Feasibility Study
by Grindline Skateparks

September 6, 2018

SEATTLE CENTER SKATEPARK RELOCATION

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PROJECT OVERVIEW

INTRODUCTION

The City of Seattle, together with the Seattle skateboarding community, is seeking a site to build a new skatepark to replace the Seattle Center Seask8 skatepark, which will be demolished in the fall of 2018 as part of a planned renovation of the KeyArena. The City selected Grindline Skateparks, Inc. to perform a feasibility study on three sites preselected by a working group of City staff with input from the Seattle Center Skatepark Coalition (SCSC). Grindline has applied its experience in skatepark design and construction to evaluate each of the three sites, take inventory, research public records, and analyze each site's Strengths, Weaknesses, Opportunities and Threats to determine if any and/or all of these sites is conducive to the construction of a cast-in-place concrete skatepark of approximately 10,000 square feet to replace the existing facility.

The three study locations are as follows (See appendix A for aerial maps and boundaries identified):

Lake Union Park: Two potential areas within Lake Union Park were identified. The first was the gravel area that runs along the south edge of the park along Valley Street, just west of the parking lot owned by the Seattle Department of Transportation (SDOT) and the Center for Wooden Boats. The second is a waterfront turf area located at the northwest corner of the park, east of Westlake Avenue and south of Kenmore Air.

Broad Street Right-of-Way: This site was formerly a piece of Broad Street prior to the street's rerouting for the State Route 99 Tunnel construction. It sits east of 5th Avenue North, north of Thomas St, and west of Taylor Avenue North. A commercial parking lot and a building leased to Ride the Ducks of Seattle border the northwestern edge of the property, and an electrical substation owned by Seattle City Light borders the southeast edge.

Broad Street Green: This site is located on the Seattle Center campus, west of the intersection of Broad Street and 5th Avenue North. The Space Needle and Space Needle Loop (Space Needle Entry Area) border the site to the west and northwest.

The City of Seattle and SCSC will use the findings in this report to inform the final site selection. It should be noted that other factors beyond the scope of this report, such as land acquisitions/ownership exchange, permitting timelines, stakeholders to the current potential and adjacent sites, etc., will be taken into consideration prior to selection

BACKGROUND

In 1993, The City of Seattle built the first Seattle Center skatepark in the parking lot located along the East Side of 5th Avenue North, just south of Republican Street. The park hosted different configurations of wood and metal ramps until a cast-in-place facility was constructed and completed in the summer of 2000. In 2005, The Bill and Melinda Gates Foundation announced that it was to purchase the land where the skatepark was located in order to construct its new global headquarters. The skatepark was eventually closed down in 2007 and demolished. The Seattle Center found a location for a new park to replace the old, by retrofitting it into the roof of the Key Arena catering kitchen on the site of the former Seattle Center Pavilion "A" building which was torn down to accommodate the skatepark. This facility was constructed and completed in July of 2009. The design and construction of the park included artwork by Perri Howard, which consisted of glass panels showing semi translucent, enlarged images of used skate decks. Desire has been expressed to re-contextualized this artwork into the future facility.

In December 2017, the City of Seattle executed a Memorandum of Understanding with the Oak View Group, a private developer, to allow for the redevelopment of the KeyArena into a modern, world-class venue for sports and entertainment. Demolition of the current skatepark will unfortunately be required as part of the proposed Seattle Center Arena Renovation Project. The skatepark is currently set to be demolished in the fall of 2018.

PROCESS

Grindline, City of Seattle staff, and SCSC representatives held a kick-off meeting in May to make team introductions, review the initial overall project schedule, and clarify project deliverables and expectations. The group discussed SCSC's priorities for a new skatepark, which included longevity for the skatepark, the opportunity to build a facility larger than

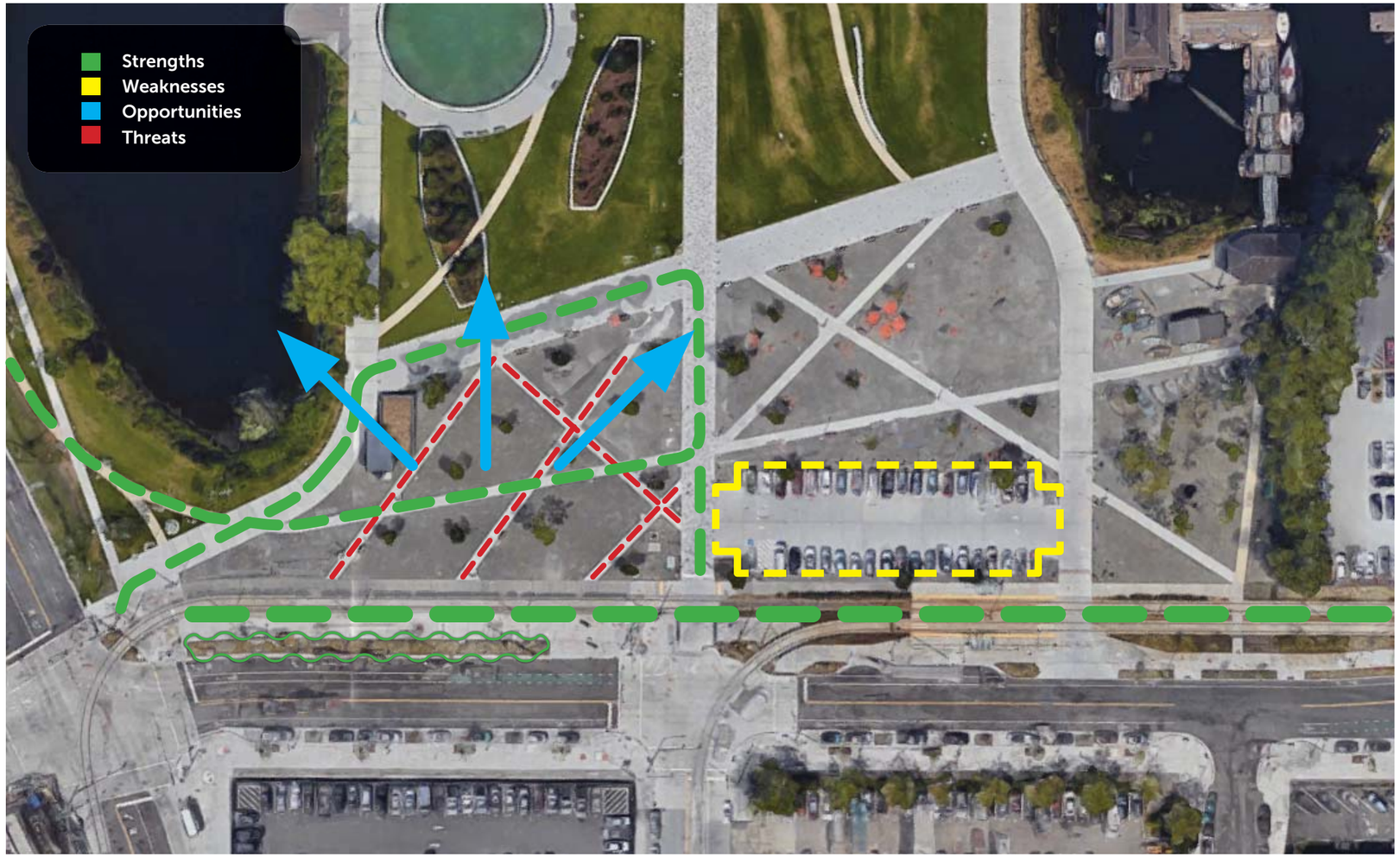
10,000 square feet, and the possibility of building a roof or canopy over part of the skatepark.

Next, the team conducted site visits to the four locations listed in the introduction. Prior to the visits, Grindline created an internal checklist of items to be noted based on field observations at each site. This checklist was then used to create a matrix showing how characteristics of the three sites compared to one another. The info contained in the matrix was then used to create SWOT (Strengths, Weakness, Opportunities, and Threats) Analysis for each proposed location.

Finally, our team used the above referenced items to create brief narratives for each site to summarize its compatibility with skatepark design and construction. Estimates of probable costs were then created based on these narratives, and refined site-specific project schedules were developed.

LAKE UNION PARK

VALLEY ST



SWOT Analysis by Grindline Skateparks

STRENGTHS

- Close proximity to public transportation
- Lots of existing pedestrian circulation
- Existing buffer from vehicular traffic
- Site is flat
- Highly visible
- Ample size for replacement target (12,300 total sq ft available)
- Existing security lighting

WEAKNESSES

- Limited parking
- Contaminated undocumented fill
- Potential liquefaction of soil (causing settling, shifting of concrete)
- High water table
- Possible need for additional pilings
- Portion of existing grade may be on top of concrete piles and foam – load limits
- Shoreline Permit Required (3-6 month lead time depending on scope)

OPPORTUNITIES

- Framed views of passive park area and Lake Union
- Close proximity to shops and restaurants
- Existing utilities nearby will likely make adding a drinking fountain feasible

THREATS

- Deed restriction constraints would require review by the Washington State Recreation and Conservation Office (RCO) as part of the permitting process, and could potentially require providing a replacement site of equivalent waterfront property in order to convert space to a non-aquatic use. RCO meets once quarterly, potentially impacting project schedule.
- Current park development funded partially by private funds/ donors
- Displaces passive use with active
- Conflict with market
- Possible lengthy public process
- Street car that traverses east to west at the south end of the site could be a safety issue for skatepark access

LAKE UNION PARK

WESTLAKE

SWOT Analysis by Grindline Skateparks

STRENGTHS

- Public parking nearby
- Close proximity to public transportation
- Waterfront views
- Existing security lighting
- Existing pedestrian circulation

WEAKNESSES

- Limited parking
- Contaminated undocumented fill
- Potential liquefaction of soil (causing settling, shifting of concrete)
- High water table
- Shoreline Permit Required (3-6 month lead time depending on scope)
- Portion of existing grade may be on top of concrete piles and foam – load limits

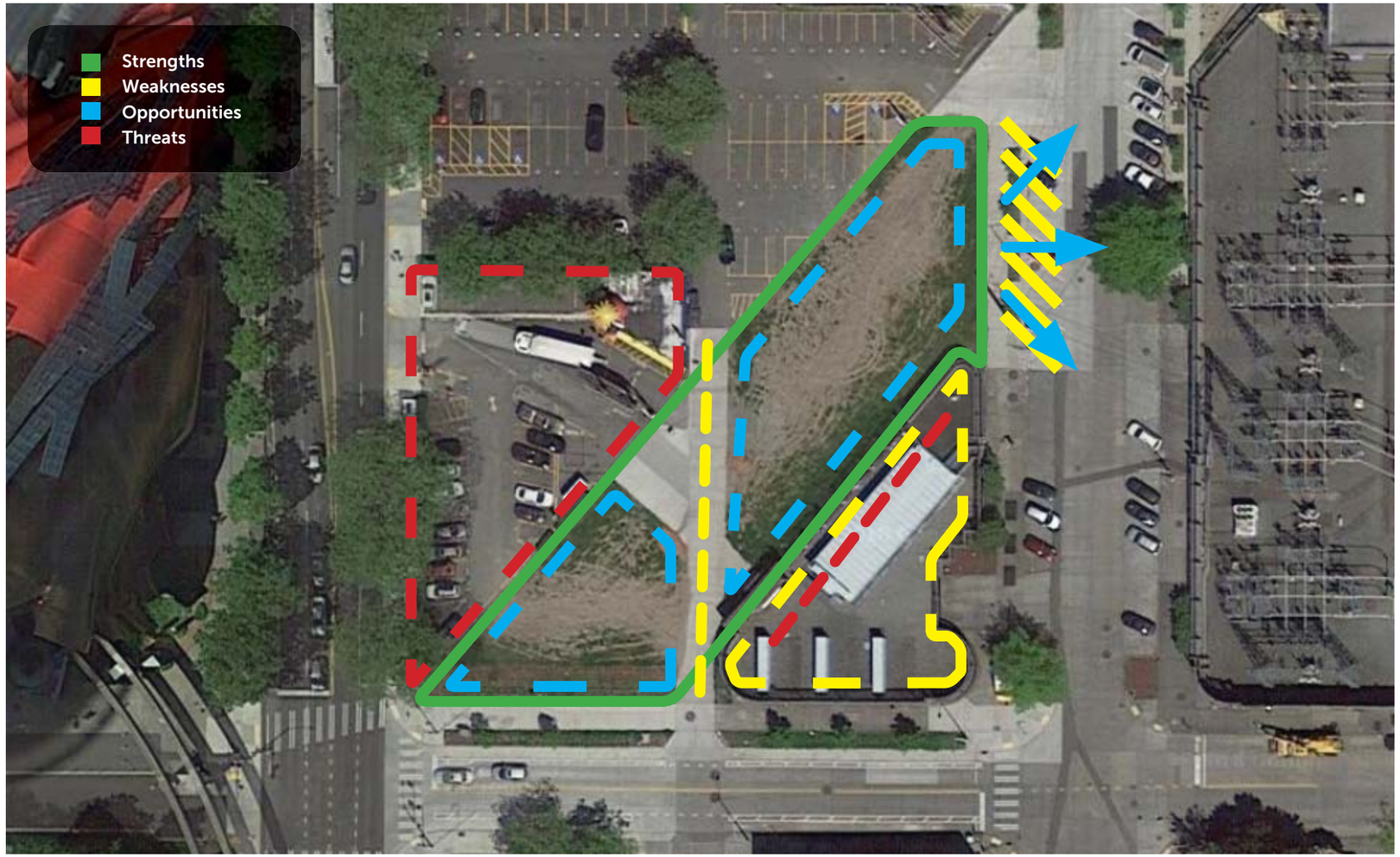
OPPORTUNITIES

- Lake views
- Existing trees along Western edge of site
- Close to Kenmore Air (noise should not be an issue)
- Suitable for a unique skatepath layout
- Existing utilities nearby will likely make adding a drinking fountain feasible

THREATS

- Deed restriction constraints would require review by the Washington State Recreation and Conservation Office (RCO) as part of the permitting process, and could potentially require providing a replacement site of equivalent waterfront property in order to convert space to a non-aquatic use. RCO meets once quarterly, potentially impacting project schedule.
- Lake Union very close to water's edge
- Lake level may rise up to 2' in winter months
- Geese could be a safety issue for pedestrians
- Future Development of NW Native Canoe Center
- Possible lengthy public process
- Current park development funded partially by private funds/donors

BROAD STREET ROW SITE



SWOT Analysis by Grindline Skateparks

STRENGTHS

- Ample size for replacement target (22,700 total sq ft available)
- Close proximity to public transportation
- Existing surface was previously road base, likely well compacted subgrade
- Visibility is limited from the Southeast

WEAKNESSES

- Next to substation
- Onsite parking limited
- Site is subdivided by an alley used for vehicular access.

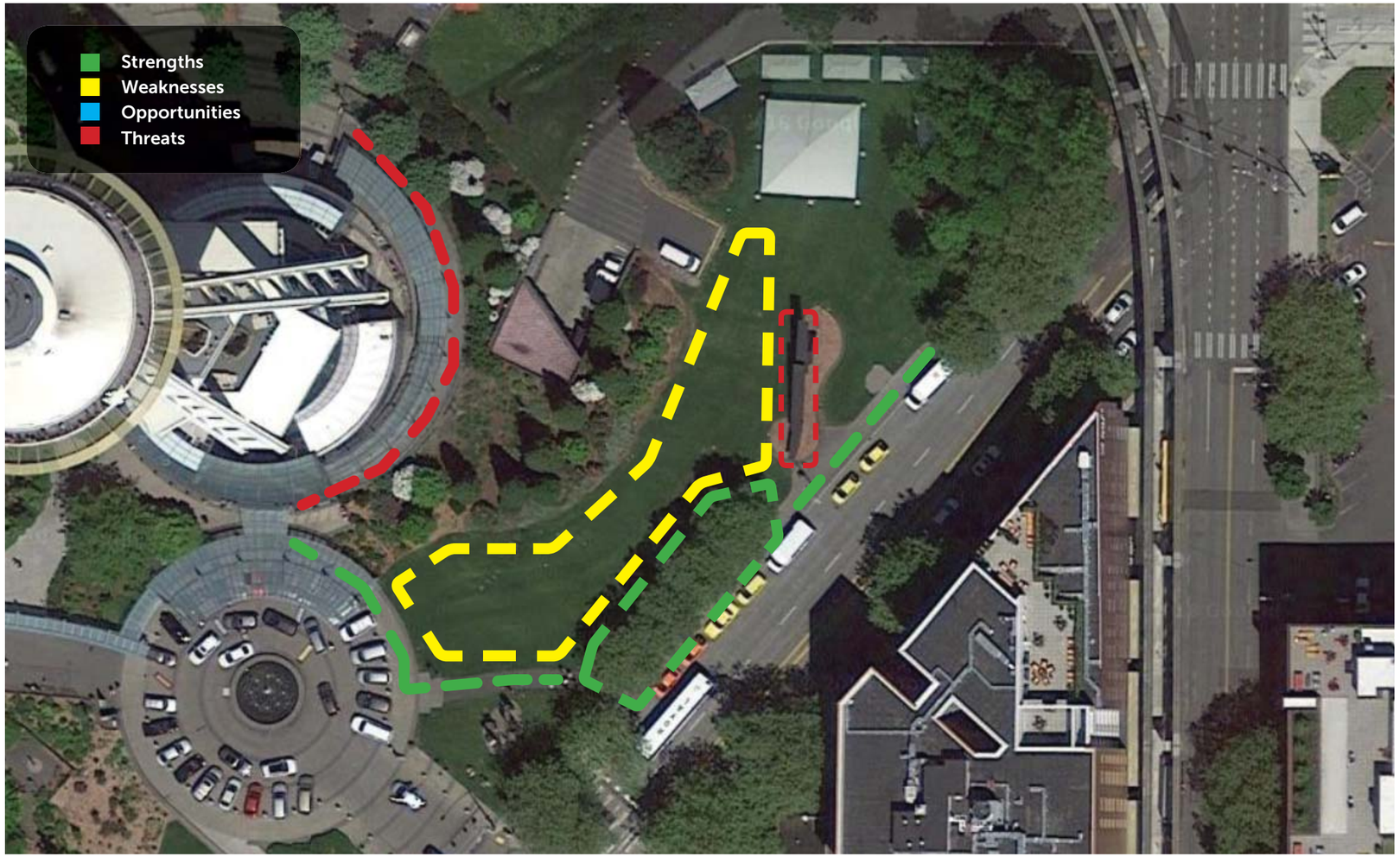
OPPORTUNITIES

- Opportunity to activate underutilized public land with active public use
- Close to Seattle Center and its amenities
- Views of Lake Union
- Potential split facility with designated beginner area
- Access alley could serve as potential pick up/drop off area
- Future development may provide additional shade/screening to the elements
- Several parking options in close proximity to site
- Existing utilities nearby will likely make adding a drinking fountain feasible
- Urban context makes a roof structure feasible at this location, it would likely not be met with strong opposition.

THREATS

- Potentia oppostion from adjacent property owners
- Potential vehicular/user conflicts

BROAD STREET GREEN



SWOT Analysis by Grindline Skateparks

STRENGTHS

- Highly visible
- Several existing pedestrian connection points
- Existing tree buffer between skateboarders and street
- Located on Seattle Center's campus
- Proximity to public transportation

WEAKNESSES

- Limited footprint (at 9,650 sq ft total footprint, less than target of 10,000 sq ft skateable footprint)
- The size of the current site does not offer opportunity for future expansion
- Soil Drainage issues (subsurface drainage and over excavation likely required)

OPPORTUNITIES

- Events in conjunction with Seattle Center
- Existing Seattle Center amenities can be utilized
- Slight side slope could support "shelved" approach
- Existing utilities nearby will likely make adding a drinking fountain feasible

THREATS

- Close proximity to Space Needle entry/drop of area which could pose potential user conflicts (Space Needle patrons vs skateboarders)
- Close proximity to "Black Lightning" sculpture which could be potentially tempting to skate
- Potential opposition from Space Needle
- Minimal parking in close proximity to site
- A roof structure would obstruct the open space and sightlines, and would likely be a target of strong opposition from stakeholders and neighboring property owners. For this reason a roof may not be feasible at this location

FEASIBILITY OF SKATEABILITY

What Size and Types of Skate Terrain Will Each Site Support?

LAKE UNION PARK

Valley St Location: The overall available build out footprint is approximately 12,340 sq ft (In order to maintain current major pedestrian thoroughfares). It is estimated that at a minimum, 85% of this total area could be used as skateable concrete terrain (allowing 15% for buffers, screening, viewing areas, and connections) which would provide 10,490 sq ft for skateable terrain. The site topography is flat. Specific soil information was not available, however it seems to be generally known that the majority of all of Lake Union Park contains contaminated soils, and a portion of the park is also constructed on concrete pilings and foam blocks. Liquefaction is also a factor on this site which can cause unfavorable settlement to slab on grade concrete. The water table is likely to be very near the existing surface. If a skatepark is to be constructed at this location Grindline would recommend that it be kept at or slightly above (3' maximum) existing grade in order to minimize mitigation of contaminated soils and reduce additional loads to minimize potential settlement. It is not recommended that a bowl or any other features that require finish grades below existing elevations be constructed at this site. A street plaza style park would be recommended for this location.

Westlake Ave Location: With an overall available footprint of 7,580 sq feet, and considering that this location possesses the same soil/water table issues as the other site, our team recommends that this potential site be removed from consideration for this project. This site could potentially however, make a great location of a skateable path or skate dot in the future.

Highlands Skate Plaza, Bellevue, WA
This park consists mainly of features which replicate that which would be found in an urban environment, along with some transitional features scattered throughout. The skatepark surface elevations typically sit at or just above existing grade.

BROAD STREET RIGHT-OF-WAY

The overall site footprint is approximately 22,700 sq ft. A paved alley of about 4,500 sq ft which runs through the site will need to remain for vehicular access. This leaves approximately 18,200 sq ft of a buildable foot print. Assuming approximately 15% of this area will need to be used for buffers, screening, viewing areas, and connections this leaves approximately 15,470 for skateable surface. One consideration could be a "split" park approach, where the access driveway would divide the skatepark into two designated areas. If this approach is favored, consideration should be given to focus one of the two areas on beginner terrain, and the other on intermediate/advanced terrain. Although site specific soils and water table information is not available at this time it is assumed (due to the fact that this site was formerly a portion of Broad St) that the site should consist of well compacted, suitable soils. This site would support a hybrid style park, which would include both transitional and street terrain features. An enclosed "stand alone" bowl may be considered to be included after further site information (geotechnical report and topographical/utility survey) is collected during the design process. Underground utilities are likely located beneath the site (as this site was formerly a road way) so a bowl may not be feasible, or the location of the utilities will dictate where on the site the bowl could be located.

Jefferson Park Skatepark, Seattle, WA
This park features a large area which consists of both street and smaller transitional features (top photo) and is complemented by a large stand alone "flow bowl" which includes transitional walls from 4' depth, and eventually graduating up to 11' depths.

BROAD STREET GREEN

The overall identified buildable footprint is approximately 9,650 sq ft. Assuming approximately 15% of this area will need to be used for buffers, viewing areas, and connections this leaves approximately 8,202 sq ft for skateable surface. This particular site is known to contain groundwater very near the surface of the existing turf. It should be assumed that these soils are non-free draining (likely glacial till), although it is unknown if this groundwater is the actual water table level or if it is perched groundwater due to the unfavorable soil conditions. Currently an existing subsurface drainage system iprevents the ground water from rising up to the surface. This system would need to be modified in order to accommodate the altered subgrade elevations for the skatepark. It should also be assumed that some level of over excavation (likely 2-3') will be required in order to remove the current soil and be replaced with a free draining select fill material. The site has a side slope to it, which means the skatepark itself could be "shelved" into the site, and the uphill (northwest) side could feature smaller transitional elements built into the hillside and street features could be focused along the downhill (southeast) edge. The site is narrow in the middle, and the adjacent trees would probably need to be removed to create enough space for a functional skatepark. In order to determine if any features which would include elevations below current subgrade (such as bowls) would be feasible at this site, further subsurface soil and water table investigations will need to be completed.

Tom Erlebach Skatepark, Star, ID
This park consists of an equal blend of street/plaza and transitional features. The majority of perimeter elevations are kept at, or just above existing elevations by using street features to accommodate elevation changes (above photo) while larger transitional features are located further inside the skatepark footprint (below photo).

CONCLUSION

Based on Grindline's review of the three potential sites and the evaluation criteria developed for this report in collaboration with the City and community stakeholders, we conclude that the Broad Street Right-of-Way site is the most feasible of the proposed sites to support a 10,000 sq ft cast in place concrete skatepark with amenities. The key factors which contributed to this conclusion are summarized below:

- The potential buildable area of more than 18,000 sf will support a skatepark of 10,000 sf and still allow ample room for amenities, viewing space, pedestrian paths, etc.
- The site allows for expansion beyond the 10,000 sf of the existing SeaSk8 facility, which is a priority the skateboarding community.
- Of the alternatives studied, this site is the only site where a roof or covering is likely to be feasible
- The site faces the fewest constraints from preexisting lease, funding, master plan or other restrictions that potentially conflict with conversion into a skatepark

Note: This recommendation is based on Grindline's expertise in the design and construction of skateparks. Additional factors such as land acquisition, permitting, and public notice requirements should be considered by the City and stakeholders prior to making a final selection.

ESTIMATE OF PROBABLE COST

Site: Lake Union (Valley St Location)

Skatepark Square Footage: 10,000 sqft

Design Costs:	
Engineering Analysis:	$50,000.00
Design (20% of Construction Costs):	$304,875.00
DESIGN TOTAL	$354,875.00
Construction Costs:	
Skatepark Construction Costs*:	$600,000.00
Contanimated Soil Mitigation:	$150,000.00
Possible Concrete Pilings:	$175,000.00
Landscape/Irrigation Allowance:	$48,000.00
Site Hardscape (connection points/viewing area) Allowance:	$30,000.00
Drinking Fountain/Plumbing Allowance	$6,500.00
Active Use/Security Lighting Allowance	$125,000.00
Site Amentites Allowance:	$85,000.00
Construction Contingnecy (25%):	$304,875.00
Construction Subtotal	$1,524,375.00
Design/Const Admin During Construction (25% of Hard Costs)	$381,093.75
Sales Tax (10.1%)	$192,452.34
CONSTRUCTION TOTAL	$2,097,921.09
City Costs:	
CIP indirect cost (5.5% of total project cost):	$100,608.75
Contracting/Purchasing Services (1.5% of total project cost):	$27,438.75
Art (1% of total project cost):	$18,292.50
Permit (2.5% of hard cost):	$38,109.38
Construction Administration:	$76,218.75
CITY COSTS TOTAL	$260,668.13
ESTIMATED TOTAL PROJECT COST:	**$2,713,464.22**

* Includes Mass excavation, underground drainage, all prep and concrete work (including some integral color) within the skatepark footprint

** Potential additional costs to purchase an equivilant lake front parcel of at least 10,000 sq ft with water front access shall be considered

ESTIMATE OF PROBABLE COST

Site: Broad Street ROW

Skatepark Square Footage: 10,000 sqft

Design Costs:	
Design (20% of Construction Costs):	$241,625.00
DESIGN TOTAL	$241,625.00
Construction Costs:	
Skatepark Construction Costs*:	$600,000.00
Additional Screening of Substation:	$72,000.00
Landscape/Irrigation Allowance:	$48,000.00
Site Hardscape (connection points/viewing area) Allowance:	$30,000.00
Drinking Fountain/Plumbing Allowance	$6,500.00
Active Use/Security Lighting Allowance	$125,000.00
Site Amentites Allowance:	$85,000.00
Construction Contingnecy (25%):	$241,625.00
Construction Subtotal:	$1,208,125.00
Design/Const Admin During Construction (25% of Hard Costs)	$302,031.25
Sales Tax (10.1%)	$152,525.78
CONSTRUCTION TOTAL	$1,662,682.03
City Costs:	
CIP indirect cost (5.5% of total project cost):	$66,446.88
Contracting/Purchasing Services (1.5% of total project cost):	$18,121.88
Art (1% of total project cost):	$12,081.25
Permit (2.5% of hard cost):	$30,203.13
Construction Administration:	$60,406.25
CITY COSTS TOTAL	$187,259.38
ESTIMATED TOTAL PROJECT COST:	**$2,091,566.41**

* Includes Mass excavation, underground drainage, all prep and concrete work (including some integral color) within the skatepark footprint

** Roof/Covering costs for this site could range between an additional cost of $100,000-$1,000,000 depending on material selection, area of coverage, integrated utilities, etc.

ESTIMATE OF PROBABLE COST

Site: Broad Street Green

Skatepark Square Footage: 8,202 sqft

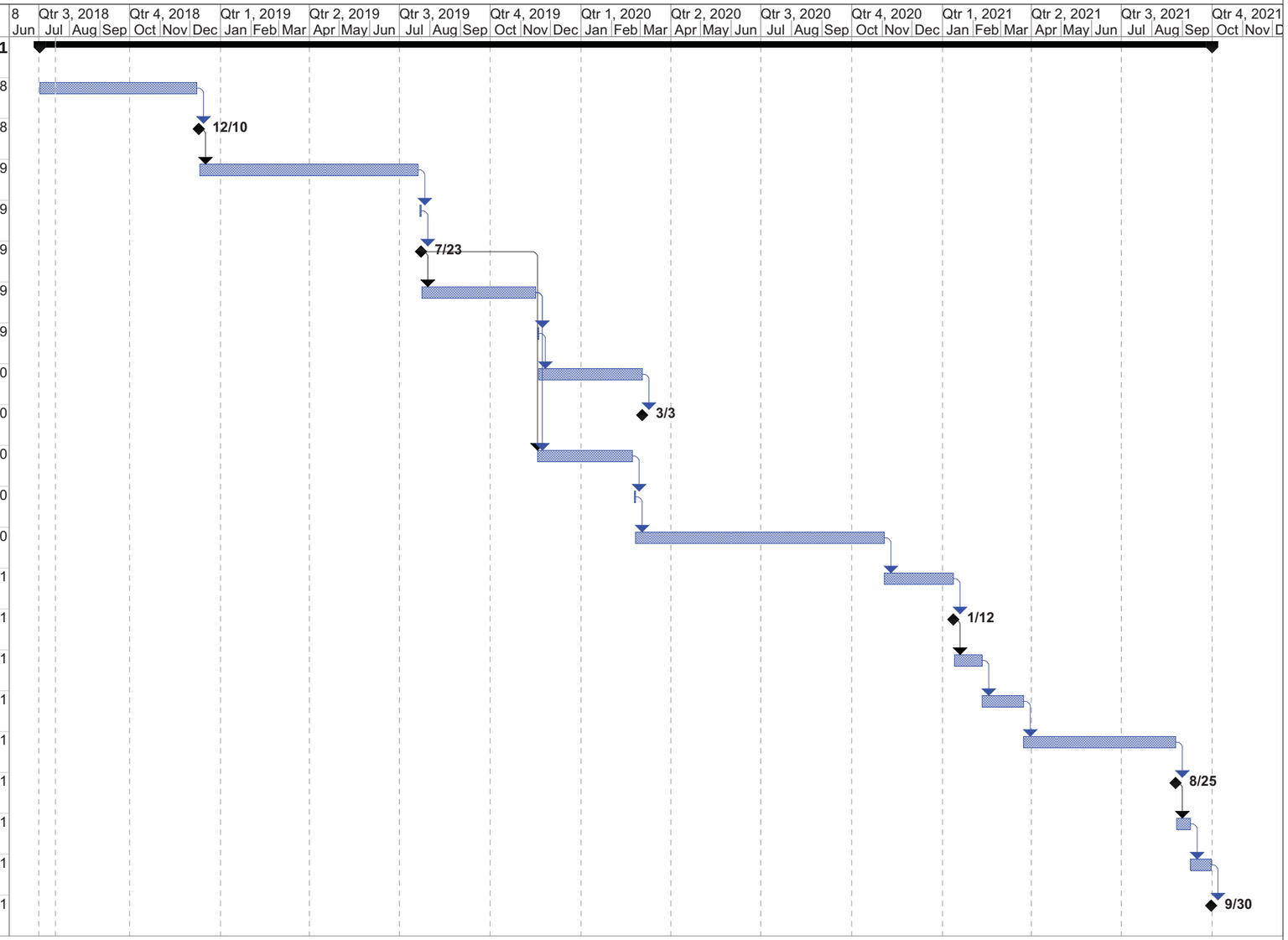
Design Costs:	
Design (20% of Construction Costs):	$214,064.00
DESIGN TOTAL	$214,064.00
Construction Costs:	
Skatepark Construction Costs*:	$492,120.00
Subsurface Drainage/Over Excavation:	$83,660.40
Landscape/Irrigation Allowance:	$39,369.60
Site Hardscape (connection points/viewing area) Allowance:	$24,606.00
Drinking Fountain/Plumbing Allowance	$6,500.00
Active Use/Security Lighting Allowance	$125,000.00
Site Amentites Allowance:	$85,000.00
Construction Contingnecy (25%):	$214,064.00
Construction Subtotal:	$1,070,320.00
Design/Const Admin During Construction (25% of Hard Costs)	$267,580.00
Sales Tax (10.1%)	$135,127.90
CONSTRUCTION TOTAL	$1,473,027.90
City Costs:	
CIP indirect cost (5.5% of total project cost):	$58,867.60
Contracting/Purchasing Services (1.5% of total project cost):	$16,054.80
Art (1% of total project cost):	$10,703.20
Permit (2.5% of hard cost):	$26,758.00
Construction Administration:	$53,516.00
CITY COSTS TOTAL	$165,899.60
ESTIMATED TOTAL PROJECT COST:	**$1,852,991.50**

* Includes Mass excavation, underground drainage, all prep and concrete work (including some integral color) within the skatepark footprint

GRINDLINE
CONCRETE SKATEPARK DESIGN & CONSTRUCTION

Seattle Center - Skatepark Replacement Schedule
Lake Union Park Site

ID	Task Name	Duration	Start	Finish
1	**Seattle Center - Skatepark Replacement**	**849 days**	**Mon 7/2/18**	**Thu 9/30/21**
2	Design Selection	115 days	Mon 7/2/18	Fri 12/7/18
3	Design Agreement Executed	1 day	Mon 12/10/18	Mon 12/10/18
4	Public Input/Conceptual Design	159 days	Tue 12/11/18	Fri 7/19/19
5	City Council	1 day	Mon 7/22/19	Mon 7/22/19
6	Final Design Concept Approved	1 day	Tue 7/23/19	Tue 7/23/19
7	Engineering Study	83 days	Wed 7/24/19	Fri 11/15/19
8	City Council	1 day	Mon 11/18/19	Mon 11/18/19
9	RCO Preperation	75 days	Tue 11/19/19	Mon 3/2/20
10	RCO Presentation/Approval	1 day	Tue 3/3/20	Tue 3/3/20
11	Contruction Documents, Design Review, Proview, ProTech	70 days	Mon 11/18/19	Fri 2/21/20
12	City Council	1 day	Mon 2/24/20	Mon 2/24/20
13	JARPA (Shoreline) Permit	180 days	Tue 2/25/20	Mon 11/2/20
14	Bid Procurement/Process	50 days	Tue 11/3/20	Mon 1/11/21
15	Bid Award/Executed Construction Contract	1 day	Tue 1/12/21	Tue 1/12/21
16	Mitigation of Contaminated Soils	20 days	Wed 1/13/21	Tue 2/9/21
17	Pilings	30 days	Wed 2/10/21	Tue 3/23/21
18	Skatepark Construction	110 days	Wed 3/24/21	Tue 8/24/21
19	Substantial Completion	1 day	Wed 8/25/21	Wed 8/25/21
20	Punchlist	10 days	Thu 8/26/21	Wed 9/8/21
21	Close Out Docs	15 days	Thu 9/9/21	Wed 9/29/21
22	Final Completion	1 day	Thu 9/30/21	Thu 9/30/21



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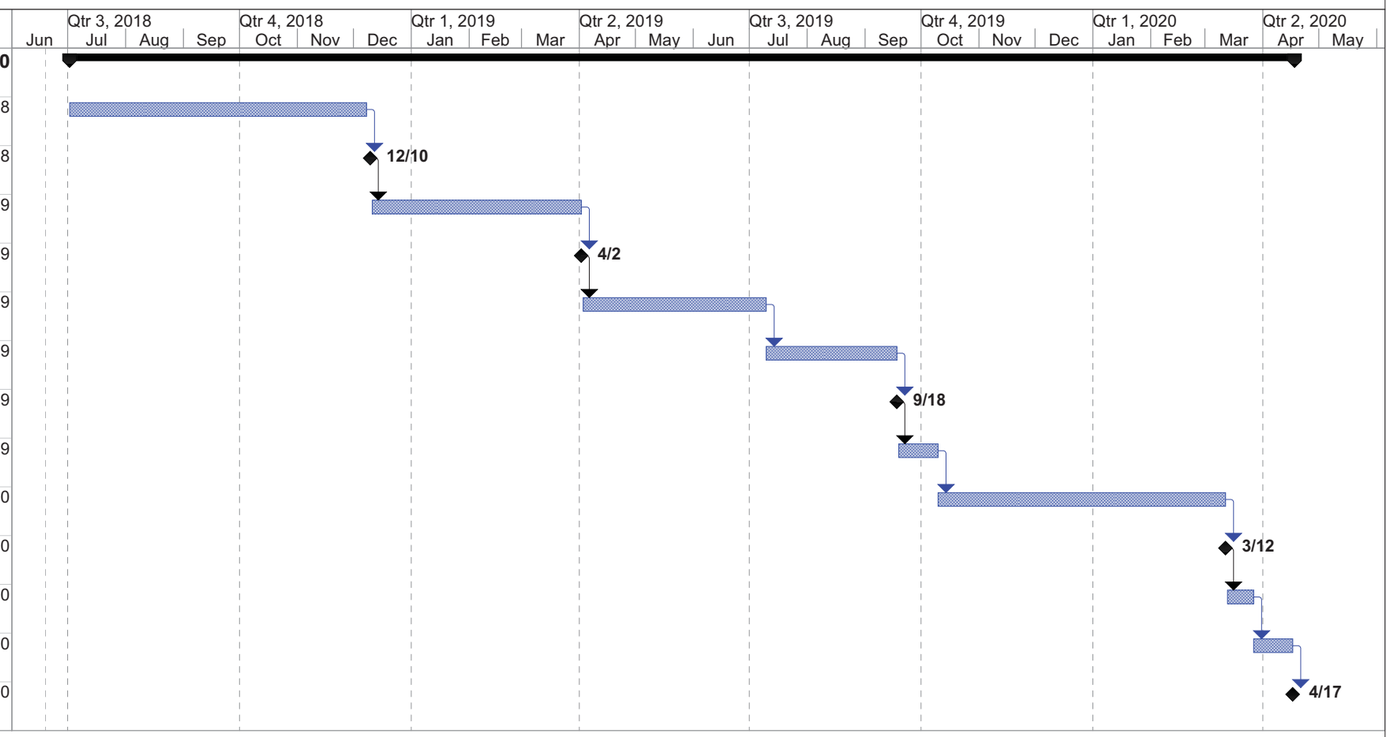
Seattle Center - Skatepark Replacement Schedule
Broad Street Green Site

ID	Task Name	Duration	Start	Finish
1	**Seattle Center - Skatepark Replacement**	**470 days**	**Mon 7/2/18**	**Fri 4/17/20**
2	Design Selection	115 days	Mon 7/2/18	Fri 12/7/18
3	Design Agreement Executed	1 day	Mon 12/10/18	Mon 12/10/18
4	Public Input/Conceptual Design	80 days	Tue 12/11/18	Mon 4/1/19
5	Final Design Concept Approved	1 day	Tue 4/2/19	Tue 4/2/19
6	Contruction Documents, Design Review, Proview, ProTech	70 days	Wed 4/3/19	Tue 7/9/19
7	Bid Procurement/Process	50 days	Wed 7/10/19	Tue 9/17/19
8	Bid Award/Executed Construction Contract	1 day	Wed 9/18/19	Wed 9/18/19
9	Over Excavation/Subsurface Drainage	15 days	Thu 9/19/19	Wed 10/9/19
10	Skatepark Construction	110 days	Thu 10/10/19	Wed 3/11/20
11	Substantial Completion	1 day	Thu 3/12/20	Thu 3/12/20
12	Punchlist	10 days	Fri 3/13/20	Thu 3/26/20
13	Close Out Docs	15 days	Fri 3/27/20	Thu 4/16/20
14	Final Completion	1 day	Fri 4/17/20	Fri 4/17/20



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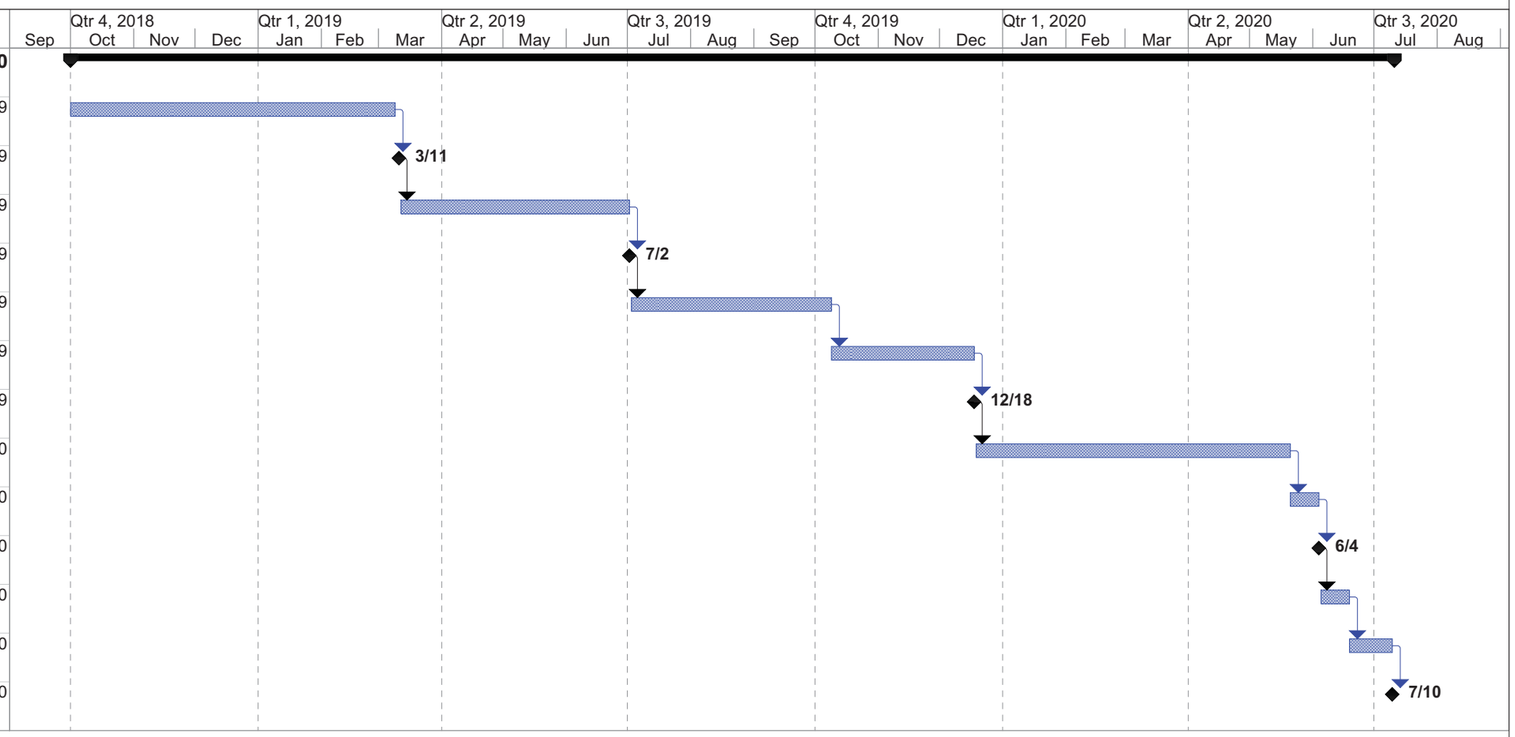
Seattle Center - Skatepark Replacement Schedule
SDOT Right Of Way Site

ID	Task Name	Duration	Start	Finish
1	**Seattle Center - Skatepark Replacement**	**465 days**	**Mon 10/1/18**	**Fri 7/10/20**
2	Design Selection	115 days	Mon 10/1/18	Fri 3/8/19
3	Design Agreement Executed	1 day	Mon 3/11/19	Mon 3/11/19
4	Public Input/Conceptual Design	80 days	Tue 3/12/19	Mon 7/1/19
5	Final Design Concept Approved	1 day	Tue 7/2/19	Tue 7/2/19
6	Contruction Documents, Design Review, Proview, ProTech	70 days	Wed 7/3/19	Tue 10/8/19
7	Bid Procurement/Process	50 days	Wed 10/9/19	Tue 12/17/19
8	Bid Award/Executed Construction Contract	1 day	Wed 12/18/19	Wed 12/18/19
9	Skatepark Construction	110 days	Thu 12/19/19	Wed 5/20/20
10	Substation Screening	10 days	Thu 5/21/20	Wed 6/3/20
11	Substantial Completion	1 day	Thu 6/4/20	Thu 6/4/20
12	Punchlist	10 days	Fri 6/5/20	Thu 6/18/20
13	Close Out Docs	15 days	Fri 6/19/20	Thu 7/9/20
14	Final Completion	1 day	Fri 7/10/20	Fri 7/10/20



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APPENDIX A

Site Inventory Matrix

GRINDLINE
CONCRETE SKATEPARK DESIGN & CONSTRUCTION

Seattle Center Skatepark Relocation - Site Inventory Matrix
Date: 05/15/2018

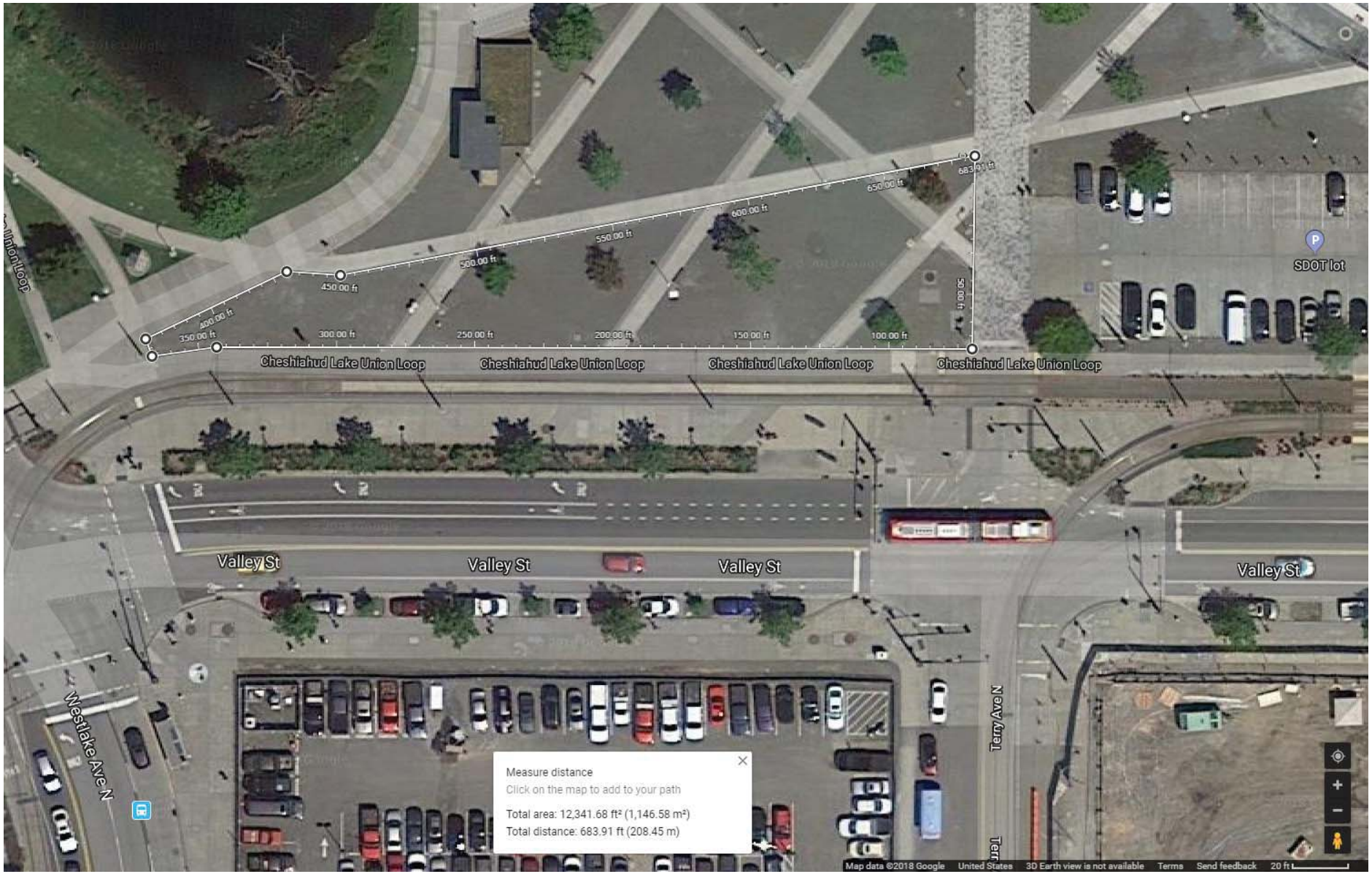
The evaluation criteria in the following matrix is based on standard site inventory & anaylsis, as used in the standrd design process, but more specifically applied to the design and construction of skateprks. Criteria identified in the City of Seattle Citywide Skatepark Plan (Arai Jackson Ellison Murakami, LLC, 2007) and the Seattle Cneter Skatepark Coalition Letter dated January 4th, 2018

	Lake Union Park	Broad Street Green	SDOT Right of Way
Underground / at ground / above ground			
Soil Conditions	The current existing soil is contaminated. There is potential liquefaction throughout the site.	Wet top soil is present on this site- 3 Feet of Over Excavation is assumed to be required.	Unknown - The site was an old road, so properly compacted native/base is assumed to exist beneath
Water Table	Water table is at Lake Level +-2'. The water table is made 2' higher in winter for the Salmon.	A high water table exists and ground water is present on the site. - Drainage issues are also present.	Water Table is unknown for this site.
Utilities	Utilities are located under the pavers up the center of the park following Terry St.	There is Electrical in the Street. Onsite subsurface storm drainage & potential sewer tie in connection are present.	Utilities exist near the site.
Easements	Existing Easements are the MOHAI parking lot & Fire Access Lane for MOHAI.	Offset from Street - Typical, Sidewalk.	Ride the Ducks Access Easement Alley Way to remain (Site will need to be "split") VAC ORD #78141
Site Topography	Valley St. Site: Flat Westlake Site: Slight slope towards lake	This site has a Slight Slope - Sloping from Northwest to Southeast	This site has a Slight Slope - Sloping from Southwest to Northeast
Environmental Considerations	This site contains Contaminated Soils. A Shoreline Permit will be required because of the proximity to the lake. There are Baby Geese at NW of park at Westlake Site.	Significant addition to impervious surface, but less than 1 acre - does not trigger SWPP requirement.	Development of this site will be replacing similar area of impervious?
Proximity to Existing amenities (if any)	There is parking for the MOHAI - limited onsite Parking.	Seattle Center amenities can be utilized for this site.	Seattle Center has the closest amenities - across the street. There are no amenities onsite.
Site Size	Valley St Site: 12,340 sq. ft., Westlake Site: 7,580 sq. ft.	9,650 sq. ft.	22,700 sq. ft.
Ease of Development	See: Lake Union Park Agreement Coverage Document	Development will be difficult with tough site conditions. This is a very high profile site. The heavy traffic on Broad St. and the entrance to the Seattle Center make for difficult construction access	Next to substation that cannot move, east site has no visible above grade elements. West Site is plantings.
Existing Security and or/ active use lighting	This park contains Passive lighting along the paths. It is partially gated to prohibit unauthorized vehicles.	Seattle Center campus and has full time security and passive lighting throughout the center.	Ride the Ducks is located at this site. There are Street Lights on the surrounding streets.
Sun/Wind/Rain related to potential skatepark orientation	The Valley St. Site is fully exposed to the elements. The Westlake Site has some trees along Westlake.	The site is fully exposed to the elements, some tree screening to the NW part of site.	This site is fully exposed to the elements.
Adjacent Properties:			
Use type	This site is used as a Park. The Wooden Boat Center and MOHAI are also located on this property.	This site sits on the property of the Seattle Center and is directly beneath the Space Needle.	There is no current use for this site. The site sits adjacent to a sub station and Ride the Ducks.
Future Development	The NW Native Canoe Center is planned to be developed in the NW corner of Park along Westlake.	There is no future development slated at this time.	Zoning and development conditions suggests future development of up to 160' (15 Stories). The substation and ROW are not included in the future development plans.
Circulation:			
Vehicular	Vehicles are not allowed to drive in the park, there is Authorized Maintenance Vehicle Access only. The Light rail is adjacent to the site.	There is heavy vehicular traffic on Broad Street to the East- Seattle Center Entrance to the North	Ride the ducks goes in and out of lot via alley.
Pedestrian	There are passive concrete sidewalks throughout park.	Pedestrian Sidewalks run along Broad St and the Space Needle Entrance.	There are existing sidewalks and crosswalks leading to SW end of site.
Parking	There is parking at Terry & Mercer Lot, Westlake and on the Street.	Parking would be the same as the Seattle Center, utilizing parking garages and on street parking.	On Street Parking near site. There is no parking at the site - Limited Street Parking East of site (Taylor Ave.) or South (Thomas St.)
Public Transit Proximity	Bus Stops & South Lake Union Transit stops in front of Site.	Public Transit is located on Broad Street - very close to site. The Monorail is located near site.	Public transit is located on 5th Ave/Thomas St. The Monorail is located across the street.
Emergency Services	There is a Fire Access Right of Way through the park.	Emergency Service Access is via the Space needle entrance.	Site is easily accessible via alley or road to East (Taylor Ave.)
Experience:			
Views for users and Spectators	Very visible from all of park.	Very Visible - on Broad Street, Under Space Needle	Most visible from Intersection of 5th Ave & Thomas St
Parental Supervision	Opportunities for viewing/spectator areas	Opportunities for viewing/spectator areas	Opportunities for viewing/spectator areas
CPTED (safety) sightlines, etc.	This is a flat site - very visible from all angles.	Site is in full view - very visible from Broad Street and Seattle Center.	Sub Station creates siteline problems , 15 story buildings to be developed around site.
Shade/ Relief	There are small trees throughout the site. There are MOHAI shade structures around the building.	There are mature trees on the West side of site.	The Substation wall may provide some morning shade.
Blending active use, passive use, and pre-existing use	Most Existing elements in the park were paid for by private donors. This could be an issue to replace these elements with a skatepark.	Some screening and/or buffer should be considered between sculpture and skatepark	Ride the Duck vehicle access will need to be maintained, pedestrian safety will need to be considered
Connections	The closest connections are: Valley St & Westlake Ave	To Seattle Center/Space Needle, Broad St	To Seattle Center, Broad St, 5th Ave, Thomas St

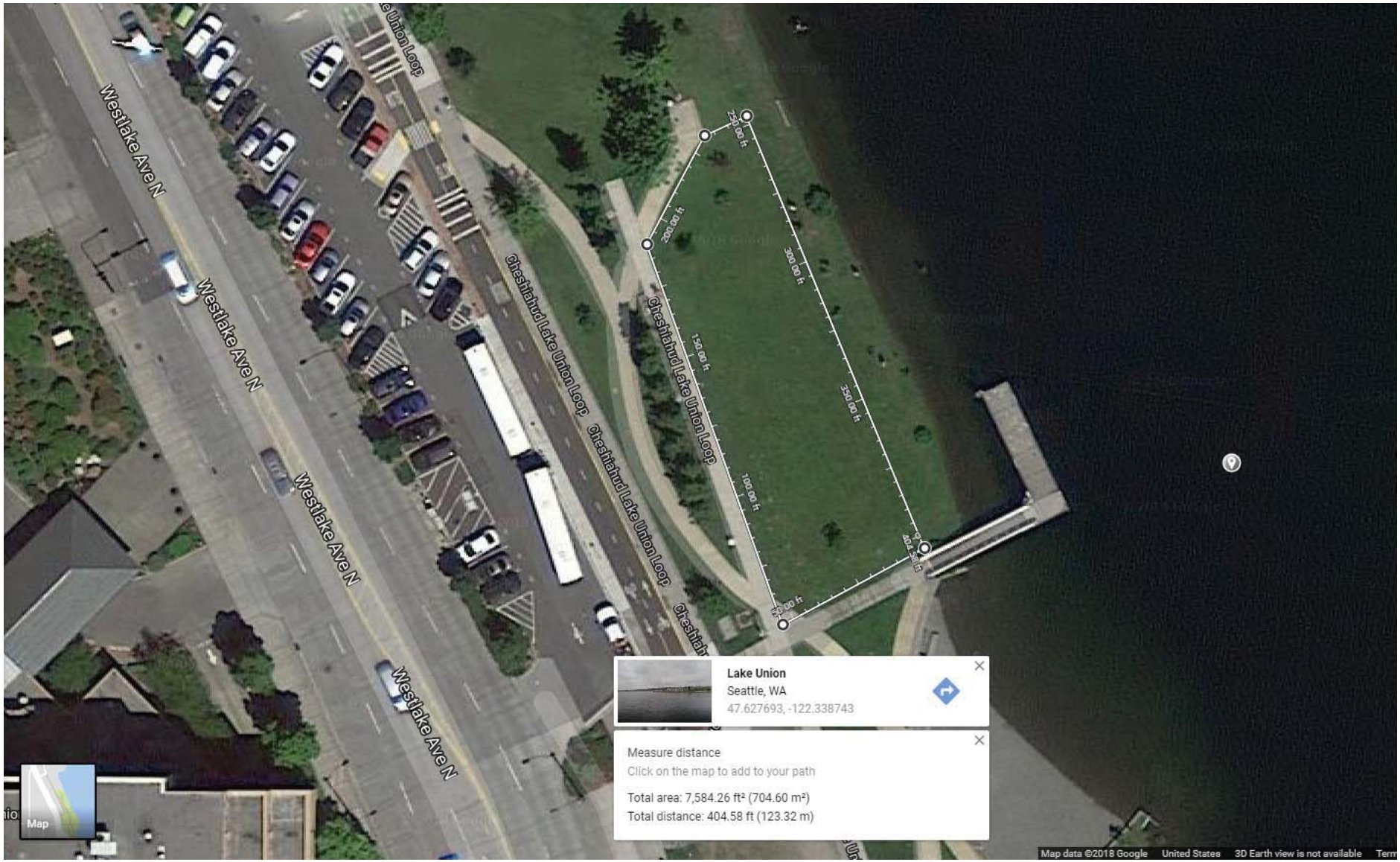
4619 14TH AVE SW SEATTLE,WA 98106
206.932.6414 (OFFICE) 206.932.6840 (FAX)
www.grindline.com

APPENDIX B

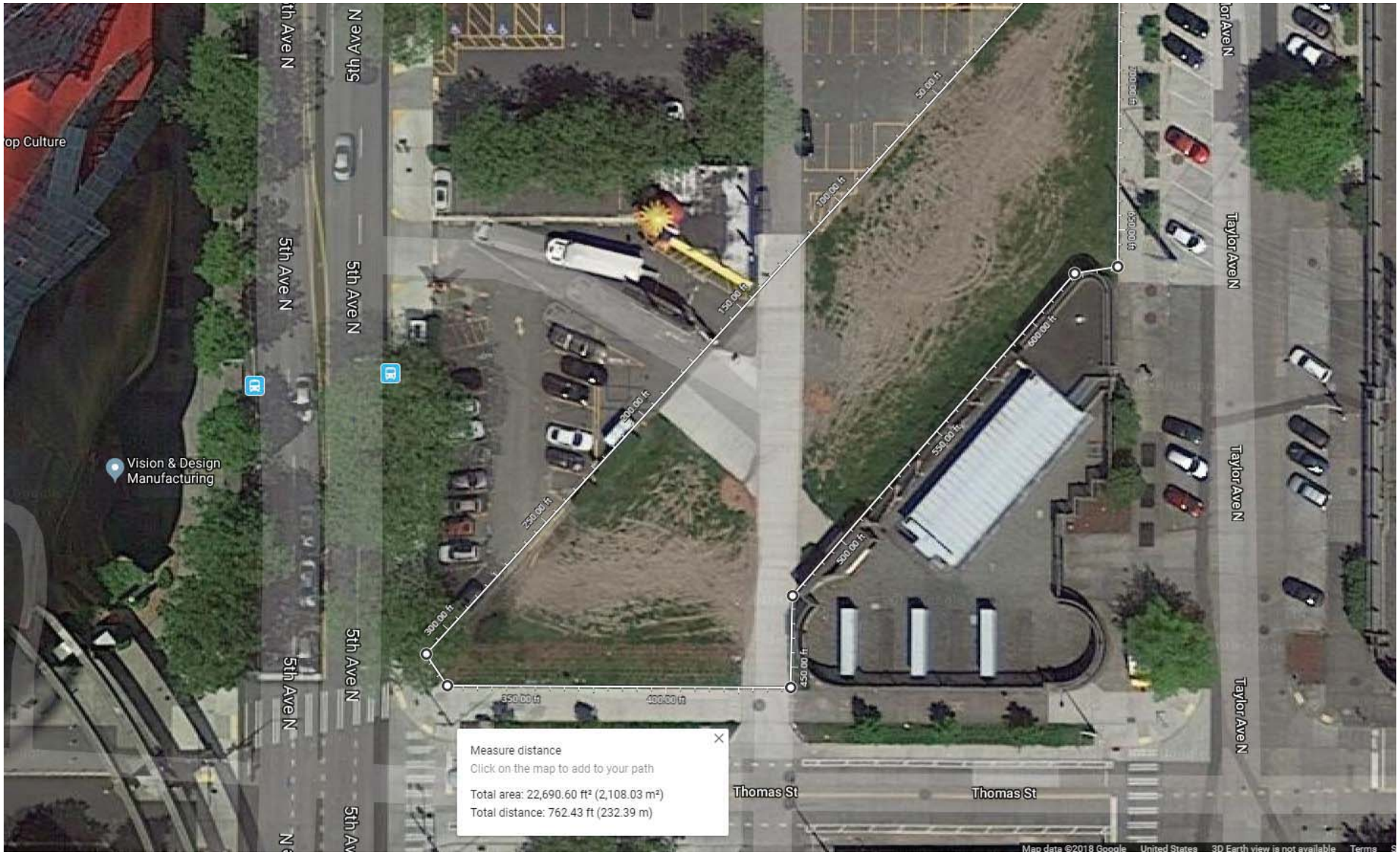
Area Take-offs



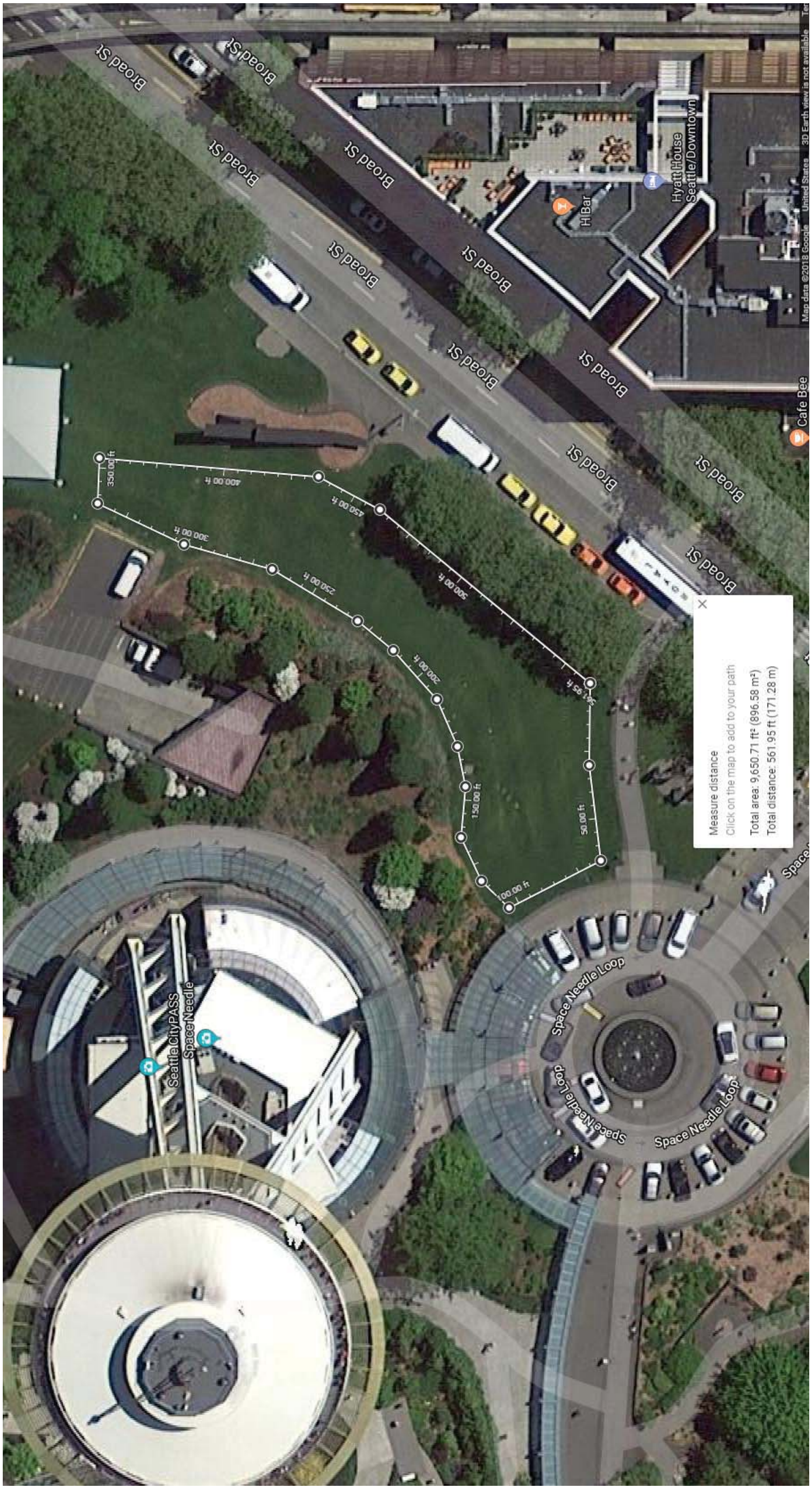
Lake Union Park – Valley St Site



Lake Union Park – Westlake Ave Site



Broad Street ROW Site



Broad St Green Site