

Journée Béton Suisse

23.06.2018

Laurent Eller - Burckhardt+Partner

## Les Pépinières au Flon

**Burckhardt+Partner SA**

Architecture et planification générale

Bâle Berne Genève Lausanne Zurich

Berlin Grenzach Stuttgart

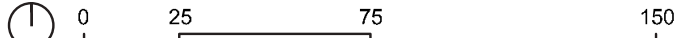
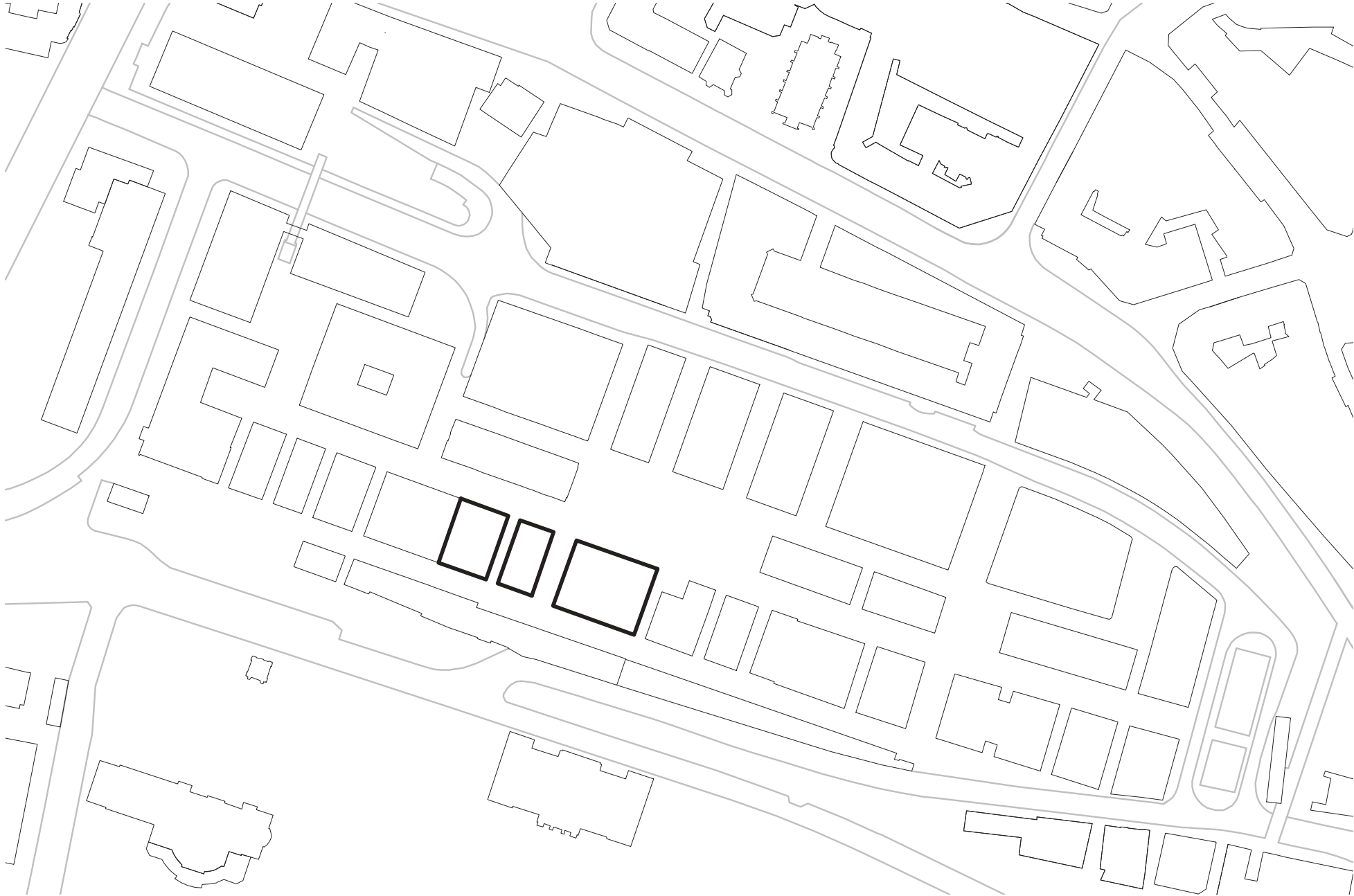


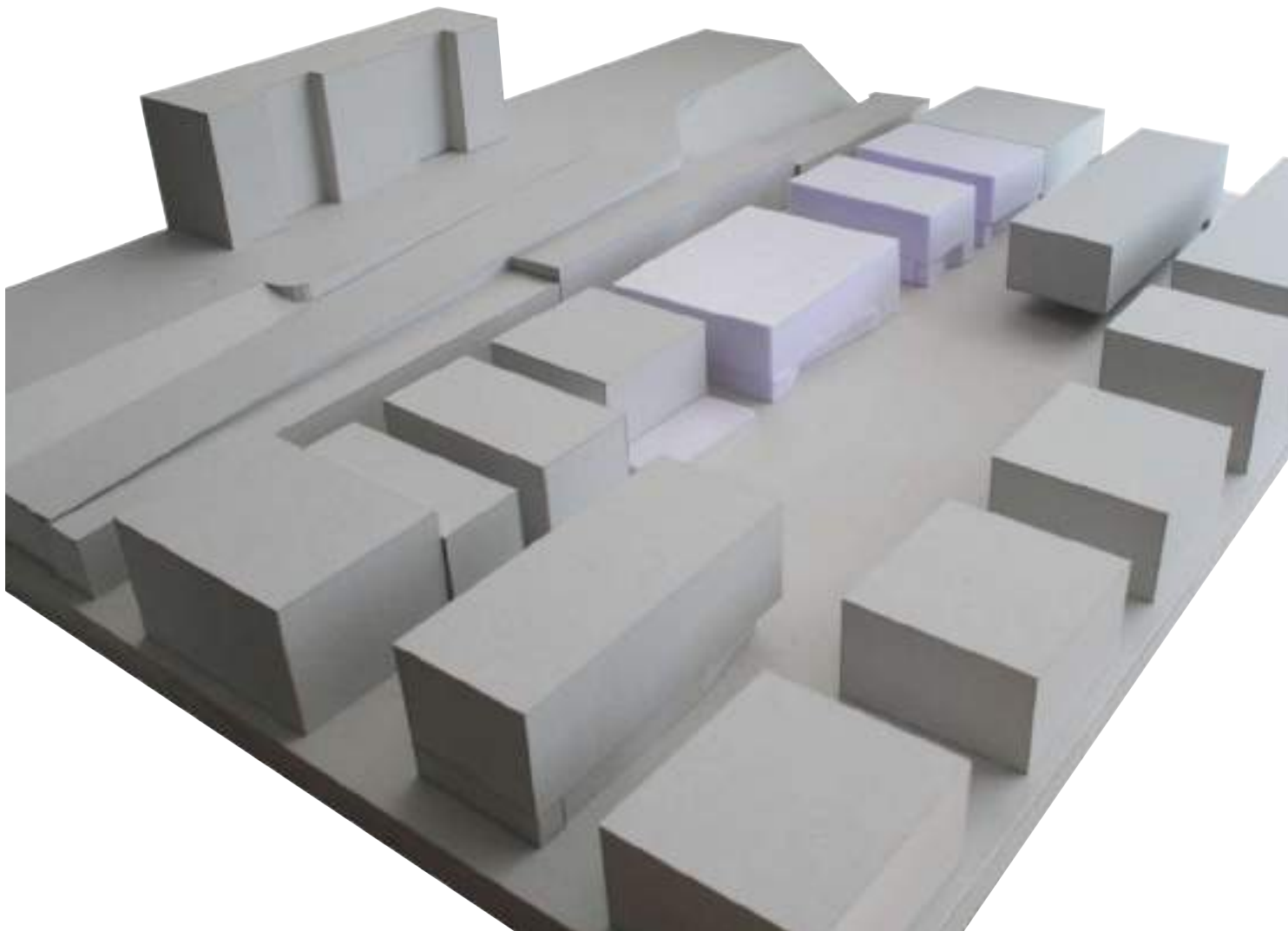














# Projet des Pépinières

## Multiples usages

### bâtiment C

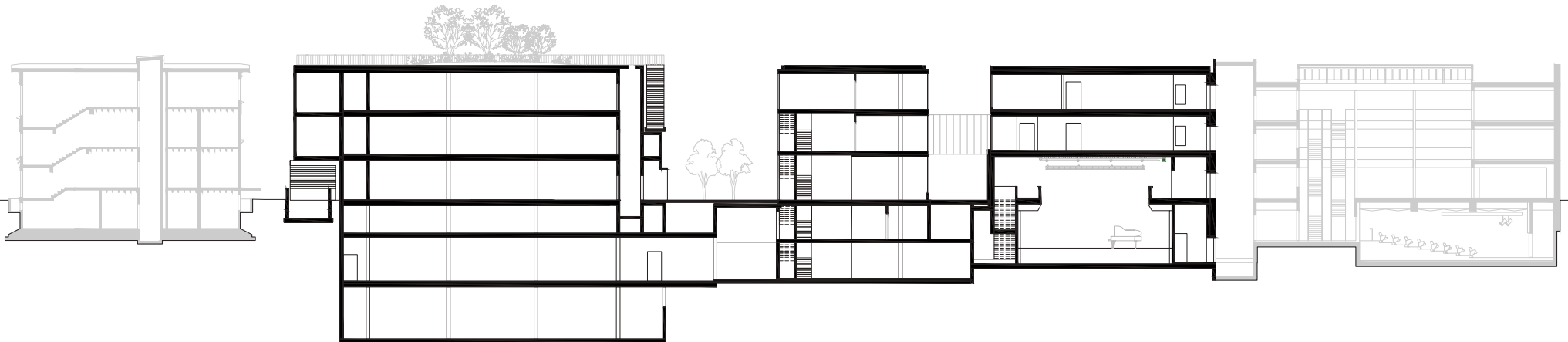
Bowling  
Gastronomie  
Disco  
Terrasse publique

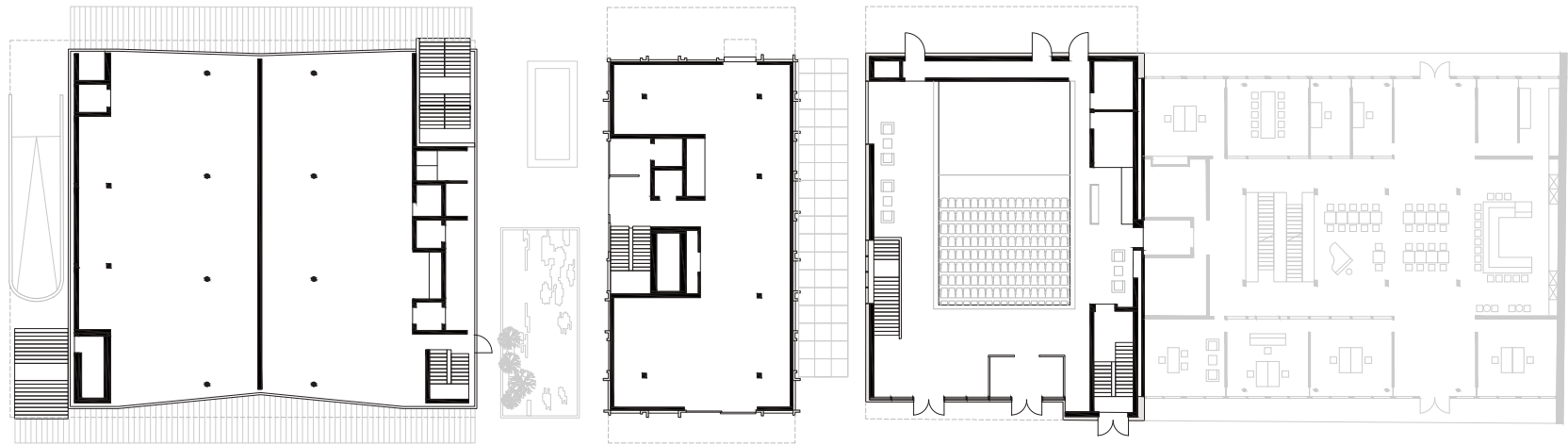
### bâtiment B

Gastronomie  
Administration

### Gebäude A

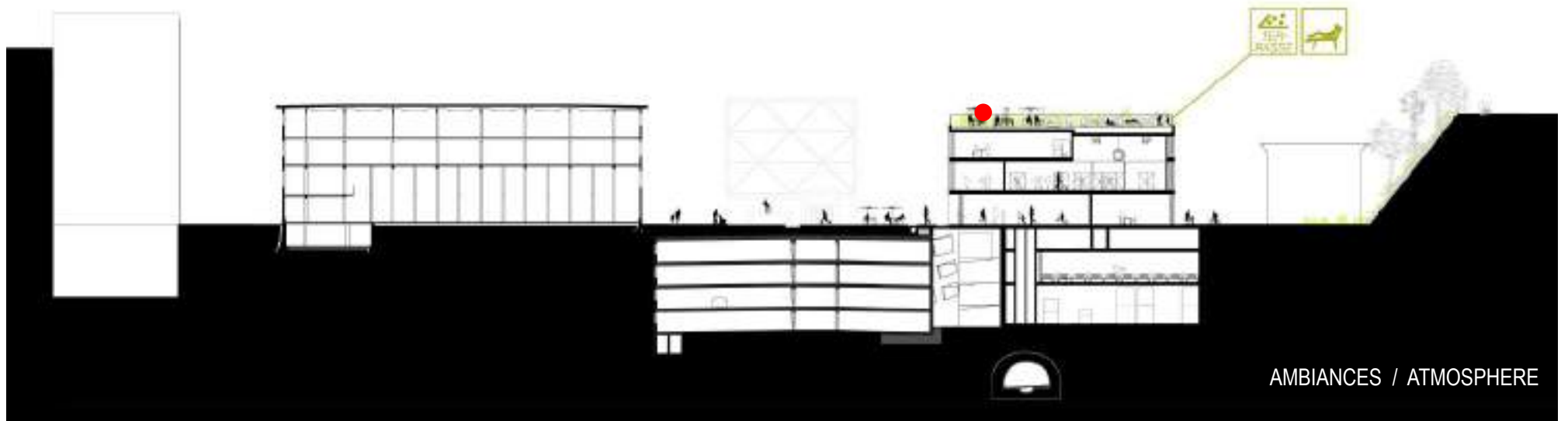
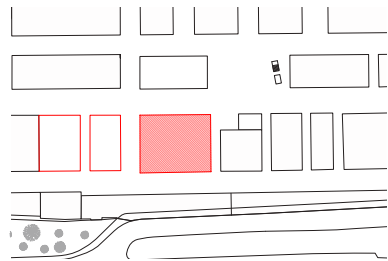
Ecole de musique  
Salle de concert (300 pers.)





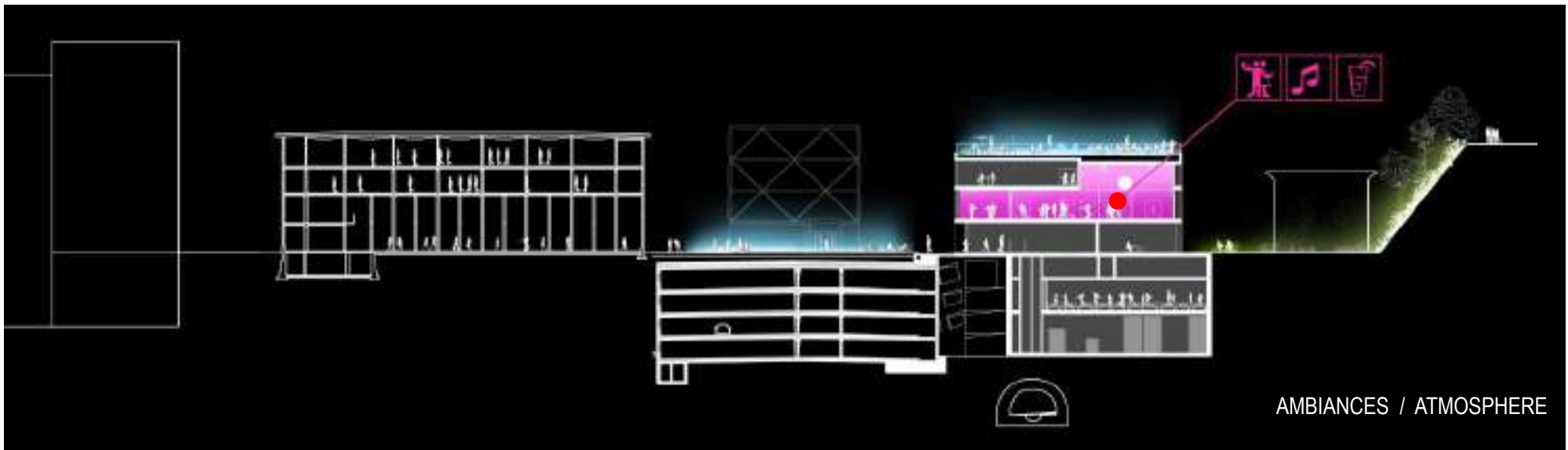
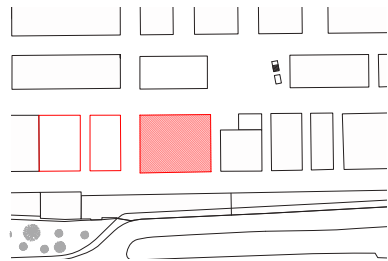
# sky garden

lausanne flon



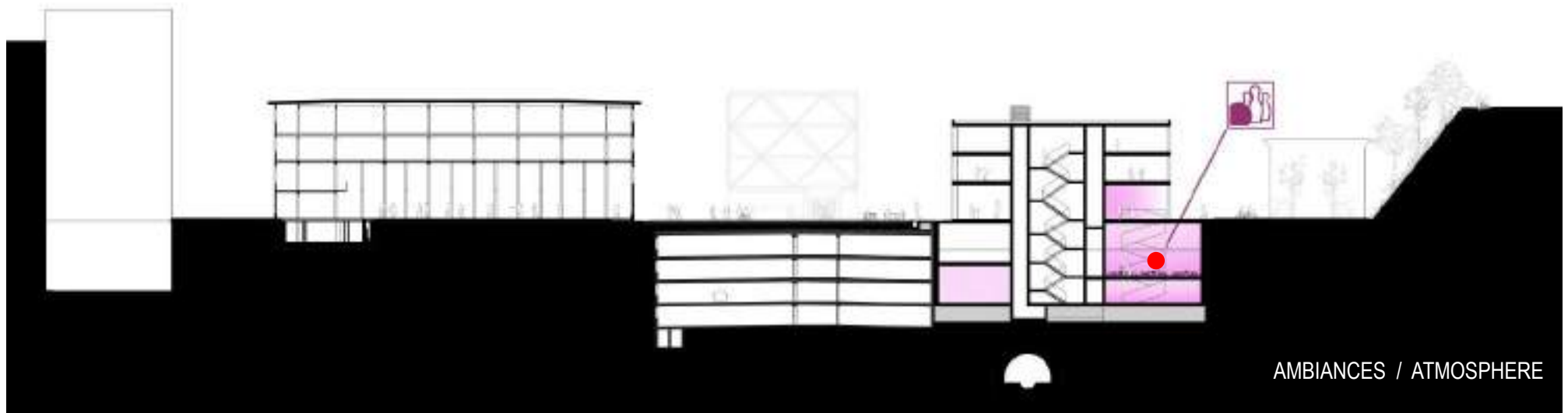
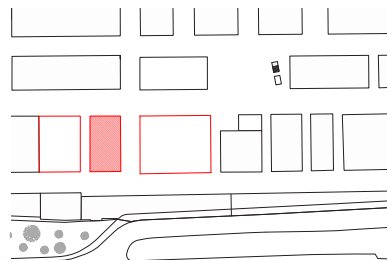
# discothèque

lausanne flon



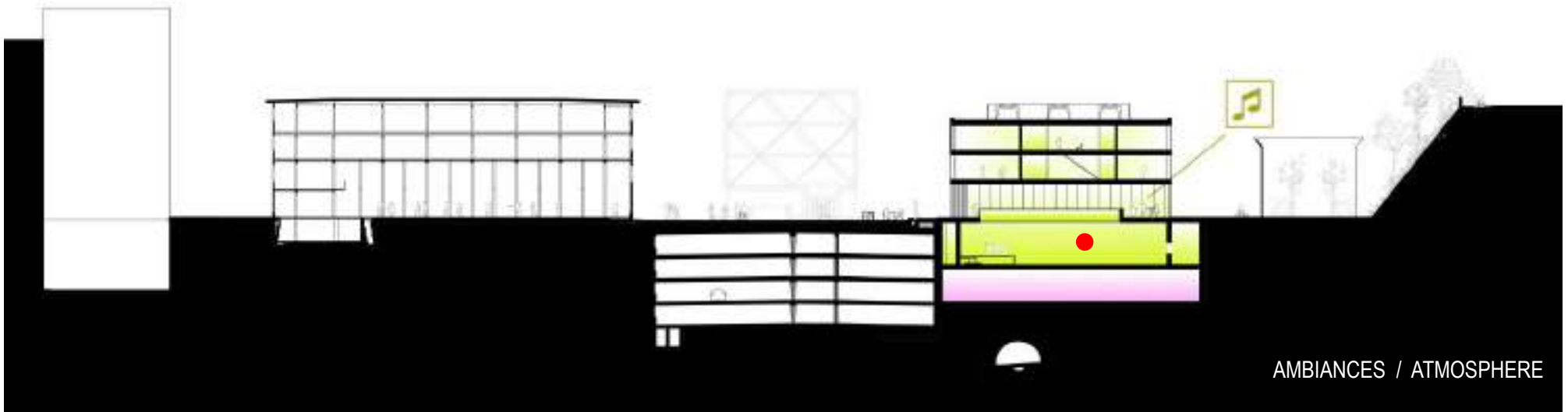
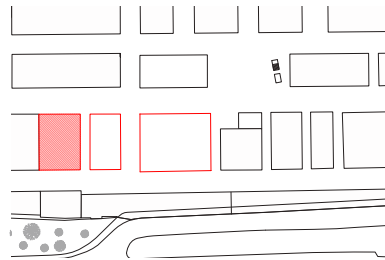
# bowling

lausanne flon



# Salle de concert

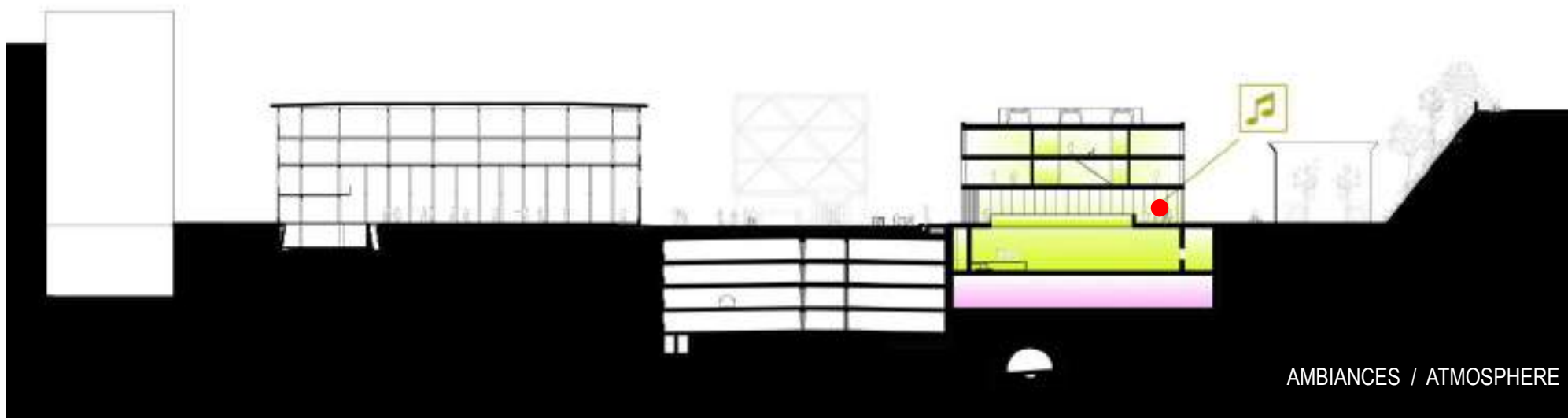
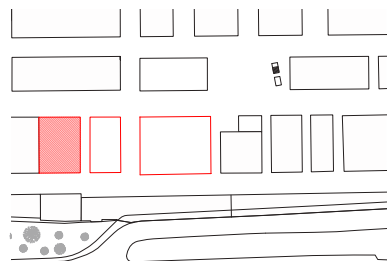
lausanne flon



AMBIANCES / ATMOSPHERE

# Salle de concert

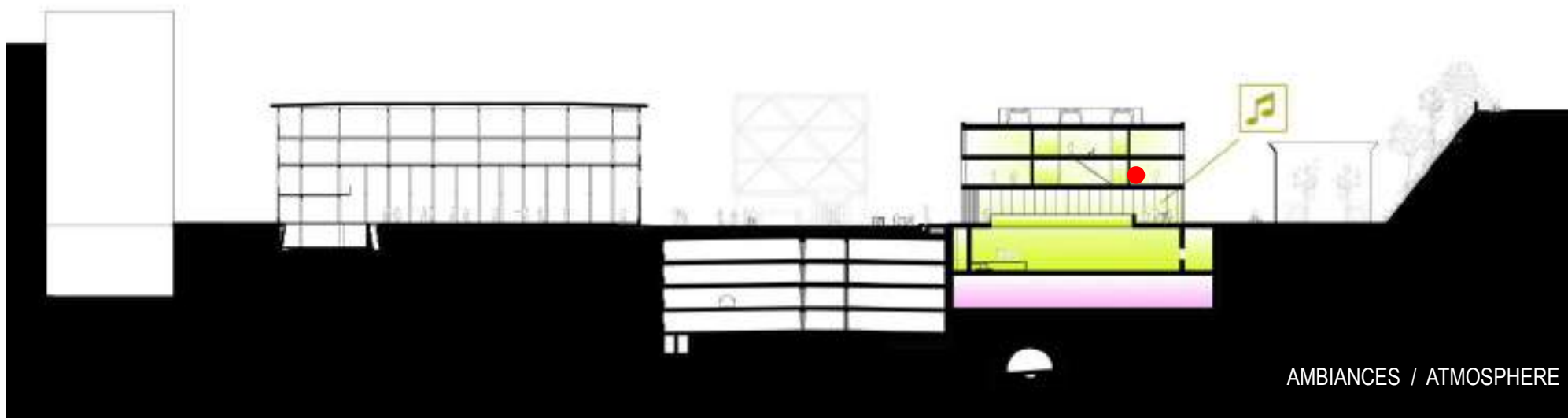
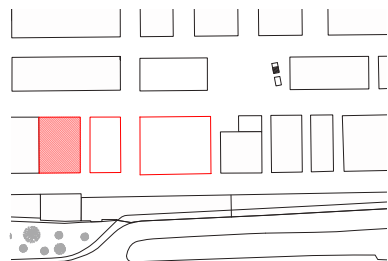
lausanne flon



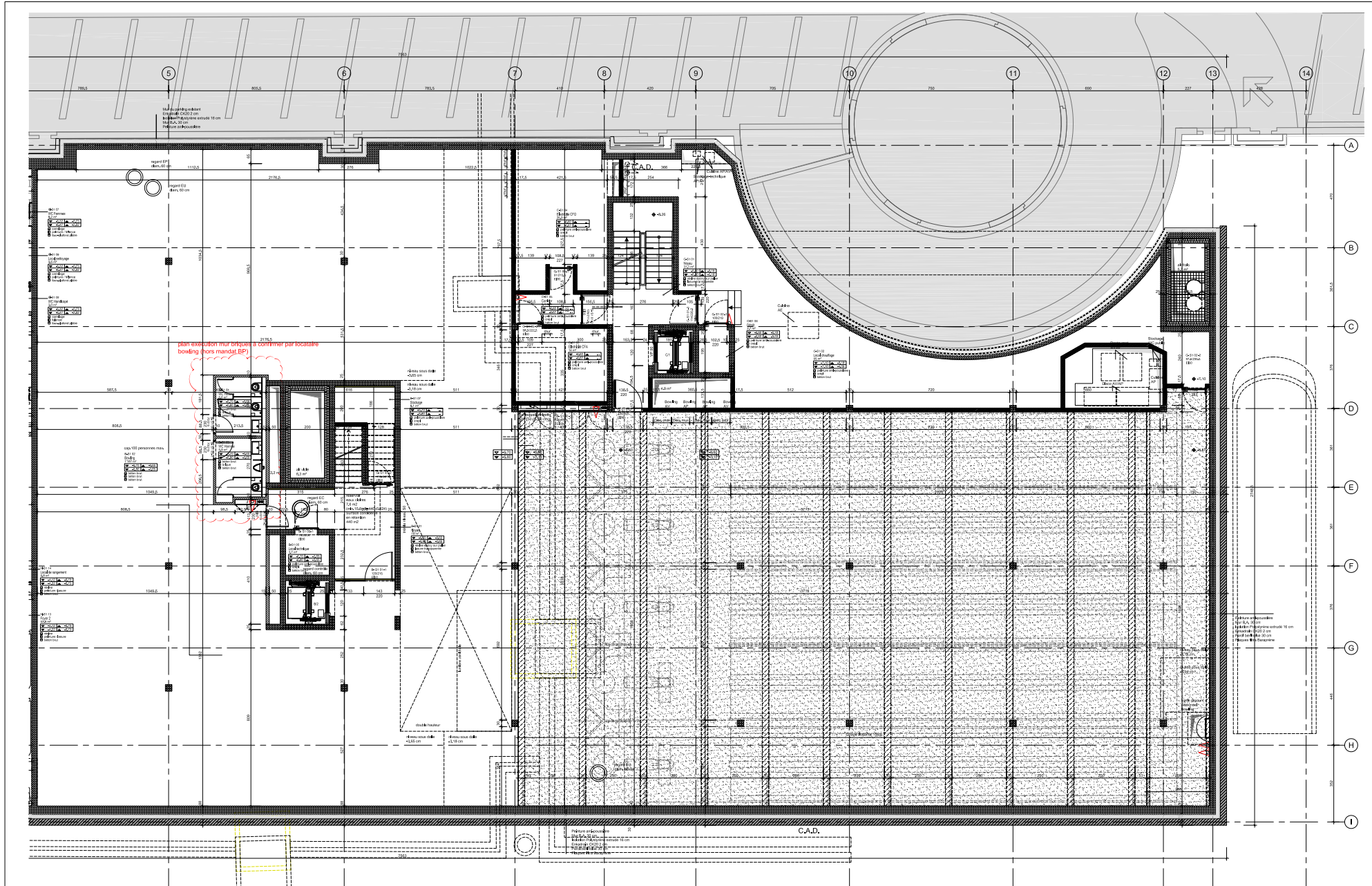
AMBIANCES / ATMOSPHERE

# Ecole de musique HEMU

lausanne flon

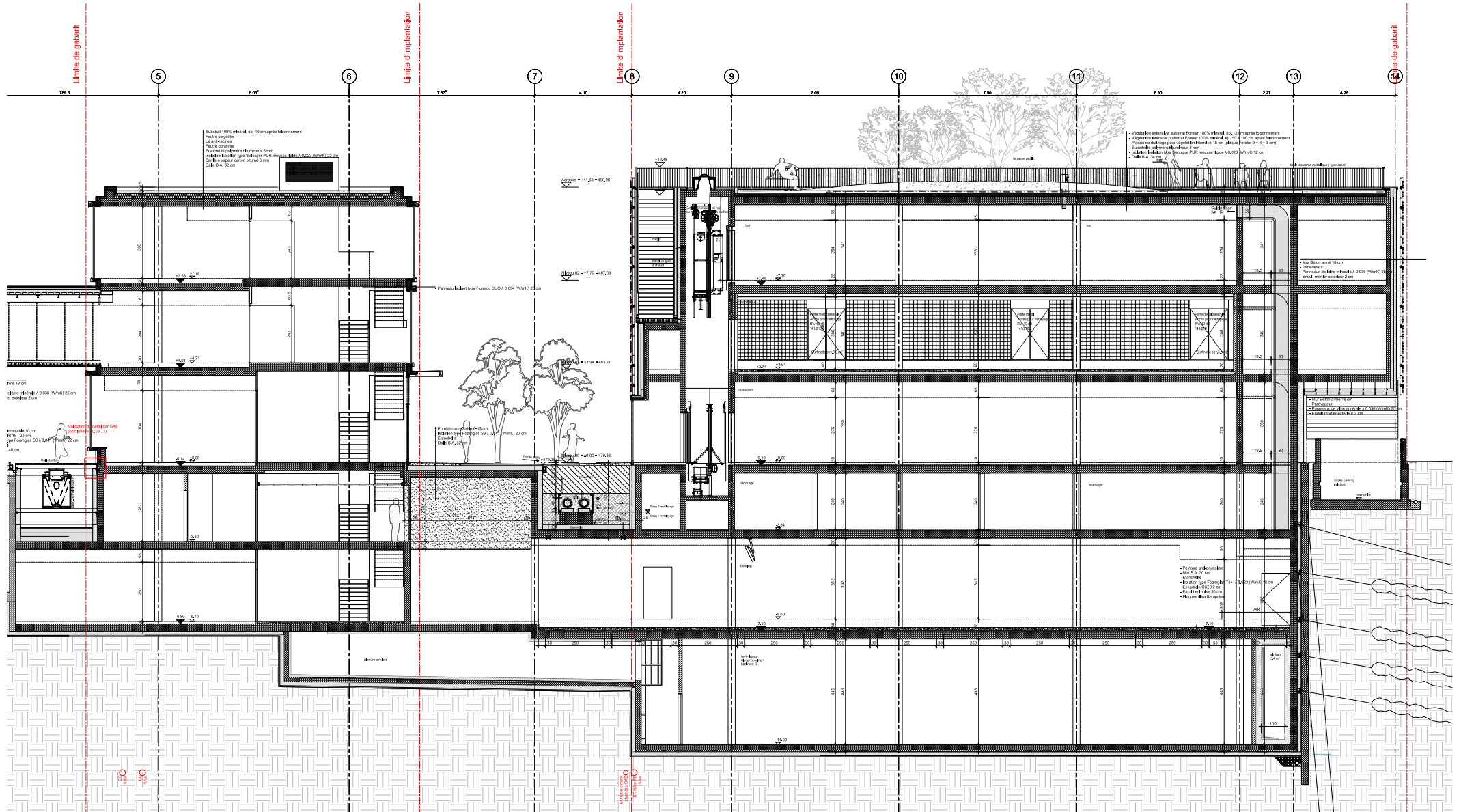


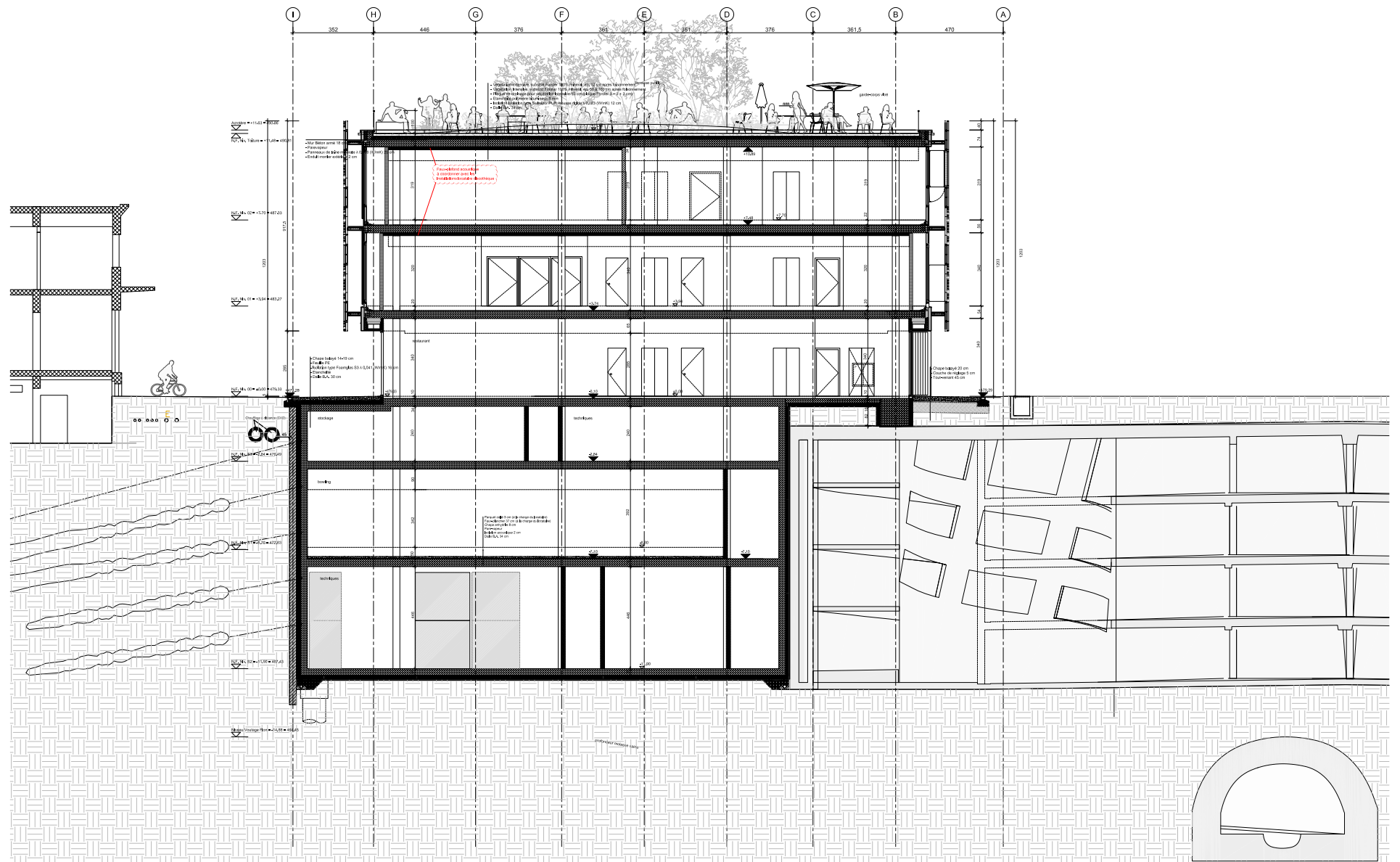


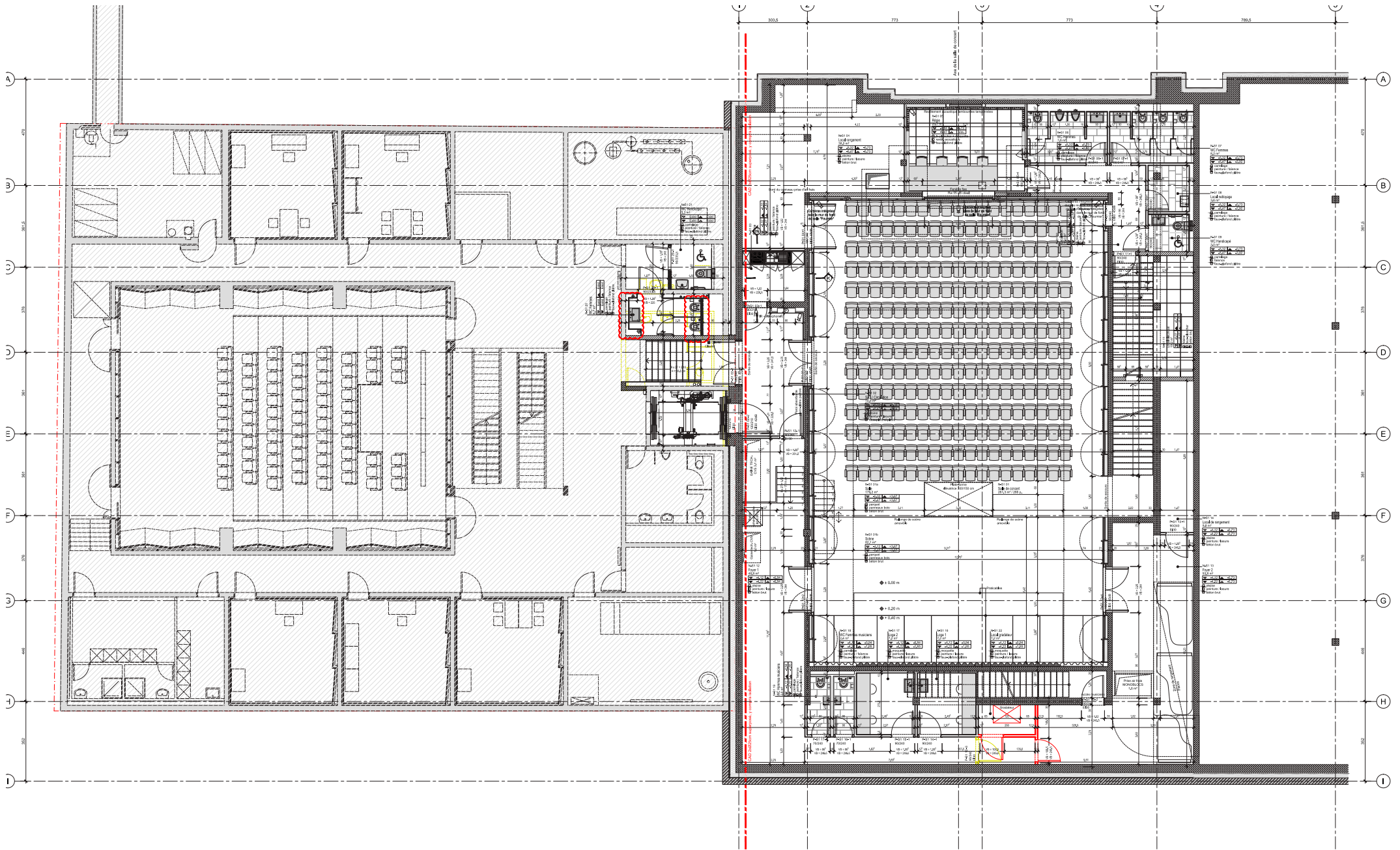


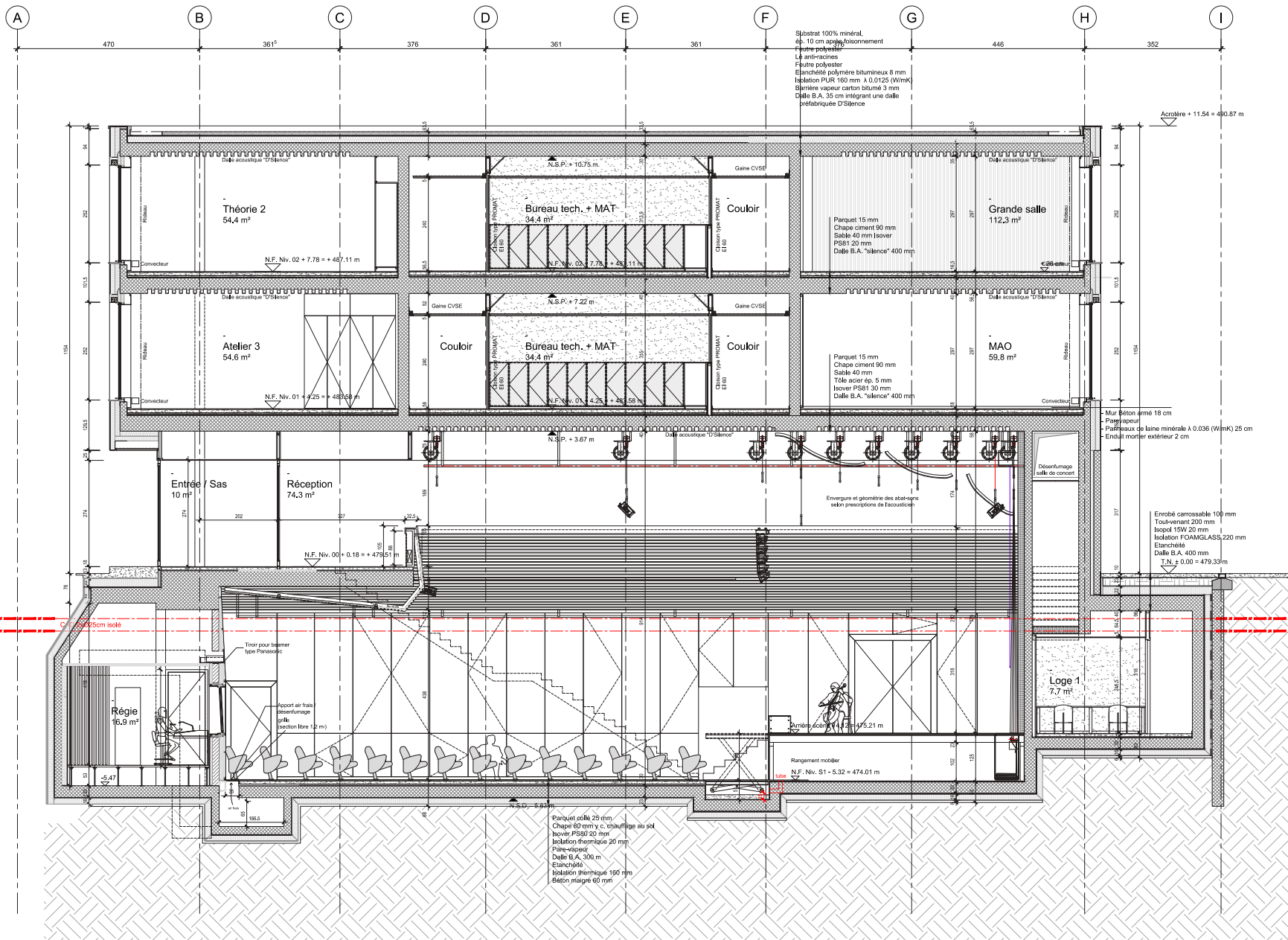
BÂTIMENT B

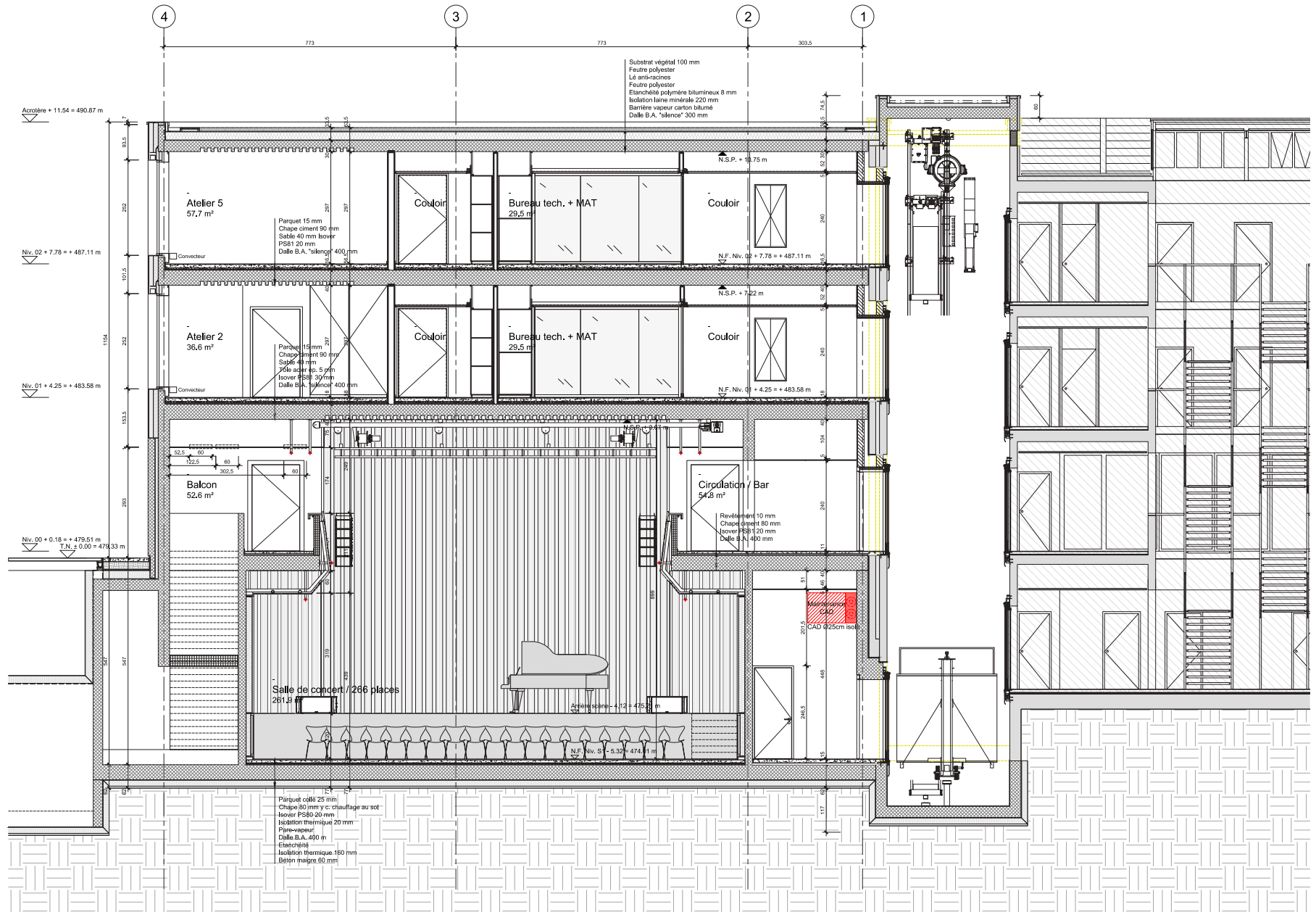
BÂTIMENT C









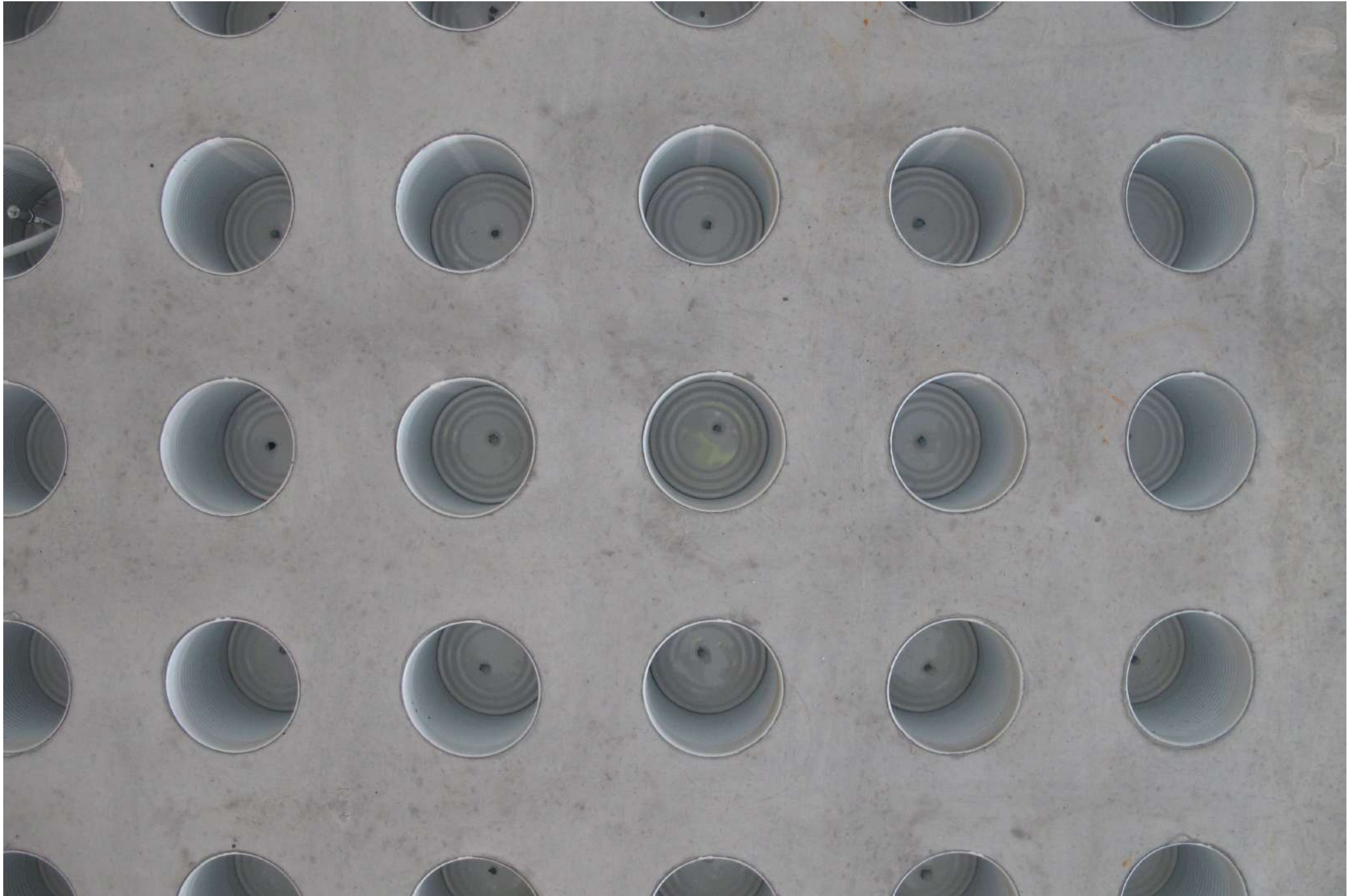


















MONTREUX JAZZ  
ARTISTS FOUNDATION

MONTREUX JAZZ  
ACADEMY















## Multiples usages

### bâtiment C

Bowling  
Gastronomie  
Disco  
Terrasse publique

### bâtiment B

Gastronomie  
Administration

### bâtiment A

Ecole de musique  
Salle de concert (300 pers.)





Floor 2

HEMU



TOKYO







## Multiples usages

### bâtiment C

Bowling  
Gastronomie  
Disco  
Terrasse publique

### bâtiment B

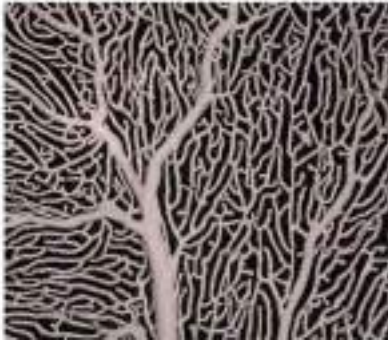
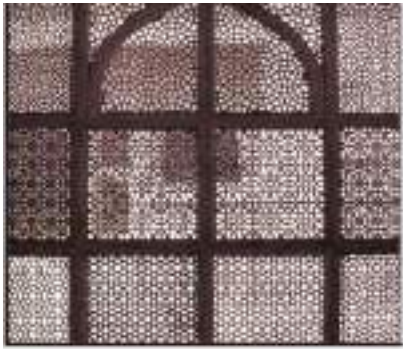
Gastronomie  
Administration

### bâtiment A

Ecole de musique  
Salle de concert (300 pers.)



la façade et la 5ème façade



Objectif et exigence du client

## Planifier une façade

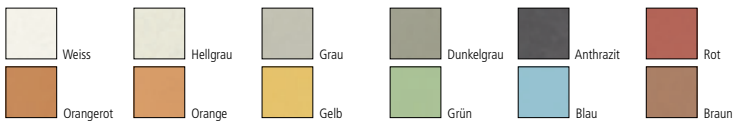
- Légère
- Transparente
- Végétal dématérialisé
- Avec une épaisseur
- Avec un écran «artistique»

## Notre inspiration

- le corail
- un moucharabieh
- les nervures d'une feuille



composants d'un BFUP: fumée de silice, ciment et sable de quartz



## Domaines d'application

### Béton fibré

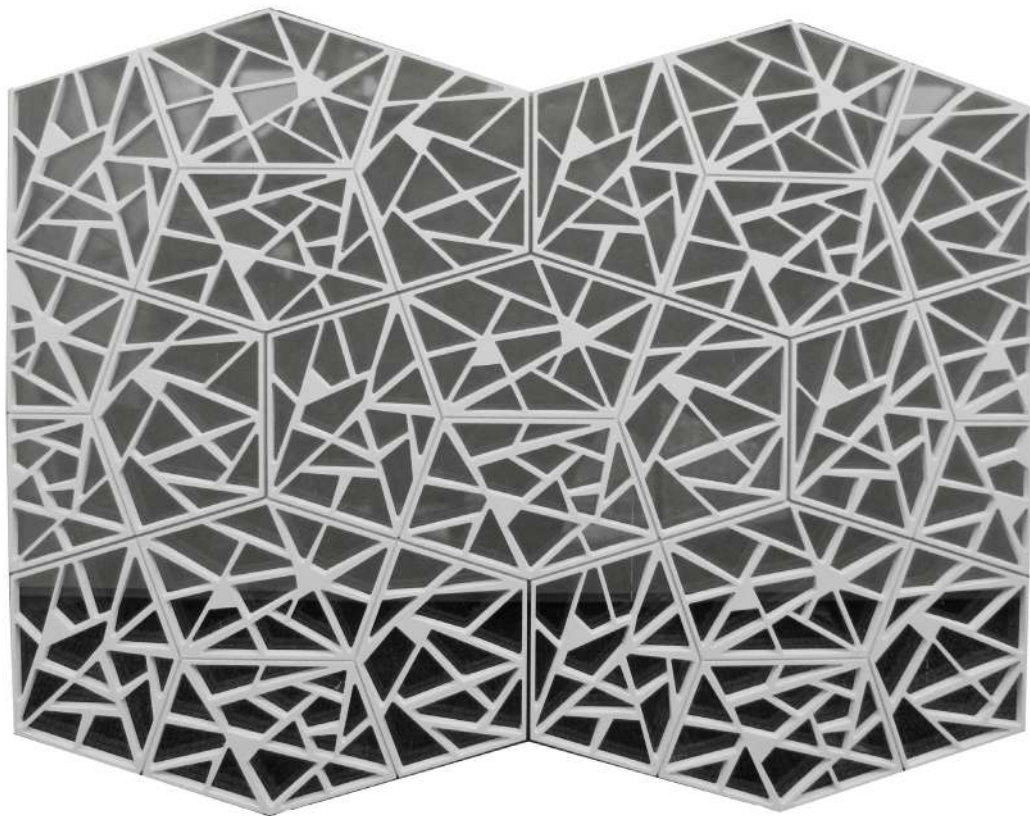
- Bâtiment
- Ponts
- Routes
- Structure offshore
- Architecture et design !

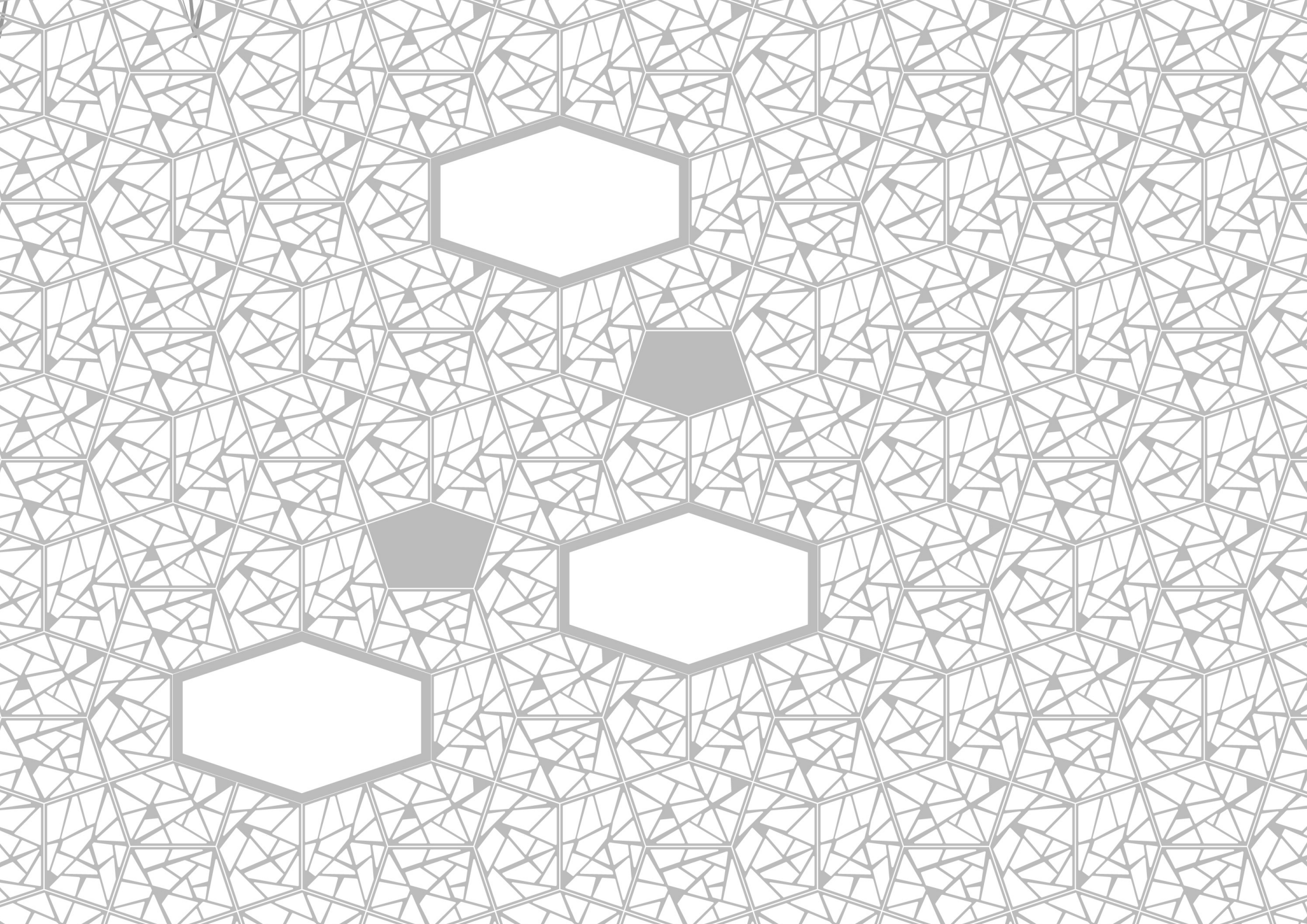
## Les avantages

- Résistance
- Flexibilité
- Esthétique

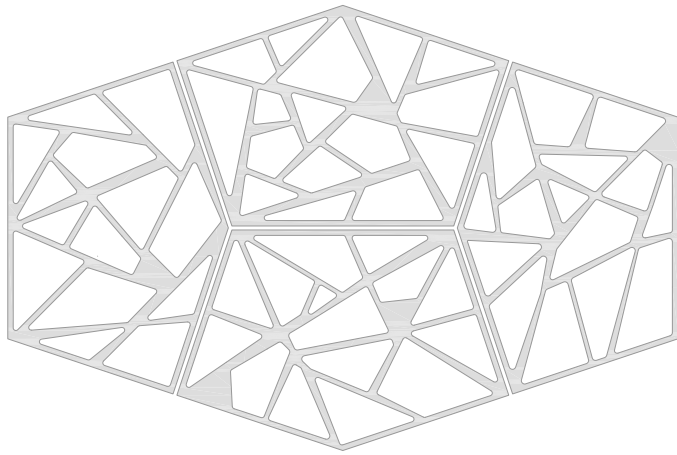
>> Idées créatives

Etudes maquettes



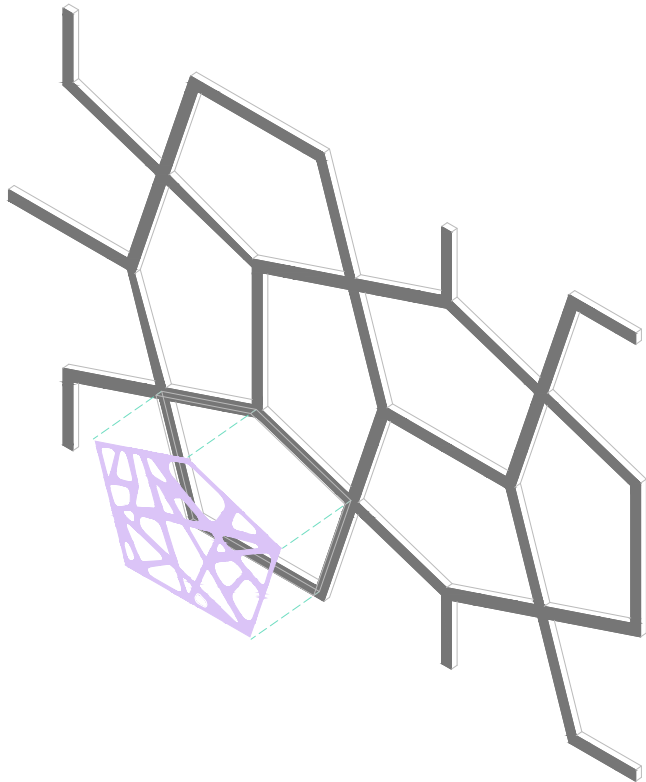


## Béton organique



- chaque élément en béton pèse 150 kg

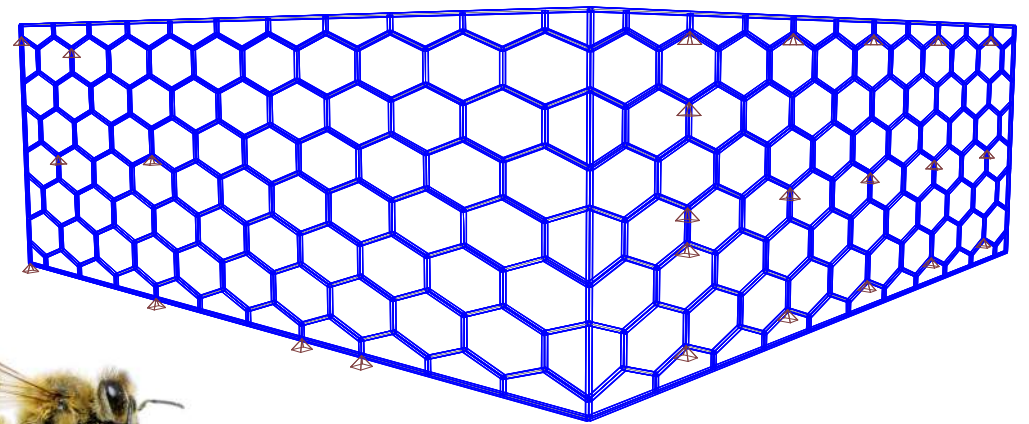
- 467 hexagones en béton (250 x 165 cm) avec un réseau filigrane

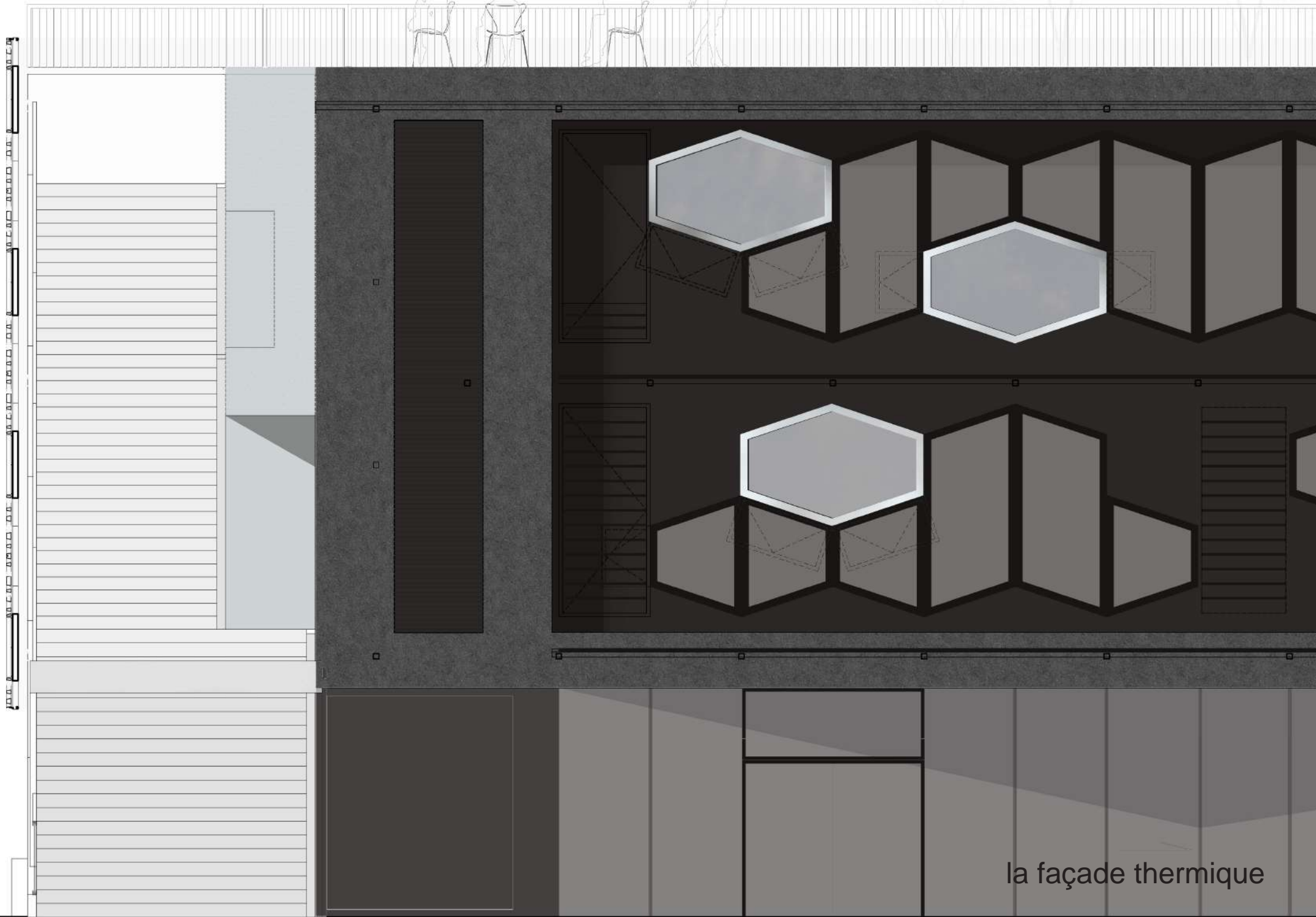




## La structure métallique

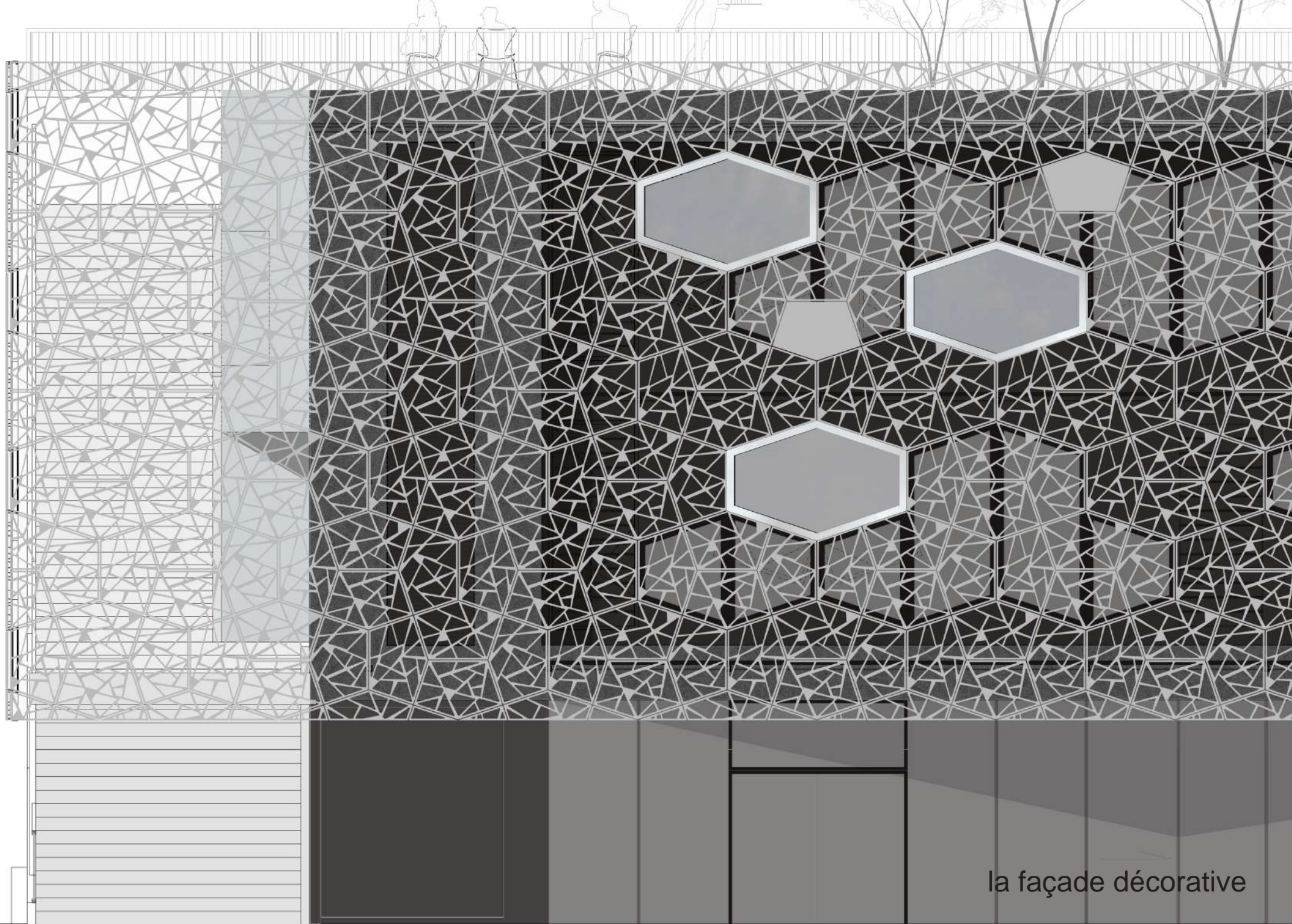
- Module hexagonal autour du bâtiment
- Construction en acier suspendue
- comme le motif d'une ruche d'abeille





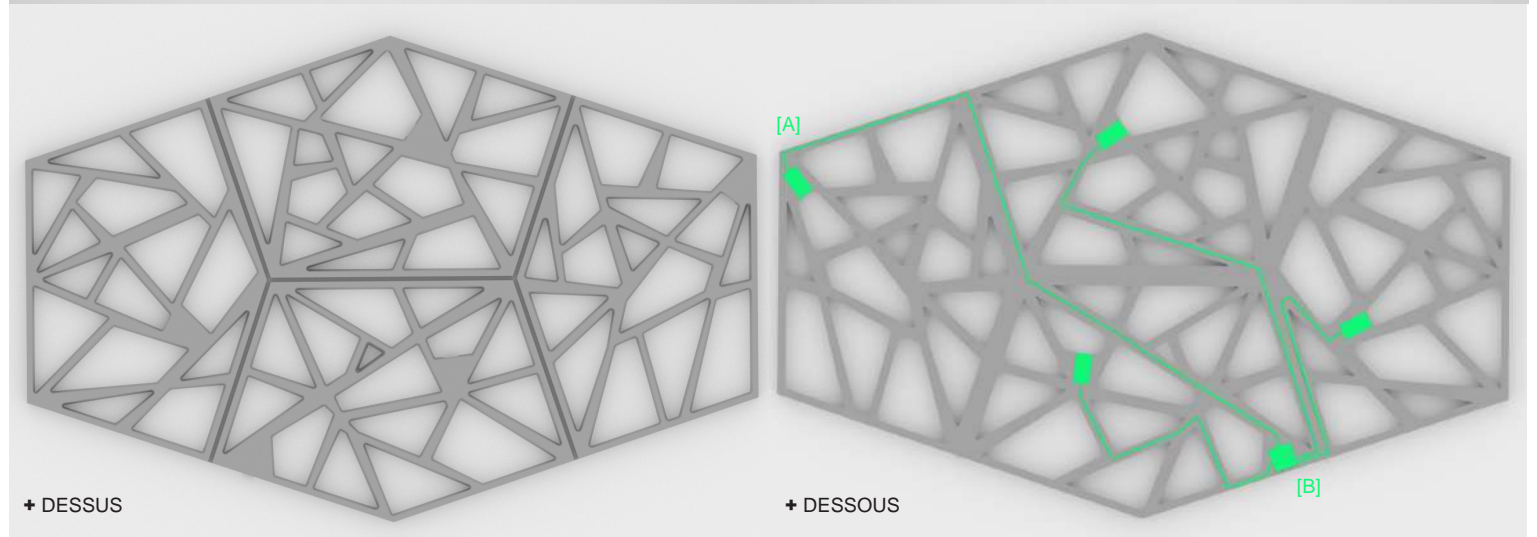
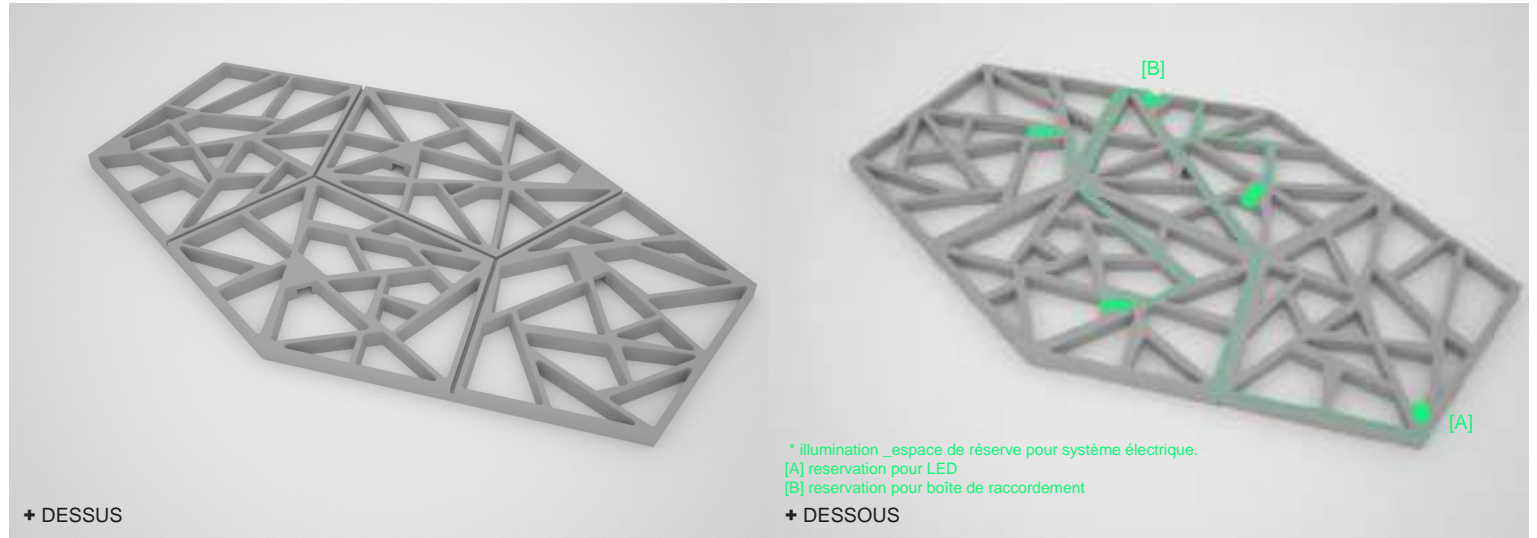
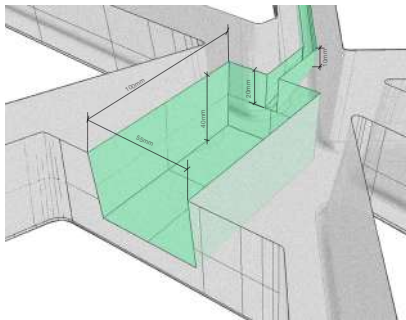
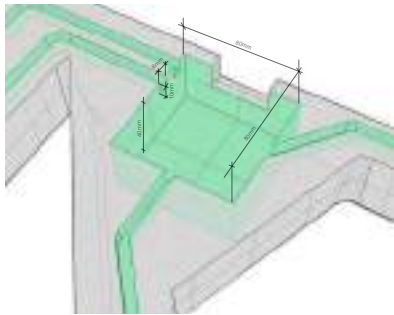
la façade thermique

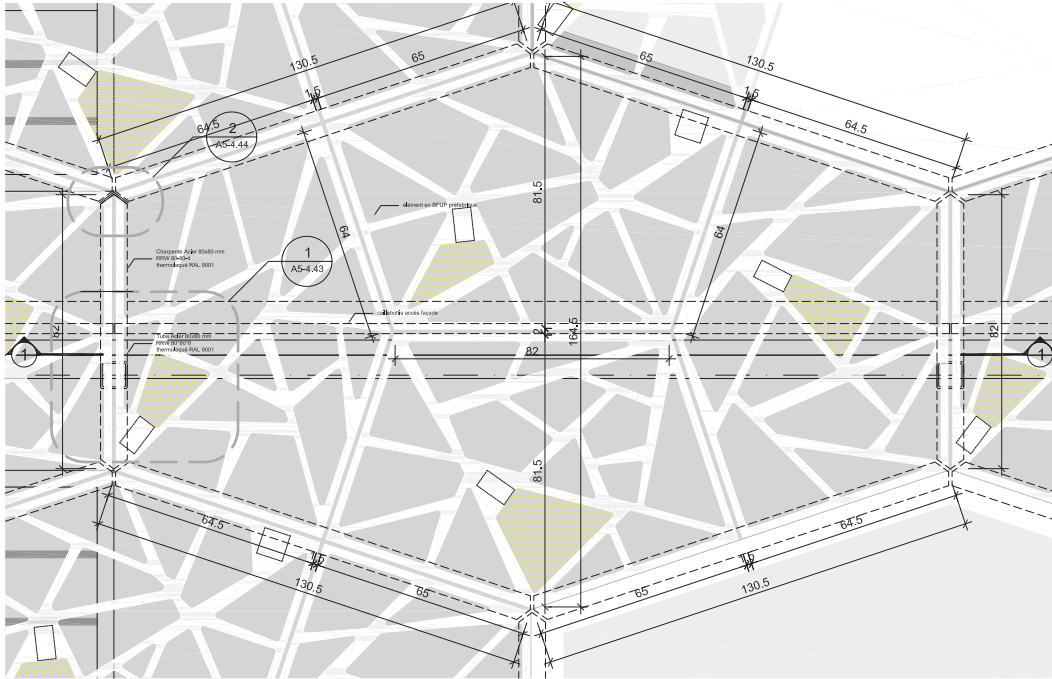




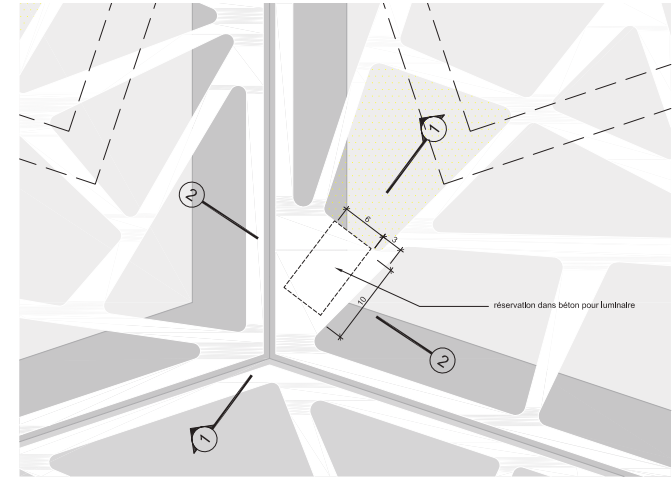
la façade décorative

# intégration de LED dans l'épaisseur

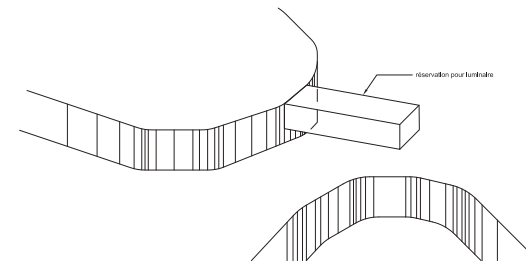




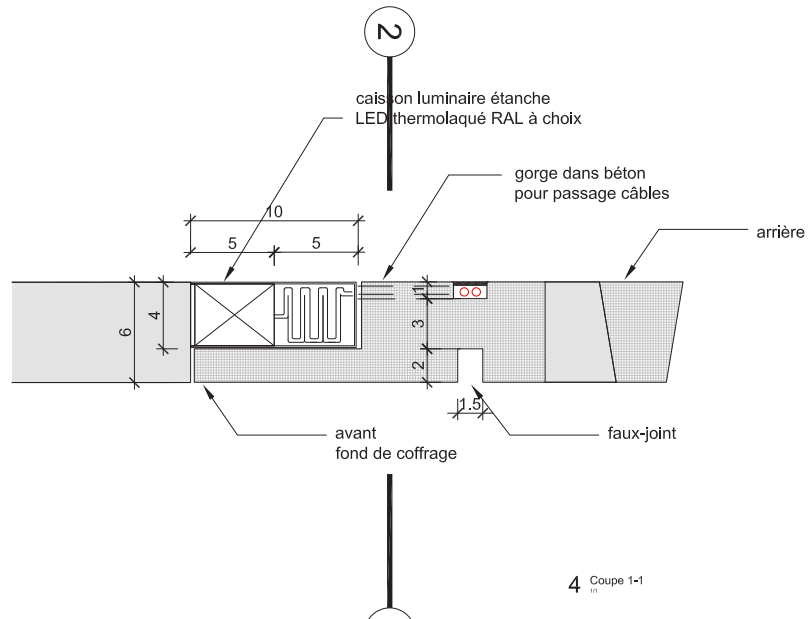
1 Elevation Ecran Bâtiment C



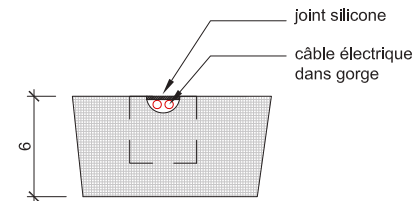
2 Détail Ecran Niche Eclairée



3 Principe de réservation pour luminaire



4 Coupe 1-1



5 Coupe 2-2



# 1.

Prototype N° 1

- trop lourds (250 kg)
- pas assez fin



# 2.

Prototype N° 2

- plus léger (150 kg)
- comment intégrer la LED



# 3.

Prototype N° 3

- avec Bow-window

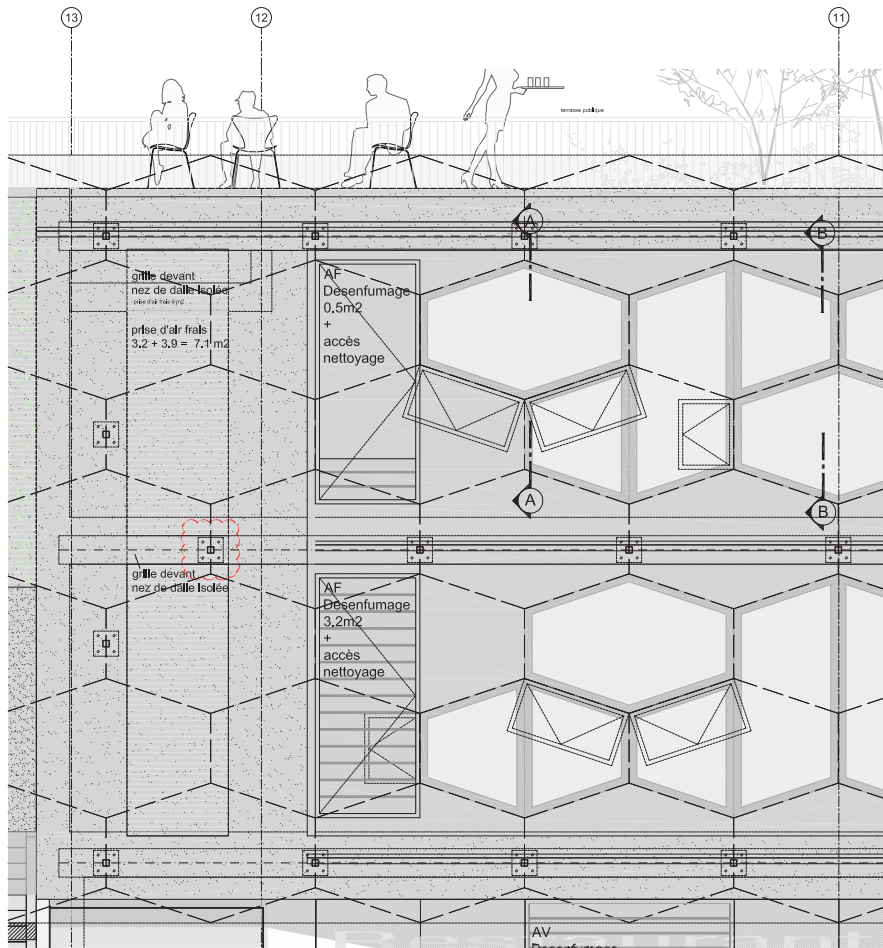


# 3bis.

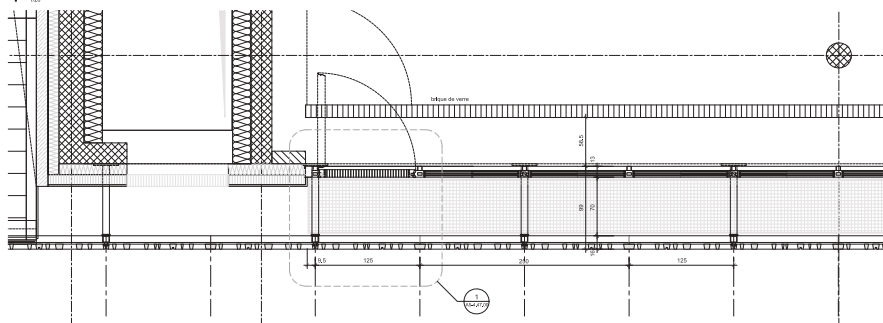
Prototype N° 3bis

- avec intégration des LED

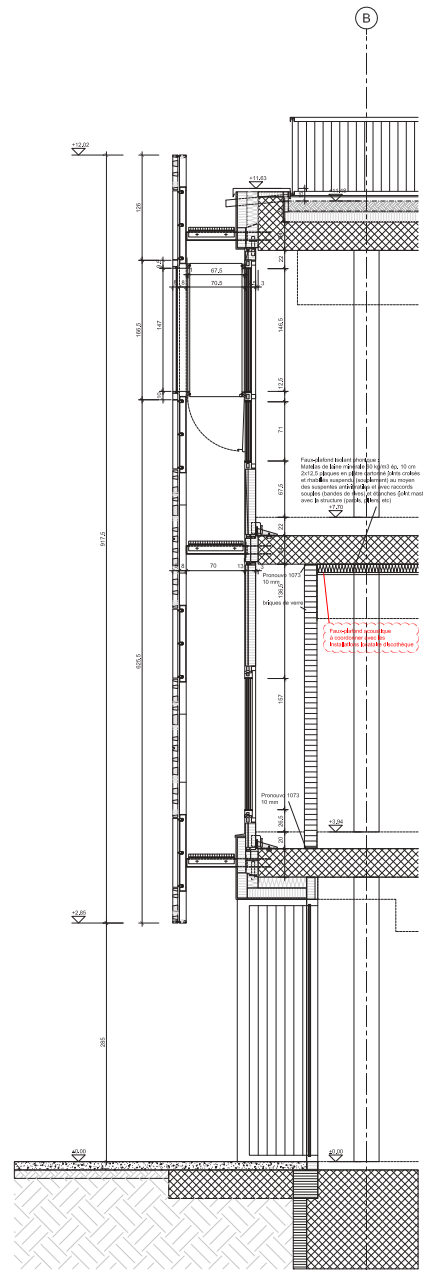




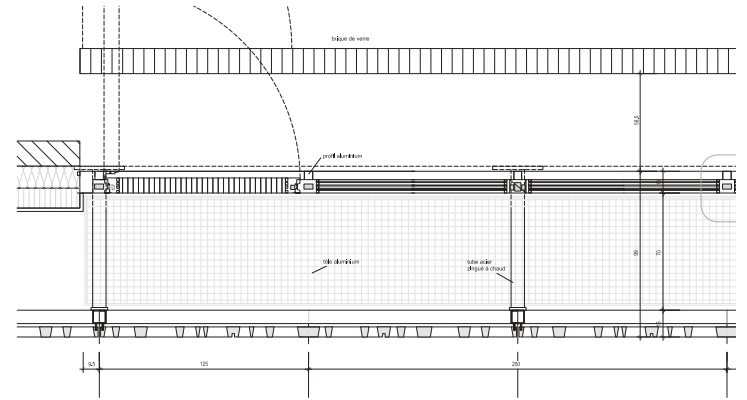
1 Elevation Facade Nord



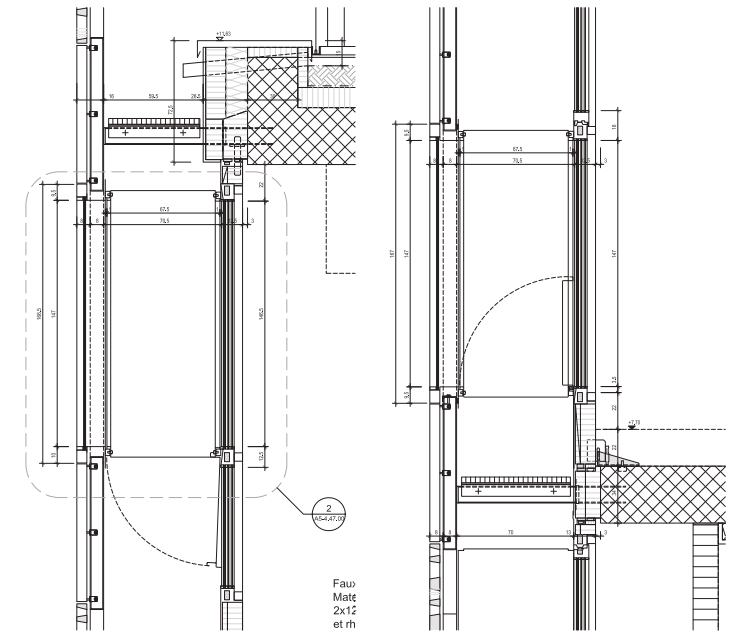
2 Plan Niveau 01



3 Coupe Facade Nord



4 Plan Façade Nord



5 Coupe A-A

6 Coupe B-B



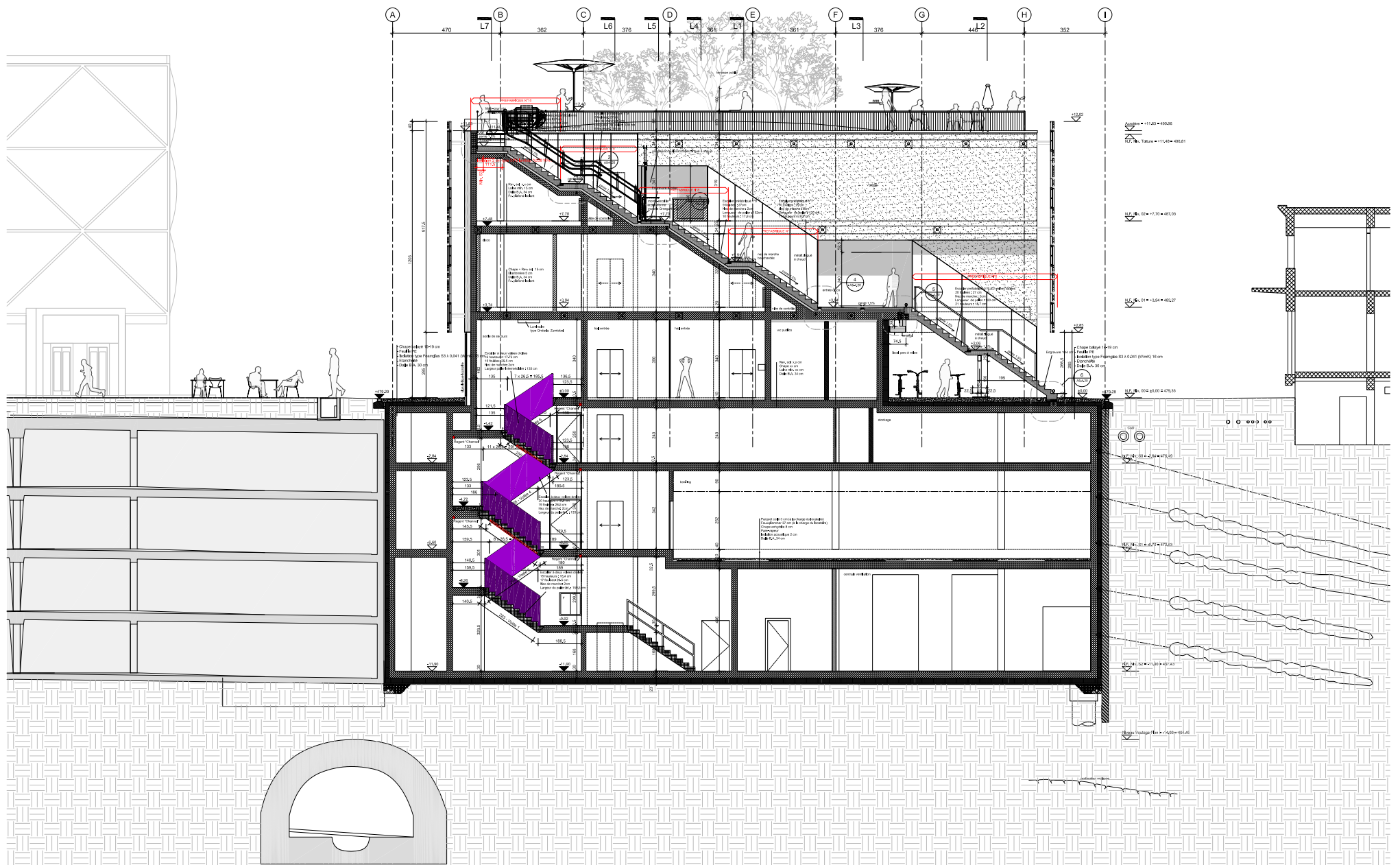


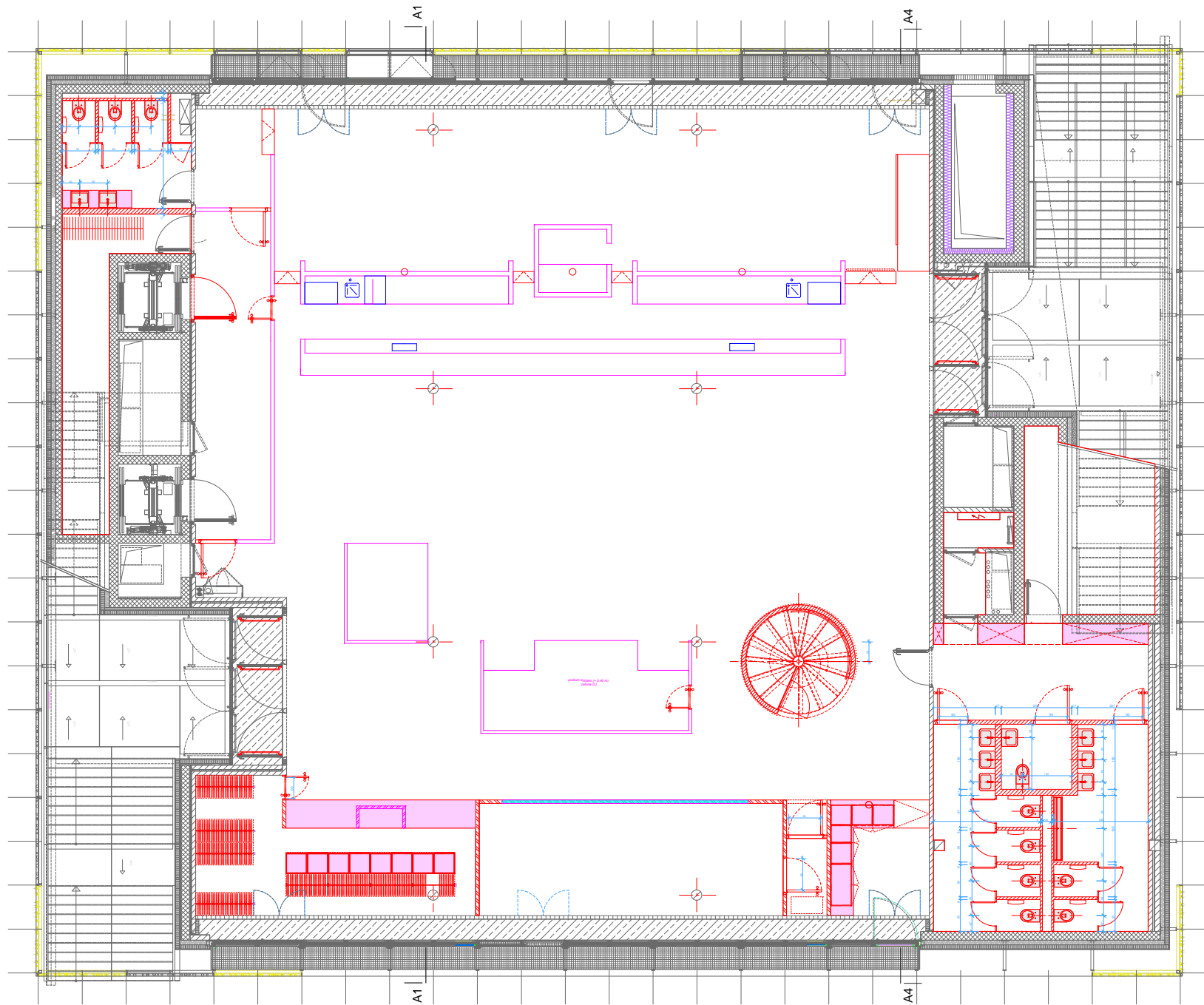
DL

is  
but



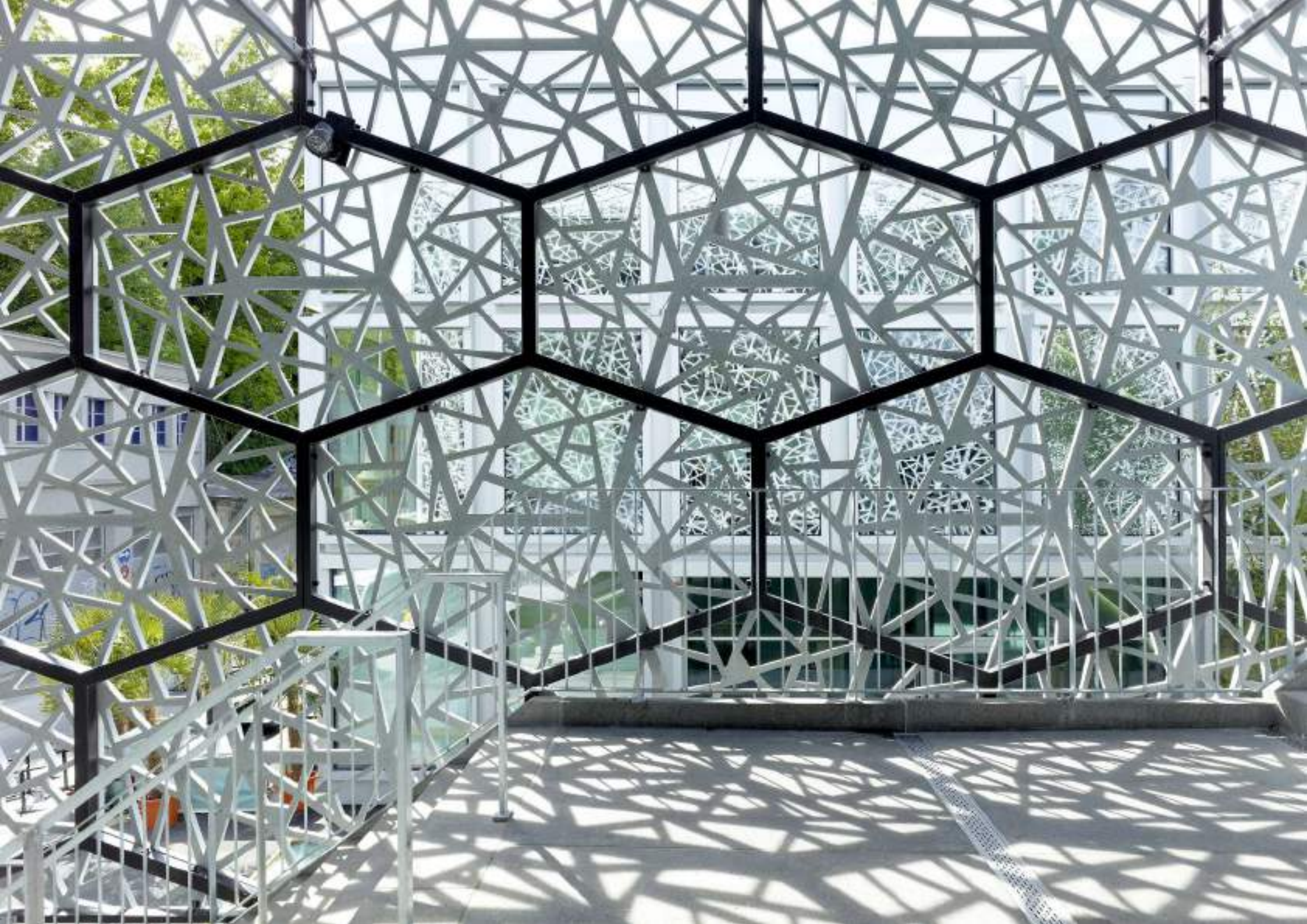




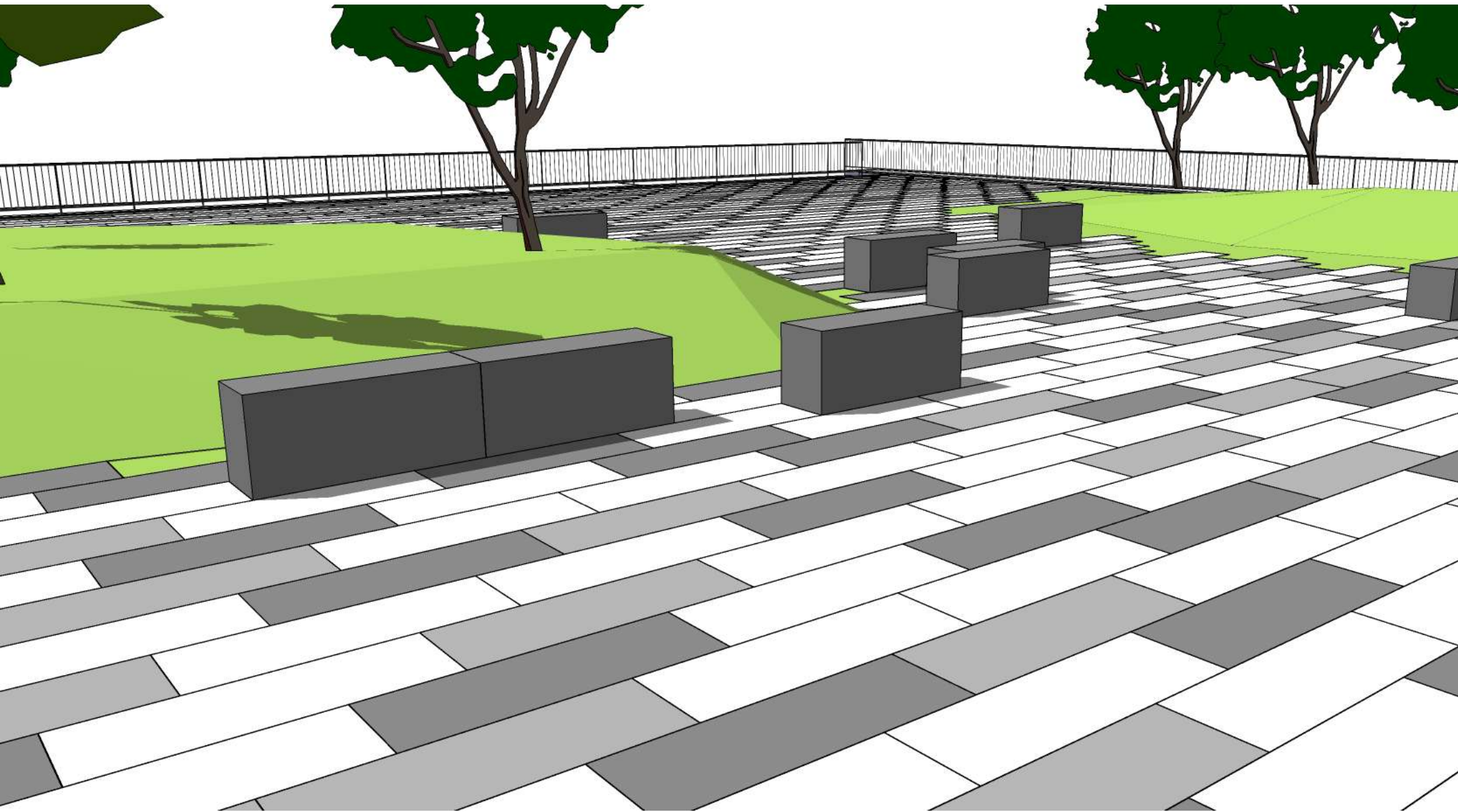


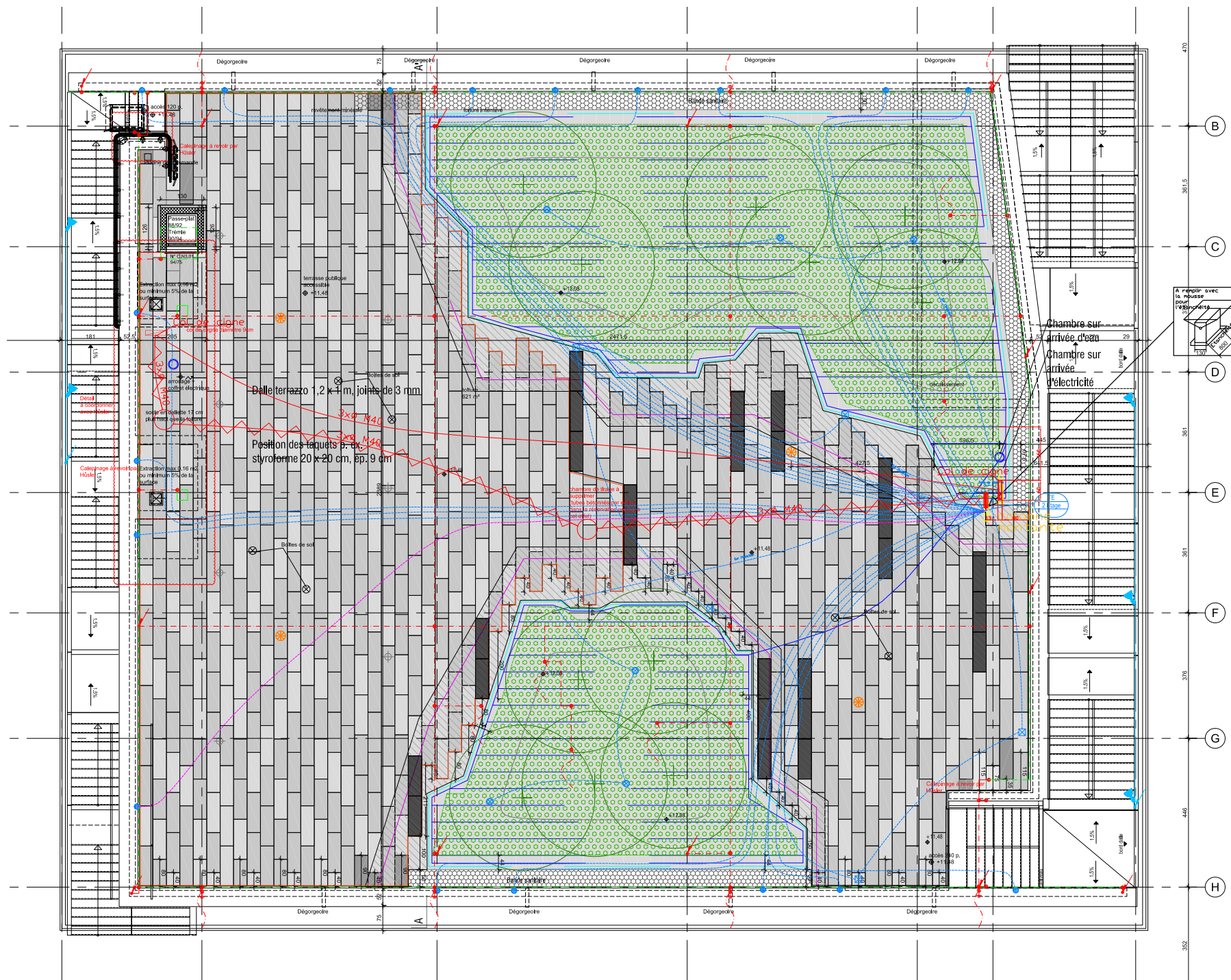












Dalle terrasse 1,2 x 4 m, joints de 3 mm

Position des taquets 3 x 4 N40  
styrofoame 20 x 20 cm, ép. 9 cm

Chambre sur  
arrivée d'eau

Chambre sur  
arrivée  
d'électricité

