

A Partnership at 720 Beatty Street

Westbank is proposing to redevelop 720 Beatty Street in partnership with Creative Energy.

Over five years ago, Creative Energy purchased Central Heat Distribution Ltd., which included the business and the lands at 720 Beatty Street.

At 720 Beatty Street, there is a surplus of lands for the utility's current and future needs. As a result, Creative Energy has chosen to redevelop the site in partnership with Westbank. Together, we have developed a proposal that supports a broader neighbourhood vision for Vancouver and provides the opportunity to upgrade Creative Energy's existing infrastructure.



+



Creative Energy

Creative Energy is building on existing energy infrastructure in Vancouver to create flexible, low carbon district energy systems across the city.

Creative Energy is a B.C. Utilities Commission-regulated district energy utility that has provided clean and reliable district energy from the 720 Beatty Street plant to downtown Vancouver since 1968. This district energy was created by a group of engineers who aimed to reduce the pollution created from heating buildings through individual heating plants. Creative Energy, previously called Central Heat, re-branded in 2014.



How Does District Energy Work:

Creative Energy's district energy system generates thermal energy in the form of steam or hot water from a central plant. The thermal energy is then distributed through a network of underground pipes to each individual building connected to its network to provide heating and hot water for the building.



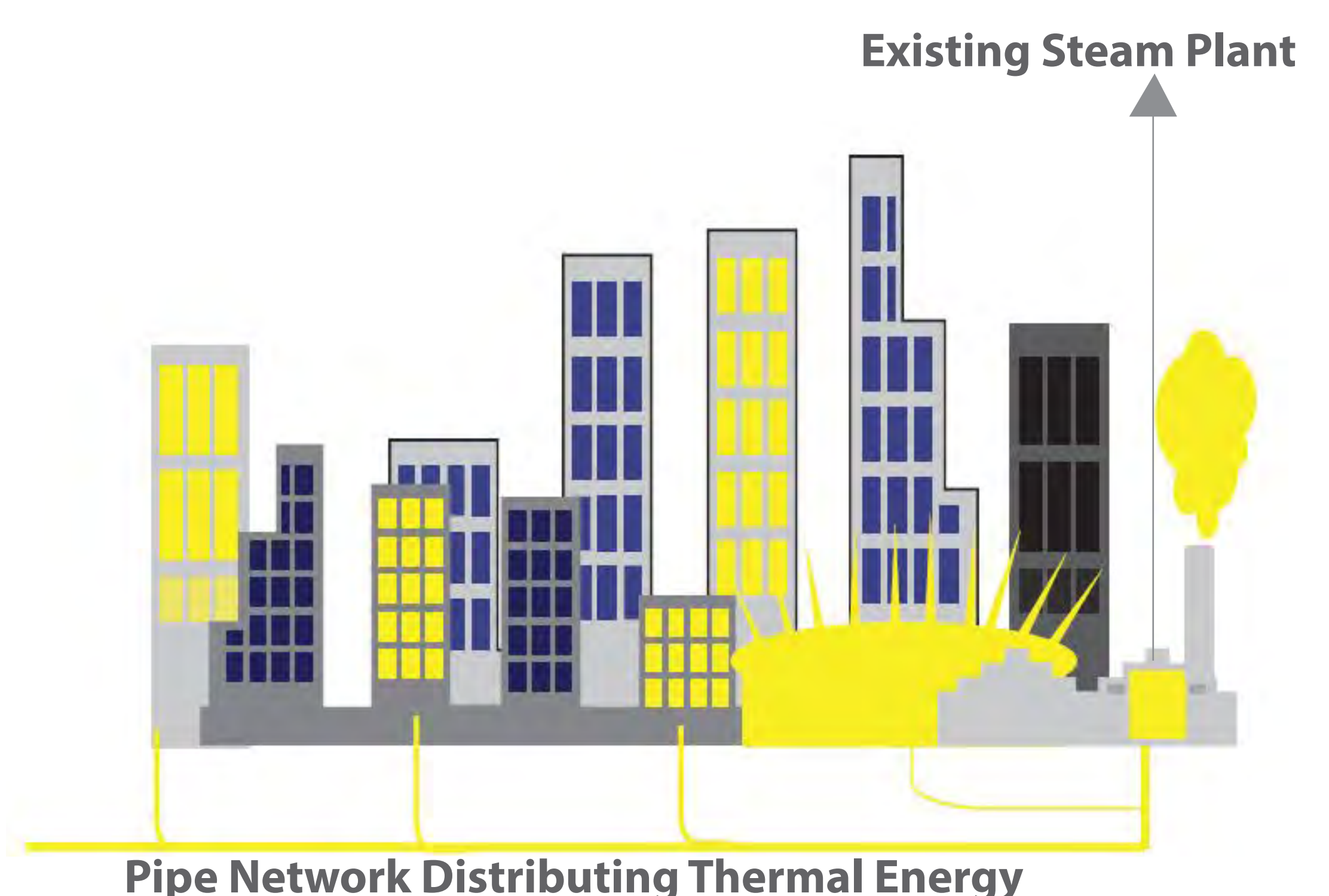
Where District Energy is Today:

Creative Energy shares its resources with over 210 buildings - including major landmarks, residential towers, commercial office buildings, retail buildings, government buildings, and hotels in the downtown core.



Why Do We Need District Energy:

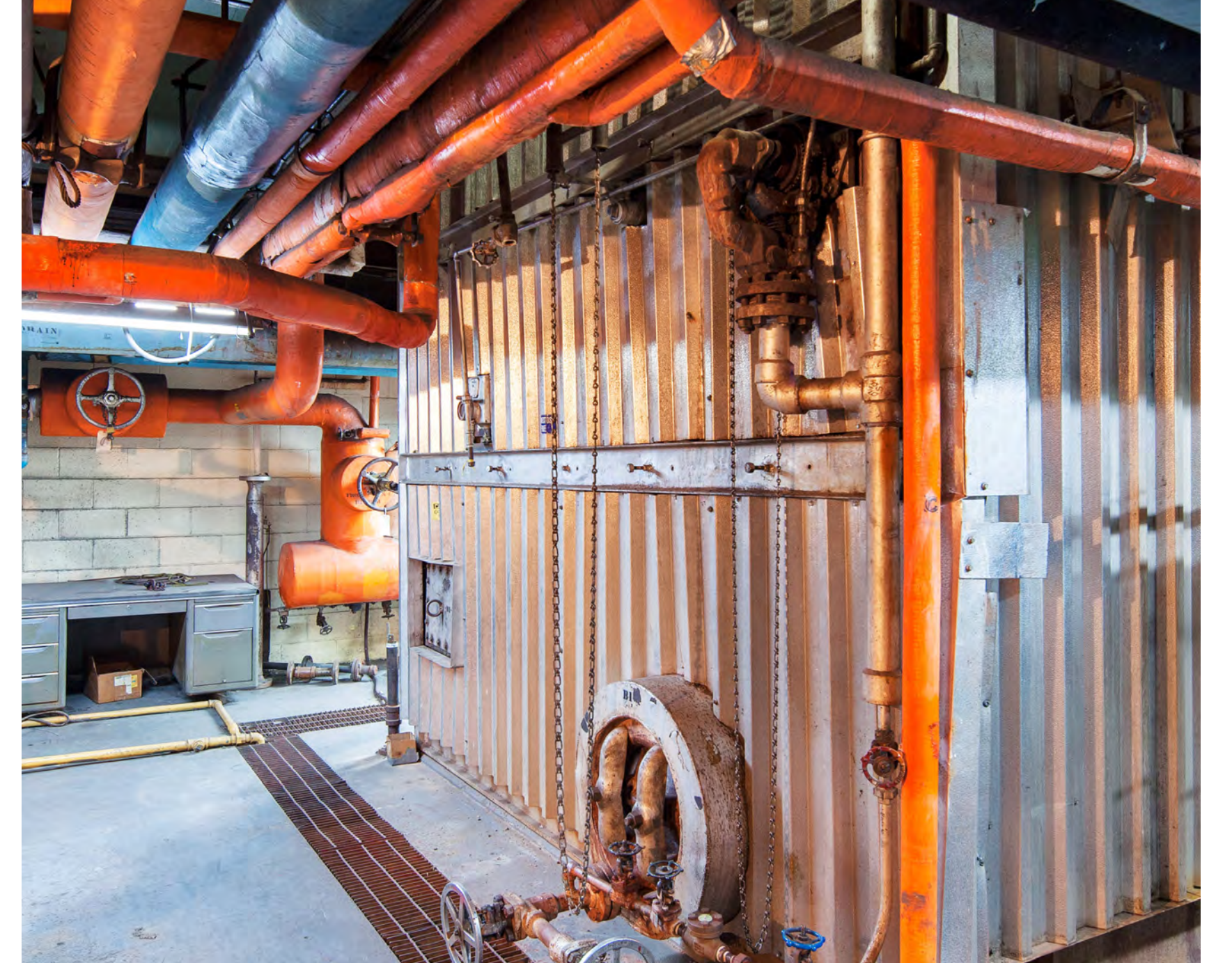
In a dense downtown neighbourhood, the Creative Energy system means there is only one central 'boiler system' instead of over 210 individual boilers systems resulting in cleaner air, lower greenhouse gas emissions, long-term sustainability, and lower energy costs for a large portion of Vancouverites.



District energy is one of the lowest-cost, highest-reliability and most environmentally-friendly sources of energy available to urban communities. District energy systems can be developed in a manner that best suits each specific community or neighbourhood and surrounding environment.

The Current State of the 720 Beatty Creative Energy Plant

Over the last 40 years, Creative Energy has proudly provided clean and reliable energy to our customers with 99.9% reliability. However, we are facing some new challenges.



WHAT ARE CREATIVE ENERGY'S EXISTING CHALLENGES?

1. Much of our steam energy equipment has reached the end of its useful life and needs to be replaced.
2. The existing equipment is lacking back-up systems and does not meet any seismic requirements. Any significant event – a fire or earthquake, for example – could cause significant damage and service interruption.
3. The existing plant does not meet current building code requirements, which puts plant staff and the greater community in danger in the event of an earthquake in downtown Vancouver.

HOW CAN CREATIVE ENERGY CONTINUE PROVIDING CLEAN ENERGY?

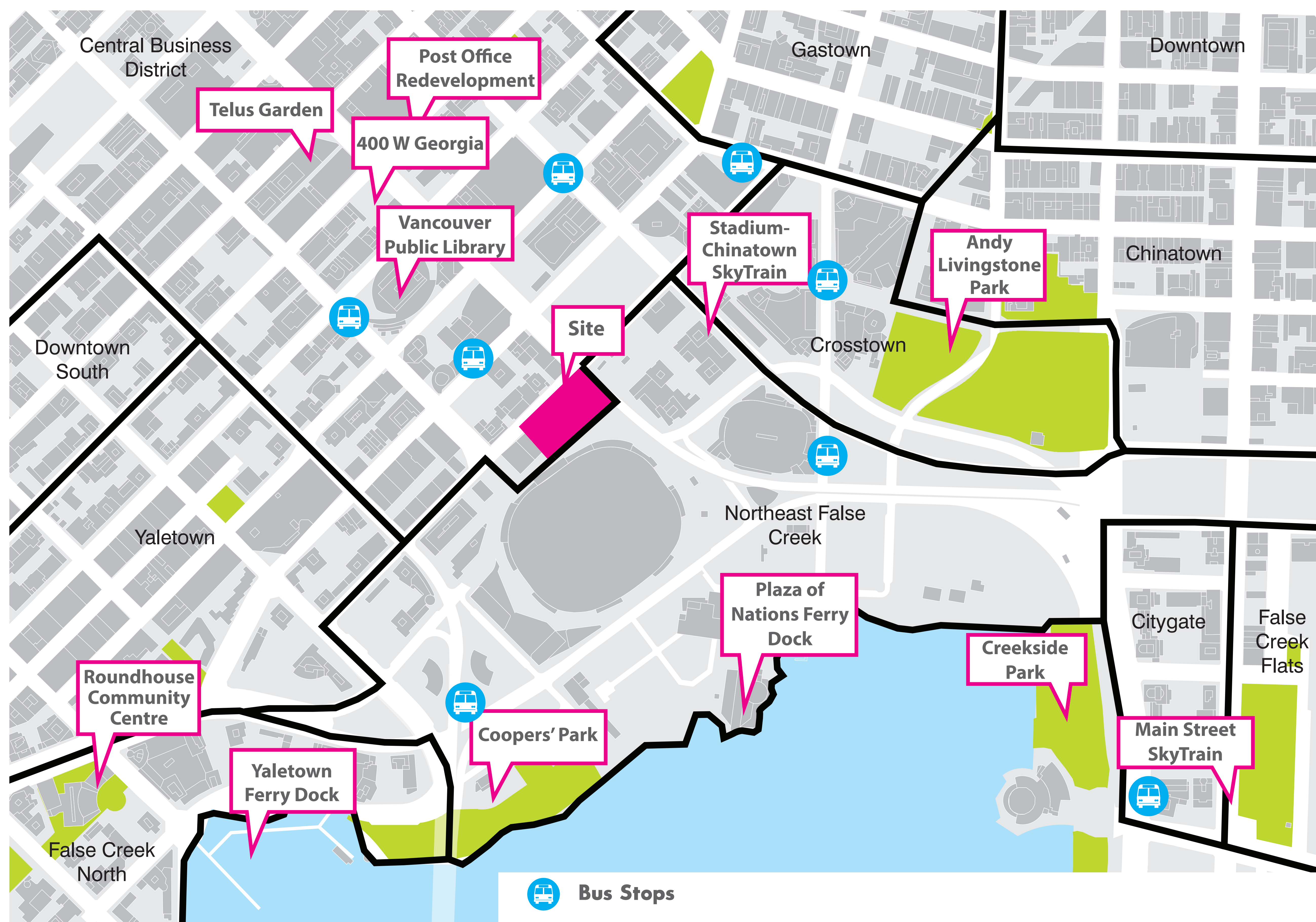
Significant re-investment is required to continue operating a safe and resilient system. This includes:

1. Constructing a new plant at the base of BC Place (not part of this application).
2. Upgrading and improving the existing 720 Beatty Street plant.

To fund the new construction of the plant and the upgrades, Creative Energy is working with Westbank to redevelop the site to support a broader neighborhood vision for Vancouver.

A New Gateway Into Vancouver

Situated within a hub of sports, cultural, and entertainment venues, 720 Beatty Street has the opportunity to serve as a ceremonial transition between the Central Business District and the surrounding entertainment and cultural districts. This becomes even more important after the realignment of the Georgia Street viaduct.



*neighbourhoods adapted from City of Vancouver Northeast False Creek Plan, February 2018 and Rezoning Policy for the Central Business District, June 2009

Site Context

720 Beatty Street is located on the Southeast corner of Beatty and West Georgia, directly adjacent to BC Place.



BIRDS EYE VIEW OF THE PROPOSED 720 BEATTY REDEVELOPMENT



EXISTING SITE FROM BEATTY STREET - FACING EAST

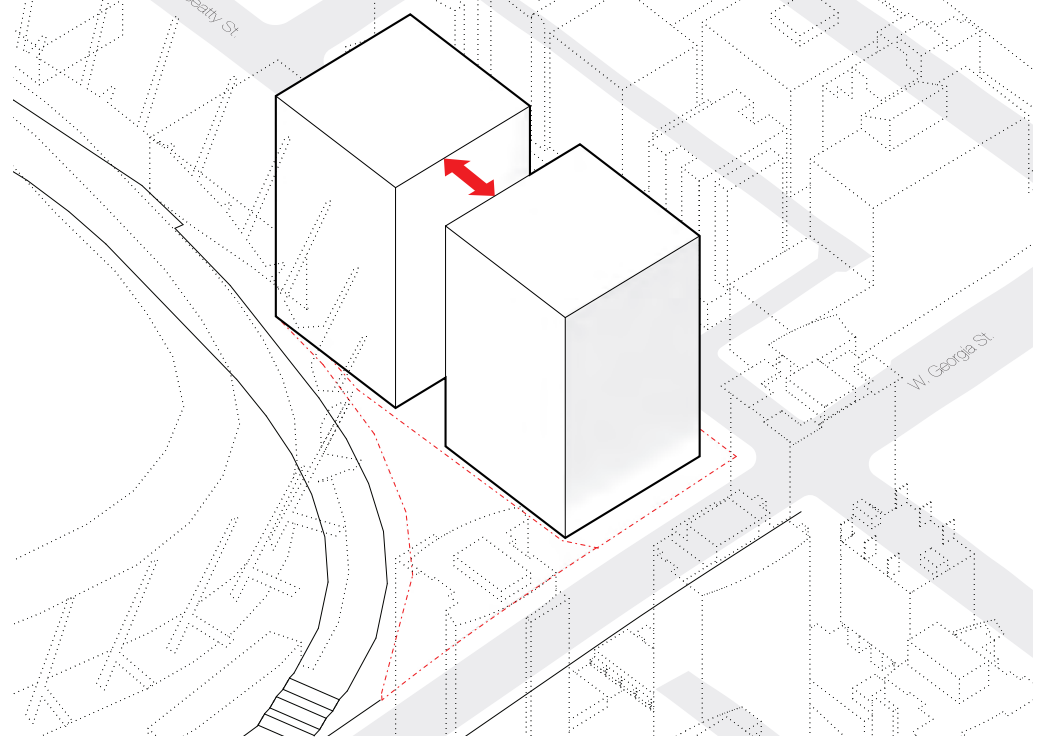


EXISTING SITE FROM WEST GEORGIA STREET - FACING WEST



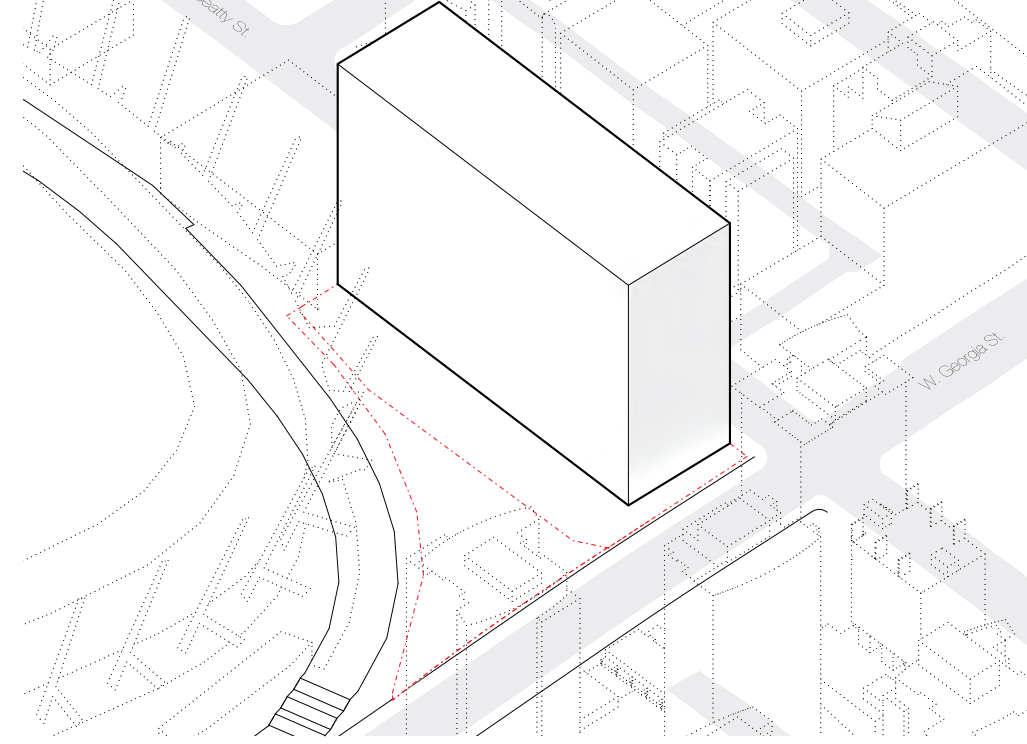
EXISTING SITE FROM BEATTY STREET - FACING SOUTH

Concept and Design Development



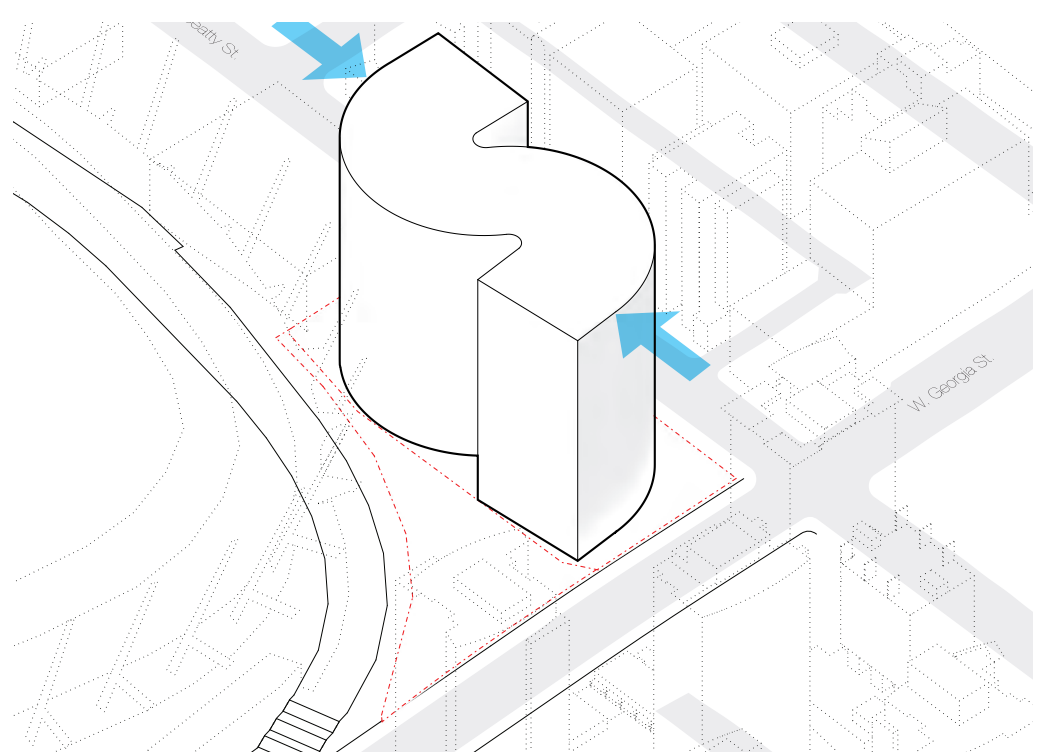
1. TWO BUILDINGS

Two buildings on the site would meet the desired 35,000 sf gross area floorplate sizes, but would create vis-a-vis issues and deep plates with little light.



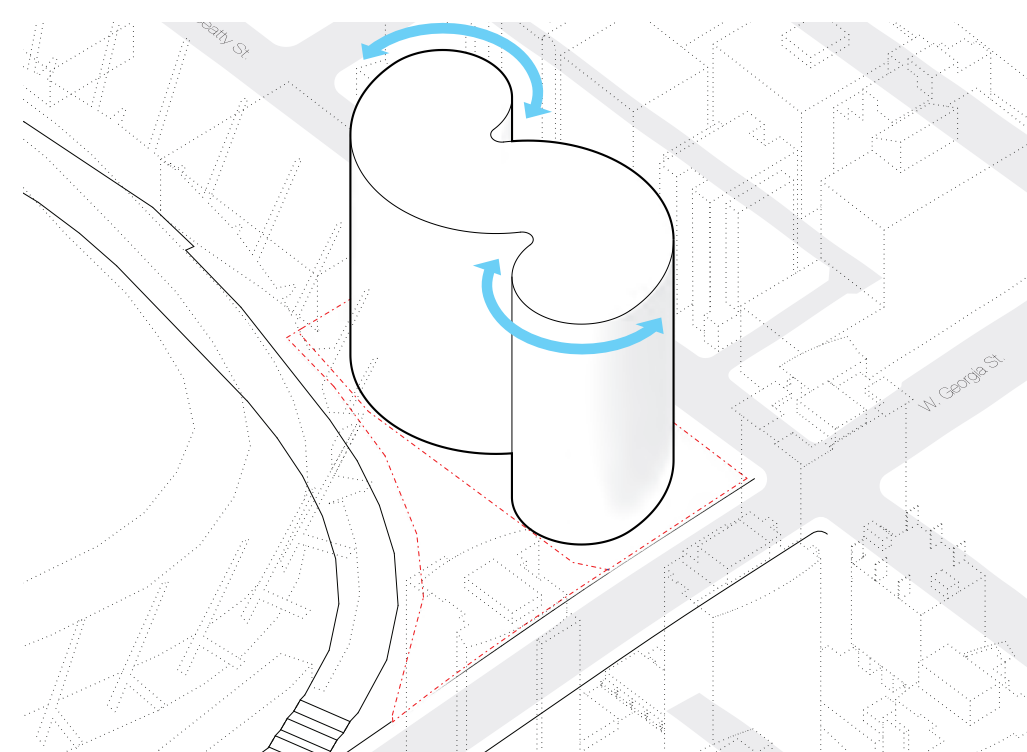
2. ONE BAR

Organizing the program as a long and continuous strip avoids vis-a-vis and provides more desirable plate depths.



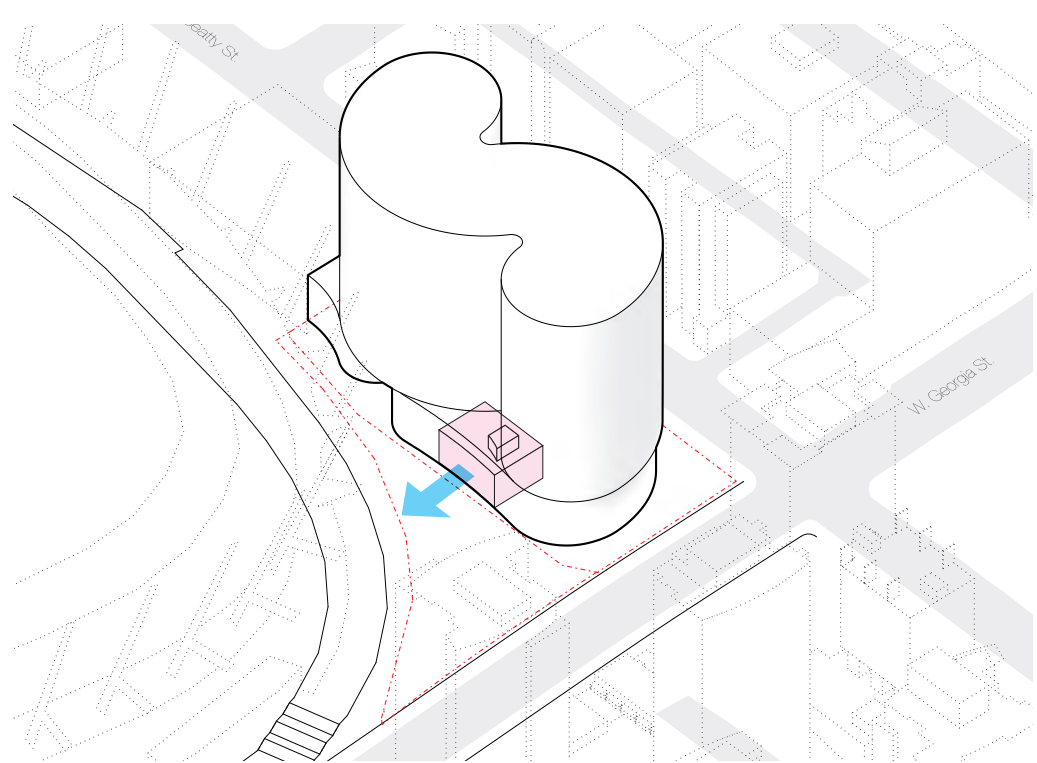
3. BEND

The bar is bent to maximize the floorplate and orient views towards Downtown Vancouver and NEFC. The bend also increases the length of the facade which will optimize daylighting, views and a healthy work environment.



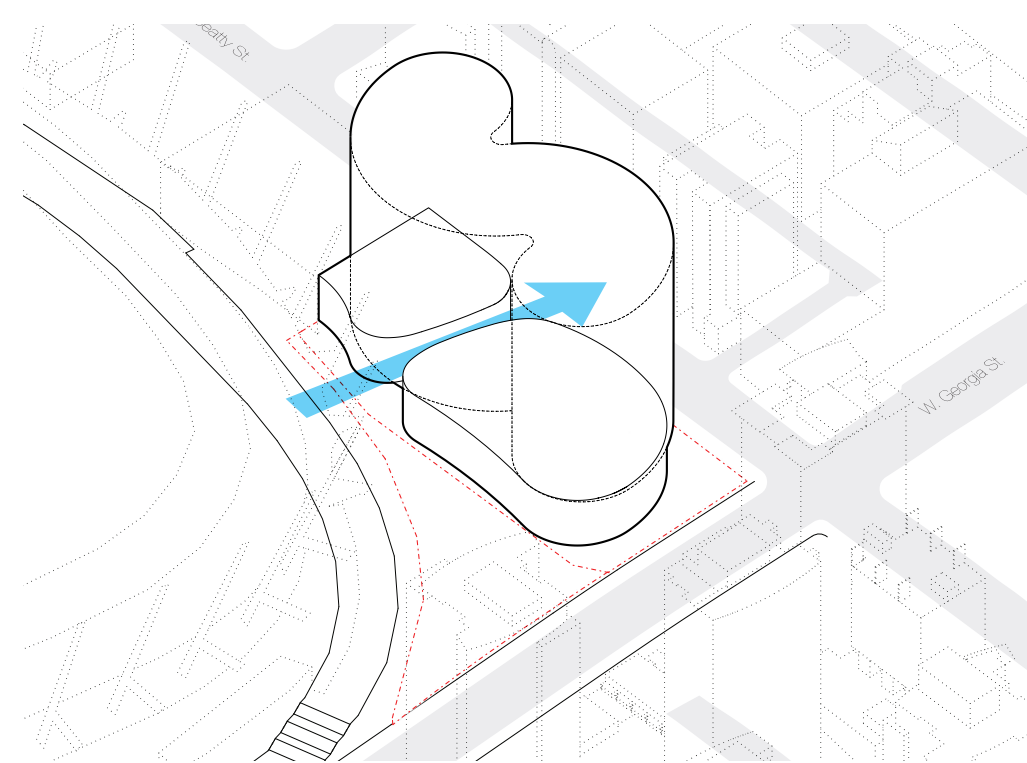
4. INFINITE FACADE

By rounding the ends of the bar, a continuous facade is created with no end and constantly changes depending on your vantage point. This makes the building appear as two from both Georgia and Beatty, and eases pedestrian flows at grade.



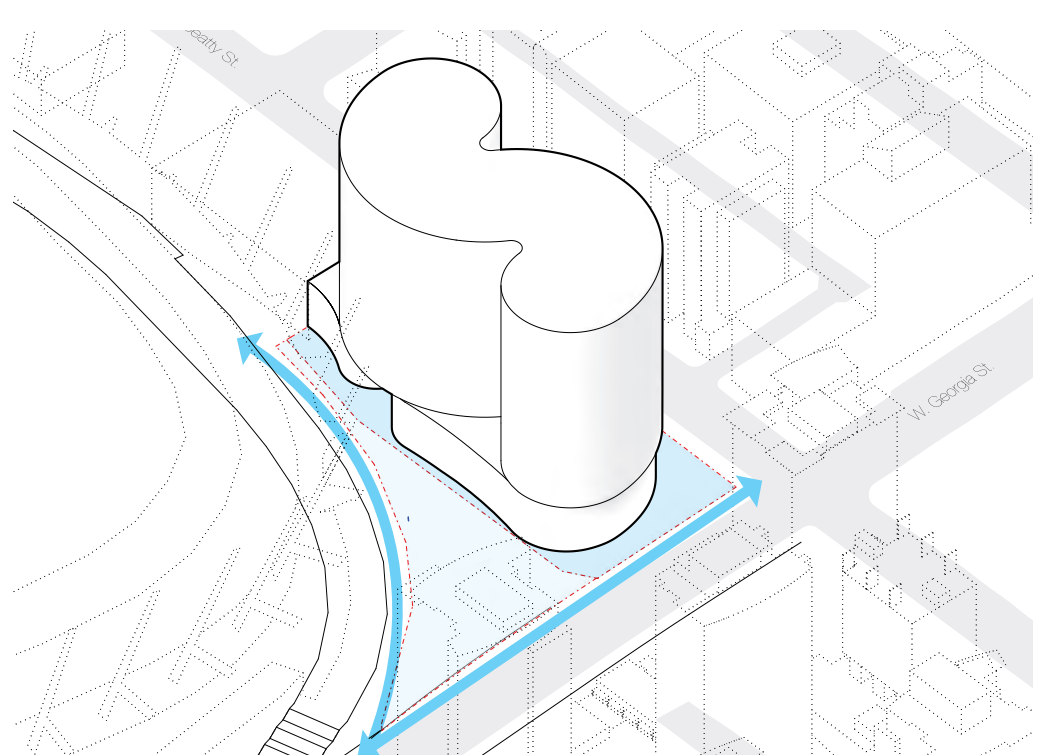
5. STEAMPLANT

The base of the building expands to wrap around the steamplant. By creating different folds, it gives terraces to the lower level office tenants.



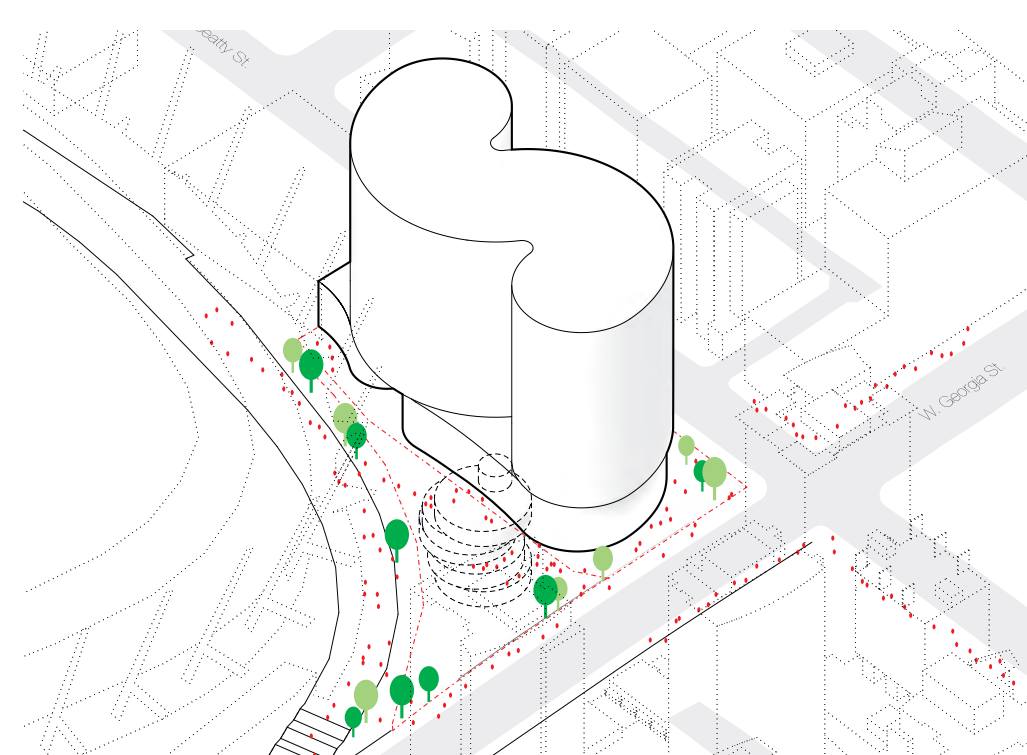
6. BREEZEWAY AND POROSITY

In order to maintain a porous and fluid public realm, a passage is made through the ground floor for people to flow between Beatty Street and BC Place.



7. CONNECTIVE PUBLIC REALM

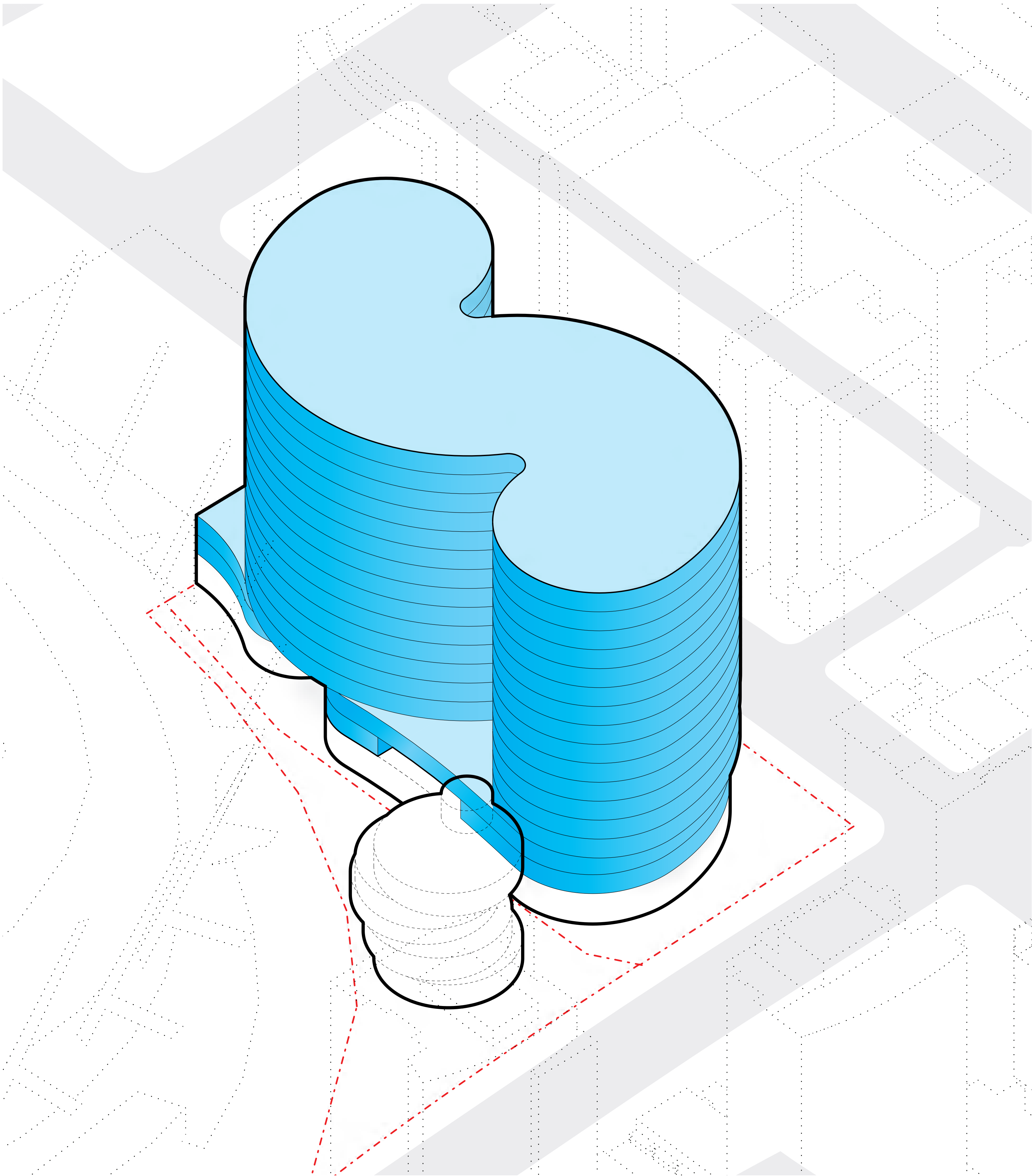
The new ground plane will seamlessly meet Beatty Street, the re-graded Georgia Street, and BC Place concourse in order to facilitate a connected public realm.



8. DESTINATION

A thoughtful landscape design will create a destination for both game days and non-game days, and be a gathering space that connects BC Place to the city.

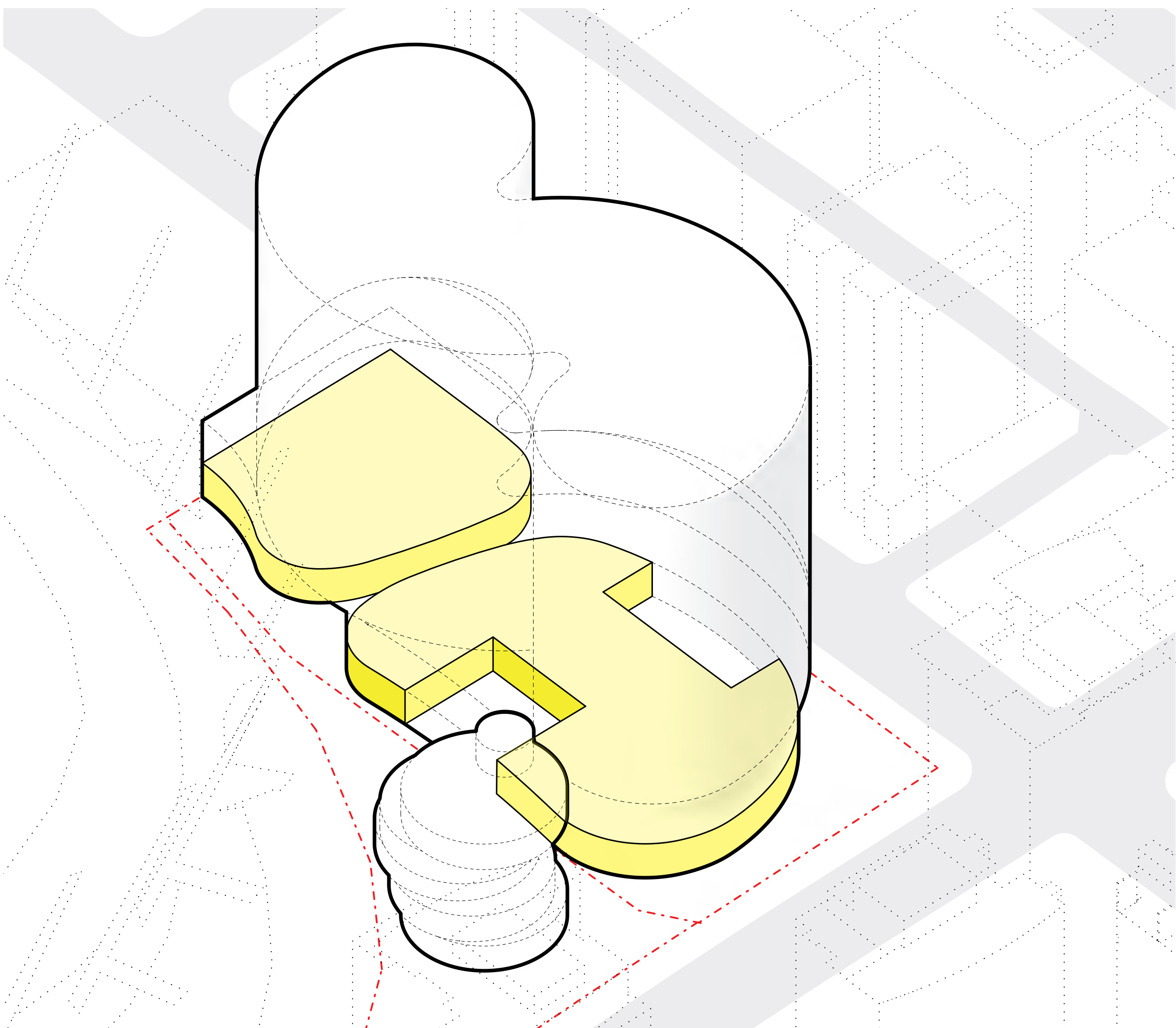
Programming



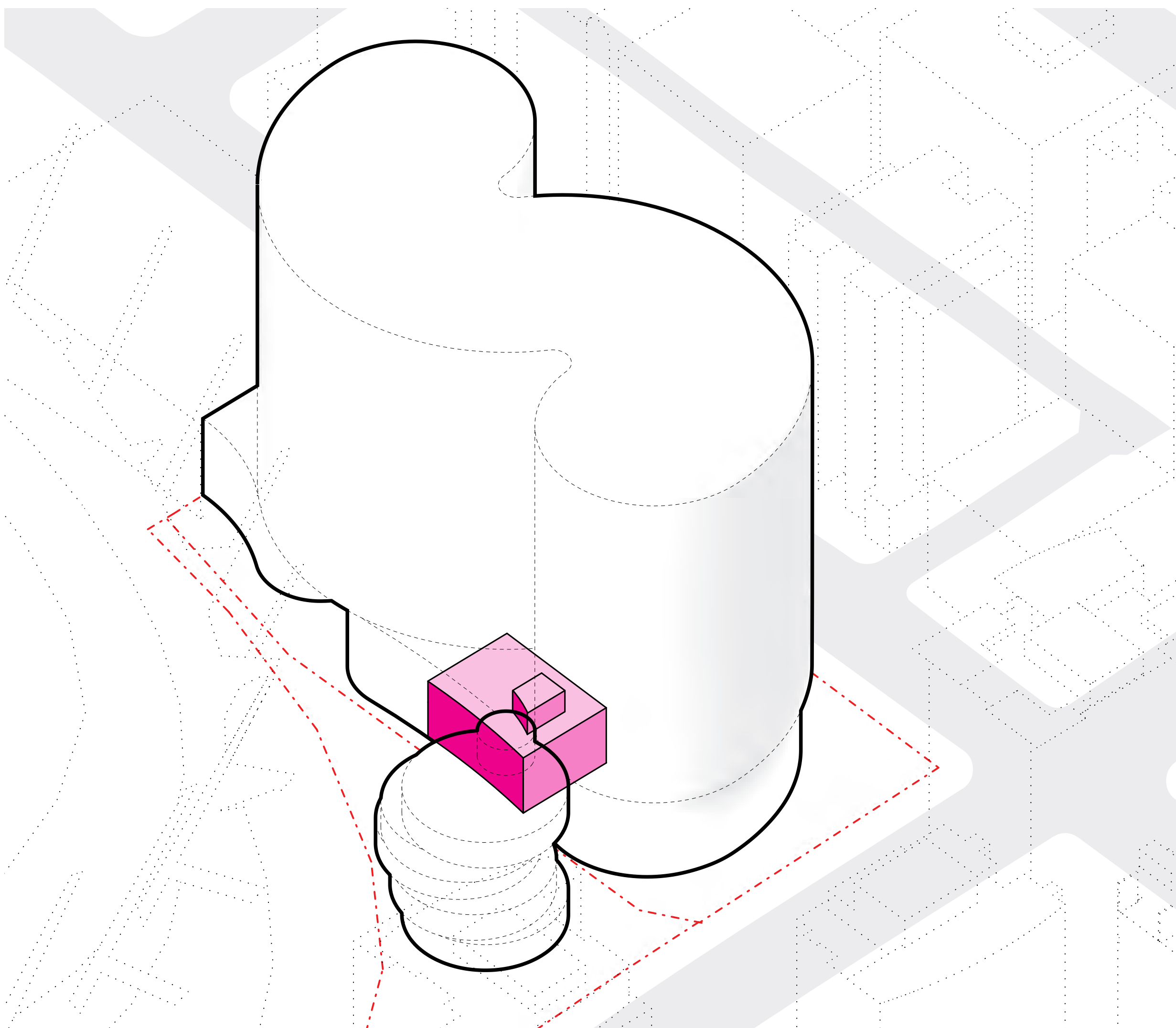
PROPOSED OFFICE SPACE IN BLUE

LEGEND

- Office
- Steamplant
- Retail



PROPOSED RETAIL AT GRADE IN YELLOW



STEAMPLANT LOCATION

Project Statistics

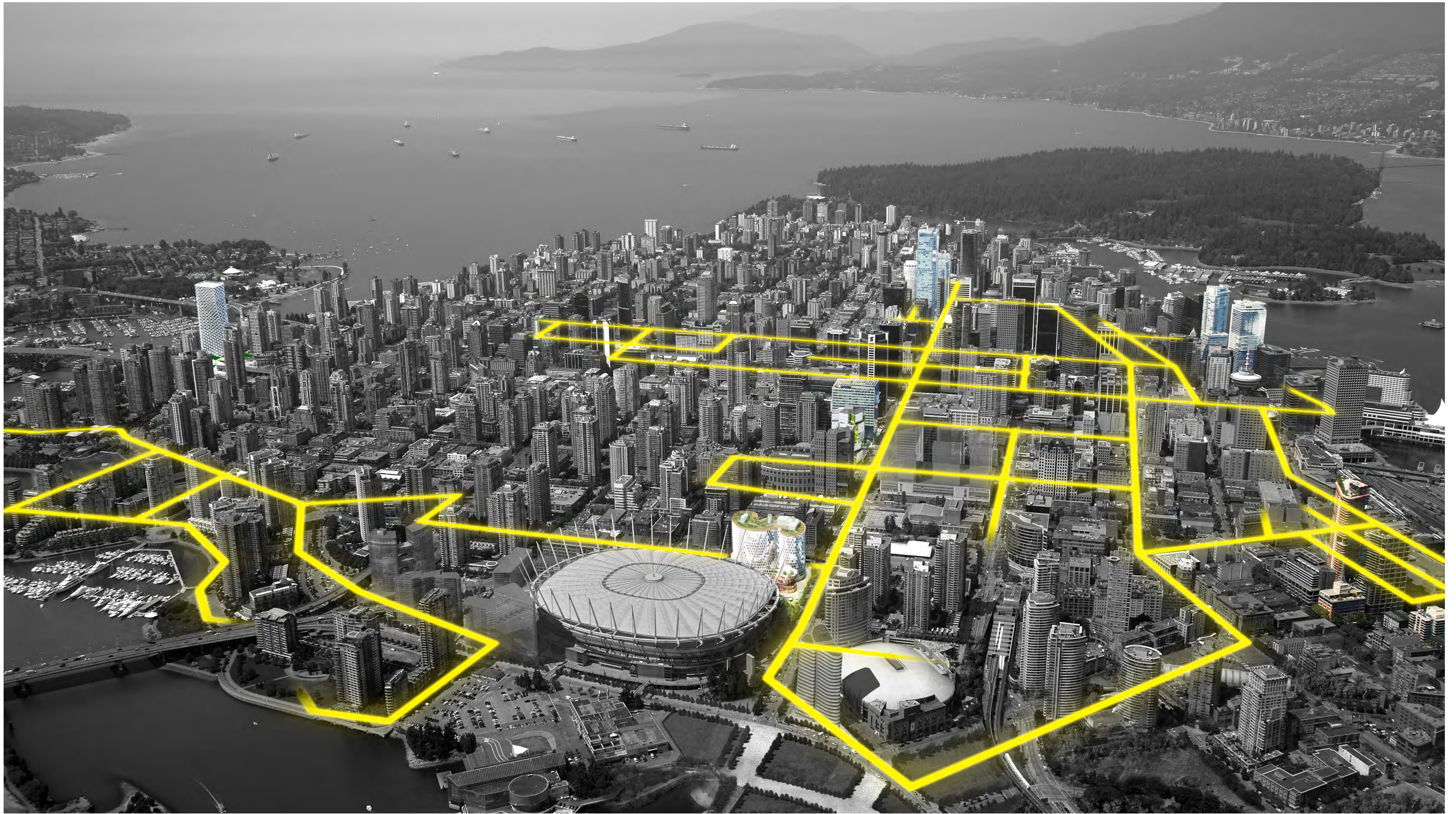
FSR	11.55	STEAM PLANT SPACE	7,223 sf (671 m ²)
HEIGHT	263.81 ft (80.41m)	TOTAL FLOOR AREA	616,847 sf (57,307 m ²)
STOREYS	17	PARKING SPACES	247
RETAIL SPACE	18,503 sf (1,719m ²)	CAR SHARE SPACES	22
OFFICE SPACE	515,150 sf (47,859 m ²)	BICYCLE SPACES	336



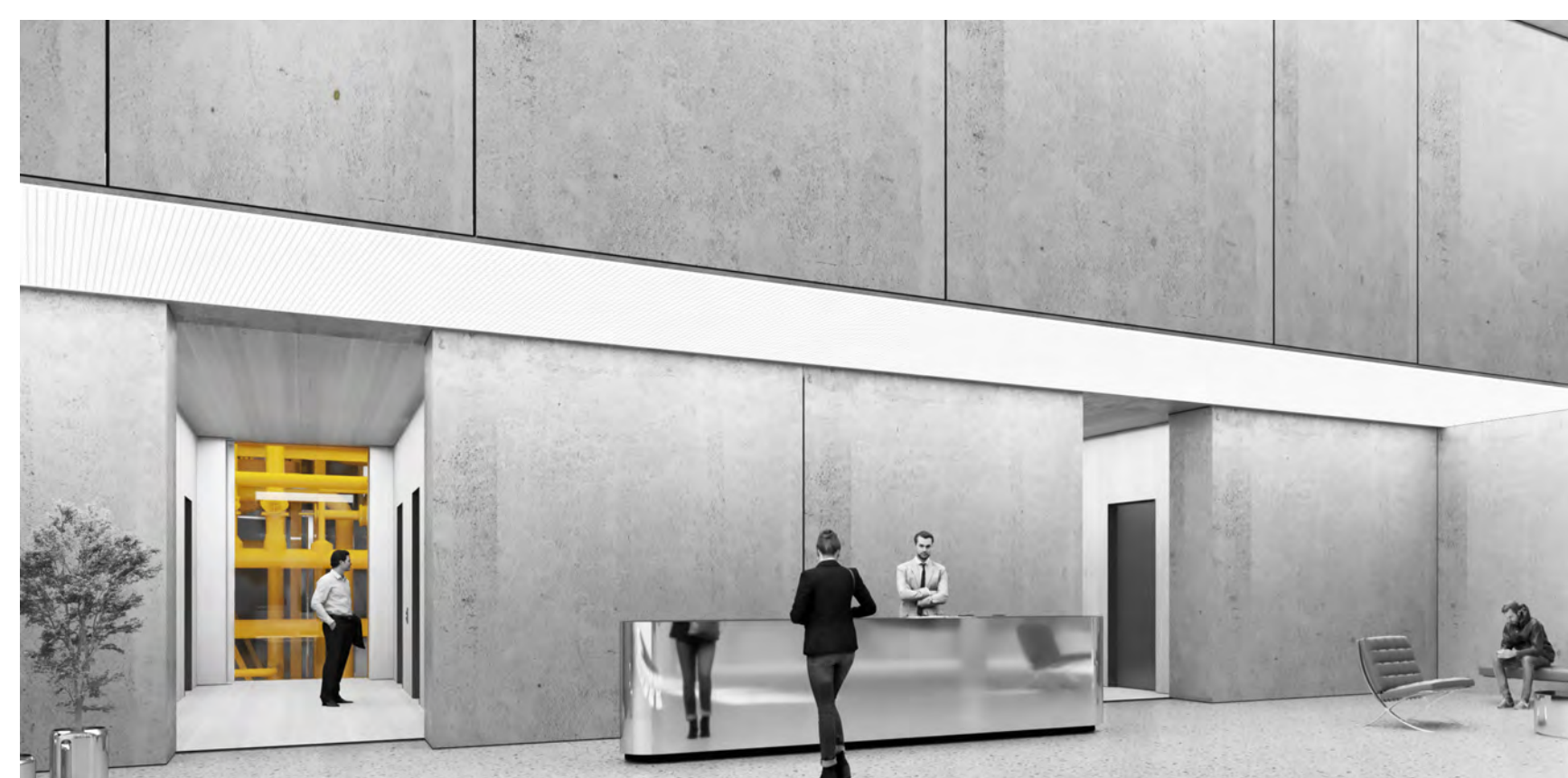
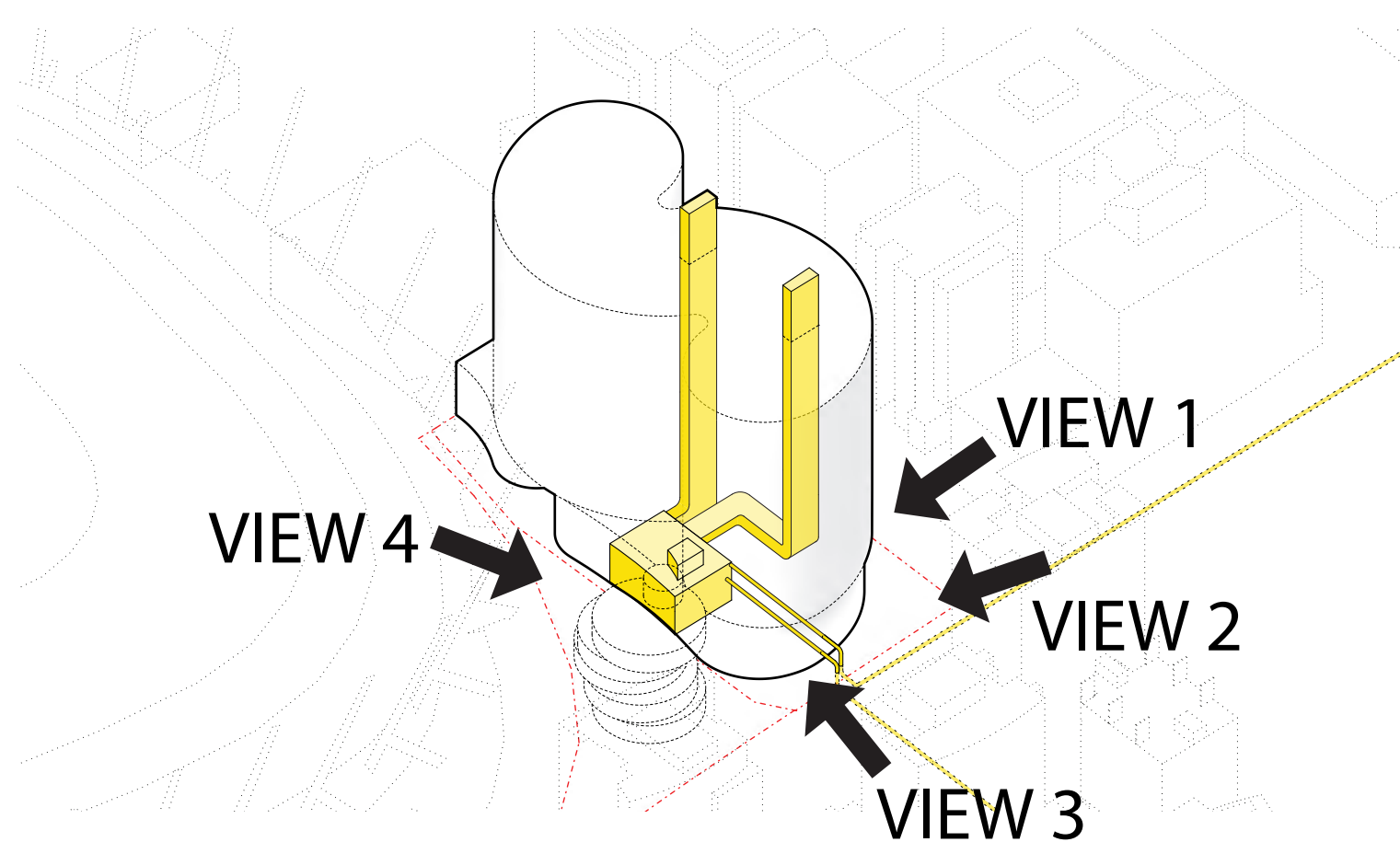
LOOKING NORTHWEST ALONG WEST GEORGIA STREET

Green Energy and Vancouver

How can we educate the people of Vancouver on this veiled plant with forward-thinking aspirations? This new development helps identify a change needed for the City of Vancouver—and all cities alike—and offers the people a gift. Through both an inviting welcome center, and by revealing the plant to the public spaces surrounding it, the people of Vancouver will be able to learn how their city is fed greener energy.



Creative Energy and Westbank

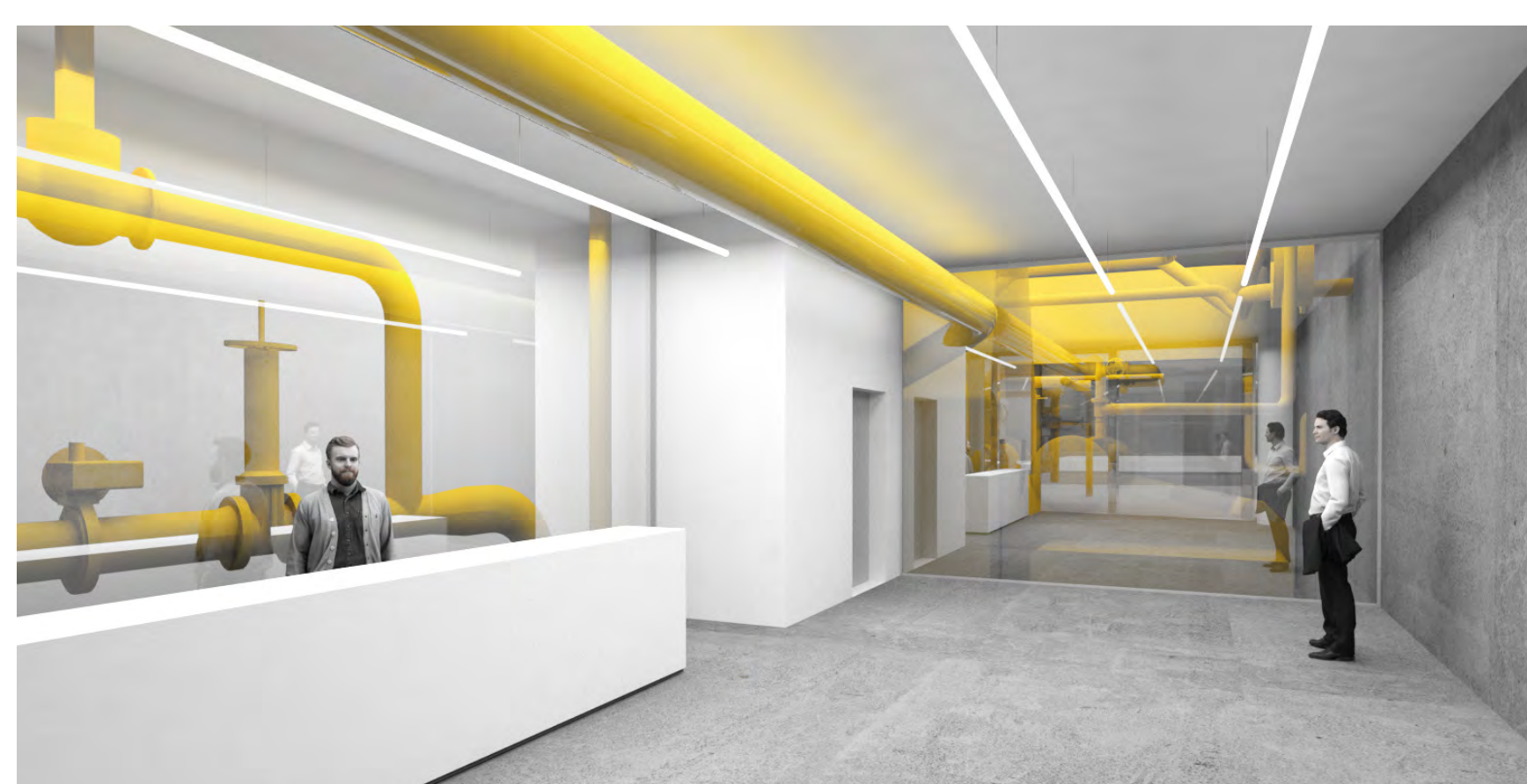


VIEW 1. BEATTY STREET AND THE OFFICE LOBBY
The office lobby will be centrally located along Beatty Street, and from the elevator banks serving it large windows will give visitors views into the plant.



VIEW 2. GEORGIA STREET
From the intersection of Beatty Street and Georgia Street, patrons will be able to see the steamheaders which connect the steamplant to the network servicing the City of Vancouver.

Rather than hide the steamplant in this new building, the proposal seeks to celebrate it and make it known and visible from all parts of the public realm. From Beatty Street, Georgia Street and the plaza, this development exposes what lies beneath—a fascinating energy plant, and the heart of green energy for the City of Vancouver.

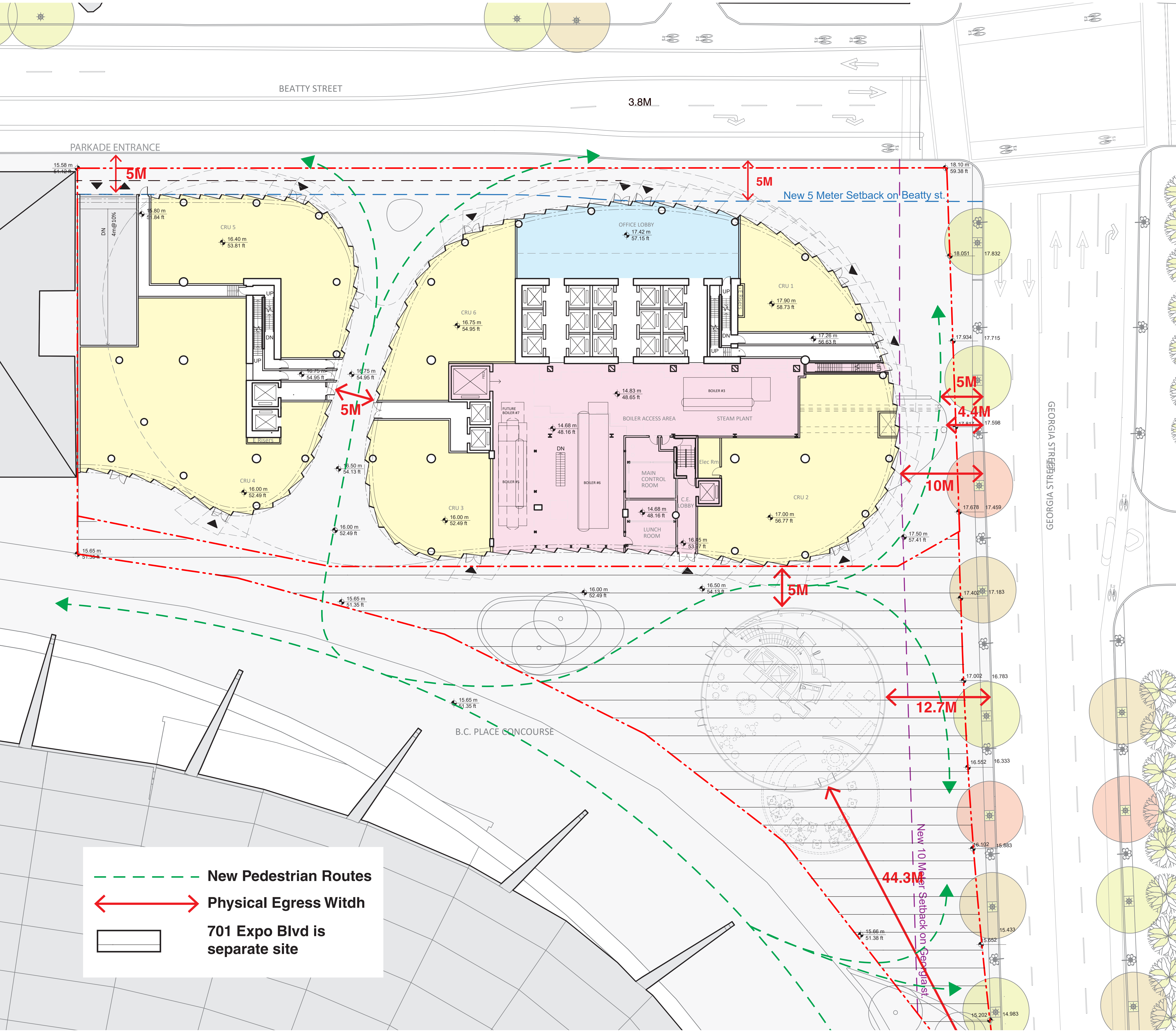


VIEW 3. CREATIVE ENERGY LOBBY AND LEARNING CENTRE
The location of the steamheaders and their breach the new building to connect to the plant creates an exciting opportunity for a learning centre open to the public. From this space, visitors can learn more about sustainability, the network and the plant, with a large window providing views of the boilers.



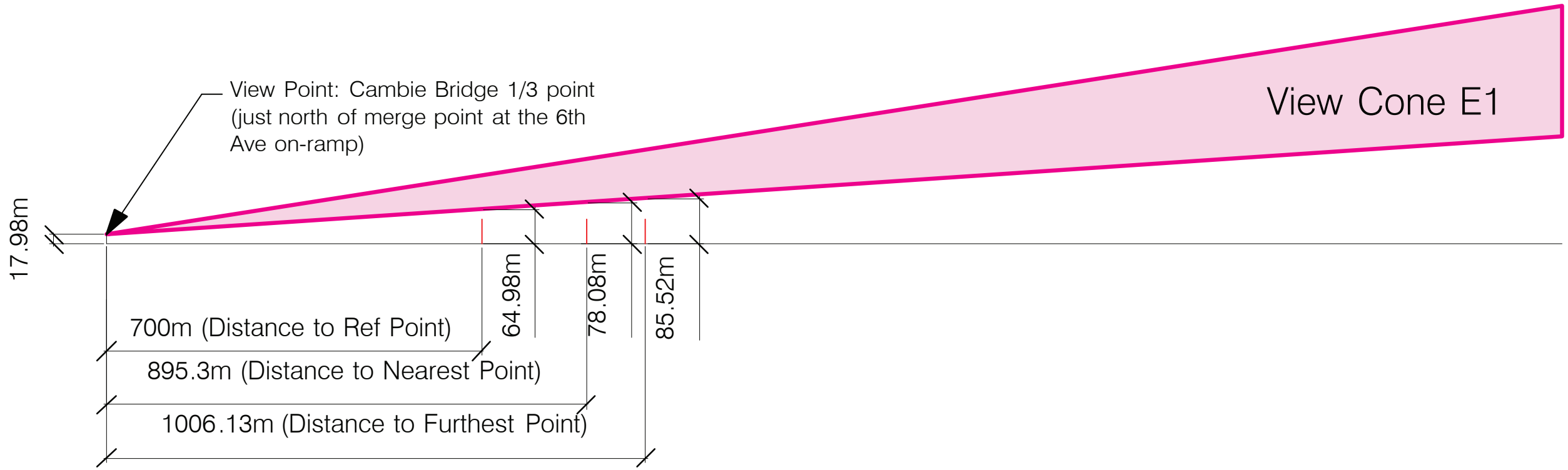
VIEW 4. The PLAZA AND BC PLACE
Lastly, from the plaza a large portion of portion of the new development's facade will interface with the plant. This means that anyone passing through the plaza and visitors to BC Place will have direct views into the plant.

Site Plan

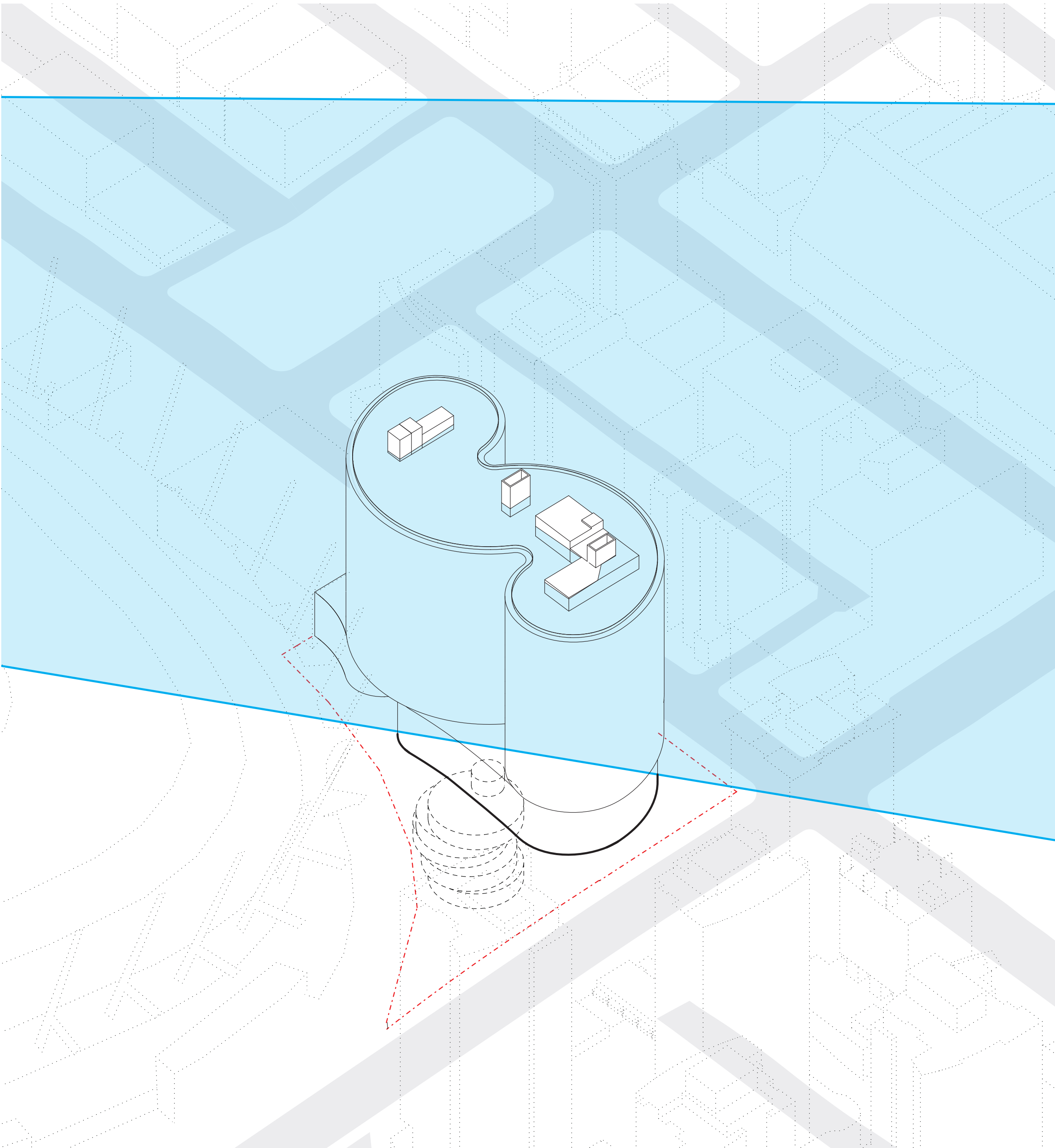


Viewcone

Four Viewcones intersect the site at 720 Beatty Street; viewcone 9.1, 9.2, A and E1. The most restrictive of the four is Viewcone E1, which is a view of the North Shore mountains from the Cambie Street Bridge.



VIEWCONE E1 PHOTOMONTAGE (WITHOUT DEVELOPMENT)



AXO OF BUILDING IN E1 VIEWCONE

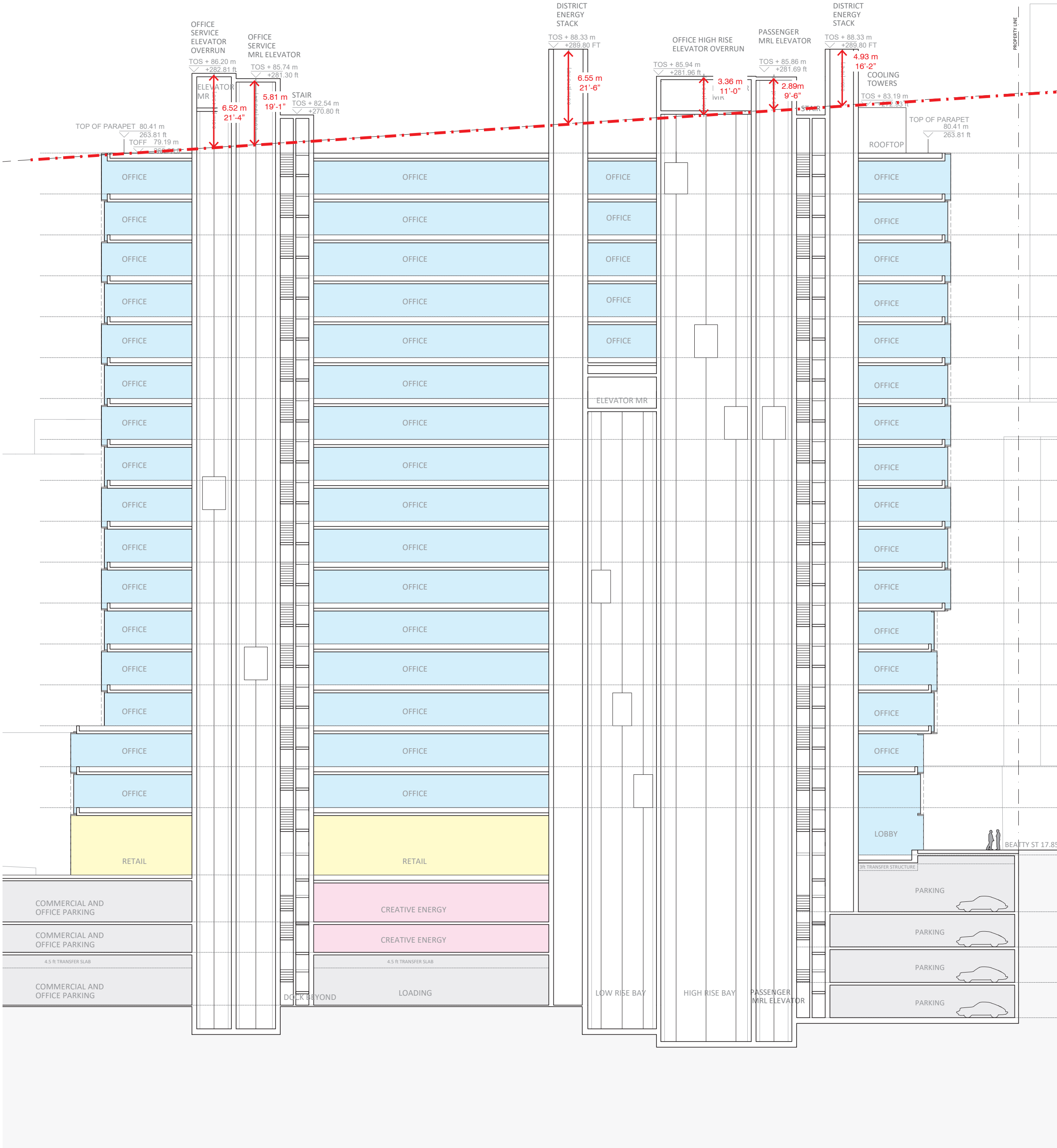
— Above View Cone E1
— Below View Cone E1

View Cone E1

View Point: Cambie Bridge 1/3 point (just north of the merge point at the 6th Ave on-ramp)
View Point Elevation: 17.98m
Reference Point: BC Place Facade
Reference Point Elevation: 64.98m
Distance from View Point to Reference Point: 700.00m
Project Site Distance from View Point & Elevation at Property Line:
• Point A: Nearest Corner: Distance= 895.3m, Geo Elevation= 90.32m, Site Elevation= 15.65m, Building Height= 74.67m
• Point C: Furthest Corner: Distance= 1,006.13m, Geo Elevation= 101.5m, Site Elevation= 18.11m, Building Height= 83.39m

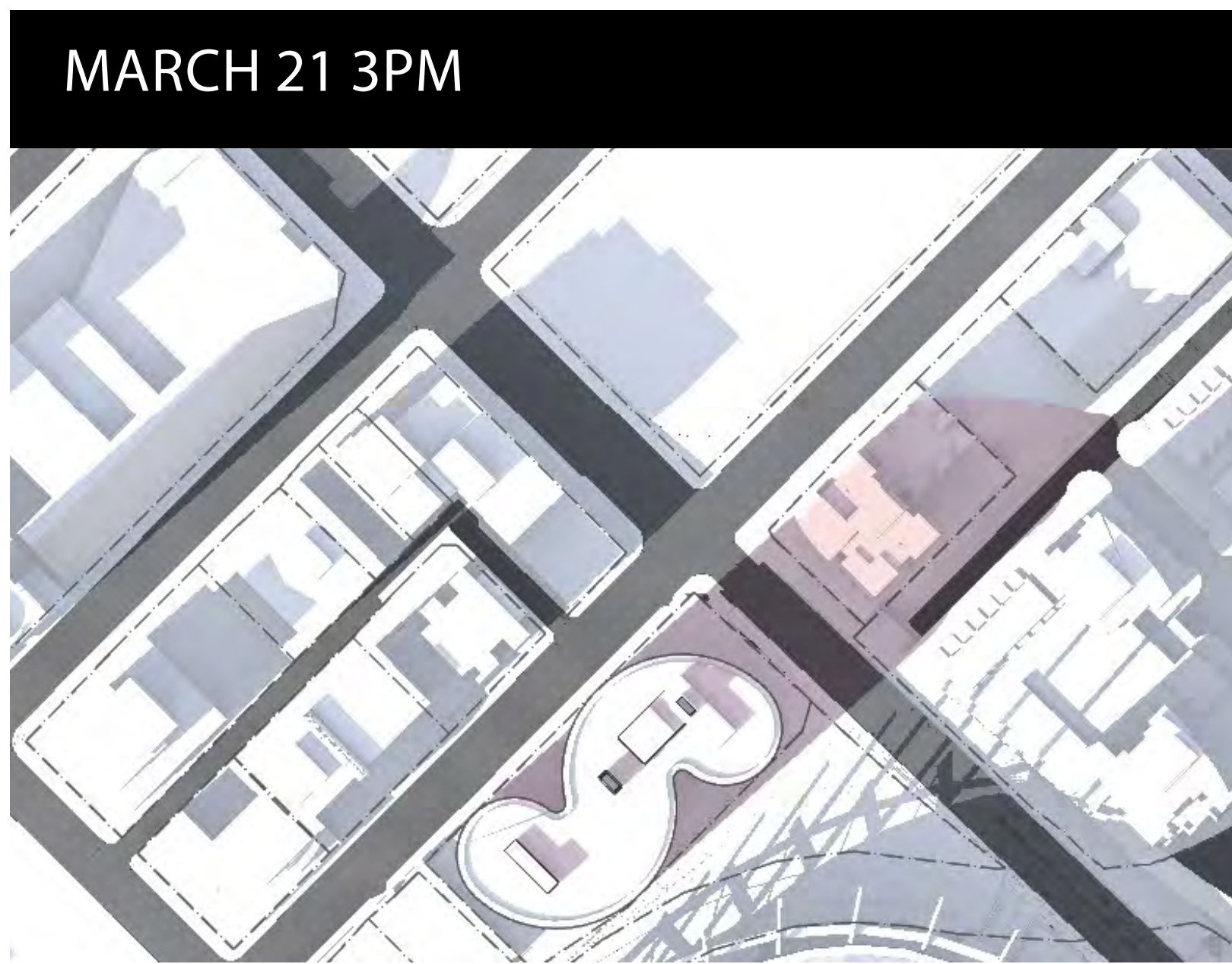
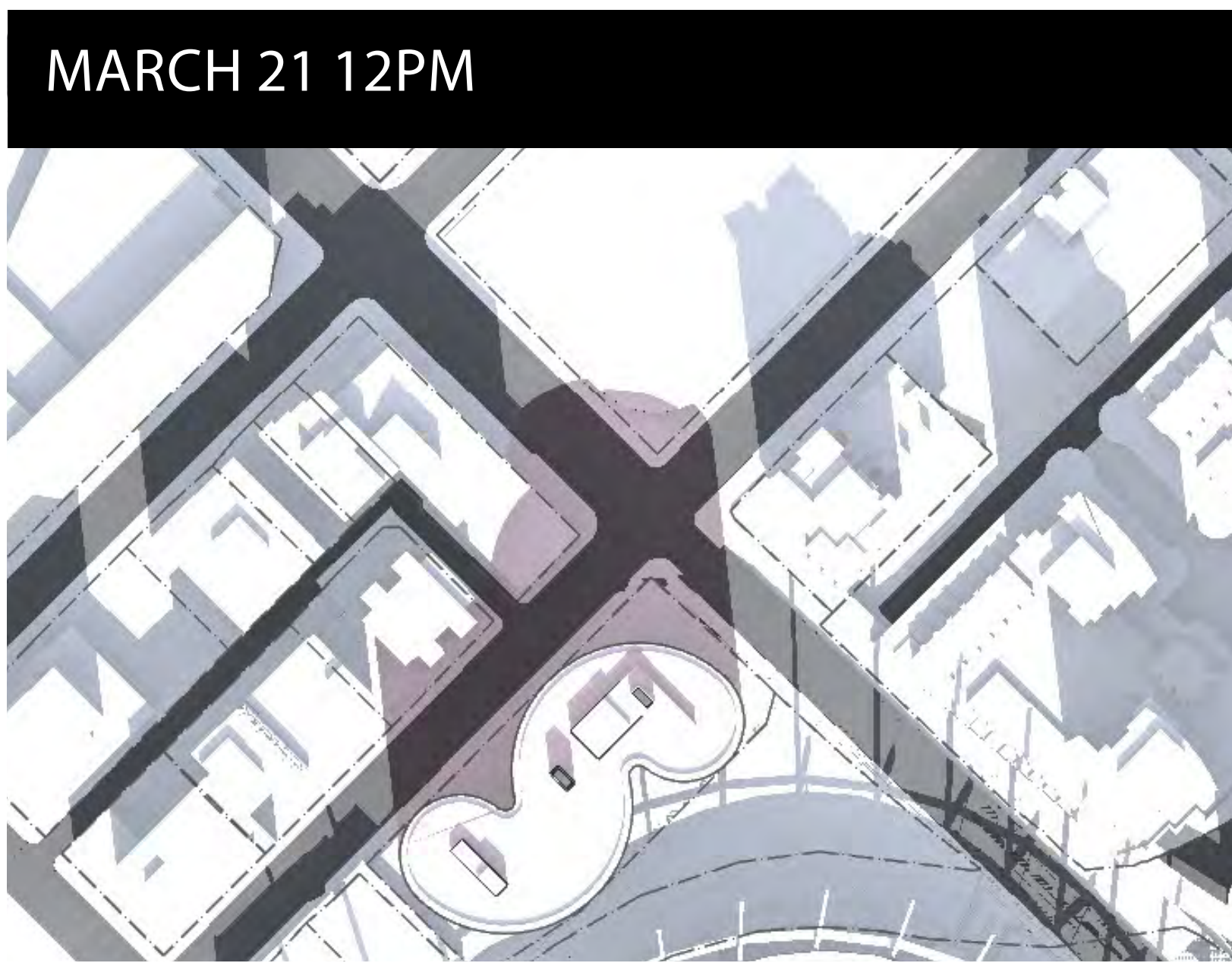


VIEWCONE E1 PHOTOMONTAGE (WITH DEVELOPMENT)



SECTION OF BUILDING FOLLOWING VIEWCONE E1

Shadow Studies



Beatty Street Views

SUMMER SOLSTICE

JUNE 21 - 10AM



LOOKING SOUTHWEST FROM INTERSECTION OF BEATTY STREET AND GEORGIA STREET



LOOKING NORTHEAST ON BEATTY STREET

JUNE 21 - 11AM



LOOKING SOUTHWEST FROM INTERSECTION OF BEATTY STREET AND GEORGIA STREET



LOOKING NORTHEAST ON BEATTY STREET

JUNE 21 - 12PM



LOOKING SOUTHWEST FROM INTERSECTION OF BEATTY STREET AND GEORGIA STREET



LOOKING NORTHEAST ON BEATTY STREET

Beatty Street Views

SPRING EQUINOX

MARCH 20 - 10AM



LOOKING SOUTHWEST FROM INTERSECTION OF BEATTY STREET AND GEORGIA STREET



LOOKING NORTHEAST ON BEATTY STREET

MARCH 20 - 11AM



LOOKING SOUTHWEST FROM INTERSECTION OF BEATTY STREET AND GEORGIA STREET



LOOKING NORTHEAST ON BEATTY STREET

MARCH 20 - 12PM



LOOKING SOUTHWEST FROM INTERSECTION OF BEATTY STREET AND GEORGIA STREET



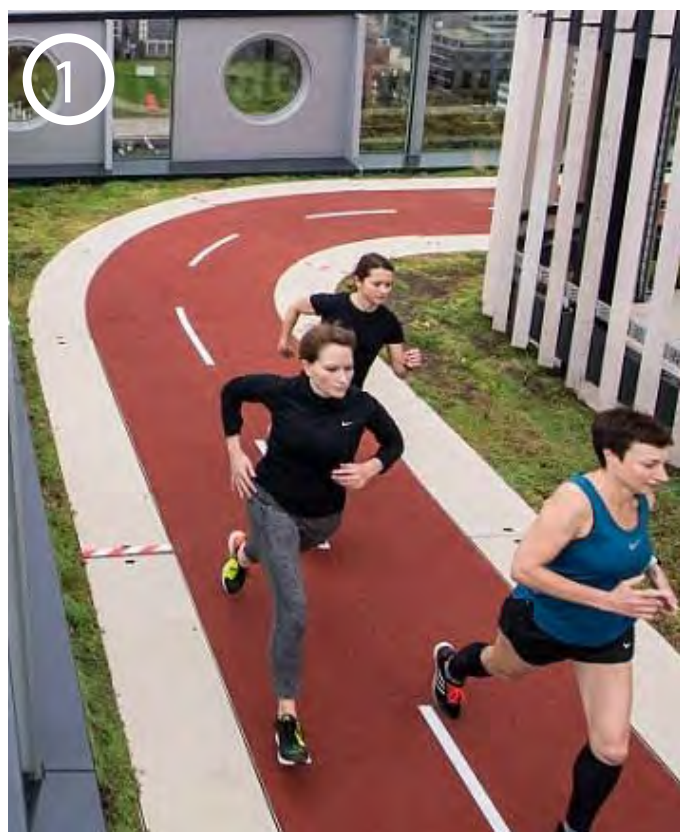
LOOKING NORTHEAST ON BEATTY STREET

Landscape

The landscape design for 720 Beatty Street draws on Vancouver’s natural environment for its inspiration.

This project aims to restore a missing link to the city’s ‘roots.’ A series of large scale landscaped ‘islands’ will showcase giant, salvaged trees from various local and regional sources in various states. Once collected and sited, their gradual decay will then support and accelerate new forms of growth, habitat and ecologies. New western red cedar trees (British Columbia’s official

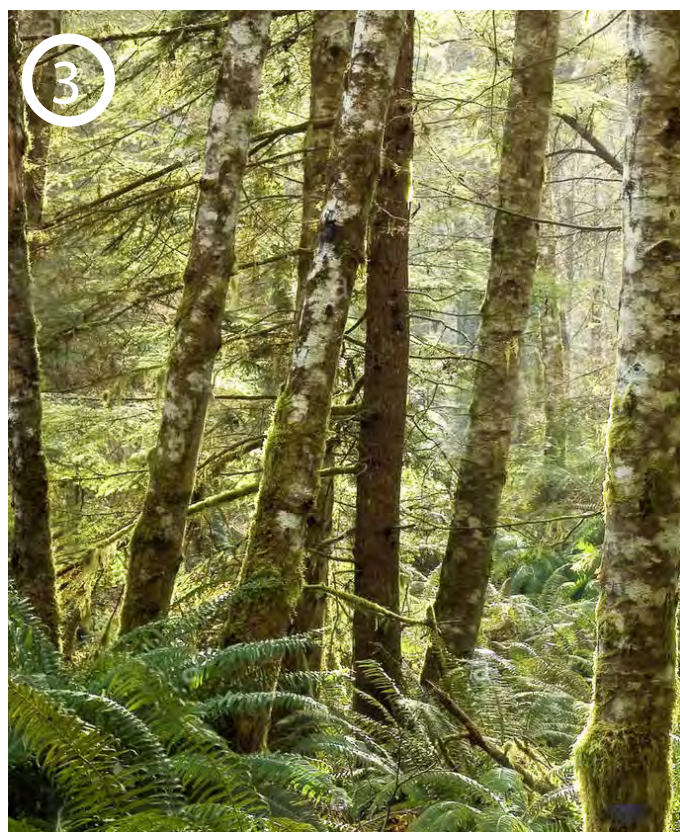
provincial tree) will be encouraged to grow up and claim their space, while ferns and mosses populate the sited fallen specimens below. The public will be invited to observe and interact with these living installations, watching as they evolve from season to season, and year to year, as cycles of death and new life are poetically expressed in the gardens.



1 Curvilinear Rooftop Running Track



2 Wood Deck Stage Flexible Activities



3 Rooftop Plantation Red Alder, Paper Birch, and Ferns



4 Edible Kitchen Garden Supporting the Pavilion Restaurant



5 Salvaged Timber Object A meeting place and an invitation into the breezeway



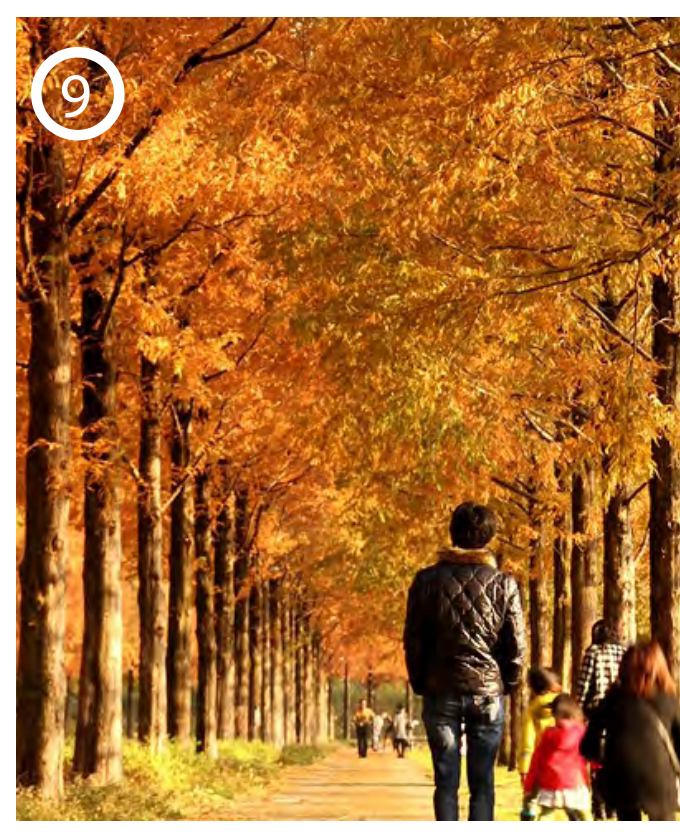
6 'Lost Giant' Garden A Return of a 'Lost Giant' as host for a next generation of growth



7 Steam Garden Showcasing the mechanical presence of the energy plant, while gently transitioning into the organic form of landscape



8 Growth and Decay Garden Expressing the Natural Phenomenon of growth and decay



9 Georgia Dawn Redwoods Streetscape Recalling Vancouver's old growth forest and anchoring the Street to the False Creek



10 Organic / Mineral Floor Inlaid timber blocks and gold-tone metal planks are set within a plaza composed of a resin-bonded stone aggregate surface

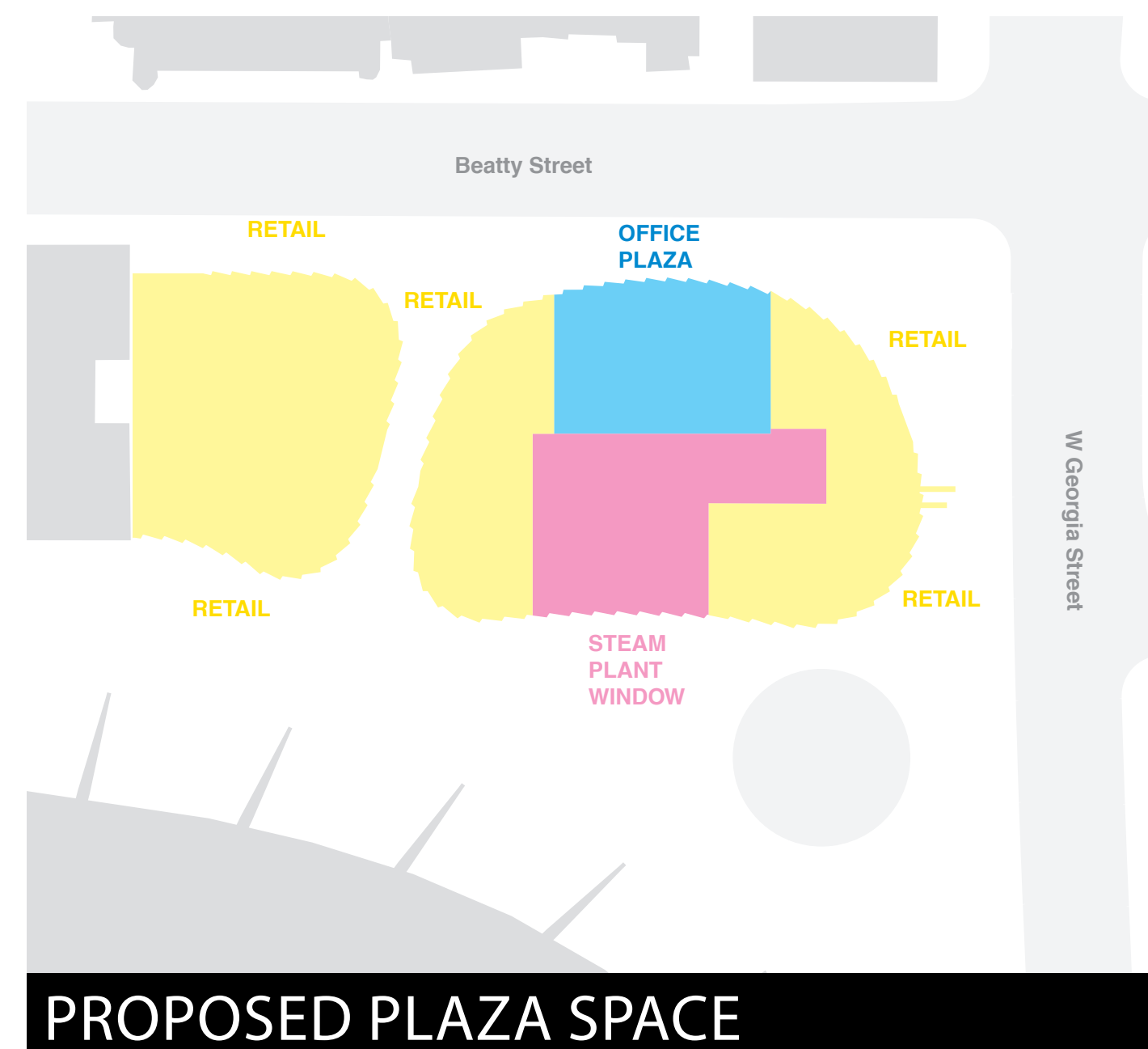
Public Realm

The proposed redevelopment creates a porous public realm, allowing for a series of access and exit points for pedestrian flows to and from BC Place.

PLAZA

A new open public space will serve as a link between BC Place and the city, as well as a new tranquil space separated from Georgia Street.

Within the public plaza, a diverse series of retail spaces are proposed, as well as a giant window into the steam plant, allowing the public to enjoy a new open-air space in Vancouver and connect with the building and its internal functions.

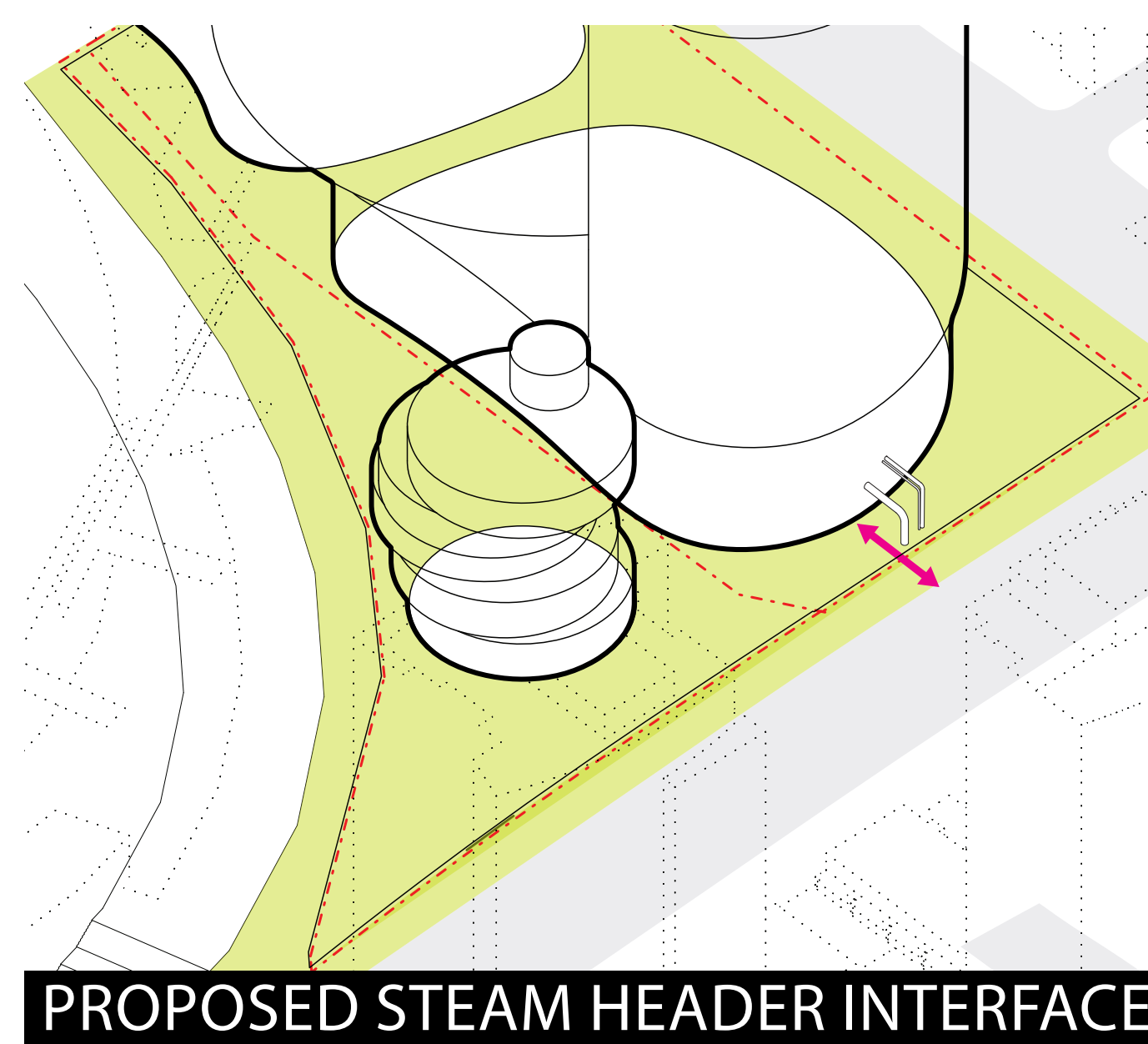


BREEZEWAY

New breezeway connections maximize the continuity between the new plaza and the surroundings, allowing easy access to Beatty Street where there will be new opportunities for retail activation. The breezeway has been sized to strike a balance between accommodating large pedestrian flows to and from BC Place during events, while still maintaining the intimacy required for a successful public realm.

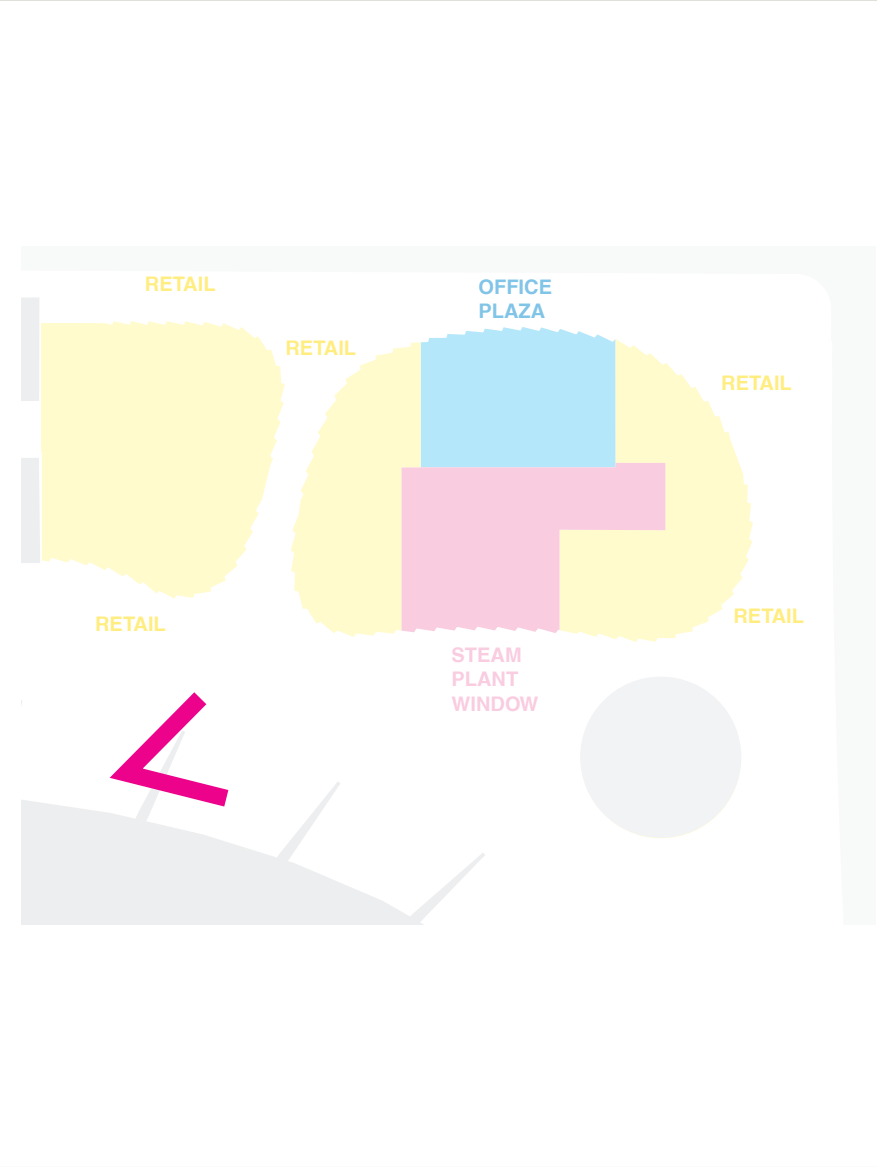
STEAM HEADERS

The steam headers are a critical component of Creative Energy's downtown network and cannot be relocated without service interruptions of critical customers, including St. Paul's Hospital. As a result, the proposal exposes the steam headers and changing their appearance to a mirrored chrome finish, surrounded by landscape, such that they become an artpiece on their own.

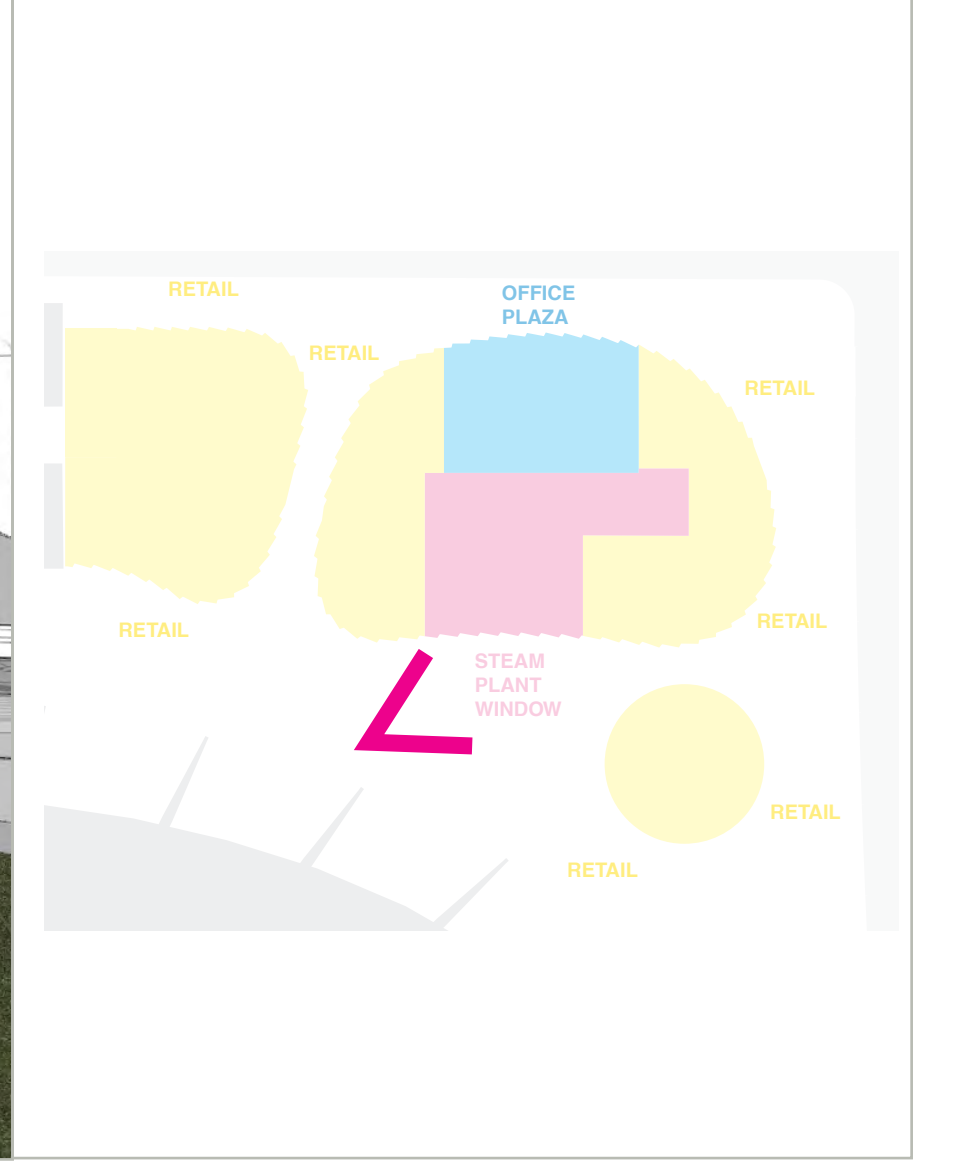


Public Realm

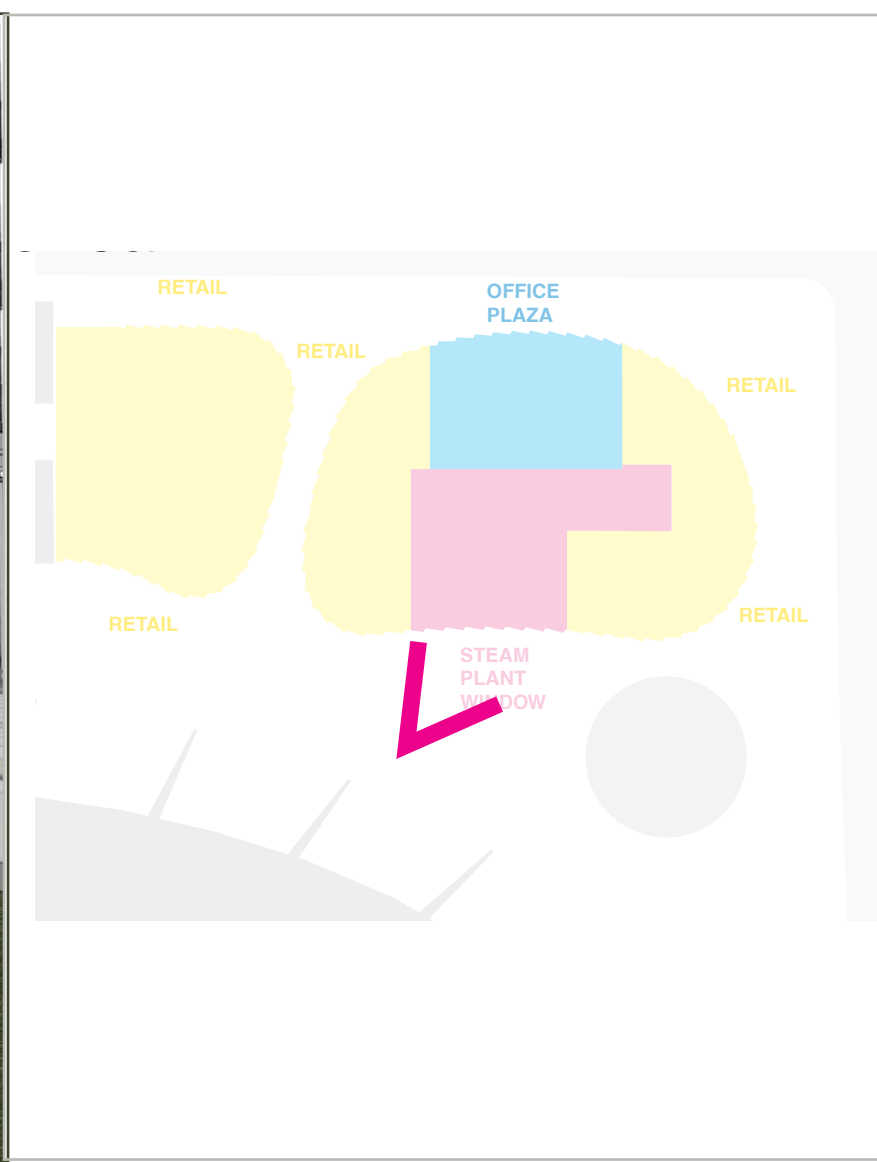
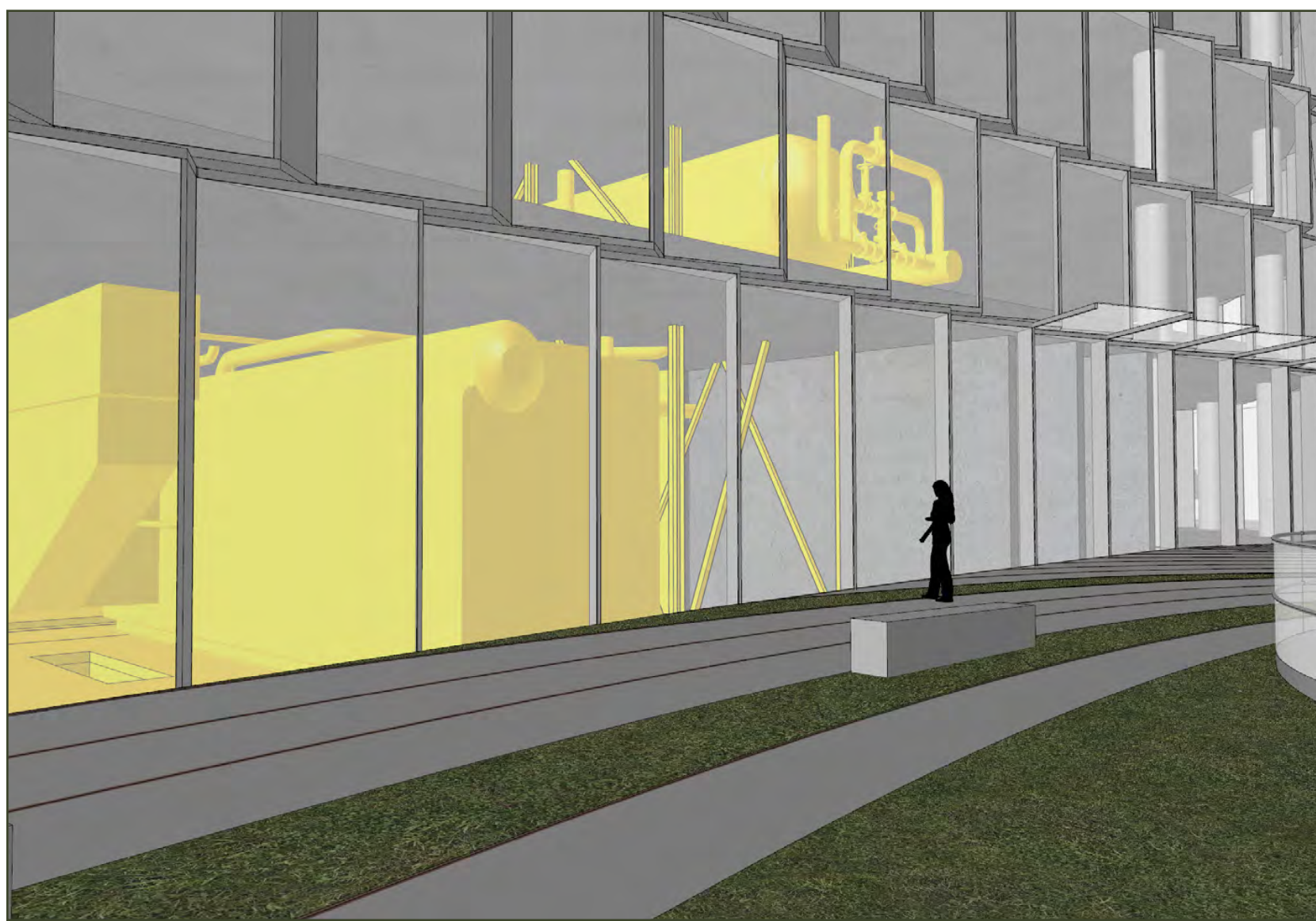
The proposed redevelopment creates an interesting and engaging public realm.



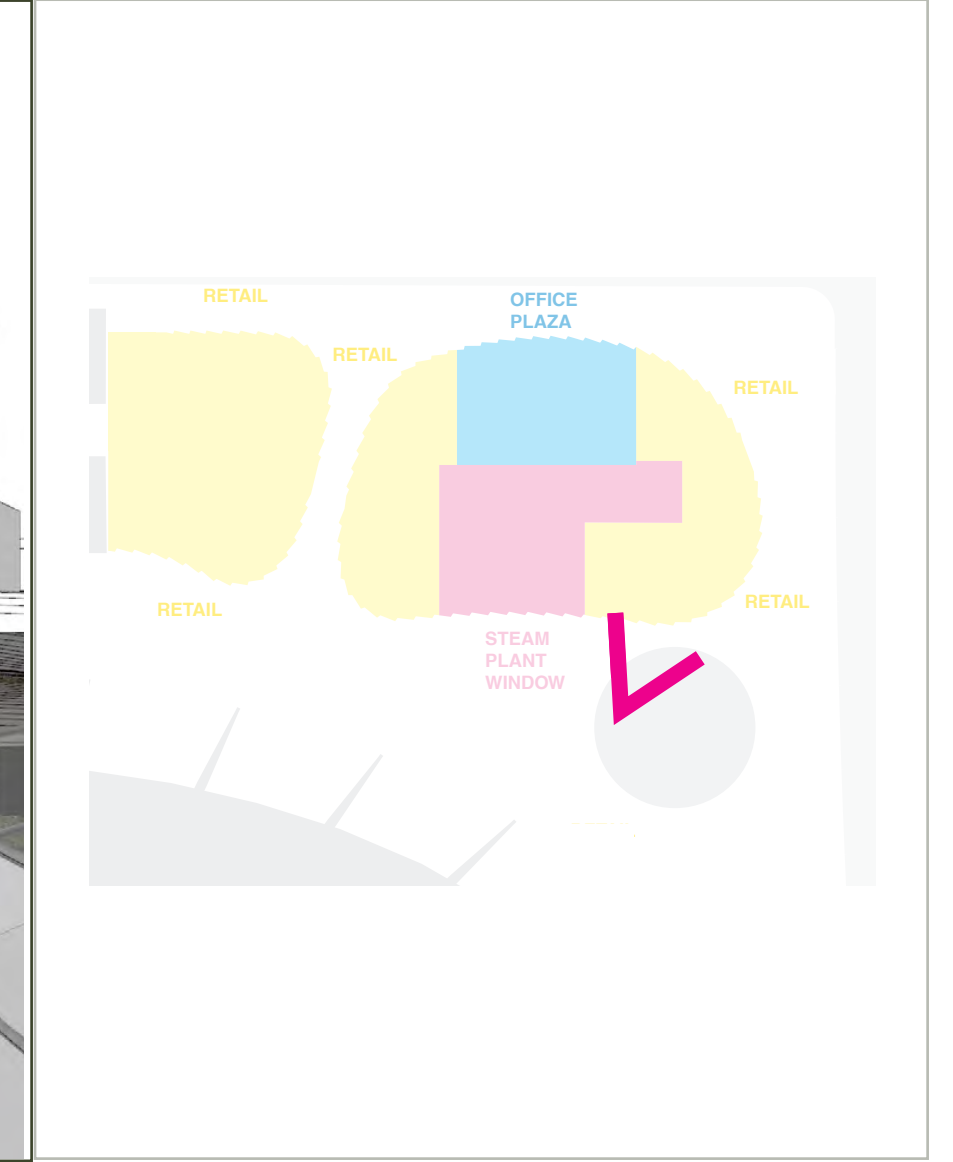
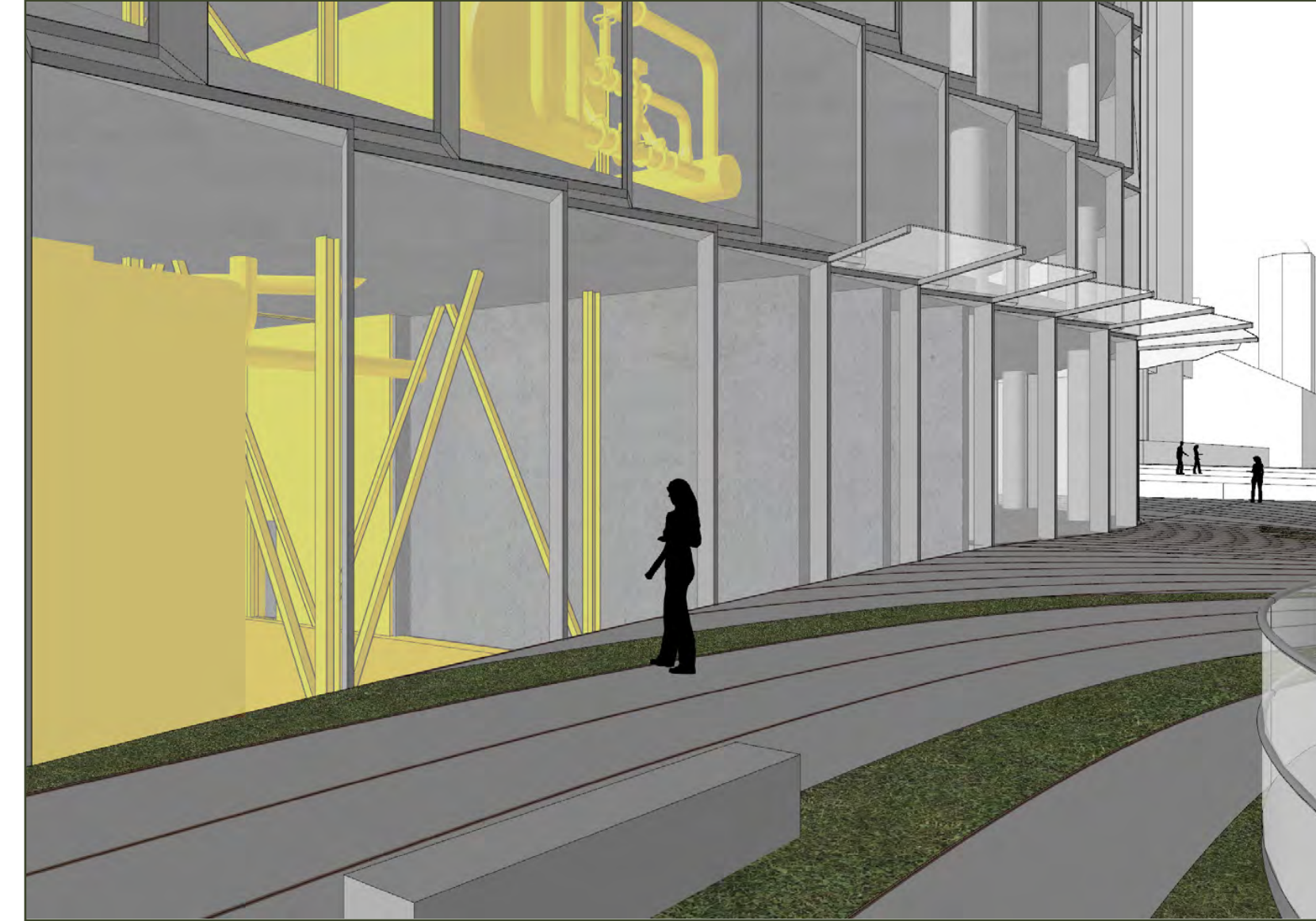
1. The plaza from BC Place Concourse



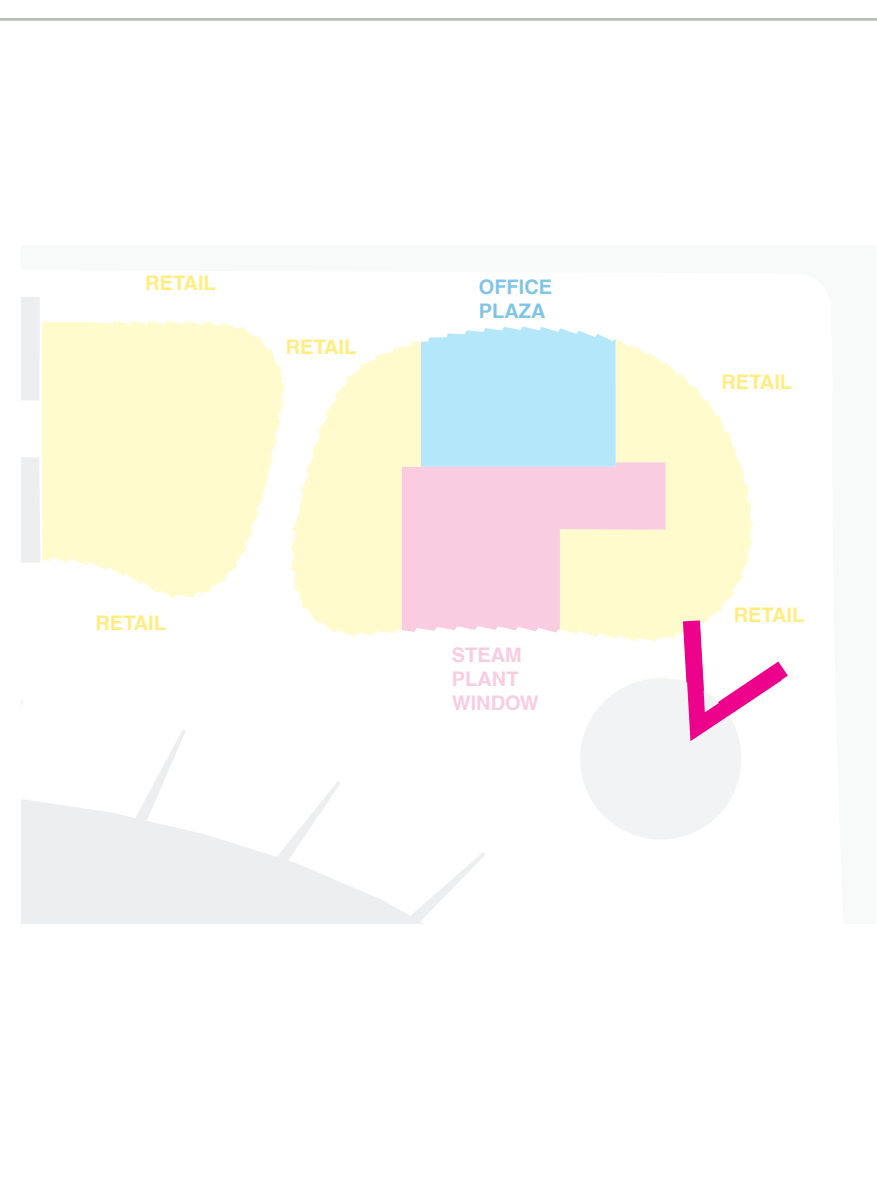
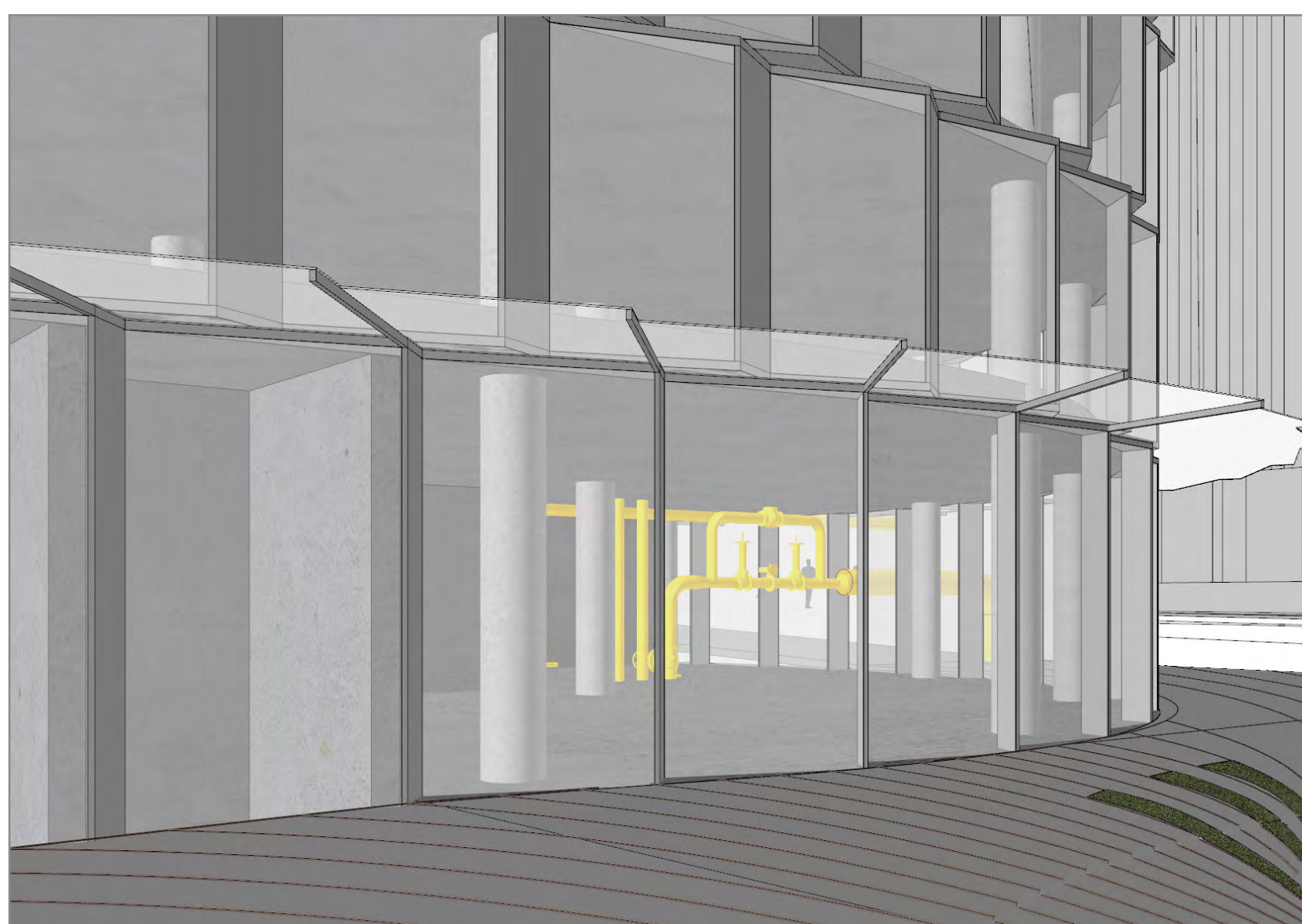
2. Approaching the steamplant



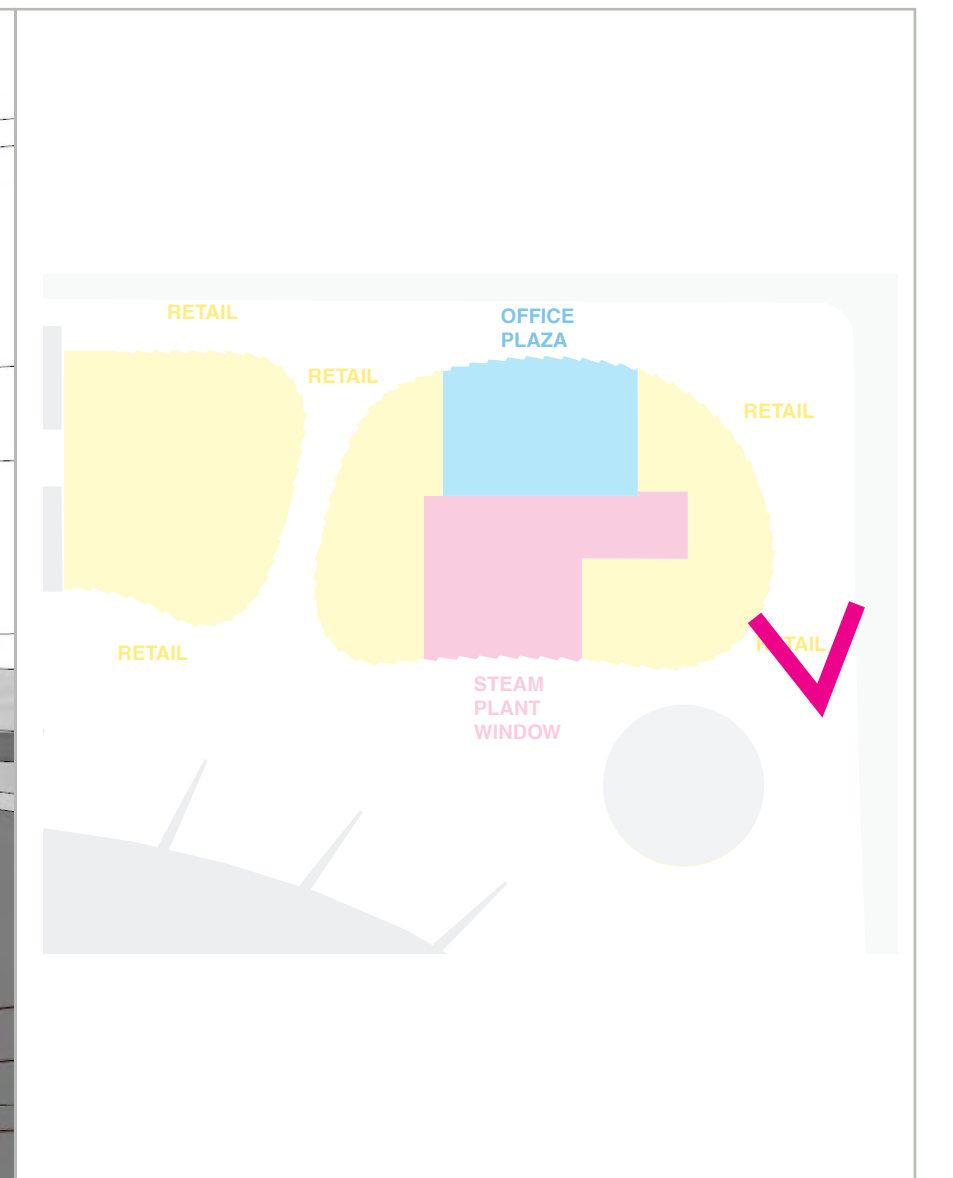
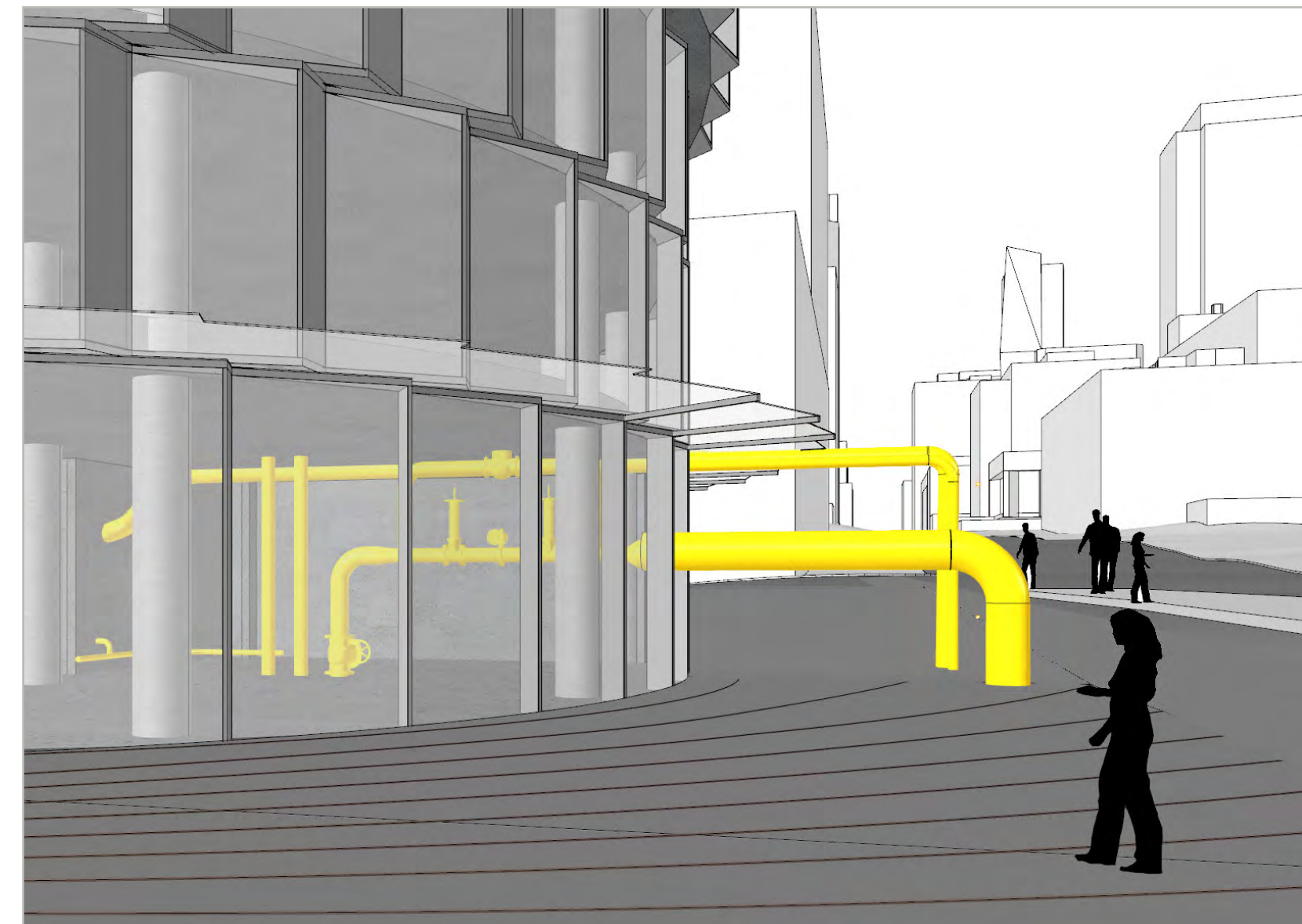
3. The steamplant can be seen from the plaza and adds a new exciting element to the public realm



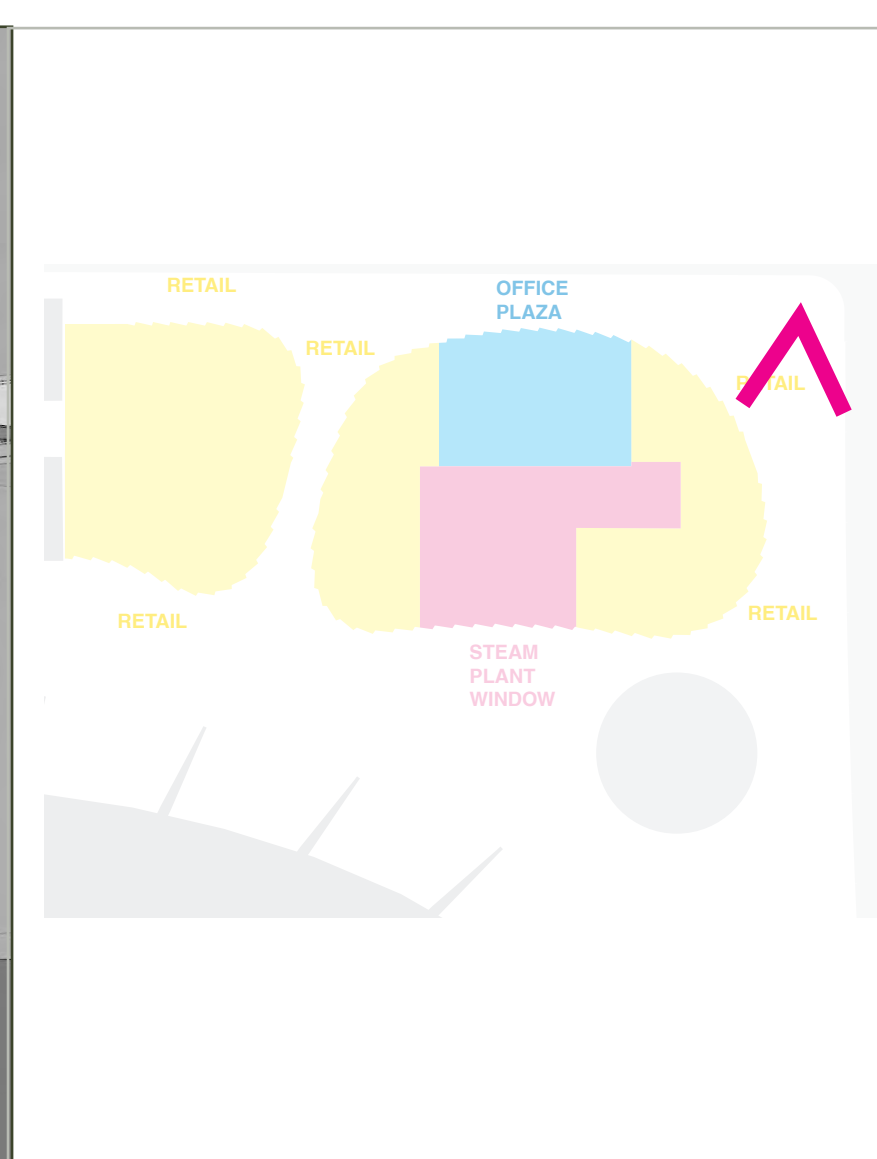
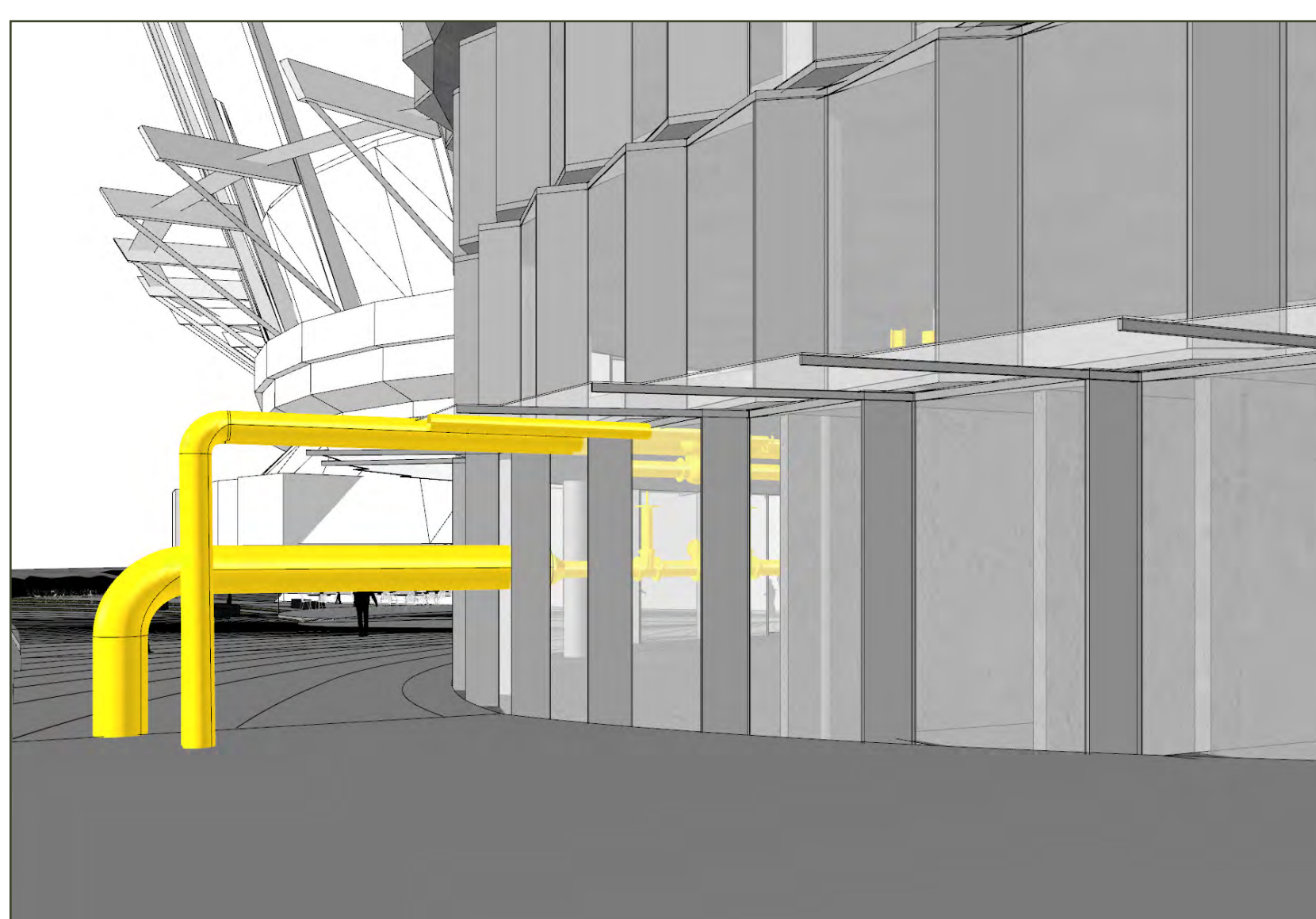
4. Components from the steamplant continue to appear as pedestrians follow the facade towards Georgia Street



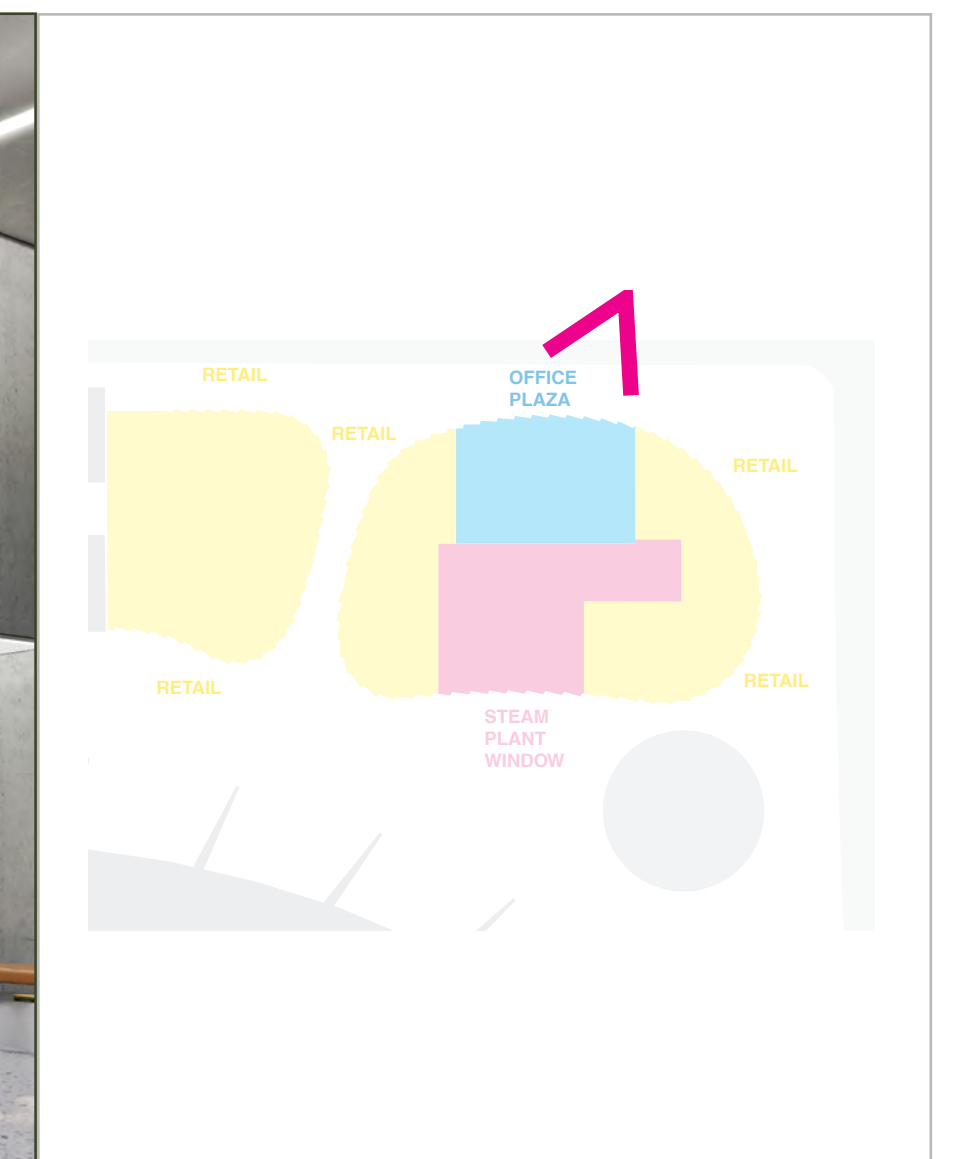
5. Steamplant pipes pass through a retail space



6. Walking towards downtown beneath the steamheaders



7. From the intersection of Georgia and Beatty pedestrians can see pipes flow in and out of the building



8. Steam pipe is prominently displayed in the lobby, celebrating the plant

Initiatives in Sustainability

The proposal at 720 Beatty Street incorporates sustainable design principles to reduce greenhouse gas emissions, parking, water, and energy consumption.

SUSTAINABLE SITE DESIGN: a passive site design has been developed to minimize energy needs including reducing reliance on mechanical systems for heating, cooling, and lighting. The design makes increased use of solar energy and capitalizes on the direction of the wind.

ACCESS TO NATURE: the project creates opportunities for people to directly experience nature in the city, as well as improve the well-being of the community through landscaping that provides habitat and enhances ecosystem functions and services.

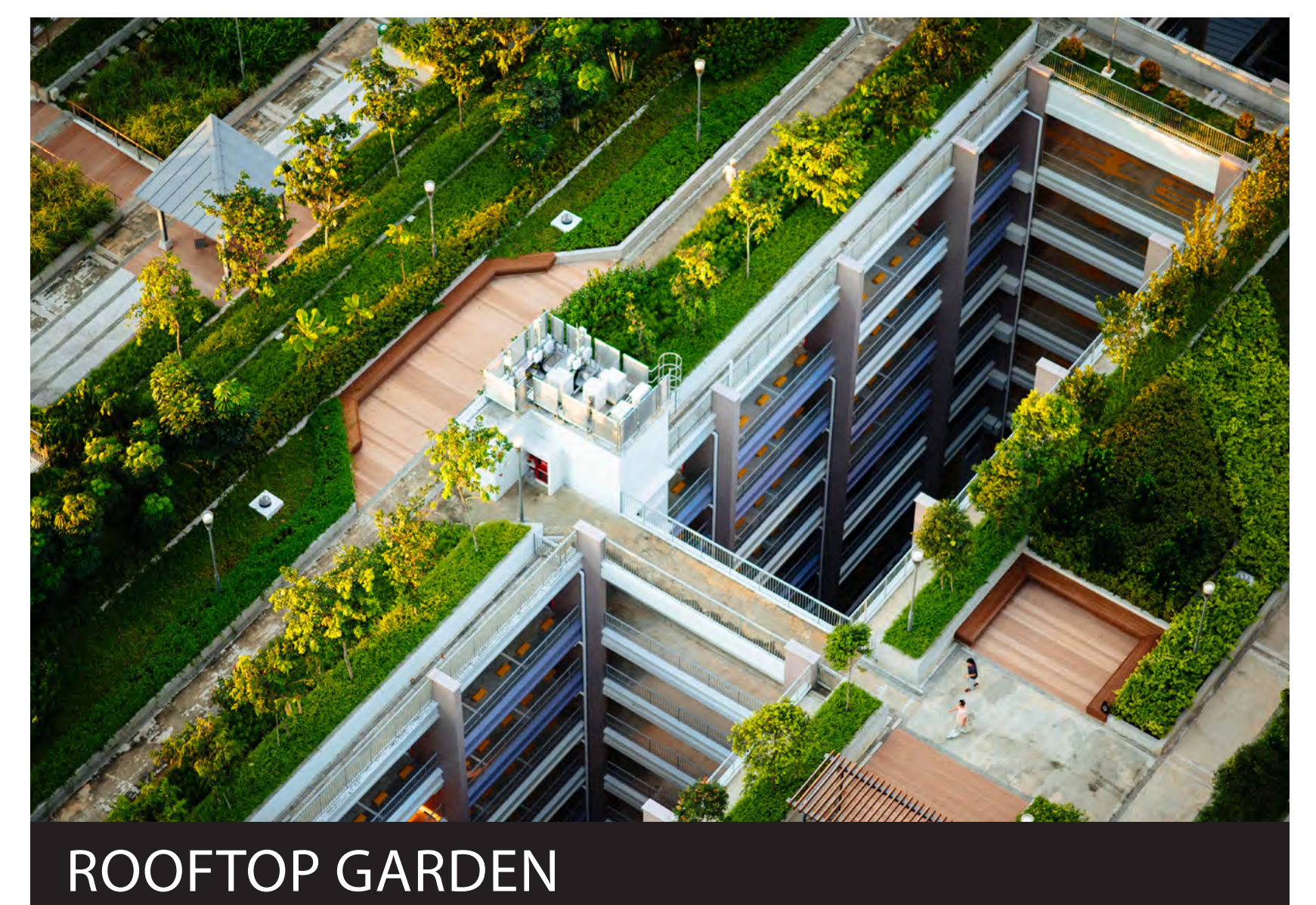
SUSTAINABLE FOOD SYSTEMS: opportunities on site to engage with local food systems include a kitchen garden, an edible roof landscape, and urban bee keeping.

GREEN MOBILITY: a green mobility plan has been created, which includes high-quality end of trip cycling facilities, pedestrian amenities such as benches and fountains, car share programs, and clear wayfinding throughout the site.

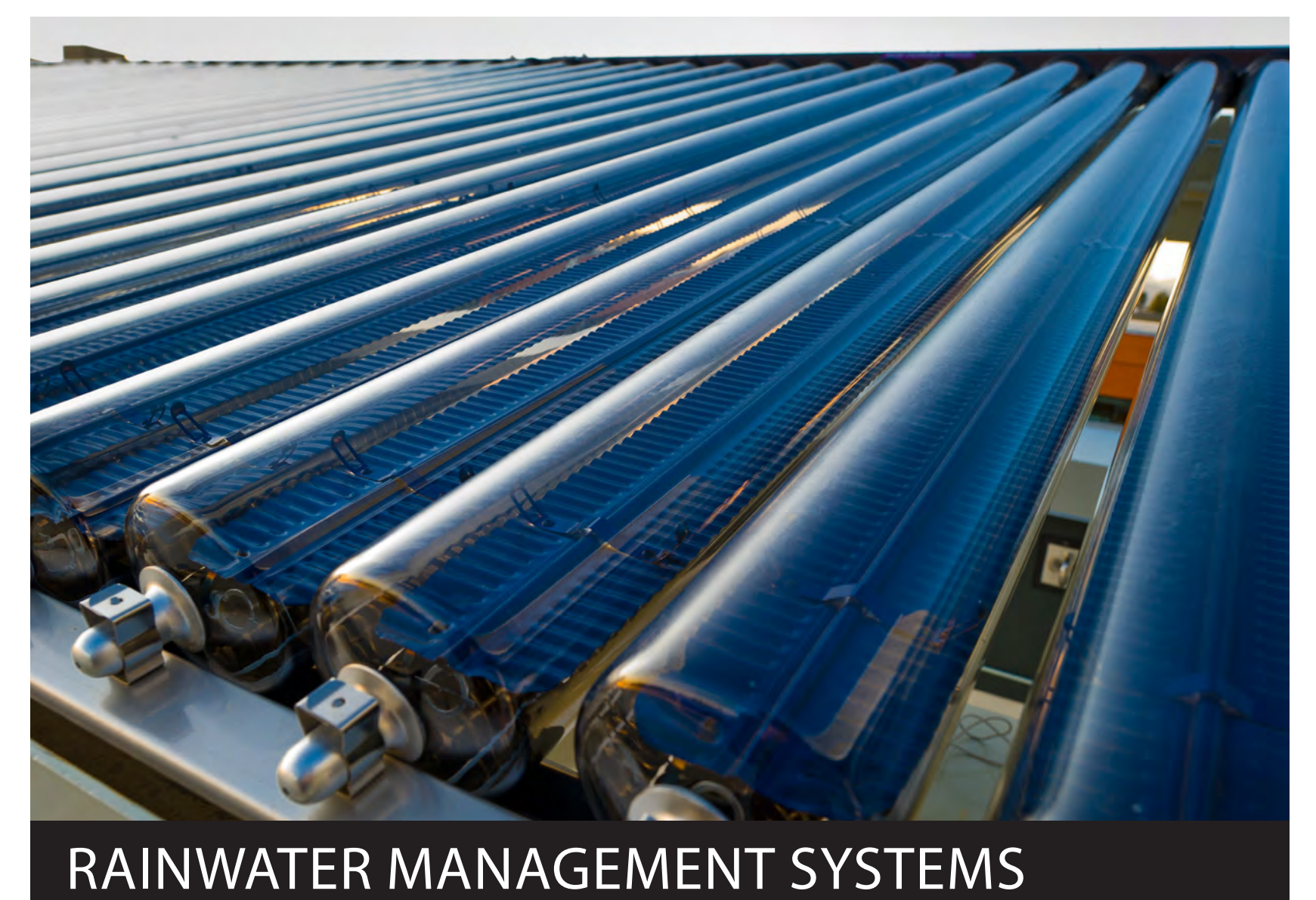
RAINWATER MANAGEMENT: at 720 Beatty Street, there is an opportunity to reuse rainwater by diverting it to either plumbing in the office spaces or for use in the steam plant, reducing the demand for potable water on site.



SUSTAINABLE SITE DESIGN



ROOFTOP GARDEN



RAINWATER MANAGEMENT SYSTEMS



PUBLIC OPEN SPACE

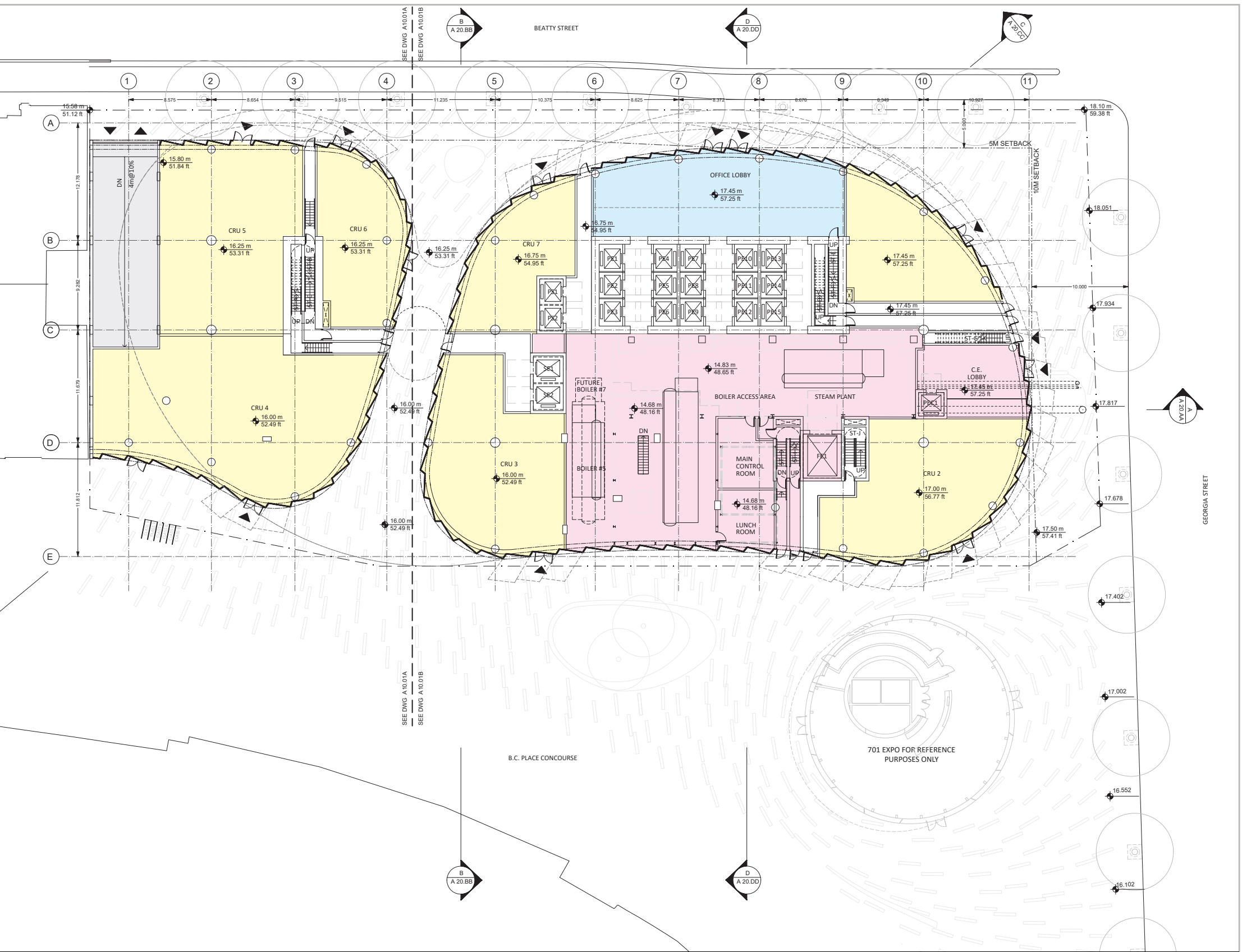


SUSTAINABLE SITE DESIGN

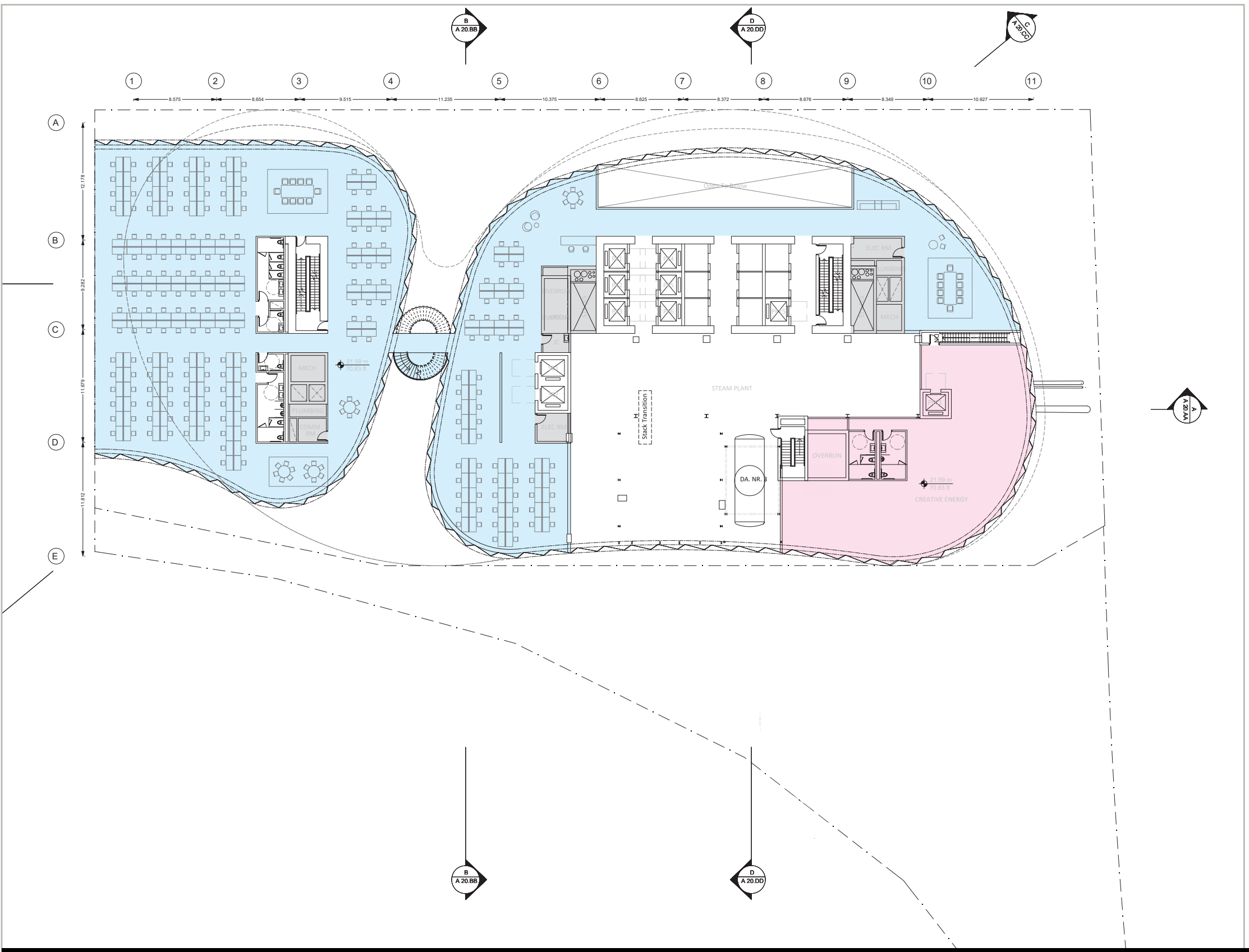


BIKE AND PEDESTRIAN IMPROVEMENTS

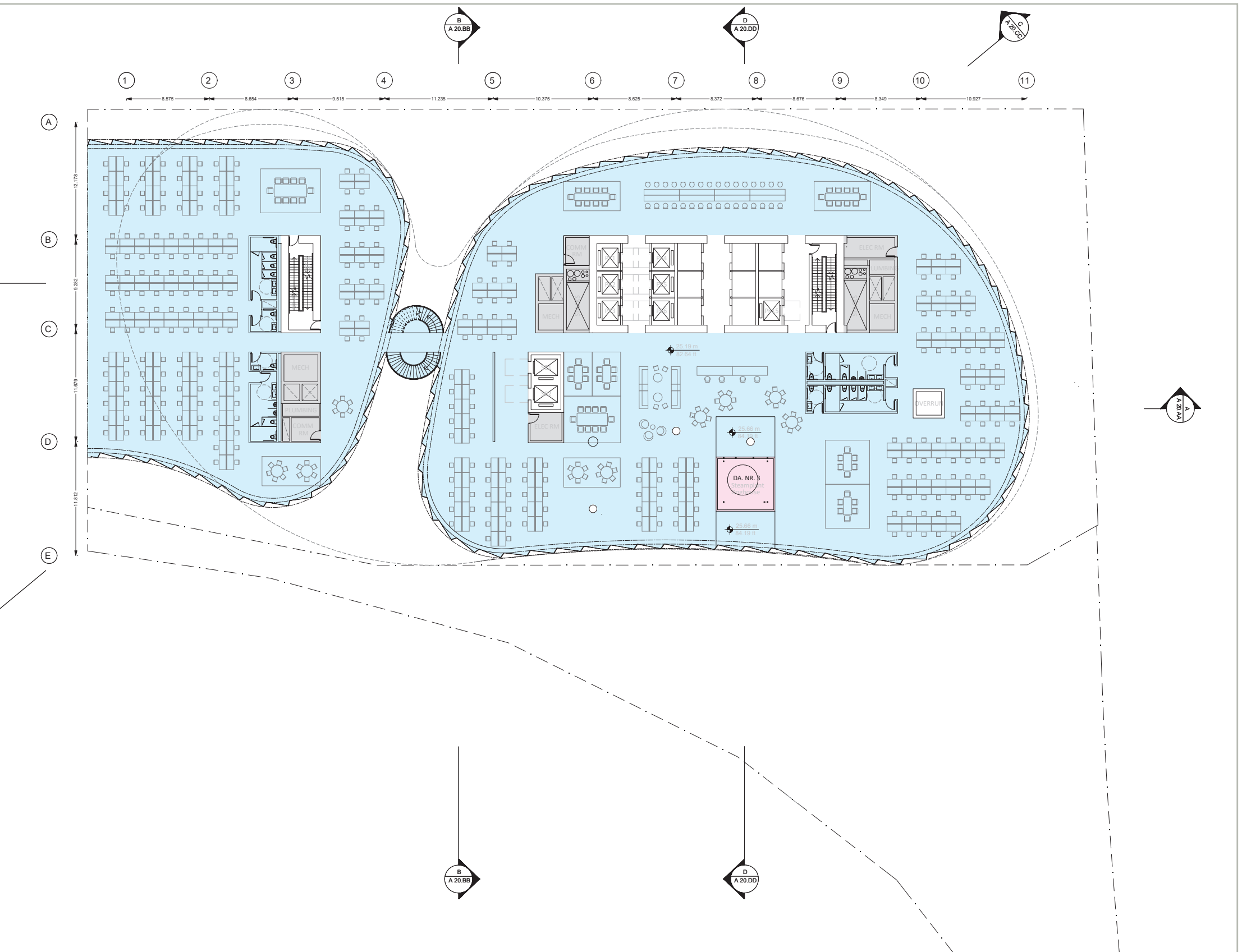
Floor Plans



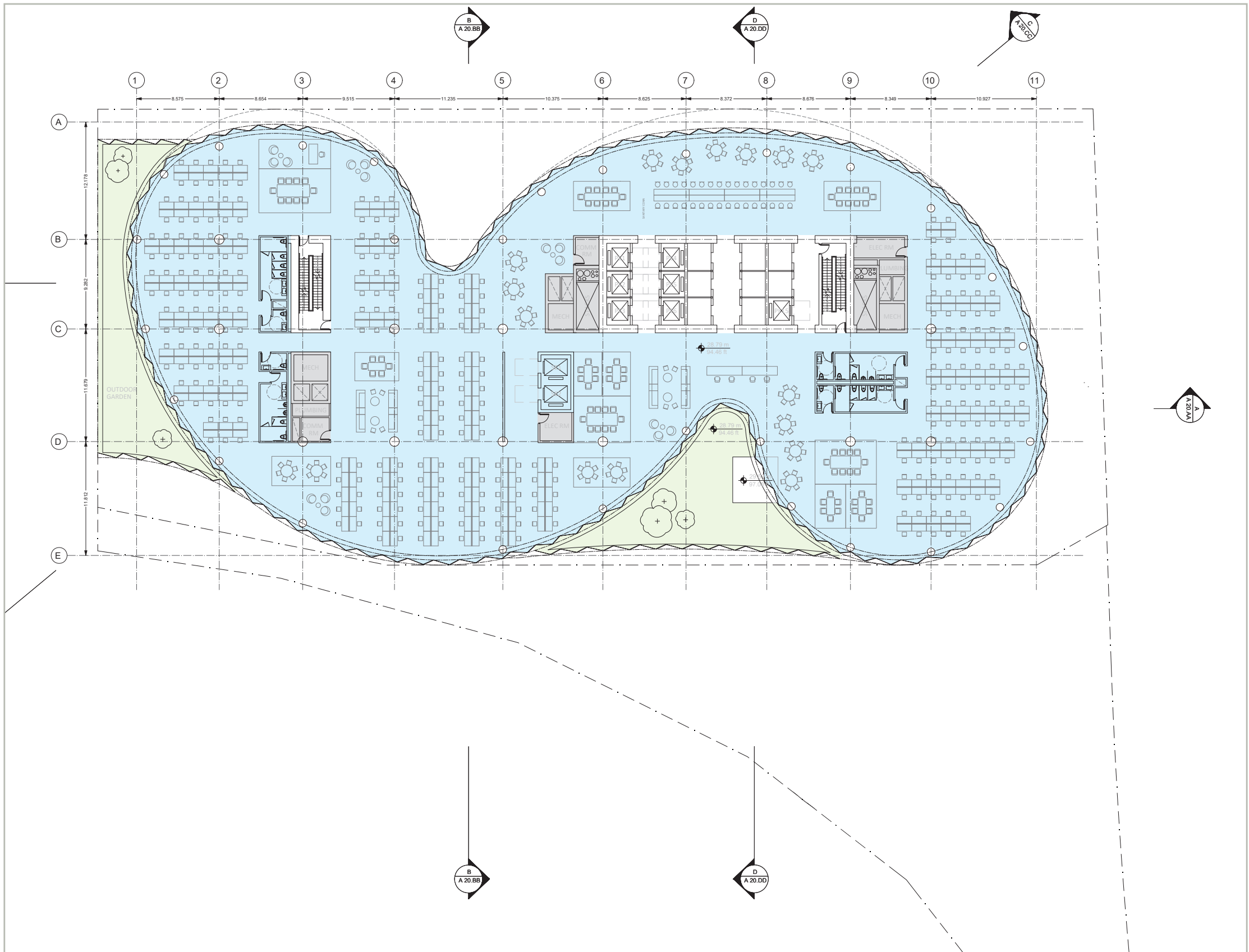
LEVEL 1



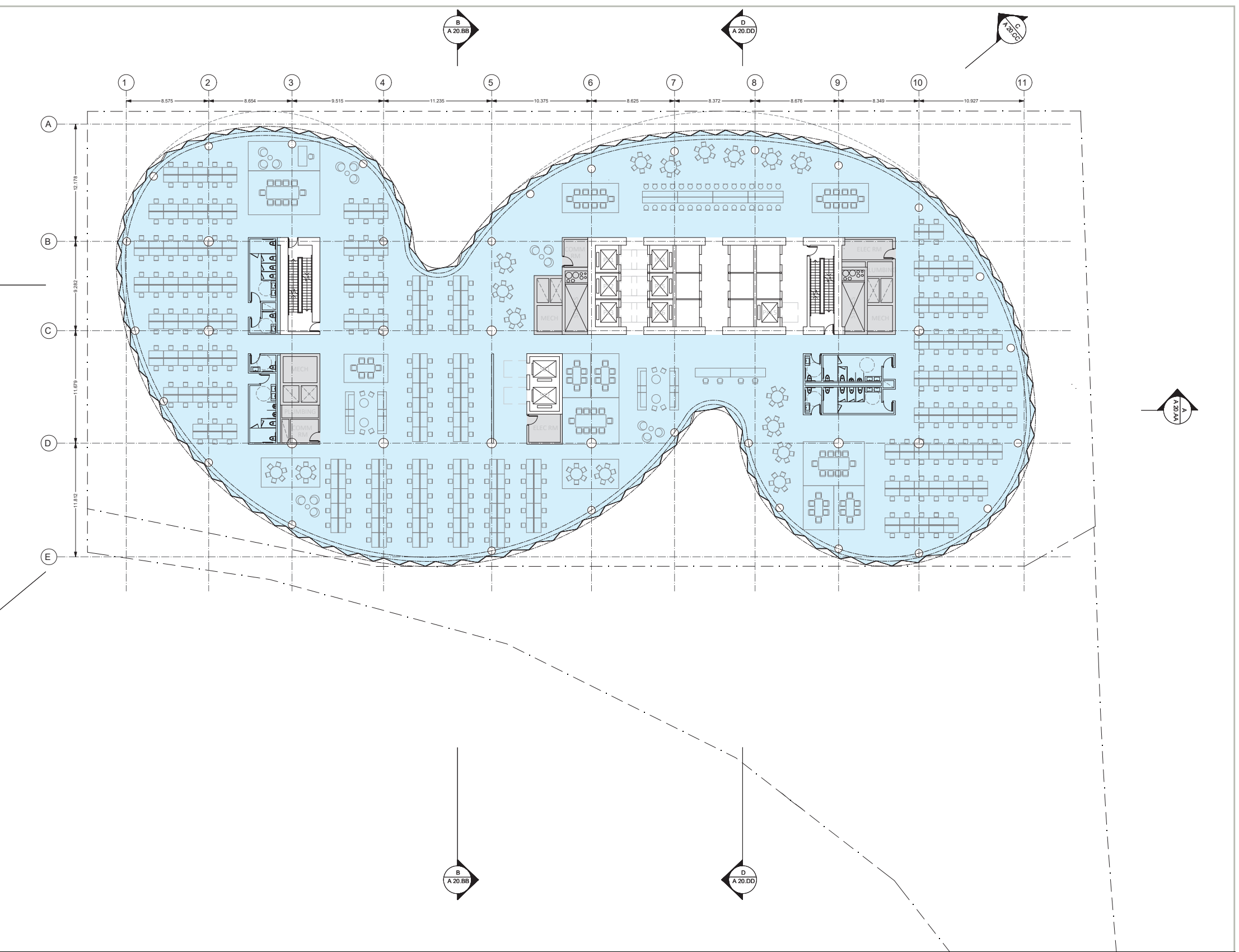
LEVEL 2



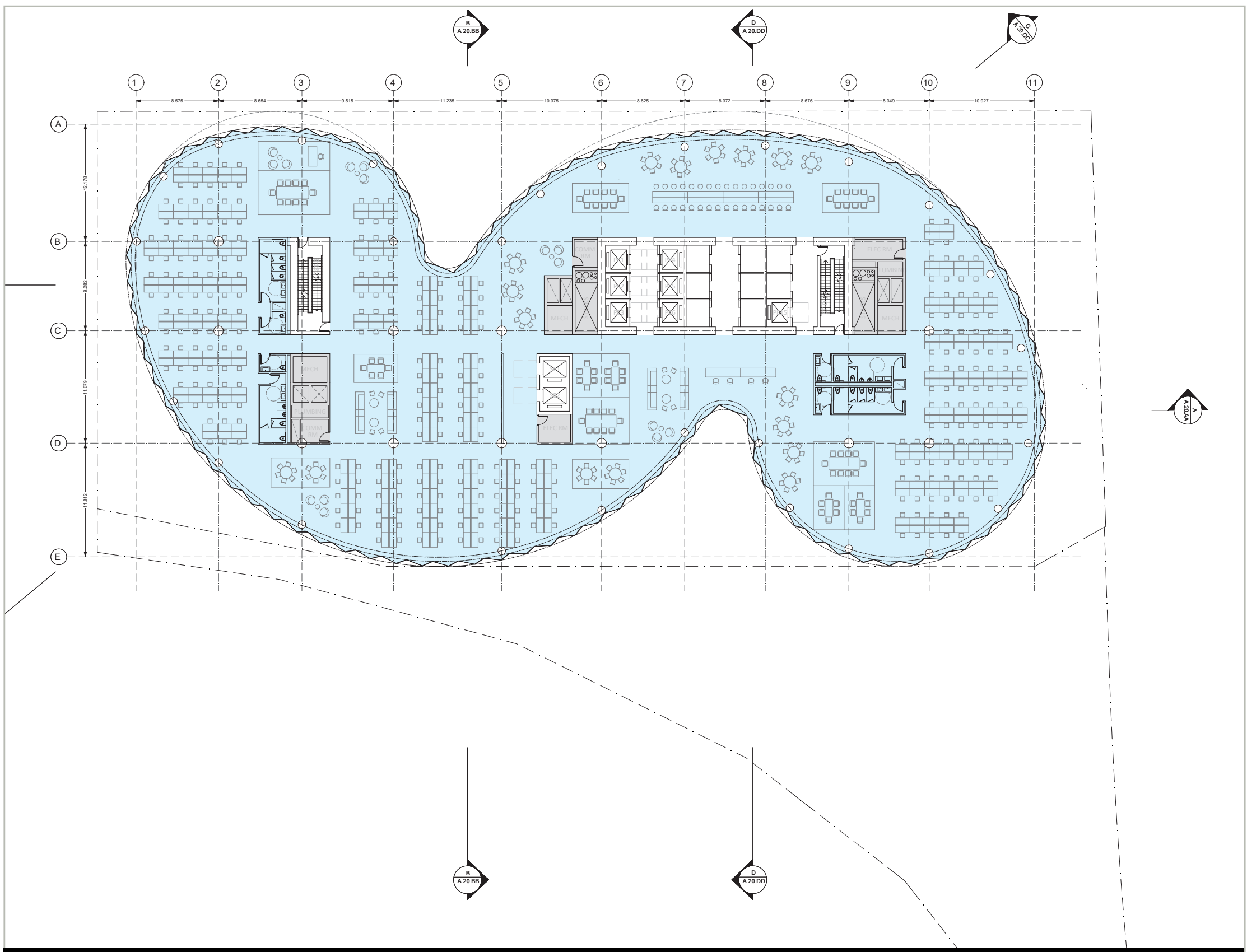
LEVEL 3



LEVEL 4

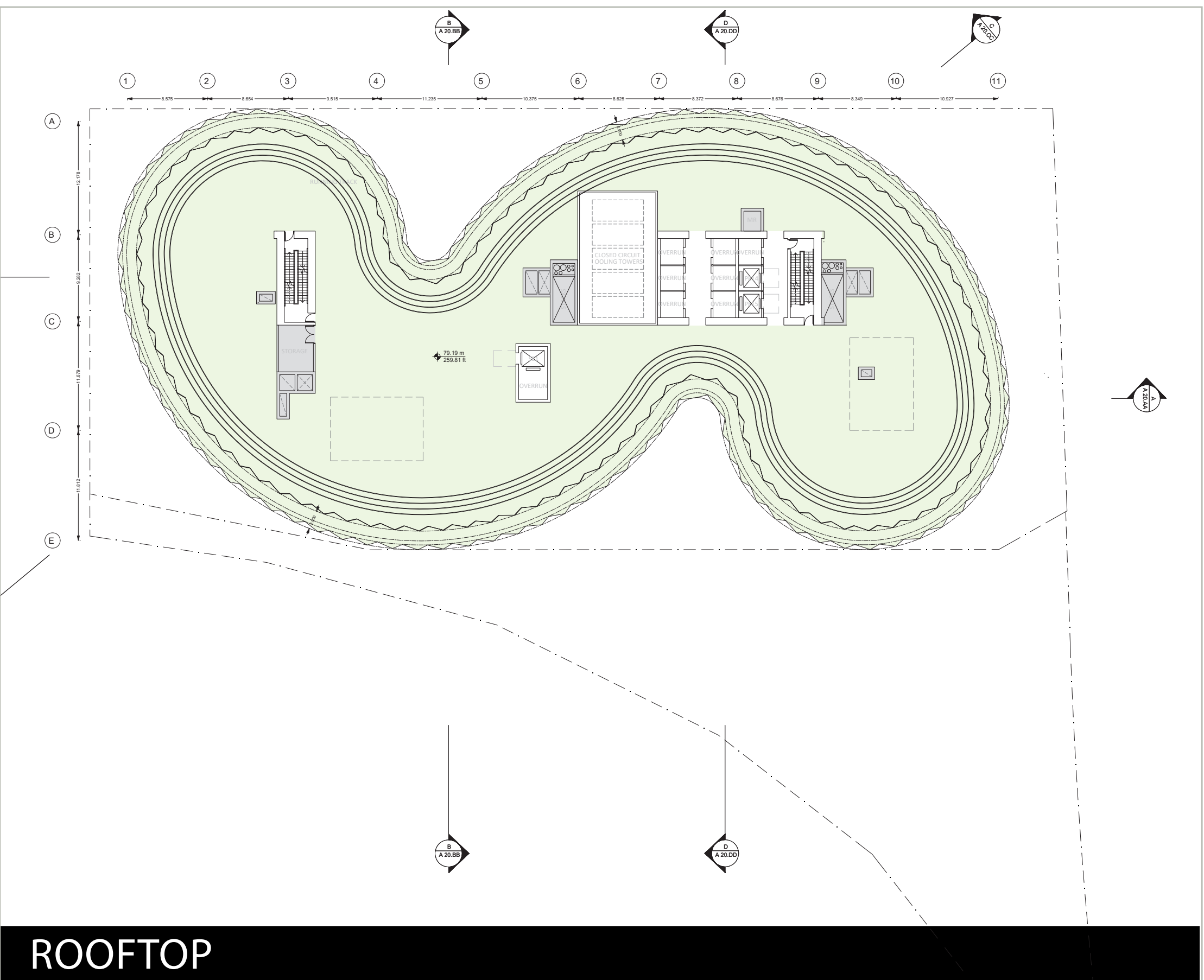
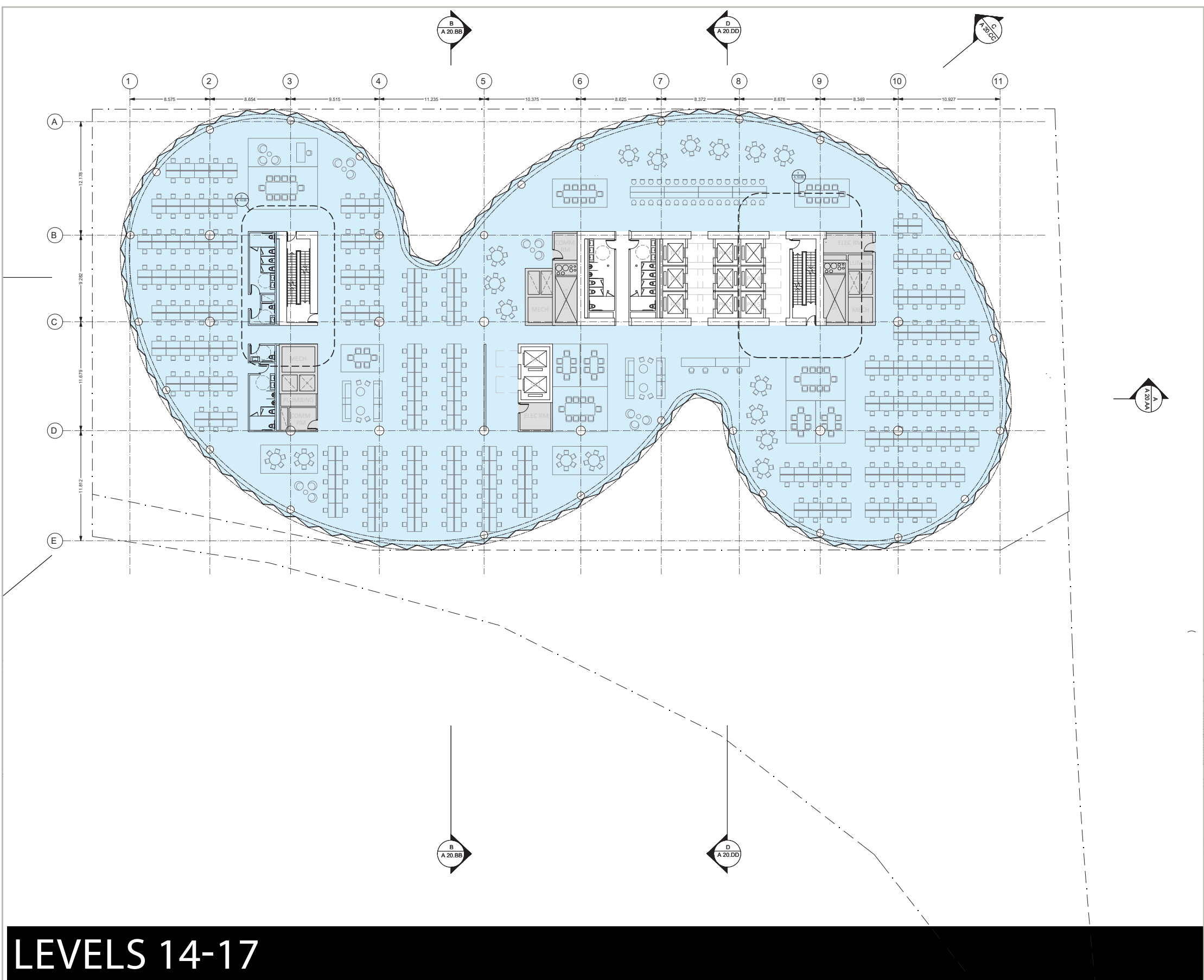
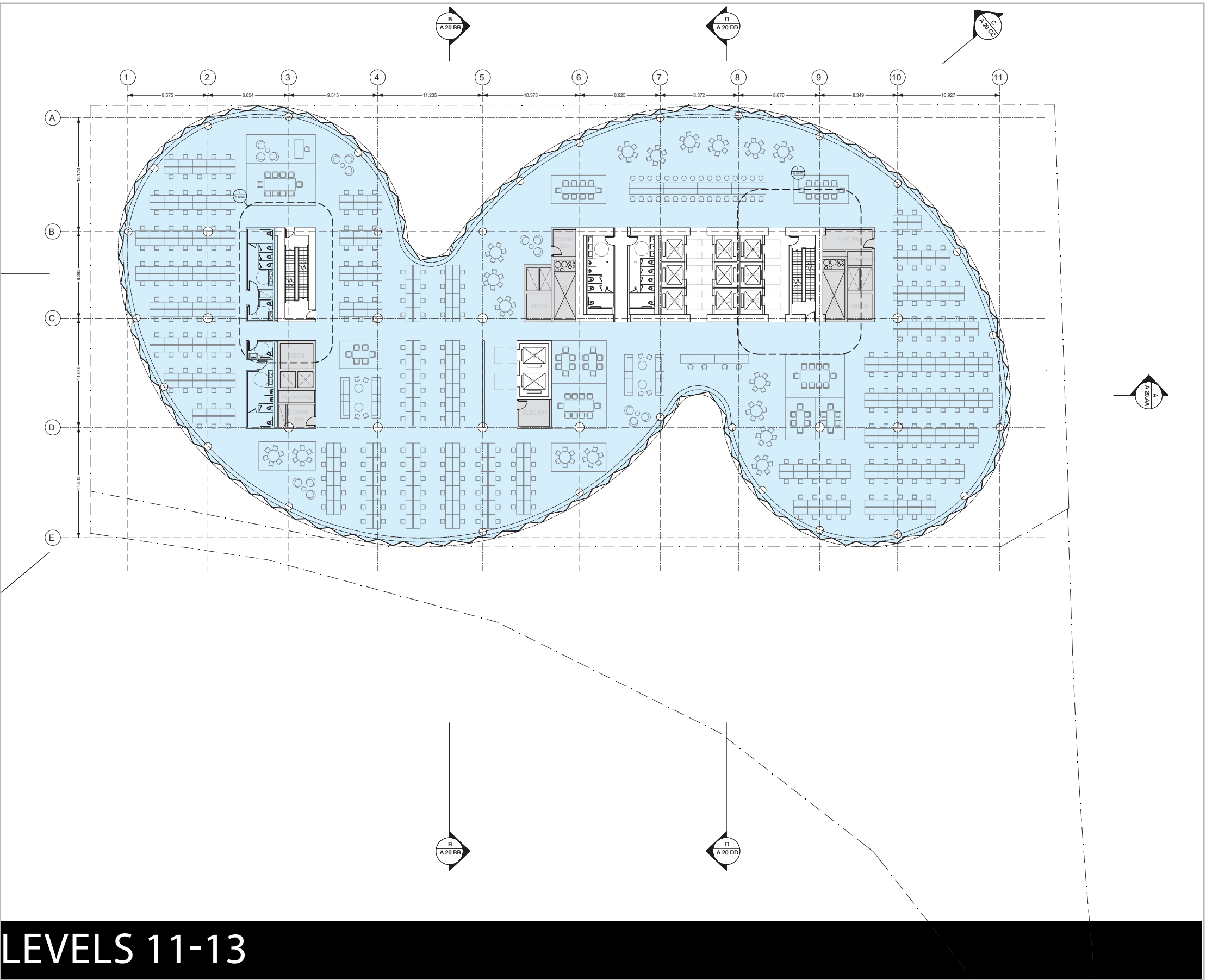
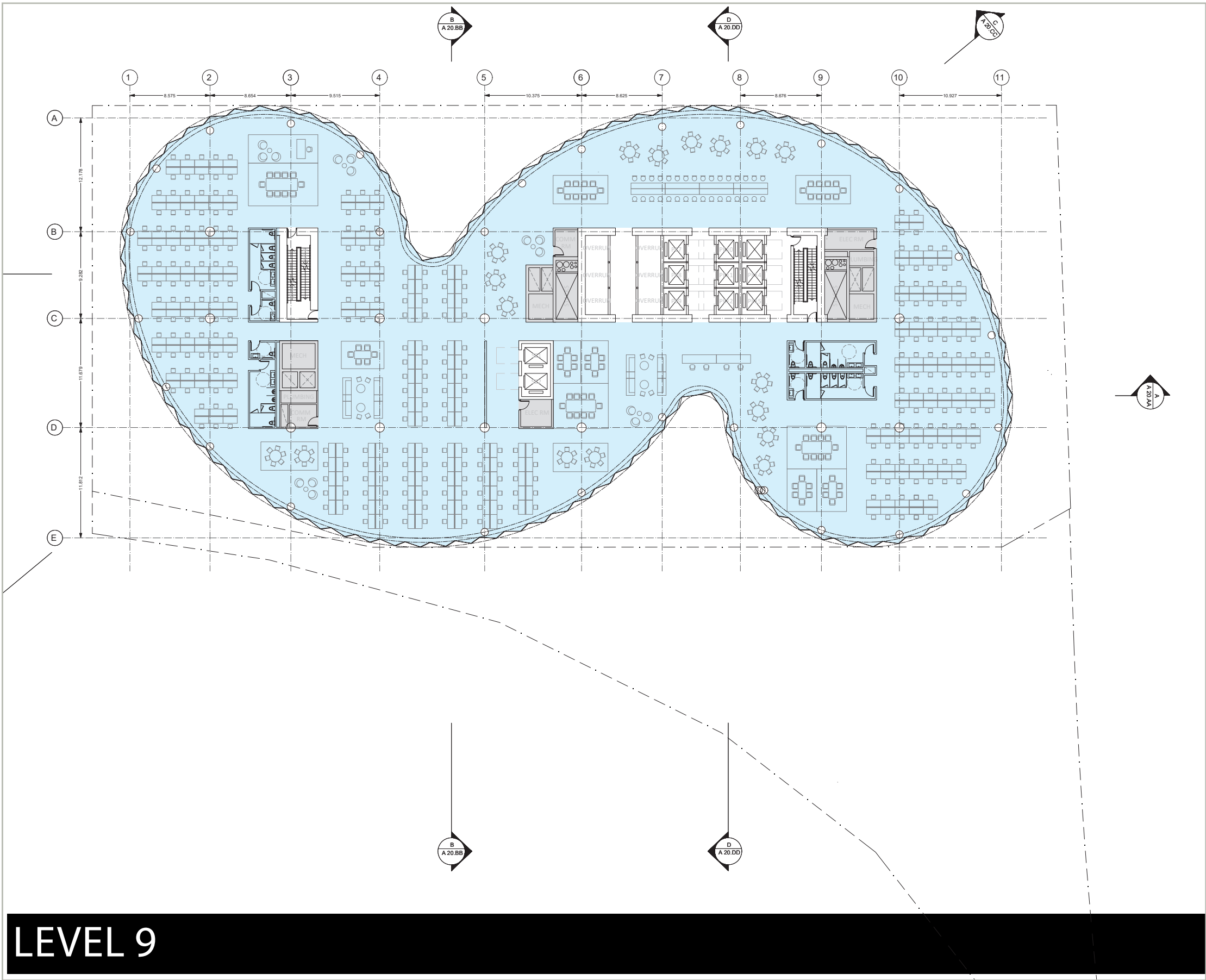
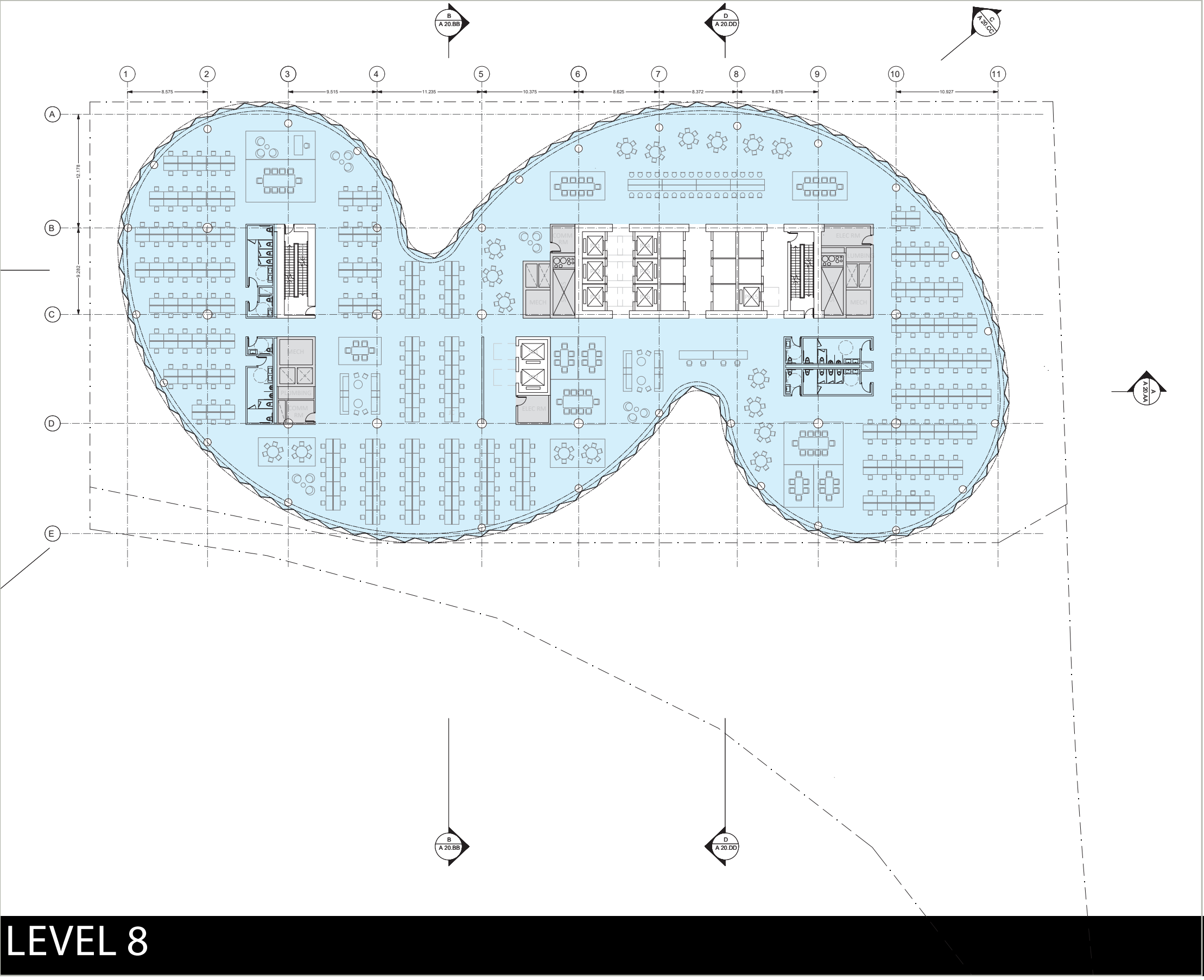
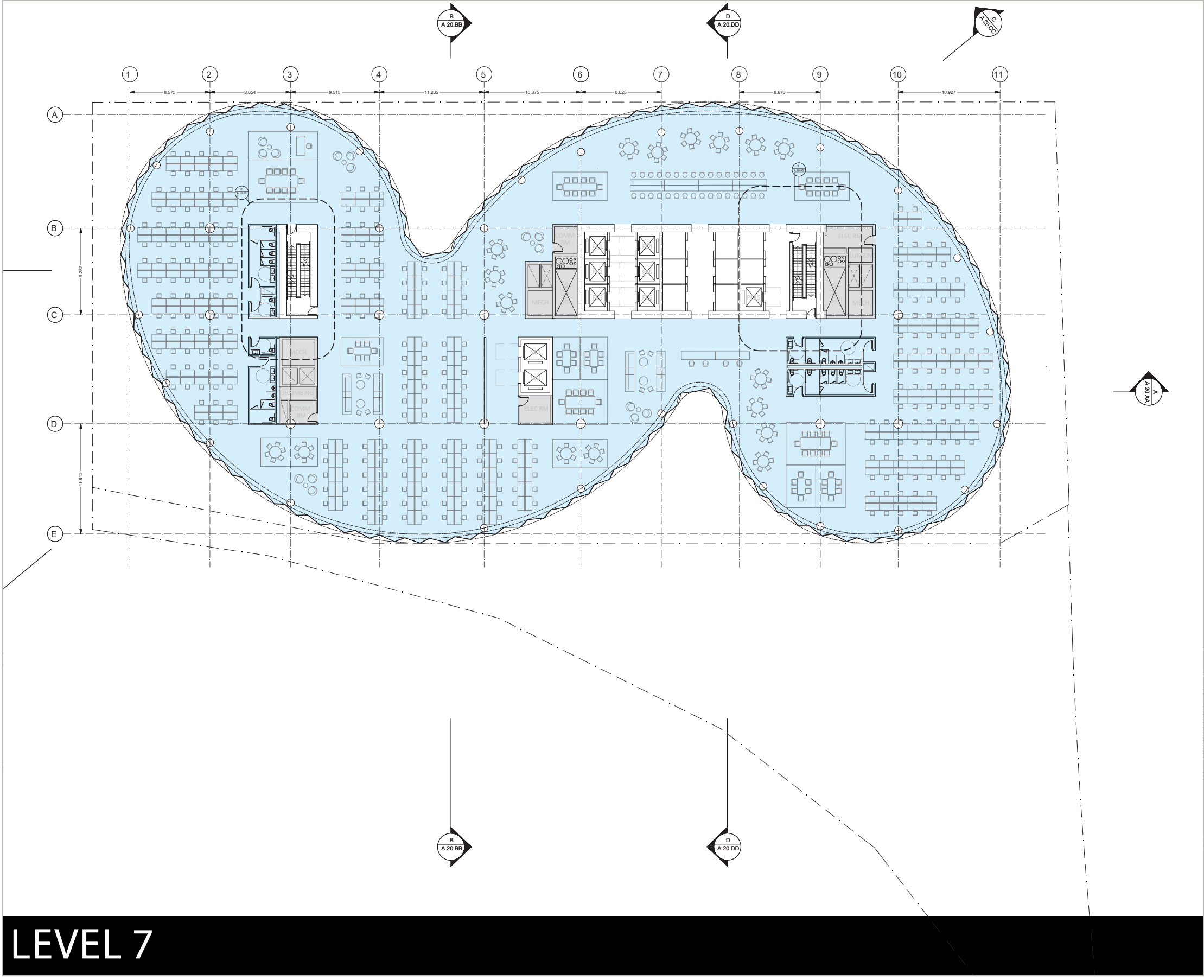


LEVEL 5

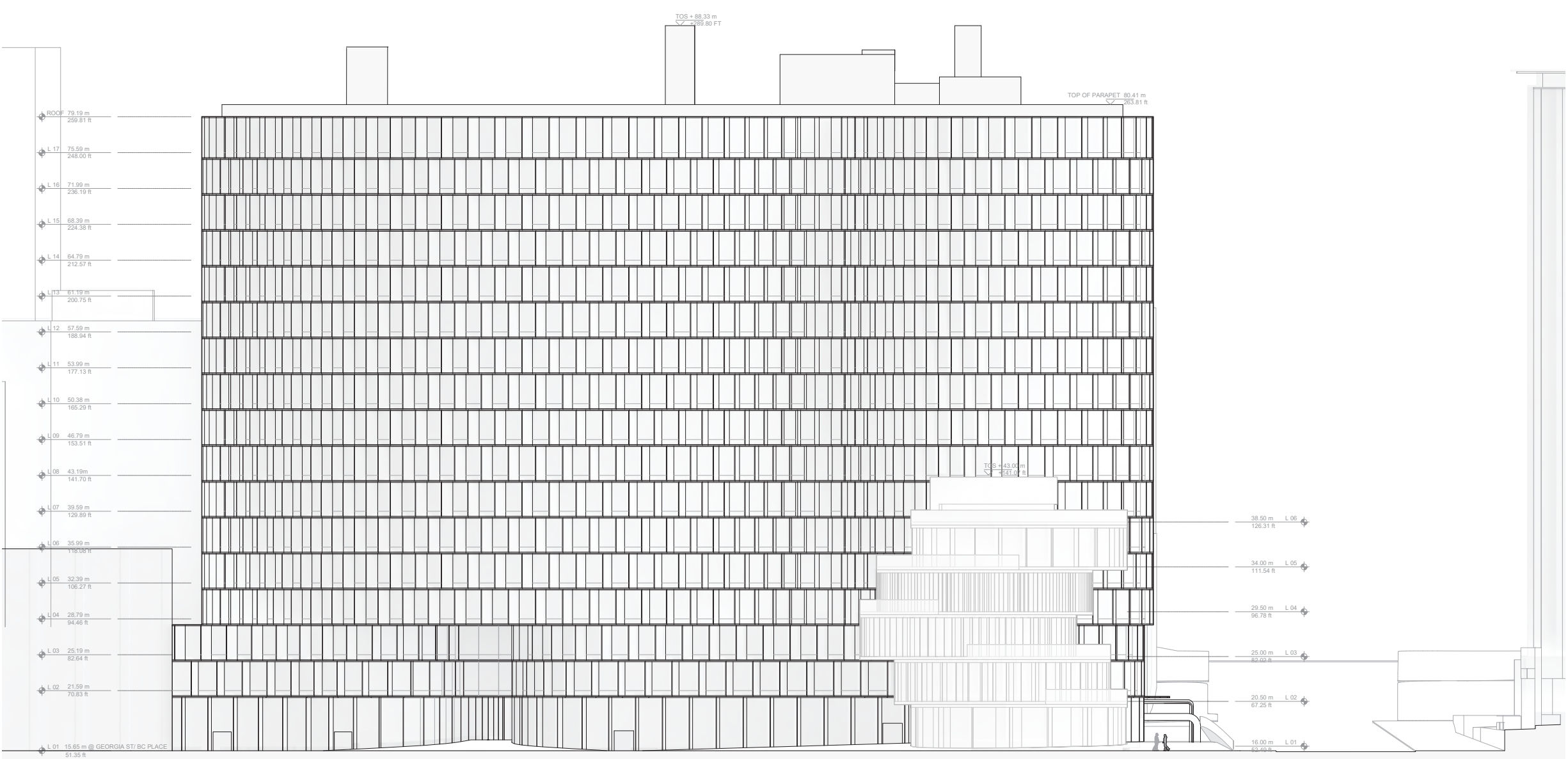


LEVEL 6

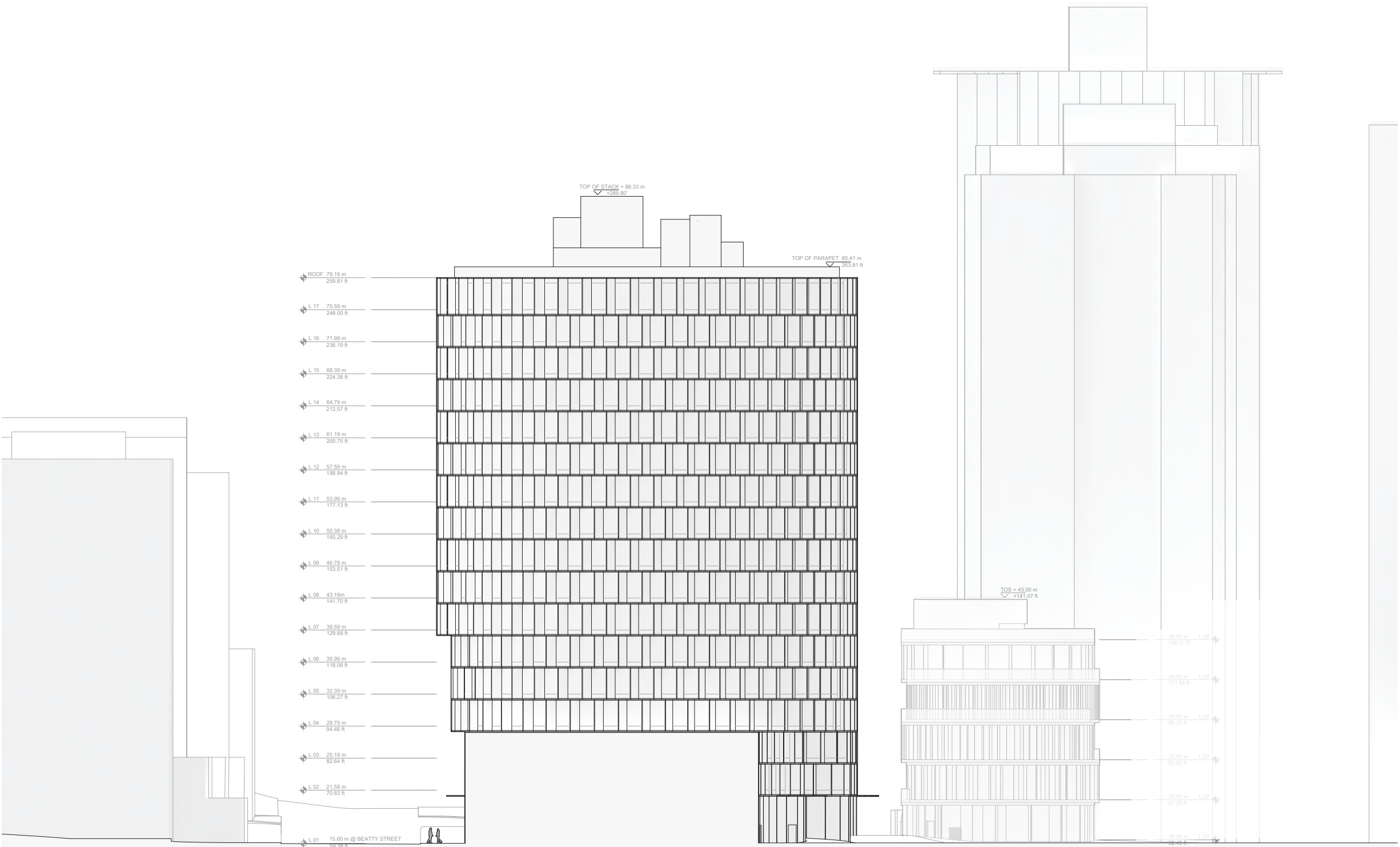
Floor Plans



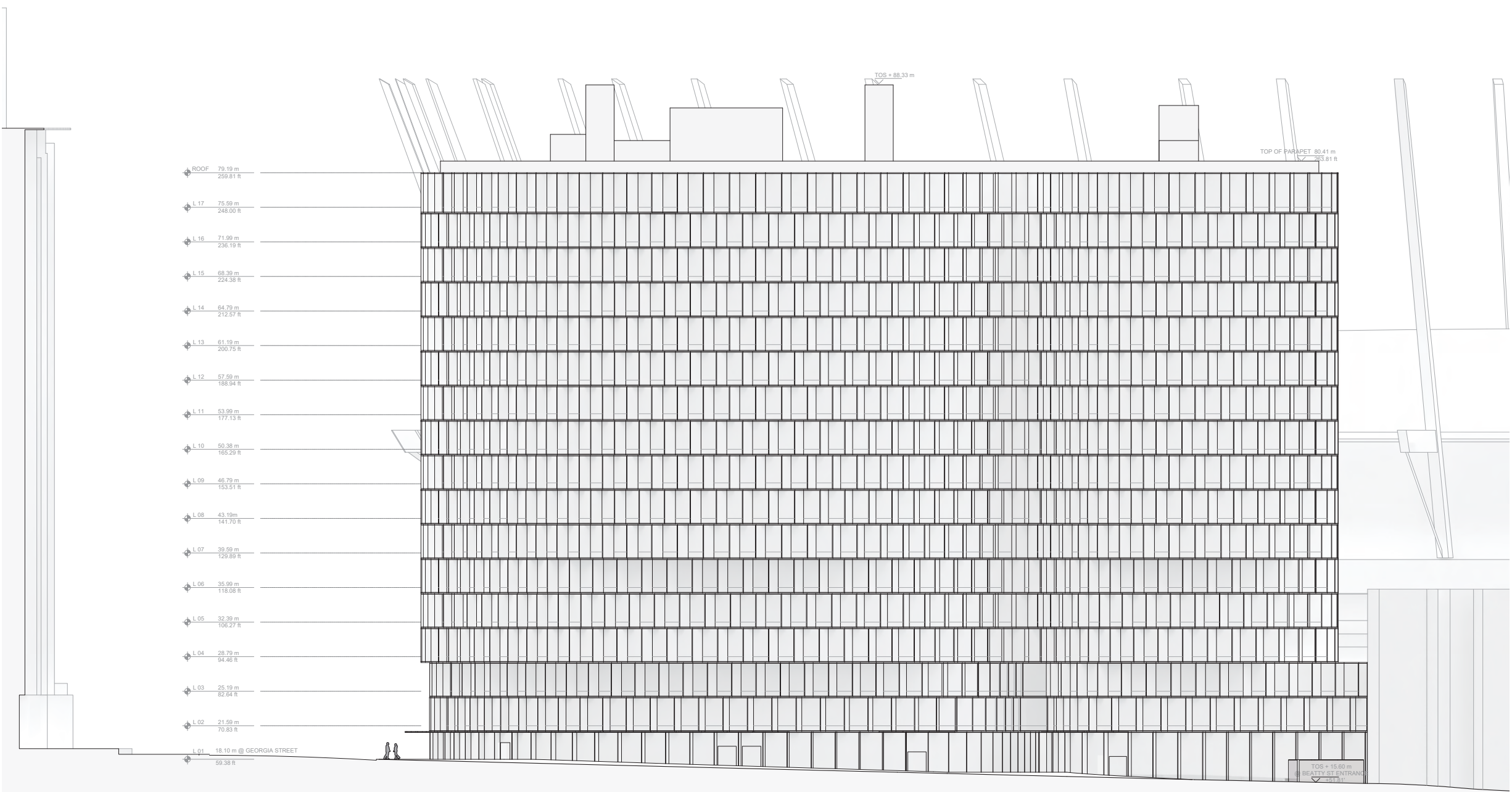
Elevations



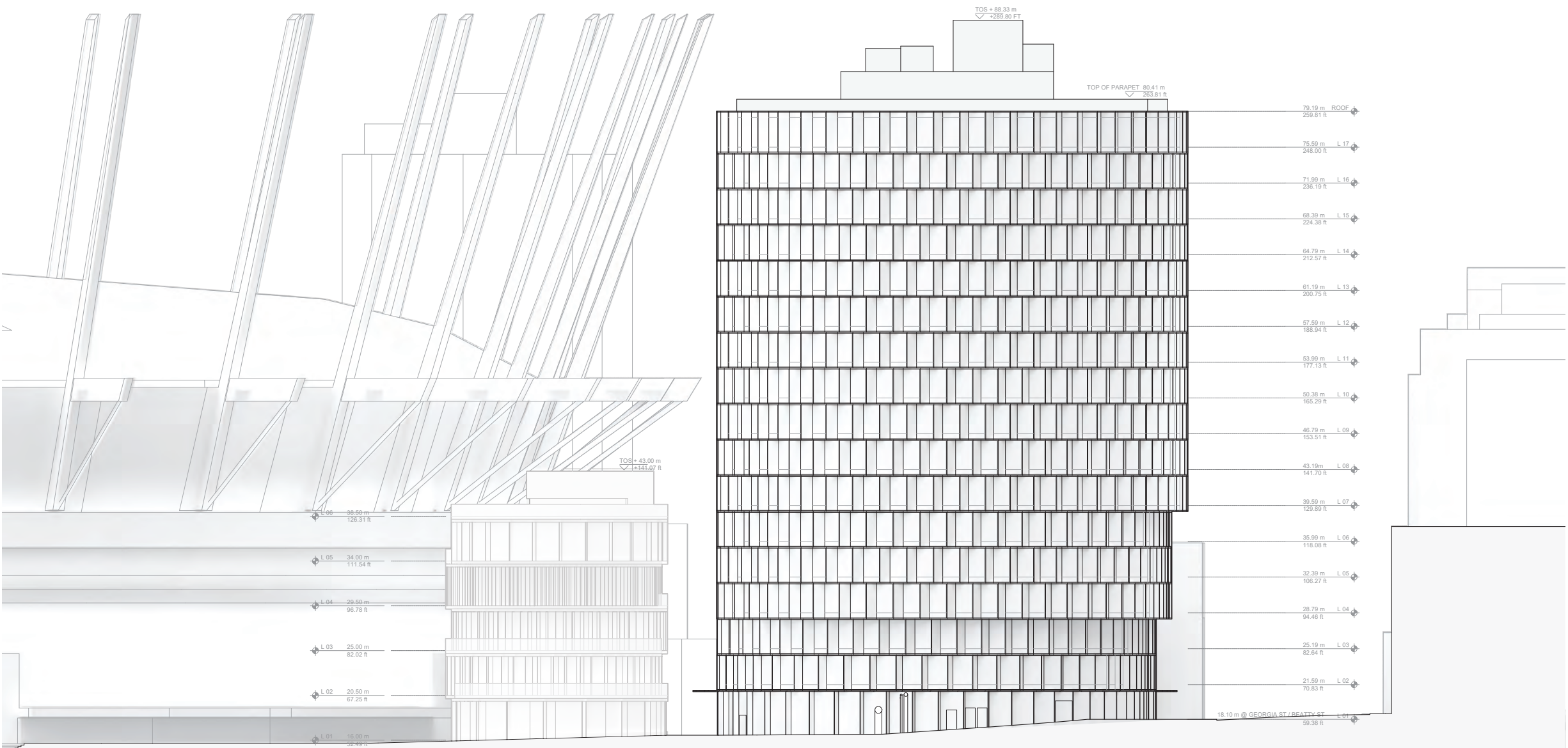
WEST ELEVATION - BEATTY ST



SOUTH ELEVATION - BEATTY ST



EAST ELEVATION - EXPO + BC PLACE CONCOURSE



NORTH ELEVATION - W GEORGIA

Renderings



DESIGN CONCEPT - BIRDS EYE VIEW



DESIGN CONCEPT - BIRDS EYE VIEW

Renderings



BIRDS EYE VIEW: LOOKING NORTHWEST



LOOKING NORTHWEST ALONG WEST GEORGIA STREET

Renderings



LOOKING EAST ACROSS BEATTY STREET



LOOKING WEST FROM BEATTY STREET

Renderings



PROPOSED BREEZEWAY



PROPOSED PLAZA

Renderings



PROPOSED LOBBY SPACE



PROPOSED OFFICE SPACE