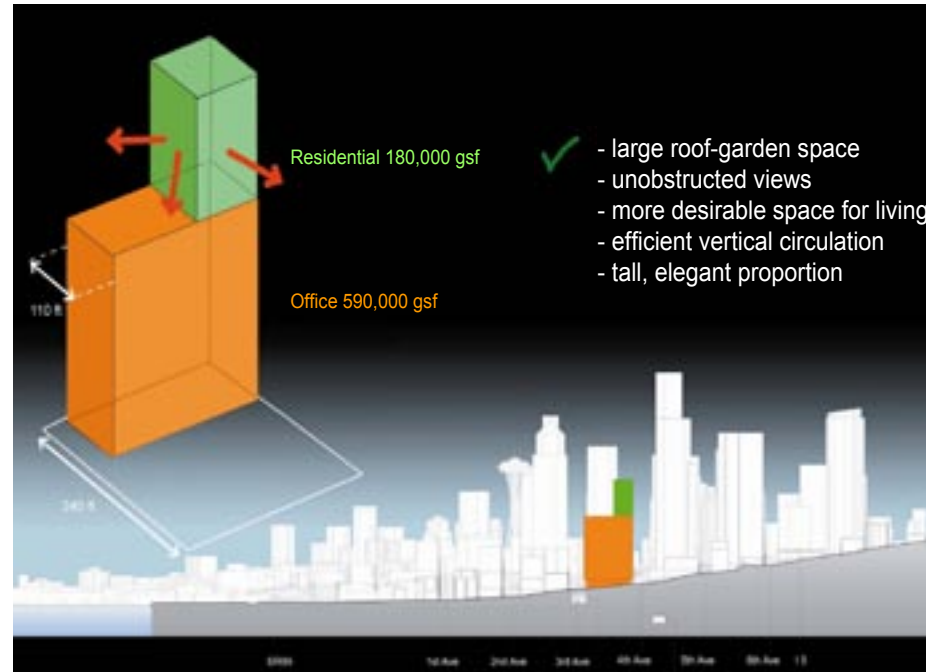


Sustainability Concepts

Urban Activation



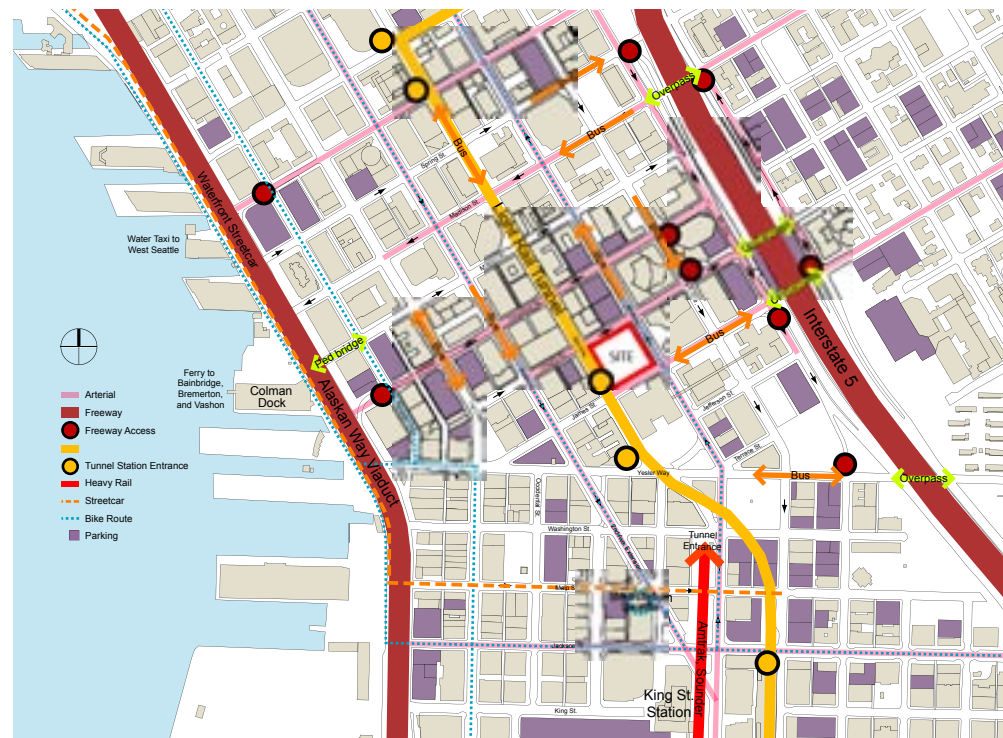
High density mixed use development.



Living, working and recreation in one development. Civic gathering space at the heart of the city.

Sustainability Concepts

Transportation Alternatives



Location well connected to public transport.



Metro connection to site.

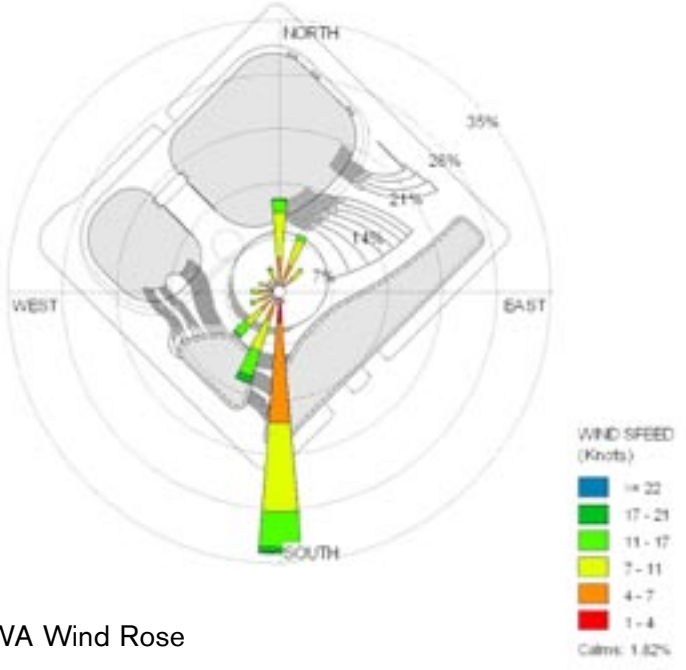
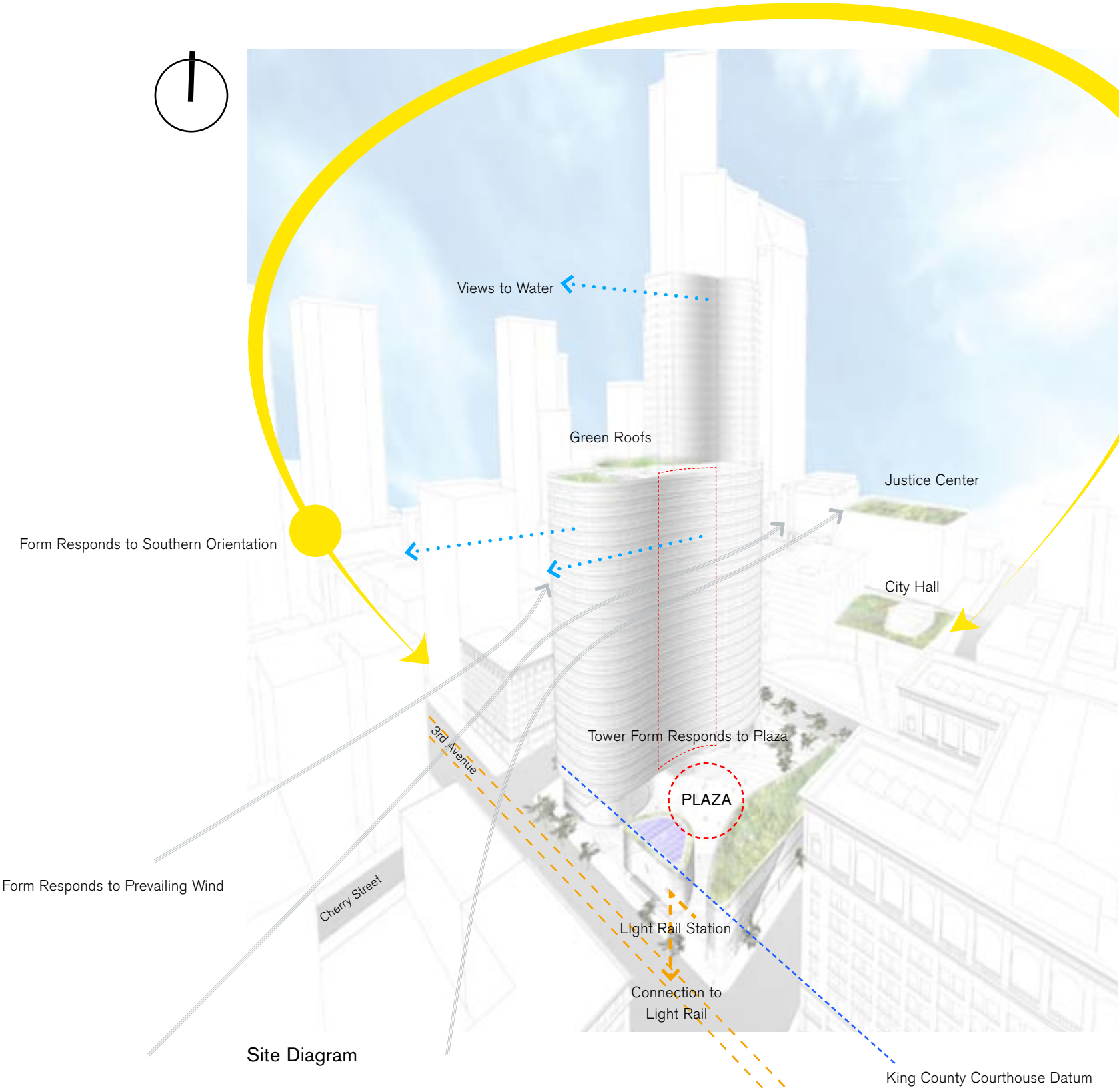


Bicycle and pedestrian friendly.

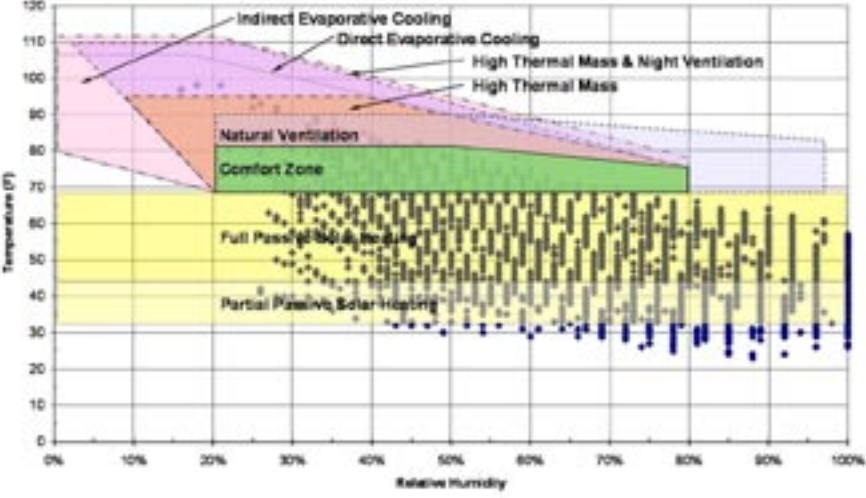
Sustainability Concepts

Site and Microclimate

City Comment A-1



Seattle, WA Wind Rose



Seattle, WA Bioclimatic Chart

Sustainability Concepts

Landscape and Habitat

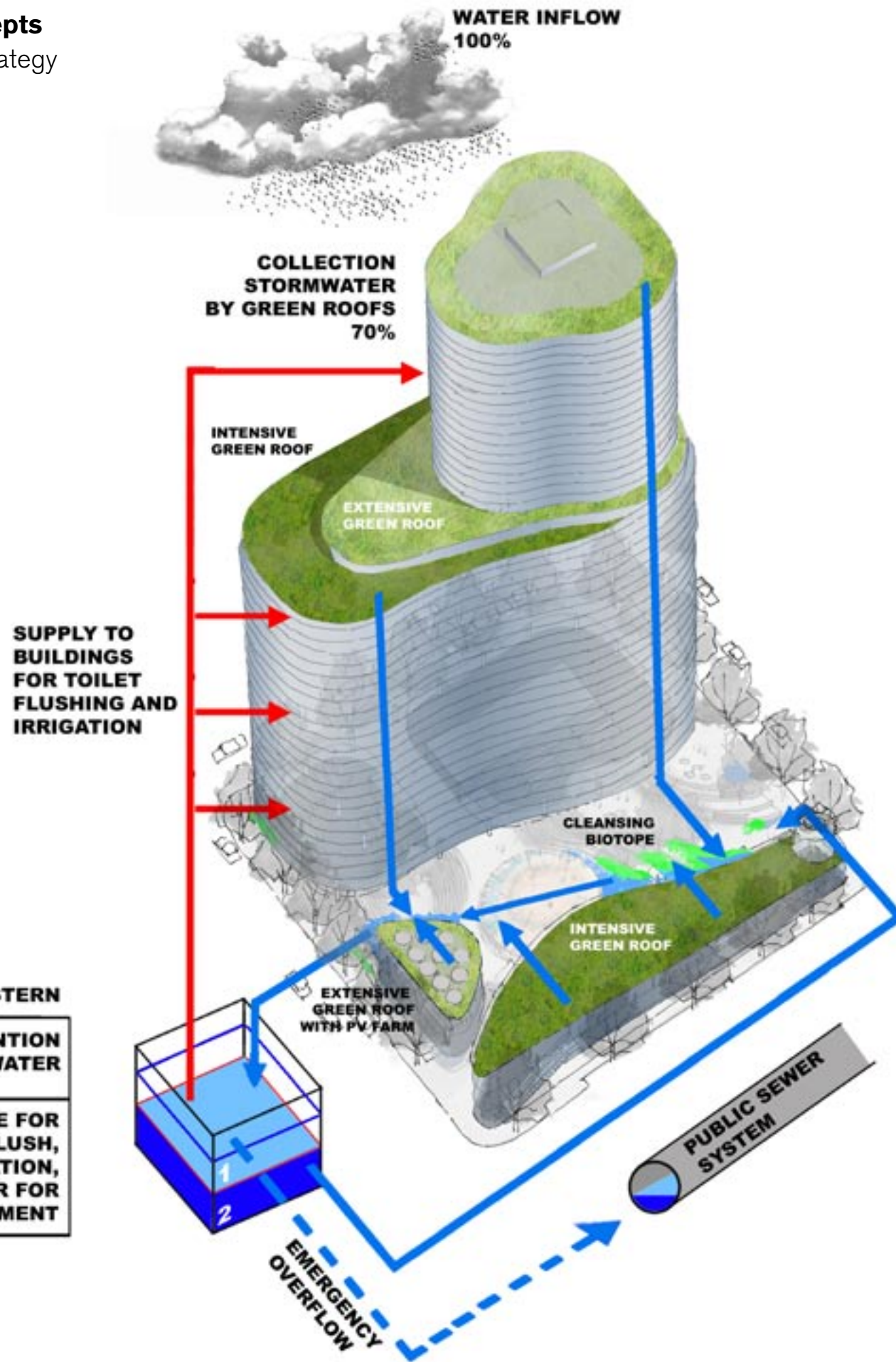


Landscaping Concept- Atelier Dreiseitl

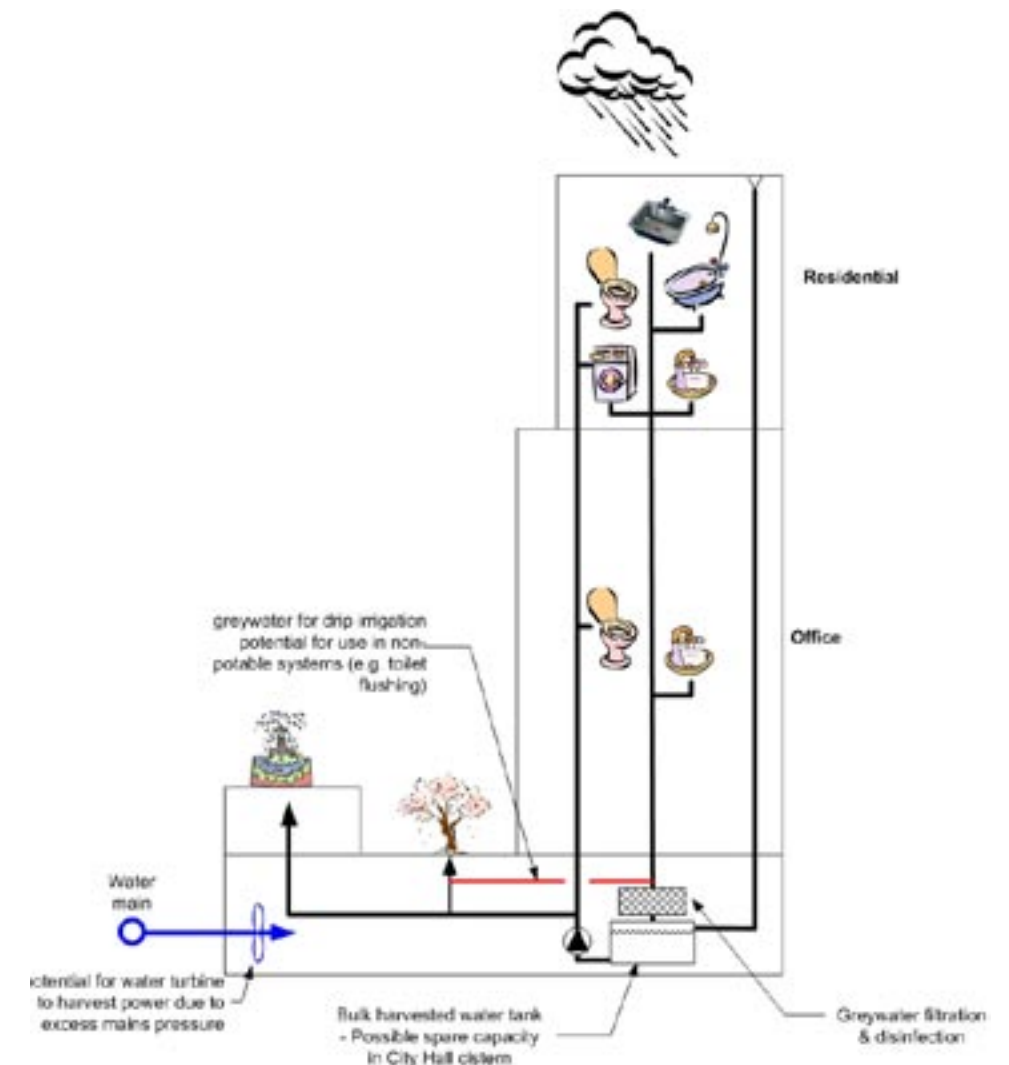


Green Roof References

Sustainability Concepts
Water Conservation Strategy

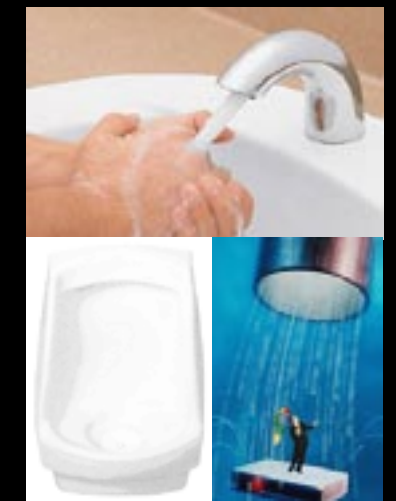


Conceptual Sketch



Water Collection and Distribution Diagram

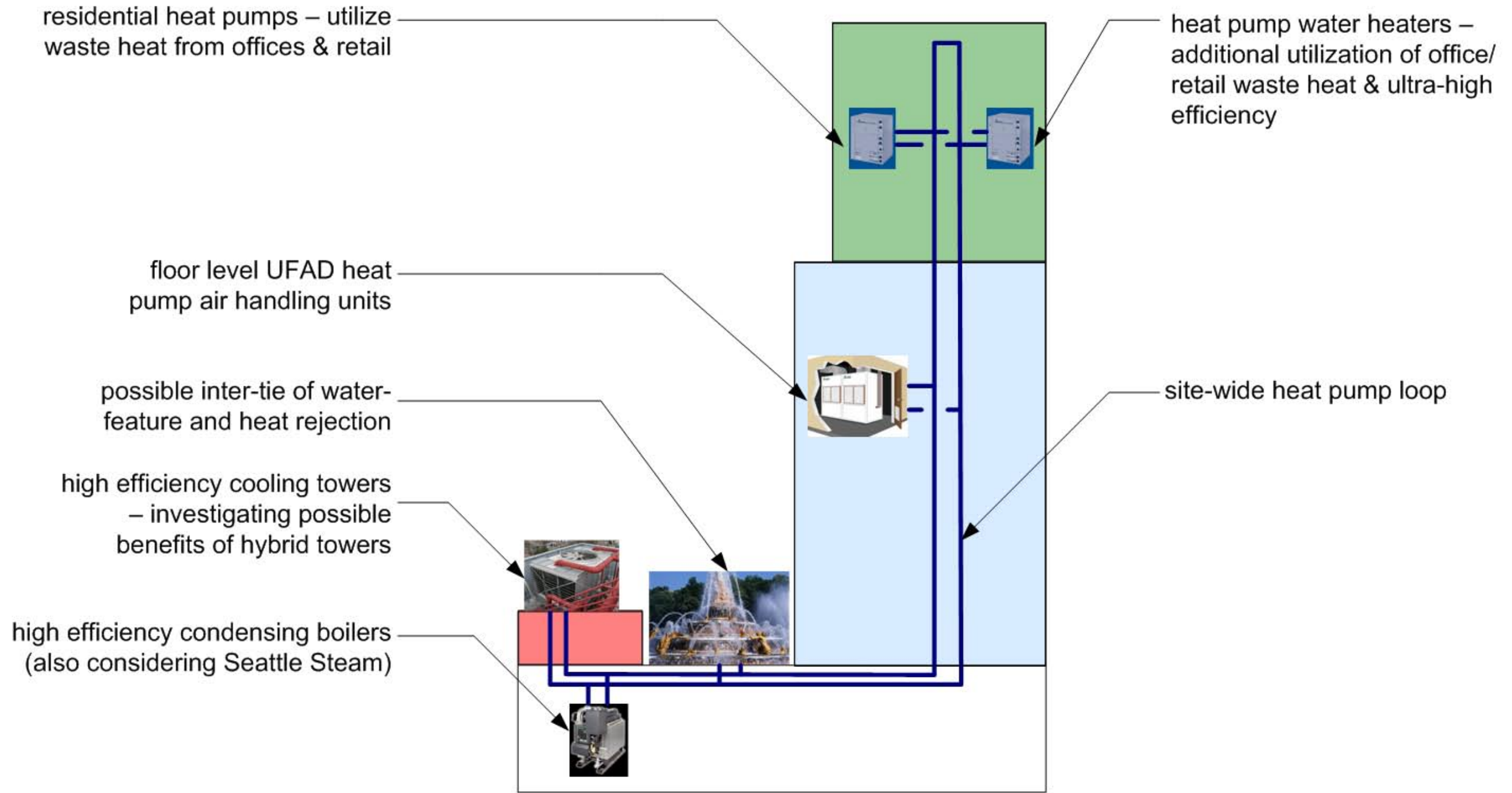
Low Flow Fixtures		
Toilets	Low volume gravity tank toilets Low volume pressurized toilets Dual flush toilets Waterless toilets	Offers significant water savings over traditional fixtures Waterless toilets offer almost 100% savings
Urinals	Low volume urinals	Offers significant water savings over traditional fixtures Waterless urinals offer almost 100% savings
Showerheads	Low volume showerheads	Offers significant water savings over traditional fixtures Energy savings can be realized by reduced hot water usage
Faucets	Low volume kitchen and lavatory faucets, using aeration, flow control or devices Sensor activated faucets Automatic shut-off faucets	Offers significant water savings over traditional fixtures Energy savings can be realized by reduced hot water usage
Clothes Washers	High efficiency, front loading washers	Offers significant water savings Energy savings can be realized by reduced operational costs and hot water usage
Dishwashers	Water efficient dishwashers	Offers significant water savings over traditional fixtures Energy savings can be realized by reduced operational costs and hot water usage



Aligns with City incentives.

Sustainability Concepts

HVAC Strategy

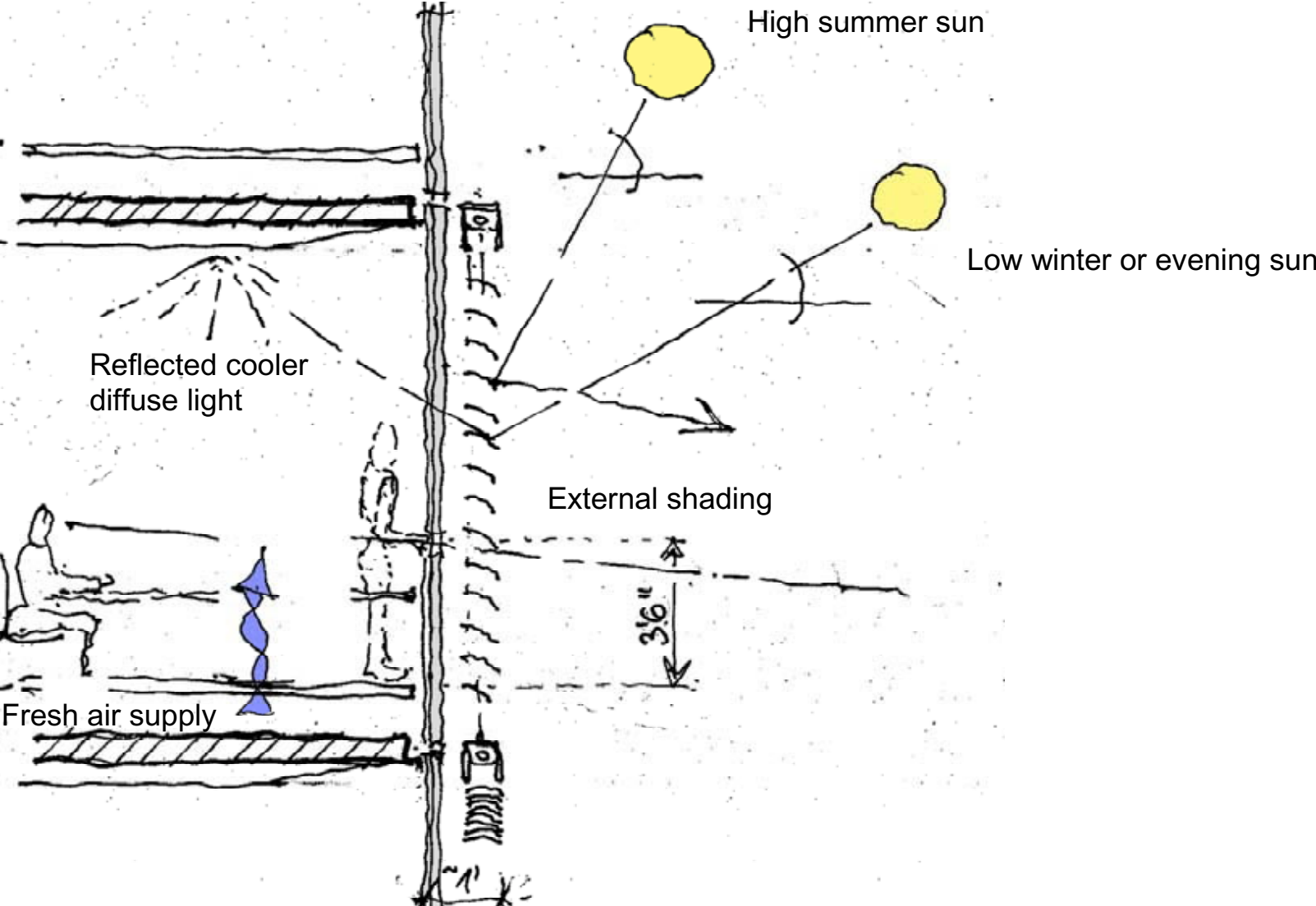


Potential scheme:
site-wide heat pump loop

Conceptual Diagram of General Heating and Cooling System

Sustainability Concepts

Solar Strategy: Shading

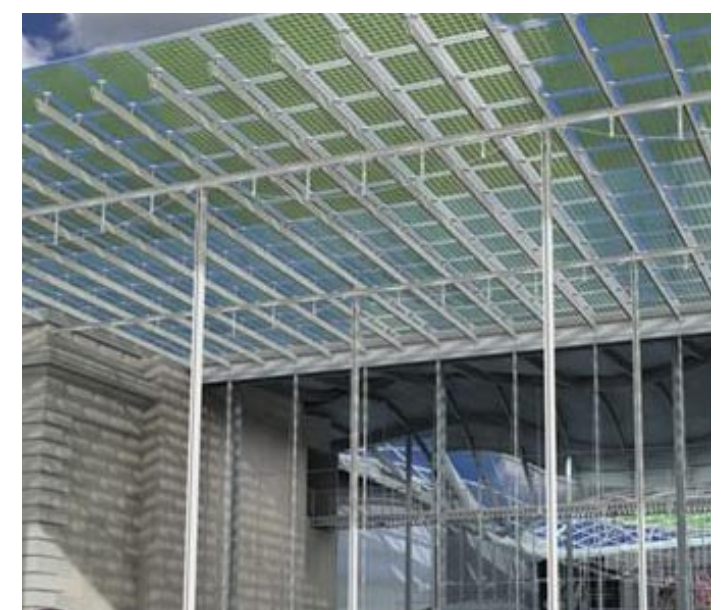
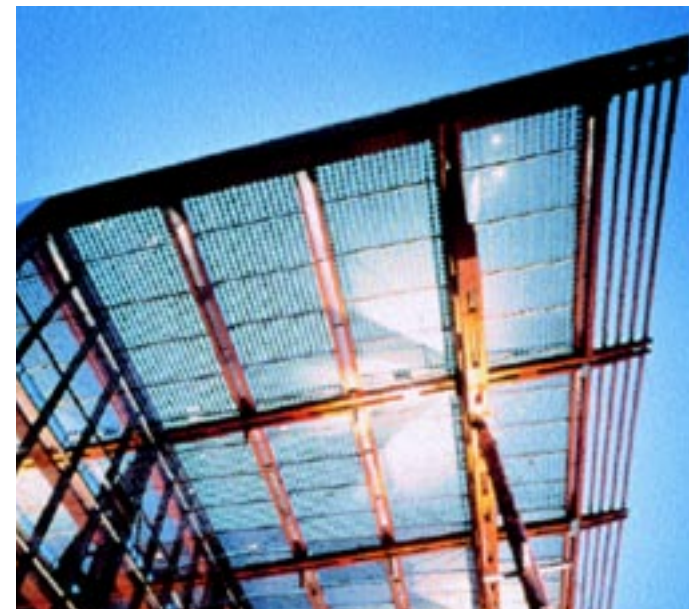
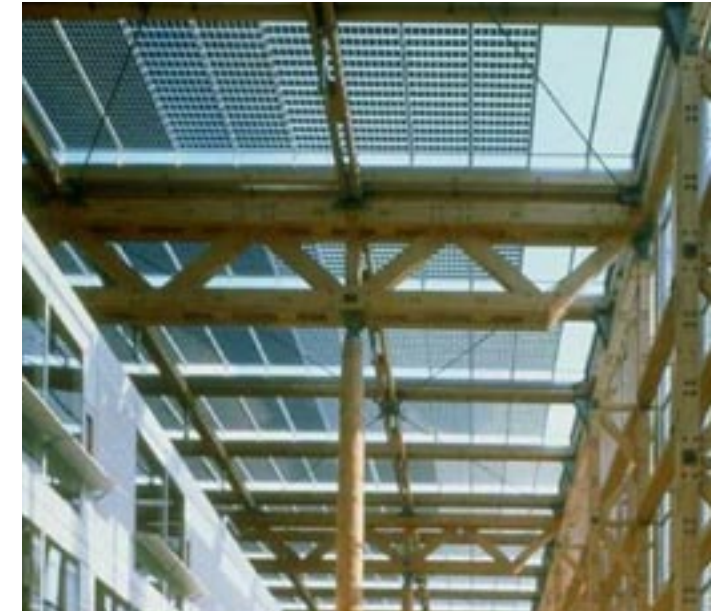


Facade Concept Sketch- Arup



Facade References

Sustainability Concepts
Solar Strategy: Photovoltaics



Photovoltaic References
Seattle Civic Square

Sustainability Concepts

Waste Reduction



Recycling and Composting



Sustainability Concepts

Sustainability Education and Public Art



Public Education and Art



Water and Wind

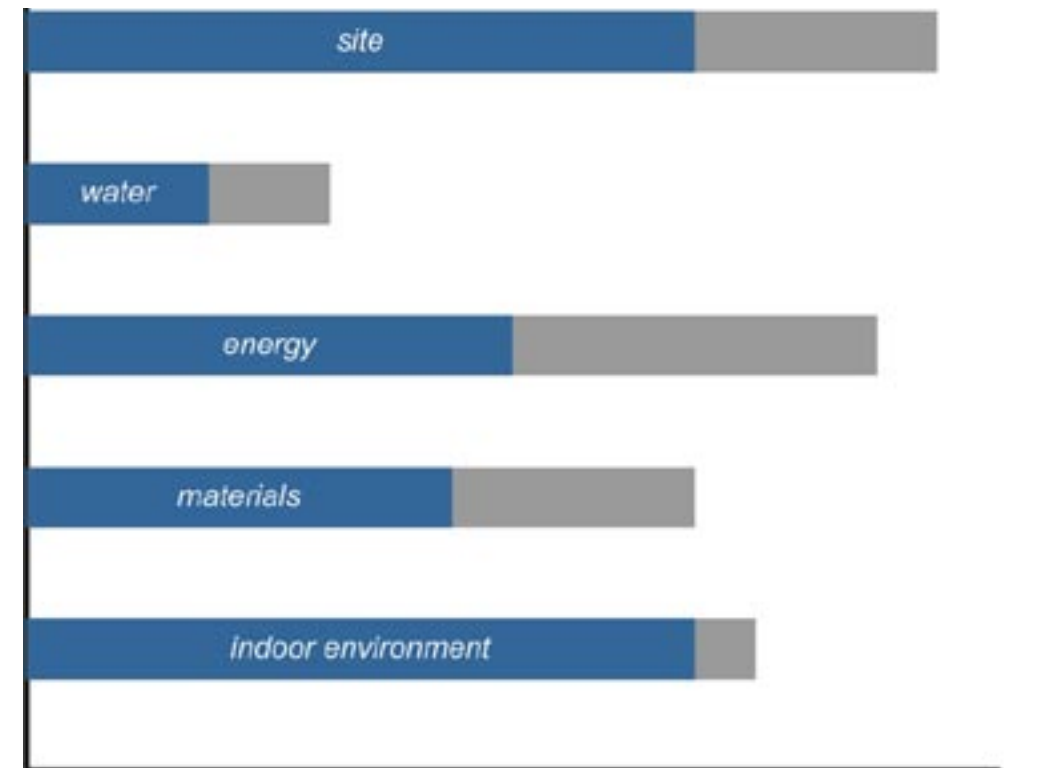


Sustainability Concepts

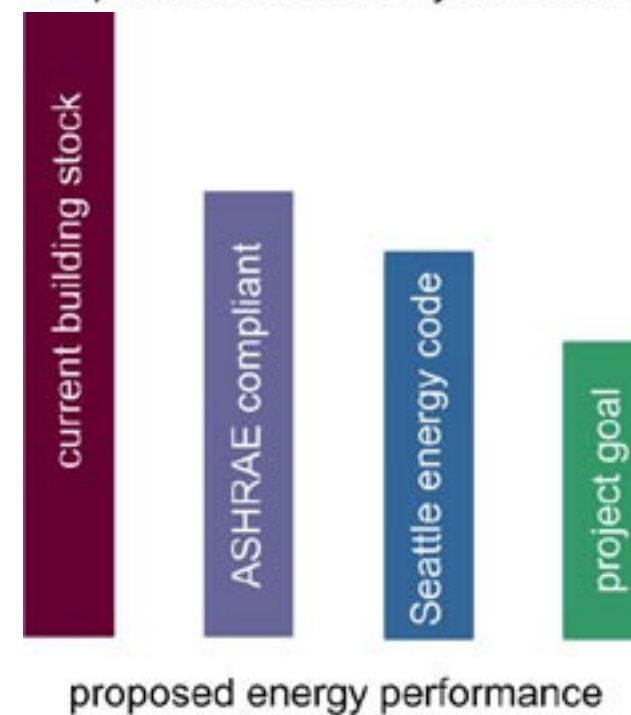
Sustainability Achievements

Advantages of proposed sustainable development over conventional building

- reduced global warming impact and ozone depletion impact
- energy savings – 15% or more beyond minimum requirements
- water savings – 20-30% or more greater than minimum requirements
- reduced urban heat island effect – green roofs and site plantings
- dense multi-use development with civic component
- alternative commuter options and incentives
- better air quality & ventilation
- a healthier home environment
- daylight & views
- a more productive work environment
- healthier & sustainably produced materials
- site recycling programs
- decreased chum costs and material impacts (reduced long term waste)
- improved construction practices



Proposed Sustainability/LEED Performance max potential target



proposed energy performance

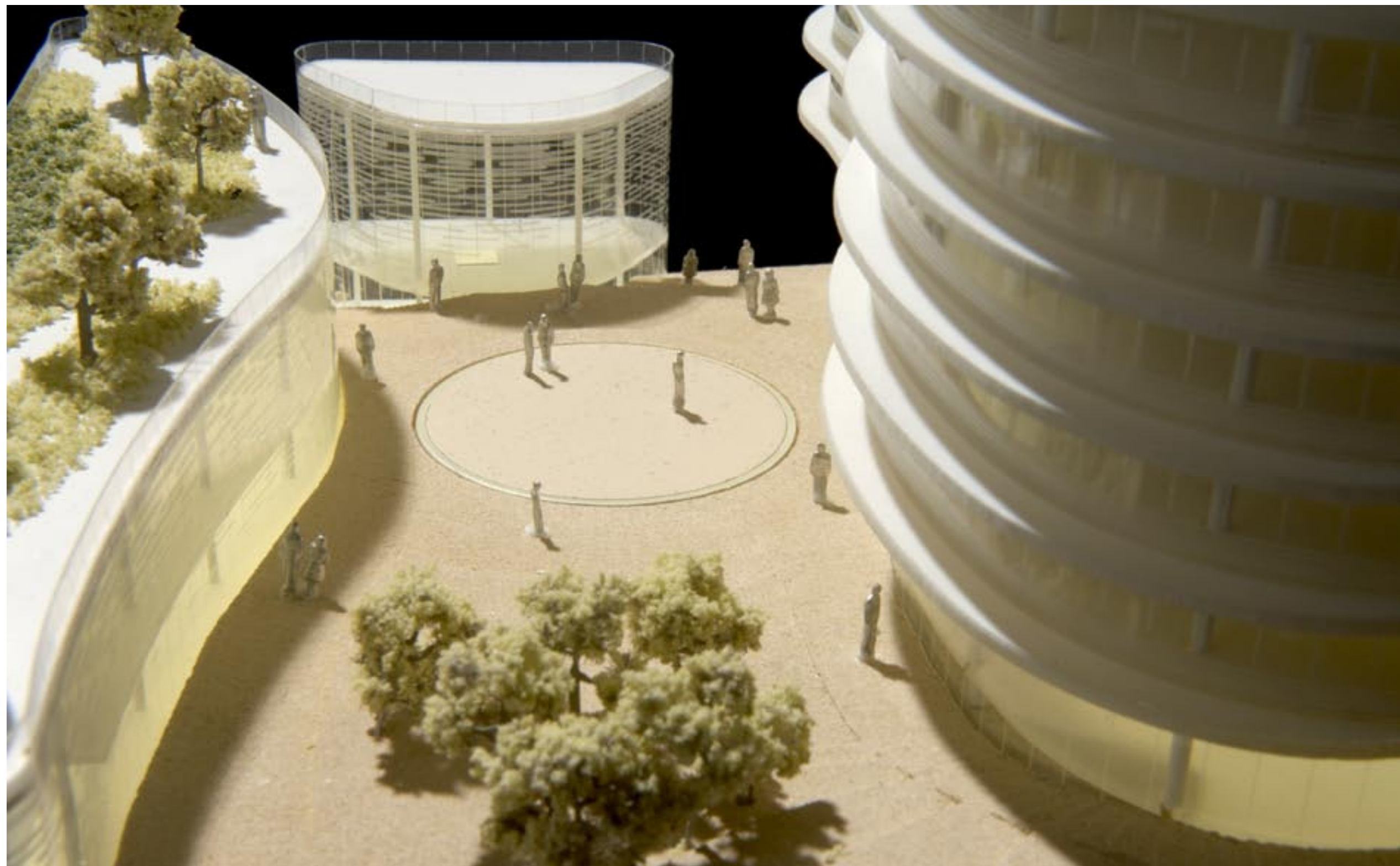
Model Photos

Plaza



Model Photos

Plaza



Visualisation

View from Terminal 18



Visualisation

Seattle Skyline at Night

City Comment A2



Visualisation

Seattle Skyline

City Comment A2





Seattle Zoning Code Review for EDG-3

Project: Civic Plaza

Project No. 2006048.00
Address: 3rd & Cherry (between James and 4th)
Date: November 2, 2007

Zone: DMC 340/290-400
 Downtown Mixed Commercial
 Downtown Fire District
 Commercial Core Urban Center Village
 James & Cherry = Class II Pedestrian Streets / Principal Art
 3rd & 4th = Class I Pedestrian Streets

23.49.008 Structure Height

A.3 Base height limit for portions of a structure containing nonresidential and live-work uses = 340 feet.
 Base height limit that applies to portions of a structure in residential use = 290 feet.
 Highest possible applicable height limit for a structure that uses the bonus available under 23.49.015 and has no nonresidential or live-work use above 340 feet = 400 feet.
 Note: A text amendment is in process that will affect this site. If implemented, it will allow for a 30% increase in height for both the residential and non-residential in exchange for

23.49.011 Floor Area Ratio.

A. Base FAR = 5
 Maximum FAR = 10
 Additions to base FAR:
 Mandatory first increment = LEED Silver = 0.50 FAR
 See also .012 and .013 below
 B. Exemption from FAR:
 Street Level Uses compliant with 23.49.009, Child Care, Residential Use, Live Work Use, Theaters, Below grade area, Short term or residential accessory parking, Public Benefit features, Public restrooms, Shower facilities for bicycle commuters, 3 ½% of Gross Floor area as deduction for mechanical equipment. Roof top mechanical area included.

23.49.012 Bonus floor area for voluntary agreements for housing and child care.

Performance or Payment options

Low income Housing

Income Level	Gross SF of Housing/sf of bonus area	Cash Contribution*
Total	0.15578507	TBD

Child Care

Income Level	Child Care slot/sf of bonus area	Cash Contribution*
Up to 30% of median income	0.000127	TBD

23.49.013 Bonus floor area for amenities

Amenity	Bonus Ratio	Maximum square feet (SF) of floor area eligible for a bonus
Hillside Terrace	5:1	6,000 SF
Urban Plaza	5:1	5,000 SF
Commercial Parcel Park	5:1	7,000 SF
Residential Parcel Park	5:1	12,000 SF
Public Atrium	5:1	5,500 SF
Hillclimb Assist	NA	Maximum gain of 0.5 FAR
Transit Station Access	NA	Maximum gain of 1.0 FAR
Public Restroom	7:1	No limit
Human Services	7:1	10,000 SF

Bonus residential floor area for voluntary agreements for low-income housing and moderate-income housing.

a. For the performance option, the applicant shall provide, as low-income housing or moderate-income housing, net rentable floor area equal to eleven (11) percent of the net residential floor area sought as bonus development.

23.49.016 Open space

Zoning

B. Open space in the amount of twenty (20) square feet for each one thousand (1,000) square feet of gross office floor area shall be required of projects that include eighty-five thousand (85,000) or more square feet of gross office floor area
Parcel park; Hillside terrace; or Urban plaza.

23.49.019 Parking quantity requirements

- A. No parking required
- B. Location of parking: Parking required below street level or separated by other uses.
- C. Maximum Parking Limit for Nonresidential Uses: limited to a maximum of one parking space per one thousand (1,000) square feet.

23.49.056 Downtown Office Core 1, Downtown Office Core 2, and Downtown Mixed Commercial street facade and street setback requirements.

A. Minimum Facade Height.

Street Classification	Minimum Facade Height
Streets Requiring Property Line Facades:	35 feet – 3 rd Ave
Class I Pedestrian Streets:	25 feet – 4 th Ave
Class II Pedestrian Streets	15 feet – James & Cherry St

B. Facade Setbacks

Between the elevations of fifteen (15) and thirty-five (35) feet above sidewalk grade, the facade shall be located within two (2) feet of the street property line, with exceptions.

C. Facade Transparency Requirements.

1. Facade transparency requirements apply to the area of the façade between two (2) feet and eight (8) feet above the sidewalk, except that when the slope along the street frontage of the facade exceeds seven and one-half (7 1/2) percent, the transparency requirements apply to the area of the facade between four (4) feet and eight (8) feet above sidewalk grade.
4. Transparency requirements are as follows:
 - a. Class I pedestrian streets (3rd Ave&4th Ave): A minimum of sixty (60) percent of the street level facade shall be transparent.
 - b. Class II pedestrian streets (James and Cherry): A minimum of thirty (30) percent of the street level facade shall be transparent.
 - c. Where the slope along the street frontage of the facade exceeds seven and one-half (7 1/2) percent, the required amount of transparency shall be reduced to fifty (50) percent on Class I pedestrian streets and designated green streets and twenty-five (25) percent on Class II pedestrian streets.

D. Blank Facade Limits.

2. Blank Facade Limits for Class I Pedestrian Streets (3rd & 4th): Blank facades shall be no more than fifteen (15) feet wide except for garage doors which may exceed fifteen (15) feet.
3. Blank Facade Limits for Class II Pedestrian Streets (James & Cherry): Blank facades shall be no more than thirty (30) feet wide, except for garage doors, which may exceed thirty (30) feet.

23.49.058 Downtown Office Core 1, Downtown Office Core 2, and Downtown Mixed Commercial upper-level development standards.

For portions of structures in non-residential use above a height of one hundred sixty (160) feet in which any story above an elevation of eighty-five (85) feet exceeds fifteen thousand (15,000) square feet. For structures with separate towers, the fifteen thousand (15,000) square foot threshold applies to each tower individually

B. Facade Modulation.

1. Facade modulation is required above a height of eighty-five (85) feet above the sidewalk for any portion of a structure located within fifteen (15) feet of a street property line. No modulation is required for portions of a facade set back fifteen (15) feet or more from a street property line.

Elevation	Maximum length of un-modulated facade within 15' of street property line
0 to 85 feet	No limit
86 to 160 feet	155 feet
161 to 240 feet	125 feet
241 to 500 feet	100 feet
Above 500 feet	80 feet

3. Any portion of a facade exceeding the maximum length of façade prescribed on Chart 23.49.058A shall be set back a minimum of fifteen (15) feet from the street property line for a

minimum distance of sixty (60) feet before any other portion may be within 15 feet of the street property line.

- C. Maximum tower width. The maximum facade width for portions of a building above two hundred forty (240) feet shall be one hundred forty-five (145) feet along the general north/south axis of a site (parallel to the Avenues), and this portion of the structure shall be separated horizontally from any other portion of a structure on the lot above 145 feet by at least eighty (80) feet at all points.

- D. Tower floor area limits and tower width limits for portions of structures in residential use. The requirements of this subsection D apply only to structures that include portions in residential use above a height of one hundred and sixty (160) feet.

10,000 sq. ft.	10,700 sq. ft.	11,500 sq. ft.	Maximum residential floor
Average residential gross floor area limit per story of a tower if height does not exceed the base height limit for residential use	Average residential gross floor area limit per story of a tower when height exceeds the base height limit for residential use	area of any story in a tower	

- E. Tower spacing is not required.

- F: Upper level setbacks are not required.

Bonus Summary:

1. Base FAR		5
2. Bonus for LEED Silver	0.5	
3. 75% of remainder for housing		3.375
4. 25% of remainder can be amenity and Performing Arts but half must be from Performing Arts		
5. Therefore performing arts is:		0.5625
6. Transit Access for a maximum of 1.0		
7. Therefore transit access is:		0.5625
8. Total:		10.

Area Summary:

1. The total chargeable office commercial area provided:	594,280 s.f.
2. Less 3-1/2% allowance for mechanical and shafts	20,800 s.f.
3. All retail that is street level or part of the Plaza activation is exempt	
4. Chargeable FAR	573,480 s.f.
5. Site area:	57,348 s.f.
6. FAR	10

Departures Matrix

Seattle Civic Square
Triad Development

Departures Requested at
EDG-3

Foster+Partners
GGLO
Arup

Design Departures	General description	Code Section	Detailed requirements	Proposal	Rationale
1 Street Level Uses					
	Street level uses are required on Third Avenue from Map 1G	23.49.009	75% of the street frontage for retail, customer service, entertainment, public atriums, etc.	Where possible the proposal provides retail along Third Avenue. Windows are provided from Third Avenue pedestrian in to the Metro Station connection escalators.	Openings to the Civic Plaza and access to Metro limit retail frontage. To the extent possible the team has maximized the retail exposure on Third Avenue.
2 Overhead Weather Protection					
	Continuous overhead weather protection shall be required for new development along the entire street frontage.	23.49.018	Exceptions: 1) portions further than 5 feet from the street property line, 2) bonused space, 3) driveways or loading docks. The overhead protection is to be at a minimum of 10 feet and a maximum of 15 feet above the sidewalk.	Overhead weather protection is provided along the retail on Third Avenue. No additional overhead weather protection is provided on Cherry Street No additional overhead weather protection is provided on James Street No additional overhead weather protection is provided on Fourth Avenue	Overhead weather protection is provided as prescribed for the retail at the west building fronting on Third Avenue. The retail at the corner of Third and Cherry is more than 5 back from the property line. This set back is necessary to improve the visual pedestrian connection to the public plaza located in the middle of the block. The office floors above overhang the retail frontages by over 7 feet. No additional weather protection is provided. The condition described above follows along Cherry to the pedestrian connection to the plaza opposite the entrance to the Arctic Club entrance on Cherry Street. The next portion of Cherry is the auto exit which is exempt. Weather protection beyond the office overhang and pedestrian connection to the plaza is not provided. As a continuation of the City Hall master plan, James street is primarily a service street. The pedestrian weather protection treatment for this project is similar to that provided for the City Hall project but in addition provides a weather protected pedestrian path with escalator to the public plaza space. Fourth Avenue is primarily access to the public plaza. In lieu of overhead weather protection at the entrance to the office tower the design provides for an internal weather protected path to the plaza along the south face of the tower.
3 Façade Modulation					
	Commercial Upper level development standards	23.49.058B	Modulation of facades is required to be no longer than xxx feet between elevations x - x as shown below: unlimited between 0 - 85 155 feet between 86 - 160 125 feet between 161 - 240 100 feet between 241- 500 80 feet above 500	The north façade is a continuation of the theme developed with the city's RFP submittal. That façade has curves at both the west and east ends and does have a continuous façade between those points.	This site has unique restrictions described in a master plan developed by the city. Site coverage is limited to 45% of the north portion of the site. The design team's goal is to maximize the civic space on the south portion of the site. If additional facade modulation were provided on the north façade there would be less area available for the civic space.

Departures Matrix

Seattle Civic Square
Triad Development

Departures Requested at
EDG-3

Foster+Partners
GGLO
Arup

4 Setback at 3rd and Cherry

Street façade and street setback requirements. Streets requiring minimum façade heights are:	23.49.056A	The maximum setback is 10 feet. No more than 40% of the façade can be setback more than 2 feet. No setback more than 2 feet can extend more than 20 feet.	The west end of the tower as it meets the ground is set back 7'-6" at the mid point and increases to over 20 feet following the radiused end.	The RFP submittal described a curved tower forming the corner of Third and Cherry. This form is not compatible with the street façade requirements. This form is key to visually connecting the pedestrian on Third Avenue to the plaza.
3rd Avenue: 35 feet				
4th Avenue: 25 feet				
James and Cherry Streets: 15 Feet	23.49.056B			

5 Blank Wall at James

Façade Transparency Requirements	23.49.056C	Façade transparency is required to be between 2 and 8 feet except streets sloping more than 7-1/2% where the requirement is between 4 and 8 feet.	The James Street elevation contains views to the pedestrian escalator, truck and auto entrances, a window to retail and glass enclosed connection to the accessible green roof top.	Similar to City Hall, the James Street façade has vehicular entrances or exits and a green wall. This project adds visual connection from the pedestrian escalator from the corner of Third and James to the public plaza connection on the west, a glass enclosed stair and elevator to a publicly accessible roof garden on the east and a window on the James Street facade to the market style retail at the plaza level and the restaurant at the Fourth Avenue level.
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6 Façade Widths.

Upper Level width limits	23.49.058C	The maximum tower width for towers (above 240 feet) is 145 feet along the general north-south axis.	The maximum width of the office portion of the tower along 4th Avenue is 131 feet when viewed in elevation but only 71 feet for the flat portion.	Project complies
	23.49.058D2	Under Residential: The maximum tower width for towers (above 85 feet) is 120 feet along the general north. south axis.	The width of the residential portion of the tower when viewed in pure elevation is 121'-6". Both the north and south ends of the elevation are curved and at the 121'-6" are 30 feet back from the façade along 4th. The flat portion is only 60 feet long.	When acknowledging the curved portions of the face, the east elevation meets the intent of the code.