



March 10, 2016

Ms. Jennifer McConney-Gayoso, R.A., LEED® AP
Kobi Karp Architecture & Interior Design, Inc.
2915 Biscayne Blvd, Suite 200
Miami, Florida 33137

***Re: Monad Terrace Redevelopment
Miami Beach, Florida
Transportation Engineering Documents***

Dear Ms. McConney-Gayoso:

The following transportation engineering documents for the Monad Terrace Redevelopment are attached:

- Methodology memorandum and methodology correspondence
- Trip generation analysis
- Valet analysis
- Maneuverability analysis
- Sight distance analysis

If you have any questions regarding these analyses please feel free to contact me.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read 'Adrian K. Dabkowski'.

Adrian K. Dabkowski, P.E., PTOE
Associate

Attachments

K:\FTL_TPTO\043709001-Monad Terrace\Correspondence\Letter\03 10 16 Monad Terrace - Submittal Letter.docx

METHODOLOGY MEMORANDUM AND CORRESPONDENCE

Dabkowski, Adrian

From: Falconi, Xavier <XavierFalconi@miamibeachfl.gov>
Sent: Monday, December 07, 2015 11:29 AM
To: Dabkowski, Adrian
Cc: clamus@fteinc.net; Majstorovic, Milos; Belush, Michael; cmcdowell@bilzin.com; jmccconney@kobikarp.com
Subject: RE: Monad Terrace - Traffic Study Methodology

Adrian,

Just wanted to reiterate the concern about the operation of the proposed exiting driveway. An alternative to consider would be to design it in such a way to allow a right out only movement, in addition to proper signage. That would constraint the traffic exiting the site to traveling southbound on West Avenue.

MIAMIBEACH

Xavier R. Falconi, PE
Transportation Planner
TRANSPORTATION DEPARTMENT
1700 Convention Center Drive, Miami Beach, FL 33139
Tel: 305-673-7000 X 6129 / Fax: 305-673-7559 / www.miamibeachfl.gov

We are committed to providing excellent public service and safety to all who live, work and play in our vibrant, tropical, historic, community.



Please do not print this e-mail unless necessary.

From: Adrian.Dabkowski@Kimley-horn.com [mailto:Adrian.Dabkowski@Kimley-horn.com]
Sent: Friday, December 04, 2015 2:55 PM
To: Falconi, Xavier
Cc: clamus@fteinc.net; Majstorovic, Milos; Belush, Michael; cmcdowell@bilzin.com; jmccconney@kobikarp.com
Subject: RE: Monad Terrace - Traffic Study Methodology

Good afternoon Xavier:

Attached is the revised methodology including the sight distance analysis, on-site bicycle parking analysis, and pavement marking and signage plan. Please let me know if the City has any further comments.

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE

Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Falconi, Xavier [mailto:XavierFalconi@miamibeachfl.gov]
Sent: Thursday, December 03, 2015 1:57 PM
To: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>
Cc: clamus@fteinc.net; Majstorovic, Milos <MilosMajstorovic@miamibeachfl.gov>; Belush, Michael <MichaelBelush@miamibeachfl.gov>; cmcdowell@bilzin.com; jmccconney@kobikarp.com
Subject: RE: Monad Terrace - Traffic Study Methodology

Adrian,

The methodology should address sight distance analysis for the proposed driveways. There is the concern from the peer reviewer about the exiting driveway being too close to the adjacent intersection. Please include proper signage and striping to address safe sight internal circulation. In addition, placement of bike racks should be included as part of the sight plan. Please resubmit the methodology addressing the items indicated. Thanks.

MIAMIBEACH

Xavier R. Falconi, PE
Transportation Planner
TRANSPORTATION DEPARTMENT
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Please do not print this e-mail unless necessary.

From: Adrian.Dabkowski@Kimley-horn.com [<mailto:Adrian.Dabkowski@Kimley-horn.com>]
Sent: Tuesday, December 01, 2015 2:36 PM
To: Falconi, Xavier
Cc: clamus@fteinc.net; Majstorovic, Milos; Belush, Michael; cmcdowell@bilzin.com; jmccconney@kobikarp.com
Subject: RE: Monad Terrace - Traffic Study Methodology

Good afternoon Xavier:

Our responses to the methodology are below in red font. The revised methodology is attached.

1. It is my understanding that West Avenue is planned for improvements. The proposed plans need to be reviewed to verify if the development will have any impact.

Response: As discussed at our meeting, the City will to provide these plans to us.

2. The report needs to discuss and analyze the impacts of the proposed driveways in relationship to the adjacent driveways and to the intersection of West Avenue at SW 13 Street. The proposed driveways seems too closed to the adjacent driveways and to the adjacent intersection at SW 13th Street and may create safety and operational issues. This may require to collect counts at the intersection and at adjacent driveways, to verify that queues will not impact the operations.

Response: The methodology memo has been updated to include a statement clarifying that the exit driveway is a right-out only driveway. Please note that the current West Avenue construction would impact data collection.

3. The report needs to discussed any proposed signs to restrict movements or direct traffic within the site.

Response: Please refer to comment response #3, the exit driveway is a right-out only driveway and will be marked as such.

4. The 2,500 square feet of retail is described in the floor plans as a coffee shop . The data range from land use codes 936 or 939 are well within the range of the proposed retail space. Please clarify whether the proposed retail space will be to serve exclusively the proposed development residents or if it will be advertised to the general public. If so, the trips generated by the retail/coffee shop must be considered in the trip generation.

Response: Based on the most recent site plan the ancillary retail space is expected to be a café/juice bar. The café/juice bar will be a low-turnover facility primarily for residents but also open to the general public. The

café/juice bar is not expected to be a destination facility and as the residential development is primarily valet-only. It is anticipated that the small amount of general public that will use the facility will walk and not drive to the site. Furthermore, the absence of visible designated on-site parking will deter the public from driving to the café/juice bar. The methodology memo has been updated to include the most recent site plan.

5. The report should discuss the proposed operations for loading and trash pickup.

Response: The operations for trash pick-up and loading will be discussed in the maneuverability analysis. The maneuverability analysis section of the methodology was updated to discuss this.

6. The methodology should note that the City reserves the right to request additional analyses including but not limited to, additional traffic counts and level of service analysis for any intersection City staff feels is necessary in order to complete the review process.

Response: Comment noted.

Please let us know if the City has any further comments.

Thank you
Adrian

Adrian K. Dabkowski, P.E., PTOE
Kimley-Horn | 600 North Pine Island Road, Suite 450, Plantation, FL 33324
Direct: 954-535-5144 | Main: 954-535-5100

From: Falconi, Xavier [<mailto:XavierFalconi@miamibeachfl.gov>]
Sent: Friday, November 20, 2015 3:52 PM
To: Dabkowski, Adrian <Adrian.Dabkowski@Kimley-horn.com>
Cc: Claudia Lamus <clamus@fteinc.net>; Majstorovic, Milos <MilosMajstorovic@miamibeachfl.gov>; Belush, Michael <MichaelBelush@miamibeachfl.gov>
Subject: FW: Monad Terrace - Traffic Study Methodology

Adrian,
Below are comments on the subject traffic study methodology. Please let us know if you have any questions. Thanks.

MIAMIBEACH

Xavier R. Falconi, PE
Transportation Planner
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1700 Convention Center Drive, Miami Beach, FL 33139
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Please do not print this e-mail unless necessary.

From: Claudia Lamus [<mailto:clamus@fteinc.net>]
Sent: Friday, November 20, 2015 1:09 PM
To: Falconi, Xavier
Cc: Majstorovic, Milos
Subject: RE: Monad Terrace - Traffic Study Methodology

Xavier,

My comments are as follows:

1. It is my understanding that West Avenue is planned for improvements. The proposed plans need to be reviewed to verify if the development will have any impact.
2. The report needs to discuss and analyze the impacts of the proposed driveways in relationship to the adjacent driveways and to the intersection of West Avenue at SW 13 Street. The proposed driveways seems too closed to the adjacent driveways and to the adjacent intersection at SW 13th Street and may create safety and operational issues. This may require to collect counts at the intersection and at adjacent driveways, to verify that queues will not impact the operations.
3. The report needs to discussed any proposed signs to restrict movements or direct traffic within the site.
4. The 2,500 square feet of retail is described in the floor plans as a coffee shop . The data range from land use codes 936 or 939 are well within the range of the proposed retail space. Please clarify whether the proposed retail space will be to serve exclusively the proposed development residents or if it will be advertised to the general public. If so, the trips generated by the retail/coffee shop must be considered in the trip generation.
5. The report should discuss the proposed operations for loading and trash pickup.
6. The methodology should note that the City reserves the right to request additional analyses including but not limited to, additional traffic counts and level of service analysis for any intersection City staff feels is necessary in order to complete the review process.

Regards,

Claudia Lamus, PE | Senior Transportation Engineer



Certified DBE | MBE Firm

8750 NW 36th Street | Suite 670 | Miami, FL 33178 | Tel: 305-463-8411, Ext. 107
clamus@fteinc.net | www.fteinc.net

Florida | Chipley, Punta Gorda, Tampa, Tallahassee | Georgia | Kansas | Missouri
Please consider the environment before printing this email.

From: Falconi, Xavier [<mailto:XavierFalconi@miamibeachfl.gov>]

Sent: Thursday, November 19, 2015 3:11 PM

To: Majstorovic, Milos; Claudia Lamus

Subject: FW: Monad Terrace - Traffic Study Methodology

Please provide me with your comments on the attached methodology by tomorrow Friday at noon so I could coordinate with Adrian. Thanks.

MIAMIBEACH

Xavier R. Falconi, PE

Transportation Planner

TRANSPORTATION DEPARTMENT

1700 Convention Center Drive, Miami Beach, FL 33139

Tel: 305-673-7000 X 6129 / Fax: 305-673-7559 / www.miamibeachfl.gov

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Please do not print this e-mail unless necessary.



Memorandum

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

CC: Milos Majstorovic, E.I., City of Miami Beach
Claudia Lamus, P.E., FTE, Inc.

From: Adrian K. Dabkowski, P.E., PTOE 
Omar Kanaan, E.I.T. 

Date: December 4, 2015

**Subject: Monad Terrace Redevelopment
Miami Beach, FL
Traffic Study Methodology**

The purpose of this correspondence is to summarize the traffic study methodology for the Monad Terrace redevelopment based on our discussions at our meeting on November 10, 2015. The proposed redevelopment site area is located west of West Avenue north of 13th Street. The redevelopment will remove Monad Terrace.

The Monad Terrace redevelopment consists of a 74-unit residential condominium building including approximately 2,500 square feet of ancillary retail space anticipated to consist of a café/juice bar. The café/juice bar will be a low-turnover facility primarily for residents but also open to the general public. The café/juice bar is not expected to be a destination facility and as the residential development is primarily valet-only and it is anticipated that the small amount of general public that will use the facility will walk and not drive to the site. Furthermore, the absence of visible designated on-site parking will deter the public from driving to the café/juice bar. The redevelopment will be served via a dedicated porte-cochere. Access to the porte-cochere will be provided by a right-in/left-in driveway and a right-out only driveway. Currently, the site consists of eight (8) single-family detached houses and 24 apartment units. The existing development will be demolished. A detailed redevelopment conceptual site plan is provided in Attachment A. The following sections summarize the proposed analysis methodology.

TRIP GENERATION ANALYSIS

Trip generation calculations for the proposed redevelopment were performed using Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 9th Edition. ITE Land Use Code (LUC) 232 (High-Rise Residential Condominium/Townhouse) was utilized for the proposed 74 residential units. The 2,500 square-foot retail space (café/juice bar) is considered ancillary to the residential component and was not included in trip generation calculations. LUC 210 (single-family detached housing) and LUC 220 (apartment) were utilized for the existing land uses.

The Monad Terrace redevelopment is expected to result in a net increase of 27 A.M. peak hour trips and a net decrease of one (1) P.M. peak hour trip. Detailed trip generation calculations are provided in

Attachment B. The results of the trip generation analysis will be formally submitted in a trip generation statement.

VALET ANALYSIS

The Monad Terrace redevelopment will be served by one (1) valet drop-off and pick-up area. Residents and visitors will be able to drop-off and pick-up vehicles in the porte-cochere along West Avenue on the east side of the redevelopment via a dedicated driveway loop. Valet vehicles will be driven by a valet attendant to the basement level of the development and parked in the 185-space parking garage; which includes 162 mechanical parking spaces and 23 self-park spaces. Self-parking is expected to be minimal at the site. Therefore, all residents and visitors arriving by personal vehicle are assumed to valet their vehicle.

A valet operations queuing analysis will be prepared for the vehicle drop-off/pick-up area to ensure that queues do not spill back into public right-of-way.

Trip generation estimates will be utilized to provide for two (2) scenarios including typical/average scenario and highest demand (peak hour of generator) scenario. The valet operations queuing analysis will be conducted consistent with procedures described in ITE's Transportation and Land Development, 1988. A traffic circulation figure will be prepared to illustrate the valet routes to and from the vehicle drop-off/pick-up area. A technical memorandum documenting analysis assumptions and results, including the required vehicle queuing area and the required number of valet attendants to service the facility under both typical and highest demand will be prepared.

MANEUVERABILITY ANALYSIS

A maneuverability analysis for the porte-cochere, loading, and refuse pick-up areas will be performed utilizing *AutoTURN* software. The analysis will also discuss the proposed refuse pick-up operations. The results of the maneuverability analysis will be documented in a technical memorandum.

SIGHT DISTANCE ANALYSIS

A sight distance analysis will be completed in accordance with the Florida Department of Transportation (FDOT) Standard Index 546 to identify driver sight distance and document sight distance obstructions. The sight distance analysis results will be superimposed on a site plan to engineering scale and documented in a technical memorandum.

ON-SITE BICYCLE PARKING

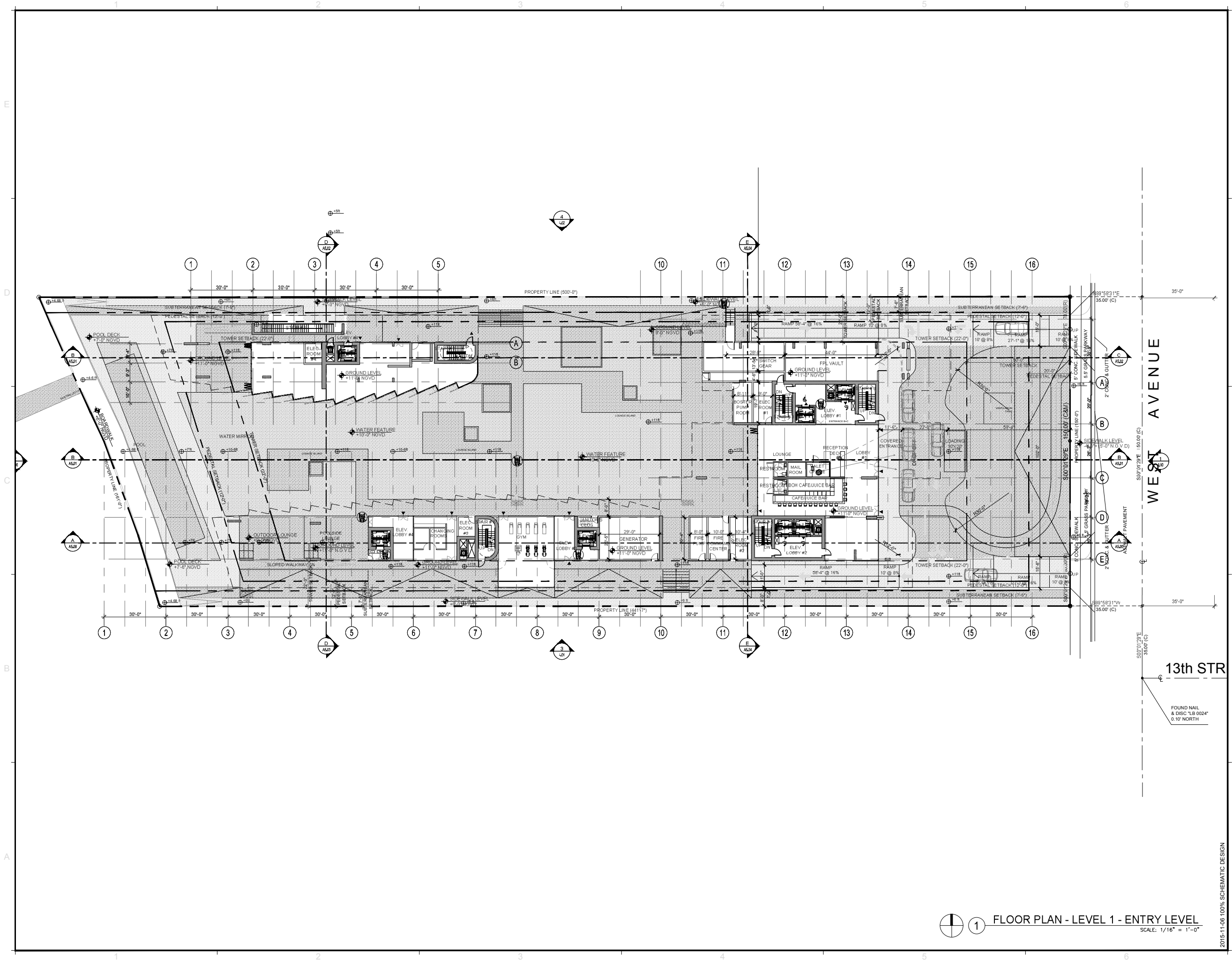
Providing on-site bicycle parking will be examined and documented for both short-term and long-term bicycle parking. The City of Miami Beach's Bicycle Parking Guidelines, March 2011 will be used in determining on-site bicycle parking feasibility. The site plan will denote bicycle parking that can be accommodated on-site.

PAVEMENT MARKINGS PLAN

A pavement marking and signage plan will be prepared for the site.

K:\FTL_TPTO\043709001-Monad Terrace\Correspondence\Memo\12 01 15 Monad Terrace - Methodology Memo rev.docx

Attachment A



REVISIONS / SUBMISSIONS	

1519

ALL DIMENSIONS AND SETBACK MATERIALS ARE SHOWN HEREIN
UNLESS OTHERWISE NOTED. THE OWNER HAS REVIEWED THIS SET
OF PLANS AND HAS NOTED ANY CHANGES TO BE MADE.
WITHOUT THE EXPRESS WRITTEN CONSENT OF ARCHITECT
MONAD TERRACE, 1300 MONAD TERRACE, MIAMI BEACH, FL 33139

MONAD TERRACE
1300 MONAD TERRACE
MIAMI BEACH, FLORIDA 33139

FLOOR PLAN
LEVEL 1 - ENTRY LEVEL

ATELIER
JEAN NOUVEL

KIMLEY-HORN

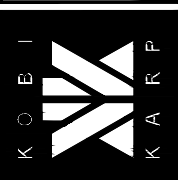
MCNAMARA - SALVIA
STRUCTURAL
ENGINEERS

EDWARDS &
ZUCK, LLC.

MONAD TERRACE
PROPERTY OWNER LLC.
104 FIFTH AVENUE
NEW YORK, NY, 10011
212 974-2844

KOB KARP
LLC # AR0012578

ARCHITECTURE
INTERIOR DESIGN
PLANNING
AIA ASID NCARB
2815 Bayview Boulevard
Miami, FL 33133
P: 305.573.1317
F: 305.573.3766
WWW.KOBKARP.COM

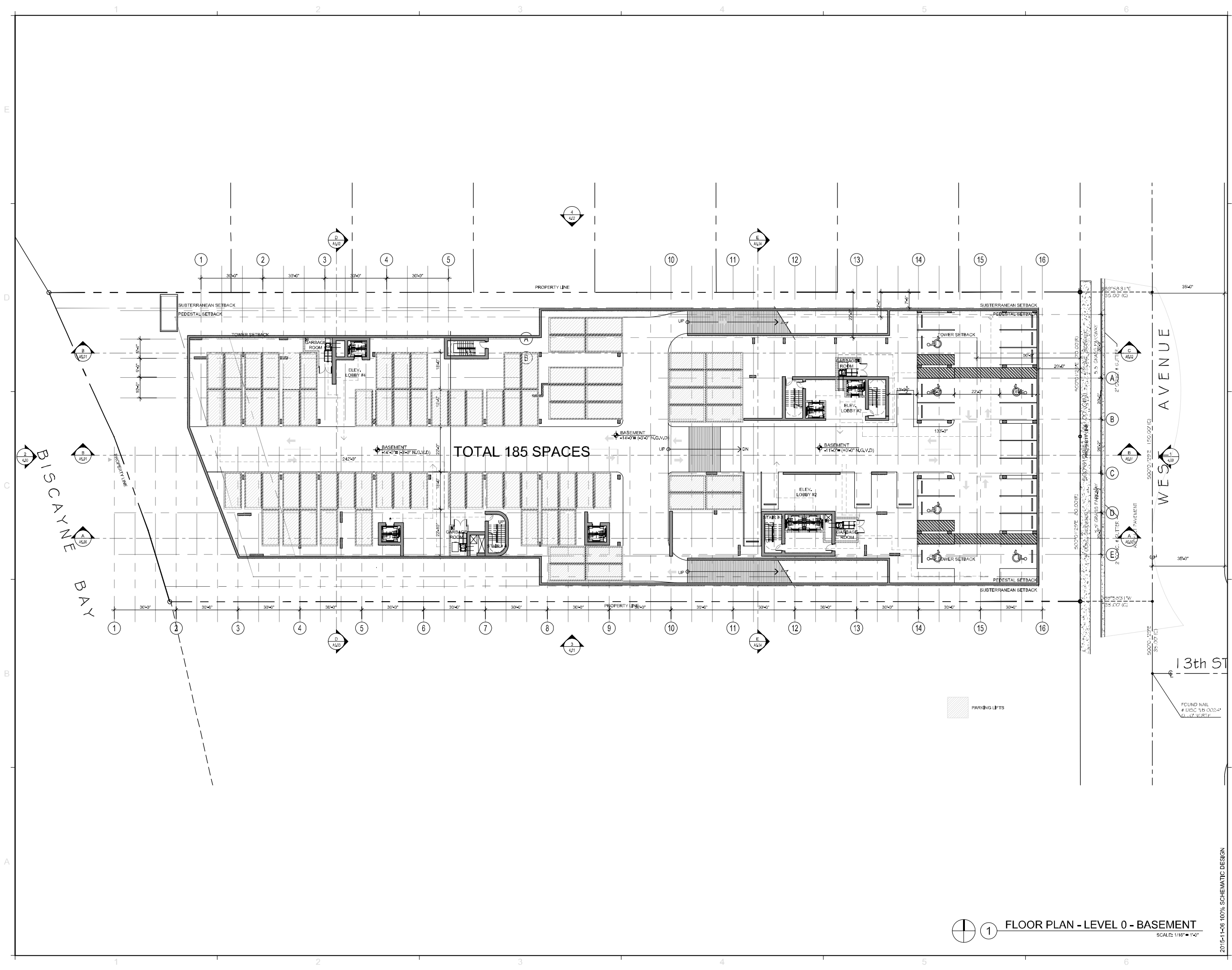


DRAWN BY: K.M. M.D.S.L.
CHECKED BY: K.K. J.M.
DATE: 11/06/2015

A3.01

1 FLOOR PLAN - LEVEL 1 - ENTRY LEVEL
SCALE: 1/16" = 1'-0"

2015-11-06 100% SCHEMATIC DESIGN



REVISIONS / SUBMISSIONS

1519

1300 MONAD TERRACE
MIAMI BEACH, FLORIDA 33139

104 FIFTH AVENUE
NEW YORK, NY, 10011

MONAD TERRACE

FLOOR PLAN

LEVEL 0 - BASEMENT

ATELIER
JEAN NOUVEL

KIMLEY-HORN

MCMANARA - SALVIA
STRUCTURAL
ENGINEERS

EDWARDS &
ZUCK, LLC.

MONAD TERRACE

PROPERTY OWNER LLC.

104 FIFTH AVENUE
NEW YORK, NY, 10011

212 874-2644

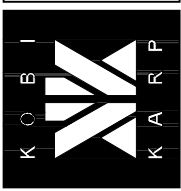
KOBILKARP

LLC. # 160015778

ARCHITECTURE
INTERIOR DESIGN
PLANNING

AIA ASID NCARB

2015 Biscayne Boulevard
Miami, FL 33137
P: 305.523.7868
WWW.KOBILKARP.COM



DRAWN BY:	KM	MD.S.L.
CHECKED BY:	KK	JM
DATE:	11/06/2015	

A3.00

1 FLOOR PLAN - LEVEL 0 - BASEMENT

SCALE: 1/16" = 1'-0"

2015-11-06 100% SCHEMATIC DESIGN

Attachment B

PEAK HOUR TRIP GENERATION COMPARISON

EXISTING SITE: WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 Single-Family Detached Housing	9	210	8	du	25%	75%	2	4	6	0.0%	0	2	4	6	10.0%	1	1	4	5
2 Apartment	9	220	24	du	20%	80%	3	12	15	0.0%	0	3	12	15	10.0%	1	2	12	14
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
210					Y=0.75(X)														
220					Y=0.49*(X)+3.73														

PROPOSED SITE: WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 High-Rise Residential Condominium/Townhouse	9	232	74	du	19%	81%	10	41	51	0.0%	0	10	41	51	10.0%	5	7	39	46
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
232					Y=0.29*(X)+28.86														

Net Difference		IN	OUT	TOTAL
		4	23	27

PEAK HOUR TRIP GENERATION COMPARISON

EXISTING SITE: WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 Single-Family Detached Housing	9	210	8	du	63%	37%	7	4	11	0.0%	0	7	4	11	10.0%	1	6	4	10
2 Apartment	9	220	24	du	65%	35%	20	11	31	0.0%	0	20	11	31	10.0%	3	18	10	28
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
210					LN(Y) = 0.9*LN(X)+0.51														
220					Y=0.55*(X)+17.65														

PROPOSED SITE: WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 High-Rise Residential Condominium/Townhouse	9	232	74	du	62%	38%	25	16	41	0.0%	0	25	16	41	10.0%	4	23	14	37
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
232					Y=0.34*(X)+15.47														

Net Difference		IN	OUT	TOTAL
		-1	0	-1

TRIP GENERATION ANALYSIS



March 8, 2016

Mr. Xavier Falconi, P.E.
City of Miami Beach
1700 Convention Center Drive
Miami Beach, FL 33139

Re: *Monad Terrace Redevelopment*
Miami Beach, FL
Trip Generation Analysis

Dear Mr. Falconi:

Kimley-Horn and Associates, Inc. has performed a trip generation analysis for the proposed Monad Terrace redevelopment located west of West Avenue north of 13th Street in Miami Beach, Florida. Currently, the north and south sides of Monad Terrace consist of eight (8) single-family detached houses and 24 apartment units. The existing development will be demolished. The proposed redevelopment consists of a 60-unit residential condominium building including approximately 2,500 square feet of ancillary retail space anticipated to consist a café/juice bar. The café/juice bar will be a low-turnover facility primarily for residents but also open to the general public. The café/juice bar is not expected to be a destination facility and as the residential development is primarily valet-only, it is anticipated that the small amount of general public that will use the facility will walk and not drive to the site. Furthermore, the absence of visible designated on-site parking will deter the public from driving to the café/juice bar. A detailed redevelopment conceptual site plan is provided in Attachment A. The following section summarizes the trip generation analysis.

TRIP GENERATION

Trip generation calculations for the proposed redevelopment were performed using the Institute of Transportation Engineers' (ITE's) *Trip Generation Manual*, 9th Edition. ITE Land Use Code (LUC) 232 (High-Rise Residential Condominium/Townhouse) was utilized for the proposed 60 residential units. The 2,500 square-foot retail space (café/juice bar) is considered ancillary to the residential component and was not included in the trip generation calculations. A ten percent (10%) multimodal reduction factor was applied to the trip generation calculations to account for the urban environment in which the redevelopment is located. LUC 210 (single-family detached housing) and LUC 220 (apartment) were utilized for the existing land uses.

As shown in Table 1, the trip generation calculations indicate that the proposed redevelopment represents a decrease of six (6) net new P.M. peak hour trips. Detailed trip generation calculations are provided in Attachment B.

Table 1: Trip Generation Summary	
Development Plan	P.M. Peak Hour Trip Generation
Existing	38
Proposed	32
Net Change	-6

In our opinion, the proposed redevelopment does not warrant further study as it results in a net reduction in the P.M. peak hour trips compared to the existing development. If you have any questions regarding this analysis please feel free to contact me.

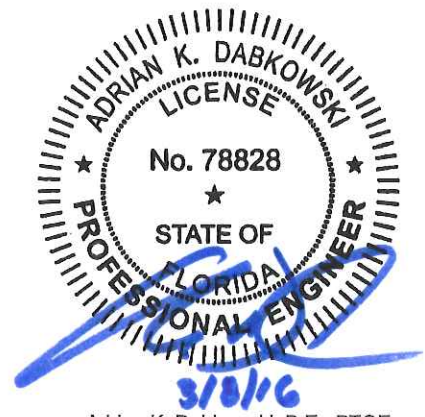
Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.



Adrian K. Dabkowski, P.E., PTOE
Associate

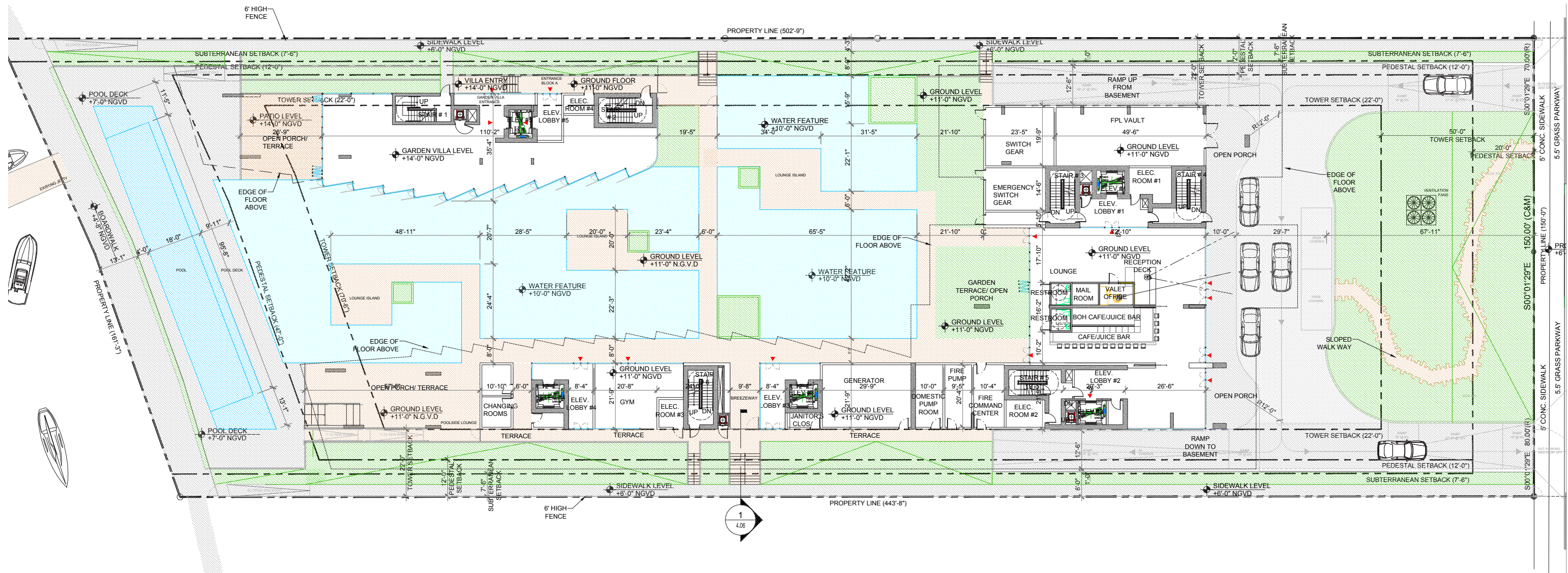
Attachments



Adrian K. Dabkowski, P.E., PTOE
Florida Registration Number 78828
Kimley-Horn and Associates, Inc.
600 North Pine Island Road, Suite 450
Plantation, Florida 33324
CA # 00000696

K:\FTL_TPTO\043709001-Monad Terrace\Correspondence\Letter\03 08 16 Monad Terrace - Trip Gen Letter_REV.docx

Attachment A



1300 MONAD TERRACE
MIAMI BEACH, FL.
Lobby Plan

OWNER
**Monad Terrace Property
Owner LLC
c/o JDS Development
Group**
104 Fifth Avenue
New York, NY 10011
Tel: [+1] 212-974-2844

ARCHITECTURAL/ LANDSCAPE
DESIGNER
AteliersJeanNouvel
10 Cité d'Angoulême
75011 Paris - France
Tel: [+33] 1 49 23 83 83

EXECUTIVE ARCHITECT
**Kobi Karp Architecture
and Interior Design**
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Suite 200
Miami, FL 33137
Tel: [+1] 305-573-1818
License #AR0012578

EXECUTIVE LANDSCAPE ARCHITECT /
CIVIL ENGINEER /TRAFFIC ENGINEER
Kimley - Horn
1221 Brickell Ave.
Suite 400
Miami, FL 33131
Tel: [+1] 305-673-2025

2/12/2016
DATE
A 3.01 **1/32"=1'**
SHEET NUMBER SCALE

Attachment B

PEAK HOUR TRIP GENERATION COMPARISON

EXISTING SITE: WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 Single-Family Detached Housing	9	210	8	du	63%	37%	7	4	11	0.0%	0	7	4	11	10.0%	1	6	4	10
2 Apartment	9	220	24	du	65%	35%	20	11	31	0.0%	0	20	11	31	10.0%	3	18	10	28
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
210					LN(Y) = 0.9*LN(X)+0.51														
220					Y=0.55*(X)+17.65														

PROPOSED SITE: WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 High-Rise Residential Condominium/Townhouse	9	232	60	du	62%	38%	22	14	36	0.0%	0	22	14	36	10.0%	4	20	12	32
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
232					Y=0.34*(X)+15.47														



Net Difference		IN	OUT	TOTAL
		-4	-2	-6

VALET ANALYSIS



Memorandum

To: Xavier Falconi, P.E.

From: Adrian K. Dabkowski, P.E., PTOE 
Omar Kanaan, E.I.T. 

Date: March 9, 2016

**Subject: Monad Terrace Redevelopment
Miami Beach, Florida
Valet Analysis Update**

Kimley-Horn and Associates, Inc. has performed a valet analysis for the proposed redevelopment of Monad Terrace located west of West Avenue north of 13th Street in Miami Beach, Florida. Currently, the site proposed for redevelopment consists of eight (8) single-family detached houses and 24 apartment units. The existing development will be demolished. The proposed redevelopment consists of a 60-unit residential condominium building including approximately 2,500 square feet of ancillary retail space. The redevelopment will be served via a dedicated porte-cochere. Access to the porte-cochere will be provided by a right-in/left-in driveway and a right-out only driveway. A detailed redevelopment conceptual site plan is provided in Attachment A. The following section summarizes the valet analysis.

VALET ANALYSIS

The Monad Terrace redevelopment will be served by one (1) dedicated valet drop-off and pick-up area with queue storage for two (2) vehicles and a by-pass lane located at the lobby level porte-cochere along West Avenue on the eastside of the redevelopment. The valet will serve both residents and visitors. Valet vehicles will be driven by a valet attendant to the basement level of the development and parked in the conventional parking garage. Mechanical parking will not be used at the redevelopment as the amount of residential units has been reduced. Residents and visitors arriving by personal vehicle are assumed to valet their vehicle as self-parking is expected to be minimal at the site. In order to provide a conservative analysis it is assumed that all vehicles accessing the site will be valeted.

TRIP GENERATION

Highest Demand Condition

Trip generation rates were examined for the weekday A.M. peak hour (one hour between 7:00 A.M. and 9:00 A.M.), P.M. peak hour (one hour between 4:00 P.M. and 6:00 P.M.), A.M. peak hour of generator, and P.M. peak hour of generator. A ten percent (10%) multimodal reduction factor was applied to the trip generation calculation to account for the urban environment in which the redevelopment is located. Please note that 100 percent (100%) of the calculated trip generation was assumed to utilize valet parking. The project's highest demand condition is expected to occur during the A.M. peak hour and is expected to generate 42 total valet trips of which 8 enter the site and 34 exit the site. During the P.M. peak hour the project is expected to generate 32 total valet trips of which 20 enter the site and 12 exit the site. Detailed trip generation calculations are included in Attachment B.

Typical Demand Condition

An average demand condition was also examined which is assumed to be equal to 25 percent (25%) of the highest demand scenario (A.M. peak hour) which accounts for more typical traffic conditions outside of the highest demand condition. The project is expected to generate 11 total valet trips of which 2 enter the site and 9 exit the site.

VALET OPERATIONS ANALYSIS

The valet queuing operations analysis was performed based on the methodology outlined in the Institute of Transportation Engineer's (ITE's) *Transportation and Land Development*, 1988. The analysis was performed to determine if valet operations could accommodate vehicular queues without blocking travel lanes on West Avenue.

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 lobby level porte-cochere. Service times for valet trips were calculated based on the time it would take a valet parking attendant to obtain and park a drop-off vehicle and the time it would take a valet parking attendant to bring a parked vehicle back to a patron.

The calculated average service time for valeted vehicles is 2.7 minutes for valet drop-off and pick-up. The average service time includes an average vehicle processing time of one (1) minute which includes the valet exchange time. The additional 1.7 minutes that comprises the service time represents the time to drive the valet vehicle to/from the parking space and for the valet attendant to walk to the parked vehicle or return to the valet station. The average service time is included as control delay in all further valet analyses. Detailed valet calculations are provided in Attachment C.

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. Since this analysis seeks to ensure that the queue length does not exceed the storage provided, at a level of confidence of 90 percent (90%). Two (2) vehicle drop-off/pick-up spaces are provided based on the attached site plan.

Analysis

An iterative approach was used to determine the number of additional valet attendants required to accommodate the proposed redevelopment demand during the analysis hour and ensure that the 90th percentile valet queue does not extend beyond the designated valet service area. The valet analysis worksheet is provided in Attachment C.

Results of the valet operations analysis demonstrate that a total of one (1) valet attendant is required under average demand conditions, three (3) valet attendants are needed during the highest A.M. peak

hour demand condition, and three (3) valet attendants are needed during the highest P.M. peak hour demand condition without negatively impacting circulation or extending beyond the designated valet service area and into the public right-of-way on West Avenue.

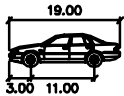
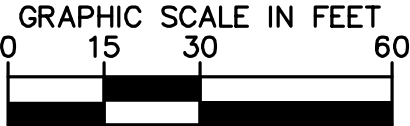
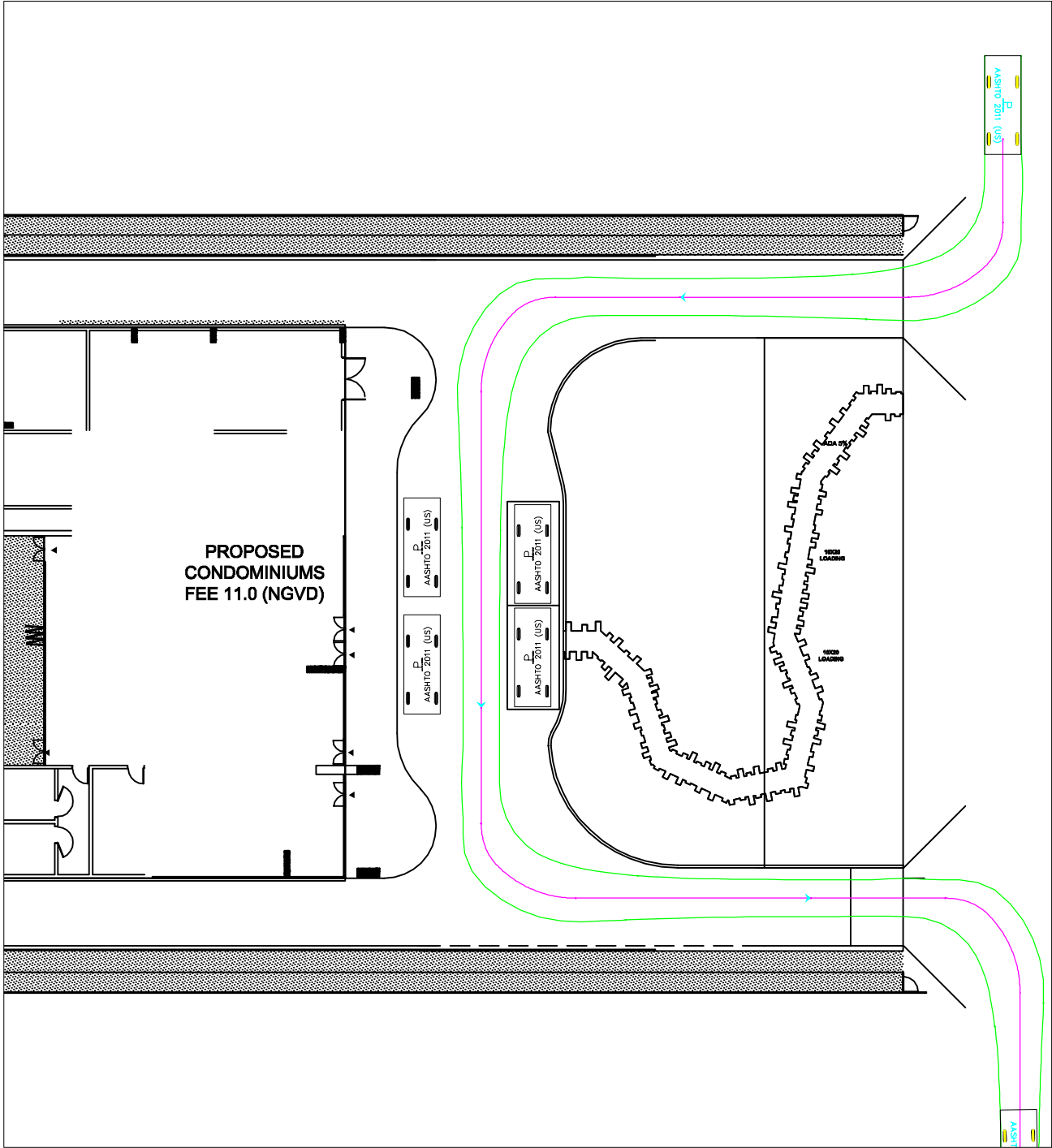
Conclusion

Based on the valet operations analysis performed, it was determined that the 90th percentile valet queues will not extend beyond the valet service area or past the two (2) vehicle storage area and into the public right-of-way on West Avenue or negatively impacting circulation. Based upon the conservative assumptions regarding the traffic demand, it was estimated that one (1) to three (3) valet attendants may be required during high demand peak periods. 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.

K:\FTL_TPTO\043709001-Monad Terrace\Correspondence\Memo\03 09 16 Monad Terrace - Valet Analysis Memo.docx

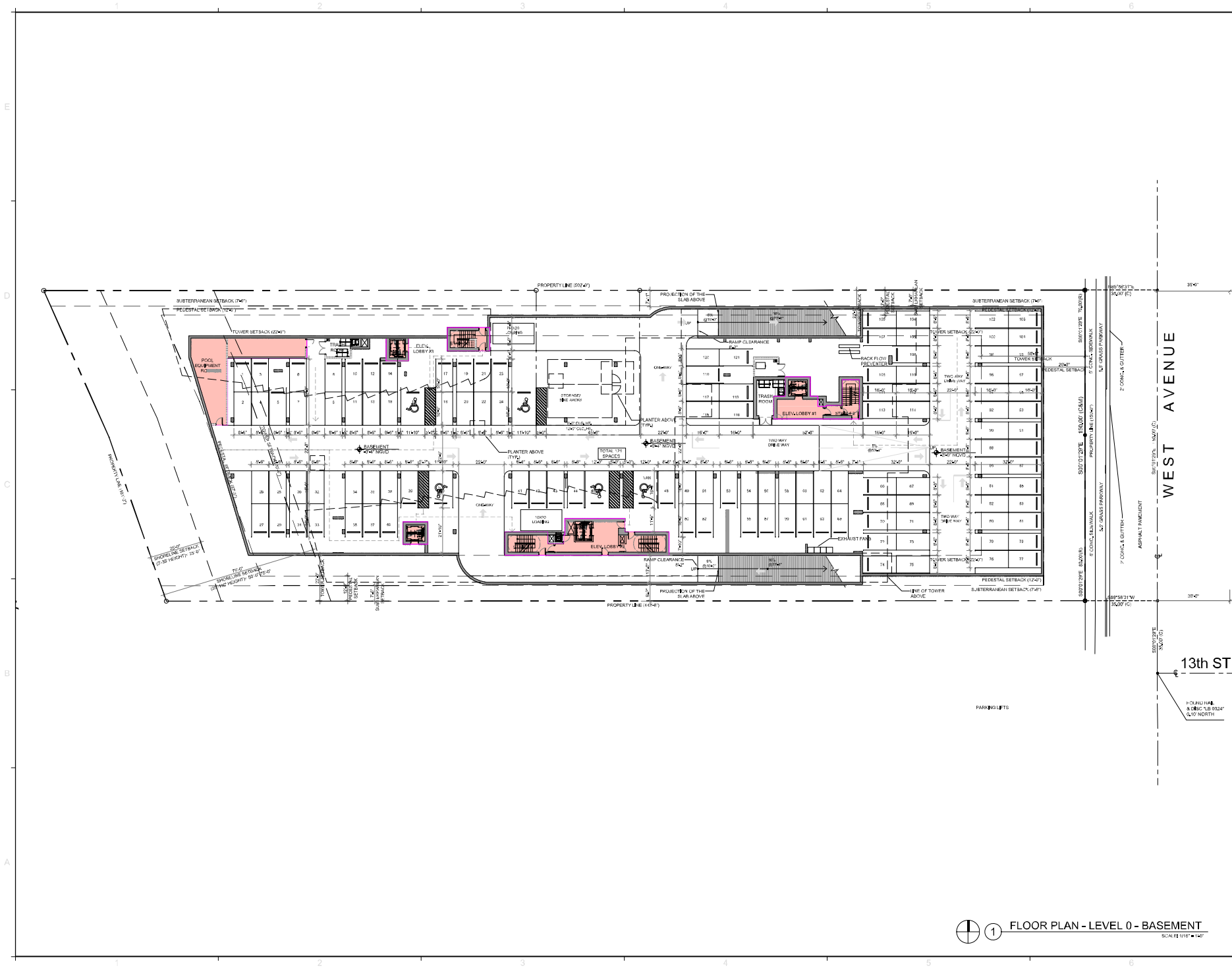
Attachment A

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

SCALE AS SHOWN		KHA PROJECT		LICENSED PROFESSIONAL		SHEET NUMBER	
DESIGNED BY		043266101		MONAD TERRACE		CAR THROUGH LOBBY	
DRAWN BY		DATE		PREPARED FOR			
CHECKED BY		3/1/2016		MONAD TERRACE			
				PROPERTY OWNER, LLC.		FL DATE:	
				MIAMI BEACH			
<div><div>Kimley»Horn</div><div>© 2016 KIMLEY-HORN AND ASSOCIATES, INC. 600 N. PINE ISLAND RD., SUITE 450, PLANTATION, FL 33324 PHONE: 954-535-8134 FAX: 561-863-8775 WWW.KIMLEY-HORN.COM CA 00000696</div></div>							



1 FLOOR PLAN - LEVEL 0 - BASEMENT
SCALE: 1/8" = 1'-0"

1519

MONAD TERRACE
100 MONAD TERRACE
MIAMI BEACH, FLORIDA 33139

FLOOR PLAN
LEVEL 0 - BASEMENT

ATELIER
JEAN NOUVEL

KIMLEY-HORN

MCNAMARA - SALVIA
STRUCTURAL
ENGINEERS

EDWARDS & ZUCK, LLC.

MONAD TERRACE
PROPERTY OWNER LLC.
104 11TH AVENUE
NEW YORK, NY 10011
212 37-4634

ARCHITECTURE
INTERIOR DESIGN
AKA **AKA** **AKA** **AKA**
100 MONAD TERRACE
MIAMI BEACH, FLORIDA 33139
WWW.KOENIGKARP.COM

K O E N I G K A R P

DRAWN BY: []

CHECKED BY: []

DATE: 06/01/16

A3.00

Attachment B

PEAK HOUR TRIP GENERATION COMPARISON

PROPOSED SITE: WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 High-Rise Residential Condominium/Townhouse	9	232	60	du	19%	81%	9	38	47	0.0%	0	9	38	47	10.0%	5	8	34	42
2																			
3																			
4																			
5																			
6																			
7																			
8																			
9																			
10																			
11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
232					Y=0.29*(X)+28.86														

PROPOSED SITE: WEEKDAY AM PEAK HOUR OF GENERATOR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 High-Rise Residential Condominium/Townhouse	9	232	60	du	17%	83%	7	36	43	0.0%	0	7	36	43	10.0%	4	6	33	39
2																			
3																			
4																			
5																			
6																			
7																			
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12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
232					Y=0.3*(X)+25.33														

PEAK HOUR TRIP GENERATION COMPARISON

PROPOSED SITE: WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 High-Rise Residential Condominium/Townhouse	9	232	60	du	62%	38%	22	14	36	0.0%	0	22	14	36	10.0%	4	20	12	32
2																			
3																			
4																			
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11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
232					Y=0.34*(X)+15.47														

PROPOSED SITE: WEEKDAY PM PEAK HOUR OF GENERATOR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			10% MULTIMODAL REDUCTION FACTOR		NET NEW EXTERNAL TRIPS		
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	MR Trips	In	Out	Total
					In	Out													
1 High-Rise Residential Condominium/Townhouse	9	232	60	du	68%	32%	22	11	33	0.0%	0	22	11	33	10.0%	4	20	9	29
2																			
3																			
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11																			
12																			
13																			
14																			
15																			
ITE Land Use Code					Rate or Equation		Total:												
232					LN(Y) = 0.84*LN(X)+0.07														

Attachment C

Monad Terrace On-Site Parking Calculated Average Travel Time			
VALET DROP-OFF			
VEHICLE TRAVEL TIME		VALET ATTENDANT TRAVEL TIME	
Travel Times (Assume 15 mph speed)		Travel Times (Assume 5 ft/s speed)	
To Valet Garage (In vehicle)		Return from Valet Garage (Walk/Run) to Valet Area	
Distance	Travel Time	Distance	Travel Time
0.08 miles	0.3 minutes	0.08 miles	1.4 minutes
Controlled Delay*	1.0 Minutes		
Total Time	2.7 Minutes		

Monad Terrace On-Site Parking Calculated Average Travel Time			
VALET PICK-UP			
VALET ATTENDANT TRAVEL TIME		VALET ATTENDANT TRAVEL TIME	
Travel Times (Assume 5 ft/s speed)		Travel Times (Assume 15 mph speed)	
To Valet Garage (Walk/Run)		Return from Valet Garage (In Vehicle) to Valet Area	
Distance	Travel Time	Distance	Travel Time
0.08 miles	1.4 minutes	0.08 miles	0.3 minutes
Controlled Delay*	1.0 Minutes		
Total Time	2.7 Minutes		

Monad Terrace Valet Analysis

Highest Demand Condition A.M. Peak Hour

Arrival Rate	IN	OUT	
	8	34	veh/hr

Service Rate	IN	OUT	
	2.70	2.70	mins/veh

Number of Valet Attendants (N) = 3

Level of Confidence = 0.90

Storage Provided On-Site = 2 vehicles

Total Entering and Exiting Vehicles(q) = 42 veh/hr

Service Capacity per N (60 mins/Service Rate) (Q) = 22.22 veh/hr/pos

Average Service Rate (t) = 2.70 mins/veh

rho (t/Q) = 0.630

N

1

2

3

4

N-1

0

1

2

3

P(n=0)= 1.000

P(n=1)= 1.890

P(n=2)= 1.786

P(n=3)= 0.000

P(0) = 12.96%

Service Time = 2.70 mins/veh

Expected (avg.) number of vehicles in the system	E(m)=	0.67	
Expected (avg.) number of vehicles waiting in queue	E(n)=	2.56	
Mean time in the queue	E(w)=	0.96	mins
Mean time in system	E(t)=	3.66	mins

Proportion of customers who wait (P) (E(w) > 0)= 39.41%

Probability of a queue exceeding a length (M) P(x > M)= 10.00%

Queue length which is exceeded 10.00% of the times is equal to 1.8 vehicles

Monad Terrace Valet Analysis

Highest Demand Condition P.M. Peak Hour

Arrival Rate	IN	OUT	veh/hr
	20	12	

Service Rate	IN	OUT	mins/veh
	2.70	2.70	

Number of Valet Attendants (N) = 3

Level of Confidence = 0.90

Storage Provided On-Site = 2 vehicles

Total Entering and Exiting Vehicles(q) = 32 veh/hr

Service Capacity per N (60 mins/Service Rate) (Q) = 22.22 veh/hr/pos

Average Service Rate (t) = 2.70 mins/veh

rho (t/Q) = 0.480

N

1

2

3

4

N-1

0

1

2

3

P(n=0)= 1.000

P(n=1)= 1.440

P(n=2)= 1.037

P(n=3)= 0.000

P(0) = 22.55%

Service Time = 2.70 mins/veh

Expected (avg.) number of vehicles in the system E(m)= 0.20

Expected (avg.) number of vehicles waiting in queue E(n)= 1.64

Mean time in the queue E(w)= 0.37 mins

Mean time in system E(t)= 3.07 mins

Proportion of customers who wait (P) (E(w) > 0)= 21.59%

Probability of a queue exceeding a length (M) P(x > M)= 10.00%

Queue length which is exceeded 10.00% of the times is equal to 0.0 vehicles

Monad Terrace Valet Analysis

Typical/Average Demand Condition

Arrival Rate	IN	OUT	
	2	9	veh/hr

Service Rate	IN	OUT	
	2.70	2.70	mins/veh

Number of Valet Attendants (N) =	1	
Level of Confidence =	0.90	
Storage Provided On-Site =	2	vehicles
Total Entering and Exiting Vehicles(q) =	11	veh/hr
Service Capacity per N (60 mins/Service Rate) (Q) =	22.22	veh/hr/pos
Average Service Rate (t) =	2.70	mins/veh
rho (t/Q) =	0.495	

N
1
2

N-1
0
1

P(n=0)=	1.000
P(n=1)=	0.000
P(0) =	50.50%

Service Time = 2.70 mins/veh

Expected (avg.) number of vehicles in the system	E(m)=	0.49	
Expected (avg.) number of vehicles waiting in queue	E(n)=	0.98	
Mean time in the queue	E(w)=	2.65	mins
Mean time in system	E(t)=	5.35	mins

Proportion of customers who wait (P) (E(w) > 0)=	49.50%
Probability of a queue exceeding a length (M) P(x > M)=	10.00%

Queue length which is exceeded 10.00% of the times is equal to 1.1 vehicles

MANEUVERABILITY ANALYSIS



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.

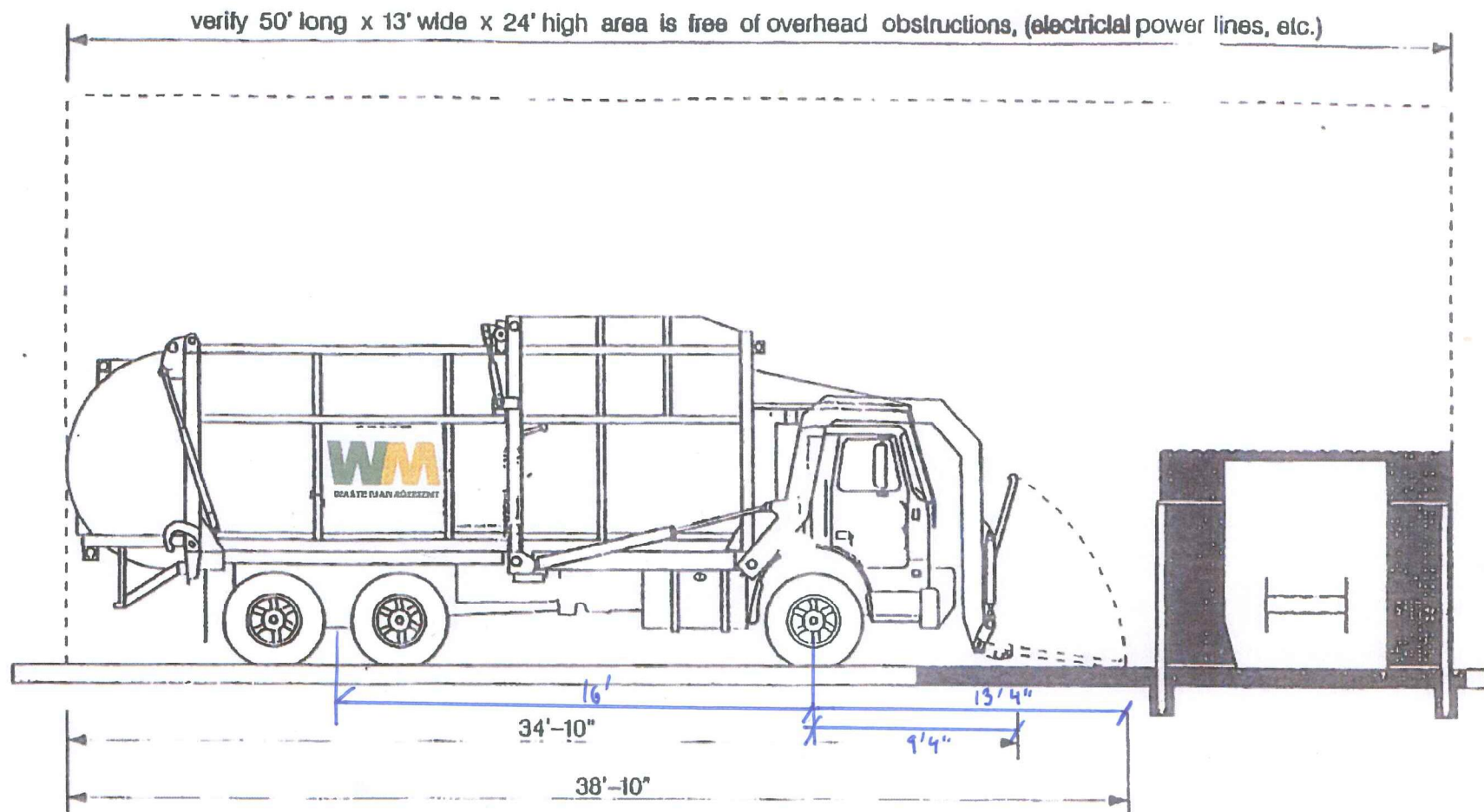
On-Site Refuse Area

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.

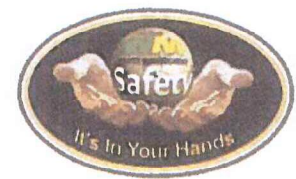
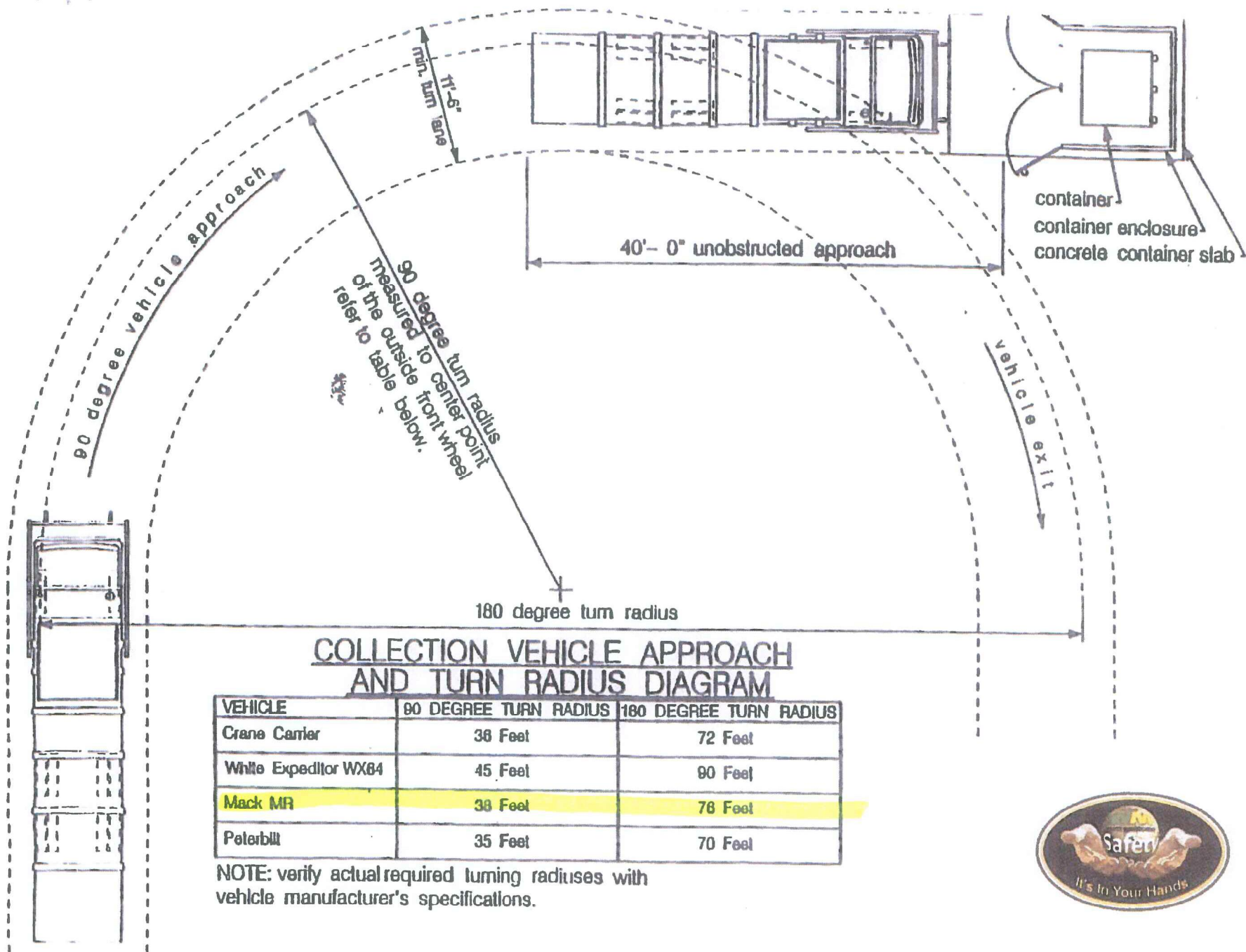
Attachment A

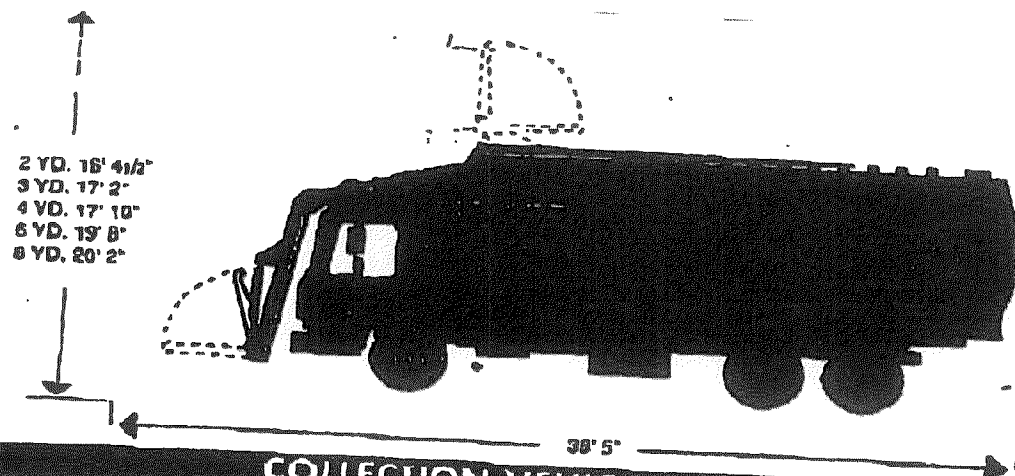


SIDE VIEW

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





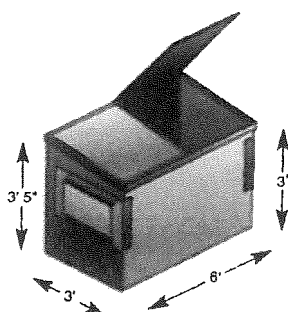


COLLECTION VEHICLE CONFIGURATION

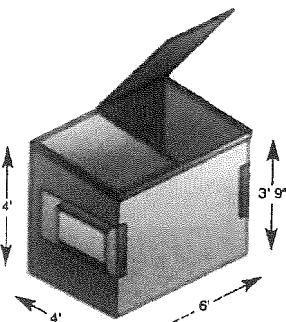
Note: Approximate specifications subject to change

CONTAINERS & TRUCKS

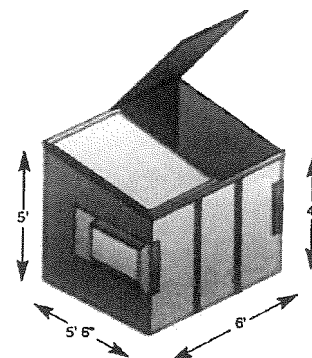
COMMERCIAL CONTAINERS



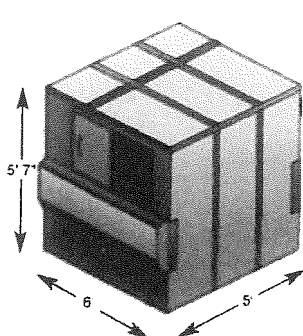
2-Yard Bin



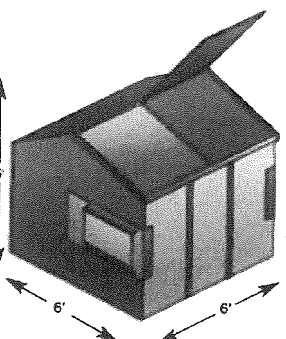
3-Yard Bin



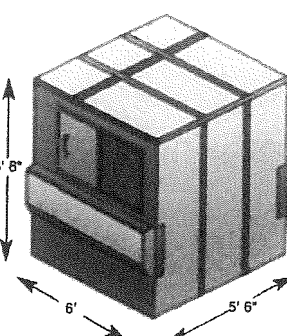
4-Yard Bin



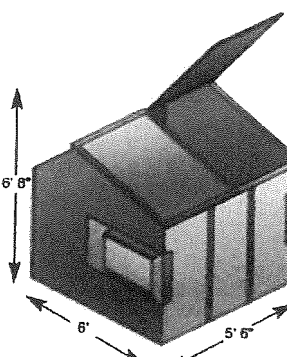
6-Yard Bin



6-Yard Slant Bin

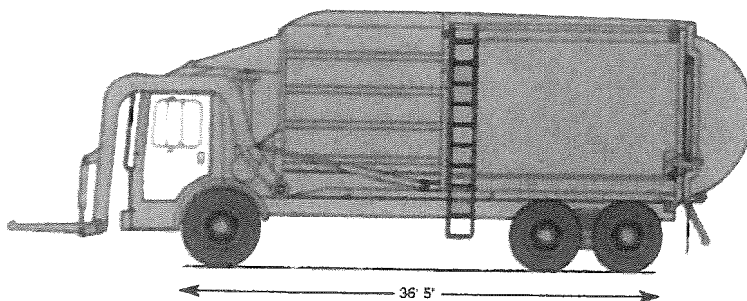


8-Yard Bin



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

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.

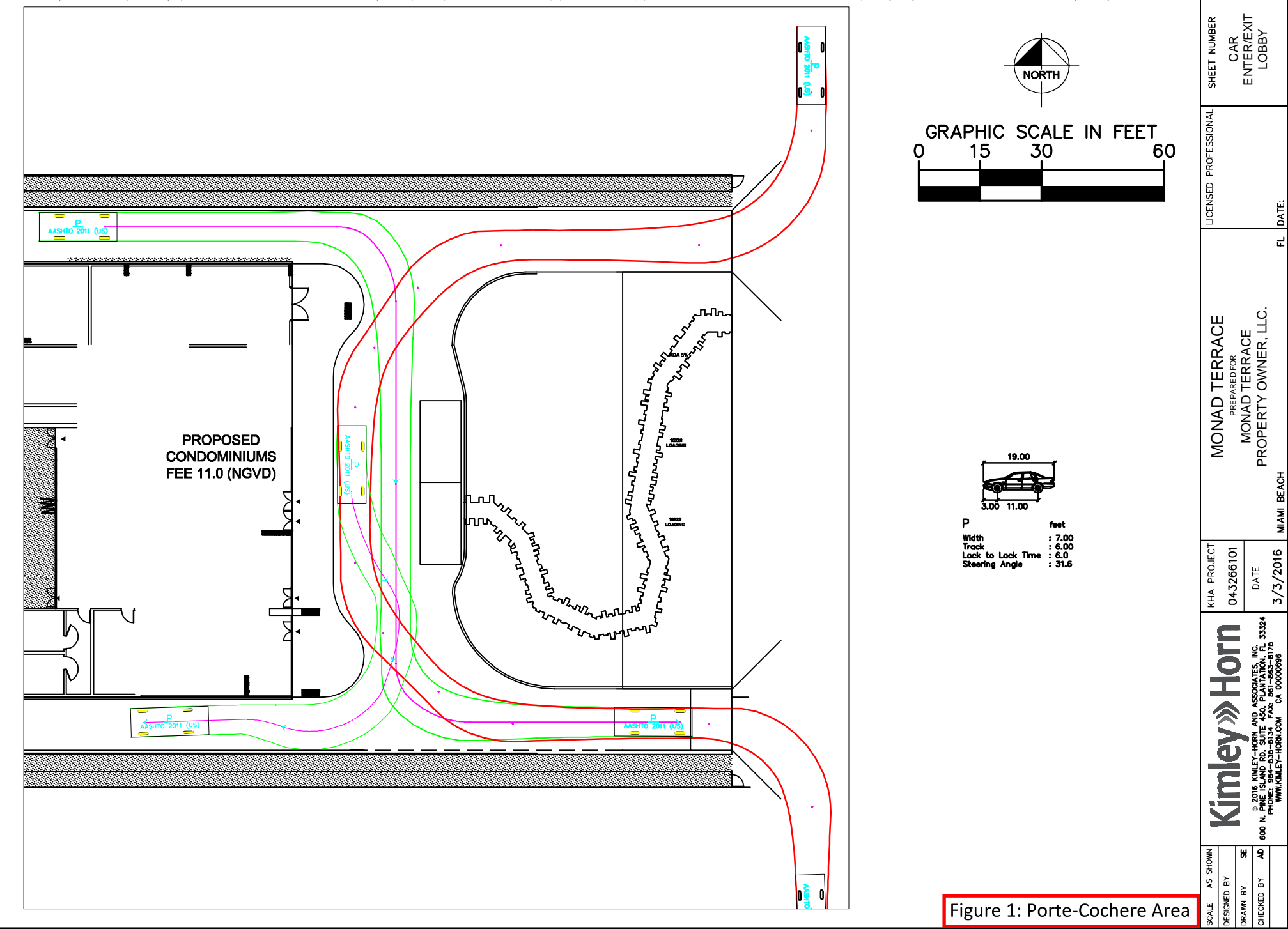
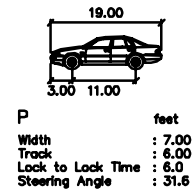


Figure 1: Porte-Cochere Area

SHEET NUMBER CAR ENTER/EXIT LOBBY		LICENSED PROFESSIONAL		FL DATE:	
MONAD TERRACE PREPARED FOR MONAD TERRACE PROPERTY OWNER, LLC.		KHA PROJECT 043266101		DATE 3/3/2016	
MIAMI BEACH		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	SE	DRAWN BY	AD
CHECKED BY					



SHEET NUMBER

CAR THROUGH LOBBY

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.

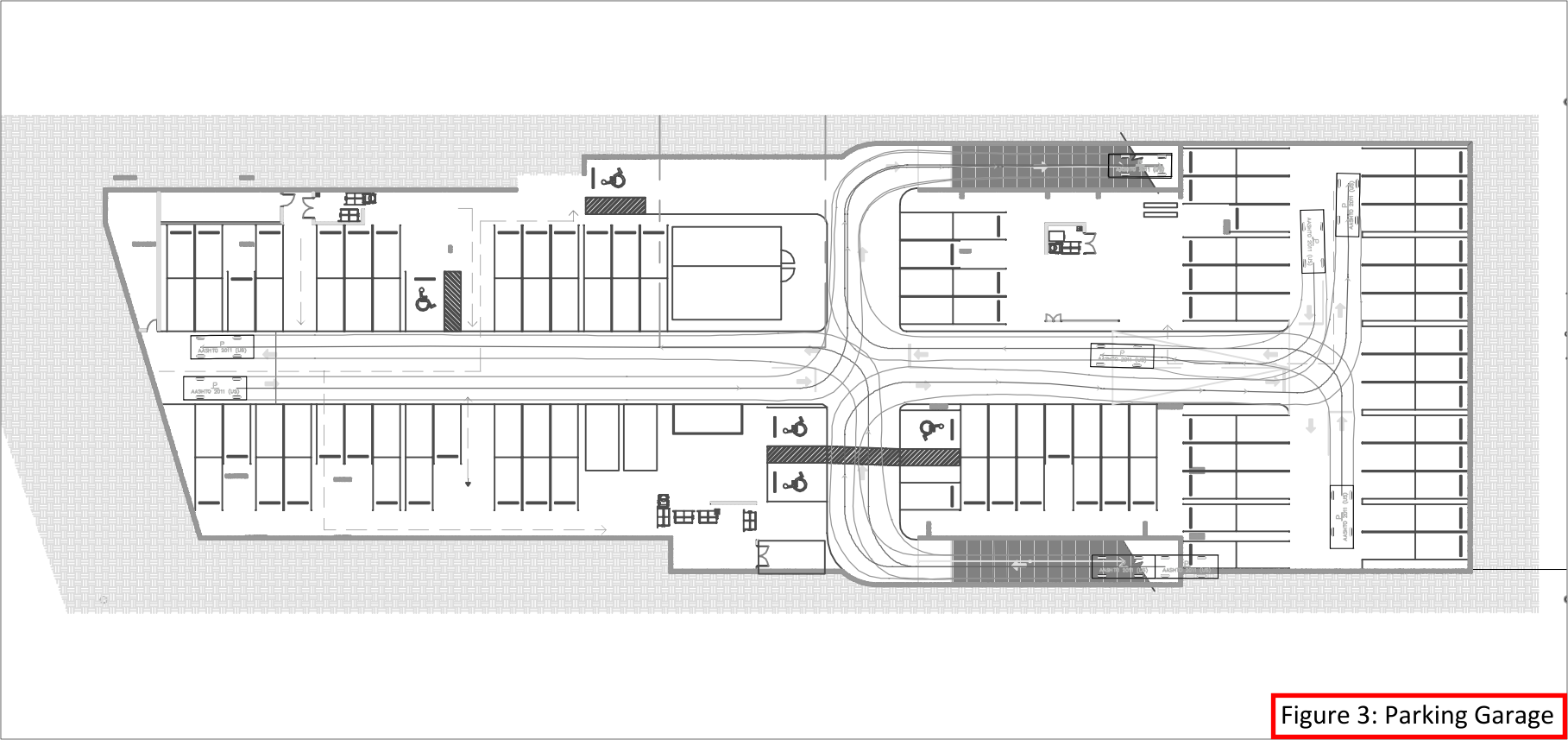
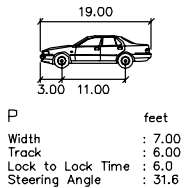


Figure 3: Parking Garage



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

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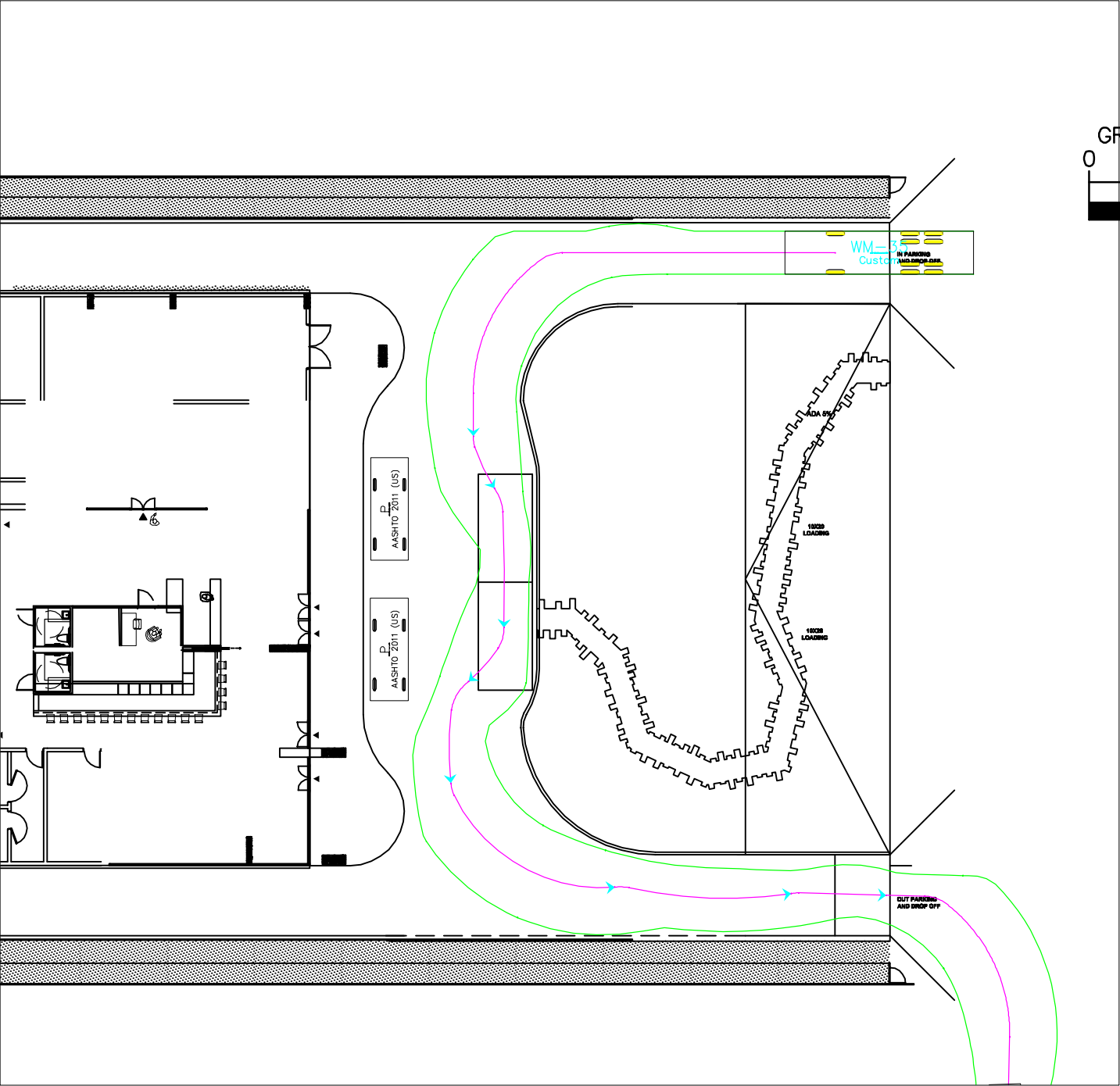


Figure 4: Refuse Area

SCALE AS SHOWN		DESIGNED BY		KHA PROJECT 043266101		MONAD TERRACE PREPARED FOR MONAD TERRACE PROPERTY OWNER, LLC.		LICENSED PROFESSIONAL		SHEET NUMBER	
DRAWN BY		SE		DATE 3/3/2016		MIAMI BEACH		FL		DATE:	
CHECKED BY		AD		© 2016 KIMLEY-HORN AND ASSOCIATES, INC. 600 N. PINE ISLAND RD, SUITE 450, PLANTATION, FL 33324 PHONE: 954-335-8134 FAX: 561-883-8175 WWW.KIMLEY-HORN.COM CA 00000946		Kimley»»Horn					

SIGHT DISTANCE ANALYSIS



Memorandum

To: Xavier Falconi, P.E.

From: Christopher Falce, P.E.

Date: February 11, 2016

***Subject: Monad Terrace Redevelopment
Miami Beach, Florida
Sight Distance Analysis***

Kimley-Horn and Associates, Inc. has prepared a Sight Distance Analysis for the Monad Terrace Redevelopment. Attached you will find the Sight Distance Exhibit. The Sight Distance Analysis was completed according to FDOT Standard Index 546 page 3 of 6 for a 2 lane undivided road at a design speed of 30 MPH. Based on the current design and criteria defined in the 2015 FDOT Design Standards, the proposed driveway locations adhere to the sight visibility criteria.

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EX-1