

HELSINKI CENTRAL LIBRARY

A BRIDGE INSIDE A BUILDING

HANS EXNER, RAMBØLL



DISPOSITION

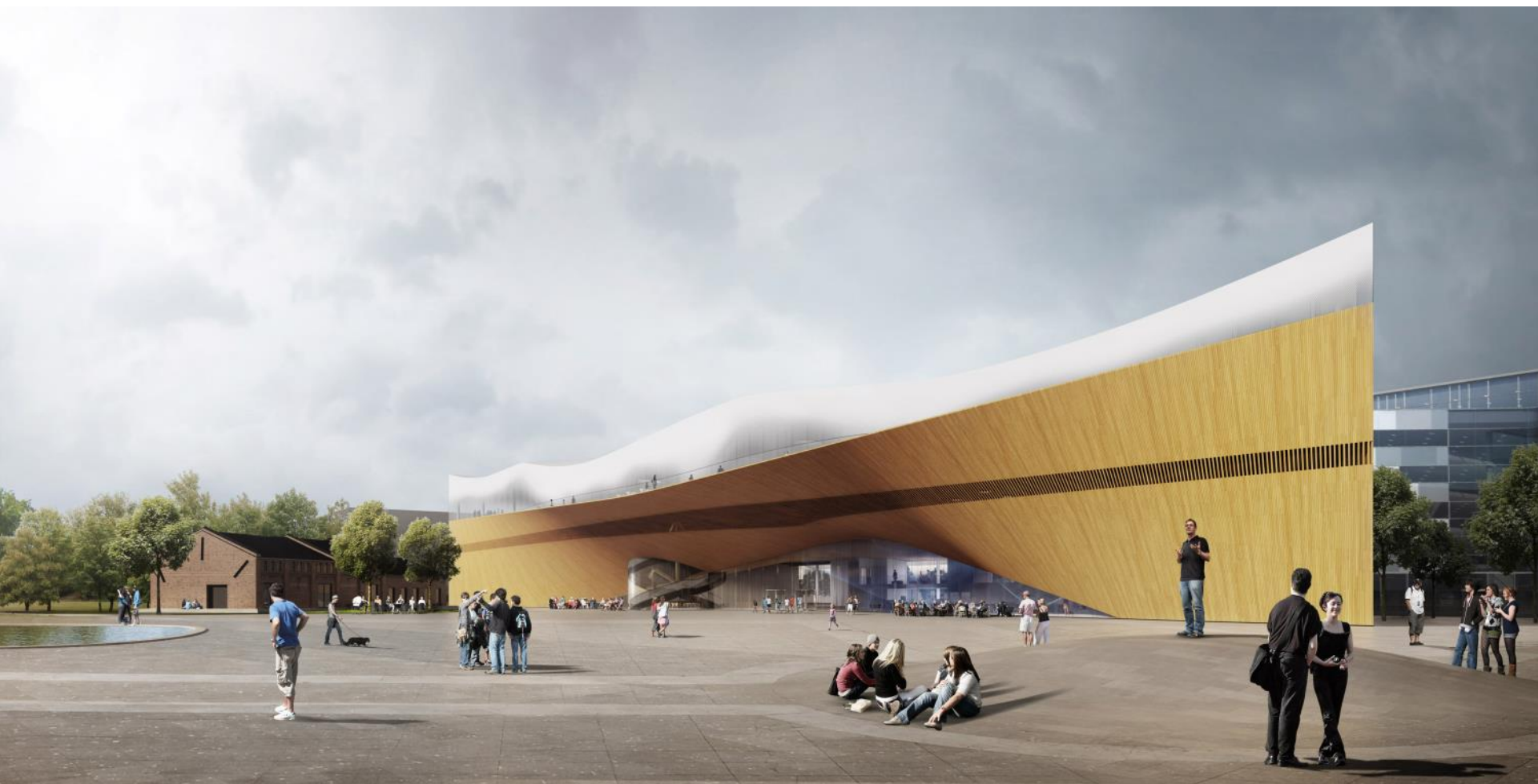
- Stedet
- Funktion
- Arkitektur
- Konstruktioner
- Proces og samarbejde
- Værktøj

HISTORIE

- Nyt hovedbibliotek, medie-center
Bygherre: Helsinki Kommune
- Arkitektkonkurrence 20xx blev vundet af
ALA Architects, Finland. Arup medvirkede.
- Ingeniørudbud på pris og kompetencer blev vundet af
Ramboll Finland med hjælp fra Ramboll UK og DK.
- Bygningens længde: 150 m, bredde: 31 m (45 m), højde: 23 m
BEA: 16.000 m².
- Indvielse ønskes i 2017, når Finland bliver 100 år.
- Status: Dispositionsforslag

STEDET



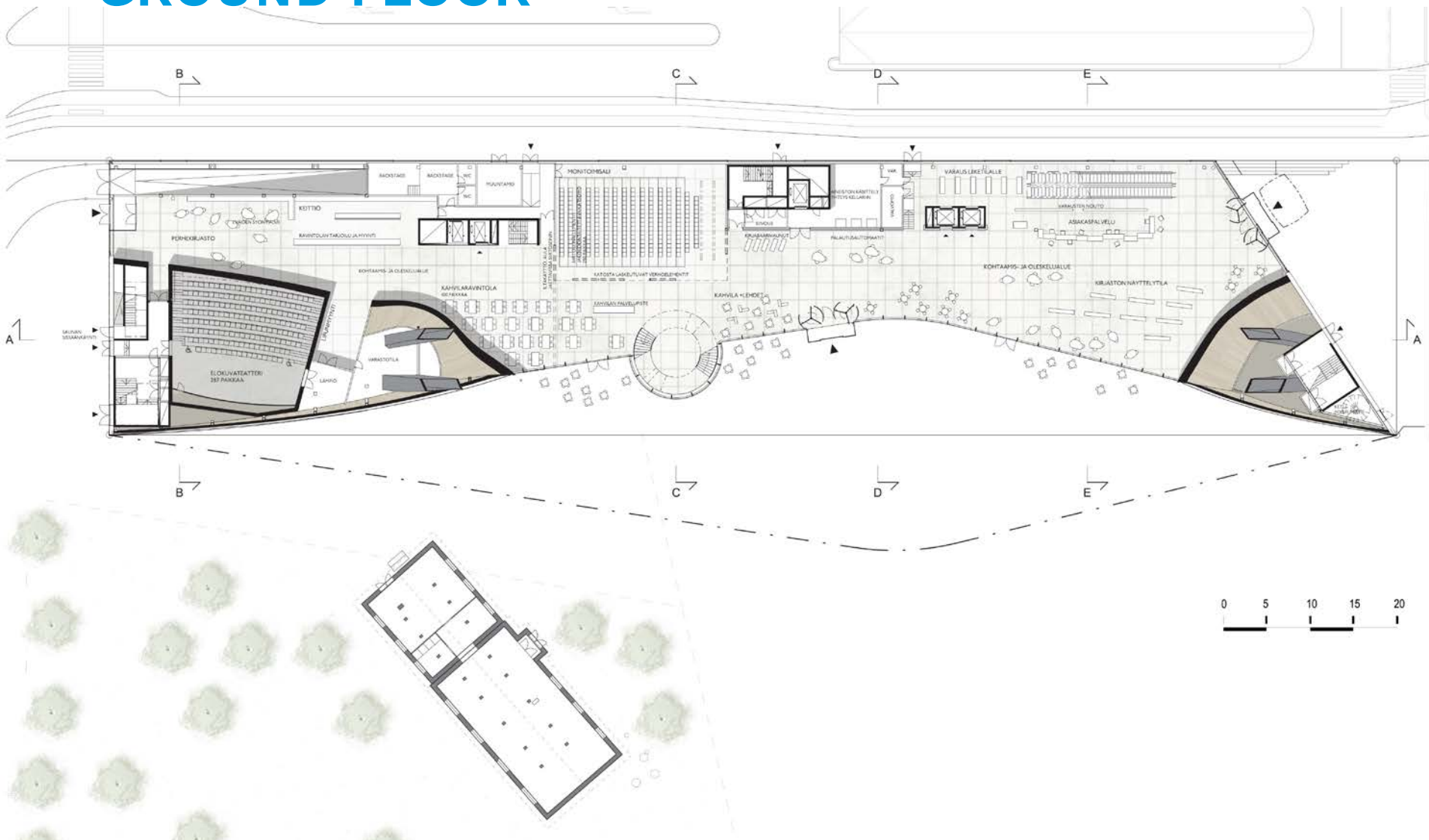


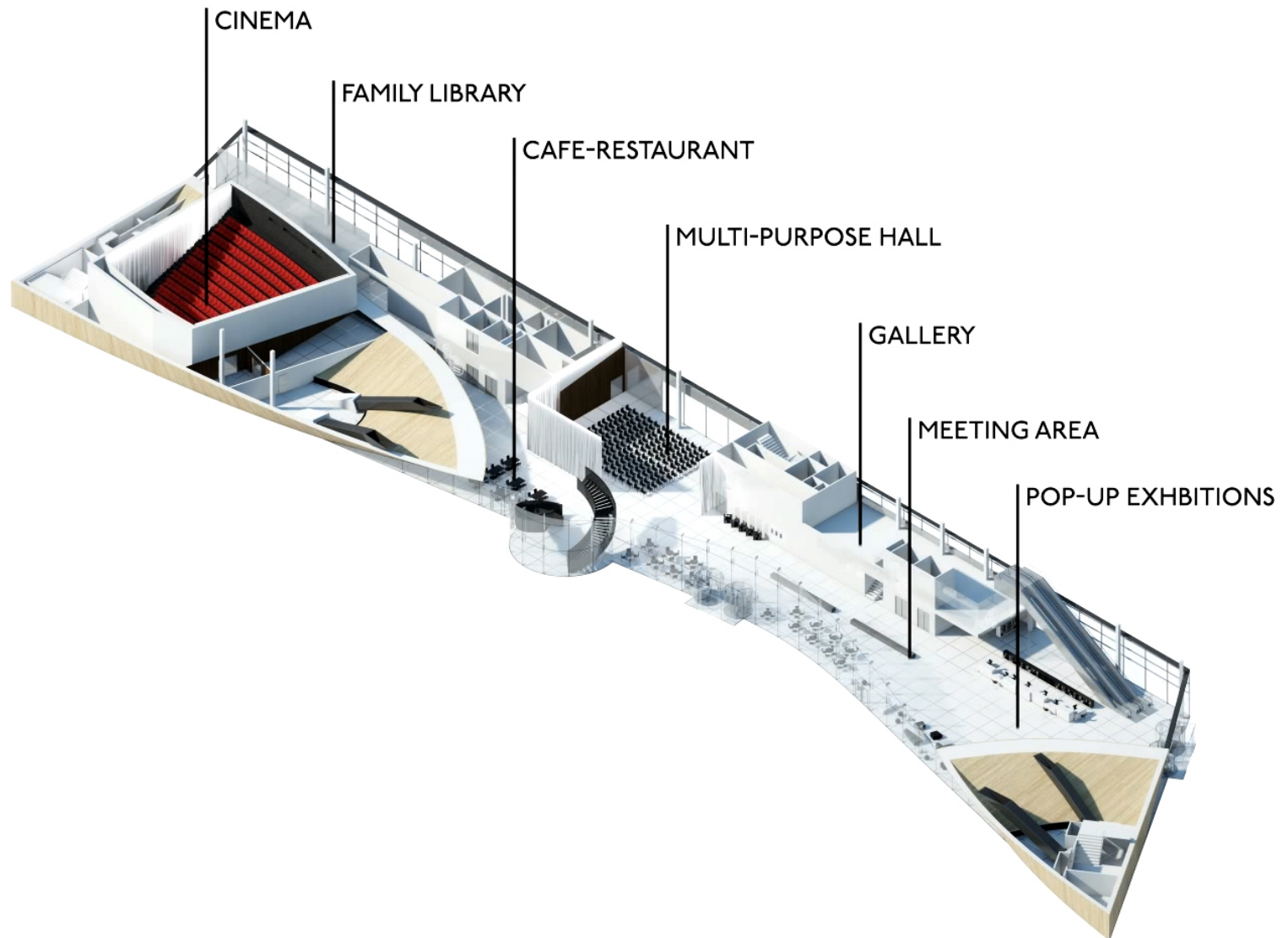
STUEETAGEN

- Stueetagen vender mod byen.
Uhindret kontakt med byen; ingen tærskel; pladsen fortsætter ind i bygningen. Robust, travl, up to date, hurtige besøg og gennemgang.
Under en stor åben bue. Gulv som udendørs belægning



GROUND FLOOR

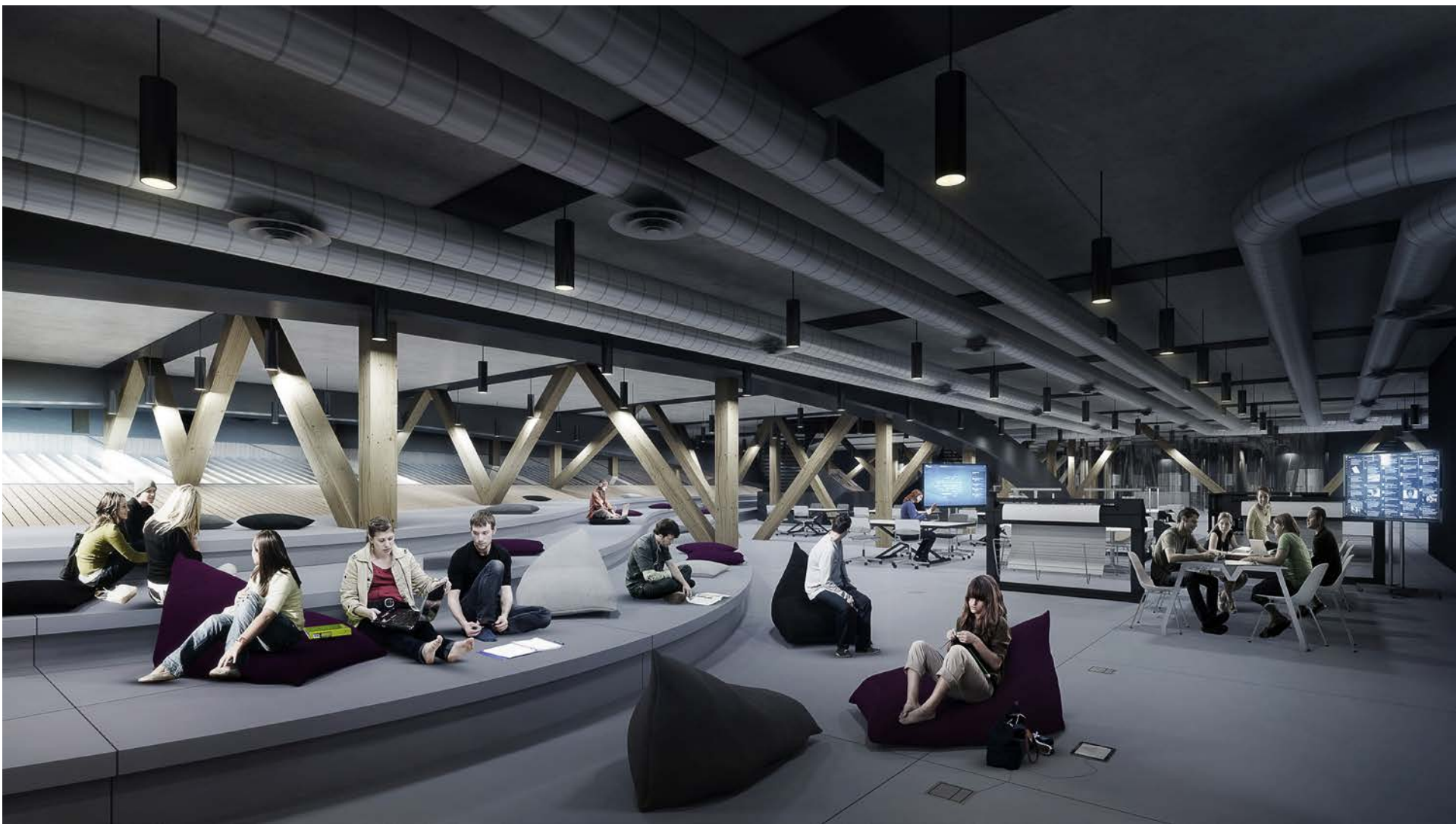


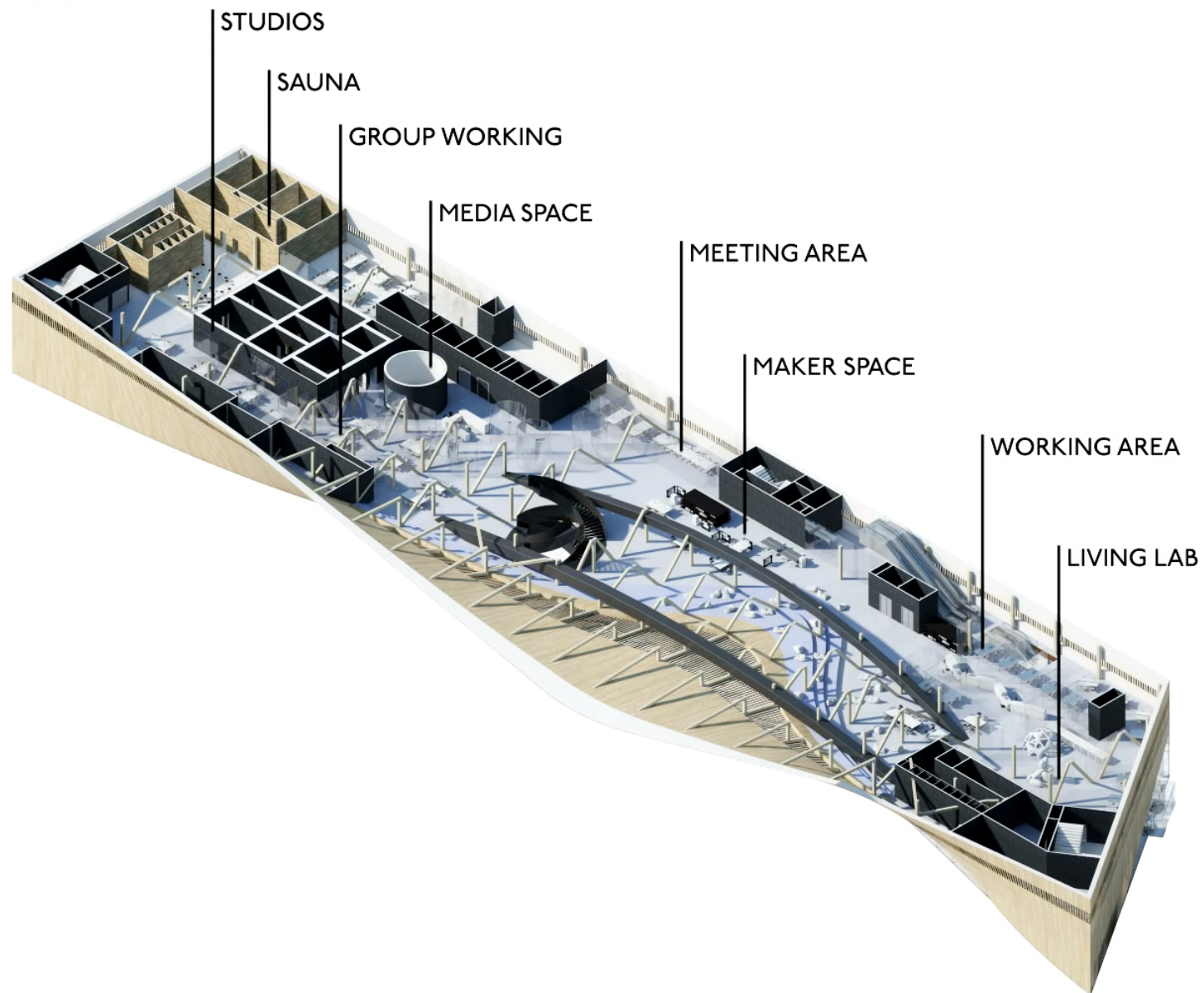




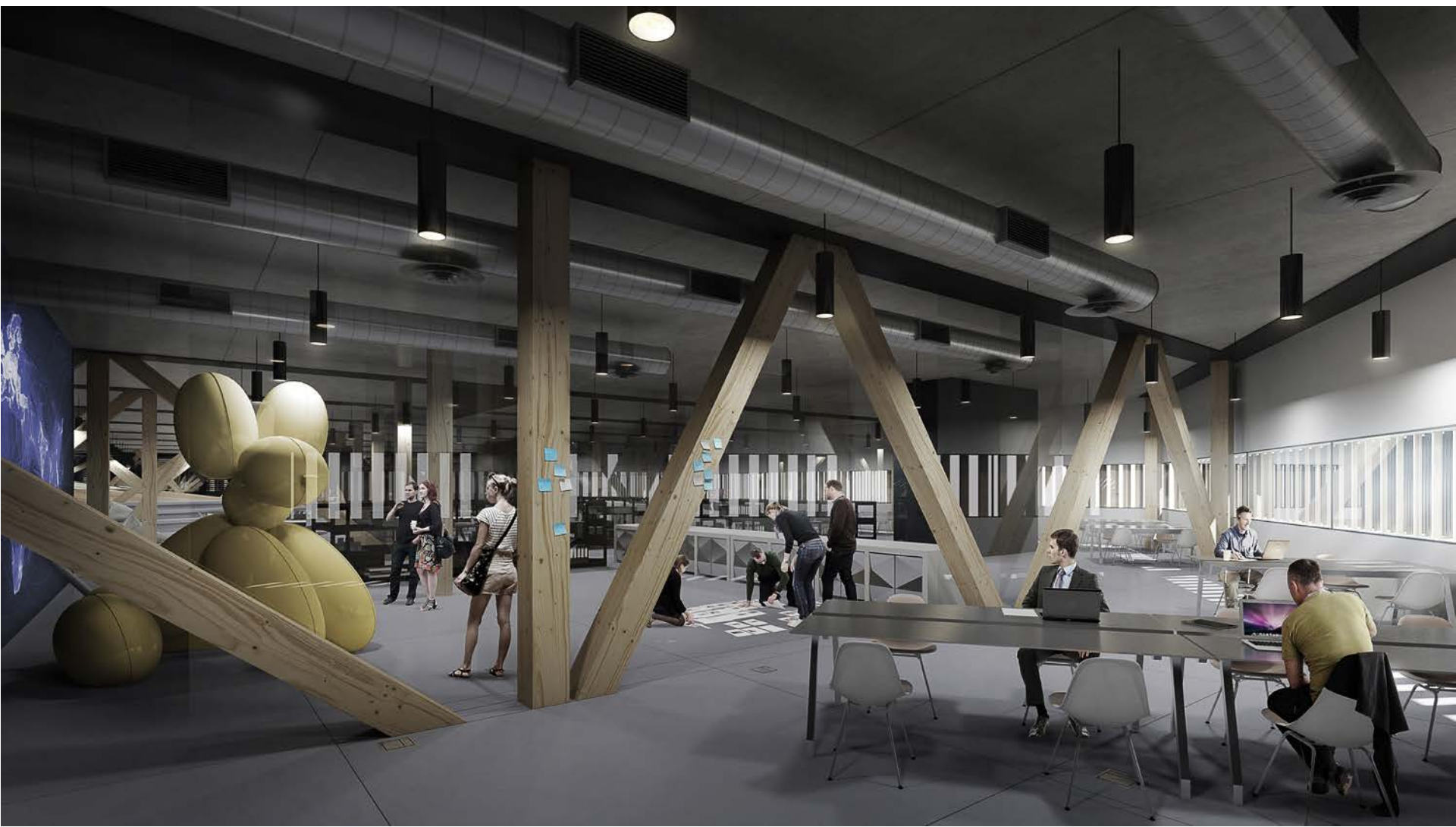
1. ETAGE

- Første etage vender indad.
Hule, laboratorier, studier, grupperum, sauna, moderne kommunikation.
Lukket, men med et vinduesbånd (snoet, ~ møbiusbånd).





HULE STÅL BRANDBESKYTTET MED TRÆ



SAUNA. DET ER FINLAND



LYDSTUDIE

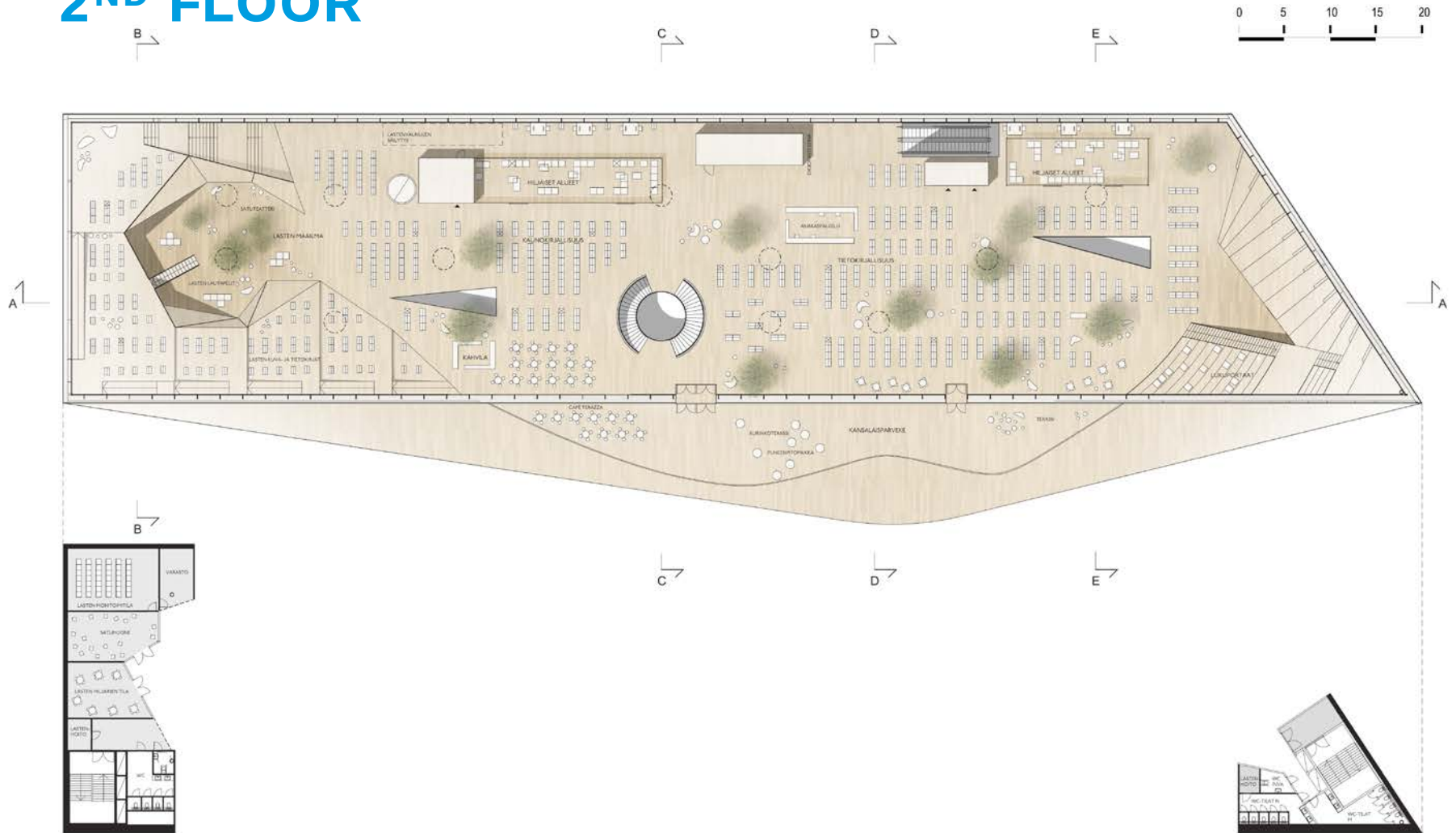


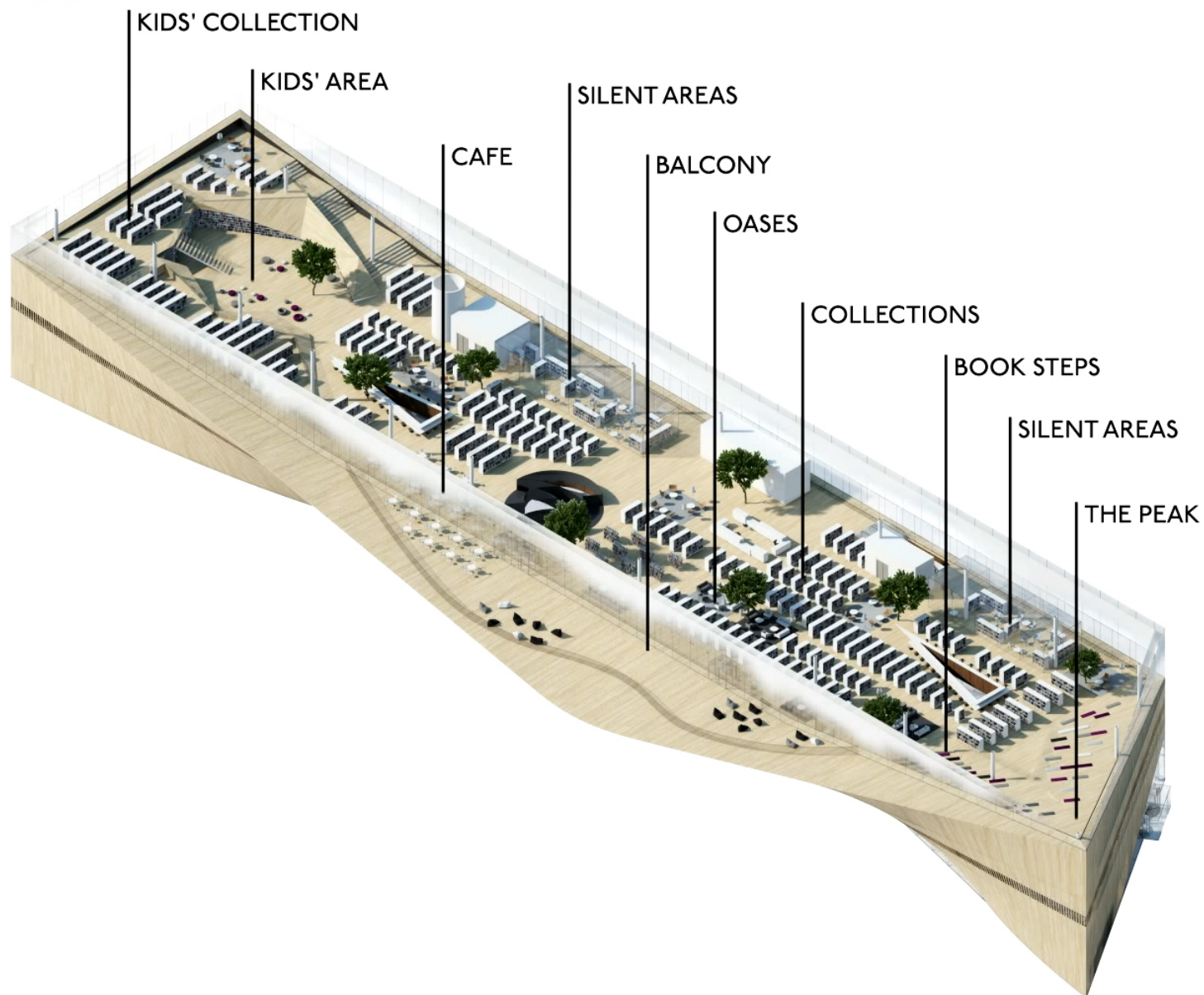
2. ETAGE

- Anden etage vender mod universet.
Fredfyldt bibliotek. Moderne teknologi og biblioteksfunktioner.
Roligt og eftertænksomt svæver etagen over det travle Helsinki.
Uhindret majestætisk udsigt til park, by, himmel
Stor, bølgende balkon. Skålformet etage. Himmeltag.



2ND FLOOR





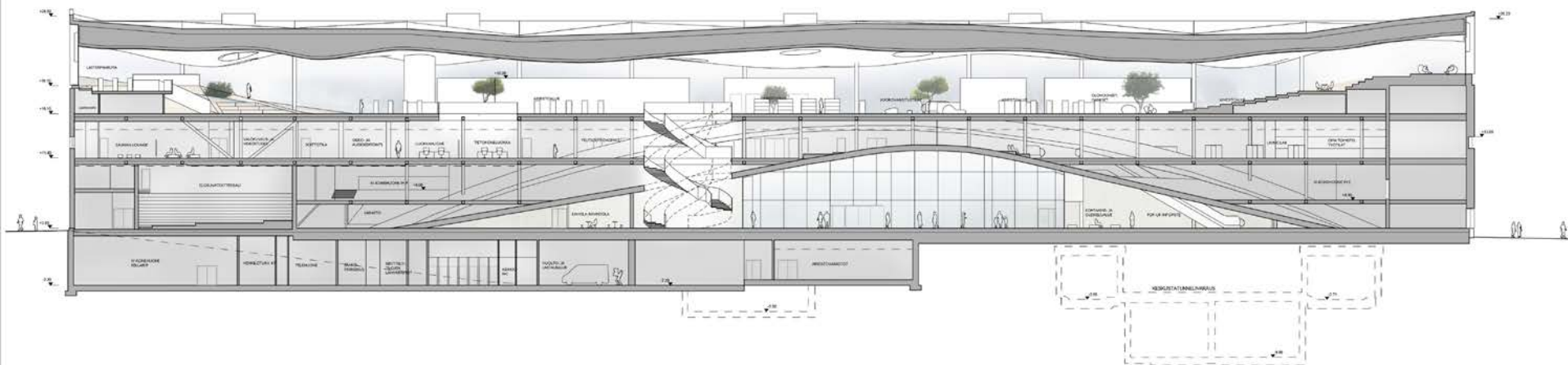
BAKKELANDSKAB UNDER SKYERNE



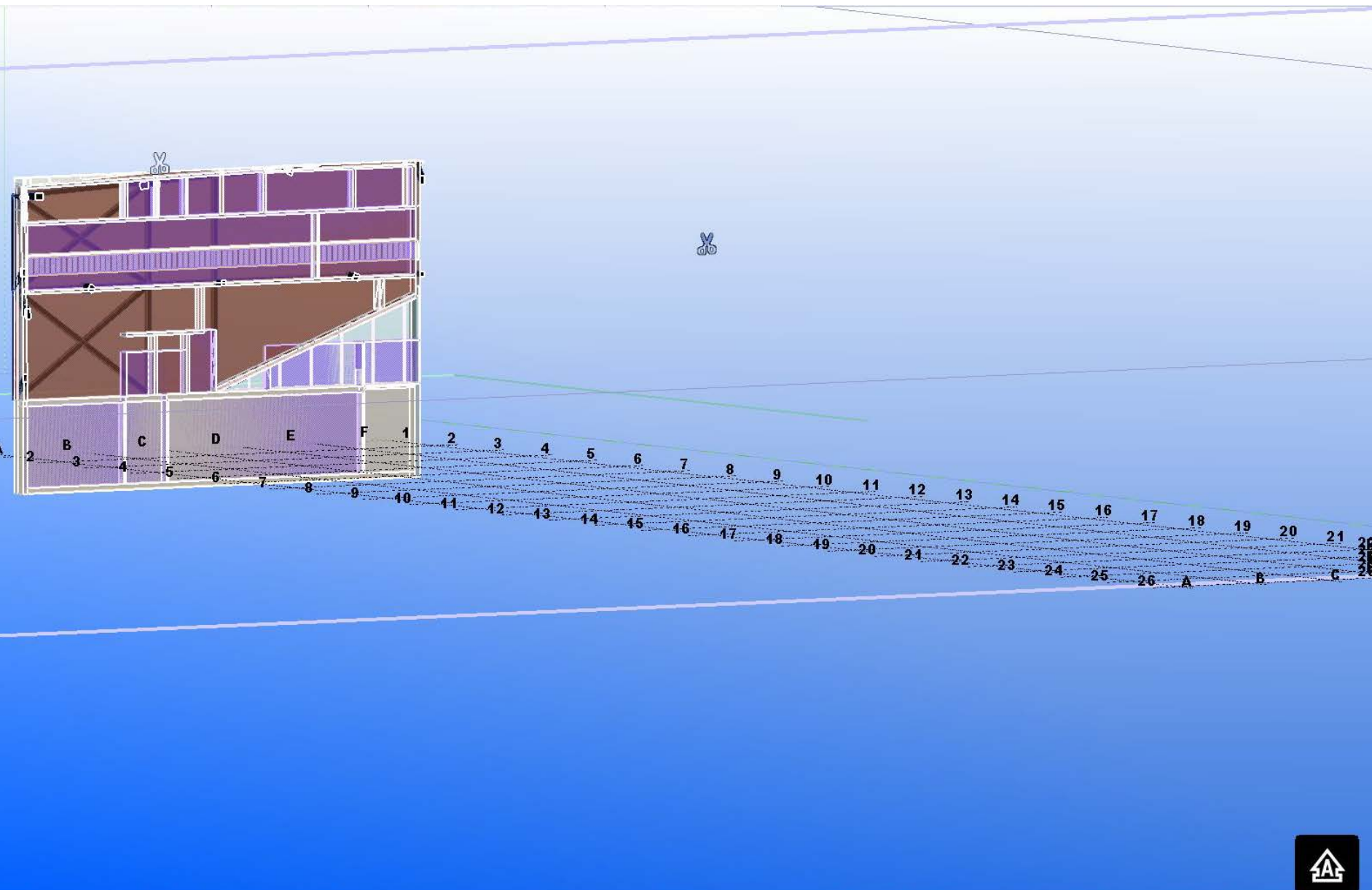
STOR BALKON UDSIGT OG HIMMEL

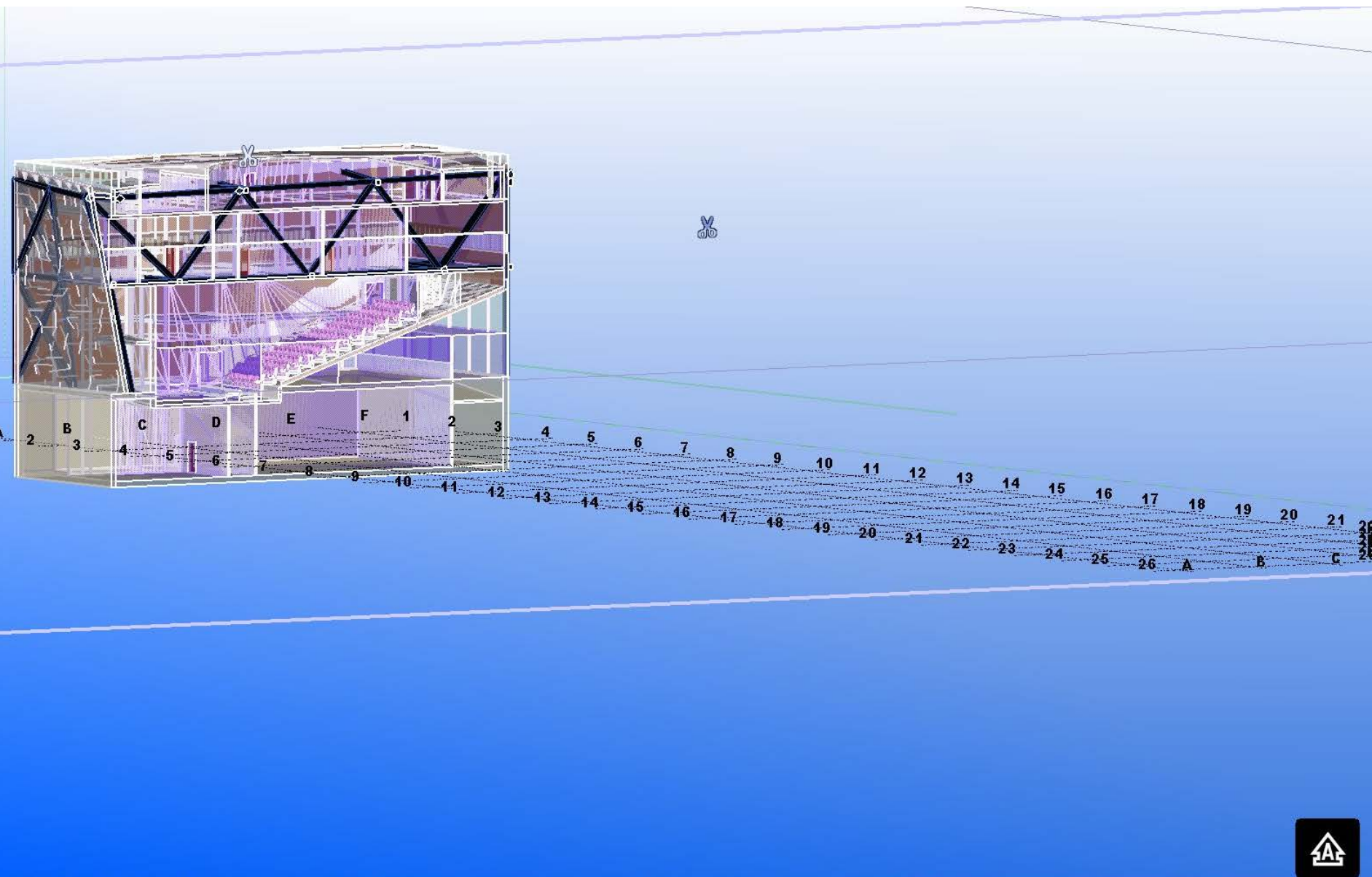


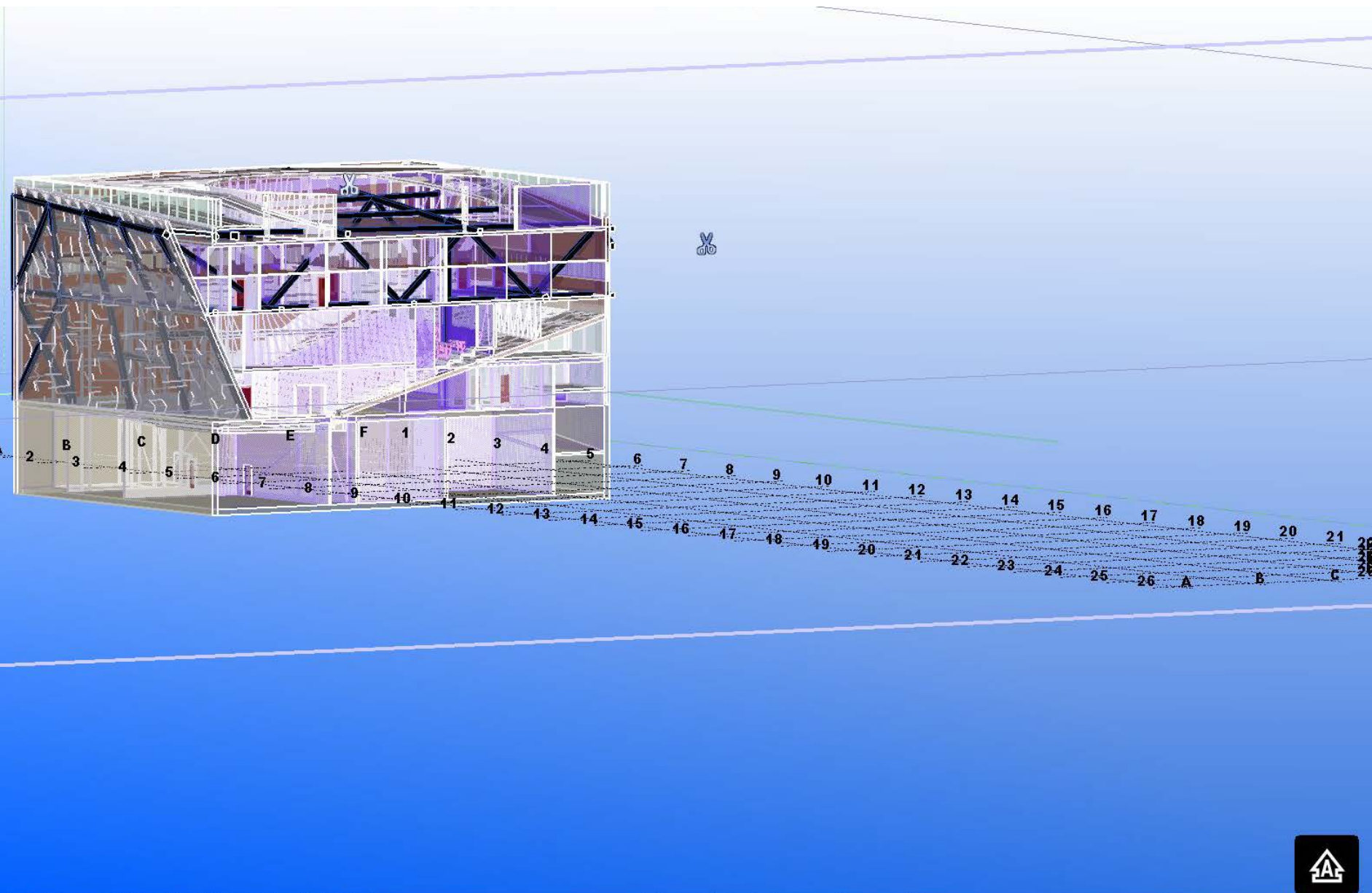
OPSTALT OG SNIT

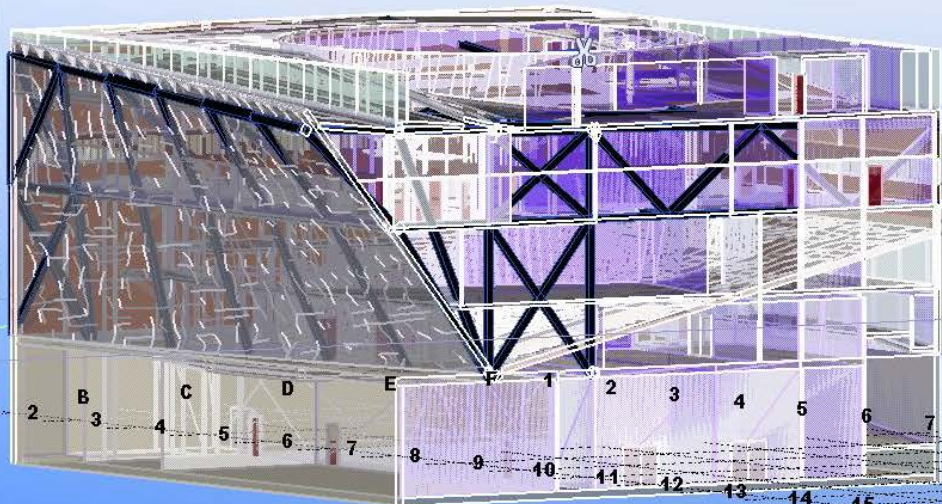


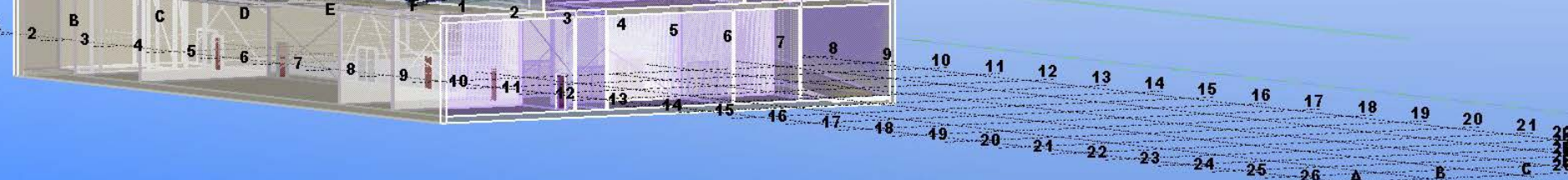
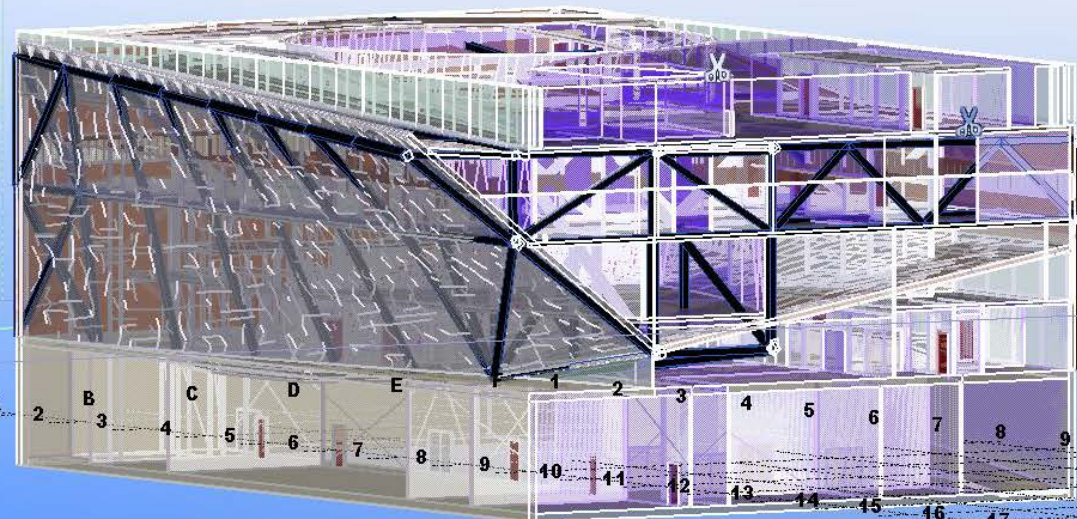


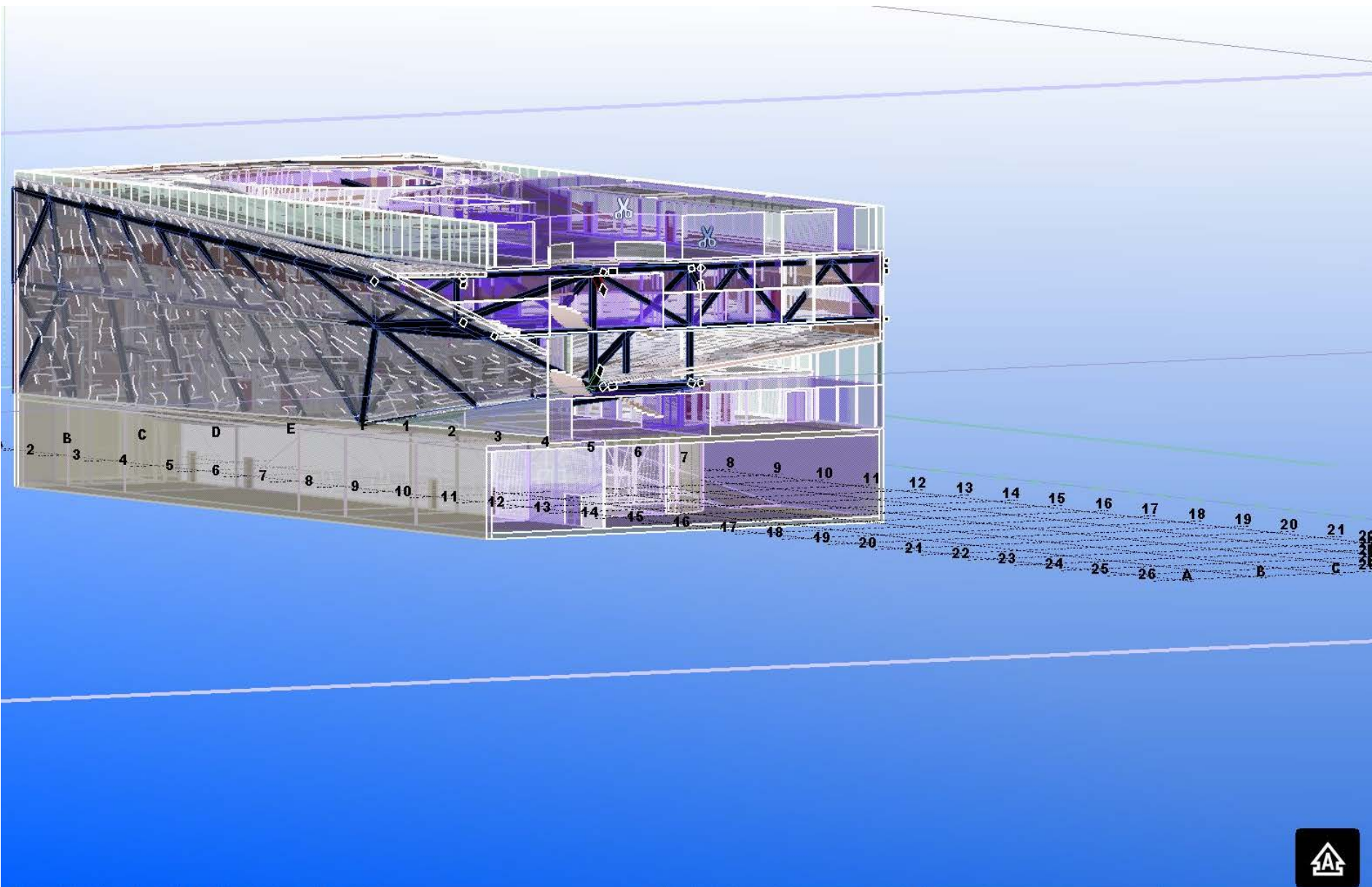


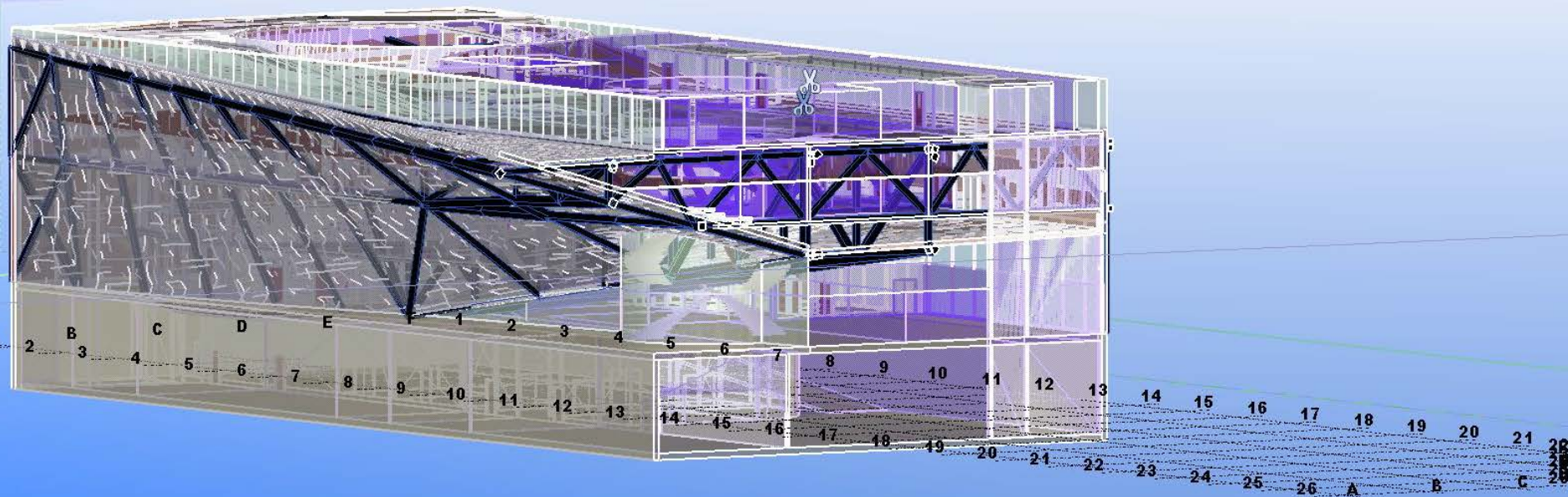


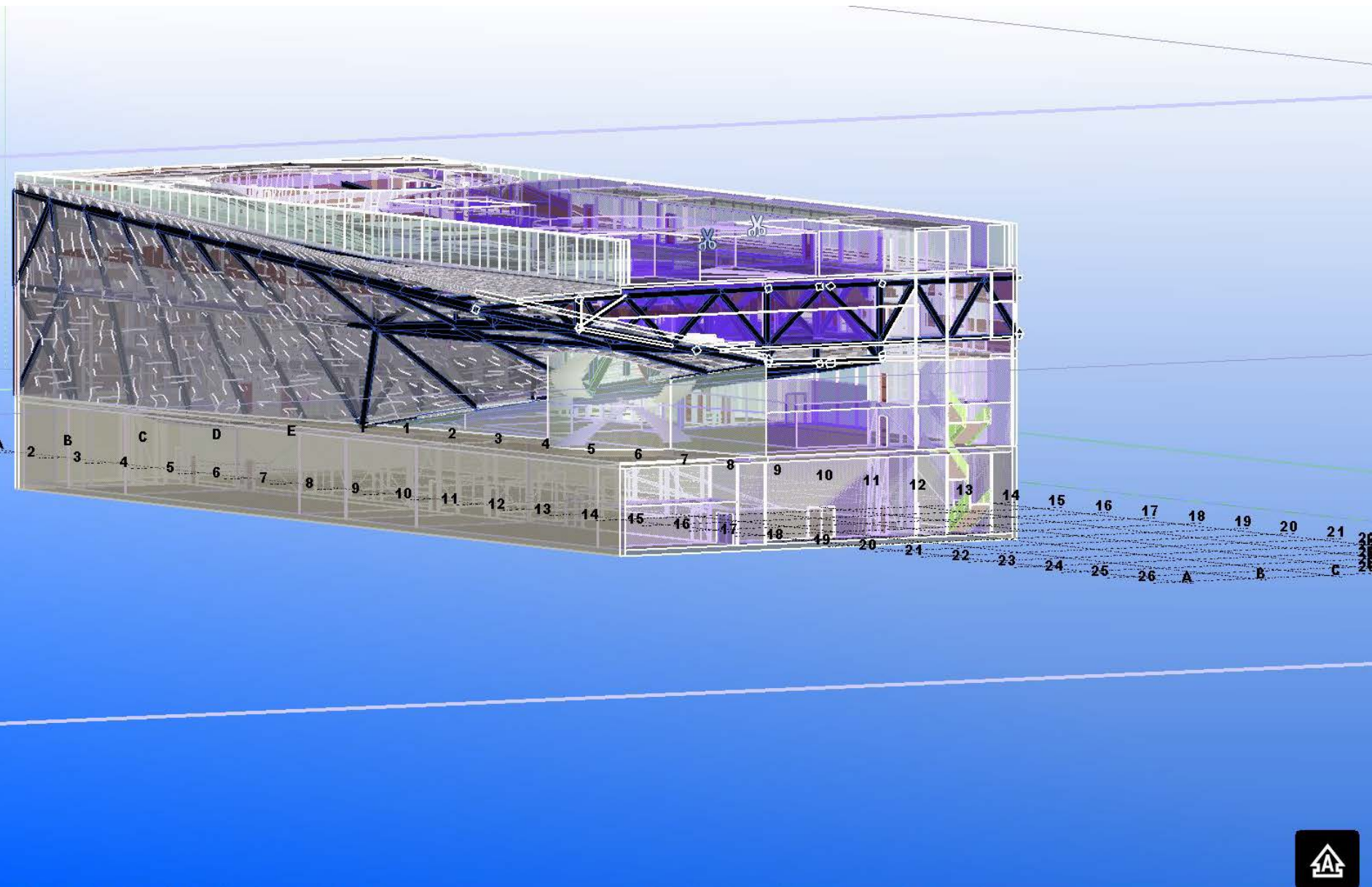


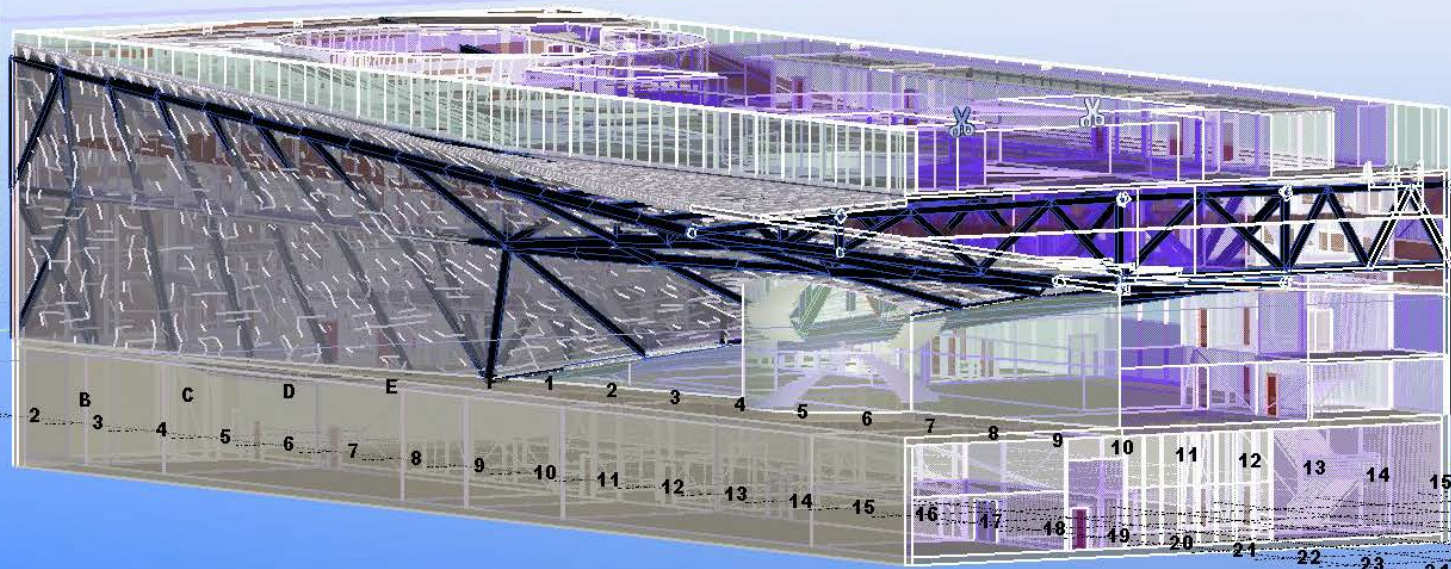






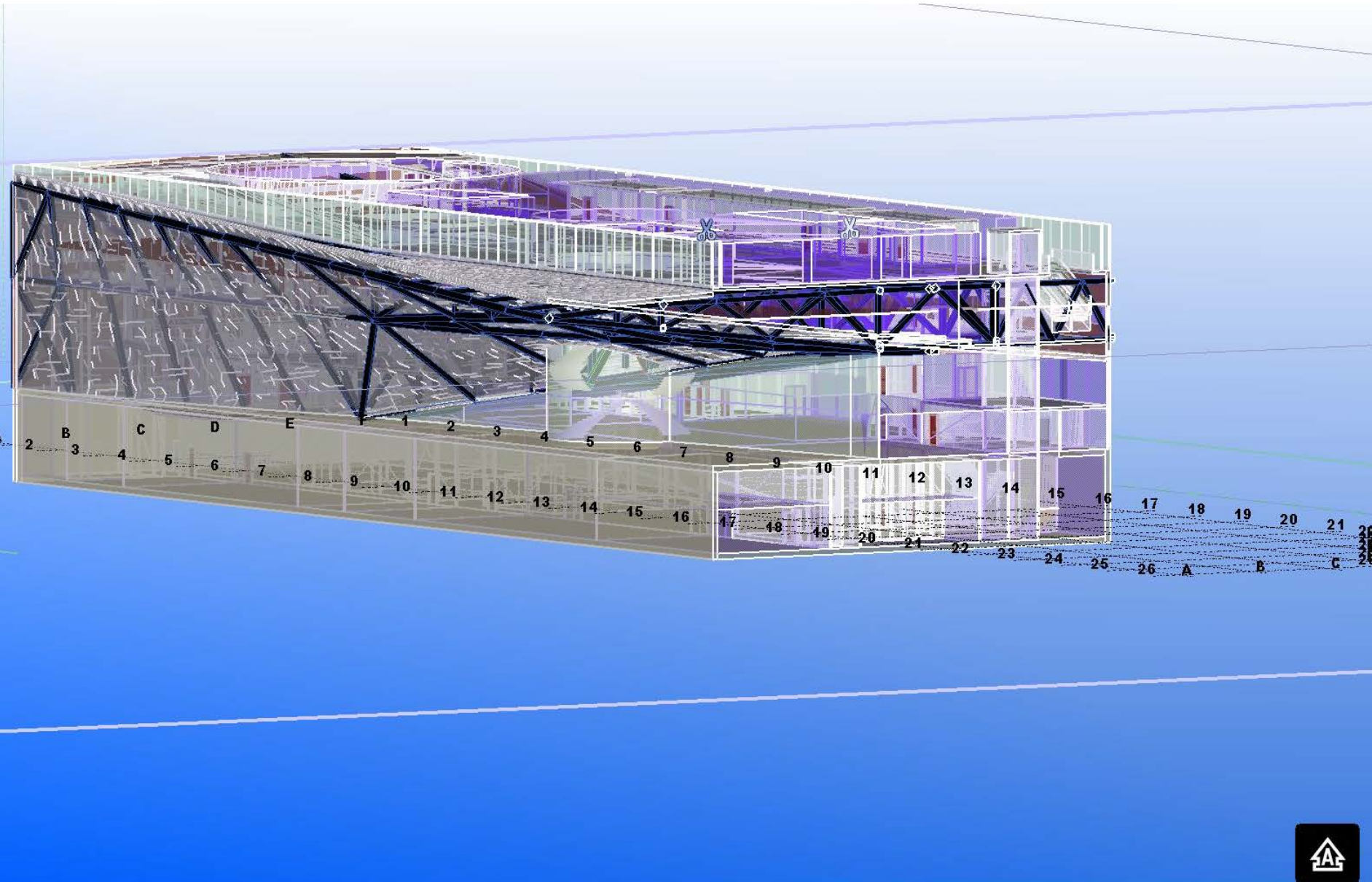


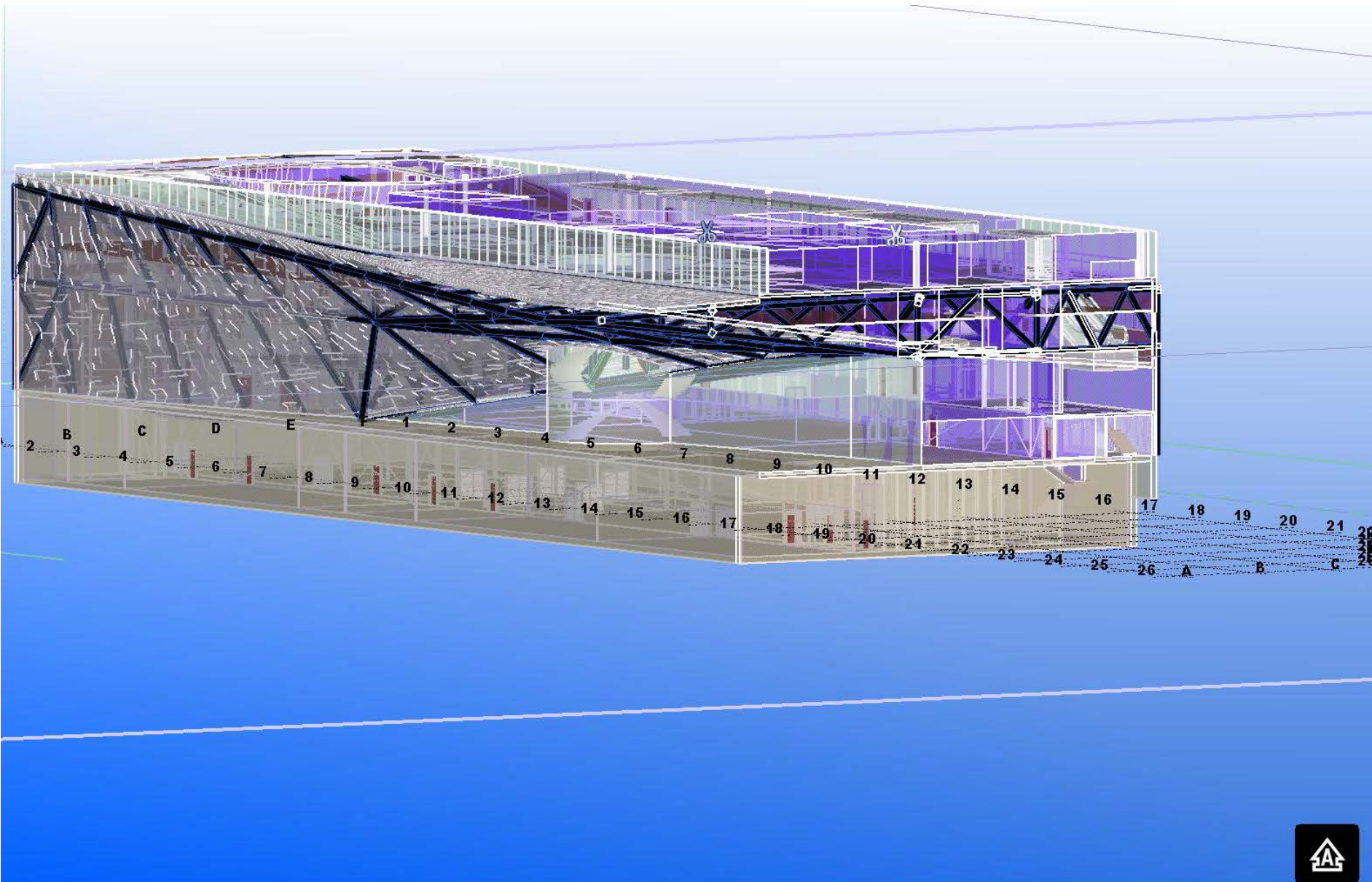


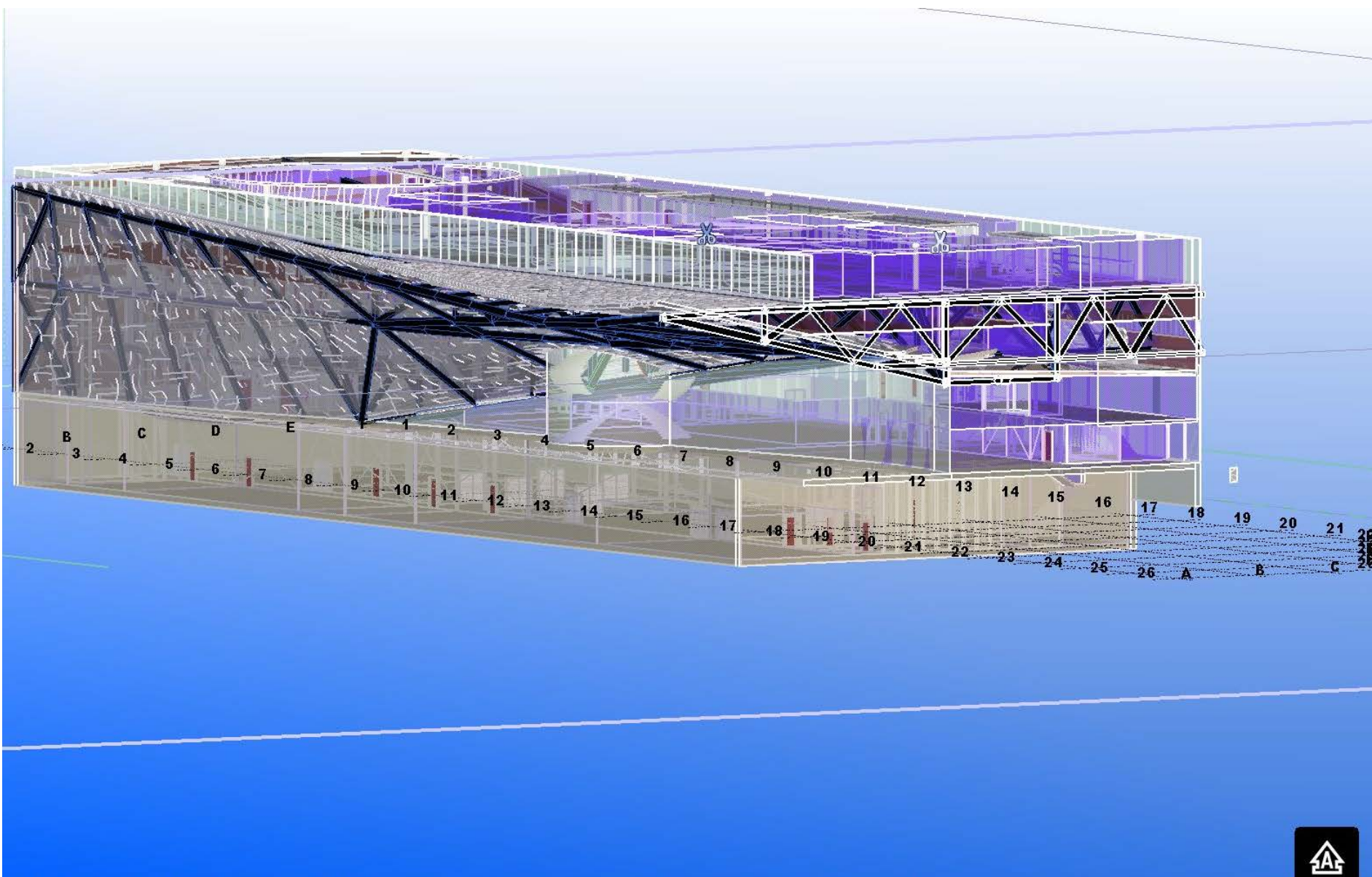


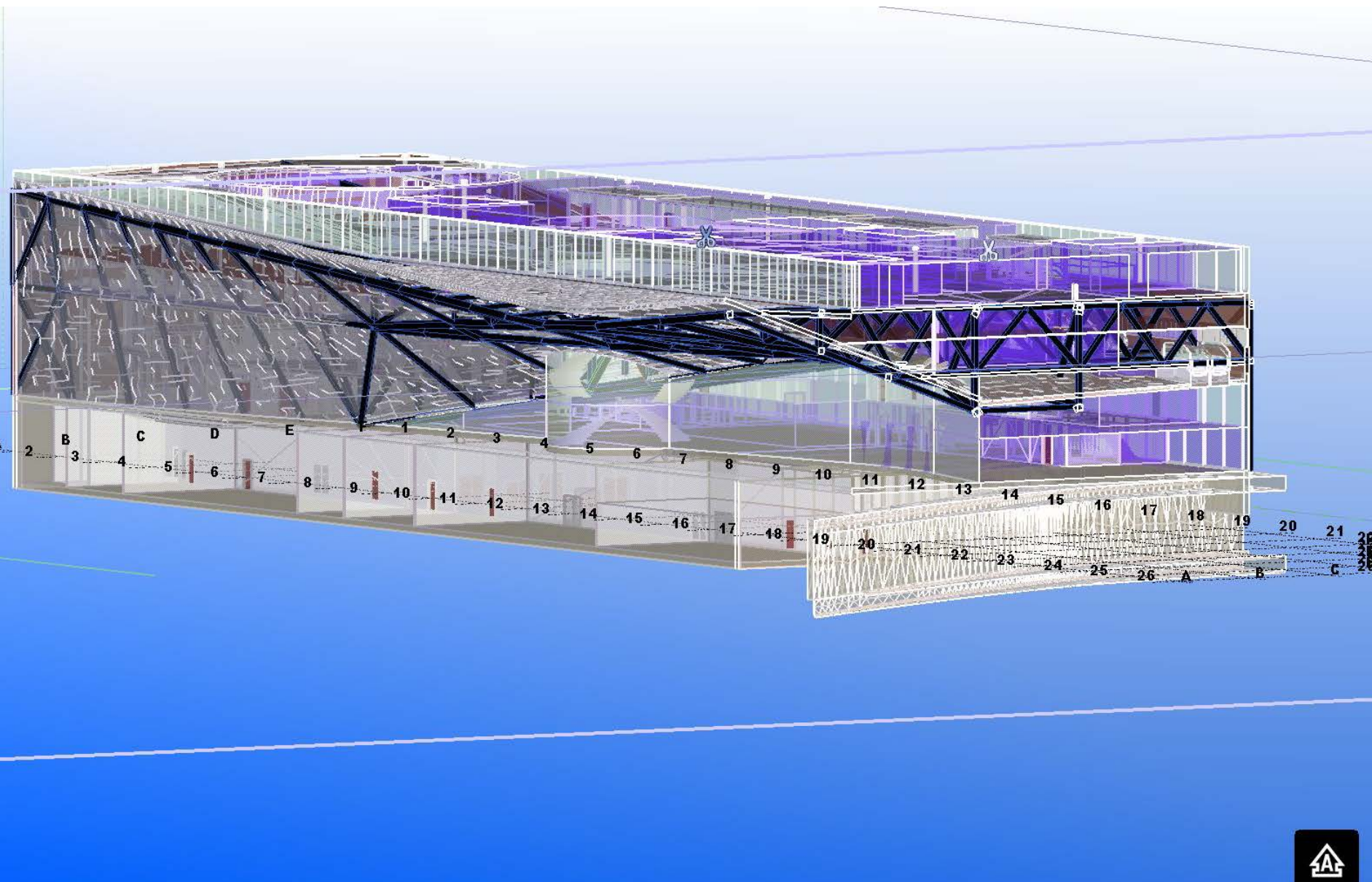
2 B 3 C 4 D 5 E 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 A B C

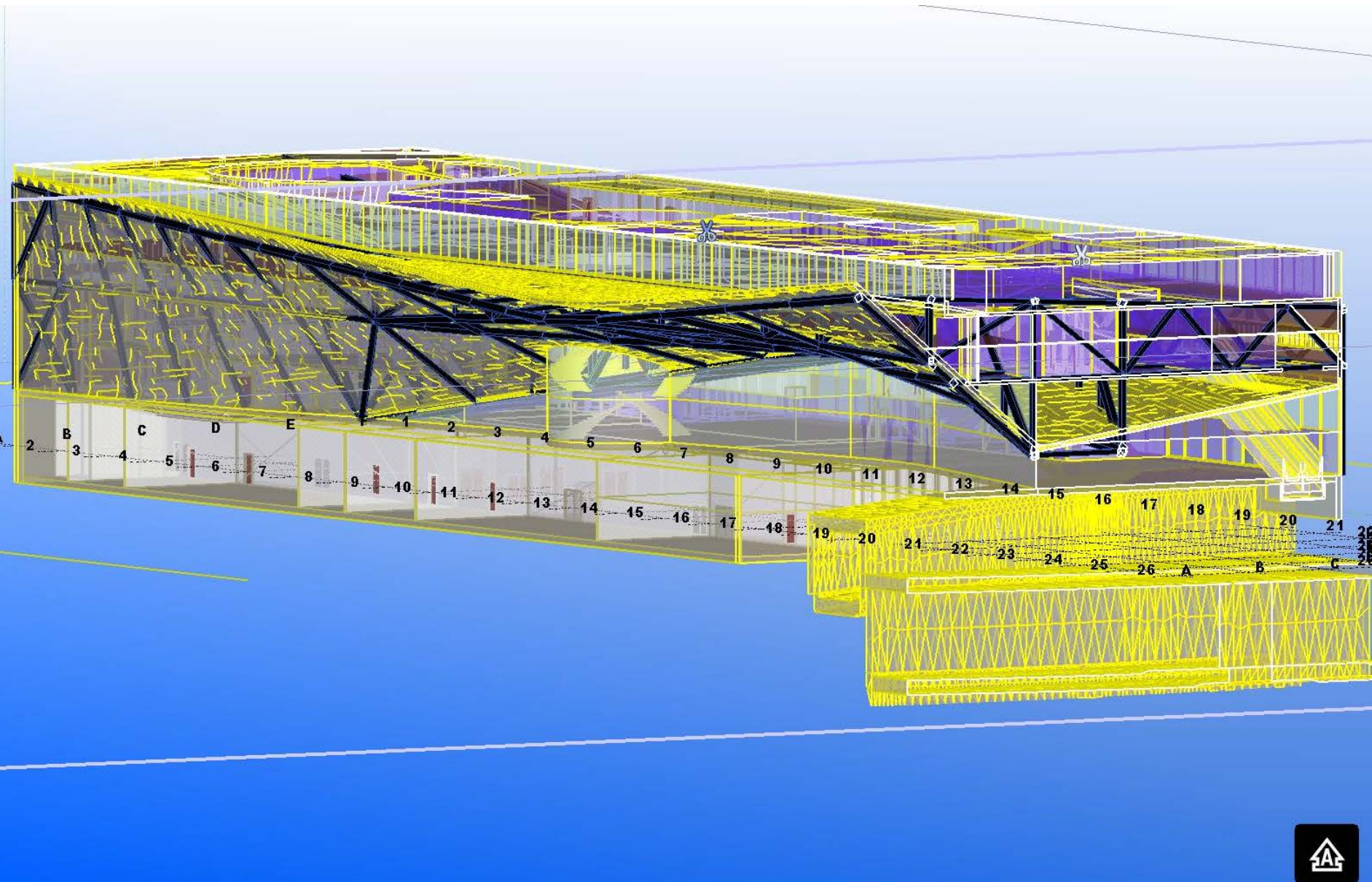


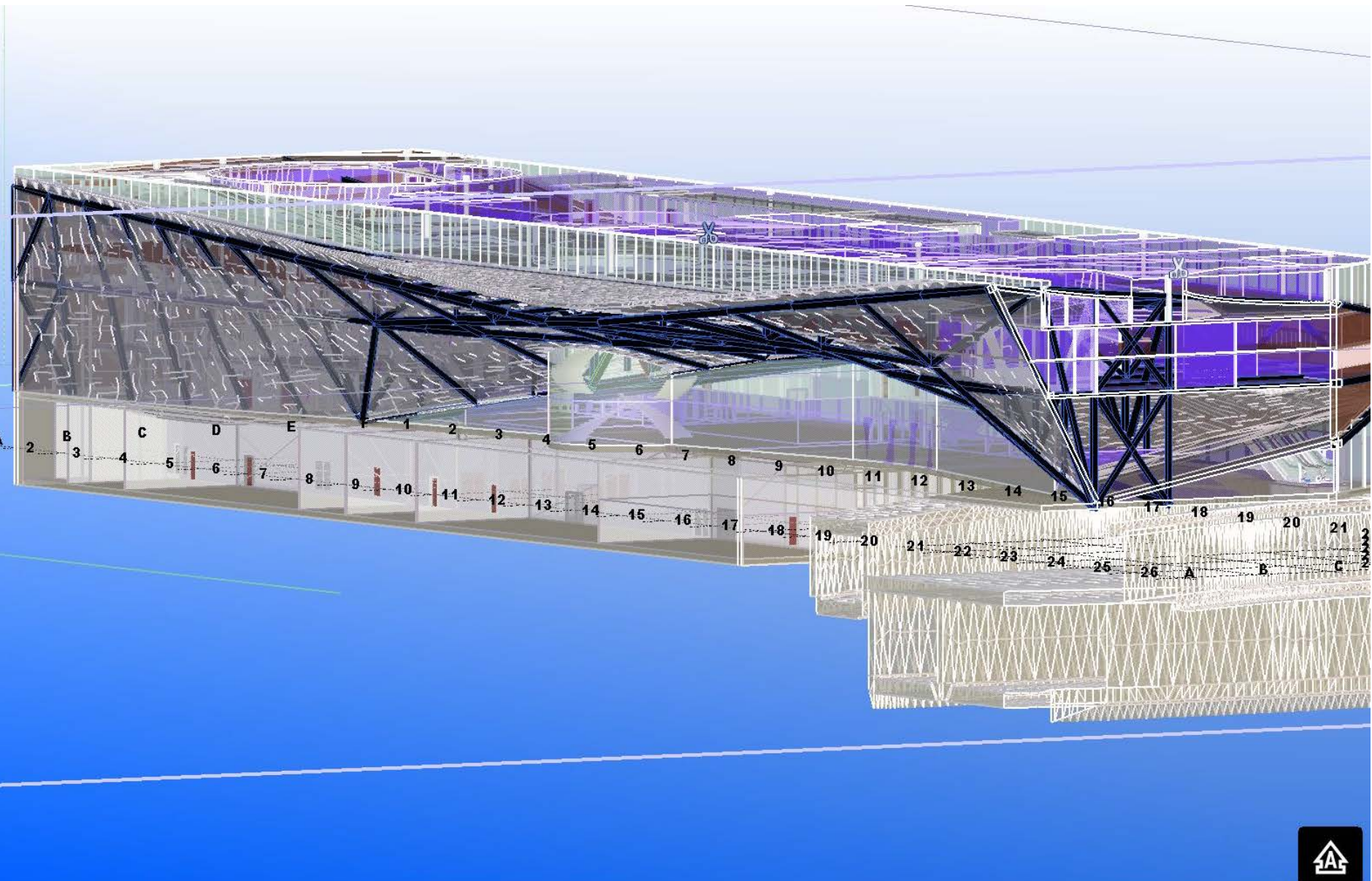


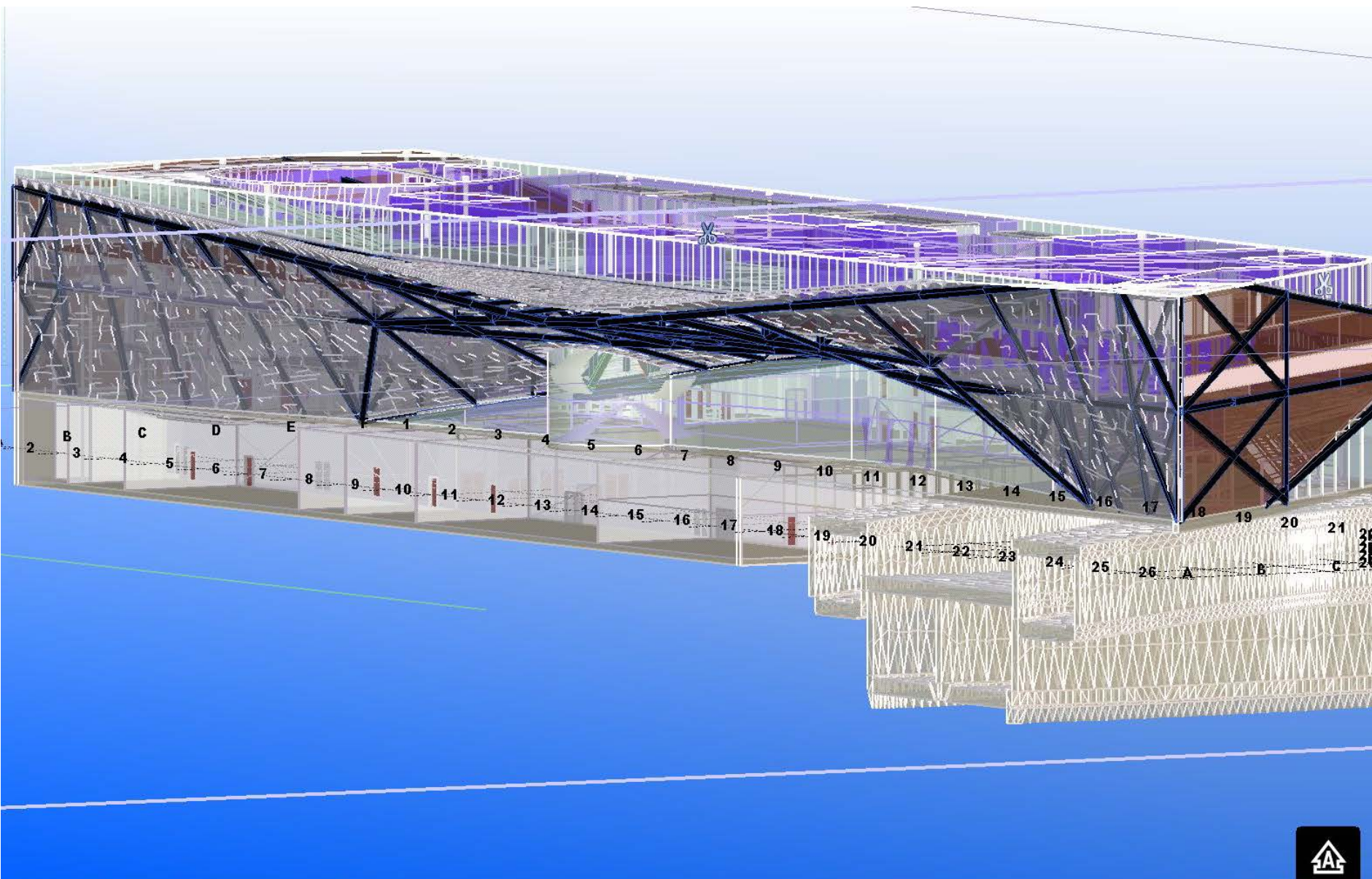




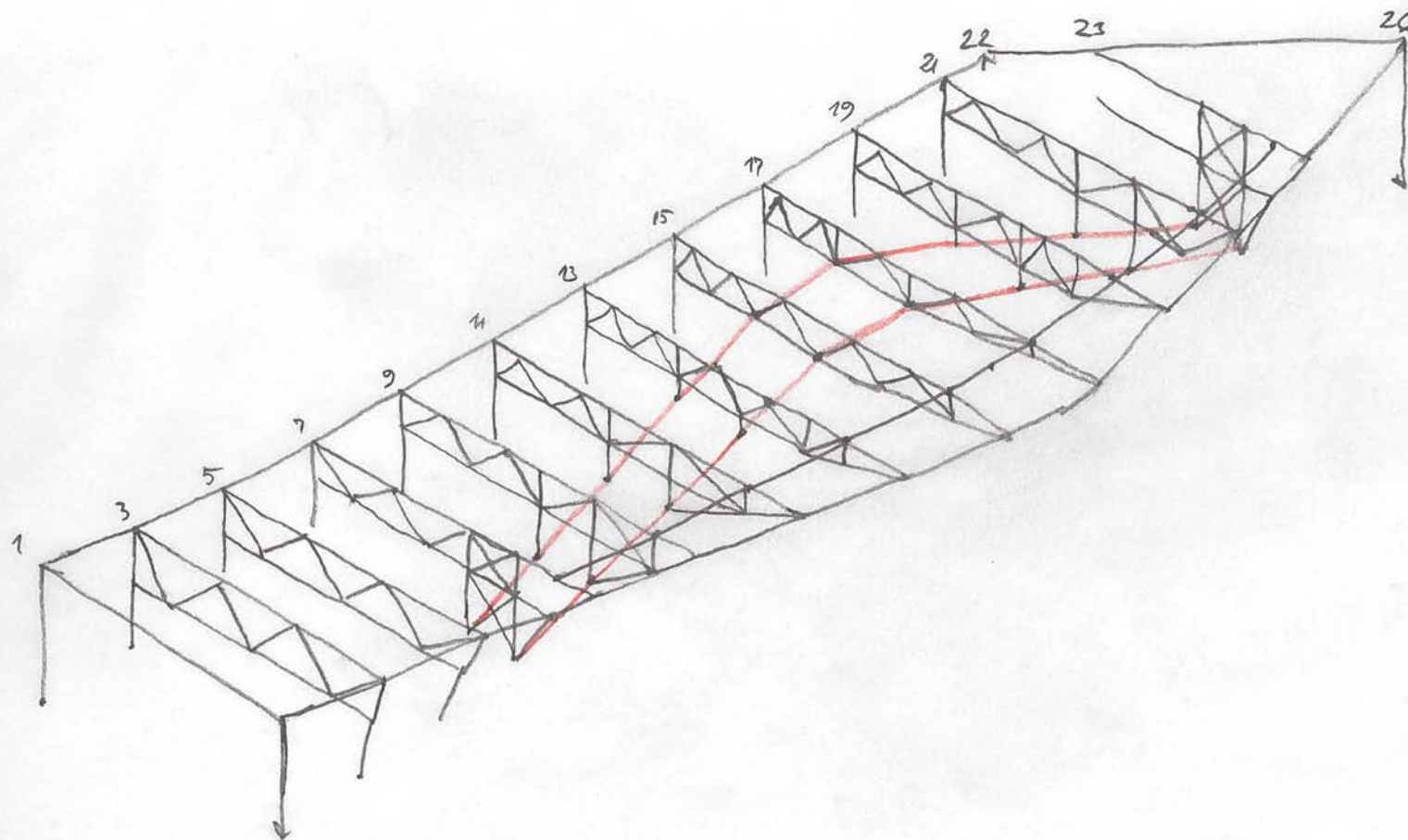








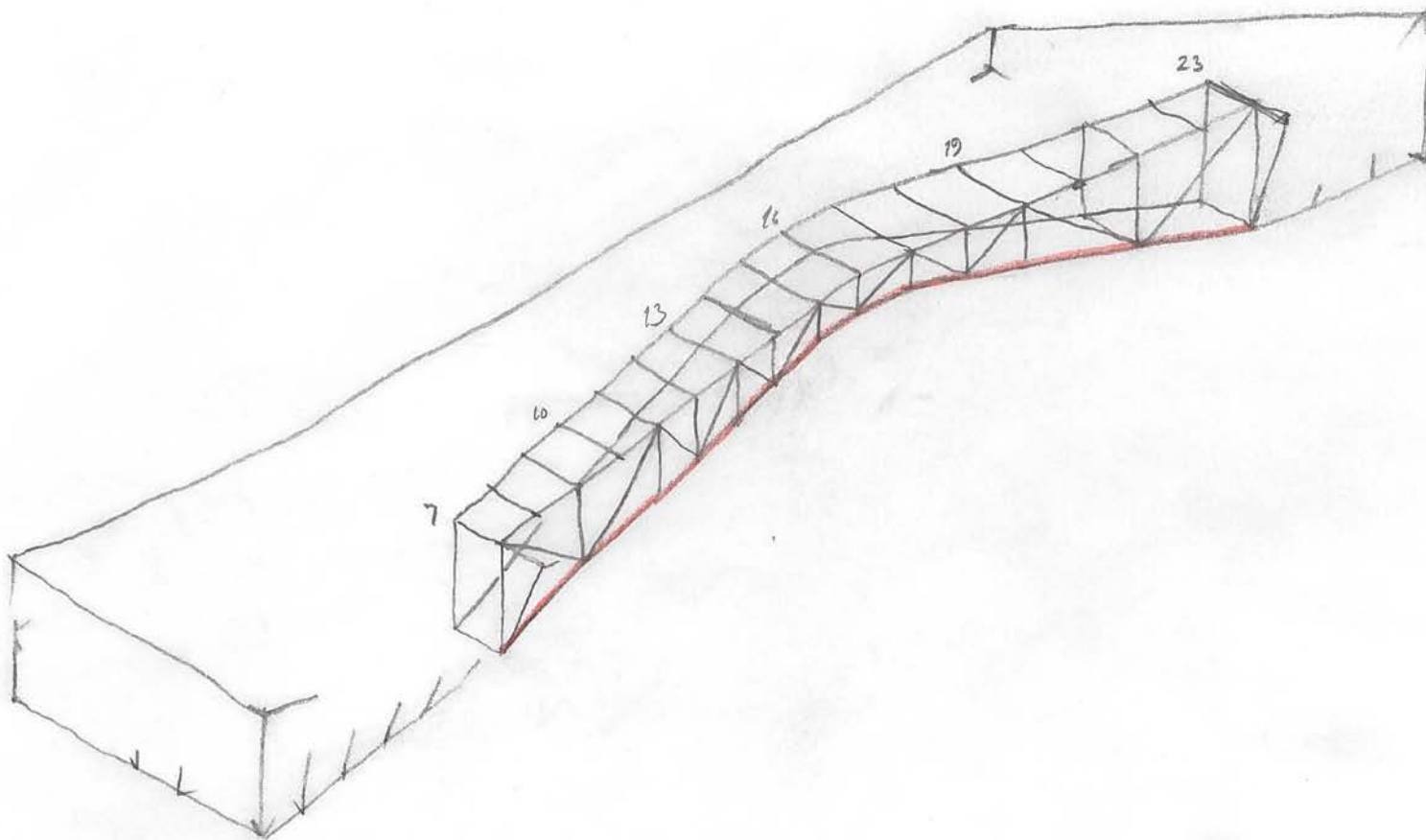
BÆRENDE KONSTRUKTION



KEK1

TRANSVERSAL TRUSSES. LEVEL 2 AND 3

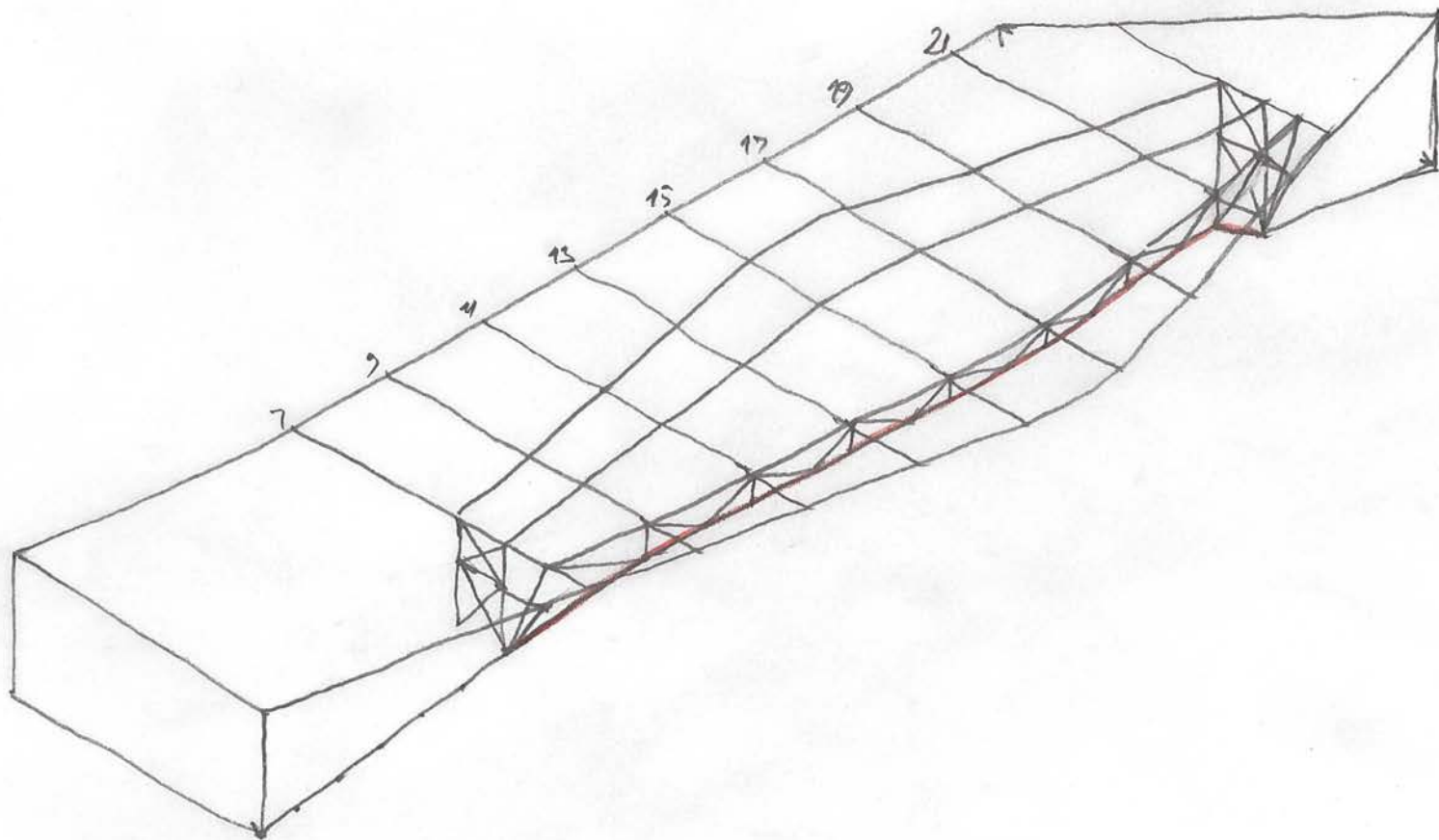
2014-02-13 ON RAMBOLL HES



KEK1

MIDDLE TRUSSED ARCH

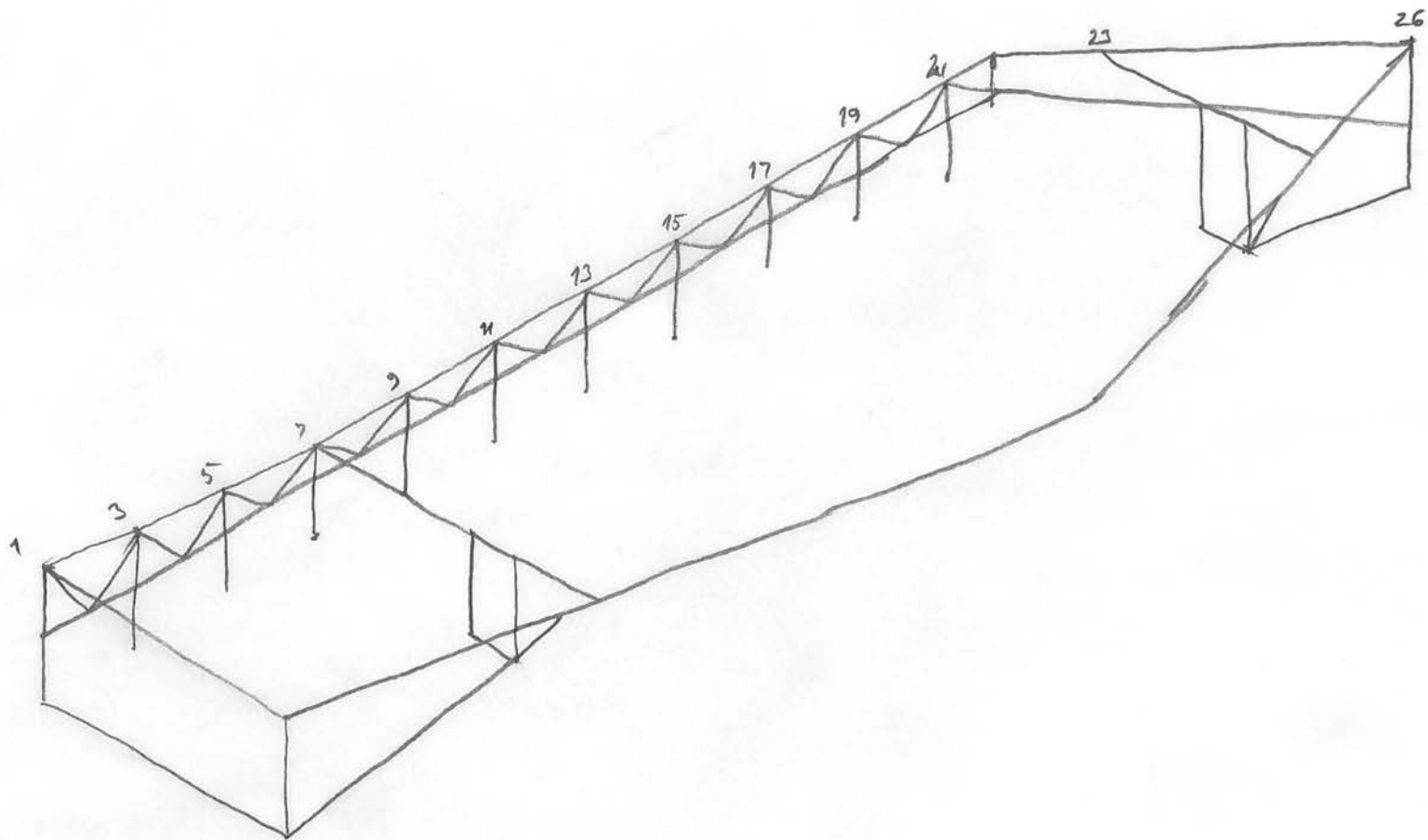
2014-02-13 03 RAMBOLL WIS



KEK1

FRONT TRUSS

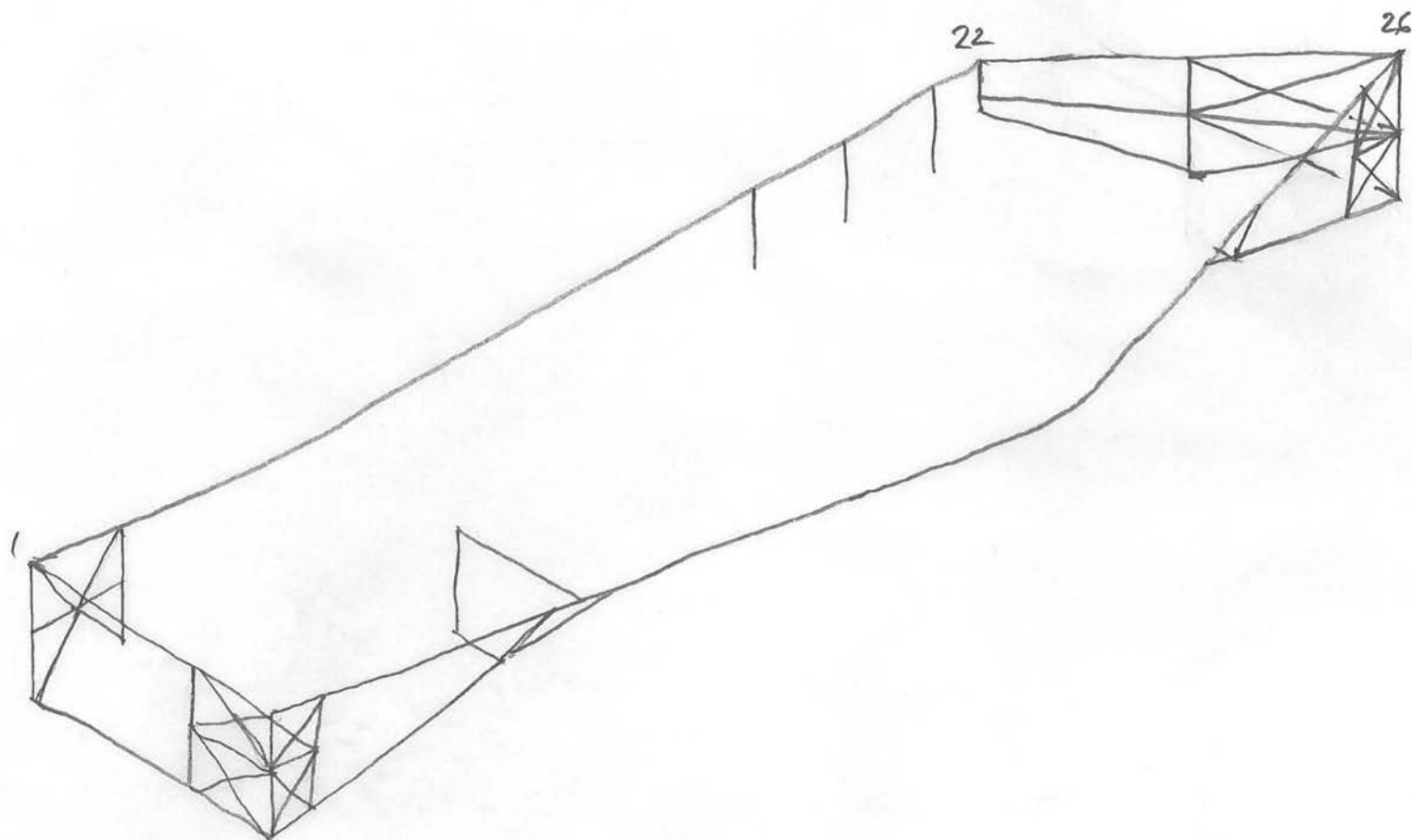
2014-02-13 04 RAMBOLL H&E



KEKI

TRUSS EAST FACADE

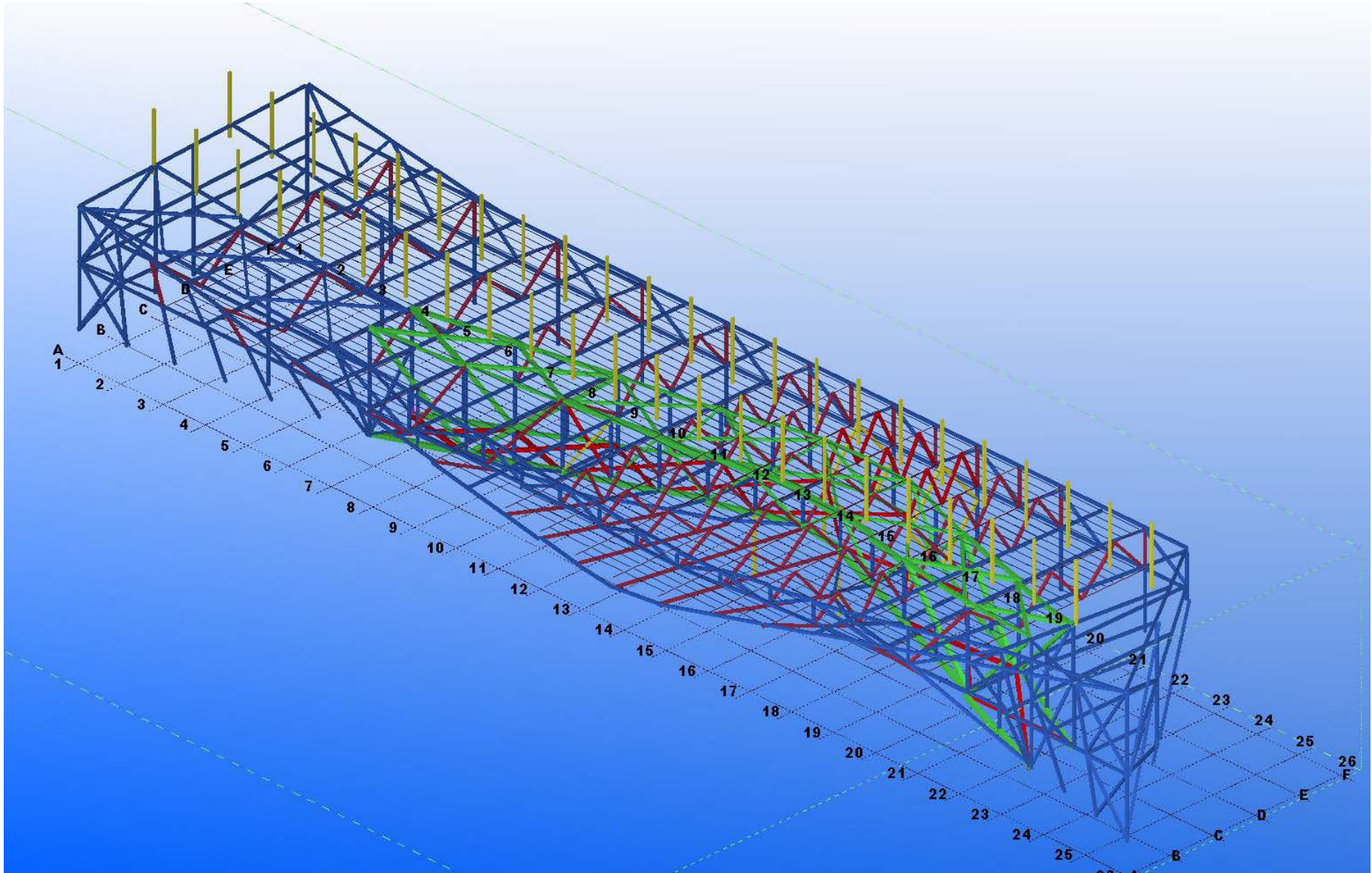
2014-02-13 06 RAMBOLL HB

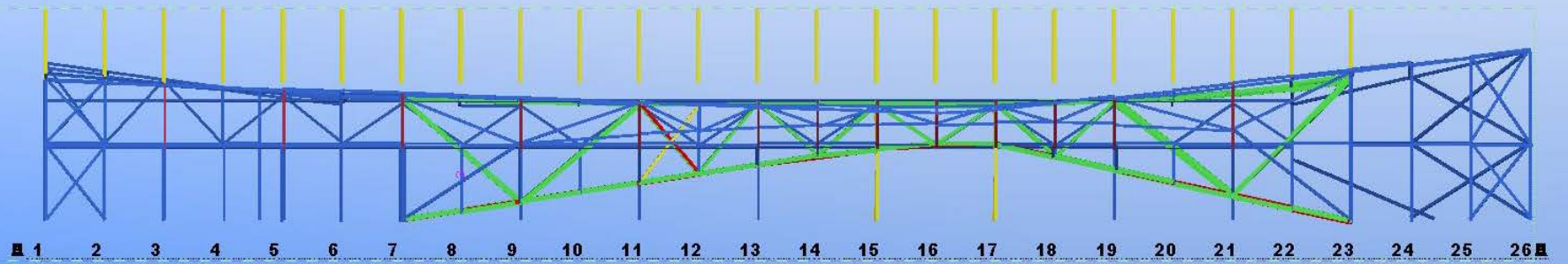


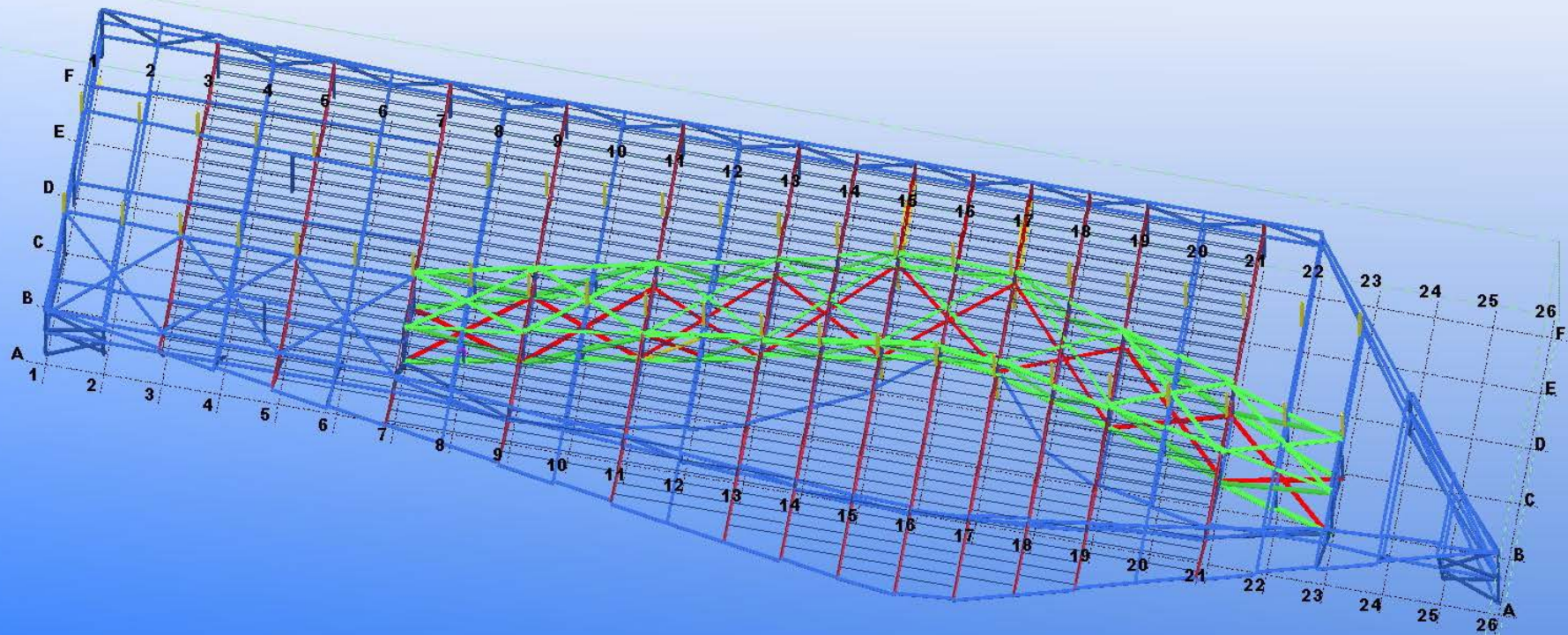
KEKI

FACADE BRACING

2014-02-13 07 RAMBOLL HE



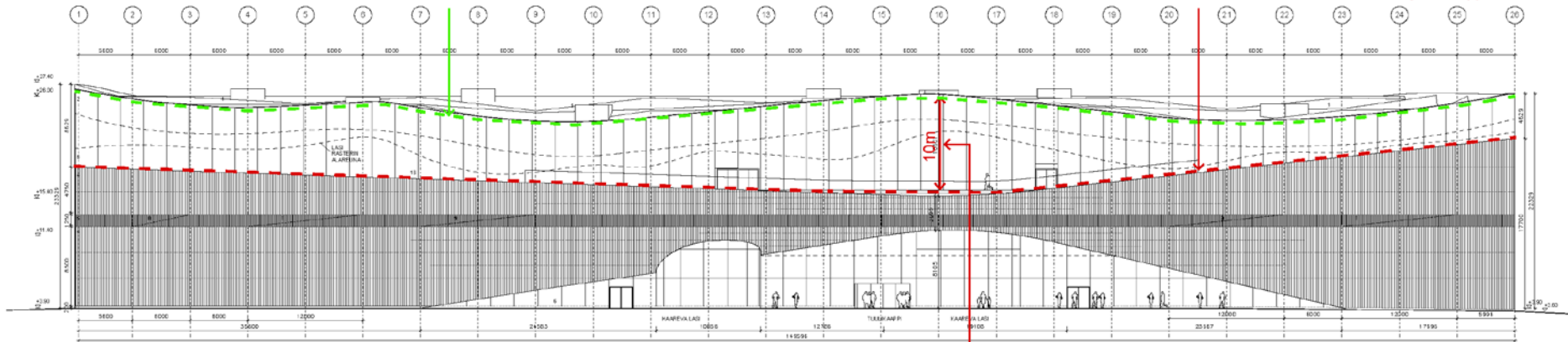




FACADER OG BEVÆGELSER

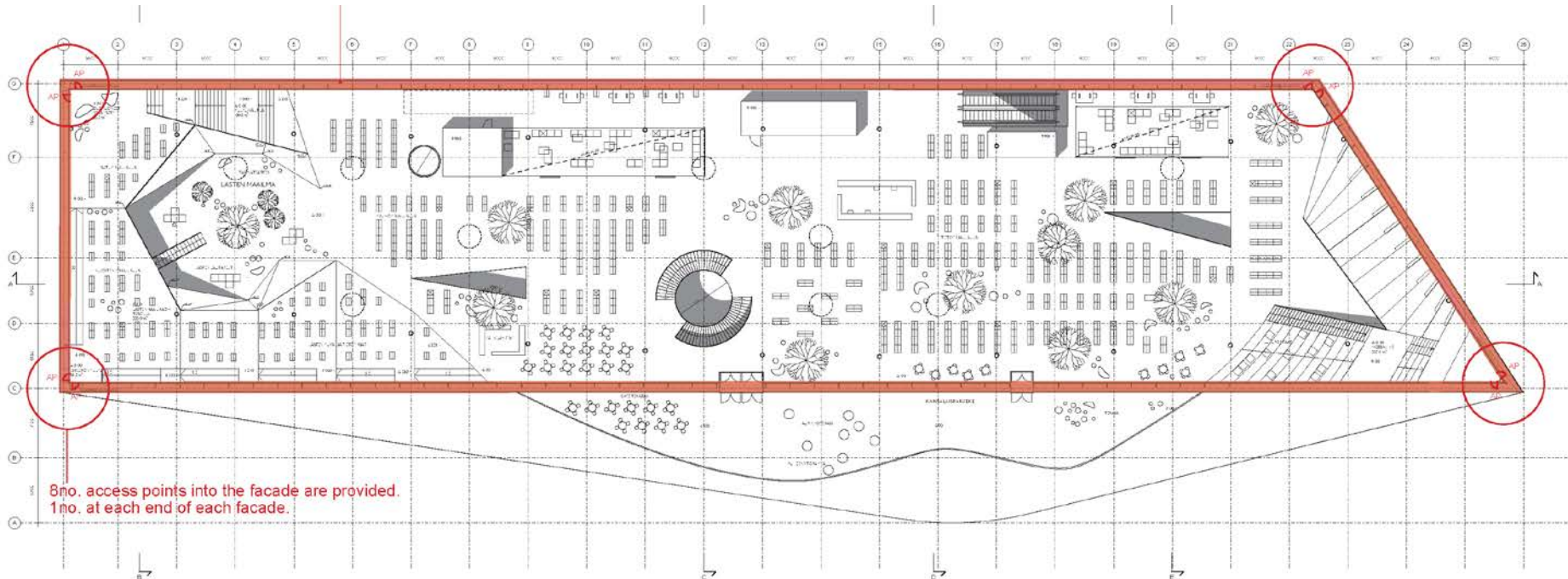
Hoist track follows undulations of roof parapet

Walkway within facade follows gradient line of timber facade. Some areas may be stepped.

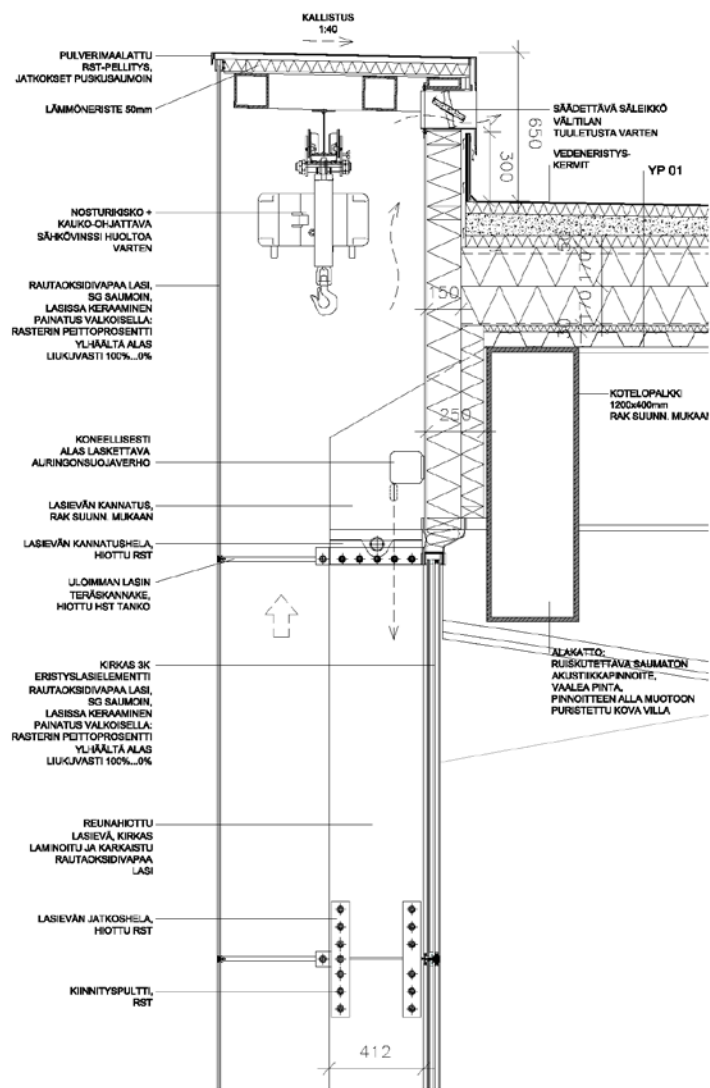


Instance of highest facade void

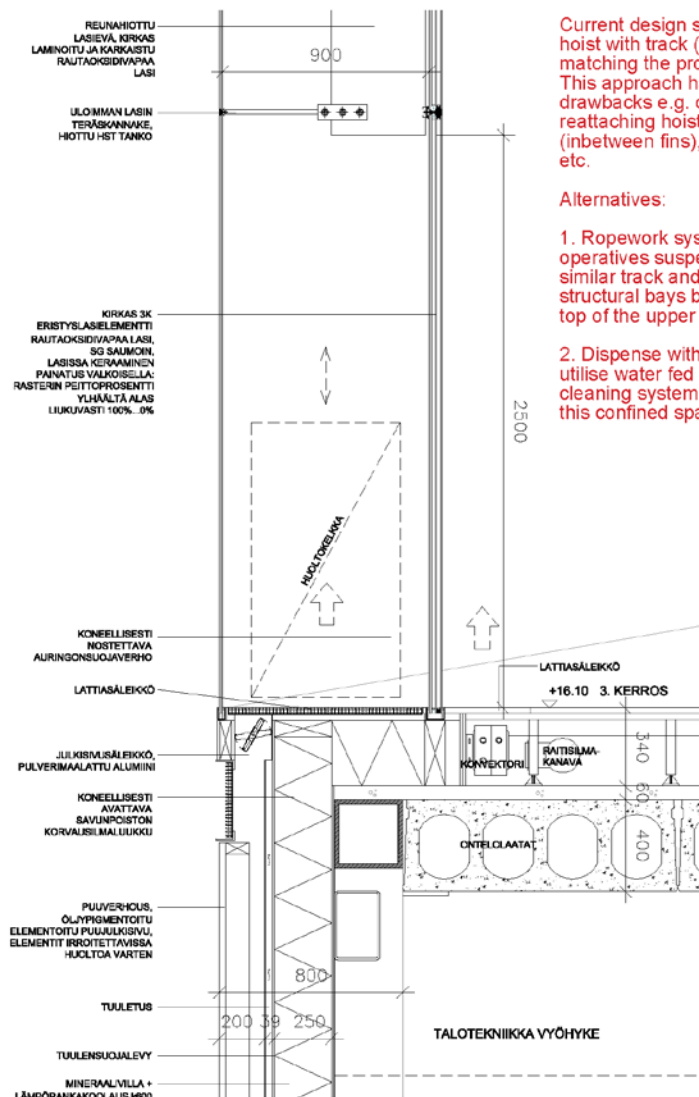
West Elevation



8 no. access points into the facade are provided.
1 no. at each end of each facade.



Typical L03 Glazed Facade / Parapet Interface



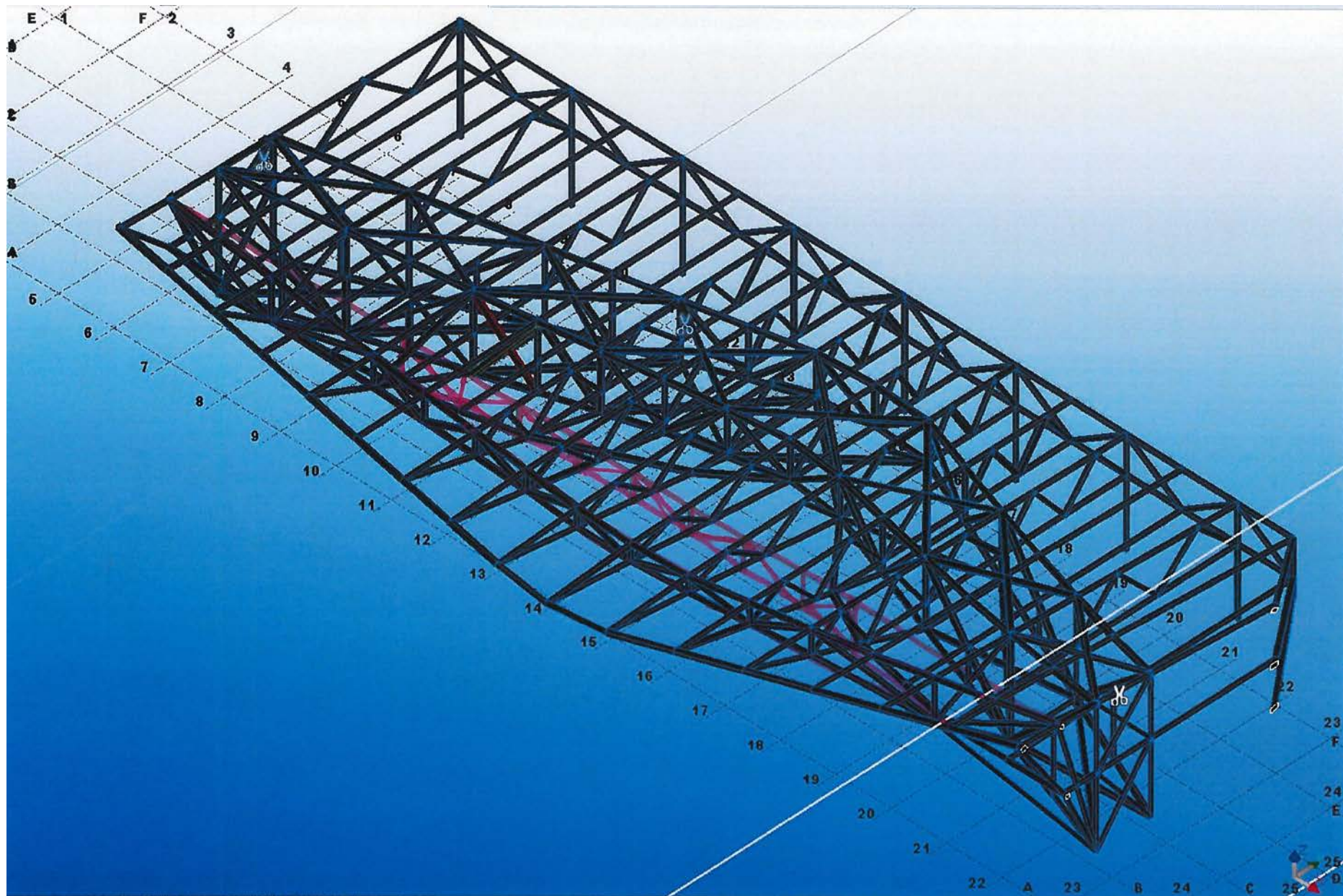
Typical L03 Glazed Facade / Floor Interface

Current design shows cradle hoist with track (that will undulate, matching the profile of the parapet). This approach has many drawbacks e.g. detaching/reattaching hoist every 2.5m (inbetween fins), storage of cradle etc.

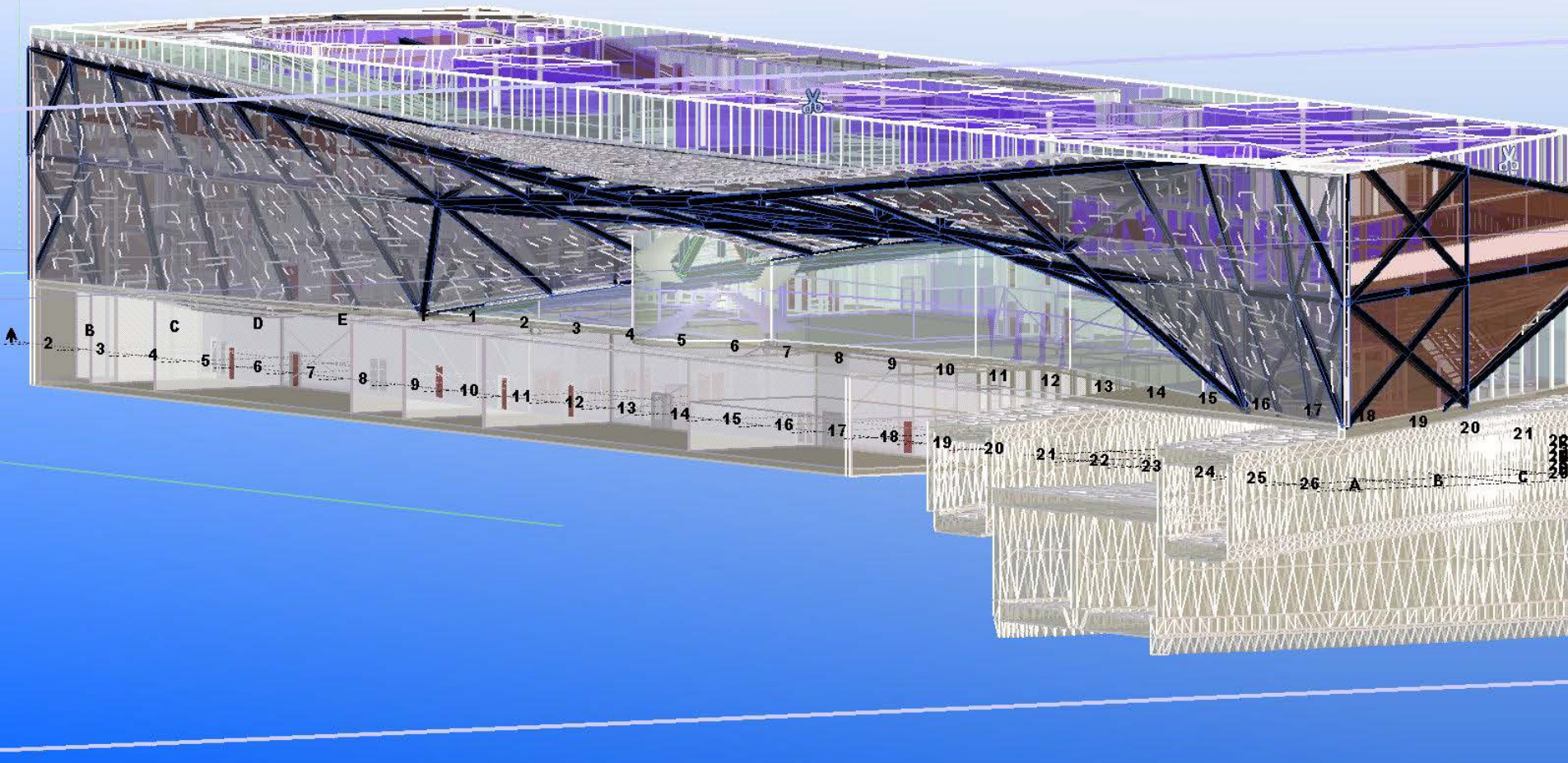
Alternatives:

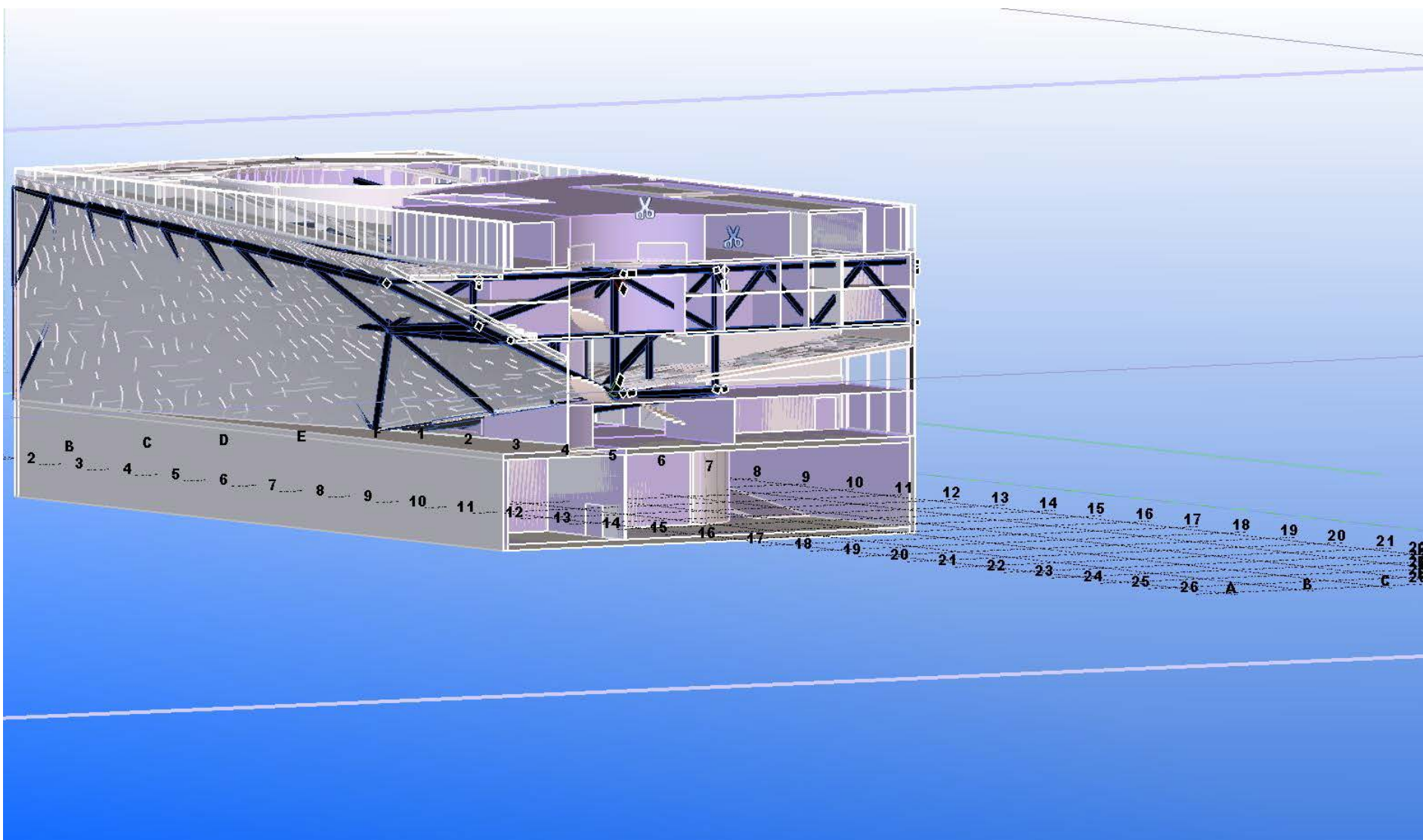
1. Ropework system with the operatives suspended from a similar track and transfer between structural bays by going over the top of the upper most strut/fin.

2. Dispense with the track and utilise water fed extendable pole cleaning system. Is this viable in this confined space?

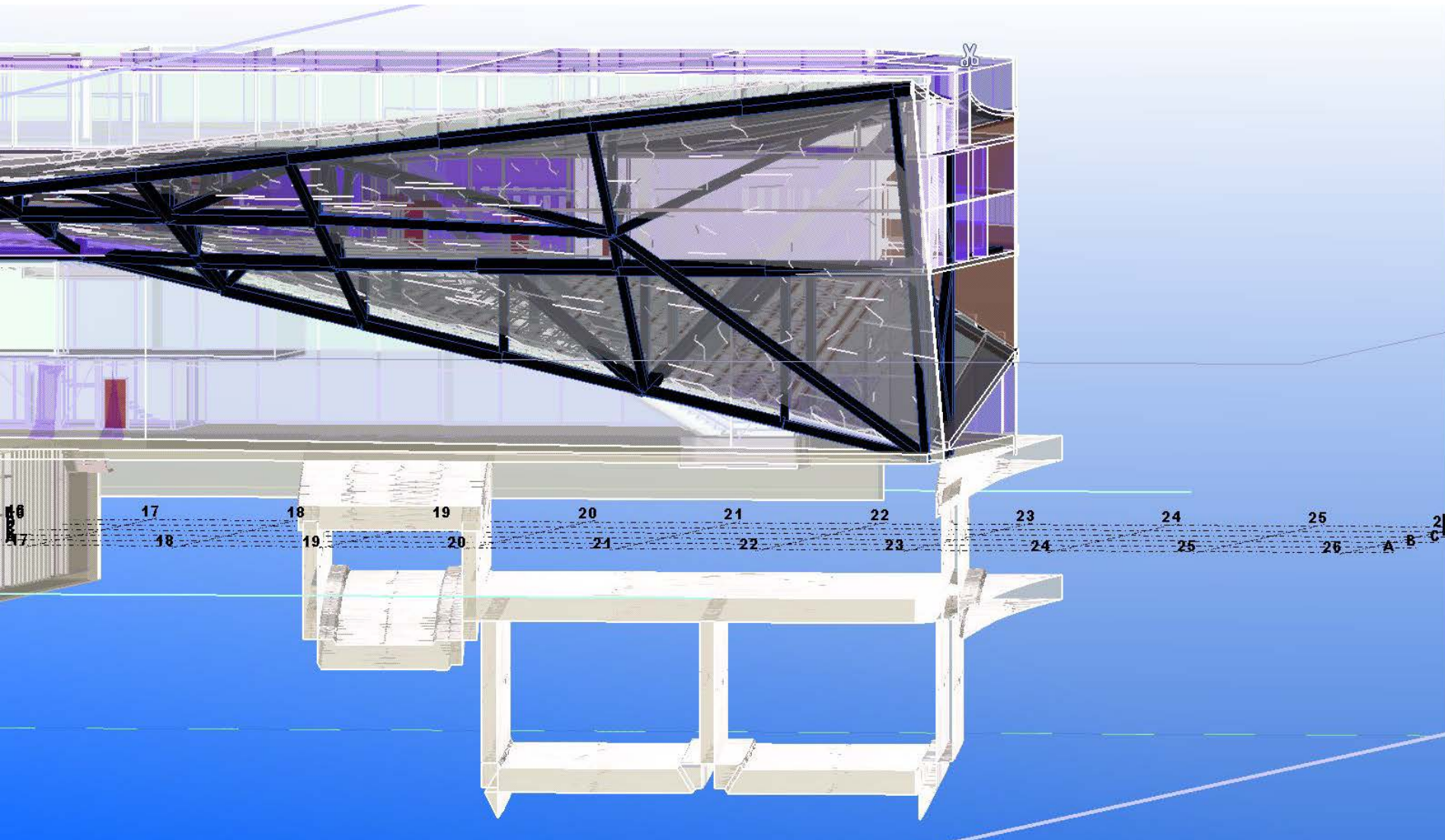


3D TILPASNING KONSTRUKTION, ARKITEKTUR, INSTALLATIONER

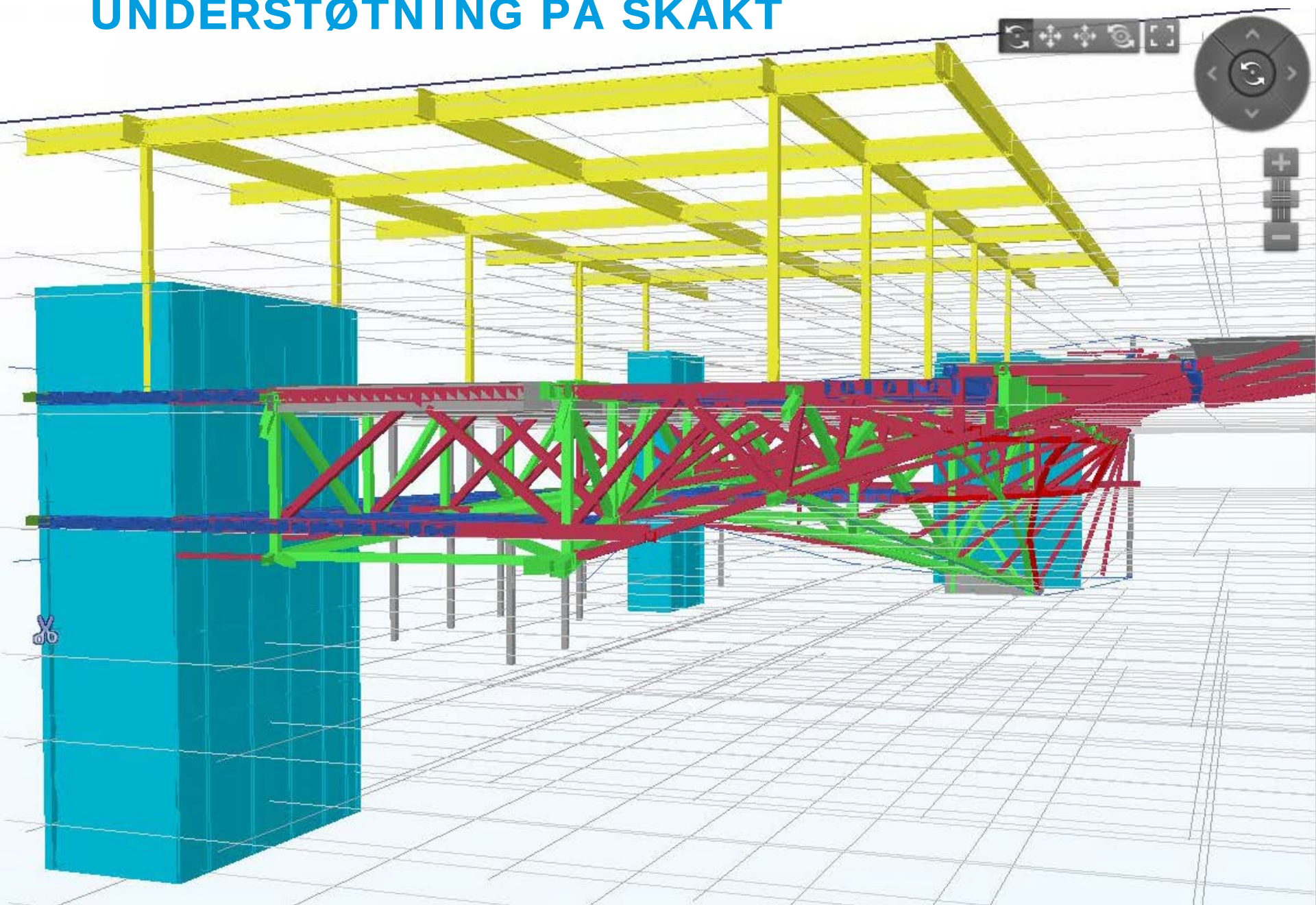




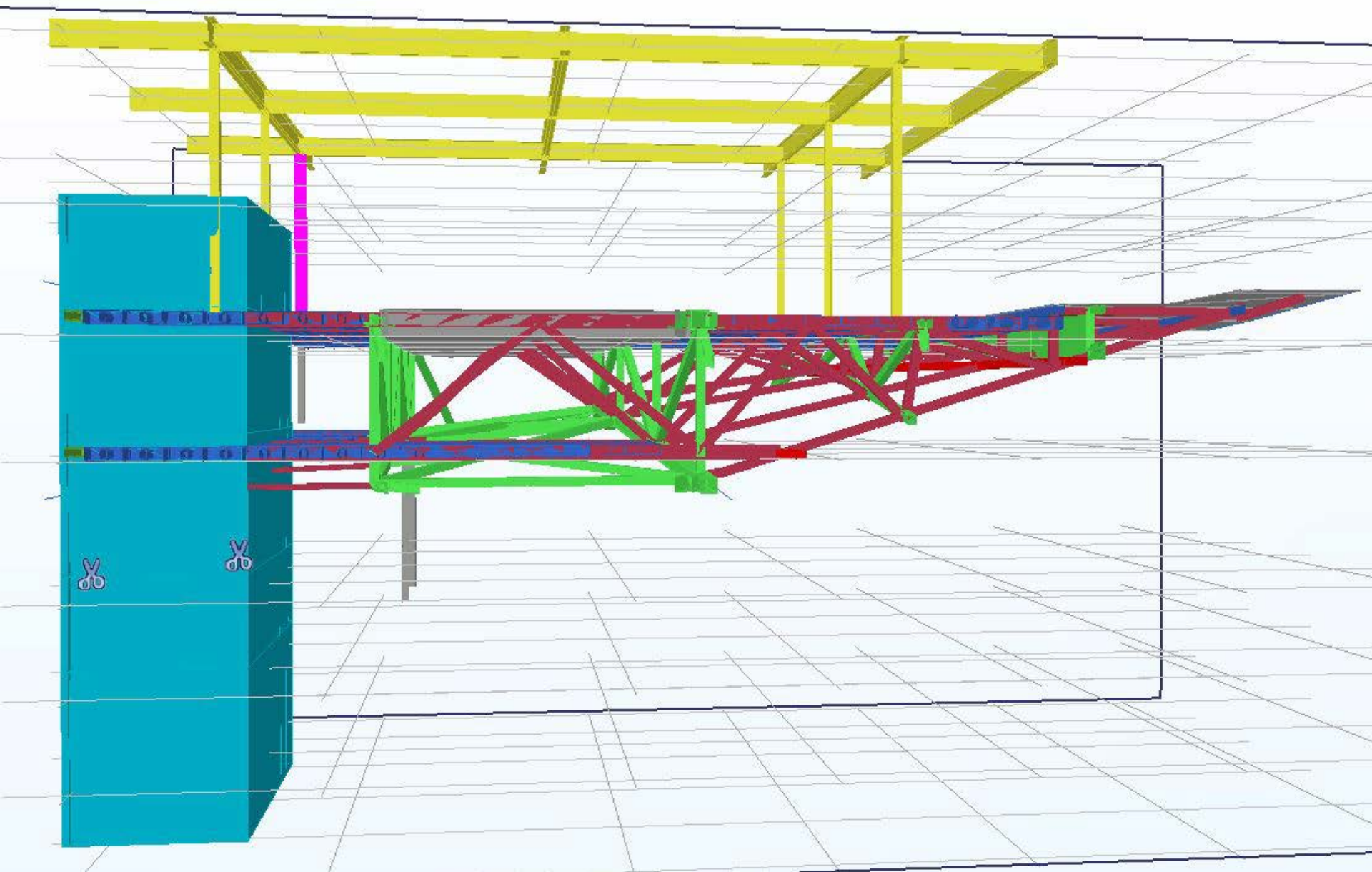
FREMTIDIG VEJTUNNEL



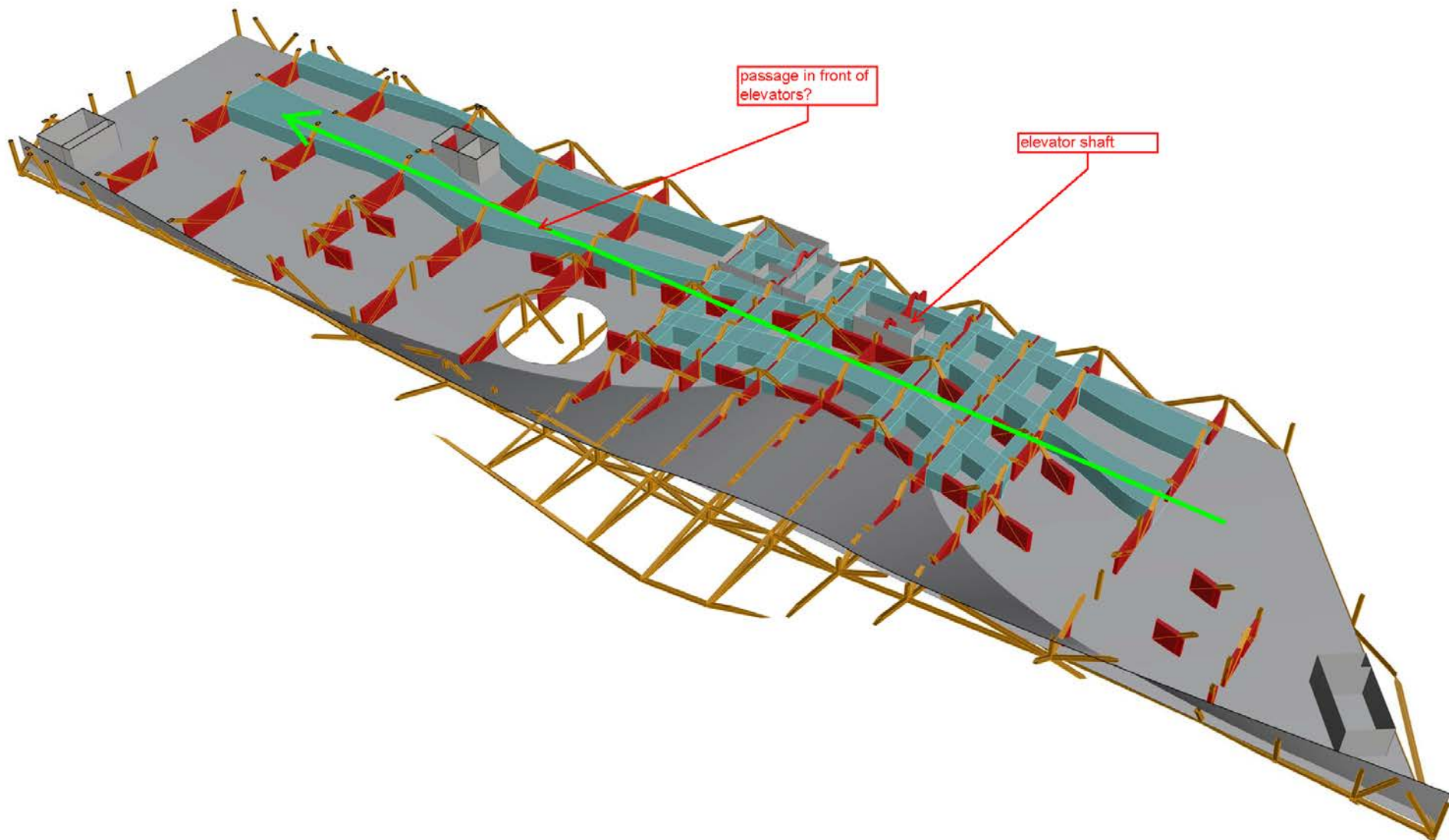
UNDERSTØTNING PÅ SKAKT



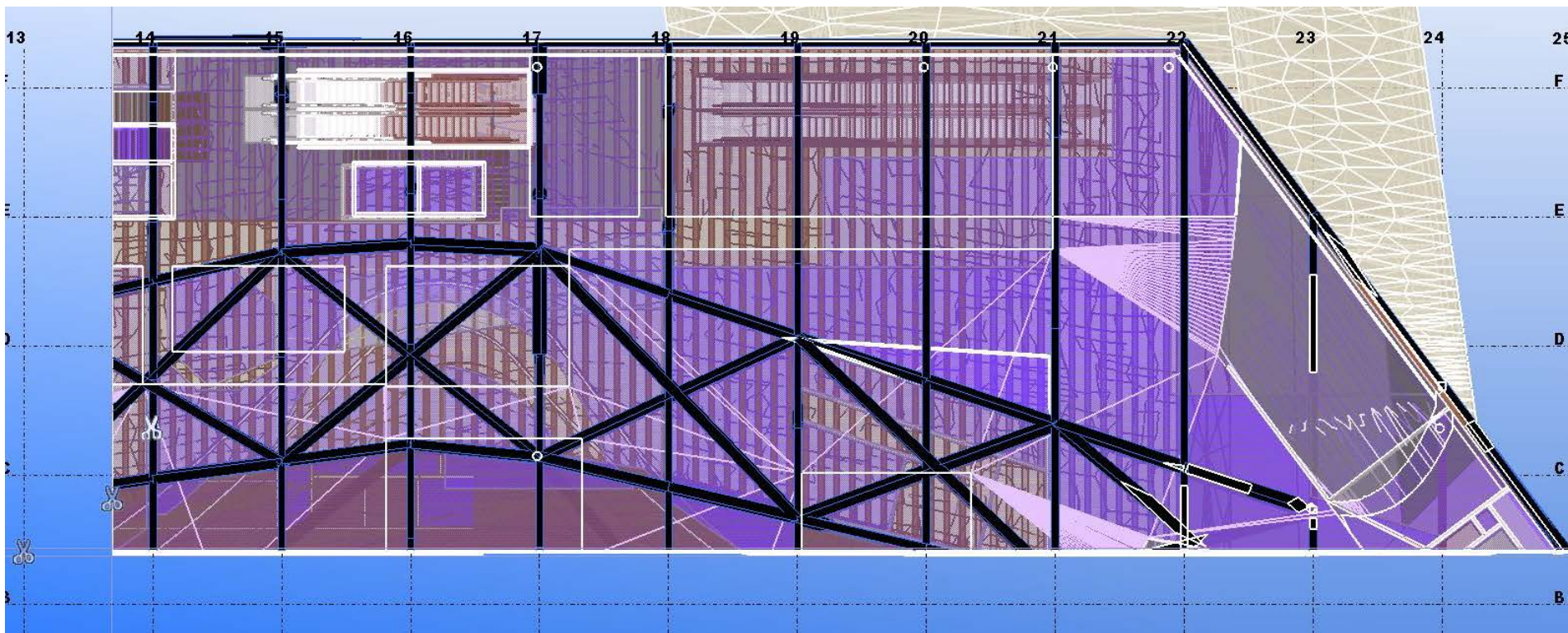
GANGLINJE

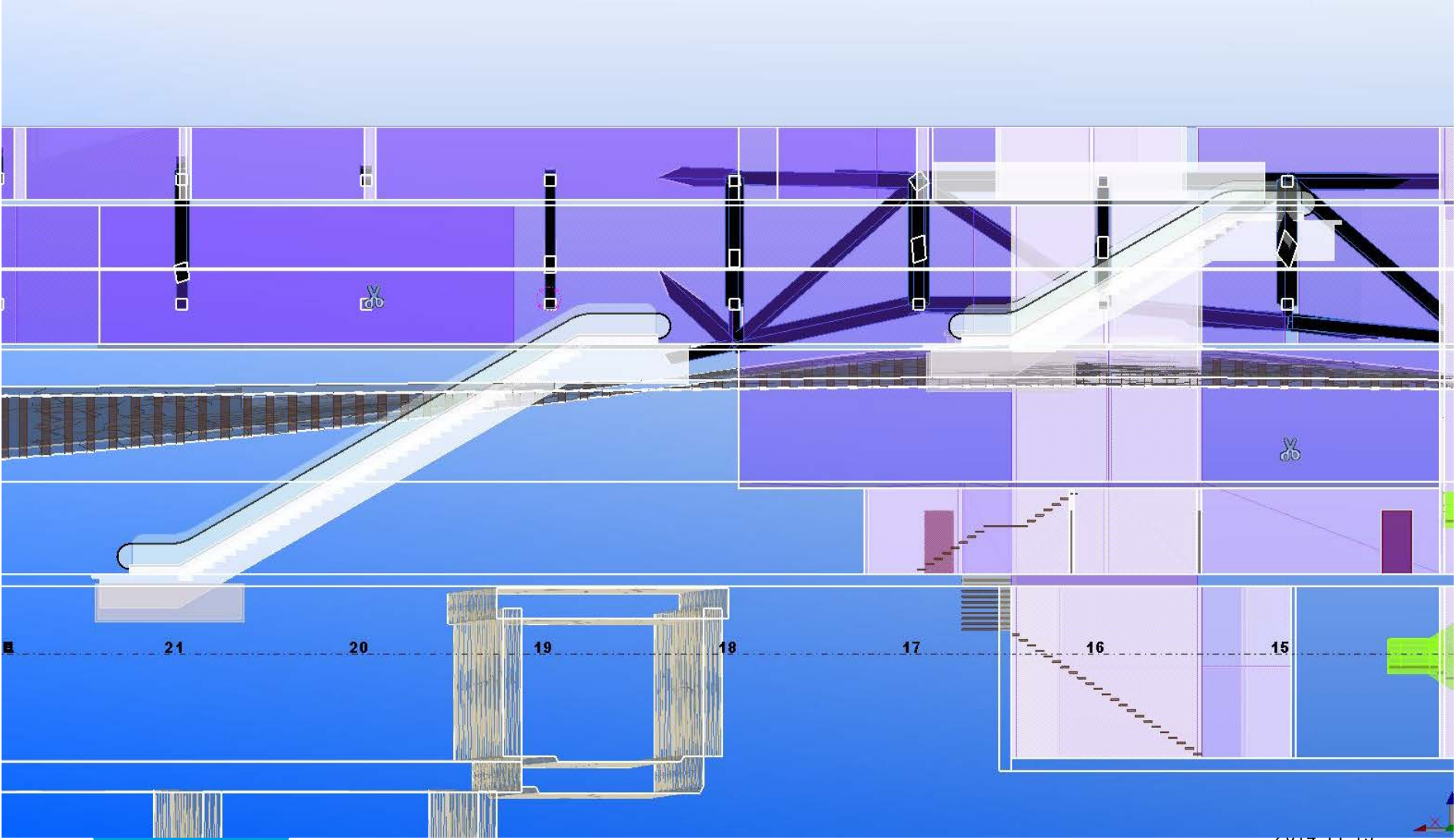


GANGLINJE DIAGONALER

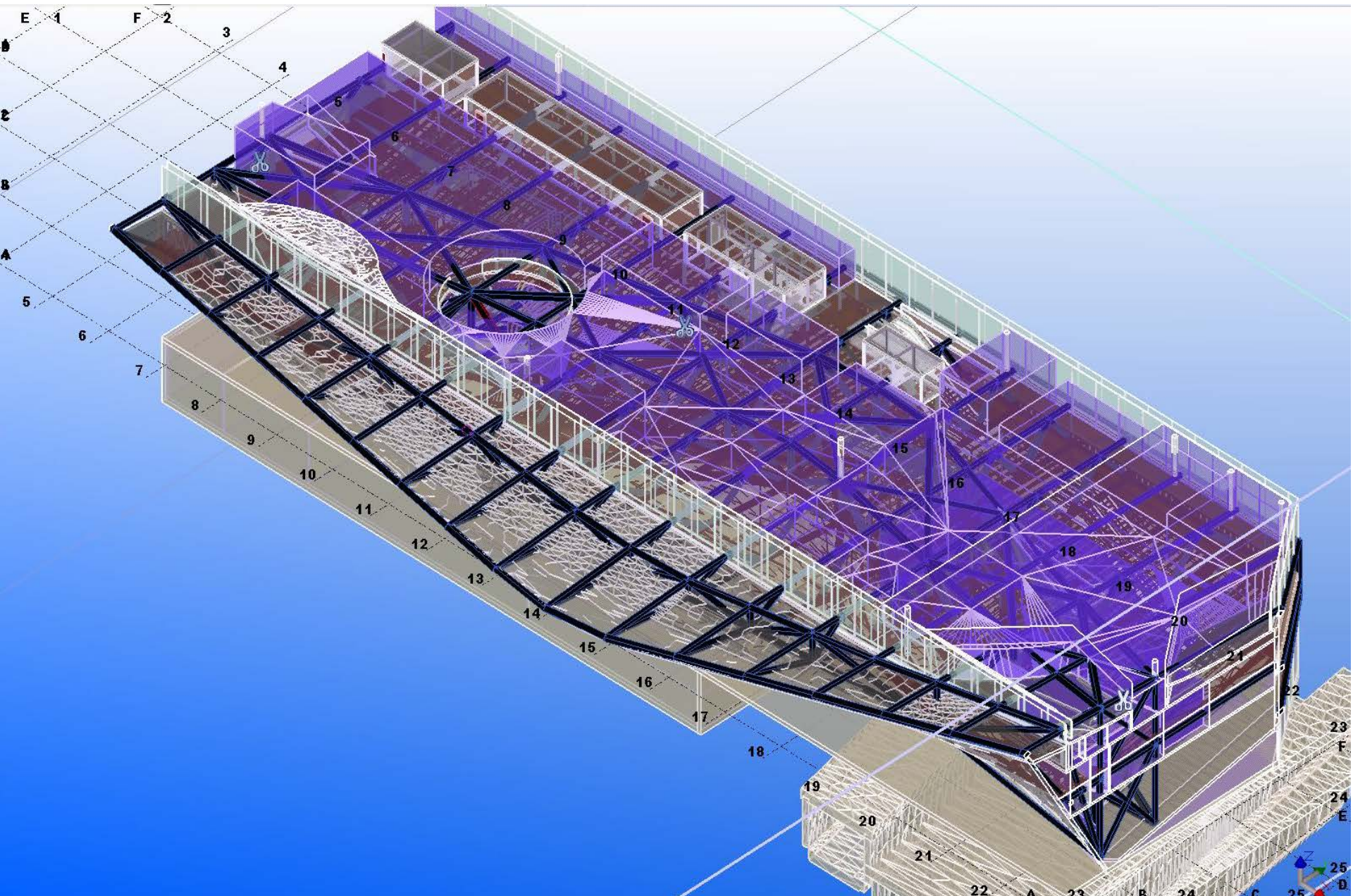


ESCALATORER OG GITTERDRAGERE

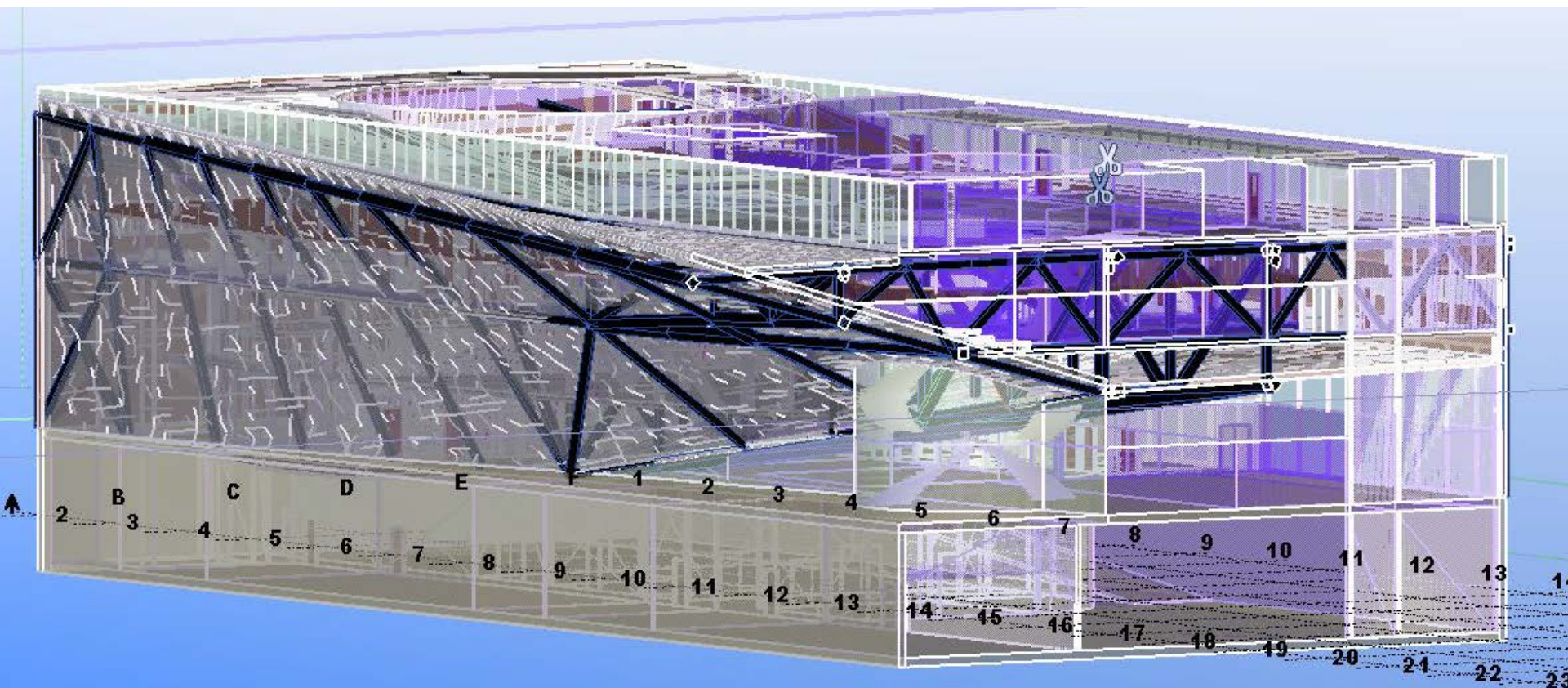


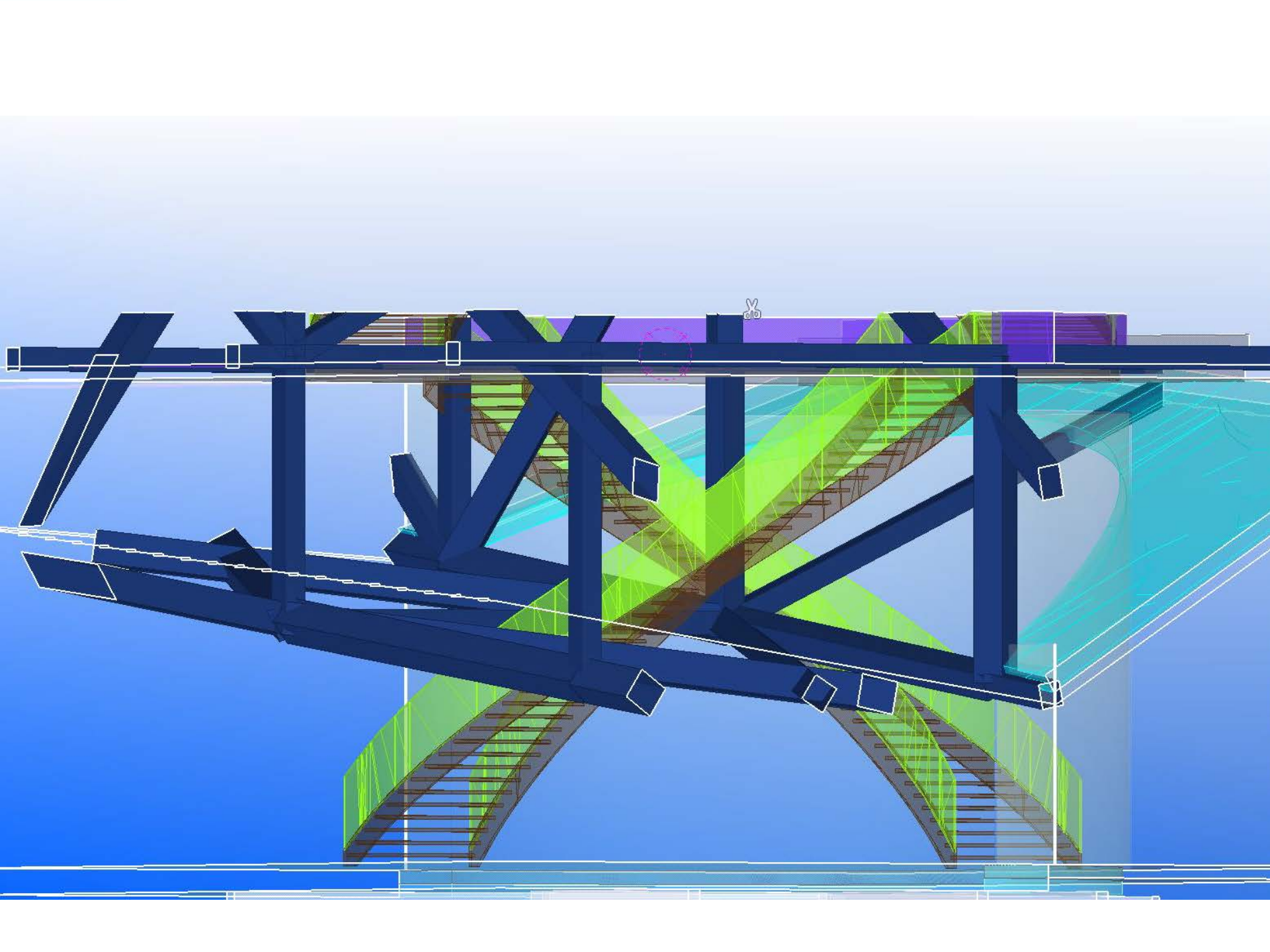


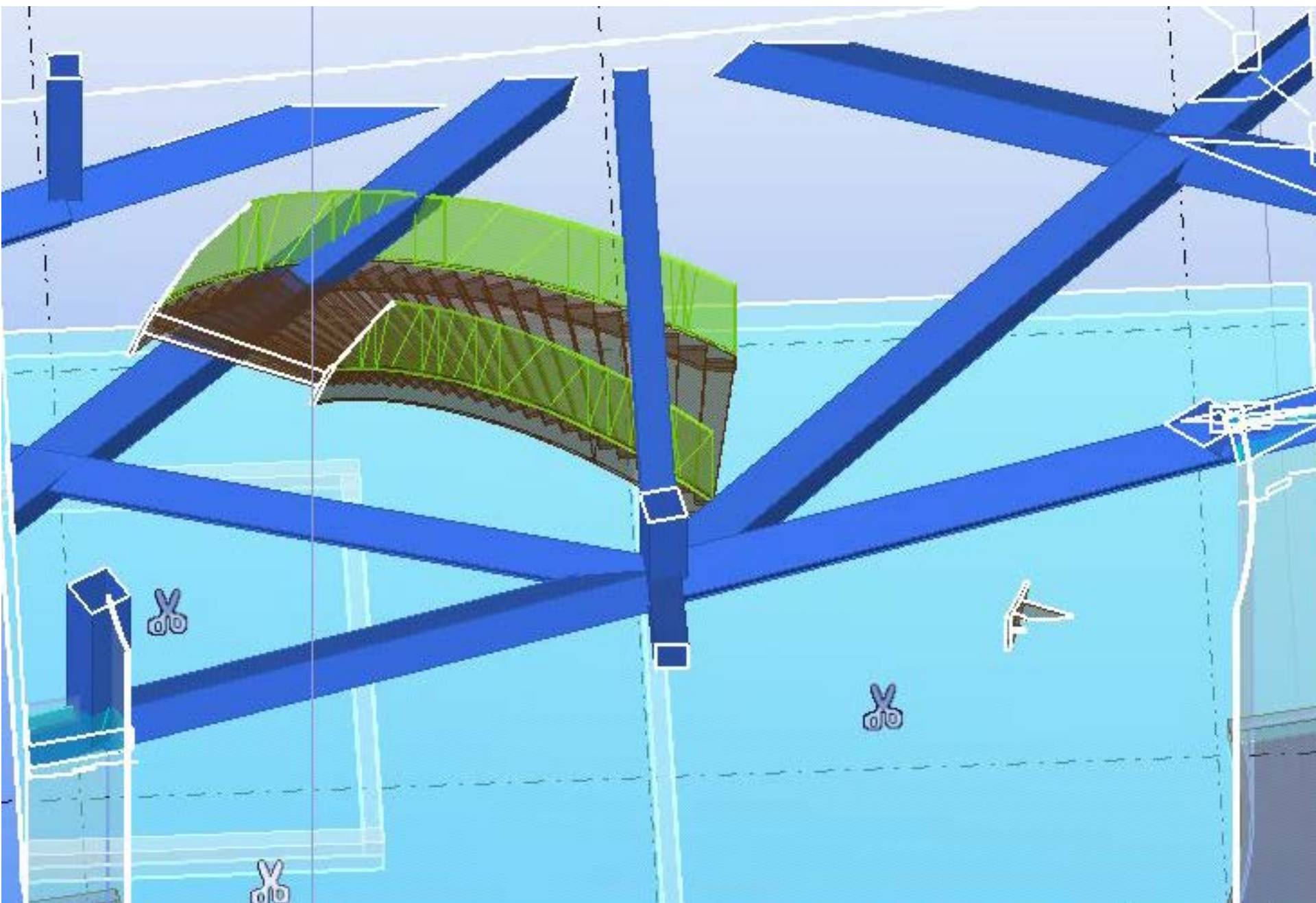
HOVEDTRAPPE



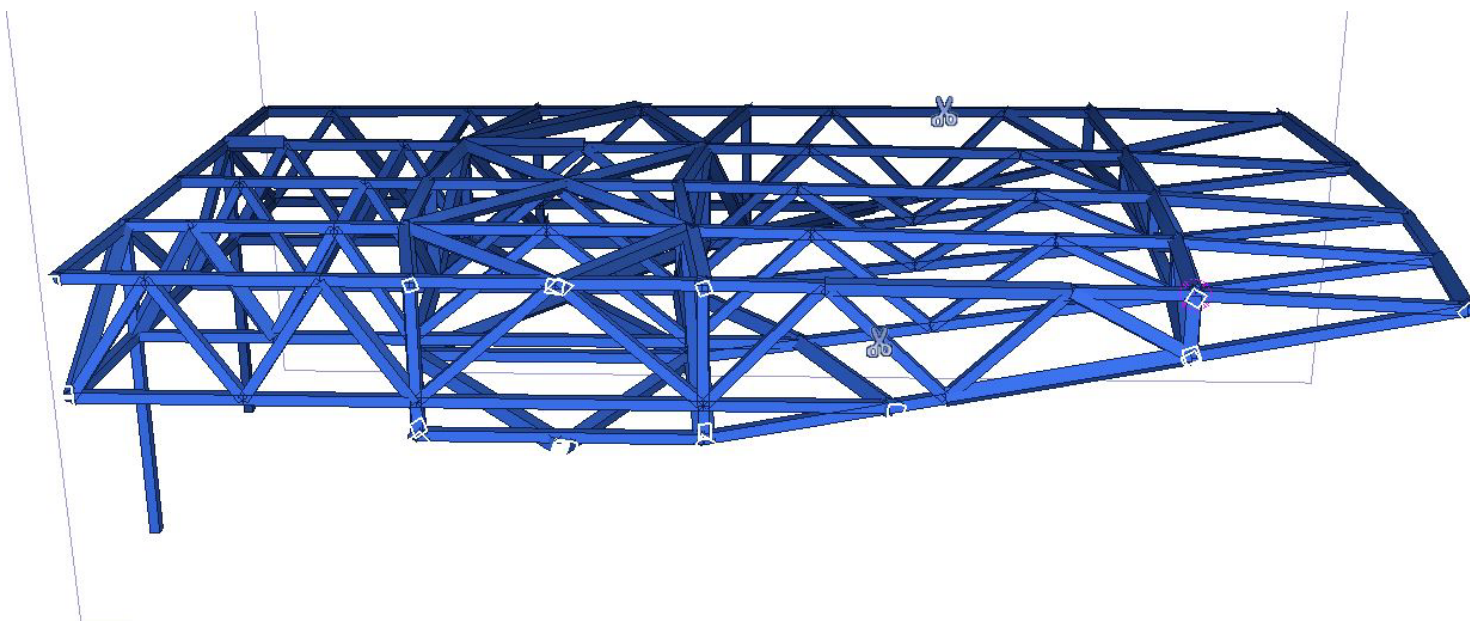
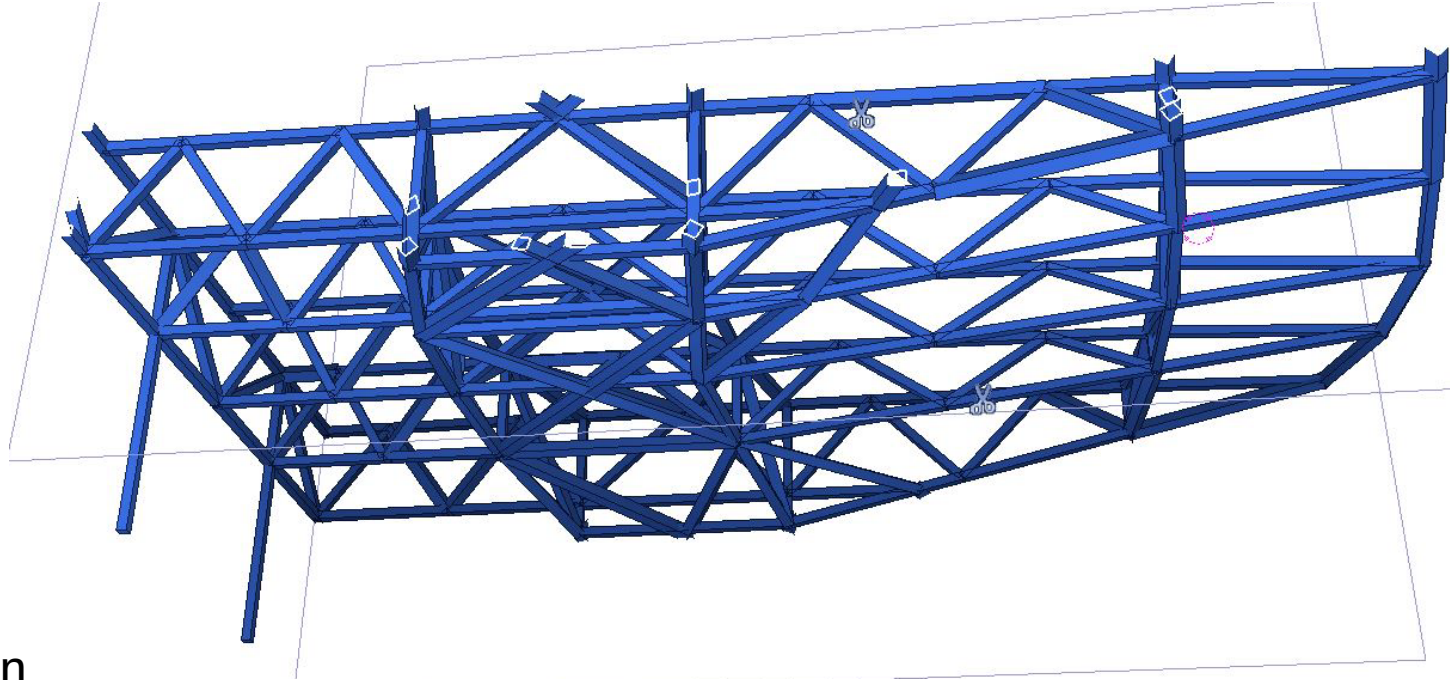
SNOS OP GENNEM BUEN



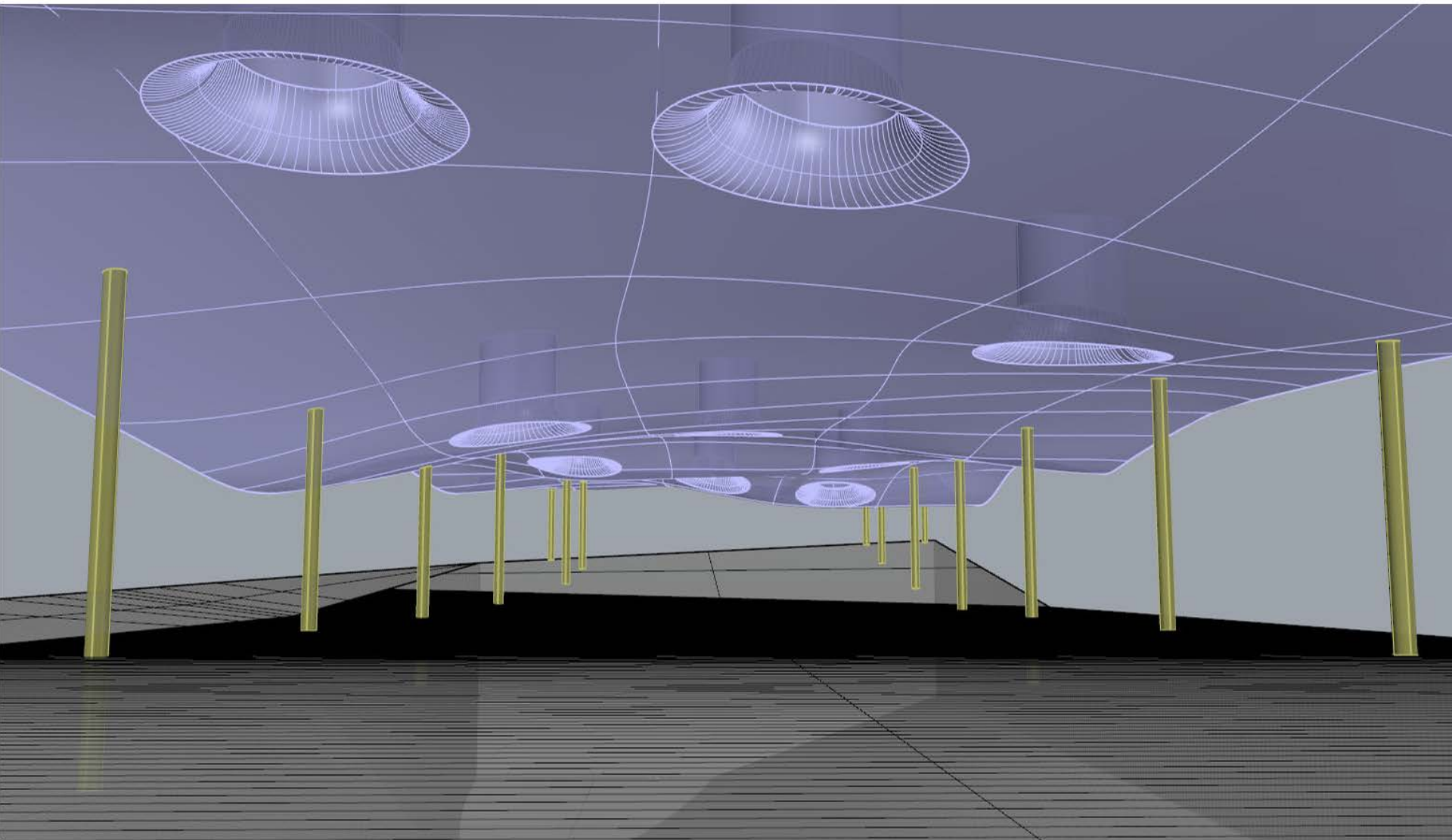




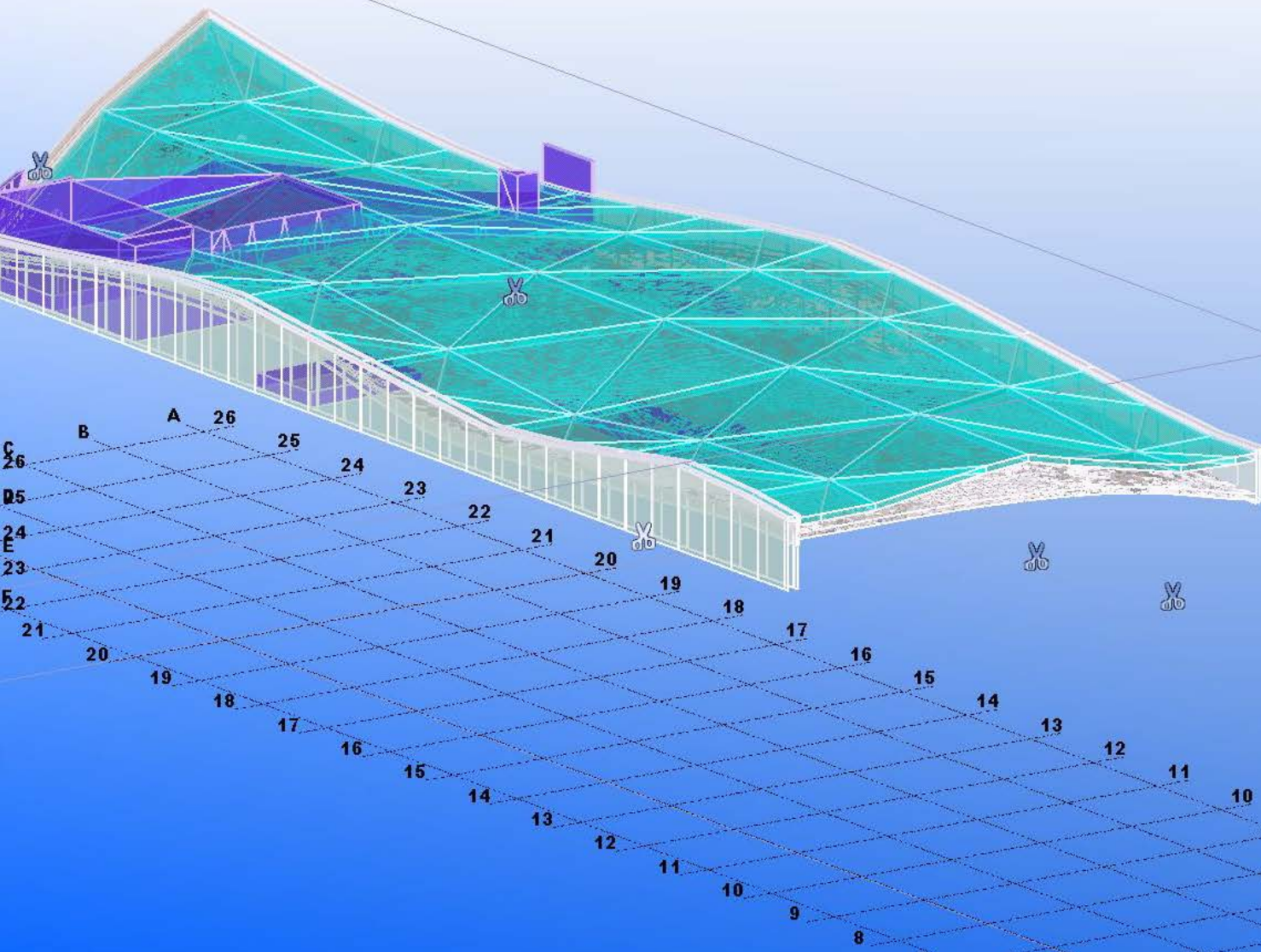
Balkonen
udkrages
27 m fra buen



TAGET BØLGER SOM HIMLEN



MED SKYER



STATUS

- Dispostionsforslag
- 100 m bro i
150 m bygning
- 24 m udkraget balkon
- Facader,
trapper,
escalatorer,
vejtunnel
- Det bliver en
bygning med
oplevelse.
- 2017

