Kimley»Horn

MEMORANDUM

To: Grant Webster
City of Miami Beach

From: Raquel Selanikio, P.E.

Date: January 8, 2026

Subject: 1250 West Avenue Redevelopment
Traffic Assessment

The purpose of this memorandum is to summarize the traffic assessment prepared for the proposed redevelopment located at 1250 West Avenue in Miami Beach, Florida. Previously a Theoretical Traffic Assessment was prepared based on a conceptual site plan as part of the previous legislative approval the site was seeking. As the site plan has been developed and is now being submitted to the City, a traffic assessment was prepared based on the developed site plan.

Currently, the site is occupied by a residential tower consisting of 238-high rise multifamily residential units. This existing tower is proposed to be demolished and replaced with the proposed redevelopment which consists of a mixed-use tower with 106-high rise multifamily residential units, 3,467 square feet of lounge space, and approximately 7,800 square feet of fitness/spa space. Note that a private dining room is proposed as an amenity for residents, however this use is private for residents only and therefore is not expected to generate additional uses. Parking will be provided on-site. A project location map and conceptual site plan are provided in Attachment A. Kimley-Horn and Associates, Inc. has completed this traffic assessment consistent with the approved City of Miami Beach methodology. The methodology detailing the traffic assessment requirements is included in Attachment B. The following sections summarize the project trip generation calculations, entry gate analysis, valet operations analysis, transportation demand management (TDM) strategies, and maneuverability analysis.

TRIP GENERATION

Trip generation calculations for the existing development and the proposed redevelopment were performed using the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 12th Edition. The trip generation for the existing development was determined using ITE Land Use Code (LUC) 222 (Multifamily Housing [High-Rise]). The trip generation for the proposed redevelopment was determined using LUC 222 (Multifamily Housing [High-Rise]), LUC 975 (Drinking Place), and LUC 492 (Health/Fitness Club).

Multimodal Reduction

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract in which the redevelopment is located. A multimodal factor of 13.3 percent (13.3%) was determined for the proposed redevelopment. It is expected that a portion of residents, guests, and patrons will choose to walk, bike, or use public transit to and from the proposed redevelopment.

Transit Route Information

Two (2) City of Miami Beach Trolley routes and two (2) Miami-Dade County Department of Transportation and Public Works (DPTW) route currently operate within the vicinity of the site during the A.M. and P.M. peak hours. Detailed transit route information is included in Attachment C.

- **City of Miami Beach Trolley Loop A** operates along Alton Road in the vicinity of the project site with the nearest stop located just north of 13th Street. This route operates with approximately 20-minute headways in a clockwise loop direction during the A.M and P.M. peak hours.
- **City of Miami Beach Trolley Loop B** operates along Alton Road in the vicinity of the project site with the nearest stop located just south of 13th Street. This route operates with approximately 20-minute headways in a counterclockwise loop direction during the A.M and P.M. peak hours.
- **DTPW Route 20** operates along Alton Road in the vicinity of the project site with the nearest stop located just south of 13th Street. This route operates with approximately 30-minute headways in the northbound and southbound directions during the A.M and P.M. peak hours.
- **DTPW Route 101** operates along Alton Road in the vicinity of the project site with the nearest stop located just south of 13th Street. This route operates with approximately 30-minute headways in the northbound and southbound directions during the A.M and P.M. peak hours.

Internal Capture

Internal capture can be expected between the complementary land uses within the project. Internal capture trips for the project were determined based upon methodology contained in the ITE's *Trip Generation Handbook*, 3rd Edition. Internal capture rates of 11.8 percent (11.8%) for the P.M. peak hour trip generation are expected for the proposed development.

Proposed Project Trips

As shown in Table 1, the project is expected to result in a reduction of 12 net new weekday A.M. peak hour vehicular trips and six (6) net new weekday P.M. peak hour vehicular trips. Detailed trip generation information is included in Attachment D.

Table 1: Peak Hour Trip Generation Summary

A.M. Peak Hour (P.M. Peak Hour)

Future Land Use (ITE Code)	Scale	Entering Trips	Exiting Trips	Net New External Trips
Existing Development				
Multifamily Housing (High Rise) (222)	238 dwelling unit	12 (33)	30 (21)	42 (54)
Proposed Redevelopment				
Multifamily Housing (High-Rise) (222)	106 dwelling unit	5 (13)	13 (7)	18 (20)
Drinking Place (975)	3,467 square feet	0 (11)	0 (5)	0 (16)
Health/Fitness Club (492)	7,800 square feet	6 (15)	6 (9)	12 (24)
	Subtotal	11 (39)	19 (21)	30 (60)
Net New Redevelopment				
Net New Project Trips		**-1 (6)**	**-11 (0)**	**-12 (6)**

PARKING GARAGE ENTRY GATE QUEUING ANALYSIS

A 95th percentile parking garage entry gate queuing analysis for the proposed redevelopment using the methodology outlined in ITE's *Transportation and Land Development*, 1988 was performed at the

proposed entry gates located approximately 100 feet from public right-of-way. The proposed entry gates will provide one (1) resident-only lane and one (1) visitor lane and provide storage for four (4) vehicles within the resident-only lane and three (3) vehicles within the visitor lane.

Residents will gain access via a proximity card (FOB) reader. It was assumed that the average service rate will be approximately 600 vehicles per hour (6.0 seconds per vehicle or 0.1 minutes per vehicle) for residents based on processing times provided in *Parking Structures 3rd Edition: Planning, Design, Construction, Maintenance, and Repair*, 2001. Resident guests and patrons of the social club and fitness/health space will gain access through the entry gate via the guard house located in advance of the entry gate. It was assumed that the average service rate will be approximately 60 vehicles per hour (60.0 seconds per vehicle or 1.0 minutes per vehicle).

Based on the trip generation prepared, a total of five (5) A.M. peak hour inbound trips and 12 P.M. peak hour inbound trips are expected within the resident only lane and a total of six (6) A.M. peak hour inbound trips and 27 P.M. peak hour inbound trips are expected within the visitor lane at the entry gate.

The queuing analysis used the single-channel waiting line model with Poisson arrivals and exponential service times. The queuing analysis is based on the coefficient of utilization, ρ, which is the ratio of the average vehicle arrival rate over the average service rate multiplied by the number of channels.

If the coefficient of utilization (average service rate/entry gate service capacity) is greater than one (>1), the calculation methodology does not yield a finite queue length. This result indicates overcapacity conditions for the entry gate area. The entry gate service capacity is the number of vehicles the entry gate can service in a one-hour period multiplied by the number of entry gates.

The analysis determined the required queue storage, M, which is exceeded P percent of the time. This analysis seeks to examine if the queue length exceeds the storage provided at a level of confidence of 95 percent (95%).

A summary of the entry gate queuing analysis is summarized in Table 2 below. As Table 2 indicates, the proposed redevelopment is expected to result in a maximum queue of 1.8 vehicles behind the service position at the entry gate. Therefore, vehicle queues are expected to be accommodated on-site without extending onto public-right-of-way. Detailed entry gate queue calculations are included in Attachment E.

Table 2: Peak Hour Entry Gate Queuing Analysis

A.M. Peak Hour (P.M. Peak Hour)

Entry Gate Lane	Entering Volumes (vph)	Service Rates (minutes/vehicle)	95th Percentile Queue Behind Service Position
Residential-Only	5 (12)	0.1	< 1 vehicle (< 1 vehicle)
Visitor	6 (27)	1.0	< 1 vehicle (1.8 vehicles)

VALET OPERATIONS ANALYSIS

The valet queuing operations analysis was performed based on the methodology outlined in ITE's *Transportation and Land Development*, 1988 to determine if valet operations could accommodate vehicular queues without extending beyond the designated area. Valet operations were analyzed for the number of valet attendants required to adequately serve the redevelopment proposed traffic.

The redevelopment may be served by one (1) valet drop-off/pick-up area located onsite. The valet drop-off/pick-up area consists of one (1) valet drop-off/pick-up lane with storage for approximately four (4) vehicles and one (1) by-pass lane. Valet vehicles are proposed to be parked in the on-site basement parking garage. Valet trips for this project were split proportionally based on the number of tandem and mechanical stacker parking spaces currently contemplated. Based on the combined 136 tandem and stacker parking spaces (78 tandem/58 stacker) allocated for valet out of the total 280 parking spaces provided, it was assumed that 48.6 percent (48.6%) of all trips will utilize valet. The project is expected to generate 14 valet trips (5 drop-off and 9 pick-up) during the A.M. peak hour and 29 valet trips (19 drop-off and 10 pick-up) during the P.M. peak hour. Detailed trip generation calculations and graphic illustrations of the proposed valet routes to and from the valet drop-off/pick-up areas are contained in Attachment F.

Valet Assumptions

The queuing analysis used the multiple-channel waiting line model with Poisson arrivals and exponential service times. The queuing analysis is based on the coefficient of utilization, ρ, which is the ratio of the average vehicle arrival rate over the average service rate multiplied by the number of channels.

Valet attendants will be stationed at the valet drop-off/pick-up area. Valet drop-off trip service time was calculated based on the time it would take a valet parking attendant to obtain and park a drop-off vehicle within the on-site parking garage. Valet pick-up trip service time was calculated based on the time it would take a valet parking attendant to bring a parked vehicle back to a patron at the valet pick-up area. As requested by City staff, during the December 18, 2025 pre-application meeting, the service times for both the furthest tandem space and the furthest mechanical stacker space were reviewed. The following summarizes the total contemplated valet drop-off and pick-up service times for tandem valet operations and stacker valet operations.

Tandem Valet Operation

The following summarizes the tandem valet drop-off service time:

- Exchange between valet attendant and driver (0.5 minutes)
- Valet attendant drives vehicle from valet drop-off/pick-up area to furthest tandem parking space within the basement parking garage (1.0 minutes)
- Valet attendant parks vehicle in tandem space (0.2 minutes)
- Valet attendant returns to valet station (0.9 minutes)
- **Total service rate: 2.6 minutes**

The following summarizes the tandem valet pick-up service time:

- Valet attendant proceeds to the furthest tandem parking space within the on-site parking garage to retrieve vehicle (0.9 minutes)
- Valet attendant retrieves vehicle from tandem space (0.5 minutes)
- Valet attendant drives vehicle from on-site basement parking garage to the valet drop-off/pick-up area (1.3 minutes)
- Exchange between valet attendant and driver (0.5 minutes)
- **Total service rate: 3.2 minutes**

Stacker Valet Operation

The following summarizes the stacker valet drop-off service time:

- Exchange between valet attendant and driver (0.5 minutes)
- Valet attendant drives vehicle from valet drop-off/pick-up area to furthest mechanical stacker parking space within the on-site parking garage (0.6 minutes)
- Valet attendant parks vehicle utilizing mechanical-lift (1.6 minutes)
- Valet attendant returns to valet station (0.9 minutes)
- **Total service rate: 3.6 minutes**

The following summarizes the stacker valet pick-up service time:

- Valet attendant proceeds to the furthest mechanical stacker parking space within the on-site parking garage to retrieve vehicle (0.9 minutes)
- Valet attendant retrieves vehicle from mechanical-lift (1.0 minutes)
- Valet attendant drives vehicle from on-site parking garage to the valet drop-off/pick-up area (0.8 minutes)
- Exchange between valet attendant and driver (0.5 minutes)
- **Total service rate: 3.2 minutes**

The pick-up service rates were determined to be 2.6 minutes for tandem parked vehicles and 3.6 minutes for stacker parked vehicles. Similarly, the drop-off service rates were determined to be 3.2 minutes for tandem parked vehicles and for stacker parked vehicles. Therefore, to provide a conservative analysis, the service time for the stacker spaces was used. Detailed travel time calculations are included in Attachment F.

If the coefficient of utilization (average service rate/valet attendant service capacity) is greater than one (>1), the calculation methodology does not yield a finite queue length. This result indicates overcapacity conditions for the valet area. The valet attendant service capacity is the number of total trips a valet attendant can make in a one-hour period multiplied by the number of valet attendants.

The analysis determined the required queue storage, M, which is exceeded P percent of the time. This analysis seeks to ensure that the queue length does not exceed the storage provided at a level of confidence of 95 percent (95%). Four (4) vehicle drop-off/pick-up spaces are provided for valet operations.

Valet Analysis

An iterative approach was used to determine the number of valet attendants required to accommodate the proposed redevelopment demand during the analysis hour and ensure that the 95th percentile valet queue does not extend beyond the designated valet service area.

The results of the valet operations analysis demonstrate that two (2) valet attendants would be needed during the A.M. peak hour and three (3) valet attendants would be needed during the P.M. peak hour to ensure that valet queues do not exceed the current contemplated storage. It should be noted that projected vehicular volumes and estimated valet processing times were conservatively assumed in the analysis. If it is determined that valet processing times can be performed more efficiently and/or actual

traffic volumes are lower than projected, a reduced number of valet attendants may be adequate to serve the site. Detailed valet analysis worksheets are provided in Attachment F.

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

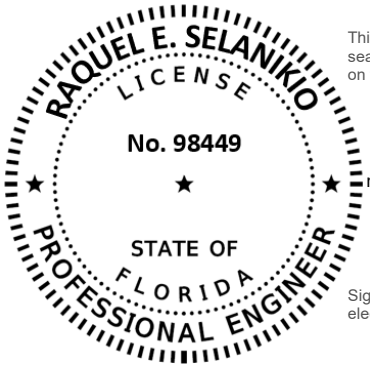
Preliminary Transportation Demand Management (TDM) strategies are proposed to reduce the impacts of the project traffic on the surrounding roadway network. These will be refined as part of the site plan process. Typical measures promote bicycling and walking, encourage car/vanpooling, and offer alternatives to the typical workday hours. The applicant will commit to providing the following incentives including:

- Providing transit information within the site including route schedules and maps.
- Providing 20 designated scooter/motorcycle parking spaces
- Providing secure bike storage
- Providing wide hallways that can accommodate bikes
- Providing elevators that can accommodate bikes

MANEUVERABILITY ANALYSIS

A maneuverability analysis was prepared for the ground level passenger vehicle circulation areas and loading area. Although the redevelopment is proceeding through legislative approval at this time, a theoretical maneuverability analysis was prepared based on a conceptual site plan. The analysis was performed using Transoft's *AutoTurn 11* software design vehicle turning templates and vehicle turning templates consistent with American Association of State Highway and Transportation Officials' (AASHTO) *A Policy on Geometric Design of Highways and Streets*, 2018. The analysis was prepared using a passenger car (P) design vehicle and a front-loading refuse vehicle.

The maneuverability evaluated the circulation of passenger and loading vehicles within the site. Based on the prepared maneuverability analysis, passenger vehicles re expected to be able to circulate the site without conflict and loading and refuse vehicles are expected to be able to conduct loading operations on-site without impacting the public right-of-way. Maneuverability analysis plots are included in Attachment G.



This item has been digitally signed and sealed by Raquel E. Selanikio, P.E., on the date adjacent to the seal.

raquel e selanikio

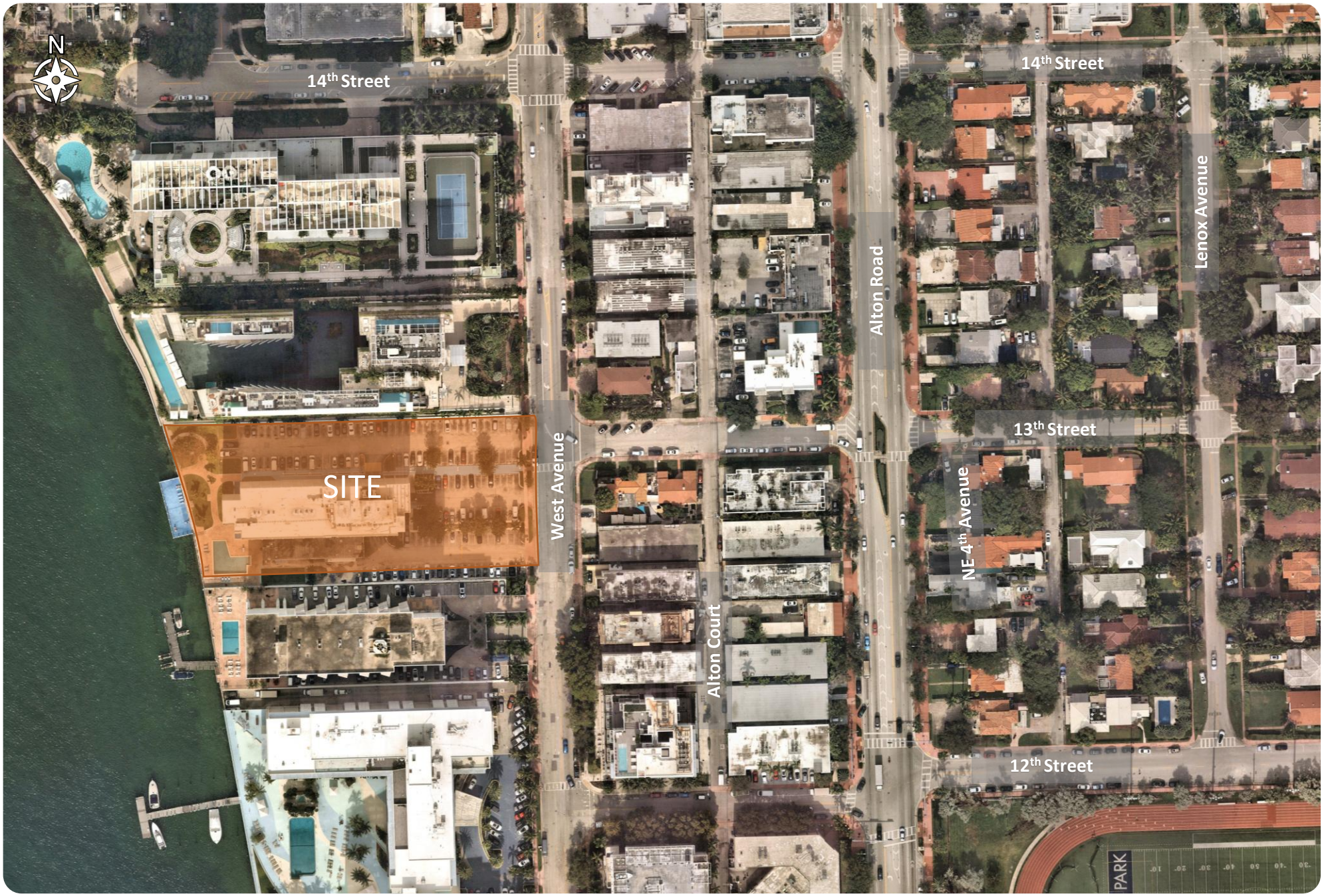
Digitally signed by raquel e selanikio
DN: CN=raquel e selanikio
Date: 2026.01.08 14:45:06-05'00'

Signature must be verified on any electronic copies.

Raquel E. Selanikio, P.E.
Florida Registration Number 98449
Kimley-Horn and Associates, Inc.
8201 Peters Road, Suite 2200
Plantation, FL 33324

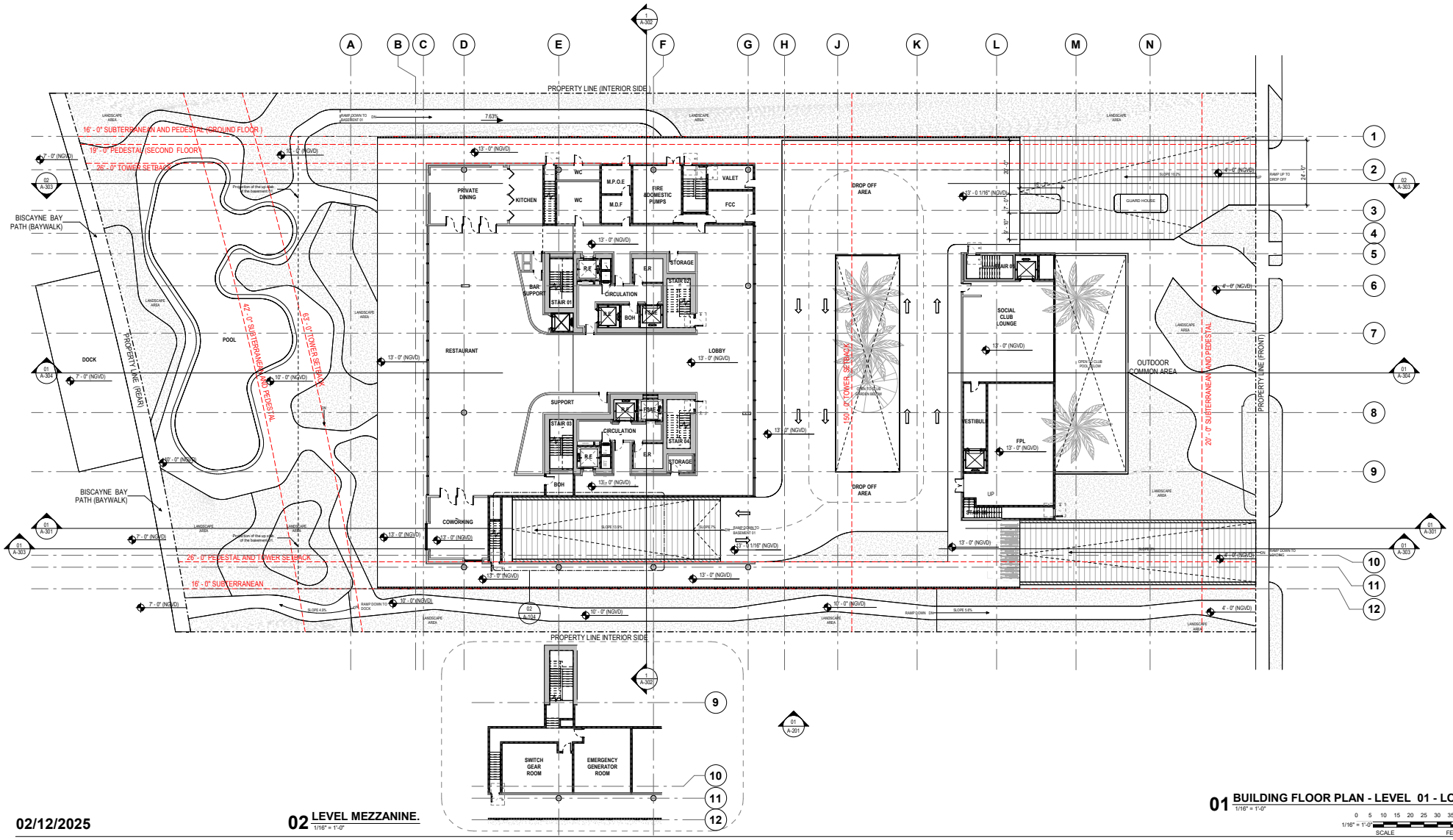
Attachment A

Project Location Map and Conceptual Site Plan



Kimley»Horn

Figure 1
Project Location Map
1250 West Avenue
Miami Beach, Florida



02/12/2025

02 LEVEL MEZZANINE.
1/16" = 1'-0"

01 BUILDING FLOOR PLAN - LEVEL 01 - LOBBY
1/16" = 1'-0"

0 5 10 15 20 25 30 35 40 45
1/16" = 1'-0"
SCALE FEET

odp
ARCHITECTURE AND DESIGN

1250 WEST AVENUE

1250 West Avenue, Miami Beach, Florida

N

LEVEL 01 - LOBBY

Attachment B

Methodology (attachments removed to avoid confusion)

Kimley»Horn

MEMORANDUM

To: Grant Webster
City of Miami Beach

From: Raquel Selanikio, P.E.

Date: January 8, 2026

Subject: 1250 West Avenue Redevelopment
Traffic Assessment Methodology

The purpose of this memorandum is to summarize the traffic assessment methodology for the proposed redevelopment located at 1250 West Avenue in Miami Beach, Florida. Previously a Theoretical Traffic Assessment was prepared based on a conceptual site plan as part of the previous legislative approval the site was seeking. As the site plan has been developed and is now being submitted to the City, a revised methodology is prepared to provide analysis of the current development program, valet operations, entry gate queueing, and maneuverability analyses.

Currently, the site is occupied by a residential tower consisting of 238-high rise multifamily residential units. This existing tower is proposed to be demolished and replaced with the proposed redevelopment which consists of a mixed-use tower with 106-high rise multifamily residential units, 3,467 square feet of lounge space, and approximately 7,800 square feet of fitness/spa space. Note that a private dining room is proposed as an amenity for residents, however this use is private for residents only and therefore is not expected to generate additional uses. Parking will be provided on-site. A location map and conceptual site plan is provided in Attachment A. The following sections summarize our proposed methodology.

TRIP GENERATION

Trip generation calculations for the proposed redevelopment were performed using Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 12th Edition and ITE's *Trip Generation Handbook*, 3rd Edition for both the existing development and proposed redevelopment plans. The trip generation for the existing development was determined using ITE Land Use Code (LUC) 222 (Multifamily Housing [High Rise]). The trip generation for the proposed redevelopment was determined using ITE LUC 222 (Multifamily Housing [High Rise]), LUC 975 (Drinking Place), and LUC 492 (Health/Fitness Club).

A multimodal (public transit, bicycle, and pedestrian) factor based on US Census *Means of Transportation to Work* data was reviewed for the census tract in the vicinity of the redevelopment. A multimodal factor of 13.3 percent (13.3%) was applied to the trip generation calculations to account for the urban environment in which the project site is located. It is expected that some residents, guests, patrons, and employees will choose to walk, bike, or use public transit to and from the redevelopment. Transit route information will be documented in the report. Detailed trip generation calculations and US Census *Means of Transportation to Work* data are included in Attachment B.

Internal capture is expected between the complementary land uses within the project. Internal capture trips for the project were determined based upon methodology contained in the ITE's *Trip Generation Handbook*, 3rd Edition. An internal capture rate of 11.8 percent (11.8%) is expected for the proposed redevelopment during the P.M. peak hour.

Per feedback received from the City's reviewer during the pre-application meeting on December 18th 2025, proposed land uses, land use codes, and pass-by rates were reviewed and modified as needed. The results of the trip generation analysis indicate that the proposed redevelopment is expected to result in a reduction of 12 net new vehicle trips during the weekday A.M. peak hour and six (6) new vehicle trips during the weekday P.M. peak hour. Note that an increase of six (6) trips during a peak hour is a nominal change and therefore, no intersection capacity analyses are proposed. Trip generation calculations are included as Attachment B.

GARAGE ENTRY GATE OPERATIONS ANALYSIS

A 95th percentile entry gate analysis will be prepared for parking garage entry points if entry gates are provided. The entry gate queuing analysis will be prepared for the weekday A.M. and P.M. peak hours. Entry gate queuing analysis will be conducted consistent with the procedures outlined in ITE's *Transportation and Land Development*, 1988. The purpose of this analysis is to determine any future queue storage deficiencies at the entry gates and provide preliminary recommendations for mitigating these deficiencies.

VALET OPERATIONS ANALYSIS

A valet operations queuing analysis will be prepared for the vehicle drop-off/pick-up area to assess expected vehicle queues. Trip generation estimates will be utilized to provide for the highest demand scenario either A.M. or P.M. peak hour. The valet operations queuing analysis will be conducted consistent with procedures described in ITE's *Transportation and Land Development*, 1988. A detailed narrative of the valet operations for stacker spaces compared to tandem spaces will be prepared. A traffic circulation figure will be prepared to illustrate the valet routes to and from the vehicle drop-off/pick-up area.

MANEUVERABILITY ANALYSIS

A maneuverability analysis for the site access and loading vehicle access will be performed utilizing Transoft Solutions' *AutoTURN* software. Deficiencies related to maneuverability, traffic flow, and vehicular conflicts will be documented in the traffic impact statement. A narrative for the loading operations will also be provided as part of the maneuverability analysis.

TRANSPORTATION DEMAND MANAGEMENT STRATEGIES

Transportation Demand Management (TDM) strategies were developed to reduce the impact of project traffic on the surrounding roadway network and promote trip reduction. Typical measures promote bicycling and walking, encourage car/vanpooling, and offer alternatives to the typical workday hours. Consistent with the Theoretical Traffic Assessment, the applicant has committed to providing the following incentives including:

- Provide transit information within the site including route schedules and maps.
- Provide designated scooter/motorcycle parking spaces
- Provide secure bike storage
- Provide wide hallways that can accommodate bikes
- Provide elevators that can accommodate bikes

DOCUMENTATION

The results of the traffic impact statement will be summarized in a technical letter. The letter will include graphics and tabulations necessary to summarize the assumptions and analysis. An electronic copy of the letter will be provided as part of the submittal package.

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Attachment C

Transit Route Information

MIAMIBEACH TROLLEY

LEGEND

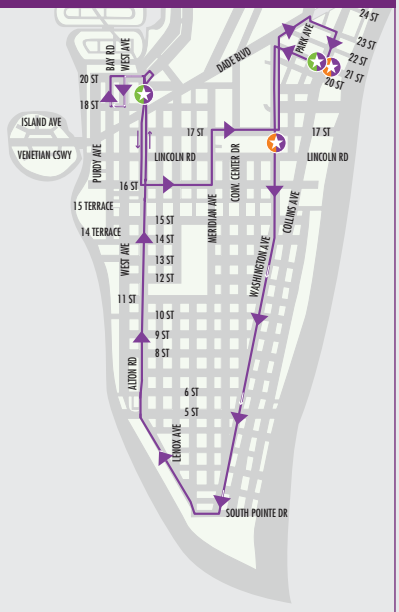
- NORTH BEACH LOOP
- COLLINS EXPRESS
- MIDDLE BEACH LOOP
- SOUTH BEACH LOOPS

TRANSFER POINTS

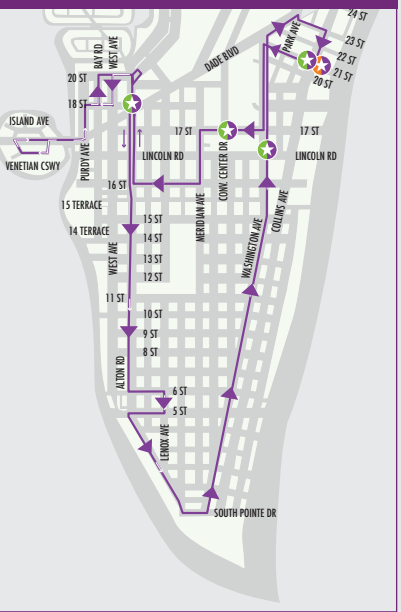
- NORTH BEACH LOOP ↔ COLLINS EXPRESS
- COLLINS EXPRESS ↔ MIDDLE BEACH LOOP
- MIDDLE BEACH LOOP ↔ SOUTH BEACH LOOPS
- COLLINS EXPRESS ↔ SOUTH BEACH LOOPS

See detailed route maps for South Beach Loops ▶

SOUTH BEACH LOOP - A
Clockwise



SOUTH BEACH LOOP - B
Counter Clockwise



For a full list of trolley stops visit: **miamibeachtrolley.com**

SERVICE FREQUENCIES

FRECUENCIAS DE SERVICIO / FREKANS SÈVIS YO

	FROM DESDE / DE	TO HASTA / A	EVERY CADA / CHAK
WEEKDAY DIAS LABORABLES LASEMÈN	**4:00 a.m.**	**11:30 p.m.**	**30 min**
SATURDAY SÁBADO SAMDI	**5:00 a.m.**	**12:00 a.m.**	**30 min**
SUNDAY DOMINGO DIMANCH	**5:00 a.m.**	**7:00 a.m.**	**60 min**
	7:00 a.m.	**8:00 p.m.**	**40 min**
	8:00 p.m.	**12:00 a.m.**	**60 min**

Frequencies are approximate and may vary depending on traffic and road conditions.
Las frecuencias son aproximadas, pues dependen del tráfico y otras condiciones de las vías.
Asosye yo apwoksimatif epi yo ka varye selon kondisyon sikilasyon sou wout yo.

Language Assistance: Miami-Dade Transit (MDT) is committed to providing information about its transit services to passengers with limited English as part of its non-discrimination program. MDT publishes route information in Spanish and Haitian Creole and offers assistance in both languages at our Call Center at 3-1-1 or 305- 468-5900. For more information, call MDT's Office of Civil Rights & Labor Relations at 786-469-5486.

Miami-Dade County provides equal access and equal opportunity in employment and does not discriminate on the basis of disability in its programs or services. Auxiliary aids and services for communication are available with five days' advance notice. For material in alternate format (audiotape, Braille or computer disk), a signlanguage interpreter or other accommodations, please contact: Miami-Dade Transit, Office of Civil Rights and Labor Relations, 701 NW 1st Court, Suite 1700, Miami, FL 33136. Attention: ADA Coordinator. Telephone: 786-469-5225, Fax: 786-469-5589. E-mail: DTPW-ADA@miamidade.gov.

Español: El Departamento de Transporte Público de Miami-Dade (MDT, su sigla en inglés) está dedicado a proveer información sobre sus servicios a los pasajeros que no hablan inglés. MDT publica información sobre sus rutas de autobús en español y creole haitiano y ofrece asistencia en ambos idiomas en nuestro Centro de Llamadas en el 3-1-1 o 305-468-5900. Para más informacion, llame la Oficina de Derechos Humanos y Relaciones Laborales de MDT al 786-469-5486.

El Condado de Miami-Dade ofrece igualdad de acceso y de oportunidades en el empleo y no practica la discriminación por discapacidad, en sus programas o servicios. Los dispositivos y servicios de ayuda auditiva para la comunicación están disponibles previa solicitud, con cinco días de anticipación. Para obtener materiales en formato alternativo (cinta de audio, Braille o disco de computadora), para solicitar un intérprete del lenguaje de las señas u otros servicios similares sírvase llamar a: Transporte de Miami-Dade, Oficina de Derechos Civiles y Relaciones Laborales, 701 NW 1st Court, Suite 1700, Miami, FL 33136. Atención: ADA Coordinator. Teléfono: 786-469-5225, Fax: 786-469-5589. Correo electrónico: DTPW-ADA@miamidade.gov.

Kreyòl Ayisyen: Miami-Dade Transit (MDT) angaje li a bay pasaje ak konesans limite an Anglè yo tout enfòmasyon sou sèvis transpò piblik nan lang pa yo. MDT pibliye enfòmasyon sou trajè otobis yo an Espanyòl ak an Kreyòl Ayisyen epi li bay asistans nan toude lang yo nan Sant Repons nou an 3-1-1 oswa 305-468-5900. Pou plis enfòmasyon, rele Biwo Dwa Sivik ak Relasyon Travay MDT la nan 786-469-5486.

Konte Miami-Dade bay aksè ak opòtinite egal ego nan anplwa epi li pa fè diskriminasyon baze sou enfi mite nan pwogram li yo ak sèvis li yo. Aparèy ak sèvis kominikasyon pou moun ki pa tande/wè byen yo disponib ak yon preyavi senk jou. Pou jwenn dokiman nan lòt fòma (tep odyo, Bray oswa disk konpit), sèvis yon entèprèt ki pale lang siy oswa lòt akomodasyon, tanpri kontakte: Miami-Dade Transit, Biwo Dwa Civil ak Relasyon Travay, 701 NW 1st Court, Suite 1700, Miami, FL 33136. Atansyon: ADA Coordinator. Telefòn: 786-469-5225, Faks: 786-469-5589. Imel: DTPW-ADA@miamidade.gov.

miamidade.gov/transportation

Information • Información • Enfòmasyon
311 (305.468.5900) TTY/Florida Relay: **711**

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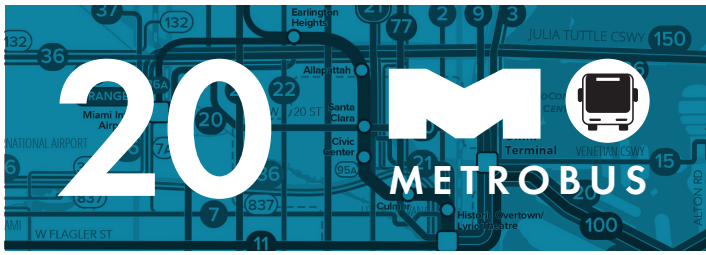

NOVEMBER 2024 NOVIEMBRE 2024 | NOVANM 2024

- Local service seven days a week.
- Travels from South Beach to Miami International Airport Metrorail Station along Alton Rd, MacArthur Cswy, NW 20 St, and NW 36 St.
- Stops include the Adrienne Arsht Center Metromover Station / Omni Metrobus Terminal.

- Servicio local los siete días de la semana.
- Va desde South Beach hasta la estación del Metrorail del Aeropuerto Internacional de Miami, pasando por Alton Road, MacArthur Cswy., NW 20 St y NW 36 St.
- Con parada en la terminal Omni del Metrobús/estación Adrienne Arsht Center del Metromover.

- Sèvis lokal sèt jou sou sèt.
- Vwayaje soti nan South Beach pou rive nan Estasyon Metrorail Ayewopò Entènasyonal Miami an sou Alton Rd, MacArthur Cswy, NW 20 St, ak NW 36 St.
- Arè yo gen ladan Estasyon Metromover Adrienne Arsht Center / Omni Metrobus Terminal.

MORE INFORMATION
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MIAMI-DADE COUNTY
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

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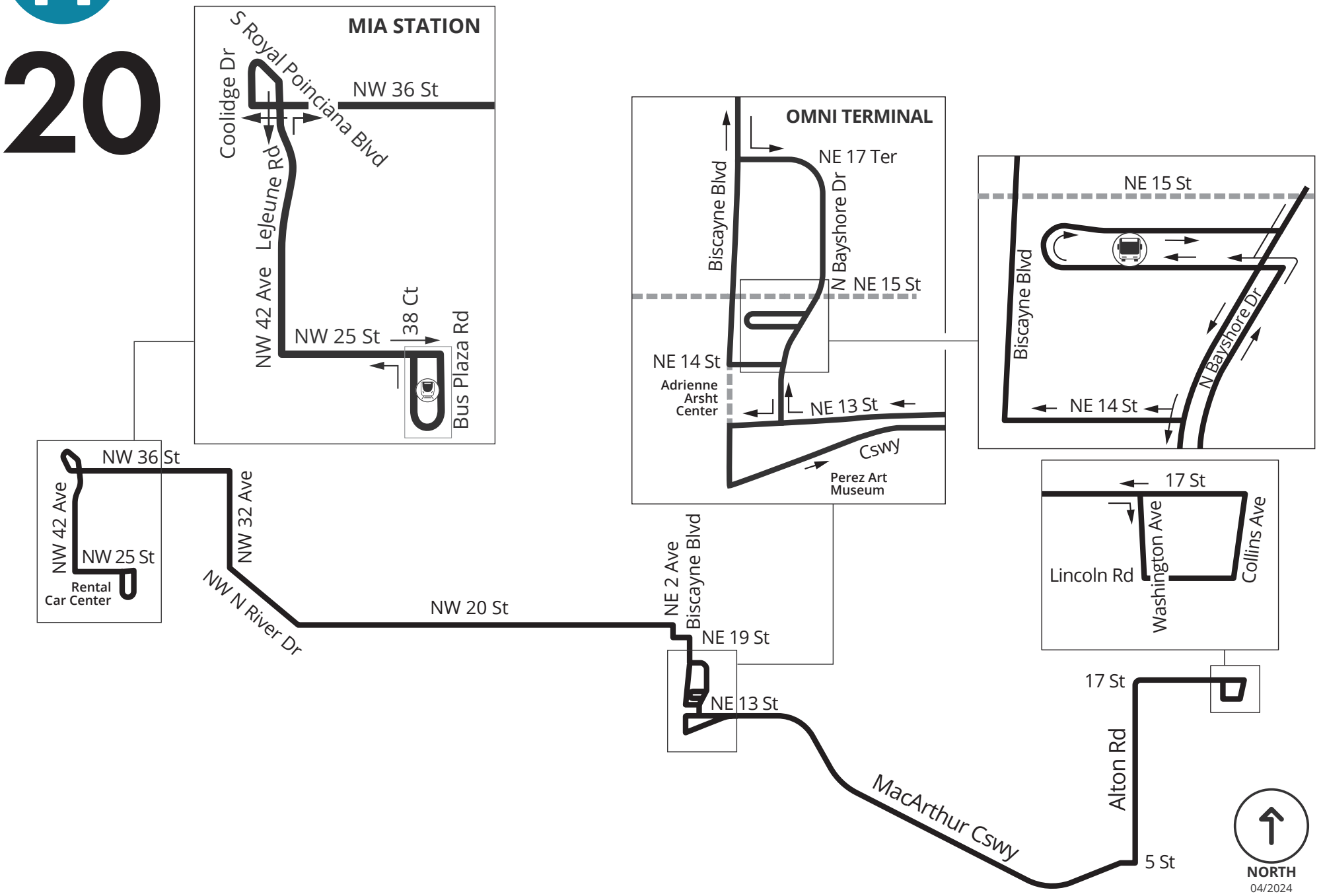
MIA STATION
S Royal Poinciana Blvd
Coolidge Dr
NW 36 St
LeJeune Rd
NW 42 Ave
NW 25 St
38 Ct
Bus Plaza Rd
OMNI TERMINAL
Biscayne Blvd
NE 17 Ter
N Bayshore Dr
NE 15 St
NE 14 St
Adrienne Arsht Center
NE 13 St
Cswy
Perez Art Museum
NW 36 St
NW 42 Ave
NW 25 St
Rental Car Center
NW 32 Ave
NW N River Dr
NW 20 St
NE 2 Ave
Biscayne Blvd
NE 19 St
NE 13 St
MacArthur Cswy
17 St
Lincoln Rd
Washington Ave
Collins Ave
Alton Rd
5 St
NORTH
04/2024

SERVICE FREQUENCIES
FRECUENCIAS DE SERVICIO / FREKANS SÈVIS YO

	FROM DESDE / DE	TO HASTA / A	EVERY CADA / CHAK
WEEKDAY DIAS LABORABLES LASEMÈN	**5:00 a.m.**	**10:00 p.m.**	**30 min**

Frequencies are approximate and may vary depending on traffic and road conditions / Frecuencias son aproximadas, pues dependen del trafico y otras condiciones de las vias / Asosye yo apwoksimatif epi yo ka varye selon kondisyon sikilasyon sou wout yo

Language Assistance: Miami-Dade Transit (MDT) is committed to providing information about its transit services to passengers with limited English as part of its non-discrimination program. MDT publishes route information in Spanish and Haitian Creole and offers assistance in both languages at our Call Center at 3-1-1 or 305- 468-5900. For more information, call MDT's Office of Civil Rights & Labor Relations at 786-469-5486.

Miami-Dade County provides equal access and equal opportunity in employment and does not discriminate on the basis of disability in its programs or services. Auxiliary aids and services for communication are available with five days' advance notice. For material in alternate format (audiotape, Braille or computer disk), a signlanguage interpreter or other accommodations, please contact: Miami-Dade Transit, Office of Civil Rights and Labor Relations, 701 NW 1st Court, Suite 1700, Miami, FL 33136. Attention: ADA Coordinator. Telephone: 786-469-5225, Fax: 786-469-5589. E-mail: DTPW-ADA@miamidade.gov.

Español: El Departamento de Transporte Público de Miami-Dade (MDT, su sigla en inglés) está dedicado a proveer información sobre sus servicios a los pasajeros que no hablan inglés. MDT publica información sobre sus rutas de autobús en español y creole haitiano y ofrece asistencia en ambos idiomas en nuestro Centro de Llamadas en el 3-1-1 o 305-468-5900. Para más informacion, llame la Oficina de Derechos Humanos y Relaciones Laborales de MDT al 786-469-5486.

El Condado de Miami-Dade ofrece igualdad de acceso y de oportunidades en el empleo y no practica la discriminación por discapacidad, en sus programas o servicios. Los dispositivos y servicios de ayuda auditiva para la comunicación están disponibles previa solicitud, con cinco días de anticipación. Para obtener materiales en formato alternativo (cinta de audio, Braille o disco de computadora), para solicitar un intérprete del lenguaje de las señas u otros servicios similares sírvase llamar a: Transporte de Miami-Dade, Oficina de Derechos Civiles y Relaciones Laborales, 701 NW 1st Court, Suite 1700, Miami, FL 33136. Atención: ADA Coordinator. Teléfono: 786-469-5225, Fax: 786-469-5589. Correo electrónico: DTPW-ADA@miamidade.gov.

Kreyòl Ayisyen: Miami-Dade Transit (MDT) angaje li a bay pasaje ak konesans limite an Anglè yo tout enfòmasyon sou sèvis transpò piblik nan lang pa yo. MDT pibliye enfòmasyon sou trajè otobis yo an Espanyòl ak an Kreyòl Ayisyen epi li bay asistans nan toude lang yo nan Sant Repons nou an 3-1-1 oswa 305-468-5900. Pou plis enfòmasyon, rele Biwo Dwa Sivik ak Relasyon Travay MDT la nan 786-469-5486.

Konte Miami-Dade bay aksè ak opòtinite egal ego nan anplwa epi li pa fè diskriminasyon baze sou enfi mite nan pwogram li yo ak sèvis li yo. Aparèy ak sèvis kominikasyon pou moun ki pa tande/wè byen yo disponib ak yon preyavi senk jou. Pou jwenn dokiman nan lòt fòma (tep odyo, Bray oswa disk konpit), sèvis yon entèprèt ki pale lang siy oswa lòt akomodasyon, tanpri kontakte: Miami-Dade Transit, Biwo Dwa Civil ak Relasyon Travay, 701 NW 1st Court, Suite 1700, Miami, FL 33136. Atansyon: ADA Coordinator. Telefòn: 786-469-5225, Faks: 786-469-5589. Imel: DTPW-ADA@miamidade.gov.

miamidade.gov/transportation
Information • Información • Enfòmasyon
311 (305.468.5900) TTY/Florida Relay: **711**
@GoMiamiDade **GO Miami-Dade Transit**

101 METROBUS

MARCH 2025 MARZO 2025 | MAS 2025

- Local weekday service.
- Travels from Mt. Sinai Medical Center in Miami Beach to Government Center Metrorail Station in Downtown Miami along Alton Rd, MacArthur Causeway and Biscayne Blvd.

- Servicio local los días laborables.
- Brinda servicio desde Mt. Sinai Medical Center en Miami Beach hasta la estación Government Center del Metrorail en el downtown de Miami, a lo largo de Alton Rd, MacArthur Causeway y Biscayne Blvd.

- Sèvis lokal lasemèn.
- Vwayaje soti nan Mt. Sinai Medical Center nan Miami Beach pou ale nan Estasyon Anba Government Center Metrorail nan Anba Lavil Miami sou Alton Rd, MacArthur Causeway ak Biscayne Blvd.

MORE INFORMATION
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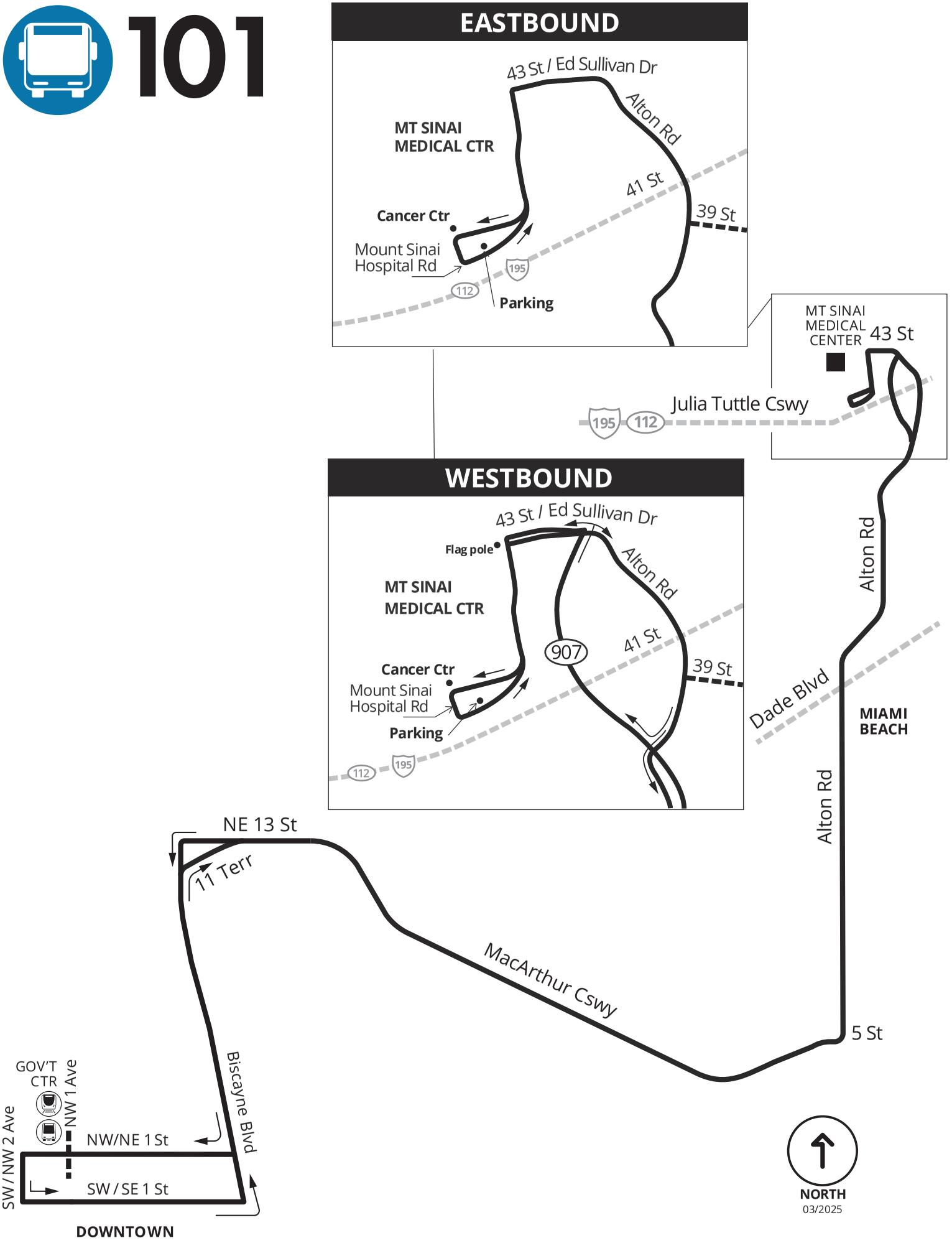
DRIVE LESS.LIVE MORE.™
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS

101


EASTBOUND
43 St / Ed Sullivan Dr
Alton Rd
MT SINAI
MEDICAL CTR
41 St
39 St
Cancer Ctr
Mount Sinai
Hospital Rd
195
112
Parking
MT SINAI
MEDICAL
CENTER
43 St
Julia Tuttle Cswy
195
112
WESTBOUND
43 St / Ed Sullivan Dr
Flag pole
Alton Rd
MT SINAI
MEDICAL CTR
907
41 St
39 St
Cancer Ctr
Mount Sinai
Hospital Rd
Parking
112
195
Alton Rd
Dade Blvd
MIAMI
BEACH
Alton Rd
NE 13 St
11 Terr
MacArthur Cswy
5 St
GOV'T
CTR
NW 1 Ave
SW / NW 2 Ave
NW/NE 1 St
SW / SE 1 St
Biscayne Blvd
DOWNTOWN
NORTH
03/2025

Attachment D

Trip Generation Calculations

Existing Development A.M. Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use	ITE Edition	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	In	Out	Total
1	Multifamily Housing (High-Rise)	12	222	238	DU	T = 0.2(X)	29%	71%	14	34	48	13.3%	6	12	30	42	0.0%	0	12	30	42	0.0%	0	12	30	42
								Total:	14	34	48	13.3%	6	12	30	42	0.0%	0	12	30	42	0.0%	0	12	30	42

Proposed Redevelopment A.M. Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use	ITE Edition	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	In	Out	Total
1	Multifamily Housing (High-Rise)	12	222	106	DU	T = 0.2(X)	29%	71%	6	15	21	13.3%	3	5	13	18	0.0%	0	5	13	18	0.0%	0	5	13	18
2	Drinking Place	12	975	3.467	KSF	[1]	50%	50%	0	0	0	13.3%	0	0	0	0	0.0%	0	0	0	0	0.0%	0	0	0	0
3	Health/Fitness Club	12	492	7.8	KSF	T = 1.79(X)	51%	49%	7	7	14	13.3%	2	6	6	12	0.0%	0	6	6	12	0.0%	0	6	6	12
								Total:	13	22	35	13.3%	5	11	19	30	0.0%	0	11	19	30	0.0%	0	11	19	30

Note: [1] The drinking place land use is expected to be closed during the A.M. peak hour.

NET NEW TRIPS	-1	-11	-12

Existing Development P.M. Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use	ITE Edition	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	In	Out	Total
1	Multifamily Housing (High-Rise)	12	222	238	DU	T = 0.26(X)	61%	39%	38	24	62	13.3%	8	33	21	54	0.0%	0	33	21	54	0.0%	0	33	21	54
								Total:	38	24	62	13.3%	8	33	21	54	0.0%	0	33	21	54	0.0%	0	33	21	54

Proposed Redevelopment P.M. Peak Hour Trip Generation Calculations

	TRIP GENERATION CHARACTERISTICS						DIRECTIONAL DISTRIBUTION		BASELINE TRIPS			MULTIMODAL REDUCTION		VEHICLE TRIPS			INTERNAL CAPTURE		EXTERNAL VEHICLE TRIPS			PASS-BY CAPTURE		NEW EXTERNAL VEHICLE TRIPS		
	Land Use	ITE Edition	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total	Factor	MR Trips	In	Out	Total	Rate	IC Trips	In	Out	Total	Rate	PB Trips	In	Out	Total
1	Multifamily Housing (High-Rise)	12	222	106	DU	T = 0.26(X)	61%	39%	17	11	28	13.3%	4	15	9	24	16.7%	4	13	7	20	0.0%	0	13	7	20
2	Drinking Place	12	975	3.467	KSF	T = 6.44(X)	66%	34%	15	7	22	13.3%	3	13	6	19	15.8%	3	11	5	16	0.0%	0	11	5	16
3	Health/Fitness Club	12	492	7.8	KSF	T = 3.77(X)	57%	43%	17	12	29	13.3%	4	15	10	25	4.0%	1	15	9	24	0.0%	0	15	9	24
								Total:	49	30	79	13.3%	11	43	25	68	11.8%	8	39	21	60	0.0%	0	39	21	60
																							NET NEW TRIPS	**6**	**0**	**6**

Internal Capture Reduction Calculations

ITE Trip Generation Handbook, 3rd Edition methodology for the P.M. peak hour.

GROSS TRIP GENERATION		Existing Development		Proposed Redevelopment	
INPUT		*Weekday Peak Hour of Adjacent Street Traffic One Hour Between 4 and 6 p.m.*		*Weekday Peak Hour of Adjacent Street Traffic One Hour Between 4 and 6 p.m.*	
	Land Use	Enter	Exit	Enter	Exit
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	0	0	13	6
	Cinema/Entertainment	0	0	15	10
	Residential	33	21	15	9
	Hotel	0	0	0	0
		33	21	43	25
INTERNAL TRIPS					
OUTPUT		*Weekday Peak Hour of Adjacent Street Traffic One Hour Between 4 and 6 p.m.*		*Weekday Peak Hour of Adjacent Street Traffic One Hour Between 4 and 6 p.m.*	
	Land Use	Enter	Exit	Enter	Exit
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	0	0	2	1
	Cinema/Entertainment	0	0	0	1
	Residential	0	0	2	2
	Hotel	0	0	0	0
		0	0	4	4
INTERNAL CAPTURE REDUCTION					
	Land Use	Internal Capture Reduction		Internal Capture Reduction	
OUTPUT	***Total % Reduction***	***0.0%***		***11.8%***	
	Office	0.0%		0.0%	
	Retail	0.0%		0.0%	
	Restaurant	0.0%		15.8%	
	Cinema/Entertainment	0.0%		4.0%	
	Residential	0.0%		16.7%	
	Hotel	0.0%		0.0%	
EXTERNAL TRIPS					
OUTPUT	Land Use	*Weekday Peak Hour of Adjacent Street Traffic One Hour Between 4 and 6 p.m.*		*Weekday Peak Hour of Adjacent Street Traffic One Hour Between 4 and 6 p.m.*	
		Enter	Exit	Enter	Exit
	Office	0	0	0	0
	Retail	0	0	0	0
	Restaurant	0	0	11	5
	Cinema/Entertainment	0	0	15	9
	Residential	33	21	13	7
	Hotel	0	0	0	0
		33	21	39	21

Means of Transportation to Work

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

Label	Census Tract 43.01; Miami-Dade County; Florida	
	Estimate	Margin of Error
(24+32+86)/(1,551-487)= 13.3%		
Total:	1,551	±247
Car, truck, or van:	819	±192
Drove alone	800	±187
Carpooled:	19	±27
In 2-person carpool	12	±24
In 3-person carpool	0	±15
In 4-person carpool	0	±15
In 5- or 6-person carpool	0	±15
In 7-or-more-person carpool	7	±14
Public transportation (excluding taxicab):	24	±26
Bus	24	±26
Subway or elevated rail	0	±15
Long-distance train or commuter rail	0	±15
Light rail, streetcar or trolley (carro público in Puerto Rico)	0	±15
Ferryboat	0	±15
Taxicab	14	±21
Motorcycle	18	±22
Bicycle	32	±29
Walked	86	±62
Other means	71	±83
Worked from home	487	±192

Table Notes

Means of Transportation to Work

Survey/Program: American Community Survey

Universe: Workers 16 years and over

Year: 2023

Estimates: 5-Year

Table ID: B08301

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, the decennial census is the official source of populat totals for April 1st of each decennial year. In between censuses, the Census Bureau's Population Estimates Program produces and disseminates the official estimates the population for the nation, states, counties, cities, and towns and estimates of housing units and the group quarters population for states and counties.

Information about the American Community Survey (ACS) can be found on the ACS website. Supporting documentation including code lists, subject definitions, data accuracy, and statistical testing, and a full list of ACS tables and table shells (without estimates) can be found on the Technical Documentation section of the ACS website.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in th Methodology
section.

Source: U.S. Census Bureau, 2019-2023 American Community Survey 5-Year Estimates

ACS data generally reflect the geographic boundaries of legal and statistical areas as of January 1 of the estimate year. For more information, see Geography Boundar by Year.

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the tru value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

Users must consider potential differences in geographic boundaries, questionnaire content or coding, or other methodological issues when comparing ACS data from different years. Statistically significant differences shown in ACS Comparison Profiles, or in data users' own analysis, may be the result of these differences and thus might not necessarily reflect changes to the social, economic, housing, or demographic characteristics being compared. For more information, see Comparing ACS Da

Workers include members of the Armed Forces and civilians who were at work last week.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on 2020 Census data. As a result, data fo urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

-

The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.

N

The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.

(X)

The estimate or margin of error is not applicable or not available.

median-

The median falls in the lowest interval of an open-ended distribution (for example "2,500-")

median+

The median falls in the highest interval of an open-ended distribution (for example "250,000+").

**

The margin of error could not be computed because there were an insufficient number of sample observations.

***

The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.

*****

A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the correspondin estimate has no sampling error and the margin of error may be treated as zero.

Attachment E

Entry Gate Analysis

Residential Entry Gate Analysis (A.M. Peak Hour)

Arrival Rate

IN
5 veh/hr

Service Rate

IN
0.100 mins/veh

Control Delay = min

Service Time = 0.10 mins/veh

Number of Entry Gates (N) =	1	
Level of Confidence =	0.95	
Storage Provided On-Site =	4	vehicles
Total Entering and Exiting Vehicles(q) =	5	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	600.00	veh/hr/pos
Average Service Rate (t) =	0.10	mins/veh
rho (t/Q) =	0.008	

Expected (avg.) number of vehicles in the system	E(m)=	0.00	
Expected (avg.) number of vehicles waiting in queue	E(n)=	0.01	
Mean time in the queue	E(w)=	0.00	mins
Mean time in system	E(t)=	0.10	mins

Proportion of customers who wait (P) (E(w) > 0)=	0.83%
Probability of a queue exceeding a length (M) P(x > M)=	5.00%

Queue length which is exceeded 5.00% of the time is equal to less than one (1) vehicle.

Residential Entry Gate Analysis (P.M. Peak Hour)

Arrival Rate

IN
12

veh/hr

Service Rate

IN
0.100

mins/veh

Control Delay = min

Service Time = 0.10 mins/veh

Number of Entry Gates (N) =	1	
Level of Confidence =	0.95	
Storage Provided On-Site =	4	vehicles
Total Entering and Exiting Vehicles(q) =	12	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	600.00	veh/hr/pos
Average Service Rate (t) =	0.10	mins/veh
rho (t/Q) =	0.020	

Expected (avg.) number of vehicles in the system	E(m)=	0.00	
Expected (avg.) number of vehicles waiting in queue	E(n)=	0.02	
Mean time in the queue	E(w)=	0.00	mins
Mean time in system	E(t)=	0.10	mins

Proportion of customers who wait (P) (E(w) > 0)=	2.00%	
Probability of a queue exceeding a length (M) P(x > M)=	5.00%	

Queue length which is exceeded 5.00% of the time is equal to less than one (1) vehicle.

Visitor Entry Gate Analysis (A.M. Peak Hour)

Arrival Rate

IN
6

veh/hr

Service Rate

IN
1.000

mins/veh

Control Delay = min

Service Time = 1.00 mins/veh

Number of Entry Gates (N) =	1	
Level of Confidence =	0.95	
Storage Provided On-Site =	3	vehicles
Total Entering and Exiting Vehicles(q) =	6	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	60.00	veh/hr/pos
Average Service Rate (t) =	1.00	mins/veh
rho (t/Q) =	0.100	

Expected (avg.) number of vehicles in the system	E(m)=	0.01	
Expected (avg.) number of vehicles waiting in queue	E(n)=	0.11	
Mean time in the queue	E(w)=	0.11	mins
Mean time in system	E(t)=	1.11	mins

Proportion of customers who wait (P)	(E(w) > 0)=	10.00%
Probability of a queue exceeding a length (M)	P(x > M)=	5.00%

Queue length which is exceeded 5.00% of the time is equal to less than one (1) vehicle.

Visitor Entry Gate Analysis (P.M. Peak Hour)

Arrival Rate

IN
27

veh/hr

Service Rate

IN
1.000

mins/veh

Control Delay = min

Service Time = 1.00 mins/veh

Number of Entry Gates (N) =	1	
Level of Confidence =	0.95	
Storage Provided On-Site =	3	vehicles
Total Entering and Exiting Vehicles(q) =	27	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	60.00	veh/hr/pos
Average Service Rate (t) =	1.00	mins/veh
rho (t/Q) =	0.450	

Expected (avg.) number of vehicles in the system	E(m)=	0.37	
Expected (avg.) number of vehicles waiting in queue	E(n)=	0.82	
Mean time in the queue	E(w)=	0.82	mins
Mean time in system	E(t)=	1.82	mins

Proportion of customers who wait (P) (E(w) > 0)=	45.00%
Probability of a queue exceeding a length (M) P(x > M)=	5.00%

Queue length which is exceeded 5.00% of the time is equal to 1.8 vehicles.

Table 4-4. PARC Service Rates

	Veh/hr	Sec/veh
Prepaid Frequent Parker Entry or Exit		
Insertion Card	435	8.3
Proximity Card	600	6.0
Automatic Veh ID	800	4.5
Pay Per Use Patron Vehicular Entry		
Push Button Ticket	400	9.0
Auto Spit Ticket	450	8.0
Pay on Entry-flat fee, gated, ticketed	200	18.0
Pay on Entry flat-fee, non gated/ticketed	300	12.0
Pay Per Use Patron Vehicular Exits		
Cash to cashier-Variable Rate	135	26.7
Credit card-online check (telephone line) and sign	95	38.0
Credit card online check but no sign	110	32.7
Credit card-batched or high speed line and no sign	175	20.7
Validated for free parking	300	12.0
Flat Rate Transaction (gated)	180	20.0
LPI if front plate	100	36.0
LPI if rear plate only	80	45.0
LPR	120	30.0
Insertion Ticket for POF Validation	360	10.0
POF Central Pay to Cashier		
Cash to POF cashier – Variable Rate	175	20.7
Credit card-online check (telephone line) and sign	115	32.7
Credit card-online check but no sign	135	26.7
Credit card-batched or high speed line and no sign	245	14.7
Validated for free parking	600	6.0
POF Central Pay to Machine		
Cash to APS-Variable Rate	75	48.0
Credit card – online check (telephone line) and sign	NA	NA
Credit card – online check but no sign	66	54.5
Credit card – batched or high speed line and no sign	100	36.0
Validated for free parking	240	15.0

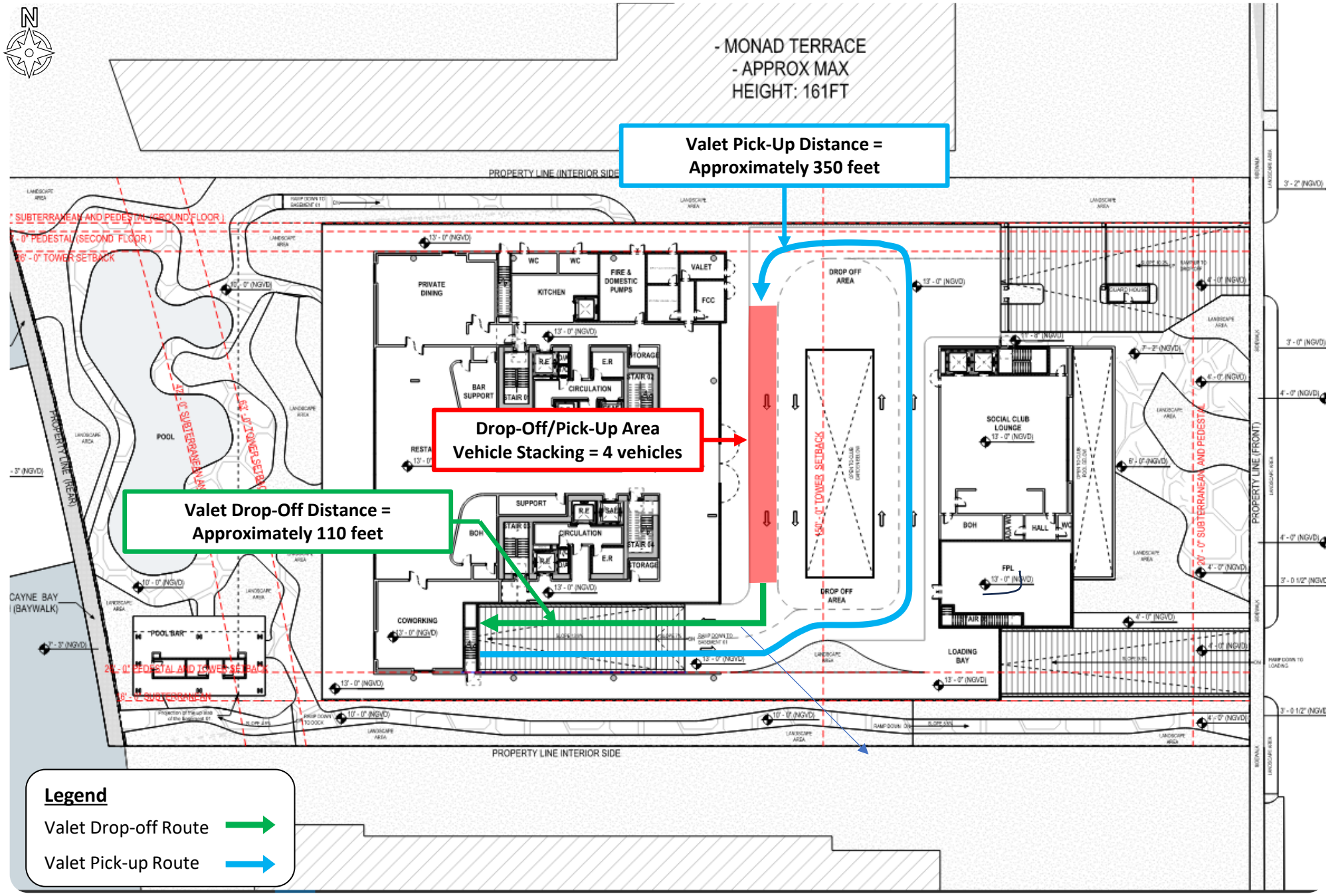
Sharp turns in the approach to equipment lanes have a significant impact on μ. When it is more difficult for a patron to pull into the lane from the first position in the queue, seconds are lost from each transaction. This loss can be accounted for by **adding** seconds to the average transaction time to represent the turning factor. See Figure 4-10 for diagrams showing appropriate turning factors for design. If, for example, the design of a lane equipped with an insertion card reader requires a very difficult turn into the lane, and thus adds five seconds to the average transaction, the adjusted service rate is 3600/(8.3+5 =13.3) seconds per

Attachment F

Valet Analysis

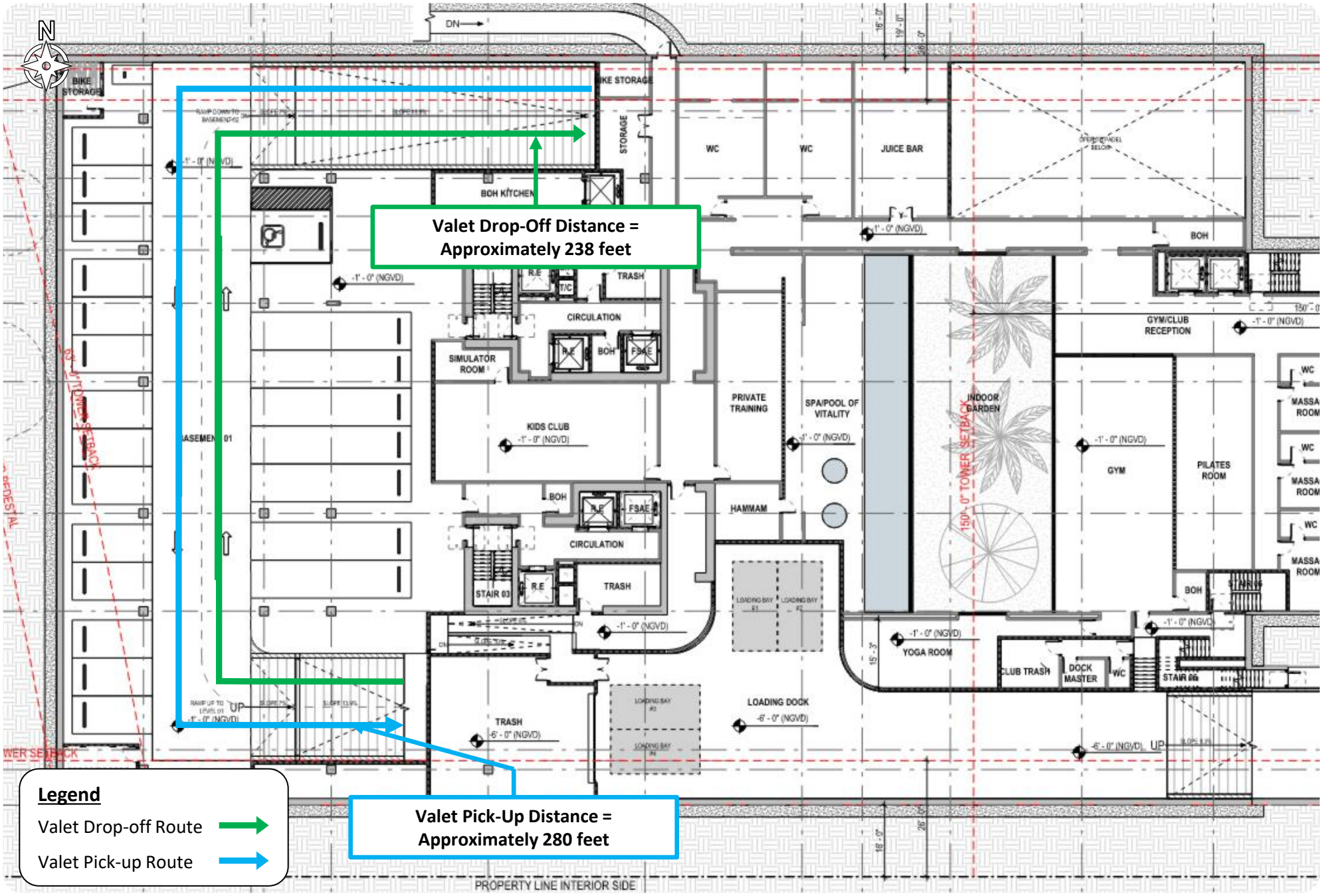
Scenario	External Vehicle Trips			Valet Percentage	Valeted Vehicles		
	In	Out	Total		In	Out	Total
A.M. Peak Hour	11	19	30	48.6%	5	9	14
P.M. Peak Hour	39	21	60		19	10	29

Valet Route Map



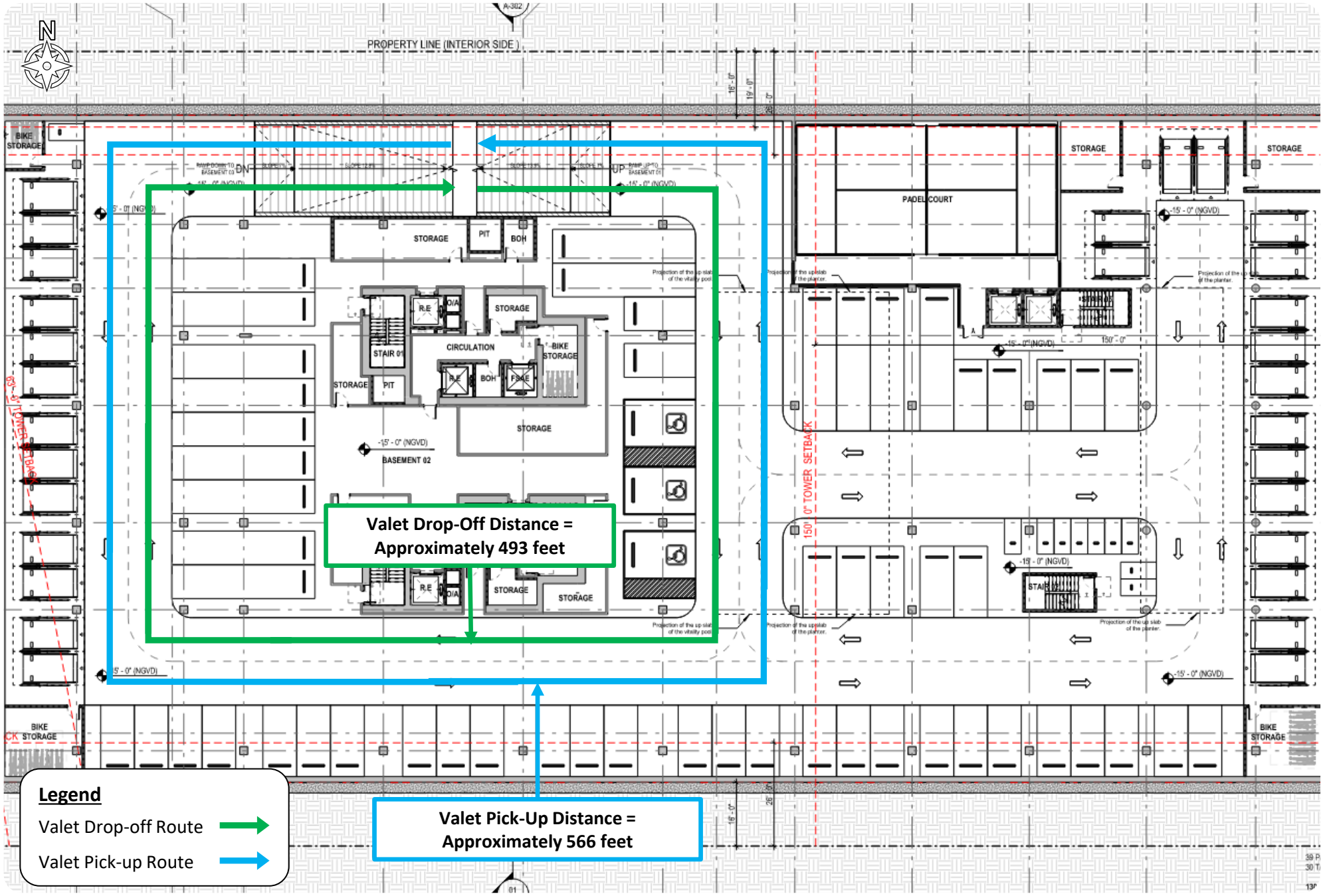
Kimley»Horn

Valet Routing Map
1250 West Avenue Redevelopment
Miami Beach, Florida



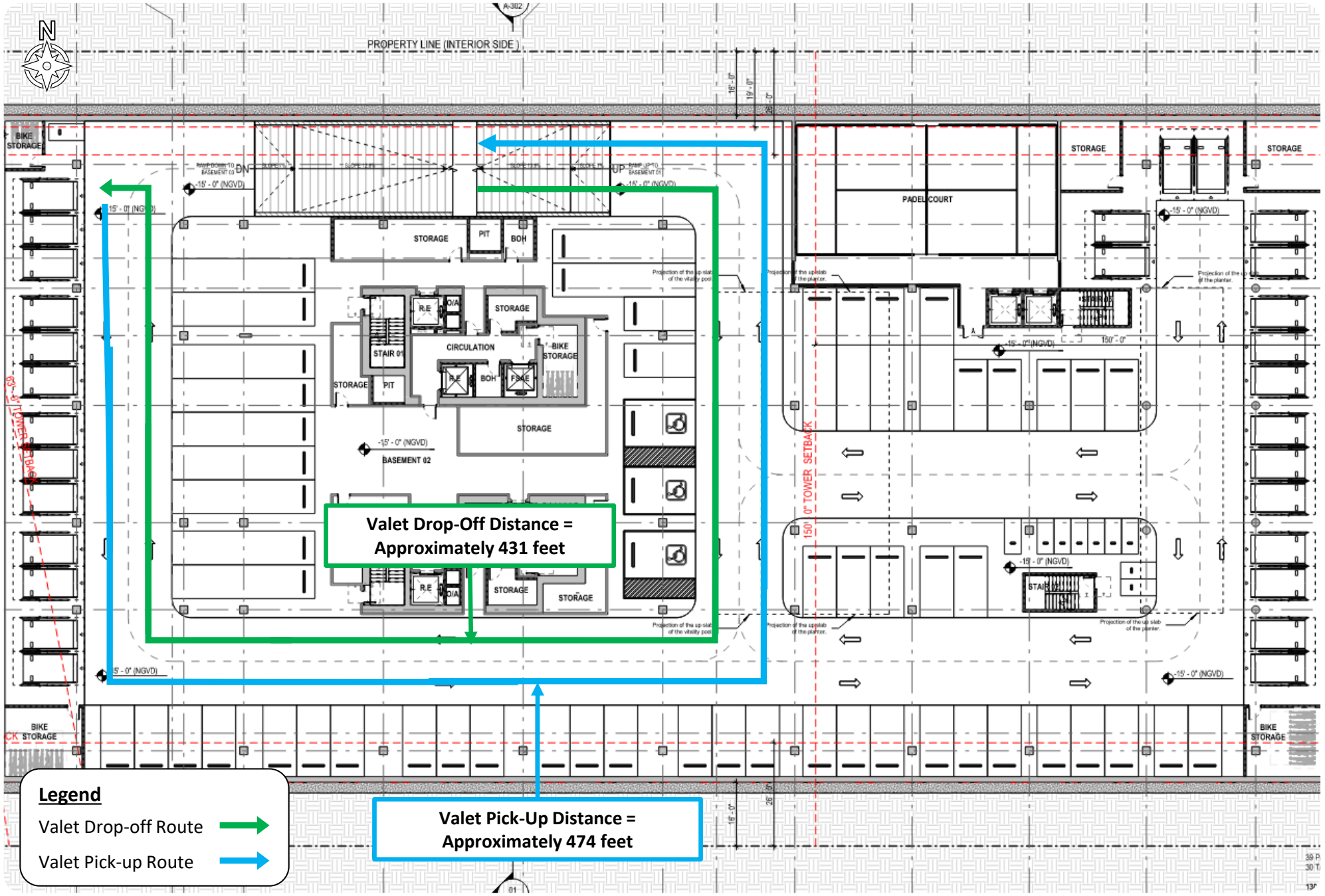
Kimley»Horn

Level Basement 01
Valet Routing Map
1250 West Avenue Redevelopment
Miami Beach, Florida



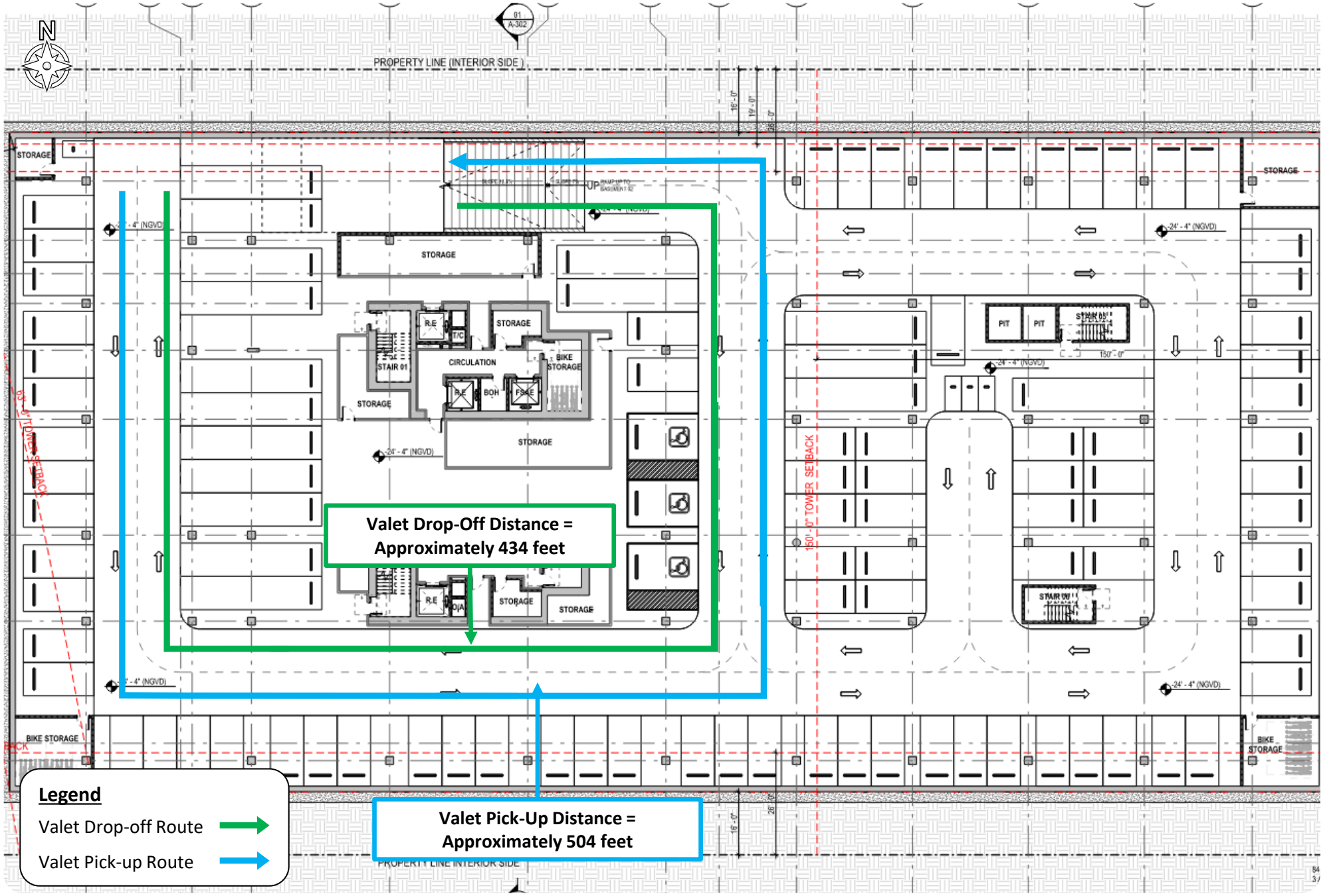
Kimley»Horn

Level Basement 02
Valet Routing Map
1250 West Avenue Redevelopment
Miami Beach, Florida



Kimley»Horn

Level Basement 02
Valet Routing Map
1250 West Avenue Redevelopment
Miami Beach, Florida



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Level Basement 03
Valet Routing Map
1250 West Avenue Redevelopment
Miami Beach, Florida

Tandem Parking Processing Scenarios

Vehicle Processing Scenarios

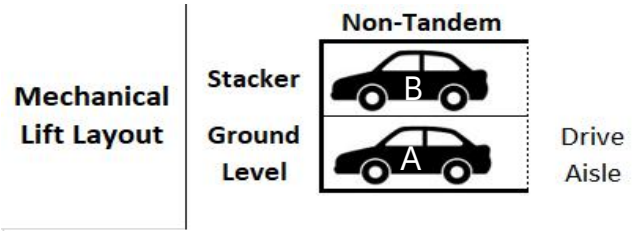
Tandem Space Layout	

Vehicle B - Drop-Off		
1.	Attendant drives into space	10
		10 sec
Vehicle B - Pick-Up (Vehicle A not Parked)		
1.	Attendant drives out of space	10
		10 sec
Vehicle B - Pick-Up (Vehicle A Parked)		
1.	Attendant enters Vehicle A	5
2.	Attendant moves Vehicle A to drive aisle	10
3.	Attendant exits Vehicle A	5
4.	Attendant enters Vehicle B and drives to drive aisle	15
5.	Attendant exits Vehicle B	5
6.	Attendant re-enters Vehicle A and drives into position B	15
7.	Attendant exits Vehicle A	5
8.	Attendant re-enters Vehicle B	5
		65 sec
Vehicle A - Drop-Off		
1.	Attendant drives into space	10
		10 sec
Vehicle A - Pick-Up		
1.	Attendant drives out of space	10
		10 sec

Average Drop-off Processing Time	10 sec
Average Pick-up Processing Time	28 sec

Mechanical-Lift Processing Scenarios

Vehicle Processing Scenarios



Vehicle A (non-tandem) - Drop-Off

1.	Attendant drives onto stacker	20
		20 sec

Vehicle B (non-tandem): No Vehicle A, Stacker Lowered- Drop-Off

1.	Attendant maneuvers onto stacker	20
5.	Attendant exits vehicle	10
6.	Attendant raises stacker	30
		60 sec

Vehicle B (non-tandem): No Vehicle A, Stacker Raised - Drop-Off

1.	Attendant maneuvers in front of stacker	10
2.	Attendant exits vehicle to lower stacker	10
3.	Attendant lowers stacker	30
4.	Attendant re-enters vehicle and drives onto stacker	30
5.	Attendant exits vehicle	10
6.	Attendant raises stacker	30
		120 sec

Vehicle B (non-tandem): Vehicle A Parked - Drop-Off

1.	Attendant exits Vehicle B	10
2.	Attendant enters Vehicle A	10
3.	Attendant moves Vehicle A to drive aisle	15
4.	Attendant exits Vehicle A	10
5.	Attendant lowers stacker	30
6.	Attendant re-enters Vehicle B and drives onto stacker	30
7.	Attendant exits Vehicle B	10
8.	Attendant raises stacker	30
9.	Attendant re-enters Vehicle A and drives into parking space	30
10.	Attendant exits Vehicle A	10
		185 sec

Vehicle A (non-tandem) - Pick-up

1.	Attendant drives off stacker	20
		20 sec

Vehicle B (non-tandem): No Vehicle A, Stacker Lowered- Pick-up

1.	Attendant drives off stacker	20
		20 sec

Vehicle B (non-tandem): No Vehicle A, Stacker Raised - Pick-up

1.	Attendant lowers stacker	30
2.	Attendant enters vehicle	10
3.	Attendant drives off stacker	20
		60 sec

Vehicle B (non-tandem): Vehicle A Parked - Pick-up

2.	Attendant enters Vehicle A	10

Vehicle Processing Scenarios

3.	Attendant moves Vehicle A to drive aisle	20	
4.	Attendant exits Vehicle A	10	
8.	Attendant lowers stacker	30	
6.	Attendant enters Vehicle B and drives off stacker	30	
1.	Attendant exits Vehicle B	10	
9.	Attendant re-enters Vehicle A and drives onto stacker	30	
		140	sec

Average Drop-off Processing Time	96	sec
Average Pick-up Processing Time	60	sec

Valet Processing Time

Valet Drop-off/Pick-Up Calculated Travel Time - Valet Drop-off/Pick-up

Parking Garage Calculated Travel Time

VALET DROP-OFF

VEHICLE TRAVEL TIME

Travel Times (Assume 15 mph speed)

To Valet Garage (In vehicle)

Distance	Travel Time
0.24 miles	1 minutes

Controlled Delay	0.5 Minutes
Tandem Delay	0.2 Minutes
Total Time	2.6 Minutes

VALET ATTENDANT TRAVEL TIME

Travel Times (Assume 5 ft/s speed)

Return from Valet Garage (Walk/Run) to Ground Level

Distance	Travel Time
0.049 miles	0.9 minutes

Parking Garage Calculated Travel Time

VALET PICK-UP

VALET ATTENDANT TRAVEL TIME

Travel Times (Assume 5 ft/s speed)

To Valet Garage (Walk/Run) from Ground Level

Distance	Travel Time
0.049 miles	0.9 minutes

Controlled Delay	0.5 Minutes
Tandem Delay	0.5 Minutes
Total Time	3.2 Minutes

VEHICLE TRAVEL TIME

Travel Times (Assume 15 mph speed)

Return from Valet Garage (In Vehicle) to Valet Area

Distance	Travel Time
0.32 miles	1.3 minutes

Valet Drop-off/Pick-Up Calculated Travel Time - Valet Drop-off/Pick-up

Parking Garage Calculated Travel Time

VALET DROP-OFF

VEHICLE TRAVEL TIME

Travel Times (Assume 15 mph speed)

To Valet Garage (In vehicle)

Distance		Travel Time	
0.15	miles	0.6	minutes

Controlled Delay	0.5	Minutes
Stacker Delay	1.6	Minutes
Total Time	3.6	Minutes

VALET ATTENDANT TRAVEL TIME

Travel Times (Assume 5 ft/s speed)

Return from Valet Garage (Walk/Run) to Ground Level

Distance		Travel Time	
0.05	miles	0.9	minutes

Parking Garage Calculated Travel Time

VALET PICK-UP

VALET ATTENDANT TRAVEL TIME

Travel Times (Assume 5 ft/s speed)

To Valet Garage (Walk/Run) from Ground Level

Distance		Travel Time	
0.05	miles	0.9	minutes

Controlled Delay	0.5	Minutes
Stacker Delay	1.0	Minutes
Total Time	3.2	Minutes

VEHICLE TRAVEL TIME

Travel Times (Assume 15 mph speed)

Return from Valet Garage (In Vehicle) to Valet Area

Distance		Travel Time	
0.21	miles	0.8	minutes

Valet Analysis

A.M. Valet Analysis

Arrival Rate

IN	OUT	
5	9	veh/hr

Service Rate

IN	OUT	
3.60	3.20	mins/veh

Control Delay = min

Service Time = 3.34 mins/veh

Number of Valet Attendants (N) =	2	
Level of Confidence =	0.95	
Storage Provided On-Site =	4	vehicles
Total Entering and Exiting Vehicles(q) =	14	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	17.95	veh/hr/pos
Average Service Rate (t) =	3.34	mins/veh
rho (t/Q) =	0.390	

Expected (avg.) number of vehicles in the system	E(m)=	0.14	
Expected (avg.) number of vehicles waiting in queue	E(n)=	0.92	
Mean time in the queue	E(w)=	0.60	mins
Mean time in system	E(t)=	3.94	mins

Proportion of customers who wait (P) (E(w) > 0)=	21.88%	
Probability of a queue exceeding a length (M) P(x > M)=	5.00%	

Queue length which is exceeded 5.00% of the times is equal to 0.6 vehicles

P.M. Valet Analysis

Arrival Rate

IN	OUT	
19	10	veh/hr

Service Rate

IN	OUT	
3.60	3.20	mins/veh

Control Delay = min

Service Time = 3.46 mins/veh

Number of Valet Attendants (N) =	3	
Level of Confidence =	0.95	
Storage Provided On-Site =	4	vehicles
Total Entering and Exiting Vehicles(q) =	29	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	17.33	veh/hr/pos
Average Service Rate (t) =	3.46	mins/veh
rho (t/Q) =	0.558	

Expected (avg.) number of vehicles in the system	E(m)=	0.38	
Expected (avg.) number of vehicles waiting in queue	E(n)=	2.05	
Mean time in the queue	E(w)=	0.79	mins
Mean time in system	E(t)=	4.25	mins

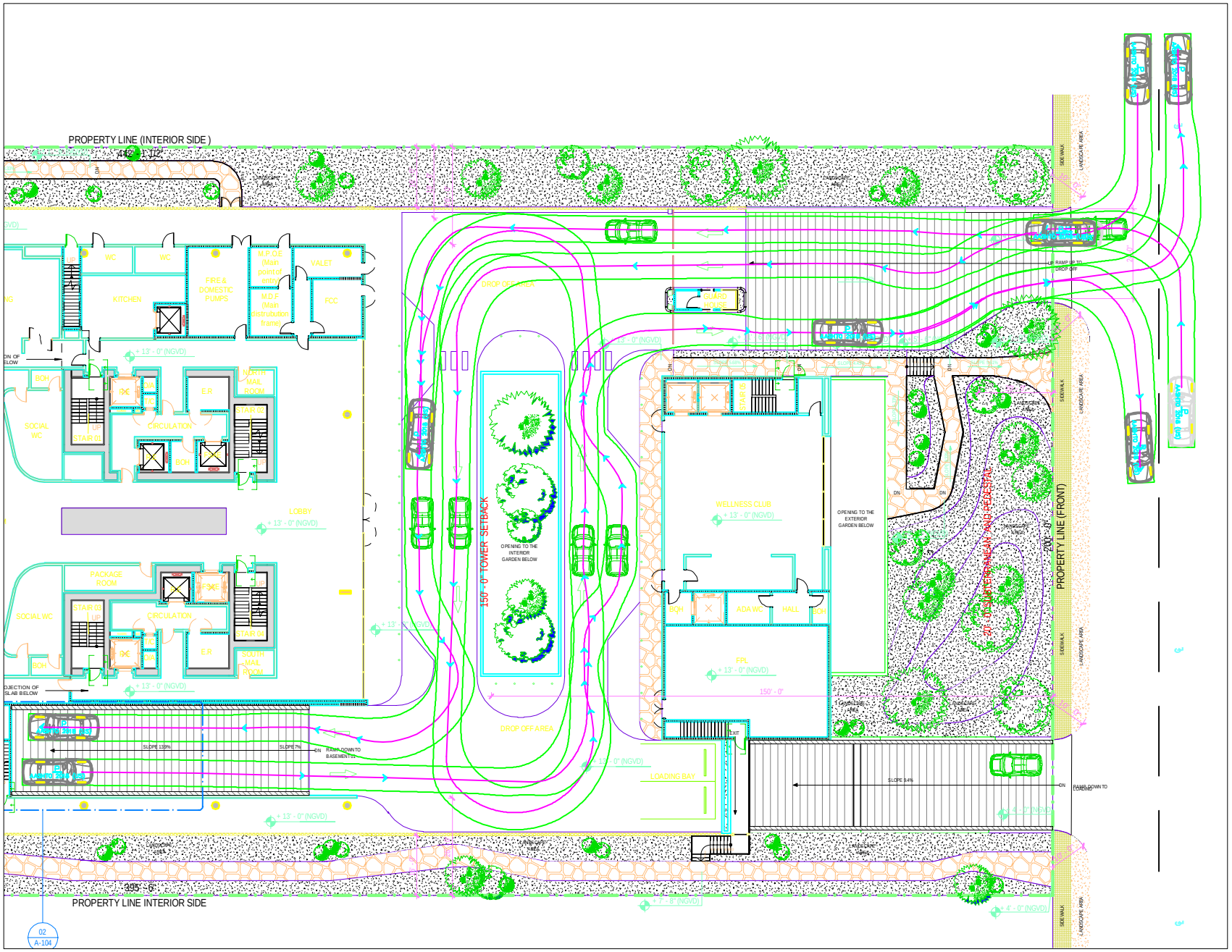
Proportion of customers who wait (P) (E(w) > 0)=	30.24%	
Probability of a queue exceeding a length (M) P(x > M)=	5.00%	

Queue length which is exceeded 5.00% of the times is equal to 2.1 vehicles

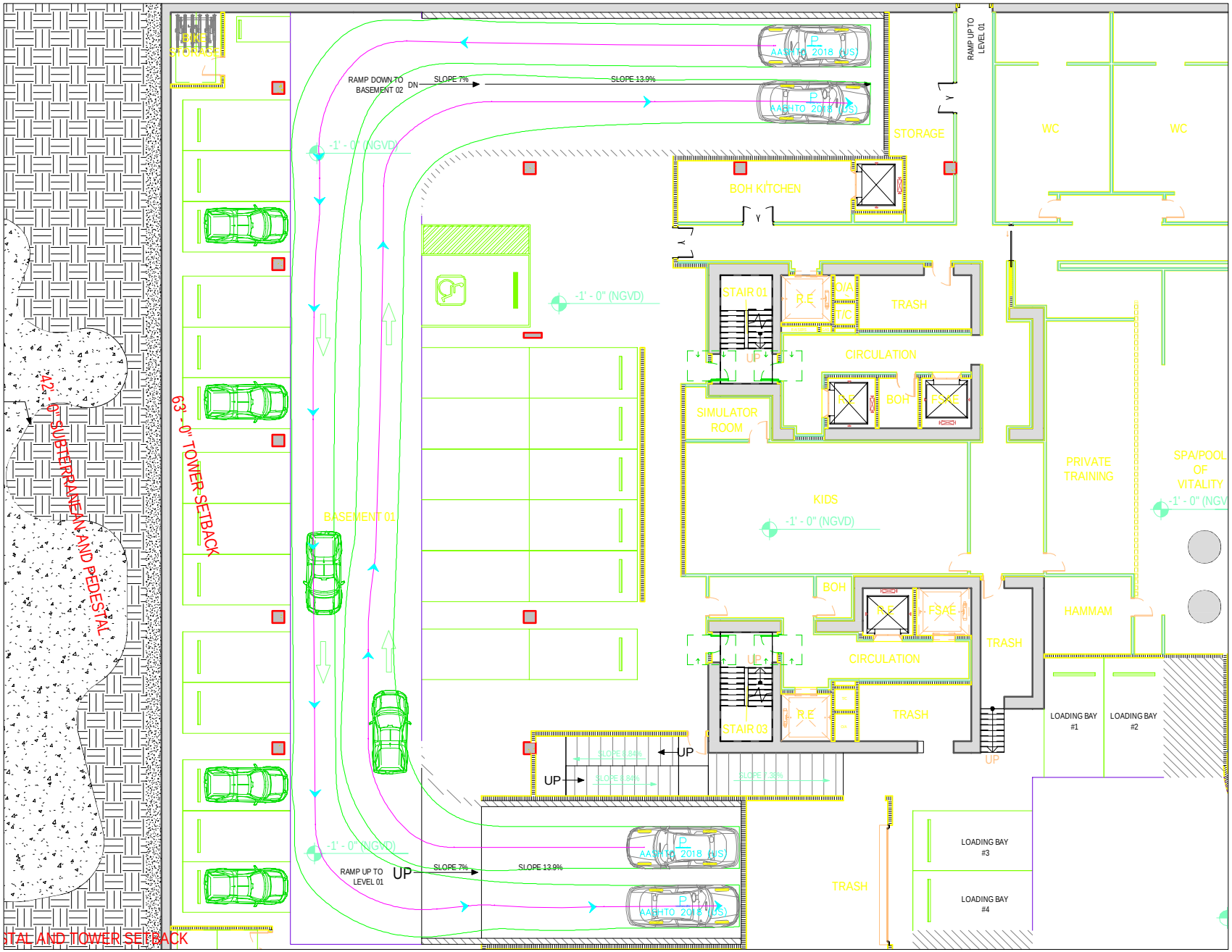
Attachment G

Maneuverability Analysis

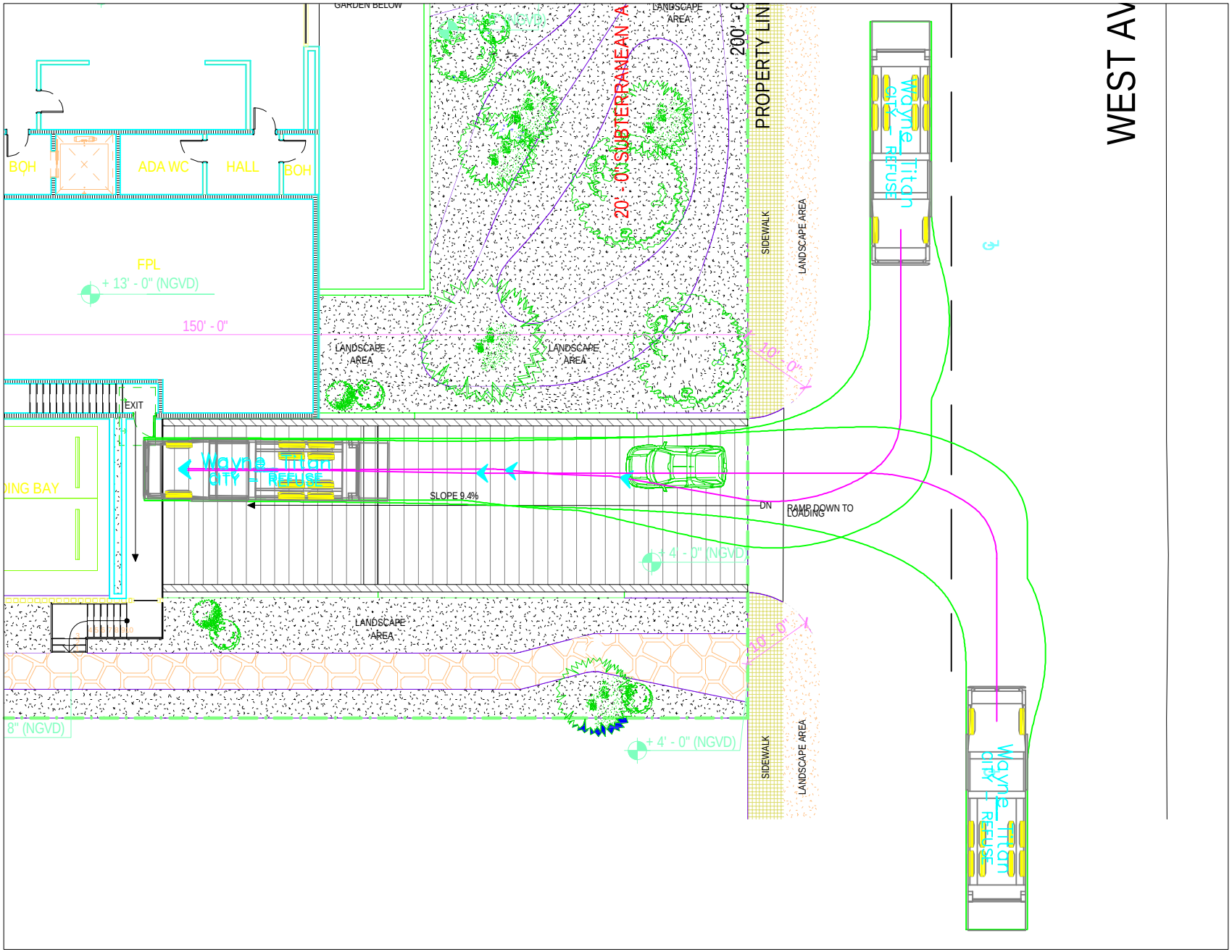
Maneuverability Analysis - Lobby - Passenger Vehicles



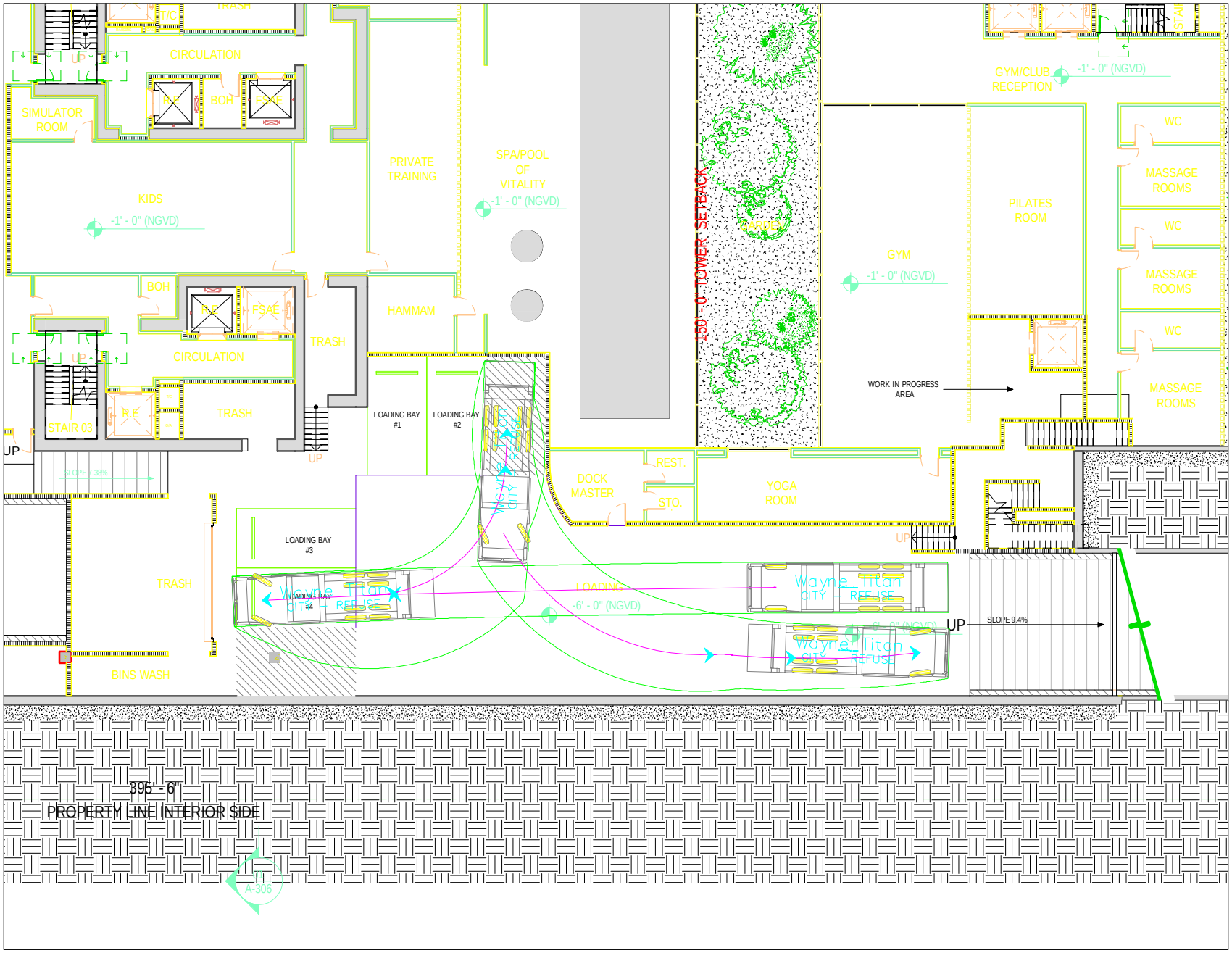
Maneuverability Analysis - Basement - Passenger Vehicles



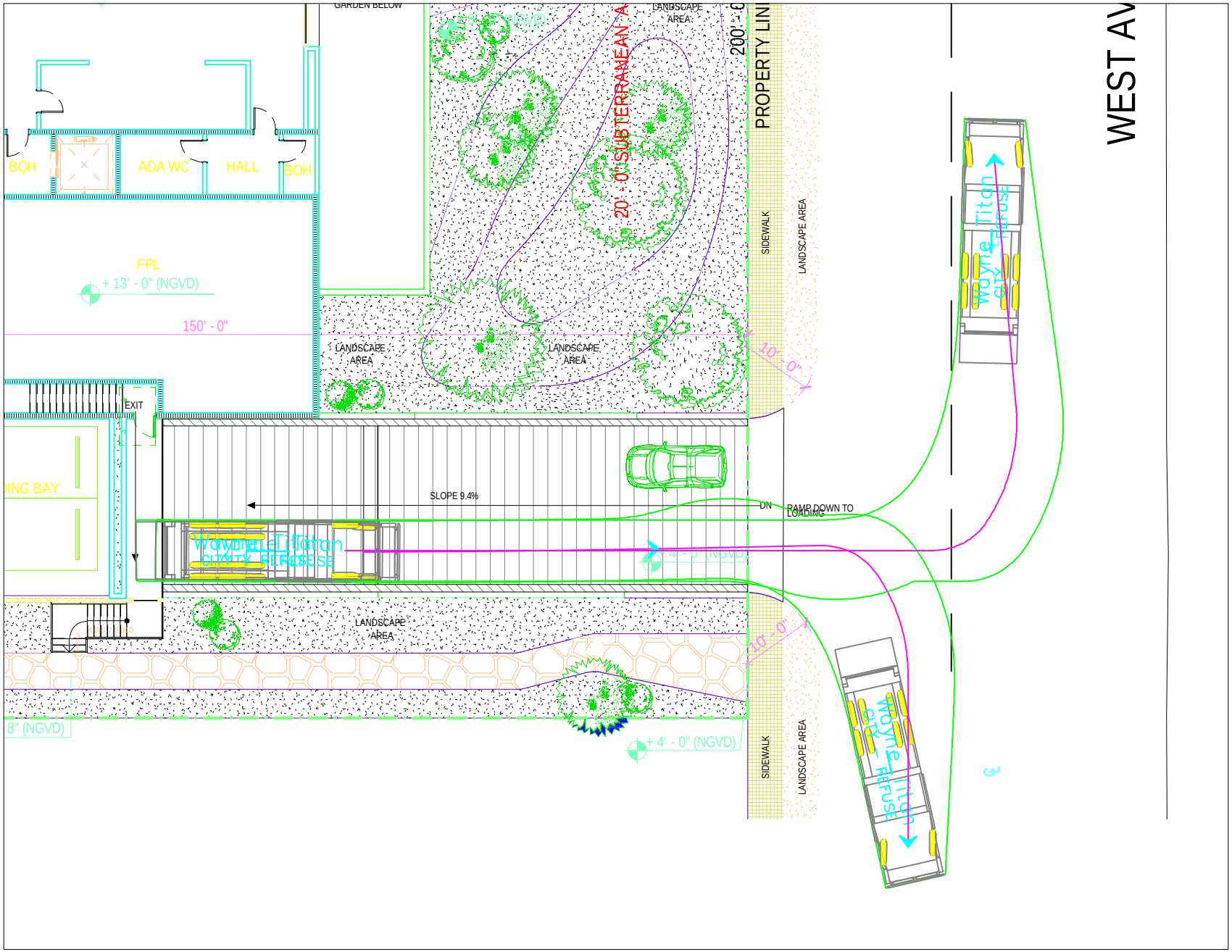
Maneuverability Analysis - Loading Area - Refuse Vehicle Ingress



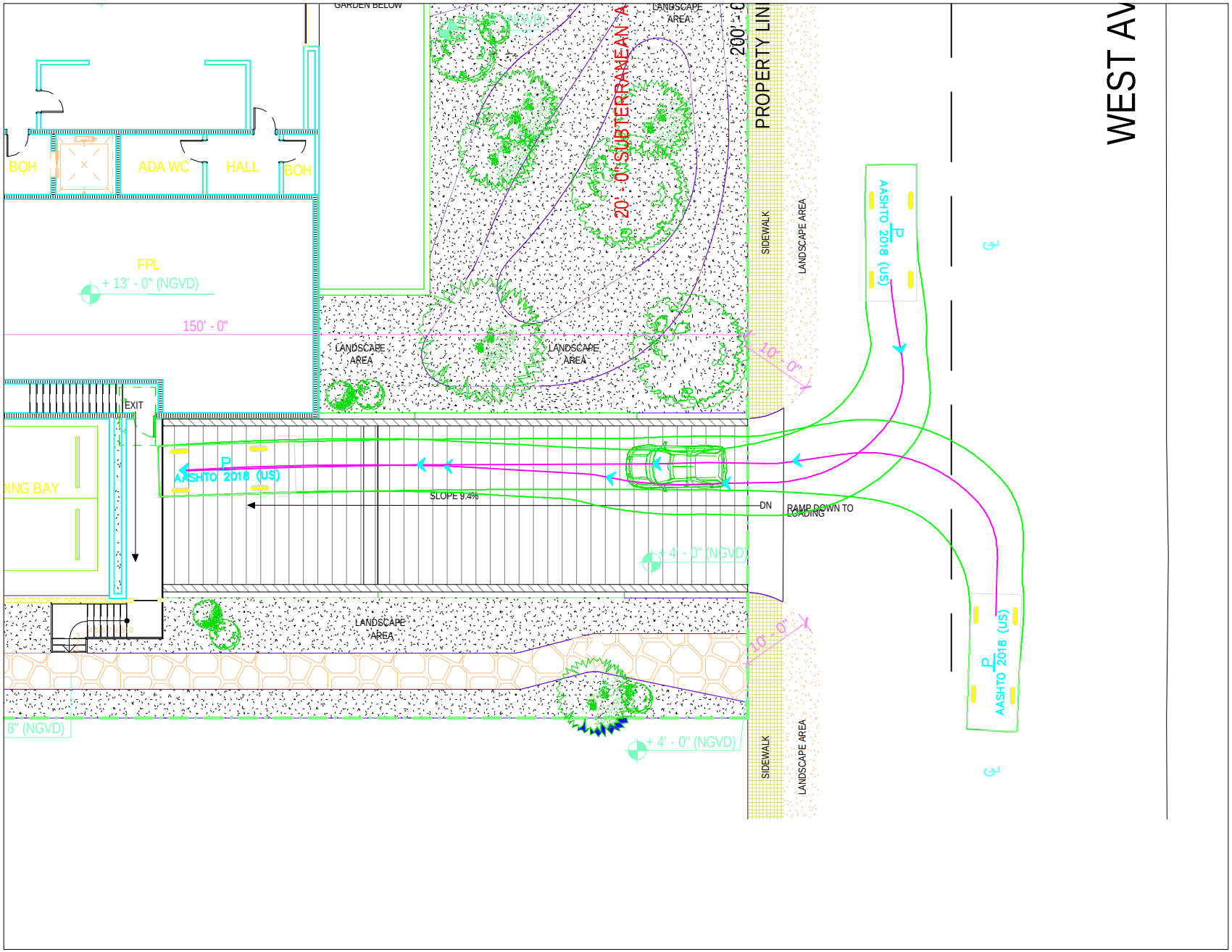
Maneuverability Analysis - Loading Area - Refuse Vehicle



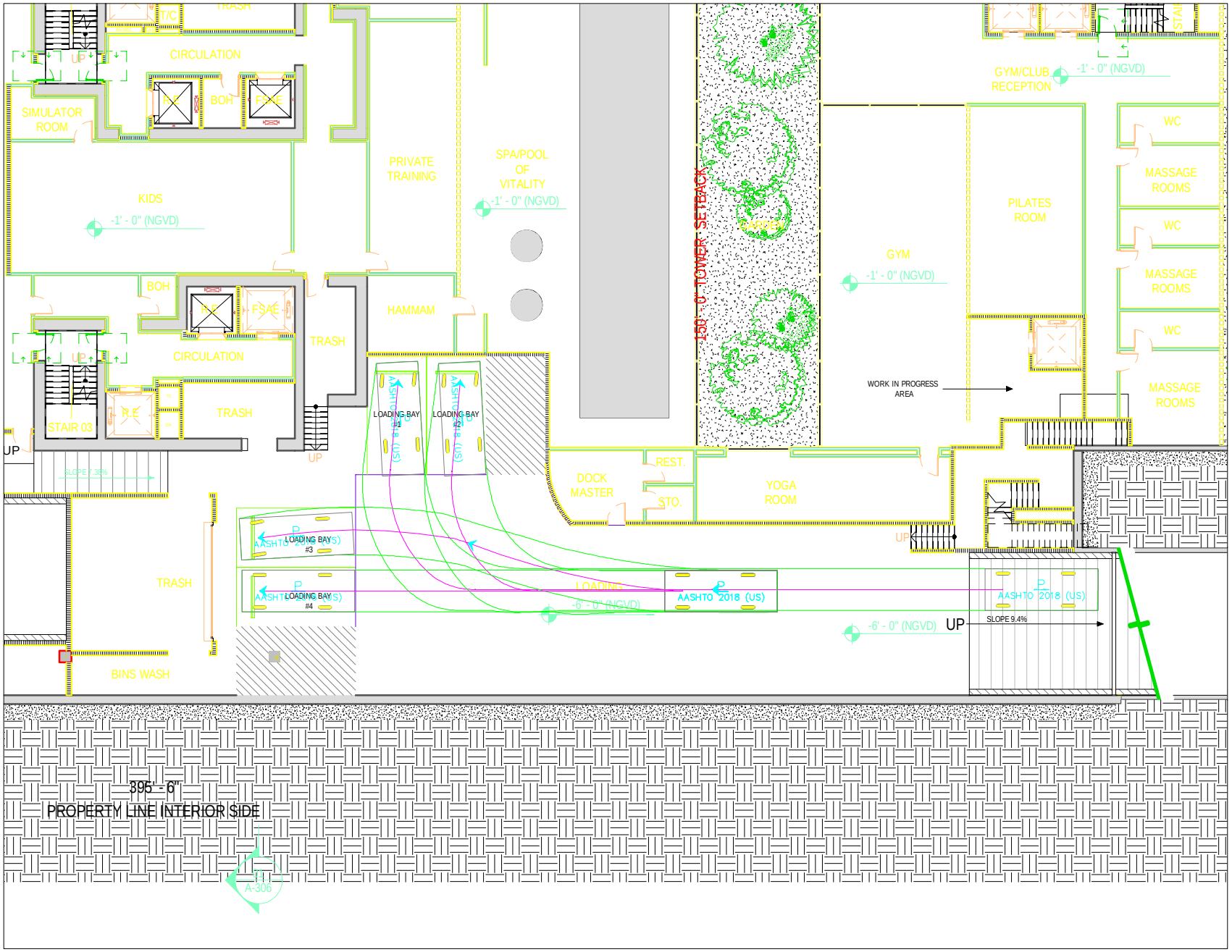
Maneuverability Analysis - Loading Area - Refuse Vehicle Egress



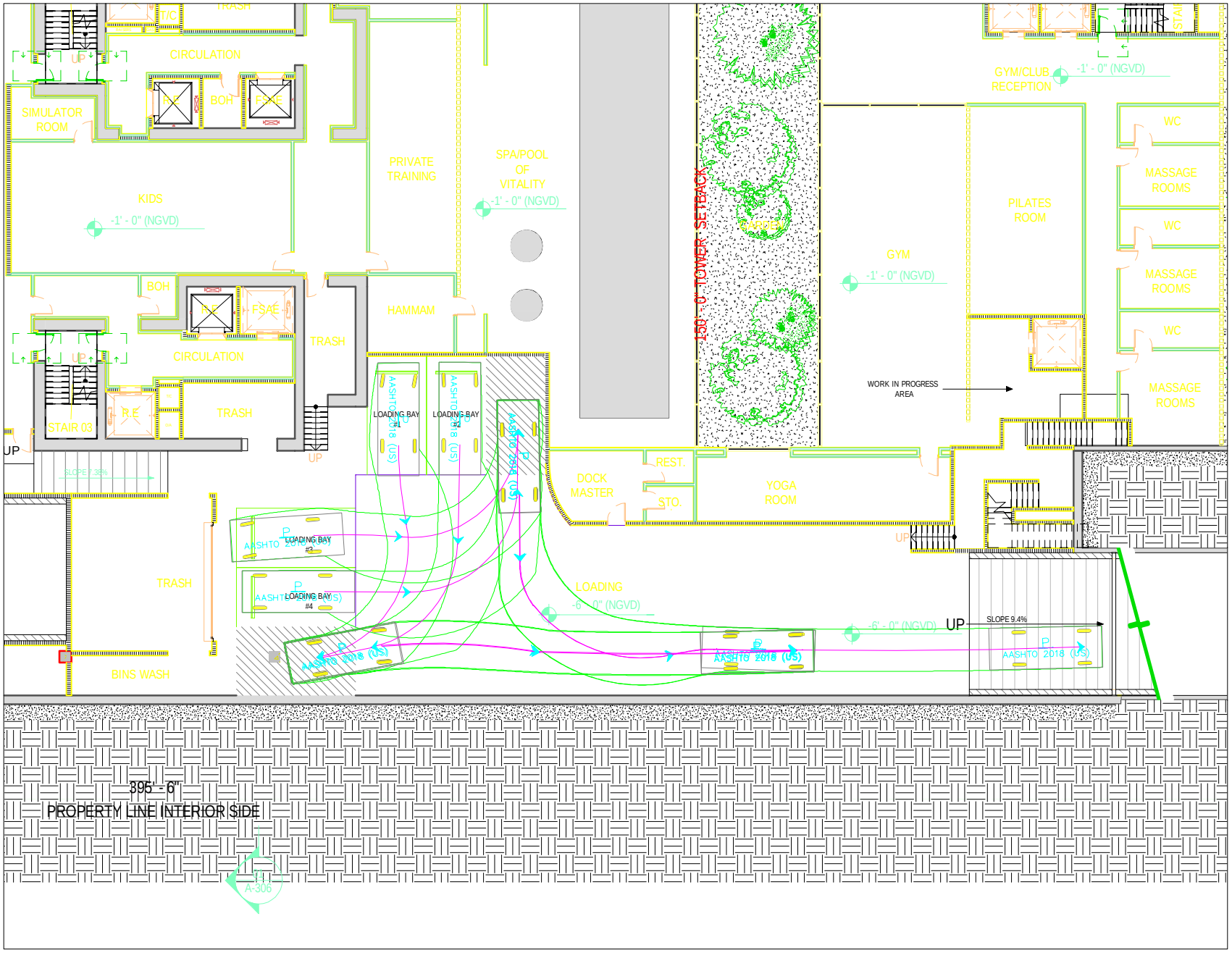
Maneuverability Analysis - Loading Area - Delivery Van Ingress



Maneuverability Analysis - Loading Area - Delivery Van Ingress



Maneuverability Analysis - Loading Area - Delivery Van Egress



Maneuverability Analysis - Loading Area - Delivery Van Egress