



Memorandum

To: Xavier Falconi, P.E.
City of Miami Beach

From: Adrian K. Dabkowski, P.E., PTOE

Date: March 3, 2016

**Subject: Monad Terrace Redevelopment
Miami Beach, Florida
Maneuverability Analysis**

Kimley-Horn and Associates, Inc. has prepared a maneuverability analysis for the Monad Terrace redevelopment. The areas included in the analysis include the on-site porte-cochere, resident parking garage and loading areas, and on-site refuse area. The analysis was performed using Transoft's *AutoTurn 9.1* software which applies vehicle turning templates consistent with American Association of State Highway and Transportation Officials' (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 2004/2011. The analysis was prepared using passenger car (P) design vehicle for the porte-cochere and parking garage areas. Delivery vans comparable to P design vehicles will be used for deliveries and loading activities. A Waste Management, Inc. Mack MR refuse truck will be used for on-site waste removal. A vehicle template was developed for the refuse truck based on vehicle dimensions and specifications provided by Waste Management, Inc. and are included in Attachment A. The following summarizes the results of this analysis.

Porte-cochere

Access to the porte-cochere is provided by a right-in only driveway along the north side of the property from West Avenue and a right-out only driveway along the south side of the property from onto West Avenue. A P design vehicle will be able to maneuver into and through the porte-cochere area without conflicting with by-passing traffic or refuse area traffic, refer to Figures 1 and 2 in Attachment B.

Parking Garage and Loading Area Access

Access to the parking garage and underground loading area will be provided via an entry ramp along the south side of the property and an exit ramp along the north side of the property. A P design vehicle will be able to maneuver into and through the parking garage without conflicting with oncoming traffic, refer to Figure 3 in Attachment B. Delivery vans, comparable to P vehicles, will be used for loading activities at the site and will be able to maneuver out of the basement.

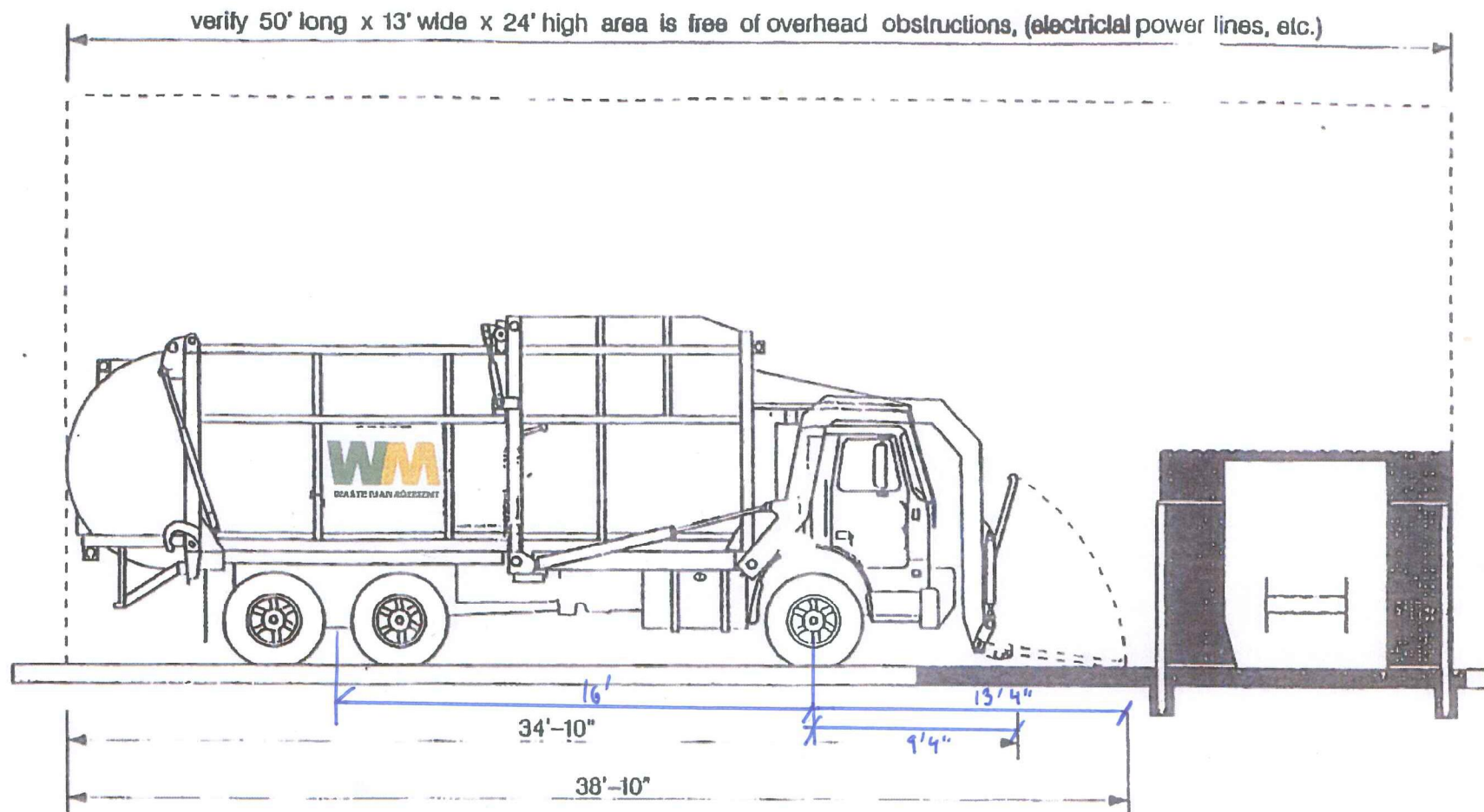
On-Site Refuse Area

The on-site refuse area is located along the east side of the drive aisle fronting the property. The refuse truck will be able to pull into the refuse area for refuse pick-up. The truck will then exit the site by pulling forward out of the refuse area as shown in Figure 4 in Attachment B.

Conclusion

In conclusion, passenger vehicle traffic will be able to ingress and egress from the site's porte-cochere and parking garage without conflicting with oncoming traffic. Additionally, delivery vans and refuse trucks will be able to maneuver into and out of the site's loading areas.

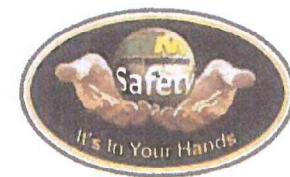
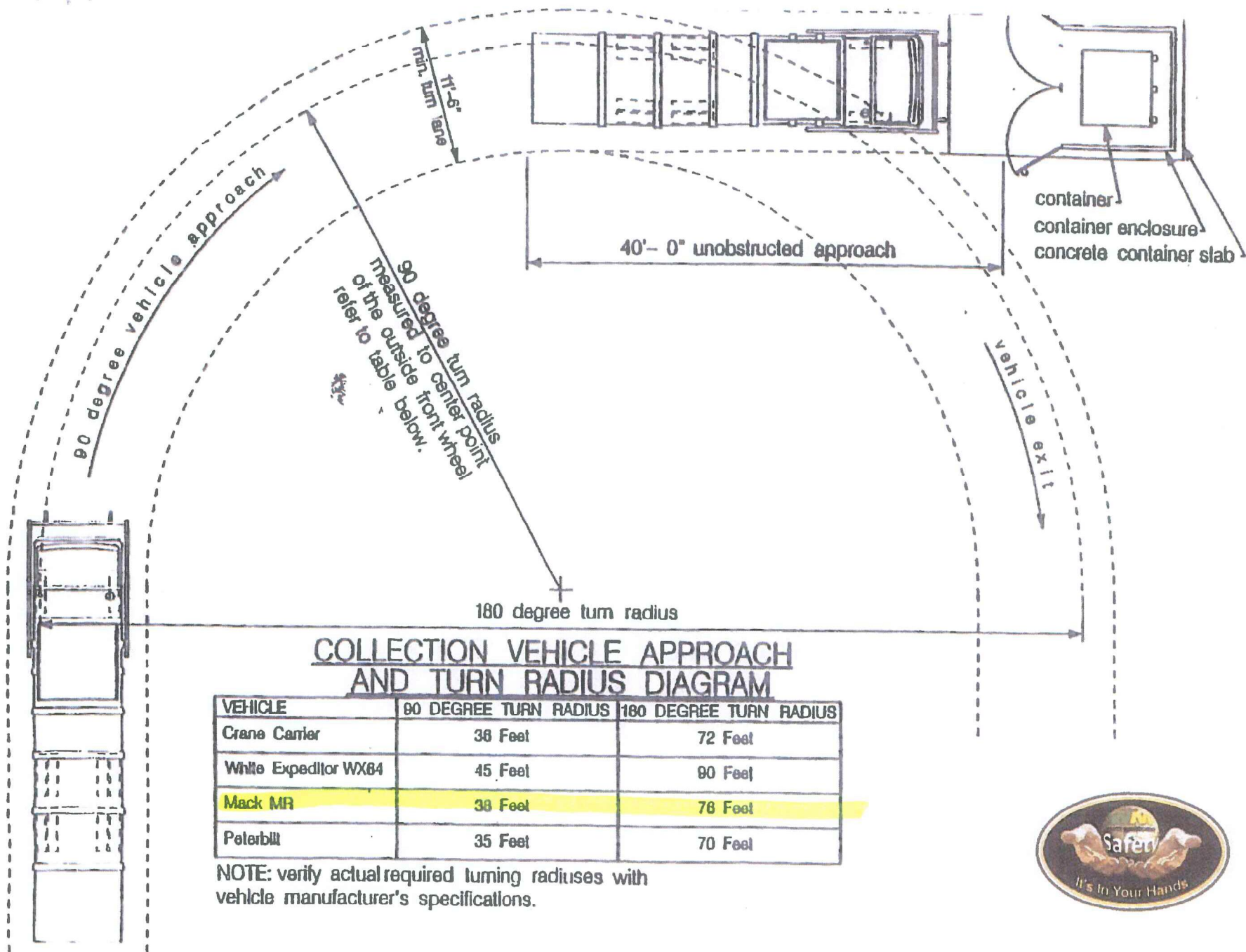
Attachment A

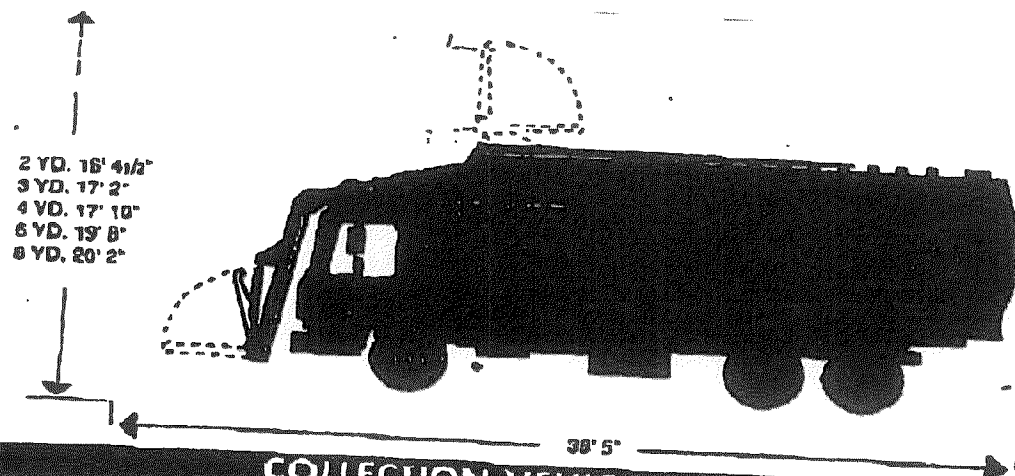


SIDE VIEW

NOTE: Vehicle shown is a 40 cu. yd. front end loading collection truck





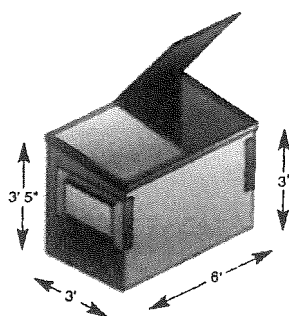


COLLECTION VEHICLE CONFIGURATION

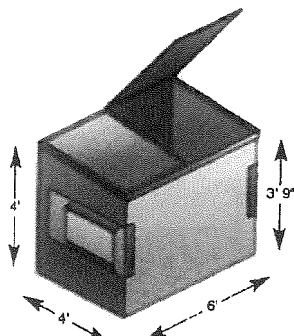
Note: Approximate specifications subject to change

CONTAINERS & TRUCKS

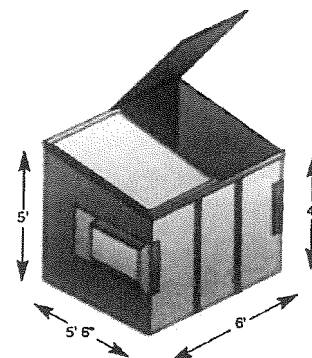
COMMERCIAL CONTAINERS



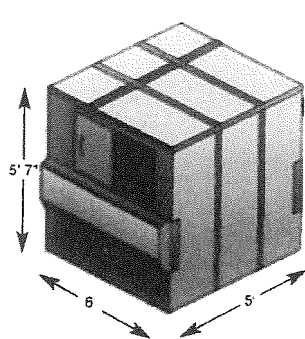
2-Yard Bin



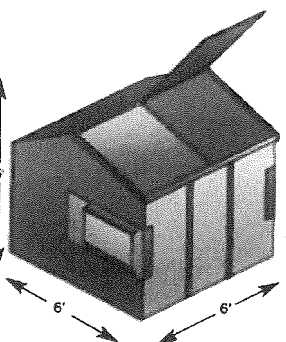
3-Yard Bin



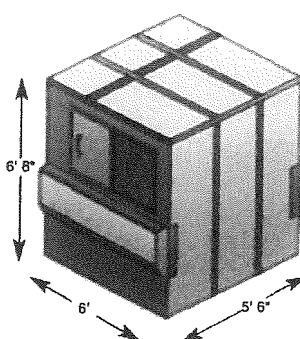
4-Yard Bin



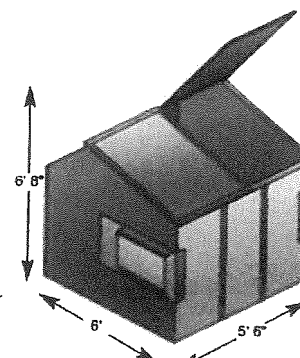
6-Yard Bin



6-Yard Slant Bin

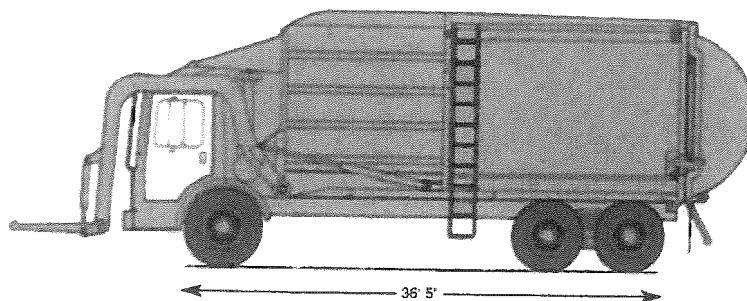


8-Yard Bin



8-Yard Slant Bin

COMMERCIAL TRUCKS



Front-End Loading Truck

*From everyday collection to environmental protection,
Think Green. Think Waste Management.*

WM
WASTE MANAGEMENT

Attachment B



A side-view diagram of a car. A horizontal line above the car indicates a total length of 19.00. A vertical line from the ground to the top of the front wheel is labeled 3.00. A horizontal line from the front wheel to the end of the trunk is labeled 11.00.

SHEET NUMBER

LICENSED PROFESSIONAL

MONAD TERRACE
PREPARED FOR
MONAD TERRACE
PROPERTY OWNER, LLC.

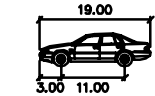
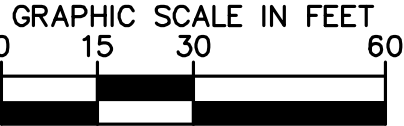
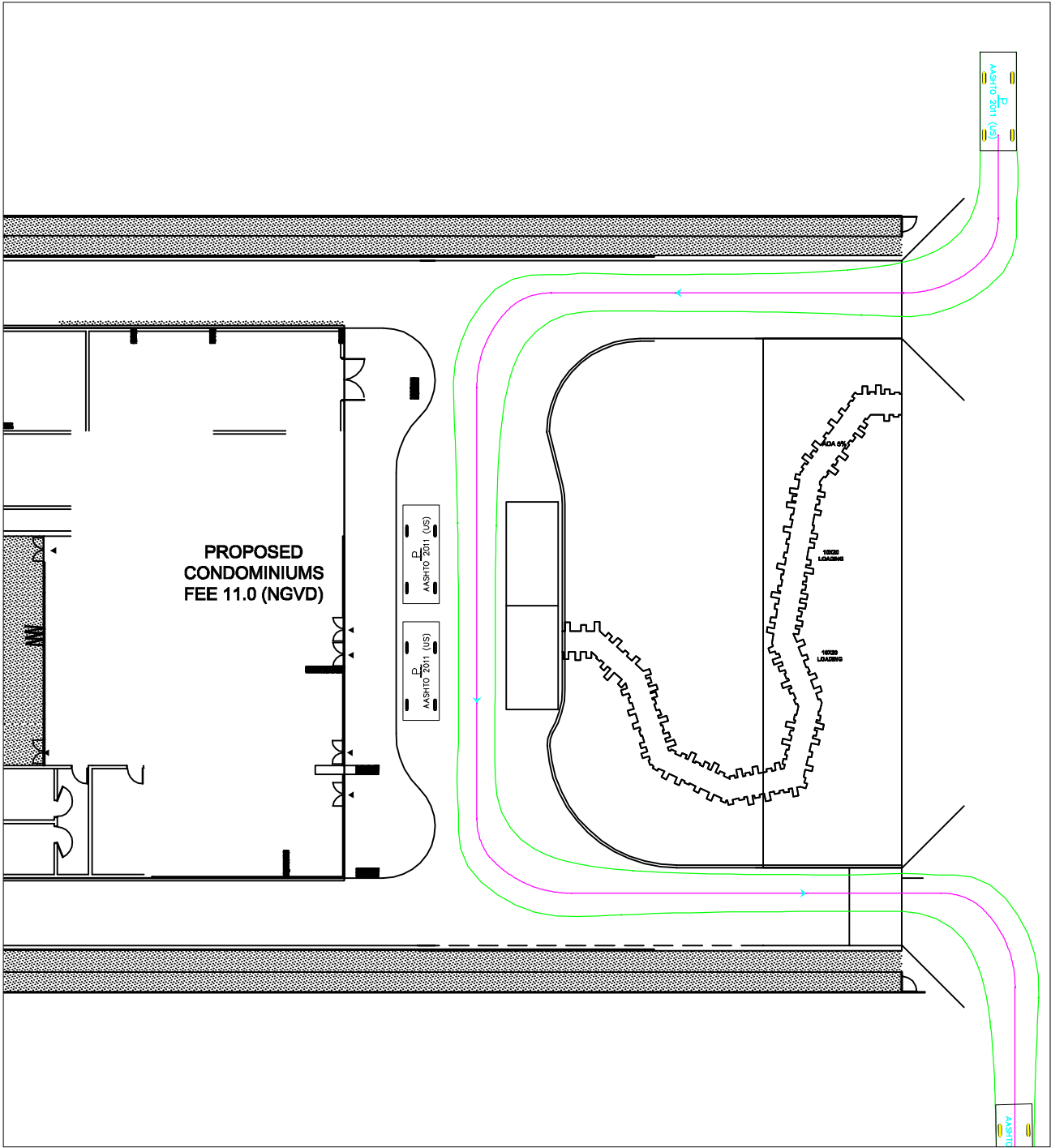
KHA PROJECT	DATE
043266101	3/3/2016

Kimley»»Horn
© 2016 KIMLEY-HORN AND ASSOCIATES, INC.
600 N. PINE ISLAND RD, SUITE 450, PLANTATION, FL 33324
PHONE: 954-535-5124 FAX: 561-863-8175
WWW.KIMLEY-HORN.COM CA 00000698

SCALE	AS SHOWN
DESIGNED BY	
DRAWN BY	SE
CHECKED BY	AD

Figure 1: Porte-Cochere Area

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



P	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

Figure 2: Porte-Cochere Area

SHEET NUMBER		CAR THROUGH LOBBY	
LICENSED PROFESSIONAL		FL DATE:	
MONAD TERRACE		MIAMI BEACH	
PREPARED FOR		PROPERTY OWNER, LLC:	
MONAD TERRACE			
KHA PROJECT		DATE	
043266101		3/3/2016	
Kimley»Horn		© 2016 KIMLEY-HORN AND ASSOCIATES, INC. 33324	
600 N. PINE ISLAND RD., SUITE 450, PLANTATION, FL		PHONE: 954-535-5134 FAX: 954-563-8775	
WWW.KIMLEY-HORN.COM CA 00000986			
SCALE AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY
		SE	AD

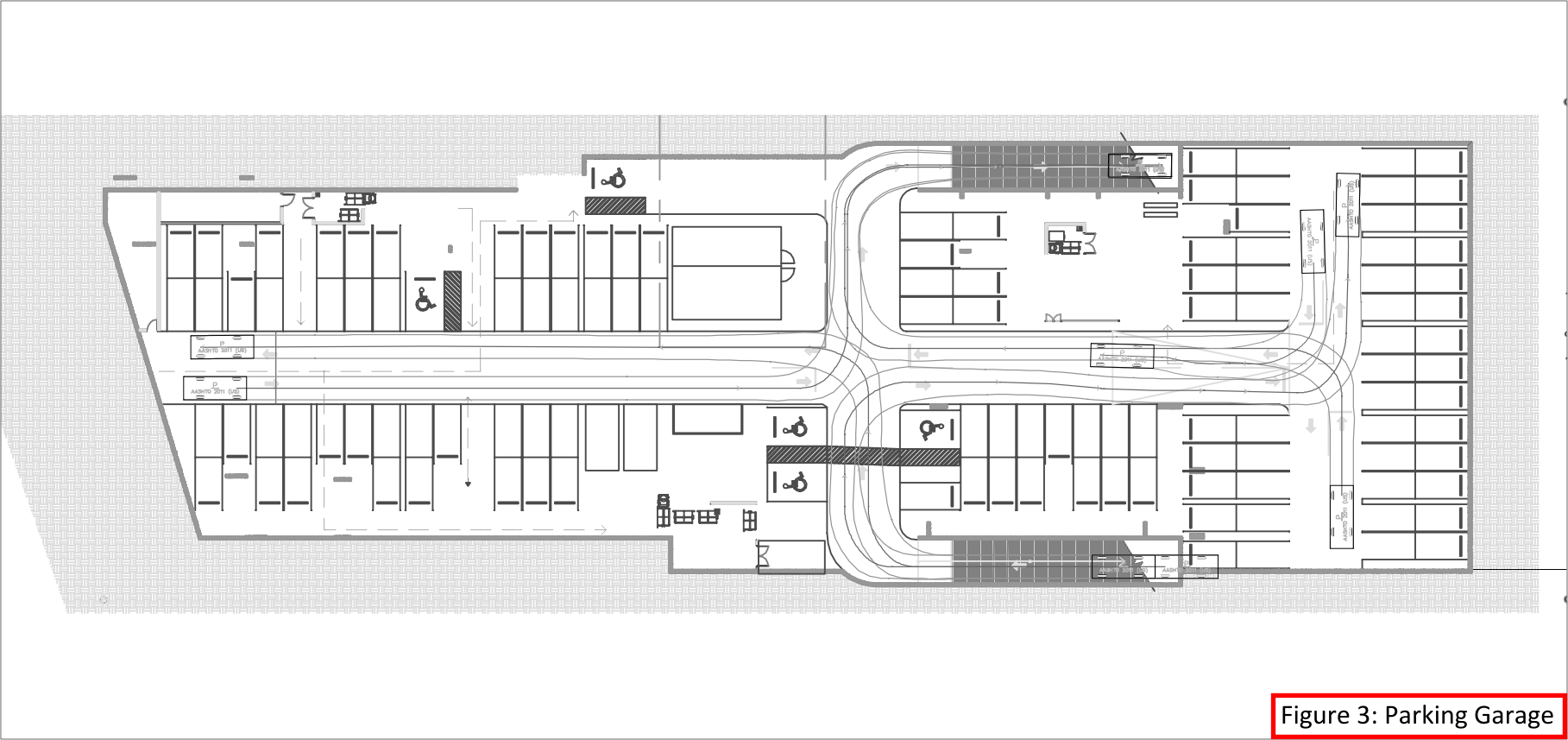
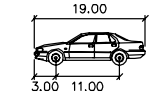


Figure 3: Parking Garage



P	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

SCALE AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY	AD	KHA PROJECT 043266101	DATE 2/29/2016	MONAD TERRACE PREPARED FOR MONAD TERRACE PROPERTY OWNER, LLC.	MAMI BEACH	FL	DATE:	LICENSED PROFESSIONAL	SHEET NUMBER CAR BASEMENT

Kimley»Horn

© 2016 KIMLEY-HORN AND ASSOCIATES, INC.
600 N. PINE ISLAND RD., SUITE 450, PLANTATION, FL 33324
PHONE: 954-335-8134 FAX: 954-363-8175
WWW.KIMLEY-HORN.COM CA 00000096

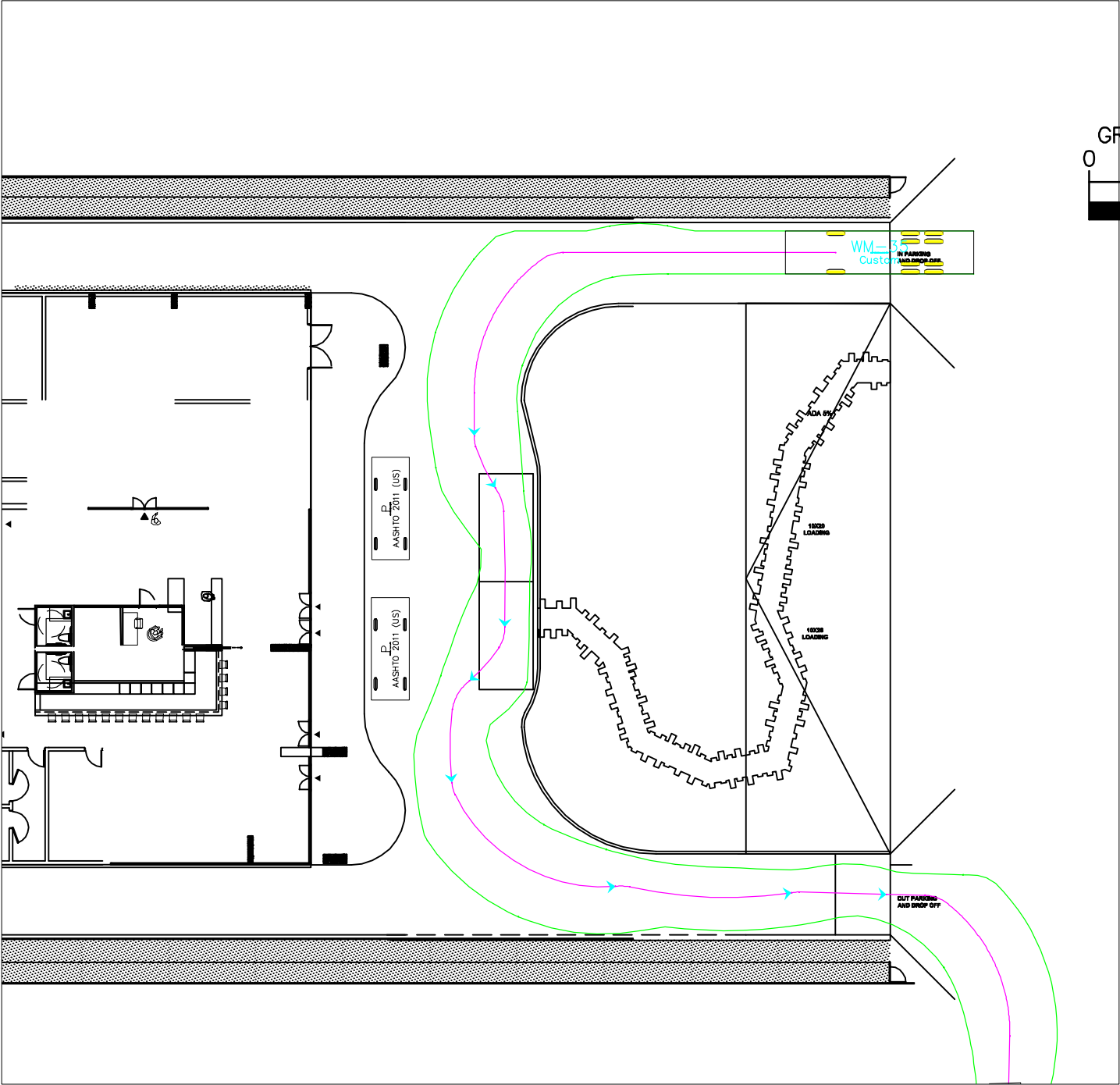


Figure 4: Refuse Area

SCALE AS SHOWN	DESIGNED BY	DRAWN BY	CHECKED BY	AD	KHA PROJECT 043266101	DATE 3/3/2016	MONAD TERRACE PREPARED FOR MONAD TERRACE PROPERTY OWNER, LLC.	LICENSED PROFESSIONAL	SHEET NUMBER TRUCK THROUGH LOBBY

Kimley»Horn
© 2016 KIMLEY-HORN AND ASSOCIATES, INC.
600 N. PINE ISLAND RD., SUITE 450, PLANTATION, FL 33324
PHONE: 954-335-8134 FAX: 954-335-8175
WWW.KIMLEY-HORN.COM CA 00000696