

**CLAYCO**

THE ART & SCIENCE OF BUILDING

PITTSBURGH ARENA REAL ESTATE  
REDEVELOPMENT LP

**FS ARCHITECTURE, PC**  
A PROFESSIONAL CORPORATION

U. S. STEEL HEADQUARTERS

LOWER HILL PLANNED DEVELOPMENT DISTRICT  
PITTSBURGH, PA

PLANNING COMMISSION HEARING 03.24.2015



## PROJECT SUMMARY

|                  |   |
|------------------|---|
| PROJECT NAME     | U. S. Steel Corporation Headquarters  |
| LOCATION         | Block D - Lower Hill Planned Development District<br>Pittsburgh, PA   |
| SITE AREA TOTAL  | 2.23 acres / 97,138.8 square feet   |
| ZONING           | SP-11<br>Office & Retail Use  |
| SITE SUBDIVISION | Parcel D1 = 1.89 acres / 82,328.4 square feet<br>Parcel D2 = 0.34 acres / 14,773 square feet  |
| BUILDING HEIGHT  | Required: 160'-0" maximum / 50'-0" minimum<br>Provided: 77'-6" average parapet height – 5 levels<br>88'-0" average mechanical screen height   |
| PARKING          | Offstreet: None required / None provided  |
| PROGRAM          | Total: 285,000 gross square feet<br>Office: 250,000 rentable square feet office (approximate)<br>Retail: 18,000 rentable square feet (approximate)<br>Footprint: 57,000 gross square feet per floor (approximate) |

## DESIGN NARRATIVE

The following project narrative allows for a proposed office and retail development on a 2.23 acre parcel named Block D at the Lower Hill Planned Development District.

The Lower Hill Planned Development District is a specially planned 28 acre site which was formerly the Pittsburgh Penguins Civic Arena Site. The site lies east of Downtown Pittsburgh and is surrounded by the Hill District, Uptown, and CONSOL Arena.

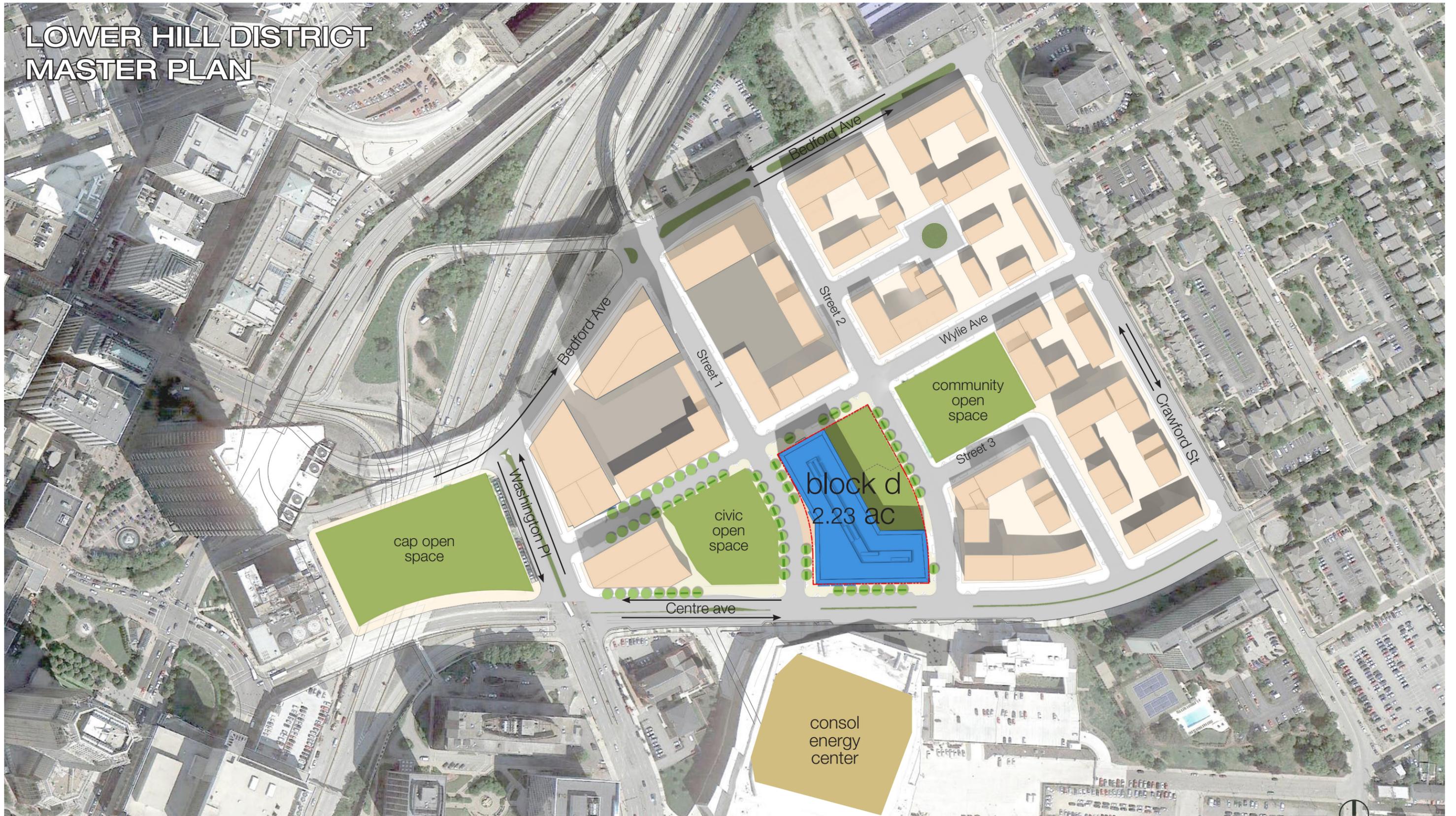
The project design goals include creating a high quality, mixed use, and sustainable corporate headquarters development that celebrate Pittsburgh's rich history in the development of the steel industry and reinforce the brand and corporate philosophy of the United States Steel Corporation.

Located as the backdrop to the civic urban park on Block F, the project is uniquely placed at the major focal point of activity for the Lower Hill District. It is expected that the proposed project at Block D will provide opportunity for entertainment uses at the ground level which will aid in the extension of energy and excitement for outdoor concerts, pre-game events, and other festival venues at this signature community park. U. S. Steel also plans for a museum space at the ground level to further activate the ground level program.

The intent of the building design is to express the heritage while focusing on the future direction of U. S. Steel while functioning as a catalyst for future development. In addition to reflecting U.S. Steel's brand and corporate philosophy, the building design must also respect its context and role of this anchor development within the newly master planned Lower Hill District. The overall appearance of the exterior will be in keeping with the expectation associated with traditional corporate headquarters office design and comparable to similar scale headquarters projects in the downtown Pittsburgh area. The building's envelope will utilize high performance materials including generous areas of engineered glazing complimented by an expressed structural steel frame which is defined by a precast concrete ribbon with wood soffits at the recessed roof line and at the street level arcades. The building articulation and setbacks create visual interest, while at street level the human scaled architecture provides street front texture, engages community and promotes an active and enhanced pedestrian experience

The construction start date is anticipated for the 3rd quarter of 2015 with final construction to be completed August 2017.

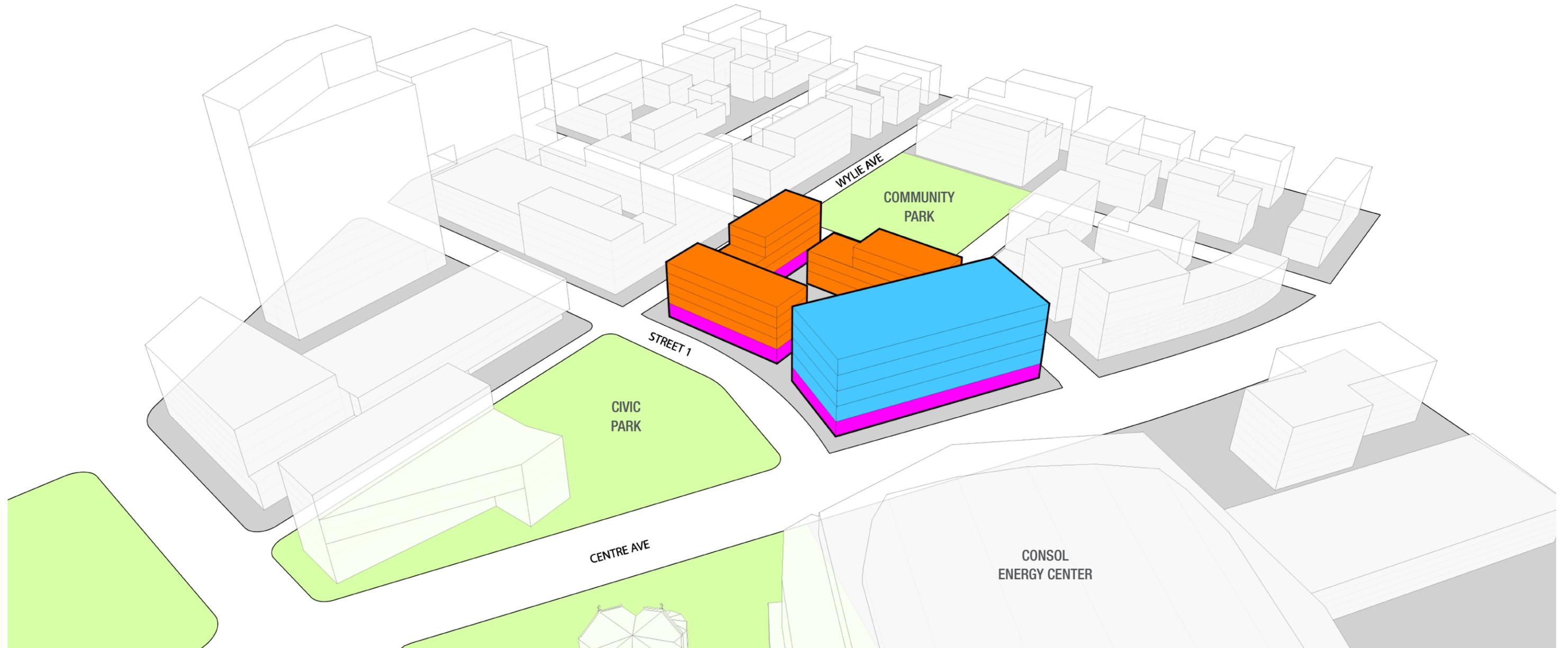
# LOWER HILL DISTRICT MASTER PLAN



**BLOCK D MASTER PLAN**

# MASSING STRATEGIES

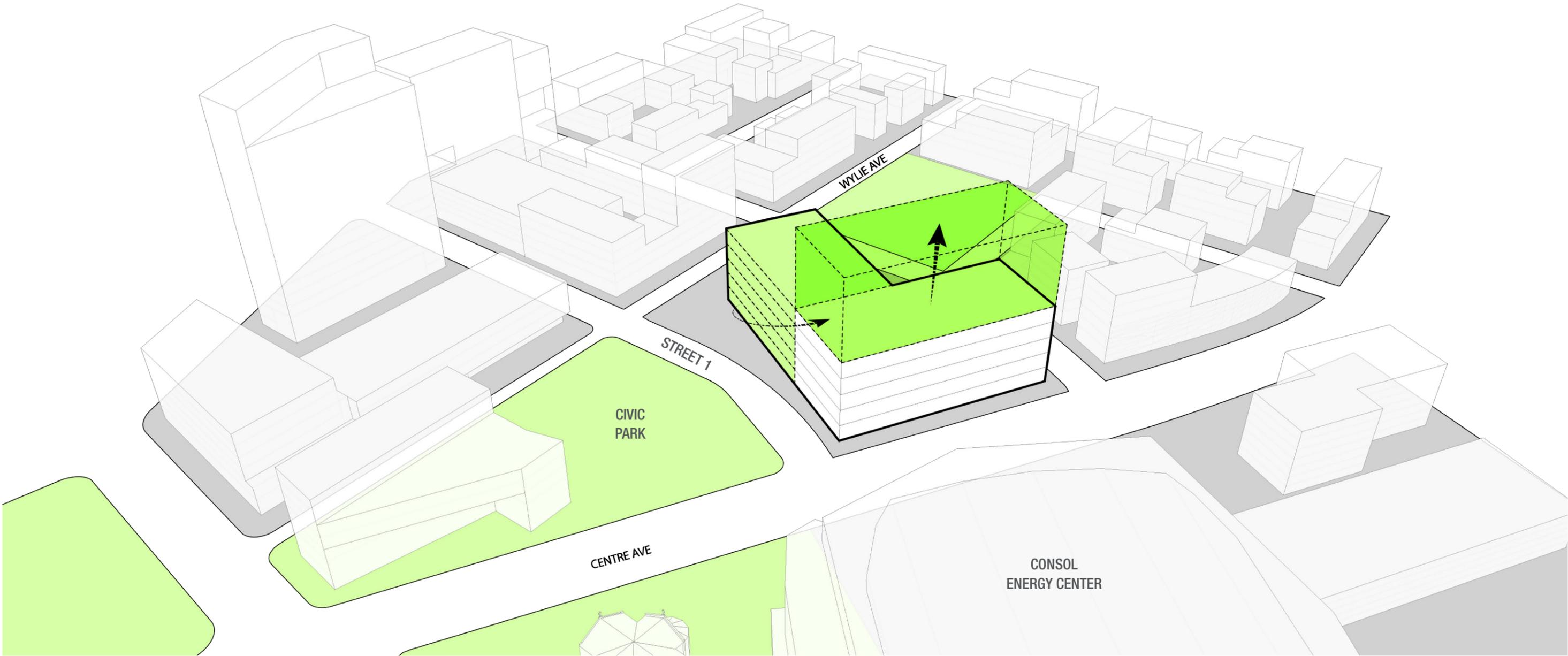
- RESIDENTIAL
- RETAIL/MUSEUM
- OFFICE



PLDP MASSING & PROGRAM

FOUR BUILDINGS - 300,000 SF

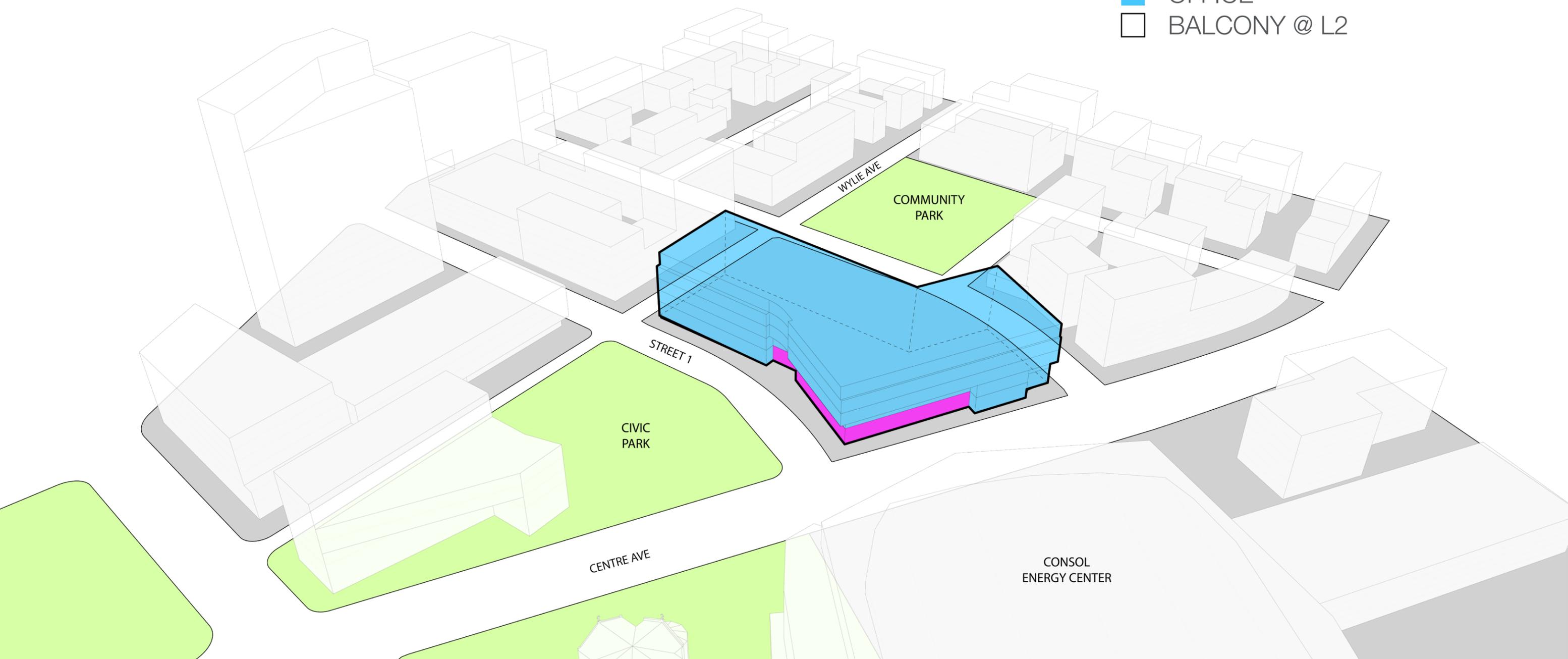
# SITE UTILIZATION



**U. S. STEEL PROGRAM MASSING CONSOLIDATION**  
285,000 GSF 800-1000 EMPLOYEES 18,000 RSF RETAIL  
5 LEVELS - 57,000 SF / LEVEL

# MASSING ATTRIBUTES

- RETAIL/MUSEUM
- OFFICE
- BALCONY @ L2



## U. S. STEEL HEADQUARTERS ACTIVATE & ENGAGE GROUND PLANE

# ARCHITECTURAL ATTRIBUTES



## LEVEL 2 TERRACE DINING

Terrace dining activates and engages the public.

## ARTICULATED BASE

Pittsburgh Connection: Defined by brick details, public programs including the entry, museum, and retail elements are connected to the community at the ground plane.

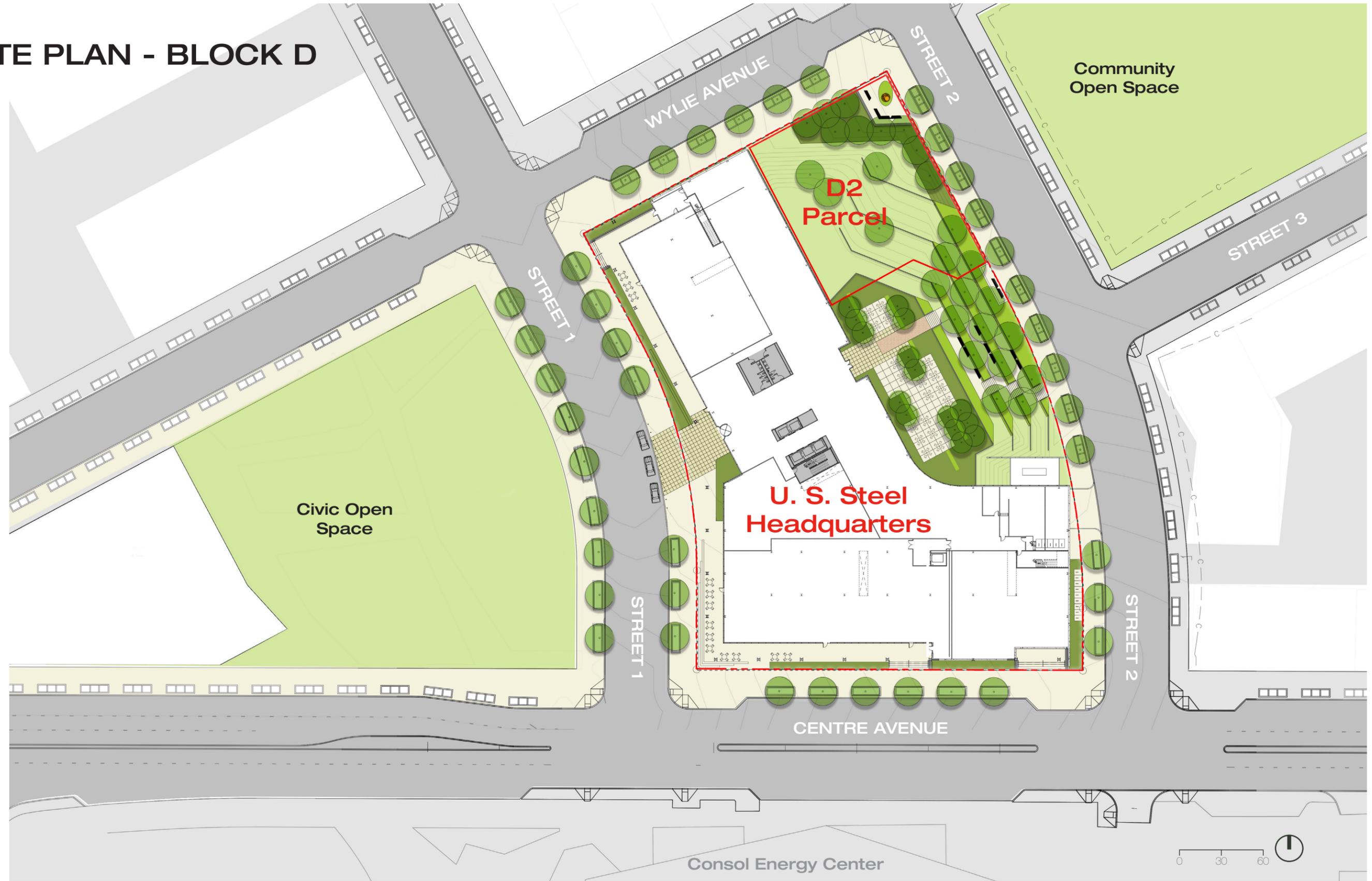
## ARCHITECTURAL EXPRESSION

U. S. Steel History: The architecture honors Pittsburgh and U. S. Steel's role in the building industry with the focus to the future.

## DEFINE ARCHITECTURAL COMPOSITION

Articulated zinc defines and separates ground plane and entrance from the primary office floors and provides transition to the sky.

# SITE PLAN - BLOCK D



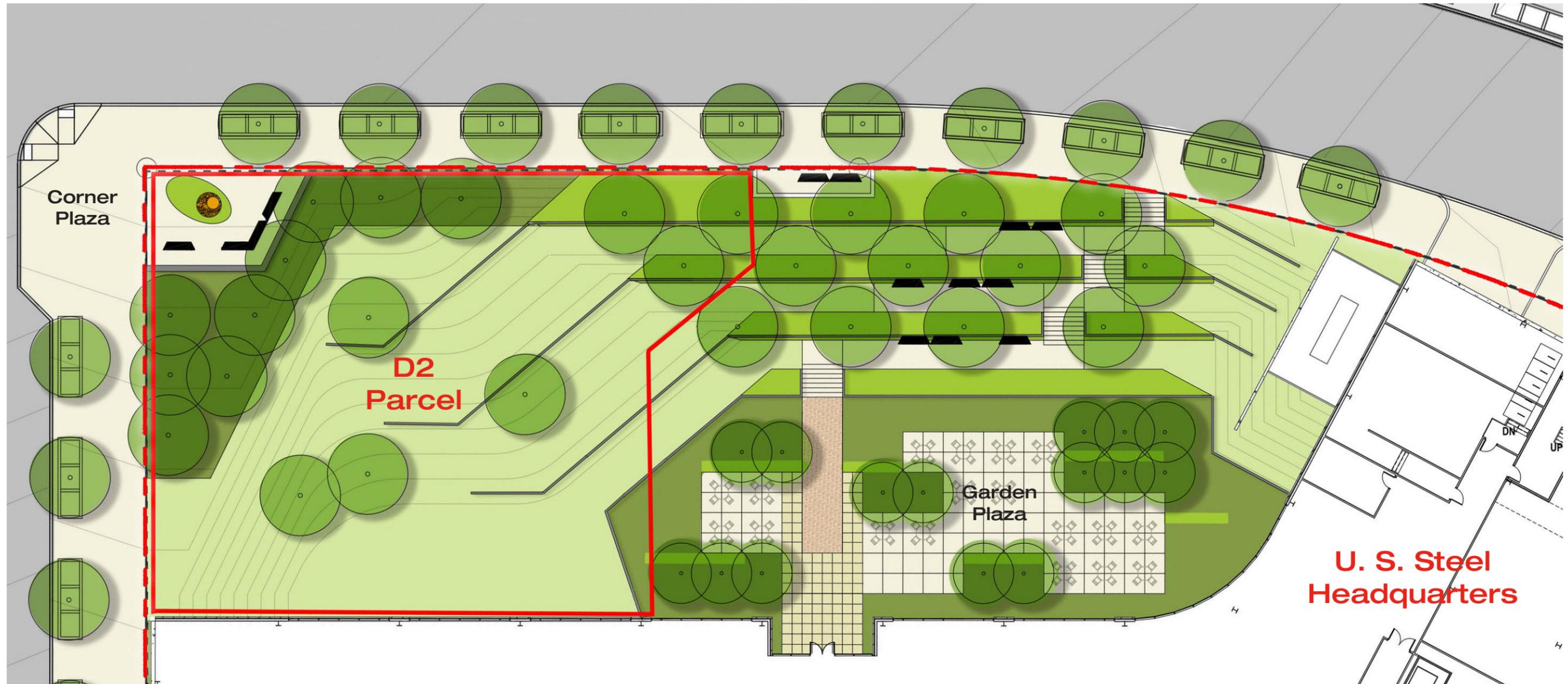
# ARCHITECTURAL / LANDSCAPE PLAN - BLOCK D



- SHRUB / PERENNIAL / ORNAMENTAL GRASS
- ORNAMENTAL GRASS / PERENNIAL
- TURF

All trees are 2.5" Caliper (min.). All plant material will include native and adapted species. Specific plant species will be referenced from the PLDP plant palette, the PLDP's approved reference websites and the City of Pittsburgh.

# ARCHITECTURAL / LANDSCAPE PLAN - BLOCK D



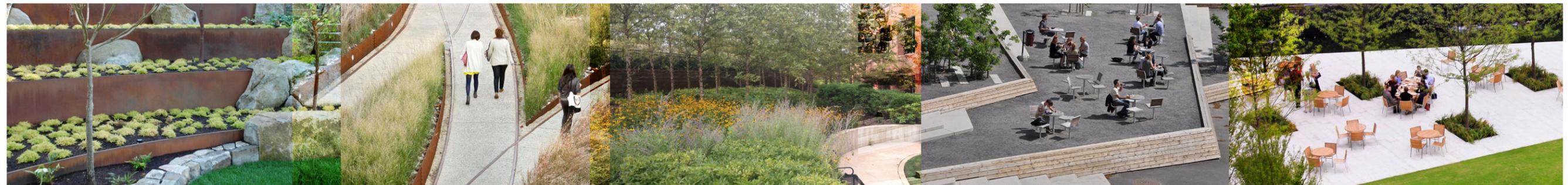
RETAINING WALLS

GEOMETRIC PATTERN

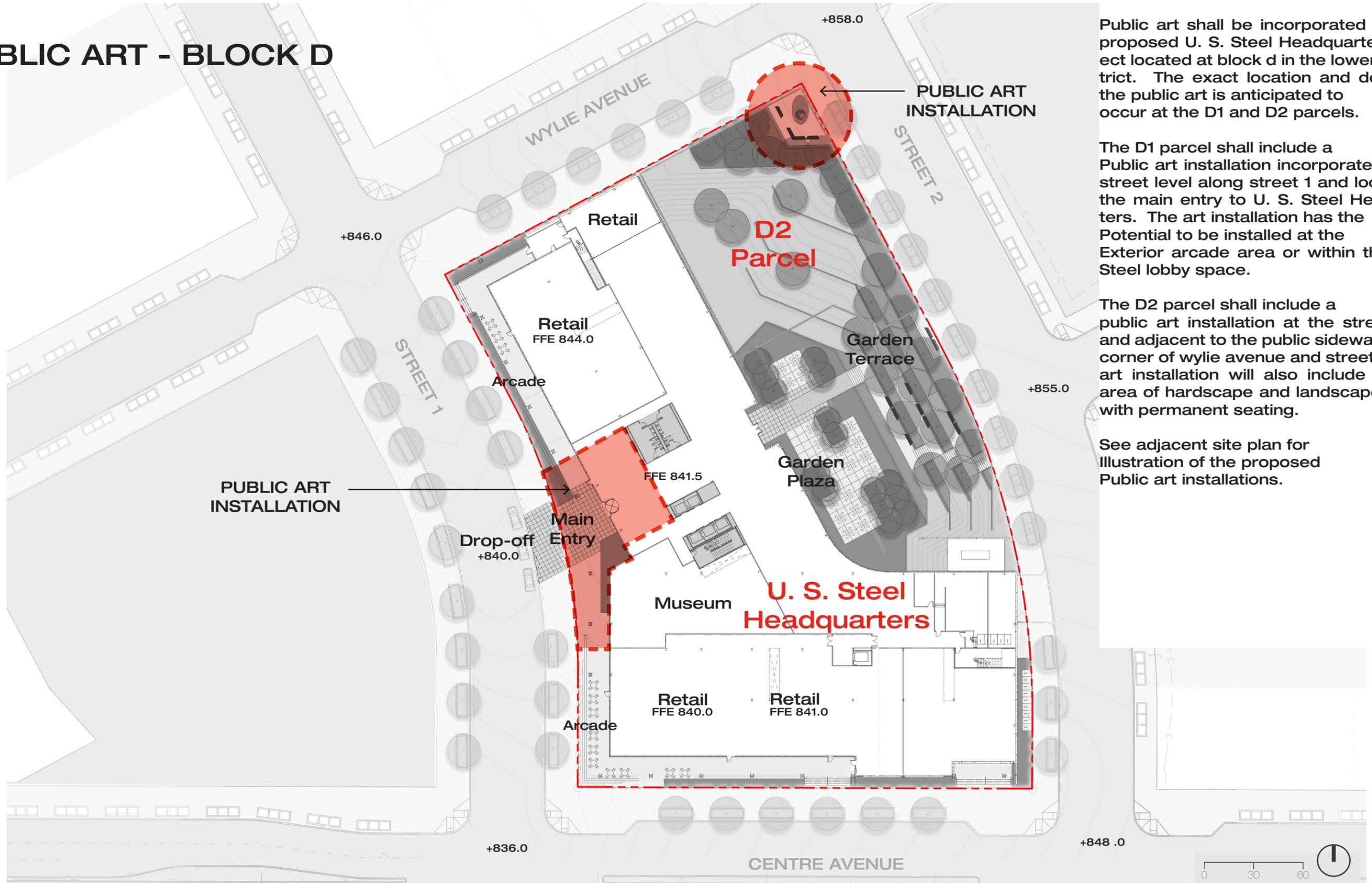
NATIVE LANDSCAPE

MULTI-LEVEL ACCESS

DINING TERRACE



# PUBLIC ART - BLOCK D



Public art shall be incorporated into the proposed U. S. Steel Headquarters project located at block d in the lower hill district. The exact location and design of the public art is anticipated to occur at the D1 and D2 parcels.

The D1 parcel shall include a Public art installation incorporated at the street level along street 1 and located at the main entry to U. S. Steel Headquarters. The art installation has the Potential to be installed at the Exterior arcade area or within the U. S. Steel lobby space.

The D2 parcel shall include a public art installation at the street level and adjacent to the public sidewalk at the corner of wylie avenue and street 2. This art installation will also include a small area of hardscape and landscape space with permanent seating.

See adjacent site plan for illustration of the proposed Public art installations.

# SITE ATTRIBUTES

## ELEVATIONS + PUBLIC REALM

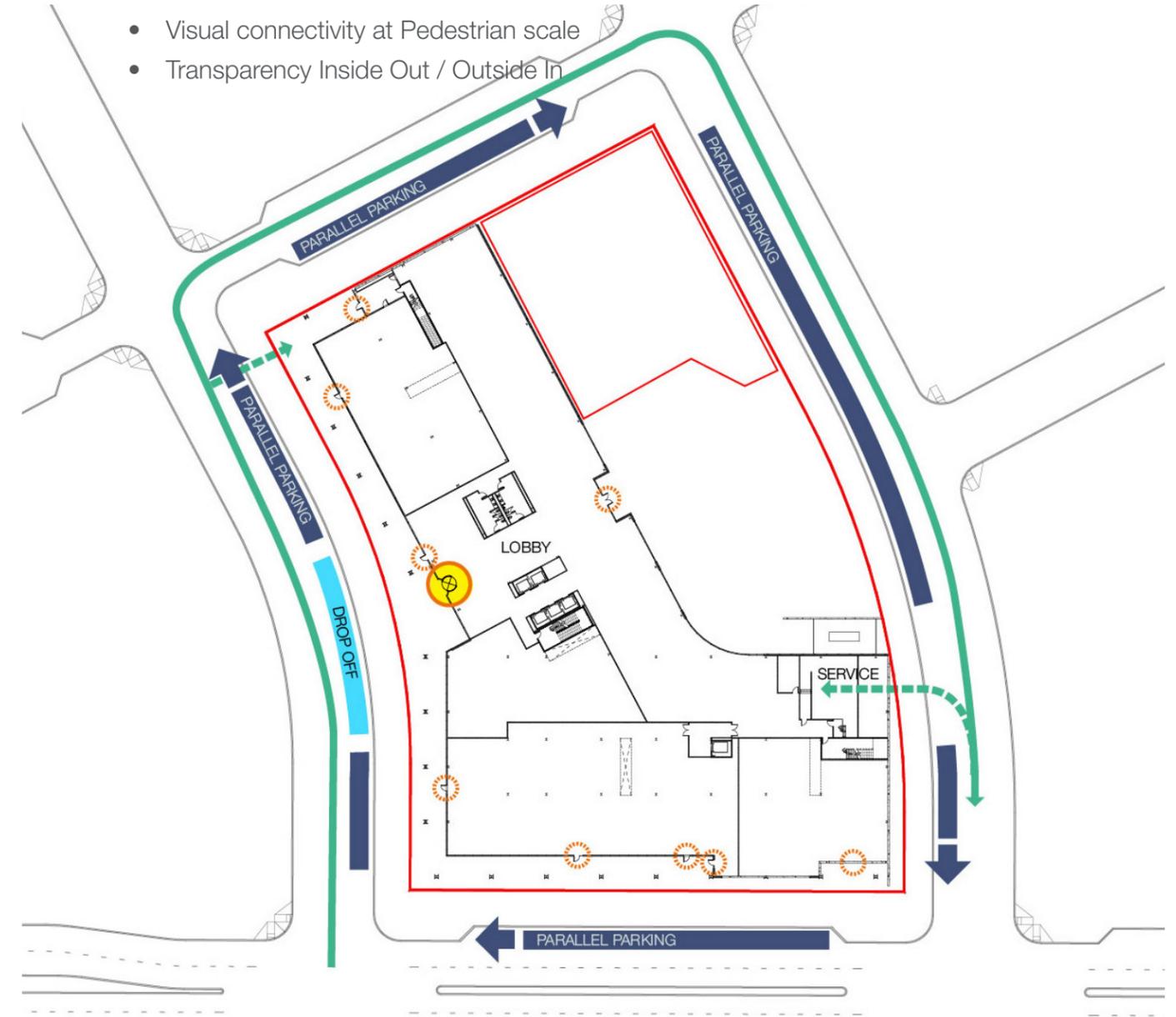
- Significant grade changes +/- 22 feet across entire site
- Architectural entries and Arcades engage street life
- Street Tree Planter locations respond to context and building footprint
- ADA accessible intersections



- SIDEWALK (NOT IN SCOPE)
- PLANTER (NOT IN SCOPE)

## VEHICULAR + PEDESTRIAN ACCESS

- Drop off designated at building main entry
- Parallel parking provided on all streets
- Service access at Level 2 of Street 2
- Visual connectivity at Pedestrian scale
- Transparency Inside Out / Outside In



- MAIN DROP-OFF
- PARALLEL PARKING
- SERVICE ACCESS
- PRIMARY U. S. S. BUILDING ACCESS
- OTHER BUILDING ACCESS

# STORM WATER PLAN - BLOCK D

PROJECT: US STEEL PROJ. NO: 214-5314

**Retention - site**

1: Water Quantity Volume:

|                              |       |  |
|------------------------------|-------|--|
| Drainage Area:               | 2.23  | Acres  |
| Percent Impervious Cover(I): | 84    | %  |
| Water Quality Required:      | 7,829 | Cu. FT $Water\ Quantity = [1.20 * (.05 + .009I)] * A / 12 * 43560$ |

2: Bio-Retention Surface Area

|                                   |       |  |  |            |       |        |
|-----------------------------------|-------|--|--|------------|-------|--------|
| Required WQv:                     | 7,829 | Cu. FT   | Provided:                                  | Area(Af) = | 1352  | Ft.^2  |
| Filter Bed Depth(df):             | 2.50  | Ft.  | Provided Volume(V1): (Above Bio-Retention) | Elevation  | Area  | Volume |
| Coefficient of Permeability(k):   | 2.0   | Ft./day*   |  | 0.00       | 1,352 | 0      |
| Height of water above Bed(hf):    | 0.50  | Ft.  |  | 1.00       | 1,854 | 1,603  |
| Design Filter Bed Drain Time(tf): | 2     | days**   |  | 1.50       | 2,118 | 2,596  |
| Surface Area of Filter Bed(Af):   | 1,631 | Ft.^2 $(WQv \times df) / [(k) \times (hf + df) \times (tf)]$ |  |            |       |        |

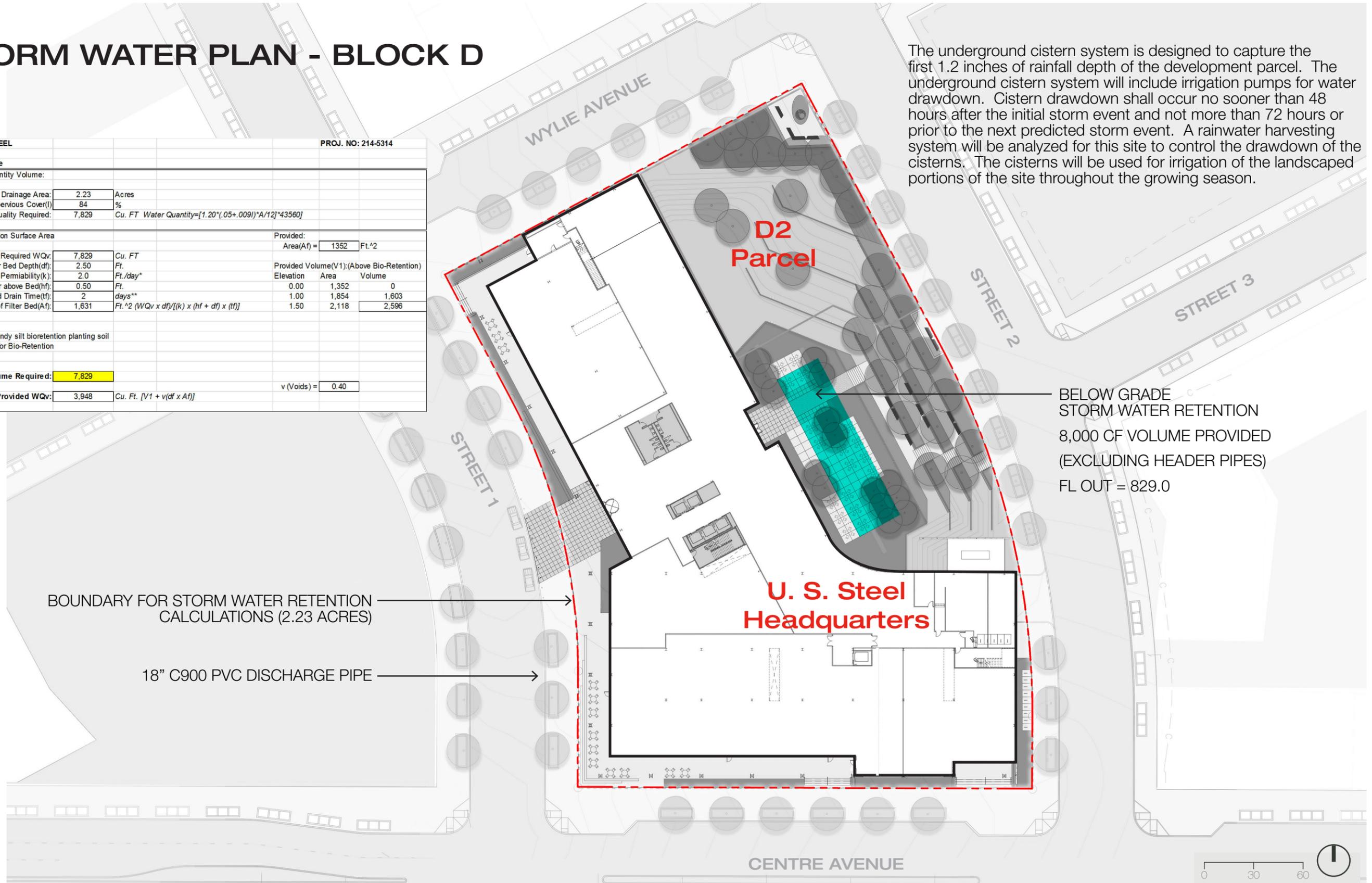
2.0 ft/day for sandy silt bioretention planting soil  
 te: 2.00 days for Bio-Retention

Retention Volume Required: **7,829**

Provided WQv: 3,948 Cu. Ft.  $[V1 + v(df \times Af)]$

v (Voids) = 0.40

The underground cistern system is designed to capture the first 1.2 inches of rainfall depth of the development parcel. The underground cistern system will include irrigation pumps for water drawdown. Cistern drawdown shall occur no sooner than 48 hours after the initial storm event and not more than 72 hours or prior to the next predicted storm event. A rainwater harvesting system will be analyzed for this site to control the drawdown of the cisterns. The cisterns will be used for irrigation of the landscaped portions of the site throughout the growing season.



BOUNDARY FOR STORM WATER RETENTION CALCULATIONS (2.23 ACRES)

18" C900 PVC DISCHARGE PIPE

BELOW GRADE STORM WATER RETENTION  
 8,000 CF VOLUME PROVIDED (EXCLUDING HEADER PIPES)  
 FL OUT = 829.0

# VIEW FROM NORTHWEST



# VIEW FROM SOUTHWEST



# VIEW FROM NORTH - WYLIE



# MATERIALITY / PRECEDENTS

## STEEL FRAME



The office program sits atop a series of columns at the southwest corner of the property.

The structural frame is communicated via wide flange expression, paying homage to U. S. Steel history

Steel flanges create strong shadow lines that provide depth within the facade system

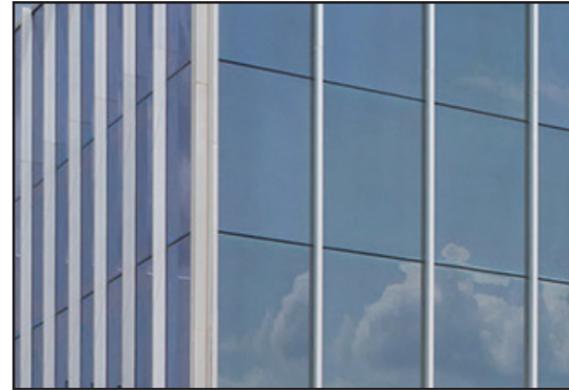
## ZINC BAND



Zinc brow and belt afford a wider, pronounced expression than the wide flange profiles.

These Zinc bands, define the boundaries of the office function / program beyond

## GLASS / MULLIONS



A series of butt glazed glass facade below precast belt, defines the dining / entertainment program.

Repetitive window wall frames above define the office function / program beyond.

Combination of mullion caps and butt glazed joints provide depth within the "office" facade system.

## WOOD SOFFIT

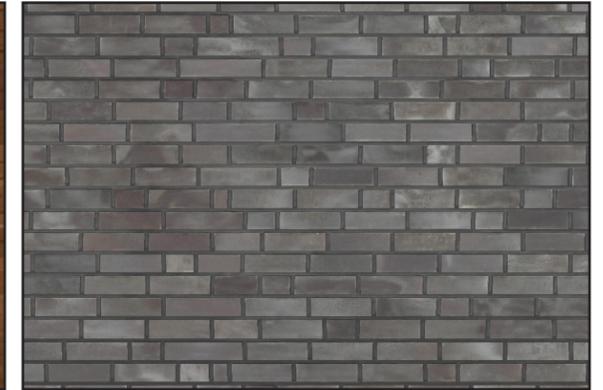


Wood soffits at balcony overhangs and south facade brow.

Creates warmth, pattern, and a human scale, at the balcony and pedestrian level.

Used in locations protected from sun and direct contact with moisture.

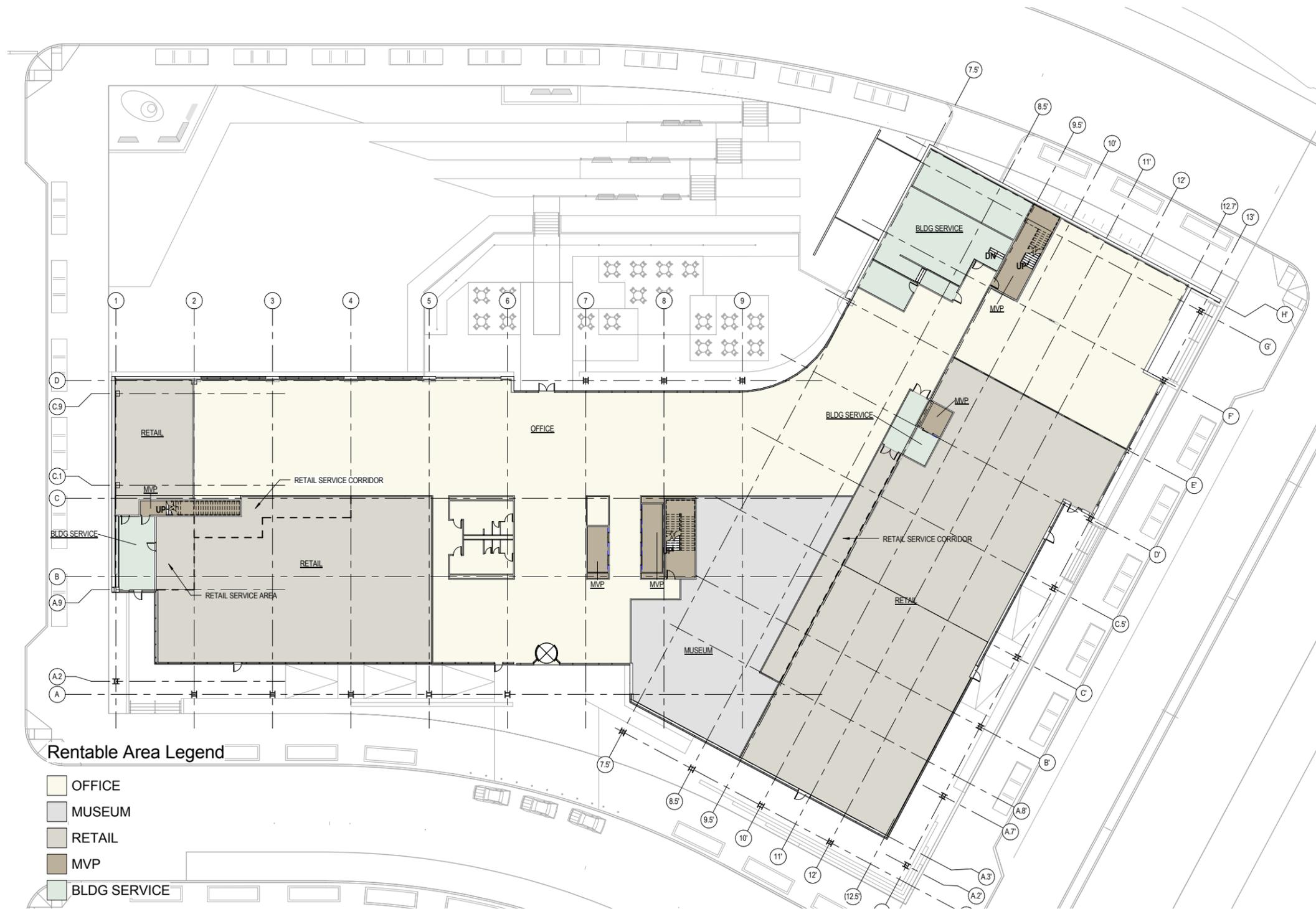
## BRICK / PATTERN / TEXTURE



A Masonry band at the SW corner separates the office dining from the public retail below

The masonry base anchors building back to the hill

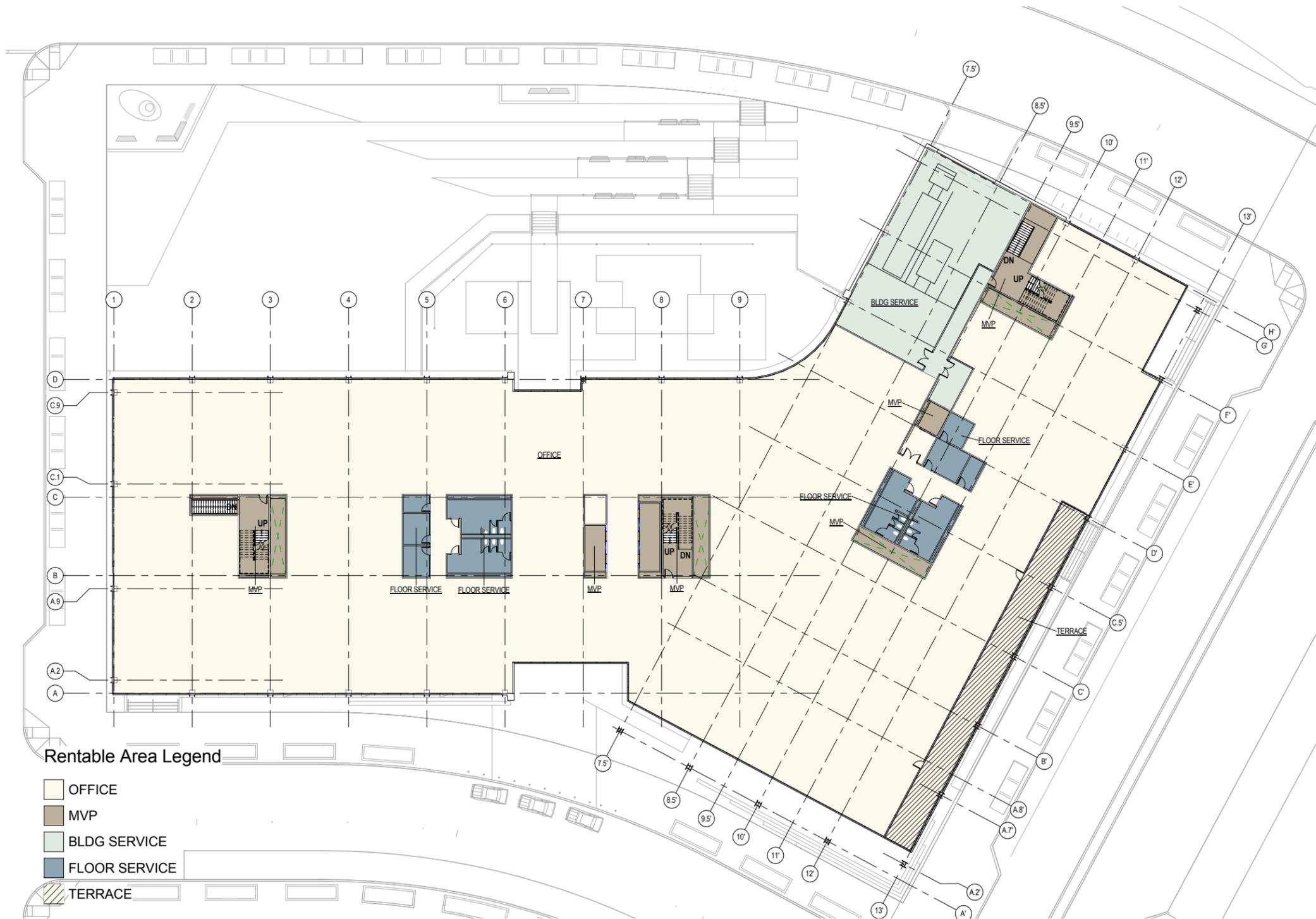
# 1ST FLOOR PLAN



## Rentable Area Legend

- OFFICE
- MUSEUM
- RETAIL
- MVP
- BLDG SERVICE

# 2ND FLOOR PLAN



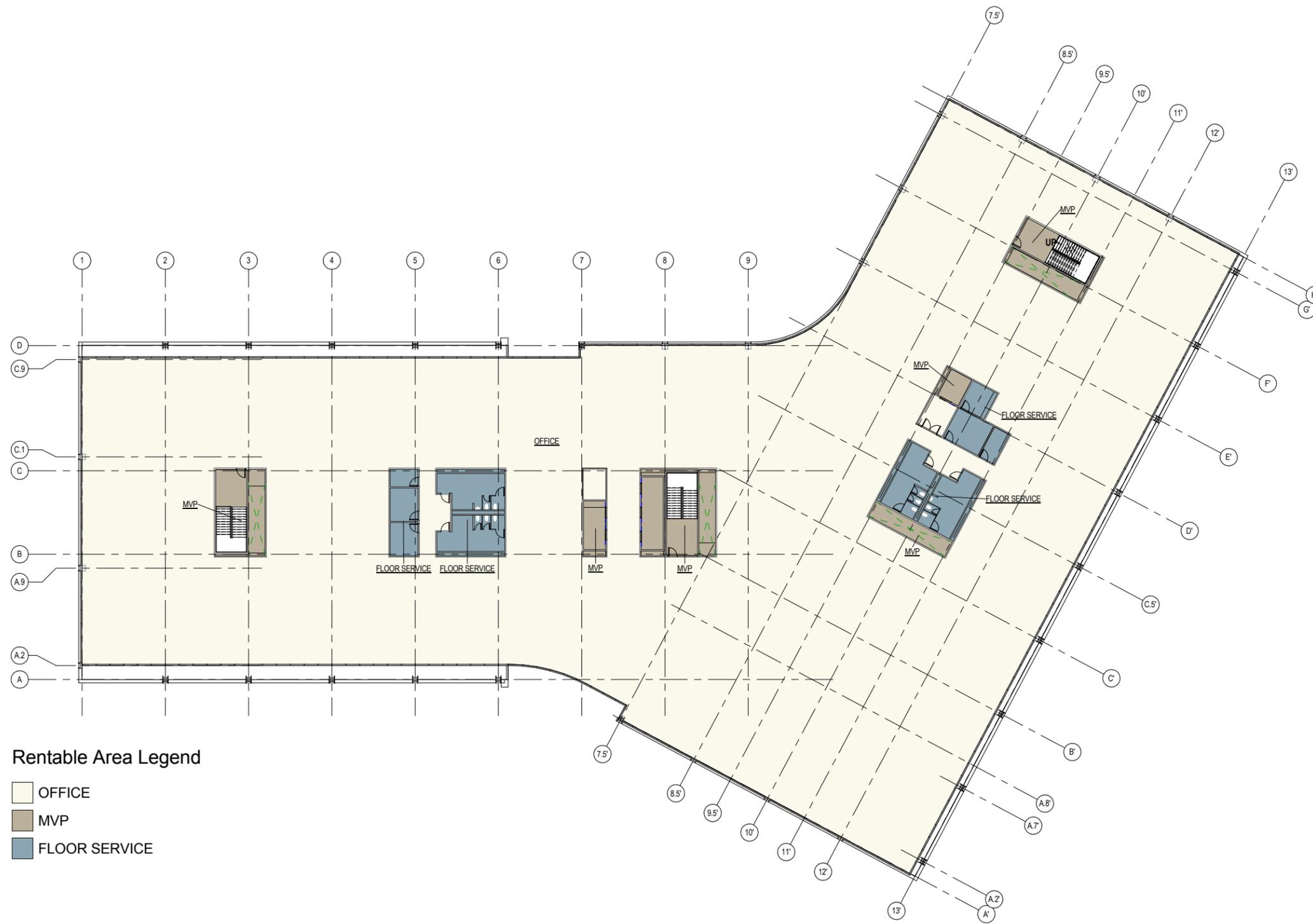
## Rentable Area Legend

- OFFICE
- MVP
- BLDG SERVICE
- FLOOR SERVICE
- TERRACE

# 3RD & 4TH FLOOR PLAN



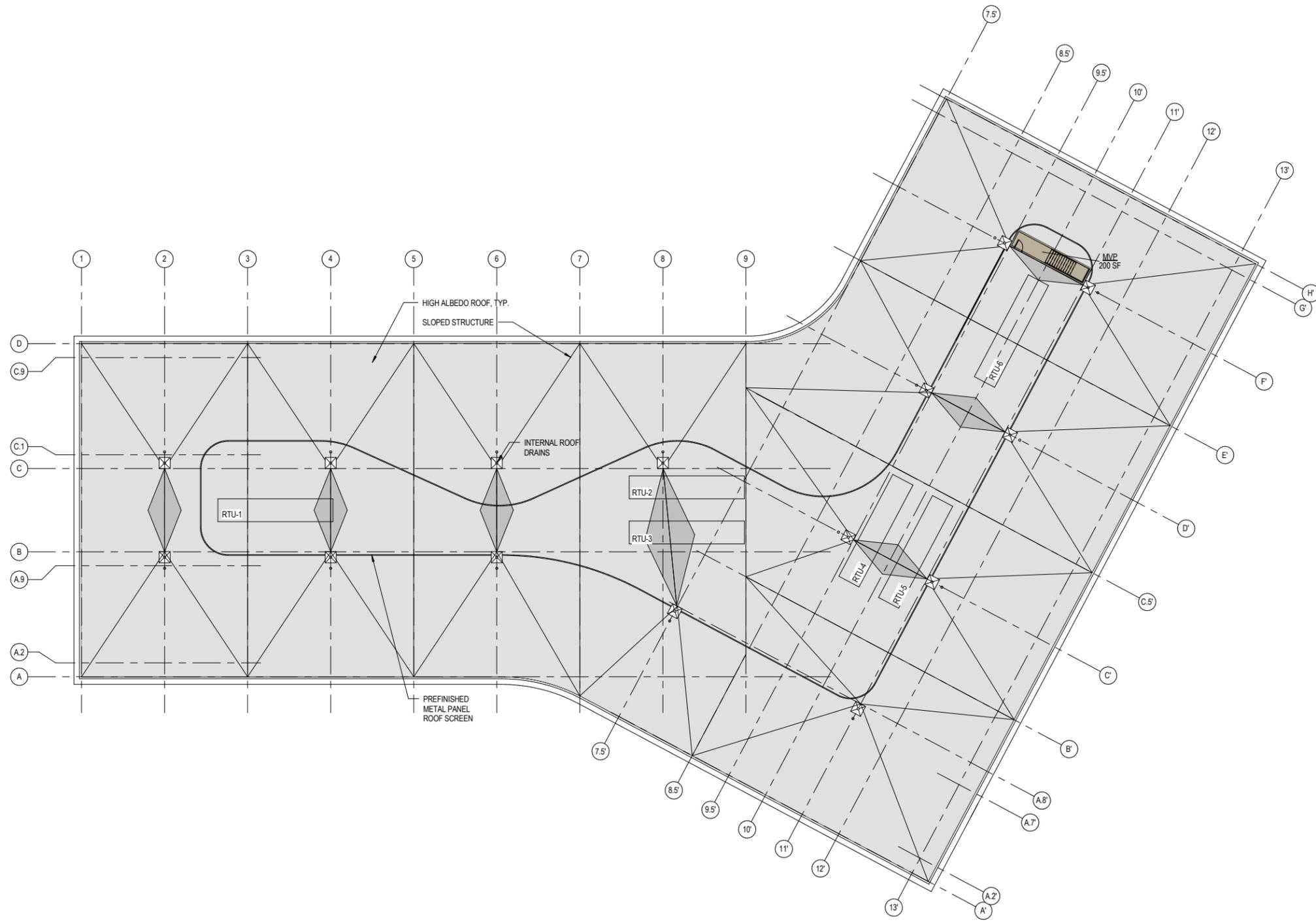
# 5TH FLOOR PLAN



## Rentable Area Legend

- OFFICE
- MVP
- FLOOR SERVICE

# ROOF PLAN



AMENDMENT #1 TO SP-II LOWER HILL PLANNED DEVELOPMENT DISTRICT  
PRELIMINARY LAND DEVELOPMENT PLAN (AS APPROVED DEC. 2, 2014)

Pittsburgh, Pennsylvania URBAN DESIGN ASSOCIATES

LaQuatra Bonci Associates



FEBRUARY 2015



# Amendment #1

This Amendment #1 to the SP-11 Lower Hill Planned Development District modifies courtyard standards, adds a new building frontage type (Type G), and modifies street frontage requirements. The applicability of this Amendment #1 is limited to Block D.

## 1. Courtyards:

On Block D, the following standards shall apply to courtyards (supplementing the standards contained on page 17, Section 2.6):

Courtyards may also support pedestrian connectivity by incorporating pedestrian paths through a block, or by helping to frame pedestrian routes along the edges of blocks. Courtyards may be defined by low hedges or plantings, trellises, or low decorative fencing (no higher than 3 ft.). When courtyards are facing a public street or sidewalk, any defining elements (such as fencing) shall preserve visual transparency between the courtyard and the public sidewalk and or street. In Block D, courtyards shall be permitted to occupy the street frontage along Street 2 for parcel D only (see graphic below), without requiring application of Street Frontage Types as set forth in Section 2.7.

In addition, the rear façade of a building shall be permitted to face a courtyard that occupies the frontage along Street 2, provided the front façade of the building is located along Street 1 and such façade includes a primary entrance or entrances.

## 2. Street Frontages

In Block D, the Zoning Administrator’s discretion with respect to frontage types and setbacks shall be as follows (modifying page 19, Section 2.7):

The Zoning Administrator may allow for flexibility with respect to the Frontage Types and setbacks in order to address grading conditions or curved property lines. In such instances additional setback areas may be permitted and such setback areas shall include landscaping or extended sidewalk treatments.

The following frontage type is added to the frontage types included on Page 21, Section 2.7.1:

### Ⓒ Commercial Frontage Type: Arcade

A frontage where the building is setback from the sidewalk a distance that is greater than the setbacks otherwise permitted in Frontage Type E and Frontage Type F, provided that an overhead building element (such as an overhang and/or upper level story) extends to the sidewalk edge or beyond (if permitted pursuant to an encroachment permit, if required). This frontage type may include columns that extend from such overhead element to the ground. The specific dimensions of arcades may vary, yet in all cases when used as a pedestrian pathway it must meet ADA and applicable code requirements.

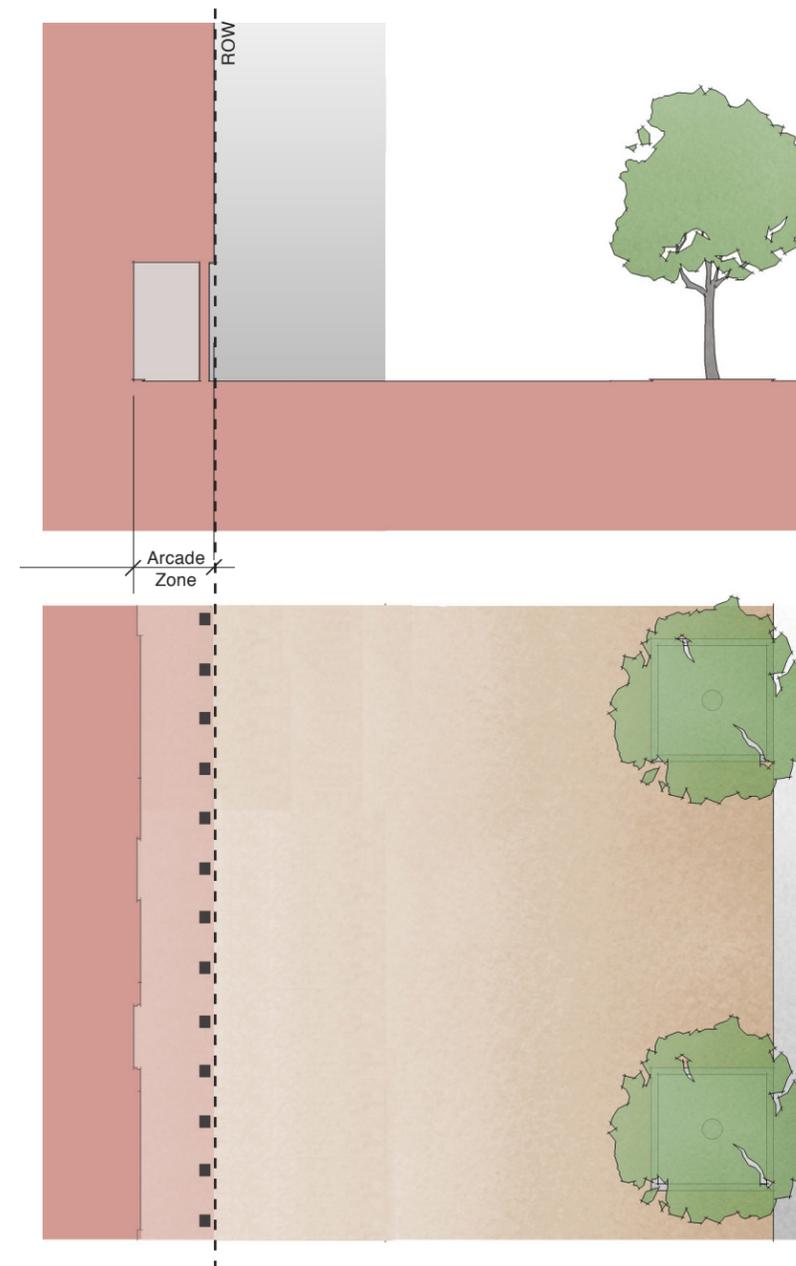
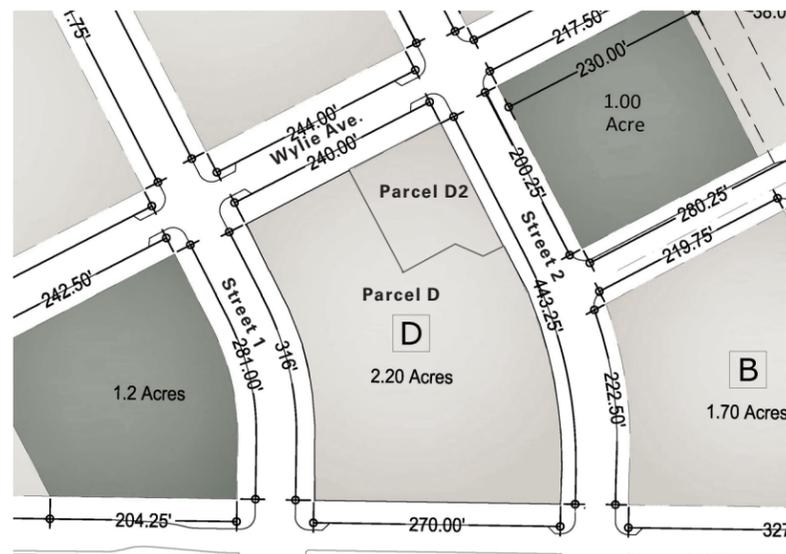


FIGURE 1.1 Frontage Type G

The Street Frontages Regulating Plan shall be modified for Block D to include the Arcade Frontage Type in the locations as depicted in Figure 1.2 herein.



FIGURE 1.2 Street Frontages Regulating Plan