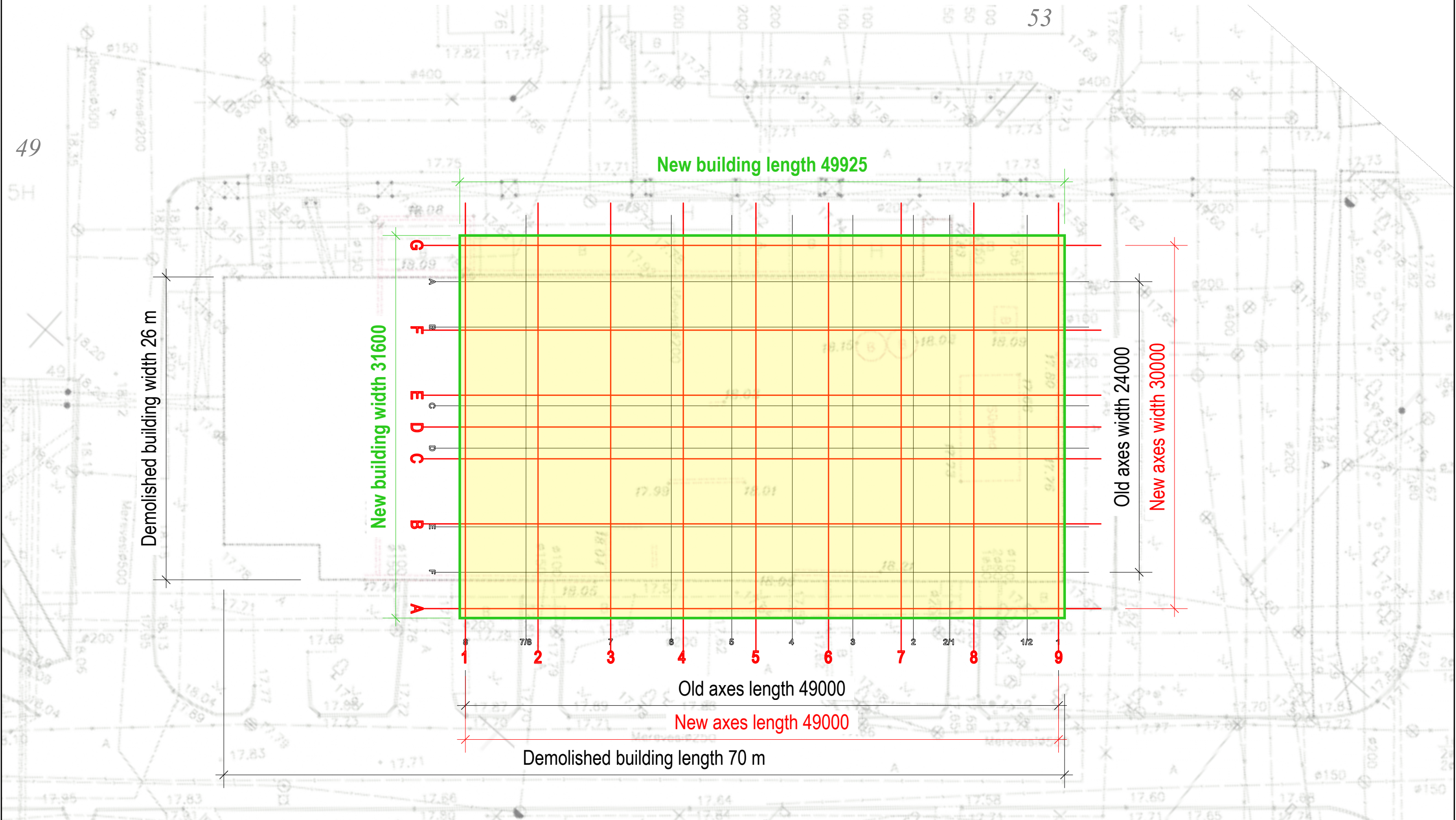


Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Location

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



FACILITY 51A: Niobium and Tantalum Line
Kesk 2/1, Sillamäe, Ida-Viru County, 40231, Estonia

PROJECT STAGE:
civil requirements
PROJECT MANAGER:
E. Prommik, +372 5557 7770

A3L / M 1:300
28.03.2016

Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Basic requirements

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016

Width (axes) B = 30 m

Length (axes) L = 49 m

Height (roof) H = ~20..21 m

Height (below truss) H = 17 m

Technological requirements:

Width = 29 m
Length = 41,25 m
Area = 1 196 m2
Height = 15 m (free height below bridge crane hook)
Volume = 20 213 m3
Load to concrete floor on Technology Hall = ~10T = 100 kN (200x200 mm)
Environment (+0,000...+10,000) = C4
Environment (+10,000..+20,000) = C3

Bridge crane requirements:

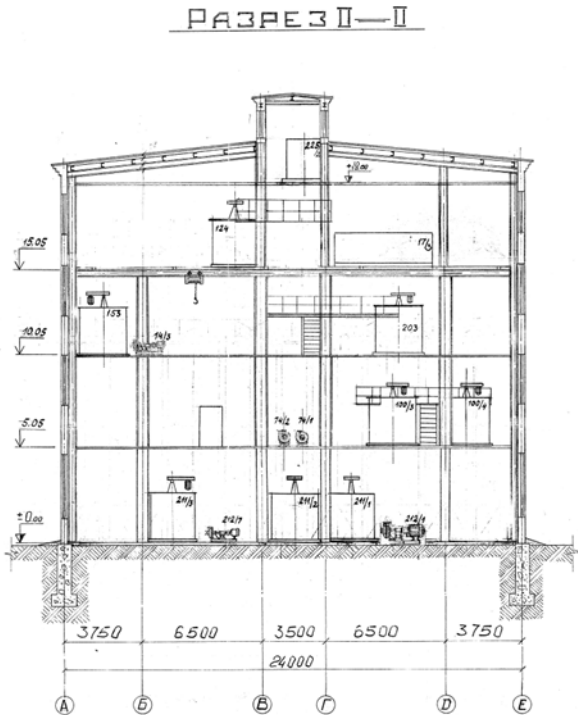
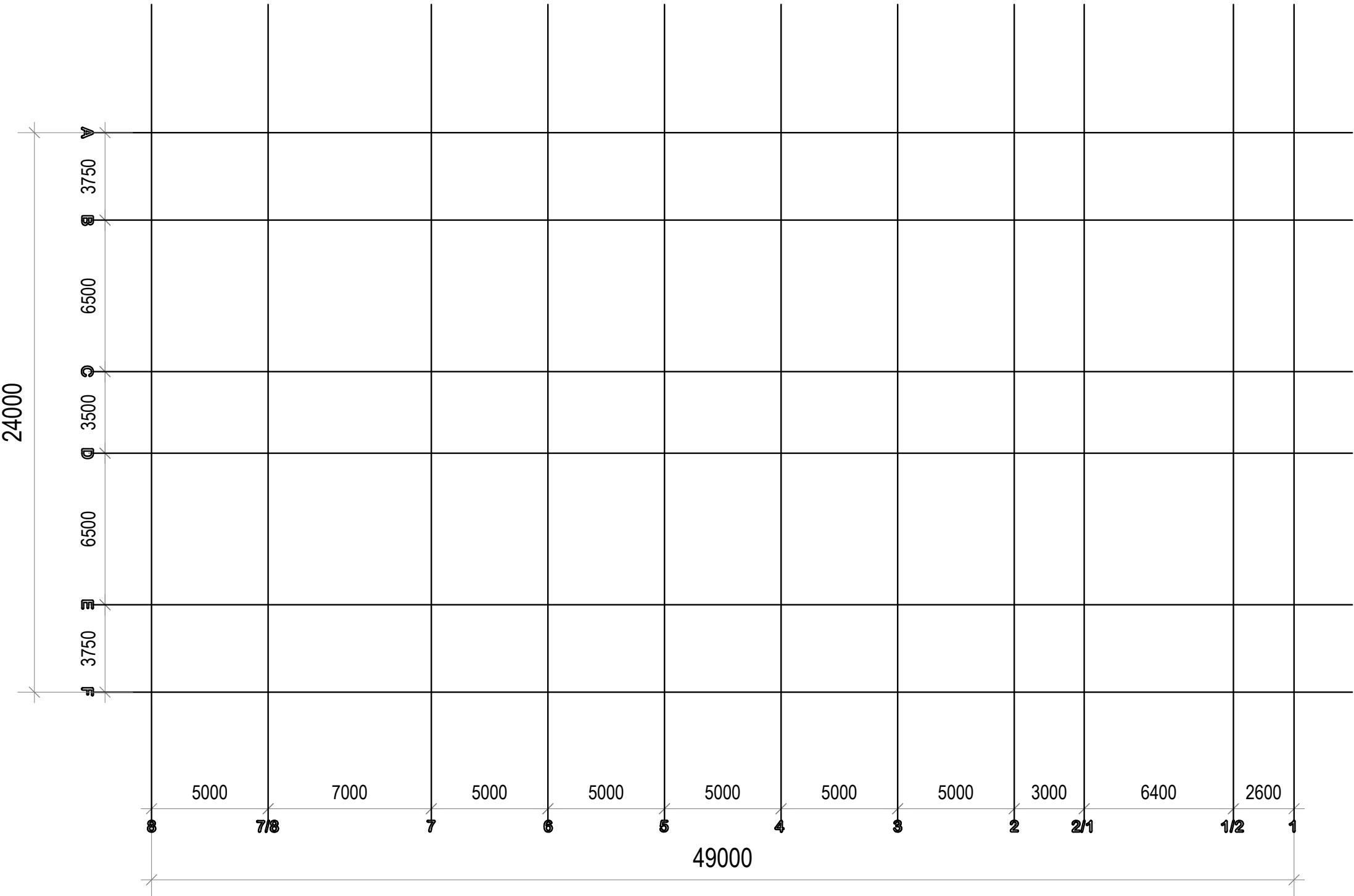
Amount = 2 cranes
Load = 3,0 T (max)
free space 1,0 m (external wall column internal side to crane)
free space 2,0 m (center, between cranes)



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Demolished building axes

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



FACILITY 51A: Niobium and Tantalum Line
Kesk 2/1, Sillamäe, Ida-Viru County, 40231, Estonia

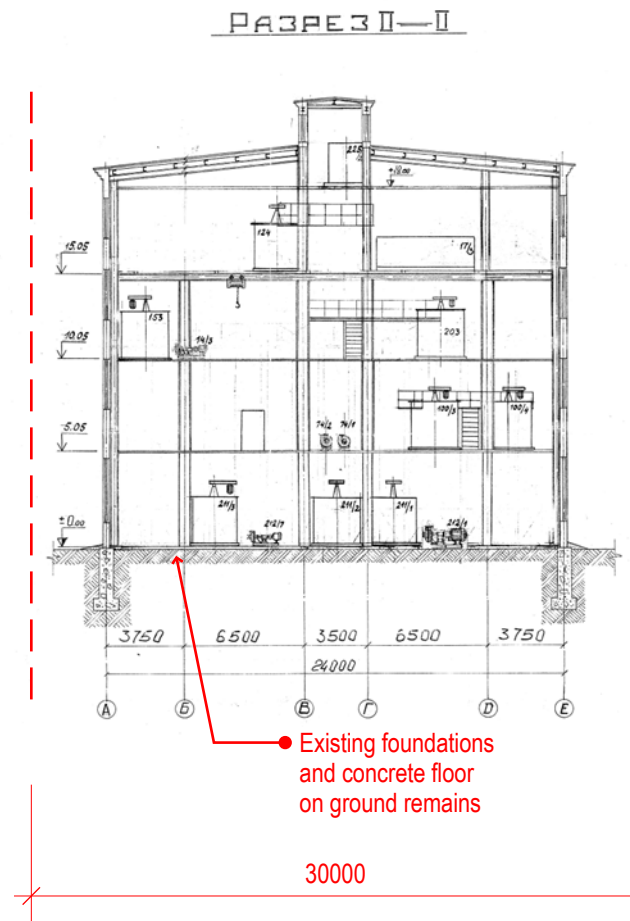
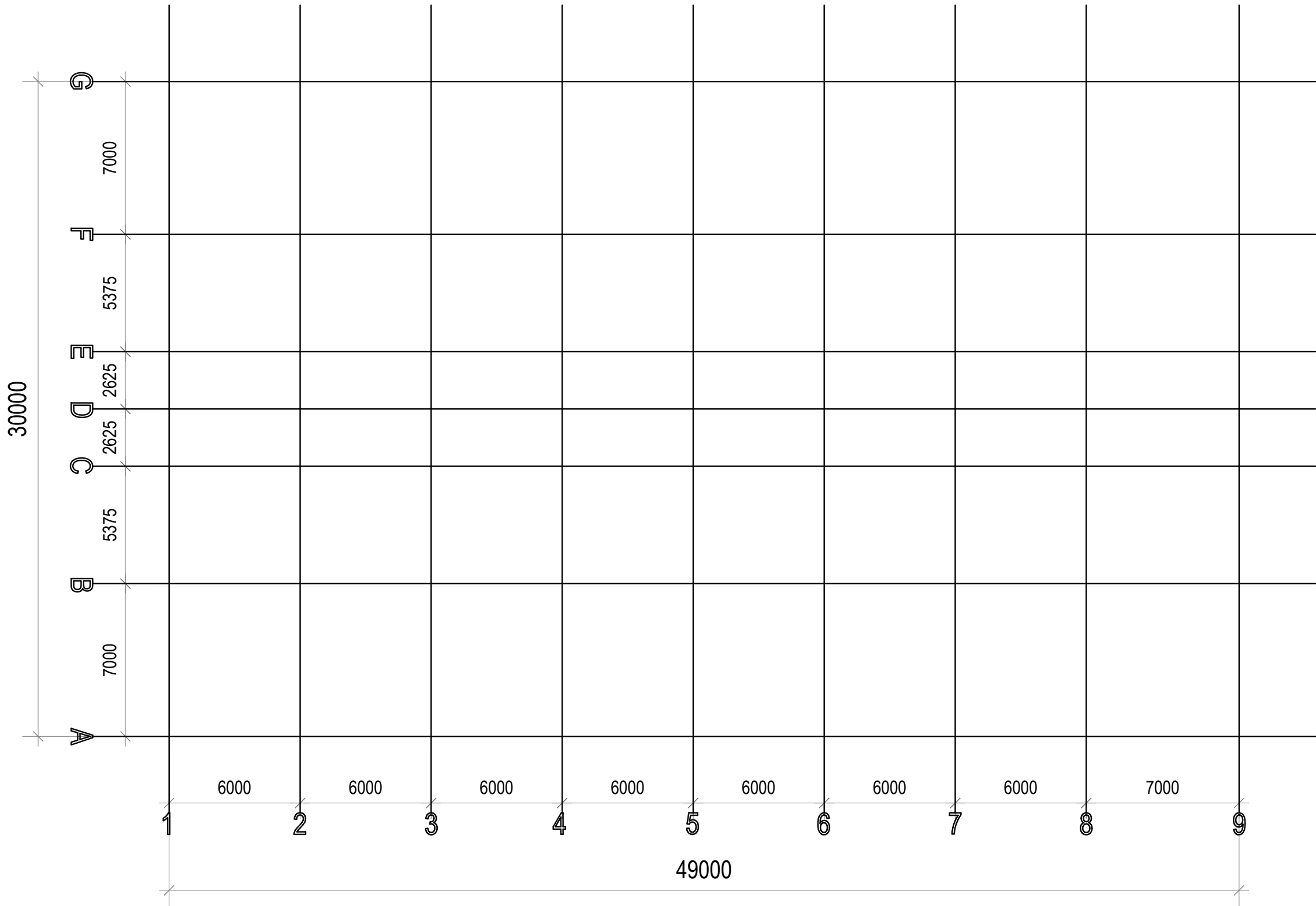
PROJECT STAGE:
civil requirements
PROJECT MANAGER:
E. Prommik, +372 5557 7770

A3L / M 1:200
28.03.2016

Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

New building axes

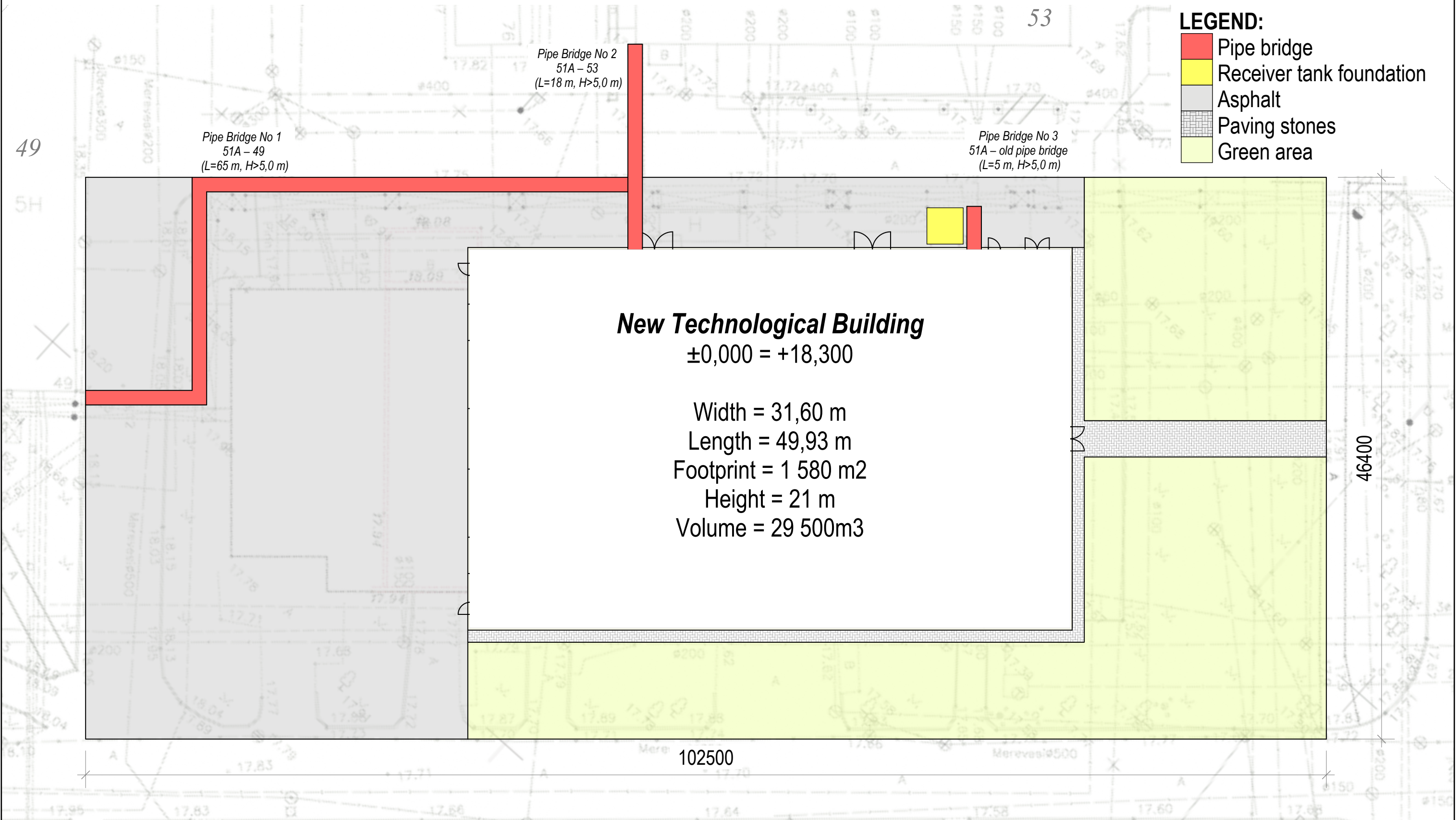
PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Layout

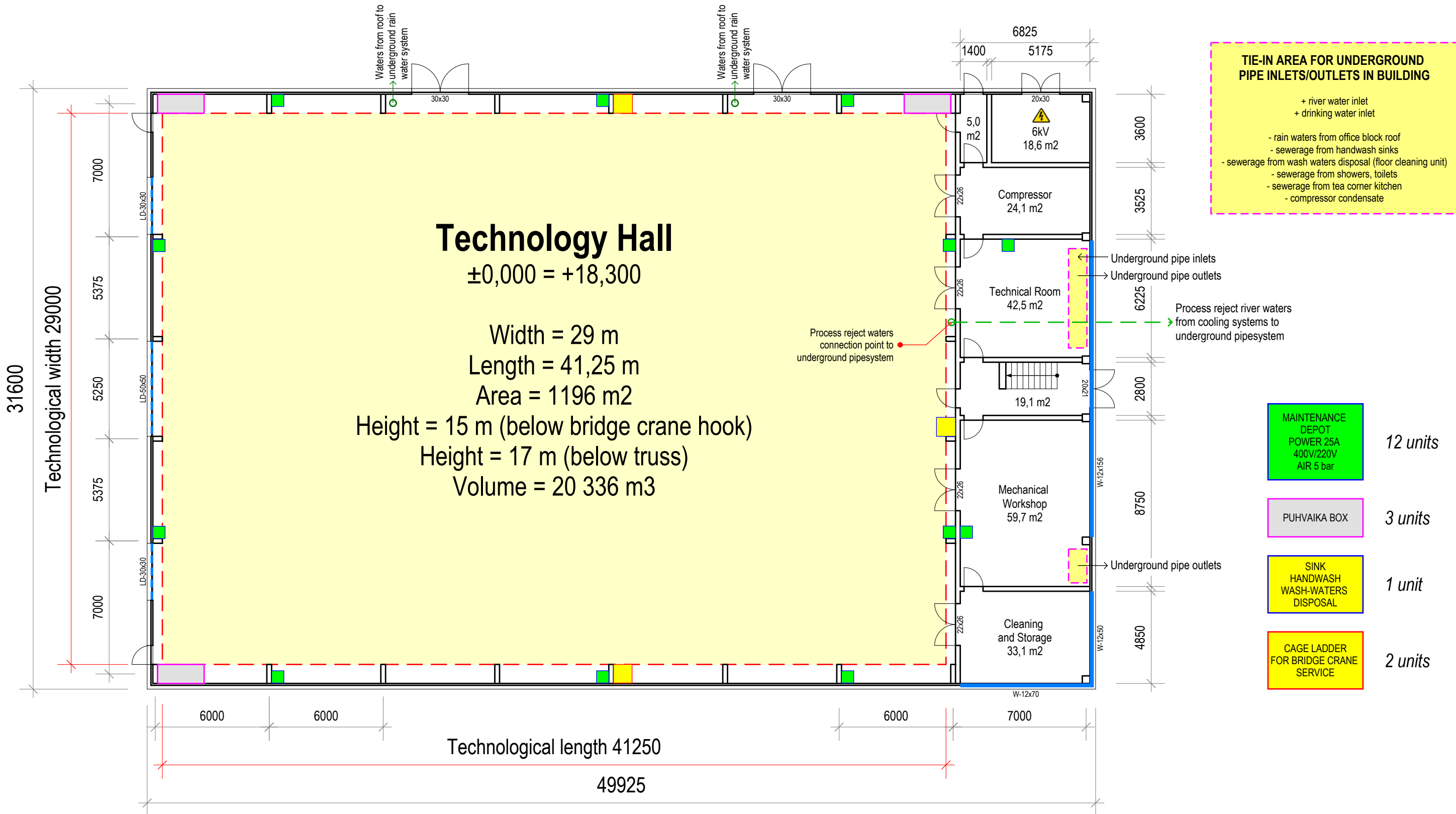
PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Plan (±0,000): 1st floor

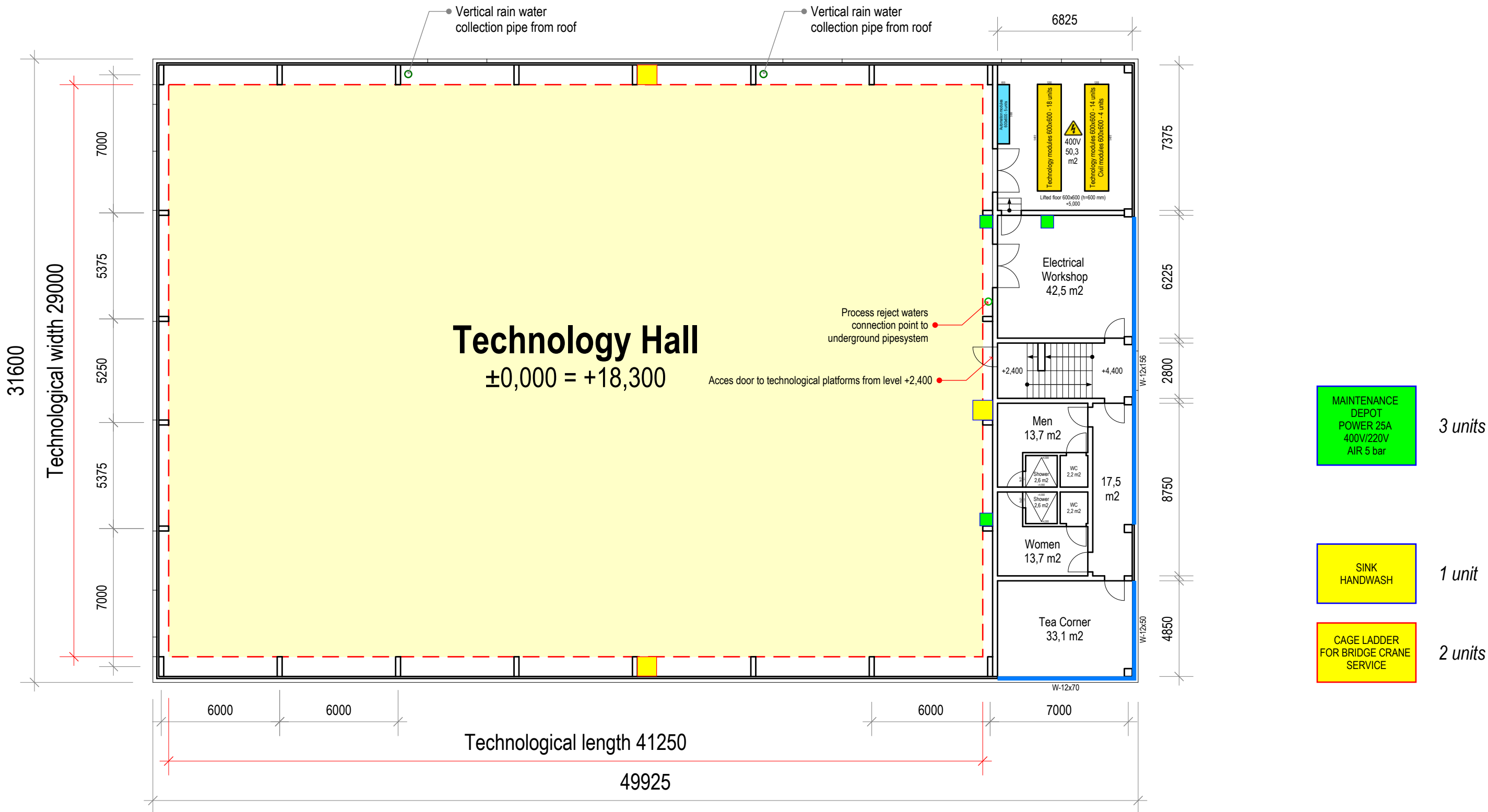
PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Plan (+4,400): 2nd floor

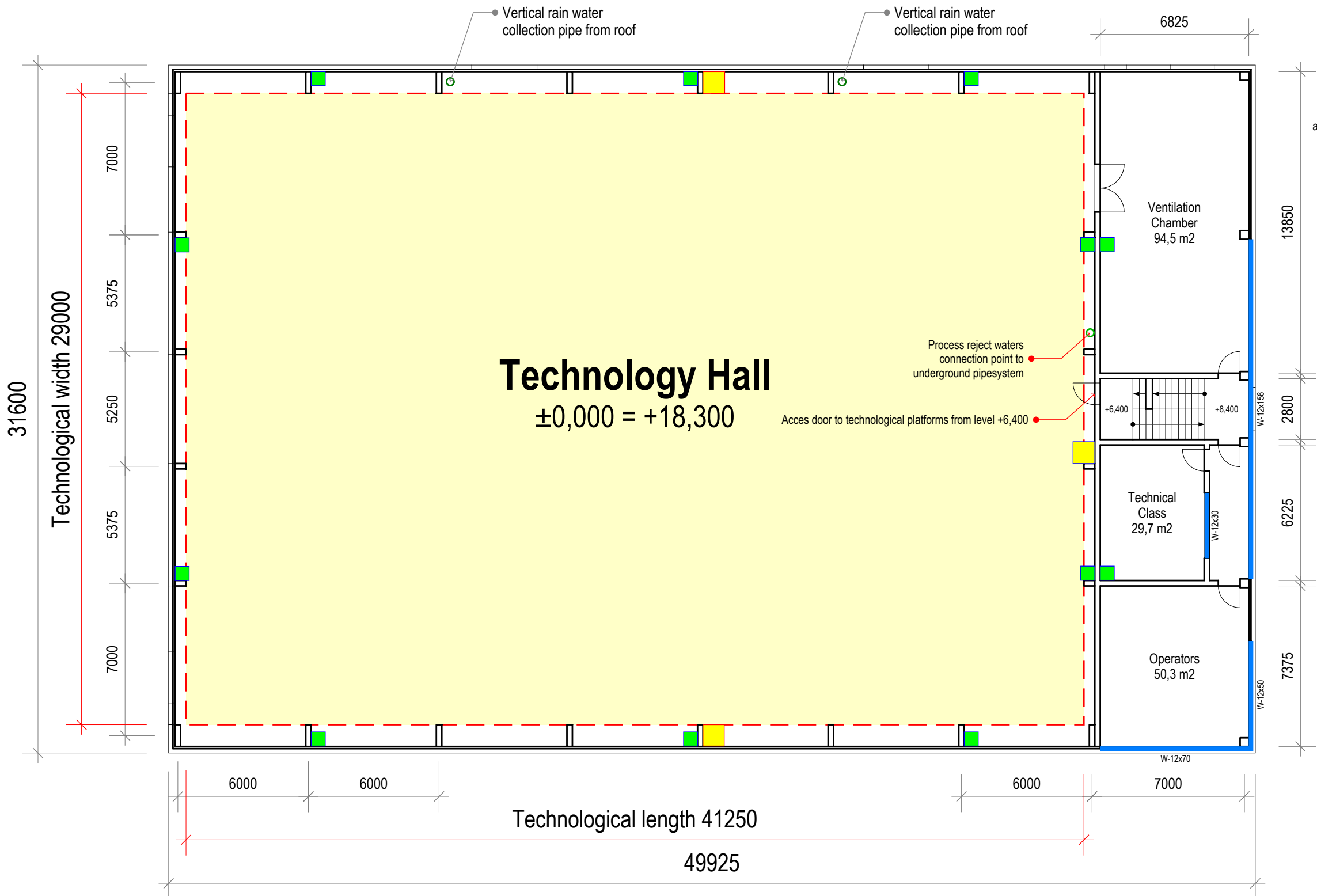
PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



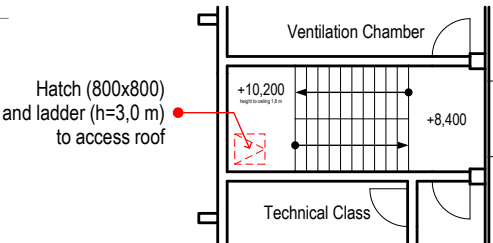
Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Plan (+8,400): 3rd floor

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Plan (+10,200) access to roof



MAINTENANCE
DEPOT
POWER 25A
400V/220V
AIR 5 bar

12 units

SINK
HANDWASH

1 unit

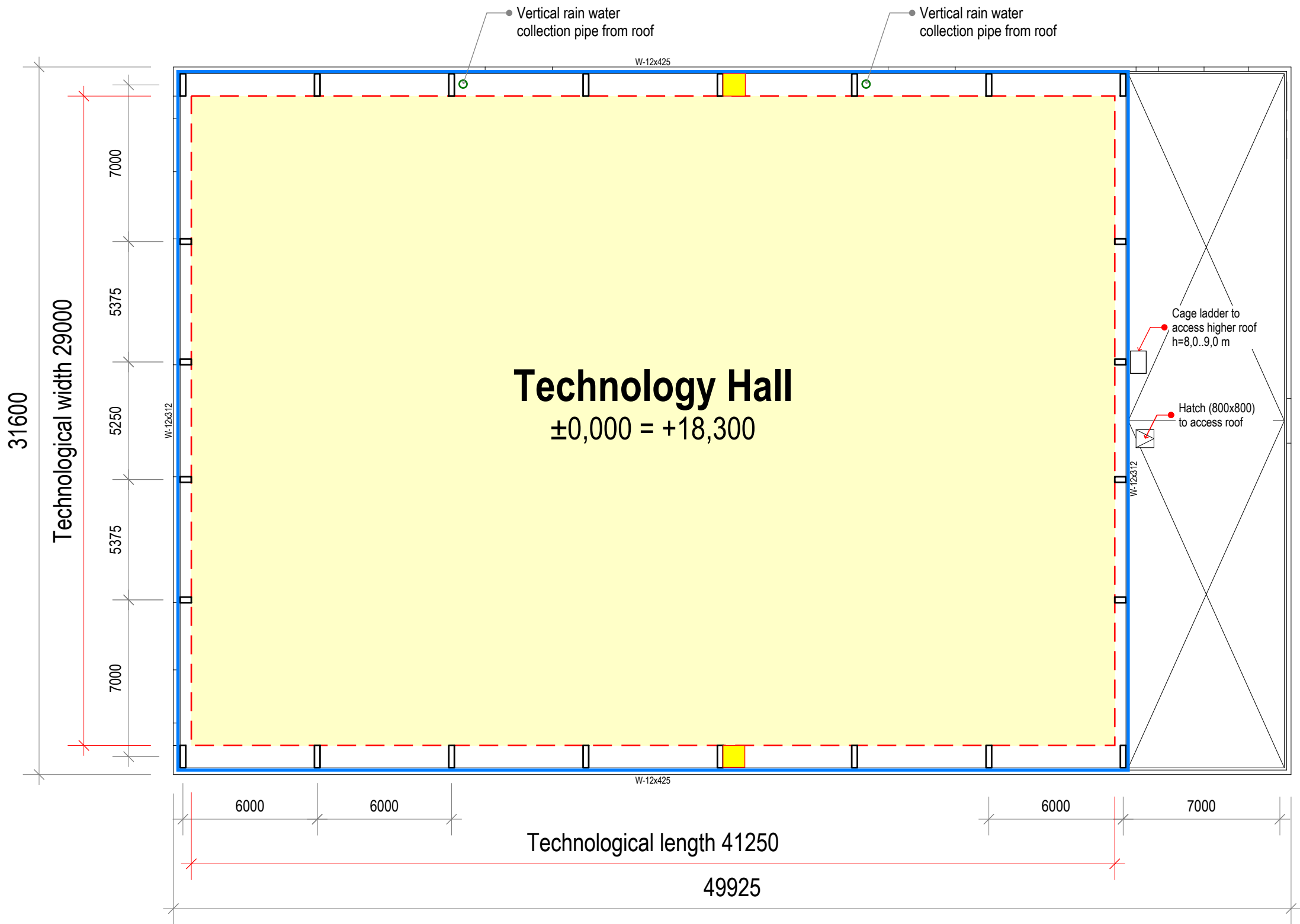
CAGE LADDER
FOR BRIDGE CRANE
SERVICE

2 units

Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Plan (+14,700): technology hall windows

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



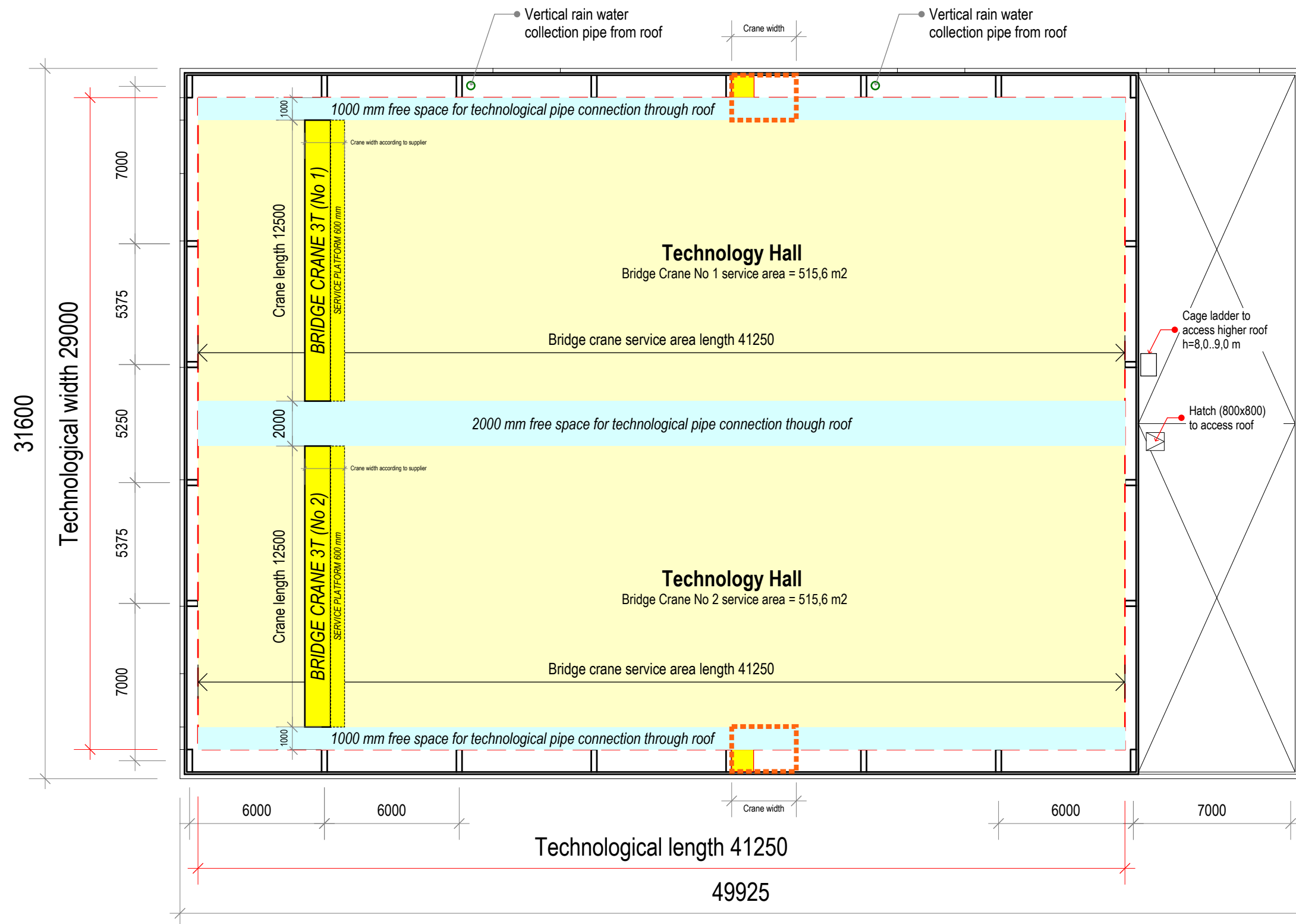
CAGE LADDER
FOR BRIDGE CRANE
SERVICE

2 units

Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Plan (+15,400): bridge cranes

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta₂O₅ and 58 T/m Nb₂O₅
Target Start-up: December 2016



CAGE LADDER
FOR BRIDGE CRANE
SERVICE

2 units

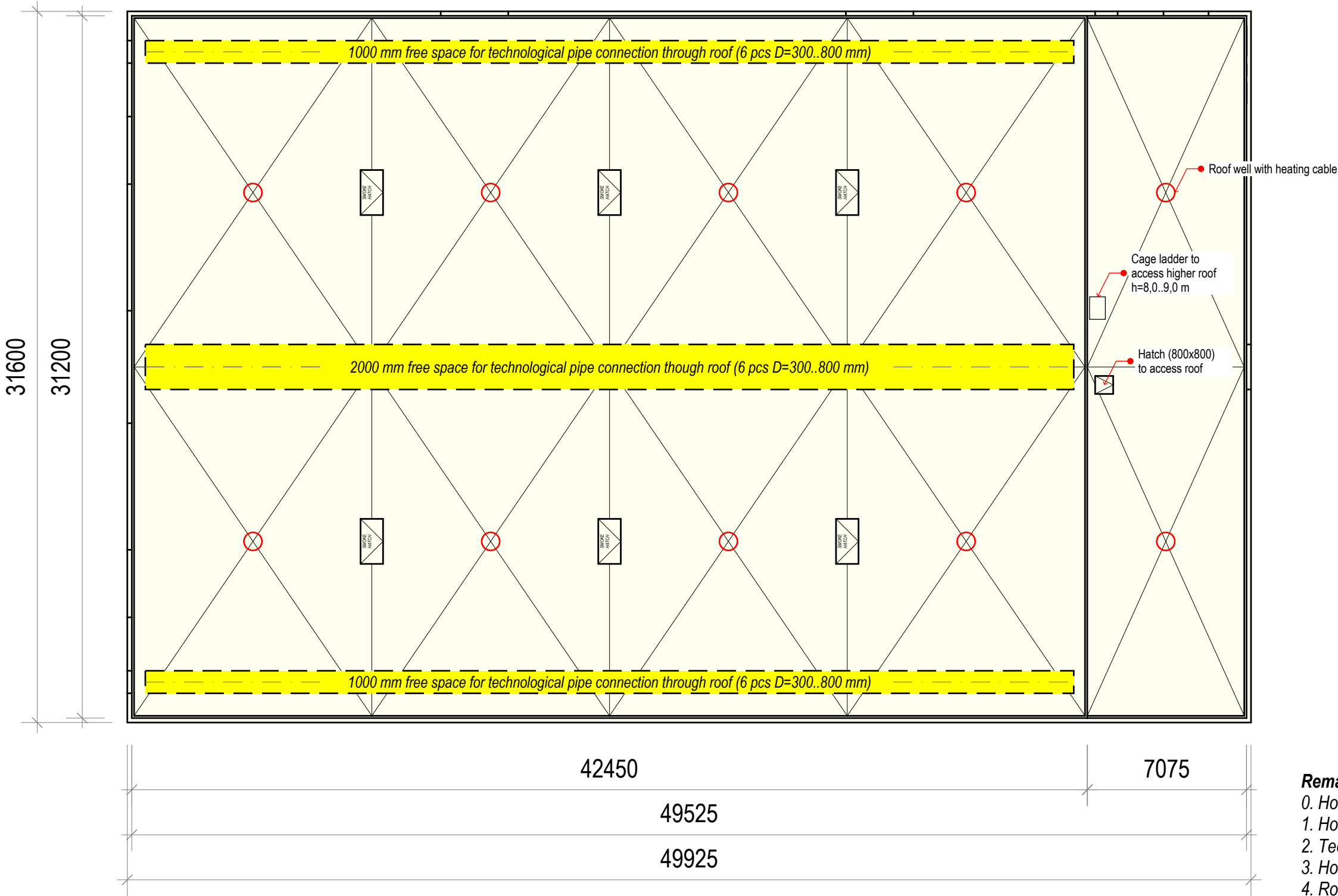
BRIDGE CRANE
SERVICE PLATFORM
+15,400

2 units

Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Plan (+21,000): roof

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Remarks:
0. Holes locations and sizes by Molycorp (2016-06)
1. Hole cutting works by Civil Contractor.
2. Technological pipe through roof by Molycorp.
3. Hole support structures by Civil Contractor.
4. Roof works by Civil Contractor.



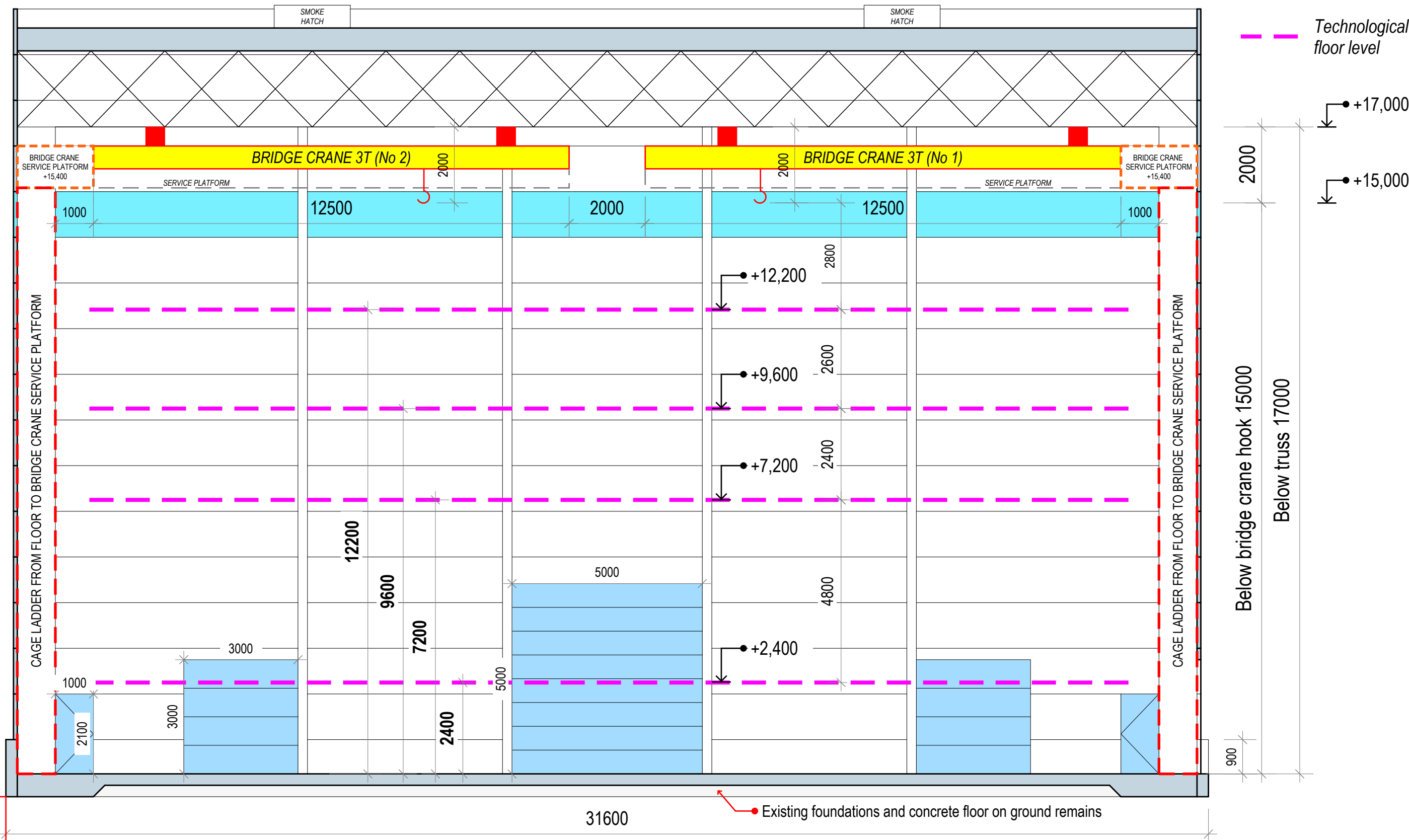
FACILITY 51A: Niobium and Tantalum Line
Kesk 2/1, Sillamäe, Ida-Viru County, 40231, Estonia

PROJECT STAGE: civil requirements	A3L / M 1:200
PROJECT MANAGER: E. Prommik, +372 5557 7770	28.03.2016

Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Section (technology)

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016

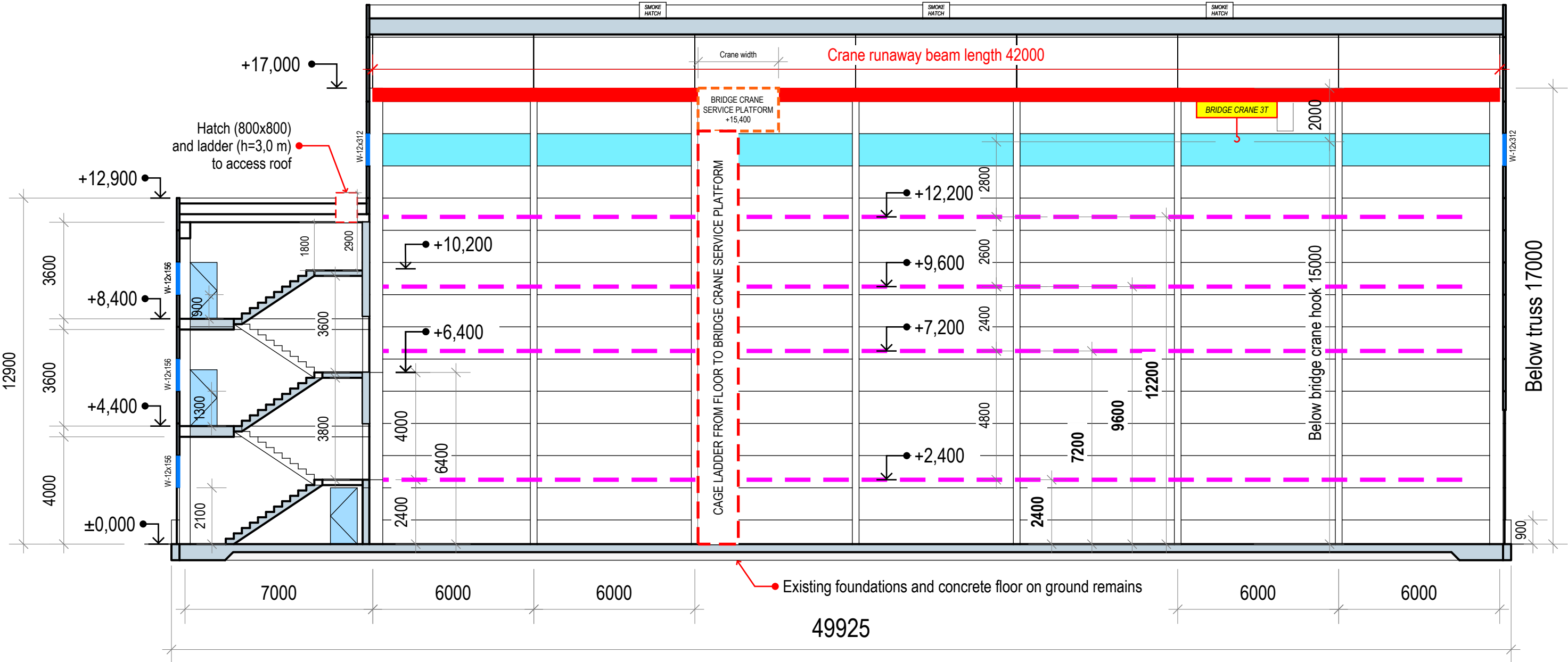


Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Section (building)

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016

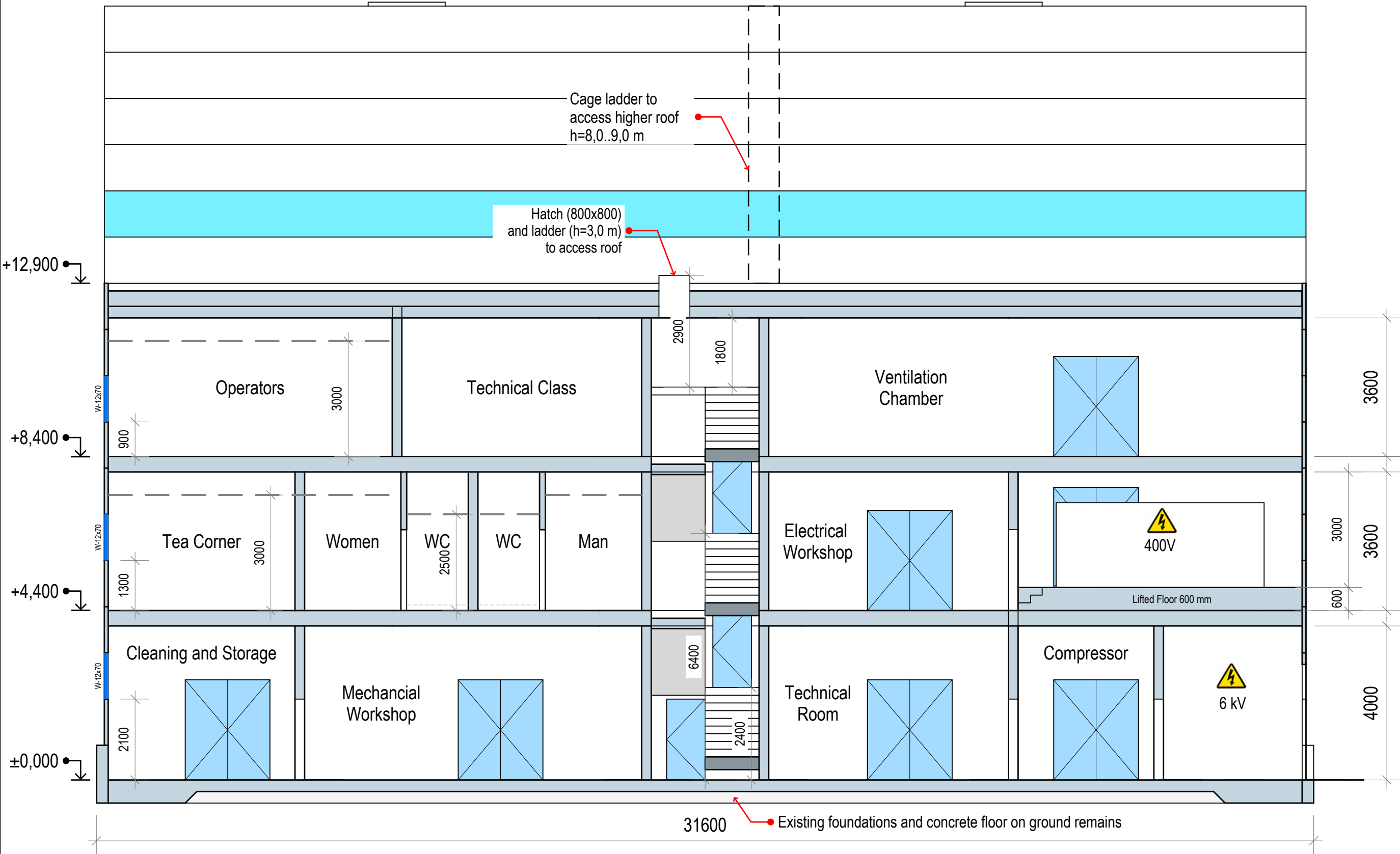
Technological floor level



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

Section (office block)

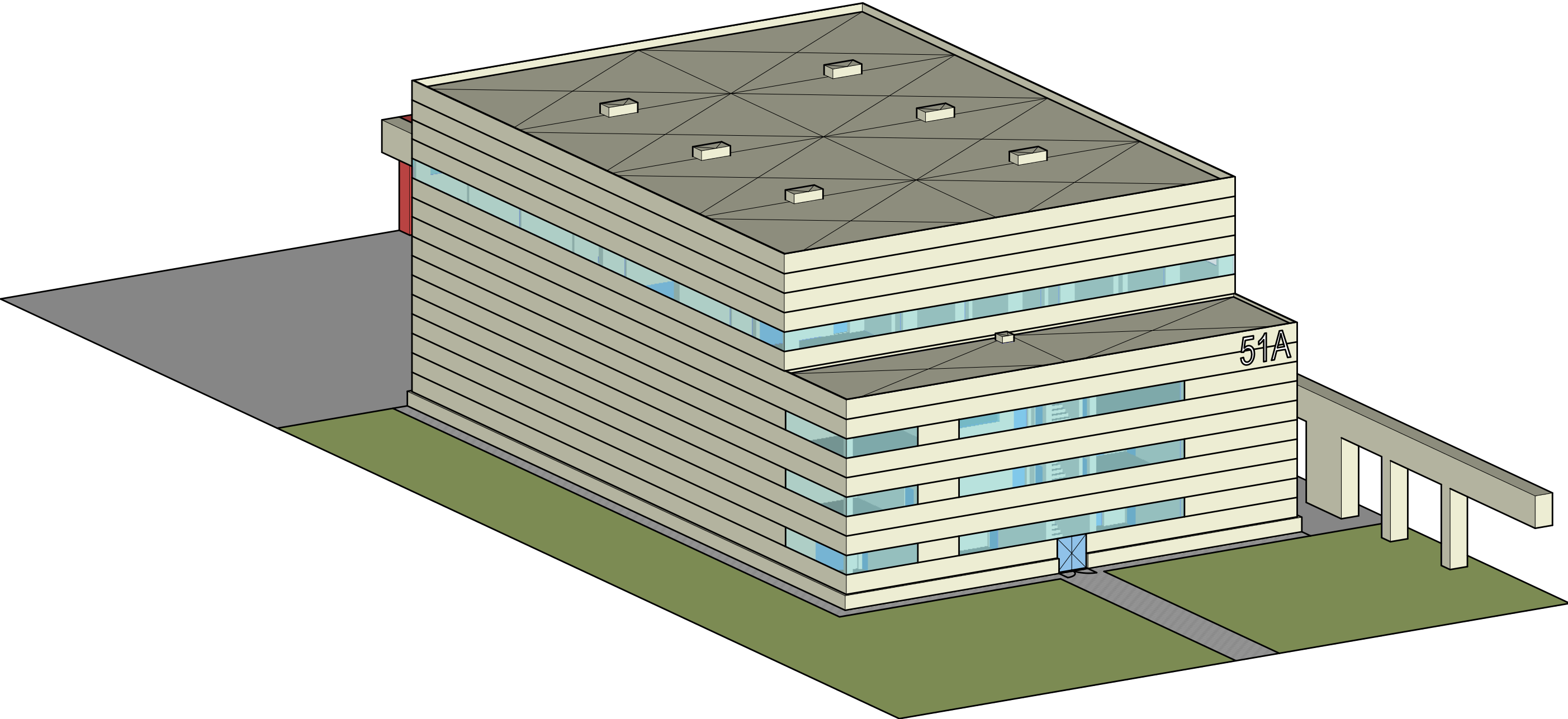
PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

View (main entrance)

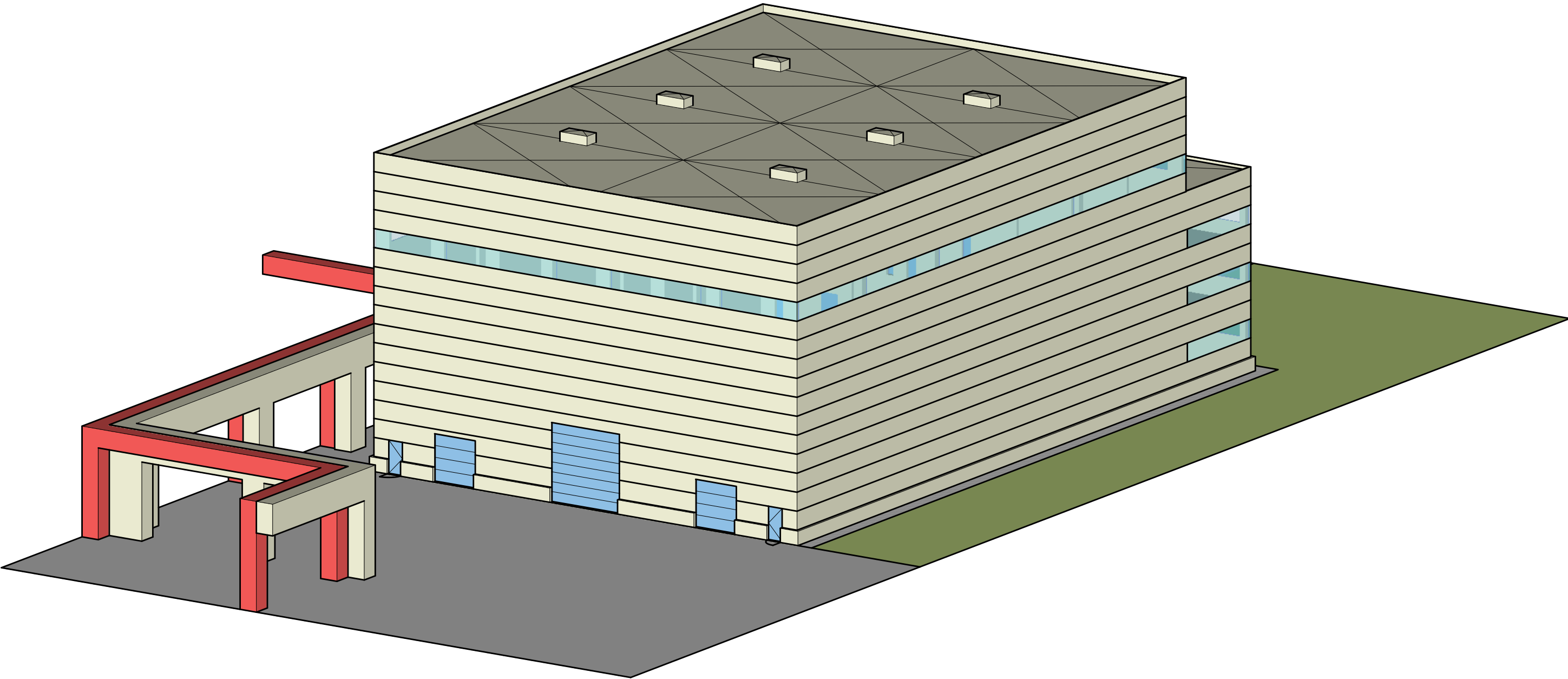
PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

View (technological entrance)

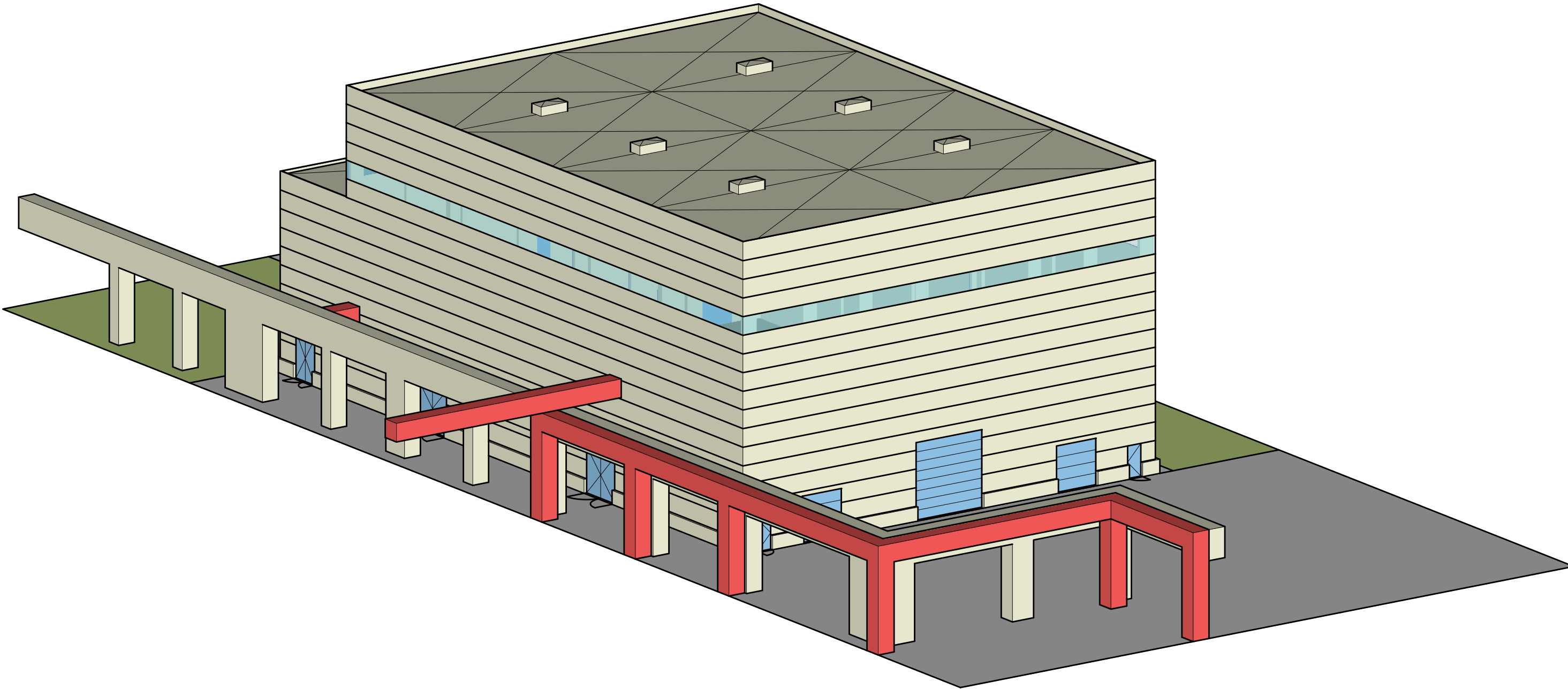
PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

View (from 49/53)

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016



Address: Kesk 2/1, Sillamäe, Ida-Viru County, 40231
Cadastral tag no: 73501:001:0086
Altitude: ABS +18.00

View (SEJ/53)

PROJECT MAIN OBJECTIVE:
Infeed Capacity: 120 T/m FeNb
Output Capacity: 9 T/m Ta2O5 and 58 T/m Nb2O5
Target Start-up: December 2016

