



MEMO

To: John Shaw, SDCI
David Landry, SDCI
Angela Wallis, SPU
Clayton Scott, SPU

cc: Rick Aramburu

From: Ross Tilghman

Date: 2 December 2022

Subject: 2033-4th Avenue, MUP #3038668-LU – Solid Waste Collection and Alley Operations

The just-approved SPU solid waste collection plan for this project shows that dumpster deployment will significantly constrain vehicle movement through the alley on collection days. And it shows that the project's loading bay cannot operate independently of the waste collection effort. Better solutions are needed to maintain a functional alley.

Dumpster Staging Effects on Alley Operations

- 1) The SPU approved plan shows the dumpsters placed perpendicular to the alley, rather than parallel to it, for ease of collection by the SPU trucks. Building staff will need to be on hand to move each dumpster out of the alley as it is emptied to enable access to the next one. If staff miss this moment, SPU will make a return trip to collect the waste. The result would be dumpsters remaining in the alley more hours than otherwise necessary. This plan, relying on staff response, is far from a fail-safe scheme, and will affect other users of the alley when it happens.
- 2) Other users include CVS, immediately north of the project site, that receives commercial deliveries in the alley and the under-construction First Light project (459 residential units, over 100,000 sq. ft. of office, plus a restaurant and retail, and 441 parking spaces) that anticipates two-way flow for its alley traffic. First Light will add 1,310 daily trips to the alley, with anywhere from one-quarter to one-third of those trips entering or exiting via Lenora.
- 3) Neighboring alley properties and users will be affected by the required perpendicular orientation of dumpsters that narrows the alley to about 10 feet, making it difficult, if not impossible, for any but the smallest vehicles to move through the alley. With four dumpster collections per week plus another collection for food waste bins, this will be a near daily occurrence. Vehicles will have to navigate around the project's dumpsters and then around those from adjacent buildings, including the YMCA. The result will be a serpentine path of travel for one vehicle at a time.
- 4) The presence of any delivery vehicle in the north portion of the alley when the project's dumpsters

are staged means that the alley will effectively become a narrow one-lane operation for two-way traffic over about half its length. How will drivers entering from Lenora know that another vehicle is already heading north to the street? And how will opposing drivers negotiate who goes first? That negotiation significantly increases the possibility of entering vehicles reversing out of the alley, or of vehicles reversing long distances in the alley's narrowest sections. Reversing out of an alley is not a legal maneuver, but drivers can be expected to do so in order to avoid conflict with other vehicles, a conflict created by the project's solid waste collection scheme. Even though the project will deed 2 feet of right-of-way per code to create an eventual 20-foot wide alley, it will not be enough to avoid this type of conflict.

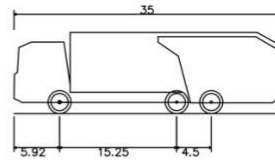
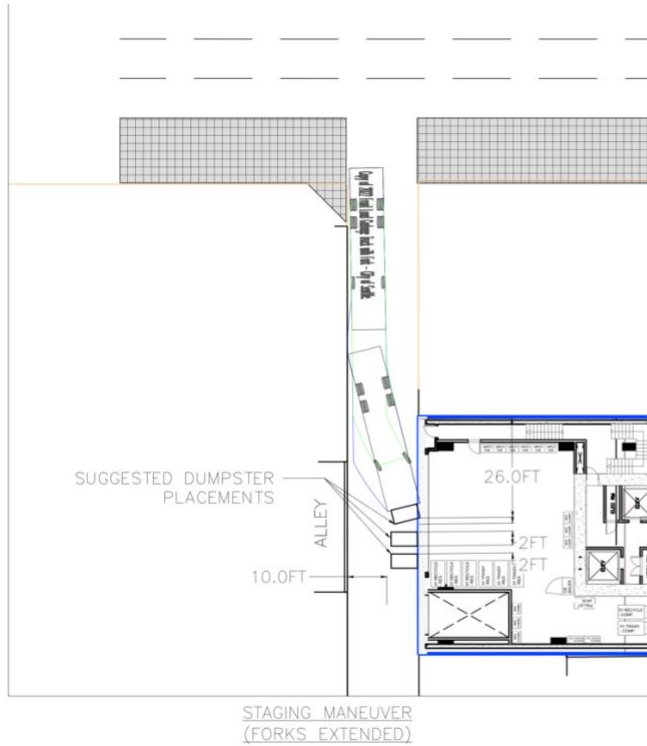
Dumpster Staging will Interfere with Loading Bay Access

- 1) The approved dumpster staging plan conflicts with use of the loading bay since the dumpsters would significantly overlap the loading bay and hinder its use. While the applicant has not shown loading bay maneuvers with dumpsters staged in the alley, the approved solid waste plan drawings and the loading bay access analysis drawings submitted to the Design Review Board (dated August 22, 2022) reveal the conflict, as shown below. The August 22 drawings show that the delivery truck (SU-30) needs the full width of the alley and almost the full width of the bay to maneuver in and out, as does the U-Haul 20' truck. Neither truck could enter or depart the loading bay when dumpsters are staged in the alley.
- 2) In short, the loading bay cannot function independently of the waste collection operation. The question here is: how many hours per day and week will the loading bay be inaccessible due to dumpster staging? And how much variability occurs in actual collection times versus scheduled times?
- 3) The credibility of any "dock management" plan that purports to schedule loading activities outside of waste collection periods must contend with the variability in collection times and the duration of dumpster staging in the alley. Given that waste collection will occur four to five days each week with staging for an unknown number of hours, is it realistic to think that loading can be successfully scheduled around it?
- 4) When the loading bay is blocked by dumpsters, arriving delivery vehicles serving the project will have no other choice but to stop in the alley, adding to the narrow single lane problem noted above.

Better Solutions

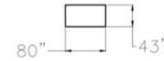
While I recognize and support SPU's need for efficient collection, the resulting plan creates congestion in the alley. Compounding that congestion is the project's own large program placing loading access, parking access and solid waste collection in just 60 feet of alley frontage for 400 units such that it cannot maintain simultaneous, independent operation of those three alley-based functions. Finally, the current code requirement for an ultimate 20-foot wide alley is still too narrow to maintain two-way flow with the solid waste staging requirements for this level of development. In light of these conflicts, I respectfully request that SPU reconsider its approval.

Greater coordination between city agencies and the applicant is needed to achieve safe, functional alley operations. One suggestion would be to eliminate the parking function in the project, freeing space for waste container storage and deployment that would pose less conflict with alley traffic and loading bay access. Another suggestion is to require a wider alley better able to accommodate the access, loading and collection functions from multiple high-rise towers.



Front Load Garbage Truck with Fork - City of Sea
 Vehicle Length 35.000ft
 Overall Length (Forks Extended) 41.000ft
 Overall Width 8.500ft
 Overall Body Height 10.568ft
 Min Body Ground Clearance 1.398ft
 Track Width 8.500ft
 Lock-to-lock time 6.00s
 Curb to Curb Turning Radius 36.730ft

3YD DUMPSTER DIMENSIONS



NOTE
 TRASH PICKUP WILL BE COORDINATED WITH
 BUILDING MANAGEMENT TEAM

le Turning Maneuvers

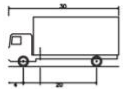
October 27, 2022

FIGURE

Screenshot

transoogroup

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SU-30 - Single Unit Truck
 Overall Length 30.000ft
 Overall Width 8.500ft
 Overall Body Height 10.568ft
 Min Body Ground Clearance 1.398ft
 Track Width 8.500ft
 Lock-to-lock time 6.00s
 Max Steering Angle (Virtual) 31.80°

LEGEND

- EXISTING FEATURES
- FORWARD BODY/CHASSIS
- REVERSE BODY/CHASSIS



2033 4th Avenue - Loading Dock (SU-30)

2033 4th Avenue Vehicle Turning Analysis

August 22, 2022

FIGURE

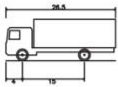
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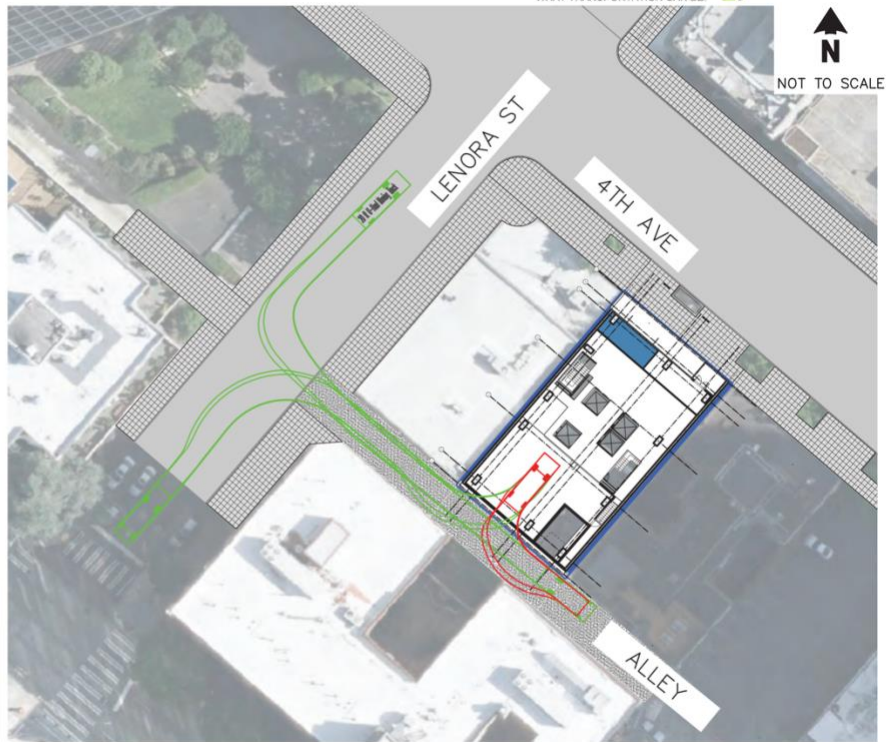
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Tilghman Group
 4618 44th Avenue South
 Seattle, Washington 98118
 Voice: 206-577-6953

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20 ft U-Haul Moving Truck	26.500ft
Overall Length	8.500ft
Overall Width	10.000ft
Overall Body Height	1.357ft
Min Body Ground Clearance	8.000ft
Body Width	5.00s
Lock-to-lock time	29.000ft
Wall to Wall Turning Radius	



LEGEND

- EXISTING FEATURES
- FORWARD BODY/CHASSIS
- REVERSE BODY/CHASSIS

2033 4th Avenue - Loading Dock (20-ft U-Haul)

August 22, 2022

FIGURE