

May 18, 2018

To: Shelley Bolser
SDCI
City of Seattle

Re: Project #3018037;
Altitude at 5th & Stewart
1903 Fifth Ave.
Seattle, WA 98101

Dear Shelley,

On behalf of Escala, a condo that shares the alley with Project #3018037, I appreciate the chance to comment on its recently posted Plan Set 7.

Now rising to 54-stories, Altitude's updated design fails to support basic loading and delivery needs for a vertical village of 1,000 residents, hotel guests, retailers, diners, bar patrons and dozens of staff and maintenance workers.

This failure won't just frustrate the people who live in and service Altitude. It will push private loading and delivery functions onto public streets and right-of-ways, further straining traffic congestion and pedestrian safety. Surrounding businesses and the public will pay the price of this poor design.

If built for efficiency, this soaring tower could be a model for density done right. If built in its current version, it will be a high profile mistake that will worsen the traffic nightmare Seattle is urgently trying to solve in its recent report on the City's urban goods delivery system.

"The Final 50 Feet" ([Appendix, 1](#)) is a detailed study of downtown streets and alleys by SDOT and the UW Urban Freight Lab. Its mission has been to provide data-based evidence and guide the design of effective loading space to help the City Center cope with e-commerce deliveries that are projected to double in the next four years—just as the buses pour out of the tunnel onto downtown streets and more vehicle lanes are dedicated to cyclists.

Altitude's loading design directly contradicts recommendations for delivery success described in the "The Final 50 Feet." **Through the lens of that report we note these loading design issues with Plan Set 7:**

- 1) Inadequate number and length of loading berths
- 2) Deficient loading facility design

- 3) **Turn radius projections are needed to confirm access to the project alley and loading berths.**
- 4) **Poor building logistics and system designs will impede deliveries and extend delays**

Issue #1: Inadequate number and length of loading berths

Despite adding five-stories of apartments and hotel rooms through HALA, the project continues to request an exception in order to have just one 10'X35' loading berth and continues to reject the need for a fourth loading berth.

Responding to Cycle 2—Zoning Review Correction Notice 4, ([Appendix, 2](#)) the design team either just discovered or decided to comply with thicker wall requirements from the 2015 Seattle Energy Code, thereby reducing its overall GSF and theoretically meeting the three-berth standard by just 3,150 gsf.

Disingenuous at best, this response dodges the significant impacts of added height and density. No matter how thick the building walls, adding more apartments, hotel rooms and people without adding another berth mocks the low usage exceptions of SMC 23.54.035B 2.a-d. and 23.54.035C 2.c. ([Appendix, 3](#))

The situation is made even worse by the substandard design of the requested loading berths.

Issue #2: Deficient loading facility design

The berth plan shows space for three loading stalls. But in reality:

- The berths are not designed to fit common trucks serving downtown. The facility provides no dock, only stalls. To offload goods without a dock, delivery drivers need ramps or lift gates plus 5' of maneuvering space.

This added working space means trucks will jut into the alley anywhere from 2' to 14'. More likely, these 8 ½' wide trucks will simply avoid the berths and park in the alley. Either way, alley circulation is blocked.

- When **fully occupied, the loading facility's only 10'X35' berth obstructs access to the service elevator** from trucks using the other two stalls, and even from deliveries by hand truck from the alley. When the 10'X35' berth is **fully occupied it also blocks access to the trash lift**. To insure garbage is collected, bins will need to be left outside on collection days, further blocking alley circulation.

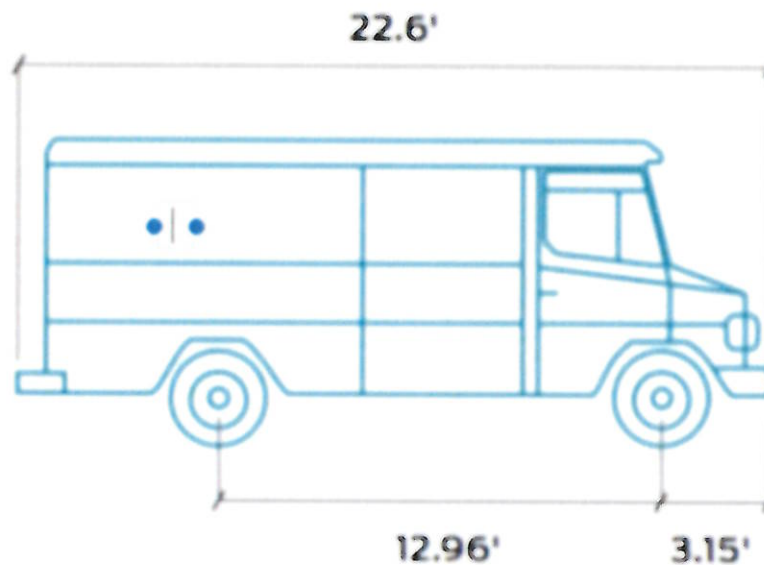
Following are illustrations and measurements of standard trucks serving downtown Seattle compiled by The Tilghman Group. After each truck illustration is a copy of page A106 of Plan Set 7 showing a scaled version of that truck in the Altitude loading berth it would be directed to use.

Note: As with all new construction, Altitude is required to dedicate a 2' setback from its property line to the alley right of way. That space is to remain open for alley traffic circulation and is not an extension of the berths. Newly amended SMC 23.53.030.F.2. states “. . . loading berths may not be located in required setbacks, similar to the existing prohibition on locating parking spaces in the setbacks.”

Trucks Using 25' Loading Berths

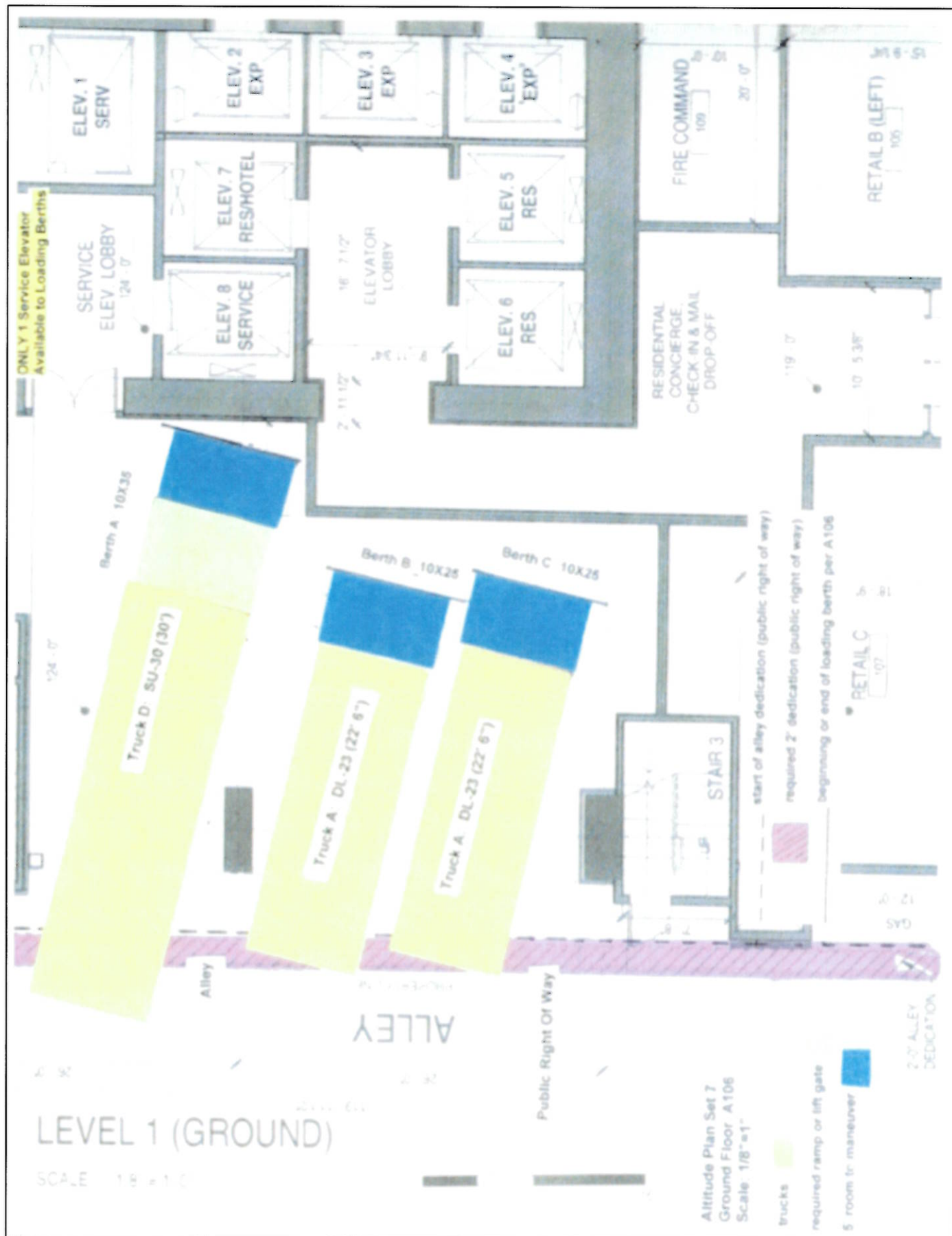
Truck A: (UPS-Fed Ex style van)

DL-23



Source: NACTO

Truck Length:	22'6"
Add 5' for maneuvering room	5'0"
Total Length	27'6"
Truck extends past berth:	2'6"



**Truck B: U-Haul 15' Truck
(commonly used by tenants moving)**

A side-view diagram of a truck with various dimensions labeled. The truck has a cab and a flatbed trailer. Dimensions include:

- Overall width: 15'
- Distance from front of cab to start of trailer: 27'
- Trailer length: 12' 8"
- Cab height: 2' 6"
- Trailer height: 7' 2"
- Distance from front of cab to front of trailer: 22' 6"
- Distance from front of trailer to end of trailer: 33' 6"
- Distance from end of trailer to the start of a ramp: 8' 9"
- Ramp length: 5'

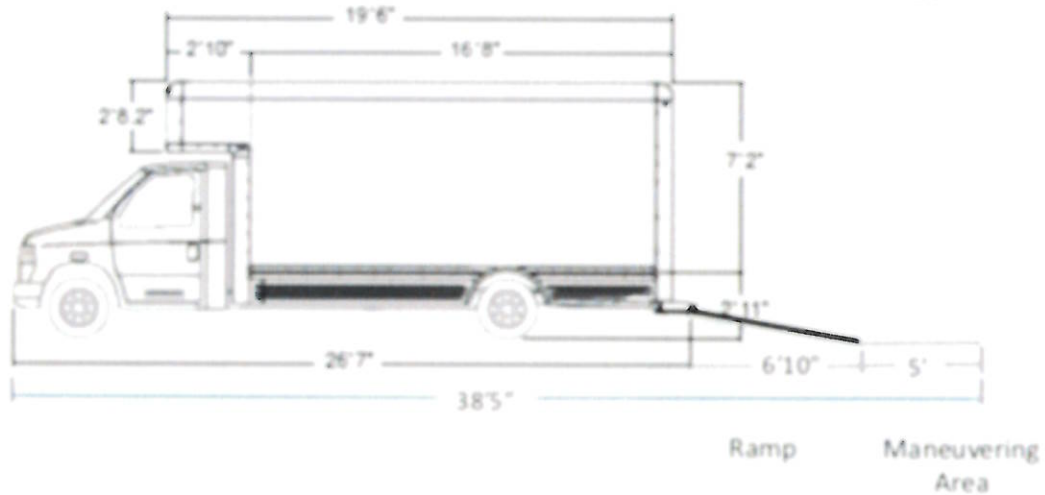
 The ramp is shown as a black line sloping downwards. Below the ramp, the text 'Ramp' and 'Maneuvering Area' are written.



Truck Length:	22'6"
Ramp	8'9"
Add 5' for maneuvering room	5'0"
Total Length	33'6"
Berth Length	25'
Truck extends past berth:	8'6"

Trucks Using 25' Loading Berths

Truck C: U-Haul 20' Truck (used for moving)



Source: U-Haul Trighman Group

Truck Length:	26'7"
Ramp	6'10"
Add 5' for maneuvering room	5'0"
Total Length	38'5"
Berth Length	25'
Truck extends past berth	13'5"





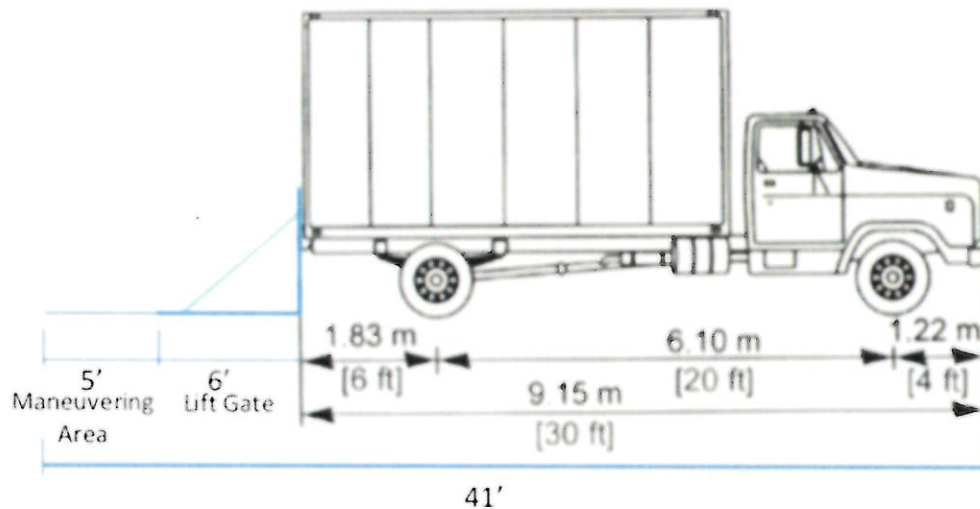
LEVEL 1 (GROUND)

SCALE 1/8" = 1'-0"

Altitude Plan Set 7
Ground Floor A106
Scale 1/8"=1'-0"

Trucks Using 35' Berths

Truck D: SU-30 (Common for food service/beverage deliveries)



Source: AASHTO, Tighman Group

Truck Length:	30'
Lift Gate	6'
Add 5' for maneuvering room	5'
Total Length	41'
<u>Berth Length</u>	<u>35'</u>
Truck Extends beyond berth:	6'

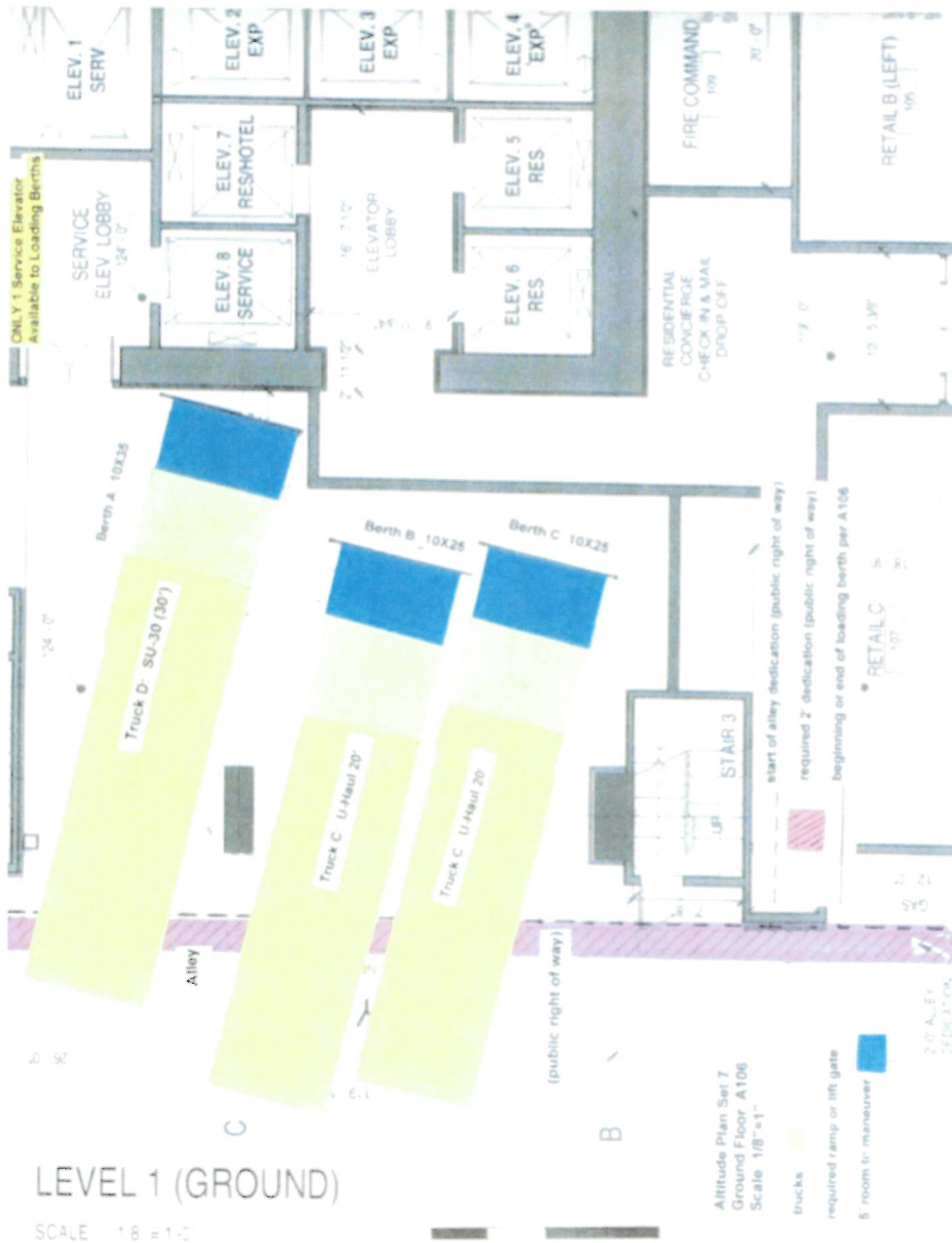
SU-30



Beverage Delivery Truck



Costco Delivery Truck

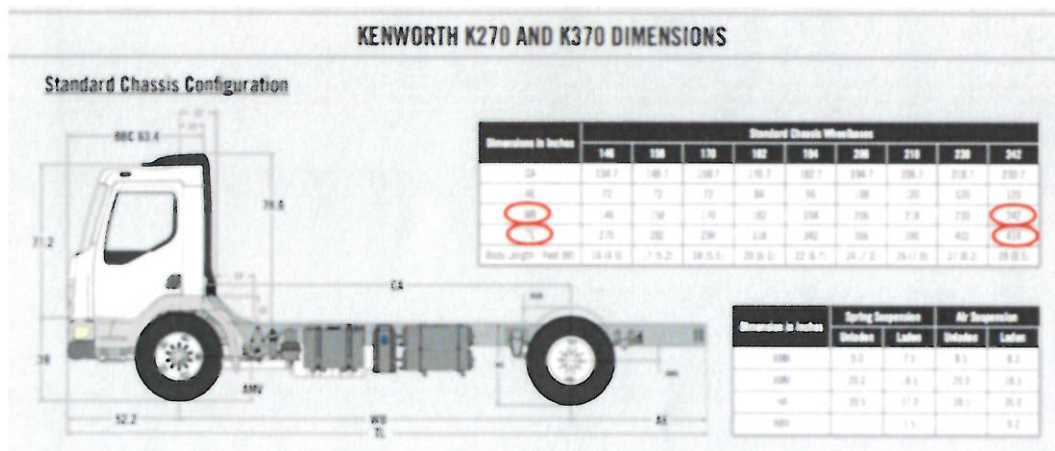


Trucks Using 35' Loading Berths

Other Standard Truck Types Under 35'

30' trucks are not the largest standard vehicles to regularly deliver downtown. If a 30' truck cannot fit in the 10'X35' Altitude loading berth, the following delivery vehicles under 35' will also be forced to park in the alley right-of-way.

SU-30 reflects a 20' wheelbase, but trucks can be longer than 30' even with that wheelbase or less:



- With a 18' wheelbase, truck length can be 32'6". With a lift-gate and maneuvering room, total length is 43'6".
- This example also shows that with a 20'2" wheelbase, the overall length is 34'6". Adding the space needed for a lift-gate and maneuvering room, the total working length would be 45'6".

A note about Altitude's transportation management plan

Altitude claims it doesn't need the full size and number of loading berths required by code because all regular "deliveries for food, beverages, linen/laundry, cleaning supplies, guest supplies and office supplies" will be provided by trucks of 25' or less. The only exception would be a 26' linen truck that would only deliver after 10 pm. (Plan Set 7, G001) But do those numbers refer to the wheel base measurement or the total truck length?

As seen in the previous Tilghman illustrations, even trucks less than 20' long will not work within the berths. Also, how can the project guarantee these claims? If a service truck greater than 25' shows up, will it be turned away, and by whom?

In a tower with hundreds of toilets, sinks and washers as well as commercial kitchens, what happens if a typical large plumbing truck arrives to fix a problem?

With Altitude's current loading design, parking in the alley will be the only option for many trucks, though the project says that won't happen because it will post **No Stopping or Parking** signs on its exterior west wall.

Who will enforce these directives and by what authority? Thirty-minute truck parking in alleys is legal. "**The Final 50 Feet**" states in its Executive Summary (p. 4) "*Other cities have focused on enforcing truck parking codes without much success in changing behavior.*" It goes on to say, ". . . SDOT has demonstrated its interest in developing innovative, system-wide solutions to achieve their policy goals."

Issue #3: Turn radius projections are needed to confirm access to the project alley and loading berths.

Writing to the city planner for Altitude last September ([Appendix, 4](#)), transportation planner Ross Tilghman of the Tilghman Group outlined missing and ambiguous information relating to the project's transportation design. Two items still missing from Plan Set 7 are projections of truck turning movements at loading berths and for trucks accessing the alley at Stewart St. Both projections should be plotted with and without dumpsters that are frequently present in the alley. ([Appendix, 5](#))

Trucks delivering to Altitude face significant access problems:

A) The narrow alley and inadequate berth depth make it doubtful whether trucks of 25' to 35' feet or less will be able to back into one of the loading berths if trucks of equal size are occupying one or both of the other berths. The situation further deteriorates when dumpsters are present in the alley. ([Exhibit A](#))

If a delivery truck is unable to back in or a resident in a U-Haul finds it too difficult to maneuver, off-loading in the alley is the easy option, provided the door to the service elevator is not blocked by a vehicle in the 10'X35' berth.

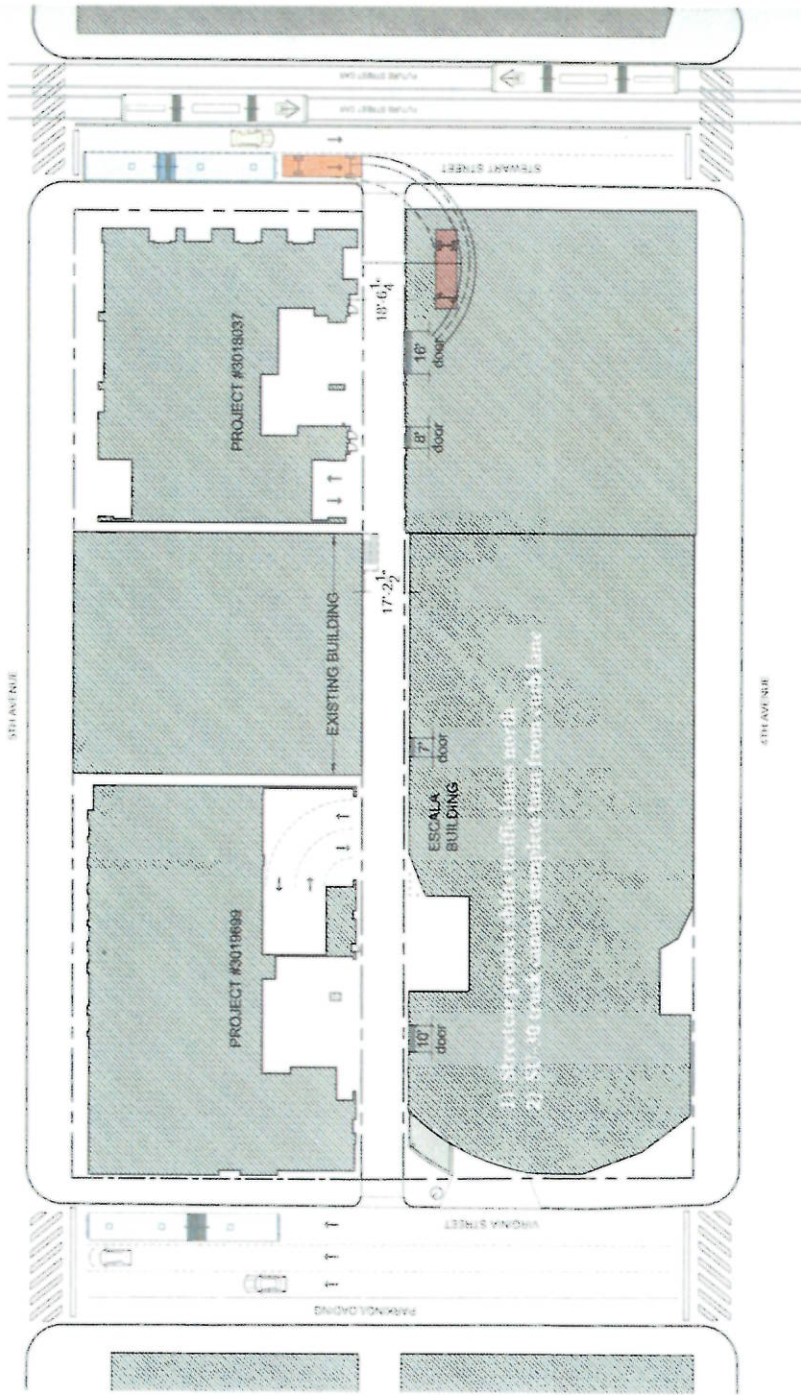
B) The alley is inaccessible to an SU-30 truck turning right onto the project alley from the curb lane on Stewart St. without "bumping" the curb or rolling fully over the sidewalk, depending on the transportation expert consulted. ([Appendix, 6](#)) Transportation experts do agree that to make a right turn into the alley at Stewart, SU-30 trucks will need to first swing wide into Stewart Street's outer left lanes. If these lanes are occupied, access is not possible. ([Exhibits B, C, D, E](#))

[illegible]

SCALE 1/32" = 1'-0" 0 5 15 30

EXHIBIT B: SU-30 RIGHT TURN FROM STEWART CURB LANE INTO ALLEY IS NOT POSSIBLE

For more info: Ross Tilghman Testimony at MUP 17-035 hearing related to trucks encroaching on sidewalk when turning from Stewart into the project alley.
<https://media.berkele.gov/traffic-case/MUP-17-035>
 Day 4, Part 3, Minutes 36:30 to 37:12



SCENARIO 4A: DELIVERY TRUCK TURN FROM CURB LANE
 SCALE 1/32" = 1'-0" 0.5 15 30

EXHIBIT C: CLOSE UP OF SU-30 RIGHT TURN FROM STEWART CURB LANE

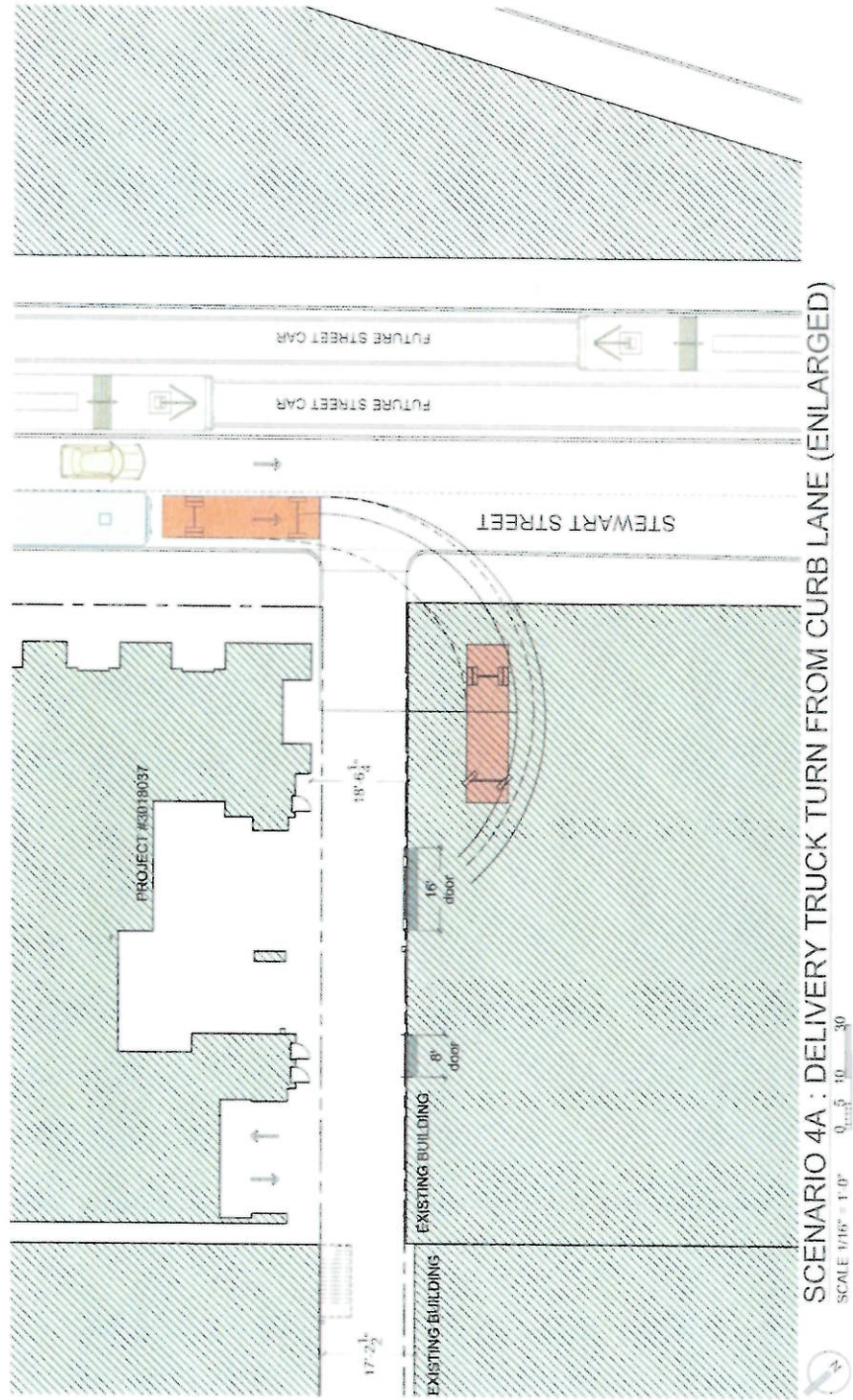
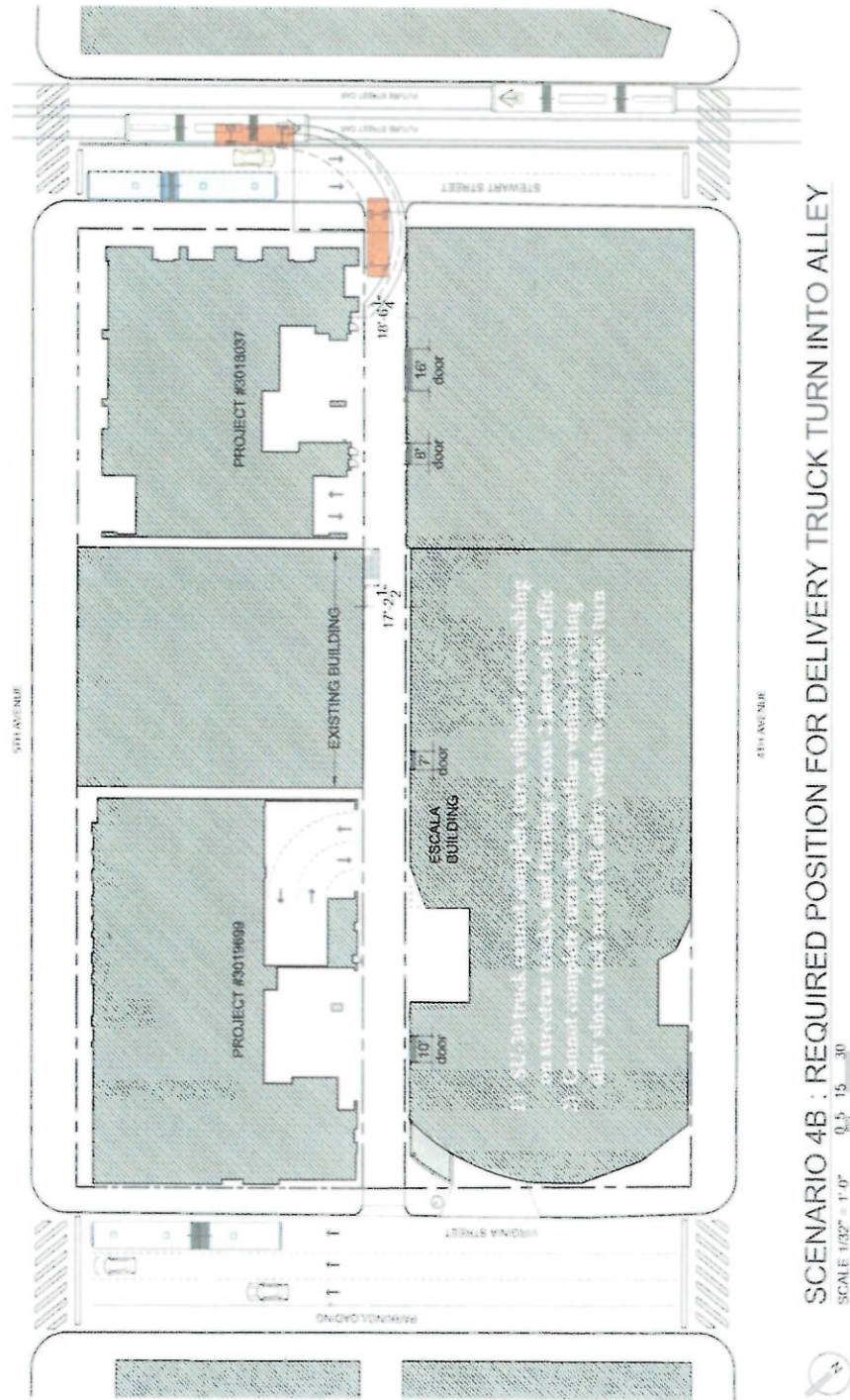


EXHIBIT D REQUIRED POSITION FOR DELIVERY TRUCKS FROM STEWART ST. INTO PROJECT ALLEY

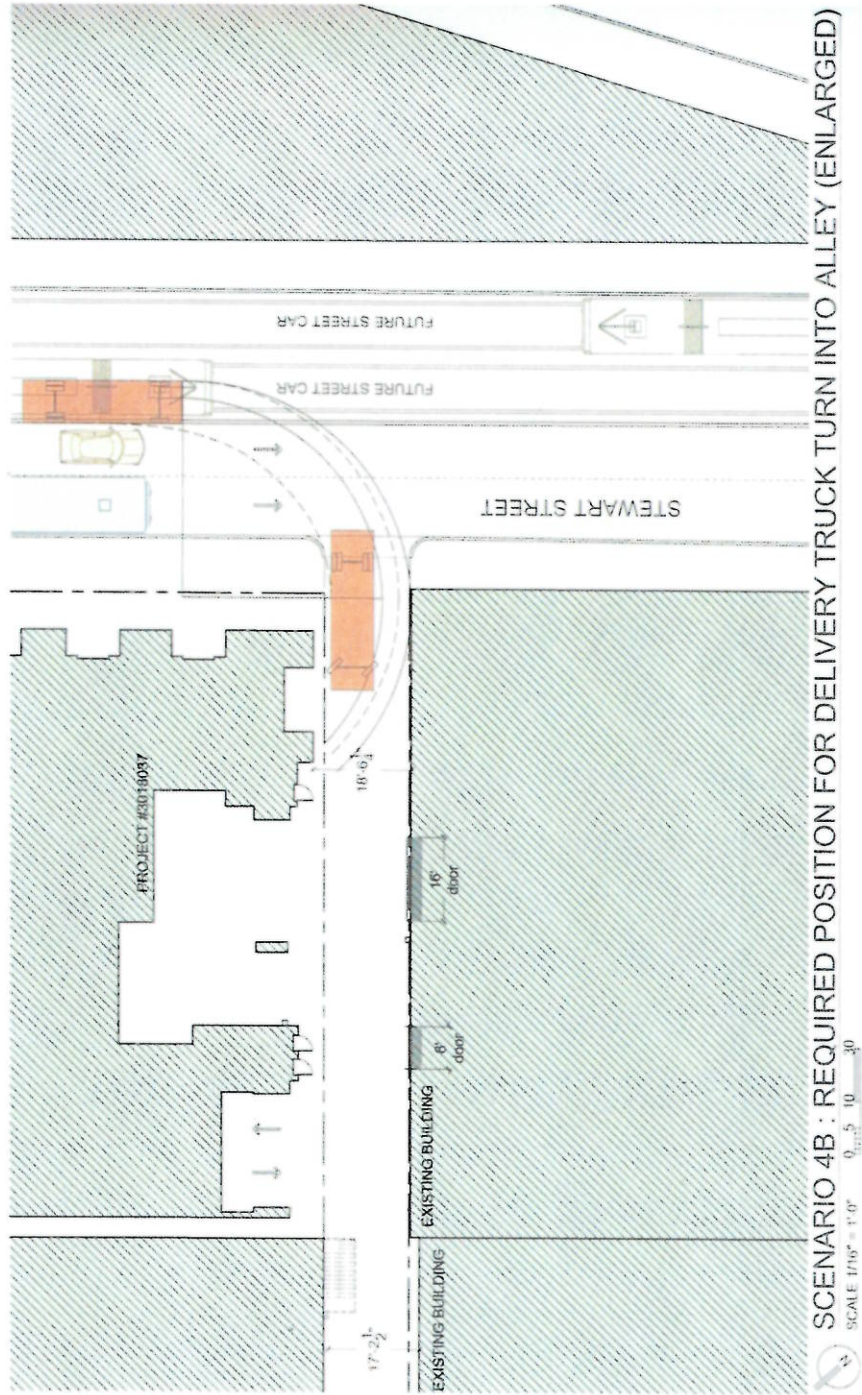
For more info: Ross Tilghman Testimony at MUP-17-035 hearing related to multi-lane wide turns into project alley from Stewart St. <https://www.seattle.gov/transportation/mup-17-035> Day 4, Part 3, Minute 35:40 to 36:22



SCENARIO 4B : REQUIRED POSITION FOR DELIVERY TRUCK TURN INTO ALLEY

SCALE 1/32" = 1'-0" 0 5 15 30

EXHIBIT E CLOSE UP OF REQUIRED POSITION FOR TRUCKS TURNING INTO PROJECT ALLEY FROM STEWART ST.



Issue #4: Poor building logistics and system designs will impede deliveries and extend delays.

In addition to **reducing the number of failed first delivery attempts**, the “Final 50 Feet” is focused on **reducing “dwell time”** which is the time delivery trucks are parked to load/unload. (Executive Summary p. 8) To reduce dwell time the report calls for better utilization of public and private loading space and smarter building design to quickly process deliveries. Altitude’s Plan Set 7 has neither.

Please consider Altitude’s delivery and loading choke points:

- **Easily blocked access to the Service Elevator:** As previously stated, when the 10’X35’ loading berth is fully occupied, access to the service elevator is blocked to deliveries from the other bays as well as from hand trucks approaching from the alley.
- A fully occupied 10’X35’ bay also **blocks access to the trash lift**, causing missed garbage collection and making it necessary to put Clean Scapes bags or garbage dumpsters in the alley where they hinder vehicle movement.
- Even if the 10’X35’ berth is open, **not locating the trash room on the ground floor and making it accessible only by elevator**, (Plan Set 7, A106) **increases time** for garbage collection which **in turn interferes with delivery trucks waiting for that single large berth**.
- **Likewise, locating the mailroom on the 6/F** (Plan Set 7, A1.11) at the far end of the hall from the service elevator **guarantees increased delivery delays** and longer “dwell times” in the loading berth or alley.

By comparison, the “Final 50 Feet” Executive Summary (p. 11) estimates that by **installing a smart locker system in the loading berth level** at another downtown mega tower, it would almost **eliminate failed first deliveries and reduce drivers’ delivery time in the building by 73%**.

- Finally, when a delivery driver successfully reaches the service elevator lobby, he or she **has access to only one of the building’s two service elevators**. That means **if the elevator has gone to deliver supplies to the top floors’ hotel, bars and restaurants, it will not soon return**, creating frustrations and delays on both ends. **As the funnel point for deliveries to 400 residents, a hotel and multiple bars and restaurants, the loading facility needs access to both service elevators.**

Conclusion

Altitude has opted to go bold by putting a massive tower on a relatively small footprint on a dense urban corridor. Pulling it off successfully for project investors *and* the neighborhood will require innovation and precise design to mitigate significant but avoidable impacts.

Instead of making implausible claims about minimal loading needs and asking for exceptions to reduce the length and number of its berths, the design team should consider requesting exceptions for ground floor retail requirements and lobby space. This could allow it to efficiently redesign the loading facility, install a dock and delivery lockers and accessibly locate vital mail and trash rooms on the ground floor.

Altitude is not alone on the block. It will be just one of three mega residential and mixed-use towers interspersed with older low and mid-rise buildings without self-contained loading and trash facilities. If not carefully planned, the cumulative impact of this density will effectively shut down circulation in the narrow alley on which all these buildings rely. That effect will ripple across traffic in the City Center.

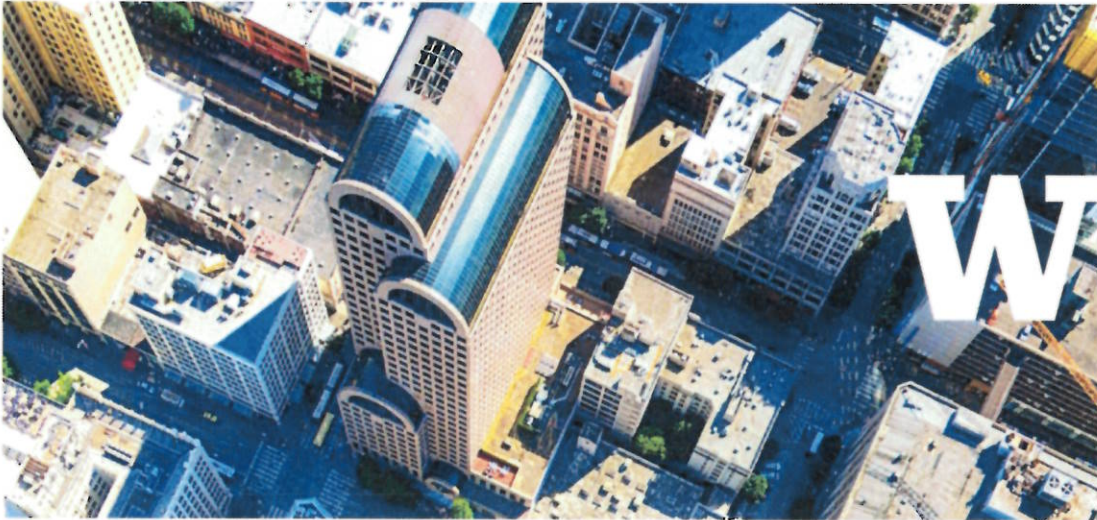
The “Final 50 Feet” report estimates 87% of downtown buildings currently rely on alleys and shrinking curb space to receive deliveries. That’s nearly at saturation point. With the “50 Feet” initiative, the City is proactively rethinking how it manages street curb parking and alley operations for trucks and other delivery vehicles. If all new buildings don’t join in this effort, what’s the point?

Altitude has the ability to contain its loading functions. Escala is asking that as SDCI reviews Plan Set 7 and future plans, it gives design direction to support the research and evidence-based solutions of the City’s “Final 50 Feet” initiative.

Thank you for your consideration.

Sincerely,

Megan Kruse
On behalf of Escala



THE FINAL 50 FEET OF THE URBAN GOODS DELIVERY SYSTEM

EXECUTIVE SUMMARY

The explosion of e-commerce and urban growth are driving innovation in the City of Seattle.

SUPPLY CHAIN TRANSPORTATION & LOGISTICS CENTER
UNIVERSITY of WASHINGTON
College of Engineering



A compound 20% annual e-commerce growth rate from 2018 - 2023 [1, 2, 3] will more than double goods deliveries (by a factor of 2.5) in 5 years. Without changes, this may double delivery trips. [4]

The explosion of e-commerce is shifting the retail landscape at the same time many U.S. cities are adding population and growing denser. Seattle and other major cities face increasing pressure due to the high demand for limited curb and alley space. The City of Seattle Final 50 Feet Program's strategic partnership with the Urban Freight Lab is a collaborative effort between the public and private sectors to improve freight delivery systems in our vibrant Center City neighborhoods.

Population, Job Growth in One Center City

There are 250,000 jobs in Seattle's Center City, including its downtown urban centers, and nearly 230,000 people commute in and out of it each day.

The City expects there to be 25,000 more households and 55,000 more jobs in Center City by 2035. [5].

E-Commerce Transforming Delivery System

Online shoppers' expectations are also rising: 61% expect orders placed by noon to arrive on the same day. 50% are willing to pay a premium for expedited shipping in order to save time, versus visiting physical stores. [6]

Over 8% of all U.S. retail sales - \$395 billion - took place online in 2016. Growth in U.S. online sales has averaged more than 15% year-over-year since 2010. [7]

This is causing the City of Seattle Department of Transportation (SDOT) to rethink how they manage street curb parking and alley operations for trucks and other delivery vehicles. It is also causing building developers and managers to react to the influx of online goods in urban towers.

How will Seattle's transportation system function when the volume of e-commerce deliveries doubles in the Center City? If e-commerce continues to grow at the historic rate and the city does not add 1 resident or worker, goods deliveries would double by 2022.

U.S. RETAIL SALES

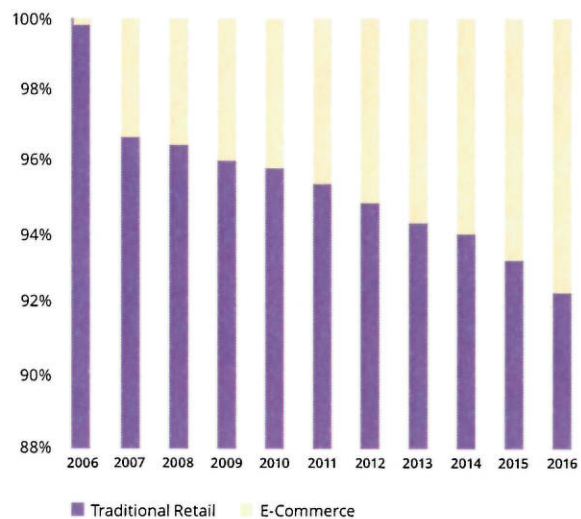


Chart based on data from U.S. Census Bureau. [7]

The role of Amazon and other retailers in this transformation cannot be overestimated. The total value of transactions by U.S. consumers on Amazon.com reached \$147 billion last year, a 31% increase compared with \$112 billion in 2015. [8]

Seattle has several innovative planning efforts underway to manage and improve transportation in the face of such growth. One Center City is a partnership formed by the City of Seattle, Sound Transit, King County, and the Downtown Seattle Association to build an integrated plan that makes it easier to get around and enjoy the Center City both in the near-term and over the next 20 years.

SDOT published Seattle's first Freight Master Plan in 2016. The plan recognizes historic growth and includes high-level policy recommendations and potential strategies to improve the urban goods delivery system.

SDOT partners with UW Urban Freight Lab

SDOT entered into a long-term strategic research partnership with the Supply Chain Transportation and Logistics Center (SCTL) at the University of Washington (UW) in 2016 to analyze the delivery system and provide data-based evidence of the impacts of the Freight Plan's proposed strategies, before they are widely adopted.

This partnership supported the formation of the Urban Freight Lab in the SCTL Center. The 5 founding members of the Urban Freight Lab: Charlie's Produce, Costco Wholesale, Nordstrom, UPS, and USPS committed funds and senior executives' time to the Lab, in large part because SDOT is engaging with them as equal partners to reach common goals.

Other cities have focused on enforcing truck parking codes without much success in changing behavior. By entering into a long-term strategic partnership with SCTL and industry partners, SDOT has demonstrated its interest in developing innovative, system-wide solutions to achieve their policy goals.

The city's willingness to pilot test and potentially adopt strategies that provide both public and private benefits was essential in attracting private sector firms to fully engage in the work.

The Urban Freight Lab uses a systems engineering approach to solve delivery problems that overlap the city's and business sectors' spheres of control. The Lab created a multi-year strategic research plan, partially funded by SDOT and partially by its members, to collect and analyze original data, and pilot test innovative approaches to solve the most important problems.

The Urban Freight Lab brings supply chain, transportation and logistics firms, retailers, building developers and managers, and technology firms into a well-defined work group to accomplish its goals. The Urban Freight Lab is a living laboratory where potential solutions are generated, evaluated, and then pilot-tested on real city streets. Members provide clear and open input as to whether proposed solutions are sustainable in their and other firms' business models.

The Lab recruited internationally-known urban goods delivery experts as external reviewers to provide critical assessments of the project's innovative approaches and methods. These representatives from the New York City Department of Transportation and City College of New York are helping the UW Lab build quality and scalability into the entire project process, so the research team can reshape interim efforts instead of waiting for a pass/fail judgment at the end.





There are 250,000 jobs in Seattle's Center City,
and nearly 230,000 people commute in and
out of it every day. [5]



The Final 50 Feet Research Project

The 'Final 50 Feet' of the urban goods delivery system is a new field of practical research in which city planners, traffic, building code, and parking professionals take action to make truck parking spaces more productive, and reduce the growth of truck traffic.

The Final 50' is shorthand for the supply chain segment that begins when trucks pull into a parking space and stop moving - in public load/unload spaces at the curb or in an alley, or in a building's loading dock or internal freight bay. It tracks the delivery process inside buildings, and ends where the customer takes receipt of their goods.

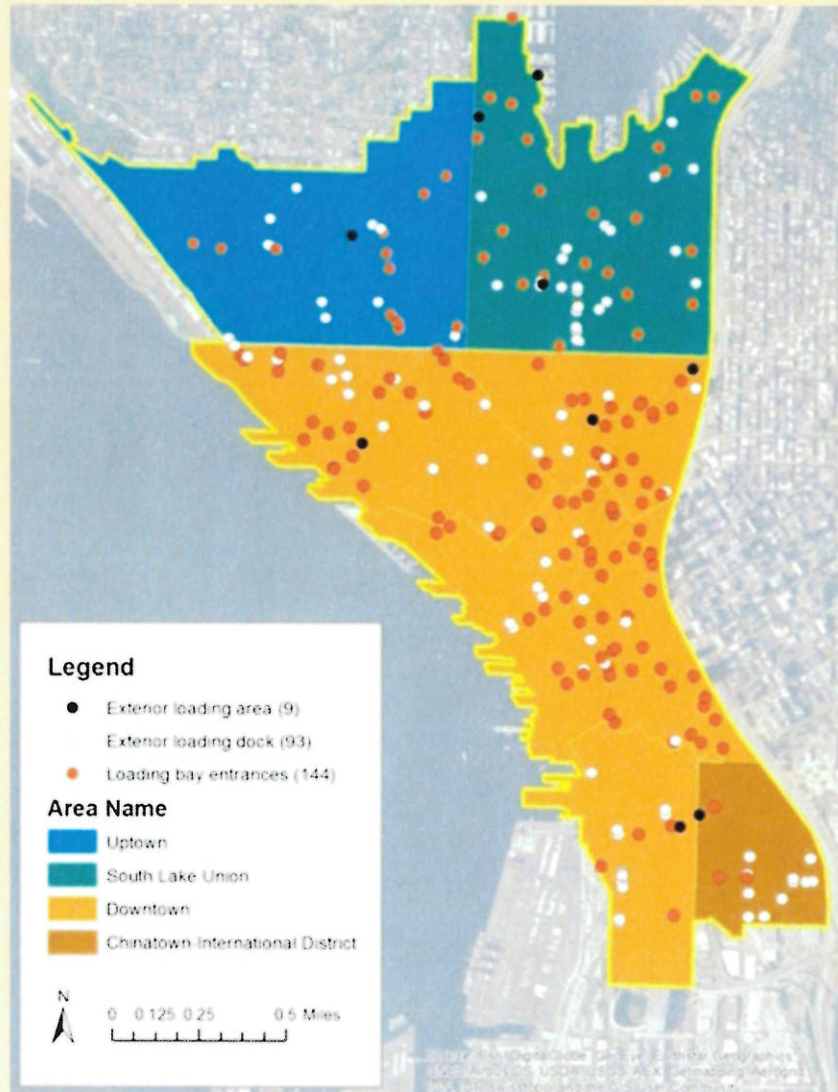
The Final 50' Program partnership with SCTL is the first time that SDOT and researchers have analyzed both the street network and the city's vertical space (office, hotel, retail and residential towers) as one unified goods delivery system.

Are Seattle's Truck Parking Spaces in the Right Places?

Because the urban goods network includes both public and private components, the first task in SDOT's Final 50' Program was to document the locations and features of all private truck load/unload spaces in Seattle's Center City. SDOT needed a comprehensive picture of the truck parking network to plan for the future.

City curb parking space, alleys, and private loading bays and docks are scarce and valuable. There is tremendous competition for this space. In addition to passenger drop-off zones and car parking, and Commercial Vehicle Load Zones for trucks to stop and make deliveries, the curb space, streets and alleys are used as streeteries (temporary food festivals and parks), for utility pole set-backs, signage, transit stops, bike lanes, to hold waste storage units, and more.

There was considerable value in collaborating with private sector members of the Urban Freight Lab on this task. Data collectors in the field initially identified 382 potential freight loading bays and docks in the 3 urban centers. However, in 127 cases the doors were closed during the survey and there was no way to tell if those locations were actually used for freight deliveries. UPS had their local drivers, deeply knowledgeable about city routes, review the closed door locations as part of their work in the Urban Freight Lab. The Urban Freight Lab provided photos and other location information. That review allowed the Lab to rule out 87% (110) of the locations behind closed doors, reducing uncertainty in the findings from 31% to less than 5%.



The research showed that in Seattle's Center City neighborhoods (downtown, uptown and South Lake Union) private loading bays and docks are scarce, forcing delivery drivers to park in public spaces. There are:

144

ENTRANCES TO
INTERNAL LOADING BAYS;

93

EXTERIOR LOADING
DOCKS; AND

9

EXTERIOR
LOADING AREAS.

Final 50' Program has Prioritized, Measurable Goals

SDOT and the Urban Freight Lab set two priority goals that offer both public and private benefits for urban goods deliveries.

#1

The first goal is to reduce the number of failed first delivery attempts. According to members of the Urban Freight Lab, the failed first delivery rate is over 15% in U.S. cities.

Failed first delivery attempts force delivery firms to take the package back out of the customer's building, re-process it, and try to deliver it again or truck it to an alternative delivery site.

There is a significant opportunity to eliminate thousands of truck trips in Seattle by reducing the number of failed first deliveries.

REDUCING FAILED FIRST DELIVERIES WILL:

- Lower traffic congestion in cities, as delivery trucks could make up to 15% fewer trips while still completing the same number of deliveries;
- Improve urban online shoppers' experiences and protect retailers' brands;
- Cut business costs for the retail sector and logistics firms;
- Cut crime and provide a safer environment for residents and workers;
- Improve an amenity that adds value at multifamily properties – the ability to ensure that their tenants can shop online and get their order when they expect it; and
- Ensure that all city neighborhoods can efficiently receive online orders, not just a few.

#2

The second goal is to reduce dwell time: the time a truck is parked in a load/unload space. The public and private benefits to reaching this goal are:

- Better utilization of public and private truck load/unload spaces will create more capacity without building additional spaces;
- Less block circling as spaces turn over more quickly;
- Room for other vehicles to move through alleys; In Seattle trucks can legally unload at both ends of the alley, but may block alley access to cars; and
- Lower costs for delivery firms, and therefore potentially lower costs for their customers.



87% of all of the buildings in downtown, uptown and South Lake Union must use the city's curb and alley space to receive deliveries. Only 13% have private loading bays and/or docks. [9]

Findings from 5 Real World Buildings

The second project task was to quantify and create maps of the Final 50' delivery process flows in and around 5 prototype city buildings in Seattle. The prototype buildings are:

- 1. The Seattle Municipal Tower, a 62-story office building;**
- 2. Insignia residential towers;**
- 3. The Dexter-Horton historic building;**
- 4. The Four Seasons hotel and condominium; and**
- 5. Westlake Mall retail center.**

The researchers then quantified delay in the process steps for the Seattle Municipal Tower to understand which improvement strategies will have the greatest payoff:

- Clearing security takes 12% of the total delivery time; and
- Looking for tenants and/or their locations, and riding the freight elevator took 61% of the total time.

SDOT Will Use the Research to...

The Final 50' Program partnership has enabled SDOT to:

- Take part in a well-defined working partnership with industry to analyze the goods delivery system, and plan to pilot test proposed delivery system solutions to verify their effectiveness;
- Obtain the locations and features of all of the privately-owned urban goods network in its urban centers;
- Understand the Final 50' delivery process flows in 5 prototype buildings in detail; and
- Identify which delivery process steps offer the greatest opportunity for improvement in and around one of the buildings: the Seattle Municipal Tower in downtown Seattle.

In the next phase of Final 50' Program research, the Urban Freight Lab and SDOT will pilot test promising improvement strategies in and on the streets around the Seattle Municipal Tower over four weeks in 2018.

SDOT may use this research to develop a network of the truck load/unload zones in high demand locations – just like they build bus stops into transit systems. The Final 50' takes into account privately-owned loading bays and loading docks inside and adjacent to buildings, as they are also part of the load/unload space network.

The Final 50' Program findings will be used to provide decision support to city officials and to private-sector firms managing scarce and expensive space in the City of Seattle, and may be used in other cities facing the same issues. By applying systems engineering and evidence-based planning, we can make receiving online goods as efficient as ordering them – without clogging city streets and curb space, or losing packages.



SCTL data showed that a smart locker system in the loading bay level of the Seattle Municipal Tower would reduce the time delivery people spend in the building by up to 73%. It would almost eliminate failed first deliveries and dramatically cut the mean truck dwell time in parking spaces serving the Tower.

References

1. Levy, Adam, "Amazon's North American retail sales increased 25.2% in 2016," Motley Fool, February 10, 2017, <https://www.fool.com/investing/2017/02/10/amazons-us-online-sales-growth-last-year-was-mor-2.aspx>
2. Deloitte Touche Tohmatsu Limited. "Global Powers of Retailing 2017: The Art and Science of Customers," <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/consumer-industrial-products/gx-cip-2017-global-powers-of-retailing.pdf>.
3. Molla, Rani and Jason DelRey. "Amazon's Epic 20-Year Run as a Public Company, Explained in Five Charts," Recode, <https://www.recode.net/2017/5/15/15610786/amazon-jeff-bezos-public-company-profit-revenue-explained-five-charts>.
4. Urban Freight Lab, University of Washington, 2017. A compound 20% annual e-commerce growth rate from 2018 - 2023 will more than double goods deliveries (by a factor of 2.5) in 5 years. Without changes, this may double delivery trips.
5. One Center City, accessed Dec. 1, 2017, <http://onecentercity.org/about>.
6. UPS, "Pulse of the Online Shopper," June 2016, <https://solutions.ups.com/ups-pulse-of-the-online-shopper/>.
7. U.S. Census Bureau News, "Quarterly Retail E-Commerce Sales Report," May 16, 2017, <https://www2.census.gov/retail/releases/historical/ecom/17q1.pdf>.
8. Zaroba, Stefany. "U.S. E-Commerce Sales Grow by 15.6% in 2016." Digital Commerce 360. February 17, 2017. Available: <https://www.digitalcommerce360.com/2017/02/17/us-ecommerce-sales-grow-156-2016/>.
9. Seattle Department of Transportation, 2017. These numbers were calculated using UW UFL data and Center City Quarter Scale Map Data. SDOT conservatively estimates 1100 buildings in that area, 144 with private loading docks as determined by the UFL.

PHOTO CREDITS

Barb Ivanov, UW SCTL Center, 2017, pg. 2 (top) and 6
Anna Alligood, UW SCTL Center, 2017, pg. 6
Christopher Eaves, Seattle Department of Transportation, pg. 4 and 8

ACKNOWLEDGEMENTS:

The authors thank the Seattle Department of Transportation for providing much more than project funding, in particular the leadership and policy support of Director Scott Kubly, Christopher Eaves, Jude Willcher, Mary Catherine Snyder and Meghan Shepard. The research team is also very grateful for the active involvement, thought leadership, and funding support from the current members of the UW Urban Freight Lab: Charlie's Produce, Costco Wholesale, Nordstrom, UPS and USPS.

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Appendix, 2

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April 16, 2018

Naomi Mason
Senior Land Use Planner
Seattle Department of Construction and Inspections
700 5th Avenue Suite 2000
Seattle, WA 98124-4019

RE: 5th and Stewart Hotel and Residential Mixed Use
1903 5th Avenue
Seattle, WA 98101
SDCI Project Number: 3018037

Subject: CYCLE 2 – ZONING REVIEW CORRECTION NOTICE 4

Dear Naomi:

Please find attached responses to your Zoning Correction Notice #4 dated March 8, 2018.

1. **Loading Berths.** Additional information is needed to verify compliance with loading berth requirements. The floor area chart on sheet G0.03 indicates there is 163,048 SF of lodging and 29,411 SF of retail/restaurant. Per SMC 23.54.035 Table A, this would require a total of 4 loading berths. Please clarify how the floor areas for loading berth calculations were determined. The information in the loading berth calculations on sheet G0.01 doesn't reflect the floor area details on sheet G0.03.

Response: Loading berth calculations have been updated to reflect revised Gross Floor Areas for Hotel Use (Low Demand); see sheets G0.01 and G0.04. (Please note that sheet G0.04 was added as part of the response to Cycle 2 Corrections for POTECH).

Total Gross Floor Area in Hotel Use (Low Demand) = 156,851 Gross Square Feet, i.e. < 160,000 GSF: Two (2) loading berths required.

Total Gross Floor Area in Restaurant/Bar Use (Medium Demand) = 29,647 Gross Square Feet, i.e. < 60,000 GSF: One (1) loading berth required.

Please note that the Gross Floor Area "G" (Column 5) in The FAR Summary on sheet G0.04 was updated to reflect actual exterior wall thickness based on 2015 Seattle Energy Code requirements. This accounts for the reduction in GSF shown in the table for all levels.

Also, for shared utility support spaces, e.g. transformer room and trash room (the mechanical floor was prorated in a previous revision), we have allocated GSF as follows (calculations are shown on sheet G0.04 at the bottom of the FAR summary):



23.54.035 - Loading berth requirements and space standards

A. Quantity of Loading Spaces.

1. The minimum number of off-street loading berths required for specific uses shall be set forth in Table A. (See Table A for Section 23.54.035.)
2. For uses not listed on Table A the Director shall determine the loading berth requirements. Loading demand and loading requirements for similar uses shall be considered in determining such requirements.
3. Existing deficits in the number of required loading berths shall be allowed to continue if a change of use occurs.
4. Uses shall be considered low-demand uses, medium-demand uses and high-demand uses, as follows. (See Table for 23.54.035 A.)
5. When a lot contains more than one (1) business establishment within the same category of low-, medium- or high-demand use, the square footage of the business establishments within the same category shall be added together in order to determine the number of required loading berths.

B. Exception to loading requirements

1. For uses with less than 16,000 square feet of gross floor area that provide a loading space on a street or alley, the loading berth requirements may be waived by the Director if, after review, the Director of Transportation finds that the street or alley berth is adequate.
2. Within the Downtown and South Lake Union Urban Centers and within the MPC-YT zone, loading berth requirements may be waived or modified if the Director finds, after consultation with and approval by the Director of Transportation, that the number of loading berths in Table A for 23.54.035 is not required and that the modified number will be sufficient. The applicant shall submit specific information addressing the following criteria, upon which the Director's determination shall be based:
 - a. All loading is proposed to occur on-site; or
 - b. Loading that is proposed to occur in a public right-of-way can take place without disrupting pedestrian circulation or vehicular traffic;
 - c. Additional evidence relating to the size, character and operation of the building and likely tenancy; and
 - d. Where loading occurs at a central loading facility, goods can be distributed to

other buildings on-site without disrupting pedestrian circulation or vehicular traffic.

C. Standards for Loading Berths.

1. Width and Clearance. Each loading berth shall be not less than ten (10) feet in width and shall provide not less than fourteen (14) feet vertical clearance.

2. Length.

- a. High-demand Uses. Each loading berth for a high-demand use shall be a minimum of fifty-five (55) feet in length unless reduced by determination of the Director as provided at subsection C2c.
- b. Low- and Medium-demand Uses. Each loading berth for low- and medium-demand uses, except those uses identified in subsection C2d, shall be a minimum of thirty-five (35) feet in length unless reduced by determination of the Director as provided at subsection C2c.
- c. Exceptions to Loading Berth Length. Where the Director finds, after consulting with the property user, that site design and use of the property will not result in vehicles extending beyond the property line, loading berth lengths may be reduced to not less than the following:
 - (i) High-demand Uses. Thirty-five (35) feet when access is from a collector arterial or local access street; and forty-five (45) feet when access is from a principal or minor arterial street;
 - (ii) Low- and Medium-demand Uses. Twenty-five (25) feet.
- d. Multipurpose convenience stores, sales, service and rental of major durables, and specialty food stores may be required by the Director to increase the length of required loading berths; however, these uses shall not be required to provide loading berths in excess of fifty-five (55) feet. The review of loading berth length requirements for these uses shall focus on the size of vehicles that frequently serve the business and the frequency of loading activity that will extend beyond the lot line during daytime hours (six (6:00) a.m. to six (6:00) p.m.). Large-truck loading occurring on a daily basis shall generally

Appendix, 4



26 September 2017

Michael Dorcy
Seattle Department of Construction and Inspections
P.O. Box 34019
Seattle, WA 98124-4019

Via email: prc@seattle.gov
re: MUP #3018037

Dear Mr. Dorcy:

I appreciate the opportunity to comment on the 1903 - 5th Avenue Development Addendum to the FEIS for the Downtown Height & Density Changes, MUP #3018037. My comments address transportation problems stemming from the project's use of the alley, its relation to other plans and projects in the immediate area, and the adequacy of the analysis.

Overview -- The Too-Narrow Gateway to the Block

The 1903 – 5th Ave. tower will effectively become the gateway to the alley serving the block that it would share with the Centennial Building, Escala, the Avis Building, and the proposed 5th & Virginia apartment/hotel tower. Based on loading bay designs for the new towers, trucks will have to enter the alley from Stewart and exit to Virginia. Their ability to pass through the alley without hindrance will be crucial to reliable deliveries and essential services including garbage collection. The ability for residents' cars to pass unhindered will be crucial both to their safety and quality of life. Unfortunately, the Addendum neither fully recognizes that gateway role nor evaluates the consequences of an inadequate gateway with the too narrow alley, the project's limited setback and its deficient loading bay design.

The Addendum – An Inadequate Document to an Out-Dated EIS

The transportation analysis contained in Appendix J and summarized in the Addendum's text presents little new work to evaluate the project's impacts, relies heavily but selectively on the work of others, and concludes that no new significant unavoidable adverse impacts would occur. This Addendum fails in its obligation to identify, evaluate and mitigate significant transportation impacts. Comparisons of newly projected traffic operations to those evaluated in the Downtown EIS become nearly meaningless in light of significant changes to the analytical tools used, to the unanticipated changes in area land use especially regarding multiple towers on single blocks, growth in South Lake Union, and to the street network with planned bike, transit and streetcar projects, not to mention redistribution of SR-99 traffic with tunnel tolls.

Tilghman Group
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1. **The Addendum overlooks significant unavoidable adverse impacts that were not anticipated or disclosed in the old Downtown Height & Density Changes EIS.** The claim that none would occur is made in the context of the Downtown EIS's limited focus on streets and major intersections. Alleys were not included in the Downtown EIS's scope, yet the 1903 – 5th Ave. project will create significant unavoidable impacts in the alley and at its intersection with Stewart Street. It is precisely because the Addendum ignores the consequences of a narrow alley mid-block and at the Stewart intersection that it finds no adverse impacts. Examples of how the analysis could have established a significant impact include:
 - a. The fact that the project causes LOS F at alley/Stewart intersection. The study acknowledges that result but then dismisses it as somehow commonplace and therefore trivial. *"Poor operations are common for unsignalized intersections in the downtown core, and vehicles may have to wait on the alley for pedestrians and main street traffic to clear. No mitigation is recommended for the alley intersections."* (Appendix J, p. 27). This repeats the case advanced by the 5th & Virginia project on the same block of creating a false equivalence with other downtown alleys and driveways that do not carry anything like the 2,000 trips per day this alley would. Consequences from such poor traffic operations could have easily been identified, but were not. For example:
 - i. The study does not indicate how long vehicles have to wait. Long delays at the alley will cause drivers exiting the alley to nose into traffic, blocking the sidewalk.
 - ii. Even though the study shows an increase of nearly 3,000 pedestrian trips daily, it fails to show how many pedestrians will cross the alley, and whether conflicts will arise between pedestrians and vehicles. Vehicles blocking the sidewalk forces pedestrians to walk around them, even between vehicles, creating unnecessary safety risks.
 - iii. Vehicles waiting to exit will block those trying to enter the alley since its width is too narrow to allow two-way flow. That delay will block one of the two future lanes on Stewart, backing up to create poor conditions such as more crosswalk blockages at the nearby 5th/Stewart intersection.
 - b. Conducting direct observations of the alley traffic and fully incorporating findings from others (Transpo and Tilghman Group) who have observed alley operations. Although the Addendum's authors appear not to have made any direct observations of alley traffic, they note the Transpo and Tilghman observations to the effect that *"...If a truck was parked, other vehicles would have to back up in the alley and use an alternative route."* (Appendix J, p. 12). They fail to describe what exactly an alternative route entails in a blocked alley — they need to say that it means vehicles back across the sidewalk into the street, a major safety problem. The report goes on to say of my findings on alley operations that *"...the results are similar and consistent with the findings presented in this report."* (Appendix J, p. 13). The Addendum didn't present any new findings, it only reiterated Transpo's work, nor did it elaborate on the full range of my findings, especially ones related to safety and the potential for vehicles to become trapped midblock.
 - c. Noting that the alley's narrowest point is just a nominal 16 feet wide (with the actual width being 15'2" due to protrusions from buildings), the Addendum could have discussed the consequence of adding traffic to that narrow segment, pointing out that vehicles cannot pass one-another, so that a truck or car departing 1903 – 5th Ave.'s loading area or residential garage would not be able to proceed if a vehicle is coming in the opposite direction. Nor did

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the Addendum go on to acknowledge the dumpsters and drainpipes that further narrow the alley's effective width to approximately 12 feet.

2. **The proposed mitigation actions are fig-leaf measures, missing the mark in addressing alley congestion, two-way circulation conflicts, and pedestrian safety at alley intersections.** Basically, the recommendations are disingenuous and ineffective.
 - a. The disingenuous recommendation to post "No Stopping or Standing" signs in the alley obliquely acknowledges the potential for trucks to block the alley, but completely overlooks the fact that many trucks have no choice but to stop in the alley, and that such stops block other vehicles. Trucks also have the right to remain for 30 minutes, so it is difficult to see how this action can be deemed effective or even consistent with current code.
 - b. Suggestions to find more on-street loading areas around the block ignore the reality of that potential given the streetcar design for Stewart that removes the parking lane, the proposed new bike/transit lanes on 4th Ave., the existing transit layover on Virginia, and very limited parking on 5th Ave. This measure initially sounds sensible but simply isn't practical given changing street functions surrounding the block.
3. **Important parts of the analysis are missing.** Missing items include:
 - a. An analysis of truck turning movements at loading bays. The bays appear to be just shy of a 90-degree turn (roughly 78 degrees). Given the alley's narrow (and nominal) 18-foot width trucks will face very difficult maneuvers to enter and exit the bays. Truck movements need to be shown in the context of actual alley conditions, including nearby dumpster locations.
 - b. An evaluation of truck turning paths in and out of the alley at Stewart Street to identify encroachment potential and pedestrian safety needs.
 - c. Any assessment of new protected bike lanes on 4th Ave on traffic, parking and loading zones affecting this block. The analysis should incorporate those changes.
 - d. LOS worksheets to verify assumptions regarding intersection lane configurations, signal timing, bike and pedestrian volumes and other relevant factors.
 - e. Any analysis of corridor level of service, which the Downtown EIS had performed. The rather favorable intersection LOS results belie the problems with back-ups affecting Stewart, Virginia, Olive and Howell, among other surrounding streets.
 - f. A construction mitigation plan to keep the alley open to maintain garbage collection, deliveries and parking access to other properties.
4. **Important assumptions differ significantly from those used in the 5th & Virginia SEPA documents.**
 - a. The Addendum used a residential trip generation rate 28% lower than the 5th & Virginia rate. That difference should be explained and justified. It amounts to 165 fewer daily vehicle trips for the preferred alternative (1B). The city and public should expect greater consistency in this sort of analysis for similar projects on the same block.
 - b. Differences in traffic distribution exist between 1903 – 5th Ave. and the 5th & Virginia studies, with 1903 – 5th Ave. assuming less I-5 use and more local street use to and from the northwest. The difference is about 2 to 1. This difference should be explained and justified.
 - c. Odd differences between the studies show up in future traffic volumes, especially on Olive Way at 5th, 6th and 7th. While generally very similar for existing traffic, 1903 – 5th Ave.'s numbers are much lower for future conditions on Olive Way, even below existing volumes. Based on the forecast methods described in the report, that shouldn't be

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possible. The report relies on volumes prepared by others for a SDOT sponsored examination of downtown signal timing that may or may not accurately account for all of the known development in the site's vicinity. The validity of those projections should be fully explored and justified.

5. **Hotel operations should be more fully described and relevant trip rates should be applied.** The hotel trip discussion cites data from two very small samples collected nearly 20 years ago that hardly compare to the proposed hotel. One sample comes from a much smaller boutique hotel, and the other from a smaller hotel that is not even located downtown. Despite citing these old sources, the report goes on to use an assumed trip rate that was applied to a new and very different type of hotel, one that is 6 times larger with major conference facilities and is not yet open. The report does not describe what meeting facilities the 1903 – 5th Ave. hotel will offer, yet the site plan shows some meeting rooms and a private restaurant room, so it's possible some independent events could be held there. The Addendum should describe more fully the hotel's target guest and meeting market, and then provide more relevant trip generation examples from comparable downtown Seattle hotels, many of which have opened in recent years. To the extent that more active meeting facilities are planned, additional vehicle trips and truck deliveries could be expected.
6. **Loading and delivery operations should be more completely described for the project...** While the Addendum notes the type and number of daily deliveries expected for the hotel, restaurants and apartments, it offers a very cursory and misleading discussion of truck sizes and their maneuvering abilities. For example, the text reports that the largest truck to service the hotel would be the linen truck at 26 feet in length, but it does not describe the size of truck that would deliver produce or beverages to the restaurants. City code allows a 30-foot single unit truck to operate downtown during the workday, a size that is typical of beverage delivery vehicles, as shown in the accompanying photo. Does the applicant mean to guarantee that only smaller vehicles will service the project? And how would that guarantee be provided? It's not credible to think that only the smallest of potential trucks would arrive.

The project's design adversely affects loading by locating the mailroom on the tower's 6th floor. Mail and package delivery personnel will need extra time going up and down from the loading bay to the mailroom, extending the time parked in the bay or in the alley.



SU-30 delivery truck with lift gate

...and for Escala. The report does not fully recognize Escala's existing and on-going loading needs. Escala's deliveries occur in the alley because its loading area does not accommodate trucks larger than small vans. Building logs show that a wide variety of deliveries serve the building with seven package carriers daily: UPS, USPS, Fed Ex Ground, Fed Ex Express, DHL, Amazon, On Track. Some of them make two trips per day. Additionally, recycling and trash collection occurs twice weekly for up to 25 minutes (all dumpsters are placed in the alley ahead of time). Other truck loading includes Good Will two to three times a week for up to

15 minutes; styrofoam pickup twice monthly; compost collection weekly; miscellaneous supplies twice a week; and catering vans for events two to three times a week.

Finally, residential move-in/move-out occurs. The Addendum noted another firm's observation of a long (3-hour) alley blockage due to a moving truck, but sought to dismiss that occurrence by showing how taking its time out of the calculation lowered the average blockage time. The point the Addendum sought to dismiss is that the 3-hour blockage recurs almost monthly and is an absolute impediment to alley circulation. 1903-5th Ave.'s own residential moving needs also threaten to block the alley, despite future management's best efforts to advise residents of appropriate truck sizes and loading times. The analysis should indicate the frequency of residential moves for 300 apartment units given typical tenure and turnover rates for downtown apartments. And it should indicate how alley operations would work with its traffic when other buildings' moving vans use the alley.

7. **The transportation report should demonstrate that trucks would not encroach on the alley when using the loading bays.** The Addendum fails to describe the loading facility but the site plan shows a loading bay, not a loading dock. Unlike a dock, a bay requires a truck to use a ramp or lift-gate to deliver and load goods. As the photo above shows, a lift gate adds significantly to the truck's length and requires additional room behind the lift to move goods on and off of it. The proposed 35-foot bay depth does not allow a SU-30 truck to load or unload without encroaching in the alley.
8. **The analysis should incorporate known plans for the streetcar and 4th Avenue bike and transit lanes.** The Addendum is curiously vague about the details of the streetcar alignment on Stewart Street, despite that project being almost fully designed when the Addendum was issued. The Addendum needs to acknowledge the shift in traffic lanes and the resultant loss of parking on Stewart, as well as the difficulty that shift imposes on vehicles turning into the alley from the curb lane. It also needs to update its LOS calculations for 4th Avenue to reflect the change in lane assignments with addition of protected bike lanes and dedicated transit lanes, and to discuss the resulting loss of parking and loading along 4th Ave.
9. **The analysis should more carefully consider where ride-sharing services would be likely to pick up and drop off passengers along the project's frontage.** The location of a separate residential lobby on Stewart could be expected to generate demand for loading on Stewart, despite the loss of parking there.

Sincerely,



Ross Tilghman

Appendix, 5

Impediments to Alley Circulation



Dumpsters and Recycling Bins

Current Scheduled Collection:

- Trash – 1 day/week (Mondays)
 - Recycling – 2 days/week (Mon & Thurs)
 - Compost – 1 day/week (Wed night)
- Collections: 4 times/week

Reduce effective alley width by 4' to 5'



Recycling bins positioned as directed by Clean Alleys Program



Impediments to Alley Circulation



Fixed Encroachments in the Alley's Right-of-Way

- Electrical and Communications conduits and panels

Protrude 4" to 6" from building wall



- Mechanical/ventilation ducts
- Electrical conduits and panels

Protrude up to 12" from building wall

Impediments to Alley Circulation



Recurring Maintenance Uses

- Window Washing – Quarterly at Escala
- Building inspection, maintenance and repair

Overhead scaffolding operated from alley



Impediments to Alley Circulation

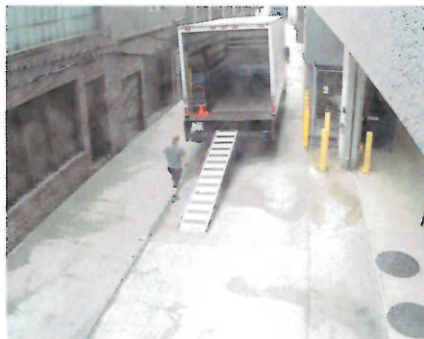


Trucks Loading in the Alley

- Lack of curb-side loading space forces trucks to use alley, especially for Times Square Building across Stewart Street



- Contractors park in alley for access to back-of-house when loading bays occupied or inaccessible



- Escala moving vans have no choice but to operate in the alley. No other trucks can pass at this time.

Duration ranges from 1 to 3 hours.

Impediments to Alley Circulation



Trucks Loading in the Alley (continued)

- Mail and package delivery trucks use alley at Escala
- Multiple deliveries can occur simultaneously
- No space left for other trucks to pass

Duration up to 20 minutes



Impediments to Alley Circulation



Trucks Loading in the Alley (continued)

- Garbage Collection
- No space left for other vehicles to pass
- Note lack of clearance at Avis building fire escape

Existing duration up to 20 minutes

Appendix, 6

On March 8, 2018 Ross Tilghman gave testimony at a hearing for MUP 17-035, a proposed tower that would share the alley with Altitude. His remarks relating to trucks encroaching on the sidewalk when turning from Stewart into the project alley can be heard at:

<https://web6.seattle.gov/Examiner/case/MUP-17-035> Day 4, Part 3, starting at 36:30 minutes through 37:12 minutes

On the same day, Ross Tilghman's testimony at the MUP-17-035 hearing related to multi-lane wide turns into Altitude's project alley from Stewart St can be heard at:

<https://web6.seattle.gov/Examiner/case/MUP-17-035>
Day 4, Part 3 Starting at 35:40 minutes through 36:22 minutes

April 8, 2019

To: PRC@seattle.gov
Crystal Torres, Senior Planner

Re: Comments on #3018037
Plan set posted on 4/1/19
Altitude at 5th & Stewart

Greetings Crystal,

Altitude's latest plan set posted on April 1, 2019 continues to significantly short the square footage of its 50/F and 51/F bar and restaurant space. Under-representing this footage allows the project to avoid a fourth loading berth. This is a problem because it already lacks enough ground floor infrastructure to support a hotel, residential complex and almost 15,000 sf of restaurant, bars and retail. (Exhibits 1, 6, 7)

If the project is too big for its footprint it should be redesigned, not granted departures and waivers that will lead to traffic and safety hazards for alley neighbors, pedestrians and vehicles on surrounding streets.

Following are annotated pages of the latest plan set showing the discrepancies and omissions in identifying and counting restaurant and bar square footage. The main points are:

- 1) The diagram on G003 shows an outline of chargeable space for the 50/F restaurant/bar but omits the 1,250 sf lobby lounge shown on A123. Bar space is identified in the 50/F berth calculations on G001 and that would be the lobby lounge. The lounge is contiguous with the area marked for dining and is not separated by a wall or door. (Exhibits 1, 2, 3)
- 2) The covered outdoor terrace next to the 51/F rooftop bar/kitchen on A124 is not included on the G003 51/F diagram showing square feet chargeable for loading berths. The covered terrace is adjacent to the area labeled "indoor seating" on A124. It's accessible only through the bar/kitchen's indoor seating area, which implies the covered terrace is the bar/kitchen's outdoor seating. Even if this 2,742 sf space is used seasonally for food and beverage service, it must be counted in G001 berth calculations. (Exhibits 1, 4, 5)
- 3) Together the 1,250 sf lobby lounge on the 50/F and the 2,742 sf of covered terrace missing on the 51/F calculations add 3,992 sf, bringing the project's total bar, restaurant and retail chargeable space to 12,670 sf. Anymore than 10,000 GSF for these uses requires adding another berth. (Exhibit 1)

The bar and restaurant calculations have been shorted in previous plans and we've not seen this issue addressed in any correction letters. Is there any reason the bar/restaurant space we've identified would not be counted and has the project been granted any loading berth departures or waivers?

Thanks for your consideration.

Sincerely,

Megan Kruse
On behalf of Escala

LOADING BERTH CALCULATIONS

Altitude at 5th & Stewart #3018037

Loading Berth Requirements (Per SMC 23.54.035 Table A)

EXHIBIT 1: 4/1/19 Loading Miscalculations

Low Demand: Hotel/Hotel Support

Floor	GSF	Use
1	5,817	Hotel Lobby, Loading Area
6	1,647	Transformer Room
33	4,110	Mechanical Hotel
34-52	190,860	Hotel Guestrooms/Hotel BOH
Total	202,434 SF	

Altitude continues to grossly misrepresent its chargeable square footage for loading berth requirements.

Exhibits 2-4 show restaurant and bar space that has not been counted that require a fourth berth.

160,001-240,000 GSF: Three (3) Loading Berths Required

None of the project's current 3 berths will hold the trucks for which they are intended.

Medium Demand: Hotel/Hotel Support

Floor	GSF	Use	
1	1,953	Street Level Retail	1,953 sf (unverified)
50	3,800	Restaurant Bar	→ 5,005 sf (additional 1,205 sf lobby lounge bar seating)
51	2,970	Rooftop Bar	→ 5,712 sf (additional 2,742 sf covered terrace seating)
Total	8,723 SF	TOTAL	→ 12,670 sf

THIS PROJECT IS TOO BIG FOR ITS FOOTPRINT.

<10,000 GSF: Zero (0) Loading Berth Required

<10,000 GSF: 1 Loading Berth Required

~~Three (3) Total Loading Berths Required:~~ **Four (4) Total Loading Berths Required**

~~One (1) @ 35'-0"~~

Four (4) @ 35'-0"

~~Two (2) @ 25'-0"~~

23.54.035 - Loading berth requirements and space standards

23.54.035C. Standards for Loading Berths.

1. Width and Clearance. Each loading berth shall be not less than ten (10) feet in width and shall provide not less than fourteen (14) feet vertical clearance. **Previous submissions show even standard vans extend from Altitude's 25' berths into the alley right of way. 30' trucks will extend midway into the alley.**

2. Length. **a. Low- and Medium-demand Uses.** Each loading berth for low- and medium-demand uses, except those uses identified in subsection C2d, shall be a minimum of thirty-five (35) feet in length unless reduced by determination of the Director as provided at subsection C2c.

c. Exceptions to Loading Berth Length. Where the Director finds, after consulting with the property user, that site design and use of the property will not result in vehicles extending beyond the property line, loading berth lengths may be reduced to not less than the following:

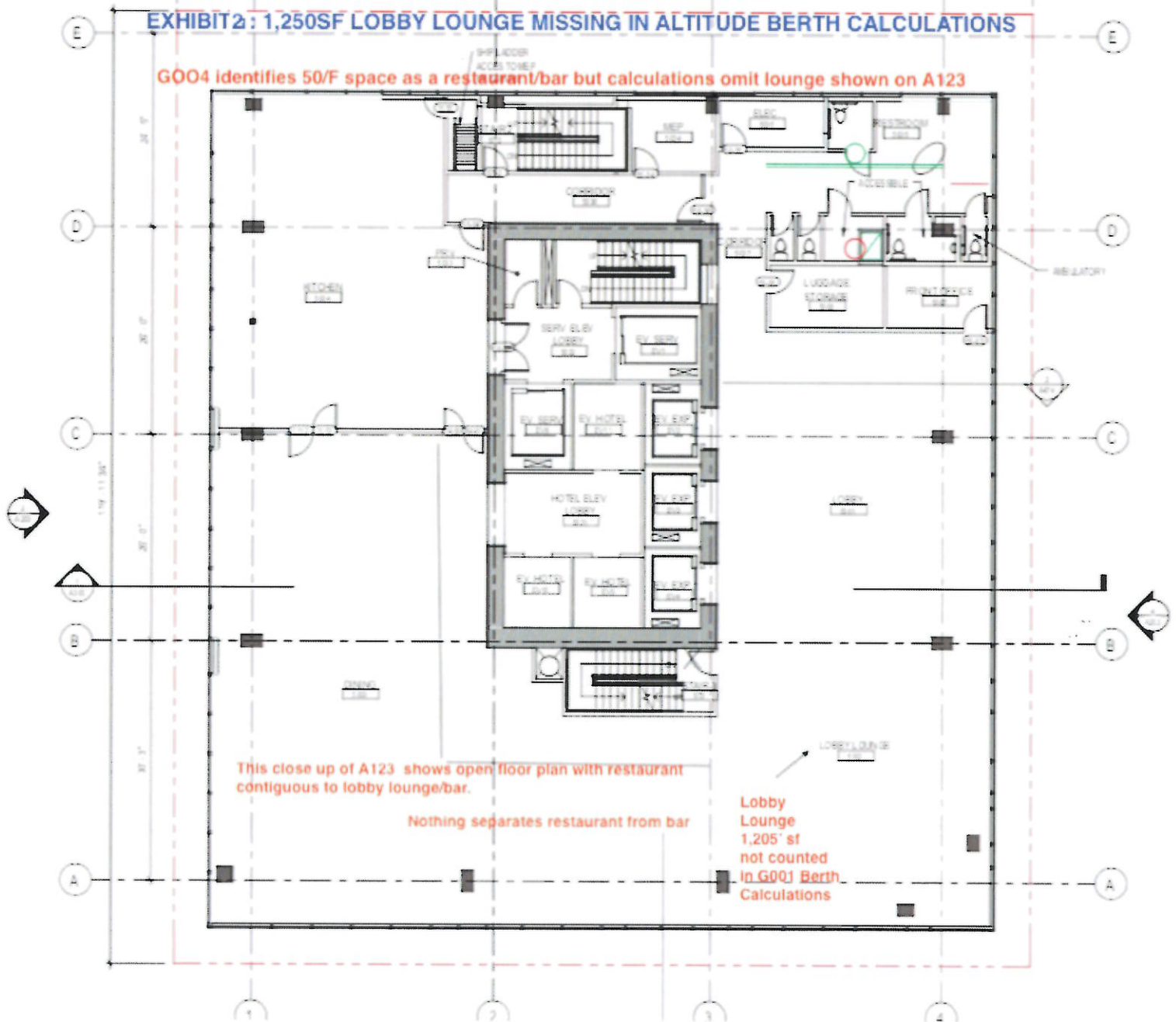
(ii) **Low- and Medium-demand Uses, Twenty-five (25) feet.**

HAS A LENGTH EXCEPTION BEEN GRANTED?

The hotel will have deliveries for food, beverages, linen/laundry, cleaning supplies, guest supplies and office supplies on a regular basis with occasional deliveries for maintenance and equipment. With the exception of linens, all deliveries will be provided by vendors with trucks of 25' in length or less. Linen supplies may come in a truck 26' in length and will be delivered after 10pm.

The same vendors with standard trucks will serve Altitude's neighbors. It's ridiculous to think they will use a special truck at night to serve Altitude.

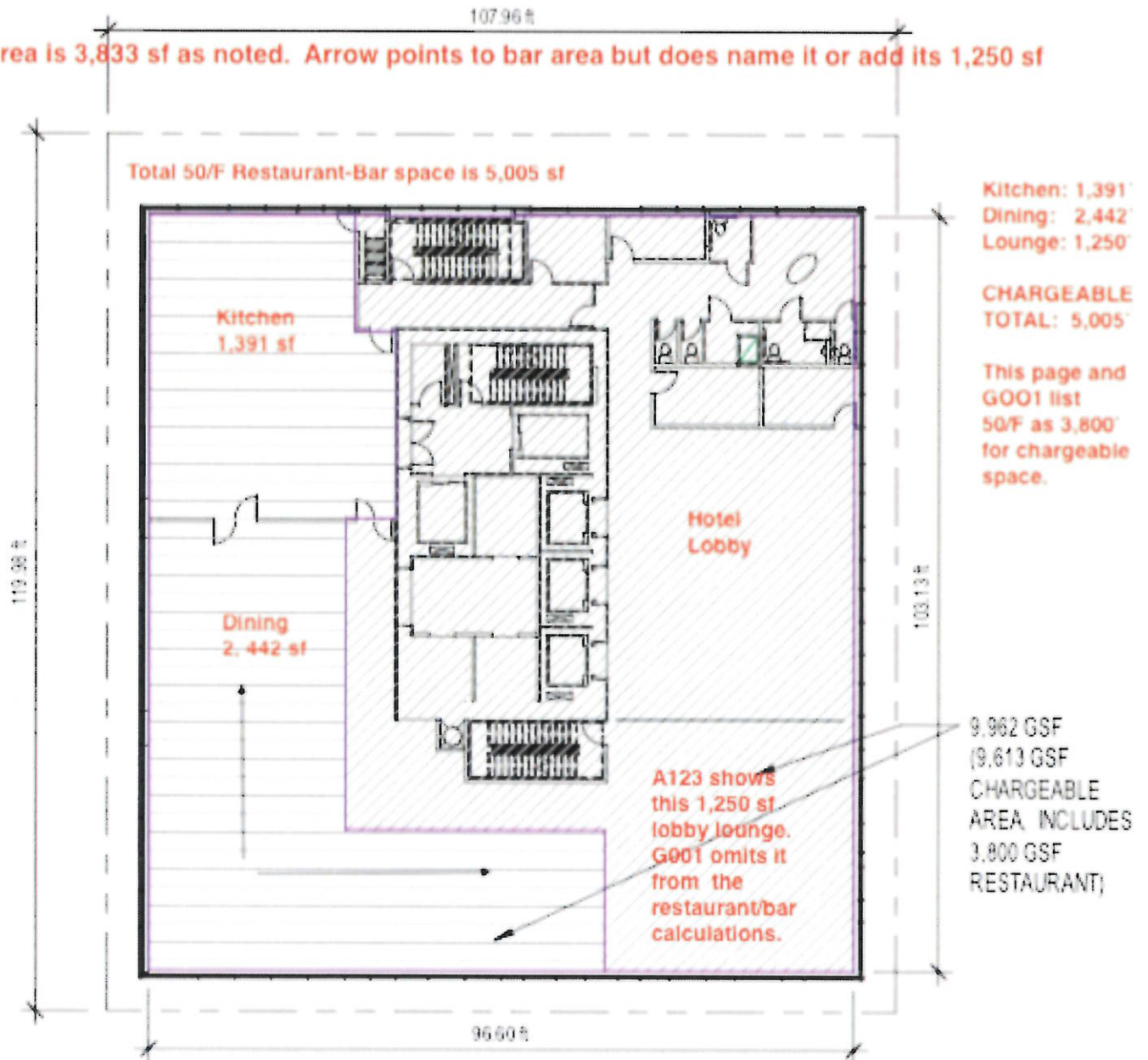
G004 identifies 50/F space as a restaurant/bar but calculations omit lounge shown on A123



SCALE: 3/64" = 1'-0"

EXHIBIT 3: G003 Chargeable Area Diagram omits SF for 50/F bar/lounge

Lined area is 3,833 sf as noted. Arrow points to bar area but does not name it or add its 1,250 sf

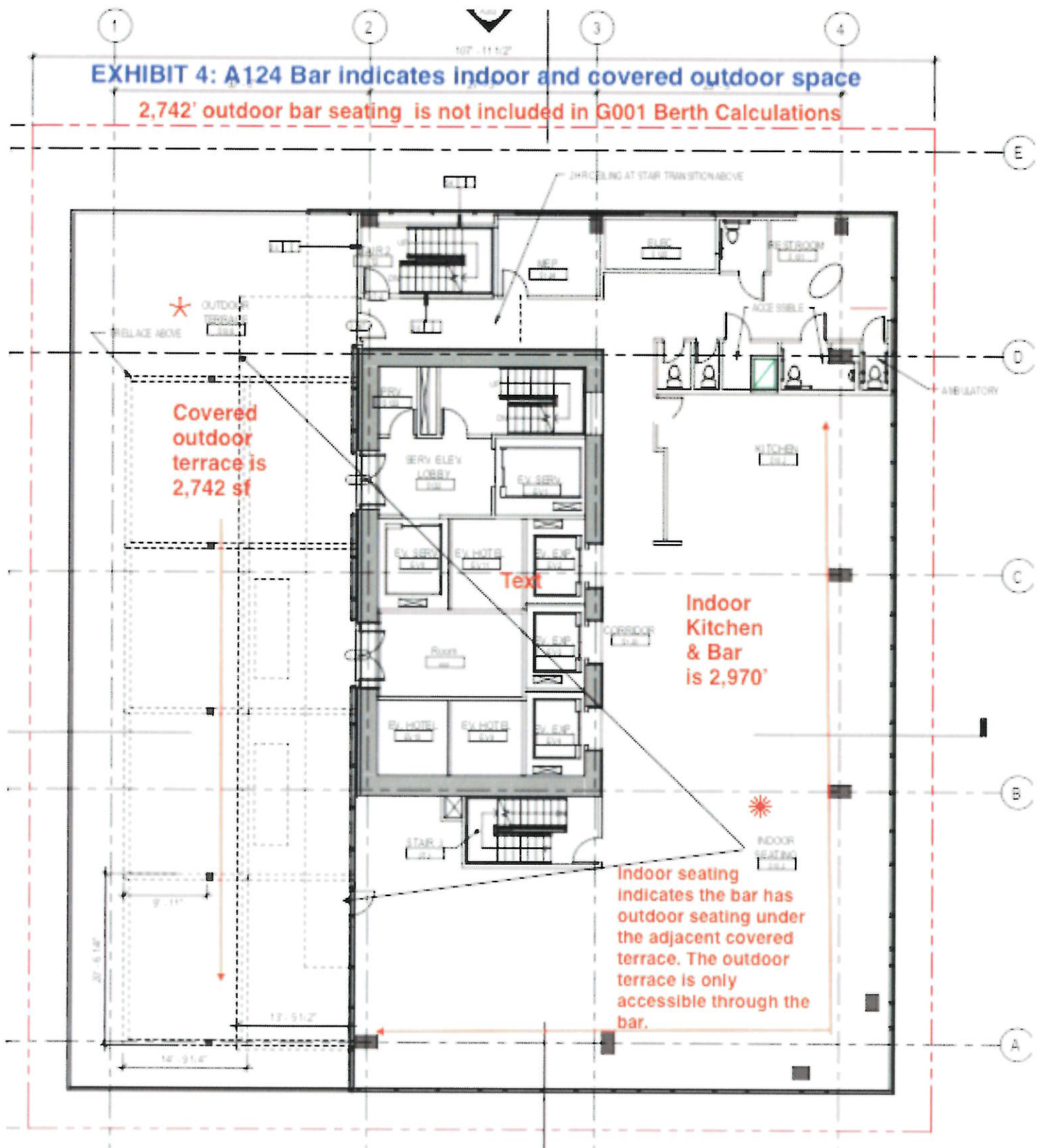


LEVEL 50 HOTEL LOBBY

SCALE: 3/64" = 1'-0"

EXHIBIT 4: A124 Bar Indicates Indoor and covered outdoor space

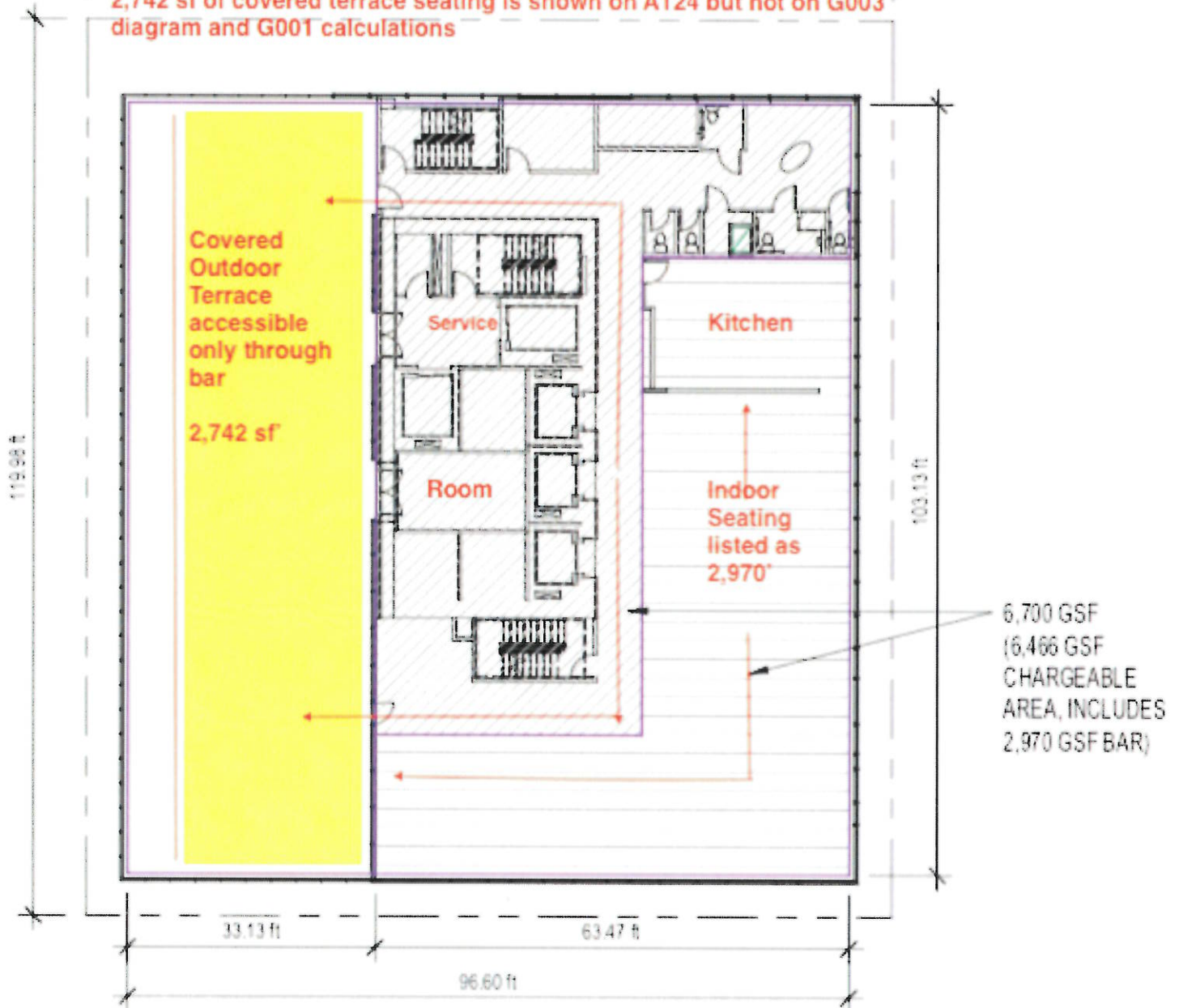
2,742' outdoor bar seating is not included in G001 Berth Calculations



107.96 ft

EXHIBIT 5: G003 Chargeable Area Diagram omits SF for 51/F Bar outdoor seating

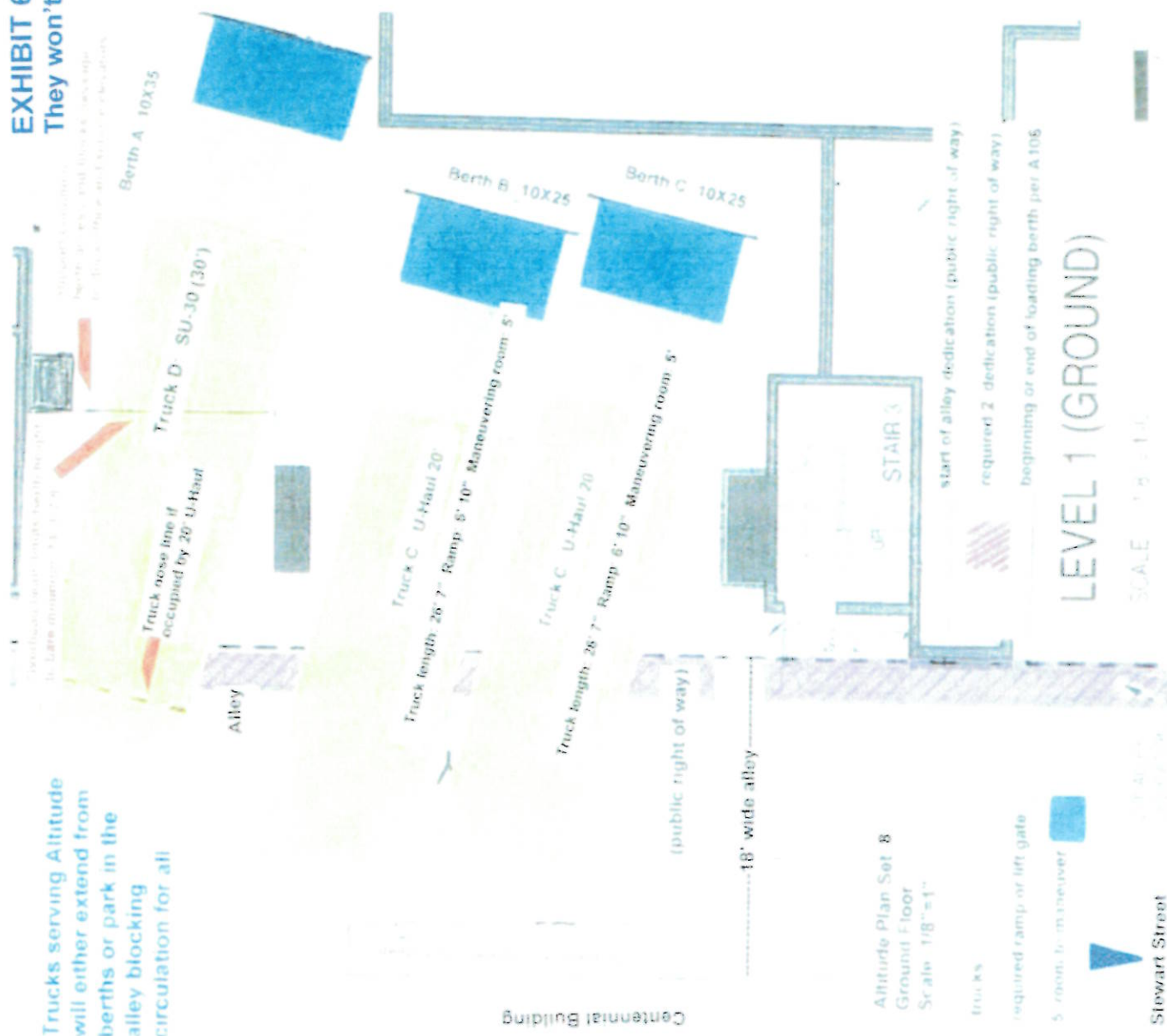
2,742 sf of covered terrace seating is shown on A124 but not on G003 diagram and G001 calculations



LEVEL 51 - RESTAURANT/BAR

SCALE: 3/64" = 1'-0"

EXHIBIT 6: 25' berths won't hold a 25 ft truck. They won't even hold a 15' U-haul (See next page)



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- Altitude claims with no proof that a truck larger than 26' serving the rest of downtown won't deliver to its tower. However even a 26' truck won't fit in its 35' berth.
- If any size truck occupies the 35' berth it blocks access to the trash and garbage
- No garbage niche on the alley means tower bins and dumpsters will line the alley on collection day, blocking access
- A new support post and overhead beam create access problems for the 35' berth
- If one of the 25' berths is occupied, there's not enough berth or alley width for another truck to access the adjacent berth

- If any size truck occupies the 35' berth it blocks access to the trash and garbage

- No garbage niche on the alley means tower bins and dumpsters will line the alley on collection day, blocking access

• A new support post and overhead beam create access problems for the 35' berth

• If one of the 25' berths is occupied, there's not enough berth or alley width for another truck to access the adjacent berth.

LEVEL 1 (GROUND)

Stewart Street

EXHIBIT 7: 25' berths won't contain a 15 ft. U-haul

How can this project design serve a hotel, residential complex with almost 15,000sf of restaurant, bars and retail?

