SEATTLE ARENA JANUARY 22, 2013 EARLY DESIGN GUIDANCE 3 OPERATIONS & CONTEXT

PLAZA & THE PUBLIC REALM

ARCHITECTURAL CHARACTER

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INTRODUCTION

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This document is the third in a series of City of Seattle Early Design Guidance (EDG) submittals made in reference to a proposed arena to be located within the 'Stadium District'. Building upon the analysis, synthesis, and design direction established in the first two EDG submittals, the general intent of this document is to respond to the Design Guidelines established for the project during the EDG 2 review and to further investigate the architectural character for the building.

Reiterating the focus from EDG 2, the project vision is to create an arena that reinforces linkages to downtown and invigorates its surroundings by reinforcing the existing city fabric and providing a destination, gathering place, and become a vital contributor to Seattle's vibrant culture.

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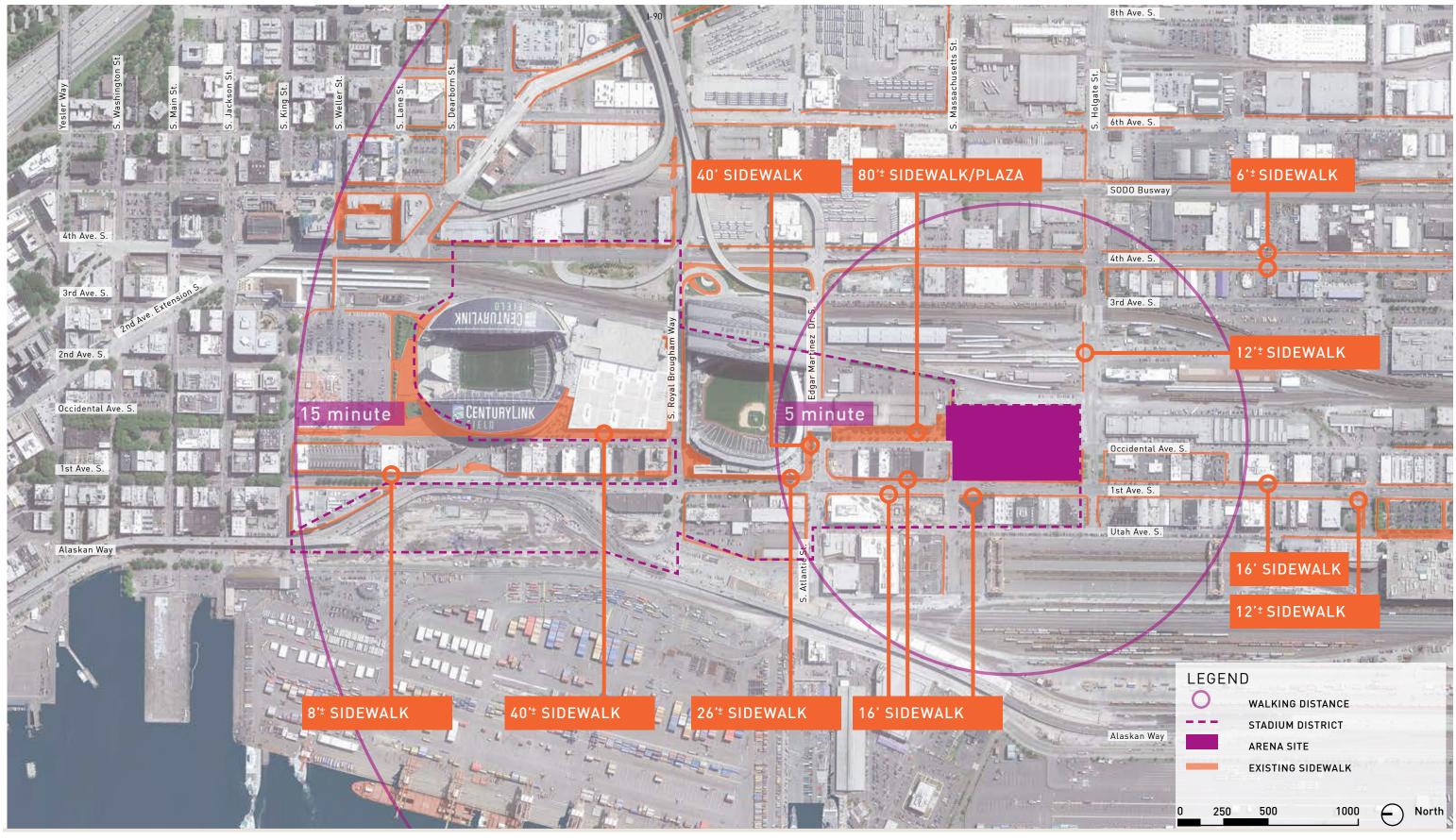
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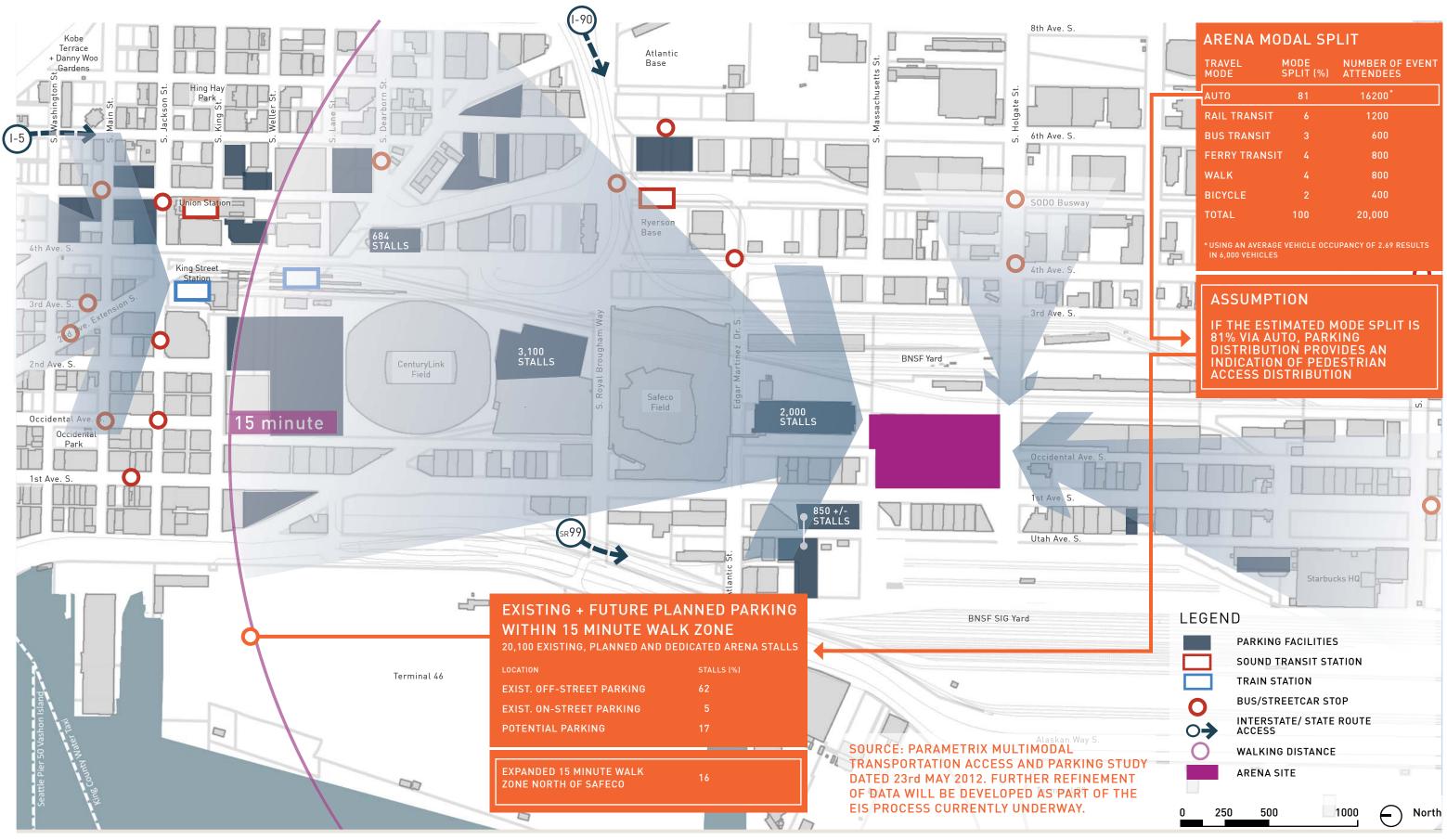






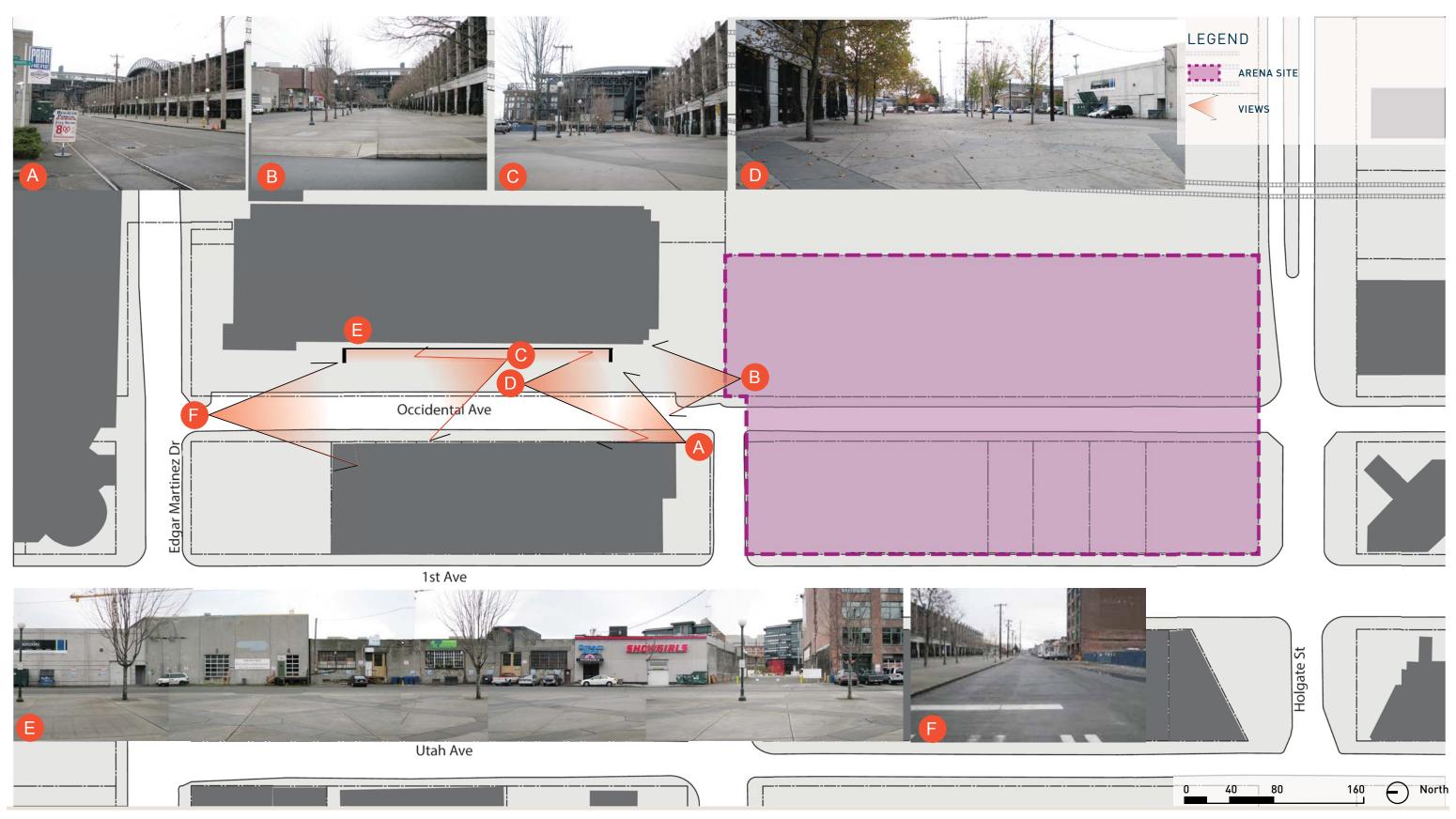
ACCESS: ARRIVAL OPPORTUNITIES

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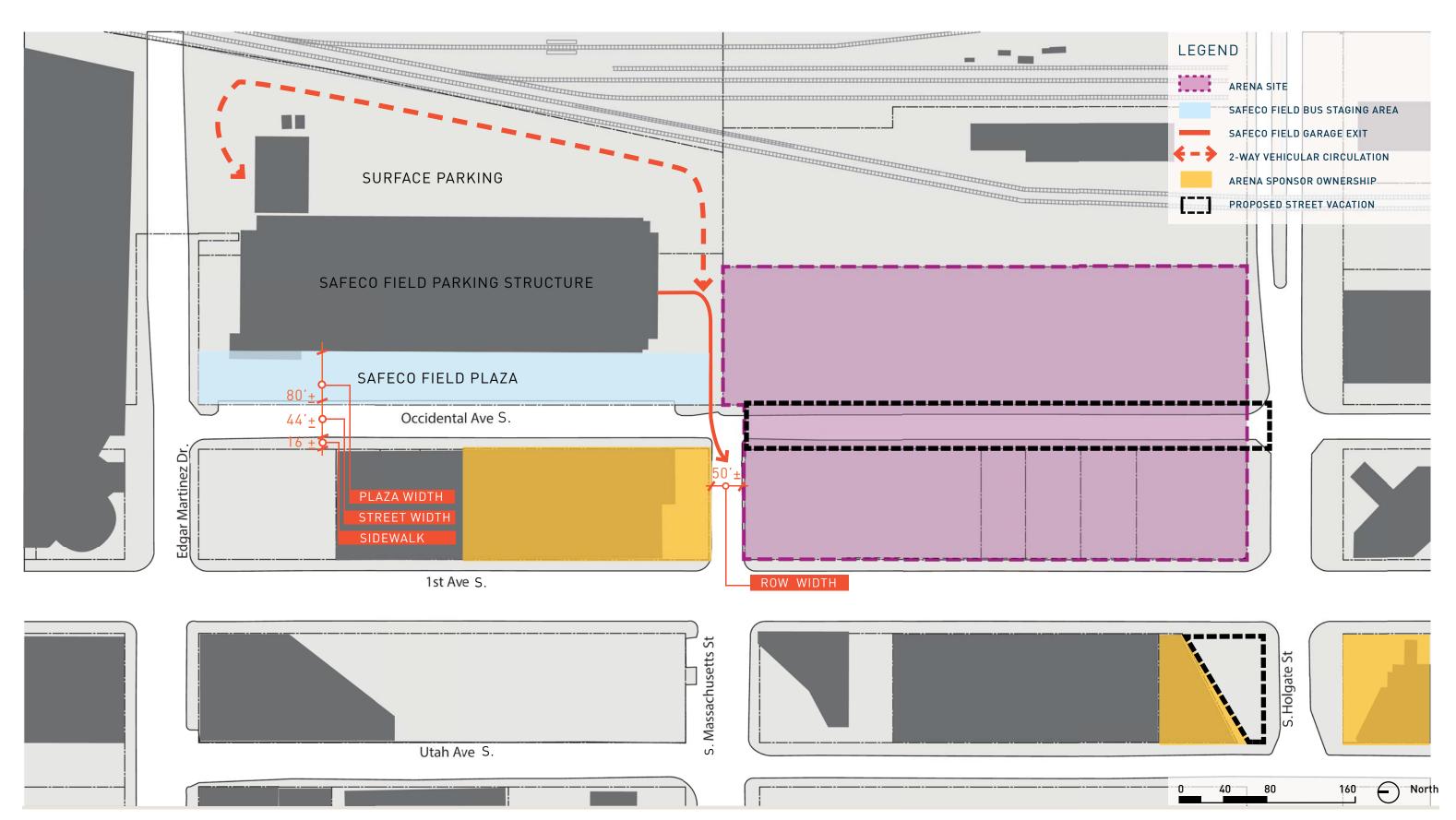


ACCESS: ATTENDEE ARRIVAL DIRECTION



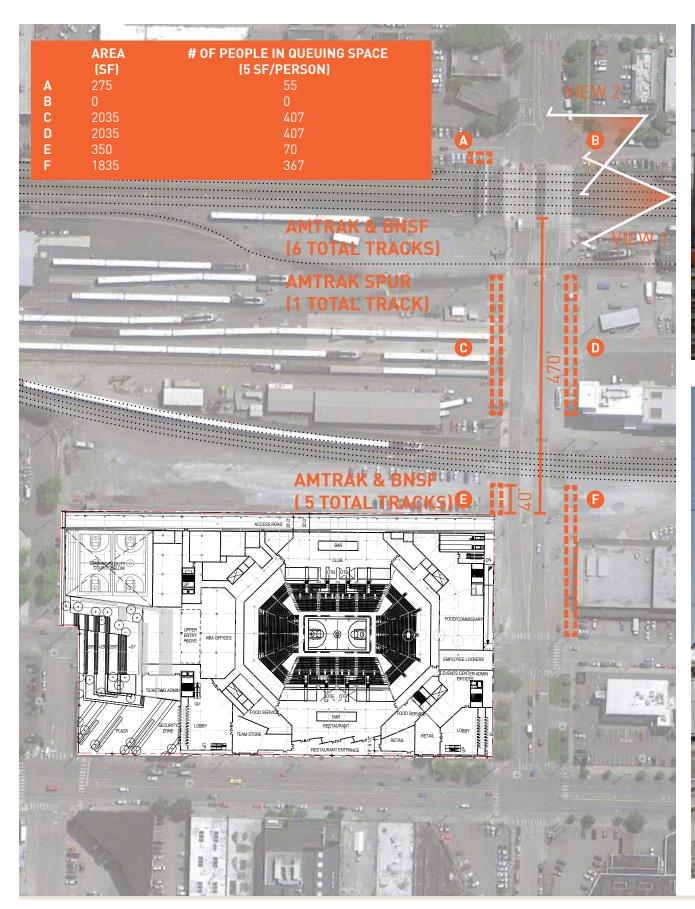


OCCIDENTAL UPDATE





OCCIDENTAL AVE: EXISTING CONDITIONS





VIEW 1

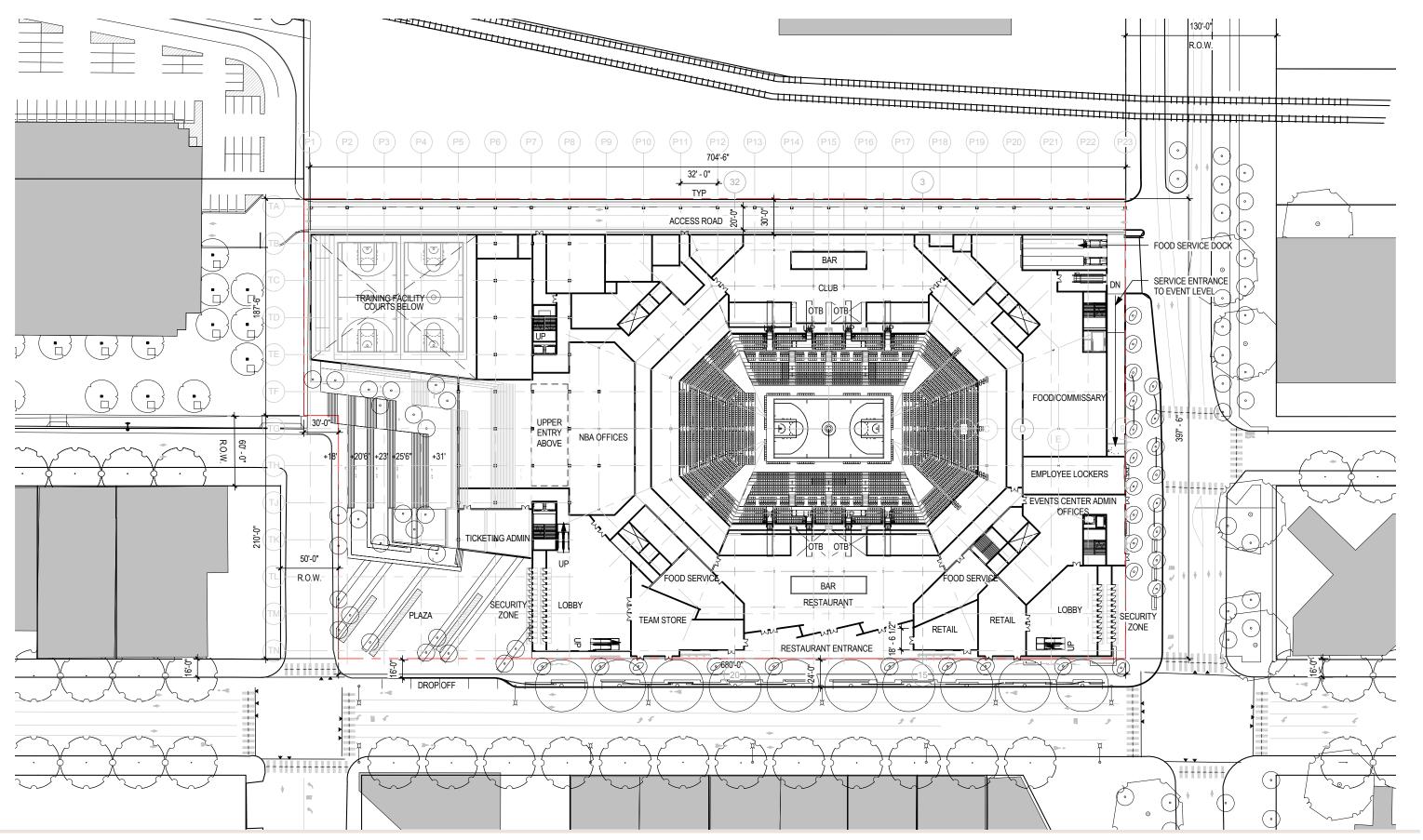


VIEW 2



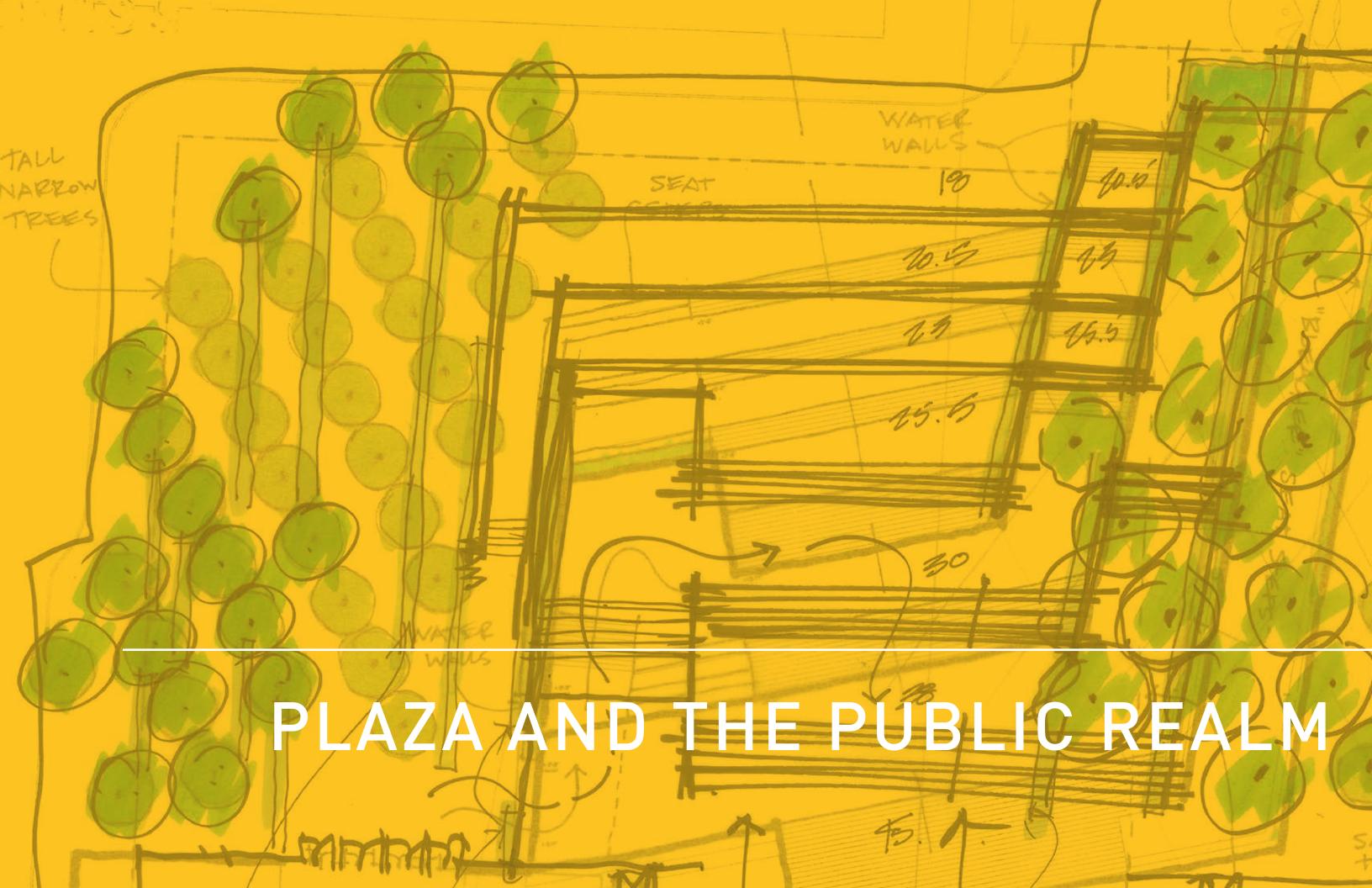
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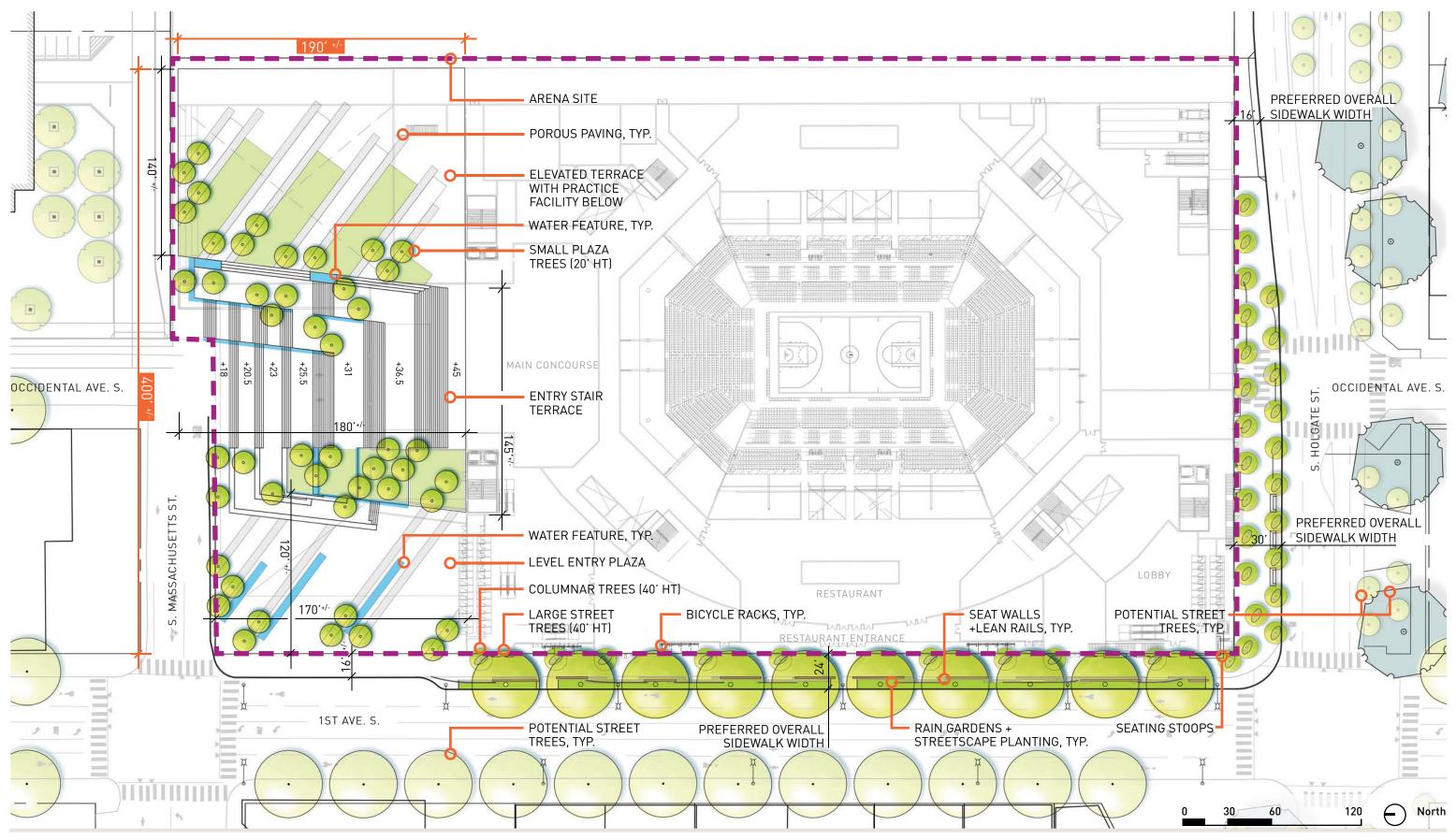
QUEUING OPPORTUNITIES ALONG HOLGATE





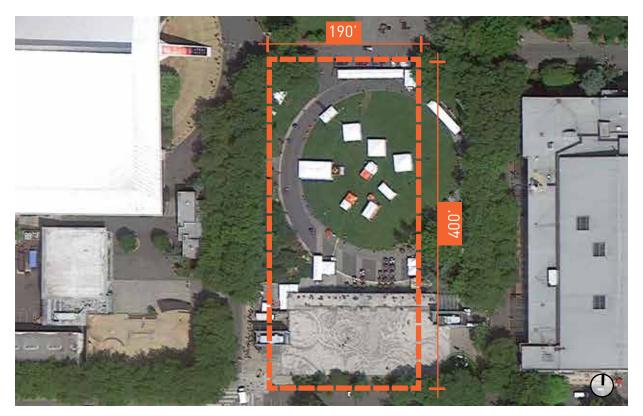
SITE PLAN



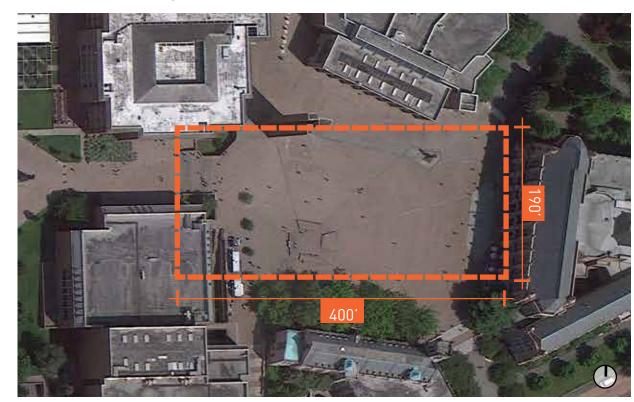




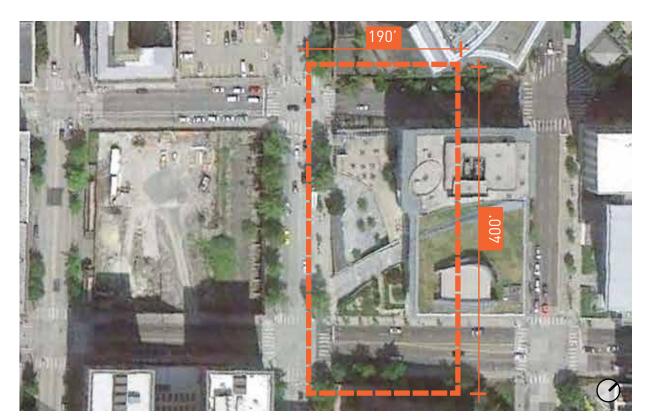
SITE PLAN



FISHER PAVILION, SEATTLE CENTER | SEATTLE



RED SQUARE, UNIVERSITY OF WASHINGTON | SEATTLE



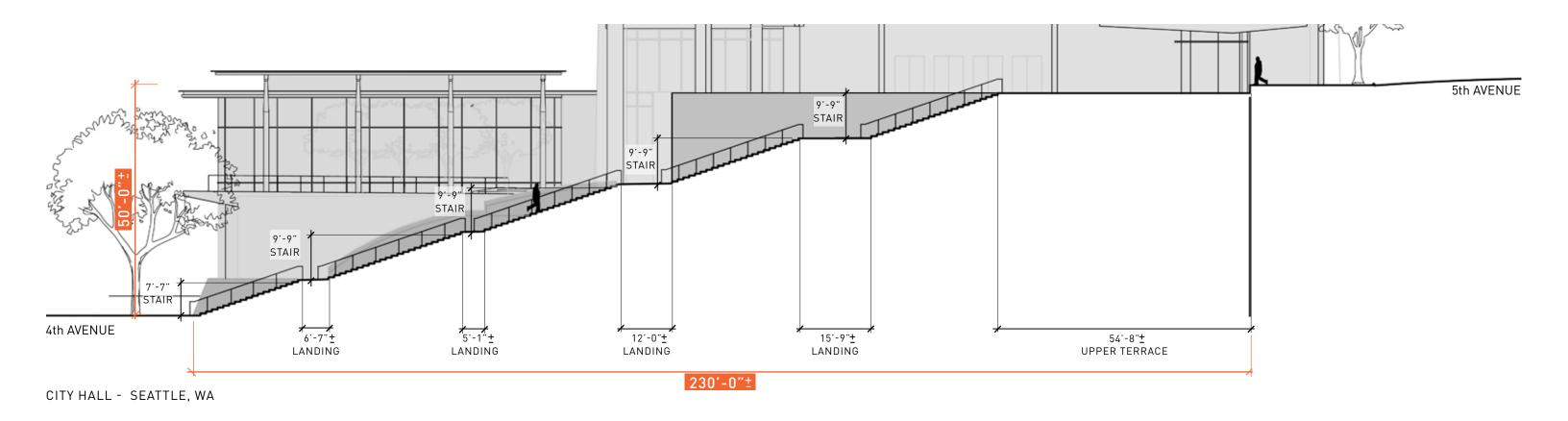
CITY HALL PLAZA | SEATTLE

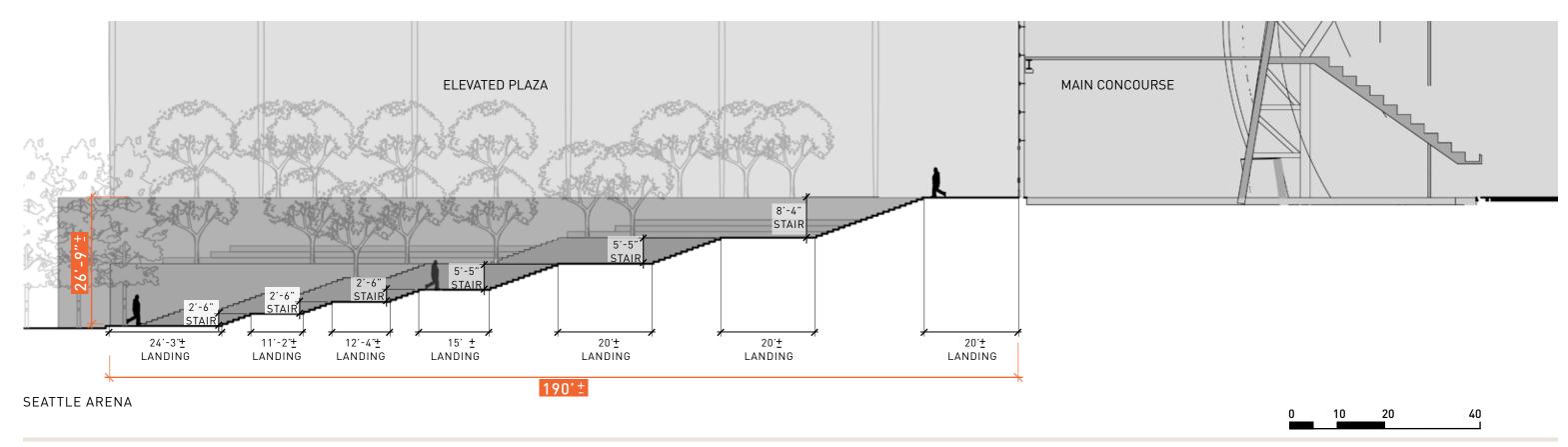


HARBOR STEPS | SEATTLE

0 60 120 240



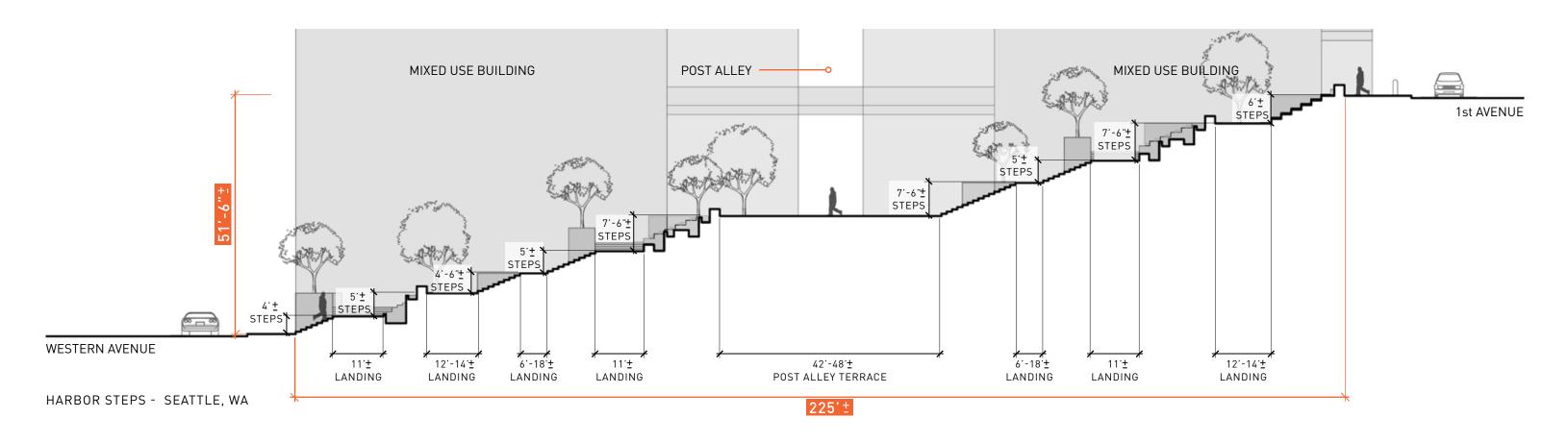


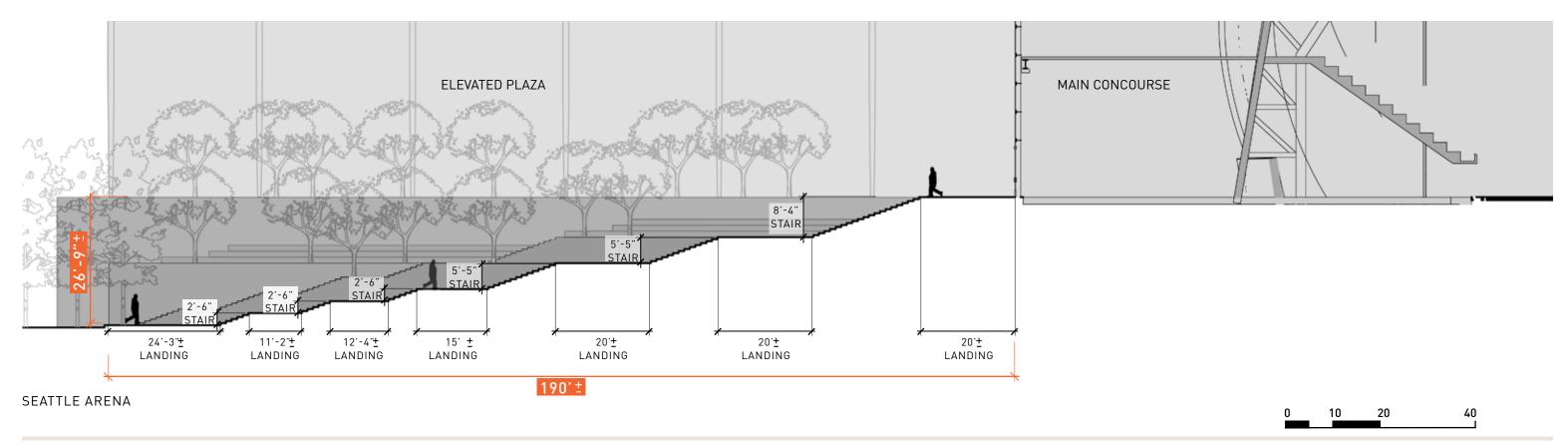




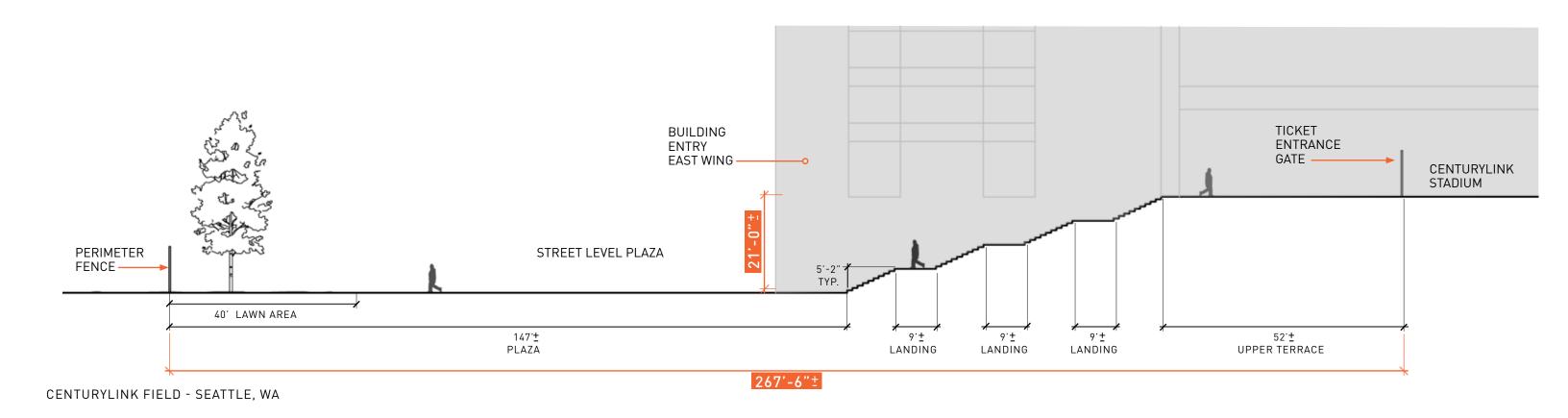
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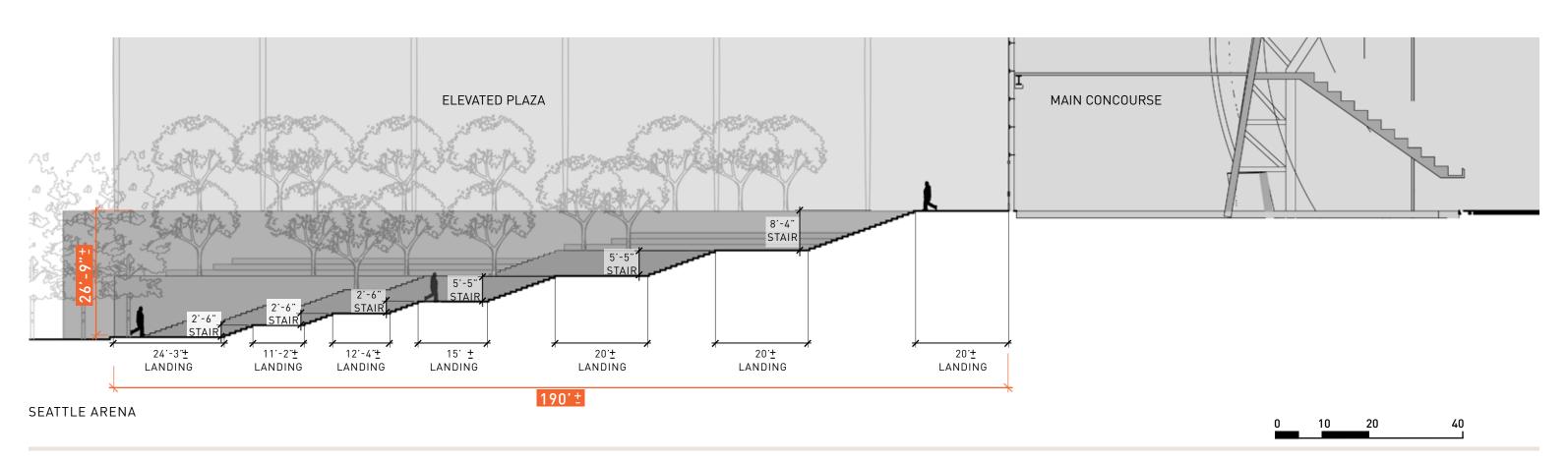
PLAZA COMPARISONS: CITY HALL

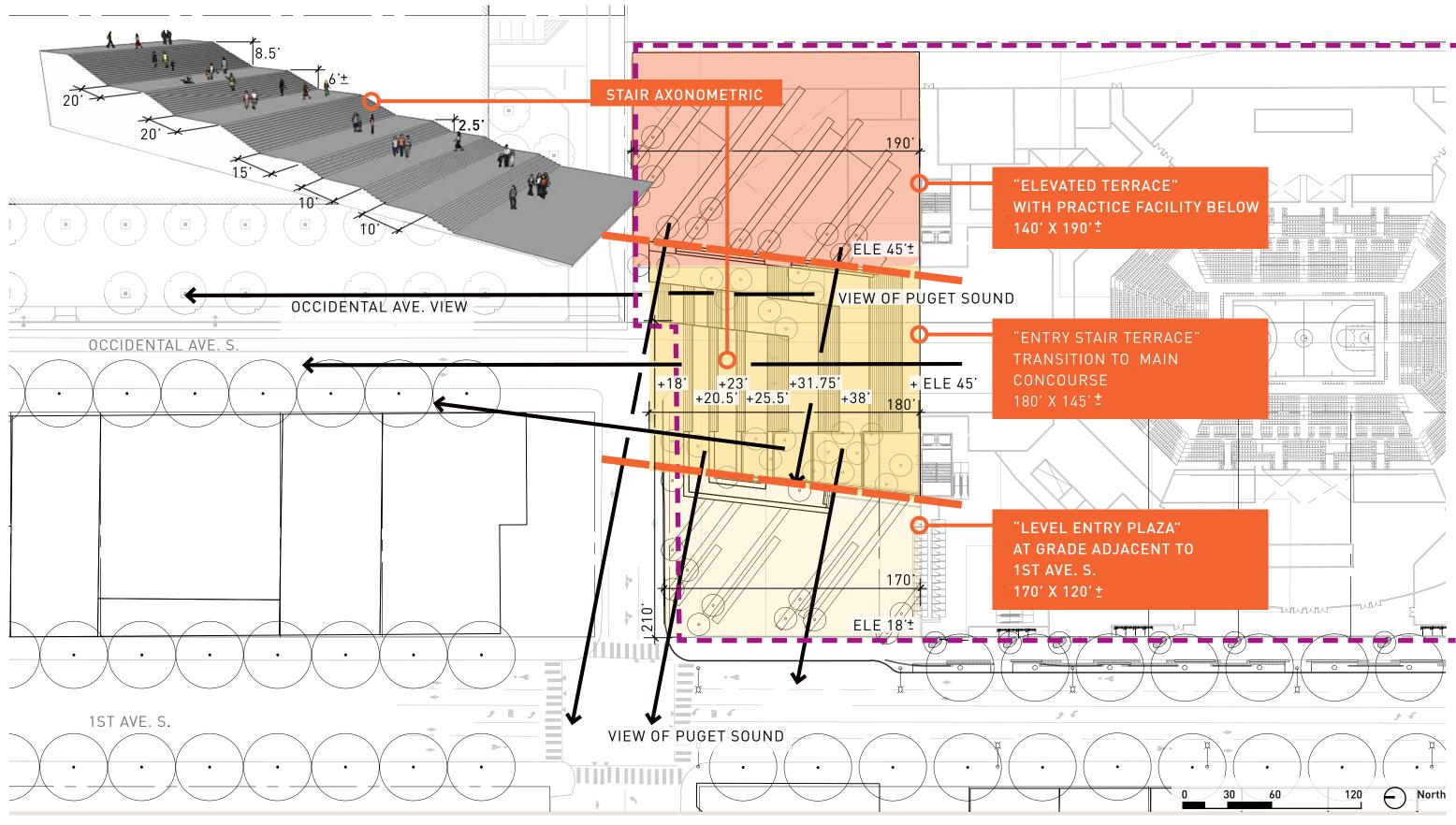






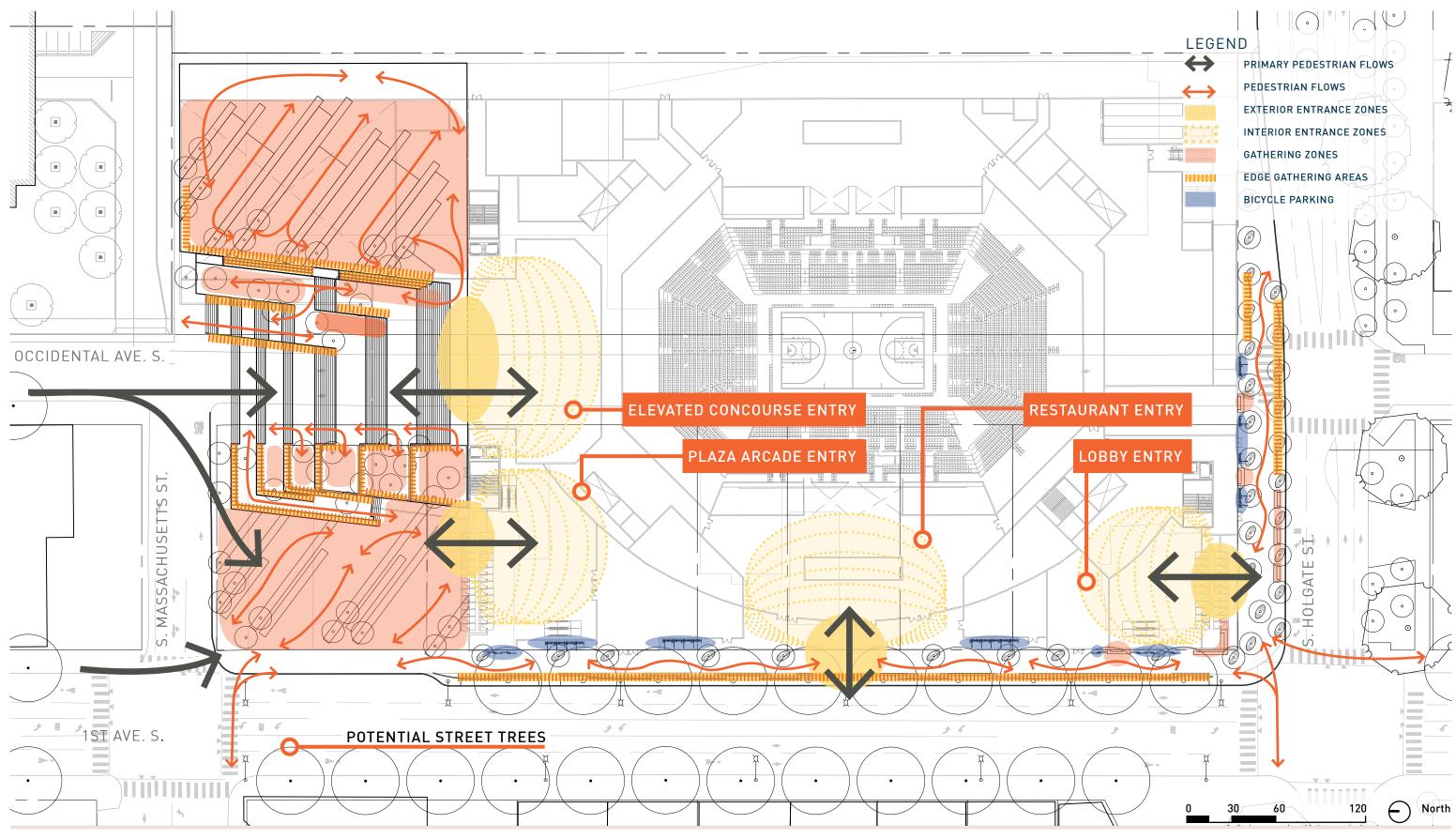








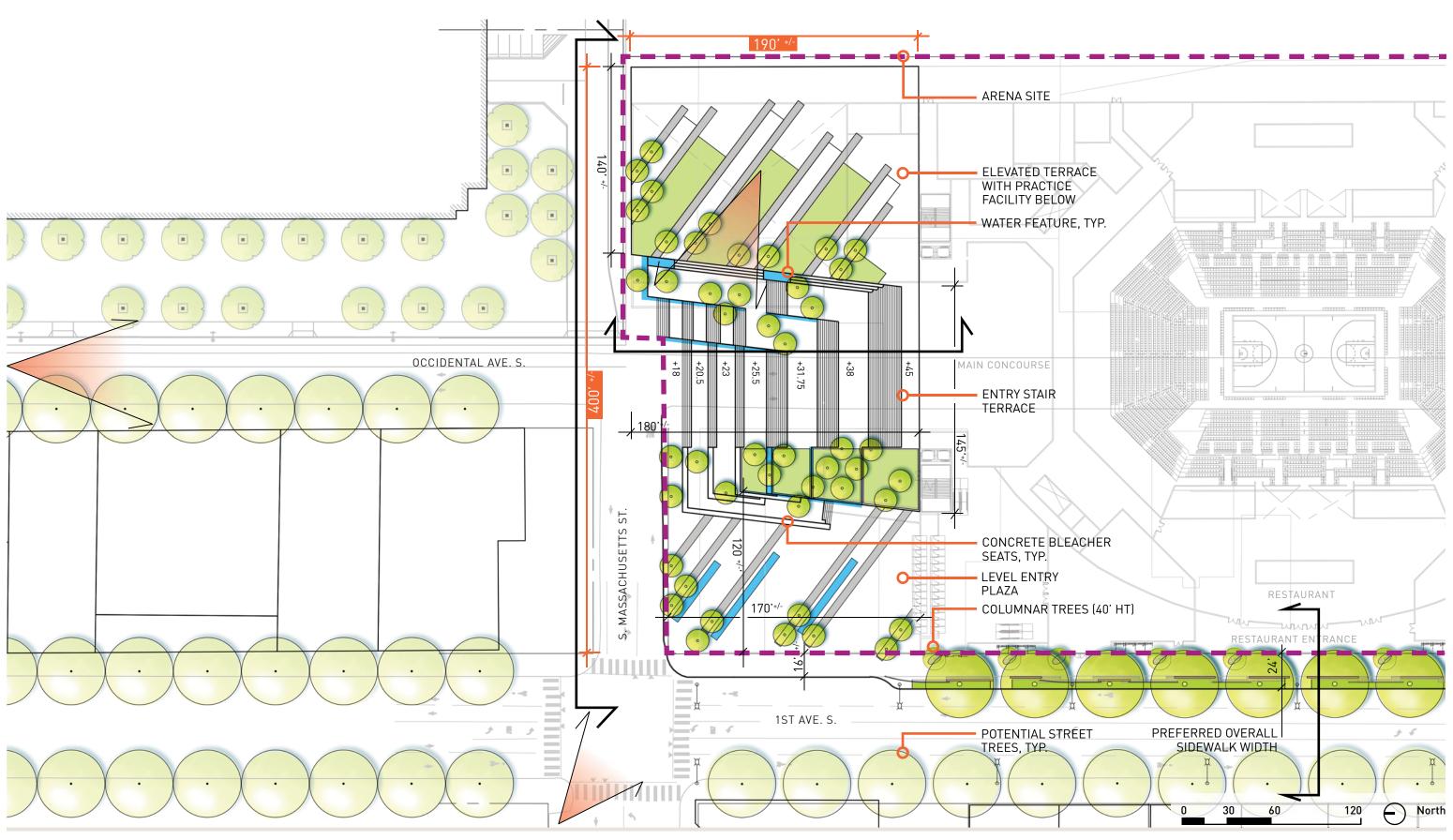
PLAZA SITE ZONES



360

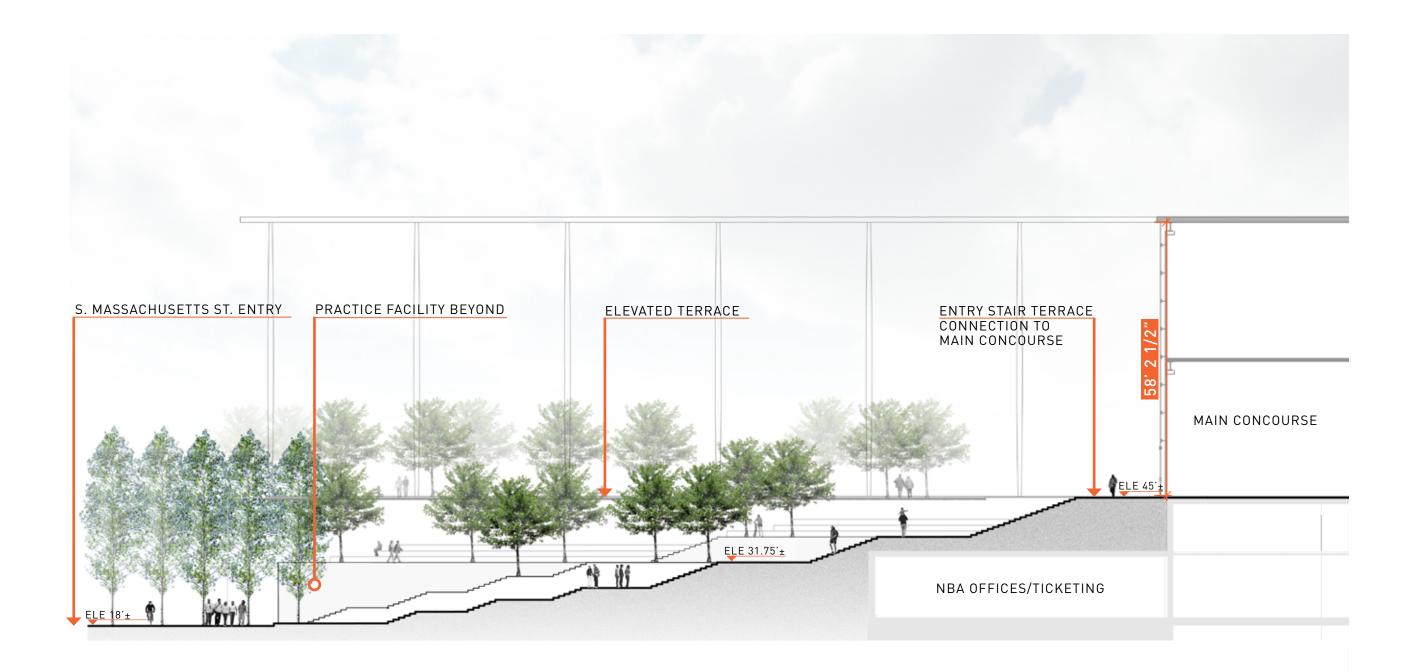
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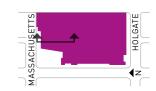
PLAZA AND STREETSCAPE PROGRAM





PLAZA PLAN

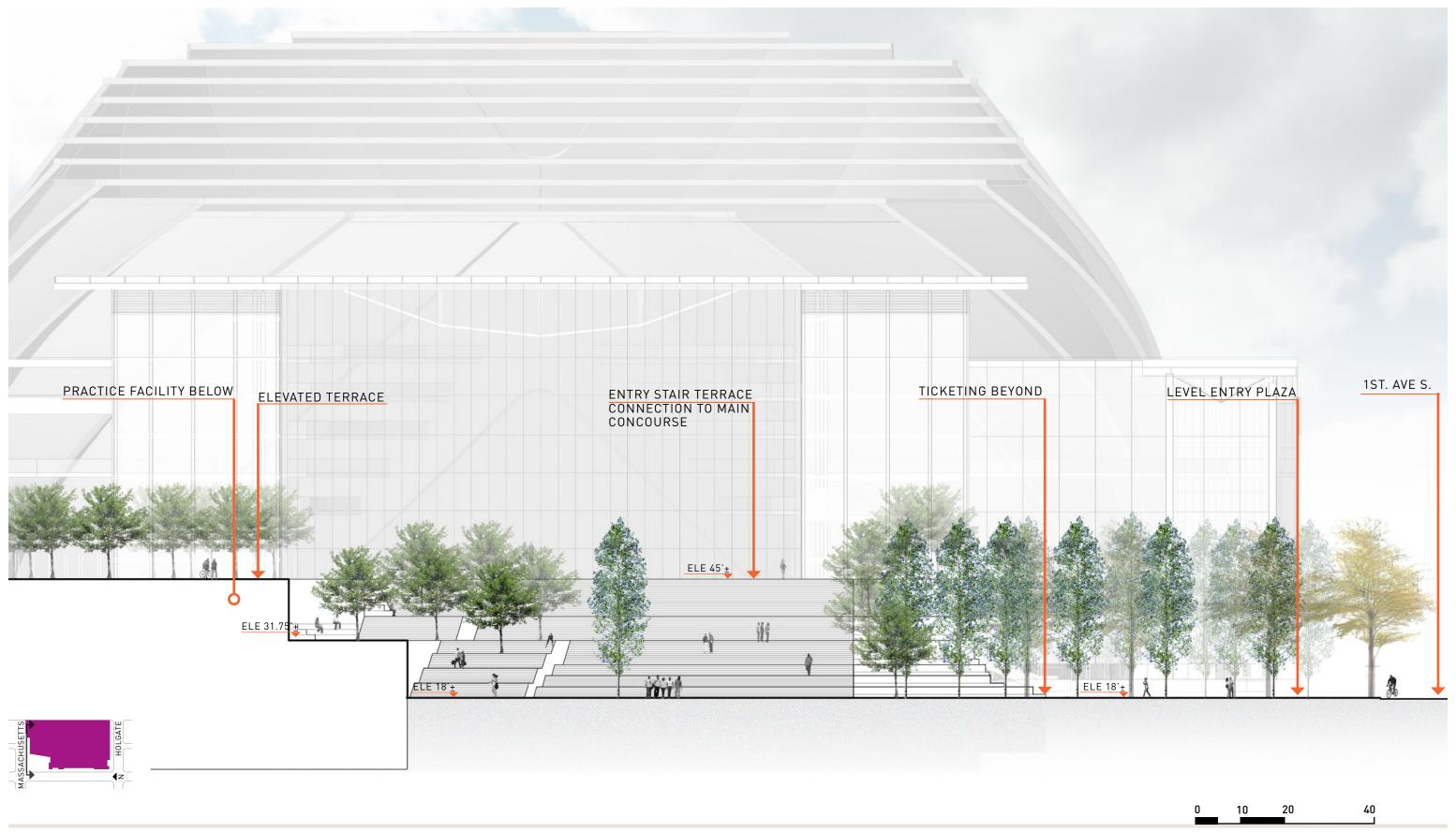




0 10 20 40

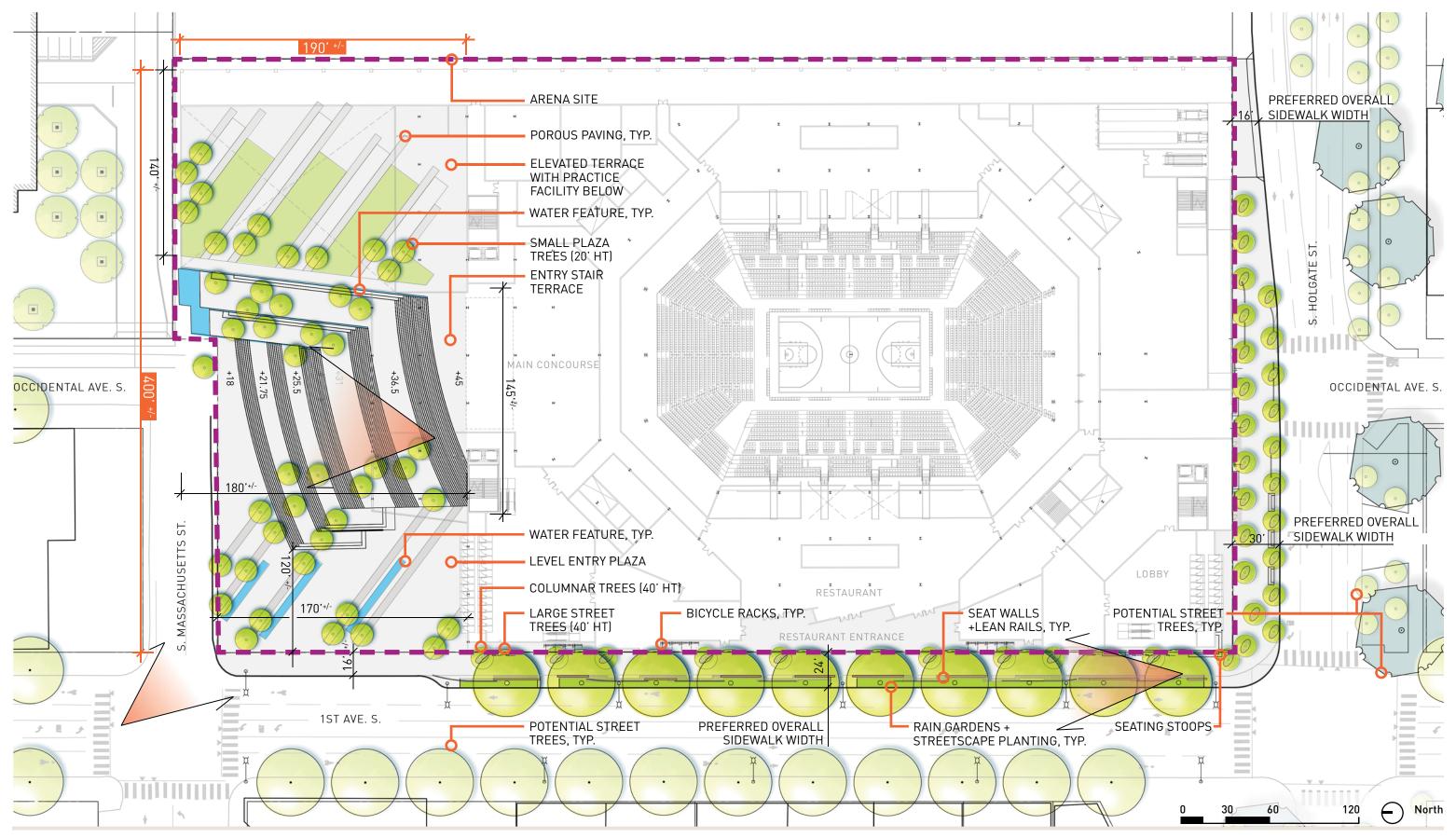
360

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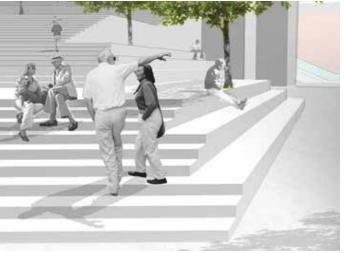
PLAZA SECTION: MASSACHUSETTS VIEW SOUTH





SITE PLAN

BLEACHER SEATS AND STAIRS





PLAZA AT SIDEWALK





WATERWALL AND GREEN WALL



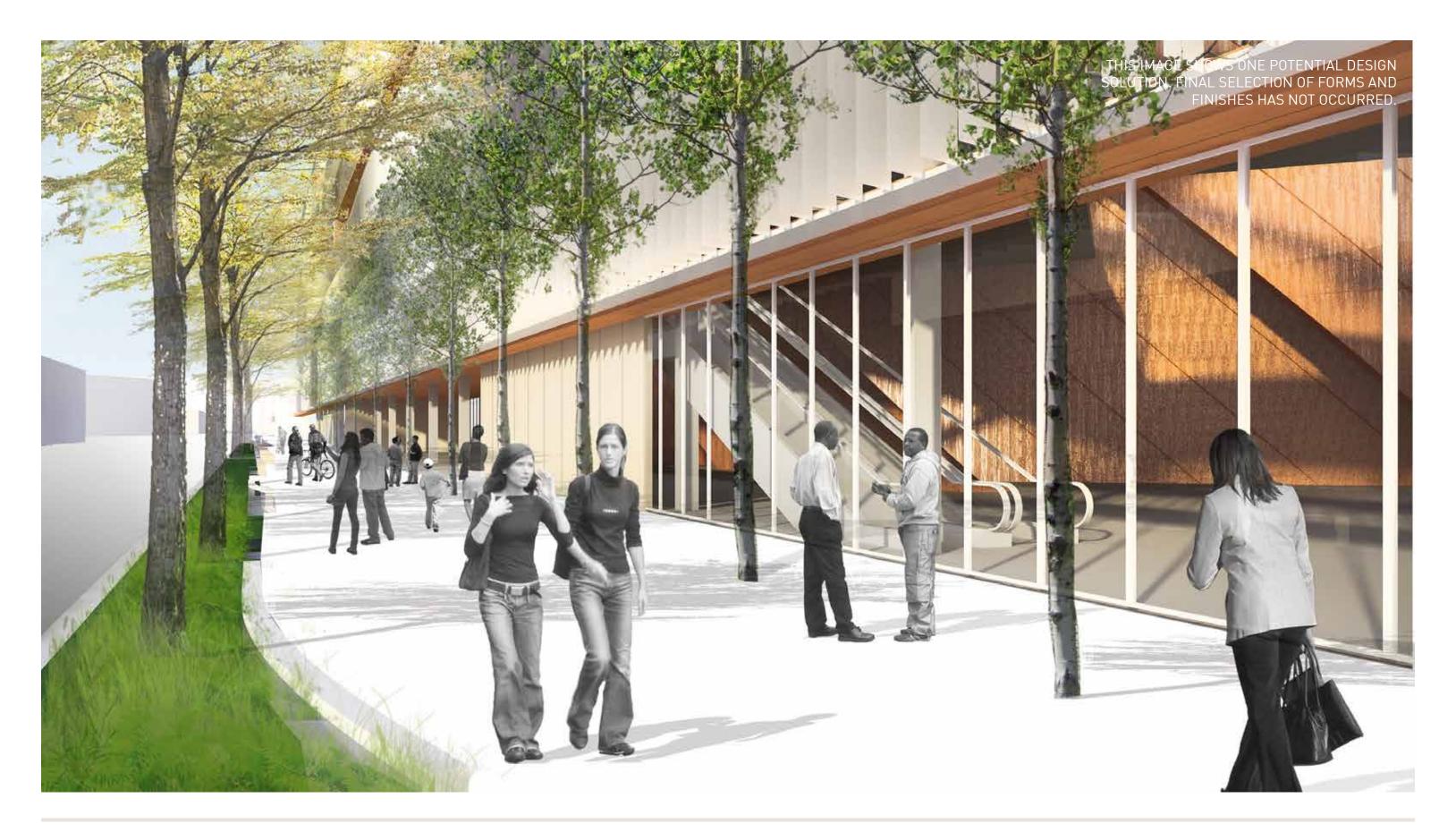




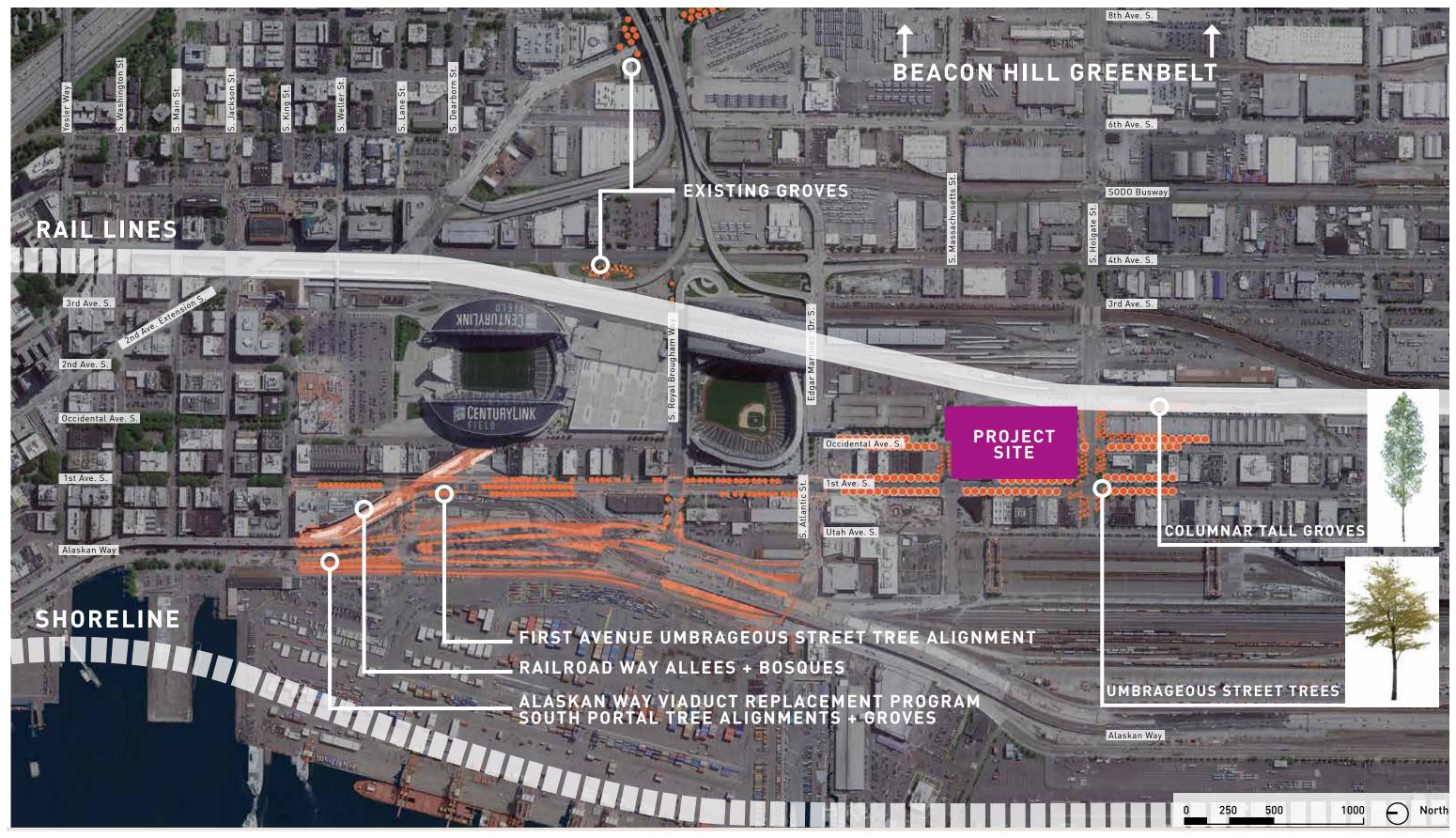




3D VIEWS: PERSPECTIVE AT PLAZA LOOKING NORTHEAST

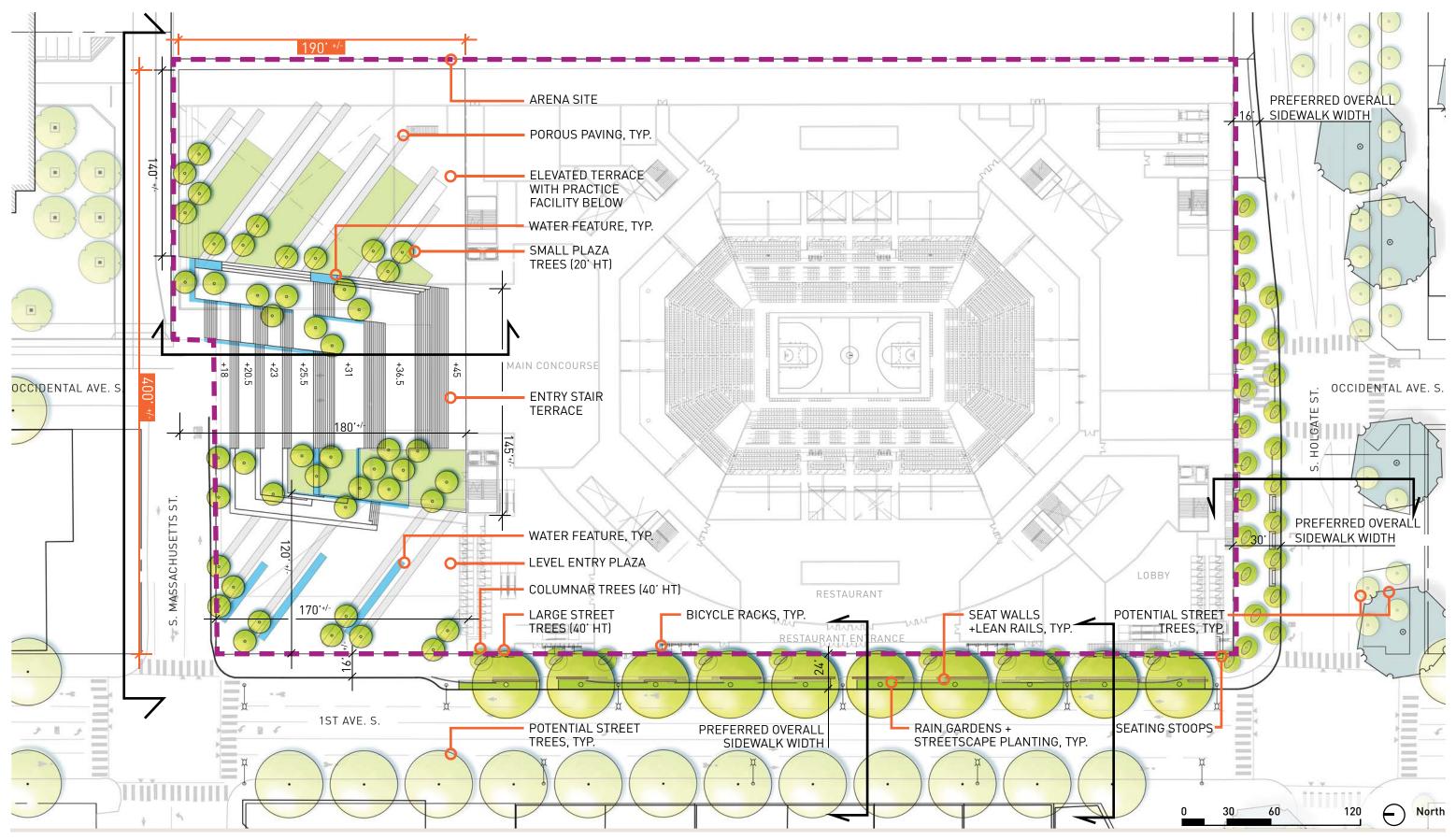






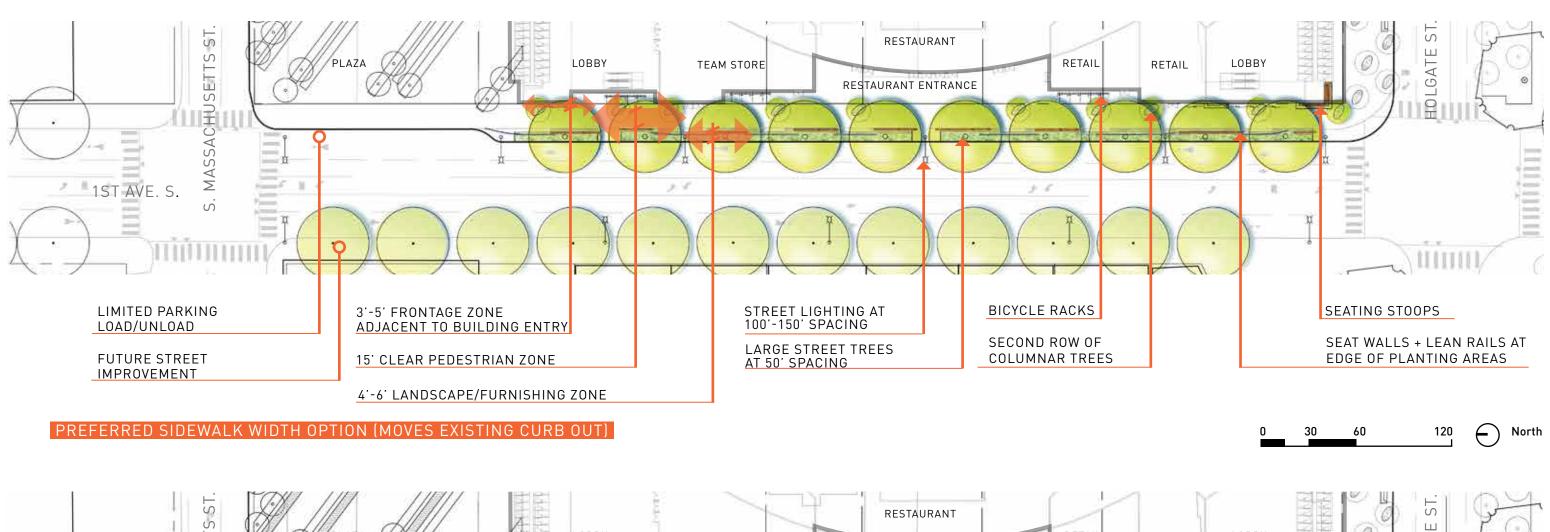


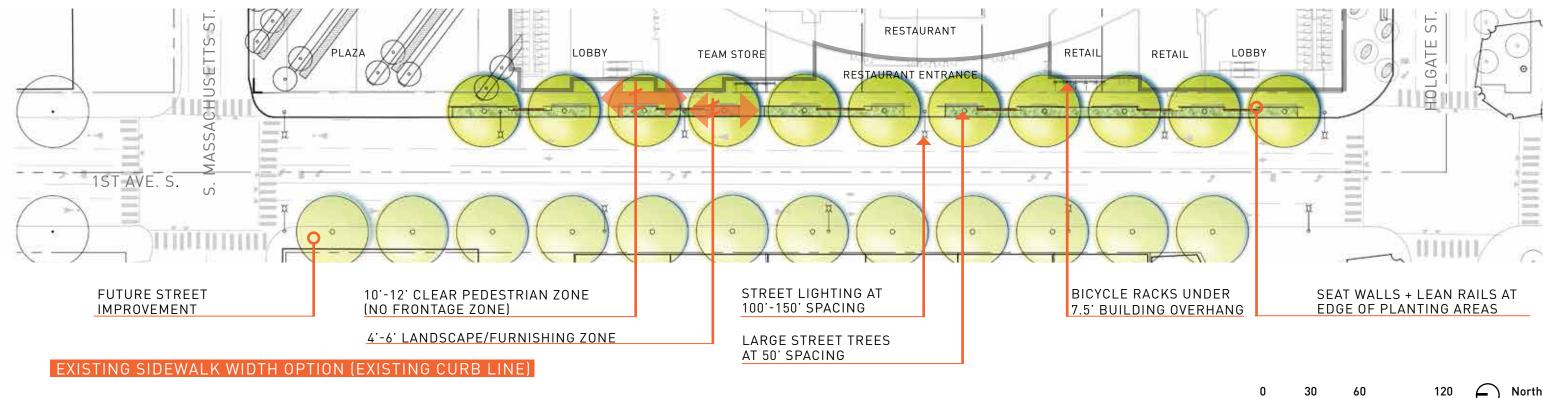
URBAN FOREST DESIGN FRAMEWORK: DISTRICT INSERTION CONCEPTUAL STRATEGY





SITE PLAN



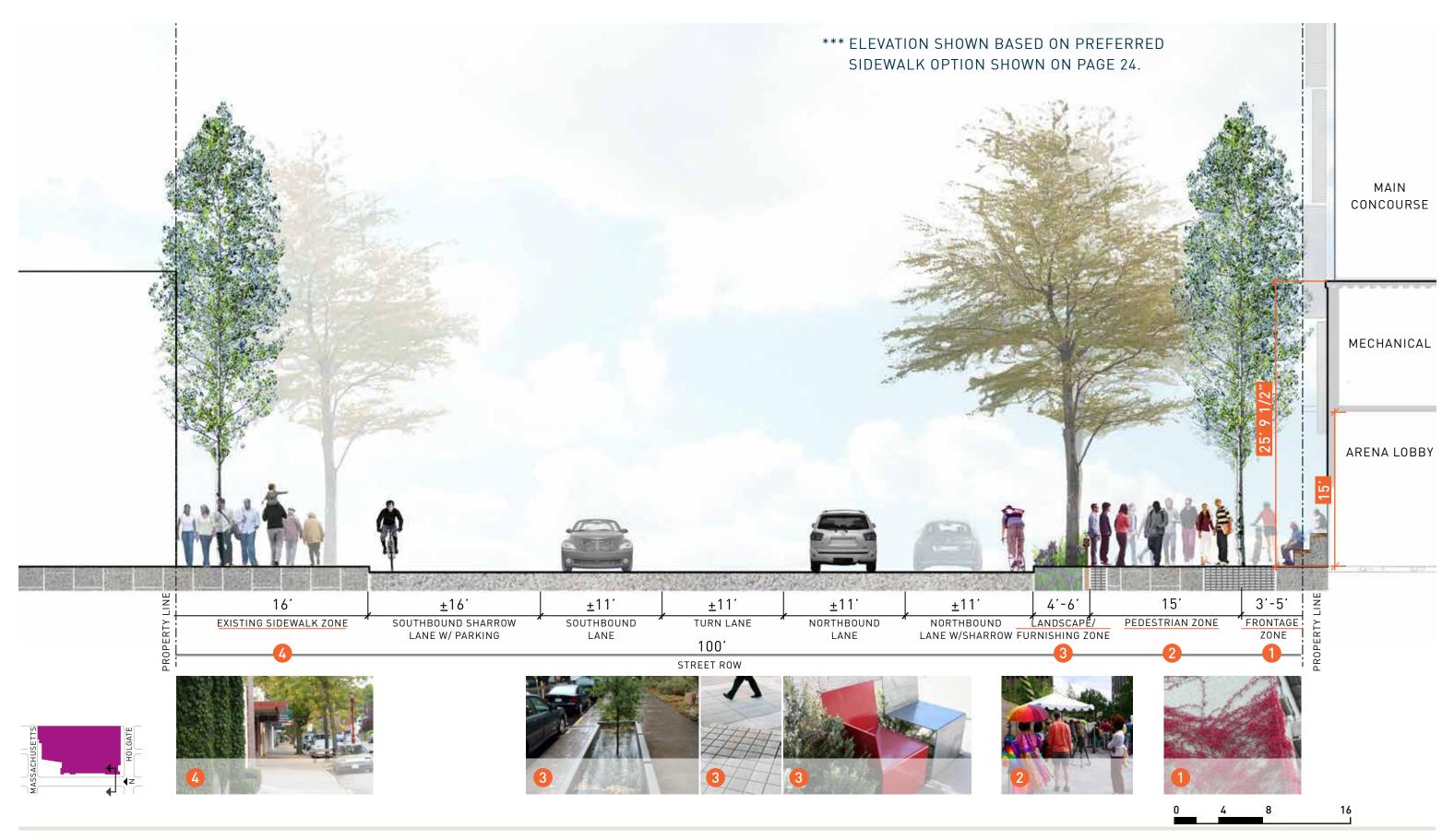




1ST AVE. SOUTH SIDEWALK OPTIONS

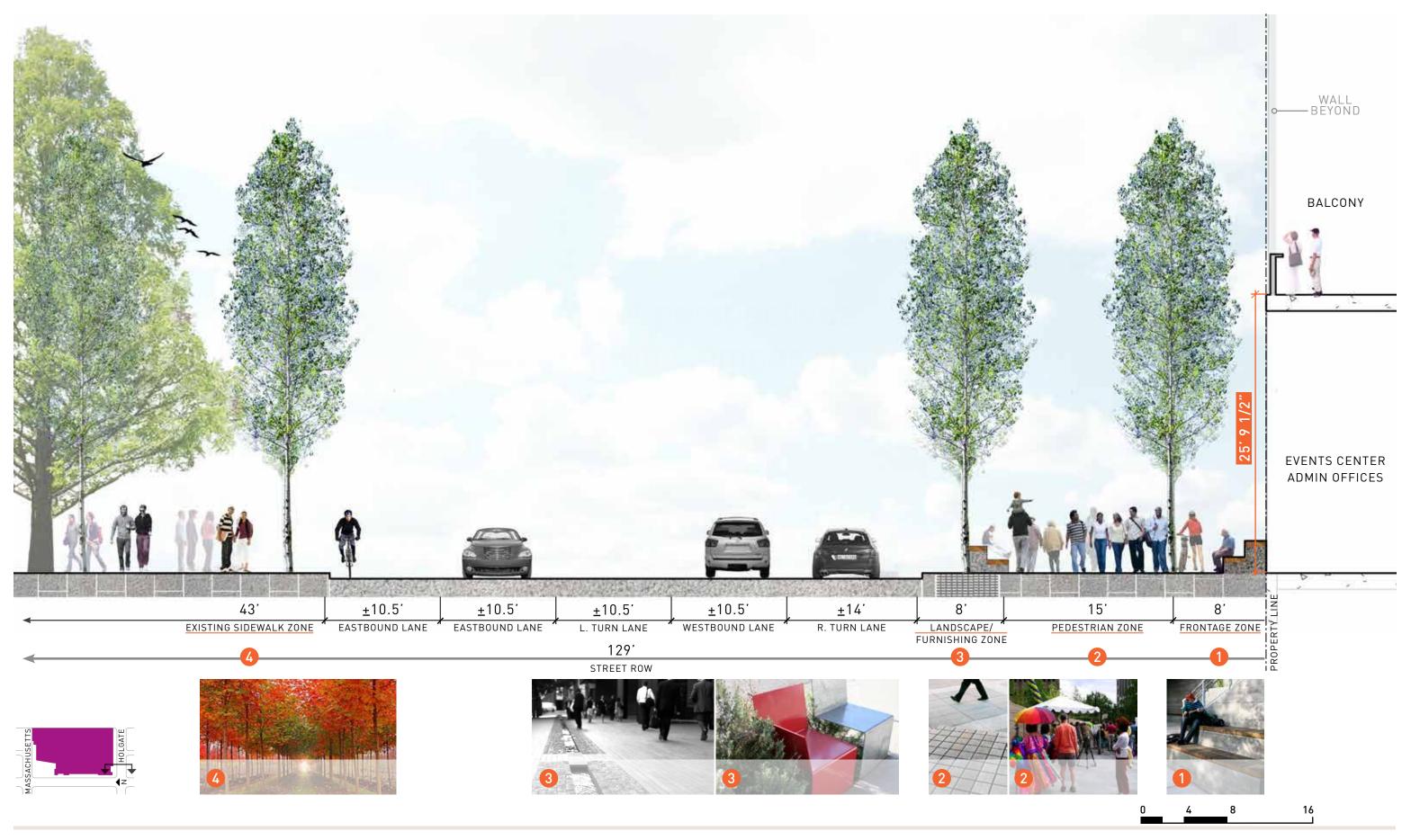




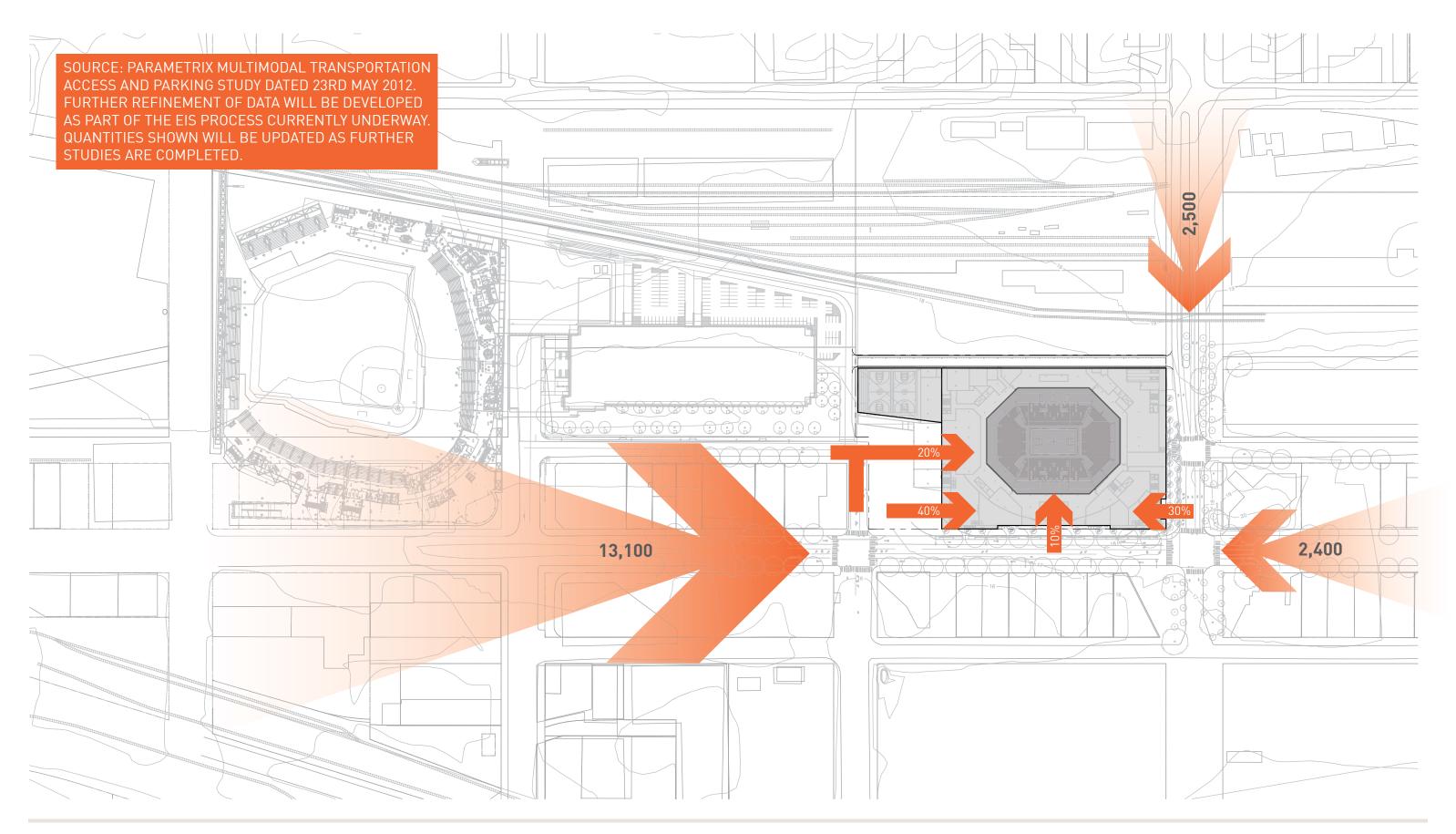




action arising from such uses

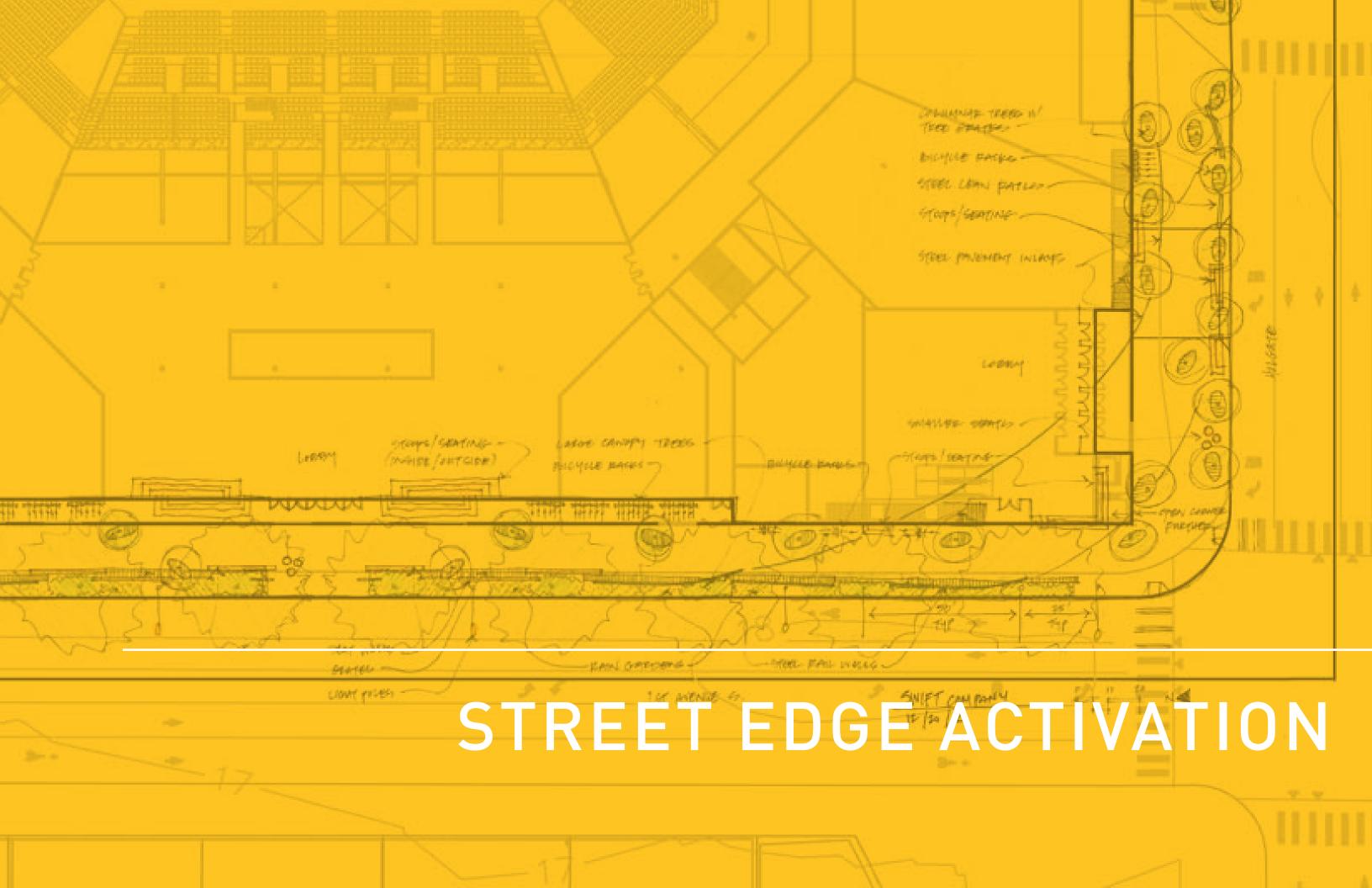


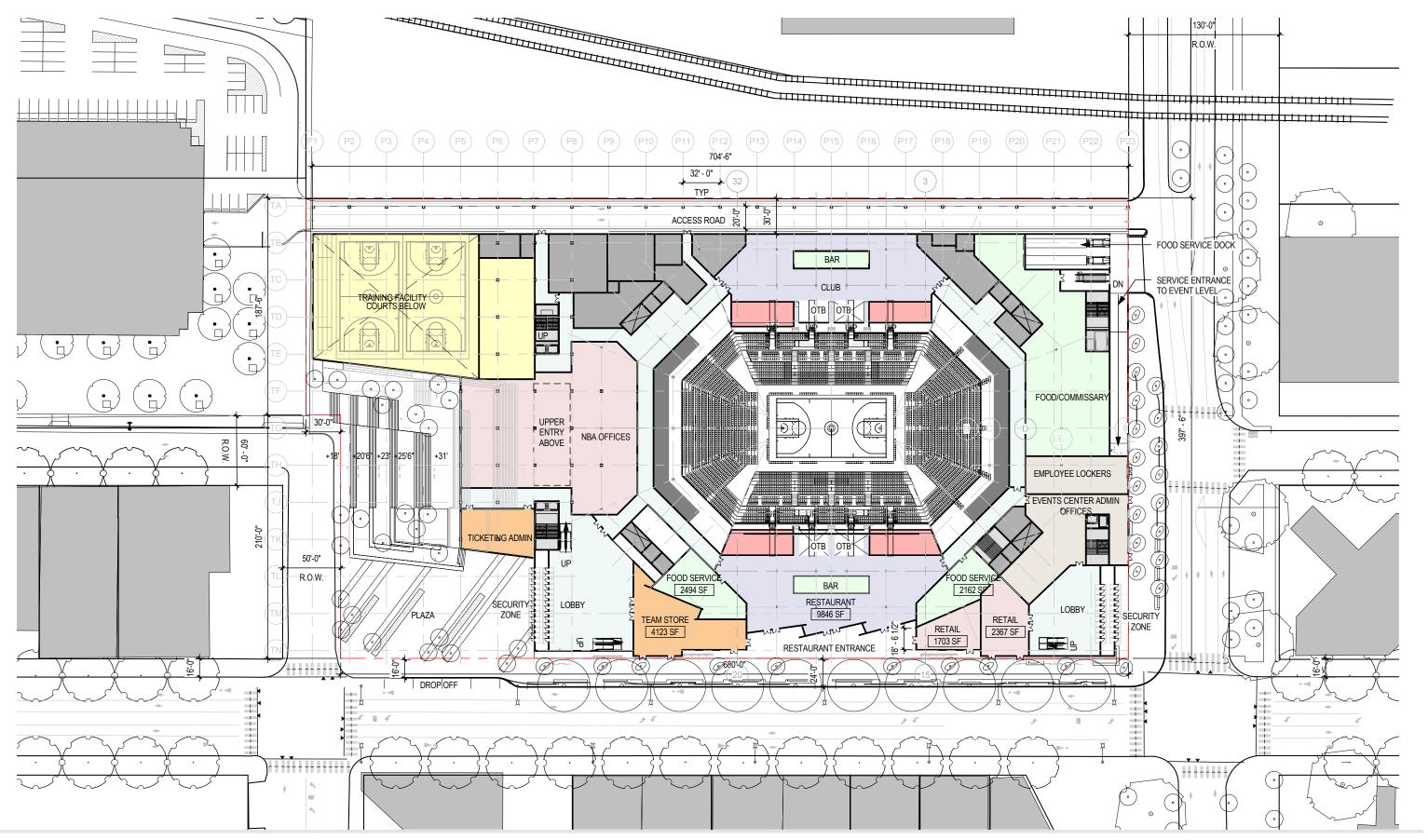






ANTICIPATED MACRO PEDESTRIAN MOVEMENTS: EVENT DAY







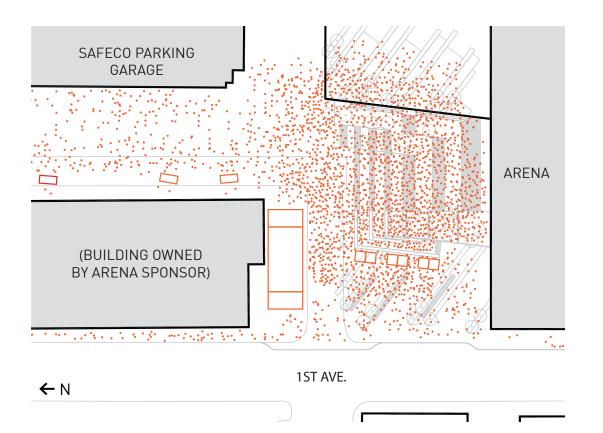
BUILDING FLOOR PLAN AT STREET EDGE



GAME DAY FAN ZONE 10,000 crowd circulation

required

During home games, the Plaza becomes the major entry space for the arena. On these days, the plaza transforms to create circulation space for approximately 10,000 fans entering and leaving the arena. The program for this space could vary, including kiosks, food trucks, or small performance stages to entertain the crowd before game time.

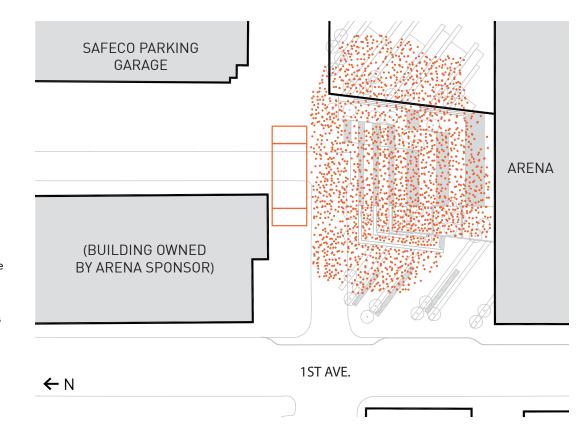




TELEVISED SPORTING EVENT/CONCERT

4,000 standing audience

The Plaza can accommodate a medium-sized outdoor concert with a standing audience of 8,000 people and a total stage area measuring 35' x 75'. There may be opportunities to use this space as a free outdoor music venue in collaboration with other local music festivals or erect a large screen for a televised sporting event.





SKATE BOARD PARK

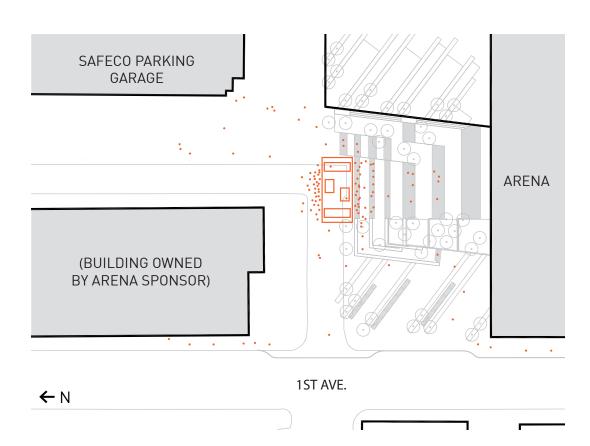
35' x 75' skate park

Plaza can accommodate a 35' x 75' temporary skate board park open to the public or facilitated for demonstrations.

SAND VOLLEYBALL / TENNIS

1 volleyball/tennis court

Plaza can accommodate 1 doubles sand volleyball court or one doubles tennis court. Volleyball court measures 70' x 45' and tennis court measures 145' x 60'.

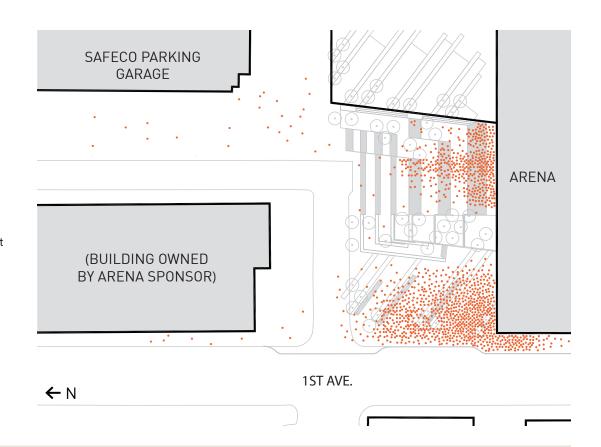




GAME DAY QUEUING

40,000+ sf queuing space

Game day ticket holders can queue in the lower plaza area near northwest entry doors and on stairs for upper entry at main concourse.





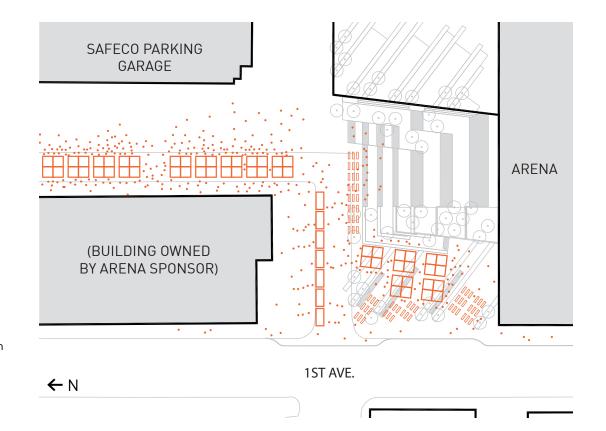
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PLAZA PROGRAMMING DIAGRAMS



ART FAIRflexible number of art display tents

An art fair is created in the Plaza and down Occidental with 12'x 12' tents and food trucks lining Massachusetts St and Occidental Ave. The program could extend down Occidental to accommodate more tents or food trucks depending on the volume. Temporary picnic tables and rest rooms could be brought in to facilitate the event.

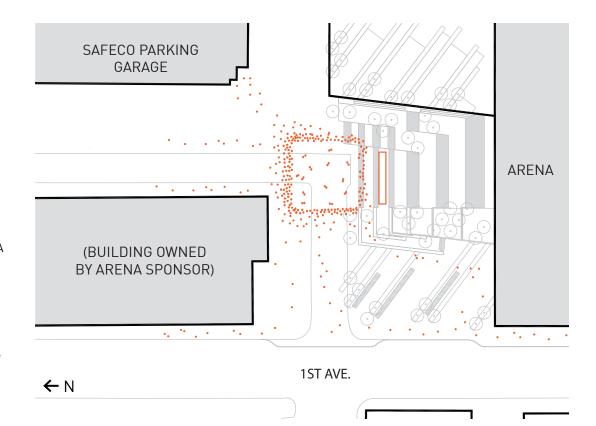




BALLROOM DANCING

40 dancing couples

Plaza can host a dance competition, with over 5,700 sf for a stage area - enough to accommodate 40 dancing couples (@ 140 sf per couple). A 60' x 10' judging area is placed along the south perimeter at an upper level, perimeter accommodates a standing audience of spectators in addition to those who watch from stair. Alternatively, this program accommodates dance classes or demonstrations.

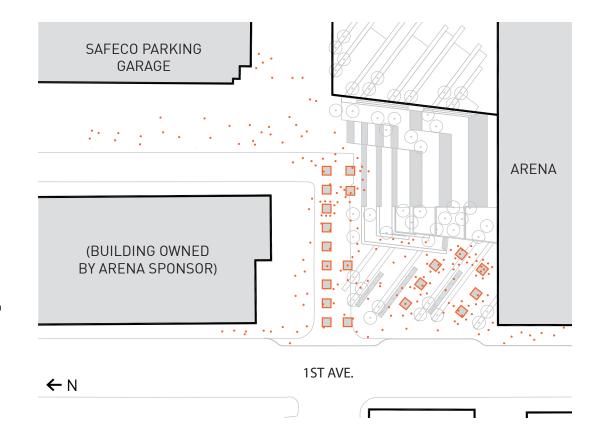




OVERSIZED BOARD GAMES

20 oversize play boards

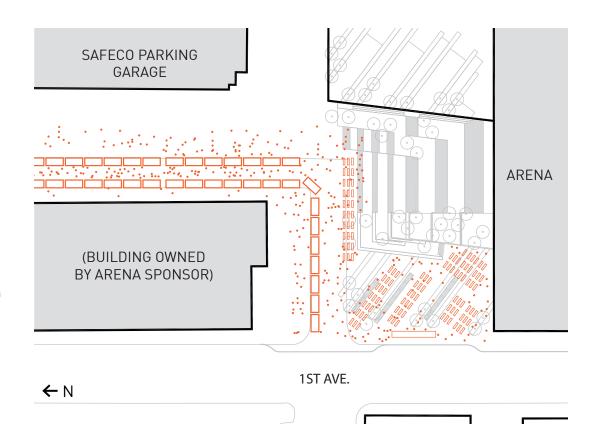
Plaza can be activated as a board game zone in the summertime, by accommodating oversize playing boards such as scrabble, twister, checkers or chess. The size of playing boards may vary - the diagram shows twenty (20) 10'x 10' boards





FOOD FESTIVAL444 seated patrons

A food festival is created in the Plaza with standard-size food trucks lining Massachusetts St and Occidental Ave. Each 8' x 3' table seats 4 patrons. The program could extend down Occidental to accommodate more food trucks depending on the volume. Temporary picnic tables and rest rooms could be brought in to facilitate the event.





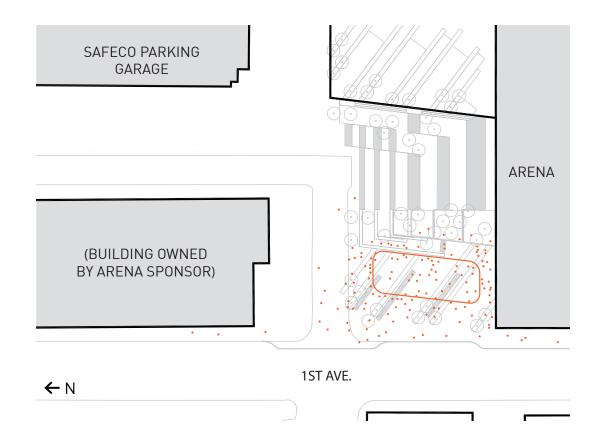
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ICE SKATING RINK 5600 sf temporary public rink

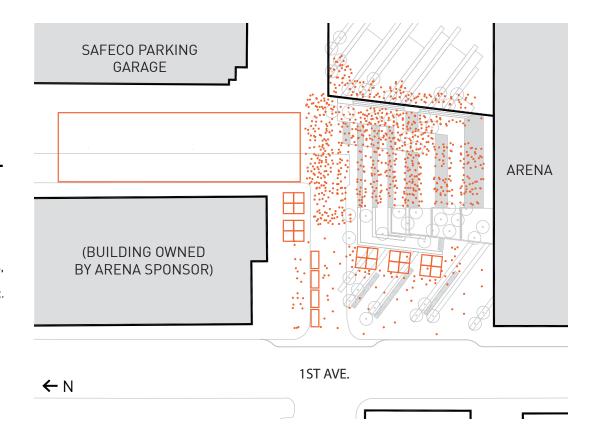
Within the lower plaza space, the Plaza can accommodate an ice skating rink approximately 5600 sf. in size for public skating sessions, figure skating, or hockey demonstrations At 35 sf per person, a maximum of 160 skaters can fit on the ice surface.





SNOWBOARD/SKI HILL 280' x 80' temporary snow hill

Extending down Occidental, a 280' x 80' snow hill can be accommodated for snowboard or ski demonstrations. Lower plaza could include food trucks, hospitality tents and additional festival space to facilitate event.

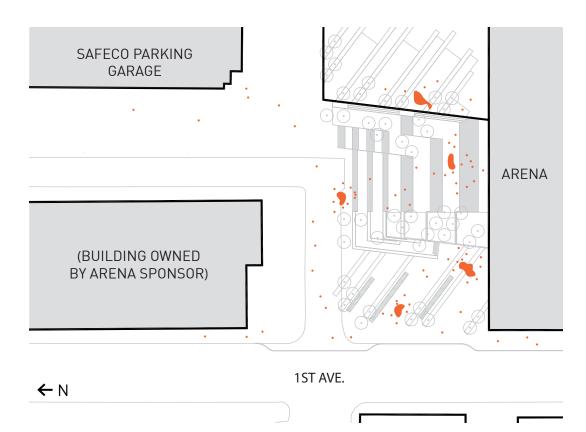




PUBLIC ART DISPLAY

multiple sites for large scale art installations

Multiple large public art displays within the Plaza space creates a landmark destination within the City of Seattle. The public art piece(s) may be composed of one large object, or several small objects. It may be a seasonally permanent feature, or a rotating display.

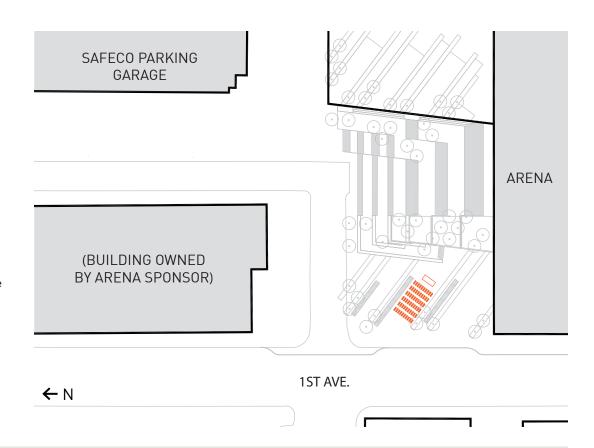




EXERCISE CLASS

50 participants

Plaza can become an outdoor exercise space for yoga, aerobics, tai chi, or bootcamp classes. As an outdoor exercise space, the Plaza can accommodate 50 yoga participants, with a small stage area for an instructor at 6' x 15'.





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PLAZA PROGRAMMING DIAGRAMS





DEFINING PLACE/PEDESTRIAN COMFORT:

OCCIDENTAL / MASSACHUSETTS STREET + PEDESTRIAN ZONE



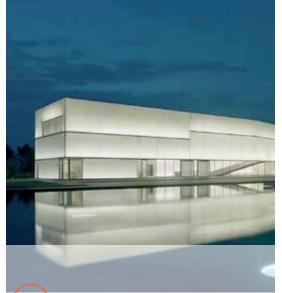








1 PLAZA + PATHS + STAIRS LIGHTS





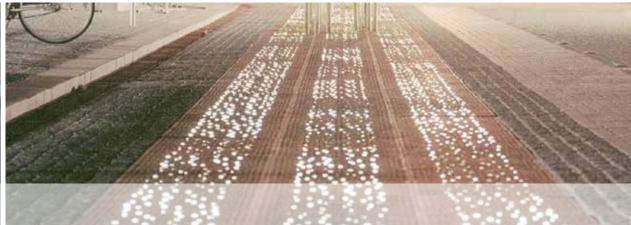






(2) LARGE SCALE LIGHTING FEATURES





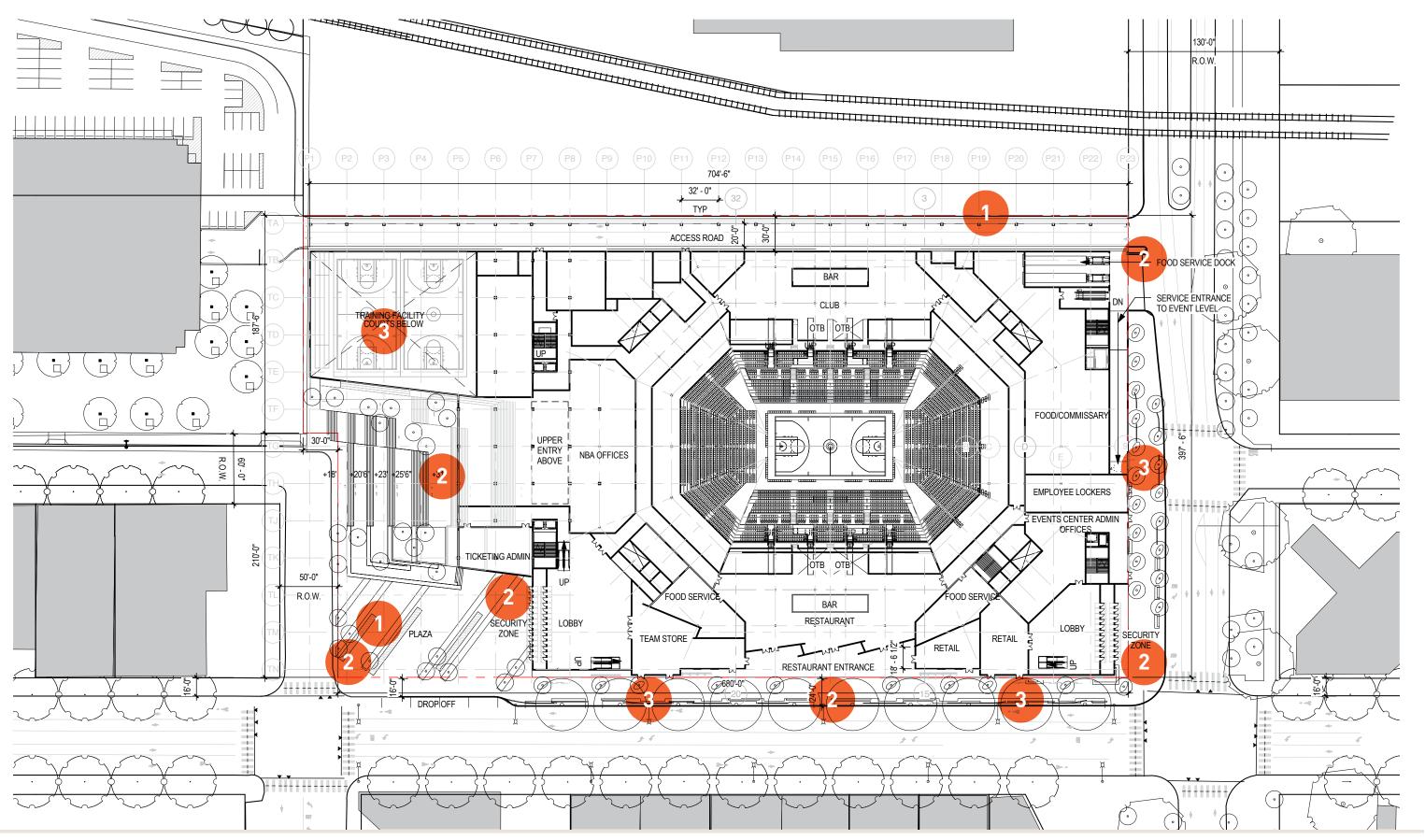




3 LIGHTING DETAILS



action arising from such uses





DEFINING PLACE/PEDESTRIAN COMFORT: SIGNAGE











EXTERIOR GRAPHIC EXPERIENCE













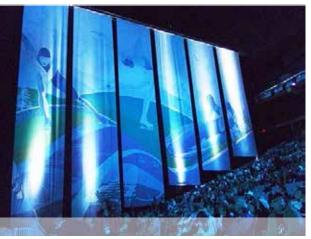
WAYFINDING & VEHICULAR DIRECTIONALS





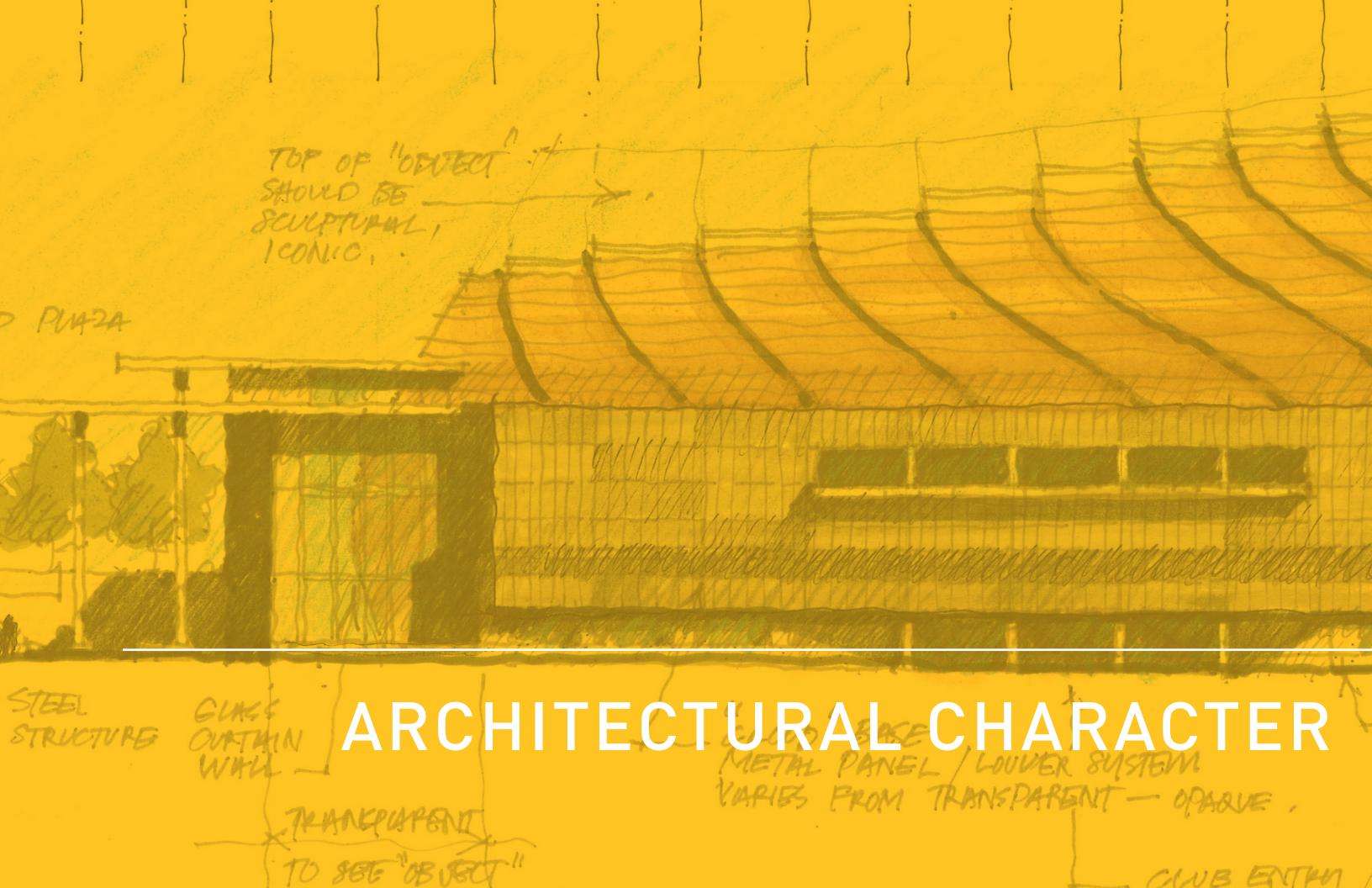






3 PAGENTRY GRAPHICS













INSPIRATION



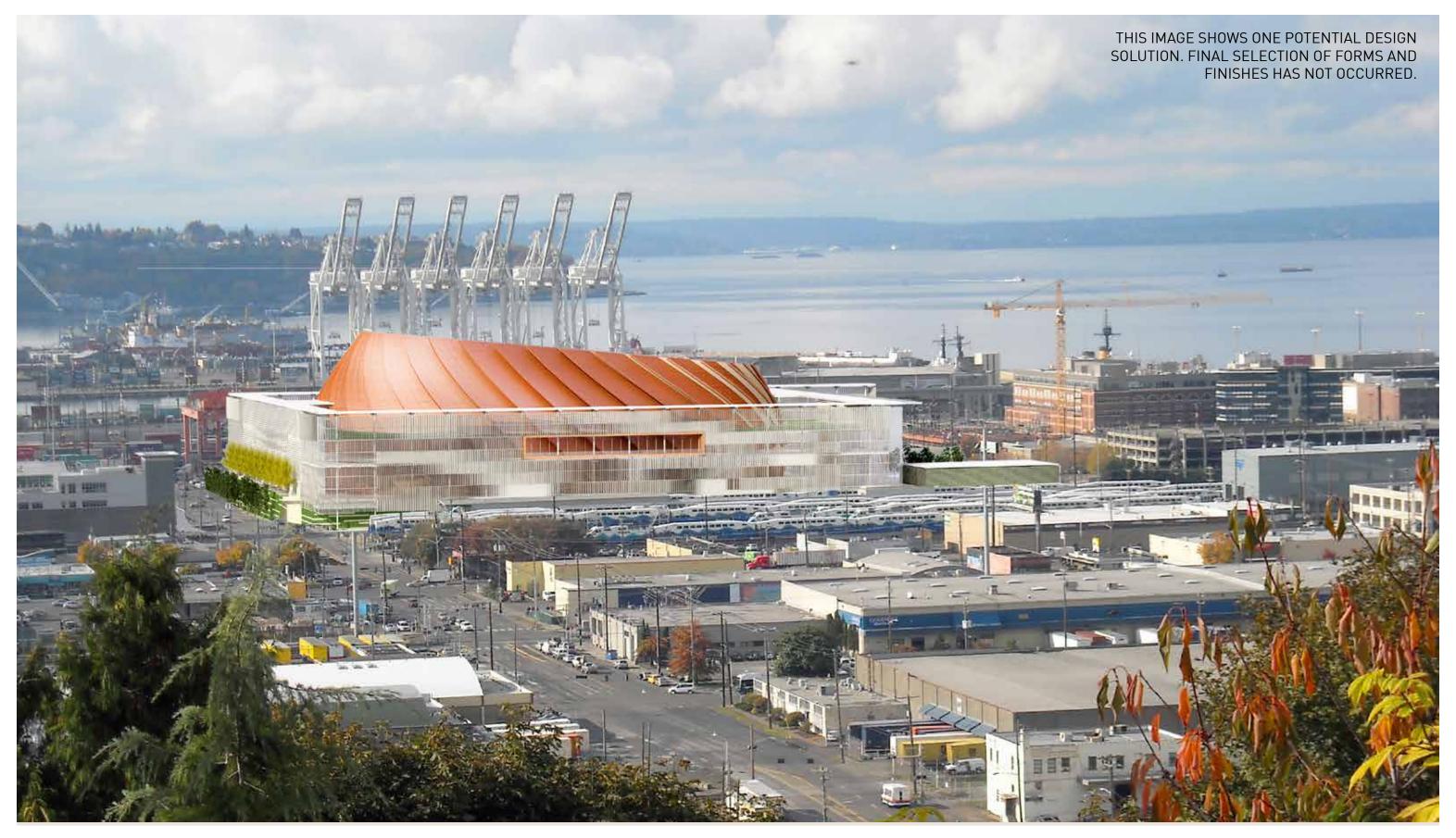


AERIAL IMAGES: NORTHWEST AERIAL DETAIL



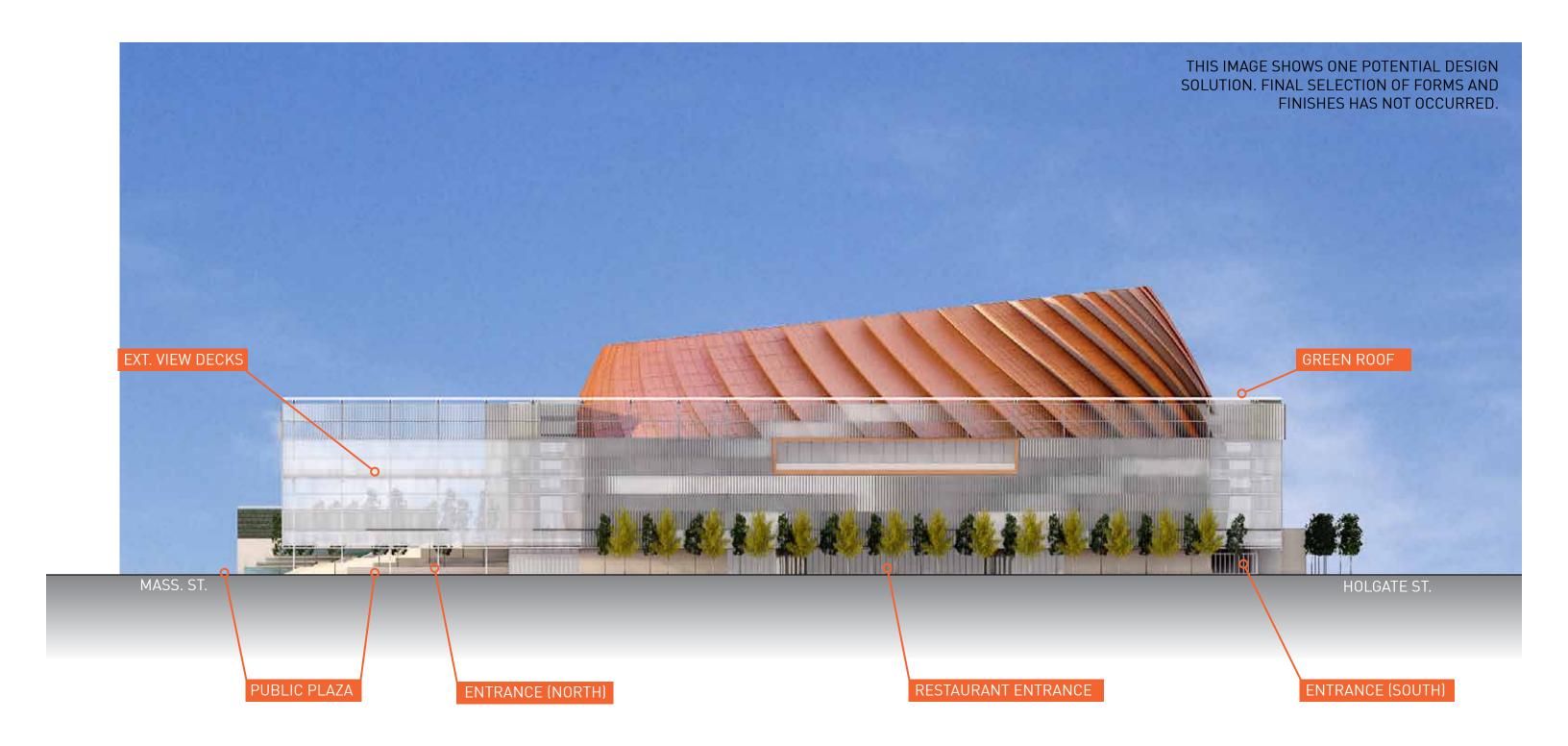


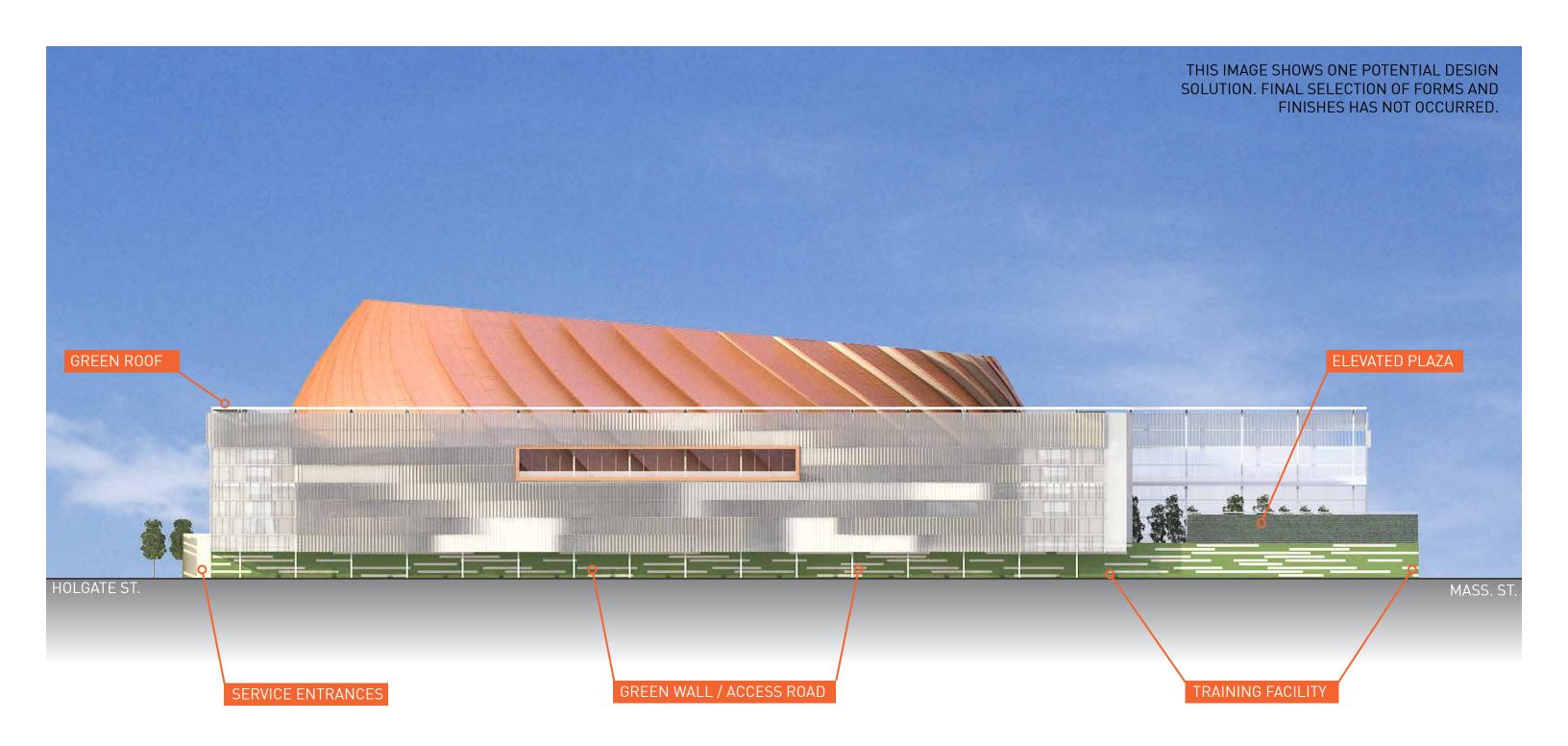
AERIAL IMAGES: SOUTHWEST AERIAL DETAIL



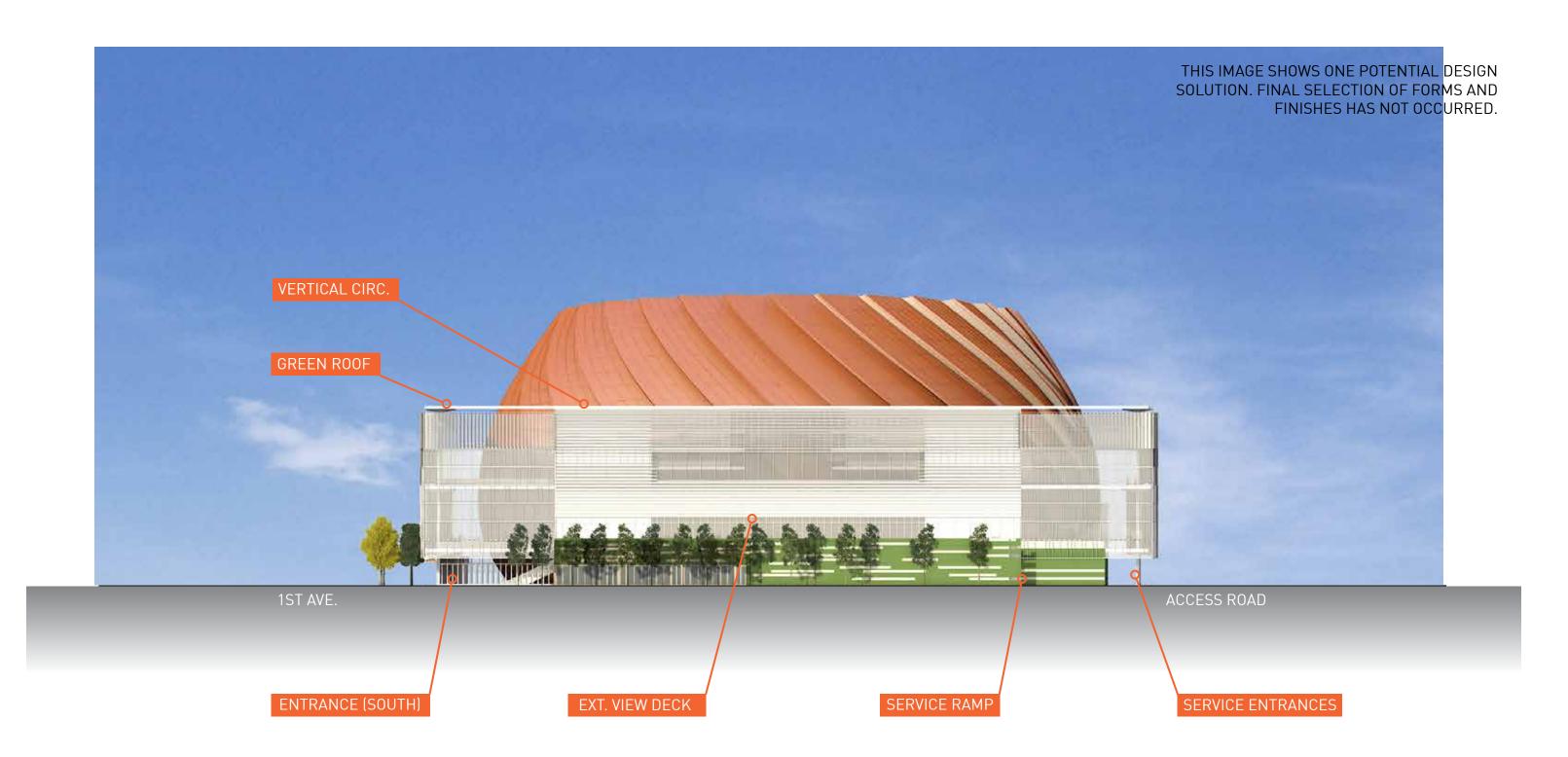


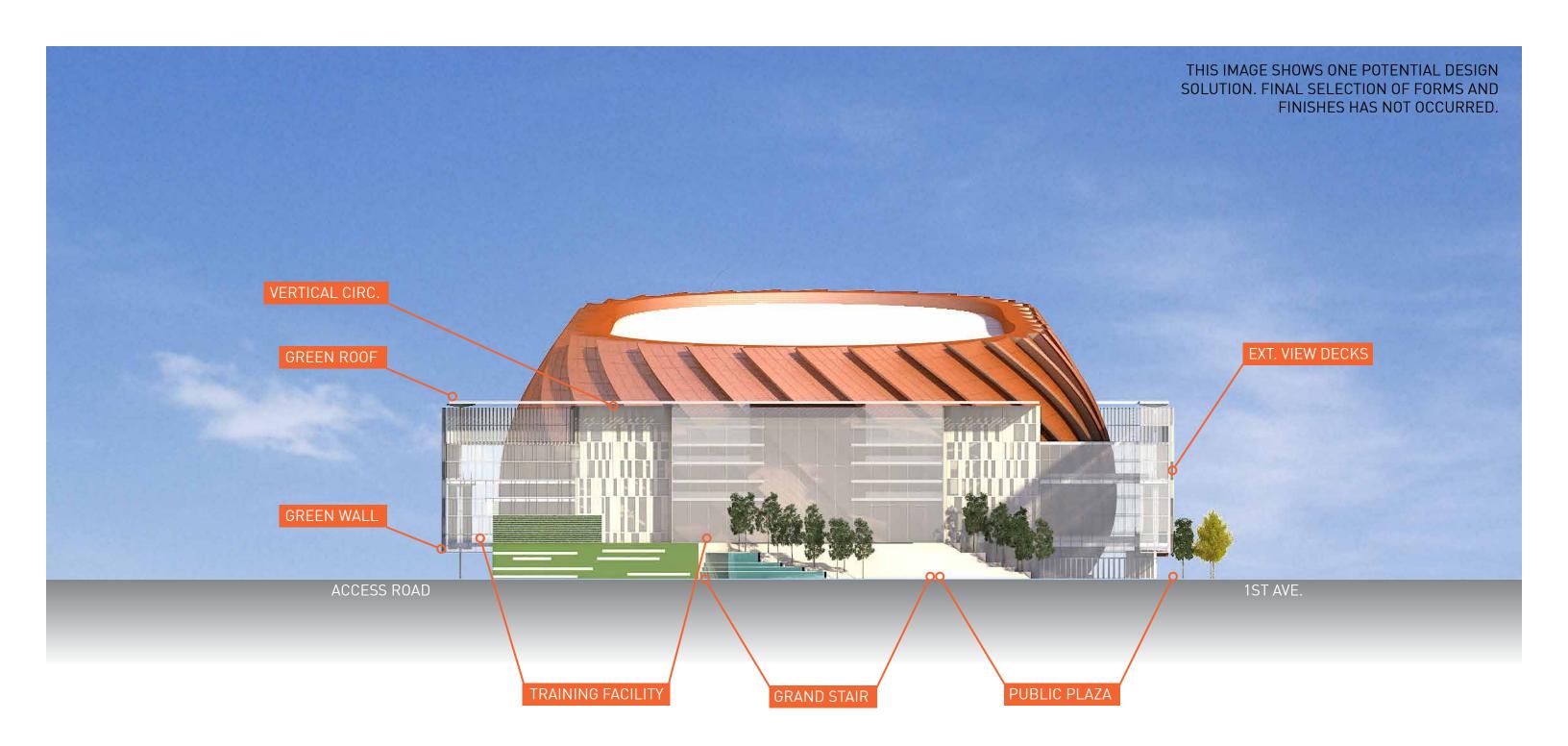
AERIAL IMAGES: VIEW FROM BEACON HILL

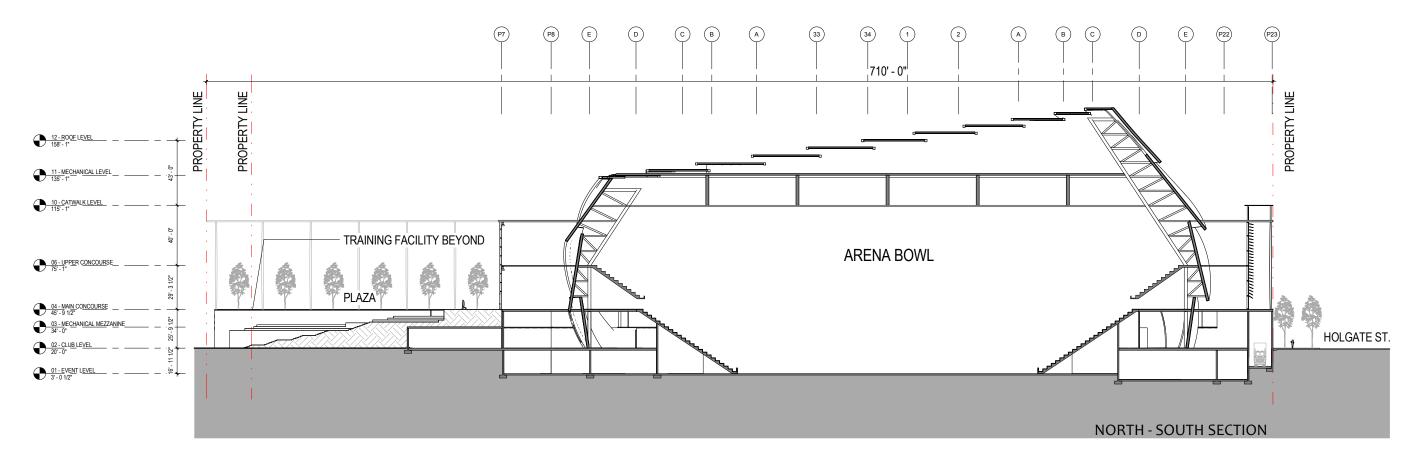


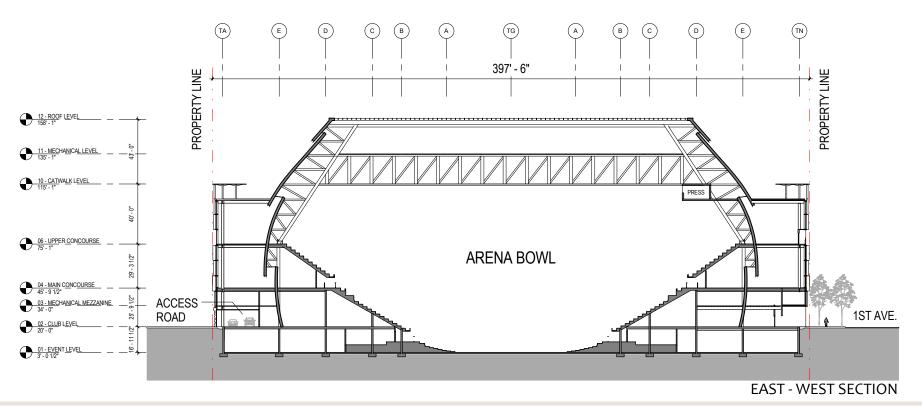


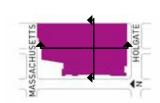
BUILDING ELEVATION: EAST



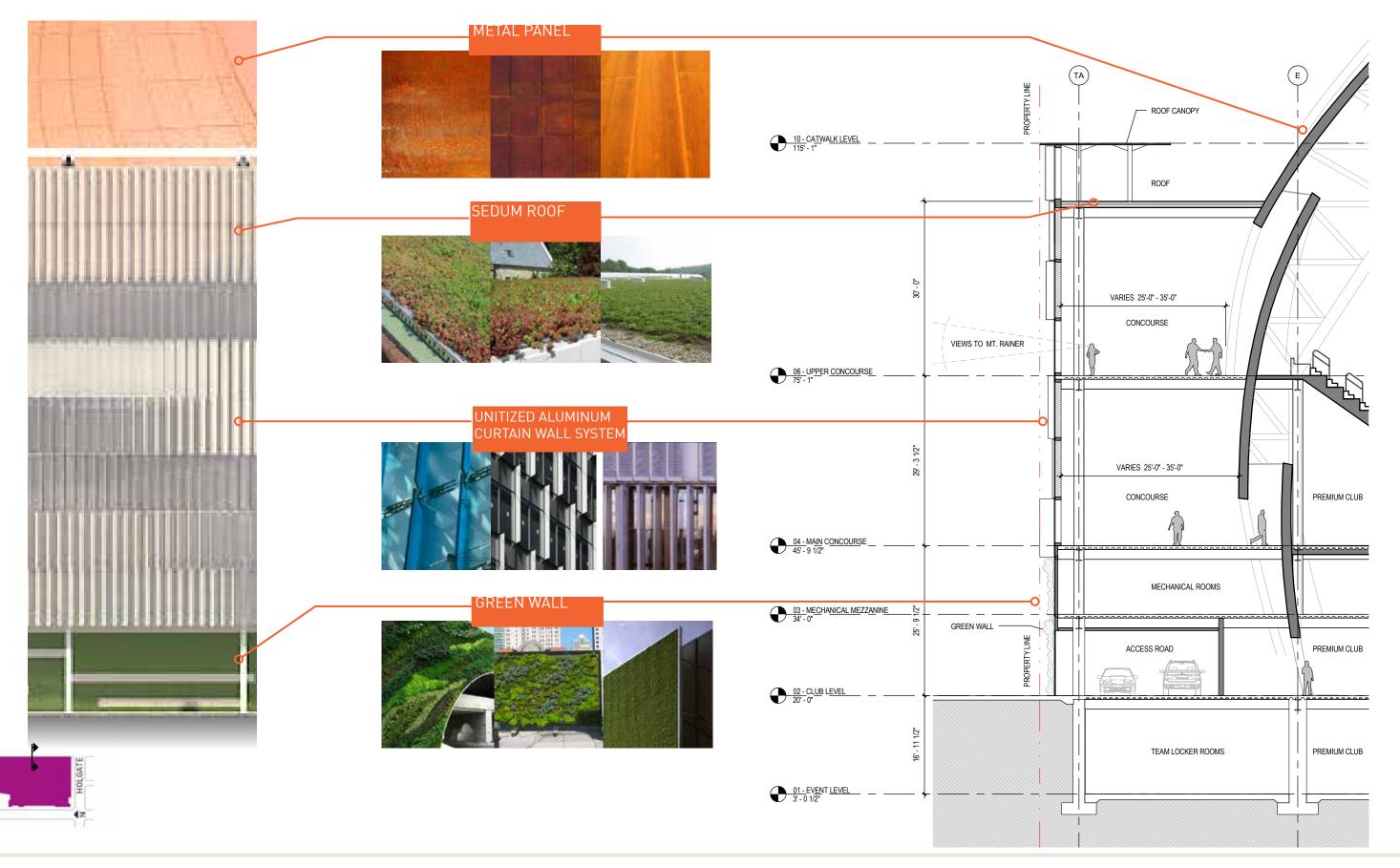






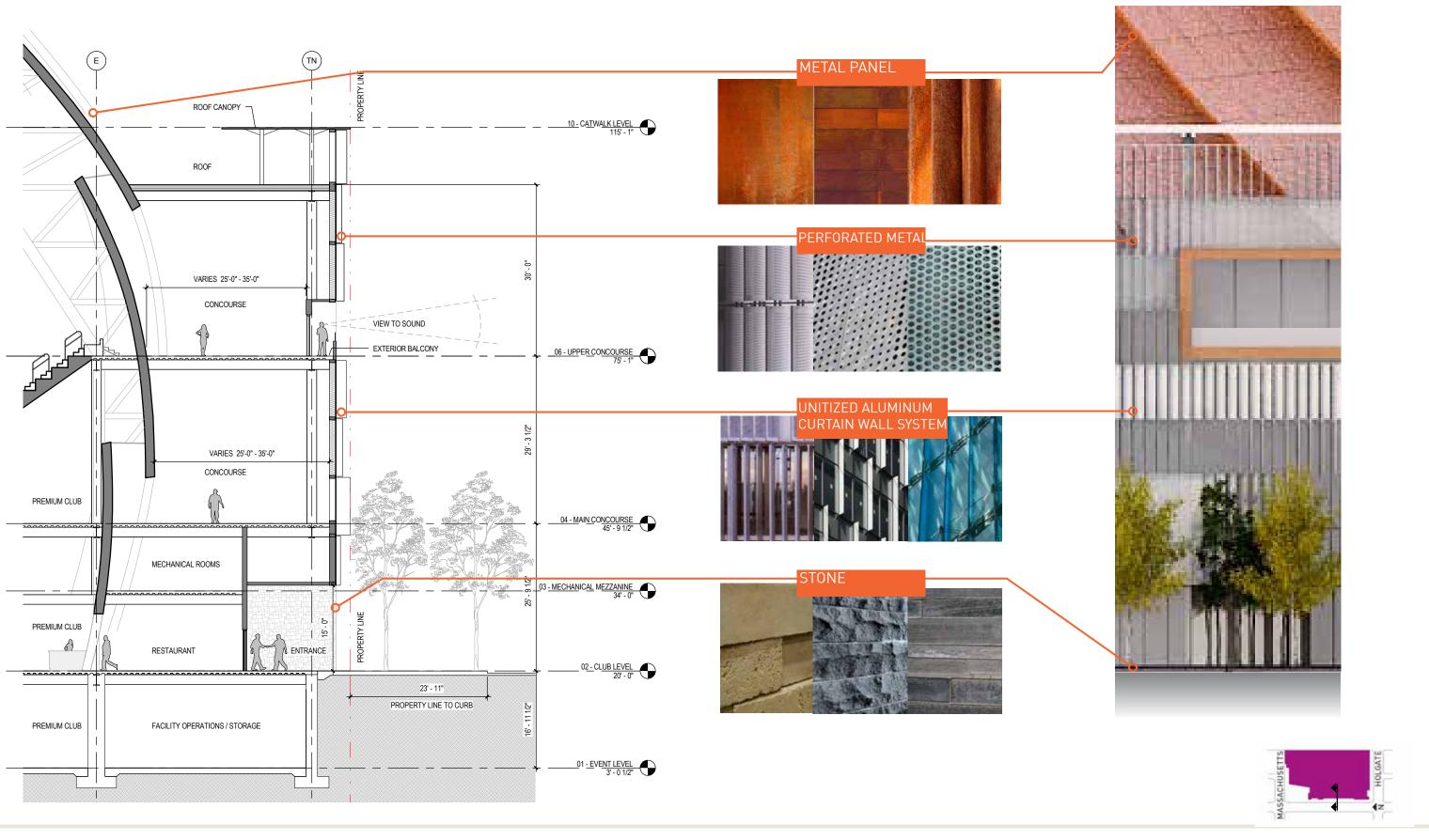






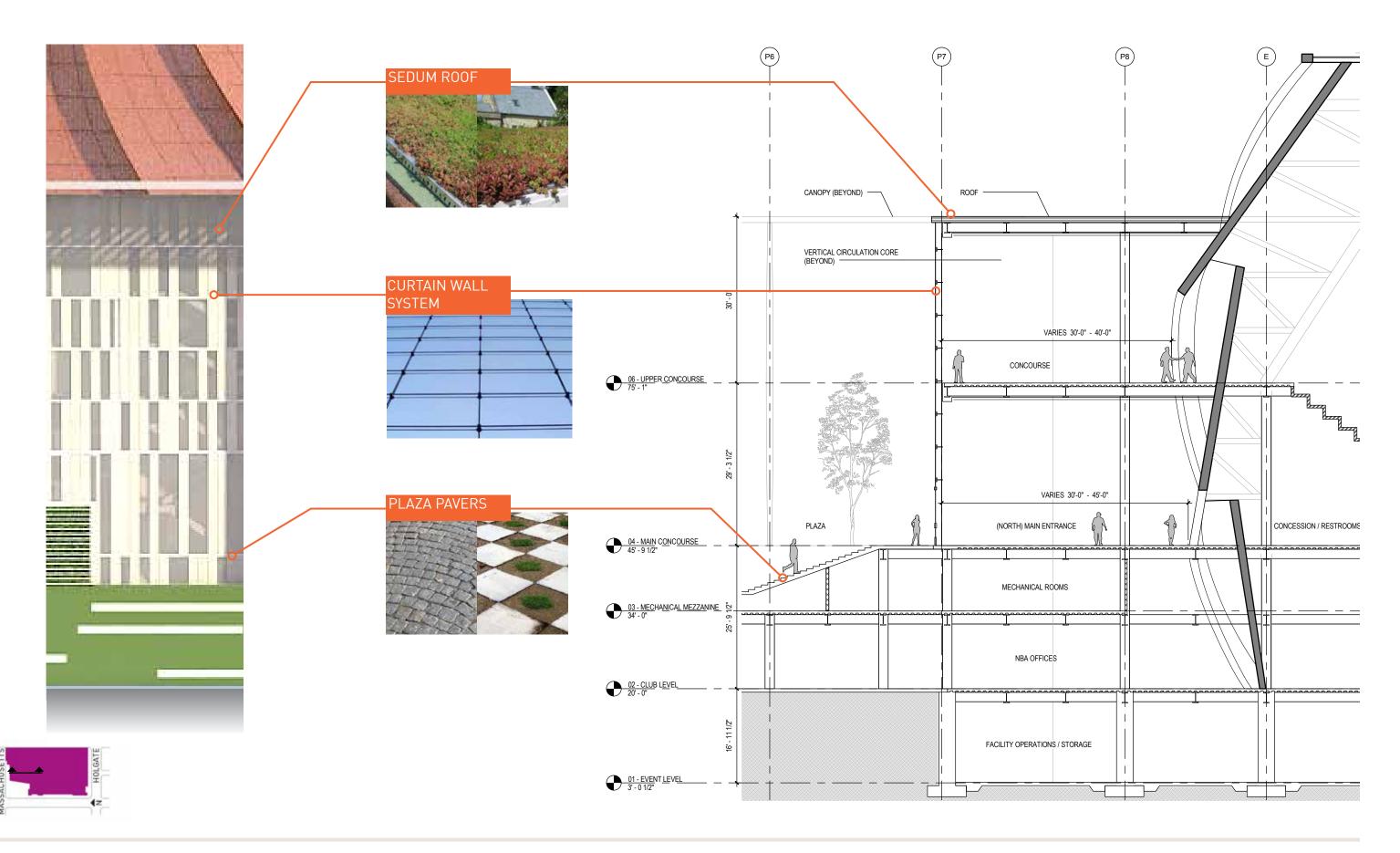


SECTION / ELEVATION DETAILS: EAST

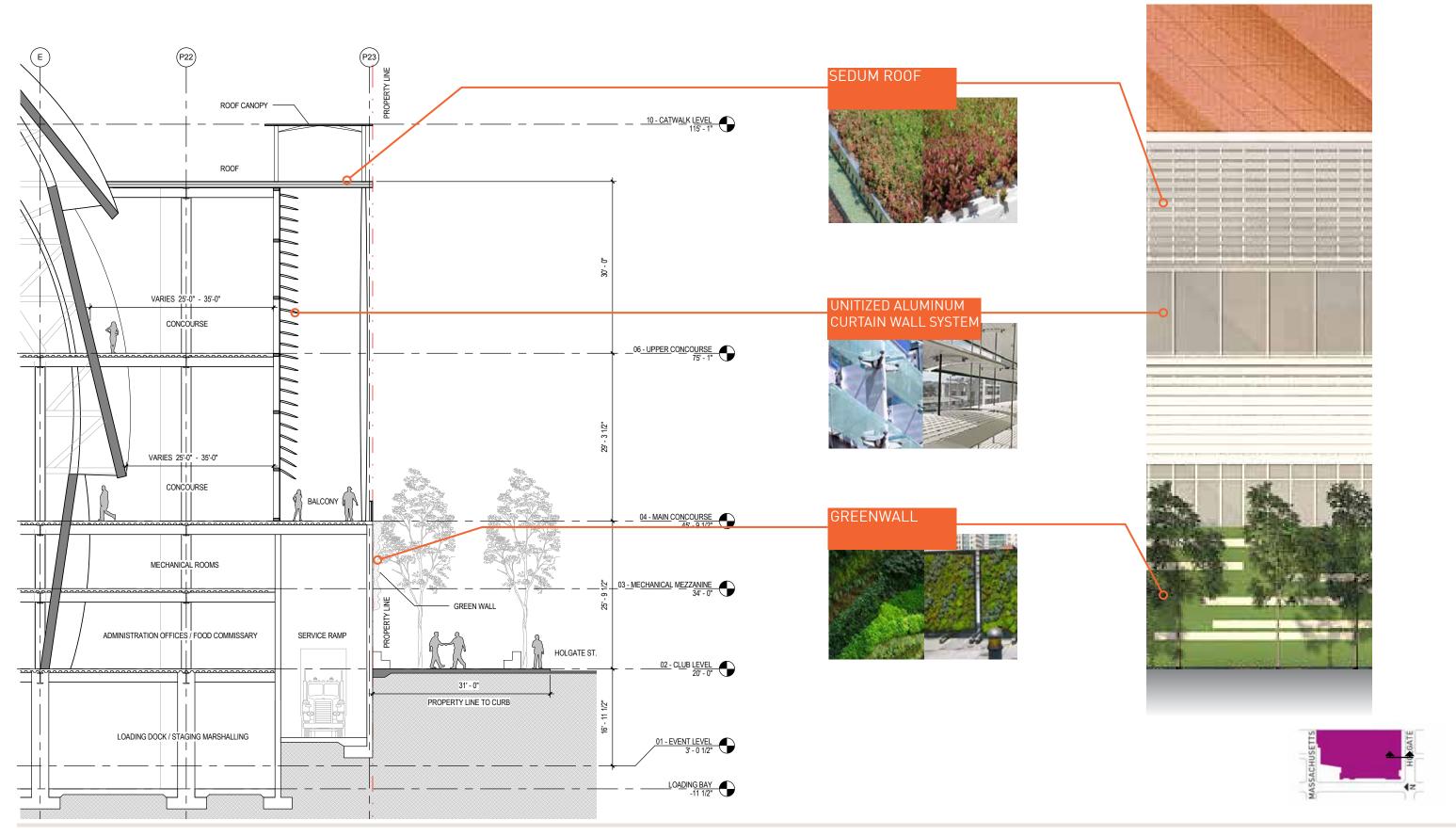




SECTION / ELEVATION DETAILS: WEST













3D VIEWS: FIRST AVE LOOKING SOUTH AT PLAZA





3D VIEWS: HOLGATE LOOKING WEST





3D VIEWS: FIRST AVE LOOKING NORTH





3D VIEWS: NORTHWEST ENTRANCE





3D VIEWS: SOUTHWEST ENTRANCE



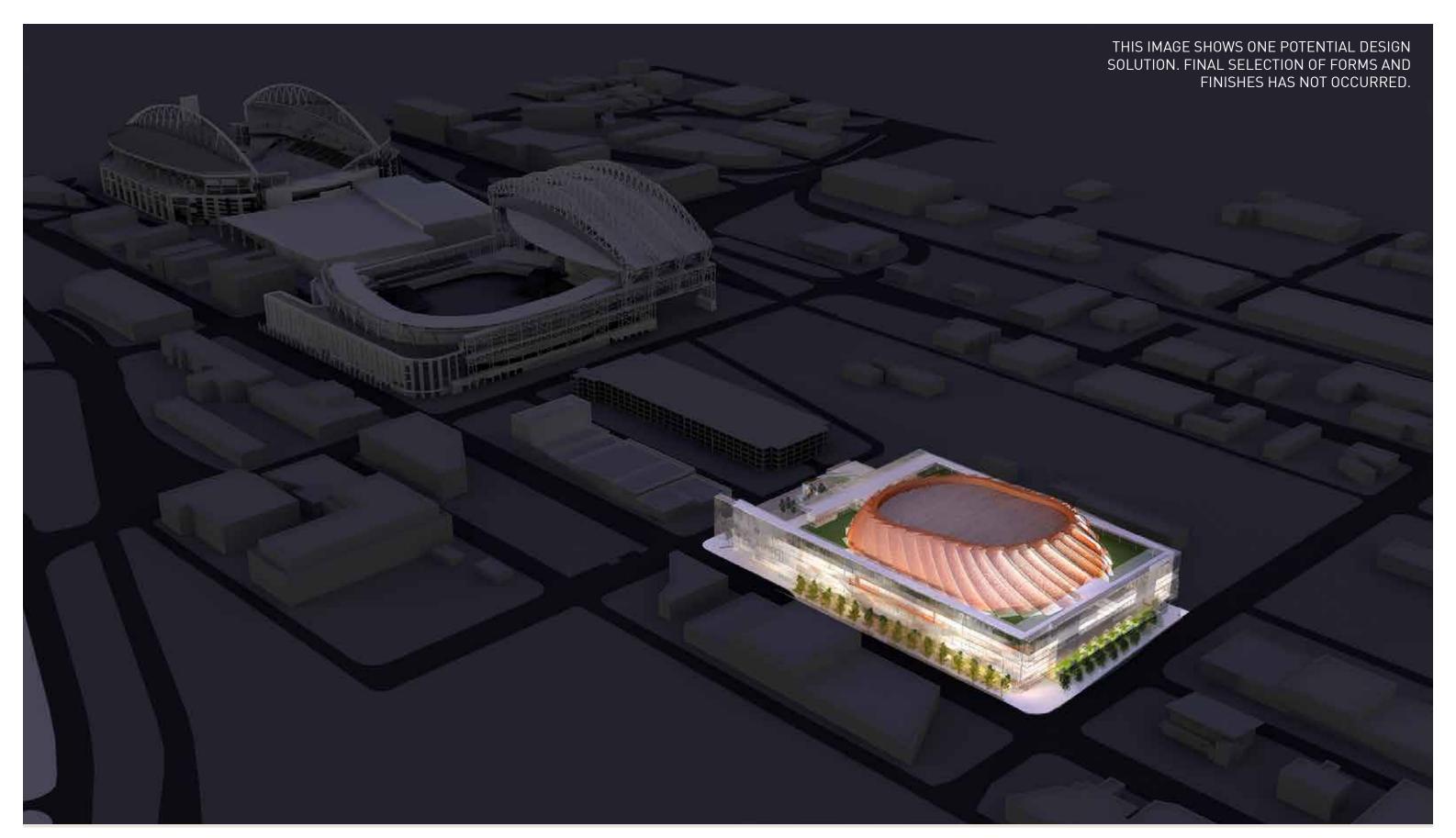


3D VIEWS: HOLGATE LOOKING WEST



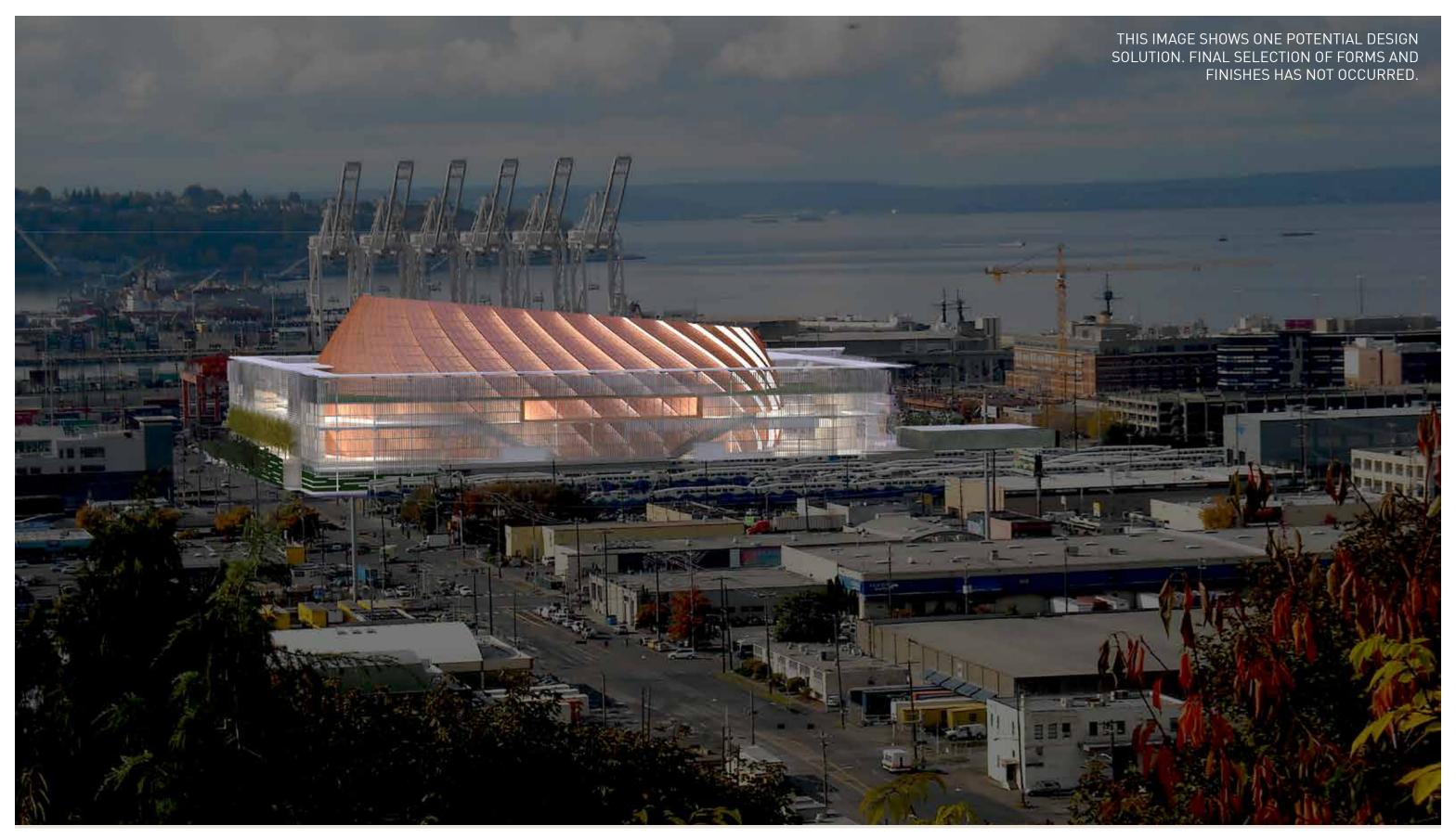


3D VIEWS: FIRST AVE LOOKING NORTH DETAIL





3D VIEWS: SOUTHWEST AERIAL AT NIGHT





3D VIEWS: VIEW FROM BEACON HILL AT NIGHT





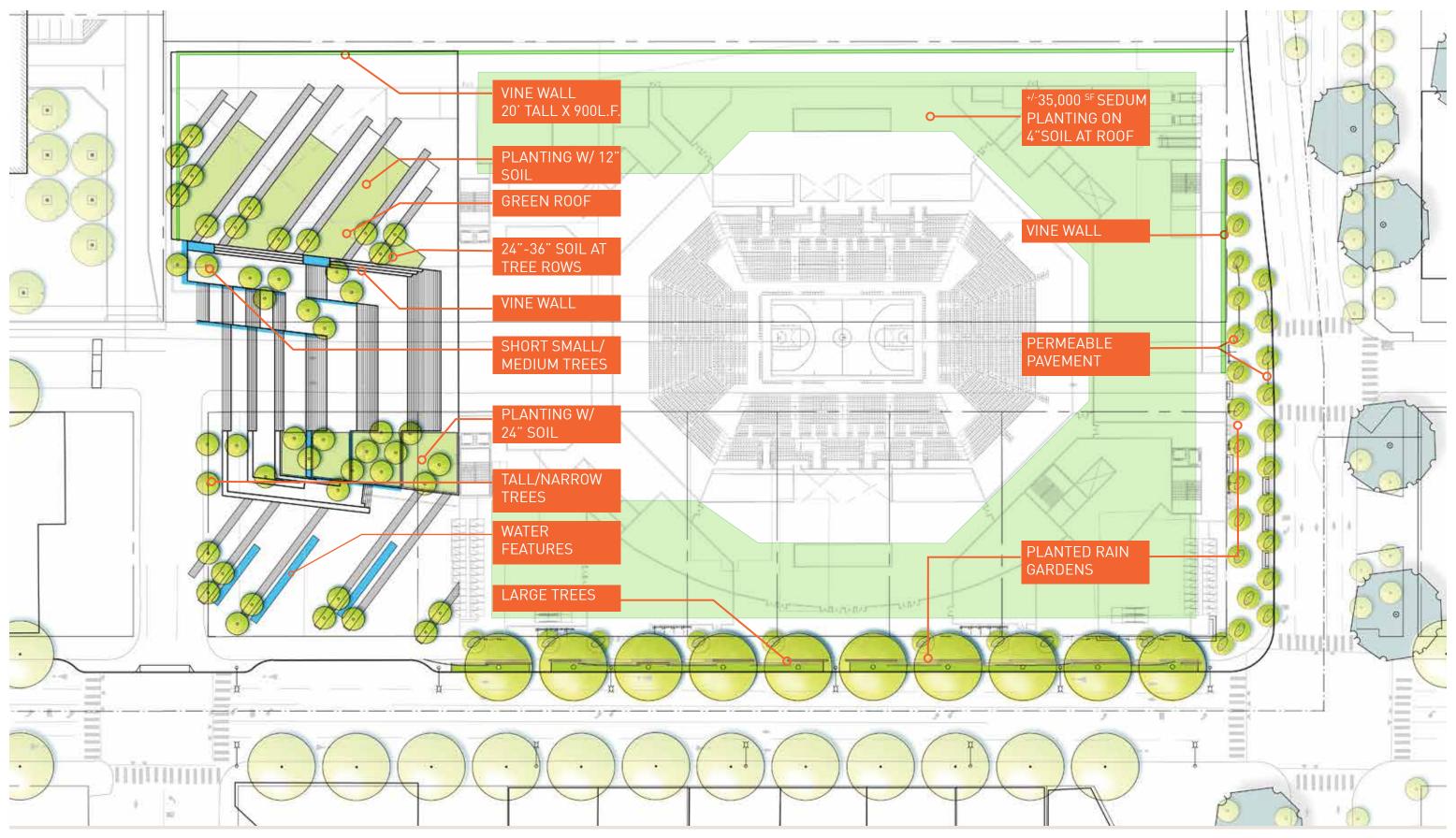
3D VIEWS: FIRST AVE LOOKING SOUTH AT PLAZA





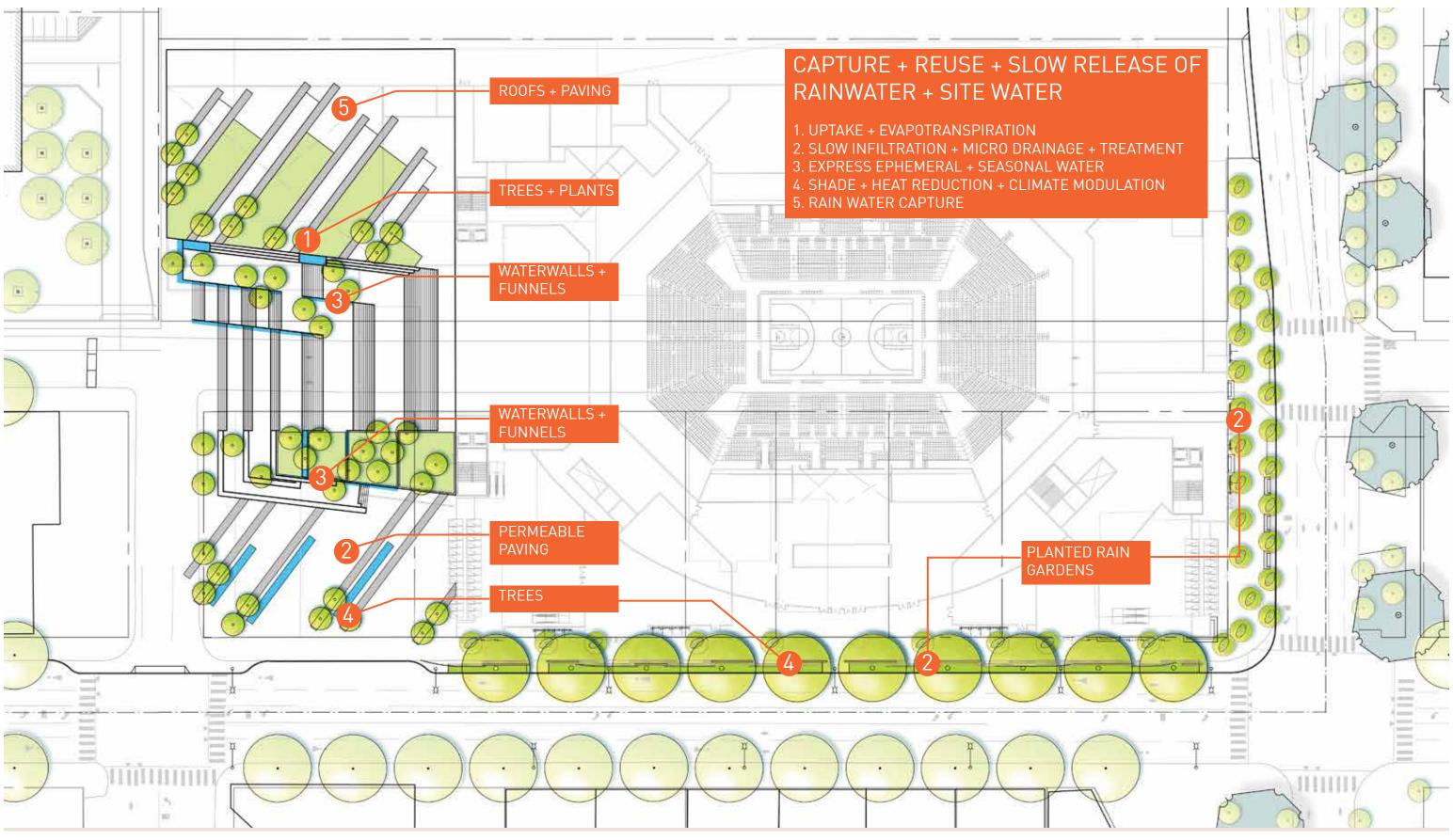
3D VIEWS: FIRST AVE LOOKING NORTH AT NIGHT





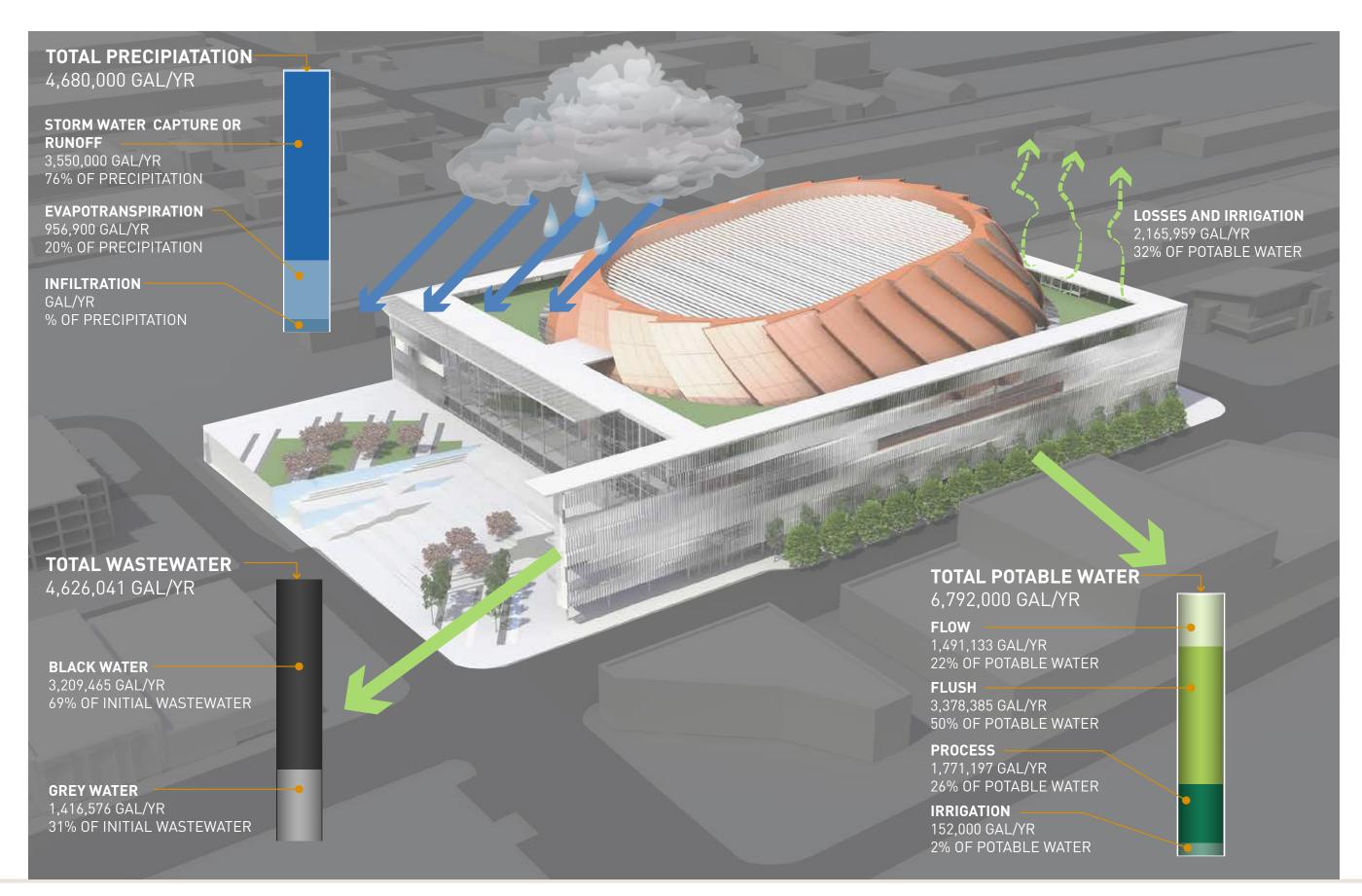


GREEN FACTOR OPPORTUNITIES





SITE WATER OPPORTUNITIES





STORMWATER DIAGRAM

TYPICAL ARENA HVAC ISSUES

THERMAL COMFORT

Pre-cooling of the seating bowl leads to cool conditions High level supply of cold air can feel drafty Heavily glazed areas can feel warm/cool

INDOOR AIR QUALITY

High occupant density

High level supply in large volumes has low air change effectiveness Recirculation of indoor air contaminants

PROPOSED DESIGN

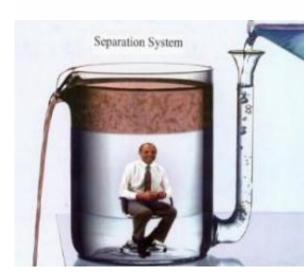
DISPLACEMENT SYSTEM

Air supplied at low level and low velocity Conditioning only the occupied space COLD DAY-Radiant heating in concourse HOT DAY- Radiant cooling in concourse

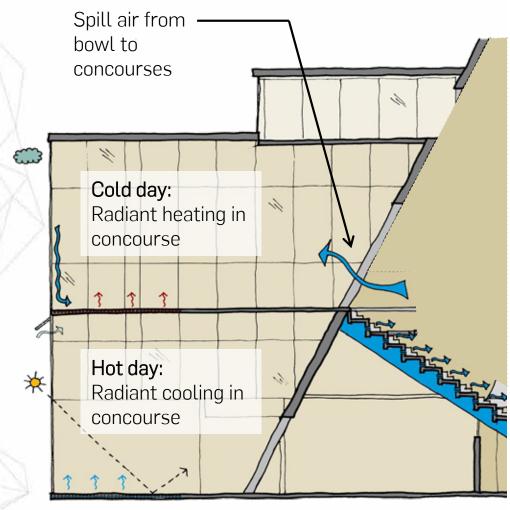
















BUILDING ENVELOPE

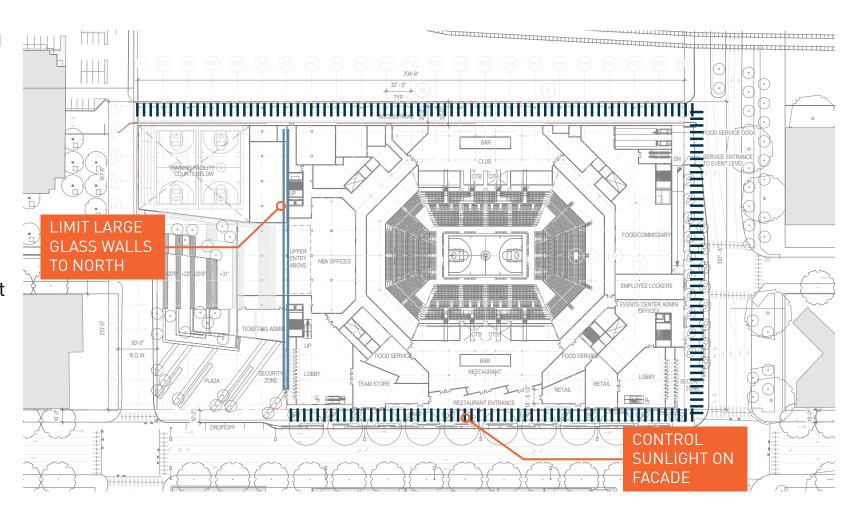
Seattle's climate is consistently cool - heating is a bigger issue than cooling on an annual basis.

Large glazed facades need careful consideration in terms of summer and winter raft and radiant effects.

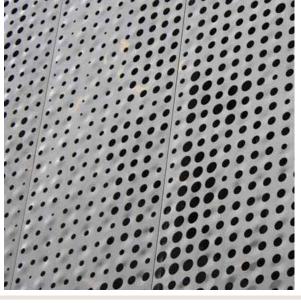
Limit large glazed expansions to the North facade Control sunlight on the E, S and W elevations using horizontal and vertical louvers, overhangs, and fritted glass.

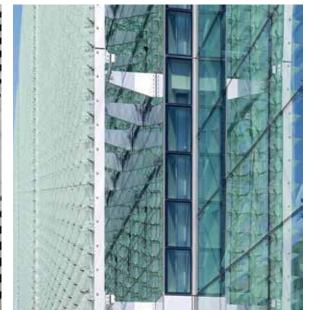
Natural light can provide amenity and natural lighting savings.

Light daily uses with natural light - Training Facility, Retail, Restaurant













SEATTLE ARENA JANUARY 22, 2013

HVAC PLANT OPPORTUNITIES

Heat Recovery [required by SEC]

Heat Pump Heating
Ice Refrigeration Heat Recovery
Water Source Food Refrigeration

Ground Source Heat Pumps

Desiccant Dehumidification

Thermal Storage

DISTRICT PLANT OPPORTUNITIES

The 2,000 ton chilled water plant and 15M BTU boiler plant for the arena could service approximately 750,000 SF of additional commercial office.

The arena could also anchor the development of a broader district plant for the area with additional capacity either in the building or in future satellite thermal plants.

Non-potable water could also be exported to adjacent buildings.

RENEWABLE ENERGY OPPORTUNITIES

Solar Thermal Hot Water

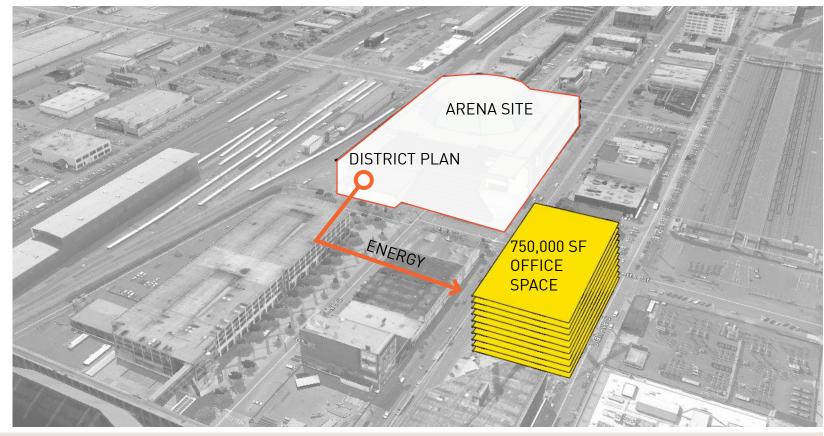
Photovoltaics [PV]







SOLAR THERMAL HOT WATER



SEATTLE ARENA JANUARY 17, 2013 EARLY DESIGN GUIDANCE 3