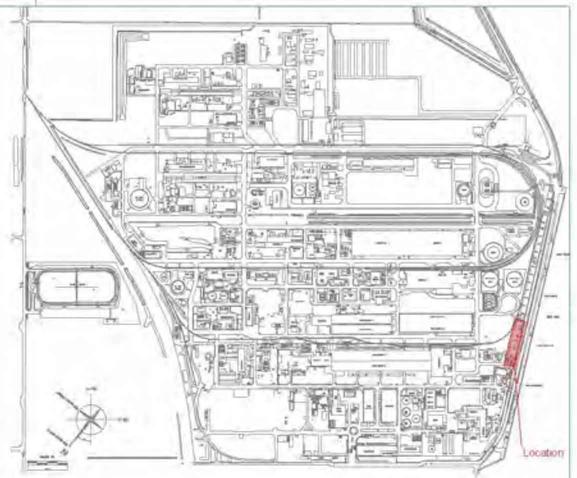
PROJECT NUMBER: 4922005

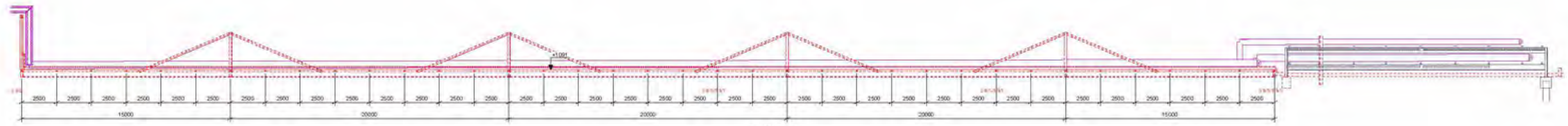
SIZE: A0

Date: 15.12.2022 | Scale: 1:25 1:50 | 5.1.2.e | 5.1.2.e | 5.1.2.e | EAR NR ?

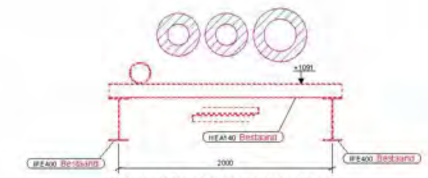
No: TO_401

Bovenzicht
SCHAAL 1:150

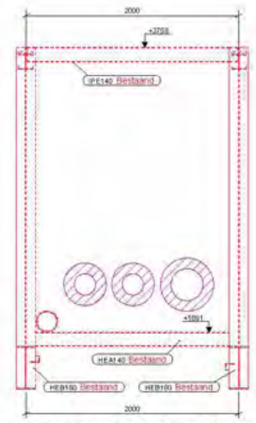




DRS A - A
SCHAAL 1:150



DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:25



DRS C - C (PRINCIPE DOORSNEDE)
SCHAAL 1:25

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
-	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis – industrial engineering 5.1.2.e

YARA SLUISKIL

PIPERACKS CCS PROJECT
BESTAAND PIPERACK
ZONE 5

YARA – Yara Technology and Projects

PROJECTNUMBER: 4922005

Size: A0

Date: 15.12.2022 | Scale: 1:25 1:150 | 5.1.2.e | EAR NR: ?

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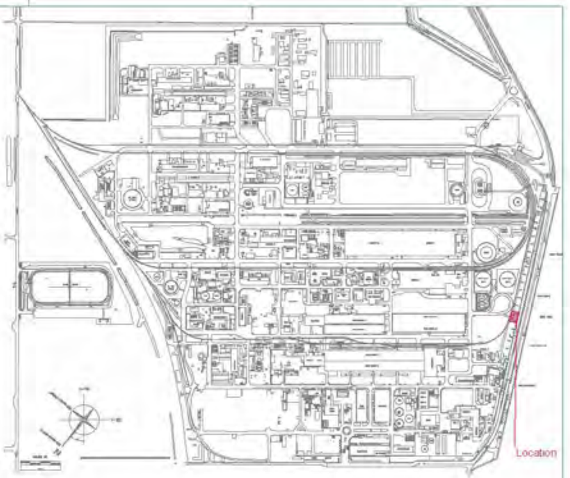
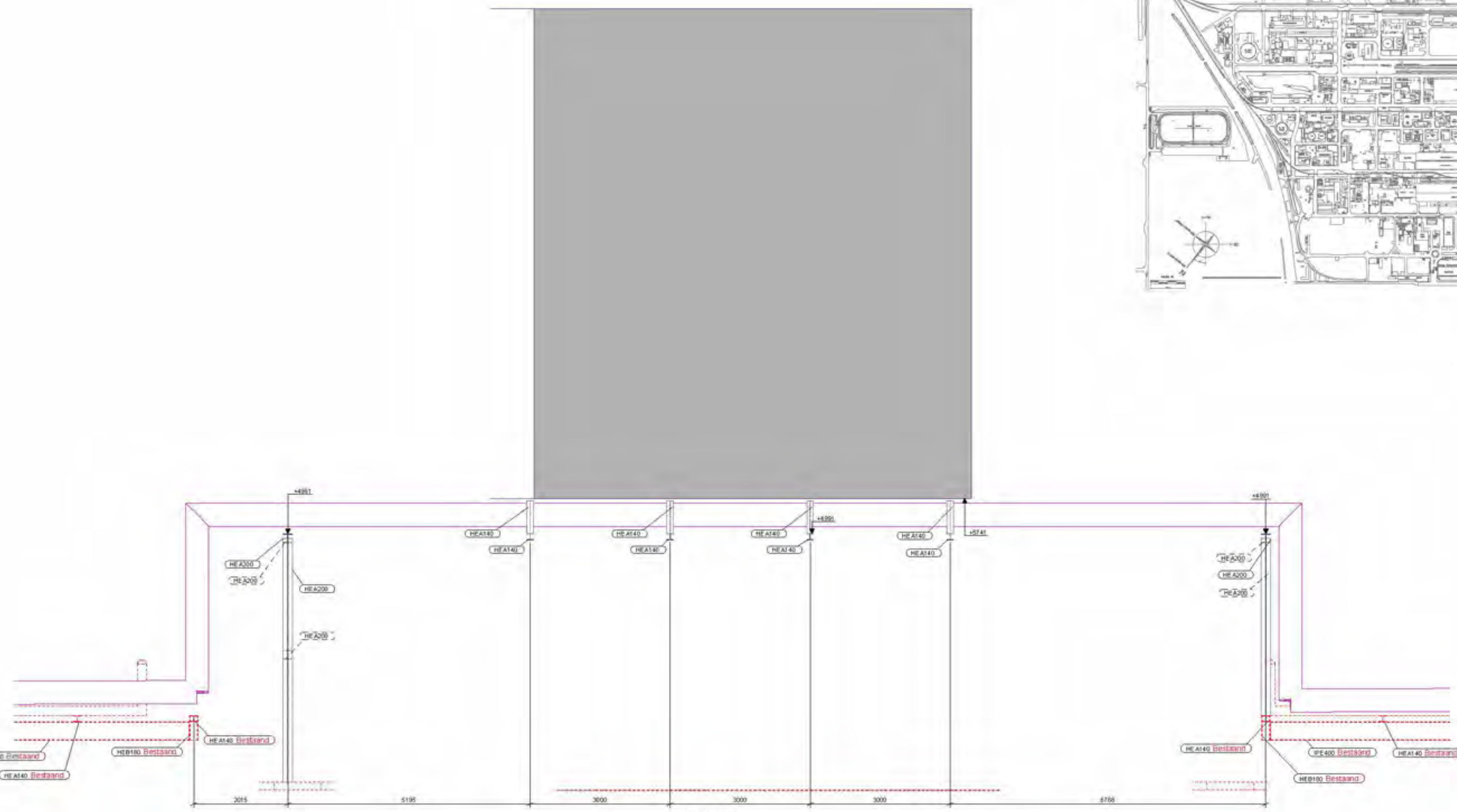
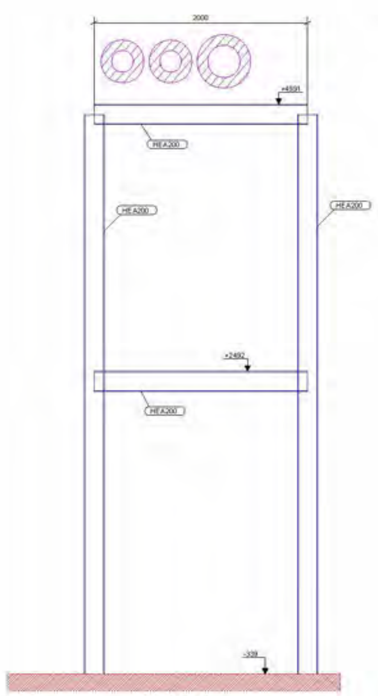
No. TO_501

Bovenzicht
SCHAAL 1:50





DRS A - A
SCHAAL 1:50



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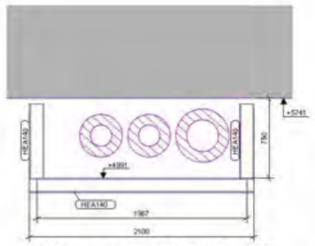
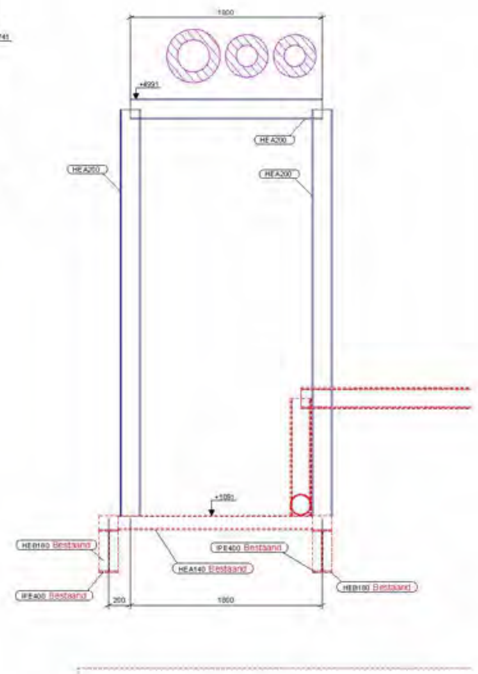
SCHAAL 1:25



DRS C - C (PRINCIPE DOORSNEDE)
SCHAAL 1:25



DRS D - D
SCHAAL 1:25

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

EXC2

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
-	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis industrial engineering 5.1.2.e

YARA SITE: YARA SLUISKIL

Project: PIPERACKS CCS PROJECT

Part: HANGERS PIPERACK TPV TOREN N ZONE 6

YARA Yara Technology and Projects

PROJECTNUMBER: 4922005

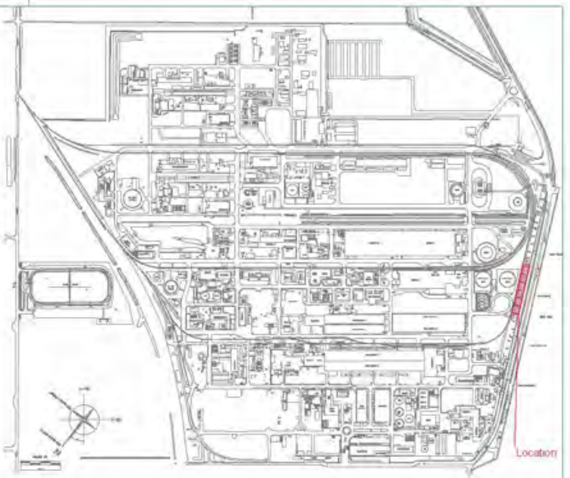
Date: 15.12.2022 Scale: 1:25 1:50 Drawn: 5.1.2.e

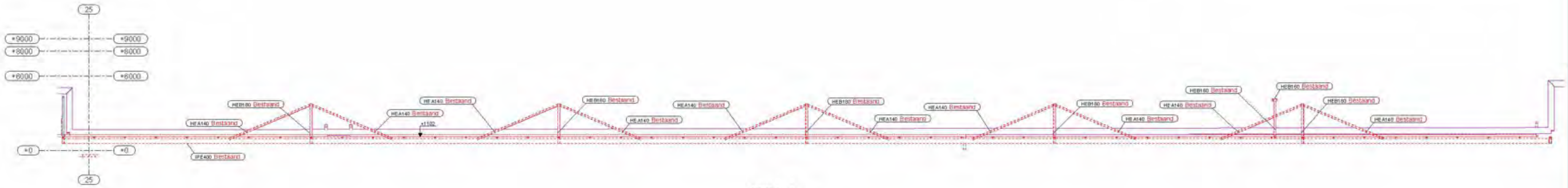
EAR NR: ?

SIZE: A0

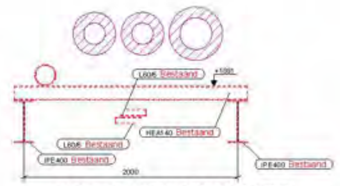
No. TO_601

Bovenzicht
SCHAAL 1:150

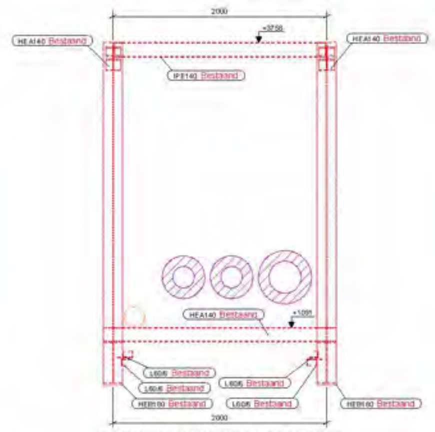




DRS A - A
SCHAAL 1:150



DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:25



DRS C - C (PRINCIPE DOORSNEDE)
SCHAAL 1:25

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
-	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis industrial engineering

5.1.2.e

YARA SITE: YARA SLUISKIL

Project: PIPERACKS CCS PROJECT

Part: PORTALEN OP BESTAAND PIPERACK ZONE 7

Yara Technology and Projects

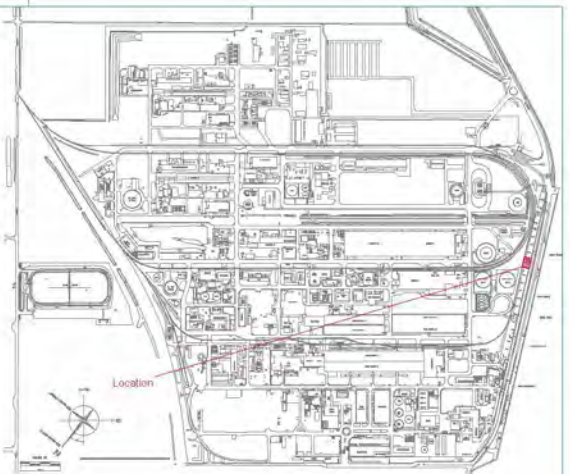
PROJECTNUMBER: 4922005

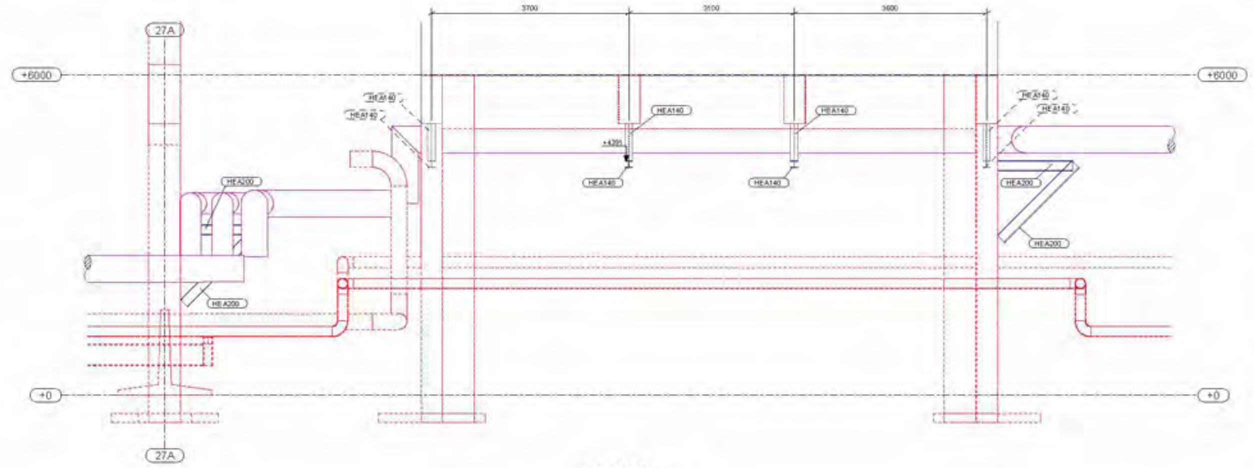
Date: 15.12.2022 | Scale: 1:25 1:150 | 5.1.2.e | EAR No.: EAR NR ?

SIZE: A0

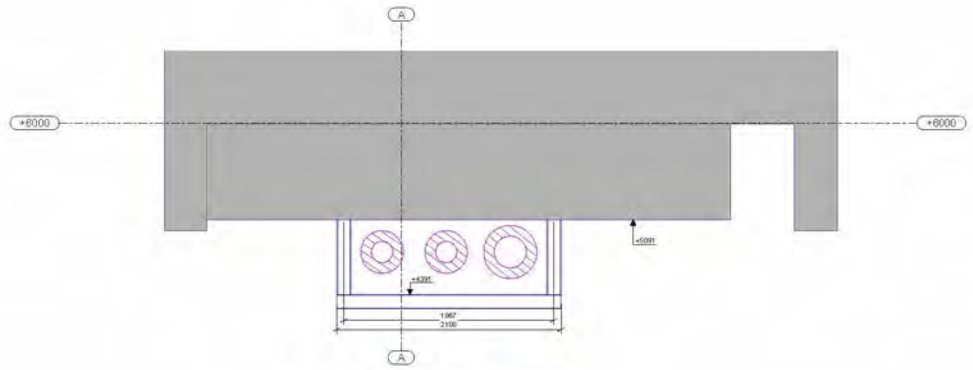
No. TO_701

Bovenzicht
SCHAAL 1:50





DRS A - A
SCHAAL 1:50



DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:25

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

GROUTING MORTAR

EXECUTION CLASS Main Steel

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
-	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis » industrial engineering

5.1.2.e

YARA SITE: YARA SLUISKIL

Project: PIPERACKS CCS PROJECT

Part: HANGERS PIPERACK TPV TOREN M ZONE 8

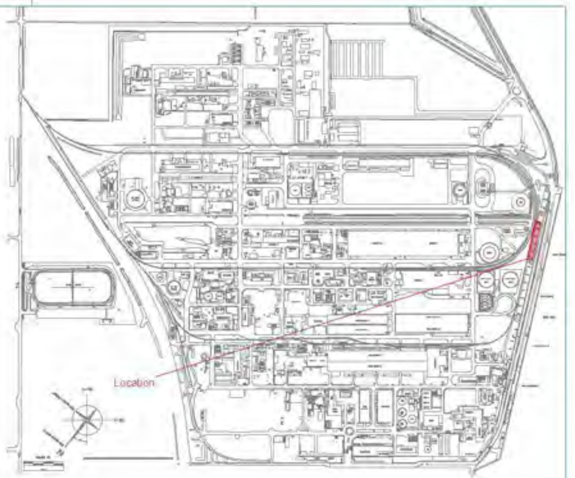
Yara Technology and Projects

PROJECTNUMBER: 4922005

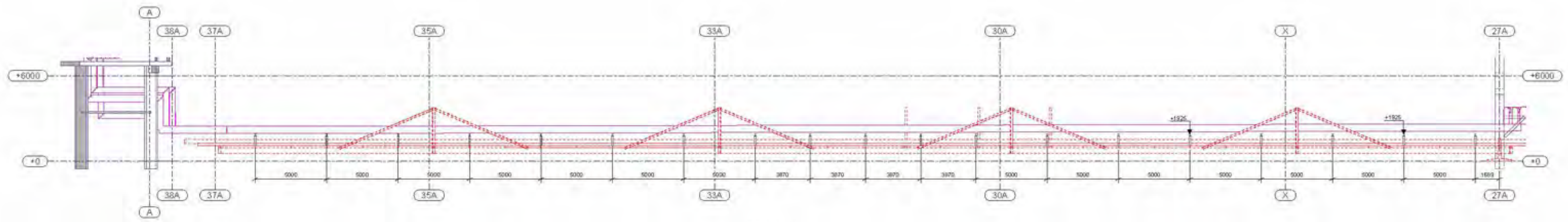
SIZE: A0

Date	Scale	Drawn	Check	Appr.	EAR No.
15.12.2022	1:25 1:50	5.1.2.e			EAR NR. ?

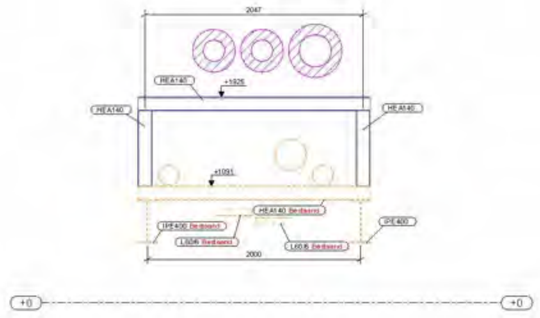
No. TO_801



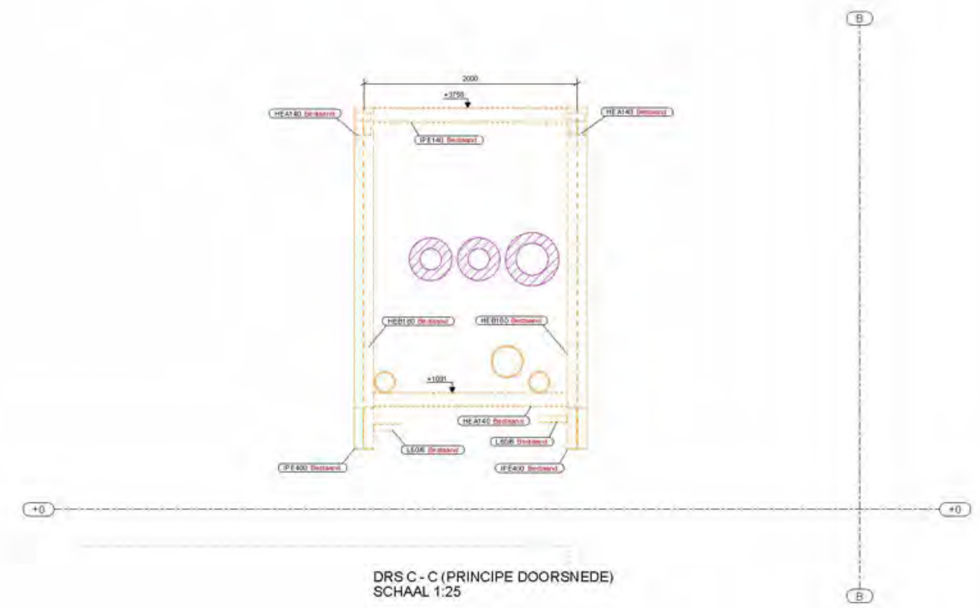
Bovenzicht
SCHAAL 1:150



DRS A - A
SCHAAL 1:150



DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:25



DRS C - C (PRINCIPE DOORSNEDE)
SCHAAL 1:25

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

EXC2

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
-	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis – industrial engineering

YARA SITE: YARA SLUISKIL

Project: PIPERACKS CCS PROJECT

Part: PORTALEN OP BESTAANDE PIPERACK ZONE 9

Yara Technology and Projects

PROJECTNUMBER KONSTRUKTIS: 4922005

Date: 15.12.2022 | Scale: 1:25 1:150 | 5.1.2.e | EAR No.: EAR NR ?

Size: A0

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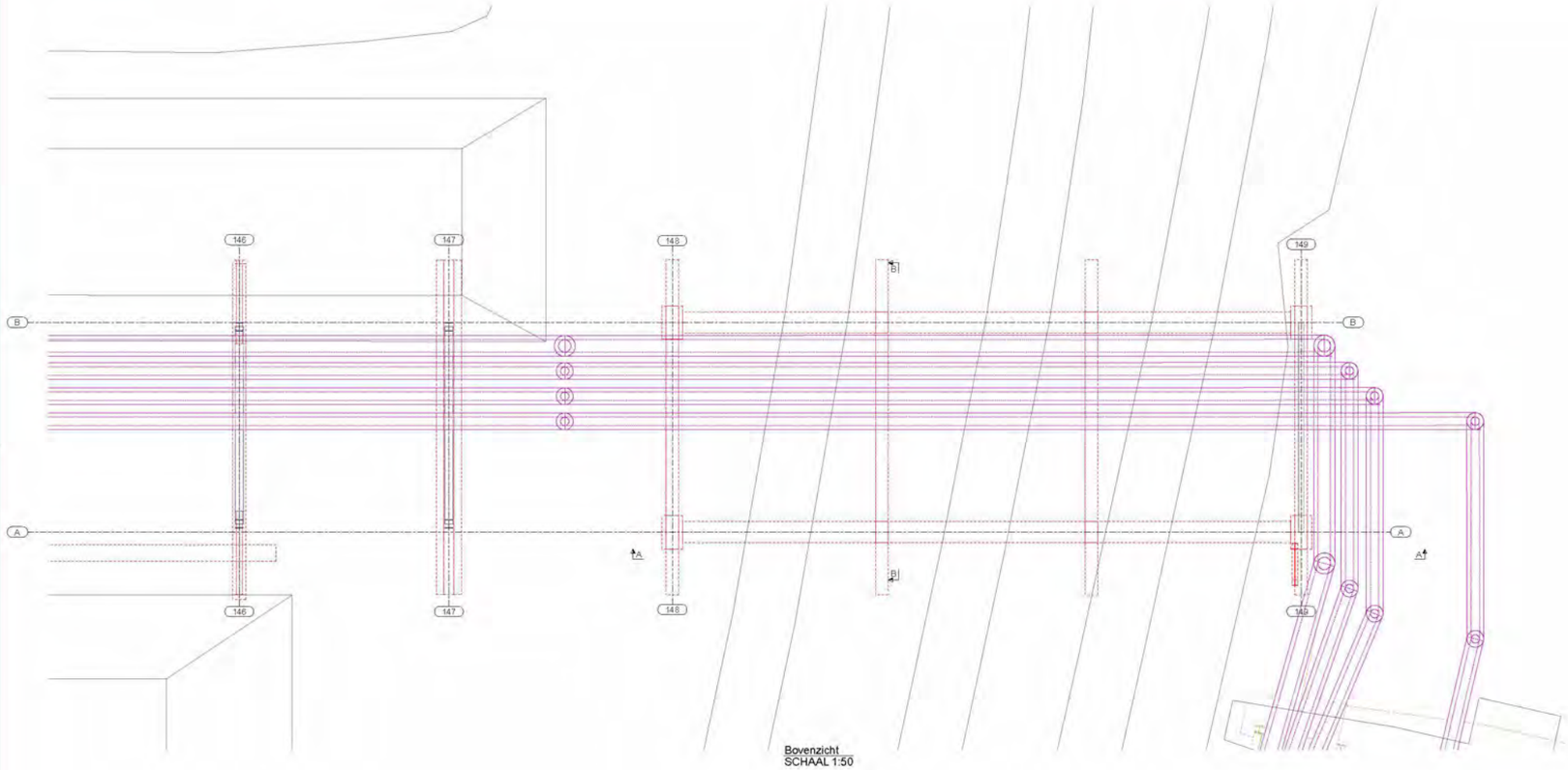
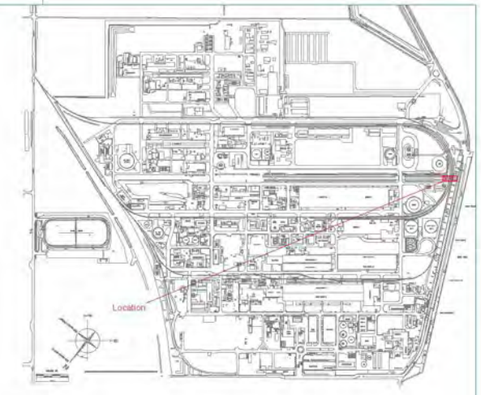
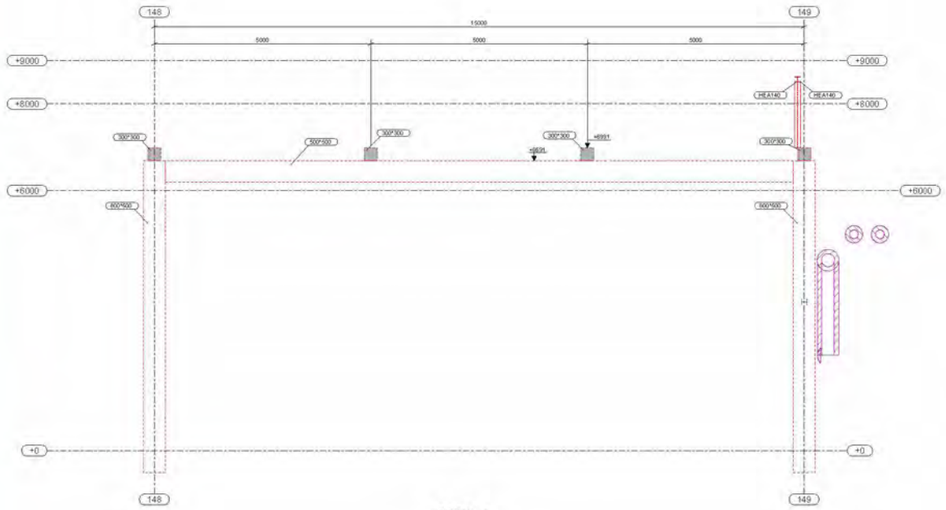
No. TO_901

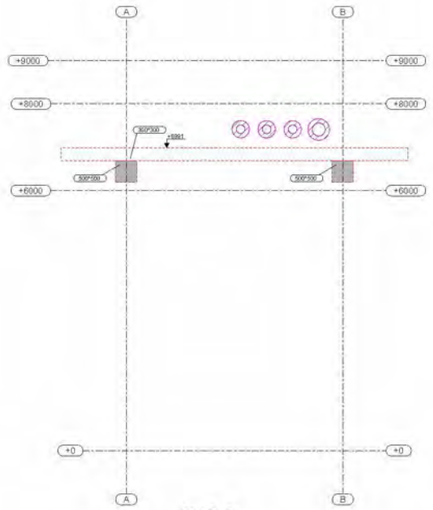


Bovenzicht
SCHAAL 1:50





DRS A - A
SCHAAL 1:50



DRS B - B
SCHAAL 1:50

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

EXECUTION CLASS Secondary steel

PRESERVATION

REMARKS

PREPARATION DEGREE

Rev	Drawn	Check	Appr.	Date	Description
-	5.1.2.e			15.12.2022	Voor omgevingsvergunning

konstruktis
industrial engineering

5.1.2.e

YARA SLUISKIL

PIPERACKS CCS PROJECT
BESTAANDE BETONNEN PIPERACK
ZONE 10

Yara Technology and Projects

15.12.2022	1:50	5.1.2.e		

4922005

A0

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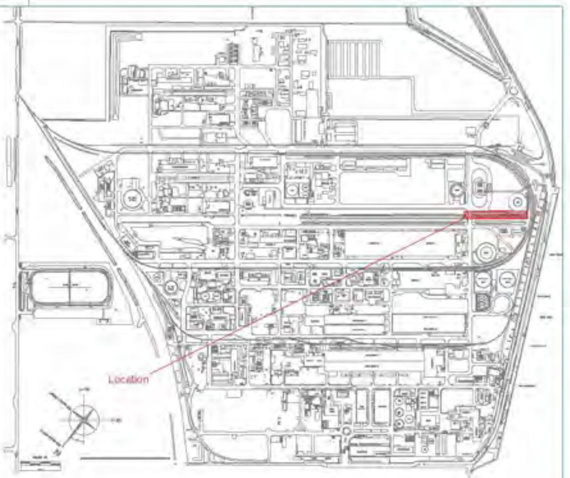
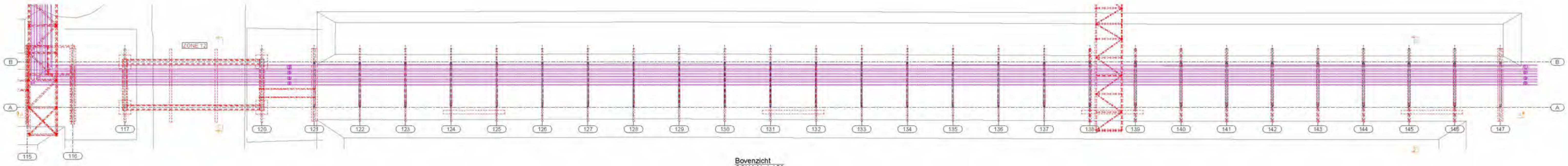
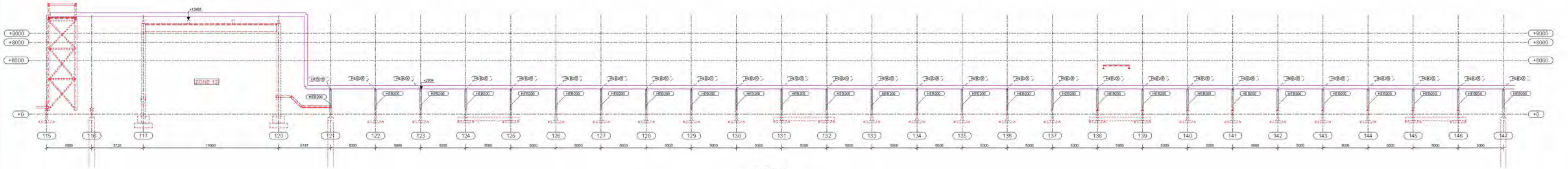
TO_1001

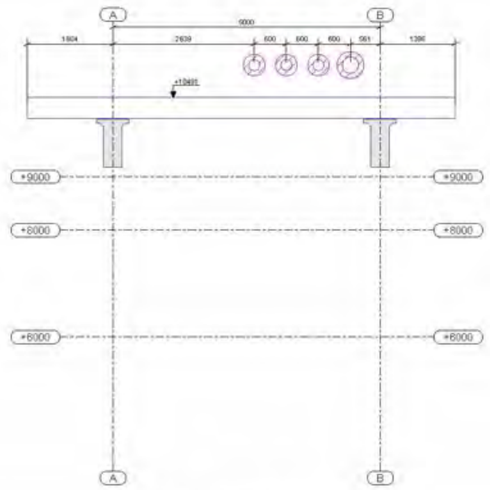




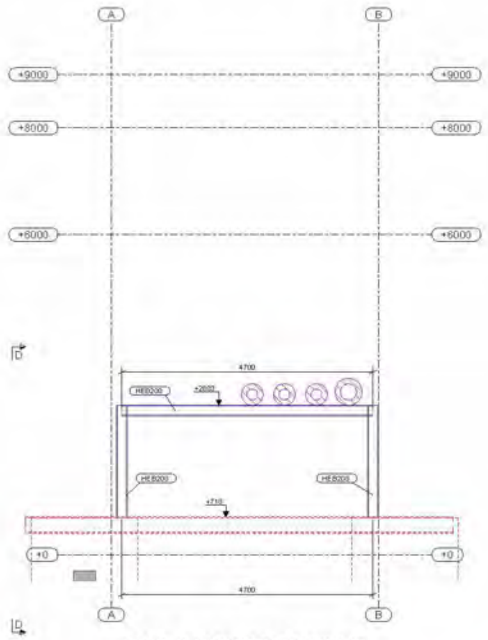
Bovenzicht
SCHAAL 1:150



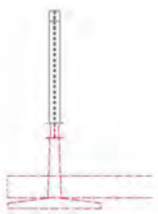
DRS A - A
SCHAAL 1:150



DRS C - C (PRINCIPE DOORSNEDE)
SCHAAL 1:50



DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:50



DRS D - D
SCHAAL 1:50

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
-	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis — industrial engineering

5.1.2.e

YARA SITE: YARA SLUISKIL

Project: PIPERACKS CCS PROJECT

Part: SUPPORTS OP BEST BETON SLEEPERS ZONE 11

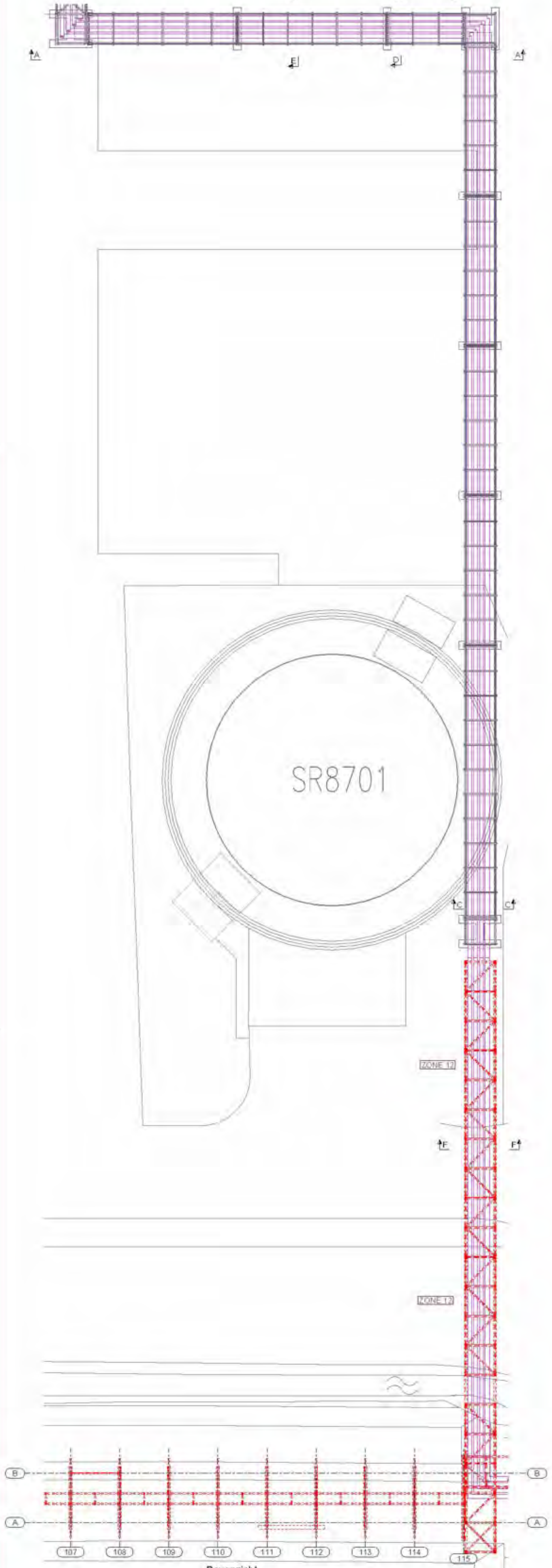
Yara Technology and Projects

PROJECTNUMBER KONSTRUKTIS: 4922005

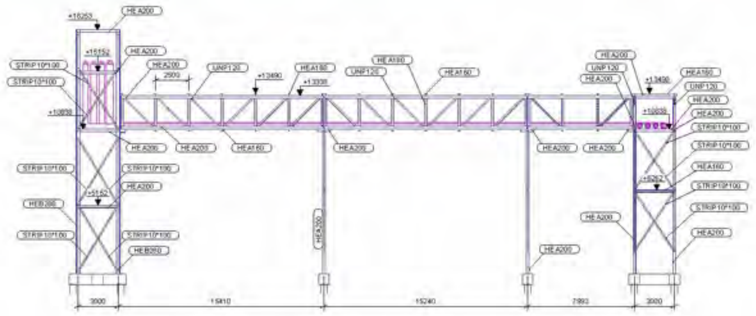
Size: A0

Date: 15.12.2022 | Scale: 1:50 1:150 | 5.1.2.e | EAR NR ?

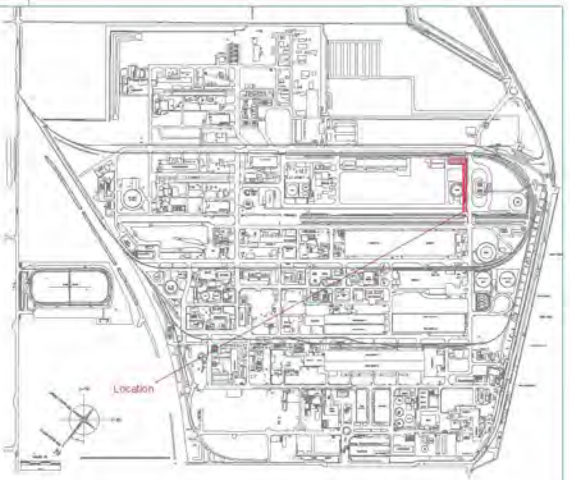
No. TO_1101

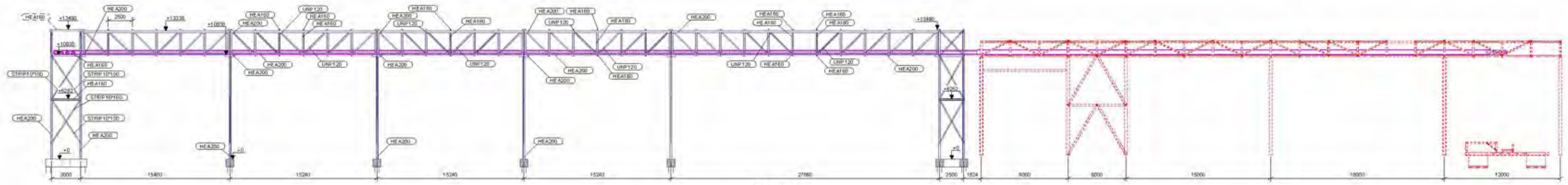


Bovenzicht
SCHAAL 1:200

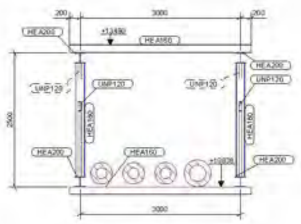


DRS A - A
SCHAAL 1:200

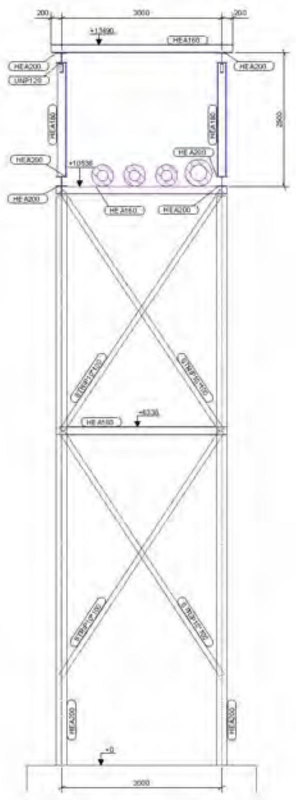




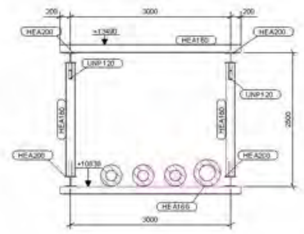
DRS B - B
SCHAAL 1:200



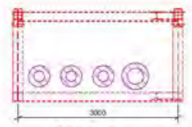
DRS C - C (PRINCIPE DOORSNEDE)
SCHAAL 1:50



DRS D - D (PRINCIPE DOORSNEDE)
SCHAAL 1:50



DRS E - E (PRINCIPE DOORSNEDE)
SCHAAL 1:50



DRS F - F
SCHAAL 1:50

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company:

konstruktis
industrial engineering

5.1.2.e

YARA SITE: YARA SLUISKIL

Project: PIPERACKS CCS PROJECT

Part: NIEUW PIPERACK
ZONE 13

YARA

Yara Technology and Projects

PROJECT NUMBER: 4922005

A0

Date: 15.12.2022

Scale: 1:50 1:200

5.1.2.e

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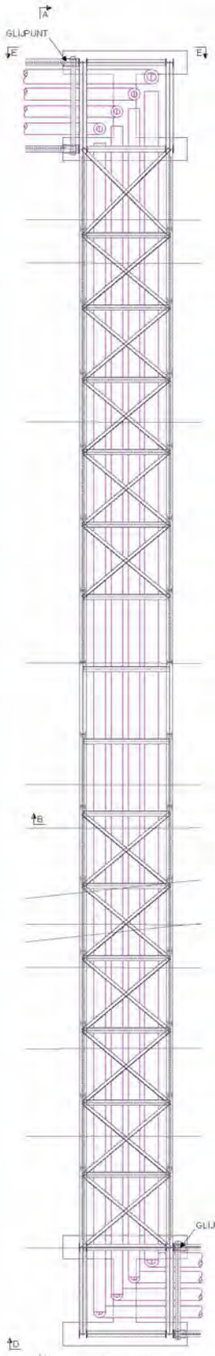
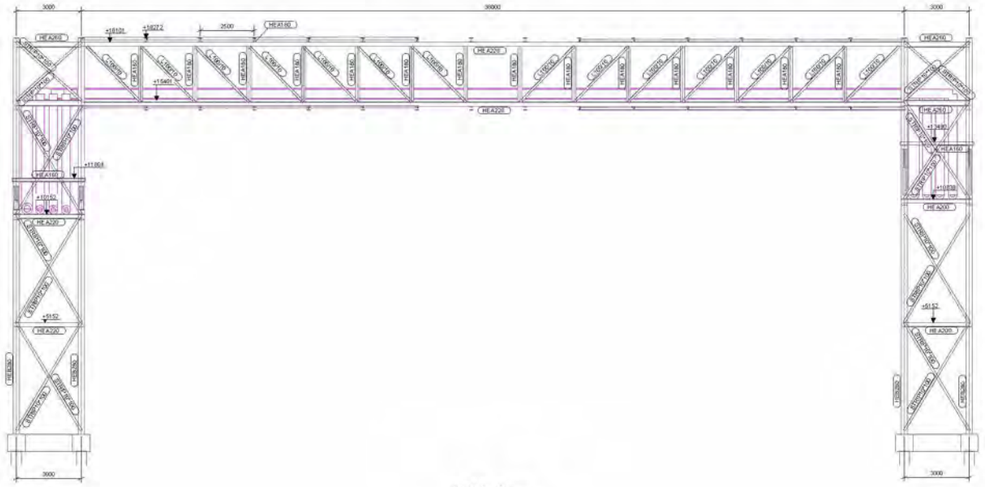
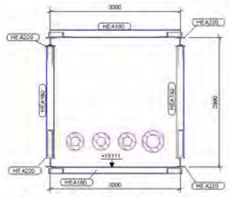
No. TO_1301



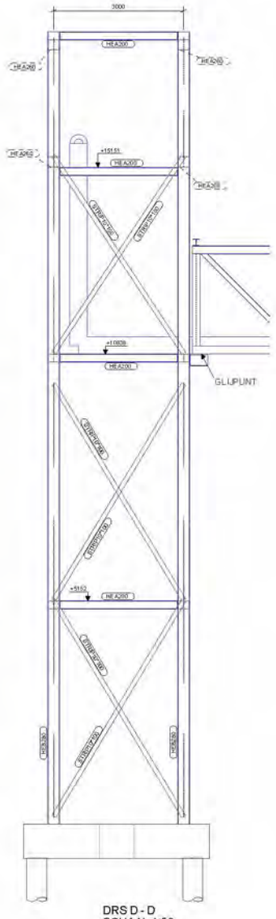
Bovenzicht
SCHAAL 1:75



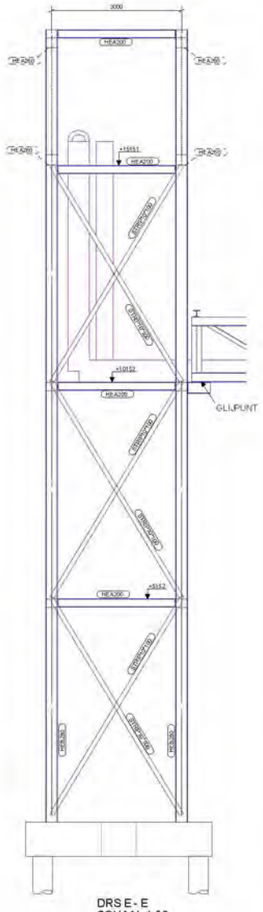
DRS A - A
SCHAAL 1:100



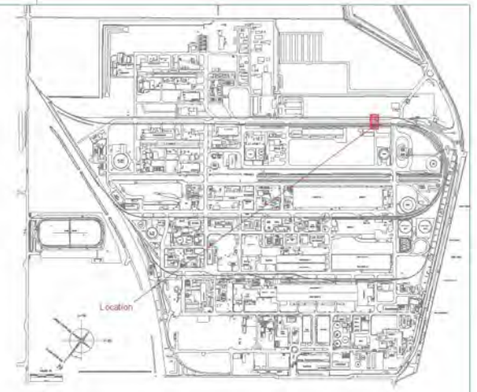
DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:50



DRS D - D
SCHAAL 1:50



DRS E - E
SCHAAL 1:50



GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

GROUTING MORTAR

EXECUTION CLASS Main Steel

PRESERVATION

REMARKS

EXECUTION CLASS Sircondary steel

PREPARATION DEGREE

-	5.1.2.e	15.12.2022	Voor omgevingsvergunning	
Rev.	Drawn	Check	Appr.	Date	Description

konstruktis
o industrial engineering

5.1.2.e

YARA SLUISKIL

PIPERACKS CCS PROJECT
NIEUW PIPERACK
ZONE 14

Yara Technology and Projects

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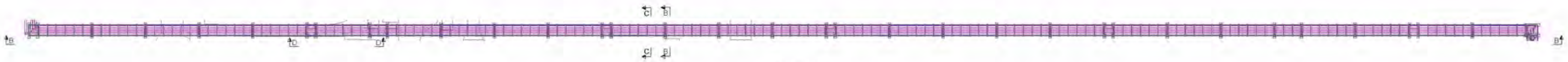
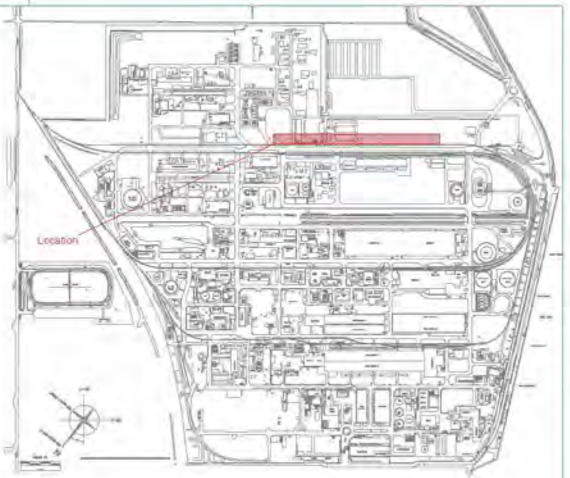
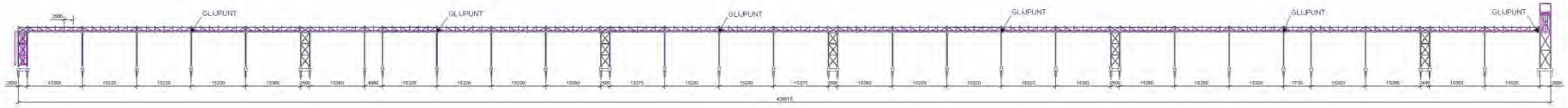
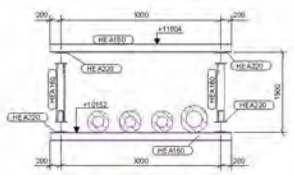


Bovenzicht
SCHAAL 1:500

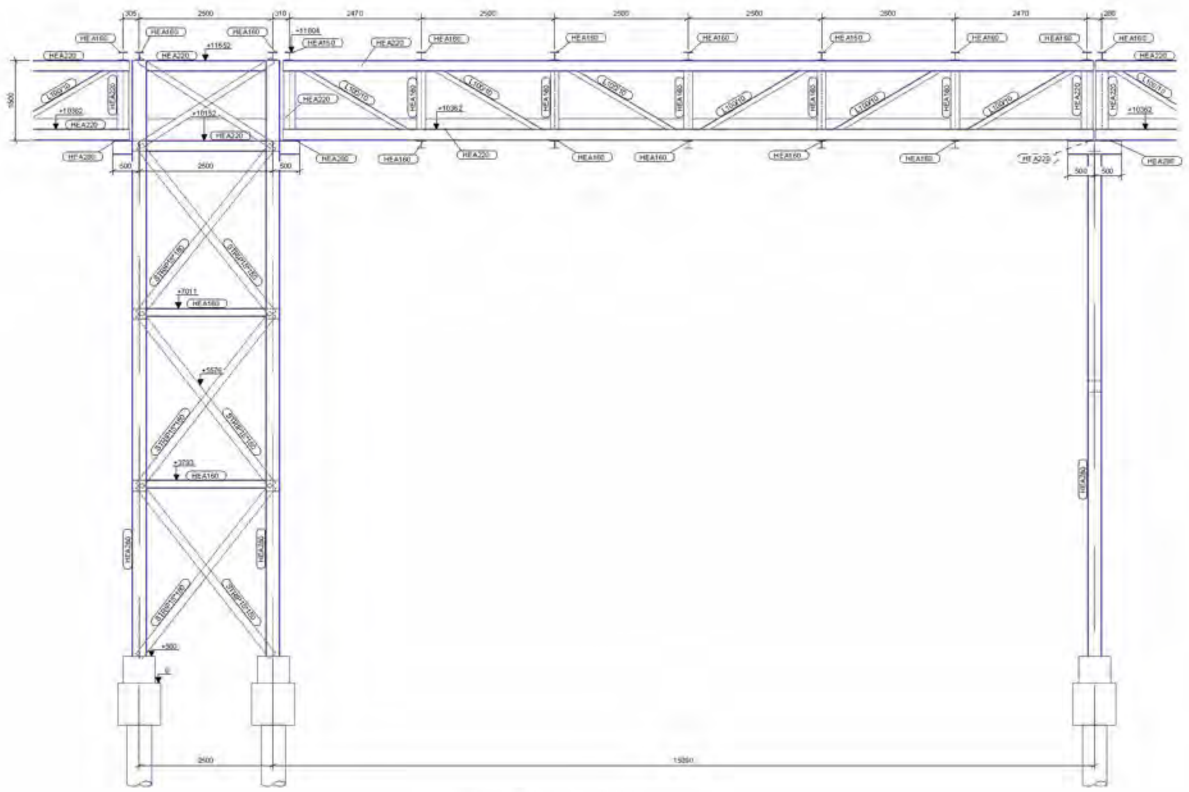




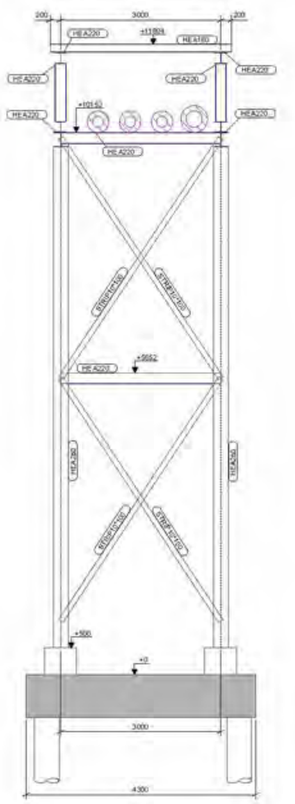
DRS B - B
SCHAAL 1:500



DRS C - C (PRINCIPE DOORSNEDE)
SCHAAL 1:50



DRS D - D (PRINCIPE DOORSNEDE)
SCHAAL 1:50



DRS B - B (PRINCIPE DOORSNEDE)
SCHAAL 1:50

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company:
konstruktis
industrial engineering
5.1.2.e

YARA SITE: YARA SLUISKIL
Project: PIPERACKS CCS PROJECT
Part: NIEUW PIPERACK
ZONE 15

Yara Technology and Projects

PROJECT NUMBER: 4922005
Size: A0

Date: 15.12.2022 | Scale: 1:50 1:500 | 5.1.2.e | EAR NR: ?

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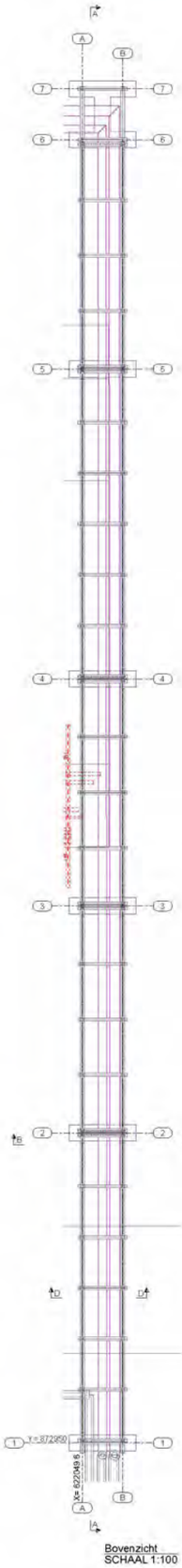
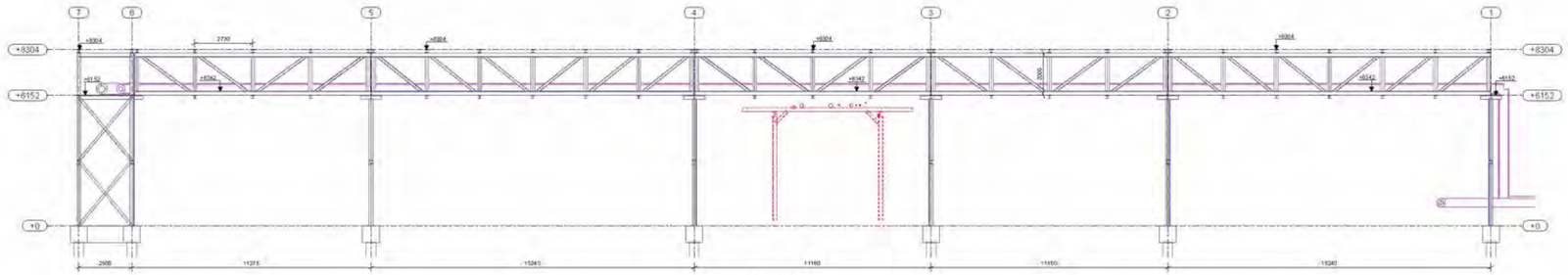
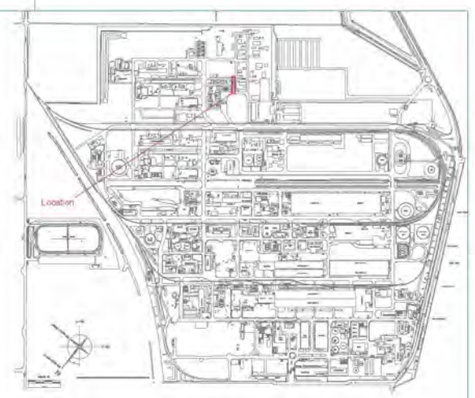
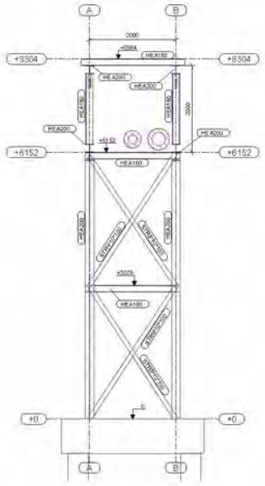
No TO_1501



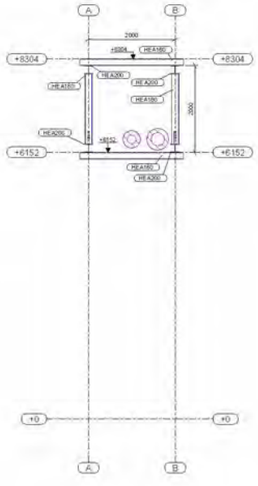


DRS A - A
SCHAAL 1:100





DRS B - B
SCHAAL 1:50



DRS D - D
SCHAAL 1:50

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

GROUTING MORTAR

EXECUTION CLASS Main Steel

EXECUTION CLASS Secondary steel

PRESERVATION

PREPARATION DEGREE

REMARKS

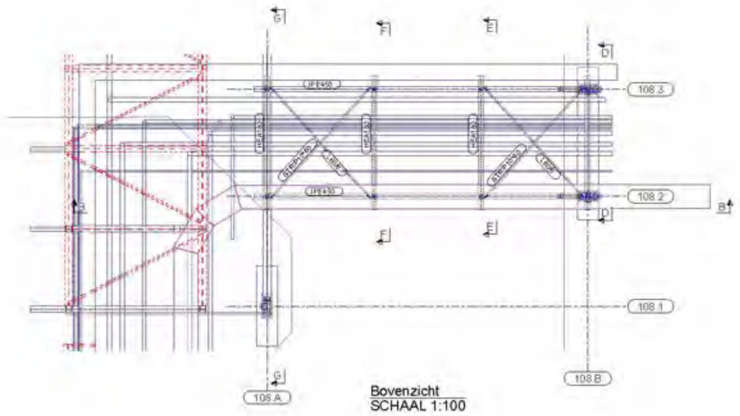
Rev.	Drawn	Check	Appr.	Date	Description
5.1.2.e				15.12.2022	Voor omgevingsvergunning

konstruktis
civil & industrial engineering
5.1.2.e

YARA SLUISKIL
PIPERACKS CCS PROJECT
NIEUW PIPERACK
ZONE 16

Yara Technology and Projects

4922005	15.12.2022	1:50 1:100	5.1.2.e
A0			TO_1601



Bovenzicht
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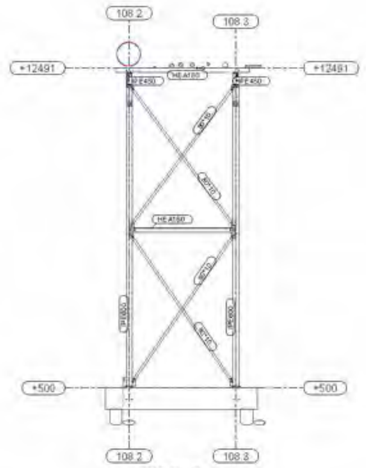

DRS D - D
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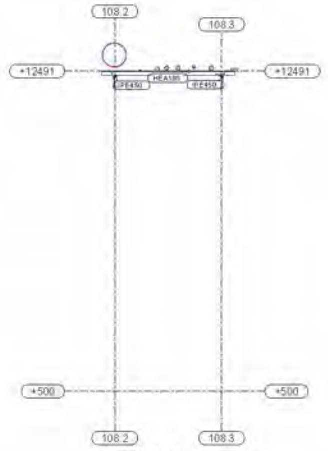

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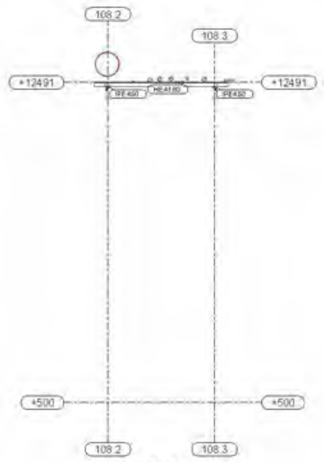

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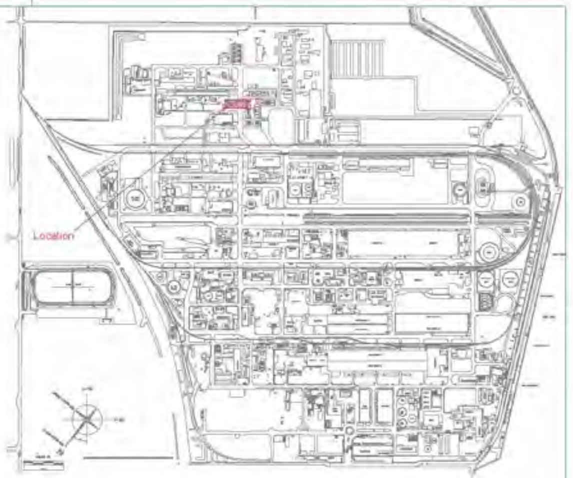
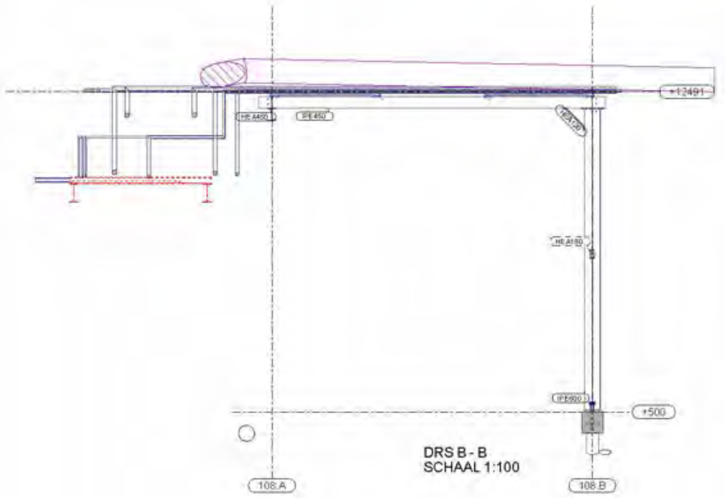
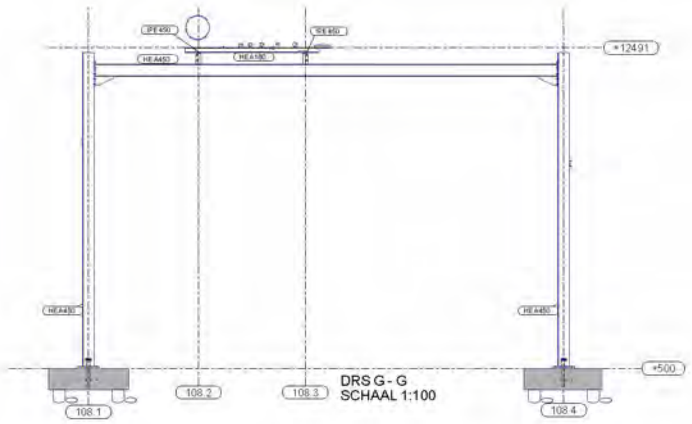




DRS B - B
SCHAAL 1:100



DRS G - G
SCHAAL 1:100

GENERAL STEEL

STEEL

ADDITIONAL YARA SPECIFICATIONS

STEEL GRADES

BOLTS

WELDING DIMENSIONS

ANCHORS

FIRE RESISTANCE

CLIMATE CLASS

EXECUTION CLASS Main Steel

GROUTING MORTAR

PRESERVATION

REMARKS

EXECUTION CLASS Secondary steel

PREPARATION DEGREE

Rev.	Drawn	Check	Appr.	Date	Description
	5.1.2.e			15.12.2022	Voor omgevingsvergunning

Engineering company: konstruktis – industrial engineering 5.1.2.e

YARA SITE: YARA SLUISKIL
Project: PIPERACKS CCS PROJECT
Part: NIEUW PIPERACK
ZONE 17

Yara Technology and Projects

Project number: 4922005
Size: A0
Date: 15.12.2022
Scale: 1:100
5.1.2.e
EAR NR ?

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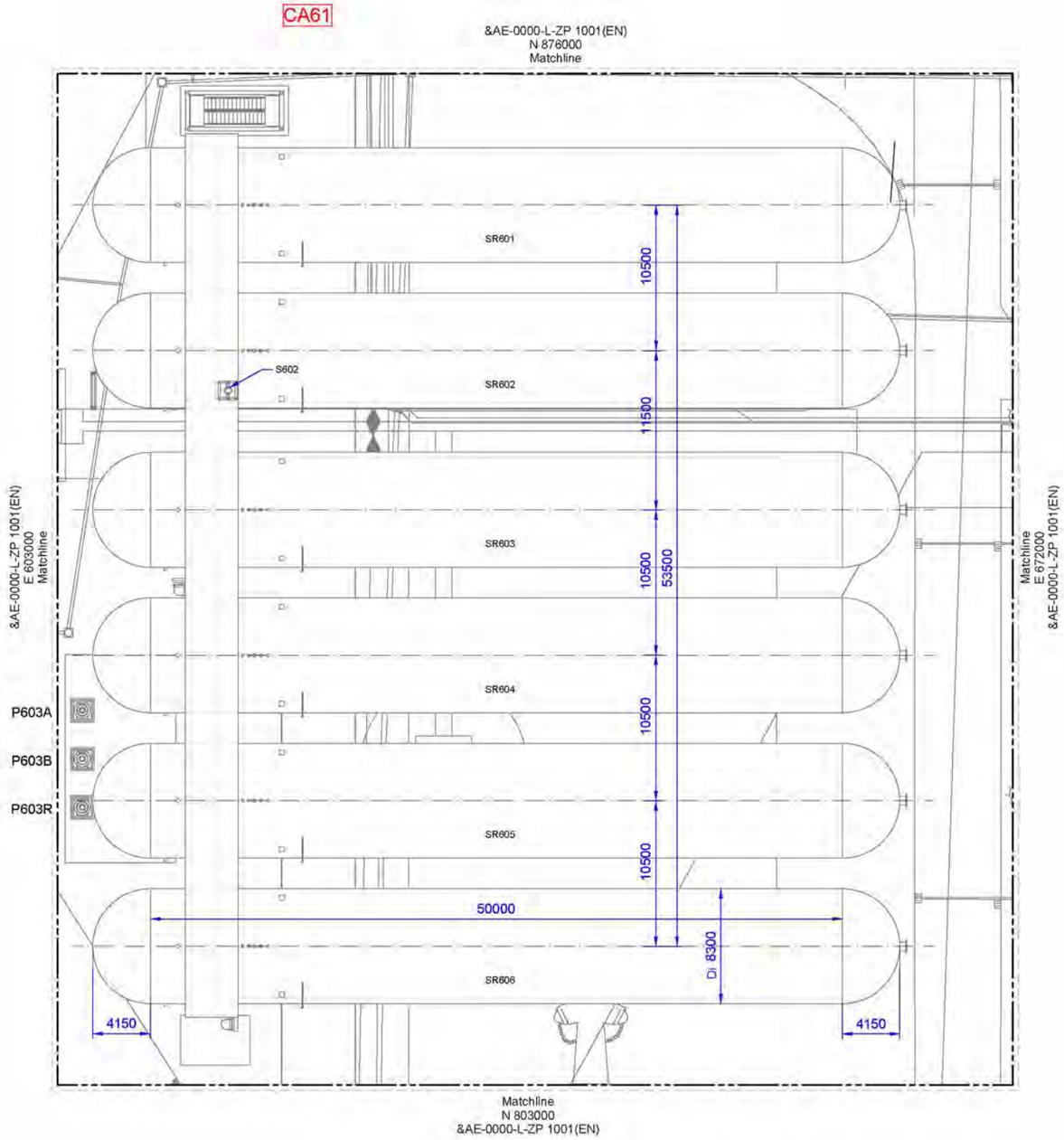
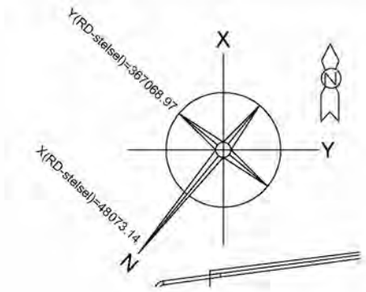
No. TO_1701

8. CO_2 opslagtanks

top view

Looking Plan
SCALE: 1:200





Construction Areas	
CA00	Area not in LEDD scope
CA02	CO2 Compression / Refrigeration (Machine House)
CA03	Field Installation
CA05	Pipe Rack
CA41	Drying Unit
CA51	Rectification Unit
CA61	Tank Farm Unit
CA63	Ship Loading Unit
CA91	Cooling Water Unit

Equipments Tank Area	
P603 A/B/R	CO2 Loading Pump
S602	Silencer Storage
SR601	CO2 Storage Tank
SR602	CO2 Storage Tank
SR603	CO2 Storage Tank
SR604	CO2 Storage Tank
SR605	CO2 Storage Tank
SR606	CO2 Storage Tank

Notes:

- Reference Drawing &AE-0000-L-ZP 1010(EN)
  "Equipment Arrangement Drawing Tank Farm Sections"

SCALE 1:200

ISSUE	DATE	STATUS	DIVISION	ORIGINATOR	REVIEWED	APPROVED	DESCRIPTION
2.0	06.09.2022		512x	xxxx	xxxx	xxxx	
1.0	22.07.2022			xxxx	xxxx	xxxx	First Draft

PLANT DESCRIPTION: Carbon Capture Storage Plant, Sluiskil

LINDE PROJECT NO. 3710AST6	CLIENT PROJECT NO. 16471
LINDE PROJECT CODE Sluiskil	CLIENT PROJECT CODE CACTUS

TITLE: Equipment Arrangement Drawing
Tank Farm
Top View

SCALE	SIZE	LINDE DOC. NO.	SHEET	SHEETS
1:200	A1	&AE-0000-L-ZP 1009(EN)		
		YARA DOC. NO. 16471-P57-00005	REV 01	1 OF 1