Washington State Convention Center Expansion Feasibility Study Draft Report Part One Executive Summary

August 15, 2013

LMN Architecture Urban Design Interiors

Part One: Executive Summary

LMN

Summary Overview

Feasibility Assignment and Approach

The following overview summarizes the WSCC Expansion Feasibility Study that was conducted in late 2012 and 2013. The study was an update to the Washington State Convention & Trade Center Expansion Feasibility and Workforce Study conducted in 2008. The purpose of the study update was to address feasibility concerns identified by the WSCC for expanded facilities at the CPS site, utilizing the 2008 feasibility work as a starting point. The analysis contained herein was developed utilizing an approach focused on a "fatal flaw" determination of feasibility. The focus of the work was on identifying potential concepts in enough detail to demonstrate basic feasibility. Conversely, concepts that were found to be problematic enough to be considered fatally flawed, were discarded.

Feasibility Concern: convention facilities size and configuration

Exhibit hall size

WSCC staff raised concern that the previous (2008) program goals resulted in insufficient exhibit hall space, and would therefore not serve the state's and region's convention and meeting needs over a 20-25 year planning horizon. Even pushing the exhibit hall floorplate to its maximum practical size at the CPS site would only result in one additional 100,000 square foot exhibit hall and flex space totaling another 100,000 square feet. Despite the 2008 program assumptions - increasing the WSCC's total amount of exhibit space to over 405,000 square feet - market research confirmed that only a very few events per year would utilize both facilities. Therefore, the effective market offering for the WSCC would not be changed significantly by the expanded facilities as envisioned in 2008 on the CPS site, although additional dates would be available.
In order to reach a part of the market not currently served by the WSCC, two exhibit halls in the 150,000 square foot range and total exhibit space of approximately 300,000 square feet was set as the 2012 program goal.

Freight loading (elevator vs. direct drive)

As envisioned in the 2008 configuration, the exhibit space was to be serviced by a series of freight elevators from a loading dock below grade. Although technically feasible, the additional time and cost to exhibitors of utilizing an elevator system would put the facility at a significant competitive disadvantage. As part of the 2012 feasibility study, alternate configurations were pursued which would allow freight to be loaded into the exhibit hall(s) via a direct-drive path.

Feasibility Concern: freight access route(s)

Freight access to the existing facilities, via the James/ Madison off-ramp from I-5 leading to Hubbell Place, is relatively straightforward, and causes minimal impact on downtown traffic. Freight access to the new facilities, in contrast, is highly problematic due to traffic constraints, turning radius needs of trucks and potential access points to the site for freight. The number of viable surface street options is limited and existing peak-hour traffic around the site is very congested, raising the strong possibility of timing restrictions being imposed by the City of Seattle. All indications suggest untenable time restrictions to efficient freight ingress and egress operations, resulting in significant cost challenges to the WSCC and its clients, potentially eroding the center's competitive position in the industry. The feasibility of utilizing the existing freight pathway along Hubbell Place was studied and it was determined that extending Terry Avenue between Pike and Pine Streets offered the potential of a relatively unencumbered freight access route, extending the current truck path and minimizing local traffic disruption. The Terry Avenue Extension would also offer the opportunity of improving the connection between the Pike/Pine neighborhood and downtown while a enhancing the connectivity between the WSCC Expansion and existing WSCC facilities. While this option seems to be technically feasible, significant additional costs and critical path approvals will be necessary to realize this option.

Feasibility Concern: Metro Transit operations

DSTT and I-5 access

The Convention Place Station currently serves as the northern portal for the Downtown Seattle Transit Tunnel

(DSTT) and an access point for Metro Transit bus routes running on the I-5 express lanes. In addition, south-end bus routes utilizing the DSTT are turned around on the CPS site before reentering the tunnel. These transit operations are scheduled to cease at some point between roughly 2016 and 2021, as use of the DSTT is turned over entirely to Sound Transit for the LINK light rail lines. The 2012 feasibility study included the consideration of the physical feasibility of retaining some or all of these transit operations under a reconfigured convention facilities plan.

Bus layover area, passenger and other transit facilities

The feasibility was also studied of including within the reconfigured WSCC facilities plan a layover area for up to 27 Metro buses, passenger facilities for the current Metro routes utilizing the CPS, and other transit facilities currently on the site.

Feasibility Opportunity: additional property for the expansion development

It was determined early in the 2008 planning process that in order to achieve the somewhat limited 2008 program goals, the privately-held parcel in the northeast corner of the overall CPS site (Honda Parcel 4) would need to be acquired. During preliminary investigation of that property, it become clear that other parcels held by the same owner (across Olive and Boren, respectively, from the CPS site) as well as additional adjacent parcels might be candidates for acquisition. The potential availability of that additional property significantly expanded the range of size and configuration options under consideration, as alternatives to the CPS site option.

Overall physical feasibility conclusions of the 2012/2013 Feasibility Study:

1. The development of new convention facilities generally achieving the 2012 Expansion Program Goals of 300,000 square feet of exhibit space, 100,000 square feet of meeting space, a 50,000 – 60,000 square foot ballroom, and appropriately sized support space, is feasible on a site encompassing the CPS and adjacent properties – referred to herein as the CPS Alternate Site.

2. The new facilities can be configured in such a way that direct-drive freight loading to the exhibit halls can be achieved.

3. A freight access path to the new facilities utilizing the current Hubbell Place approach coupled with an extension of Terry Avenue is physically feasible.

4. Metro Transit access to the Downtown Seattle Transit Tunnel and to the I-5 express lanes is physically feasible under the revised convention center configuration, as are passenger facilities for transit routes utilizing the Convention Place Station, a bus layover area for up to 27 busses, and other existing transit functions.

5. Transit operations can be accommodated during the construction of the WSCC facilities, but at a significant incremental cost and impact to the construction schedule. The scope of operations during construction is dependent on the mix of transit operations to be accommodated and on the timing of removal of Metro bus routes from the DSTT as Sound Transit LINK light rail service to the UW and to Northgate is initiated.

6. The addition of the property north of Olive Way (CPS Alternate Site) adds significant opportunity for private co-development as part of the overall project.

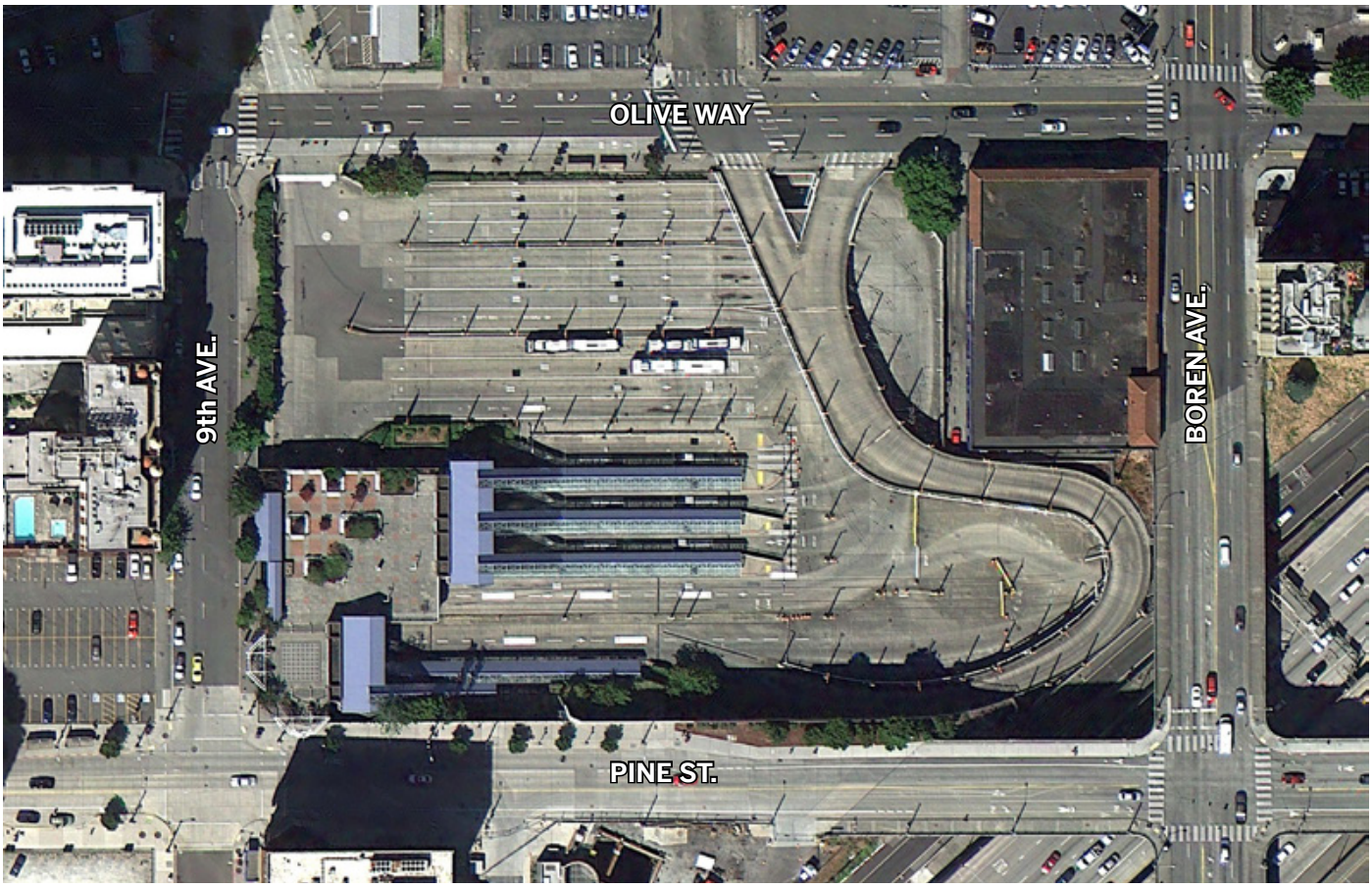
Section 1: Background

Previous Studies

In 2008, the WSCC hired Economics Research Associates (ERA|AECOM) to conduct a preliminary marketplace feasibility analysis to determine if there was a need for a future expansion of the Center. The results of that study concluded that substantial additional market demand exists for space and dates at the center, suggesting that serious consideration should be given to exploring the possibility of an expansion.

Based on the results of the ERA|AECOM research, LMN Architects was engaged to study potential expansion options and project potential construction costs for the preferred option.

Subsequent work showed that the proposed expansion could be financed through the use of existing hotel/motel tax.



CPS Site

The results of the 2008 site study illustrated a convention center expansion which would have produced 260,000 square feet of net flexible exhibit/meeting room space with a maximum contiguous area of 100,000 square feet each, and a 50,000 square foot ballroom. Service/loading would have occurred on a below grade level (Level +150), with service to the upper levels by multiple freight elevators.

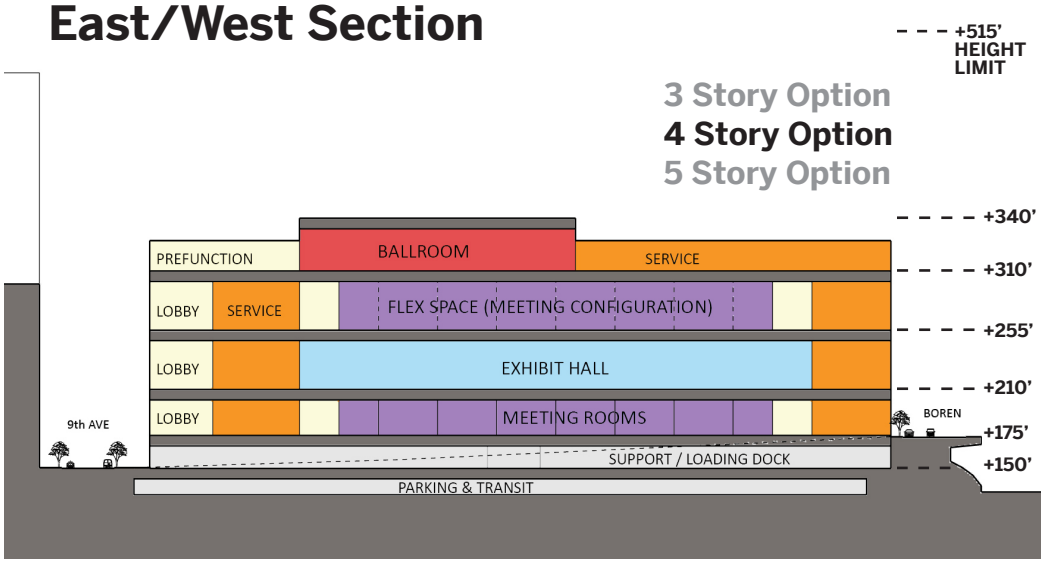
2008 CPS Site Expansion

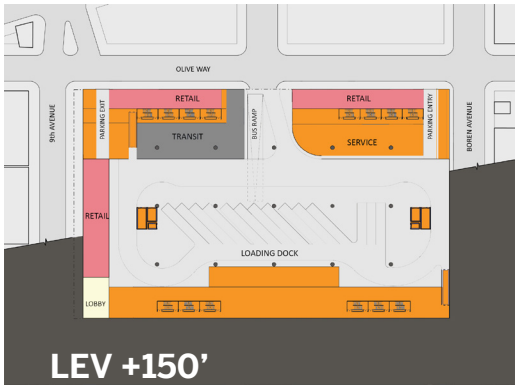
Exhibit Halls	***100,000 sf***
Flex Space	***100,000 sf***
Meeting Rooms	***60,000 sf***
Ballroom	***50,000 sf***
Net Area	***310,000 sf***
Gross Area	***850,000 sf***

Exhibit Hall Service	***Truck and freight elevators***
Truck bays	***14***
Metro	***Tunnel access and full service bus transit station; minimal layover space***

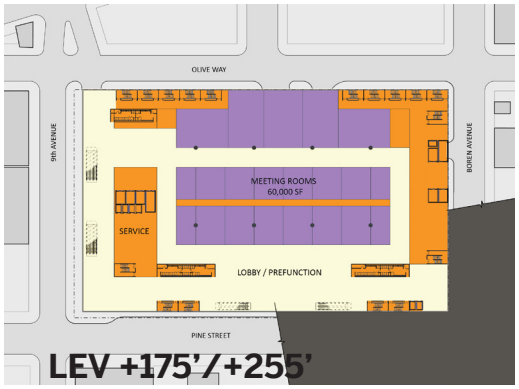
CPS Site Preferred Option - 2008

East/West Section



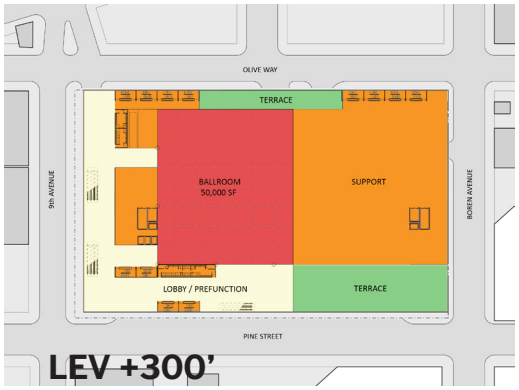


LEV +150'



LEV +175'/+255'

LEV +210'



LEV +300'

2012 Update

It was determined early in the 2008 planning process that in order to achieve even the somewhat limited program goals defined in that study of 100,000 square foot exhibit hall floorplates, the privately-held parcel in the northeast corner of the overall CPS site (Honda Parcel #4 in the diagram below) would need to be acquired. During preliminary investigation of that property, it became clear that Parcel #4 was available, along with others held by the same owner to the north of the CPS site.

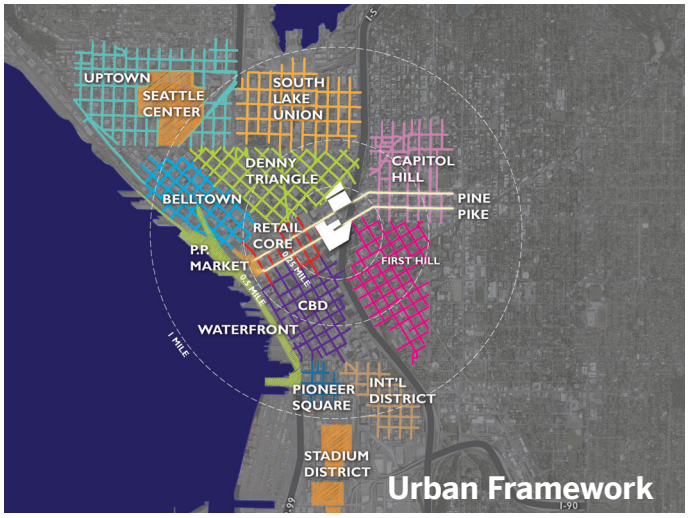
The potential availability of that additional property significantly expanded the range of size and configuration options under consideration in the 2012 Study. Various combinations of Parcels #1, 2 and 3 were added to Parcel #4, and studied as CPS Alternate Sites. The additional parcels were hoped to offer:

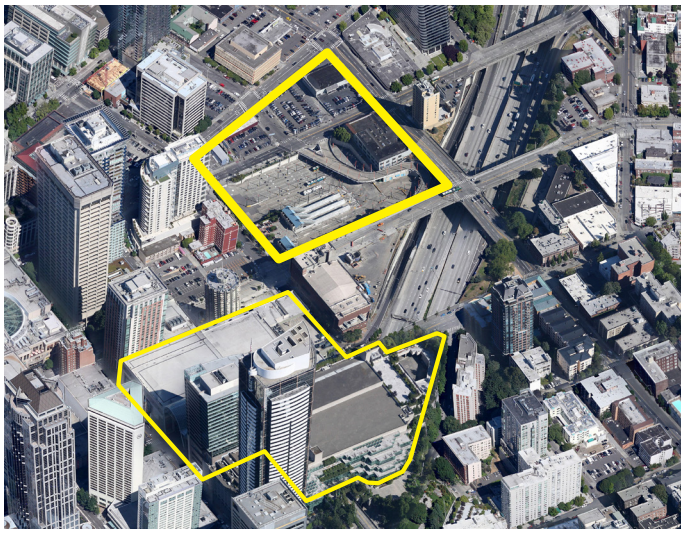
- Increased contiguous exhibition hall floor areas
- Contiguous loading locks
- Bus layover for 27 busses

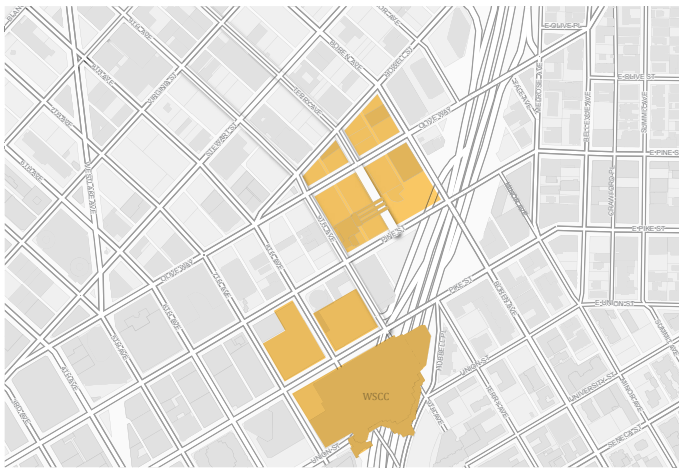
The larger CPS Alternate Site studied in the updated 2012 study is bounded by Pine Street to the south, 9th Avenue to the west, Boren Avenue to the east and Howard Street to the north. See below.

CPS Alternate Site

Section 2: Site Analysis







Context

The site of the WSCC Expansion is located at the intersection of Seattle's Retail Core, Central Business District, First Hill and Capitol Hill. The adjacent "Pike/ Pine Neighborhood" is immediately to the east – across Interstate 5.

The expansion site is located one block to the north of the existing WSCC. The expansion site leverages proximity to the existing convention center along with easy walkability to transit, hotels, restaurants and entertainment.

Convention Center District

The aerial of the proposed site plan illustrates the 'campus' nature of the WSCC. The existing original convention center is located south of Pike Street, spanning I-5, with the 2001 expansion located directly across the street to the north and connected by two bridges over Pike Street. The proposed expansion site is located one block to the north and one block east at the intersection of Pine Street and Ninth Avenue.

The two facilities must be able to operate independently or together. From a delegate's viewpoint the two facilities must be integrated into a coherent campus – a convention center district. The most direct connection both visually and physically will be on 9th Avenue – which is designated by the City of Seattle as a Green Street. This will be the primary pedestrian 'corridor' linking the facilities.

Strategies to enhance the cohesiveness of the convention center district should be focused on the pedestrian realm and should include:

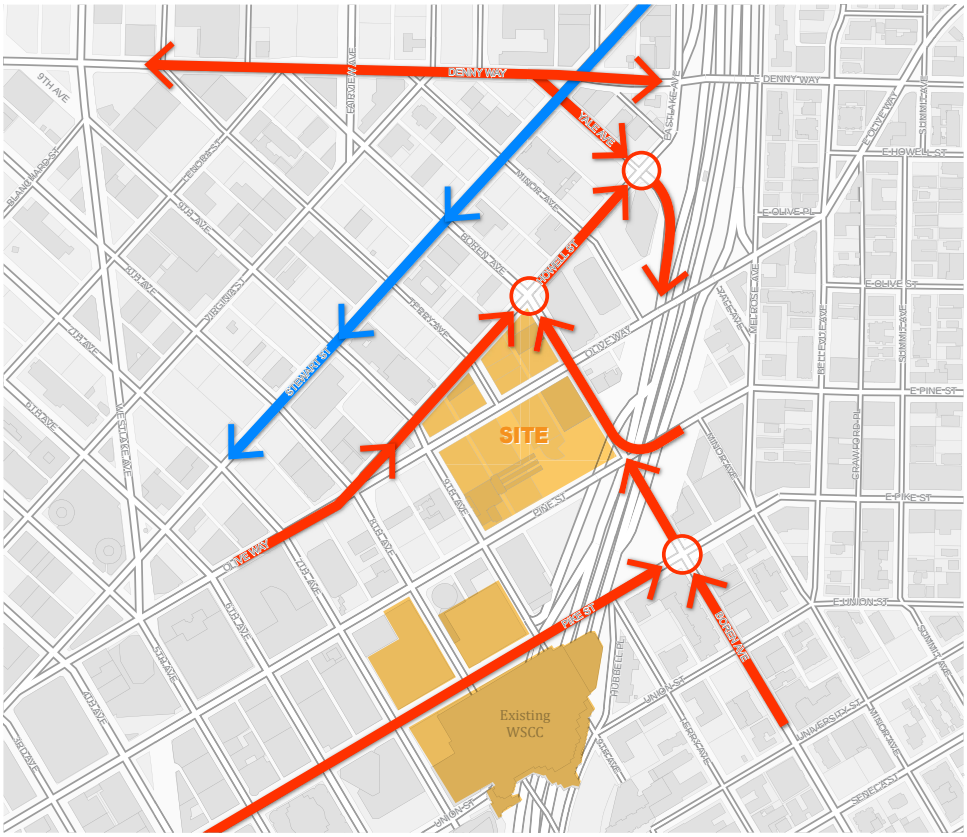
- Enhanced landscape - both hardscape and landscape elements.
- Unified signage and environmental graphics program.
- Strong visual connection and potentially even overhead weather protection.

Street Classifications

The streets surrounding the WSCC Expansion site provide important linkages in many transportation modes. Each of the east/west streets is a principal arterial and each is a principal transit route. Each of these east/west routes link downtown to Interstate 5 access points. Parking in the immediate vicinity of the site is restricted during peak hours. Bicycles and pedestrians also utilize the surrounding streets.

Interstate 5 has a limited number of access points downtown. The expansion site is located in a very congested traffic district, in the midst of several routes feeding directly into two of those access points.

Peak Hour Congestion



Section 3: Expansion Building Programs

The program targets were initiated out of the 2008 Market Feasibility Analysis prepared by ERA|AECOM as part of the Washington State Convention & Trade Center Expansion Feasibility and Workforce Study.

In addition to updating the 2008 program targets, the 2012 Expansion Feasibility Study also looked carefully at the potential impact to the expansion program of expanding the site to the north to include the Honda Parcels, including the ability to achieve a larger and more competitive building program. The larger site is referred to herein as the CPS Alternate Site The program goals for the 2012 Expansion project on the CPS Alternate Site are described below. The actual area which was achieved in conceptual layouts actually exceeded those targets slightly, producing larger contiguous exhibition halls and increased meeting area – see 2012 Expansion Concept, below.

2012 Expansion Program Goals

Exhibit Halls	***300,000 sf***
Meeting Rooms/ Flex Space	***100,000 sf***
Ballroom	***60,000 sf***
Net Area	***460,000 sf***

Exhibit Hall Service	***Truck and freight elevators with truck ramps***
Truck bays	***30***
Metro	***Bus layover for ~27 buses, tunnel access for service/ emergency vehicles***

2012 Expansion Concept

Exhibit Halls	***310,000 sf***
Meeting Rooms	***135,000 sf***
Ballroom	***50,000 to 60,000 sf***
Net Area	***500,000 sf***
Gross Area (not incl. Metro areas)	***1,230,560 sf***

Exhibit Hall Service	***Truck ramps with freight elevators***
Truck bays	***30***
Metro	***Bus layover for ~27 buses, tunnel access for service/ emergency vehicles***

Section 4: Freight Access

There are two distinct issues related to convention center freight movement – the internal movement of freight within the facility and access to the site for trucks delivering that freight.

Internal Freight Movement

The benefit to the project of the increased area of the CPS Alternate Site is the ability to increase the length of the site perimeter which then affords the possibility of a conventional loading dock with potential locations along the north or east edge. To minimize the amount of street cover, particularly over Olive Way, the preferred location for the loading dock was deemed to be the eastern edge, with truck ramp access to the upper level exhibit hall and access at every level via freight elevators.

Truck Access to the Site

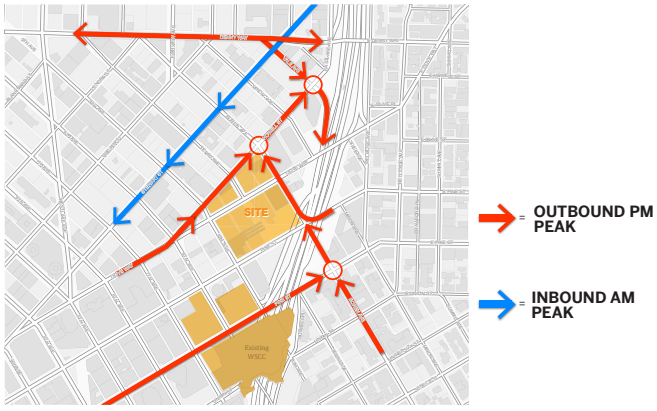
Interstate 5 has a limited number of access points through downtown Seattle and the project site is bounded by several streets which provide peak commuter access to I-5 on and off ramps. In fact, some of Seattle's most congested peak hour intersections are located at or near the site.

Truck access is a significant concern which, if not adequately addressed, could impact the overall long-term success of the facility. A 300,000 square foot exhibit hall is expected to generate on the order of 215-220 truck trips over the course of the three day long move-in period and again at move-out. At peak times, trucks could be moving in and out of the site with a frequency of 15 trucks per hour – or one every 4 minutes.

A number of potential truck access routes were evaluated for both inbound and outbound traffic, all demonstrating significant truck access concerns (below).

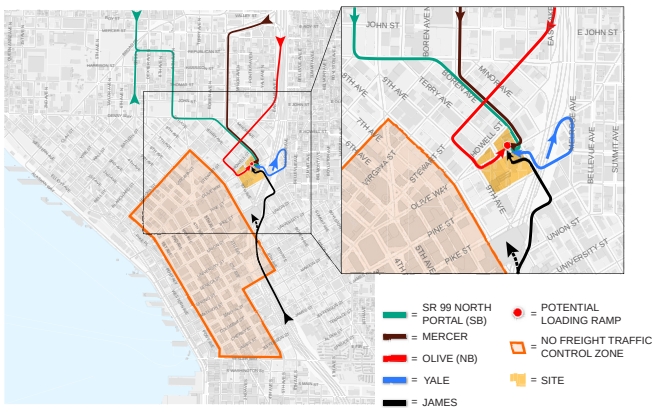
Two approaches were identified for addressing truck access to and from the project site:

- An approach which would add new infrastructure, creating a new truck path to and from the site which would reduce the convention center's contribution to existing traffic congestion – The Terry Avenue Extension.
- A thorough investigation of all possible surface routes, with an analysis of expected travel times and route feasibility.

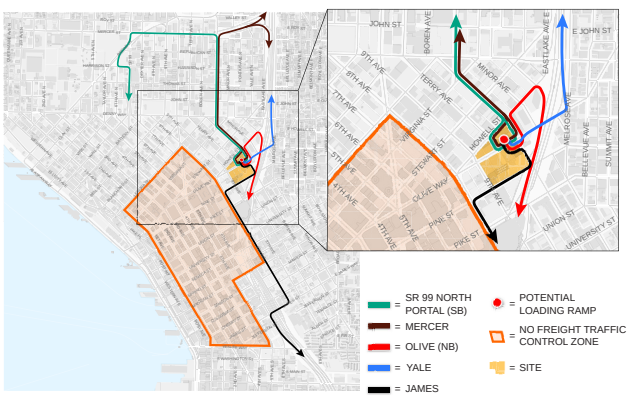


PEAK HOUR CONGESTION

Inbound Truck Access Analysis



Outbound Truck Access Analysis



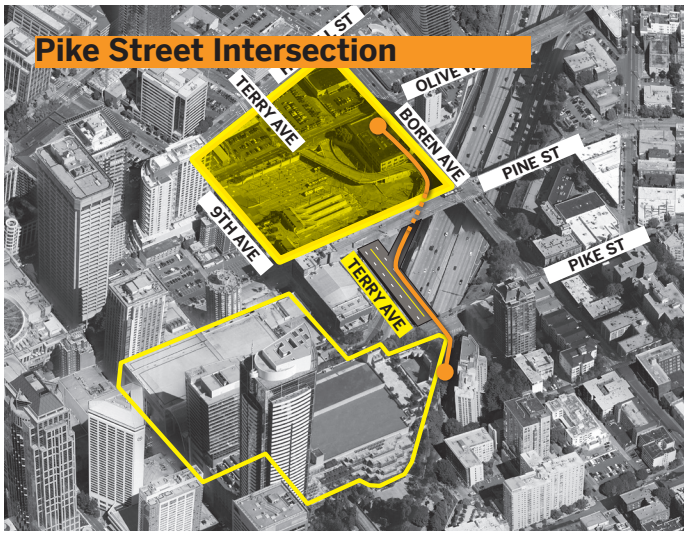
Terry Avenue Extension

Given the difficulties of accommodating truck movement in the intersections around the site and the general level of traffic congestion in the immediate area surrounding the site, alternative solutions for truck access were studied, resulting in the Terry Avenue Extension option.

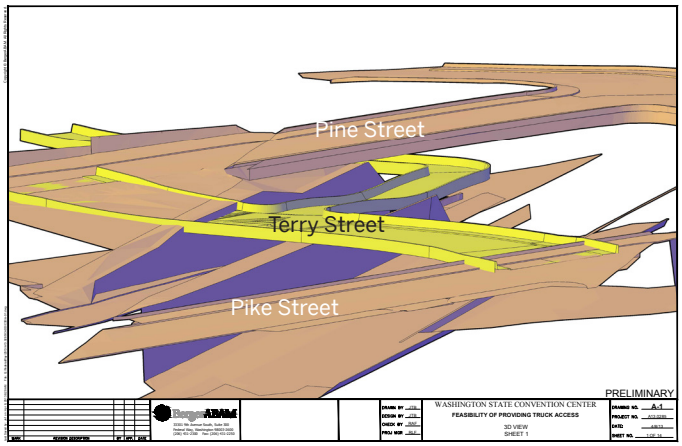
Freight access to the existing convention center occurs along Hubbell Place, to the east of the existing convention center. The Terry Avenue Extension has the operational benefit of continuing the existing truck route, reducing confusion amongst truck drivers as to the route to the various convention center components.

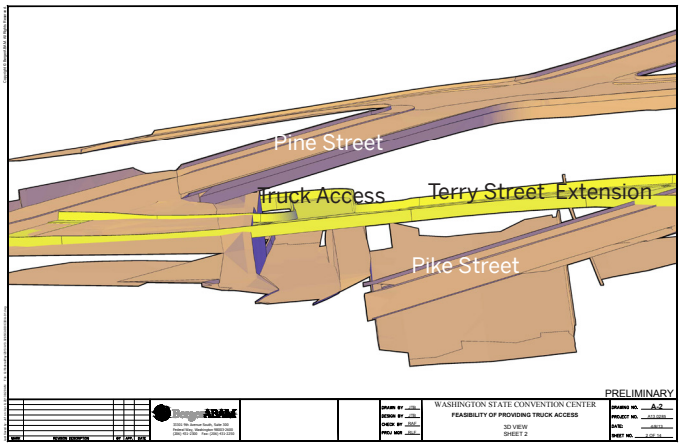
The Terry Avenue Extension would route trucks along the eastern edge of the existing convention center, on Hubbell Place. Trucks proceeding to the expansion would continue past the existing loading dock entrance and continue to a new signaled intersection at Terry Avenue and Pike Street. Trucks would then continue across Pike Street and on to the Terry Avenue Extension, proceeding to the entrance ramp for the expansion loading dock. Trucks would then continue on the loading dock access ramp, located above the I-5 HOV lane access ramp, cross under Pine Street and continue ramping down the exhibit hall/loading dock level at elevation +105 (20 feet below existing grade at the CPS site). Trucks would exit the facility on the same path continuing the route that they use today.

The preferred option, extending the existing Terry Avenue right-of-way to the north provides a new city street - improving the link between the Pike/Pine Neighborhood and downtown while allowing trucks to access the site with only one street crossing - at Pike Street. The extension of Terry Avenue across I-5 also presents an opportunity to extend the I-5 cover to the east, creating a Park Lid over the freeway. This option is technically feasible, but is currently not included in the convention center budget.

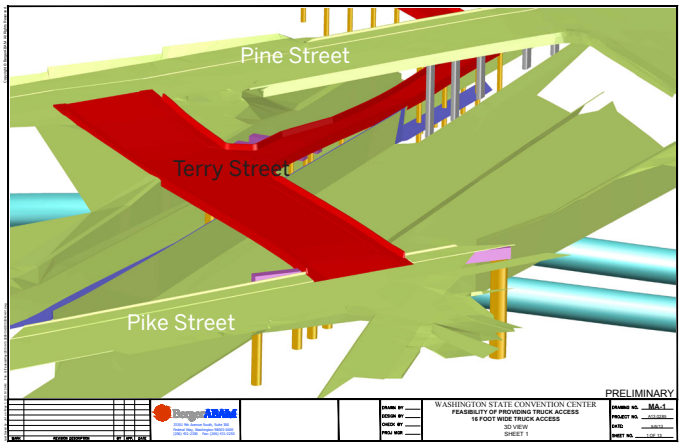


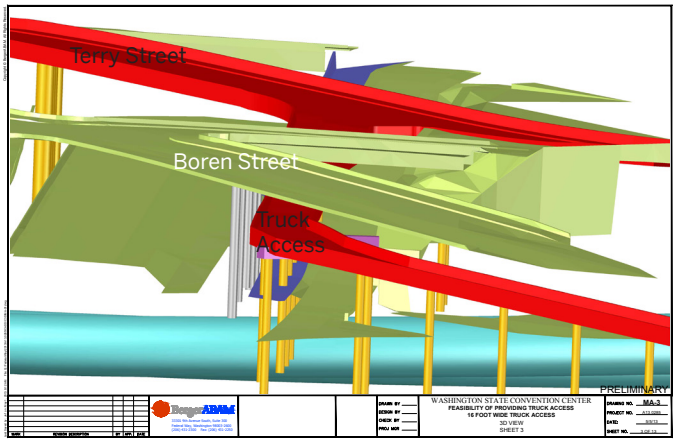
Initial studies were conducted to test the feasibility of the basic geometries and to test clearances.





Structural requirements and column locations were then tested, along with the analysis of clearance with the new below-grade Sound transit tunnel, as illustrated below.





The project cost for the Terry Avenue Extension is projected to be in the range of $47-63 million.

Surface Street Options

Following a thorough investigation of potential surface truck routes, four potential routes were identified.

Criteria used to evaluate these routes include:

- Distance (including the distance on the freeway)
- Number of Turns
- Truck Turning Path Viability
- Off-Peak Travel Time
- PM Peak Period Travel Time

When evaluation criteria was applied to each site, the initial analysis eliminated Routes 2 and 3 from consideration.

Further analysis was conducted on Options 1 and 4 and The Terry Avenue Extension was added to the evaluation, as Option 0. While each of these options has a different inbound route configuration, the Mercer/Fairview Option 4 does not work outbound due to the inability of the truck to negotiate the outbound turning maneuvers. Therefore, Options 1 and 4 share the same outbound route configuration – Howell to Yale - while Option 0 would utilize the outbound route across the Terry Avenue Extension to Pike to Hubbell, joining the existing outbound truck route from the existing convention center.

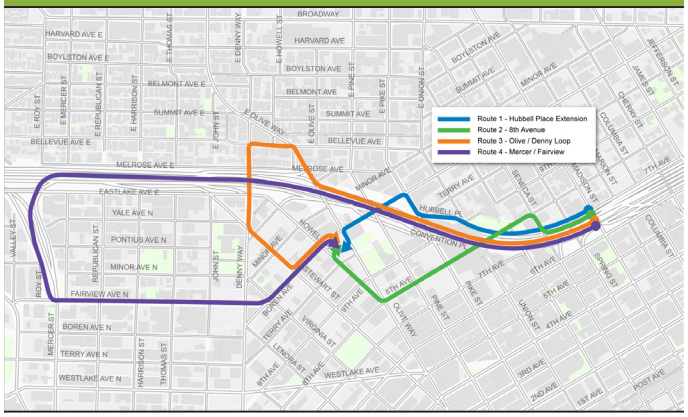
In an attempt to provide relative analysis between the anticipated travel times of the routes, each route was driven in an automobile multiple times over the course of a single day and the average times recorded for each route – inbound and outbound/ peak and off-peak. (See illustration,) It is recognized that a truck can expect significantly longer travel times than an auto, as merging and completing turning maneuvers will be much more difficult in a truck. Therefore, the value of the travel time data should be thought of as a relative scale – Option to Option - rather than an accurate prediction of truck travel times.

Summary observations of the above analysis include:

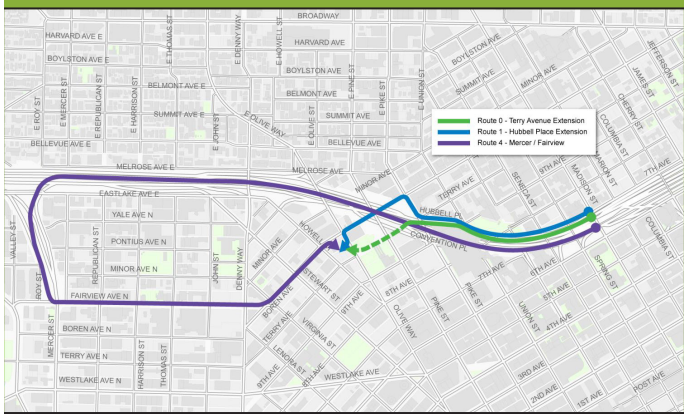
- Terry Avenue Extension recorded about half the travel time of Routes 1 and 4 – both inbound and outbound.
- Routes 1 and 4 reflect similar times inbound.
- The outbound Routes 1 and 4 show significant delays, particularly during the PM peak hours. Actual delays will be significantly worse due to internal ramp queues and the difficulty for large trucks to enter the standing traffic queues on Howell Street.

There is significant risk that in contributing to an already congested traffic condition, restricted hours of operation may be placed on the convention center.

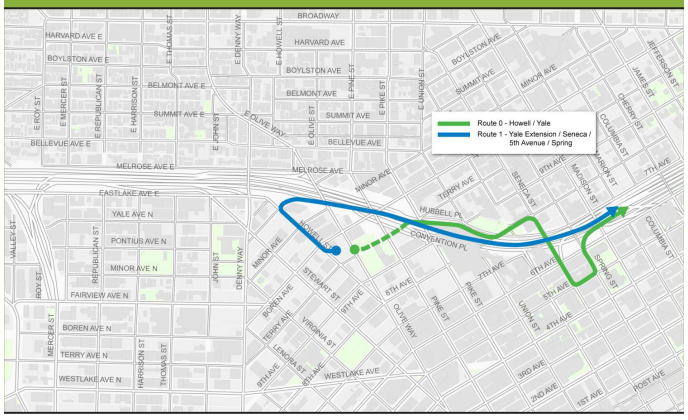
Inbound Surface Route Options

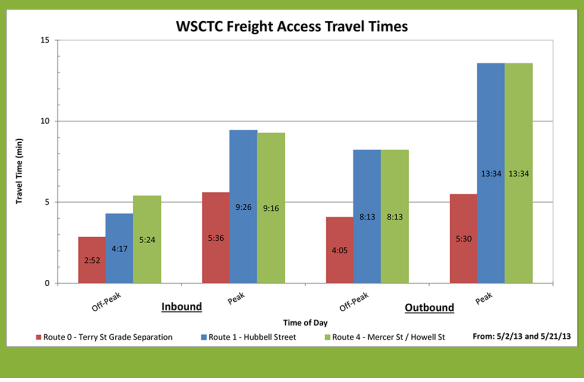


Inbound Surface Route Options



Outbound Surface Route Options





BASELINE CONDITION - DESIRED CAPACITY/FLOW

	Move-in Day 1	Move-in Day 2	Move-in Day 3	Show Day	Show Day	Show Day & 4pm Move-out	Move-out Day 2	Move-out Day 3
6:00 AM	5	5	2				10	
7:00 AM	5	10	10			2	10	5
8:00 AM	5	15	5	1	1	2	**DOCKS FULL	5
9:00 AM	2	5	5			2	5	10
10:00 AM	2	15	10	1	1	10	10	5
11:00 AM	2	5	5			2	5	5
12:00 PM	1	5	5	1	1		5	
1:00 PM	1	15	15			2	15	5
2:00 PM	10	5	5	1	1	2	3	10
3:00 PM	2	15	1			18	15	1
4:00 PM		5	1	1	1	5	10	1
5:00 PM		10	1			**DOCKS FULL	5	
6:00 PM		5				5	5	
7:00 PM		5				15		
8:00 PM						5		
9:00 PM								
10:00 PM								
11:00 PM								47
	35 trucks	**120 trucks**	**65 trucks**			**70 trucks**	**98 trucks**	**47 trucks**

15 TRUCKS PER HOUR = 1 TRUCK EVERY 4 MINUTES

POTENTIAL RESTRICTED HOURS

To assess the impact of potential restricted hours during the PM peak period, anticipated truck traffic has been illustrated above, with the hours within the potentially restricted period highlighted in gray. If truck traffic were to be restricted, the truck traffic during those hours would have to be accommodated after the peak hours - extending the loading period – or pushed to the next day – adding an additional day to move-in and move-out. As either condition would increase the costs to an exhibitor, the competitive position of the convention center relative to its peer facilities is potentially at risk, were restricted hours to be imposed on the operations of the facility.

The convention center is an unique facility in downtown Seattle, and there is no precedent example for comparison that has the same dependence on the smooth flow of freight to and from the facility. The closest precedent would be downtown construction sites, where the delivery of materials results in a high frequency of truck deliveries. There are many examples of downtown construction projects which have operated under restricted hour access conditions, particularly in the PM peak hours. Therefore, restricted hours must be considered as a real possibility in all surface route options.

In summary, surface route options seem viable, though any option seems likely to result in a restriction of operating hours during the peak afternoon hours.

Section 5: Metro Access Considerations

Overview

The following analysis described Metro's desired site program for inclusion in the Washington State Convention Center Potential Facility Expansion on the Convention Place Station (CPS) site. The "CPS Alternate Site" refers to this general location of a site study in downtown Seattle incorporating the CPS site and analysis of additional parcels to the north.

Since the construction of the Downtown Seattle Transit Tunnel (DSTT), the CPS site has been its northern terminus. As the DSTT northern portal, the site currently provides a number of important access and infrastructure functions that support bus operations throughout the tunnel, including street, I-5 and tunnel access, bus layover and passenger facilities.

Since May 2009, the DSTT has been operating with both buses and light rail trains. The Downtown Seattle Transit Tunnel (DSTT) is currently being expanded to the north, as part of the implementation of LINK - the light rail system extension to the University of Washington. LINK is expected to be operational in 2016 and at that time the number of light rail trains in the tunnel will increase. As light rail ridership and the frequency of light rail trains increase, the number of buses in the tunnel is expected to decrease, potentially removing buses from the tunnel all together by 2021, when the light rail system is expected to be further extended to Northgate. Therefore, there are three CPS Site conditions that must be considered in the analysis of transit related requirements on the site:

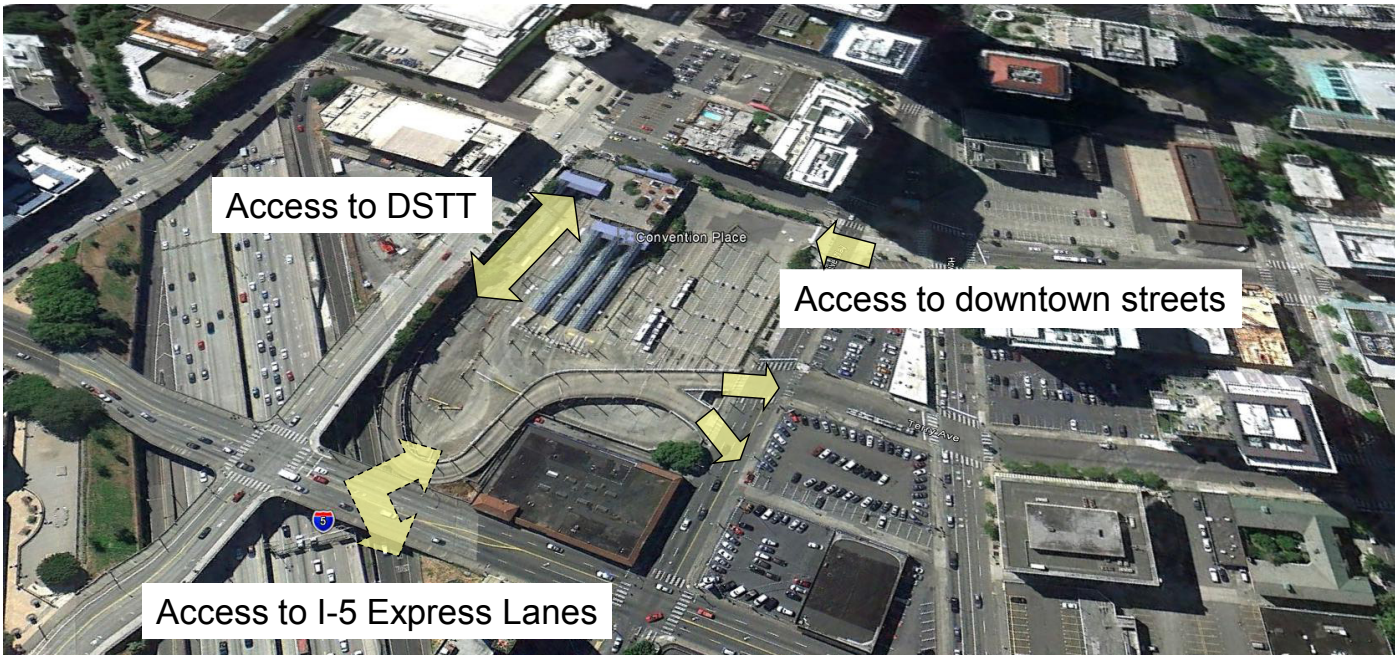
- The Current Condition.
- 2016-2021 – when additional light rail trains serve the University of Washington
- Post 2021 – when buses no longer access the tunnel.

Transit Access

The CPS site currently provides access to and from the Downtown Seattle Transit Tunnel (DSTT), to and from city streets and to and from (depending on time of day) the reversible Interstate 5 express lanes. During peak hours, 60 buses per hour enter and depart the DSTT via the north tunnel portal at the CPS site.

In 2016, access to the site from the reversible Interstate 5 express lanes is no longer required. At that point, commuter access from the north will be provided via light rail.

Sometime between 2016 and 2021, as light rail traffic ramps up to high capacity, bus access to and from the DSTT will no longer be accommodated and the tunnel access point at the CPS will be "sealed".



Bus Layover

Bus layover provides an area where buses can be parked and staged between morning and afternoon peak hours or during periods where they are changing routes. The northern half of the CPS site is currently devoted to bus layover for 24 buses. Additional bus layover area for three buses is provided along 9th Avenue. In addition, south end bus routes utilizing the DSTT are turned around on the southern portion of the site before reentering the tunnel.

Bus layover for 27 buses has been considered in the planning of the WSCC expansion on the CPS site, independent of bus access to the DSTT. This would occur below-grade at the floor level of the existing CPS station – elevation +125 – allowing the potential of access to and from I-5 and to and from the DSTT, should either of those access routes prove desirable. The bus layover area would connect to surface streets via an on-site ramp. See Section 6: Site Test Fits.

Passenger Facilities

Passenger facilities are currently located on site serving bus lines entering and exiting the DSTT at the north tunnel portal.

Conceptual budget estimates were prepared for the proposed passenger station. Using a similar level of amenity and finish to other existing bus tunnel passenger stations, order of magnitude cost estimates suggest that a project cost budget for the passenger station should be $29 million.

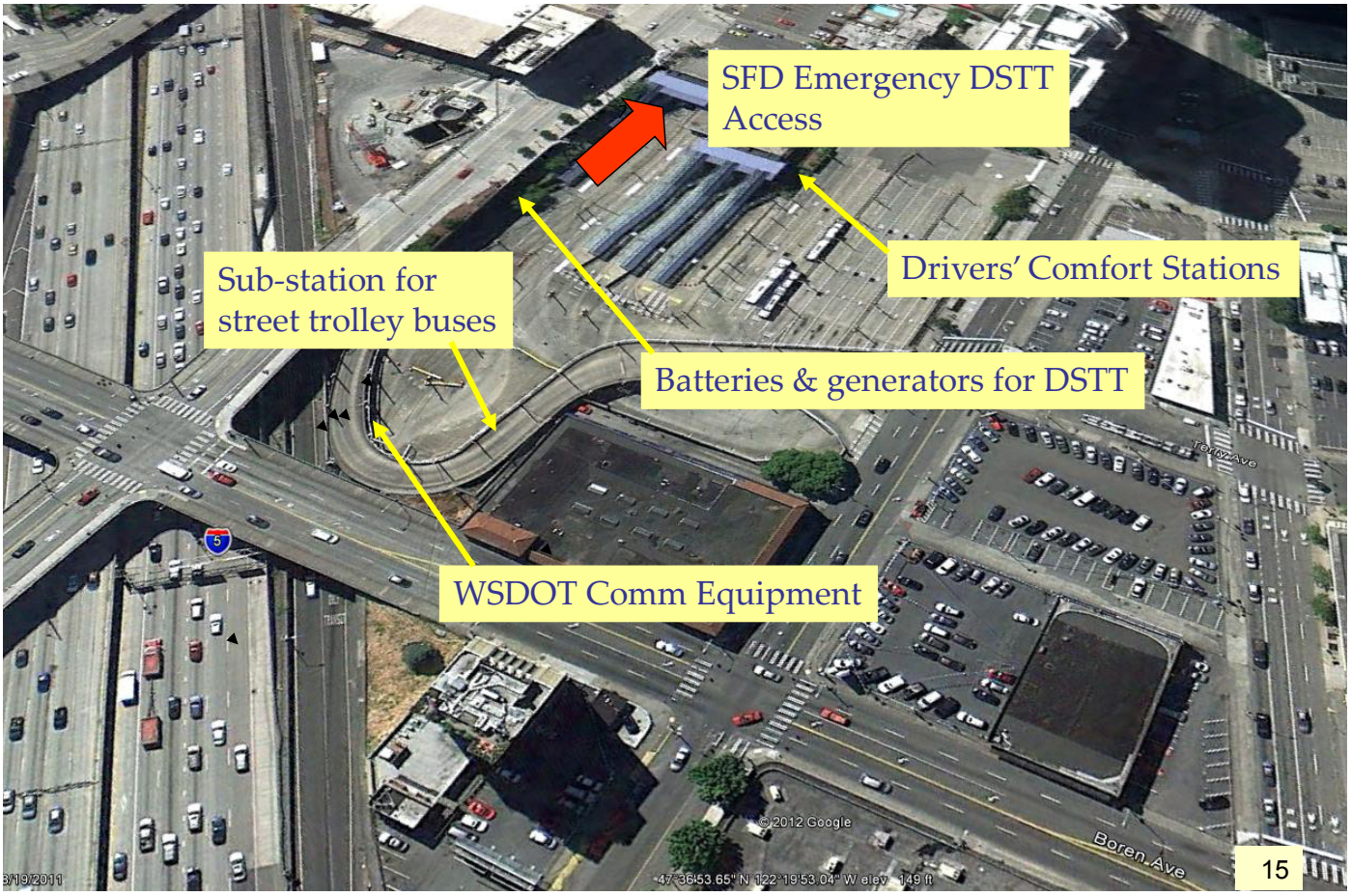
Passenger facilities are only required with bus access, so this requirement changes over time – becoming unnecessary after 2021.

Other Existing CPS Functions

In addition, there are a number of transit related infrastructure components located on the site including:

- Sub-station for street trolley buses
- WSDOT communications equipment
- Batteries and generators for DSTT
- Drivers' comfort stations
- Seattle Fire Department emergency access to DSTT

Many of these components are located along the perimeter of the site and will not need to be disturbed. Driver's comfort station will need to relocated to be adjacent to the bus layover area.



Section 6: Site Test Fits

CPS Site

The proposed site studied in 2008, the CPS Site, is bounded by Olive Way to the north, Boren to the east, Pine Street to the south and 9th Avenue to the west. The majority of the site is currently utilized by King County Metro as the Convention Center Transit Station – accepting buses from the reversible Interstate 5 express lanes exit ramp and providing access to the existing downtown Seattle transit tunnel (DSTT). Buses also use the site as a queuing and holding area, prior to accessing the downtown street system via the ramp at mid-block.

The 2012 study began with an update of the 2008 study, looking at the CPS site alone in order to determine:

- The largest contiguous exhibit hall floorplate that could be achieved on a single level.
- The feasibility of a configuration which could service the exhibit halls through a more traditional loading dock – rather than freight elevators.

As the following plans illustrate, it was not possible to accommodate a large exhibit hall floor (min. 100,000 sf) and a conventional loading dock, therefore the loading dock was placed below grade with service elevators in each corner. However, this configuration was able to achieve a large exhibit hall – measuring 145,000 sf on level +225.

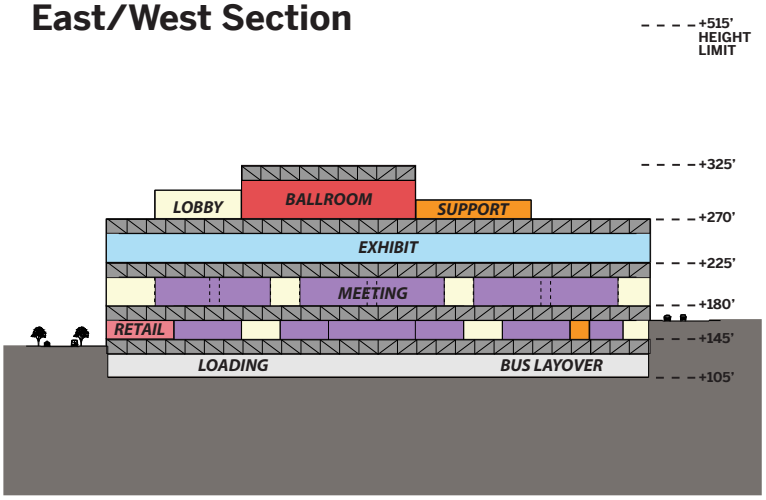
The floor plans which follow illustrate a concept where the primary service floor is located below grade, the grade level (at 9th Avenue) and a second grade level (along Pine Street) would accommodate lobbies and flexible meeting room floors. The exhibit hall would be located above on the third public floor at level +225 with the ballroom located on level 4 at +270.

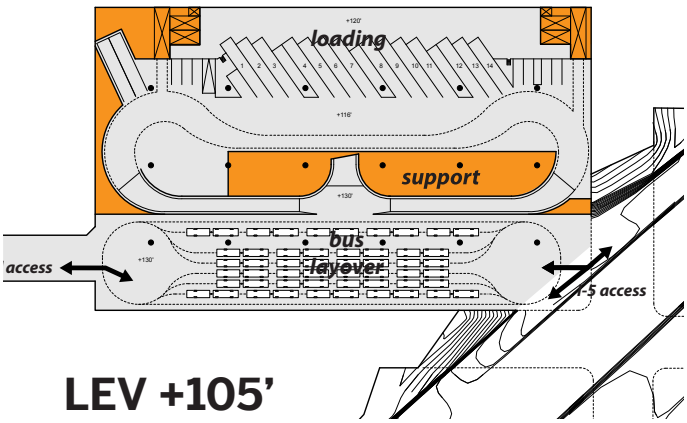
2012 CPS Site Expansion

Exhibit Halls	*140,000 sf*
Flex Space	*70,000 sf*
Meeting Rooms	*50,000 sf*
Ballroom	*50,000 sf*
Net Area	*310,000 sf*
Gross Area ...	*850,000 sf*

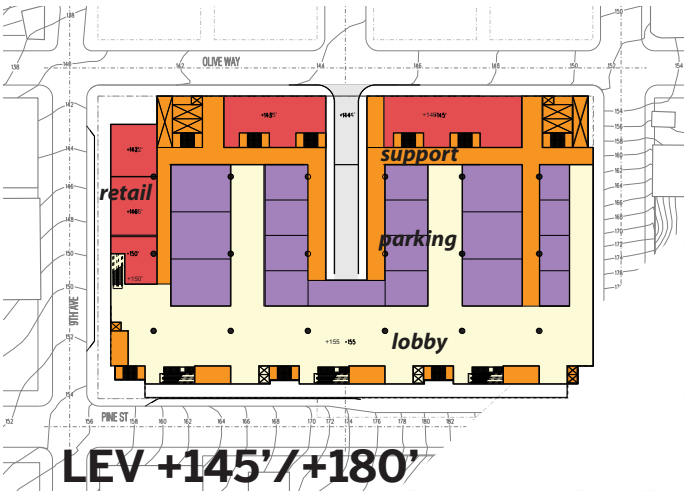
Exhibit Hall Service	*Truck and freight elevators*
Truck bays	*14*
Metro	*Bus layover for ~27 buses, tunnel access for service/ emergency vehicles*

East/West Section

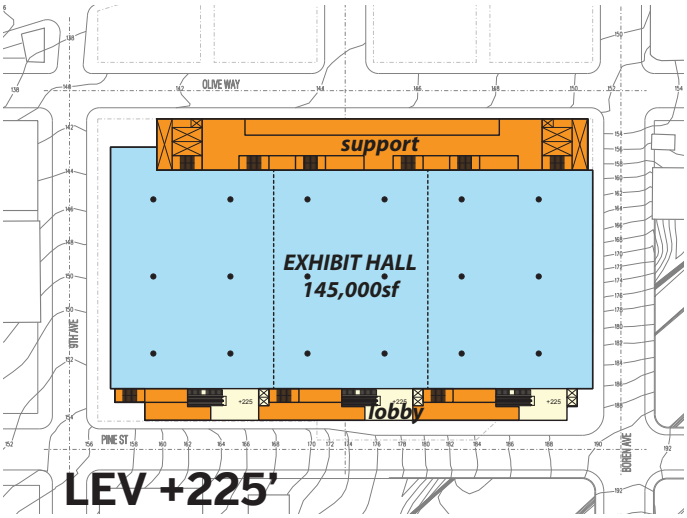




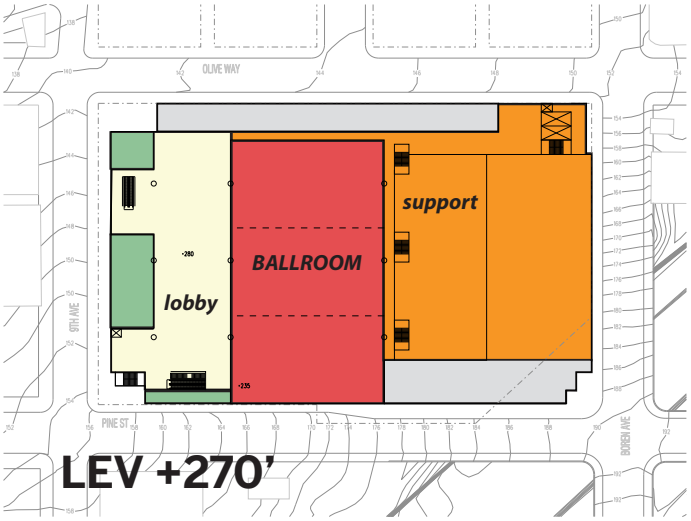
LEV +105'



LEV +145'/+180'



LEV +225'



LEV +270'

LMN

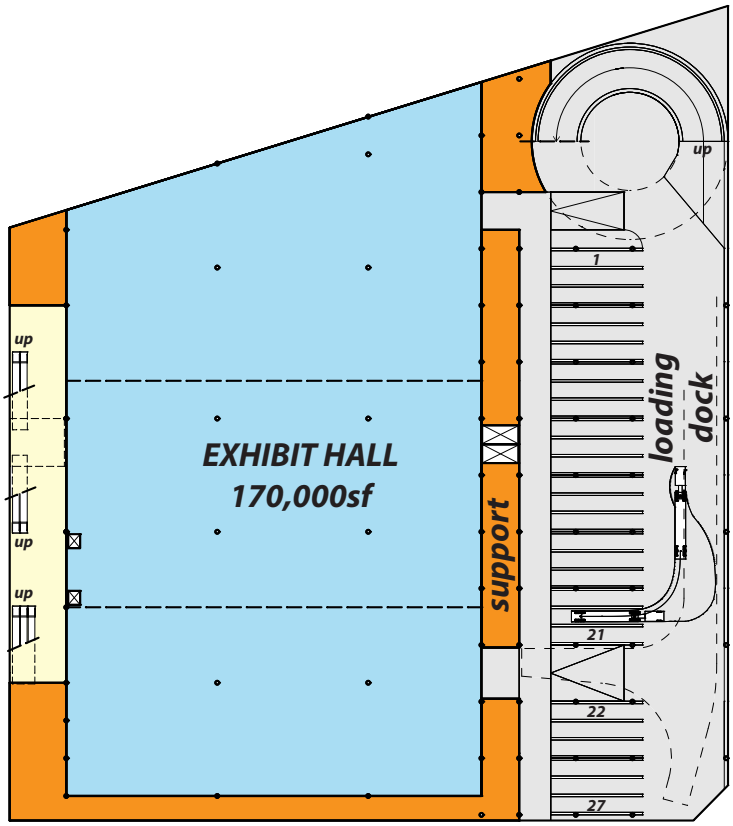
CPS + Honda Parcels/ CPS Alternate Site

Honda Parcel #4 was always envisioned to be a necessary component of the CPS site in order to achieve even the 2008 program target for exhibit hall area. The addition of Honda Parcels #1, #2 and #3, along with the remaining parcels to the north of the CPS site between 9th and Boren Avenues, combine to create the CPS Alternate site. The CPS Alternate Site allows the possibility of extending the area available for the WSCC Expansion to the north across Olive Way to Howell Street, encompassing the area between Pine and Howell Streets and 9th and Boren Avenues. The CPS Alternate Site Option is illustrated below.

Preferred Option/ CPS Alternate Site

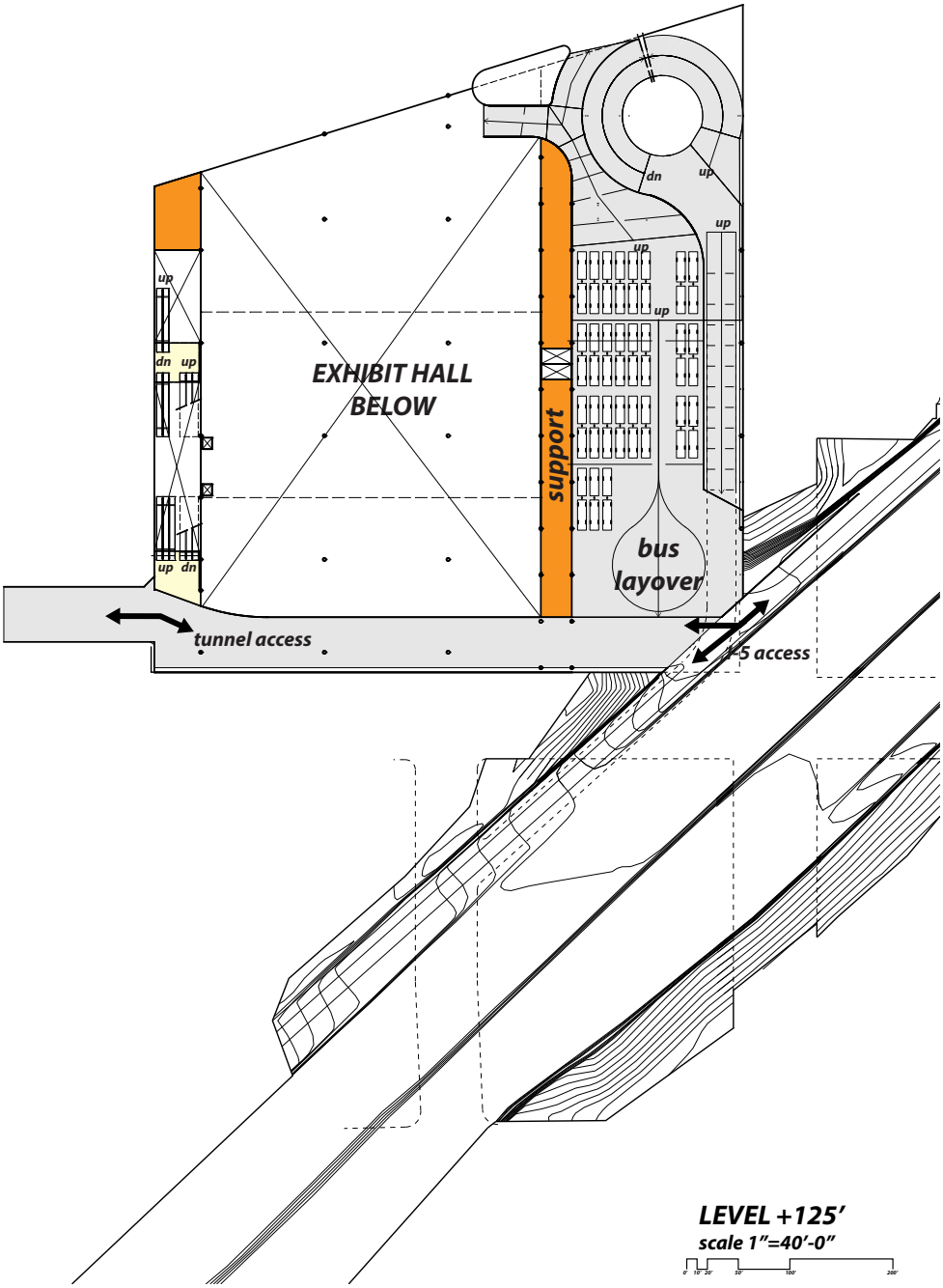
Level +105 Plan illustrates the lowest floor in the convention center. Elevation 105 is approximately 20 feet lower than the existing grade elevation on the CPS site. The depth of excavation is necessary to provide full height exhibit hall clearance under Olive Way.

Level +105 houses the primary exhibition hall at 170,000 square feet. The exhibition hall is ringed with support space around its perimeter. To the east of the exhibit hall is a full length loading dock accommodating 27 trucks along with a spiral truck ramp to the north providing access to the upper level exhibit hall at Level +200. Oversize freight elevators provide access to all of the upper levels. On the western edge of the site is public vertical circulation with connection to the registration and prefunction areas above.



LEVEL +105'
scale 1"=40'-0"

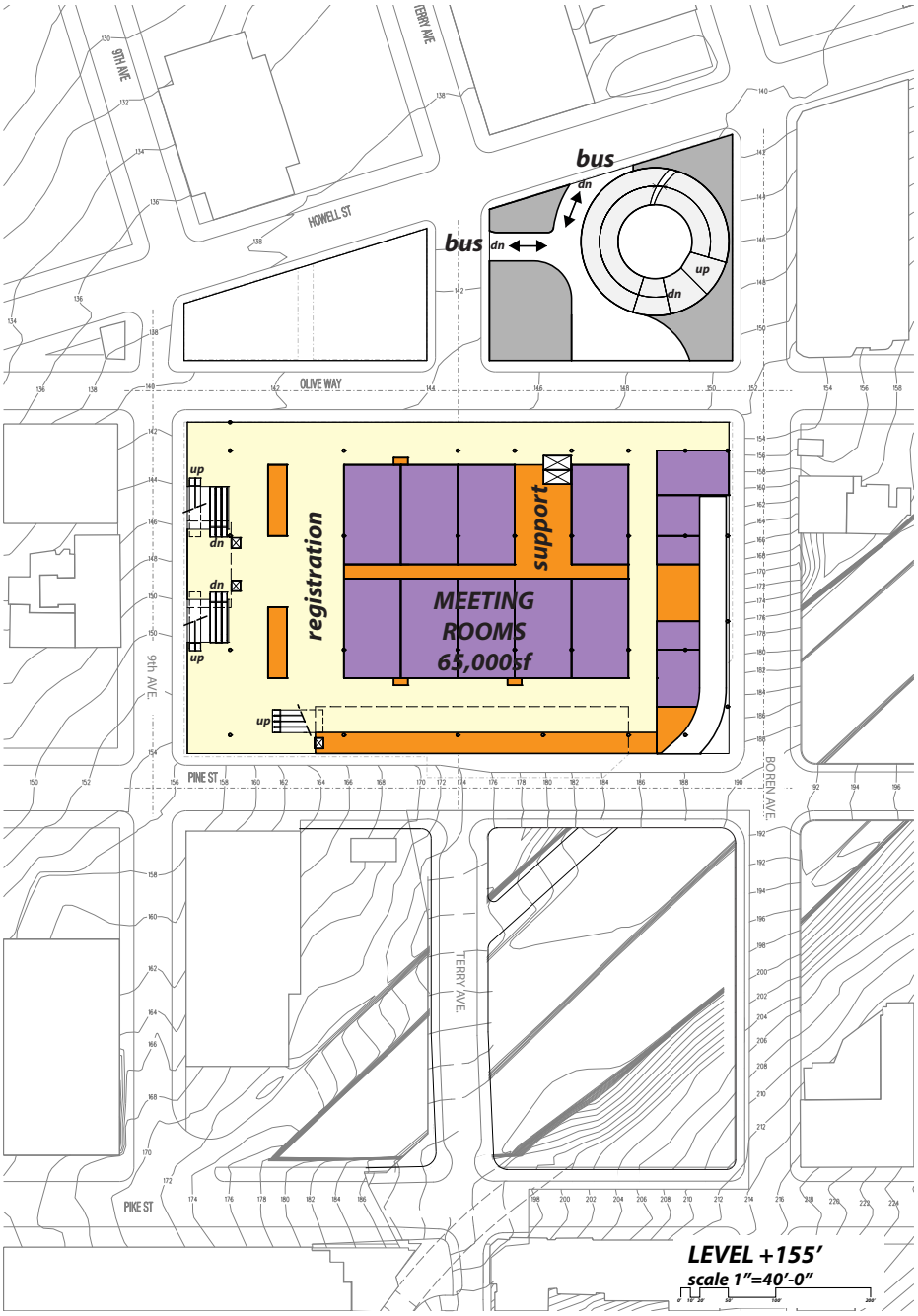
Level +125 Plan illustrates the condition at the existing CPS site level. Bus access is provided from the Interstate 5 reversible HOV ramp on the southeast corner of the site, connecting to the Downtown Seattle Transit Tunnel to the west and the bus layover area for 27 buses to the east – located above the convention center's loading dock. The bus layover area connects to surface streets on its northern edge. On the eastern edge of the site is the truck access ramp, connecting the Terry Avenue Extension at grade to the lower level loading dock and upper level exhibit hall.



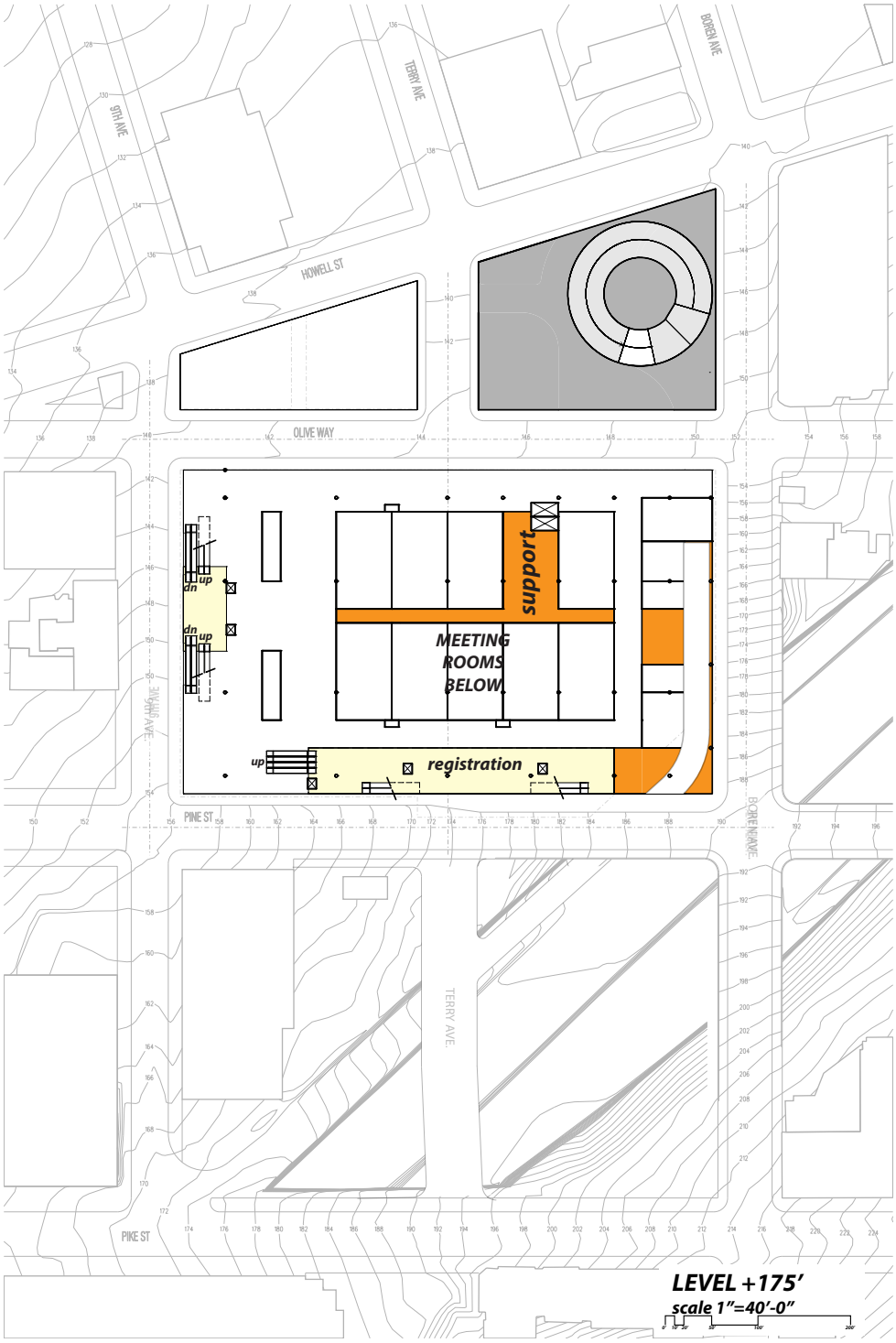
Level +155 Plan illustrates the condition at grade along Ninth Avenue, on the western edge of the site. Public vertical circulation to upper and lower levels would occur on the western edge of the project, as well as the southern edge of the site, following the grade of Pine Street. A large flexible registration/prefunction area would surround a bank of flexible meeting rooms, with internal support areas connecting to the loading dock below, via service elevators. Street front retail would also be maximized on this level.

The Terry Avenue Extension is illustrated at this level, providing a platform for truck access to and from the expansion (see Section 4: Freight Access).

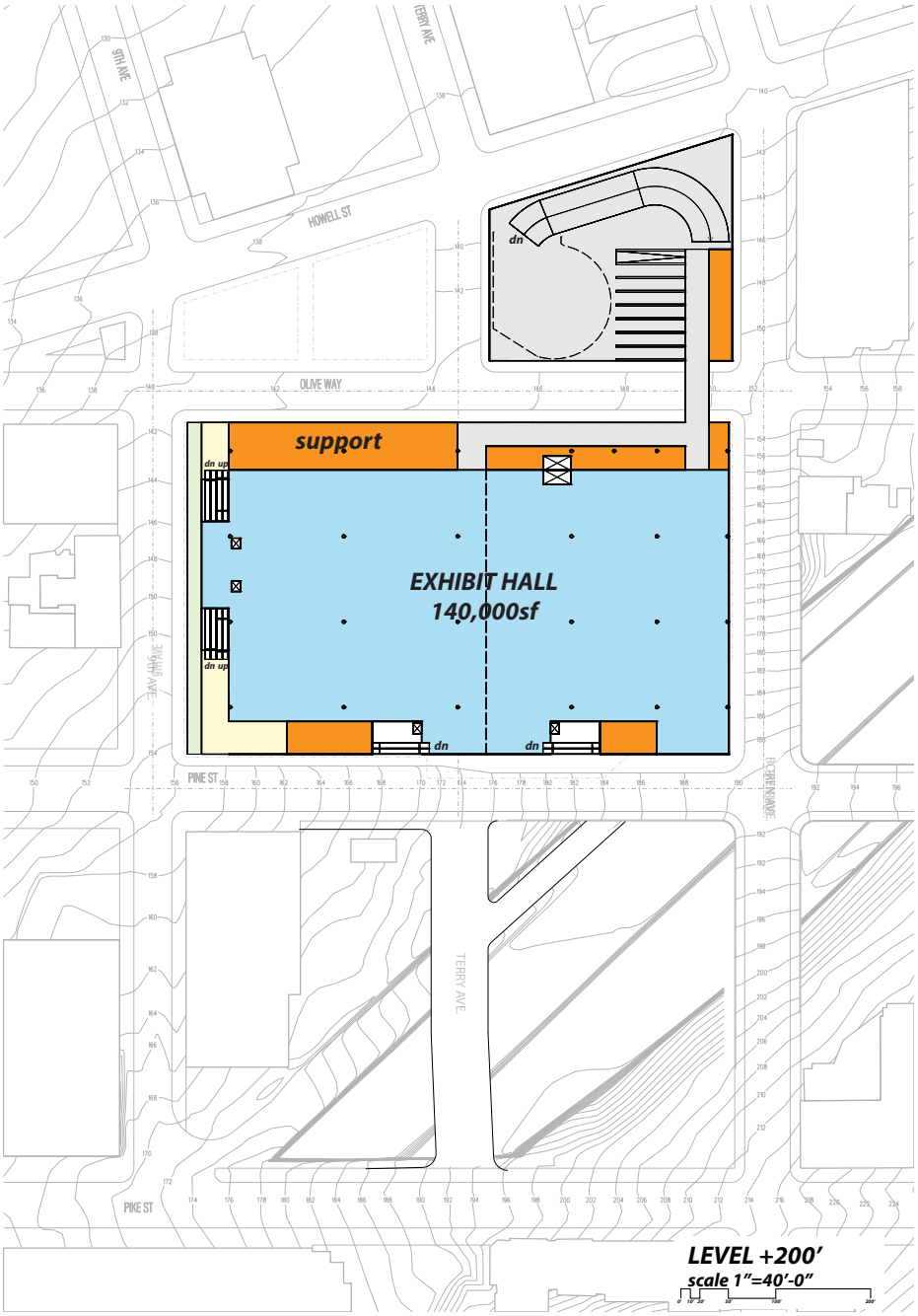
The Site Parcels on the northwest corner of the site (including Honda Parcel 1), between Ninth and Terry Avenues and Olive Way and Howell Street are not used for convention center program above grade and are available as a prime codevelopment site. The Site Parcels on the northeast corner of the site (Honda Parcels 2 and 3) are utilized above grade for the spiral truck ramp up to level +200 and at grade for surface street access for buses from the below grade bus layover. Codevelopment options on this portion of the site could include a "podium" surrounding the ramp with codevelopment.



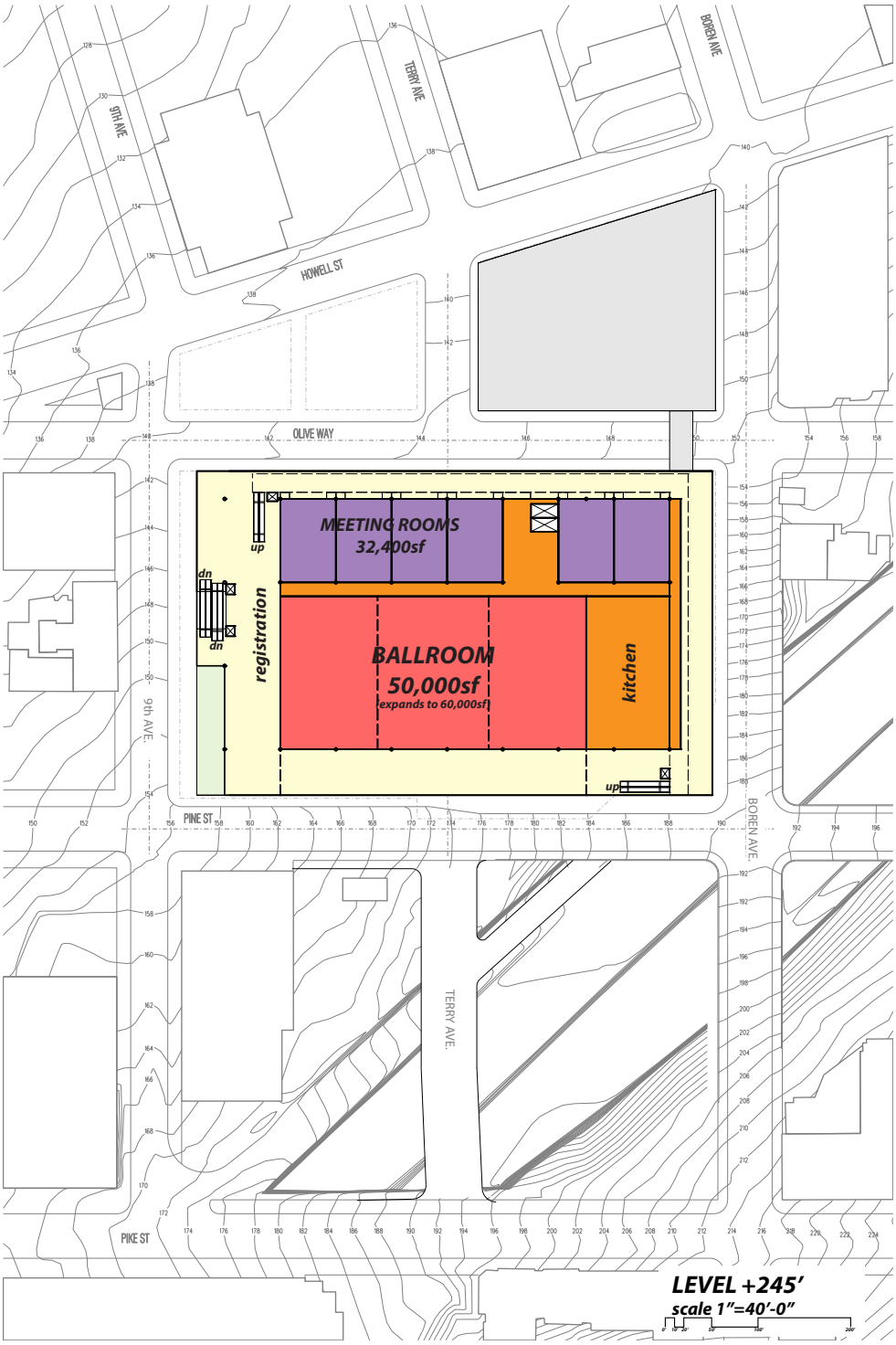
Level +175 Plan illustrates the vertical circulation mezzanines as the public circulation path follows the slope of Pine Street up to the east.



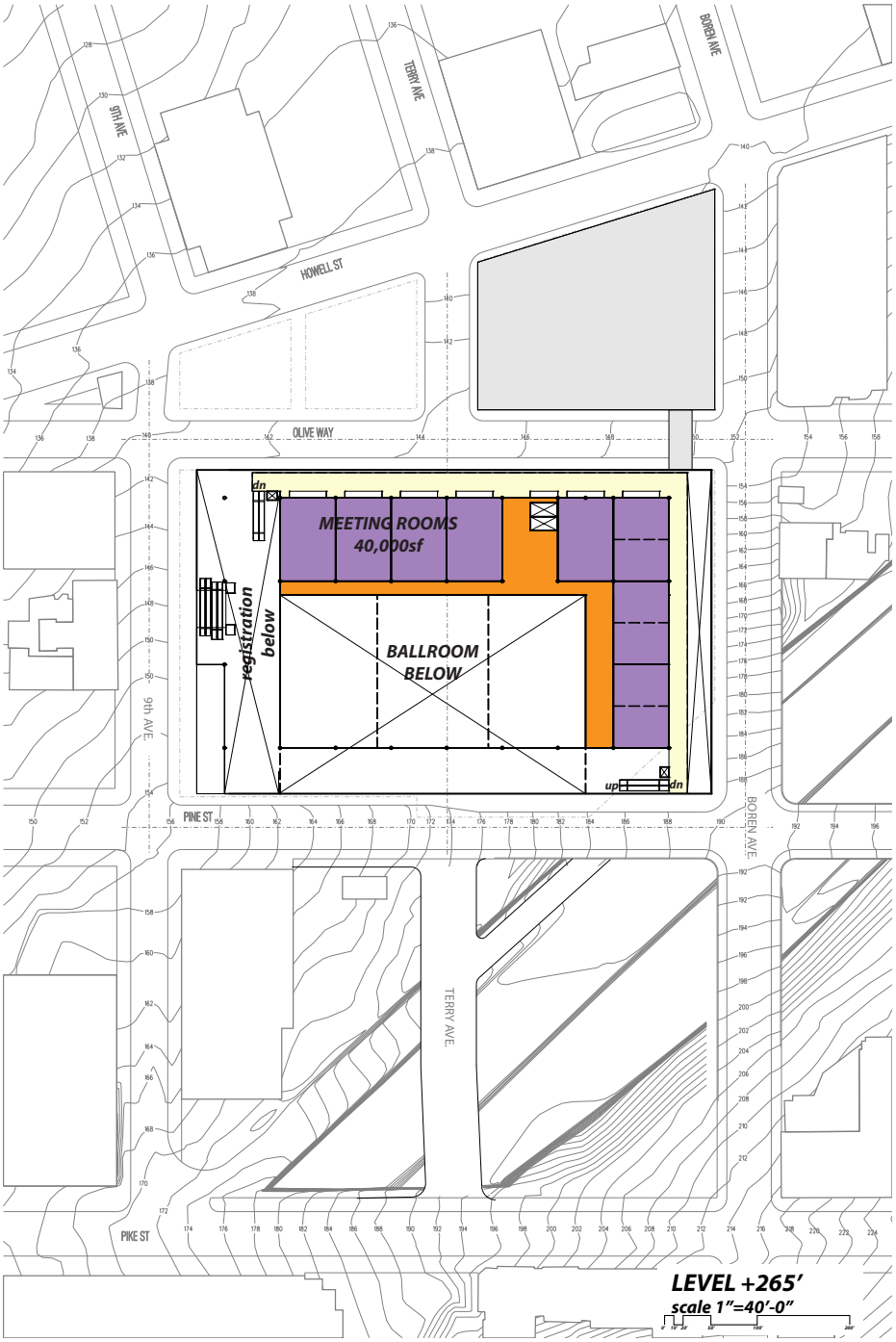
Level +200 Plan illustrates the remainder of the 310,000 square foot exhibit hall program, yielding an additional 140,000 square feet of exhibit hall area on this level. Public circulation is provided via escalator and elevator on the western and southern edges. Freight access is provided via two oversized freight elevators and a loading dock located across Olive Way, accessible from below by spiral truck ramp and providing access to the exhibition hall via a small bridge over Olive Way. Support area are provided along the building perimeter.



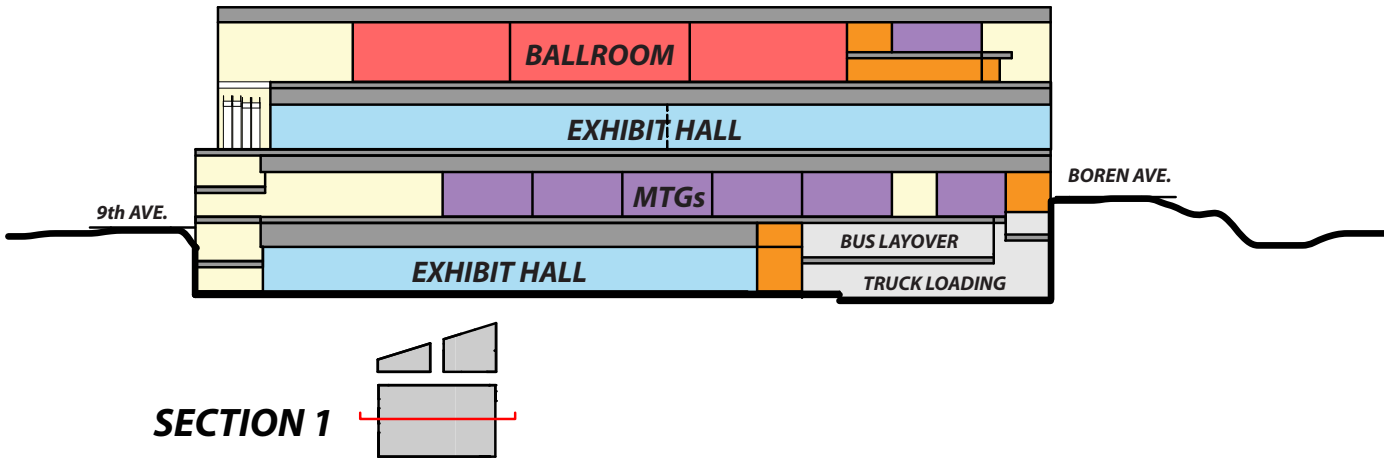
Level +245 Plan illustrates the Ballroom Level, providing a 50,000 square foot ballroom, expandable to 60,000, along with 32,400 square feet of meeting rooms. Prefunction space surrounds the Ballroom and Meeting Rooms with support space, including the banquet kitchen, provided internal to the plan.



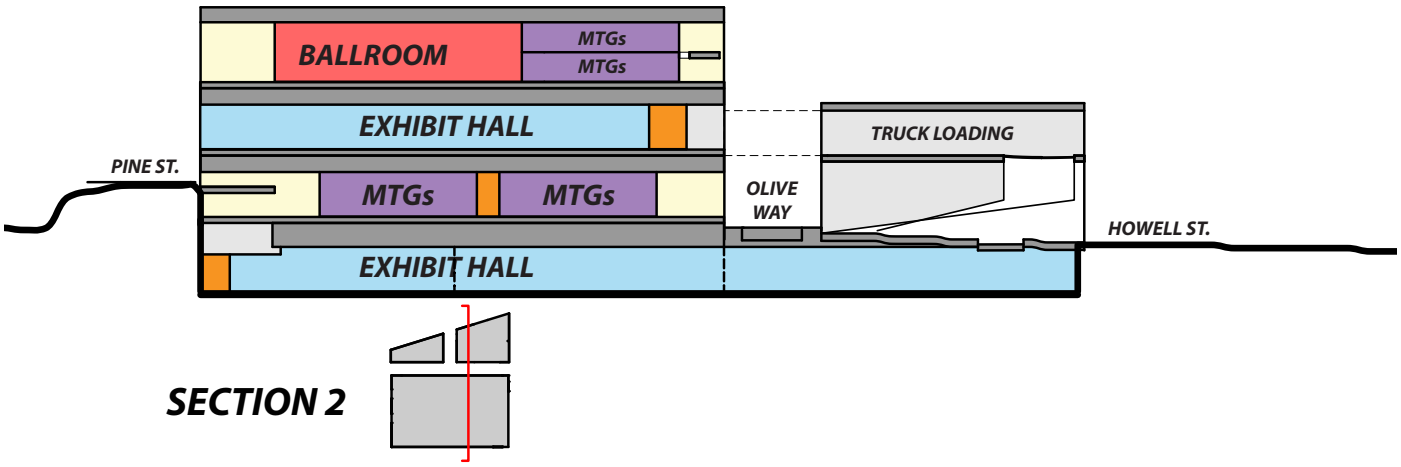
Level +265 Plan illustrates an optional Meeting Room Level which could be provided by stacking two level of meeting rooms adjacent to the Ballroom, taking advantage of the high volume space adjacent to the Ballroom. This option is not currently included in the convention center's budget.



Sections illustrate the below grade exhibit hall with full height exhibit hall clearance beneath Olive Way, bus layover above the loading dock and the distribution of convention center program components across the various levels.



SECTION 1



SECTION 2

Parking

Opportunities for parking were explored. Parking options take advantage of two unique conditions resulting from this program on this site: the stacked nature of the building, requiring multiple floors of deep long-span trusses and the sloped site, providing multiple access points to those trusses. As a result, parking in the truss spaces was considered as the primary parking location. Additional parking could be potentially located below the exhibit hall floor, increasing the depth of excavation.

The below illustration describes the truss locations available for parking – Areas 1C, 1D and 1E, yielding a combined total of approximately 1,100 parking stalls. This was determined to meet the convention center's parking needs.

Additional parking could be provided beneath the exhibit hall – Areas 1A and 1B – yielding an additional approximately 1,500-1,600 parking stalls.

PARKING 1E: AREA = 180,700sf = approx. 450 STALLS

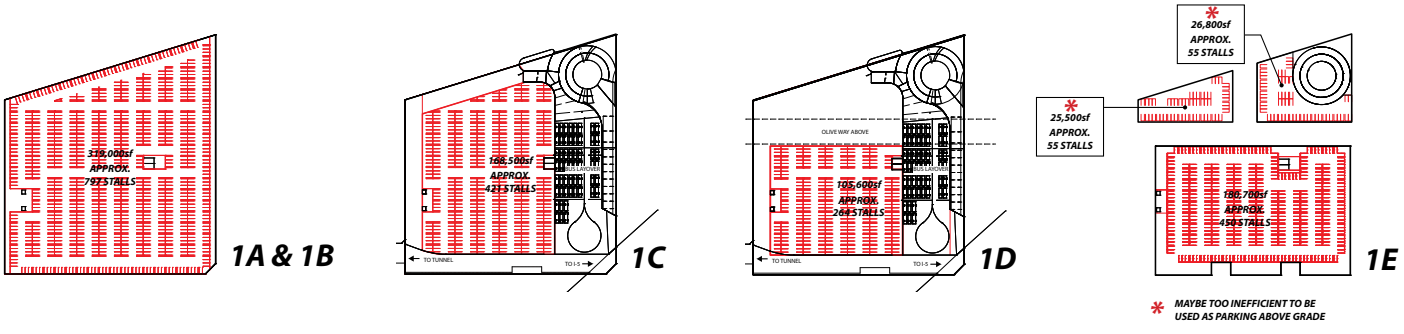
PARKING 1D: AREA = 105,600sf = approx. 264 STALLS

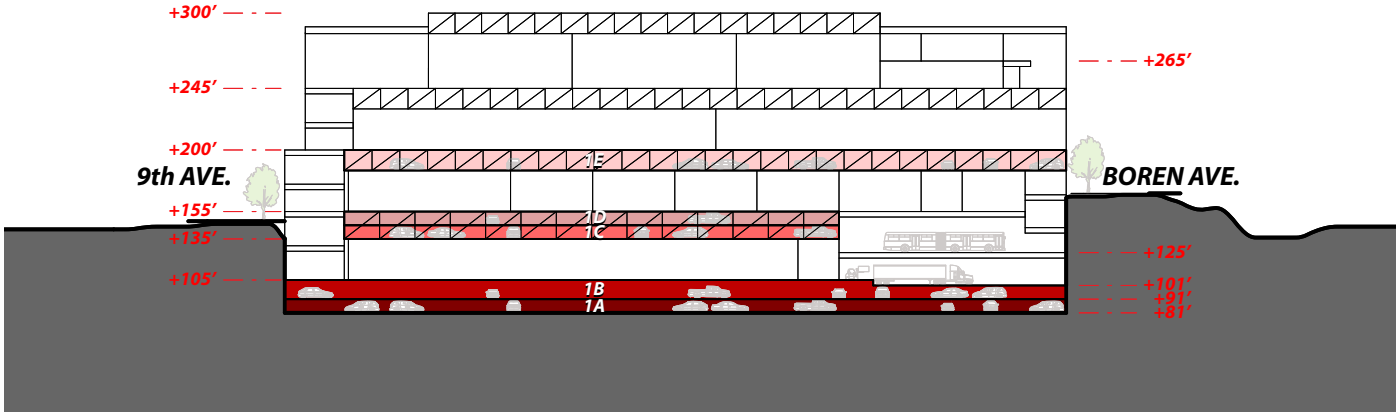
PARKING 1C: AREA = 168,500sf = approx. 421 STALLS

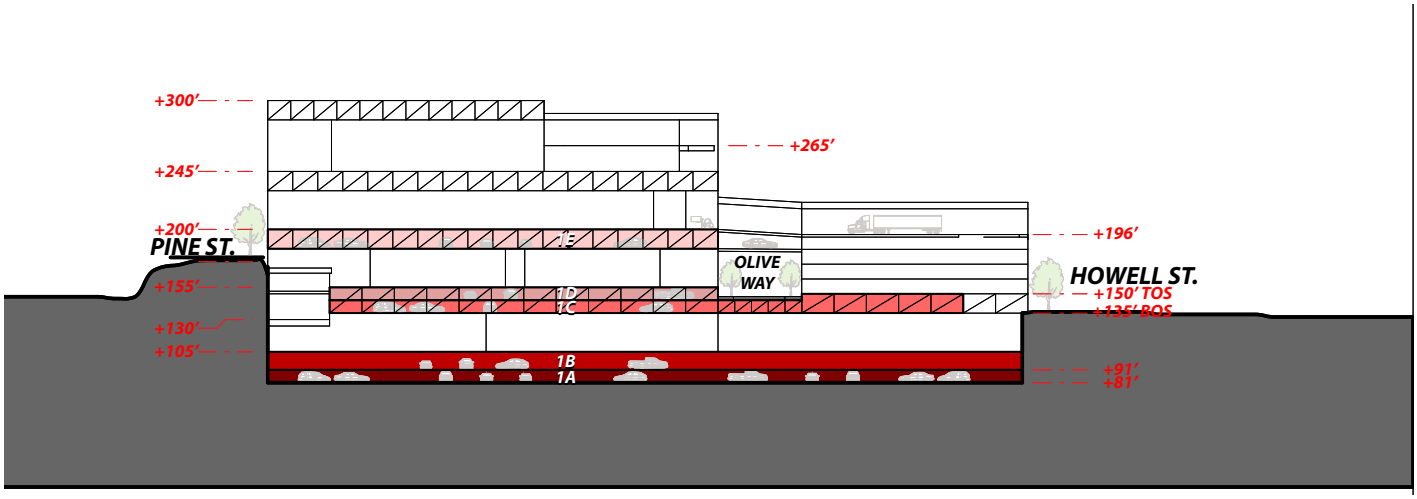
PARKING 1B: AREA = 319,000sf = approx. 797 STALLS

PARKING 1A: AREA = 319,000sf = approx. 797 STALLS

TOTAL = approx. 2,729 STALLS



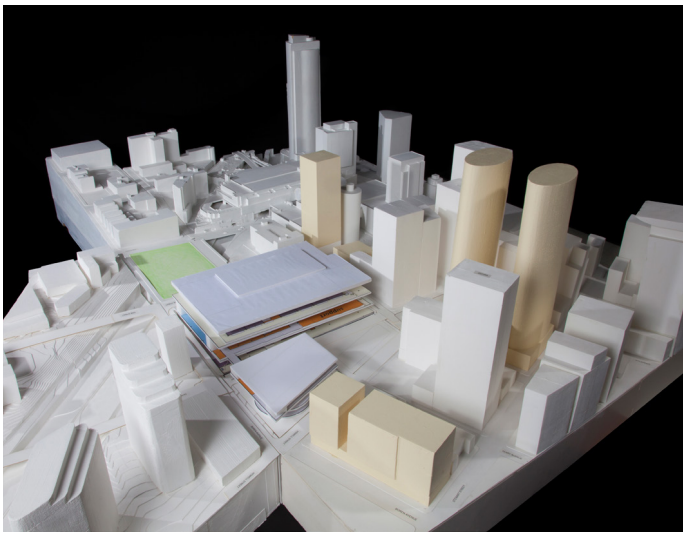

+300′
+245′
+200′
+155′
+135′
+105′
9th AVE.
1E
1D
1C
1B
1A
+265′
BOREN AVE.
+125′
+101′
+91′
+81′

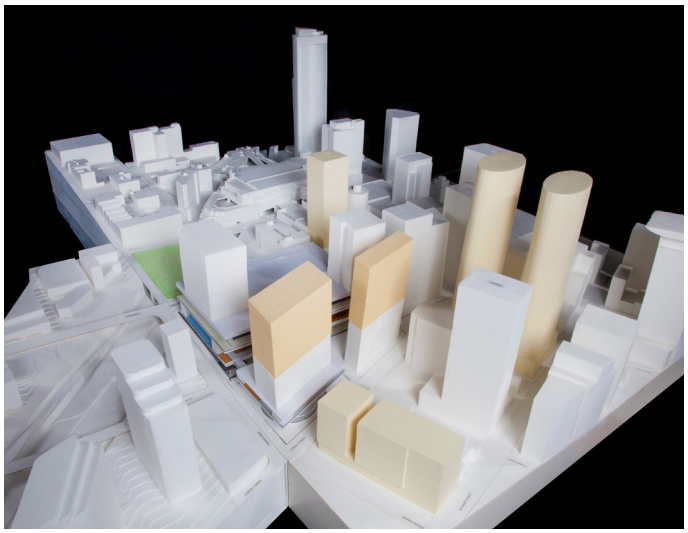

+300′
+245′
+200′
+155′
+130′
+105′
PINE ST.
1E
1D
1C
1B
1A
+265′
OLIVE WAY
+196′
HOWELL ST.
+150′ TOS
+135′ BOS
+91′
+81′

Section 7: Codevelopment Potential

The WSCC Expansion does not fill the zoning envelope and therefore does not utilize the full development potential of the site. In fact, each site component has a very different site utilization and therefore presents different codevelopment opportunities. For instance, codevelopment on the CPS site would sit above the convention center, running up against the height limit well before exhausting potential development area. By contrast, the northeast and northwest parcels (of the CPS Alternate site) would exhaust development area before reaching the site height limit.

Codevelopment was not thoroughly explored. The analysis which follows is purely an analysis of site development potential, and physical configuration, not a recommendation. None of the options were priced. From a purely physical perspective, the two north parcels would seem to offer the most codevelopment potential – they would seem to be the easiest to develop and would have fewer cost and timing issues than options located above the roof of the convention center. Ultimately, codevelopment potential would be dependent on additional proforma driven analysis.





The following chart summarizes the development potential of each site. The development capacity and height available are defined, followed by development options considering the potential for office or hotel uses. The parking program is then defined and summarized with the convention center's needs.

CPS Site

CPS Site Alternate Site

SITE DEVELOPMENT CAPACITY	CPS Site	Northwest - Parcel #1	Northeast - Parcel #2/3
Site Area	204,034	25,484	50,922
Base Far	5.0	5.0	5.0
Base Capacity	1,020,170	127,420	254,610
Amenity Bonus (75% of base max)	8.75	8.75	8.75
Bonus Capacity	1,785,298	222,985	445,568
TDR - Maximum FAR	10.0	10.0	10.0
TDR - Maximum Capacity	2,040,340	254,840	509,220
Convention Center Area	677,000	0	50,922
Potential Codevelopment Area (w/bonus)	1,108,298	222,985	394,646
Potential Codevelopment Area (w/TDR)	1,363,340	254,840	458,298

HEIGHT AVAILABLE	CPS Site		Northwest - Parcel #1	Northeast - Parcel #2/3
	Ninth	Boren		
Height Limit (above avg. grade)	340		340	340
Podium Height (above avg. grade)	142	119	0	81
Available Height (above avg. grade)	198	221	340	259

DEVELOPMENT OPTIONS	CPS Site		Northwest - Parcel #1		Northeast - Parcel #2/3	
	Ninth Hotel	Boren Office	Hotel	Office	Hotel	Office
Rooms per Floor	22		28		28	
Area per Floor	15,000	25,000	15,000	22,000	15,000	25,000
Height per Floor	10	14	10	14	10	14
Number of Floors to Height Limit	19	15	34	24	25	18
Height Limit - Number of Rooms	418		952		700	
Height Limit - Floor Area	285,000	375,000	510,000	528,000	375,000	450,000
Height Limit - Total Codevelopment	hotel+office:	660,000	hotel:	510,000	office:	450,000
Area at FAR Limit (bonus max)	1,108,298		222,985		394,646	
Unused FAR	448,298					
FAR Shortfall			-287,015		-55,355	
Number of Floors at FAR Limit (bonus max)	19	15	14		15	
At Full Capacity	19	15	34		18	
Unused Height at FAR Limit	Less than 1 floor		200 feet (20 floors)		49 feet (3 floors)	
	Scheme is limited by Height		Scheme is limited by FAR		Scheme is limited by FAR	
Transfer of Development Rights						
Unused Development Rights	448,298					
Development Rights to Maximize Height			-287,015		-55,355	
TOTAL FAR TRANSFER FROM CPS			342,370			

PARKING PROGRAM (w/FAR Transfer)	CPS Site	Northwest - Parcel #1	Northeast - Parcel #2/3
Convention Center Program Area	1,230,000		
Parking at 1/1,000 sf (zoning max)	1,230		
Hotel - estimated number of rooms	400	800	
Hotel Parking at .65 per room	260	520	
Office Floor Area	375,000		450,000
Office Parking at 1 space per 1,000 sf	375		450

TOTAL PARKING SPACES	
Convention Center	1,230
Codevelopment	1,605

Parking

Parking for the convention center would total approximately 1,100 spaces, located in the truss spaces framing the exhibit halls – Parking Areas 1C, 1D and 1E. Codevelopment parking would be beneath the exhibit hall footprint – Parking Areas 1A and 1B, yielding approximately 1,600 parking stalls.

PARKING 1E: AREA = 180,700sf = approx. 450 STALLS

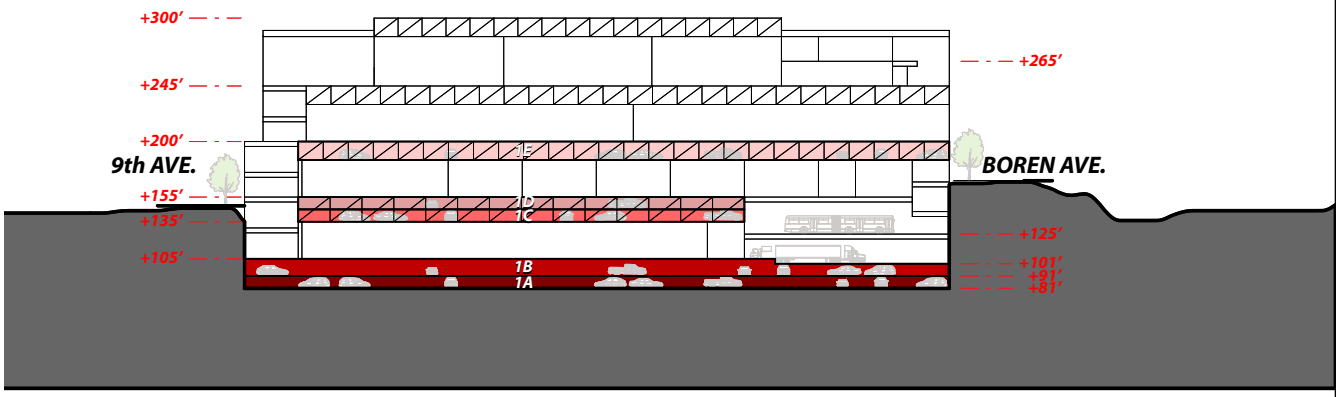
PARKING 1D: AREA = 105,600sf = approx. 264 STALLS

PARKING 1C: AREA = 168,500sf = approx. 421 STALLS

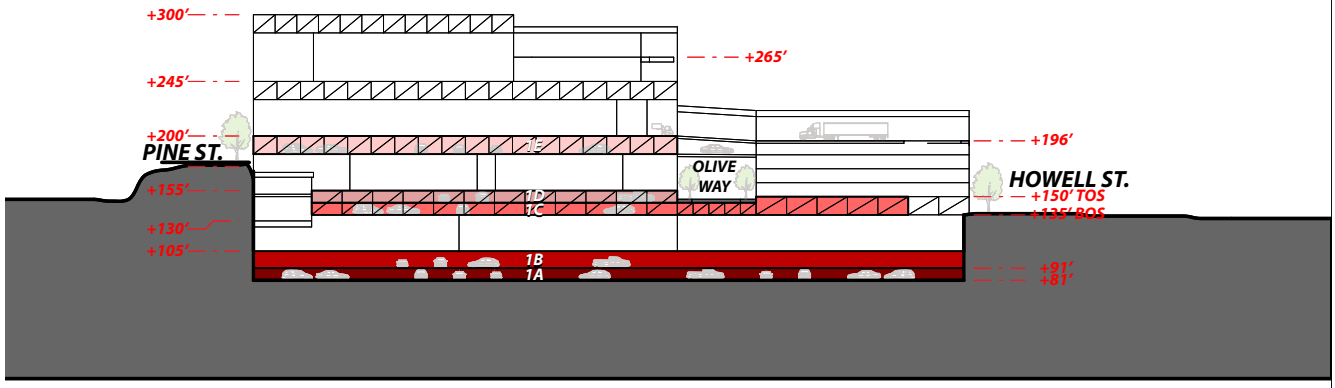
PARKING 1B: AREA = 319,000sf = approx. 797 STALLS

PARKING 1A: AREA = 319,000sf = approx. 797 STALLS

TOTAL = approx. 2,729 STALLS



EAST-WEST SECTION



NORTH-SOUTH SECTION

Section 8: Cost and Schedule Projections

Project Cost Budget

A Cost Plan was prepared for the Preferred Alternative on the CPS Alternative Site and a Total Project Cost Budget was shared with the WSCC Expansion Committee, see below.

12/17/2012

PRELIMINARY - FOR DISCUSSION

		2012 CPS Alternative Site	Notes
WSCC Base Facility Construction:			
Exhibit Halls		310,000	
Meeting Rooms		100,000	
Ballroom		55,000	
Total Net Area		465,000	Total Rentable Area
Total Gross Area		1,163,700	Convention Center Only
Cost per Square Foot	$	463.78	includes sitework, loading, building
TOTAL WSCC BASE FACILITY CONSTRUCTION COST	**$**	**539,702,000**	includes a 15% estimating contingency
WSCC Affiliated Construction:			all items below include 30% contingency
Olive Way Reconstruction	$	21,264,000	
Parking Construction (WSCC only - 1,000 cars)	$	43,044,000	Convention Center associated only
Terry Avenue Extension with Truck Access Ramp	$	42,800,000	New street lid between Pike and Pine - does not include potential Park Lid
TOTAL WSCC AFFILIATED CONSTRUCTION COST	**$**	**107,108,000**	
TOTAL WSCC CONSTRUCTION COST	**$**	**646,810,000**	
Transit-Related Construction:			
Transit Related Items	$	32,020,000	92,400 sf
TOTAL TRANSIT-RELATED CONSTRUCTION COST	**$**	**32,020,000**	
Sale Tax on Construction		9.50%	
Escalation		16.88%	3.5% annual rate
Soft Costs		32.42%	average

Phasing Options

Recognizing Metro's stated desire for continuous operations during convention center construction, a workshop was held with representatives of Metro, WSCC, LMN and Davis Langdon to discuss alternatives for phasing the construction. Two options emerged from the workshop.

Phasing Option 1

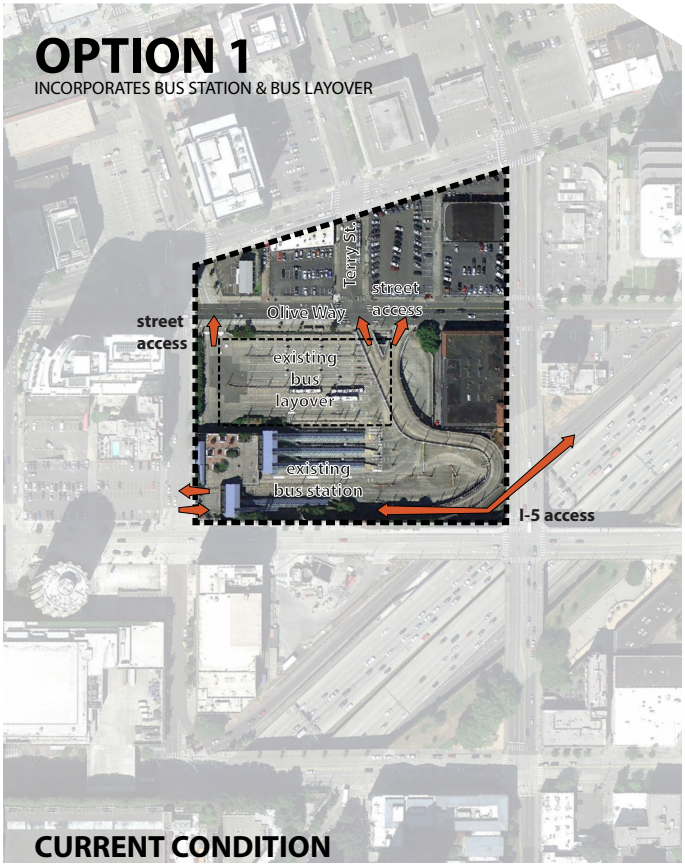
Phasing Option 1 incorporates Metro's full site program including continuous operations of full transit facility access, bus layover and passenger facilities during convention center construction. Accomplishing this requires that the convention center and reconfigured Metro components be built over three phases. See Phasing Option 1 illustrations on next page.

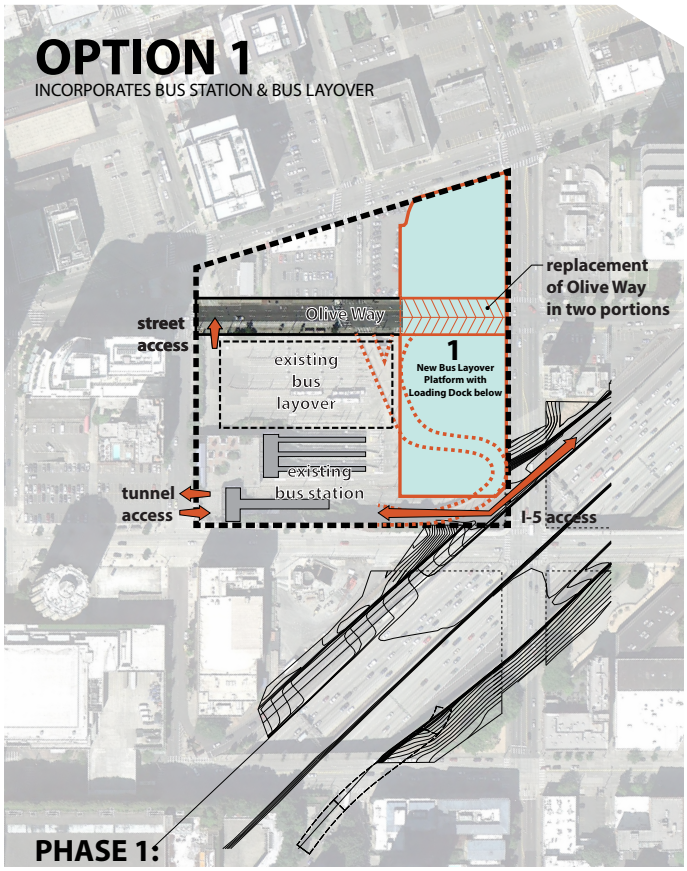
Phase One would build the convention center's loading dock, truck access ramp and Metro's bus layover. During construction, Metro would access the tunnel along the southern edge of the site and surface streets via the ramp adjacent to Ninth Avenue. The existing street access ramp would be demolished. The existing bus layover and passenger facility would remain in operation during this phase of construction.

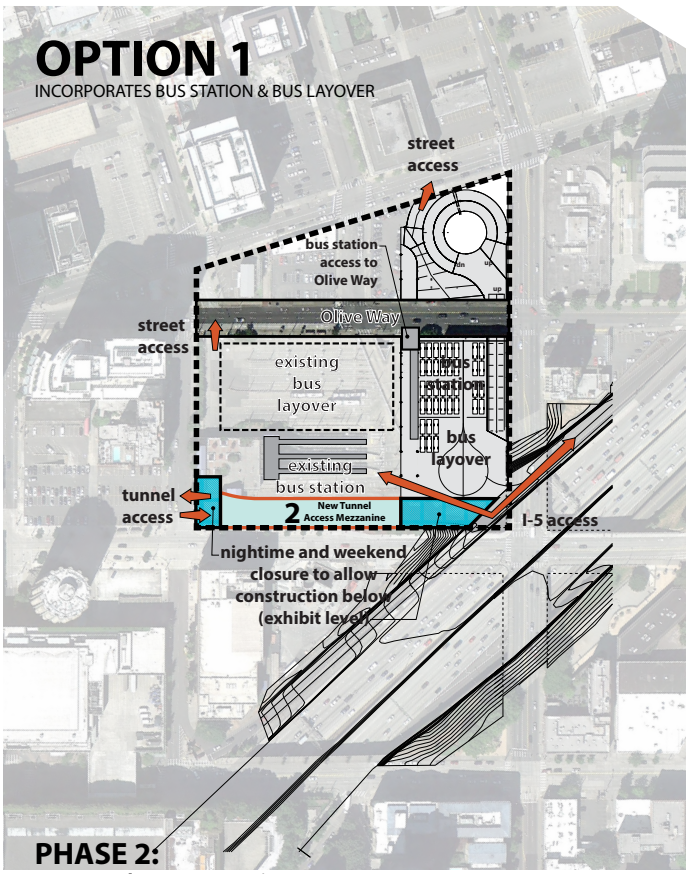
With the completion of Phase One, street access and passenger facilities would be provided via the new bus layover area and Phase Two would commence. Phase Two would build the new tunnel access mezzanine, along the southern edge of the site. Tunnel access would via the ramp adjacent to Ninth Avenue during construction of this phase. During this phase the final pieces along the southern edge of the site, at the tunnel and the I-5 access points, would be built utilizing night and weekend construction.

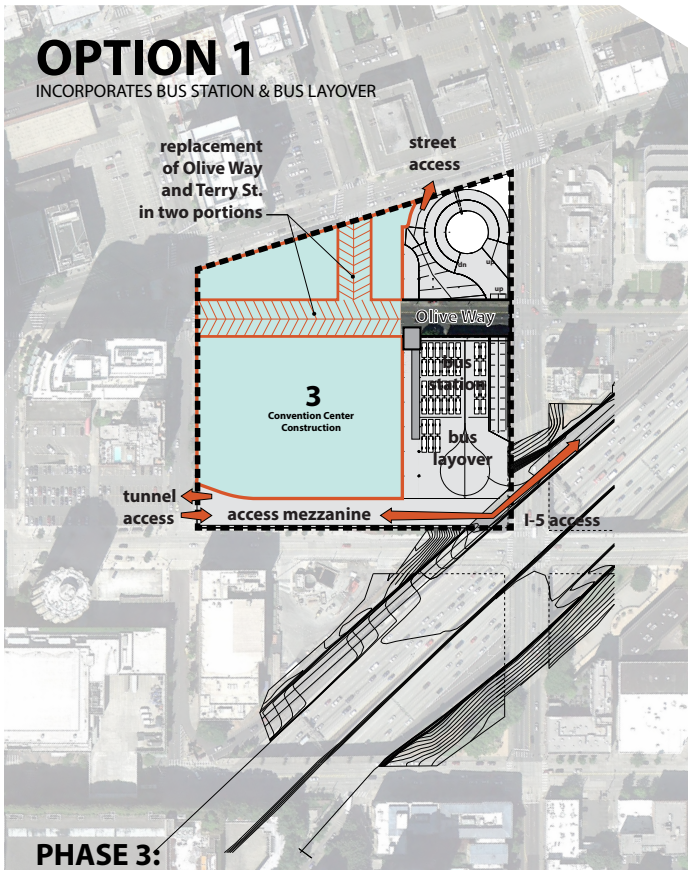
Phase Three would build the remainder of the convention center.

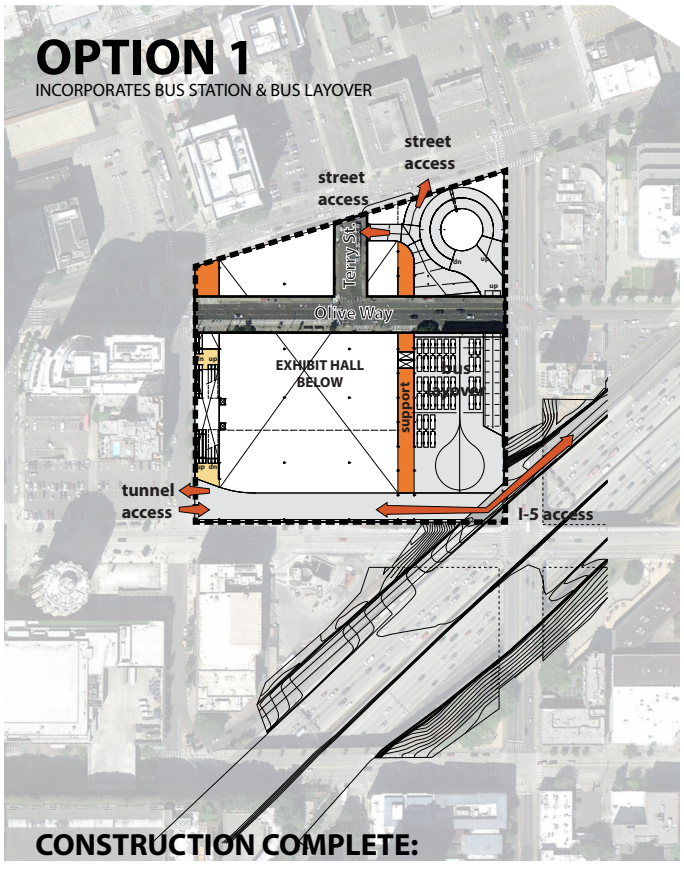
Phasing Option 1 is a lengthy alternative, adding approximately 22 months to the duration of the baseline construction – the construction duration of the convention center with no phasing.




OPTION 1
INCORPORATES BUS STATION & BUS LAYOVER
replacement of Olive Way in two portions
street access
Olive Way
existing bus layover
1
New Bus Layover Platform with Loading Dock below
existing bus station
tunnel access
I-5 access
PHASE 1:


OPTION 1
INCORPORATES BUS STATION & BUS LAYOVER
street access
bus station access to Olive Way
Olive Way
existing bus layover
bus station
bus layover
existing bus station
tunnel access
2
New Tunnel Access Mezzanine
I-5 access
nightime and weekend closure to allow construction below (exhibit level)
PHASE 2:


OPTION 1
INCORPORATES BUS STATION & BUS LAYOVER
replacement of Olive Way and Terry St. in two portions
street access
Olive Way
3
Convention Center Construction
bus station
bus layover
tunnel access
access mezzanine
I-5 access
PHASE 3:


OPTION 1
INCORPORATES BUS STATION & BUS LAYOVER
street access
street access
Terry St.
Olive Way
EXHIBIT HALL BELOW
support
bus layover
tunnel access
I-5 access
CONSTRUCTION COMPLETE:

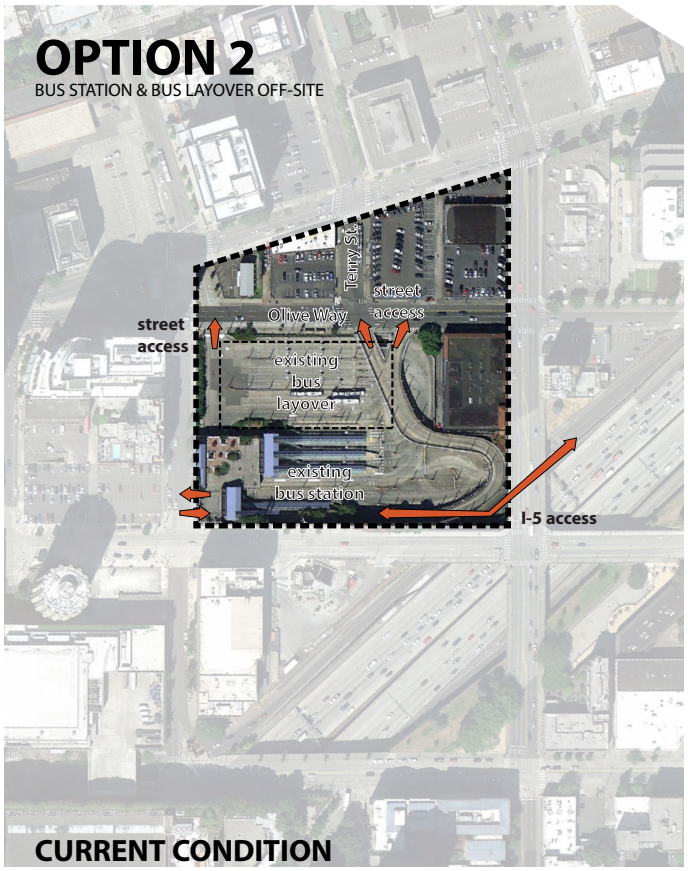
Phasing Option 2

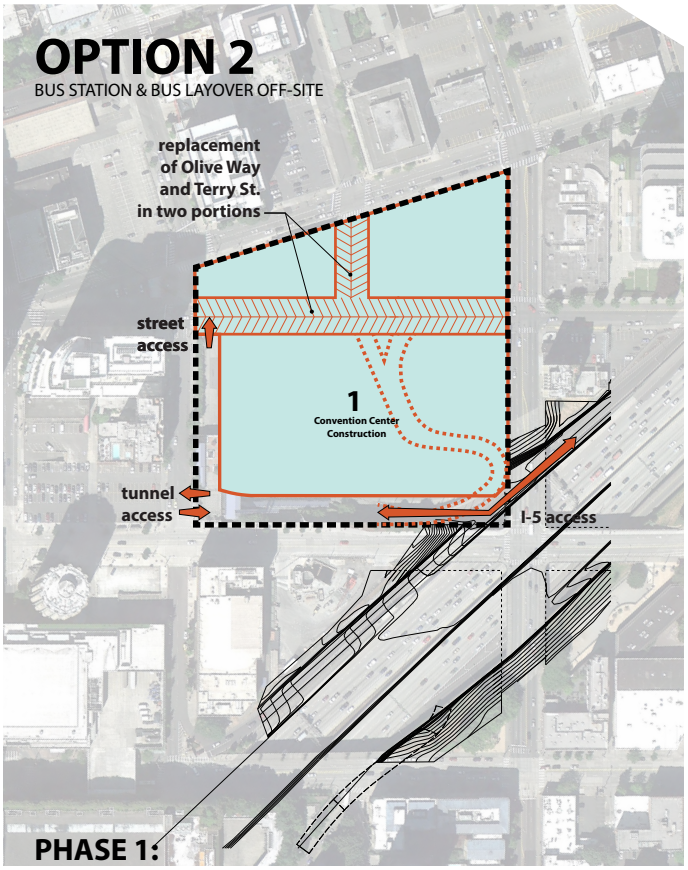
Phasing Option 2 takes a more streamlined approach, providing transit access to the tunnel, Interstate 5 and surface streets, but providing bus layover and passenger facilities off-site. Accomplishing this requires that the convention center and reconfigured Metro components be built over two phases. See Phasing Option 2 illustrations on the next page.

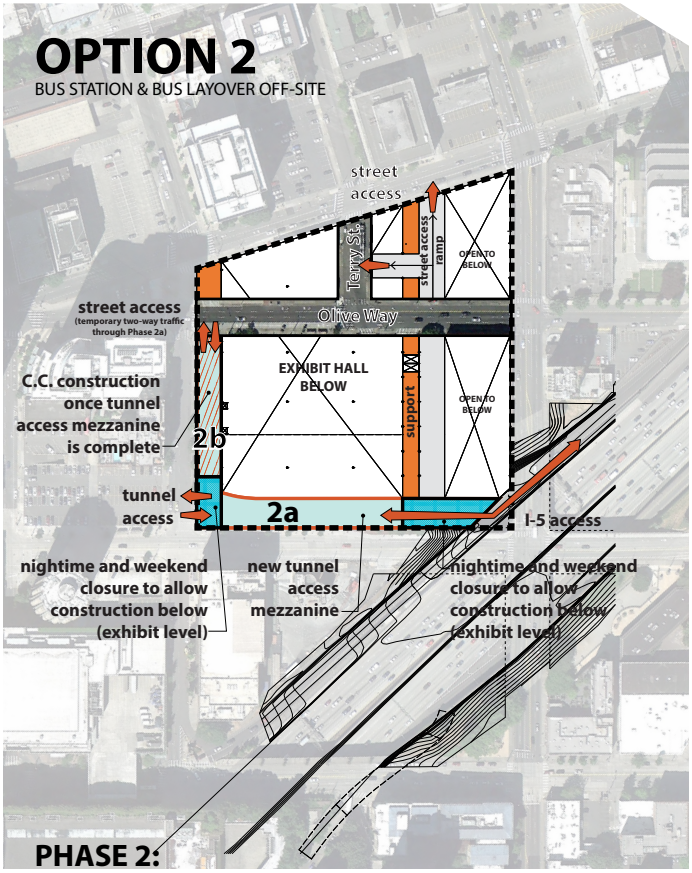
Phase One would build the convention center. Metro would maintain connectivity between I-5, the tunnel and surface streets along the southern and western edges. This option does not include an on-site bus layover area, but provides a two lane wide street access ramp above the convention center's loading dock, connecting the tunnel and I-5 to surface streets.

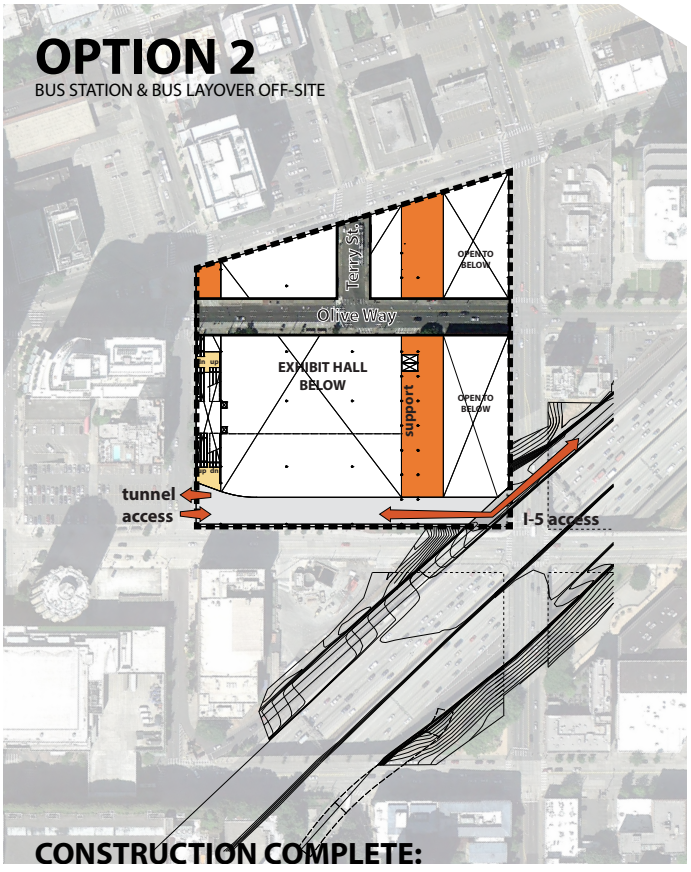
With the completion of the street access ramp, Phase Two would commence with Phase 2a - the construction of the tunnel access mezzanine. During this period, Metro would access the tunnel via the ramp adjacent to Ninth Avenue. With the completion of Phase 2a, the ramp adjacent to Ninth Avenue would be removed for the construction of the convention center's western edge – Phase 2b.

Phasing Option 2 adds approximately 4 months to the baseline schedule and is much less expensive than Option 1.




OPTION 2
BUS STATION & BUS LAYOVER OFF-SITE
replacement of Olive Way and Terry St. in two portions
street access
1
Convention Center Construction
tunnel access
I-5 access
PHASE 1:


OPTION 2
BUS STATION & BUS LAYOVER OFF-SITE
street access
Terry St.
street access ramp
OPEN TO BELOW
Olive Way
street access
(temporary two-way traffic through Phase 2a)
EXHIBIT HALL BELOW
support
OPEN TO BELOW
C.C. construction once tunnel access mezzanine is complete
2b
tunnel access
2a
I-5 access
nightime and weekend closure to allow construction below (exhibit level)
new tunnel access mezzanine
nightime and weekend closure to allow construction below (exhibit level)
PHASE 2:

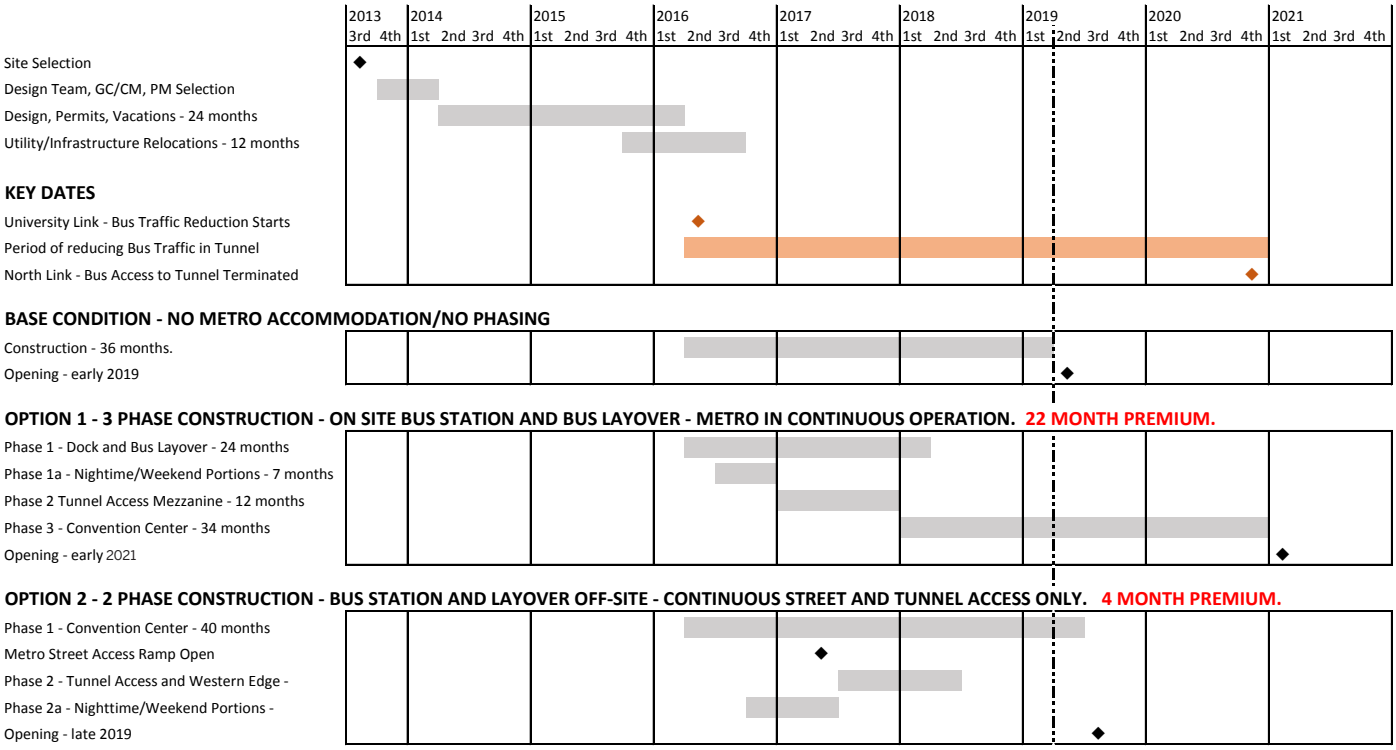

OPTION 2
BUS STATION & BUS LAYOVER OFF-SITE
Terry St.
OPEN TO BELOW
Olive Way
EXHIBIT HALL BELOW
support
OPEN TO BELOW
tunnel access
I-5 access
CONSTRUCTION COMPLETE:

Phasing Schedules

The baseline schedule was developed in order to assess the calendar impact of the two phasing options. The baseline construction schedule defines the construction period anticipated for the convention center alone, with no phasing.

WSCC EXPANSION
FEASIBILITY SCHEDULE ANALYSIS

EXPANSION COMMITTEE MEETING - MAY 15, 2013



Phasing Costs

The costs of phasing Option 1 and Phasing Option 2 were added to the Project Cost Budget.

5/28/2013

PRELIMINARY - FOR DISCUSSION

		2012 CPS Alternative Site	Notes
WSCC Base Facility Construction:			
Exhibit Halls		310,000	
Meeting Rooms		100,000	
Ballroom		55,000	
Total Net Area		465,000	Total Rentable Area
Total Gross Area		1,163,700	Convention Center Only
Cost per Square Foot	$	476.24	includes site clearance and relocations, sitework, loading, building
TOTAL WSCC BASE FACILITY CONSTRUCTION COST	**$**	**554,202,000**	includes a 15% estimating contingency increased $14,500,000 - bus layover adjustment
WSCC Affiliated Construction:			all items below include 15-25% contingency
Olive Way Reconstruction	$	21,264,000	
Parking Construction (WSCC only - 1,000 cars)	$	43,044,000	Convention Center associated only
Terry Avenue Extension with Truck Access Ramp	$	35,000,000	New street lid between Pike and Pine - does not include potential Park Lid
TOTAL WSCC AFFILIATED CONSTRUCTION COST	**$**	**99,308,000**	**increased $22,472,000 - transit related**
TOTAL WSCC CONSTRUCTION COST	**$**	**653,510,000**	
Transit-Related Construction:			
Transit Related Facility Construction	$	47,792,000	Includes Bus Station at Level 125
Phasing Option 1	$	164,000,000	22 month phasing impact
TOTAL TRANSIT-RELATED CONSTRUCTION COST-PHASING OPTION 1	**$**	**211,792,000**	
Transit Related Facility Construction	$	47,792,000	Includes Bus Station at Level 125
Deduction for Relocation of Bus Layover/Passenger Station	$	(35,000,000)	
Phasing Option 2	$	53,870,000	4 month phasing impact
TOTAL TRANSIT-RELATED CONSTRUCTION COST-PHASING OPTION 2	**$**	**66,662,000**	
Sales Tax on Construction		9.50%	
Escalation		16.88%	3.5% annual rate
Soft Costs		32.42%	average

Phasing Summary

The baseline schedule (no phasing) illustrates an approximate 3 year construction schedule, with the convention center expansion opening in the 1st quarter of 2019.

Phasing Option 1 provides full site access to Metro during the full extent on the convention center construction. However it lengthens the construction duration by 22 months and increases the project budget by $164 million. The convention center in phasing option 2 can be expected to open early in 2021. The cost impacts does not include the "lost business" that could expected during that 22 month period.

Phasing Option 2 provides a reduced site program to Metro, thereby reducing the phasing impacts. Option 2 lengthens the construction duration by 4 months over the baseline, and increases the project budget by $54 million. The convention center in phasing option 2 can be expected to open mid-2019.

Section 9: Conclusions

The focus of 2008 Feasibility Study was the determination of the physical feasibility of achieving the WSCC program goals on the CPS site. The study showed that while the overall 2008 program goals could be achieved, the physical limitations of the CPS site resulted in compromises in the amount of contiguous exhibit hall area and the approach to freight loading, utilizing oversize elevators.

The 2012 Feasibility Study aimed to serve the convention and meeting needs for the region over a 20 – 25 year planning horizon, investigating more ambitious program targets including larger contiguous exhibit hall areas and a more conventional approach to freight loading. The 2012 program was achieved on a larger site, incorporating available parcels to the north of the CPS site to create the CPS Alternate Site. The 2012 study continued into 2013 with the specific analysis of freight access options and phasing scenarios.

The conclusions following the body of feasibility analysis described herein include:

- Program: The development of new convention facilities generally achieving the 2012 Expansion Program Goals of 300,000 square feet of exhibit space, 100,000 square feet of meeting space, a 50,000 – 60,000 square foot ballroom, and appropriately sized support space, is feasible on a site encompassing the CPS and adjacent properties – referred to herein as the CPS Alternate Site.
- Freight Loading: The new facilities can be configured in such a way that direct-drive freight loading to the exhibit halls can be achieved.
- Freight Access: A freight access path to the new facilities utilizing the current Hubbell Place approach coupled with an extension of Terry Avenue is physically feasible.
- Metro Transit Operations: Metro Transit access to the Downtown Seattle Transit Tunnel and to the I-5 express lanes is physically feasible under the revised convention center configuration, as are passenger facilities for transit routes utilizing the Convention Place Station, a bus layover area for up to 27 busses, and other existing transit functions.
- Transit operations can be accommodated during the construction of the WSCC facilities, but at a significant incremental cost and impact to the construction schedule. The scope of operations during construction is dependent on the mix of transit operations to be accommodated and on the timing of removal of Metro bus routes from the DSTT as Sound Transit LINK light rail service to the UW and to Northgate is initiated.
- Codevelopment Opportunities: The addition of the property north of Olive Way adds significant opportunity for private co-development as part of the overall project.