APPENDIX E
VMT Analysis

Placeholder for VMT Screening Analysis

Michael Baker
INTERNATIONAL

Technical Memorandum

To: Sergio Gutierrez, City of Long Beach

From: Carla Dietrich, Michael Baker International

CC: Jessica Ditto, Michael Baker International

Date: November 22, 2022

Subject: 1711 Harbor Avenue and 1515 W. 17th Street, City of Long Beach, VMT Screening Analysis

1. Introduction

Michael Baker International (Michael Baker) has evaluated the proposed Green Trucking Facility and Container Storage Project located at 1711 Harbor Avenue and 1515 West 17th Street in the City of Long Beach relative to vehicle miles traveled (VMT) analysis. The purpose of this memorandum is to document the site trip generation analysis and VMT screening, and to provide recommended next steps based on the findings. This evaluation was based on City of Long Beach *CEQA Transportation Thresholds of Significance Guide* (May 2020) (City Guidelines). The City Guidelines contain multiple screening criteria for land development projects. If the Project meets one or more of the screening thresholds, it may be presumed to result in a less-than-significant transportation impact under CEQA and would not require a detailed quantitative VMT assessment.

2. Project Information

Project Description

The Green Trucking Facility and Container Storage Project (Project) would occur on two properties; one located at 1711 Harbor Avenue and the other at 1515 West 17th Street. These two properties make up the Project site. **Exhibit 1** shows the Project location and **Exhibit 2** is the proposed site plan. A full sized site plan is contained in **Attachment A**. Each of the Project site areas are discussed below for each of the two (2) redevelopment areas: 1711 Harbor Avenue and 1515 W. 17th Street. The Project would include approximately 174 double stacked container stalls and approximately 57 single stacked container stalls, for a total of 231 stalls to accommodate approximately 405 containers on-site. Additionally, **Table 1** summarizes key existing development characteristics and **Table 2** summarizes the proposed Project conditions.

1711 Harbor Avenue

The previous manufacturing use at 1711 Harbor Avenue is no longer in operation on the site and instead, the site operator has a temporary permit to store truck chassis (with support of the City and the Port of Long Beach) while the permanent condition studies are underway. The Project proposes to demolish two of the existing buildings on site and prepare the area to accommodate shipping container storage for the temporary stowage of shipping containers and local freight trailers en route to and from the Port of Long Beach. An existing building located on the southeast corner of the Project site is to remain and would be renovated to serve as an office building. The 1711 Harbor Avenue portion of the Project will include 221 truck parking stalls and 13 parking stalls for personnel, located north of the office building. Additionally, a new approximately 50 square-foot guard shack is proposed.

1515 W. 17th Street

An unused storage yard/parking lot currently exists at 1515 W. 17th Street. The Project proposes to develop this lot to accommodate shipping container storage and act as a remote parking lot. This portion of the Project will include 10 truck parking spaces.

Project Site Access

For the 1711 Harbor Avenue property, site access is currently provided via two site driveways along Harbor Avenue. For the 1515 West 17th Street property, two enter only driveways are provided along West 17th Street and one exit only driveway is provided along Caspian Avenue. Additionally, a driveway curb cut currently exists along East Pacific Coast Highway which provides access to a property to the north of the 1711 Harbor Avenue property. The Project proposes to utilize existing driveways along Harbor Avenue, East Pacific Coast Highway, W. 17th Street, and Caspian Avenue, with the exception of the southeastern driveway along West 17th Street which provides access to 1515 West 17th Street which would be removed. The access details are summarized below.

1711 Harbor Avenue

- The main driveway for truck ingress/egress for the proposed Project would be the northern driveway along Harbor Avenue. The driveway would be approximately 24 feet wide and would be secured with a sliding gate. This entrance location would also provide pedestrian access to the site.
- A 20-foot wide vehicle and pedestrian entrance with a sliding gate would be provided at the southeast corner of the property along Harbor Avenue, adjacent to the office building and site parking.
- The egress driveway along East Pacific Coast Highway would be approximately 18 feet wide and secured with a new truck access gate. An existing curb cut at this driveway would be expanded for use by the Project.
- Four curb cuts along Caspian Avenue and one curb cut along W. 17th Street will be removed.

1515 West 17th Street

- The proposed 20-foot driveways located along West 17th Street (ingress) and Caspian Avenue (egress) would provide vehicular access to the remote parking lot.
- An existing curb cut/driveway along 1515 West 17th Street would be infilled with a full curb and gutter.

Exhibit 1: Project Location

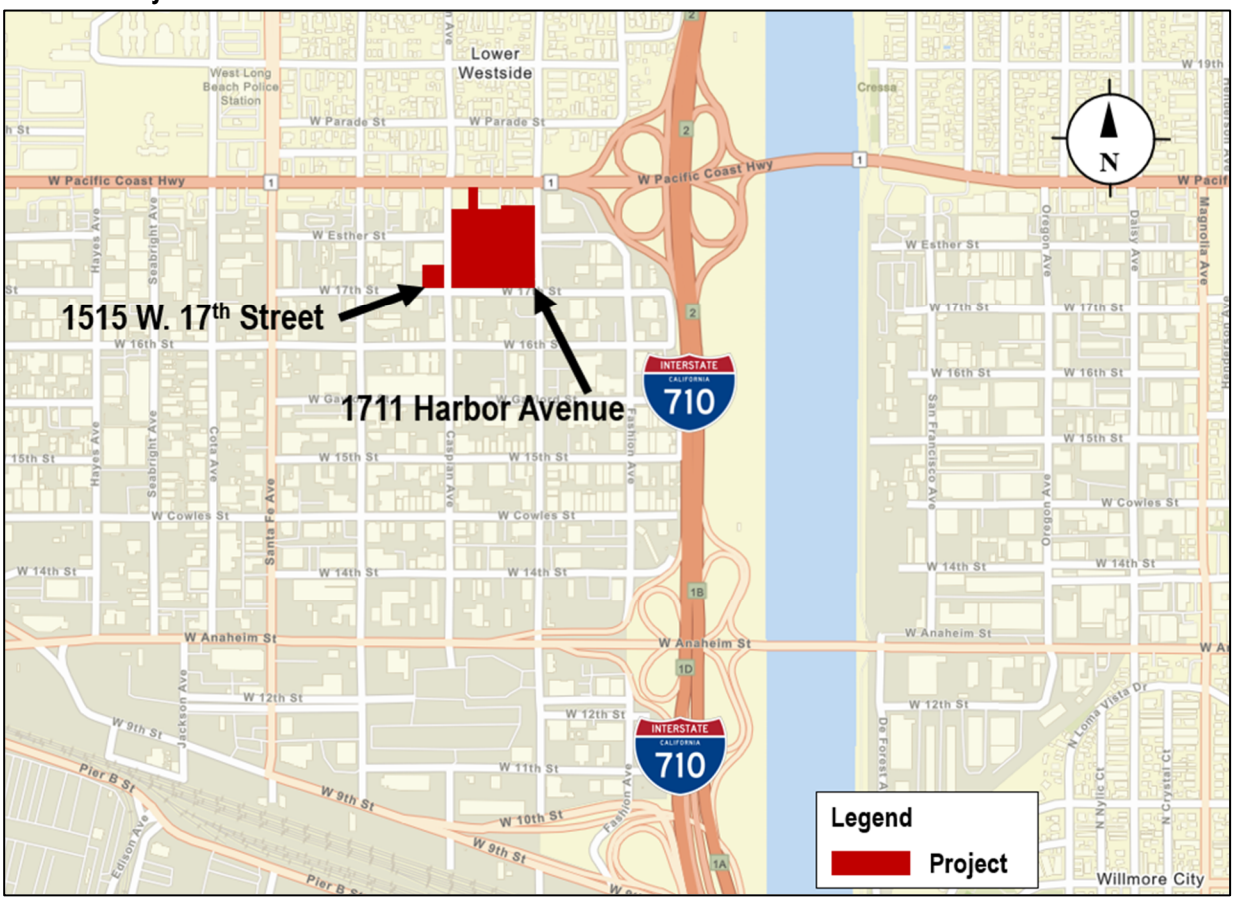

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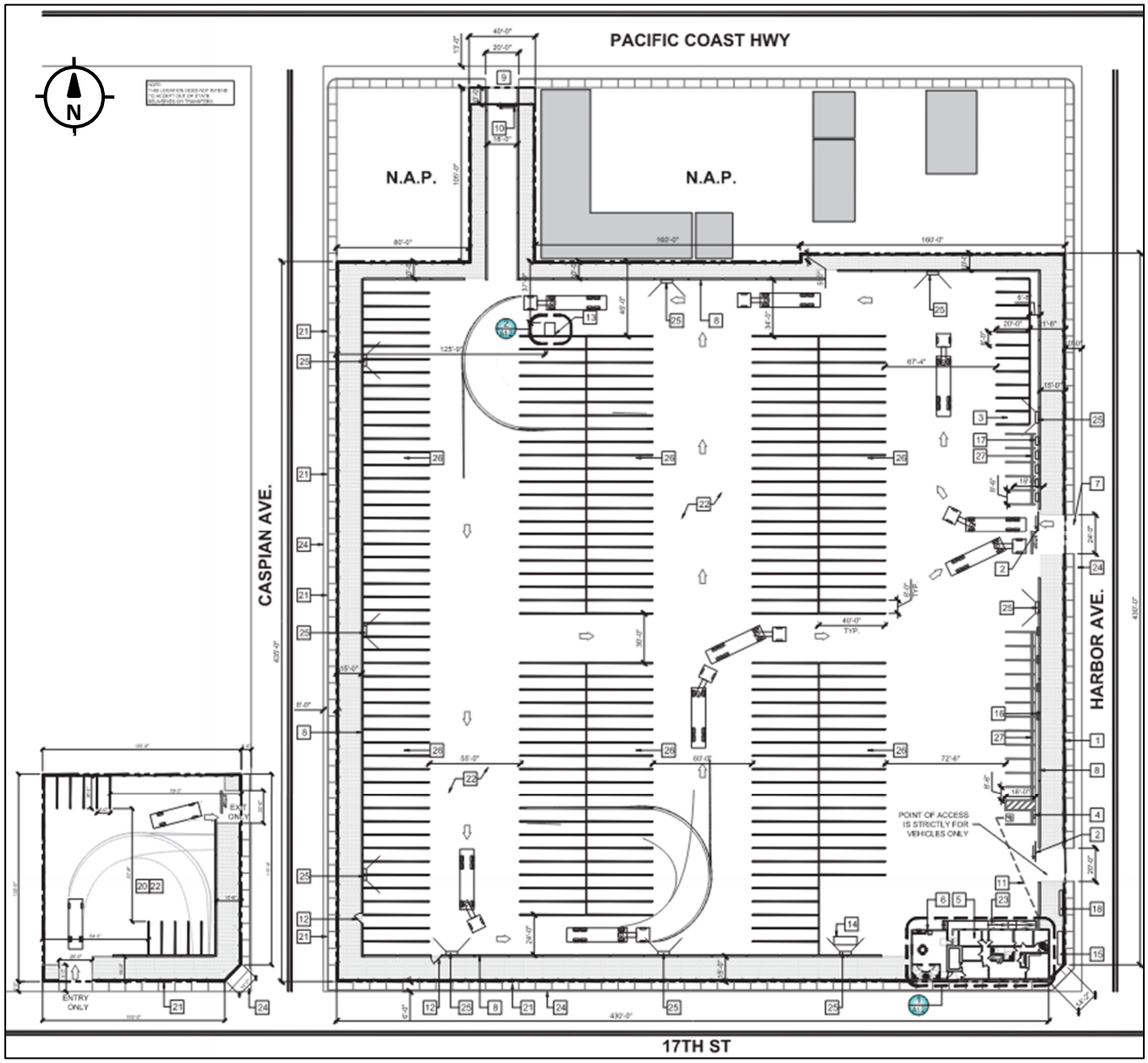
Exhibit 2: Proposed Site Plan



Source: Menemsha Proposed Site Plan

Table 1: Existing Information Summary

Item	Description
Project Location	**1711 Harbor Avenue, Long Beach, CA 90813:** On the west side of Harbor Avenue, north of W. 17th Street and approximately 100 feet to the south of East Pacific Coast Highway **1515 W. 17th Street, Long Beach, CA 90813:** On the west side of Caspian Avenue, north of W. 17th Street and approximately 430 feet to the south of East Pacific Coast Highway
Existing Land Uses	Custom Fiberglass Manufacturing Company DBA SnugTop no longer in operation (light industrial use) -- site operator currently has temporary permit to store truck chassis on site; Vacant storage yard/parking lot on 1515 W. 17th Street
Accessor's Parcel Number (APN)	7432-015-011, 7432-014-022, 7432-014-025, 7432-014-030
Acreage	**1711 Harbor Avenue:** 196,350 square feet **1515 W. 17th Street:** 14,950 square feet **Total:** Approximately 4.85 acres (211,300 square-feet)
Existing Zoning	General Industrial (IG)
Nearby Land Uses	North: East Pacific Coast Highway and developed commercial East: Harbor Avenue and developed industrial South: W 17th Street and developed industrial West: Caspian Ave and developed industrial
Existing Access	**1711 Harbor Avenue:** Two (2) unsignalized driveways along Harbor Avenue **1515 W 17th Street:** Two (2) unsignalized driveways along W. 17th Street one unsignalized driveway along Caspian Avenue

Table 2: Project Information Summary

Item	Description
Project Title	Green Trucking Facility & Container Storage Project
Proposed Use	Removal of two existing onsite structures and construction of parking lot able to accommodate shipping container storage. Construction of an approximately 50 square-foot guard shack. Renovation of the existing office building in the southeast corner and construction of an additional 654 square feet of office space.
On-Site Parking	**1711 Harbor Avenue:** 221 truck parking stalls + 13 personnel parking spaces **1515 W 17th Street:** 10 truck parking stalls **Total:** 231 truck parking stalls + 13 personnel parking spaces
Anticipated Opening Year	2023
Proposed Access	**1711 Harbor Avenue:** Two (2) driveways along Harbor Avenue and one driveway on East Pacific Coast Highway. The East Pacific Coast Highway driveway is an existing curb cut that is proposed to remain and will be increased in size. The curb cut provides the adjacent property owner access along the Project site, which will be modified to include a gate along the property line to separate the two sites. This is an existing point of ingress/egress on East Pacific Coast Highway that will be modified for egress only proposes. **1515 W 17th Street:** One driveway along W. 17th Street and one along Caspian Avenue.

3. Trip Generation Analysis

Trip generation rates for land use projects are typically obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition. However, a review of the ITE *Trip Generation Manual* indicates no land use similar to the proposed Project. A site-specific trip generation rate was developed given the specific proposed land use.

The site operator provided information regarding the anticipated site usage. The following site characteristics were accounted for in the trip generation analysis:

1) Hours of operation are from 7:00 AM to 3:00 AM that operate in two shifts. Day shift assumed to be from 7:00 AM to 5:00 PM and night shift from 5:00 PM to 3:00 AM.
2) Saturday hours of operation are from 7 AM to 5 PM, thus weekdays would experience greater trips than Saturdays.
3) 8 to 12 employees are anticipated to be employed at the site.
4) 4 to 6 employees are anticipated to be on site per shift.
5) The anticipated type of truck that will access the site is a drayage trucks.

A total of 254 daily trips (54 passenger vehicles and 200 trucks) are expected to be generated by the Project. The AM Peak Hour is anticipated to experience 66 trips (33 entering / 33 exiting) and the PM Peak Hour is anticipated to experience 16 trips (11 entering/ 5 exiting). **Attachment B** contains detail trip generation worksheets.

Table 3: Project Site Trips

Land Use	Vehicle Type Breakdown	Trip Generation (Vehicles)[1]						
		Daily Trips	AM Peak Hour[2]			PM Peak Hour		
			Total	Enter	Exit	Total	Enter	Exit
Shipping Container Storage Facility	Passenger Cars	54	0	0	0	6	6	0
	Trucks	200	66	33	33	10	5	5
	Total	**254**	**66**	**33**	**33**	**16**	**11**	**5**

Notes: 1) Weekday Average Trips
2) Employees utilizing passenger cars for the day shift are assumed to be on site prior to the AM Peak Hour.

4. VMT Screening

City Guidelines were used to evaluate the VMT assessment requirement for the Project. Land use projects that meet one or more of the screening thresholds documented in the City Guidelines can be presumed to result in a less-than-significant transportation impact under CEQA. For land development projects, these criteria include size, location, proximity to transit, or trip-making potential. The screening criteria is listed below along with the detailed project-specific evaluation.

Screening Criteria

- Screening Criteria 1: Transit Priority Area (TPA) or High-Quality Transit Area Screening
- Screening Criteria 2: Low VMT Area Screening
- Screening Criteria 3: Local Serving Retail
- Screening Criteria 4: Affordable Housing
- Screening Criteria 5: Project Size Screening
- Screening Criteria 6: Institutional/Government Project Type Screening

Screening Criteria 1: Transit Priority Area (TPA) or High-Quality Transit Area Screening

A project can be presumed to create a less-than-significant impact if the project is within a Transit Priority Area or a High-Quality Transit Area unless the project is inconsistent with the RTP/SCS, has a floor-to-area ratio (FAR) less than 0.75, provides an excessive amount of parking, or reduces the number of affordable residential units. In accordance with SB 743, "Transit priority areas" are defined as "an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program." A Major Transit Stop means: "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service of 15 minutes or less during the morning and afternoon peak commute periods." A High-Quality Transit Area or Corridor is a corridor with fixed-route bus service with service intervals no longer than 15 minutes during peak commute hours.

Screening Criteria 1 Project Evaluation & Finding: While the Project is located within ½ mile from a High Quality Transit Corridor per Figure 1 on the City Guidelines (see **Exhibit C** in **Attachment C**), the Project is not consistent with the other requirements associated with this screening criteria (floor-to-area ratio and amount of parking) given the nature of the proposed development. The Project may not be presumed to have a less-than-significant impact based on the TPA / High Quality Transit Area evaluation.

Screening Criteria 2: Low VMT Area Screening

A project can be presumed to create a less-than-significant impact if the project is a residential or office development located in areas with low VMT and have similar characteristics to the surrounding development (such as density or mix of uses).

Screening Criteria 2 Project Evaluation & Finding: The Project is not residential or office use in nature, therefore, this evalaution does not apply. The Project may not be presumed to have a less-than-significant impact based on the Low VMT Area evaluation.

Screening Criteria 3: Local Serving Retail

A project can be presumed to create a less-than-significant impact if the project involves local-serving retail space of less than 50,000 square feet.

Screening Criteria 3 Project Evaluation: & Finding The Project is not retail in nature, therefore, this evalaution does not apply. The Project may not be presumed to have a less-than-significant impact based on the Local Serving Retail evaluation.

Screening Criteria 4: Affordable Housing

A project can be presumed to create a less-than-significant impact if the project has a high level of affordable housing units.

Screening Criteria 4 Project Evaluation & Finding: The Project is not residential in nature, therefore, this evalaution does not apply . The Project may not be presumed to have a less-than-significant impact based on the Affordable Housing evaluation.

Screening Criteria 5: Project Size Screening

A project can be presumed to result in a less-than-significant impact if the project generates a low volume of daily traffic. The Governor's Office of Planning and Research *Senate Bill (SB) 743 Technical Advisory* would recommend a volume of 110 Average Daily Traffic (ADT). This recommendation is not based on any analysis of GHG reduction but was instead based on the potential trip generation of an office project that would be categorically exempt under CEQA. The City Guidelines include a review of GHG emissions versus trip generation. Based on that analysis, a common GHG emissions threshold is 3,000 MT CO_2e/yr. The vehicle emissions are typically more than 50 percent of the total project GHG emissions. Thus, a project with 500 ADT would generally have total project emissions that could be less than 1,300 MT CO_2e/year (i.e., 50 percent or 643 MT CO_2e/year coming from vehicle emissions and the other 50 percent coming from other project activities). As this level of GHG emissions would be less than 3,000 MT CO_2e/year, therefore, the emissions of GHG from a project up to 500 ADT would typically be less-than-significant.

Screening Criteria 5 Project Evaluation & Finding: As shown in **Table 3**, the Project is estimated to generate 254 daily vehicle trips. The evaluation of the 254 daily trip is below the 500 daily trip-threshold, therefore, the Project does meet the project type screening based on Project Size. The Project may be presumed to have a less-than-significant impact based on the Project Size evaluation.

Screening Criteria 6: Institutional/Government Project Type Screening

The development of institutional/government and public service uses that support community health, safety, and welfare are also screened from subsequent CEQA VMT analysis. These facilities (e.g., police stations, fire stations, community centers, refuse stations) are already part of the community and, as a public service, the VMT is accounted for in the existing regional average. Many of these facilities generate fewer than 500 ADT and/or use vehicles other than passenger cars or light-duty trucks. These other vehicle fleets are subject to regulation outside of CEQA, such as CARB and the South Coast Air Quality Management District.

Screening Criteria 6 Project Evaluation & Finding: The Project is not institutional or govenement in nature, therefore, this evalaution does not apply. The Project may not be presumed to have a less-than-significant impact based on the Institutional/Government Project Type evaluation.

VMT Screening Conclusions

Table 4 summarizes the screening results. **The Project meets the Screening Criteria based on Project Size which allows a determination of a less-than-significant impact on VMT, thus a project-specific VMT assessment is not required.**

Table 4: VMT Screening Summary

VMT Screening Criteria	Project Evaluation Result
1: Transit Priority Area (TPA) or High-Quality Transit Area Screening	Does Not Screen Out
2: Low VMT Area Screening	Does Not Screen Out
3: Local Serving Retail	Does Not Screen Out
4: Affordable Housing	Does Not Screen Out
5: Project Size Screening	**Does Screen Out**
6: Institutional/Government Project Type Screening	Does Not Screen Out

Attachment A – Site Plan

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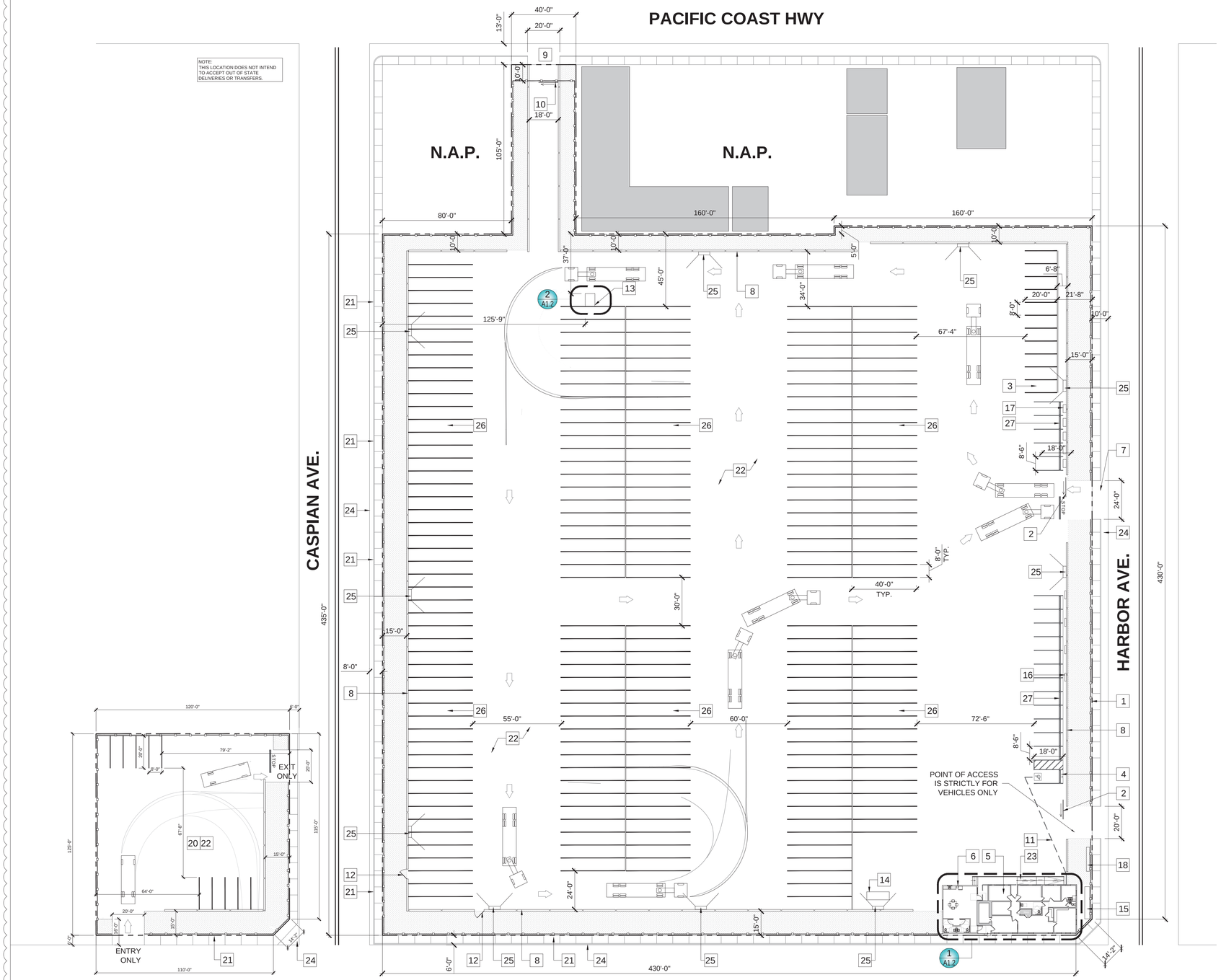

PROPOSED SITE PLAN

SCALE 1/32" = 1'-0" | 1

GENERAL NOTES

1. ALL ITEMS INCLUDED IN THE PLAN ARE NEW UNLESS SPECIFICALLY NOTED AS EXISTING.

KEYNOTES

1	8'-0" HT BLACK ROD IRON FENCE AROUND SITE PERIMETER
2	SLIDING GATE PROVIDING VEHICULAR AND PEDESTRIAN ACCESS
3	8'-0" WIDE X 20'-0" LONG TRAILERS
4	ACCESSIBLE PARKING STALL
5	EXISTING BUILDING, REFER SHEET A1.1
6	ADDITION TO EXISTING BUILDING. ADDITION SHALL BE APPROX. 761 SF AND WILL INCLUDE 2 ACCESSIBLE RESTROOMS AND AN OFFICE SPACE
7	MAIN TRUCK ENTRY
8	32" HIGH X 20'-0" LONG K RAILING (CONCRETE) AROUND PERIMETER FENCE
9	EXISTING CURB CUT FOR EXIT ONLY
10	NEW EXIT GATE, APPROXIMATELY 8 FEET HIGH
11	ACCESSIBLE PATH OF TRAVEL FROM ADA PARKING STALL TO BUILDING
12	PEDESTRIAN ACCESS GATE
13	GUARD SHACK FOR CHECKING IN TRUCKS
14	BIKE RACK PER LONG BEACH STANDARDS, MINIMUM 10 BIKE CAPACITY
15	COVERED BENCH
16	TRUCK CHARGING STATIONS (5 TOTAL)
17	REEFER STATION WITH 5 PLUGINS
18	SIGN UNDER A SEPARATE
19	DROUGHT RESISTANCE LANDSCAPE
20	REMOTE PARKING LOT- 1515W. 17TH ST., LONG BEACH , CA.90813
21	EXISTING CURB CUT TO BE INFILLED WITH A FULL CURB AND GUTTER PER 21.41
22	ALL PARKING AREAS SHALL BE TOPPED WITH A MINIMUM OF 6" LOAD BEARING BASE TO MEET CODE REQUIREMENT
23	ADA COMPLIANT ACCESSIBLE RAMP
24	RIGHT OF WAY
25	DIRECTIONAL LED PERIMETER SITE POLE LIGHTING SHIELDED TO PREVENT LIGHT TRESPASS
26	WHEELED STORAGE CAN BE CONVERTED TO CONTAINER STACKING AT A MAXIMUM OF TWO UNITS HIGH
27	CONCRETE WHEEL STOPS AT VEHICLE PARKING

PARKING SUMMARY

TOTAL PARKING STALLS FOR TRUCK	231 SPACES

LEGEND

	LED PERIMETER DIRECTIONAL LIGHT
	NEW CONSTRUCTION
	EXISTING STRUCTURES
	TRUCK PARKING STALL - TYPICAL SIZE 8'X40'

CONSULTANT:

Menemsha

LOS ANGELES | BOSTON
20521 EARL STREET
TORRANCE, CA 90503
Voice: 310-263-3516
Fax: 775-890-9954
www.menemshasolutions.com

STAMP:

PROJECT OWNER:

cargomatic

PROJECT ADDRESS:

1515 W. 17TH ST. & 1711 HARBOR AVE
LONG BEACH, CA 90813

ISSUE FOR DESCRIPTION:

CUP SUBMITTAL SET

ISSUE DATE:

05/27/2022

REVISIONS:

NO.	DESCRIPTION	DATE
1	PLANNER COMMENTS	05/27/2022
2	PLANNER COMMENTS	06/24/2022

PRINCIPAL IN CHARGE:

PROJECT MANAGER:
DAVID BOYD

DRAWN BY:
AEC

PROJECT NUMBER:
26082

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

A1.0

Attachment B – Trip Generation Worksheets

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Long Beach Storage Container Facility - Trip Generation Summary

Time Period	Start Time	End Time	Average Daily (Per Day, Monday through Friday)		
			Total Passenger Cars (PC)	Total Drayage Trucks	Total Trips (Passenger Cars & Trucks)
AM Peak	7:00 AM	8:00 AM	0	66	66
PM Peak	4:00 PM	5:00 PM	6	10	16
Off Peak	Other 22 hours		48	124	172
Total			**54**	**200**	**254**

Notes:
1) AM Peak and PM Peak consistent with adjacent street area roadway network peak times.
2) Trip generation developed based on site specific information provided by site operator.
3) Site operator indicated the only anticipated truck type would be the container hauler (drayage trucks).

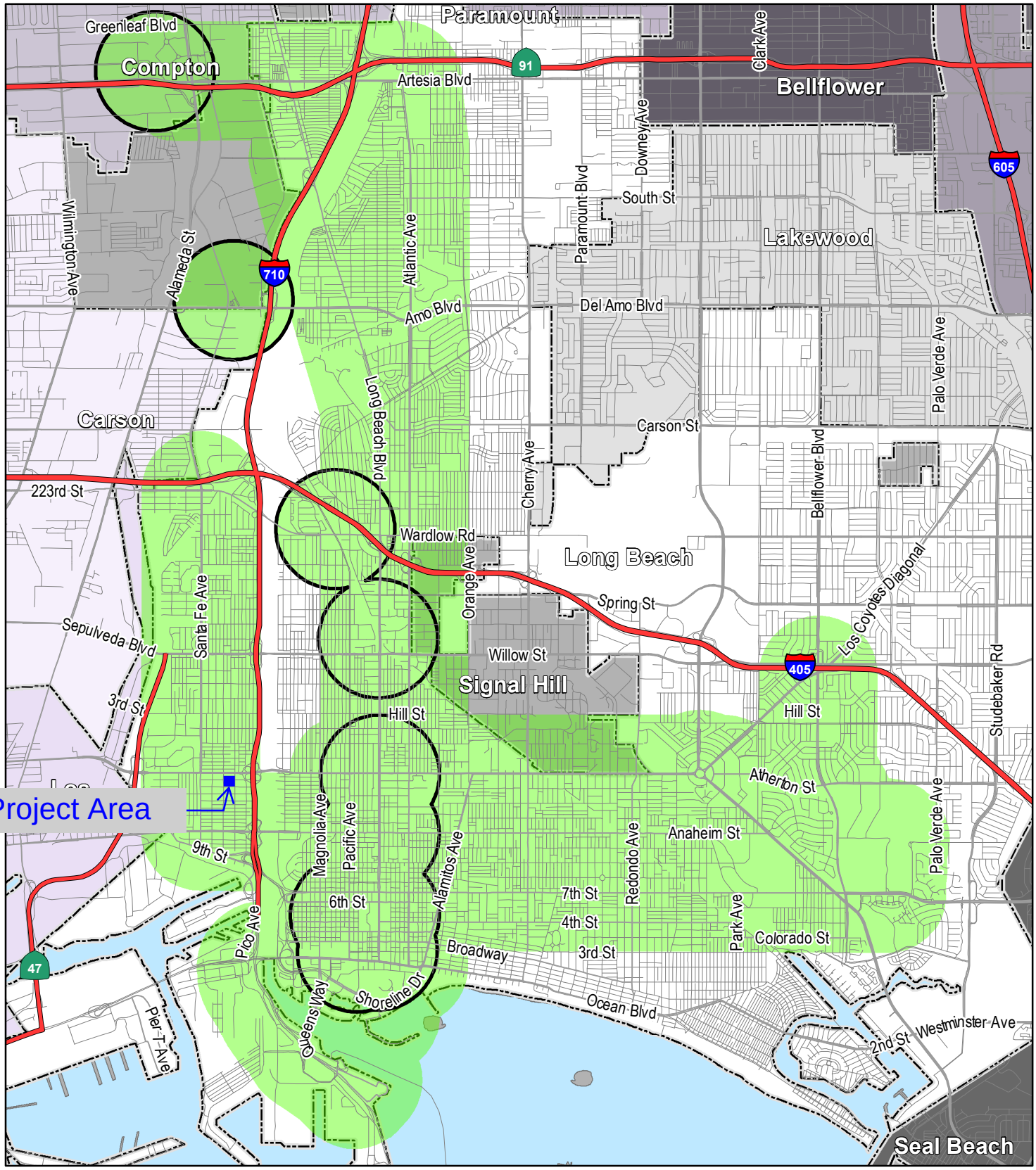
Long Beach Storage Container Facility - Trip Generation Breakdown by Vehicle Type and Hour

	Hour	Start Time	End Time	Average Daily (Per Day, Monday through Friday)																		
				Passenger Cars (PC)										Trucks								
				Employees - Passenger Vehicles						Other Non-Employees - Passenger Vehicles			Total PC	Drayage Trucks (Container Delivery & Pickup)						Total Trucks	Total Trips (Passenger Cars & Trucks)
				Day Shift			Night Shift			Day Shift				Day Shift			Night Shift				
				Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit		Total	Enter	Exit	Total	Enter	Exit		
Night Shift	1	12:00 AM	1:00 AM	0			0			0			0	0			2	1	1	2	2
	2	1:00 AM	2:00 AM	0			0			0			0	0			2	1	1	2	2
	3	2:00 AM	3:00 AM	0			0			0			0	0			2	1	1	2	2
Non Operational	4	3:00 AM	4:00 AM	0			6	0	6	0			6	0			0			0	6
	5	4:00 AM	5:00 AM	0			0			0			0	0			0			0	0
	6	5:00 AM	6:00 AM	0			0			0			0	0			0			0	0
	7	6:00 AM	7:00 AM	6	6	0	0			0			6	0			0			0	6
Day Shift	**8**	**7:00 AM**	**8:00 AM**	**0**			**0**			**0**			**0**	**66**	**33**	**33**	**0**			**66**	**66**
	9	8:00 AM	9:00 AM	0			0			0			0	10	5	5	0			10	10
	10	9:00 AM	10:00 AM	0			0			0			0	10	5	5	0			10	10
	11	10:00 AM	11:00 AM	0			0			2	1	1	2	10	5	5	0			10	12
	12	11:00 AM	12:00 PM	4	2	2	0			0			4	10	5	5	0			10	14
	13	12:00 PM	1:00 PM	4	2	2	0			0			4	4	2	2	0			4	8
	14	1:00 PM	2:00 PM	4	2	2	0			0			4	8	4	4	0			8	12
	15	2:00 PM	3:00 PM	0			0			0			0	10	5	5	0			10	10
	16	3:00 PM	4:00 PM	0			0			2	1	1	2	10	5	5	0			10	12
	17	**4:00 PM**	**5:00 PM**	**0**			**6**	**6**	**0**	**0**			**6**	**10**	**5**	**5**	**0**			**10**	**16**
Night Shift	18	5:00 PM	6:00 PM	6	0	6	0			0			6	0			6	3	3	6	12
	19	6:00 PM	7:00 PM	0			0			0			0	0			6	3	3	6	6
	20	7:00 PM	8:00 PM	0			0			0			0	0			6	3	3	6	6
	21	8:00 PM	9:00 PM	0			0			2	1	1	2	0			8	4	4	8	10
	22	9:00 PM	10:00 PM	0			4	2	2	0			4	0			8	4	4	8	12
	23	10:00 PM	11:00 PM	0			4	2	2	0			4	0			8	4	4	8	12
	24	11:00 PM	12:00 AM	0			4	2	2	0			4	0			4	2	2	4	8
	Total			**24**	**12**	**12**	**24**	**12**	**12**	**6**	**3**	**3**	**54**	**148**	**74**	**74**	**52**	**26**	**26**	**200**	**254**

Notes: 1) Hours of operation from 7:00 AM to 3:00 AM that operation in two shifts. Day Shift from 7:00 AM to 5:00 PM and Night Shift from 5:00 PM to 3:00 AM.
2) Saturday hours of operation are from 7 AM to 5 PM, thus weekdays would experience greater trips than Saturdays.
3) Drayage truck is a 5-axle truck.

Attachment C – Transit Screening Map

Michael Baker
INTERNATIONAL



LSA

LEGEND

Half mile from High Quality Transit Corridor or Major Transit Stop

Half mile from Major Transit Stop

FIGURE 1

N

0 3000 6000

FEET

SOURCE: Esri (2008); City of Long Beach (3/116/2020)

I:\CLB1904.09\GIS\MXD\LB_TPA.mxd (3/31/2020)

CEQA Transportation Thresholds of Significance Guide

Long Beach Transit Priority Areas

Exhibit C - Transit Screening Map