RESOLUTION No. 22-14

A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, APPROVING THE SITE PLAN FOR KIA AND SUBARU SHOWROOMS AND SERVICE BUILDINGS FOR THE PROPERTY LOCATED AT 10155 NW 12 STREET; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, on November 2, 2016, the City of Doral (the "City") adopted Ordinance No. 2016-29 amending the City's Land Development Code to establish procedures for the Mayor and City Council site plan review and approval process; and

WHEREAS, Lehman Doral Partners LLC (the "Applicant") has submitted an application for Mayor and Council Site Plan Review and Approval for Kia and Subaru Showroom and Service Buildings for the property located at 10155 NW 12 Street, Doral, FL, as legally described in "Exhibit A," pursuant to section 74-152 of the City's Land Development Code; and

WHEREAS, a zoning workshop was held on November 4, 2021, at which meeting the public was afforded an opportunity to examine the project and provide feedback; and

WHEREAS, the City of Doral staff finds that the proposed site plan complies with the requirements and standards of the City's Land Development Code; and

WHEREAS, after notice of public hearing duly published and notifications of all property owners of record within 500-foot radius, a public hearing was held before the Mayor and City Council of the City of Doral on January 26, 2022, at which hearing all interested persons were afforded the opportunity to be heard; and

WHEREAS, the Mayor and City Council of the City of Doral find the adoption of this Resolution is in the best interest of the health, safety and welfare of the residents of the City of Doral.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, AS FOLLOWS:

Section 1. Recitals. The foregoing recitals are confirmed, adopted, and incorporated herein and made as part hereof by this reference.

Section 2. Approval. The City Council hereby approve the site plan for Kia and Subaru Showroom and Service Buildings for the property located at 10155 NW 12 Street Doral, FL, as legally described in "Exhibit A," pursuant to section 74-152 of the City's Land Development Code. The site plan consists of a Kia and Subaru dealer showroom and service centers. A copy of the site plan is provided in "Exhibit B." The approval of the site plan is subject to the following conditions. Violation of the conditions may result in a code compliance citation or the revocation of this Resolution.

1. Covenant in Lieu of Unity of Title unifying the three parcels of land must be approved by the City of Doral and recorded by the Applicant prior to building permit issuance.
2. The proposed project shall be built in substantial compliance with the plans entitled "New Kia & Subaru Showroom & Service Building," prepared by Stiles Architectural Group, dated stamped received November 29, 2021.
3. The project shall be landscaped in accordance with the landscape plan, prepared by Michael J. Phillips, RLA, dated stamped received November 29, 2021 as amended, and included with the site plan submittal.
4. Compliance with Ordinance No. 2015-09, "Public Arts Program" will be required at the time of building permit, if applicable.
5. That the Applicant comply with the City's Floodplain Management regulations (Chapter 23, Article II, Floodplain Management) of the Land Development Code.
6. That the Applicant provide the City a certified drainage inspection report prior to the issuance of a certificate of occupancy.
7. A Stormwater Pollution Prevention Plan (SWPPP) must be submitted by the Applicant at time of building permit. The Plan should provide guidelines for implementing an erosion and sedimentation control program before the site is cleared or graded, including areas where topsoil will be removed and contours of slopes will be cleared. The Plan shall also include location and

type of erosion control measures, storm water and sediment management systems, and a vegetative plan for temporary and permanent stabilization. The Plan shall remain on-site for the duration of the construction activity.

8. If more than one (1) acre of land is disturbed during construction the Contractor/Developer is responsible to obtain NPDES Stormwater permit coverage through the Florida Department of Environmental Protection (FDEP), Construction Generic Permit (CGP). If the project is less than one (1) acre, but part of a larger common plan of development or sale that will ultimately disturb one or more acres, permit coverage is also required. Instruction to request and obtain a CGP can be found at: http://www.dep.state.fl.us/water/stormwater/npdes/docs/cgp.pdf. Contractor/Developer should submit the Notice of Intent (NOI) with the appropriate processing fees to the NPDES Stormwater Notices Center. Contractor/Developer must apply for permit coverage at least two (2) days prior to submitting construction drawings for building permit.
9. Construction shall be permitted only during the hours set forth in Ordinance No. 2011-01 “Noise Ordinance.”
10. That the Applicant comply with all applicable conditions and requirements of the Miami-Dade County Department of Regulatory and Economic Resources.
11. That the Applicant comply with all applicable conditions and requirements of the Miami-Dade County Fire Rescue Department.
12. All applicable local, state and federal permits must be obtained before commencement of the development.
13. Issuance of this development permit by the City of Doral does not in any way create any right on the part of an Applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the City of Doral for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

Section 3. Effective Date. This Resolution shall become effective immediately upon its adoption.

The foregoing Resolution was offered by Councilmember Mariaca who moved its adoption. The motion was seconded by Vice Mayor Cabral and upon being put to a vote, the vote was as follows:

Mayor Juan Carlos Bermudez	Yes
Vice Mayor Digna Cabral	Yes
Councilman Pete Cabrera	Yes
Councilwoman Claudia Mariaca	Yes
Councilman Oscar Puig-Corve	Yes

PASSED AND ADOPTED this 26 day of January, 2022.

JUAN CARLOS BERMUDEZ, MAYOR

ATTEST:

CONNIE DIAZ, MMC
CITY CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY
FOR THE USE AND RELIANCE OF THE CITY OF DORAL ONLY:

LUIS FIGUEREDO, ESQ.
CITY ATTORNEY

EXHIBIT “A”

LEGAL DESCRIPTION:

The East 45.00 feet of the following property as described in Official Records Book 24375, Page 3970 of the Public Records of Miami-Dade County, Florida:

A portion of the South 1/2 of Section 32, Township 53 South, Range 40 East, Miami-Dade County, Florida, being more particularly described as follows:

COMMENCE at the Southeast corner of the Southwest 1/4 of said Section 32; thence S89°20'56"W along the South line of said Section 32 for a distance of 118.68 feet to a point; thence N01°43'13"W for a distance of 80.01 feet to a point on the northerly right-of-way of N.W. 12th Street; thence continuing N01°43'13"W for a distance of 481.55 feet to the Point of Beginning; thence due West a distance of 273.70 feet to a point; thence S64°49'27"W a distance of 497.70 feet to a point; thence N34°00'00"W a distance of 151.31 feet to a point; thence N 45°56'45" E a distance of 190.52 feet to a point; thence 60.36 feet along a curve to the right having a radius of 150.00 feet and a central angle of 23°03'15" to a point; thence N69°00'00"E a distance of 360.94 feet to a point; thence 245.30 feet along an arc to the left having a radius of 400.00 feet and a central angle of 35°08'13" to a point; thence due East a distance of 84.73 feet to a point; thence S01°43'13"E a distance of 358.49 feet to a Point of Beginning.

AND

A portion of the South 1/2 of Section 32, Township 53 South, Range 40 East, Miami-Dade County, Florida, being more particularly described as follows:

COMMENCE at the Southeast corner of the Southwest 1/4 of said Section 32; thence S89°2O'56"W along the South line of said Section 32 for a distance of 118.68 feet to a point; thence N01°43'13"W for a distance of 80.01 feet to a point of the Northerly right-of-way of N.W. 12th Street; thence continuing N01°43'13"W for a distance of 840.04 feet to the POINT OF BEGINNING; thence N9O"00'00"W for 271.82 feet to a point on the East Line of Tract "A" of MIAMI INTERNATIONAL MALL PROPERTIES, according to the plat thereof as recorded in Plat Book 117 at Page 84 of the Public Records of Miami Dade County, Florida; thence N01°43'13"W along said East line of Tract "A" for 1287.65 feet to the Southwest comer of Tract "A" of GREAT SPRINGS AT I.C.P., according to the Plat thereof as recorded in Plat Book 158 at Page 94 of the Public Records of Miami- Dade County, Florida; thence N89°40'09"E along the South line of said Tract "A" of GREAT SPRINGS AT I.C.P. for 271.77 feet to the Northwest Corner of Tract "K" of INTERNATIONAL CORPORATE PARK SECTION 6; thence S01"43'13"E along the West line of said Tract "K" and along the West Line of Tract "A" of DOLE FLOWERS SUBDIVISION, according to the Plat thereof as recorded in Plat Book 157 al Page 57, of the Public Records of Miami-Dade County, for 1289.22 feet to the POINT OF BEGINNING.

Containing 366,189 Square Feet or 8.41 Acres, more or less, by calculations.

AND

Tract "A" of LEHMAN DORAL SUBDIVISION, according to the Plat therefore as recorded in Plat Book 172 at Page 41 of the Public Records of Miami-Dade County, Florida.

EXHIBIT “B”

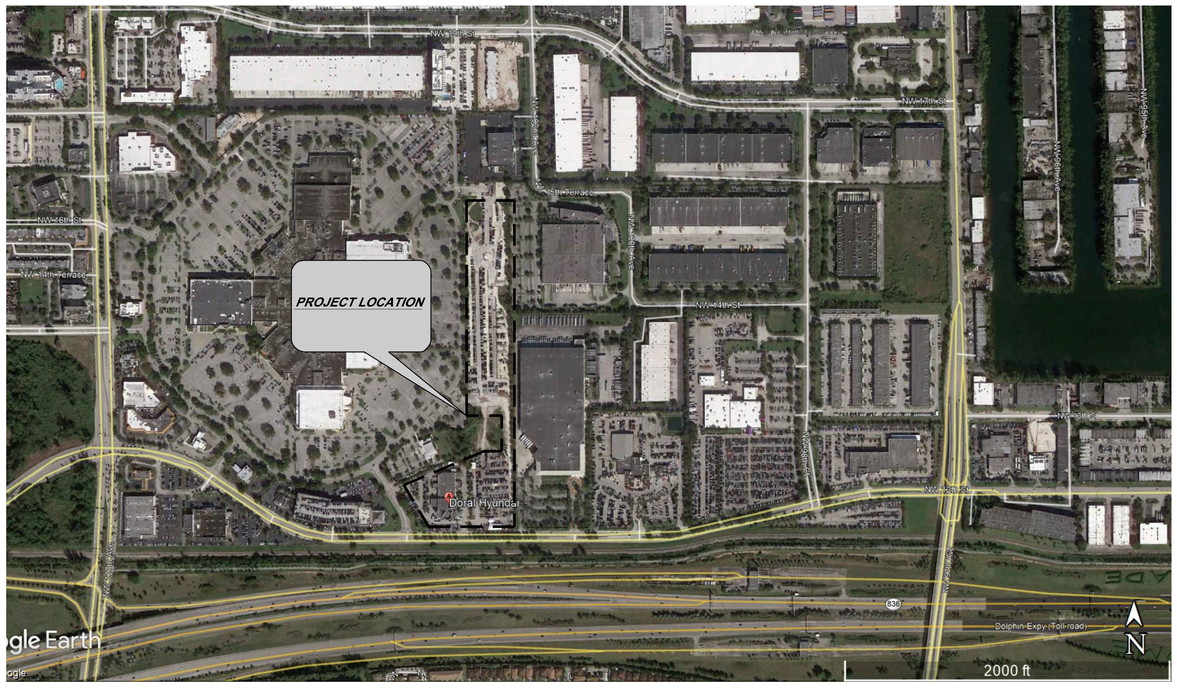
Exhibit B

RECEIVED
By Stephanie Puglia at 3:47 pm, Nov 29, 2021

NEW KIA & SUBARU SHOWROOMS & SERVICE BUILDINGS

LEHMAN DORAL

10155 NW 12th STREET
CITY OF DORAL, FLORIDA 33172



OWNER:

LEHMAN DORAL PARTNERS, LLC
21400 NW 2nd AVENUE
MIAMI GARDENS, FL 33169
P: (305) 650-3453

ARCHITECT:

STILES ARCHITECTURAL GROUP
301 EAST LAS OLAS BOULEVARD
FORT LAUDERDALE, FL 33301
P: (954) 627-9180
FAX: (954) 627-9189

LANDSCAPE ARCHITECTS:

KEITH ENGINEERING, INC.
5805 BLUE LAGOON DRIVE, SUITE 218
MIAMI, FL 33126
P: (954) 788-3400

CIVIL ENGINEER:

KEITH ENGINEERING, INC.
5805 BLUE LAGOON DRIVE, SUITE 218
MIAMI, FL 33126
P: (954) 788-3400

LAND DESCRIPTION:

A PARCEL OF LAND LOCATED IN THE SOUTHWEST ONE-QUARTER OF SECTION 32, TOWNSHIP 53 SOUTH, RANGE 40 EAST, MIAMI-DADE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCE AT THE SOUTHEAST CORNER OF THE SAID SOUTHWEST ONE-QUARTER OF SECTION 32; THENCE SOUTH 89°20'56" WEST ALONG THE SOUTH LINE OF SAID SECTION 32 FOR A DISTANCE OF 118.68 FEET TO A POINT; THENCE NORTH 01°43'13" WEST FOR A DISTANCE OF 80.01 FEET TO A POINT ON THE NORTHERLY RIGHT-OF-WAY LINE OF N.W. 12TH STREET TO THE POINT OF BEGINNING; THENCE ALONG SAID NORTHERLY RIGHT-OF-WAY LINE SOUTH 89°20'56" WEST A DISTANCE OF 271.74 FEET TO A POINT; THENCE LEAVING SAID NORTHERLY RIGHT-OF-WAY LINE NORTH 01°43'13" WEST A DISTANCE OF 484.64 FEET TO A POINT; THENCE NORTH 90°00'00" EAST A DISTANCE OF 271.82 FEET TO A POINT; THENCE SOUTH 01°43'13" EAST A DISTANCE OF 481.55 FEET TO A POINT ON SAID NORTHERLY RIGHT-OF-WAY LINE OF N.W. 12TH STREET, SAID POINT BEING THE POINT OF BEGINNING AND CONTAINING 3.013 ACRES OF LAND, MORE OR LESS.

INDEX OF DRAWINGS

REVISIONS :

SEAL

STATE OF FLORIDA · KEVIN CRUZ · AR 97952 · REGISTERED ARCHITECT

CONSULTANT
KEVIN CRUZ
Fl Reg # 97952
11/1/2021

STILES
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Fort Lauderdale, Florida. 33301
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FL. REG # AA-26001798

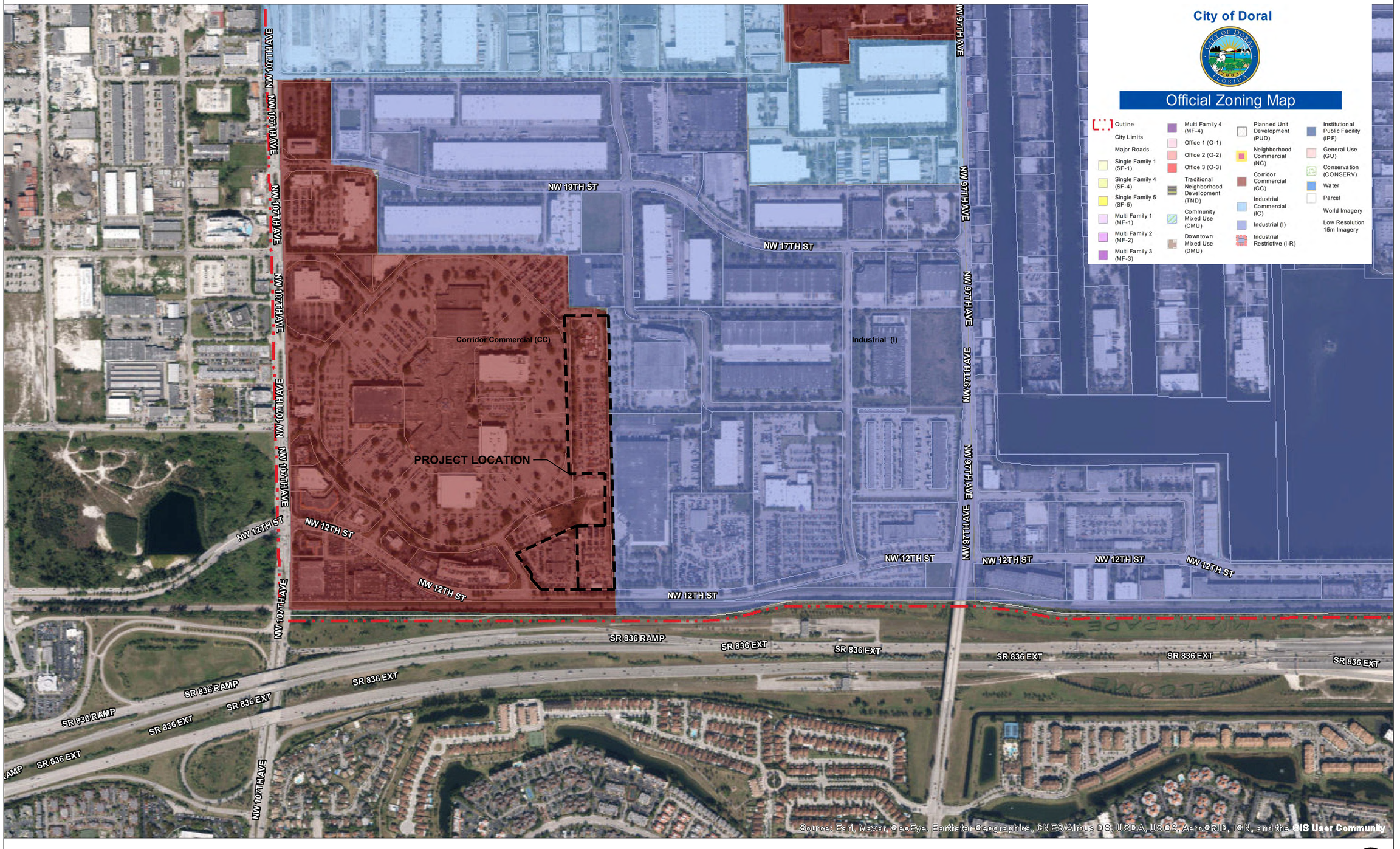
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

COVER SHEET

A-0

PROJECT NO.
74094
DRAWN BY :
R.J. / J.J.
CHECKED BY :
K.C.
DATE :
04/28/2021

74094 DRC_A-0 COVER SHEET.DWG



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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

ZONING MAP

A-0.1

PROJECT NO.
74094
DRAWN BY :
R.J. / J.J.
CHECKED BY :
K.C.
DATE :
04/28/2021

74094 DRC_A-0.1 VICINITY MAP.DWG

PROJECT DATA:

1. JURISDICTION: CITY OF DORAL, FLORIDA
2. ADDRESS: TRACT A: 10155 NW 12TH STREET, DORAL FL 33172
   PARCEL C: 10111 NW 12TH STREET, DORAL FL 33172
3. ZONING DESIGNATION: CC (CORRIDOR COMMERCIAL)
4. SITE AREA:
   TRACT A: 131,288 S.F. (3.01 ACRES)
   PARCEL A: 16,105 S.F. (0.370 ACRES)
   PARCEL C: 349,715 S.F. (8.03 ACRES)
   TOTAL: 497,108 S.F. (11.41 ACRES)
5. BUILDING AREA : SEE CHART
6. APPLICABLE CODE(S): FLORIDA BUILDING CODE - 2020 (7th ED.)
   FLORIDA ACCESSIBILITY CODE - 2020 (7th ED.)
   FFPC - 2020 (7th EDITION)
7. TYPE OF CONSTRUCTION: II-B
8. OCCUPANCY CLASSIFICATION: S-1, S-2, B
9. BUILDING HEIGHTS:
   S-1 STORAGE SERVICE BAYS
   S-2 PARKING GARAGE
   B BUSINESS

   TRACT A:
   (NEW KIA) +32'-0" T.O. PARAPET

   PARCEL C:
   (NEW SUBARU) +44'-6" T.O. PARAPET
   +49'-2" T.O. STAIR ENCLOSURE

1

SETBACKS:

	TRACT A		PARCEL A		PARCEL C	
DIRECTION	REQUIRED	PROVIDED	REQUIRED	PROVIDED	REQUIRED	PROVIDED
NORTH	5'-0"	149'-6"	N/A	N/A	5'-0"	744'-1"
SOUTH	20'-0"	105'-7"	N/A	N/A	5'-0"	273'-6"
EAST	5'-0"	47'-0"	N/A	N/A	5'-0"	32'-11"
WEST	5'-0"	58'-7"	N/A	N/A	20'-0"	62'-6"

1

1

BUILDING AREAS:

		FACILITY	SHOWROOMS	OFFICES	RETAIL	MISC.	PARTS STOR.	SERVICE REPAIR	SERVICE DRIVEWAY	CAR WASH	TOTAL
NEW CONSTRUCTION	TRACT A	**NEW KIA SHOWROOM**									
		- 1st FLOOR	4,167 SF	7,684 SF	572 SF	--	1,389 SF	8,586 SF	9,266 SF	--	31,664 SF
		- 2nd FLOOR	--	4,831 SF	--	--	3,587 SF	--	--	--	8,418 SF
		KIA TOTAL:	4,167 SF	12,515 SF	--	--	4,976 SF	8,586 SF	9,266 SF	--	**40,082 SF**
	PARCEL A	**N/A**								--	
		N/A								--	
		N/A								--	
	PARCEL C	**NEW SUBARU SHOWROOM**								--	
		- 1st FLOOR	2,985 SF	9,254 SF	377 SF	--	5,607 SF	7,242 SF	12,319 SF	1,300 SF	39,084 SF
		- 2nd FLOOR	--	10,172 SF	--	--	3,473 SF	--	--	--	13,645 SF
		- 3rd FLOOR	--	--	--	45,318 SF	--	--	--	--	45,318 SF
		- 4th FLOOR	--	--	--	45,318 SF	--	--	--	--	45,318 SF
		SUBARU TOTAL:	2,985 SF	19,426 SF	377 SF	90,636 SF	9,080 SF	7,242 SF	12,319 SF	1,300 SF	**143,365 SF**
		GRAND TOTAL	**7,152 SF**	**31,951 SF**	**949 SF**	**90,636 SF**	**14,056 SF**	**15,828 SF**	**21,585 SF**	**1,300 SF**	**183,447 SF**

1

ZONING LIMITATIONS:

ALLOWABLE STORIES: 6 STORIES

SPECIAL PROVISION
ALLOWABLE SERVICE AREA:
(REPAIR BAYS)

MAX ALLOWED = 35% OF TOTAL BUILDING AREA

TRACT A (KIA): 8,586 SF = 8,586 SF
PARCEL C (SUBARU): 7,242 SF = 7,242 SF
TOTAL SERVICE AREA = 15,828 SF

TOTAL BUILDING AREA = 183,447 SF

REPAIR BAY PERCENTAGE OF TOTAL AREA = 15,828 SF / 183,447 SF = 8.6%

1
2

AREA CALCULATIONS:

(CITY OF DORAL - CHAPTER 68 AND 71)

	TRACT A	PARCEL A	PARCEL C	TOTALS REQUIRED	TOTALS PROVIDED
TOTAL AREA	131,288 SF	16,105 SF	349,715 SF	N/A	497,108SF
LANDSCAPED OPEN SPACE (17% MIN. OF SITE AREA)	22,319 SF	2,738 SF	59,452 SF	84,509 SF	117,350 SF
FLOOR AREA RATIO (50 % MAX)	65,644 SF	-	174,858 SF	240,501 SF max	183,447 SF

PARKING CALCULATIONS:

	TRACT A	PARCEL A	PARCEL C	TOTALS REQUIRED	TOTALS PROVIDED
PARKING (SEE BELOW FOR BREAKDOWN OF PARKING CALCULATION)	140	N/A	283	423	1,006 [1]

LEGEND:

1. THE 1,006 PARKING SPACES PROVIDED ARE BROKEN DOWN TO
   -423 CUSTOMER / EMPLOYEE
   -583 INVENTORY
   AND FURTHER BROKEN DOWN TO:
   * KIA: 120 STANDARD, 5 ACCESSIBLE
   * SUBARU: 291 STANDARD, 7 ACCESSIBLE
   * INVENTORY: 583 STANDARD

THE REQUIRED PARKING SPACES ARE CALCULATED AS FOLLOWS:

TRACT A LEHMAN DORAL - PARKING CALCULATIONS: (CITY OF DORAL CODE OF ORDINANCES APR 12, 2021). BREAKDOWN AS FOLLOWS:

SHOWROOM:
THREE PARKING SPACES PER FIRST 2500 SF OF FLOOR AREA OR FRACTION THEREOF; 1 PARKING SPACE PER EACH ADDITIONAL 500 SF OF GROSS FLOOR AREA OR FRACTION THEREOF; AND 3 PARKING SPACES PER 5,000 SF OF OPEN LOT AREA OR FRACTION THEREOF. PARKING SPACES FOR OFFICE AREAS SHALL BE PROVIDED AS PER THE RESPECTIVE USES IN THIS MATRIX

TOTAL: 4,167 SF - 2,500 SF = 3 REQ SPACES

REMAINING AREA: 1,667 SF / 500= 4 REQ SPACES

OPEN LOT:
PLUS 3 SPACES FOR EACH 5,000 SF OF OPEN LOT AREA

TOTAL OPEN LOT AREA:102,002 SF / 5,000 SF X 3 = 62 REQ SPACES

OFFICE:
OFFICE AREAS REQUIRE 1 PARKING SPACE FOR EVERY 300 SF

TOTAL OFFICE AREA: 12,515 SF/ 300= 42 REQ SPACES

RETAIL PARTS:
ONE SPACE PER 250 SF OF THE GROSS FLOOR AREA OR FRACTION THEREOF

TOTAL RETAIL:572 SF/ 250 = 3 REQ SPACES

PARTS STORAGE AND SERVICE REPAIR:
3 SPACES FOR THE FIRST 2,500 SF OF FLOOR AREA OR FRACTION THEREOF; 1 SPACE PER ADDITIONAL 500 SF OF GROSS FLOOR AREA OR FRACTION THEREOF.

TOTAL PARTS & SERV.: 13,562 SF -2,500 SF = 3 REQ SPACES

REMAINING AREA: 11,062 SF / 500 = 23 REQ SPACES

TOTAL REQUIRED SPACES: 140

PARCEL C - PARKING CALCULATIONS: (CITY OF DORAL CODE OF ORDINANCES APR 12, 2021). BREAKDOWN AS FOLLOW:

SHOWROOM:
THREE PARKING SPACES PER FIRST 2500 SF OF FLOOR AREA OR FRACTION THEREOF; 1 PARKING SPACE PER EACH ADDITIONAL 500 SF OF GROSS FLOOR AREA OR FRACTION THEREOF; AND 3 PARKING SPACES PER 5,000 SF OF OPEN LOT AREA OR FRACTION THEREOF. PARKING SPACES FOR OFFICE AREAS SHALL BE PROVIDED AS PER THE RESPECTIVE USES IN THIS MATRIX

TOTAL: 2,985 SF - 2500 SF = 3 REQ SPACES

REMAINING AREA: 485 SF/ 500= 1 REQ SPACES

OPEN LOT:
PLUS 3 SPACES FOR EACH 5,000 SF OF OPEN LOT AREA

TOTAL OPEN LOT AREA: 300,677 SF/ 5,000 SF X 3= 181 REQ SPACES

OFFICE:
OFFICE AREAS REQUIRE 1 PARKING SPACE FOR EVERY 300 SF

TOTAL OFFICE AREA: 19,426 SF/ 300= 65 REQ SPACES

RETAIL PARTS:
ONE SPACE PER 250 SF OF THE GROSS FLOOR AREA OR FRACTION THEREOF

TOTAL RETAIL PARTS AREA: 377 SF/ 250 = 2 REQ

PARTS AND SERVICE REPAIR:
3 SPACES FOR THE FIRST 2,500 SF OF FLOOR AREA OR FRACTION THEREOF; 1 SPACE PER ADDITIONAL 500 SF OF GROSS FLOOR AREA OR FRACTION THEREOF.

TOTAL: 16,322 SF -2,500 SF = 3 REQ SPACES

REMAINING AREA:13,822 SF/ 500= 28 REQ SPACES

TOTAL REQUIRED SPACES: 283

OVERALL SITE PLAN AND DATA

01

1 COMMENTS 08/24/2021
2 PLANNING & ZONING COMMENTS 10/19/2021

SEAL
STATE OF FLORIDA
KEVIN CRUZ
AR 97952
REGISTERED ARCHITECT

CONSULTANT
KEVIN CRUZ
FI Reg # 97952
11/10/2021

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida 33301
954 - 627- 9180 FL. REG # AA-26001798

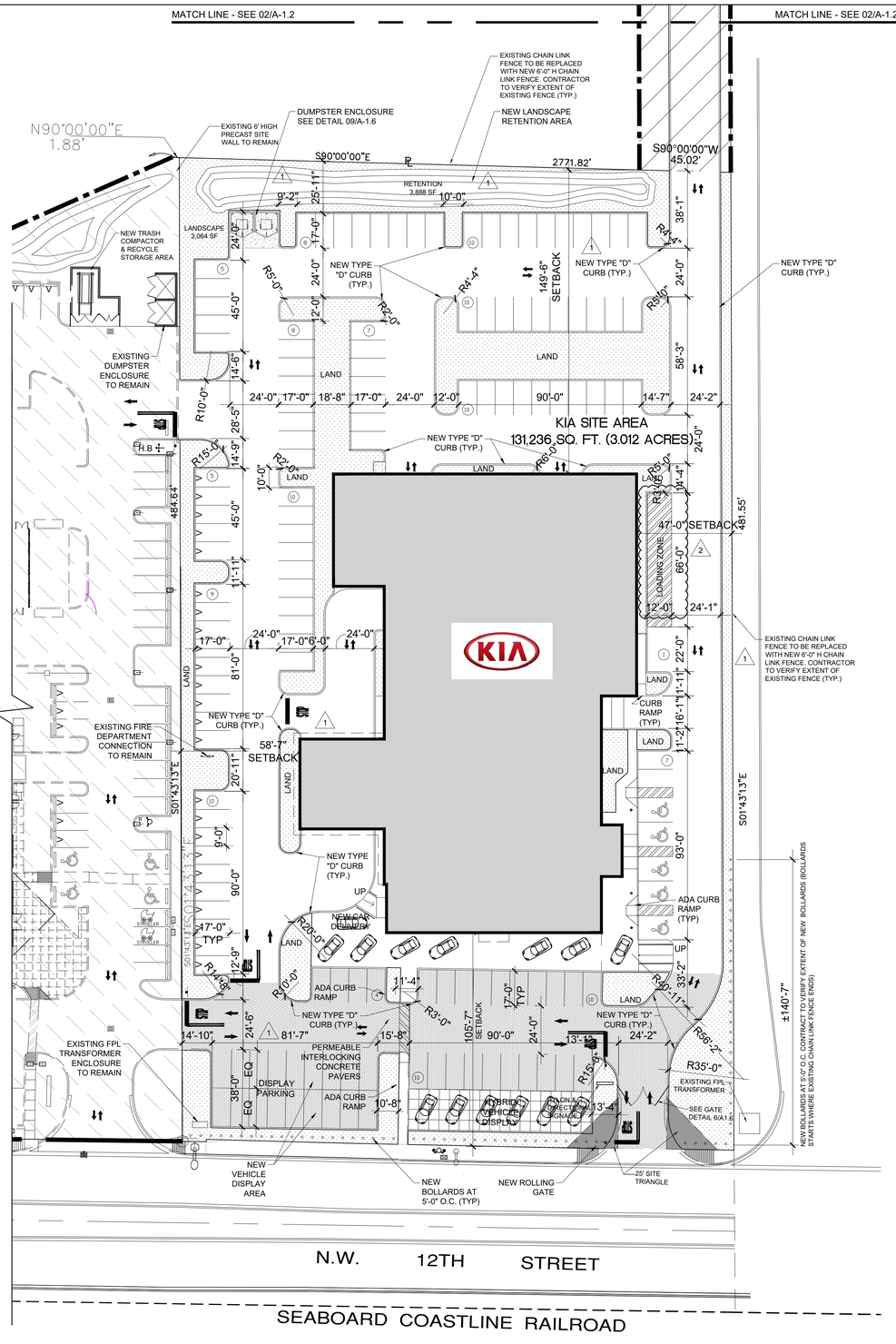
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

OVERALL SITE PLAN

A-1.0

PROJECT NO. 74094
DRAWN BY : R.J. / J.J.
CHECKED BY : K.C.
DATE : 04/28/2021

74094 DRC_A-1.0 SITE PLAN.DWG



NEW BUILDING FOOTPRINT
NEW LANDSCAPE AREA
PROPERTY LINE
NEW CURB

SEE WALL TYPE LEGEND-SHEET A-3.1
SEE DOOR SCHEDULE-SHEET A-5.6
SEE WINDOW SCHEDULE SHEET A-5.6

SEE WALL OPEN AIR PARKING GARAGE
CALCS - SHEETS A-6.2/A-6.3

PARTIAL SITE PLAN

SCALE: 1/32" = 1'-0" | 01

1	PLANNING & ZONING COMMENTS 08/24/2021
2	PLANNING & ZONING COMMENTS 10/19/2021

SEAL

STATE OF FLORIDA
KEVIN CRUZ
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REGISTERED ARCHITECT

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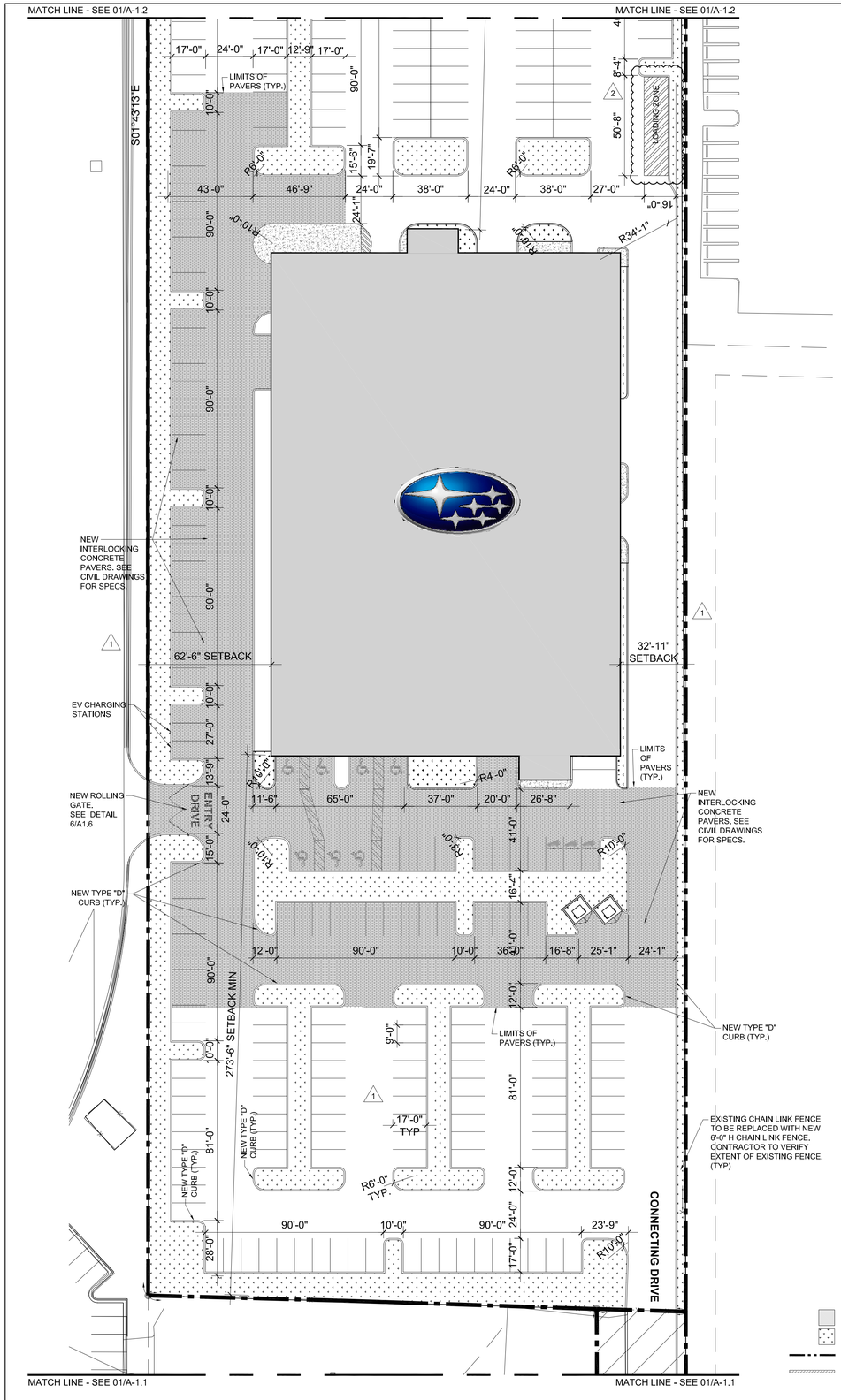
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

TRACT A
SITE PLAN

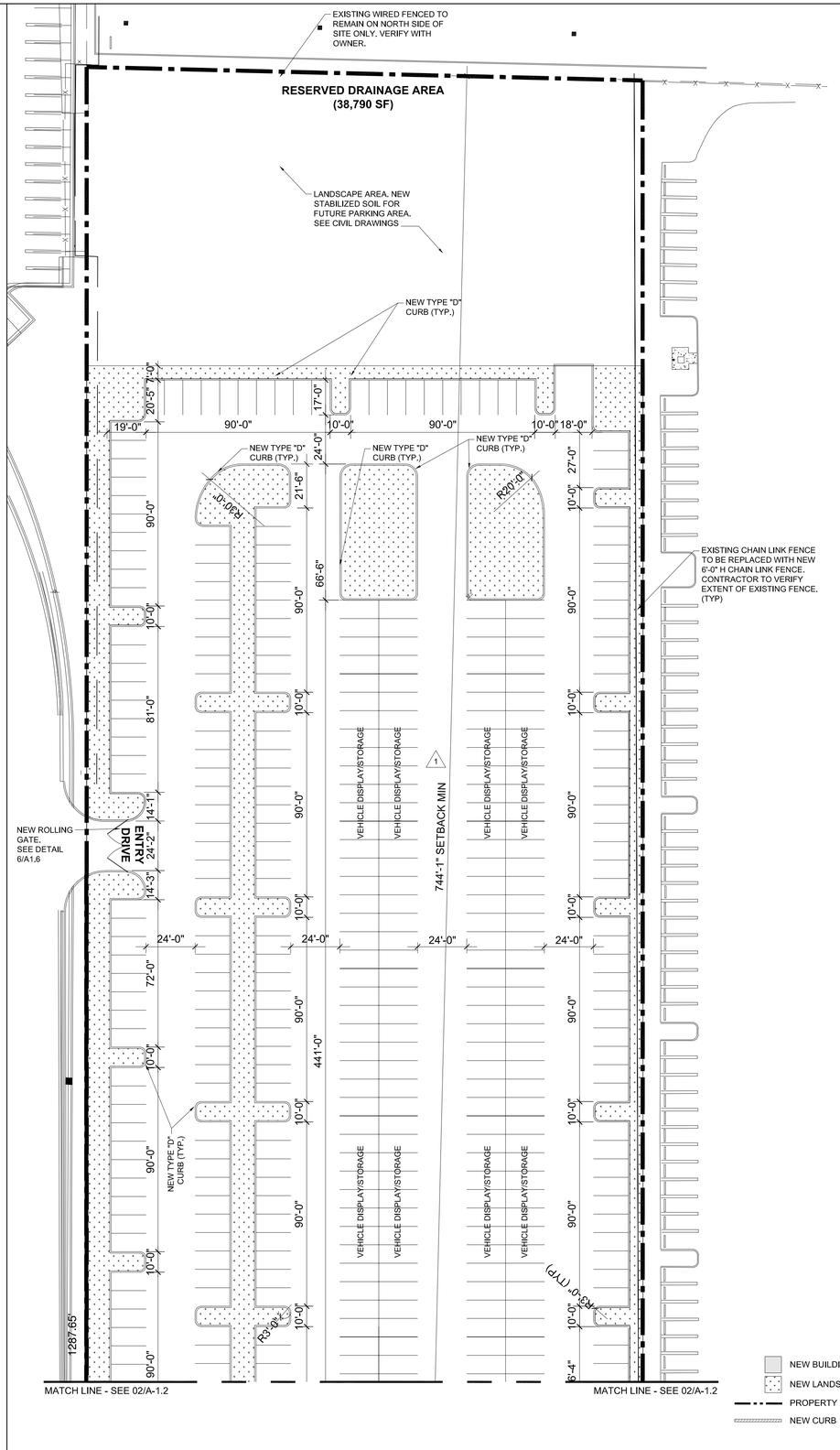
A-1.1

PROJECT NO.
74094
DRAWN BY :
R.J. / J.J.
CHECKED BY :
K.C.
DATE :
04/28/2021
74094 ORC A-1.1 KIA SITE PLAN.DWG



PARCEL C - PARTIAL SITE PLAN

SCALE: 1/32" = 1'-0" | 02



PARCEL C - PARTIAL SITE PLAN

SCALE: 1/32" = 1'-0" | 01

1	PLANNING & ZONING COMMENTS 08/24/2021
2	PLANNING & ZONING COMMENTS 10/19/2021

SEAL

STATE OF FLORIDA
KEVIN CRUZ
AR 97952
REGISTERED ARCHITECT

CONSULTANT
KEVIN CRUZ
Fl Reg # 97952
11/16/2021

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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

KIA
10155 NW 12th STREET
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PARCEL C
SITE PLAN

A-1.2

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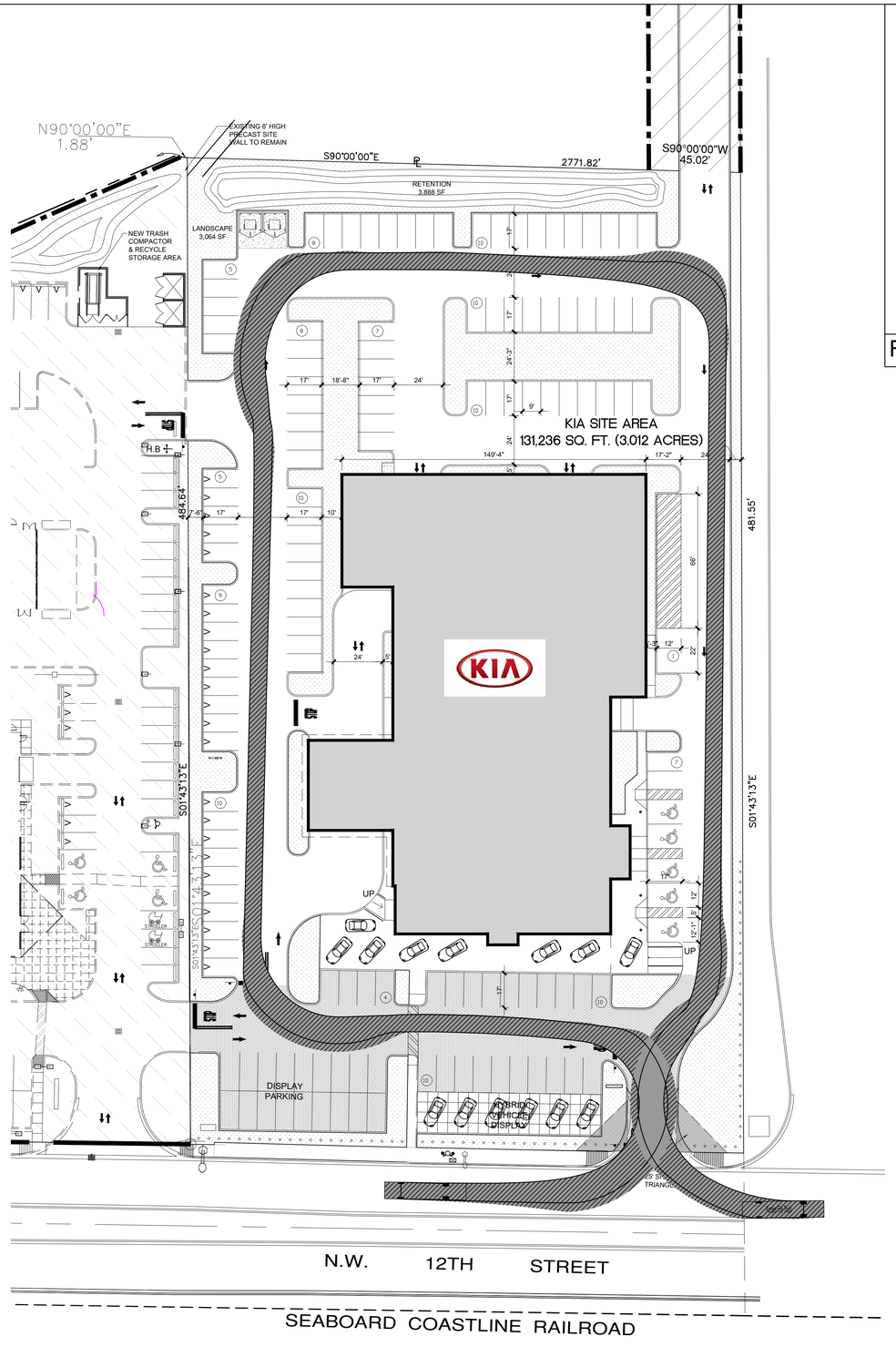
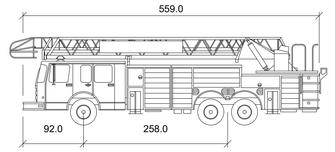
04/28/2021

74094 DRC_A-1.2 SUBARU SITE PLAN.DWG





Fire Dept. Truck

	inches
Width	: 96.0
Track	: 102.0
Lock to Lock Time	: 6.0
Steering Angle	: 33.3

FIRE TRUCK SPECIFICATIONS | 02

NEW BUILDING FOOTPRINT
NEW LANDSCAPE AREA
PROPERTY LINE
NEW CURB

PARTIAL SITE PLAN - FIRE TRUCK ROUTE

SCALE: 1/32" = 1'-0" | 01

REVISIONS :

SEAL

STATE OF FLORIDA · KEVIN CRUZ · AR 97952 · REGISTERED ARCHITECT

CONSULTANT
KEVIN CRUZ
Fl Reg # 97952
11/10/2021

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida, 33301
954 - 627- 9180
FL. REG # AA-26001798

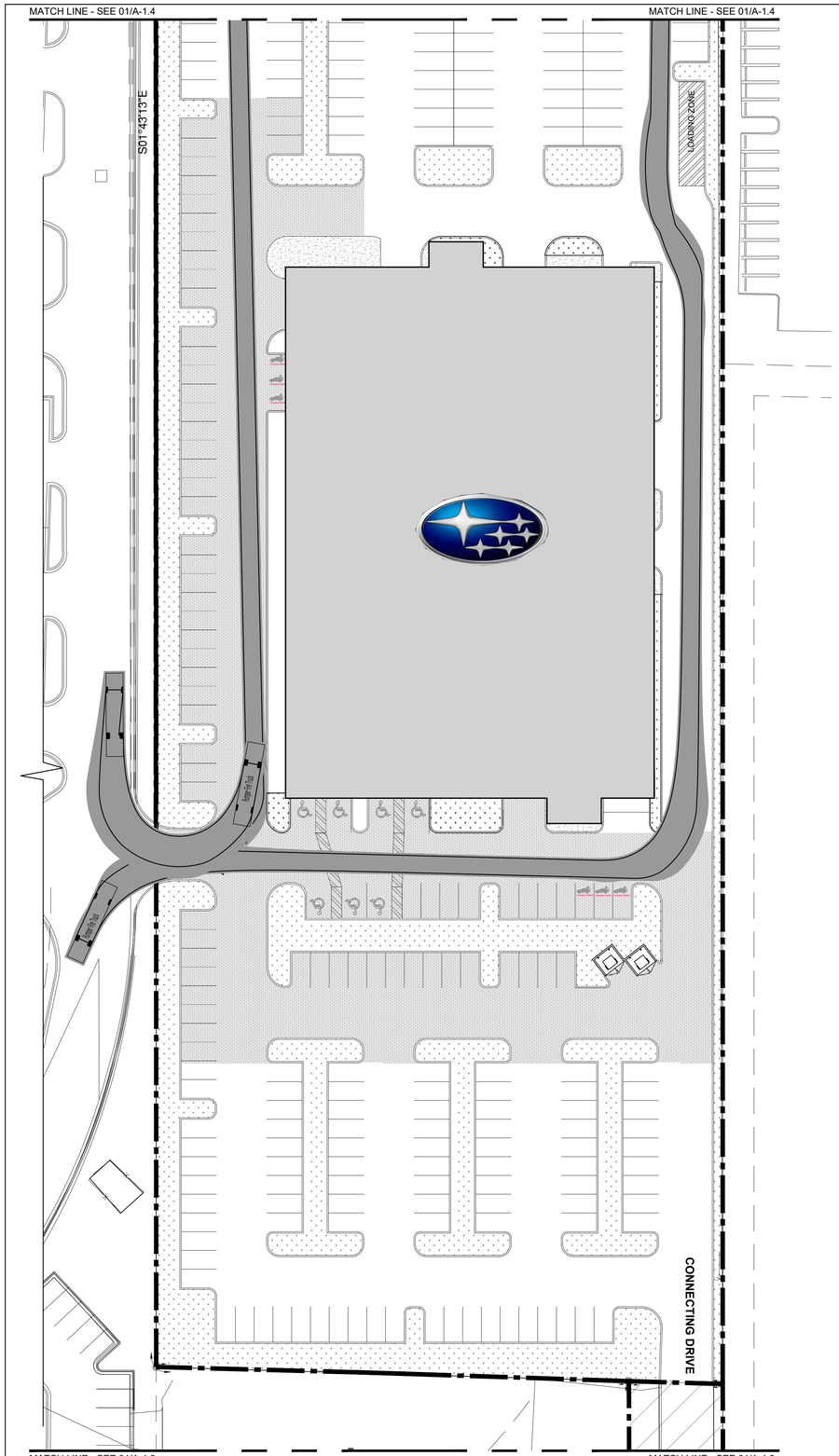
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

TRACT A FIRE TRUCK SIMULATION

A-1.3

PROJECT NO.
74094
DRAWN BY :
R.J. / J.J.
CHECKED BY :
K.C.
DATE :
04/28/2021

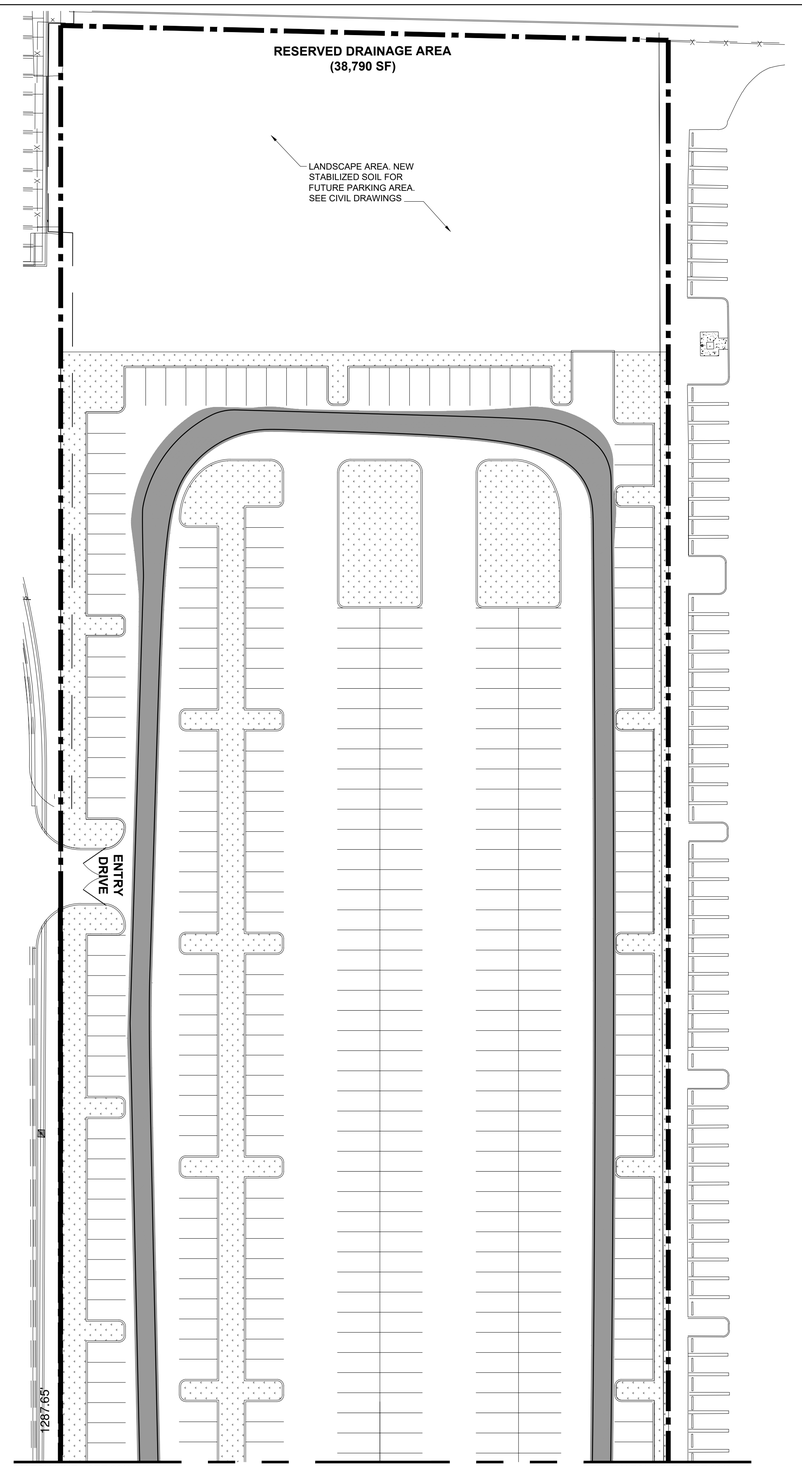
74094 DRC A-1.3 KIA FIRE SIM
25 JAN 2021



SEE 02/A-1.3 FOR FIRE TRUCK SPECIFICATIONS

NEW BUILDING FOOTPRINT
NEW LANDSCAPE AREA
PROPERTY LINE
NEW CURB

PARTIAL SITE PLAN - FIRE TRUCK ROUTE — SCALE: 1" = 60'-0" — 02



SEE 02/A-1.3 FOR FIRE TRUCK SPECIFICATIONS

NEW BUILDING FOOTPRINT
NEW LANDSCAPE AREA
PROPERTY LINE
NEW CURB

PARTIAL SITE PLAN - FIRE TRUCK ROUTE — SCALE: 1" = 60'-0" — 01

REVISIONS :

SEAL

STATE OF FLORIDA
KEVIN CRUZ
AR 97952
REGISTERED ARCHITECT

CONSULTANT
KEVIN CRUZ
Fl Reg # 97952
11/10/2021

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida, 33301
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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

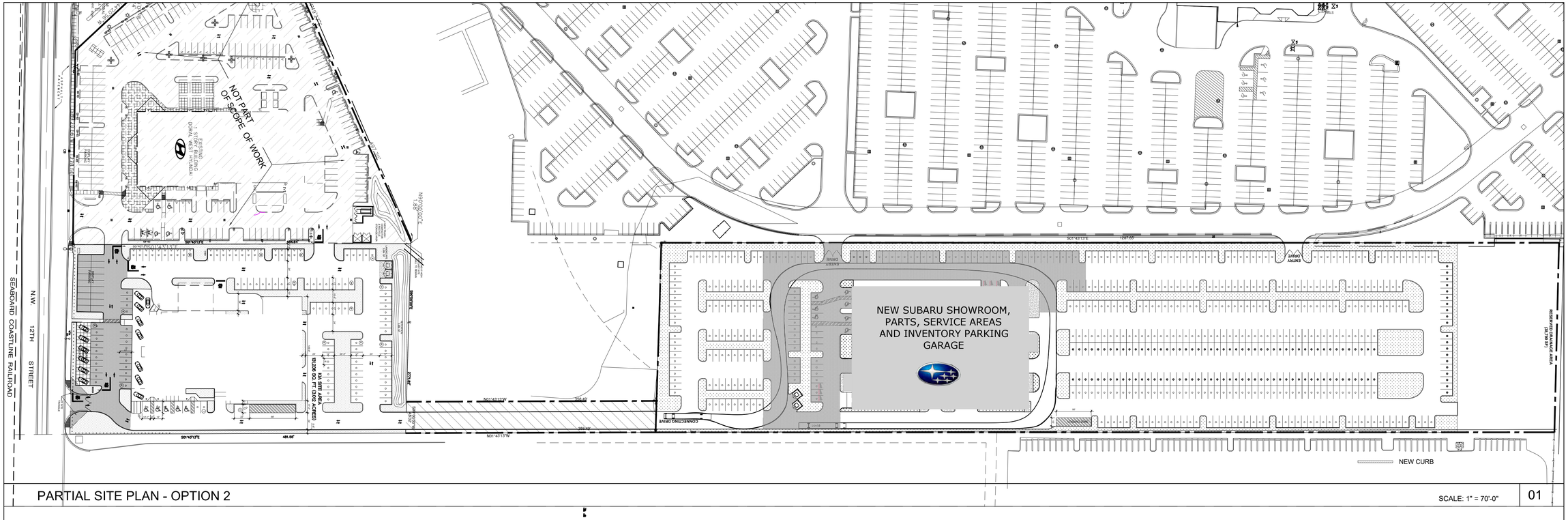
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

PARCEL C FIRE TRUCK SIMULATION

A-1.4

PROJECT NO.
74094
DRAWN BY :
R.J. / J.J.
CHECKED BY :
K.C.
DATE :
04/28/2021

74094 DRC A-1.4 SUBARU FIRE SIM
25 JUN 2021



PARTIAL SITE PLAN - OPTION 2

SCALE: 1" = 70'-0"

01

NEW BUILDING FOOTPRINT
NEW LANDSCAPE AREA
PROPERTY LINE
NEW CURB

PARTIAL SITE PLAN - OPTION 1

SCALE: 1" = 70'-0"

01

REVISIONS :

SEAL

STATE OF FLORIDA
KEVIN CRUZ
AR 97952
REGISTERED ARCHITECT

CONSULTANT
KEVIN CRUZ
Fl Reg # 97952
11/10/2021

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida.
954 - 627 - 9180 33301
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

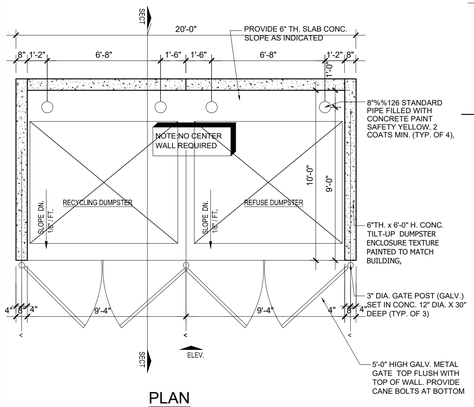
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

CARRIER SEMI MANEUVER

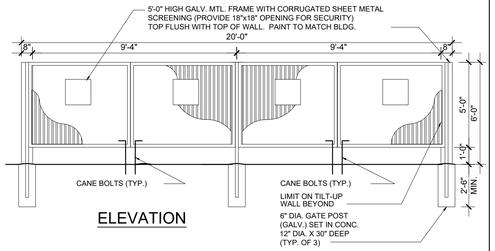
A-1.5

PROJECT NO.
74094
DRAWN BY :
R.J. / J.J.
CHECKED BY :
K.C.
DATE :
04/28/2021

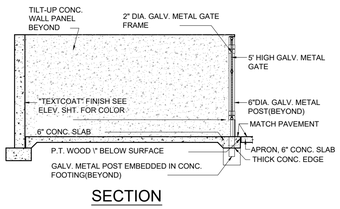
74094 DRC_A-1.5 CARRIER SEMI MANEUVER.DWG



PLAN



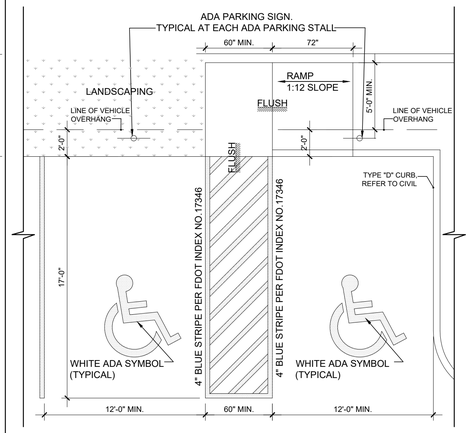
ELEVATION



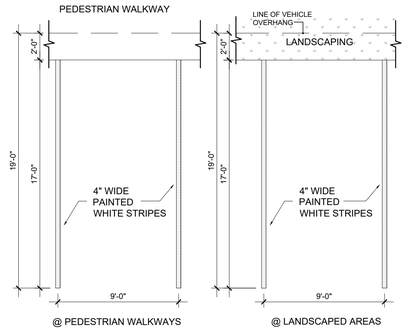
SECTION

DUMPSTER ENCLOSURE DETAILS

SCALE: NTS | 09



1. ADA STALL STRIPING FDOT STANDARD INDEX 17346 (JANUARY, 1998) (TYP.) 3'-6" WIDE AS REFERENCED BY THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION.
2. ADA PARKING SHALL BE AS PER 2020 FLORIDA ACCESSIBILITY CODE SECT. 502 AND SECT. IV, PG. 74 OF THE ADA PARKING COMPLIANCE MANUAL.

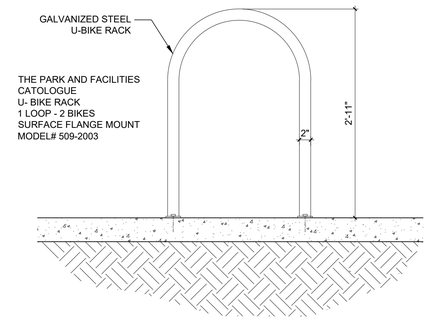


PARKING DETAILS

07

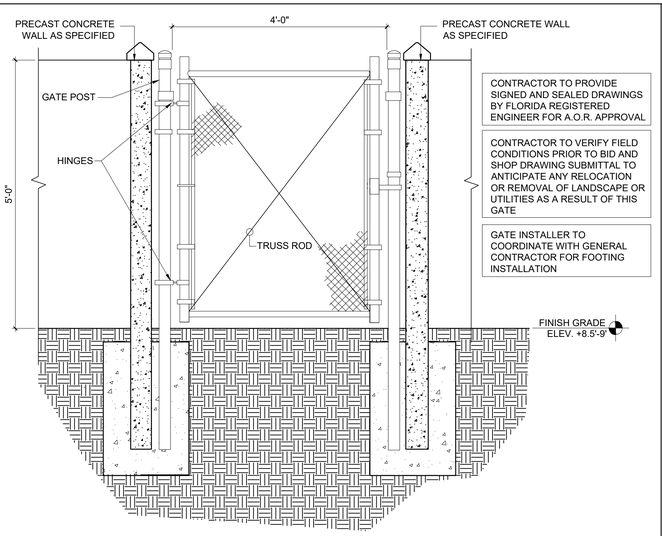
SEE SITE PLAN FOR LOCATION

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.



U-BIKE RACK ELEVATION

SCALE: NTS | 04



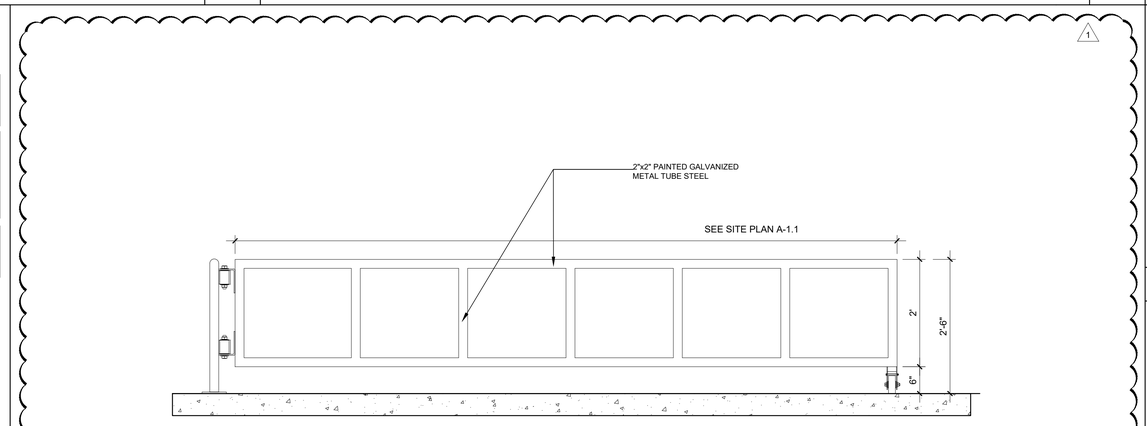
CONTRACTOR TO PROVIDE SIGNED AND SEALED DRAWINGS BY FLORIDA REGISTERED ENGINEER FOR A.O.R. APPROVAL

CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO BID AND SHOP DRAWING SUBMITTAL TO ANTICIPATE ANY RELOCATION OR REMOVAL OF LANDSCAPE OR UTILITIES AS A RESULT OF THIS GATE

GATE INSTALLER TO COORDINATE WITH GENERAL CONTRACTOR FOR FOOTING INSTALLATION

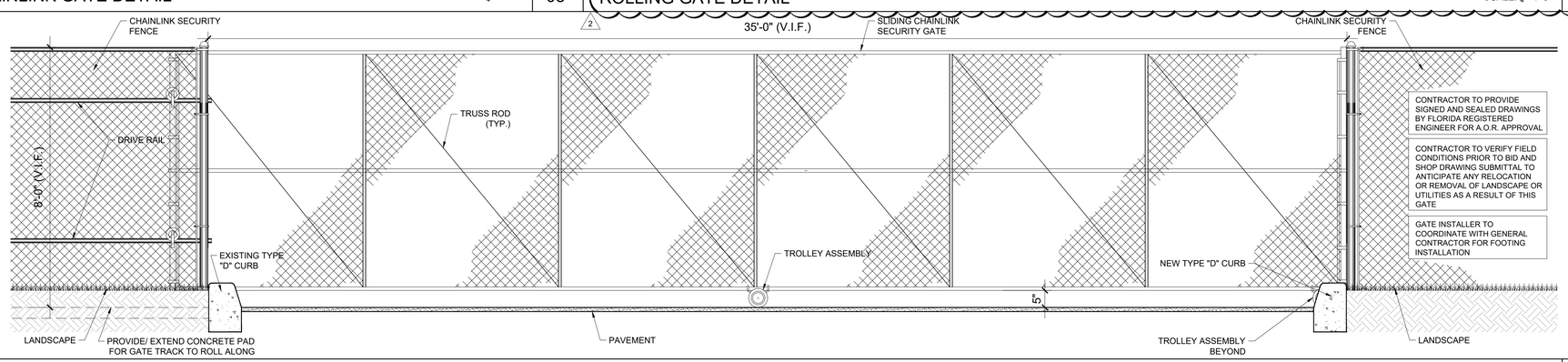
CHAINLINK GATE DETAIL

SCALE: $\frac{3}{4}$"=1'-0" | 08



ROLLING GATE DETAIL

SCALE: $\frac{3}{4}$"=1'-0" | 06



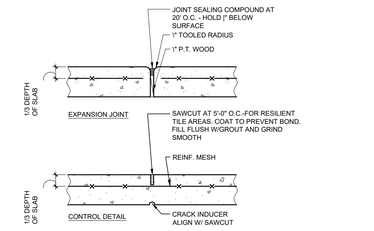
CONTRACTOR TO PROVIDE SIGNED AND SEALED DRAWINGS BY FLORIDA REGISTERED ENGINEER FOR A.O.R. APPROVAL

CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO BID AND SHOP DRAWING SUBMITTAL TO ANTICIPATE ANY RELOCATION OR REMOVAL OF LANDSCAPE OR UTILITIES AS A RESULT OF THIS GATE

GATE INSTALLER TO COORDINATE WITH GENERAL CONTRACTOR FOR FOOTING INSTALLATION

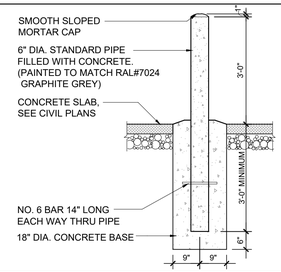
CHAINLINK SLIDING GATE DETAIL

SCALE: $\frac{1}{2}$"=1'-0" | 05



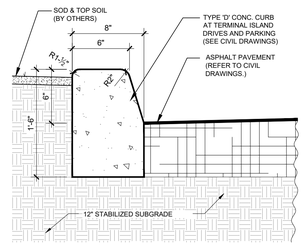
SIDEWALK CONTROL JOINT

SCALE: NTS | 03



BOLLARD DETAIL

SCALE: 1"=1'-0" | 02



TYPE "D" CURB

SCALE: NTS | 01

REVISIONS :

1	PLANNING & ZONING COMMENTS 08/24/2021
2	PLANNING & ZONING COMMENTS 10/19/2021

SEAL

STATE OF FLORIDA · KEVIN CRUZ · AR 97952 · REGISTERED ARCHITECT

CONSULTANT

KEVIN CRUZ
Fl Reg # 97952
11/10/2021

STILES ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

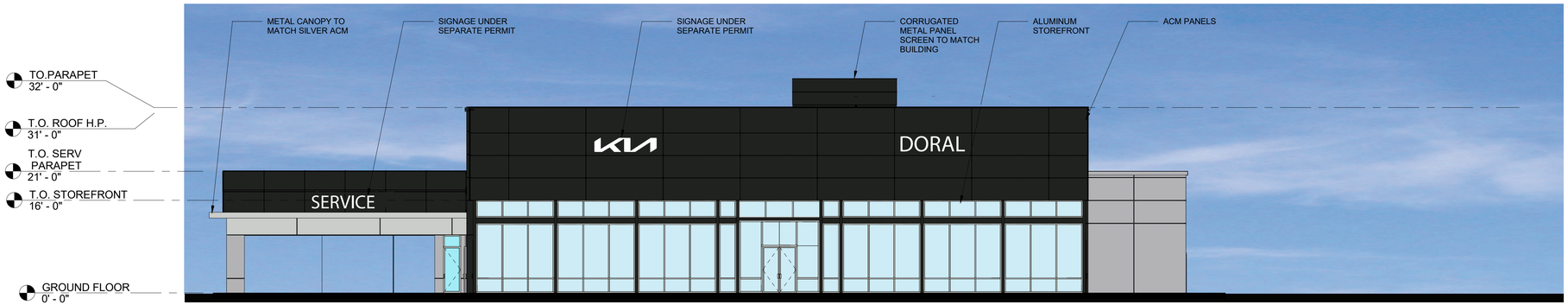
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

SITE DETAILS

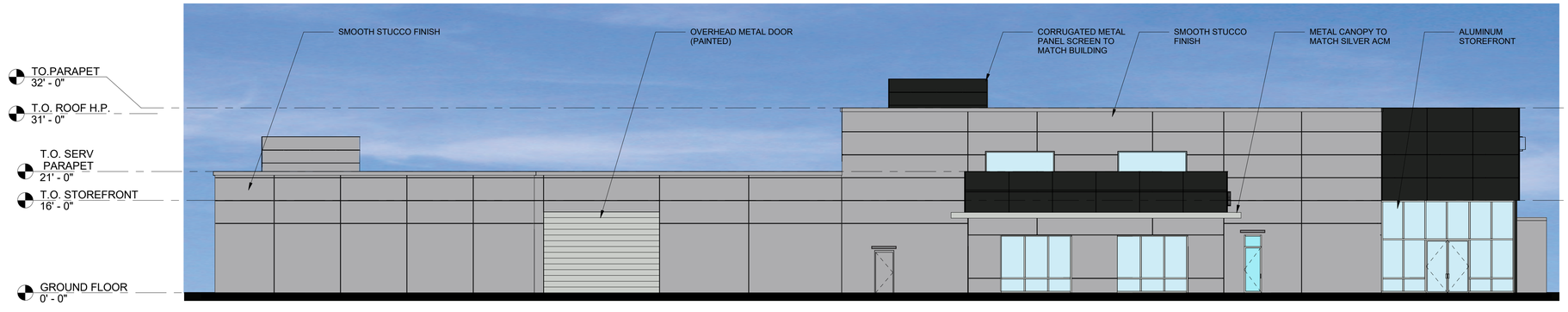
A-1.6

PROJECT NO.
74094
DRAWN BY :
R.J. / J.J.
CHECKED BY :
K.C.
DATE :
04/28/2021

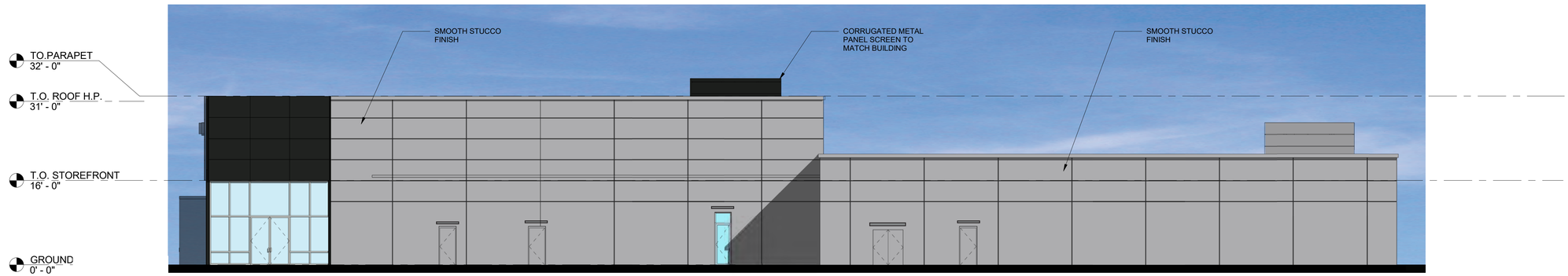
74094 DRC_A-1.6 SITE DETAILS.DWG



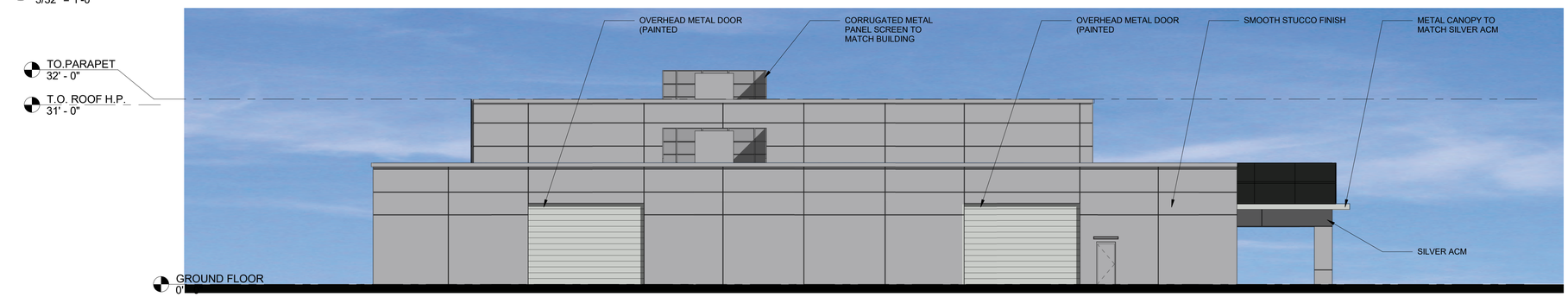
2 South Elevation
3/32" = 1'-0"



4 East Elevation
3/32" = 1'-0"



3 West Elevation
3/32" = 1'-0"



1 Norh Elevation
3/32" = 1'-0"

MATERIAL LEGEND

1 GRAY SMOOTH STUCCO FINISH

2 SILVER ACM

TSZ Silver Metallic
4:152:70
LRV 32.00

3 BLACK ACM (ALPOLIC TOB BLACK 15-GLOSS)

TOB Block
4:TOB:15
LRV 1.01/SRI 0

4 CLEAR ANODIZED OR SILVER STOREFRONT(TYP.)

5 CORRUGATED METAL PANEL SCREEN

REVISIONS :

SEAL

STATE OF FLORIDA
KEVIN CRUZ
AR 97952
REGISTERED ARCHITECT

CONSULTANT
KEVIN CRUZ
Fl Reg # 97952
12/19/2019

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

IMPROVEMENTS FOR:

NEW KIA & SUBARU SHOWROOMS, NEW SERVICE BUILDING ,
EXISTING HYUNDAI SHOWROOM RENOVATION, & SITE

LEHMAN DORAL

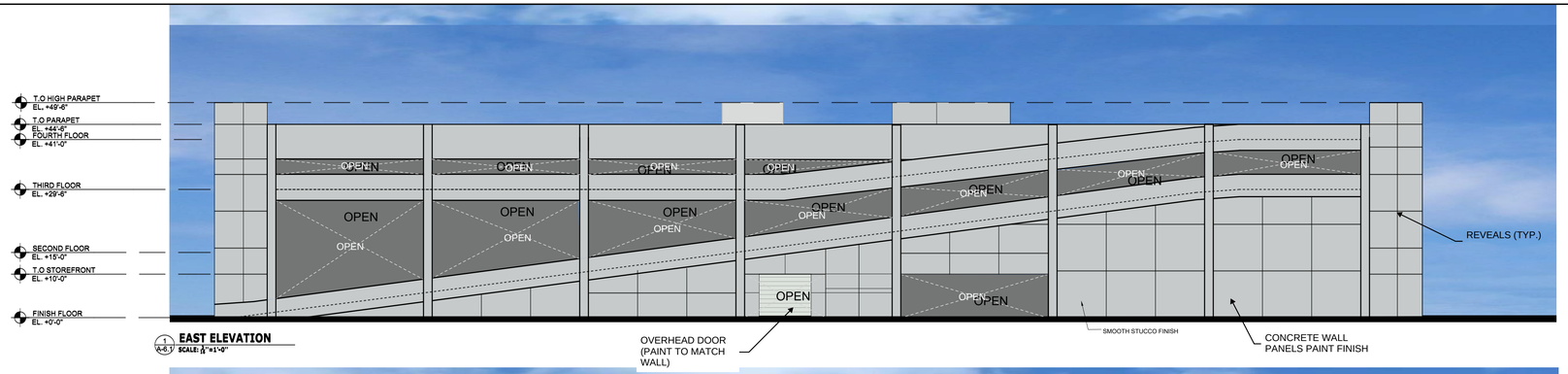
10155 NW 12th STREET
DORAL, FLORIDA 33172

KIA SHOWROOM
EXTERIOR ELEVATIONS

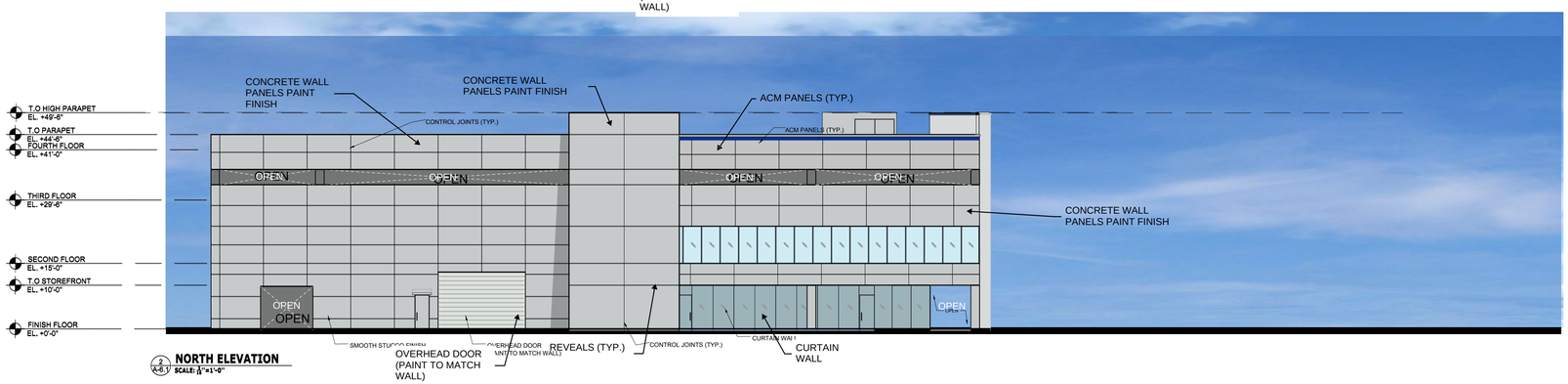
A-6.1

PROJECT NO.
74050
DRAWN BY :
N.M.
CHECKED BY :
K.C.
DATE :
10/14/2020

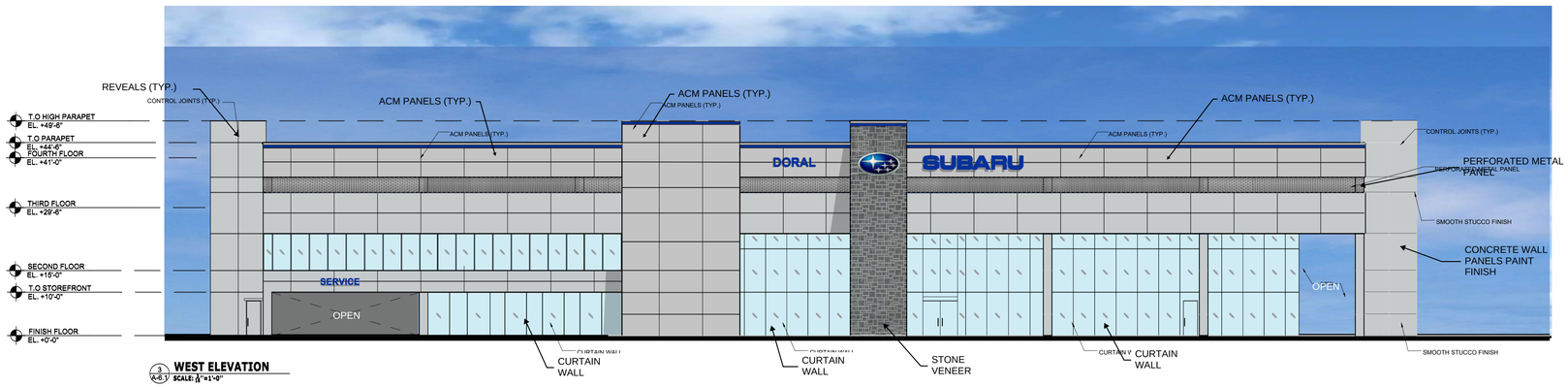
74050 DORAL KIA TB.DWG



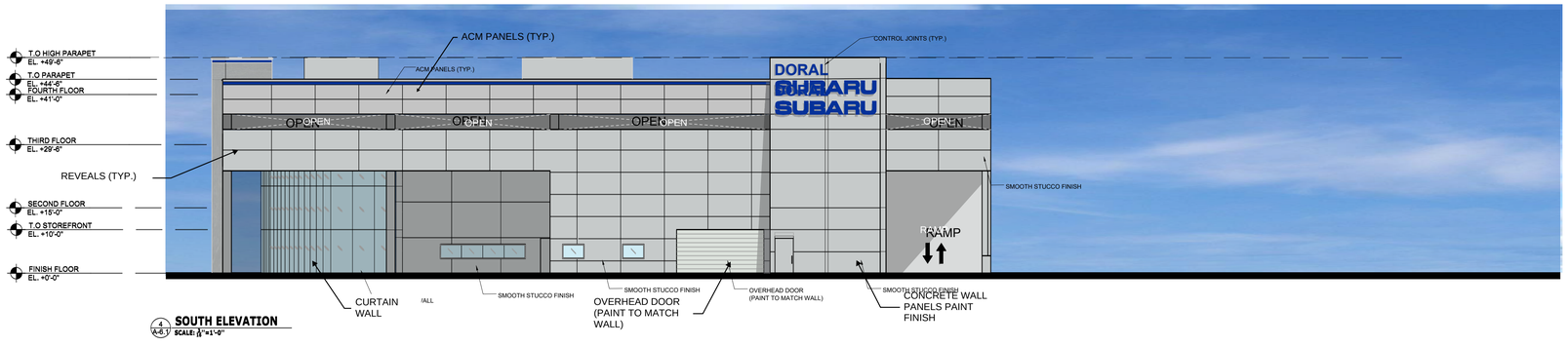
1 A-6.1 **EAST ELEVATION**
SCALE: 1/8"=1'-0"



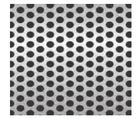
2 A-6.1 **NORTH ELEVATION**
SCALE: 1/8"=1'-0"



3 A-6.1 **WEST ELEVATION**
SCALE: 1/8"=1'-0"



4 A-6.1 **SOUTH ELEVATION**
SCALE: 1/8"=1'-0"



PERFORATED METAL PANELS
HENDRICK ARCHITECTURAL
.250"DIA X .375" STAGGERED
40% OPEN AREA

STUCCO PAINT COLOR
SHERWIN WILLIAMS
SW 7071 - GRAY SCREEN

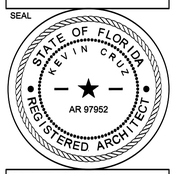
ACM PANEL
ALPOLIC
SHB BLUE

STONE VENEER
CAMARA SLATE
SHADOW GRAY

ACM PANEL
ALPOLIC
SMX SILVER MTLC

REVISIONS :

SEAL



CONSULTANT
KEVIN CRUZ
Fl Reg # 97952
8/26/2021

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida
954 - 627 - 9180 33301
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

SUBARU EXTERIOR ELEVATIONS

A-6.2

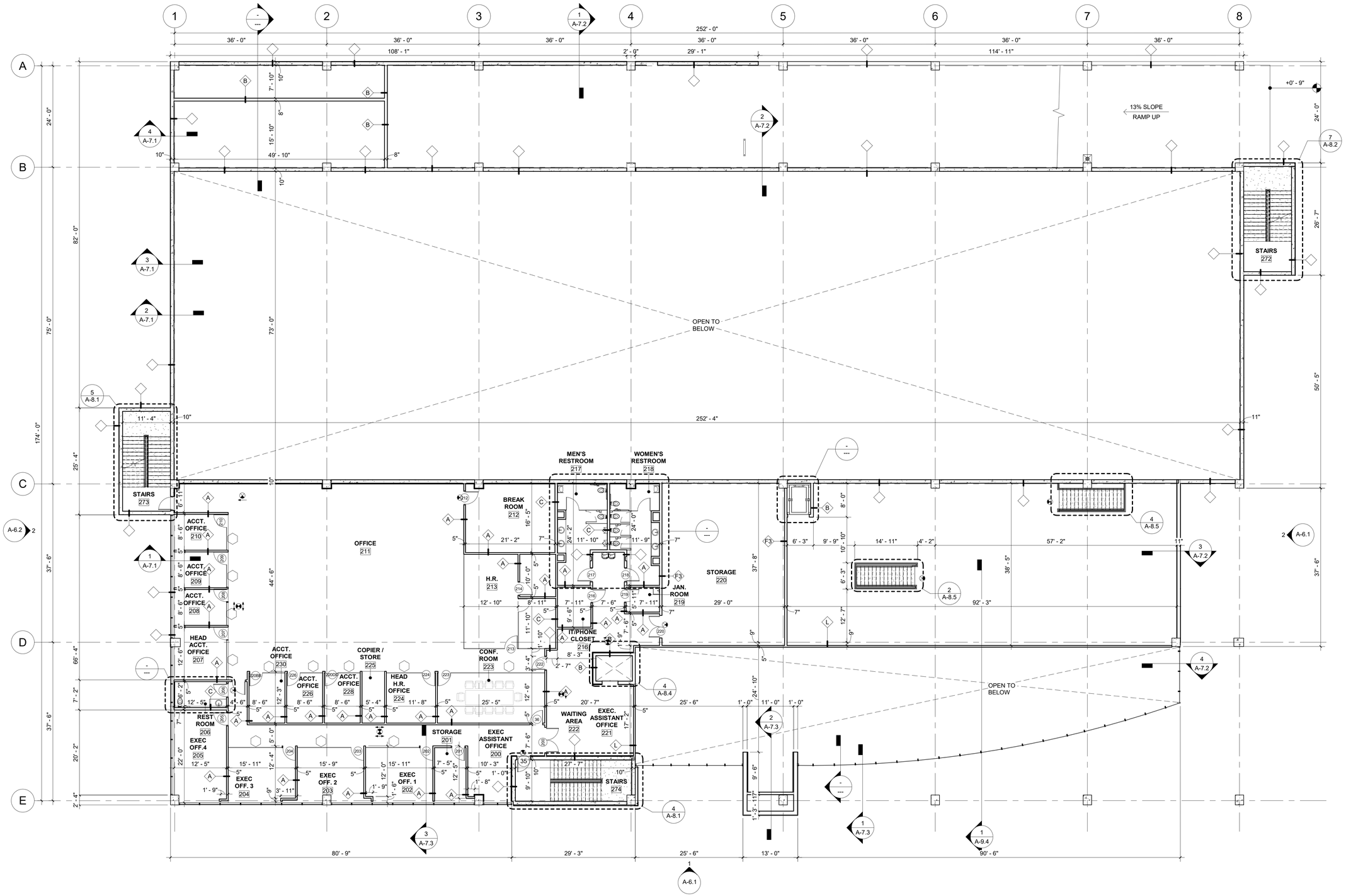
PROJECT NO.
74094
DRAWN BY :
R.J. / J.J.
CHECKED BY :
K.C.
DATE :
04/28/2021

74094 DRC_A-2.0 SUBARU EXTERIOR ELEVATIONS.dwg

EXTERIOR ELEVATIONS

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

GENERAL NOTES:
1. SEE CIVIL DRAWINGS FOR SITE ELEVATIONS
2. REFER TO SHEET A-5.7 FOR WINDOW SCHEDULE
3. REFER TO SHEET A-5.8 FOR DOOR SCHEDULE
4. REFER TO SHEET A-2.19 FOR OCCUPANCY CALCULATIONS
5. REFER TO COVER SHEET FOR EGRESS LOAD CALCULATIONS
6. REFER TO COVER SHEET FOR PLUMBING FIXTURE COUNT/ CALCULATIONS



1 SECOND FLOOR
3/32" = 1'-0"

REVISIONS :

No.	Description	Date

SEAL

CONSULTANT

STILES
ARCHITECTURAL GROUP
201 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

PROPOSED NEW DEALERSHIP & PARKING GARAGE FOR:

DORAL SUBARU

10111 NORTHWEST 12TH STREET
DORAL, FLORIDA 33172

2ND FLOOR PLAN

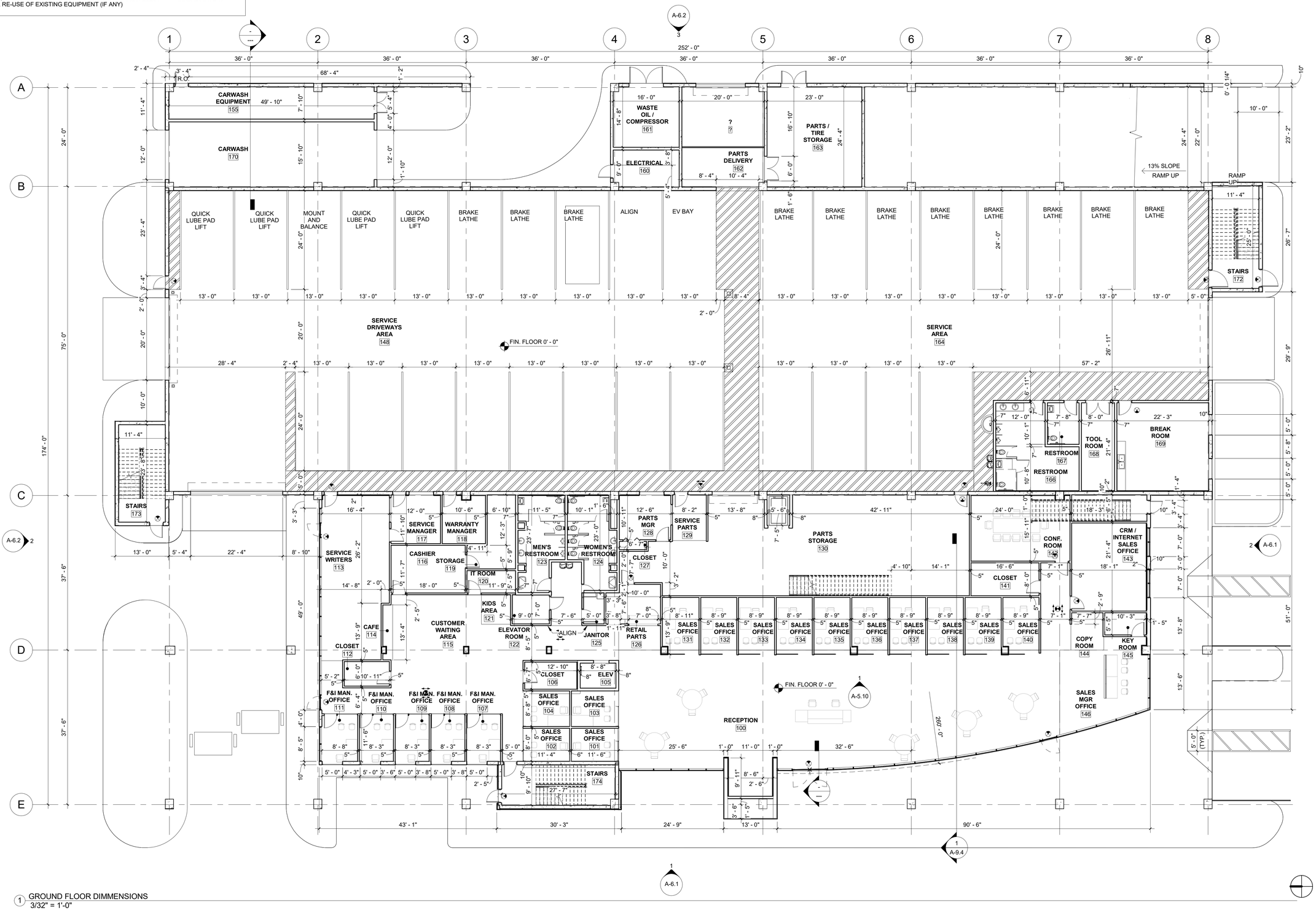
A-2.2

PROJECT NO.
74095
DRAWN BY :
R.J / L.B.
CHECKED BY :
K.C. / J.A.
DATE :
07/21/2021

C:\Users\JorgeArt\Documents\74095 Doral Subaru_Central_jorge.archoreva.rvt

GENERAL NOTES:

1. SEE CIVIL DRAWINGS FOR SITE ELEVATIONS
2. REFER TO SHEET A-5.7 FOR WINDOW SCHEDULE
3. REFER TO SHEET A-5.8 FOR DOOR SCHEDULE
4. REFER TO SHEET A-2.19 FOR OCCUPANCY CALCULATIONS
5. REFER TO COVER SHEET FOR EGRESS LOAD CALCULATIONS
6. REFER TO COVER SHEET FOR PLUMBING FIXTURE COUNT/ CALCULATIONS
7. CONTRACTOR SHALL COORDINATE W/ SECURITY VENDOR, DOOR SUPPLIER, ELECTRICAL, & ELEVATOR MANUFACTURER TO CONFIRM ALL CONDUITS, CONTROLS, INTERFACES, ETC. ARE PROPERLY PROVIDED FOR AND INSTALLED. COORDINATE W/ OWNER FOR RE-USE OF EXISTING EQUIPMENT (IF ANY)



1 GROUND FLOOR DIMMENSIONS
3/32" = 1'-0"

C:\Users\JorgeA\Documents\74095 Doral Subaru_Central_jorge.archvonsa.rvt

REVISIONS :

No.	Description	Date

SEAL

CONSULTANT

STILES
ARCHITECTURAL GROUP
201 East Las Olas Blvd
Fort Lauderdale, Florida.
954 - 627- 9180 33301
FL. REG # AA-26001798

PROPOSED NEW DEALERSHIP & PARKING GARAGE FOR:

DORAL SUBARU

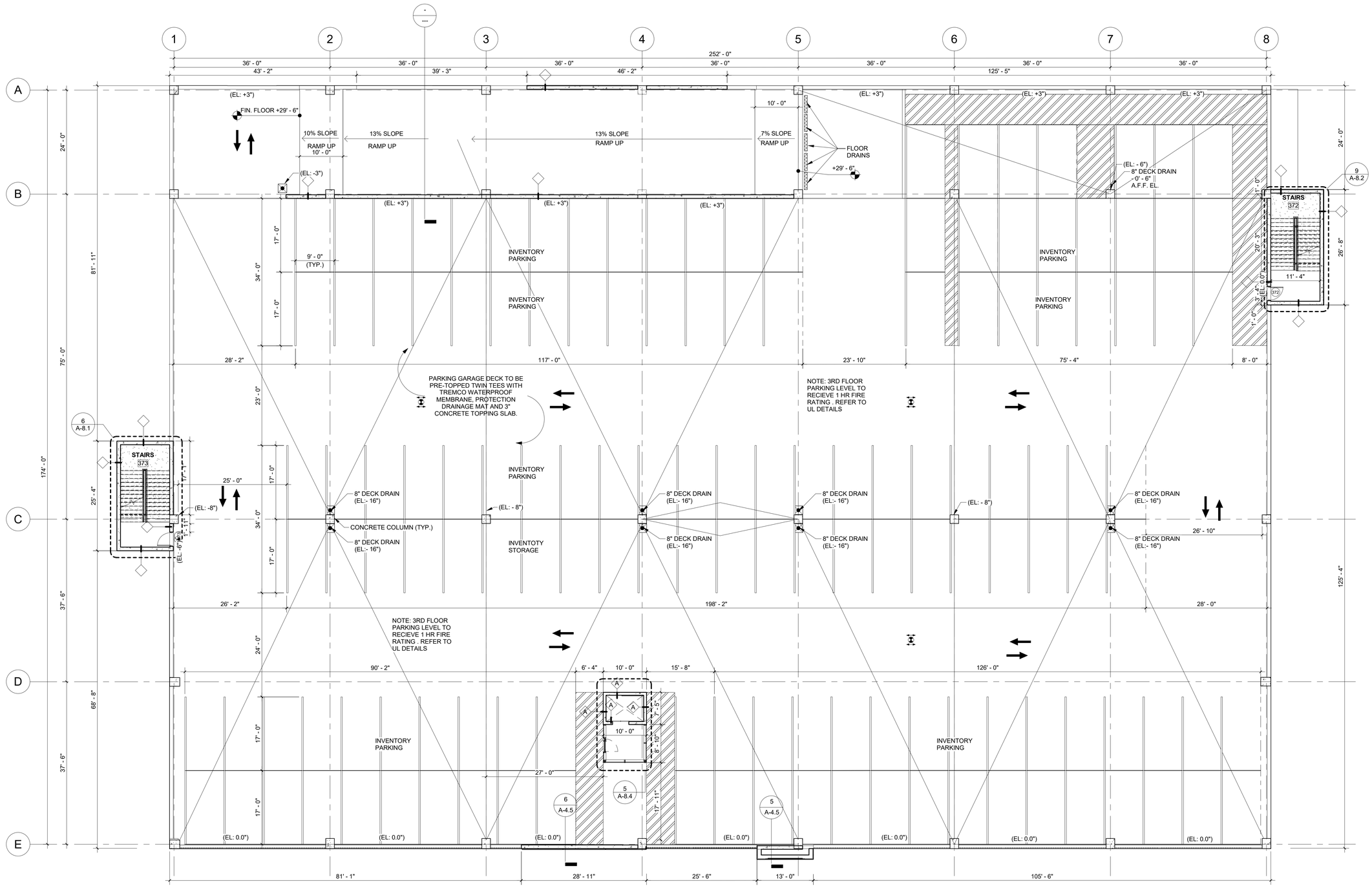
10111 NORTHWEST 12TH STREET
DORAL, FLORIDA 33172

GROUND FLOOR DIMMENSIONS

A-2.1B

PROJECT NO.
74095
DRAWN BY :
R.J./ L.B.
CHECKED BY :
K.C. / J.A.
DATE :
07/21/2021

GENERAL NOTES:
1. SEE CIVIL DRAWINGS FOR SITE ELEVATIONS
2. REFER TO SHEET A-5.7 FOR WINDOW SCHEDULE
3. REFER TO SHEET A-5.8 FOR DOOR SCHEDULE
4. REFER TO SHEET A-2.19 FOR OCCUPANCY CALCULATIONS
5. REFER TO COVER SHEET FOR EGRESS LOAD CALCULATIONS
6. REFER TO COVER SHEET FOR PLUMBING FIXTURE COUNT/ CALCULATIONS



1 THIRD FLOOR
3/32" = 1'-0"

C:\Users\Jorge\AnDocuments\74095\Doral Subaru_Central_jorge.anchorena.rvt

REVISIONS :

No.	Description	Date

SEAL

CONSULTANT

STILES
ARCHITECTURAL GROUP
201 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

PROPOSED NEW DEALERSHIP & PARKING GARAGE FOR:

DORAL SUBARU

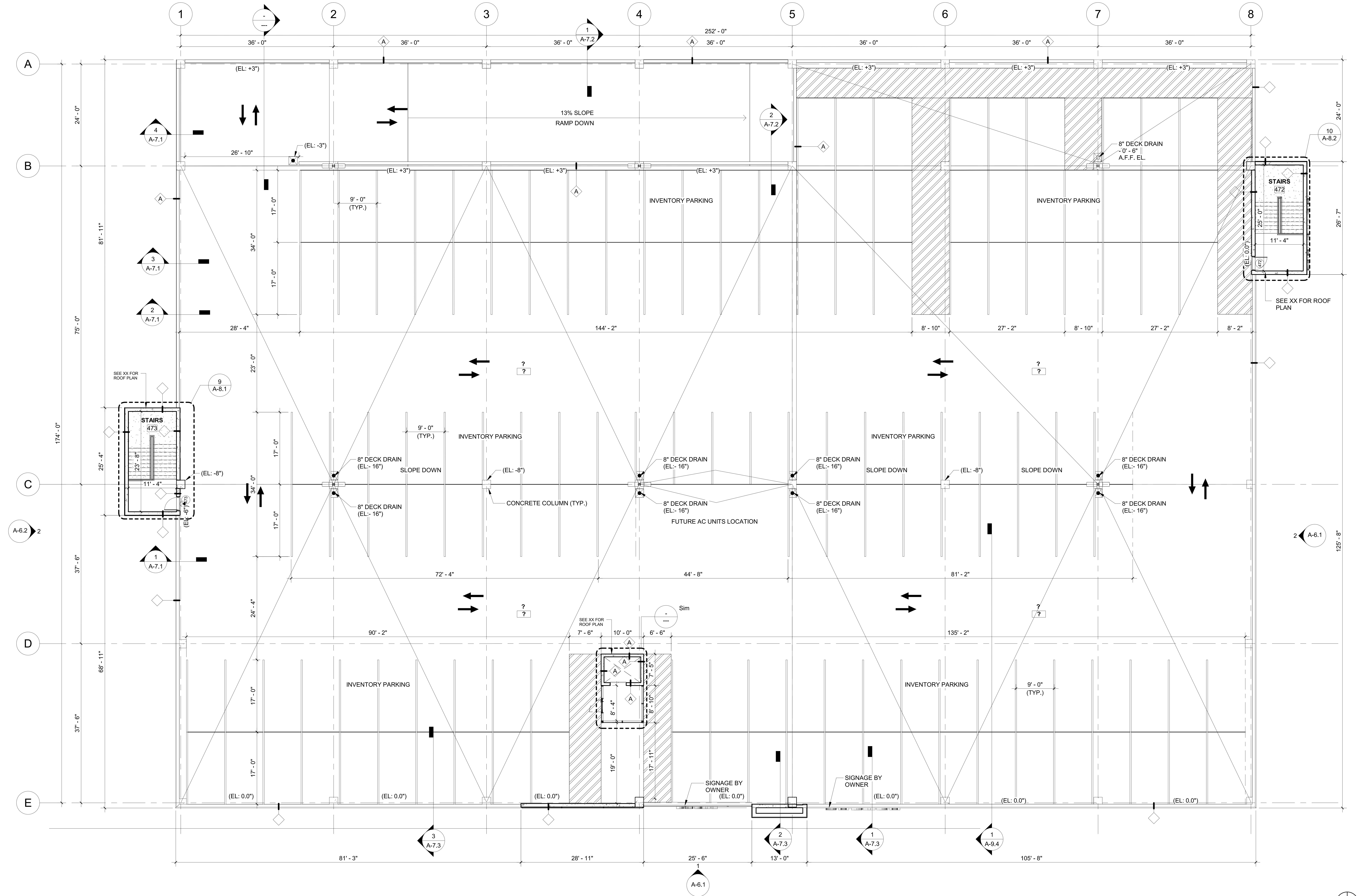
10111 NORTHWEST 12TH STREET
DORAL, FLORIDA 33172

3RD FLOOR PLAN

A-2.3

PROJECT NO.
74095
DRAWN BY :
R.J./ L.B.
CHECKED BY :
K.C. / J.A.
DATE :
07/21/2021

GENERAL NOTES:
1. SEE CIVIL DRAWINGS FOR SITE ELEVATIONS
2. REFER TO SHEET A-5.7 FOR WINDOW SCHEDULE
3. REFER TO SHEET A-5.8 FOR DOOR SCHEDULE
4. REFER TO SHEET A-2.19 FOR OCCUPANCY CALCULATIONS
5. REFER TO COVER SHEET FOR EGRESS LOAD CALCULATIONS
6. REFER TO COVER SHEET FOR PLUMBING FIXTURE COUNT/ CALCULATIONS



1 FOURTH FLOOR
3/32" = 1'-0"

REVISIONS :

No.	Description	Date

SEAL

CONSULTANT

STILES
ARCHITECTURAL GROUP
201 East Las Olas Blvd
Fort Lauderdale, Florida, 33301
954 - 627 - 9180
FL. REG # AA-26001798

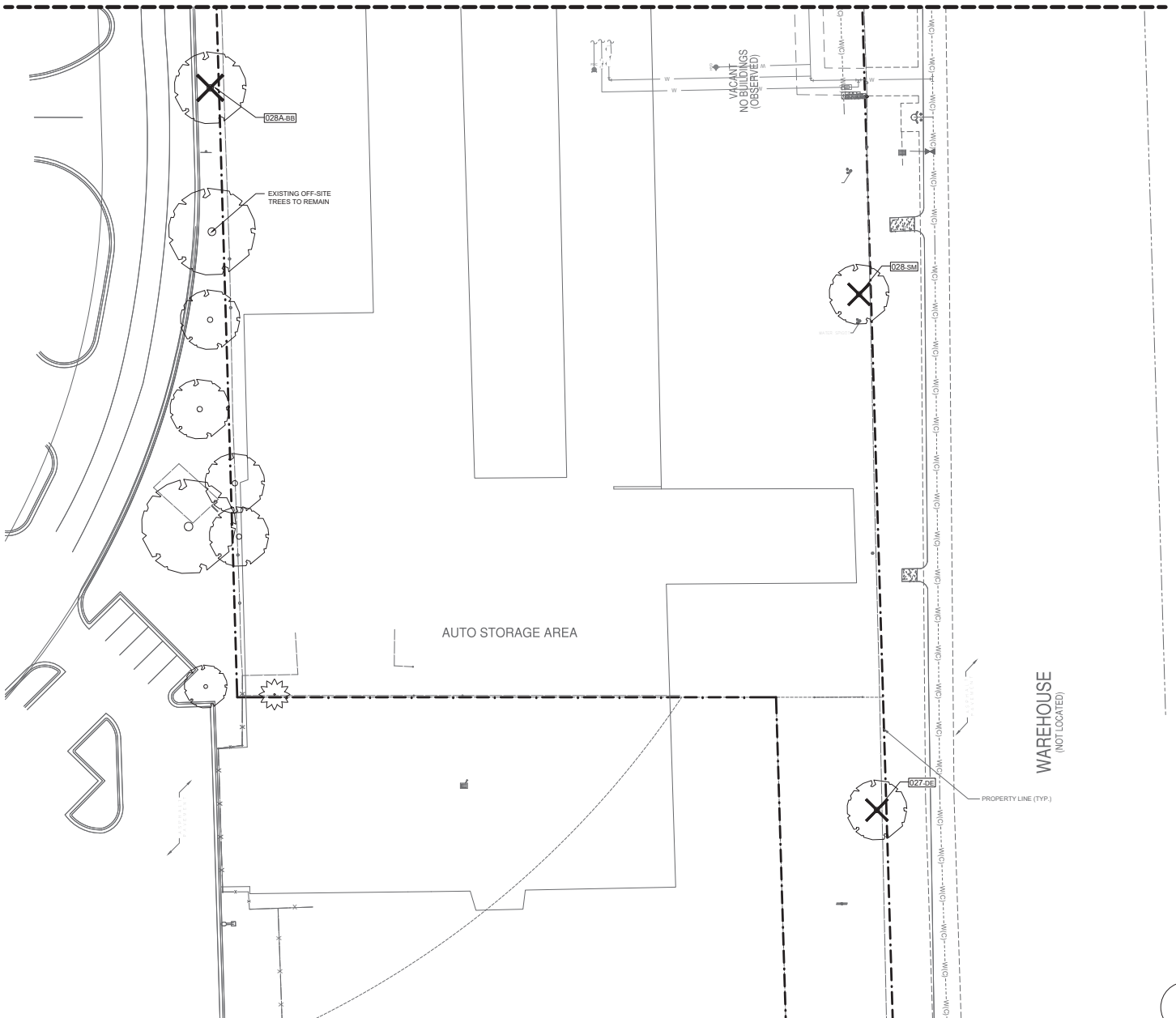
PROPOSED NEW DEALERSHIP & PARKING GARAGE FOR:
DORAL SUBARU
10111 NORTHWEST 12TH STREET
DORAL, FLORIDA 33172

4TH FLOOR PLAN

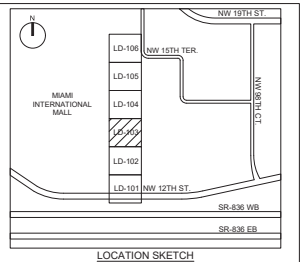
A-2.4

PROJECT NO.
74095
DRAWN BY :
R.J./ L.B.
CHECKED BY :
K.C. / J.A.
DATE :
07/21/2021

MATCHLINE: REF. SHEET LD-104



MATCHLINE: REF. SHEET LD-102



LOCATION SKETCH
(NOT TO SCALE)

TREE DISPOSITION LEGEND

SYMBOL	DESCRIPTION
	EXISTING TREE / PALM TO REMAIN (NO SYMBOL) TO BE PROTECTED DURING CONSTRUCTION
△	EXISTING TREE / PALM TO RELOCATE. REFER TO LANDSCAPE PLAN FOR NEW LOCATION
X	EXISTING TREE / PALM TO REMOVE. REMOVE ALL CAT 1 INVASIVE EXOTICS. (EX: BRAZ, PEPPER)
XXX-xx	EXISTING TREE / PALM NUMBER. REFER TO TREE DISPOSITION TABLE ON LD-102

TREE DISPOSITION NOTES

1. EXISTING TREES TO REMAIN SHALL BE TRIMMED PER ANSI-A300 STANDARDS, REMOVING WEAKEST RUBBING BRANCHES AND DEAD BRANCHES, BUT RETAINING 80% OF FOLIAGE. LARGE TREES SHALL HAVE LOWER BRANCHES CLEARED UP TO 8'.
2. SYMBOLS MAY BE SHOWN OFFSET FROM ACTUAL TREE LOCATION FOR CLARITY.
3. CONTACT LANDSCAPE ARCHITECT / ISA CERTIFIED ARBORIST FOR CLARIFICATION ON ANY DISCREPANCIES.
4. TRIMMING AND ANY NECESSARY ROOT PRUNING SHALL BE PERFORMED OR SUPERVISED BY A CERTIFIED ARBORIST.
5. ALL TREE WORK REQUIRE PERMITTING BY A REGISTERED COUNTY TREE TRIMMER.
6. BUBBLERS SHALL BE PROVIDED FOR ALL RELOCATED TREES AND PALMS.
7. REMOVAL OF ANY TREES OR PALMS WILL REQUIRE A WRITTEN "TREE REMOVAL PERMIT" FROM THE LOCAL GOVERNING AGENCY PRIOR TO REMOVAL. CONFIRM WITH LOCAL GOVERNING AGENCY THAT TREES CLASSIFIED AS NUISANCE/EXOTIC INVASIVE MAY BE EXEMPT.
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9. ALL CATEGORY 1 EXOTIC/NATIVE TREES TO BE REMOVED PER LOCAL ORDINANCE.

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

REVISIONS :
1 PLANNING & ZONING COMMENTS 08/24/2021

SEAL

Michael J Phillips
Digitally signed by Michael J Phillips
Date: 2021.08.26 10:34:25 -04'00'

CONSULTANT
MICHAEL J. PHILLIPS, R.L.A.
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(FOR THE FIRM)

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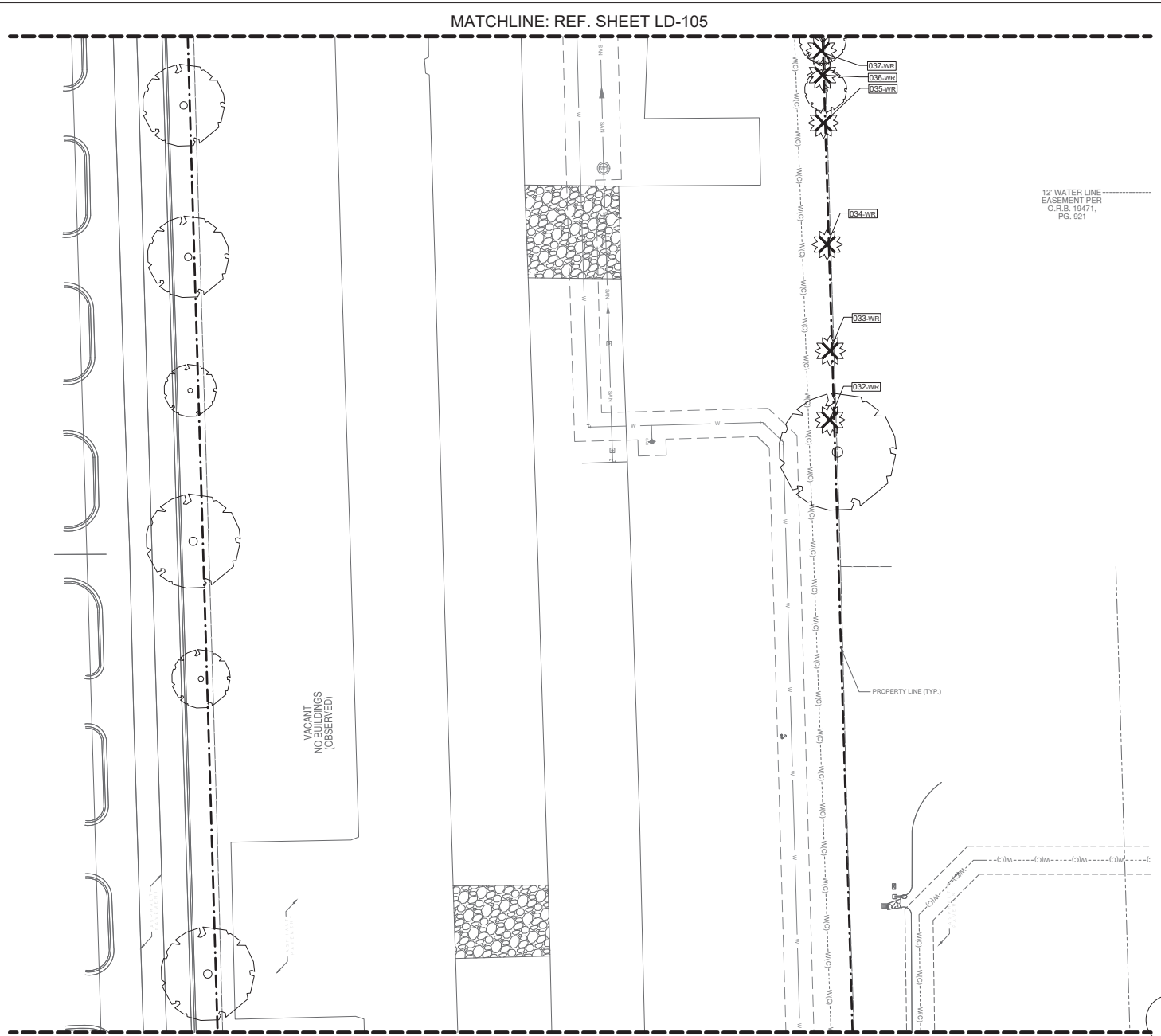
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LD-103

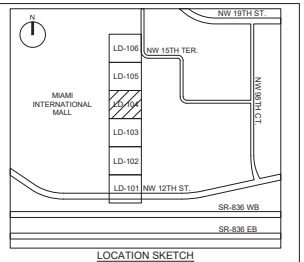
1 TREE DISPOSITION PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LD-105



MATCHLINE: REF. SHEET LD-103



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REVISIONS :
1 PLANNING & ZONING COMMENTS 08/24/2021

SEAL

Michael J Phillips
Digitally signed by Michael J Phillips
Date: 2021.08.26 10:35:01 -04'00'

CONSULTANT
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NEW KIA & SUBARU
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LEHMAN DORAL
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10155 NW 12th STREET
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LD-104

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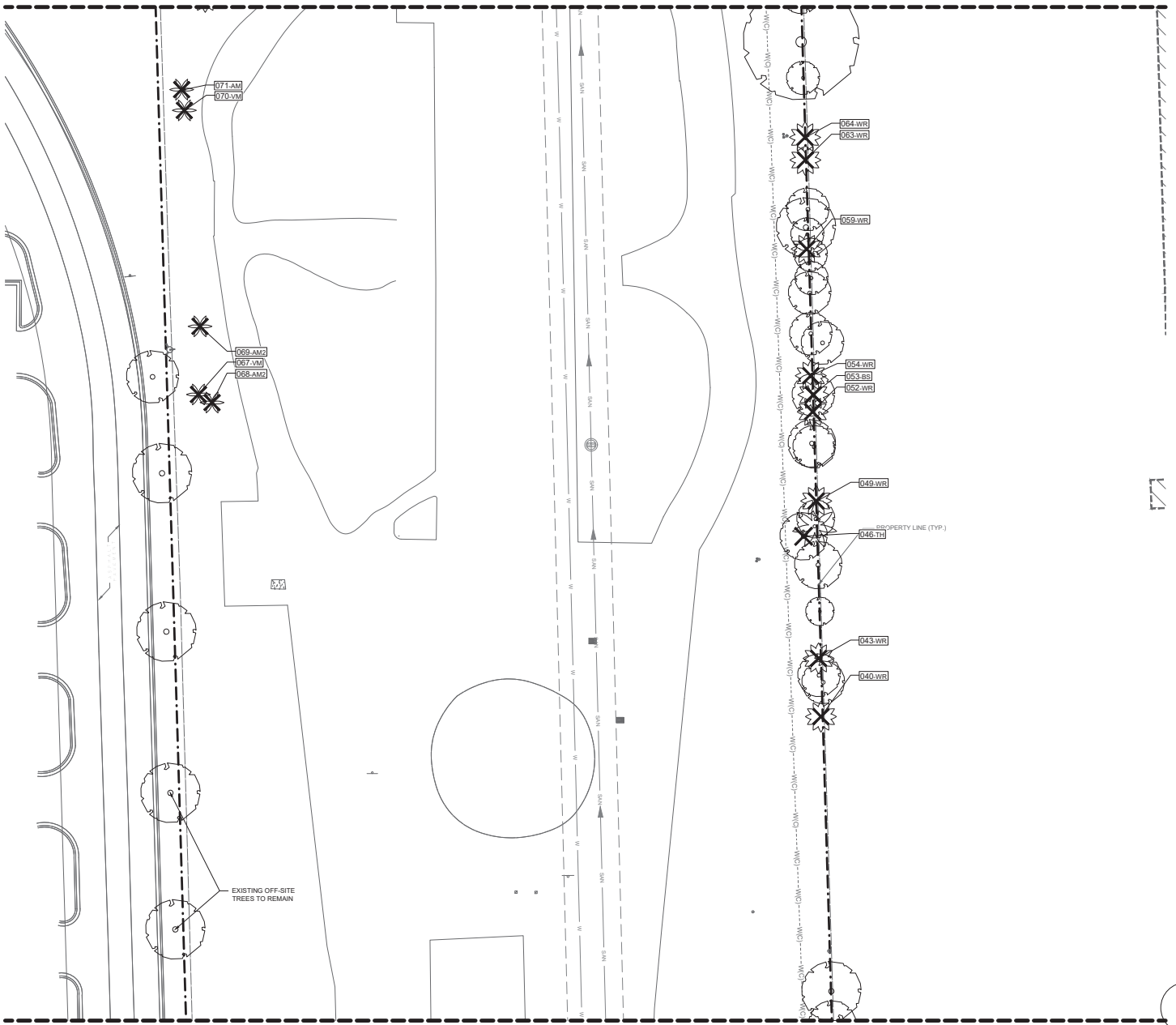
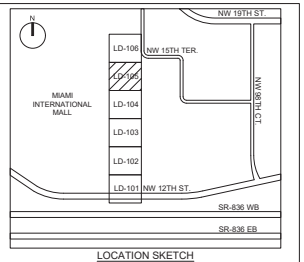
PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LD-106



MATCHLINE: REF. SHEET LD-104



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REVISIONS :
1 PLANNING & ZONING COMMENTS 08/24/2021

SEAL

Michael J Phillips
Digitally signed by Michael J Phillips
Date: 2021.08.26 10:35:39 -04'00'

CONSULTANT
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NEW KIA & SUBARU
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10155 NW 12th STREET
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LD-105

1 TREE DISPOSITION PLAN

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11916.00
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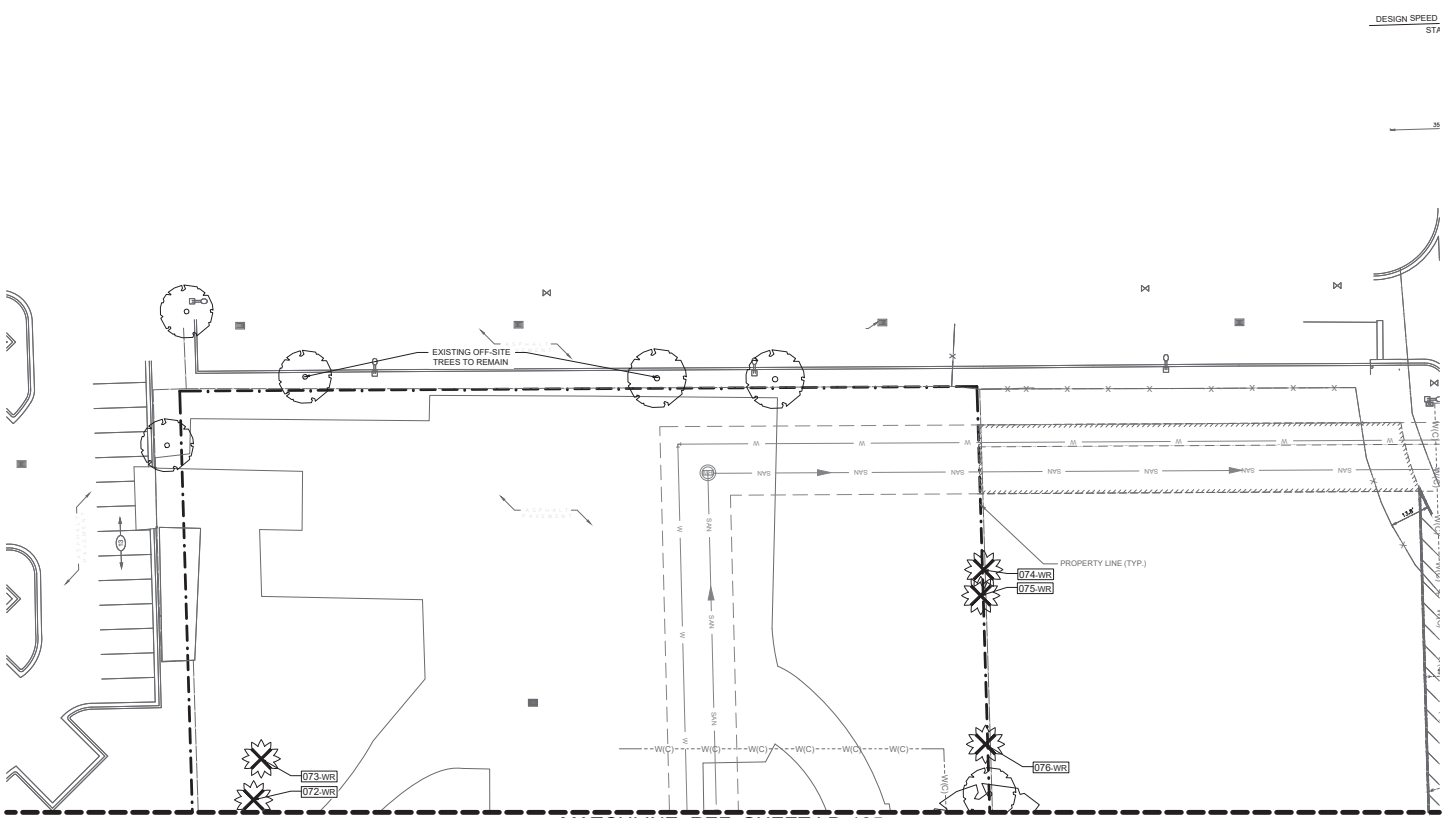

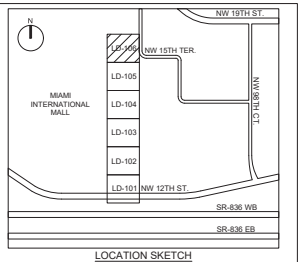

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SEAL
Michael J Phillips
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Date: 2021.08.26 10:36:09 -04'00'

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SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
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DORAL, FLORIDA 33172

LD-106

TREE DISPOSITION PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

A. SCOPE

1. The location of plants, as shown on the plans, is approximate. The final locations may be adjusted slightly to accommodate unforeseen field conditions, to comply with safety setback criteria, to avoid creating unsafe sight conditions, or as otherwise directed or approved by the Landscape Architect / owner in writing. All other location adjustments to the layout are to be approved in advance in writing by the Landscape Architect and owner.
2. Contractor understands that an important element of the design of this project is meeting landscape ordinances with a design flare that includes symmetry, alignment, focal points and / or smooth curvilinear forms where applied and contractor shall follow and instruct the working crews accordingly. In the event of any doubt as to how to execute the plans, Contractor shall immediately consult with Architect and/or Owner.
3. Landscape Contractor shall fine grade, prepare site as outlined in the following notes and per plans; furnish and install all plants, shrubs, trees and / or palms meeting minimum requirements and brace them per details provided. Furnish and install soil, gravel, boulders, sod and mulch as specified in plans and notes below.
4. Landscape contractor shall furnish and install all trees, palms, shrubs, groundcover, sod, planting soil, fertilizer, herbicide, pre-emergence herbicide, seed, and mulch.

B. BIDDING

1. Contractor to have liability insurance including Owner and Landscaper as insured's in excess of $10,000 as well as Worker's Compensation.
2. Contractors and Subs must ensure they are doing take offs from Bldg Dept.. Revised sets and / or Bid Set documents. Verify with this Office that you are bidding from latest available plans.
3. Read ALL notes and typical planting details sheets prior to submitting RFIs and prior to bidding.
4. When submitting an RFI reference sheet number, detail number and/or note category and number.
5. Landscape contractor shall verify all estimated quantities of material shown on the drawings prior to submitting their bid. Plant list pricing (if shown) is for permitting / mitigation comparison purposes only, any prices shown are to be disregarded by Landscape Contractor.
6. All Plant Material shall meet or exceed height and spread requirement. Heights are local code requirement and / or design intent related and always governs over container size. Container size given for reference only and must be sized-up to meet height requirements of plant list. Plant material available with excessive height beyond specifications must be consulted with Landscape Architect for design intent.
7. All landscape material was confirmed to be available at time of design. Landscape contractor understands that some material may not be available locally, however is available in Tri-County Region. Plant material supply is the responsibility of the Landscape Contractor that is awarded the contract and he/she shall take steps to ensure availability at the time of installation. Bring to the attention of Landscape Architect if specific material is no longer available at the time of bidding and / or prior to actual construction. Substitutions must be approved prior to construction.
8. Pre-inspections of site required prior to bidding.
9. The plant list is intended only as an aid to bidding. Any discrepancies found between the quantities on the plan and the quantities on the plant list shall be brought to the attention of the Landscape Architect for clarification.
10. All labor and material for soil amendments and fertilizer that is required to ensure the successful establishment and survival of the proposed vegetation, as well as all the cost for the removal of unsuitable or excess backfill material from plant beds, in addition to fine grading and mulching all plant beds and individual trees shall be included in the contractor's bid to perform the work represented in this plan set.
11. Bid shall be itemized for possible value engineering.
12. Sod and Rocks (if specified) shall be estimated by scaling plans. Include price per square foot for sod. Rocks (include price per ton). Small rocks and gravel beds shall have landscape fabric material and minimum 4" depth. Boulders to be bid by unit.
13. All S.F. if noted is approximate and shall not be considered all inclusive; it is the contractor's responsibility to do his or her take off, submit price per S.F. and in the end, sod all areas that are not covered either by plants, mulch and/or rocks. It shall be the responsibility of the contractor to include in the bid, the repair of any existing sod which may be damaged during construction.
14. Final payment to the Contractor shall be for actual plants installed on the project.
15. Contractor shall be responsible for obtaining and paying for costs of all permits described in bid whether permit costs are reimbursable by owner or included in bid. Research permit status and research all permits and additional documentation and certifications required such as separate tree removal permit for example, and consider prior to bidding.
16. General / Landscape Contractor shall leave a 5% unforeseen conditions allowance such as for additional root barriers determined to be needed on site and as job progresses.
17. Refer to Section T, Watering, for supplemental watering requirement.
18. Landscape contractor is responsible for verifying all plant quantities prior to bidding and within 7 calendar days of receipt of these plans shall notify the landscape architect in writing of any and all discrepancies. In case of discrepancies, planting plans shall take precedence over plant list. No substitutions are to be made without prior consent of the Landscape Architect.

C. GENERAL LANDSCAPE NOTES

1. Plants grown in containers prior to installation shall be removed from their containers before they are planted in the ground and have circling roots removed. All screening shrubs shall be planted for proper operation of equipment being screened and/or per the requirements of the utility as necessary. All hedge material required for screening purposes shall be planted with branches touching. Adjust spacing as necessary and/or provide additional plants to provide an adequate screen as required by code. Leave access to utility or clearance as required.
2. All landscaping shall be installed according to sound nursery practices. Contractor shall comply with federal, state and local laws and regulations pertaining to the inspection for plant disease and insect infestation.
3. All ideas, designs and plans indicated or represented by this drawing are owned by and are the exclusive property of Keith and Associates and may not be duplicated without authorization or used for other projects than the intended.
4. The Landscape Contractor shall exercise caution to protect any existing sod, electrical and irrigation. Any damage to the sod, electrical or irrigation shall be replaced or repaired to the original state by the Landscape Contractor at no additional cost to the owner.
5. Tree, palm, accent shrubs and bed lines are to be located in the field and approved by the Landscape Architect / owner prior to planting. Landscape Contractor acknowledges that material planted without approval of location may be subject to relocation by Landscape Architect to maintain design intent if not followed properly.
6. All trees must be pruned as per Landscape Architect's direction.
7. In areas where asphalt is removed in order to receive landscape material, the lime rock sub-base material must also be removed and replaced with approved planting soil mix.
8. Landscape contractor is responsible for sending photographs to the landscape architect to pre-approve all trees, palms, and shrubs prior to delivery to project site.
9. Landscape contractor shall coordinate his or her work with that of the irrigation, landscape lighting, and hardscape contractor if different.
10. The landscape contractor shall treat plant areas with pre-emergence herbicide after weeds and grass have been removed. Landscape contractor shall wait 7 days after pre-emergence treatment prior to planting.

D. PERMITS & REGULATIONS

1. Contractor(s) must obtain separate landscape, irrigation and tree relocation/removal permits from the governing authority prior to the issuance of the first building permit for the project.
2. Landscape contractor to call the local Landscape Inspector to schedule a pre-construction meeting prior to installation if required.
3. All mandatory requirements by local Landscape Departments and their inspectors shall govern and landscape contractor commits by accepting contract to comply promptly for builder/owner to obtain C.O.

E. TREE REMOVAL

1. Removal of any trees or palms will require a written "tree removal permit" from the local governing agency prior to removal. Non-native trees classified as "prohibited" trees may be exempt from the permit if listed as Category 1 by Florida Exotic Pest Plant Council. Confirm with Local Municipality.
2. Landscape Contractor is responsible to remove ALL invasive nuisance trees such as Brazilian Pepper, Melaleuca, Australian Pine and all invasive trees as categorized by the governing agencies, whether listed on plans or not.
3. The Landscape Contractor is responsible for coordinating tree and palm removals and transplants shown on the tree/palm Disposition Plan. The Landscape Contractor is to remove and discard from site existing unwanted trees, palms, shrubs, ground covers, sod and weeds within landscape areas.

F. EXISTING TREES

1. Existing trees designated to remain shall be protected during all construction phases. Any trees or shrubs designated to remain that are scarred or destroyed will be replaced at the contractor's expense, per the appraised value.
2. Existing plant material not shown on the plan and in conflict with new planting shall be evaluated at the time of new planting installation by the Landscape Architect. Trees and plant material indicated to be relocated with no new location provided in plans shall be moved to a location on site designated as a nursery holding area with the root ball protected from direct sunlight, maintained and irrigated until new location is determined.
3. Prune trees to remove damaged branches and improve natural shape and thin out structure. Do not remove more than 15% of branches. Do not prune back terminal leader.
4. Prune existing shrubs to remove damaged branches and improve natural shape.
5. Existing trees to remain shall be trimmed per Ansi-A300 standards. Supervision of the trimming shall be performed by an ISA Certified Arborist to ensure quality work.
6. All existing trees shall be "lifted and thinned" to provide an 8' minimum clearance for sidewalks and pedestrian walkways and a 14' minimum clearance for roadways, driveways and all vehicular use areas.
7. Selective canopy and root pruning of existing trees can be conducted (only as necessary and in no event more than 35%) to accommodate for new approved construction. Pruning shall be conducted / supervised by an ISA Arborist.
8. If plans call for relocation of trees, palms or plants. High level of care should be exercised to assure that they are not damaged in the process and that they are promptly replanted upon being dug up.
9. All underground utilities and drain or irrigation lines shall be routed outside the tree protection zone. If lines must traverse the protection area, they shall be tunneled or bored under the tree.
10. Erosion control devices such as silt fencing, debris basins, and water diversion structures shall be installed to prevent siltation and/or erosion within the tree protection zone.
11. Roots shall be cut manually by digging a trench and cutting exposed roots with a saw, vibrating knife, rock saw, narrow trencher with sharp blades, or other approved root pruning equipment.

G. TREE RELOCATION (These notes for relocation trees only and if applicable)

1. Flag all trees and palms to be transplanted with differentiating color than those to be saved or removed.
2. Tree Relocation process must be performed or supervised by ISA Certified Arborist.
3. Water the root zones to field capacity for 5 continuous days before root pruning. At a minimum soak the soil to a 4'-0" depth within a 6' radius.
   Root prune a minimum of six weeks before relocation. Prune away all dead or damaged limbs or fronds. For trees, prune out 1/3 of the existing canopy by selectively trimming small internal branches. For palms, gather fronds above the bud and tie them loosely with jute twine to avoid damage.
4. Brace root pruned trees awaiting relocation.
5. Root prune $\frac{1}{3}$rd of the root system, irrigate daily for 2 weeks then root prune another $\frac{1}{3}$ rd, irrigate daily and prune last $\frac{1}{3}$ rd on actual relocation date, no less than two weeks (six weeks total minimum root pruning by stages). ISA Arborist on staff shall observe for intense shock. Canopy pruning may be deemed necessary by Arborist on staff to balance for intense root ball loss, canopy shall be trimmed only as necessary to increase survival.
6. Root prune with proper clean equipment to sever roots. Ensure roots are not torn or pulled apart.
7. With hand tools, dig a 2'-0" wide by 3'-0" deep trench at a minimum distance as determined by the consulting arborist to expose roots. Cut all roots 1.5" and larger in diameter with a clean, sharp pruning saw. Treat all cuts with a fungicidal barrier. Backfill the trench, within 4 hours of digging, with a 1:1 mixture of site soil and sawdust or other fine organic material. Do not compact.
8. Form a rootball size in compliance with Florida grades and Florida standards number 1 or better.
9. Maintain the soil moisture at field capacity throughout the six weeks.
10. Allow the plant to regenerate roots over a period of six weeks.
11. At the end of six weeks, prepare the planting pit at the new location. Overdig the hole diameter a minimum of 2' beyond the root ball, with the recipient hole to be at least 1/3 larger than the area that was trenched for transplanting.
12. With the consulting arborist present, undercut the entire root ball of the plants to be transplanted at a depth specified by the arborist. The undercutting method may be a choker cable drawn through the root ball with heavy equipment.
13. At the direction of a professional rigger, assemble slings, padding, guiding ropes and cables for attachment to the crane or backhoe. The professional rigger shall determine the size of machinery necessary to execute the lifting and moving operation.
14. Install trees within 24 hours of removal from their original location to locations provided by Landscape Architect or Developer with approval of municipal / Landscape Inspector.
15. Recipient site to be within 4" of finished grade. Tree pit excavation to mathch the size of root ball. Top of root ball to match the finished grade
16. Maintain trees in a healthy and vigorous condition during installation and throughout the plant establishment period. Replace trees that do not meet this requirement with the same species, size, and quality or per mitigation requirements specific to the governing authority with jurisdiction.
17. Fertilize the plant as directed by the consulting arborist.
18. When the plant is placed in the new location, backfill the planting pit with topsoil and water thoroughly to eliminate air pockets and compact the soil. Set the tree no deeper than its original condition.
19. Cover the root ball area with 3" depth of organic mulch.
20. Provide fungicide and fertility applications at the direction of the consulting arborist.
21. Post transplant watering to provide moisture and reduce any excessive stress due to root desiccation. Watering to be adjusted according to conditions and at the supervision and direction of the ISA certified arborist.
22. The diameter of the root–pruning or transplanting circle shall be at a distance away from the trunk equal to 12 times each inch of trunk diameter at breast height.
23. For all palms except Sabal palmetto, the lower fronds shall be pruned leaving 9-11 fronds that can be tied without an extensive amount of weight that may damage the heart of the palm. The Sabal palmetto shall have all fronds cut without damaging the bud.
24. Digging and preparation of the new hole for the transplant shall be done prior to removing the tree from the existing location.
25. The landscape Contractor is to verify that all new holes have appropriate percolation.
26. Over the guarantee period the Landscape contractor shall be responsible for resetting any trees or palms that are not in a vertical position.
27. After transplanting trees and palms, the landscape contractor shall be responsible for obtaining water and watering to maintain soil moisture during the guarantee period at a minimum of: First month- daily, Second month - three times per week, Third and Fourth months - two times per week, Last eight months - one time per week.

H. SITE PREPARATION & GRADING

1. Landscape contractor shall loosen and till compacted soils that are overly compacted in all planting areas of the project to provide for proper soil aeration for plant establishment.
2. Planted areas shall be cleared of underground rocks, construction debris and other materials detrimental to the health of the plants. Lime rock base material shall be removed within planting pits and adjacent to pavement. The planting areas should be clean to a depth equal to the root ball of the trees/palms proposed for the area. Planting area soils shall be tested for ph before planting. Soils showing high (alkaline) ph (over 7.5) shall be amended or replaced with native soil having a ph range of 6.5 - 7.5, as approved by Landscape Architect.
3. All planting areas and planting pits shall be tested for sufficient percolation prior to final planting and irrigation installation to ensure proper drainage. Plant beds in parking lots and in areas compacted by heavy equipment shall be de-compacted so that drainage is not impeded.
4. Landscape Contractor shall treat plant areas with pre-emergence herbicide after weeds and grass have been removed. Landscape Contractor shall wait (7) seven days after pre-emergence treatment prior to planting.
5. Site preparation shall include the eradication and removal of any weeds, clean-up of any dead material, debris, and rubbish.
6. General site and berm grading to +/- 1 inch (1") shall be provided by the general contractor. All finished site grading shall be provided by the Landscape Contractor. All planting beds shall be free of all rocks 1/2" or larger, sticks, and objectionable material including weeds and weed seeds. All lime rock shall be removed/cleaned down to the native soils.
7. The Landscape contractor shall ensure the planting areas are at finish grade prior to installing plant materials.
8. All trees and plant material to remain shall be protected during construction. Contractor shall install protective barriers such as "Tenax" orange safety fencing or similar, to be installed before the beginning of the project. Barriers shall be located to include the drip line of the trees, palms and plant material. The contractor shall take extra caution to prevent any damage to the trunk, root zones and grade.
9. Final grade within planting areas to be 4" below adjacent paved areas or top of curb. Sod areas to be 2" below.
10. All planting beds shall be shaped and sloped to provide proper drainage away from building and structures and to swales, if applicable.

I. IRRIGATION

1. Any Irrigation Notes and specifications included in Irrigation Sheets govern over the following Irrigation Notes.
2. The Landscape Contractor shall coordinate with the irrigation contractor if not the same and leave provisions for all individual trees in turf areas and all planting beds.
3. Irrigation / Landscape contractor to guarantee 100% coverage and 50% overlap (head to head coverage) to all landscaped areas and furnish and install a rain sensor.
4. Irrigation Contractor to adapt design to onsite conditions adjusting heads and changing nozzles as required to avoid overspray onto buildings or paved areas.
5. The contractor shall ensure that the irrigation system is operational and free of leaks prior to any planting being finalized. Plant material that is installed prior to the irrigation system being operational shall be watered by the contractor at his or her expense. Water for plant establishment should be included in the cost of the plant.
6. All guidelines as outlined by the South Florida Water Management District (SFWMD) or water management district with jurisdiction shall be strictly adhered to.
7. Irrigation water whether pumped from a lake or a well shall be treated for algae, rust, etc. to provide clean treated irrigation water that will not clog or stain property or components.
8. Any existing irrigation system shall be retrofitted to comply with the specifications as outlined above.

J. HARDSCAPE & OTHER MATERIALS

1. Face of trees and palms to be located a minimum of 2' setback from all fences, walkways, walls, and paved surfaces, unless otherwise indicated on the plans. Refer to details.

K. UTILITIES / CLEARANCES

1. The contractor shall be responsible for determining the location of and avoid and protect utility lines, buried cables, and other utilities. The owner or Landscape Architect shall not be responsible for damage to utility or irrigation lines.
2. Trees shall be placed a minimum of 5 ft. from underground utilities, unless otherwise approved in writing by Landscape Architect and Owner.
3. All canopy trees to be planted min. of 15' from light source/poles. Unless otherwise approved by the governing authority / Landscape Architect and Owner.
4. Landscape contractor shall contact the county, governing authority and/or utility companies to locate all underground utilities or structures prior to digging. Landscape contractor shall repair all damage to underground utilities, and/or construction caused by utility damage, at no cost to the owner.
5. All plant material symbols shown on landscape plan shall be considered diagrammatic and should be adjusted in the field by contractor to avoid all utilities, and all other obstructions.
6. If/ When digging in right of way needed: Two (2) full business days before digging, call toll free 1-800-432-4770, or 811, Sunshine State One Call of Florida, inc. Notification Center. In addition, call the Governing Agency's Utilities/Public Works Department. Contractors are responsible for coordinating with the owners and appropriate public agencies to assist in locating and verifying all underground utilities prior to excavation. All existing utilities shown on the plans are to be considered approximate and should be verified by the contractor prior to the start of work operations.
7. Above and below ground utilities shall be verified and located in the field by the contractor prior to commencing work in the project area. The contractor shall examine available utility plans and confirm conflicts between indicated or located utilities and landscape work. The contractor shall then notify the Project Engineer of said conflicts and the Engineer will coordinate any necessary adjustments with the utility provider. Tree locations will be adjusted as necessary when in conflict with existing utilities.
8. The final plant locations may be adjusted, as approved / directed by the Landscape Architect in writing, to accommodate utilities compliance. Excavations within 5' of known utilities should be done by hand.
9. Contractor shall familiarize himself with the location of and avoid and protect utility lines, buried cables, and all other utilities, noted or not, on plans.
10. Leave clearance and access to all above ground or at grade meters and equipment.
11. Landscape planting shall be in conformance with FPL guidelines for setbacks from overhead utility lines.
12. Landscaping shall not interfere with light poles, fire hydrants, electrical/mechanical equipment access, signs, drainage structures, etc. Bring to the attention of Landscape Architect any conflicts.

L. ROOT BARRIERS

1. Root barriers will be installed to protect building foundations, curbing, walkways, paved areas, roadway base material and utilities from existing large trees or proposed new trees that are within 5' of existing or new approved construction or as may be deemed necessary as job progresses.
2. Mechanical Root barriers will be used for large existing Canopy Trees and chemical type barriers will be used for new trees.
3. Mechanical Root barriers will be "DeepRoot" and Chemical Root barriers will be "Biobarrier". Substitutions must be of approved equal or better quality.
4. Root barriers will be installed per manufacturer specifications.
5. Root barrier depths will be determined by the manufacturer recommended depth chart and as required by on-site conditions in a case by case basis as deemed necessary by Landscape Architect Architect / ISA Arborist and Landscape Inspector.

M. LANDSCAPE BACKFILL & SOIL AMENDMENT

1. All building construction material and foreign material shall be removed from the planting areas and replaced with 70/30 mix (70% sand / 30% organic compost) or amend existing soils per section H.2.
2. Planting soil mix shall be delivered to the site in a clean loose and friable condition and is required around the root ball of all trees and shrubs, the top 6" of all shrubs and ground cover beds and top 2" of all grassed areas. This soil shall be tilled into the existing soil after the existing soil has been cleaned of all undesirable foreign materials. Recycled compost is encouraged as a soil amendment alternative. Planting soil to be weed free.
3. Planting backfill for palms shall be clean coarse native sand unless specified elsewhere.
4. Do not allow air pockets to form when backfilling. All trees shall be watered-in utilizing water probe or a tree bar.

N. PLANT SIZE & QUALITY

1. All plant material must meet or exceed the minimum size requirements as specified on the plant list. Height specification governs over container size if both specifications given cannot be met. Any other requirements for specific shape or effect as noted on the plan shall also be required for acceptance.
2. Material specified as Balled and Burlapped (B&B) can be accepted in container if not available as B&B at the discretion of Landscape Architect; if so, root bound and/or circling roots shall be removed and root ball must be proportionate to Tree / Palm.
3. U.O.N, All trees designated as single trunk shall have a single, relatively straight, dominant leader, proper structural branching and even branch distribution. Trunks on palms shall be uniform in thickness for the entire length of the palm and shall not taper off to disproportionate thinness towards the crown. Trees with bark inclusion, tipped branches, and co-dominant trunks will not be accepted. Trees with girdling, circling and/or plunging roots will be rejected.
4. Use nursery grown plant materials that complies with all required inspection, grading standards, and plant regulations in accordance with the latest edition of Florida Department of Agriculture, "Grade & Standards for Nursery Plants".
5. All trees and palms shall be free of open wounds and unsightly visible scars.
6. All substitutions must be approved by the governing authority if it is required Canopy and by Landscape Architect / Owner if supplementary accent material.
7. Contractor shall comply with Federal, State, and Local laws and regulations pertaining to the inspection for plant disease and insect infestation.
8. Trees, palms, shrubs, ground covers:
   Plant species and sizes shall conform to those indicated on the drawings. All nursery stock shall be in accordance with grades and standards for nursery plants parts 1 and 2, latest edition published by the Florida Department of Agriculture and Consumer Services, unless specified otherwise. All plants shall be Florida grade number 1 or better as determined by the Florida Division of Plant Industry and tightly knit plant, so trained or favored in its development that first appearance is unquestionable and it is outstandingly superior in form, number of branches, compactness and symmetry. All plants shall be freshly dug, sound, healthy, vigorous, well branched and free of disease and insect eggs and larvae and shall have adequate root systems. Trees and palms shall be uniform in size and shape. All materials shall be subject to approval by the Landscape architect. Plants shall be pruned prior to delivery only upon the approval of the Landscape Architect.
9. All container grown material shall be healthy, vigorous, well-rooted plants and established in the container in which they are sold. The plants shall have tops of good quality and be in a healthy growing condition. An established container grown plant shall be transplanted into a container and grown in that container sufficiently long enough for the new fibrous roots to have developed so that the root mass will retain its shape and hold together when removed from the container.
10. Field grown trees and palms previously root pruned shall obtain a root ball with sufficient roots for continued growth without resulting shock.
11. Root suckers on any tree are not acceptable and must be properly pruned.
12. Contractor shall coordinate with Landscape Architect and Owner to obtain prior approval for the selection of the specific specimens of all palms and any trees of more than six feet in height. Contractor to supply photograph of trees prior to purchase and installation.

O. PLANTING NOTES

1. At the discretion of the Landscape Architect, plants are subject to review for approval for size, variety, condition and appropriateness to the design intent.
2. All synthetic burlap, synthetic string or cords, or wire baskets shall be removed before any trees are planted. All synthetic tape (i.e. tagging tape, nursery tape) shall be removed from trunks, branches, etc. before inspection. The top 1/3 of any natural burlap shall be removed or tucked into the planting hole before the trees are back filled.
3. All "groundcover" requires 75% coverage and 100% within 3 months of installation. Bring to the attention of Landscape Architect in writing before commencing if this is not achievable with the design.
4. Set tree no deeper than it was in its original growing condition with the top of the root ball even with, or slightly higher (+/- 1") than the finished grade.
5. All trees/palms shall be planted so the top of the root ball, root flair are slightly above final grade. Shrub material shall be planted such that the top of the plant ball is flush with the surrounding grade.
6. All trees and palms shall be braced / staked per accepted standards by the Florida Nursery, Growers & Landscape Association (FNGLA). Nailing into trees and palms for any reason is prohibited and the material will be rejected. Please refer to the planting details.
7. All trees, new or relocated, to be staked and guyed as detailed.
8. Layout shrubs to create a continuous smooth front line and fill in behind with triangular spacing.
9. Excavate pit or trench to 1-1/2 times the diameter of the balls or containers or 1' wider than the spread of roots and 3" deeper than required for positioning at proper height . Compact a layer of topsoil in bottom before placing plants. Backfill around plants with planting mixture, compacted to eliminate voids and air pockets. Form grade slightly dished and bermed at edges of excavation. Apply 3" of mulch.
10. Groundcover and shrubs to be spaced in a uniform and consistent pattern per planting details.
11. All mechanical equipment, irrigation pumps, FPL transformers, pool pumps, etc. shall be screened on a minimum of three sides by landscape shrubs.
12. Contractor shall not mark or scar trunks in any fashion.
13. When requested by Landscape Architect, demonstration of healthy root system if not previously approved, can include tree removal and re-installation for inspection at no additional cost to the owner.
14. Remove rejected Plant material from the Site immediately and replace with acceptable plants.

P. FERTILIZATION

1. All Fertilization shall comply with state fertilization laws. Fertilization shall be Agriform "20-10-5 Plus minors" or similar approved slow-release tablets applied per manufacturer suggested application rate chart:

Agriform® 21-gm Tablets (SKU# 90026*; 500 tablets/case)

	NEW Tree / Shrub Container Size						
	1 Gal	2 Gal	3 Gal	5 Gal	7 Gal	15 Gal	24" Box
Installation:	1	1 to 2	2 to 3	2 to 3	3 to 5	7 to 10	15 to 24

- Place plant in the hole and backfill to halfway point.
- Do not place tablets in the bottom of the planting hole.
- Place Agriform Tablets in the hole about 1to 2 inches away from root tips.
- Finish filling the hole around the plant to grade level.

SCOTTS: 1-800-492-8255 or visit www.scottspro.com

Q. SOD

1. All areas disturbed during construction shall be sodded with St. Augustine 'Seville' unless otherwise noted. These disturbed areas shall have proper irrigation established or re-established if they were disrupted or non-functional.
   Landscape Contractor to supply and install 2" soil layer 50/50 mix blanket for all new sod areas.
2. All open areas not covered by trees, palms, shrubs, vines, ground covers or existing sod in good condition to remain, shall receive Stenotaphrum Secundatum, St. Augustine 'Seville' sod, whether labeled on the plans or not, unless a different species is indicated on the planting plan. Sod shall be strongly rooted, free from weed, fungus, insects and disease. Contractor shall be paid by the total sodded area x the unit price submitted (field verified).
3. Sod shall be machine stripped no more than 24 hours prior to laying.
4. Lay sod strips with tight joints, do not overlap, stagger strips to offset joints in adjacent courses. Work sifted soil mix into minor cracks between pieces of sod and remove excess soil deposits from sodded areas. Sod on slopes greater than 3:1 shall be immediately staked after planting.

R. SUBMITTALS

1. Submit 1 gallon container of all planting media for landscape architect review. Samples to include specified planting mix, topsoil, container planting mix (if applicable) and mulch.
2. Submit representative nursery photos of all Trees and Palms for review prior to delivery to the site. Include scale for height.
3. Submit representative nursery photos of all shrub and groundcover material for review prior to delivery to the site.

S. INSPECTION & ACCEPTANCE

1. Notify the governing Agency if required and Landscape Architect of commencement.
2. Onsite plant deliveries shall occur on Monday through Friday only unless otherwise directed by the Landscape Architect / Owner. The contractor shall ensure that plant material is delivered undamaged from transportation or digging operations. The Landscape Architect may reject material that has been damaged or rendered unacceptable due to relocation or transportation from the point of origin. All plant material shall be available for inspection and approval by the Landscape Architect prior to final installation.
3. There shall be one final inspection for approval by each of the presiding governing agency, Landscape Architect and owner. Contractor shall ensure that the plans, details, specifications and notes have been adhered to and that the landscape and irrigation installation is compliant to all items as directed on the plans prior to scheduling of the final inspection.
4. Upon completion of the work, the Landscape Contractor shall notify the Landscape Architect and request a final inspection. Any items that are judged incomplete or unacceptable by the Landscape Architect or owner shall be promptly corrected by the Landscape Contractor.
5. No substitution of plant material, type or sizes will be permitted without prior written authorization from the Landscape Architect and owner.
6. To obtain final payment, Contractor must provide release of all mechanic's liens and material liens.

T. MULCH

1. All planting beds shall be mulched to a depth of 3" with an organic mulch approved by Landscape Architect. No heavy metals, such as arsenic, etc. are to be contained in the mulch. The contractor shall provide certification if requested or proof that all mulch is free of heavy metals or similar environmental contaminants.
2. Shredded approved organic mulch to be used beyond trunk in all directions and throughout all hedges and plant material.
3. All trees in sodded areas shall have a clean cut 4' diameter mulch ring.
4. Preferred mulch is shredded melaleuca. Cypress, red, gold and green mulch is prohibited.
5. All mulch shall have a minimum 3" separation from the trunk of the tree/palm trunk to avoid rotting.

U. WATERING

1. All plant material shall be watered in thoroughly at the time of planting.
2. It is the sole responsibility of the Landscape Contractor to ensure that all new plantings receive adequate water during the installation and until completion of contract. Deep watering of all new trees and palms and any supplemental watering that may be required to augment natural rainfall and site irrigation is mandatory to ensure proper plant establishment and development and shall be provided by Contractor as a part of this contract.

V. CLEAN UP

1. The Landscape Contractor is responsible for maintaining all landscape planting areas until final acceptance of the owner.
2. The contractor is responsible for mowing the entire project during planting and establishment periods, based on mowing project once a month from October to April, and twice a month from April to October (During installation and plant establishment only and until final inspection and owner accepts and takes ownership).
3. Any excess soil, undesired stones or debris resulting from landscape operations shall be removed promptly, keeping the site clean as work progresses.
4. The Landscape Contractor shall at all times keep the premises free from accumulation of waste material or debris caused by their crews during the performance of the work. Upon completion of the work, the contractor shall promptly remove all waste materials, debris, unused plant material, empty plant containers, and all equipment from the project site.

W. MAINTENANCE

1. Landscape Contractor to return to job site 12 months after tree bracing and remove all tree braces. Owner may choose to retain 5% of payment to ensure compliance.
2. The Landscape Contractor shall water, mulch, weed, prune, and otherwise maintain all plants, including sod, until completion of contract or acceptance by landscape architect. Settled plants shall be reset to proper grade, planting saucers restored, and defective work corrected.
3. Trees and shrubs shall be maintained to keep clearance of stop signs and safety clearance for visibility at traffic intersection.

X. GUARANTEE & REPLACEMENT

1. By accepting the contract, the Contractor is thereby guaranteeing all plant materials and design for a period of not less than one (1) year from the time of final acceptance by the owner. Contractor shall replace any plants which die or wither within such period with healthy plants that meet specifications of the same species and size without additional cost to the owner unless such death or withering is due to Owner's failure to do ordinary maintenance on such plants after final acceptance in accordance with any maintenance instructions given by Landscape Architect for such plants. Such replacement shall include all plants and labor to plant the replacement plants. Any plant materials damaged by lightning, storms, freeze damage or other "acts of God" as well plants damaged by vehicles, vandalism or neglect are not included in this replacement agreement. If requested, the Landscape Architect may act as a mediator between owner and Landscape Contractor on a time material basis. "Plants" includes all trees, palms, shrubs, grass and other plants provided or planted by Contractor.

Y. MISCELLANEOUS.

1. All work to be done in a professional manner.
2. No change order shall be valid, due or paid unless it is approved by Owner in writing in advance.
3. These notes shall be an integral part of the contract of Contractor and shall be deemed incorporated therein by reference. In the event of a conflict among the terms among the plans and these notes, the terms of this document shall control.

Z. ABBREVIATIONS IN NOTES AND PLANS

UNO = Unless Otherwise Noted
L.A = Landscape Architect
S.F. = Square Feet
STD = Standard (single trunk)
B&B = Balled and Burlapped
BLDG DEP = Building Department
RFI = Request for Information
FPL= Florida Power & Light
C.O. = Certificate of Occupancy
ISA CA or ISA Arborist = International Society of Arboriculture Certified Arborist

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REVISIONS :

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NEW KIA & SUBARU
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10155 NW 12th STREET
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LP-001

LANDSCAPE NOTES

PROJECT NO. 11916.00
DRAWN BY : BRITTANY J.
CHECKED BY : MICHAEL P.
DATE : 06/08/2021

N

GRAPHIC SCALE

0 40 80

SCALE: 1" = 40 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	REMARKS
BB	11	BUCIDA BUCERAS `SHADY LADY`	14` HT X 7` SPRD, 3" DBH, FULL CANOPY		
BA	14	BULNESIA ARBOREA VERAWOOD	12` HT X 6` SPRD, 2" DBH, FULL CANOPY		
BS	11	BURSERA SIMARUBA GUMBO LIMBO	14` HT. X 7` SPRD, 3" DBH, FULL CANOPY	N**	
BS-R	14	BURSERA SIMARUBA GUMBO LIMBO	RELOCATED FROM SITE	N**	
CE	52	CONOCARPUS ERECTUS GREEN BUTTONWOOD	14` HT X 7` SPRD, 3" DBH, FULL CANOPY	N**	
DR	5	DELONIX REGIA ROYAL POINCIANA	14` HT X 7` SPRD, 3" DBH, FULL CANOPY		
LS	9	LAGERSTROEMIA SPECIOSA QUEEN`S CRAPE MYRTLE	14` HT. X 7` SPRD, 3" DBH		
LL	20	LYSILOMA LATISILIQUUM WILD TAMARIND	12` HT X 6` SPRD, 2" DBH, FULL CANOPY	N**	
MF	1	MYRCIANTHES FRAGRANS SIMPSON'S STOPPER	12` HT X 6` SPRD, 2" DBH, FULL CANOPY	N**	
QV	77	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	14` HT. X 7` SPRD, 3" DBH	N**	
QV-R	3	QUERCUS VIRGINIANA SOUTHERN LIVE OAK	RELOCATED FROM SITE	N**	
SM	15	SWIETENIA MAHAGONI MAHOGANY	14` HT. X 7` SPRD, 3" DBH	N**	
TD3	12	TAXODIUM DISTICHUM BALD CYPRESS	10` HT X 5` SPRD, 1.5" DBH, FULL CANOPY	N**	
TD	27	TAXODIUM DISTICHUM BALD CYPRESS	14` HT. X 7` SPRD, 3" DBH	N**	
TG	10	TIBOUCHINA GRANULOSA PURPLE GLORY TREE	5` HT. X 3` SPRD, 1.5" DBH		STANDARD TREE FORM

PALMS	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	REMARKS
AM	23	ADONIDIA MERRILLII CHRISTMAS PALM	6 & 10` C.T. HTS., HEAVY, STAGGERED		SINGLE
PE	5	PTYCHOSPERMA ELEGANS SOLITARE PALM	10` & 16` CT, HEAVY	**	SINGLE
PE3	6	PTYCHOSPERMA ELEGANS SOLITARE PALM	10` CT	**	TRIPLE
RE	6	ROYSTONEA ELATA ROYAL PALM	15` CT, HEAVY, MATCHED		
RE-R	3	ROYSTONEA ELATA ROYAL PALM	RELOCATED FROM SITE		
TR	7	THRINAX RADIATA FLORIDA THATCH PALM	6` CT		
VM	5	VEITCHIA MONTGOMERYANA MONTGOMERY PALM	10` & 16` CT, HEAVY	**	SINGLE

SHRUB AREAS	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	SPACING
ARA	142	ARACHIS GLABRATA PERENNIAL PEANUT	4" HT. X 12" SPRD.	*	16" OC
BUL	1,188	BULBINE FRUTESCENS STALKED BULBINE	12" HT. X 12" SPRD.	**	12" OC
CHR	1,204	CHRYSOBALANUS ICACO RED TIP COCOPLUM	24" HT. X 24" SPRD.	N**	24" OC
CLG	884	CLUSIA GUTTIFERA SMALL LEAF CLUSIA	36" HT. X 30" SPRD.		30" OC
ERD	739	ERNODEA LITTORALIS GOLDEN CREEPER	12" HT. X 14" SPRD.	N**	
FIM	1,451	FICUS MICROCARPA `GREEN ISLAND`	12" HT. X 12" SPRD.	**	16" OC
HAM	587	HAMELIA PATENS 'AFRICAN' AFRICAN FIREBUSH	24" HT. X 24" SPRD.		24" OC
JAS	1,260	JASMINUM VOLUBILE WAX JASMINE	10" HT. X 16" SPRD.		24" OC
JUN	225	JUNIPERUS C. 'PARSONII' PARSONI JUNIPER	12" HT X 16" SPRD. 18" O.C.		18" OC
MIS	147	MICROSORUM SCOLOPEBDRIUM WART FERN	12" HT. X 14" SPRD.		18" OC
NEP	1,478	NEPHROLEPIS EXALTATA BOSTON FERN	12" HT X 14" SPRD., CERTIFIED NATIVE ONLY	N**	24" OC
PBM	563	PHILODENDRON X 'BURLE MARX' BURLE MARX PHILODENDRON	18" HT. X 18" SPRD.		20" OC
PRC	66	PHILODENDRON X 'ROJO CONGO'	24" HT. X 24" SPRD.		30" OC
PSY	863	PSYCHOTRIA NERVOSA WILD COFFEE	24" HT. X 24" SPRD.	N**	30" OC
RON	229	RONDELETIA LEUCOPHYLLA PANAMA ROSE	24" HT. X 24" SPRD.		24" OC
SAG	67	SAGITTARIA LATIFOLIA LANCE-LEAFED ARROWHEAD	24" HT. X 24" SPRD.	N**	36" OC
TFP	51	TABERNAEMONTANA DIVARICATA 'FLORE PLENO'	30" HT. X 24" SPRD.	**	24" OC
THR	136	THRYALLIS GLAUCA THRYALLIS	24" HT. X 24" SPRD.		24" OC
TRD	768	TRIPSACUM DACTYLOIDES FAKAHATCHEE GRASS	24" HT. X 16" SPRD.	N**	30" OC
TRF	63	TRIPSACUM FLORIDANUM FLORIDA GAMAGRASS	18" HT. X 12" SPRD.	N**	30" OC
TUL	779	TULBAGHIA VIOLACEA SOCIETY GARLIC	12" HT. X 12" SPRD.		12" OC
ZAM	638	ZAMIA PUMILA COONTIE	15" HT. X 18" SPRD.	N**	24" OC

NOTES:

1. SOD TO BE ST. AUGUSTINE 'FLORATAM', EXCEPT IN RETENTION AREAS. CONTRACTOR TO DETERMINE QUANTITY.
2. ALL PLANTS TO BE FLORIDA NO. 1 OR BETTER PER FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS.
3. ALL SOD AND LANDSCAPE TO RECEIVE 100% COVERAGE WITH 100% OVERLAP FROM AN AUTOMATIC IRRIGATION SYSTEM USING AN APPROVED WATER SOURCE.
4. BUBBLERS TO BE PROVIDED FOR NEW AND RELOCATED TREES AND PALMS.
5. CONTRACTOR IS RESPONSIBLE FOR ALL CONDITIONS AND LANDSCAPE SPECIFICATION ATTACHED TO THIS PLAN AND PLANT LIST. PLAN AND SPECIFICATIONS SHALL BE CONSIDERED CONTRACT DOCUMENTS.
6. PRE-CONSTRUCTION MEETING IS REQUIRED BEFORE ANY PLANT MATERIAL IS INSTALLED ON SITE.
7. ALL ROAD ROCK, CONCRETE, ASPHALT AND OTHER NON-NATURAL MATERIAL BE REMOVED AND BE REPLACED WITH PLANTING SOIL PRIOR TO LANDSCAPE INSTALLATION.
8. NO TRENCHING ALLOWED WITHIN ROOT ZONES OF EXISTING TREES.
9. ALL CATEGORY 1 EXOTIC/NATIVE TREES TO BE REMOVED PER LOCAL ORDINANCE.
10. ALL DEAD OR DECLINING LANDSCAPE MATERIAL IS REQUIRED TO BE REPLACED WITH THE SAME OR SIMILAR SPECIES WITHIN 60 DAYS OF PROBLEM IDENTIFICATION.

City of Doral		
Landscape Requirements		
Land Use Designation	CC	
Net Area	11	ACRES
Interior Landscape Requirements		
	REQUIRED	PROVIDED
22 Trees per acre of net lot area	251	272
30% Max Palms (2:1 Palms per tree)	38	28
50% Native trees / palms required	126	201
20% required open space	2 acres	2.55 acres
10 shrubs per required tree	2,510	4,372
50% Native shrubs	1,255	2,902
Trees	REQUIRED	PROVIDED
Street Trees (1 per 35')	8	**9**
Parking Lot Trees (1 Tree per 25 LF of parking lot landscape strip) =1028' LF	42	**45**

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33122
(954) 788-3400
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REVISIONS :

1 PLANNING & ZONING COMMENTS 08/24/2021

SEAL

CONSULTANT
MICHAEL J. PHILLIPS, R.L.A.
FLORIDA REG. NO. LA0001540 (FOR THE FIRM)

STILES ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LP-100

1 LANDSCAPE NOTES & SCHEDULE

PROJECT NO.
11916.00

DRAWN BY :
BRITTANY J.

CHECKED BY :
MICHAEL P.

DATE :
06/08/2021

MATCHLINE: REF. SHEET LP-102

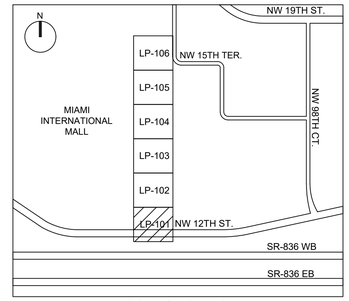
PROPOSED BUILDING
F.F.E. = 10.00 NGVD

EXISTING OFF-SITE TREES TO REMAIN

EXISTING TREES TO REMAIN

SOD

NW 12TH ST



LOCATION SKETCH
(NOT TO SCALE)

QUICK REFEENCE: SEE SHEET LP-100 FOR OVERALL PLANT LIST

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME
BB	11	BUCIDA BUCERAS `SHADY LADY`
BA	14	BULNESIA ARBOREA VERAWOOD
BS	11	BURSERA SIMARUBA GUMBO LIMBO
BS-R	14	BURSERA SIMARUBA GUMBO LIMBO
CE	52	CONOCARPUS ERECTUS GREEN BUTTONWOOD
DR	5	DELONIX REGIA ROYAL POINCIANA
LS	9	LAGERSTROEMIA SPECIOSA QUEEN`S CRAPE MYRTLE
LL	20	LYSILOMA LATISILIQUUM WILD TAMARIND
MF	1	MYRCIANTHES FRAGRANS SIMPSON'S STOPPER
QV	77	QUERCUS VIRGINIANA SOUTHERN LIVE OAK
QV-R	3	QUERCUS VIRGINIANA SOUTHERN LIVE OAK
SM	15	SWIETENIA MAHAGONI MAHOGANY
TD3	12	TAXODIUM DISTICHUM BALD CYPRESS
TD	27	TAXODIUM DISTICHUM BALD CYPRESS
TG	10	TIBOUCHINA GRANULOSA PURPLE GLORY TREE

PALMS	QTY	BOTANICAL / COMMON NAME
AM	23	ADONIDIA MERRILLII CHRISTMAS PALM
PE	5	PTYCHOSPERMA ELEGANS SOLITARE PALM
PE3	6	PTYCHOSPERMA ELEGANS SOLITARE PALM
RE	6	ROYSTONEA ELATA ROYAL PALM
RE-R	3	ROYSTONEA ELATA ROYAL PALM
TR	7	THRINAX RADIATA FLORIDA THATCH PALM
VM	5	VEITCHIA MONTGOMERYANA MONTGOMERY PALM

SHRUB AREAS	QTY	BOTANICAL / COMMON NAME
ARA	142	ARACHIS GLABRATA PERENNIAL PEANUT
BUL	1,188	BULBINE FRUTESCENS STALKED BULBINE
CHR	1,204	CHRYSOBALANUS ICACO RED TIP COCOPLUM
CLG	884	CLUSIA GUTTIFERA SMALL LEAF CLUSIA
ERD	739	ERNODEA LITTORALIS GOLDEN CREEPER
FIM	1,451	FICUS MICROCARPA `GREEN ISLAND`
HAM	587	HAMELIA PATENS 'AFRICAN' AFRICAN FIREBUSH
JAS	1,260	JASMINUM VOLUBILE WAX JASMINE
JUN	225	JUNIPERUS C. 'PARSONII' PARSONI JUNIPER
MIS	147	MICROSORUM SCOLOPEBDRIUM WART FERN
NEP	1,478	NEPHROLEPIS EXALTATA BOSTON FERN
PBM	563	PHILODENDRON X 'BURLE MARX' BURLE MARX PHILODENDRON
PRC	66	PHILODENDRON X 'ROJO CONGO'
PSY	863	PSYCHOTRIA NERVOSA WILD COFFEE
RON	229	RONDELETIA LEUCOPHYLLA PANAMA ROSE
SAG	67	SAGITTARIA LATIFOLIA LANCE-LEAFED ARROWHEAD
TFP	51	TABERNAEMONTANA DIVARICATA 'FLORE PLENO'
THR	136	THRYALLIS GLAUCA THRYALLIS
TRD	768	TRIPSACUM DACTYLOIDES FAKAHATCHEE GRASS
TRF	63	TRIPSACUM FLORIDANUM FLORIDA GAMAGRASS
TUL	779	TULBAGHIA VIOLACEA SOCIETY GARLIC
ZAM	638	ZAMIA PUMILA COONTIE

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH
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REVISIONS :
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NEW KIA & SUBARU
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LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LP-101

1 LANDSCAPE PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LP-103

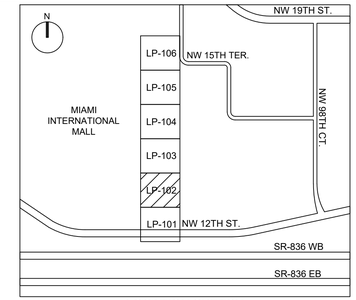
MATCHLINE: REF. SHEET LP-101

EXISTING OFF-SITE TREES TO REMAIN

EXISTING TREES TO REMAIN

PROPERTY LINE (TYP.)

PROPOSED BUILDING
F.F.E. = 10.00 NGVD



LOCATION SKETCH
(NOT TO SCALE)

QUICK REFEENCE: SEE SHEET LP-100 FOR OVERALL PLANT LIST

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME
BB	11	BUCIDA BUCERAS `SHADY LADY`
BA	14	BULNESIA ARBOREA VERAWOOD
BS	11	BURSERA SIMARUBA GUMBO LIMBO
BS-R	14	BURSERA SIMARUBA GUMBO LIMBO
CE	52	CONOCARPUS ERECTUS GREEN BUTTONWOOD
DR	5	DELONIX REGIA ROYAL POINCIANA
LS	9	LAGERSTROEMIA SPECIOSA QUEEN`S CRAPE MYRTLE
LL	20	LYSILOMA LATISILIQUUM WILD TAMARIND
MF	1	MYRCIANTHES FRAGRANS SIMPSON'S STOPPER
QV	77	QUERCUS VIRGINIANA SOUTHERN LIVE OAK
QV-R	3	QUERCUS VIRGINIANA SOUTHERN LIVE OAK
SM	15	SWIETENIA MAHAGONI MAHOGANY
TD3	12	TAXODIUM DISTICHUM BALD CYPRESS
TD	27	TAXODIUM DISTICHUM BALD CYPRESS
TG	10	TIBOUCHINA GRANULOSA PURPLE GLORY TREE

PALMS	QTY	BOTANICAL / COMMON NAME
AM	23	ADONIDIA MERRILLII CHRISTMAS PALM
PE	5	PTYCHOSPERMA ELEGANS SOLITARE PALM
PE3	6	PTYCHOSPERMA ELEGANS SOLITARE PALM
RE	6	ROYSTONEA ELATA ROYAL PALM
RE-R	3	ROYSTONEA ELATA ROYAL PALM
TR	7	THRINAX RADIATA FLORIDA THATCH PALM
VM	5	VEITCHIA MONTGOMERYANA MONTGOMERY PALM

SHRUB AREAS	QTY	BOTANICAL / COMMON NAME
ARA	142	ARACHIS GLABRATA PERENNIAL PEANUT
BUL	1,188	BULBINE FRUTESCENS STALKED BULBINE
CHR	1,204	CHRYSOBALANUS ICACO RED TIP COCOPLUM
CLG	884	CLUSIA GUTTIFERA SMALL LEAF CLUSIA
ERD	739	ERNODEA LITTORALIS GOLDEN CREEPER
FIM	1,451	FICUS MICROCARPA `GREEN ISLAND`
HAM	587	HAMELIA PATENS 'AFRICAN' AFRICAN FIREBUSH
JAS	1,260	JASMINUM VOLUBILE WAX JASMINE
JUN	225	JUNIPERUS C. 'PARSONII' PARSONI JUNIPER
MIS	147	MICROSORUM SCOLOPEBDRIUM WART FERN
NEP	1,478	NEPHROLEPIS EXALTATA BOSTON FERN
PBM	563	PHILODENDRON X 'BURLE MARX' BURLE MARX PHILODENDRON
PRC	66	PHILODENDRON X 'ROJO CONGO'
PSY	863	PSYCHOTRIA NERVOSA WILD COFFEE
RON	229	RONDELETIA LEUCOPHYLLA PANAMA ROSE
SAG	67	SAGITTARIA LATIFOLIA LANCE-LEAFED ARROWHEAD
TFP	51	TABERNAEMONTANA DIVARICATA 'FLORE PLENO'
THR	136	THRYALLIS GLAUCA THRYALLIS
TRD	768	TRIPSACUM DACTYLOIDES FAKAHATCHEE GRASS
TRF	63	TRIPSACUM FLORIDANUM FLORIDA GAMAGRASS
TUL	779	TULBAGHIA VIOLACEA SOCIETY GARLIC
ZAM	638	ZAMIA PUMILA COONTIE

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH
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NEW KIA & SUBARU
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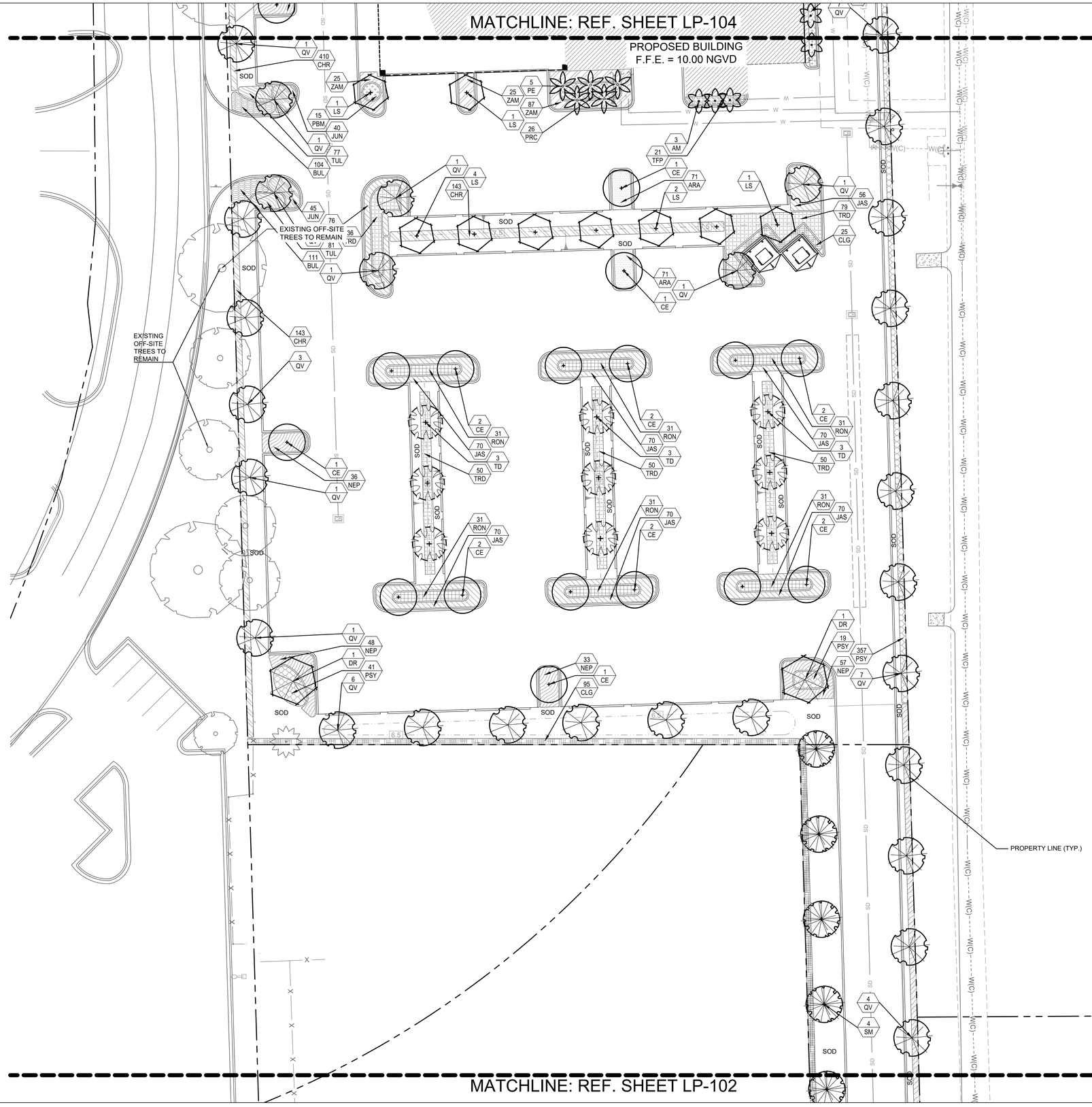
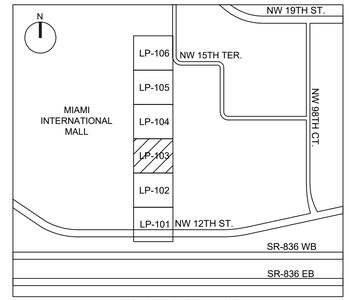
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LP-102

1 LANDSCAPE PLAN

PROJECT NO. 11916.00
DRAWN BY : BRITTANY J.
CHECKED BY : MICHAEL P.
DATE : 06/08/2021





LOCATION SKETCH
(NOT TO SCALE)

QUICK REFEENCE: SEE SHEET LP-100 FOR OVERALL PLANT LIST

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME
BB	11	BUCIDA BUCERAS `SHADY LADY`
BA	14	BULNESIA ARBOREA VERAWOOD
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DR	5	DELONIX REGIA ROYAL POINCIANA
LS	9	LAGERSTROEMIA SPECIOSA QUEEN`S CRAPE MYRTLE
LL	20	LYSILOMA LATISILIQUUM WILD TAMARIND
MF	1	MYRCIANTHES FRAGRANS SIMPSON'S STOPPER
QV	77	QUERCUS VIRGINIANA SOUTHERN LIVE OAK
QV-R	3	QUERCUS VIRGINIANA SOUTHERN LIVE OAK
SM	15	SWIETENIA MAHAGONI MAHOGANY
TD3	12	TAXODIUM DISTICHUM BALD CYPRESS
TD	27	TAXODIUM DISTICHUM BALD CYPRESS
TG	10	TIBOUCHINA GRANULOSA PURPLE GLORY TREE

PALMS	QTY	BOTANICAL / COMMON NAME
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PE3	6	PTYCHOSPERMA ELEGANS SOLITARE PALM
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RE-R	3	ROYSTONEA ELATA ROYAL PALM
TR	7	THRINAX RADIATA FLORIDA THATCH PALM
VM	5	VEITCHIA MONTGOMERYANA MONTGOMERY PALM

SHRUB AREAS	QTY	BOTANICAL / COMMON NAME
ARA	142	ARACHIS GLABRATA PERENNIAL PEANUT
BUL	1,188	BULBINE FRUTESCENS STALKED BULBINE
CHR	1,204	CHRYSOBALANUS ICACO RED TIP COCOPLUM
CLG	884	CLUSIA GUTTIFERA SMALL LEAF CLUSIA
ERD	739	ERNODEA LITTORALIS GOLDEN CREEPER
FIM	1,451	FICUS MICROCARPA `GREEN ISLAND`
HAM	587	HAMELIA PATENS 'AFRICAN' AFRICAN FIREBUSH
JAS	1,260	JASMINUM VOLUBILE WAX JASMINE
JUN	225	JUNIPERUS C. 'PARSONII' PARSONI JUNIPER
MIS	147	MICROSORUM SCOLOPEBDRIUM WART FERN
NEP	1,478	NEPHROLEPIS EXALTATA BOSTON FERN
PBM	563	PHILODENDRON X 'BURLE MARX' BURLE MARX PHILODENDRON
PRC	66	PHILODENDRON X 'ROJO CONGO'
PSY	863	PSYCHOTRIA NERVOSA WILD COFFEE
RON	229	RONDELETIA LEUCOPHYLLA PANAMA ROSE
SAG	67	SAGITTARIA LATIFOLIA LANCE-LEAFED ARROWHEAD
TFP	51	TABERNAEMONTANA DIVARICATA 'FLORE PLENO'
THR	136	THRYALLIS GLAUCA THRYALLIS
TRD	768	TRIPSACUM DACTYLOIDES FAKAHATCHEE GRASS
TRF	63	TRIPSACUM FLORIDANUM FLORIDA GAMAGRASS
TUL	779	TULBAGHIA VIOLACEA SOCIETY GARLIC
ZAM	638	ZAMIA PUMILA COONTIE

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH
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REVISIONS :
1 PLANNING & ZONING COMMENTS 08/24/2021

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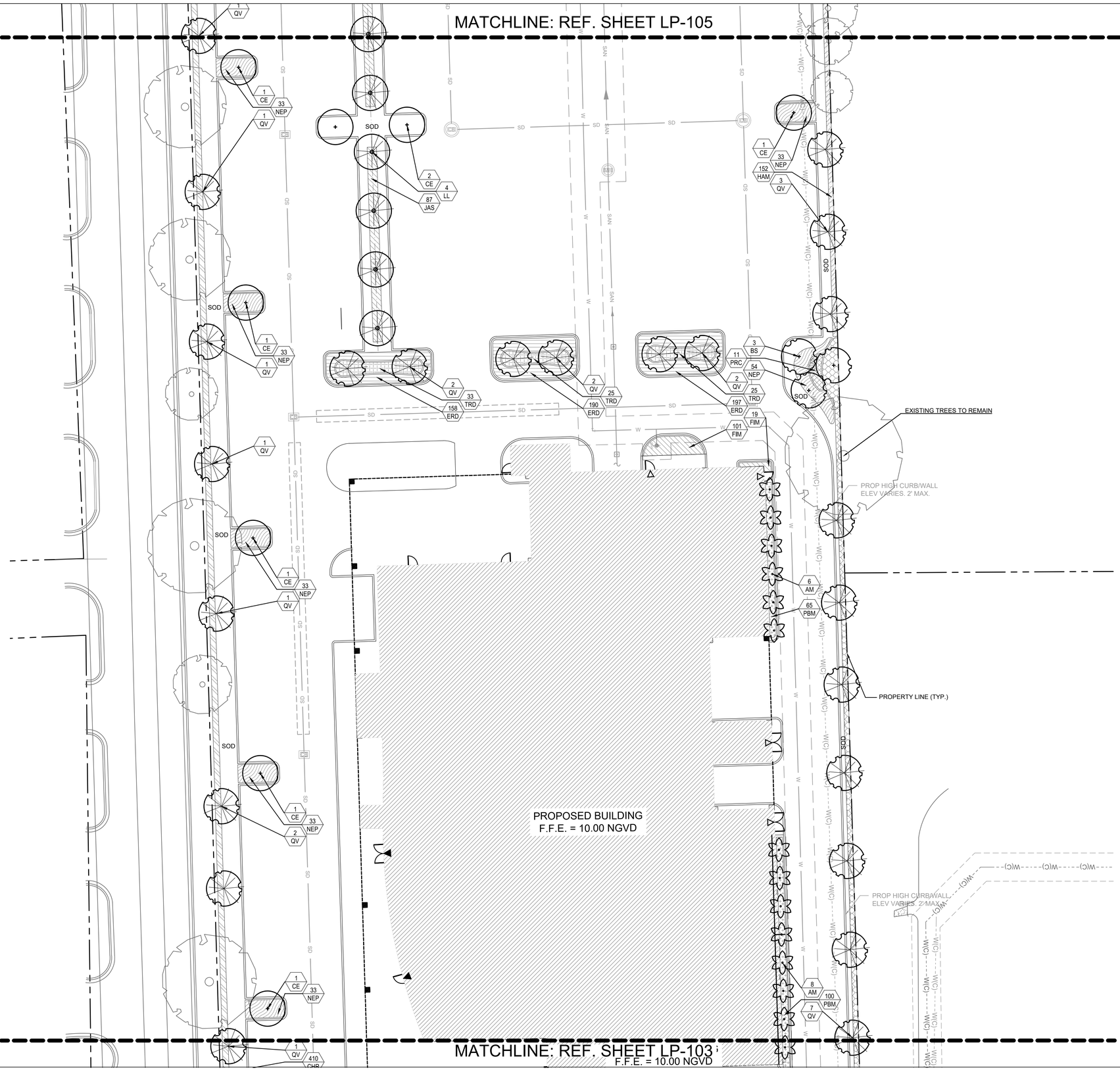
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LP-103

1 LANDSCAPE PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LP-105



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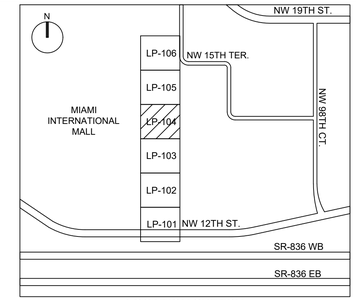
F.F.E. = 10.00 NGVD



LOCATION SKETCH
(NOT TO SCALE)

QUICK REFEENCE: SEE SHEET LP-100 FOR OVERALL PLANT LIST

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME
BB	11	BUCIDA BUCERAS `SHADY LADY`
BA	14	BULNESIA ARBOREA VERAWOOD
BS	11	BURSERA SIMARUBA GUMBO LIMBO
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DR	5	DELONIX REGIA ROYAL POINCIANA
LS	9	LAGERSTROEMIA SPECIOSA QUEEN`S CRAPE MYRTLE
LL	20	LYSILOMA LATISILIQUUM WILD TAMARIND
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N

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SCALE: 1" = 20 '

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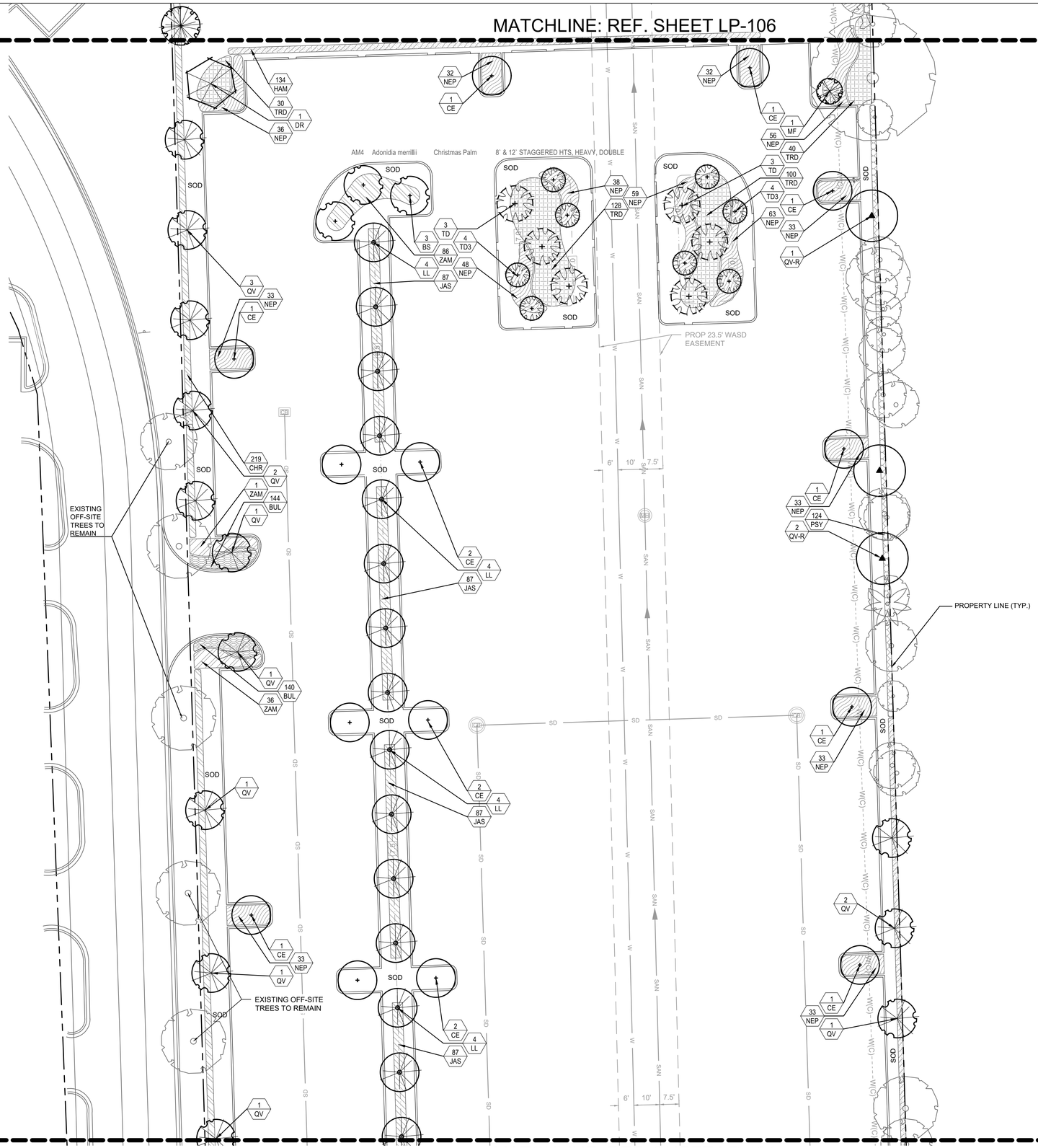
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LP-104

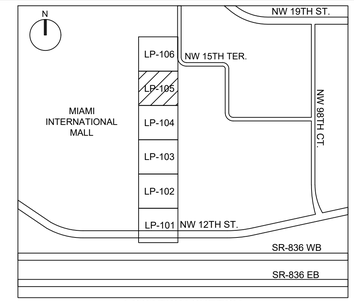
1 LANDSCAPE PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LP-106



MATCHLINE: REF. SHEET LP-104



LOCATION SKETCH
(NOT TO SCALE)

QUICK REFEENCE: SEE SHEET LP-100 FOR OVERALL PLANT LIST

PLANT SCHEDULE

TREES	QTY	BOTANICAL / COMMON NAME
BB	11	BUCIDA BUCERAS `SHADY LADY`
BA	14	BULNESIA ARBOREA VERAWOOD
BS	11	BURSERA SIMARUBA GUMBO LIMBO
BS-R	14	BURSERA SIMARUBA GUMBO LIMBO
CE	52	CONOCARPUS ERECTUS GREEN BUTTONWOOD
DR	5	DELONIX REGIA ROYAL POINCIANA
LS	9	LAGERSTROEMIA SPECIOSA QUEEN`S CRAPE MYRTLE
LL	20	LYSILOMA LATISILIQUUM WILD TAMARIND
MF	1	MYRCIANTHES FRAGRANS SIMPSON'S STOPPER
QV	77	QUERCUS VIRGINIANA SOUTHERN LIVE OAK
QV-R	3	QUERCUS VIRGINIANA SOUTHERN LIVE OAK
SM	15	SWIETENIA MAHAGONI MAHOGANY
TD3	12	TAXODIUM DISTICHUM BALD CYPRESS
TD	27	TAXODIUM DISTICHUM BALD CYPRESS
TG	10	TIBOUCHINA GRANULOSA PURPLE GLORY TREE

PALMS	QTY	BOTANICAL / COMMON NAME
AM	23	ADONIDIA MERRILLII CHRISTMAS PALM
PE	5	PTYCHOSPERMA ELEGANS SOLITARE PALM
PE3	6	PTYCHOSPERMA ELEGANS SOLITARE PALM
RE	6	ROYSTONEA ELATA ROYAL PALM
RE-R	3	ROYSTONEA ELATA ROYAL PALM
TR	7	THRINAX RADIATA FLORIDA THATCH PALM
VM	5	VEITCHIA MONTGOMERYANA MONTGOMERY PALM

SHRUB AREAS	QTY	BOTANICAL / COMMON NAME
ARA	142	ARACHIS GLABRATA PERENNIAL PEANUT
BUL	1,188	BULBINE FRUTESCENS STALKED BULBINE
CHR	1,204	CHRYSOBALANUS ICACO RED TIP COCOPLUM
CLG	884	CLUSIA GUTTIFERA SMALL LEAF CLUSIA
ERD	739	ERNODEA LITTORALIS GOLDEN CREEPER
FIM	1,451	FICUS MICROCARPA `GREEN ISLAND`
HAM	587	HAMELIA PATENS 'AFRICAN' AFRICAN FIREBUSH
JAS	1,260	JASMINUM VOLUBILE WAX JASMINE
JUN	225	JUNIPERUS C. 'PARSONII' PARSONI JUNIPER
MIS	147	MICROSORUM SCOLOPEBDRIUM WART FERN
NEP	1,478	NEPHROLEPIS EXALTATA BOSTON FERN
PBM	563	PHILODENDRON X 'BURLE MARX' BURLE MARX PHILODENDRON
PRC	66	PHILODENDRON X 'ROJO CONGO'
PSY	863	PSYCHOTRIA NERVOSA WILD COFFEE
RON	229	RONDELETIA LEUCOPHYLLA PANAMA ROSE
SAG	67	SAGITTARIA LATIFOLIA LANCE-LEAFED ARROWHEAD
TFP	51	TABERNAEMONTANA DIVARICATA 'FLORE PLENO'
THR	136	THRYALLIS GLAUCA THRYALLIS
TRD	768	TRIPSACUM DACTYLOIDES FAKAHATCHEE GRASS
TRF	63	TRIPSACUM FLORIDANUM FLORIDA GAMAGRASS
TUL	779	TULBAGHIA VIOLACEA SOCIETY GARLIC
ZAM	638	ZAMIA PUMILA COONTIE

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33122
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :
1 PLANNING & ZONING COMMENTS 08/24/2021

SEAL

CONSULTANT
MICHAEL J. PHILLIPS, R.L.A.
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

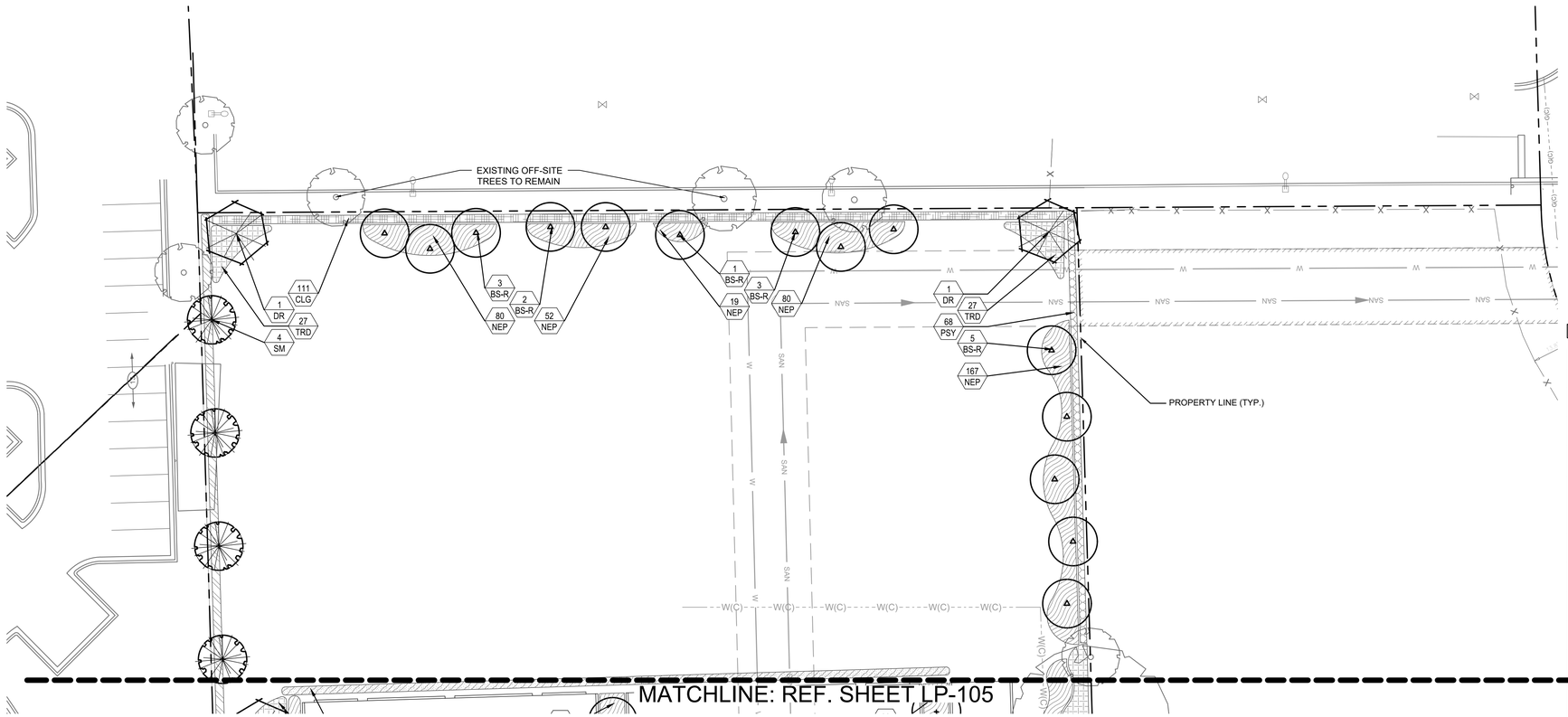
STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

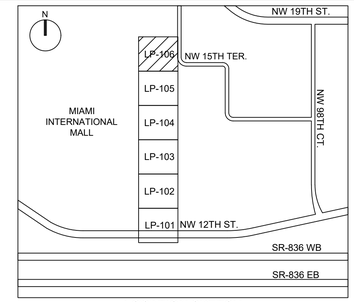
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LP-105

1 LANDSCAPE PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021





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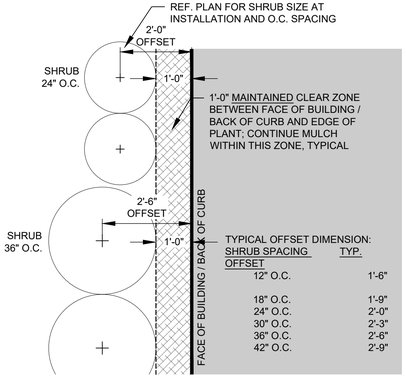
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LP-106

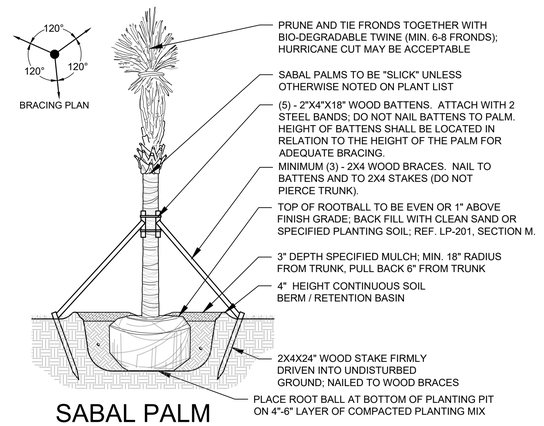
1
LANDSCAPE PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021



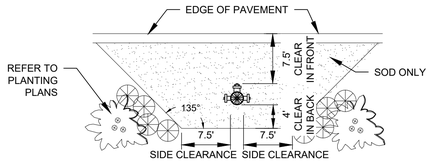
TYPICAL SHRUB OFFSET AT BUILDING / CURB

11 PLAN NOT TO SCALE



SABAL PALM PLANTING DETAIL

10 SECTION NOT TO SCALE

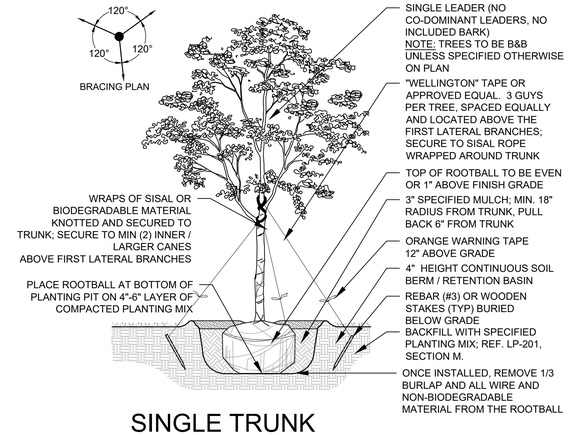


REQUIREMENTS APPLY TO FIRE HYDRANTS, SIAMESE CONNECTIONS AND ANY OTHER FIRE EQUIPMENT FOR UTILIZING FIRE HOSE, ON PUBLIC OR PRIVATE PROPERTY. BY THE AUTHORITY OF THE FLORIDA BUILDING CODE.

THE CLEAR ZONE SHALL BE FREE OF LANDSCAPE (EXCEPT SOD), MAILBOXES, PARKING, LAMP-POSTS AND ALL OTHER OBJECTS. EXCEPTIONS: OTHER FIRE FIGHTING EQUIPMENT OR TRAFFIC POSTS TO PREVENT FIRE FIGHTING EQUIPMENT BEING BLOCKED.

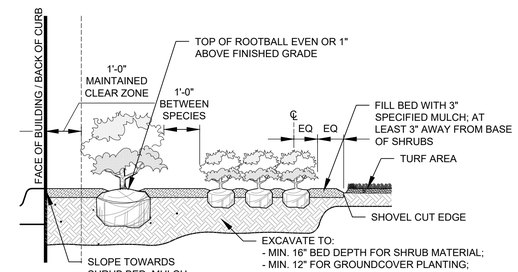
FIRE HYDRANT CLEAR ZONE

09 PLAN NOT TO SCALE



SINGLE TRUNK TREE PLANTING DETAIL

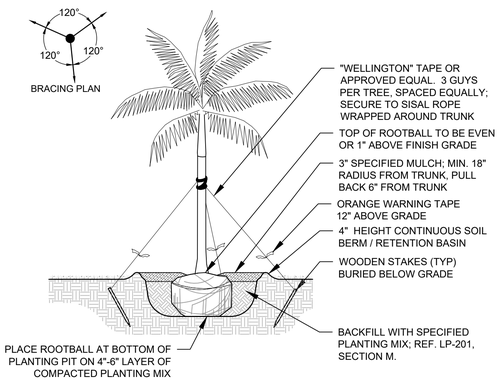
08 SECTION NOT TO SCALE



NOTE:
- PLANT MATERIAL SHALL NOT BE PRUNED PRIOR TO INSTALLATION. AFTER PLANTS HAVE BEEN INSTALLED, EACH PLANT SHALL BE PRUNED FOR UNIFORMITY OR AT THE DIRECTION OF THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL ASSURE PERCOLATION OF ALL PLANTING BEDS PRIOR TO INSTALLATION.

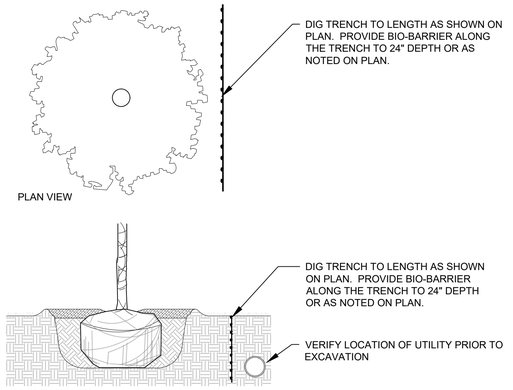
SHRUB AND GROUNDCOVER PLANTING

07 SECTION NOT TO SCALE



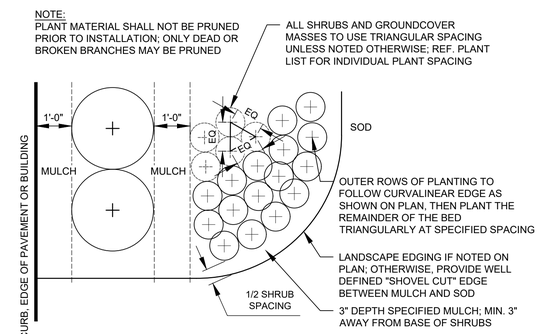
SMALL / MEDIUM TREE PALM PLANTING DETAIL

06 SECTION NOT TO SCALE



ROOT BARRIER DETAIL

05 PLAN / SECTION NOT TO SCALE

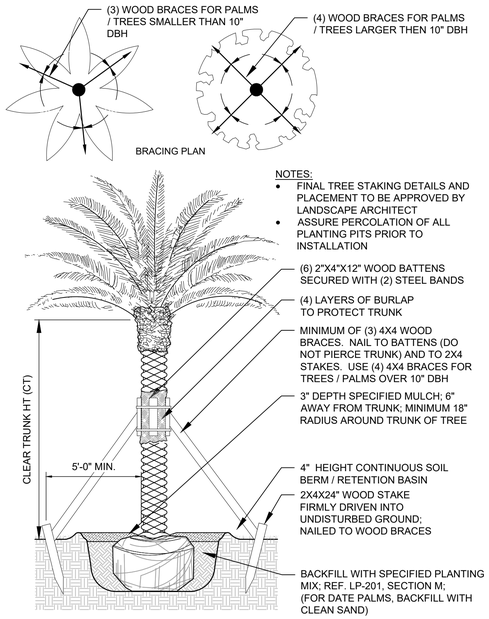


NOTE:
PLANT MATERIAL SHALL NOT BE PRUNED PRIOR TO INSTALLATION; ONLY DEAD OR BROKEN BRANCHES MAY BE PRUNED

ALL SHRUBS AND GROUNDCOVER MASSES TO USE TRIANGULAR SPACING UNLESS NOTED OTHERWISE; REF. PLANT LIST FOR INDIVIDUAL PLANT SPACING

SHRUB AND GROUNDCOVER PLANTING

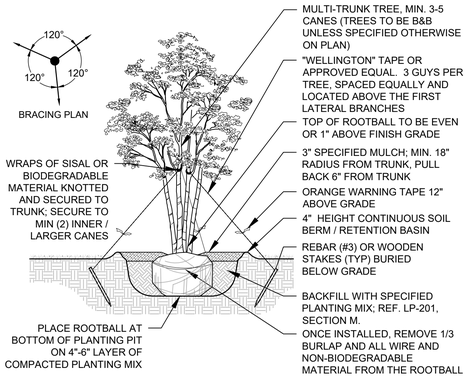
04 PLAN NOT TO SCALE



NOTES:
- FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY LANDSCAPE ARCHITECT
- ASSURE PERCOLATION OF ALL PLANTING PITS PRIOR TO INSTALLATION

LARGE TREE PALM PLANTING DETAIL

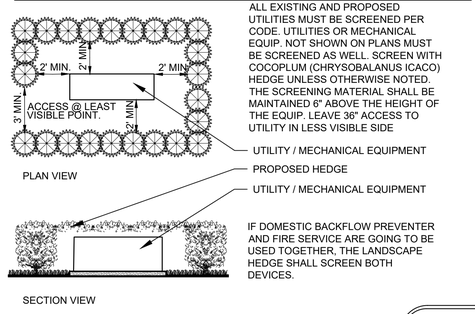
03 SECTION NOT TO SCALE



MULTI-TRUNK TREE PLANTING DETAIL

02 SECTION NOT TO SCALE

NOTE:
- REF. LP-201, LANDSCAPE NOTES, FOR ADDITIONAL REQUIREMENTS.
- ROOT BALL SIZE FOR ALL TREES AND PALMS TO BE IN PROPORTION TO SIZE AND TYPE OF PALM PER FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS.



TYPICAL SCREEN FOR UTILITIES / MECH. EQUIP.

01 PLAN / SECTION NOT TO SCALE

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REVISIONS :

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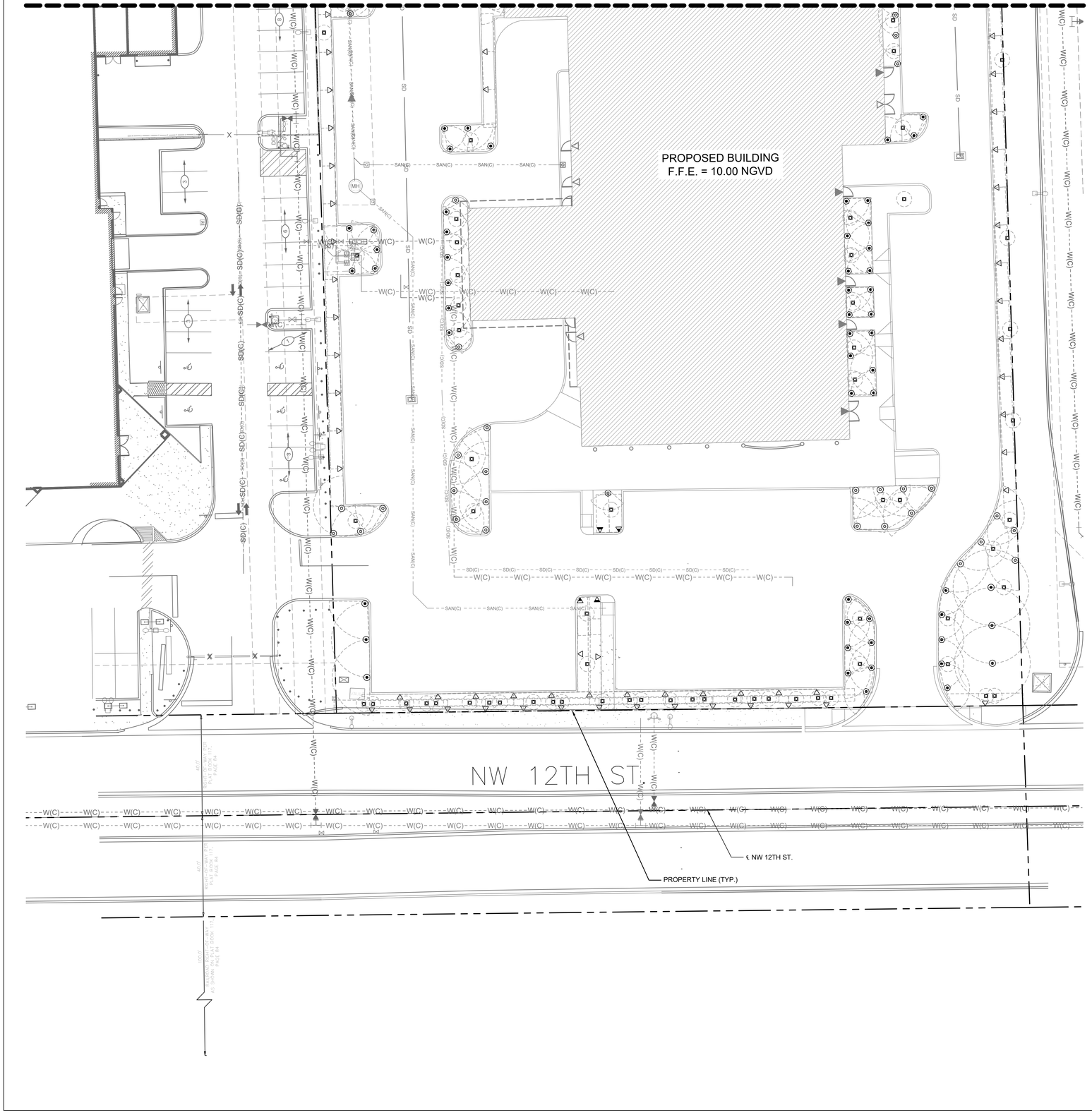
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

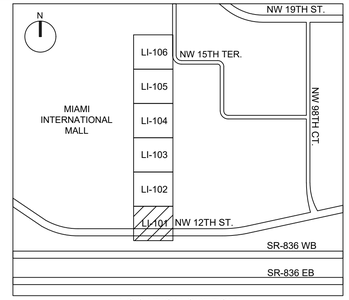
LP-501

LANDSCAPE DETAILS

PROJECT NO. 11916.00
DRAWN BY : BRITTANY J.
CHECKED BY : MICHAEL P.
DATE : 06/08/2021

MATCHLINE: REF. SHEET LI-102





LOCATION SKETCH
(NOT TO SCALE)

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI		
EST LCS RCS CST SST	HUNTER PROS-06 5' STRIP SPRAY SHRUB SPRAY, 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	283	30		
4 6 8 10 12 15 17	HUNTER PROS-06 ADJUSTABLE ARC SHRUB SPRAY, 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	696	30		
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT. ADD 2 BUBBLERS PER TREE, BUBBLERS PLAN WILL BE PROVIDED ON NEXT SUBMITTAL.	305	20		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
△	HUNTER I-90-ADV LONGEST DISTANCE TURF ROTOR, 3.0" POP-UP. ADJUSTABLE ARC, DRAIN CHECK VALVE, PLASTIC RISER, 1-1/2" FEMALE NPT INLET.	6	60	22	63'
△	HUNTER I-90-ADV LONGEST DISTANCE TURF ROTOR, 3.0" POP-UP. ADJUSTABLE ARC, DRAIN CHECK VALVE, PLASTIC RISER, 1-1/2" FEMALE NPT INLET.	6	60	34	69'

NOTES:

1. ALL SOD AND LANDSCAPE TO RECEIVE 100% COVERAGE WITH 100% OVERLAP FROM AN AUTOMATIC IRRIGATION SYSTEM USING AN APPROVED WATER SOURCE.
2. A RAIN SENSOR MUST BE INSTALLED TO OVER-RIDE THE CONTROLLER.
3. BUBBLERS TO BE PROVIDED FOR NEW AND RELOCATED TREES AND PALMS.
4. CONTRACTOR IS RESPONSIBLE FOR ALL CONDITIONS AND IRRIGATION SPECIFICATION ATTACHED TO THIS PLAN. PLAN AND SPECIFICATIONS SHALL BE CONSIDERED CONTRACT DOCUMENTS.
5. INVESTIGATE TO DETERMINE AND VERIFY THE LOCATION OF UNDERGROUND UTILITIES BEFORE EXCAVATION.
6. REFER TO SHEET LI-501 FOR ADDITIONAL IRRIGATION SPECIFICATIONS AND DETAILS.
7. NOZZLE SELECTION BASED ON COVERAGE REQUIREMENTS.

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

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KIA
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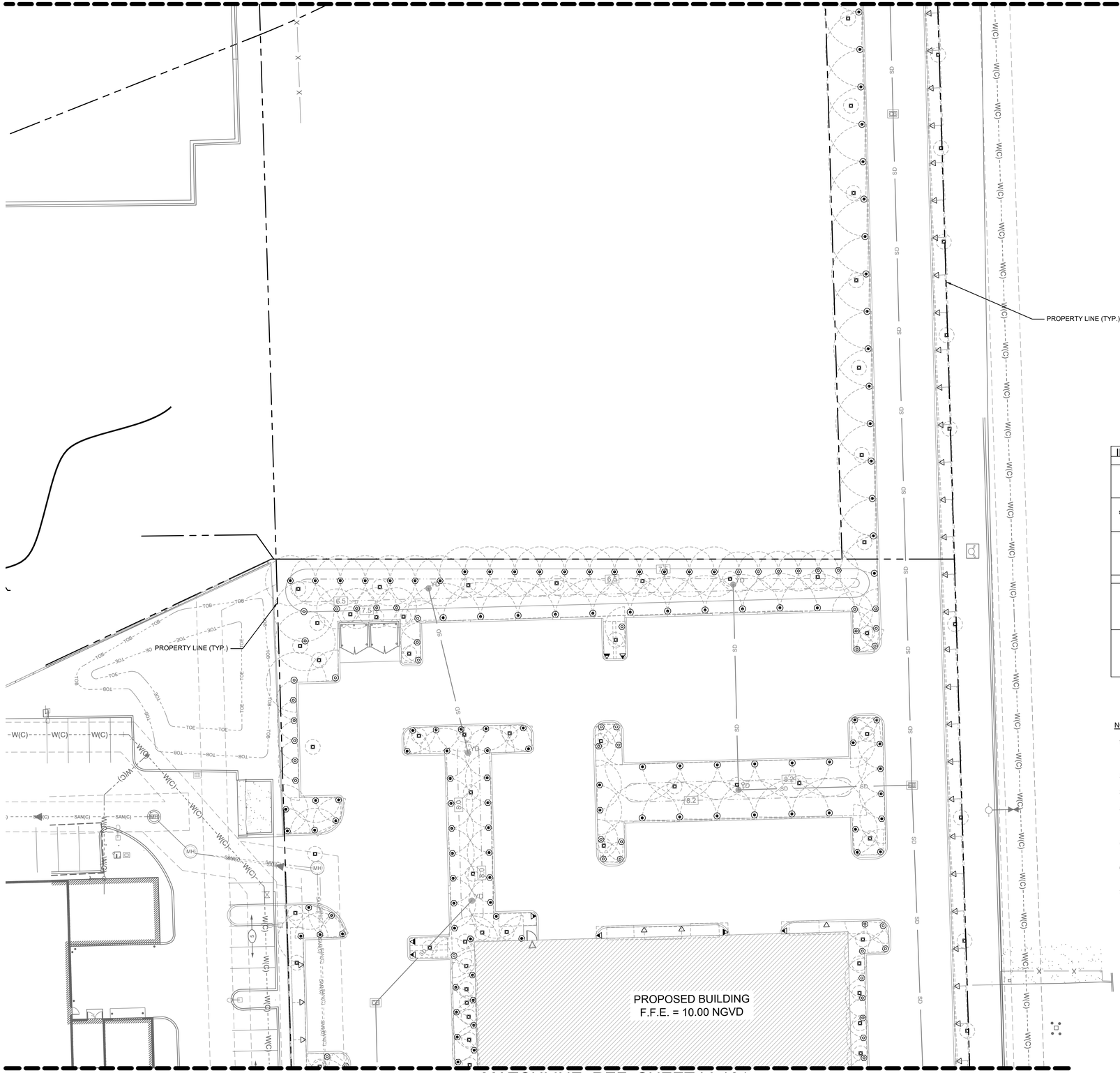
LI-101

1

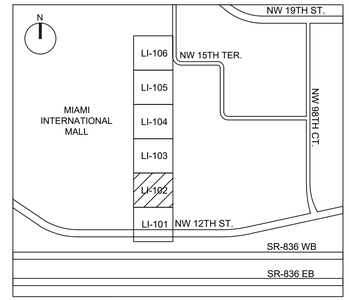
IRRIGATION PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LI-103



MATCHLINE: REF. SHEET LI-101



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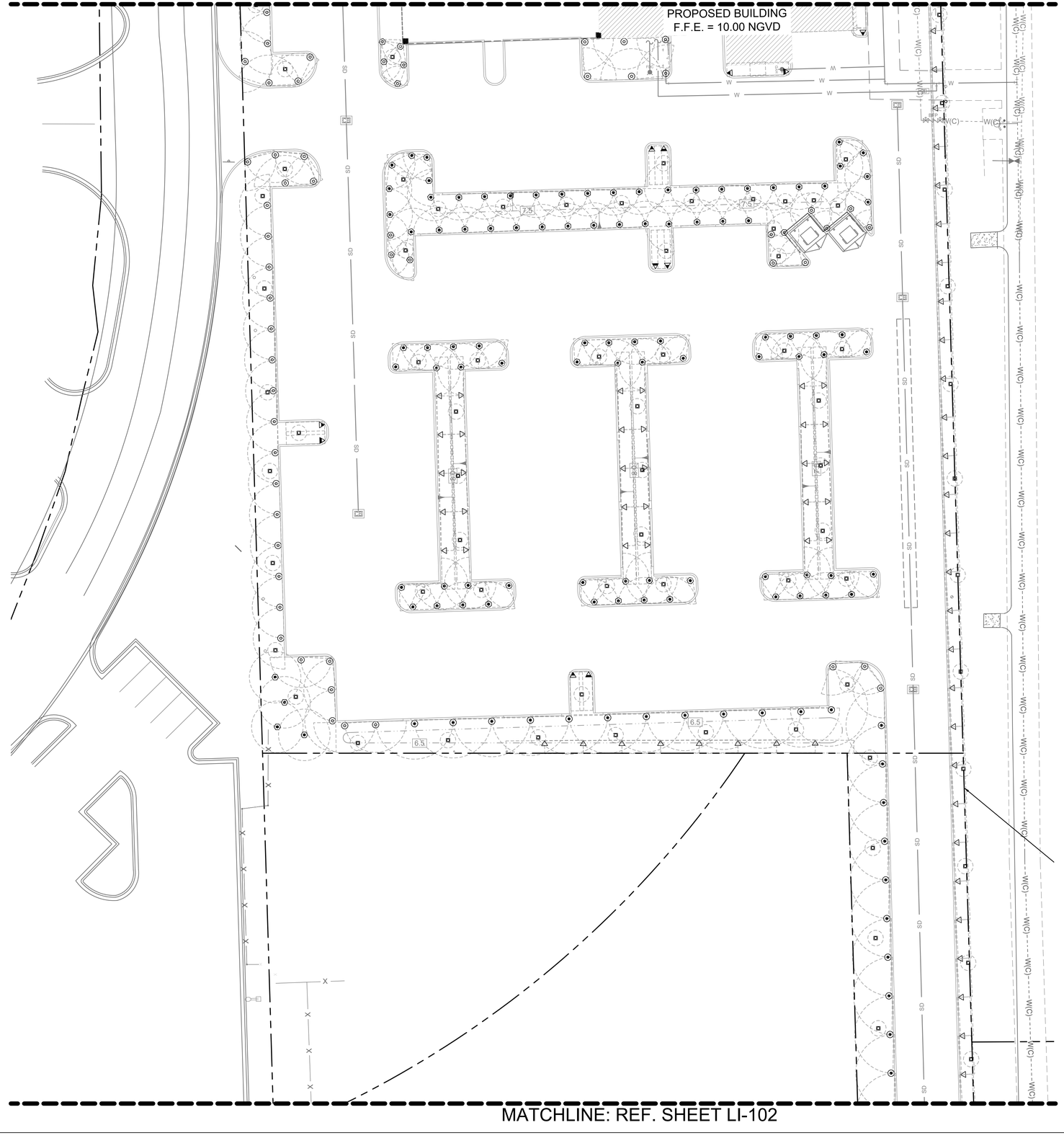
DORAL, FLORIDA 33172

LI-102

1
IRRIGATION PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LI-104



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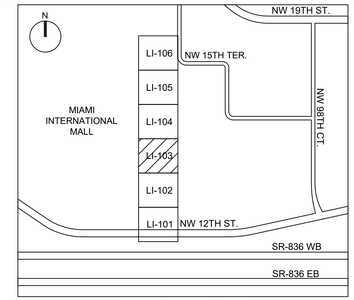

LOCATION SKETCH
(NOT TO SCALE)

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI		
EST LCS RCS CST SST	HUNTER PROS-06 5´ STRIP SPRAY SHRUB SPRAY, 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	283	30		
4 6 8 10 12 15 17	HUNTER PROS-06 ADJUSTABLE ARC SHRUB SPRAY, 6.0" POP-UP. CO-MOLDED WIPER SEAL WITH UV RESISTANT MATERIAL.	696	30		
25 50 10 20	HUNTER PCB 10 FLOOD BUBBLER, 1/2" FIPT. ADD 2 BUBBLERS PER TREE, BUBBLERS PLAN WILL BE PROVIDED ON NEXT SUBMITTAL.	305	20		
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI	GPM	RADIUS
△	HUNTER I-90-ADV LONGEST DISTANCE TURF ROTOR, 3.0" POP-UP. ADJUSTABLE ARC, DRAIN CHECK VALVE, PLASTIC RISER, 1-1/2" FEMALE NPT INLET.	6	60	22	63'
△	HUNTER I-90-ADV LONGEST DISTANCE TURF ROTOR, 3.0" POP-UP. ADJUSTABLE ARC, DRAIN CHECK VALVE, PLASTIC RISER, 1-1/2" FEMALE NPT INLET.	6	60	34	69'

NOTES:

1. ALL SOD AND LANDSCAPE TO RECEIVE 100% COVERAGE WITH 100% OVERLAP FROM AN AUTOMATIC IRRIGATION SYSTEM USING AN APPROVED WATER SOURCE.
2. A RAIN SENSOR MUST BE INSTALLED TO OVER-RIDE THE CONTROLLER.
3. BUBBLERS TO BE PROVIDED FOR NEW AND RELOCATED TREES AND PALMS.
4. CONTRACTOR IS RESPONSIBLE FOR ALL CONDITIONS AND IRRIGATION SPECIFICATION ATTACHED TO THIS PLAN. PLAN AND SPECIFICATIONS SHALL BE CONSIDERED CONTRACT DOCUMENTS.
5. INVESTIGATE TO DETERMINE AND VERIFY THE LOCATION OF UNDERGROUND UTILITIES BEFORE EXCAVATION.
6. REFER TO SHEET LI-501 FOR ADDITIONAL IRRIGATION SPECIFICATIONS AND DETAILS.
7. NOZZLE SELECTION BASED ON COVERAGE REQUIREMENTS.

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '
NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH
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State of Florida Certificate of Authorization Number - 7928

REVISIONS :
1 PLANNING & ZONING COMMENTS 08/24/2021

SEAL

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SHOWROOM & SERVICE BUILDING
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KIA
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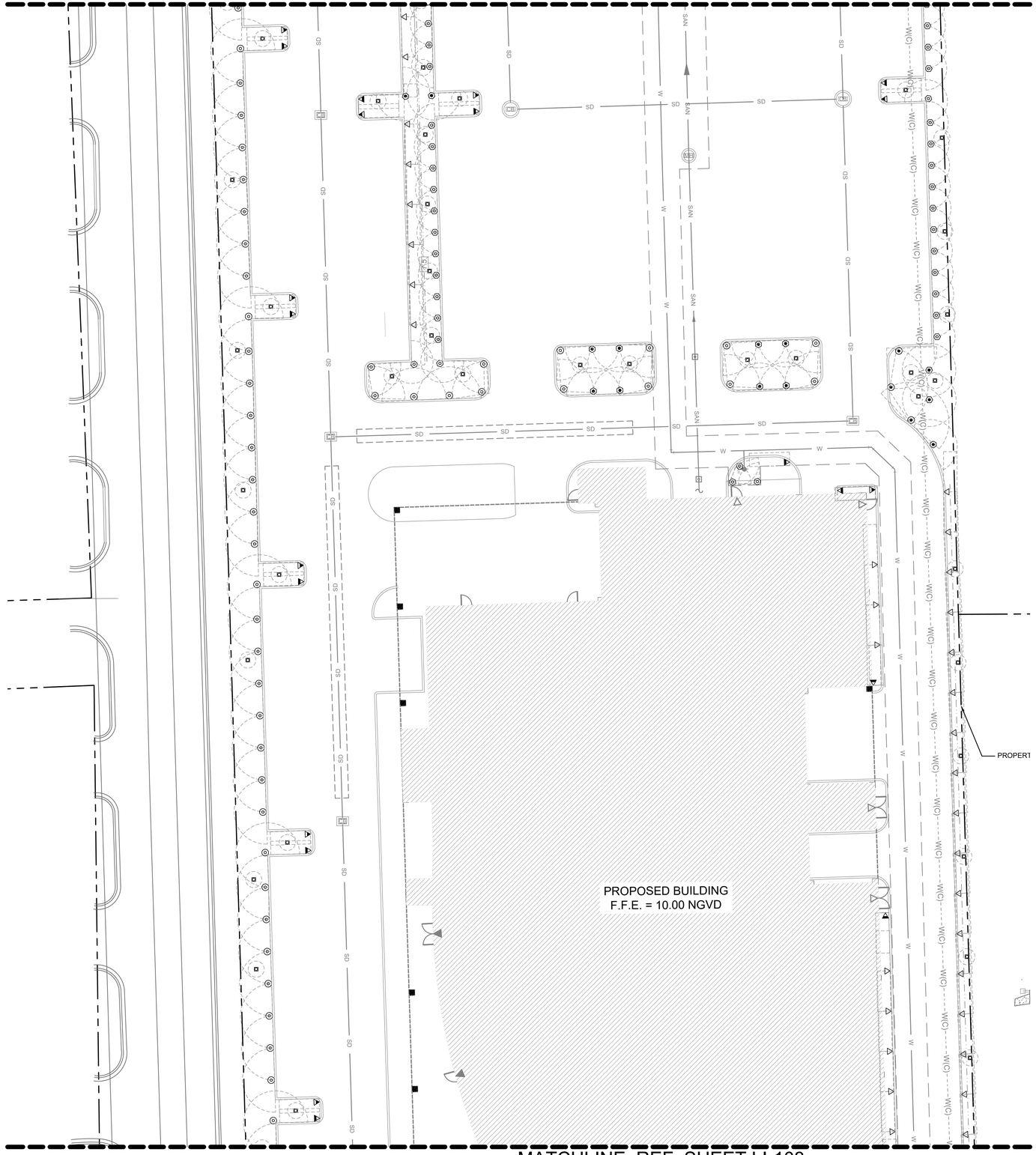
DORAL, FLORIDA 33172

LI-103

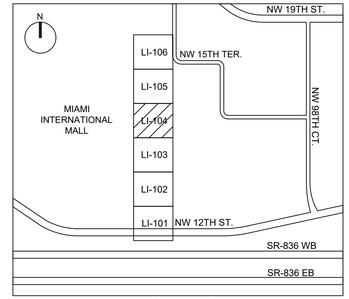
1
IRRIGATION PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LI-105



MATCHLINE: REF. SHEET LI-103



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IRRIGATION SCHEDULE

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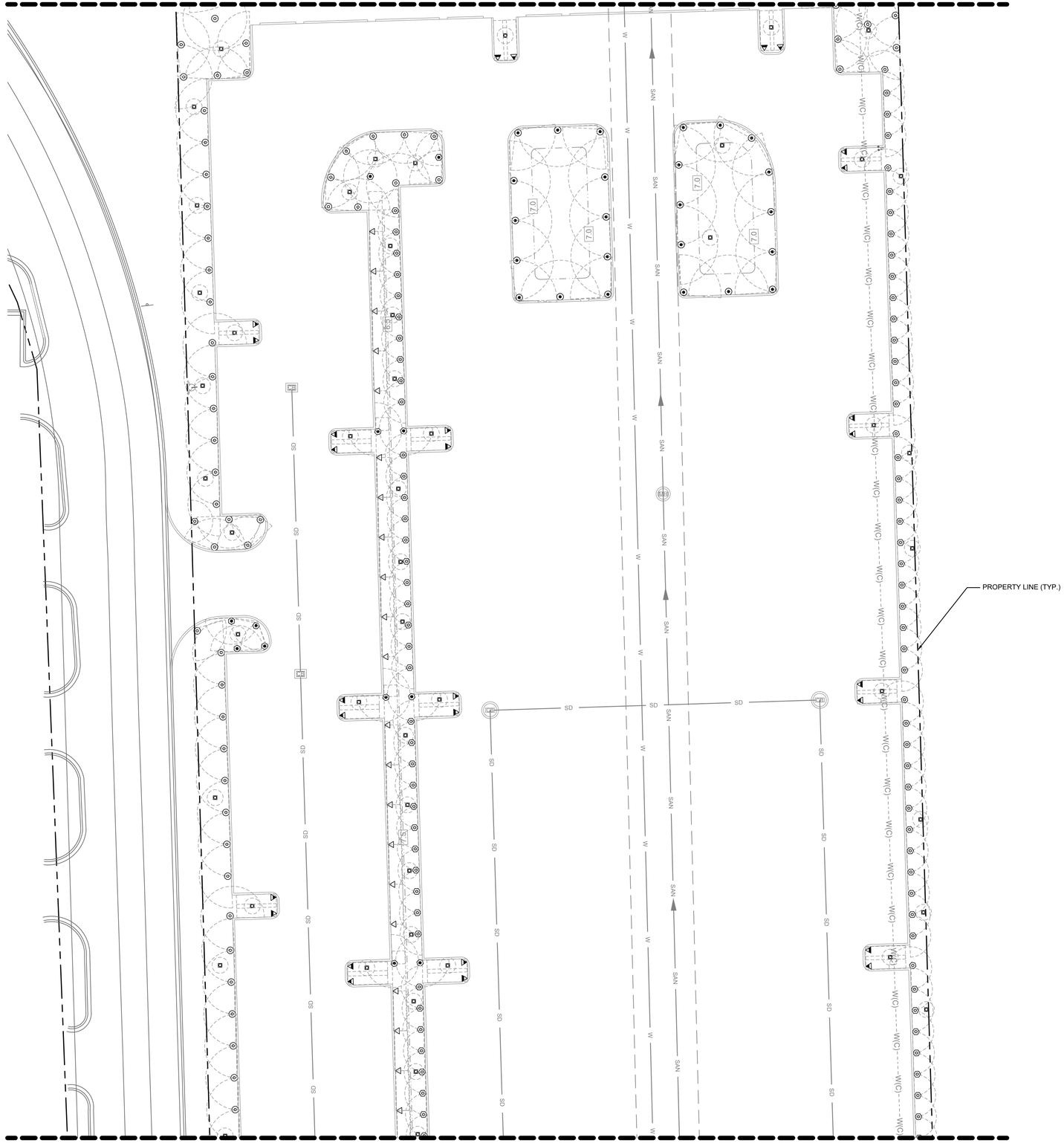
LI-104

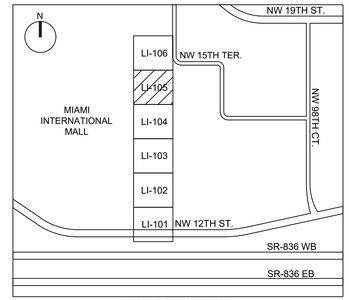
1 IRRIGATION PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

MATCHLINE: REF. SHEET LI-104



MATCHLINE: REF. SHEET LI-106



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IRRIGATION SCHEDULE

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LI-105

1
IRRIGATION PLAN

PROJECT NO.
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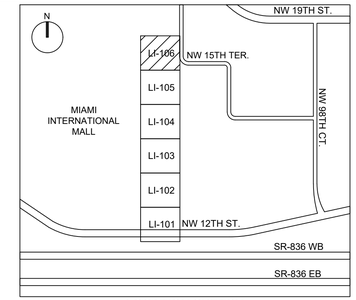
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021



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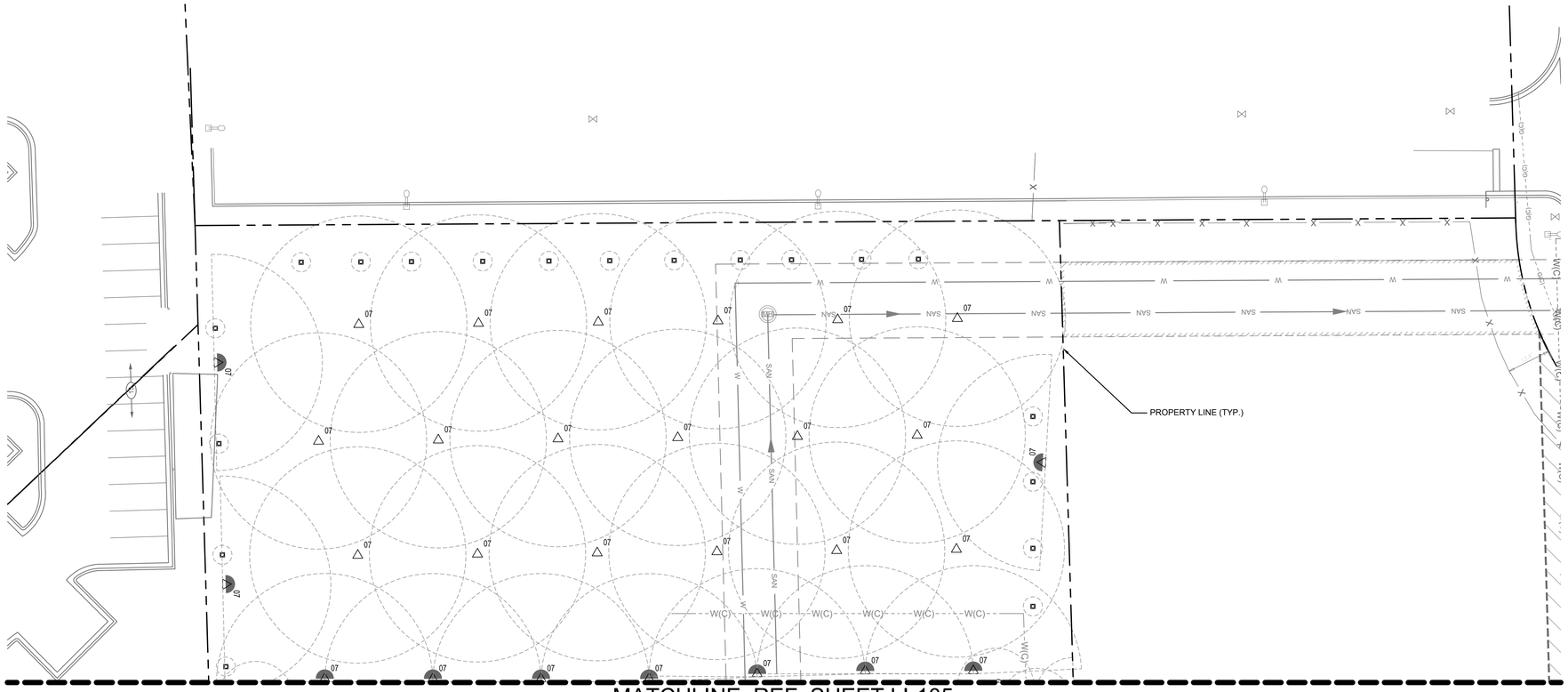

MATCHLINE: REF. SHEET LI-105

IRRIGATION SCHEDULE					
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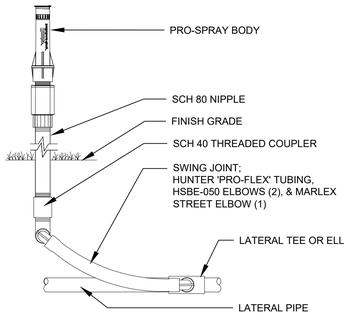
LI-106

1 IRRIGATION PLAN

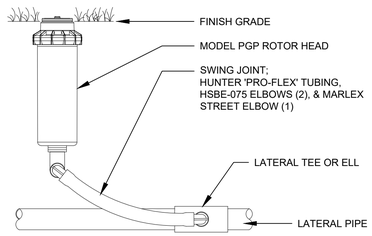
PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021



HUNTER IRRIGATION DETAIL SPRAY HEAD ON RISER

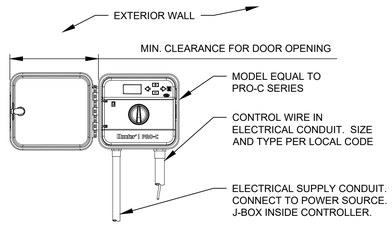
10 SECTION NOT TO SCALE

*WHEN USING LARGER GPM NOZZLES, BEWARE OF HIGH FRICTION LOSS IN SWING JOINTS.



HUNTER IRRIGATION DETAIL PGP ROTOR HEAD

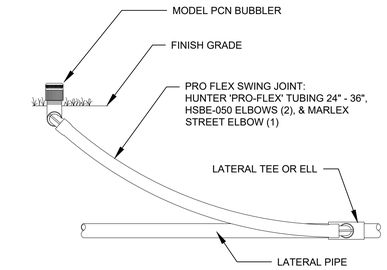
09 SECTION NOT TO SCALE



NOTE
SPECIFY 4,7,10,13,16 STATION MODEL CONTROLLER. MOUNT CONTROLLER WITH LCD SCREEN AT EYE LEVEL. CONTROLLER SHALL BE HARD-WIRED TO GROUNDED 110 VAC SOURCE.

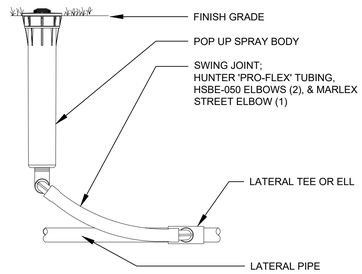
HUNTER IRRIGATION DETAIL PROC-C CONTROLLER

08 SECTION NOT TO SCALE



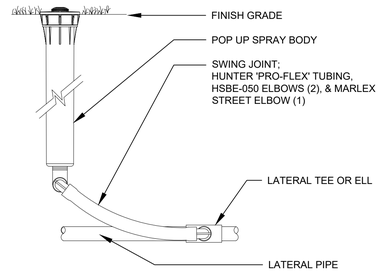
HUNTER IRRIGATION DETAIL PCN BUBBLER

07 SECTION NOT TO SCALE



HUNTER IRRIGATION DETAIL 6" POP-UP SPRAY HEAD

06 SECTION NOT TO SCALE

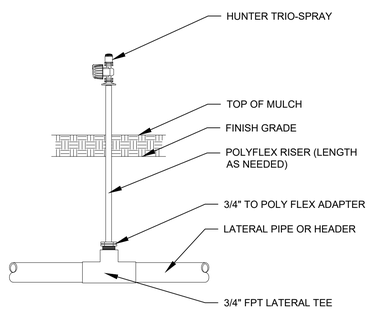


HUNTER IRRIGATION DETAIL 12" POP-UP SPRAY HEAD

05 SECTION NOT TO SCALE

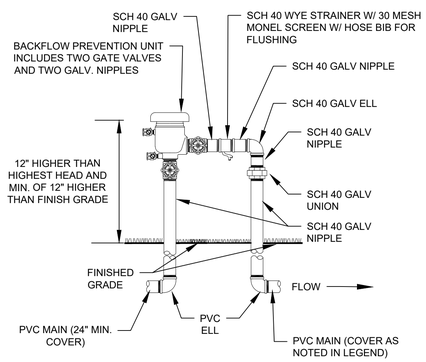
LANDSCAPING NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL MATERIAL REQUIRED TO MAKE THE SYSTEM FUNCTION PROPERLY. ALL IRRIGATION SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND ALSO STATE AND/OR LOCAL CODES.
2. IRRIGATION PLANS ARE SCHEMATIC AND DRAWN FOR GRAPHIC CLARITY. ALL PIPING BELOW PAVEMENT SHALL BE SLEEVED. LAYOUT OF IRRIGATION SYSTEM SHALL BE COORDINATED WITH CORRESPONDING LANDSCAPE PLAN.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LOCAL UNDERGROUND UTILITY PROVIDERS TO VERIFY LOCATIONS. THE CONTRACTOR IS ENCOURAGED TO VISIT THE SITE PRIOR TO INSTALLATION AND BECOME FAMILIAR WITH EXISTING CONDITIONS.
4. VALVE LOCATIONS ARE SCHEMATIC ONLY AND WILL BE ADJUSTED FOR SITE CONDITIONS. EACH VALVE SHALL BE INSTALLED IN A AMETEK OR CARSON VALVE BOX. THE FLOW ADJUSTMENT FEATURE WILL BE USED TO BALANCE PRESSURE THROUGHOUT THE SYSTEM.
5. PIPING SHALL BE SIZED TO MINIMIZE FRICTION LOSS AND MAINTAIN FLOW VELOCITY BELOW 5 FPS.
6. THE IRRIGATION CONTROLLER SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL CODES AND MANUFACTURER'S RECOMMENDATIONS. PROPER GROUNDING EQUIPMENT AND SURGE PROTECTION SHALL BE PROVIDED. A RAIN SENSOR SHALL BE INSTALLED TO OVER-RIDE THE CONTROLLER.
7. ALL HEADS ON RISERS SHALL BE SET AT THE HEIGHT OF ADJACENT PLANT MATERIAL.
8. SPRINKLER LOCATIONS ADJACENT TO PAVEMENT, STRUCTURES, FENCES, ETC. SHALL BE OFFSET AS FOLLOWS: 12" MIN FOR POP-UP MIST HEADS, 18" FOR SHRUB RISERS, 18" FOR ROTOR HEADS, AND TYPICALLY 5 FEET FOR ROTORS ALONG UNCURBED ROADWAYS.
9. ALL SLEEVING SHALL BE SCH 40 PVC TO SIZE INDICATED ON PLAN, OR IF NOT INDICATED, A MIN. OF 2 PIPE SIZES LARGER THAN SUPPLY LINE CONTAINED. ALL SLEEVES SHALL BE INSTALLED A MIN. OF 24" BELOW FINISH GRADE.
10. CONTROL WIRES SHALL BE UL APPROVED PE IRRIGATION CONTROL WIRE. USE 14 GAGE CONTROL WIRE AND 12 GAGE GROUND WIRE. WIRE SHALL BE BUNDLED AND ATTACHED TO THE MAIN LINE IN TRENCH OR THROUGH WIRE SLEEVES AT PAVEMENT CROSSINGS 24" BELOW FIN. GRADE. ALL SPLICES SHALL BE MADE WITH WATERPROOF DIRECT-BURIAL SPLICE KITS AND CONTAINED IN VALVE BOXES. TWO EXTRA CONTROL WIRES SHALL BE INSTALLED TO THE FURTHEST VALVES IN EACH DIRECTION FROM THE CONTROLLER.
11. PIPING IN NARROW PLANTING AREAS, PARKING ISLANDS AND PLANTERS SHALL BE SET TO ONE SIDE TO ALLOW ROOM FOR ROOT BALLS. PIPE AS INDICATED ON PLAN IS SCHEMATIC AND SHOULD BE ADJUSTED FOR FIELD CONDITIONS.
12. ALL GLUE JOINTS SHALL BE CLEANED, SANDED, AND TREATED WITH A COLORED HIGH ETCH PRIMER AND JOINED USING A SOLVENT CONFORMING WITH ASTM D2564.
13. SYSTEM PIPE SIZE 3/4" SHALL BE CLASS 200 PVC; SYSTEM PIPE SIZE 1" OR GREATER SHALL BE CLASS 160 PVC. SYSTEM MAIN WILL BE SCH. 40 PVC TO SIZE INDICATED ON PLAN. ALL FITTINGS WILL BE SOLVENT WELD SCH 40 PVC. MAIN LINE SHALL HAVE 24" MINIMUM COVER; ALL OTHER PIPING WILL HAVE 12" MIN. COVER. ALL BACKFILL FOR PIPE TRENCHES SHALL BE CLEAN AND FREE OF FOREIGN DEBRIS AND SHARP OBJECTS; BACKFILLED TRENCHES SHALL BE PROPERLY COMPACTED. ALL MAIN LINES WILL BE INSTALLED A MIN. OF 3' FROM ANY TREE OR PALM.
14. WATERING TIME PER STATION WILL BE DETERMINED IN THE FIELD AND PER LOCAL REQUIREMENTS. REFER TO MANUFACTURER'S INSTRUCTIONS FOR PRECIPITATION RATES OF SPRINKLERS SPECIFIED.
15. IRRIGATION SYSTEM TO PROVIDE 100% COVERAGE WITH 100% OVERLAP MIN. PROVIDE BUBBLERS FOR ALL NEW AND RELOCATED TREES AND PALMS.
16. RUST CONTROL SYSTEM TO BE INSTALLED WITH PUMP STATION (IF FROM WELL).
17. THE IRRIGATION SYSTEM IN THE RIGHT-OF-WAY IS TO INCORPORATE LOW TRAJECTORY SPRAY HEADS TO MINIMIZE OVERSPRAY.
18. AS-BUILT DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR AND GIVEN TO THE OWNER PRIOR TO FINAL ACCEPTANCE.
E SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE OWNER PRIOR TO SUBMITTAL OF THE FINAL PAYMENT.



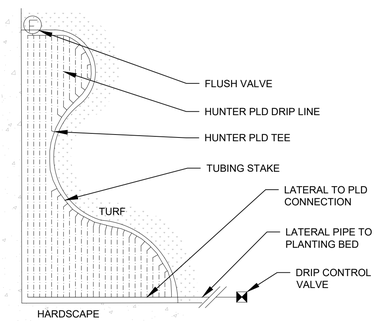
HUNTER IRRIGATION DETAIL TRIO-SPRAY ON POLY RISER

04 SECTION NOT TO SCALE



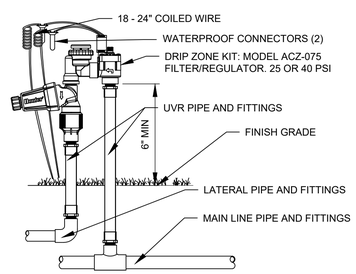
HUNTER IRRIGATION DETAIL PRESSURE VACUUM BREAKER

03 SECTION NOT TO SCALE



HUNTER IRRIGATION DETAIL IN-LINE DRIP TUBING

02 PLAN NOT TO SCALE



NOTE
ANTI-SIPHON VALVES SHOULD BE INSTALLED 6-12" ABOVE THE HIGHEST SPRINKLER HEAD WITHIN THE ZONE, OR, ACCORDING TO LOCAL CODE.

HUNTER IRRIGATION DETAIL ACZ-075 VALVE

01 PLAN NOT TO SCALE

REVISIONS :

SEAL

CONSULTANT
MICHAEL J. PHILLIPS, R.L.A.
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LI-501

IRRIGATION DETAILS

KEITH
5805 Blue Lagoon Drive, Suite 218
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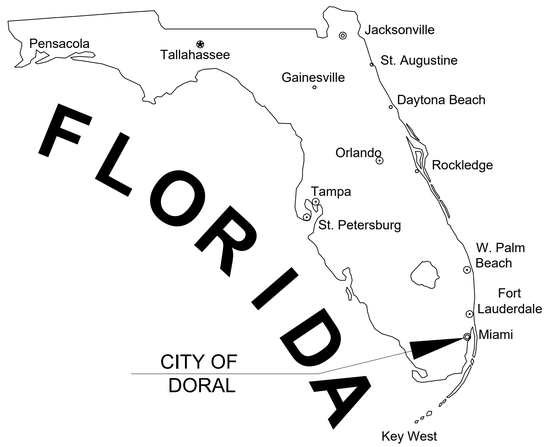
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

LEHMAN DORAL
KIA & SUBARU

10155 NW 12th St
CITY OF DORAL, MIAMI DADE COUNTY, FLORIDA



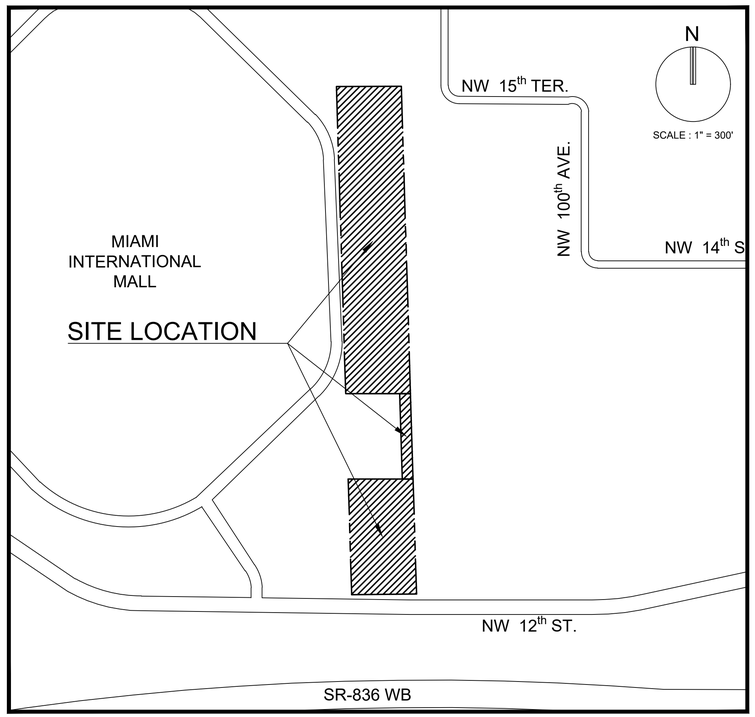
PRELIMINARY CIVIL ENGINEERING PLANS

INDEX OF SHEETS	
SHEET IDENTIFICATON	SHEET TITLE
GI-001	KEY SHEET
GI-002	LEGEND AND ABBREVIATIONS
GI-003	GENERAL CONSTRUCTION NOTES
GI-004	GENERAL SPECIFICATIONS
CP-101 - CP-106	PAVING, GRADING, AND DRAINAGE PLANS
CP-501 - CP-503	PAVING, GRADING, AND DRAINAGE DETAILS
CU-101 - CU-106	WATER AND SEWER PLAN
CM-101 - CM-106	PAVEMENT MARKING AND SIGNAGE PLAN

LAND DESCRIPTION:

Parcel A:
The East 45.00 feet of the following property as described in Official Records Book 24375 at Page 3970 of the Public Records of Miami-Dade County, Florida:

A portion of the South 1/2 of Section 32, Township 53 South, Range 40 East, Miami-Dade County, Florida, being more particularly described as follows: Commence at the Southeast corner of the Southwest 1/4 of said Section 32; thence S89°20'56"W along the South line of said Section 32 for a distance of 118.68 feet to a point; thence N01°43'13"W for a distance of 80.01 feet to a point on the Northerly right-of-way of N.W. 12th Street; thence continuing N01°43'13"W for a distance of 481.55 feet to the POINT OF BEGINNING; thence due West a distance of 273.70 feet to a point; thence S64°49'27"W a distance of 497.70 feet to a point; thence N34°00'00"W a distance of 151.31 feet to a point; thence N45°56'45"E a distance of 190.52 feet to a point; thence 60.36 feet along a curve to the right having a radius of 150.00 feet and a central angle of 23°03'15" to a point; thence N69°00'00"E a distance of 360.94 feet to a point; thence 245.30 feet along an arc to the left having a radius of 400 feet and an central angle of 35°08'13" to a point; thence due East a distance of 84.73 feet to a point; thence S01°43'13"E a distance of 358.49 feet to a POINT OF BEGINNING.
AND
Parcel C:
A portion of the South 1/2 of Section 32, Township 53 South, Range 40 East, Miami-Dade County, Florida, being more particularly described as follows: Commence at the Southeast corner of the Southwest 1/4 of said Section 32; thence S89°20'56"W along the South line of said Section 32 for a distance of 118.68 feet to a point; thence N01°43'13"W for a distance of 80.01 feet to a point on the Northerly right-of-way of N.W. 12th Street; thence continuing N01°43'13"W for a distance of 840.04 feet to the POINT OF BEGINNING; thence N90°00'00"W for 271.82 feet to a point on the East Line of Tract "A" of MIAMI INTERNATIONAL MALL PROPERTIES, according to the plat thereof as recorded in Plat Book 117 at Page 84 of the Public Records of Miami-Dade County, Florida; thence N01°43'13"W along said East line of Tract "A", for 1287.65 feet to the Southwest Corner of Tract "A" of GREAT SPRINGS AT I.C.P., according to the Plat thereof as recorded in Plat Book 158 at Page 94, of the Public Records of Miami-Dade County, Florida; thence N89°40'09"E along the South line of said Tract "A" of GREAT SPRINGS AT I.C.P for 271.77 feet to the Northwest Corner of Tract "K" of INTERNATIONAL CORPORATE PARK SECTION 6; thence S01°43'13"E along the West line of said Tract "K" and along the West Line of Tract "A" of DOLE FLOWERS SUBDIVISION, according to the Plat thereof as recorded in Plat Book 157 at Page 57, of the Public Records of Miami-Dade County, for 1289.22 feet to the POINT OF BEGINNING.
AND
Tract "A", LEHMAN DORAL, according to the plat thereof as recorded in Plat Book 172 at Page 41 of the Public Records of Miami-Dade County, Florida.



LOCATION MAP

SECTION 53, TOWNSHIP 40S, RANGE 32E
FOLIO #35-3032-000-0121
FOLIO #35-3032-045-0010
FOLIO #35-3032-008-0017

FEMA FLOOD ZONE:

THE PROPERTY IS LOCATED WITHIN FLOOD ZONE AH WITH A BASE FLOOD ELEVATION OF 8 FEET, AS SHOWN ON F.I.R.M. NUM. 12086C0286L, BEARING A MAP EFFECTIVE DATE OF 9/11/2009

THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

PREPARED FOR:
STILES ARCHITECTURAL GROUP
301 EAST LAS OLAS BOULEVARD
FORT LAUDERDALE, FLORIDA 33301

KEITH
5808 Blue Lagoon Drive, Suite 218
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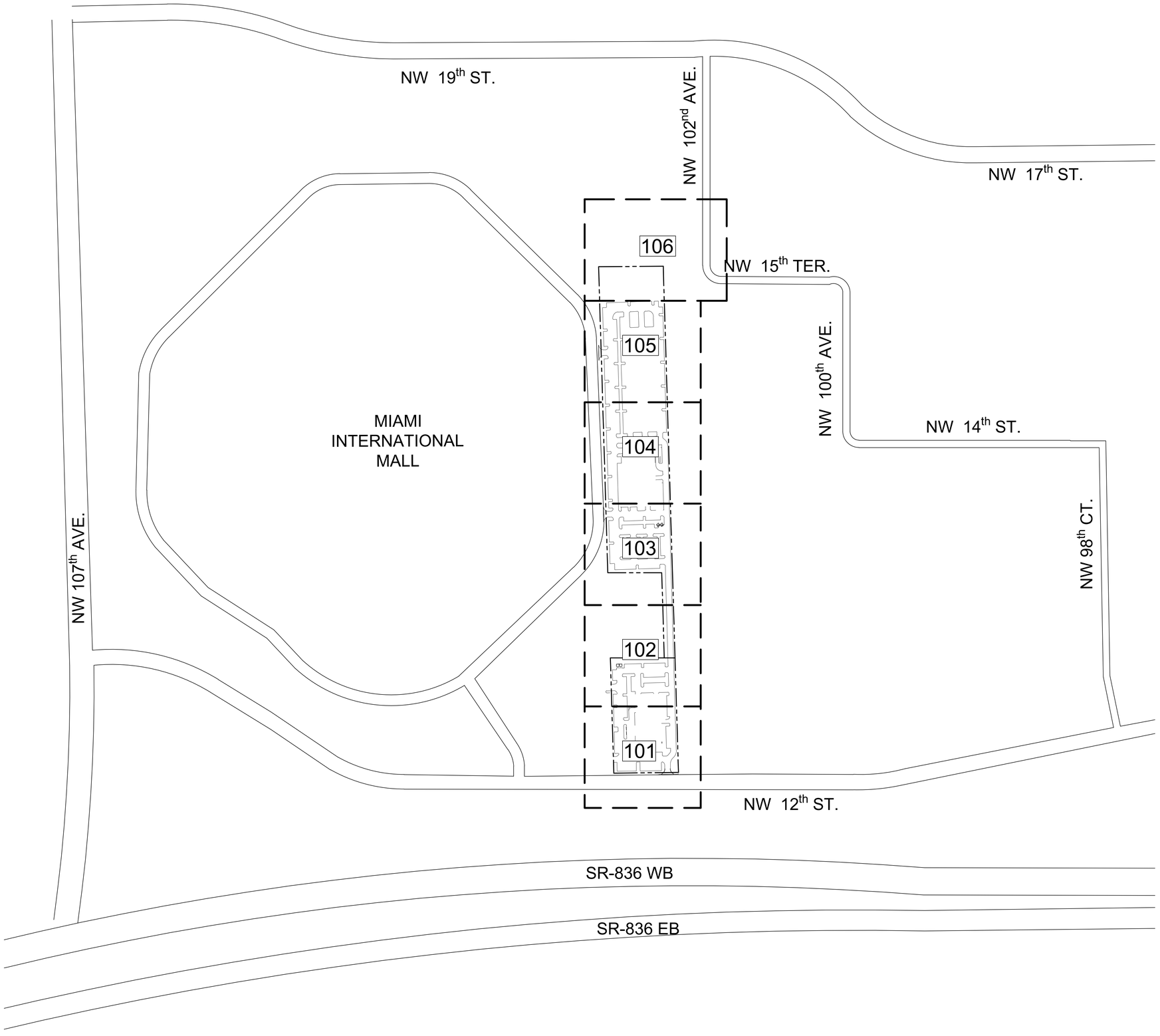
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

PROJECT No. 11916.00 DATE: November 2021



REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
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Plotted by: akosh On 11/15/2021 7:43 PM

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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
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DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\11916.00-GI-XXX.dwg

GI-001

KEY SHEET

KEITH
5805 Blue Lagoon Drive, Suite 218
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(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

GENERAL SYMBOLS

SYMBOL	DESCRIPTION
A / CP-301	PROPOSED SECTION MARKER INDICATING THE SECTION LETTER AND THE SHEET ON WHICH THE SECTION VIEW APPEARS.
22 / C-05	DETAIL REFERENCE CALL OUT INDICATING THE DETAIL NUMBER AND THE SHEET ON WHICH THE DETAIL VIEW APPEARS.
1	REVISION TRIANGLE NUMBER
	MISC BREAK LINES
PIC#	PHOTO LOCATION AND CORRESPONDING PICTURE NUMBER.
N: 623025.4322 E: 850262.1786	COORDINATE VALUES SHOWN ON PROPOSED IMPROVEMENTS ARE RELATIVE TO THE COORDINATE VALUES INDICATED ON THE RIGHT-OF-WAY, PROPERTY CORNERS OR REFERENCE MONUMENT

GEN SITE & PMS

SYMBOL	DESCRIPTION
	PAVEMENT MARKING ARROWS
	STOP BAR
	ADA PARKING
	CONCRETE CAR STOP
	BICYCLE
	BICYCLE RACK
	AUTOMOBILE
	POST MOUNTED SIGNS 1,2, DOUBLE POST & 4 WAY
33	PARKING SPACE NUMBER
BL CL PL FL ML	BASELINE, CENTER, PROPERTY, FLOW & MONUMENT LINE
	BUILDING ACCESS (ADA) / (NON-ADA)

PAVING & GRADING

SYMBOL	DESCRIPTION
0.04% 0.04%	FLOW DIRECTIONAL ARROW
6"	ELEVATION CHANGE
5.00 5.00	MAJOR / MINOR CONTOUR ELEVATION
13.56	GRADE ELEVATION
13.56 / 22.00	TOP OF CURB / PAVEMENT ELEVATION
MEG	MATCH EXISTING GRADE
	SLOPE BANK
A-1 24'	DRIVEWAY TURNOUT IDENTIFICATION (FDOT INDEX 515) W/ DRIVE WIDTH
CR-?	SIDEWALK CURB RAMP (PER FDOT INDEX 304)
	SEAWALL

UTILITY PIPES

SYMBOL	DESCRIPTION
	PIPE FITTINGS: TEE, 90, 45, 22.5, 11.2, CAP,
	CAP W/FVO, REDUCER, VERTICAL, PLUG
	VALVES: GATE, BUTTERFLY, DOUBLE BTRFLY, BFP, DDCV, VACUUM BREAKER
MBO ABO ARV	MAN/AUTO BLOWOFF, ARV, PIV, FLUSH VLV, CORP STOP
SP# HYD FDC WW	SAMPLE PNT, HYDRANT, FDC, WATER WELL
	TAPPING SADDLE
SD	EXFILTRATION TRENCH
W	PIPE CASING
V	VENT PIPE BOX
22	UTILITY CROSSING TABLE REFERENCE
22	UTILITY CROSSING

HATCH PATTERNS

SYM	DESCRIPTION	SYM	DESCRIPTION
	CONCRETE AREA		BRICK PAVERS
	JOGGING PATH		SOIL TRACKING PREVENTION DEVICE
	PAVEMENT AREA		SAND (DETAIL / ELEVATION)
	BUILDING HATCH		EARTH (DETAIL / ELEVATION)
	MILLING AND RESURFACING		GRAVEL (DETAIL / ELEVATION)
	DETECTABLE WARNING PER FLORIDA CODE		GRASS AREA
	DEMOLITION AREA		ADA STRIPING
			PAVEDRAIN (PERMEABLE ARTICULATING CONCRETE BLOCK)

UTILITY STRUCTURES

SYMBOL	DESCRIPTION
CB	FDOT C,D,E,F,G & FABRIC CATCH BASIN
CB MH SS	NON-FDOT ROUND CB'S & MANHOLES, MDC STRUCTURE
	FDOT CURB INLETS TYPE1-TYPE10
	TRENCH DRAIN
	PIPE CULVERT - MITERED END SECTION
	STRAIGHT ENDWALL
PS#	PUMP STATION LOCATION AND NUMBER
	GREASE TRAP SINGLE AND DOUBLE
	SEPTIC TANK
	SEPTIC DRAIN FIELD
	DRAINAGE WELL, DRAIN C.B., CONTROL STRUCTURE
MW	MONITORING WELL
WELL	WATER WELL
M	METER BOX WATER AND IRRIGATION
YD DD DD	YARD DRAIN / 9" DECK DRAIN ROUND & SQUARE
CO CO CO	CLEAN OUT 6", 4" & BOX
22	STORM STRUCTURE TABLE REFERENCE NUMBER
22	SEWER STRUCTURE TABLE REFERENCE NUMBER

XX — CONST. 5' Ø CB
RIM EL. = 12.88
N INV. ELEV. = 4.50' - XX" DIP
E INV. ELEV. = 4.50' - XX" DIP
S INV. ELEV. = 4.50' - XX" DIP
W INV. ELEV. = 4.50' - XX" DIP

SEWER STRUCTURE CALLOUT (SHOWN AS A CIRCLE CIRCUMSCRIBING THE STRUCTURE NUMBER.)

XX — CONST. 5' Ø CB
RIM EL. = 12.88
N INV. ELEV. = 4.50' - XX" DIP
E INV. ELEV. = 4.50' - XX" DIP
S INV. ELEV. = 4.50' - XX" DIP
W INV. ELEV. = 4.50' - XX" DIP

STORM STRUCTURE CALLOUT (SHOWN AS A HEXAGON CIRCUMSCRIBING THE STRUCTURE NUMBER.)

INDICATES STRUCTURE NUMBER, STATION & OFFSET, STRUCTURE SIZE & TYPE, RIM/GRATE ELEVATION, PIPE INVERT ELEVATIONS & DIRECTION, PIPE SIZE & MATERIAL AS WELL AS ANY SPECIAL NOTES.

LINE TYPES

PROPOSED UTILITIES

W	WATER LINE
SAN	SANITARY SEWER
FM	FORCE MAIN
LFM	LOW PRESSURE FM
SD	STORM DRAIN
PSD	PRESSURE STORM
IRR	IRRIGATION
RAW	RAW WATER
RCW	RECLAIMED WATER
G	GAS LINE

TOPO

	BREAKLINE
	MAJOR CONTOUR
	MINOR CONTOUR
	TOP OF BANK
	TOE OF SLOPE
	EDGE OF WATER
CLS CLS	CENTERLINE OF SWALE

PAVEMENT MARKING

	STRIPE SKIP 2-4
	STRIPE SKIP 3-9
	STRIPE SKIP 6-10
	STRIPE SKIP 10-30
	STRIPE SKIP 10-10-20
	STRIPE SKIP 2-2-2

GENERAL SITE

	DEMOLITION
	TURBIDITY BARRIER
	PARKING STRIPING (SINGLE)
	BUILDING SETBACK
	FIRE TRUCK PATH
	SIGHT TRIANGLE
	BUILDING FOOTPRINT
	VEHICLE OVERHANG
O	CONSTRUCTION LIMITS
SF SF	SILT FENCE
SSF	SUPER SILT FENCE
	PARKING STRIPING (DOUBLE)

ABBREVIATIONS

ABBRV	DESCRIPTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL
BIT.	BITUMINOUS
BC	BACK OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWY	DRIVEWAY
ELEV (OR EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (OR EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MEG	MATCH EXISTING GRADE
MH	MANHOLE
MIN	MINIMUM
NIC	NOT IN CONTRACT

ABBREVIATIONS CONTINUED

ABBRV	DESCRIPTION
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
RT	RIGHT
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TSV	TAPPING SLEEVE AND VALVE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

LINE WEIGHTS

EXISTING	SHADED LINES & TEXT DENOTE EXISTING EQUIPMENT AND STRUCTURES.
FUTURE	NON-SHADED DASHED LINES & TEXT DENOTE FUTURE EQUIPMENT, STRUCTURES AND WORK.
PROPOSED / CONSTRUCT	NON-SHADED, BOLD, SOLID LINES & TEXT DENOTE PROPOSED EQUIPMENT, STRUCTURES AND WORK.

NOTE: THIS IS A STANDARD LEGEND SHEET. NOT ALL ITEMS ARE PERTINENT TO THIS SET OF DRAWINGS

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(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:43 PM

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SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\d11916.00-GI-XXX.dwg

GI-002

LEGEND AND ABBREVIATIONS

PROJECT NO. 11916.00
DRAWN BY : AARON K.
CHECKED BY : CARLOS M.
DATE : 11/16/2021

STATUS: PERMIT

GENERAL NOTES

THIS CONSTRUCTION PROJECT MAY OR MAY NOT INCLUDE ALL ITEMS COVERED BY THESE NOTES AND SPECIFICATIONS, I.E. PAVING, GRADING, DRAINAGE LINES, WATER LINES, OR SANITARY SEWER LINES. SEE PLANS FOR DETAILED PROJECT SCOPE. NOTES AND SPECIFICATIONS ON THIS SHEET REFER TO PAVING, GRADING, DRAINAGE, WATER, AND SANITARY SEWER, AND ARE INTENDED FOR THIS PROJECTS SCOPE OF WORK AND FOR REFERENCE PURPOSES FOR OTHER WORK ITEMS THAT MAY BE REQUIRED DUE TO UNFORESEEN EXISTING CONDITIONS OR REQUIRED REMEDIAL WORK.

1. SPECIFIC SITE NOTES

1.1. COUNTY AND "CITY" IN THESE NOTES REFERS TO COUNTY AND CITY IN WHICH PROJECT RESIDES.

1.2. STATE IN THESE NOTES REFERS TO THE STATE OF FLORIDA.

1.3. EXISTING TOPOGRAPHIC INFORMATION IN THE PLANS IS BASED ON SURVEY DATA AND BEST AVAILABLE INFORMATION. SEE PROJECT SURVEY AND NOTES ON PLAN SHEETS REGARDING THE SOURCE OF THE TOPOGRAPHIC INFORMATION.

2. APPLICABLE CODES

2.1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY, COUNTY, AND ALL OTHER JURISDICTIONAL, STATE AND NATIONAL CODES WHERE APPLICABLE.

2.2. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS, AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATION BOOKLET, THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION.

2.3. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND JURISDICTIONAL SAFETY AND HEALTH REGULATIONS.

2.4. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, AND REGULATIONS.

2.5. ALL HANDICAP ACCESSIBLE AREAS TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), STATE ADA CODES, AND FLORIDA BUILDING CODE ADA CODES LATEST EDITION.

2.6. TRENCH SAFETY ACT

2.6.1. ALL TRENCH EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT).

2.6.2. ALL TRENCH EXCAVATION IN EXCESS OF 5 FEET IN DEPTH SHALL BE UNDERTAKEN IN ACCORDANCE WITH O.S.H.A. STANDARD 29 CFR. SECTION 1926.650 SUBPART P.

2.6.3. THE CONTRACTOR SHALL SUBMIT WITH HIS CONTRACT A COMPLETED, SIGNED, AND NOTARIZED COPY OF THE TRENCH SAFETY ACT COMPLIANCE STATEMENT. THE CONTRACTOR SHALL ALSO SUBMIT A SEPARATE COST ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY CODES.

2.6.4. A TRENCH SAFETY SYSTEM, IF REQUIRED, SHALL BE DESIGNED BY THE EXCAVATION CONTRACTOR UTILIZING A SPECIALTY ENGINEER AS REQUIRED.

3. CONSTRUCTION NOTES:

3.1. CONTRACTOR SHALL TIE TO EXISTING GRADE BY EVENLY SLOPING FROM CLOSEST PROPOSED GRADE PROVIDED TO EXISTING GRADE AT LIMITS OF CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PLANS. IF NO LIMIT OF WORK LINE IS INDICATED, SLOPE TO ADJACENT PROPERTY LINE OR RIGHT-OF-WAY LINE, AS APPLICABLE.

3.2. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL EXISTING MANHOLES, CATCH BASINS, METERS AND OTHER STRUCTURES, WHETHER INDICATED ON THE PLANS OR NOT SHALL BE ADJUSTED TO MATCH THE NEW GRADE, BY THE CONTRACTOR.

3.3. THE CURB SHALL BE SLOPED TO ACCOMMODATE THE NEW PAVEMENT, CATCH BASIN AND GRATE, AND THE SURFACE FLOW PATTERN.

3.4. THE CONTRACTOR SHALL USE CARE WHEN CUTTING THE EXISTING ASPHALT PAVEMENT AND DURING EXCAVATIONS, SO THAT THE EXISTING CATCH BASINS AND GRATES THAT ARE TO REMAIN WILL NOT BE DAMAGED.

3.5. THE CONTRACTOR SHALL MAINTAIN THE ROADWAY SLOPE WHEN RESURFACING THE ROADWAY. THE EDGE OF PAVEMENT SHALL MATCH THE NEW GUTTER LIP PER FDOT INDEX 300.

3.6. THE NEW SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GIVEN ELEVATIONS AND AT THE PROPER SLOPES DEPICTED IN THE SPECIFICATIONS, DETAILS AND STANDARDS. EXISTING DRIVEWAYS AND OTHER FEATURES SHALL BE MATCHED WHEN POSSIBLE AS DIRECTED BY THE ENGINEER.

3.7. RADII SHOWN ARE TO THE EDGE OF PAVEMENT.

3.8. ALL BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS.

3.9. ALL EXCESS MATERIAL IS TO BE DISPOSED BY THE CONTRACTOR WITHIN 72 HOURS.

3.10. IN AREAS WHERE THE BASE IS EXPOSED BY THE MILLING OPERATION, THE CONTRACTOR SHALL RESTORE THE BASE TO ITS ORIGINAL THICKNESS AND STRUCTURAL CAPACITY BEFORE PAVING OVER SUCH AREAS. THIS INCLUDES BUT IS NOT LIMITED TO RESTORING ORIGINAL DEGREE OF COMPACTION, MOISTURE CONTENT, COMPOSITION, STABILITY, AND INTENDED SLOPE. IF PAVING WILL NOT TAKE PLACE THE SAME DAY THE BASE IS EXPOSED AND REWORKED, THE BASE SHALL BE SEALED ACCORDING TO THE GOVERNING STANDARDS AND SPECIFICATIONS. ANY ADDITIONAL WORK RESULTING FROM THE CONTRACTOR'S FAILURE TO PROTECT THE EXPOSED BASE AS STATED ABOVE IN ORDER TO RESTORE THE ORIGINAL STRUCTURAL CAPACITY SHALL BE THE CONTRACTOR'S COST.

3.11. THE CONTRACTOR IS TO MAINTAIN EXISTING SIGNAGE DURING CONSTRUCTION OPERATIONS, IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC.

3.12. THE TOPOGRAPHIC SURVEY INCLUDED WITH THIS SET OF PLANS REFLECTS PRE-DEMOLITION CONDITIONS AND DOES NOT REFLECT THE SITE CONDITIONS AFTER DEMOLITION. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE IN DETERMINING THE REQUIRED EARTHWORK FOR THE PROPOSED DEVELOPMENT OF THE SITE. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY EXCAVATION/DREDGE AND FILL ACTIVITIES REQUIRED AT ANY PHASE OF THE PROJECT. THE CONTRACTOR SHALL USE THE FINAL APPROVED (RELEASED FOR CONSTRUCTION) PLANS, SURVEYS, GEOTECHNICAL REPORTS, AND ANY OTHER AVAILABLE INFORMATION FOR DETERMINING THE AMOUNT OF EXCAVATION/DREDGING AND FILLING REQUIRED. ANY QUANTITIES INCLUDED IN THE APPROVED PERMITS WERE ESTIMATED BY THE ENGINEER FOR PURPOSES OF OBTAINING THE PERMIT AND UNDER NO CIRCUMSTANCES SHALL BE USED BY THE CONTRACTOR IN LIEU OF PERFORMING THEIR OWN EARTHWORK CALCULATIONS REQUIRED FOR COST ESTIMATING AND BIDDING THE PROJECT.

3.13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FAMILIARIZING THEMSELVES WITH ANY AND ALL AVAILABLE GEOTECHNICAL REPORTS PREPARED BY OTHERS AND/OR ANY RECOMMENDATIONS WRITTEN OR IMPLIED BY THE GEOTECHNICAL ENGINEER FOR THIS PROJECT. THE GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THESE REPORTS ARE IN FORCE AND IN FULL EFFECT AS PART OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL THE WORK ASSOCIATED WITH THIS PROJECT IS IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. KEITH AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE SUITABILITY OR UNSUITABILITY OF THE SOILS ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE MEANS AND METHODS OF CONSTRUCTION USED CAN AND WILL ALLOW FOR THE SUCCESSFUL COMPLETION OF THE REQUIRED SITE IMPROVEMENTS.

3.14. THE CONTRACTOR SHALL ENSURE THAT THE AVAILABLE GEOTECHNICAL INFORMATION IS SUFFICIENT FOR HIS COMPLETE UNDERSTANDING OF THE SOIL CONDITIONS FOR THE SITE. IF ADDITIONAL GEOTECHNICAL INVESTIGATION IS REQUIRED BY THE CONTRACTOR, THIS ADDITIONAL WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

3.15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF EXISTING PAVEMENT, PIPES, CONDUITS, SPRINKLER HEADS, CABLES, ETC., AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS AND SHALL RESTORE AT NO ADDITIONAL COST.

3.16. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION FROM THE OWNER, CITY AND ENGINEER. THE CONTRACTOR SHALL PROVIDE THE OWNER, CITY AND ENGINEER WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE. THE PROJECT ENGINEER SHALL COORDINATE WITH THE OWNER AND CITY PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR.

3.17. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT BY THE CONTRACTOR SHALL BE IMMEDIATELY REPORTED TO THE CITY AND/OR ENGINEER, WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS. THE CITY AND/OR ENGINEER ARE TO NOTIFY THE OWNER/ENGINEER OF THE DISCOVERY. THE OWNER/ENGINEER WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION OF THE HAZARDOUS MATERIAL. THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE ENGINEER.

3.18. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE CITY ENGINEERING INSPECTOR AND ENGINEER 48 HOURS IN ADVANCE OF THE EVENT TO NOTIFY THE CITY OF CONSTRUCTION START UP, OR TO SCHEDULE ALL REQUIRED TESTS AND INSPECTIONS INCLUDING FINAL WALK-THROUGHS.

4. PRECONSTRUCTION RESPONSIBILITIES

4.1. ALL UTILITY / ACCESS EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION.

4.2. NO CONSTRUCTION MAY COMMENCE UNTIL THE APPROPRIATE PERMITS HAVE BEEN OBTAINED FROM ALL MUNICIPAL, STATE, COUNTY, AND FEDERAL AGENCIES AND A PRE-CONSTRUCTION MEETING HAS BEEN CONDUCTED.

4.3. ALL REQUIRED GOVERNMENTAL AGENCY BUILDING PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY.

4.4. CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULING FOR CONNECTION TO THE EXISTING WATER AND SEWER LINES WITH THE UTILITY DEPARTMENT THAT OWNS AND/OR MAINTAINS THE WATER AND SEWER LINES.

4.5. PRIOR TO THE START OF CONSTRUCTION, THE OWNER SHALL SUBMIT AN NPDES CONSTRUCTION GENERAL PERMIT (CGP) "NOTICE OF INTENT (N.O.I.) TO USE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITIES FORM (DEP FORM 62-621.300(4)(B)) TO FDEP NOTICES CENTER. THE CONTRACTOR WILL BE RESPONSIBLE FOR (1) IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT WAS REQUIRED TO BE DEVELOPED PRIOR TO NOI SUBMITTAL, AND (2) RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION. A "NOTICE OF TERMINATION (N.O.T.) OF GENERIC PERMIT COVERAGE" FORM (DEP FORM 62-621.300(6)) MUST BE SUBMITTED TO FDEP TO DISCONTINUE PERMIT COVERAGE, SUBSEQUENT TO COMPLETION OF CONSTRUCTION. FOR ADDITIONAL INFORMATION SEE FDEP WEBSITE: HTTP://WWW.DEP.STATE.FL.US/WATER/ STORM WATER/NPDES.

4.6. PRIOR TO CONSTRUCTION OR INSTALLATION, 5 SETS OF SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AS REQUIRED FOR THE FOLLOWING ITEMS LISTED BELOW, BUT NOT LIMITED TO:

- DRAINAGE: CATCH BASINS, MANHOLES, HEADWALLS, GRATES/TOPS, YARD DRAINS.
- WATER: FIRE HYDRANTS, VALVES, BACKFLOW PREVENTER, DDCV, METER BOX.
- SEWER: MANHOLES, LIFT STATIONS (WETWELL, HATCHES, VALVES, PUMP DATA, ELECTRICAL PANEL)

4.0.1. CATALOGUE LITERATURE SHALL BE SUBMITTED FOR DRAINAGE, WATER AND SEWER PIPES, FITTINGS, AND APPURTENANCES.

4.0.2. PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS, AND SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S PLANS OR SPECIFICATIONS.

4.0.3. INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

4.7CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC PLAN(S) IN ACCORDANCE WITH FDOT AND COUNTY REQUIREMENTS, AND SUBMIT FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION.

5. INSPECTIONS / TESTING:

5.1. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER, CITY, COUNTY, ENGINEER OF RECORD, AND ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO REQUIRED INSPECTIONS OF THE FOLLOWING ITEMS, WHERE APPLICABLE:

- CLEARING AND EARTHWORK
- STORM DRAINAGE SYSTEMS
- SANITARY SEWER SYSTEMS
- WATER DISTRIBUTION SYSTEMS
- SUBGRADE
- LIMEROCK BASE
- ASPHALT OR CONCRETE PAVEMENT
- SIDEWALKS, CONCRETE FLATWORK/CURBING
- LANDSCAPING
- PAVEMENT MARKING AND SIGNAGE
- SIGNALIZATION
- SITE LIGHTING
- ELECTRICAL AND COMMUNICATION LINES
- UTILITY CONDUITS
- IRRIGATION
- FINAL

5.1. THE OWNER, ENGINEER, AND JURISDICTIONAL PERMITTING AGENCIES MAY MAKE INSPECTIONS OF THE WORK AT ANY TIME. THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL INSPECTIONS.

5.3. TESTING - ALL TESTING REQUIRED BY THE PLANS AND SPECIFICATIONS SHALL BE PERFORMED BY A LICENSED / FDOT QUALIFIED TESTING COMPANY. REQUIRED TEST FOR ASPHALT AND LIMEROCK SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OR THE JURISDICTIONAL GOVERNMENTAL AGENCY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

6. TEMPORARY FACILITIES

6.1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, COMMUNICATIONS, AND ELECTRICITY, FOR HIS OPERATIONS AND WORKS, COST INCLUDED UNDER MOBILIZATION.

6.2. CONTRACTOR SHALL CONSTRUCT TEMPORARY FENCING TO SECURE CONSTRUCTION AREAS AT ALL TIMES, COST INCLUDED IN MOBILIZATION.

6.3. CONTRACTOR TO OBTAIN A SECURE STAGING AREA AND OBTAIN ALL NECESSARY APPROVALS FROM THE OWNER.

6.4. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY LIGHTING AS REQUIRED TO LIGHT THE CONSTRUCTION PROJECT LIMITS AT ALL TIMES, TO AT LEAST THE SAME LIGHTING INTENSITY LEVELS AS THE EXISTING CONDITIONS.

6.5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.

7. PROJECT PROGRESS AND CLOSEOUT

7.1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE BROOM SWEPT CLEAN.

7.2. THE CONTRACTOR SHALL RESTORE OR REPLACE ANY PUBLIC OR PRIVATE PROPERTY (SUCH AS HIGHWAY, DRIVEWAY, WALKWAY, AND LANDSCAPING), DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.

7.3. MATERIAL OR DEBRIS SHALL BE HAULED IN ACCORDANCE WITH NPDES PERMIT AND JURISDICTIONAL LAWS.

7.4. ALL LAND SURVEY PROPERTY MONUMENTS OR PERMANENT REFERENCE MARKERS, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

7.5. ALL UNPAVED SURFACES DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE GRADED, SODDED, & RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.

8. PROJECT RECORD DOCUMENTS:

8.1. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE LOCATION, LENGTH, MATERIAL AND ELEVATION OF ANY FACILITY NOT BUILT ACCORDING TO PLANS. THIS COPY OF THE "AS-BUILT" SHALL BE SUBMITTED TO ENGINEER FOR PROJECT RECORD.

8.2. UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AT LEAST 48 HOURS BEFORE PLACING ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 50 FOOT INTERVALS, INCLUDING LOCATIONS AND ELEVATIONS OF ALL HIGH AND LOW POINTS.

8.3. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES, DIMENSIONS, LOCATIONS, AND ELEVATIONS OF ALL IMPROVEMENTS.

8.4. "AS-BUILT" DRAWINGS OF WATER LINES AND FORCE MAINS SHALL INCLUDE THE FOLLOWING INFORMATION:

8.4.1. TOP OF PIPE ELEVATIONS EVERY 100 LF.

8.4.2. LOCATIONS AND ELEVATIONS OF ALL FITTINGS INCLUDING BENDS, TEES, GATE VALVES, DOUBLE DETECTOR CHECK VALVES, FIRE HYDRANTS, AND APPURTENANCES.

8.4.3. ALL CONNECTIONS TO EXISTING LINES.

8.4.4. ENDS OF ALL WATER SERVICES AT THE BUILDINGS WHERE THE WATER SERVICE TERMINATES.

8.5. "AS-BUILT" DRAWINGS OF GRAVITY SANITARY SEWER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

8.5.1. RIM ELEVATIONS, INVERT ELEVATIONS, LENGTH OF PIPING BETWEEN STRUCTURES, AND SLOPES.

8.5.2. THE STUB ENDS AND CLEANOUTS OF ALL SEWER LATERALS SHALL BE LOCATED HORIZONTALLY AND VERTICALLY.

8.6. "AS-BUILT" DRAWINGS OF ALL DRAINAGE LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

8.6.1. RIM ELEVATION, INVERT ELEVATION, LENGTH OF PIPING BETWEEN STRUCTURES, AND CONTROL STRUCTURE ELEVATIONS IF APPLICABLE.

8.6.2. THE SIZE OF THE LINES.

8.6.3. DRAINAGE WELL STRUCTURE SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP OF CASING ELEVATION, TOP AND BOTTOM ELEVATIONS OF THE STRUCTURE AND BAFFLE WALLS, RIM ELEVATIONS AND PIPE INVERTS.

8.7. "AS-BUILT" DRAWINGS OF CONSTRUCTION AREAS SHALL INCLUDE THE FOLLOWING:

8.7.1. ROCK ELEVATIONS AT ALL HIGH, AND LOW POINTS, AND AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY.

8.7.2. ROCK ELEVATIONS AND CONCRETE BASE ELEVATIONS SHALL BE TAKEN AT ALL LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS.

8.7.3. ALL CATCH BASIN AND MANHOLE RIM ELEVATIONS.

8.7.4. FINISH GRADE ELEVATIONS IN ISLAND AREAS.

8.7.5. "AS-BUILT" ELEVATIONS SHALL BE TAKEN ON ALL PAVED AND UNPAVED SWALES, AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY AND CONFORMANCE TO THE PLAN DETAILS.

8.7.6. LAKE AND CANAL BANK "AS-BUILT" DRAWINGS SHALL INCLUDE A KEY SHEET OF THE LAKE FOR THE LOCATION OF CROSS SECTIONS. LAKE AND CANAL BANK CROSS SECTIONS SHALL BE PLOTTED AT A MINIMUM OF EVERY 100 LF, UNLESS OTHERWISE SPECIFIED. "AS-BUILT" DRAWINGS SHALL CONSIST OF THE LOCATION AND ELEVATION OF THE TOP OF BANK, EDGE OF WATER, AND THE DEEP CUT LINE, WITH THE DISTANCE BETWEEN EACH SHOWN ON THE DRAWING.

8.7.7. RETENTION AREA "AS-BUILT" ELEVATIONS SHALL BE TAKEN AT THE BOTTOM OF THE RETENTION AREA AND AT THE TOP OF BANK. IF THERE ARE CONTOURS INDICATED ON THE DESIGN PLANS, THEN THEY SHALL BE INCLUDED IN "AS-BUILT" DRAWINGS AS WELL.

8.8. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PREPARE "AS-BUILT" DRAWINGS ON FULL SIZE, 24" X 36" SHEETS. ALL "AS-BUILT" INFORMATION SHALL BE PUT ON THE LATEST ENGINEERING DRAWINGS. EIGHT (8) SETS OF BLUE OR BLACK LINE DRAWINGS SHALL BE SUBMITTED. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

8.9. AN ELECTRONIC COPY OF THESE "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN AUTOCAD, VERSION 2008 OR LATER.

9. UTILITY NOTES

9.1. CONTRACTOR IS RESPONSIBLE FOR UTILITY VERIFICATION PRIOR TO FABRICATION.

9.2. THE CONTRACTOR IS ADVISED THAT PROPERTIES ADJACENT TO THE PROJECT HAVE ELECTRIC, TELEPHONE, GAS, WATER AND/OR SEWER SERVICE LATERALS WHICH MAY NOT BE SHOWN IN PLANS. THE CONTRACTOR MUST REQUEST THE LOCATION OF THESE LATERAL SERVICES FROM THE UTILITY COMPANIES.

9.3. THE CONTRACTOR SHALL USE HAND DIGGING WHEN EXCAVATING NEAR EXISTING UTILITIES. EXTREME CAUTION SHALL BE EXERCISED BY THE CONTRACTOR WHILE EXCAVATING, INSTALLING, BACKFILLING OR COMPACTING AROUND THE UTILITIES.

9.4. THE CONTRACTOR SHALL NOTIFY AND OBTAIN AN UNDERGROUND CLEARANCE FROM ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A SUNSHINE811.COM CERTIFICATION CLEARANCE NUMBER AND FIELD MARKINGS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.

- PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.

9.1. FOR STREET EXCAVATION OR CLOSING OR FOR ALTERATION OF ACCESS TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR SHALL NOTIFY:

- ROADWAY JURISDICTIONAL ENGINEERING / PUBLIC WORKS AUTHORITY.
- COUNTY TRANSIT AUTHORITY
- SCHOOL BOARD TRANSPORTATION AUTHORITY
- JURISDICTIONAL FIRE DEPARTMENT DISPATCH
- JURISDICTIONAL POLICE DEPARTMENT(S)

9.1. THE CONTRACTOR SHALL USE EXTREME CAUTION WORKING UNDER, OVER, AND AROUND EXISTING ELECTRIC LINES. THE CONTRACTOR SHALL CONTACT THE ELECTRIC PROVIDER COMPANY TO VERIFY LOCATIONS, VOLTAGE, AND REQUIRED CLEARANCES, ONSITE, IN RIGHT-OF-WAYS, AND IN EASEMENTS, PRIOR TO ANY CONSTRUCTION IN THE VICINITY OF EXISTING LINES.

9.2. LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY (FACILITIES) AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION (VERTICAL & HORIZONTAL) OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS AND LOCATIONS OF ALL EXISTING FACILITIES, IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. IF AN EXISTING FACILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE CONFLICT.

9.3. THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND UTILITY COMPANIES REQUIRED. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY COMPANIES.

10. SIGNING AND PAVEMENT MARKINGS

10.1. ALL SIGNING AND PAVEMENT MARKINGS INSTALLED AS PART OF THESE PLANS SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), COUNTY TRAFFIC DESIGN STANDARDS AND FDOT DESIGN STANDARDS AS A MINIMUM CRITERIA.

10.2. MATCH EXISTING PAVEMENT MARKINGS AT THE LIMITS OF CONSTRUCTION.

10.3. REMOVAL OF THE EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY WATER BLASTING OR OTHER APPROVED METHODS DETERMINED BY THE ENGINEER.

10.4. INCORRECTLY PLACED PAINT OR THERMOPLASTIC PAVEMENT MARKINGS OVER FRICTION COURSE WILL BE REMOVED BY MILLING AND REPLACING THE FRICTION COURSE A MINIMUM WIDTH OF 18 IN AT THE CONTRACTOR'S EXPENSE. THE ENGINEER MAY APPROVE AN ALTERNATIVE METHOD IF IT CAN BE DEMONSTRATED TO COMPLETELY REMOVE THE MARKINGS WITHOUT DAMAGING THE ASPHALT.

10.5. PLACE ALL RETRO-REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH STANDARD INDEX 17352 AND / OR AS SHOWN IN THE PLANS.

10.6. CAUTION SHOULD BE EXERCISED WHILE RELOCATING EXISTING SIGNS TO PREVENT UNNECESSARY DAMAGE TO SIGNS. IF THE SIGN IS DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

10.7. ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED, STOCKPILED, AND RELOCATED BY THE CONTRACTOR. SIGN REMOVAL SHALL BE DIRECTED BY THE ENGINEER.

10.8. RELOCATED SIGN SUPPORT SYSTEM MUST MEET THE CURRENT DESIGN STANDARD.

10.9. THE CONTRACTOR SHALL PROVIDE AN INVENTORY OF EXISTING SIGNS TO REMAIN OR TO BE RELOCATED PRIOR TO STARTING THE JOB AND FORWARD THIS LIST TO THE ENGINEER. CONTRACTOR SHALL NOTIFY IF THERE ARE ANY MISSING OR DAMAGE SIGNS THAT THE PLANS SHOW TO REMAIN OR TO BE RELOCATED.

10.10. ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 711.

10.11. HAND DIG THE FIRST FOUR FEET OF SIGN FOUNDATION.

10.12. ALL SIGNS SHALL MEET ALL OF THE FOLLOWING:

- MEET THE CRITERIA OUTLINED IN SECTION 2A.08 OF THE 2009 MUTCD
- MEET THE SPECIFICATIONS OUTLINED IN SECTION 700 AND 994 OF THE LATEST FDOT STANDARD SPECIFICATIONS.
- CONSIST OF MATERIALS CERTIFIED TO MEET THE RETROREFLECTIVE SHEETING REQUIREMENTS OUTLINED IN THE CURRENT VERSION OF ASTM D4956 FOR TYPE-XI RETROREFLECTIVE SHEETING MATERIALS MADE WITH PRISIMS, EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL BE COMPRISED OF RETROREFLECTIVE FLUORESCENT YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS.
- CONSIST OF RETROREFLECTIVE SHEETING MATERIALS THAT HAVE A VALID FDOT APPROVED PRODUCT LIST (APL) CERTIFICATION FOR SPECIFICATION 700 HIGHWAY SIGNING FOR FDOT SHEETING TYPE XI (OR TYPE IV FOR SCHOOL AND PEDESTRIAN SIGNS).

10.13. PATCH ATTACHMENT HARDWARE, SUCH AS COUNTERSUNK SCREWS OR RIVET HEADS, WITH RETRO REFLECTIVE BUTTONS THAT MATCH THE COLOR AND SHEETING MATERIAL OF THE FINISHED SI

CONSTRUCTION SPECIFICATIONS

SECTION 20 - GENERAL SPECIFICATIONS PAVING GRADING DRAINAGE AND EARTHWORK

20.GENERAL

20.1. IT IS THE INTENT OF THESE SPECIFICATIONS TO DESCRIBE THE MINIMUM ACCEPTABLE TECHNICAL REQUIREMENTS FOR THE MATERIALS AND WORKMANSHIP FOR CONSTRUCTION OF SITE IMPROVEMENTS FOR THIS PROJECT. SUCH IMPROVEMENTS MAY GENERALLY INCLUDE, BUT NOT TO BE LIMITED TO, CLEARING, GRADING, PAVING, REMOVAL OF EXISTING PAVEMENT STORM DRAINAGE, WATER LINES AND SANITARY SEWERS.

20.2. IT IS THE INTENT THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION: (CURRENT EDITION) TOGETHER WITH "SUPPLEMENTAL SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (CURRENT EDITION) BE USED WHERE APPLICABLE FOR THE VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THE WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY; THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" TOGETHER WITH THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT. IF WITHIN A PARTICULAR SECTION, ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE PART OF THE STANDARD SPECIFICATIONS ALSO. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL AND STATE LAWS, REGULATIONS AND BUILDING CODES WHICH HAVE JURISDICTION IN THE AREA.

20.3. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT AND PERFORM ALL OPERATIONS REQUIRED TO COMPLETE THE CONSTRUCTION OF A PAVING AND DRAINAGE SYSTEM AS SHOWN ON THE PLANS, SPECIFIED HEREIN, OR BOTH. IT IS THE INTENT TO PROVIDE A COMPLETE AND OPERATING FACILITY IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS. THE MATERIAL AND EQUIPMENT SHOWN OR SPECIFIED SHALL NOT BE TAKEN TO EXCLUDE ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.

20.4. ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE PLANS AND CONSTRUCTION SPECIFICATIONS AND THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE UNIT OF GOVERNMENT WHICH HAS JURISDICTION AND RESPONSIBILITY FOR THE CONSTRUCTION. WHERE CONFLICTS OR OMISSIONS EXIST, THE JURISDICTIONAL GOVERNMENT ENGINEERING DEPARTMENT'S STANDARDS SHALL GOVERN. SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.

20.5. GUARANTEE - ALL MATERIALS AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT, SHALL BE GUARANTEED FOR A PERIOD OF (L) ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTEE PERIOD, THE AFFECTED PART OR MATERIALS SHALL BE REPLACED PROMPTLY WITH NEW PARTS OR MATERIALS BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER. IN THE EVENT THE CONTRACTOR FAILS TO MAKE NECESSARY REPLACEMENT OR REPAIRS WITHIN (7) SEVEN DAYS AFTER NOTIFICATION BY THE OWNER, THE OWNER MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.

21.EARTHWORK

21.1. ALL AREAS WITHIN THE PROJECT LIMITS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1'. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.

21.2. NONE OF THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT IS TO BE INCORPORATED IN THE NEW LIMEROCK BASE, UNLESS NOTED IN PLANS. THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT MAY BE INCORPORATED INTO THE STABILIZED SUBGRADE / SUBBASE, OR STABILIZED SHOULDER.

21.3. FILL MATERIAL SHALL BE CLASSIFIED AS A-L, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO N--145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL. NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.

21.4. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

21.5. ALL MATERIAL OF CONSTRUCTION SHALL BE SUBJECT TO INSPECTION AND TESTING TO ESTABLISH CONFORMANCE WITH THE SPECIFICATIONS AND SUITABLY FOR THE USES INTENDED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO THE TIME HE WILL BE READY FOR AN INSPECTION OR TEST. THE CONTRACTOR SHALL FOLLOW CITY AND COUNTY INSPECTION PROCEDURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PHASE OF WORK DEPENDENT ON AN INSPECTION OR TEST OF AN EARLIER PHASE OF WORK, PRIOR TO THAT TEST OR INSPECTION PASSING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND LIMEROCK, UTILITIES, EXCAVATION, ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC.

21.6. WHEN ENCOUNTERED, MUCK SHALL BE COMPLETELY REMOVED FROM THE CENTER LINE (10) TEN FEET BEYOND THE EDGE OF PAVEMENT EACH SIDE. ALL SUCH MATERIAL SHALL BE REPLACED BY APPROVED GRANULAR FILL.

21.7. WHEN ENCOUNTERED WITHIN DRAINAGE SWALES, HARDPAN SHALL BE REMOVED TO FULL DEPTH FOR A WIDTH OF (5) FIVE FEET AT THE INVERT AND REPLACED WITH GRANULAR MATERIALS.

21.8. ALL UNDERGROUND UTILITIES AND DRAINAGE INSTALLATIONS SHALL BE IN PLACE PRIOR TO SUBGRADE COMPACTION AND PAVEMENT CONSTRUCTION.

21.9. GROUND ADJACENT TO ROADWAY/PAVEMENT HAVING RUNOFF SHALL BE GRADED (2) TWO INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD.

21.10.SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1' OF THE REQUIRED ELEVATION FOR NON PAVED AREAS AND ALL AREAS SHALL BE GRADED TO DRAIN WITHOUT PONDING.

21.11.THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, FILL, EMBANKMENT AND GRADING TO ACHIEVE THE PROPOSED PLAN GRADES INCLUDING TYPICAL ROAD SECTIONS, SIDE SLOPES AND CANAL SECTIONS. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS. IF FILL MATERIAL IS REQUIRED IN EXCESS OF THAT GENERATED BY THE EXCAVATION, THE CONTRACTOR SHALL SUPPLY THIS MATERIAL AS REQUIRED FROM OFF-SITE.

21.12.A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SODDED OR SEEDED AND MULCHED WITHIN THE PROJECT LIMITS UNLESS OTHERWISE INDICATED ON THE PLANS.

21.13.SOD SHALL BE ST. AUGUSTINE UNLESS OTHERWISE INDICATED ON THE PLANS, AND SHALL BE PLACED ON THE GRADED TOP SOIL AND WATERED TO INSURE SATISFACTORY CONDITION UPON FINAL ACCEPTANCE OF THE PROJECT.

22.DRAINAGE

22.1. INLETS - ALL INLETS SHALL BE THE TYPE DESIGNATED ON THE PLANS, AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.

22.2. PIPE SPECIFICATIONS: THE MATERIAL TYPE IS SHOWN ON THE DRAWINGS BY ONE OF THE FOLLOWING DESIGNATIONS:

- RCP = REINFORCED CONCRETE PIPE, ASTM DESIGNATION C--76, SECTION 941 OF THE STANDARD SPECIFICATIONS.
- CMP = CORRUGATED METAL (ALUMINUM) PIPE, ASTM DESIGNATION M-196.
- CMP (SMOOTH LINED) = CORRUGATED METAL ALUMINUM PIPE, (SMOOTH LINED) ASTM DESIGNATION M-196.
- SCP = SLOTTED CONCRETE PIPE, SECTIONS 941 AND 942, OF THE STANDARD SPECIFICATIONS.
- PVC = POLYVINYL CHLORIDE PIPE.
- PCMP = PERFORATED CMP, SECTION 945, OF THE STANDARD SPECIFICATIONS
- CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE) (12 INCHES TO 60 INCHES), SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 948-2.3.

22.3. PIPE BACKFILL - REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE AS DEFINED IN THE SECTION 125-8, OF THE STANDARD SPECIFICATIONS. PIPELINE BACKFILL SHALL BE PLACED IN 6 INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (AASHTO T--99 SPECIFICATIONS)

22.4. LOCATION OF DRAINAGE STRUCTURES SHALL GOVERN, AND PIPE LENGTH MAY HAVE TO BE ADJUSTED TO ACCOMPLISH CONSTRUCTION AS SHOWN ON THESE PLANS.

22.5. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE INNER WALLS OF STRUCTURES.

22.6. FILTER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL CONFORMING TO SECTION 985 OF THE STANDARD SPECIFICATIONS.

23.ASPHALT PAVING

23.1. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.

23.2. INTERNAL ASPHALT PAVING CONSTRUCTED ON EXISTING SANDY SOILS SHALL BE CONSTRUCTED WITH A 12" SUBGRADE, COMPACTED TO A MINIMUM DENSITY OF 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. THE COMPACTED SUBGRADE SHALL BE CONSTRUCTED IN THE LIMITS SHOWN ON THE PLANS. ALL SUBGRADE SHALL HAVE AN LBR OF 40 UNLESS OTHERWISE NOTED.

23.3. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE SURFACE COURSE SHALL CONSIST OF THE THICKNESS AND TYPE ASPHALTIC CONCRETE AS SPECIFIED IN THE PLANS. ALL ASPHALTIC CONCRETE SHALL BE IN ACCORDANCE WITH SECTIONS 320, 327, 330, 334, 336, 337, 337, 338, 339 AND 341 OF THE STANDARD SPECIFICATIONS.

23.4. LIMEROCK BASE SHALL BE PREPARED, COMPACTED AND GRADED AND SHALL BE IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS. ALL LIMEROCK SHALL BE COMPACTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 70% OF CARBONATES OF CALCIUM AND MAGNESIUM UNLESS OTHERWISE DESIGNATED. THE ENGINEER SHALL INSPECT THE COMPLETED BASE COURSE AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES AND CLEAN THE BASE COURSE PRIOR TO THE PLACEMENT OF THE PRIME COAT. A TACK COAT WILL ALSO BE REQUIRED IF THE ENGINEER FINDS THAT THE PRIMED BASE HAS BECOME EXCESSIVELY DIRTY OR THE PRIME COAT HAS CURED TO THE EXTENT OF LOSING BOUNDING EFFECT PRIOR TO PLACEMENT OF THE ASPHALTIC CONCRETE SURFACE COURSE. THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

23.5. LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO EQUAL LIFTS. IF, THROUGH FIELD TESTS, THE CONTRACTOR CAN DEMONSTRATE THAT THE COMPACTION EQUIPMENT CAN ACHIEVE DENSITY FOR THE FULL DEPTH OF A THICKER LIFT, AND IF APPROVED BY THE ENGINEER, THE BASE MAY BE CONSTRUCTED IN SUCCESSIVE COURSES OF NOT MORE THAN 8 INCHES (200 MM) COMPACTED THICKNESS.

23.6. ASPHALT EDGES THAT ARE NOT CURBED SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE TO THE DIMENSIONS SHOWN ON PLANS.

24.CONCRETE CONSTRUCTION

24.1. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH SECTION 522 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 310. CONCRETE SIDEWALK SHALL BE 4" THICK, UNLESS OTHERWISE NOT AND CONSTRUCTED ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS PLACED AT A MAXIMUM OF 75', UNLESS OTHERWISE NOTED ON PLANS. CRACK CONTROL JOINTS SHALL BE 5' ON CENTER. ALL CONCRETE SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE 6" THICK, UNLESS OTHERWISE NOTED ON PLANS.

24.2. SIDEWALK CURB RAMPS HALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 304.

24.3. CONCRETE CURB SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS AND SHALL BE IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS. CONCRETE CURBING SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 300.

24.4.

SECTION 30 - WATER DISTRIBUTION AND SANITARY SEWER FORCE MAINS.

30. MATERIALS:

NOTE: IF MATERIALS LIST HERE ON ARE IN CONFLICT WITH UTILITY OWNER, MATERIAL OWNER REQUIREMENTS SHALL GOVERN.

30.1. ALL WATER MAIN PIPE, INCLUDING FITTINGS, SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.

30.2. DUCTILE IRON PIPE FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. THE PIPE SHALL BE ADAPTED FOR USE WITH CLASS 250 FITTINGS FOR ALL SIZES. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.

30.3. DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND- LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE INTERIOR CERAMIC EPOXY LINED AND EXTERIOR COATED WITH THE MANUFACTURER'S COATING SYSTEM (PROTECTO 401 CERAMIC EPOXY WITH A MINIMUM DRY FILM THICKNESS OF 40 MILS AND AN OUTSIDE COATING OF EITHER COAL TAR EPOXY OR ASPHALT). CEMENT MORTARED LININGS ARE NOT APPROPRIATE FOR THIS APPLICATION.

30.4. ALL PIPE & FITTINGS ON THE LIFT STATION SITES SHALL BE DUCTILE IRON CONFORMING TO THE SAME SPECIFICATIONS AS ABOVE FOR SEWAGE FORCE MAINS EXCEPT THAT FLANGED DUCTILE IRON PIPE & FITTINGS SHALL BE USED INSIDE VALVE PITS AND WET WELLS. FLANGED PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA C115/A21.15 LATEST REVISION AND ANSI/AWWA C110/A21.10 LATEST REVISION. THE FOLLOWING THICKNESS CLASSES SHALL BE ADHERED TO: 4" - 12" - CLASS 52, 14" & LARGER - CLASS 51.

30.5. PVC PRESSURE PIPE FOR SIZES 4" THROUGH 12" AND SHALL CONFORM TO ANSI/AWWA STANDARD C900 LATEST REVISION. PVC PRESSURE PIPE SHALL BE MADE FROM CLASS 12454-A OR CLASS 12454-B VIRGIN MATERIAL AND CONFORM WITH THE OUTSIDE DIAMETER OF CAST IRON PIPE WITH A MINIMUM WALL THICKNESS OF DR SERIES 18. ULTRA VIOLET DEGRADATION OR SUN BLEACHED PIPE WILL BE CAUSE FOR REJECTION. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES. FORCE MAIN SHALL BE IMPREGNATED WITH GREEN PIGMENT. REUSE MAIN SHALL BE IMPREGNATED WITH PURPLE PIGMENT.

30.6. DUCTILE IRON FITTINGS FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. WATER MAIN FITTING SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.

30.7. CAST IRON AND DUCTILE IRON FITTINGS FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE COATED IN ACCORDANCE WITH THE REQUIREMENTS OF DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS.

30.8. JOINTS FOR BELL AND SPIGOT DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C111/A21.11 LATEST REVISION. MECHANICAL JOINT OR PUSH-ON JOINT TO BE RUBBER GASKET COMPRESSION-TYPE. SPECIAL FITTINGS AND JOINTS SHALL BE CONSIDERED FOR SPECIFIC INSTALLATION SUBJECT TO THE APPROVAL OF THE ENGINEER.

30.9. JOINTS FOR PVC PRESSURE PIPE SHALL BE BELL AND SPIGOT PUSH-ON RUBBER GASKET TYPE ONLY. NO SOLVENT WELD OR THREADED JOINTS WILL BE PERMITTED.

30.10.WATER DISTRIBUTION SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW:

- JOINT RESTRAINT
- PUSH-ON P.V.C. EBAA IRON SERIES 1600
- PUSH-ON DIP EBAA IRON SERIES 1700
- TR-FLEX BY U.S. PIPE OR
- FLEX RING BY AMERICAN
- FITTINGS W/ DIP EBAA IRON SERIES 1100 MEGALUG
- FITTINGS W/ P.V.C. EBAA IRON SERIES 2000 MEGALUG
- LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET)

30.11. SEWAGE FORCE MAIN SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW

- JOINT RESTRAINT
- PUSH-ON P.V.C. EBAA IRON SERIES 1600
- PUSH-ON DIP EBAA IRON SERIES 1700
- TR-FLEX BY U.S. PIPE OR
- FLEX RING BY AMERICAN
- FITTINGS W/ DIP EBAA IRON SERIES 1100 MEGALUG
- FITTINGS W/ P.V.C. EBAA IRON SERIES 2000 MEGALUG
- LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET)

30.12.WATER DISTRIBUTION VALVES SHALL BE GATE VALVES, IRON BODY, FULLY RESILIENT SEAT BRONZED MOUNTED NON-RISING STEM, RATED AT 200 PSI AND CONFORMING TO ANSI/AWWA C509 LATEST REVISION, AND SHALL HAVE MECHANICAL JOINTS.

30.12.1. GATE VALVES 4" AND LARGER SHALL BE MUELLER A-2361/2362, AMERICAN 250 LINE OR CLOW F-6100, CONFORMING TO ANSI/AWWA C500 LATEST REVISION OR APPROVED EQUAL.

30.12.2. TAPPING VALVES SHALL BE MUELLER T-2361/2362 OR APPROVED EQUAL.

30.12.3. GATE VALVES 3" OR LESS SHALL BE NIBCO T-133 OR T-136 WITH MALLEABLE HAND WHEELS OR APPROVED EQUAL.

30.13.TAPPING SLEEVES SHALL BE MUELLER H615, CLOW F- 2505 OR APPROVED EQUAL.

30.14.VALVE BOXES SHALL BE U.S. FOUNDRY 7500 OR APPROVED EQUAL PAINTED BLUE WITH THE DESIGNATION "WATER".

30.15.RETAINER GLANDS FOR DIP SHALL CONFORM TO ANSI/AWWA C111/A21.11 LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWRITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE RATING. CLOW CORPORATION MODEL F-1058, STANDARD FIRE PROTECTION EQUIPMENT COMPANY OR APPROVED EQUAL.

30.16.DRESSER COUPLINGS SHALL BE REGULAR BLACK COUPLINGS WITH PLAIN GASKETS FOR GALVANIZED STEEL PIPE. THEY SHALL BE DRESSER STYLE 90. NO SUBSTITUTIONS ALLOWED.

30.17.FIRE HYDRANTS SHALL BE MUELLER CENTURION TRAFFIC TYPE A-423 WITH 5 1/4" INTERNAL VALVE OPENING OR APPROVED EQUAL. PUMPER NOZZLE TO BE 18" FROM FINISHED GRADE. ALL HYDRANTS TO BE INSTALLED WITH CONTROL VALVE. RETAINER GLANDS ARE PREFERRED FOR RESTRAINING. FIRE HYDRANT SHALL COMPLY WITH ANSI/AWWA C502 LATEST REVISION. FIRE HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH NFPA #291 OR PER AGENCY STANDARDS HAVING JURISDICTION. BLUE RAISED REFLECTIVE PAVEMENT MARKER (RPM) SHALL BE USED TO IDENTIFY FIRE HYDRANT LOCATION. THE PLACEMENT OF THE RPM TO BE AT THE CENTERLINE OF THE OUTSIDE ROADWAY LANE.

30.18.SEWAGE FORCE MAIN VALVES SHALL BE PLUG VALVES WHICH SHALL BE OF THE NON-LUBRICATED, ECCENTRIC TYPE WITH RESILIENT FACED PLUGS, PORT AREAS FOR VALVES 20 INCHES AND SMALLER SHALL BE AT LEAST 80% OF FULL PIPE AREA. PORT AREA OF VALVES 24 INCHES AND LARGER SHALL BE AT LEAST 70% OF FULL PIPE AREA. THE BODY SHALL BE OF SEMI-STEEL (ASTM A-126 C1.B) AND SHALL HAVE BOLTED BONNET WHICH GIVES ACCESS TO THE INTERNALS OF THE VALVE. SEATS SHALL BE WELDED OVERLAY OF HIGH NICKEL CONTENT OR A STAINLESS STEEL PLATE LOCKED IN THE BODY CAVITY. IF A PLATE IS USED, IT SHALL BE REPLACEABLE THROUGH THE BONNET ACCESS. BEARINGS SHALL BE PERMANENTLY LUBRICATED OF STAINLESS STEEL, BRONZE OR TEFLON LINED, FIBER GLASS BACKED DURALON. BEARING AREAS SHALL BE ISOLATED FROM THE FLOW WITH GRIT SEALS. VALVES SHALL HAVE PACKING BONNETS WHERE THE SHAFT PROTRUDES FROM THE VALVE AND THE PACKING SHALL BE SELF-ADJUSTING CHEVRON TYPE WHICH CAN BE REPLACED WITHOUT REMOVING THE BONNET. ALL NUTS, BOLTS, SPRINGS AND WASHERS SHALL BE STAINLESS STEEL.

30.19.PLUG VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 150 PSI THE VALVE AND ACTUATOR SHALL BE CAPABLE OF SATISFACTORY OPERATION IN EITHER DIRECTION OF FLOW AGAINST PRESSURE DROPS UP TO AND INCLUDING 100 PSI (FOR PLUG VALVES OVER 12" IN DIAMETER). VALVES SHALL BE BUBBLE TIGHT IN BOTH DIRECTIONS AT 100 PSI DIFFERENTIAL. PLUG VALVES OVER 12" IN DIAMETER SHALL HAVE WORM GEAR OPERATORS. THE OPERATING MECHANISM SHALL BE FOR BURIED SERVICE WITH A 2 INCH SQUARE OPERATING NUT.

30.20.PLUG VALVES ARE TO BE INSTALLED WITH THE SEAT POINTED TOWARDS THE UPSTREAM FLOW, WHEN SPECIFIED.

30.21.SWING CHECK VALVES FOR WATER, SEWAGE, SLUDGE, AND GENERAL SERVICE SHALL BE OF THE OUTSIDE LEVER AND SPRING OR WEIGHT TYPE, IN ACCORDANCE WITH ANSI/AWWA C 508 LATEST REVISION SWING-CHECK VALVES FOR WATERWORKS SERVICE, 2" THROUGH 24" NPS, UNLESS OTHERWISE INDICATED, WITH FULL-OPENING PASSAGES, DESIGNED FOR A WATER-WORKING PRESSURE OF 150 PSI THEY SHALL HAVE A FLANGED COVER PIECE TO PROVIDE ACCESS TO THE DISC.

30.22.HIGH DENSITY POLYETHYLENE PIPE (HDPE) FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO AWWA C906 STANDARD, LATEST REVISION. PIPES SHALL BE COLOR-CODED BLUE, MINIMUM 40 FEET STANDARD LENGTHS.

31.SERVICE CONNECTION:

31.1. SERVICE SADDLES SHALL BE FUSION BONDED PLASTIC COATED DUCTILE IRON (ASTM A536) WITH STAINLESS STEEL STRAPS, SADDLES SHALL BE DOUBLE STRAP TYPE.

31.2. SERVICE LINES SHALL BE POLYETHYLENE (PE 3408), 200 P.S.I RATED, DR9. PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE TOTALLY CONFINED GRIP SEAL AND COUPLING NUT.

31.3. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN ACCORDANCE WITH ASTM B-62 WITH THREADED ENDS, AS MANUFACTURED BY FORD BALLCORP, CATALOG # 1100 OR APPROVED EQUAL.

31.4. CURB STOPS SHALL BE FORD V63-44W-X" LATEST REVISION OR APPROVED EQUAL.

31.5. METER STOPS SHALL BE 90 DEGREE LOCKWING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE FV63-777W" LATEST REVISION WITH ASTM B-62. METER STOPS SHALL BE CLOSED BOTTOM DESIGN AND RESILIENT "0" RING SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES, AS MANUFACTURED BY FORD OR APPROVED EQUAL.

32. INSTALLATION:

32.1. WHERE RESTRAINED PIPE JOINTS ARE REQUIRED DUE TO FITTINGS, APPURTENANCES, ETC., PIPE MATERIAL SHALL BE DIP

32.2. ALL PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION "GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEM," AND ANSI/AWWA C605-XX LATEST REVISION STANDARD.

32.3. ALL DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/ C600-XX LATEST REVISION.

32.4. ALL WATER MAINS SHALL TYPICALLY BE LAID WITH A MINIMUM 36" COVER FOR PVC AND 30" COVER FOR DIP.

32.5. DETECTOR TAPE SHALL BE LAID 18 INCHES ABOVE ALL WATER AND SEWER LINES. A 14 GAUGE MULTI-STRAND WIRE SHALL BE ATTACHED TO ALL NONCONDUCTIVE WATER MAINS TO FACILITATE LOCATION. AN EXTRA 4 FEET OF WIRE SHALL BE PROVIDED AT ALL VALVES, BLOW-OFFS, HYDRANTS, ETC. THE WIRE SHALL BE TESTED FOR CONTINUITY AT THE PRESSURE TEST.

32.6. PIPE DEFLECTION SHALL NOT EXCEED 50% OF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER.

32.7. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED. BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

32.8. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER" OR "SEWER", AS APPLICABLE, CAST IN THE COVER. U.S. FOUNDRY OR APPROVED EQUAL.

33.TESTING:

33.1. BEFORE ANY PHYSICAL CONNECTIONS AND ACCEPTANCE FOR OPERATION TO THE EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE FLUSHED, PRESSURE TESTED AND DISINFECTED. COPIES OF PASSING BACTERIOLOGICAL RESULTS AND PRESSURE TEST RESULTS MUST BE SUBMITTED TO, AND APPRO

1. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.

2. COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 4'-0" MIN.

3. ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 5.3 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.

4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AND CHECK VALVE AT THE POINT OF ENTRY.

5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.

6. ALL WATER METERS WILL BE INSTALLED BY THE MIAMI-DADE WATER AND SEWER DEPARTMENT, PROVIDING THE APPROPRIATE CHARGES HAVE BEEN PREPAID.

7. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY MIAMI-DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.

8. CONTRACTOR MUST CALL MDWASD INSPECTION DIVISION TO ARRANGE FOR A PRECONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.

9. CONTRACT INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THE DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.

10. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE DEPARTMENT:

a. EASEMENTS, IF REQUIRED
b. CONTRACTOR'S WAIVER AND RELEASE OF LIEN
c. ABSOLUTE BILL OF SALE
d. i. CONTRACTOR'S LETTER OF WARRANTY (I.E.; LETTER AGREEMENT)
   ii DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT).
e. "RECORD DRAWING" PRINTS (24"x 36") SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF ALL WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED SURVEYOR & MAPPER, ALONG WITH PRINTS OF "RECORD DRAWINGS" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR & MAPPER. (No. OF PRINTS: 3–FOR WATER, 4–FOR GRAVITY SEWER AND 5–FOR FORCE MAIN OR PUMP STATION PROJECTS). Submittal of final CAD Files required.
f. H.R.S. LETTER OF RELEASE REQUIRED FOR ALL WATER PROJECTS
g. BILL OF SALE SKETCH (8½"x 11") FOR WATER AND SEWER, SEPARATELY

11. ALL NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP.

12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MDWASD FOR ALL NEW SUBDIVISIONS PRIOR TO APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.

13. UNLESS OTHERWISE SPECIFIED, ALL TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS WILL BE DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.

ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — Delivering Excellence Every Day — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
03/01/2010	V.F.C.
07/20/2016	D.V.

STANDARD DETAIL

STANDARD REQUIREMENTS WATER AND SEWER CONSTRUCTION

GS 0.5 SHEET 1 OF 2

1. AT THE COMPLETION OF ANY WATER AND SEWER JOB EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT:
   a. RECORD DRAWING PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER (QTY. OF PRINTS AS REQUIRED BY THE DEPARTMENT).

2. "RECORD DRAWING" FORMAT:
   a. 24"x 36" PRINTS
   b. PDF FILE
   c. CADD FILE (DWG OR DXF) ROTATED AND TRANSLATED TO STATE PLANE COORDINATES NAD 83 FLORIDA EAST ZONE
   d. THE WORDS "RECORD DRAWING" IN LARGE LETTERS
   e. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION
   f. PREFERRED SCALE TO BE 1"= 40' HORIZONTALLY AND 1"= 4' VERTICALLY*
   g. STREET NOMENCLATURE
   h. SEPARATE RECORD DRAWINGS FOR WATER AND SEWER
   i. SEPARATE WATER AND SEWER PROFILE
   j. STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E. ℄, ℈, ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN
   k. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT
   l. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC.)
   m. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY RECORD DRAWING INFORMATION REFLECTED IN DRAWINGS

3. WATER "RECORD DRAWINGS" MUST INCLUDE:
   a. PLANS SHOWING PIPE SIZE, MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (IF ANY), STATION OF SERVICES, HYDRANTS, VALVES, FITTINGS, IF ANY, ALL IN STATE PLANE COORDINATES. UTILITY CROSSINGS SHALL BE CLEARLY IDENTIFIED AND LOCATED.
   b. PROFILE SHOWING TOP OF GROUND AND TOP OF PIPE ELEVATIONS AT EVERY 100' STATION AND AT ANY CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERENCED TO PLAN.

4. SEWER "RECORD DRAWINGS" MUST INCLUDE:
   a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, SLOPE OF GRAVITY SEWER, LOCATION OF LATERALS WITH REFERENCE TO MANHOLE AND CLEANOUTS.
   b. THE NORTHERLY AND EASTERLY COORDINATES ON ALL FIELD OBTAINED MEASUREMENTS AND PROVIDED ON ALL RECORD DRAWING SUBMITTALS
   c. PROFILE SHOWING MANHOLE NUMBER (AS PER PLAN), RIM AND INVERT ELEVATIONS (IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH, ETC.), AND STATION STARTING AT 0+00 AT DOWNSTREAM MANHOLE.

5. FORCE MAIN "RECORD DRAWING" SAME AS WATER MAIN.

6. EACH RECORD DRAWING SHALL SHOW THE FLORIDA STATE PLANE COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT.

* OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED BY THE DEPARTMENT PRIOR TO PREPARATION OF DRAWINGS.

ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — Delivering Excellence Every Day — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
03/11/2009	V.F.C.
07/20/2016	D.V.

STANDARD DETAIL

"RECORD DRAWING" REQUIREMENTS

GS 0.5 SHEET 2 OF 2

NOT A PART OF MD-WASD NOTES NOR APPROVAL

RER-DERM WATER-SEWER GENERAL NOTES

1. A horizontal distance of at least 6 feet, and preferably 10 feet (outside to outside), shall be maintained between gravity or pressure sewer pipes and water pipes. The minimum horizontal separation can be reduced to 3 feet for vacuum-type sewers or for gravity sewers where the top of the sewer pipe is at least 6 inches below the bottom of the water pipe. When the above specified horizontal distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met:
   a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
   b) The sewer is encased in a watertight carrier pipe or concrete.
   c) The top of the sewer is at least 18 inches below the bottom of the water pipe.
2. A vertical distance of at least 12 inches (outside to outside) shall be maintained between any water and sewer mains with sewer pipes preferably crossing under water mains. The minimum vertical separation can be reduced to 6 inches for vacuum-type sewers or for gravity sewers where the sewer pipe is below the water main. The crossing shall be arranged so that all water main joints are at least 6 feet from all joints in gravity and pressure sewer pipes. This distance can be reduced to 3 feet for vacuum-type sewers. When the above specified vertical distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met:
   a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
   b) The sewer is encased in a watertight carrier pipe or concrete.
3. Air release valves shall be provided at high points of new force main sanitary sewers.
4. Gravity sanitary sewers constructed within a public wellfield protection area shall be C-900 PVC or Ductile Iron Pipe. The maximum allowable exfiltration rate of gravity sanitary sewers constructed in a public wellfield protection area shall be:
   a) Residential Land Uses. Fifty (50) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
   b) Non-Residential Land Uses. Twenty (20) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
   c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
5. The maximum allowable exfiltration rate of gravity sanitary sewers constructed outside a public wellfield protection area shall be one hundred (100) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe. Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
6. Forcemain sanitary sewers constructed within a public wellfield protection area shall be ductile iron, C-900 PVC, HDPE or reinforced concrete pressure sewer pipes.
7. The maximum allowable exfiltration/leakage rate of forcemain sanitary sewers shall be:
   a) Ductile Iron, C-900 PVC, HDPE and PVC Pipe. The allowable leakage rate specified in American Water Works Association Standard (AWWAS) C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours.
   b) Reinforced Concrete Pressure Pipe. Half (1/2) the allowable leakage rate specified in AWWA C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours.
   c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
8. The contractor shall verify nature, depth, and character of existing underground utilities prior to start of construction.
9. In no case shall a contractor install utility pipes, conduits, cables, etc. in the same trench above an existing water or sewer pipe except where they cross.
10. If any area of the work site is found to contain buried solid waste and/or ground or ground water contamination, the following shall apply:
   a) All work in the area shall follow all applicable safety requirements (e.g., OSHA, etc.) and notification must be provided to the appropriate agencies.
   b) Immediately notify the Environmental Monitoring and Restoration Division (EMRD). The EMRD can be contacted at (305) 372-6700.
   c) If contaminated soils and/or buried solid waste material is excavated during construction, then they require proper handling and disposal in accordance with the local, state and federal regulations. Be advised that the landfill owner/operator is the final authority on disposal and may have requirements beyond those provided by herein. If disposal within a Miami-Dade County owned landfill (Class I landfill) is appropriate and selected, please contact the Miami-Dade County Department of Solid Waste Management at (305) 594-6666 for information.
   d) The reuse of contaminated soils that are not returned to the original excavation requires prior approval of a Soil Management Plan from the Environmental Monitoring and Restoration Division. The EMRD can be contacted at (305) 372-6700.
11. Pumps must comply with the National Electrical Code (NEC) requirements for Class I, Group D, Division 1 locations (Explosion Proof).

Rev. 5/25/2017

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M-D WASD NOTES:

FOR ALL PROJECTS WHERE REMOVAL OF UTILITY LINES IS PROPOSED

1. ALL EXISTING UTILITIES BEING REMOVED AND/OR RELOCATED MUST REMAIN ACTIVE AND IN SERVICE, UNTIL SUCH TIME WHEN NEW REPLACING UTILITIES HAVE BEEN INSTALLED, IN SERVICE, ACCEPTED BY THE DEPARTMENT AND ALL RELATED SERVICES FROM THE EXISTING MAINS HAVE BEEN TRANSFERRED TO THE NEW ONES, BY A LICENSED CONTRACTOR UNDER SUPERVISION OF WASD LICENSED OPERATOR AND WASD DONATION INSPECTOR UNDER THE SCOPE AND JURISDICTION OF THE CONTRACTOR'S RIGHT-OF-WAY PERMIT.

2. ALL WATER AND/OR SEWER FACILITIES LOCATED IN PRIVATE PROPERTY SHALL BE REMOVED AFTER ALL INSTALLED SERVICES FROM THEM HAVE BEEN TRANSFERRED TO THE ALREADY INSTALLED AND IN SERVICE NEW MAINS. ANY ASSOCIATED EXCLUSIVE EASEMENTS SHALL BE CLOSED AND RELEASED AFTER THE REMOVAL OF THE EXISTING WATER AND/OR SEWER FACILITIES.

DISCLOSURE RELATED TO CRITICAL HABITAT FOR ENDANGERED SPECIES

PLEASE BE ADVISED THAT THE FEDERAL GOVERNMENT HAS DESIGNATED ALL OR A PART OF THE SUBJECT PROPERTY AS CRITICAL HABITAT FOR ONE OR MORE ENDANGERED SPECIES.

YOU ARE NOT AUTHORIZED TO COMMENCE ANY WORK OR ACTIVITIES PURSUANT TO THIS PERMIT UNTIL YOU OBTAIN ANY AND ALL APPROVALS OR PERMITS, IF NECESSARY, FROM THE FEDERAL GOVERNMENT PURSUANT TO THE ENDANGERED SPECIES ACT AND FROM THE STATE OF FLORIDA PURSUANT TO FLORIDA LAW ON ENDANGERED SPECIES. PLEASE BE ADVISED THAT, EVEN AFTER WORK COMMENCES, IF MIAMI-DADE COUNTY IS ADVISED BY THE FEDERAL GOVERNMENT, THE STATE OF FLORIDA, OR A COURT THAT AN ACTIVITY ON THE SUBJECT PROPERTY IS IN VIOLATION OF THE ENDANGERED SPECIES ACT, IN VIOLATION OF FLORIDA LAW ON ENDANGERED SPECIES, OR IN VIOLATION OF A PERMIT OR APPROVAL GRANTED BY THE FEDERAL GOVERNMENT PURSUANT TO THE ENDANGERED SPECIES ACT, SUCH VIOLATION MAY RESULT IN AN IMMEDIATE STOP WORK ORDER.

YOU ARE STRONGLY ADVISED TO CONSULT WITH THE UNITED STATES FISH AND WILDLIFE SERVICE AND ANY OTHER NECESSARY FEDERAL OR STATE AGENCIES BEFORE CONDUCTING ANY WORK OR\ ACTIVITIES ON THE PROPERTY. THE VERO BEACH OFFICE OF THE UNITED STATES FISH AND WILDLIFE SERVICE MAY BE REACHED AT (772) 562-3909. PLEASE BE AWARE THAT THE FEDERAL GOVERNMENT MAY REQUIRE CERTAIN ACTIONS OR PROTECTIONS ON THE PROPERTY, AND THIS MAY RESULT IN THE NEED TO MODIFY THE PLANS FOR THE PROPERTY. THEREFORE, IT IS RECOMMENDED THAT YOU CONSULT WITH THE UNITED STATES FISH AND WILDLIFE SERVICE AT AN EARLY STAGE IN THE PROCESS.

IN THE EVENT THAT THE UNITED STATES FISH AND WILDLIFE SERVICE ADVISES THAT YOUR PLANS FOR THE SUBJECT PROPERTY MAY RESULT IN A "TAKE" OF ENDANGERED OR THREATENED SPECIES, YOU ARE STRONGLY RECOMMENDED TO INFORM MIAMI-DADE COUNTY IN WRITING AT THE EARLIEST STAGE POSSIBLE.

MD-WASD AGGREEMENT ID#24152

HEALTH DEPARTMENT NOTES

(NOT PART OF MD-WASD NOTES NOR APPROVAL)

WATER MAIN HORIZONTAL SEPARATION

SEPARATION SHALL BE MEASURED OUTSIDE EDGE TO OUTSIDE EDGE BETWEEN WATER MAINS AND, STORM SEWERS, STORMWATER FORCE MAINS, OR RECLAIMED WATER LINES, SHALL BE 3 FT MINIMUM.

BETWEEN WATER MAINS AND VACUUM TYPE SEWER PREFERABLY 10 FT, AND AT LEAST 3 FT, MINIMUM

GRAVITY OR PRESSURE SANITARY SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER PREFERABLE 10FT, AND AT LEAST 6FT, MAY BE REDUCED TO 3 FT. WHERE BOTTOM OF WATER MAINS IS AT LEAST 6 INCHES ABOVE TOP OF SEWER.

10 FT TO ANY PART OF ON-SITE SEWER TREATMENT OR DISPOSAL SYSTEM.

WATER MAIN VERTICAL SEPARATION

SEPARATION BETWEEN WATER MAINS AND GRAVITY SEWER, VACUUM TYPE SEWER, OR STORM SEWERS, TO BE PREFERABLY 12 INCHES, OR AT LEAST 6 INCHES ABOVE, OR AT LEAST 12 INCHES IF BELOW.*

PRESSURE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR RECLAIMED WATER, AT LEAST 12 INCHES ABOVE OR BELOW.*

* NOTE: CENTER 1-FULL LENGTH OF WATER MAIN PIPE AT CROSSINGS: ALTERNATIVELY ARRANGE PIPES SO JOINTS ARE AT LEAST 3 FEET FROM JOINTS I NVACUUM, STORM OR STORM FORCE MAINS. AT LEAST 6 FEET FROM JOINTS IN GRAVITY OR PRESSURE SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:43 PM

STILES ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-GI-XXX.dwg

GI-005

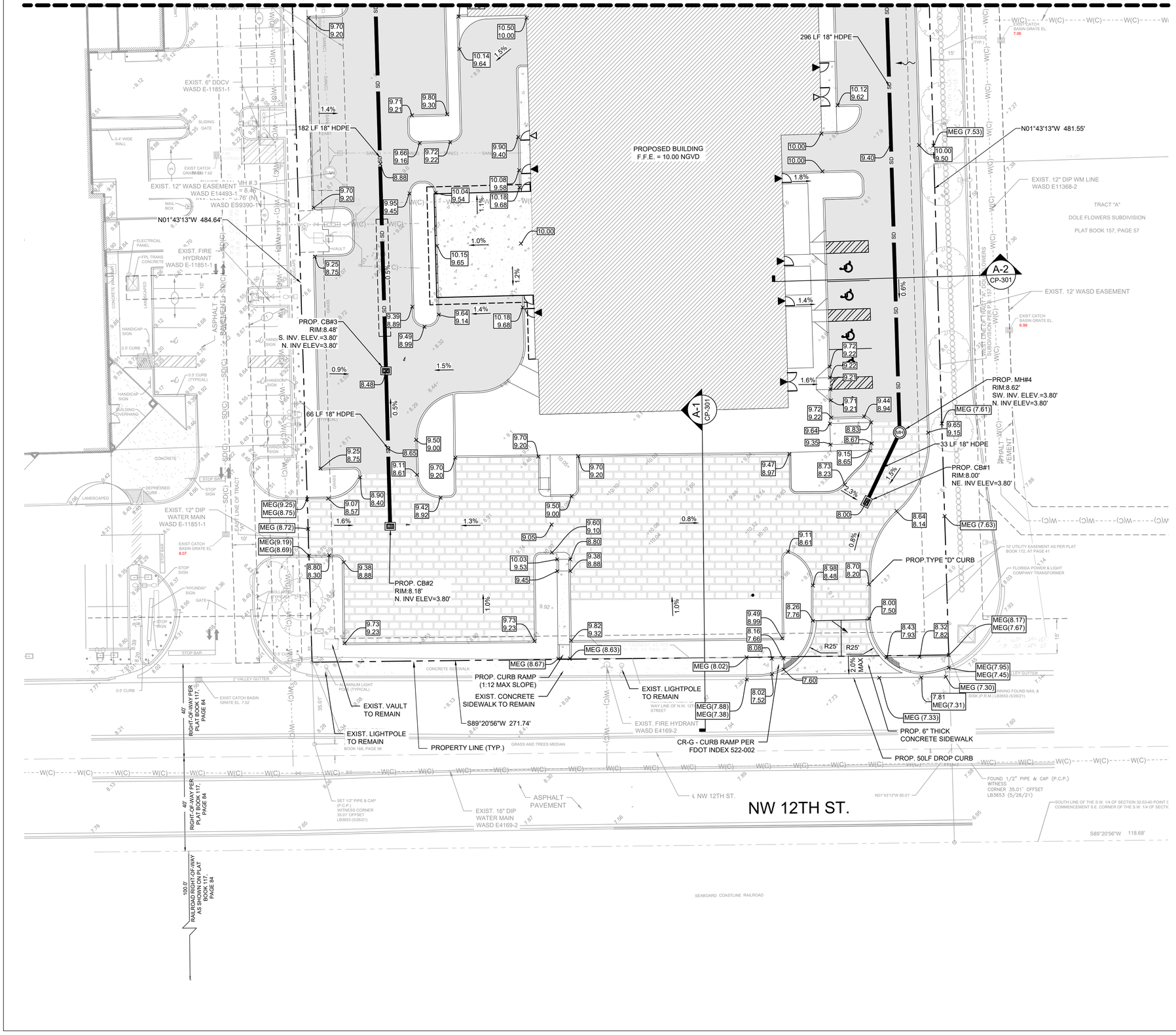
WATER & SEWER NOTES

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL. 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CP-102



N

GRAPHIC SCALE

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SCALE: 1" = 65.62

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

LOCATION SKETCH
(NOT TO SCALE)

GENERAL ADA SLOPE NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADA CRITERIA IS MET FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO SIDEWALKS, RAMPS AND ADA PARKING STALLS).
2. ALL ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. SIDEWALKS SHALL NOT EXCEED 5% IN THE LONGITUDINAL DIRECTION AND CROSS-SECTIONAL SLOPES SHALL NEVER EXCEED 2%, UNLESS CLEARLY IDENTIFIED ON PLANS.
4. FOR ANY REASON THE CONTRACTOR FINDS ANY GRADING DISCREPANCIES THAT WOULD RESULT IN NOT BEING ABLE TO MEET ADA CRITERIA; IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ADVISE THE ENGINEER AT ONCE AND PROVIDE ADEQUATE TIME TO DETERMINE PROPER COURSE OF ACTION. IF FOR ANY REASON IT IS DEEMED NECESSARY FOR AS-BUILT INFORMATION TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO MAKE THE NECESSARY DECISIONS AND/OR PROVIDE DIRECTION, THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR.

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

KIA FLOOD LEGEND	
FLOOD ZONE	AH
BASE FLOOD ELEVATION	8.00
BACK OF SIDEWALK ELEVATION(s)	8.41
CROWN OF ROAD ELEVATION(s)	8.49
FEMA LETTER OF MAP CHANGE #	
LOWEST FLOOR ELEVATION	10.00
SUPPORT BLDG FLOOR ELEVATION(s)	
LOWEST MACHINERY ELEVATION(s)	

KEITH
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REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:46 PM

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954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-1XX.dwg

CP-101

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00

DRAWN BY :
AARON K.

CHECKED BY :
CARLOS M.

DATE :
11/16/2021

STATUS: PERMIT

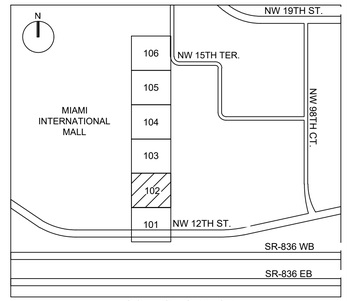
MATCHLINE: REF. SHEET CP-103

MATCHLINE: REF. SHEET CP-101

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

GENERAL ADA SLOPE NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADA CRITERIA IS MET FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO SIDEWALKS, RAMPS AND ADA PARKING STALLS).
2. ALL ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. SIDEWALKS SHALL NOT EXCEED 5% IN THE LONGITUDINAL DIRECTION AND CROSS-SECTIONAL SLOPES SHALL NEVER EXCEED 2%, UNLESS CLEARLY IDENTIFIED ON PLANS.
4. FOR ANY REASON THE CONTRACTOR FINDS ANY GRADING DISCREPANCIES THAT WOULD RESULT IN NOT BEING ABLE TO MEET ADA CRITERIA; IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ADVISE THE ENGINEER AT ONCE AND PROVIDE ADEQUATE TIME TO DETERMINE PROPER COURSE OF ACTION. IF FOR ANY REASON IT IS DEEMED NECESSARY FOR AS-BUILT INFORMATION TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO MAKE THE NECESSARY DECISIONS AND/OR PROVIDE DIRECTION, THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR.

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

KEITH
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Miami, FL, 33126
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State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:46 PM

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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
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DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-1XX.dwg

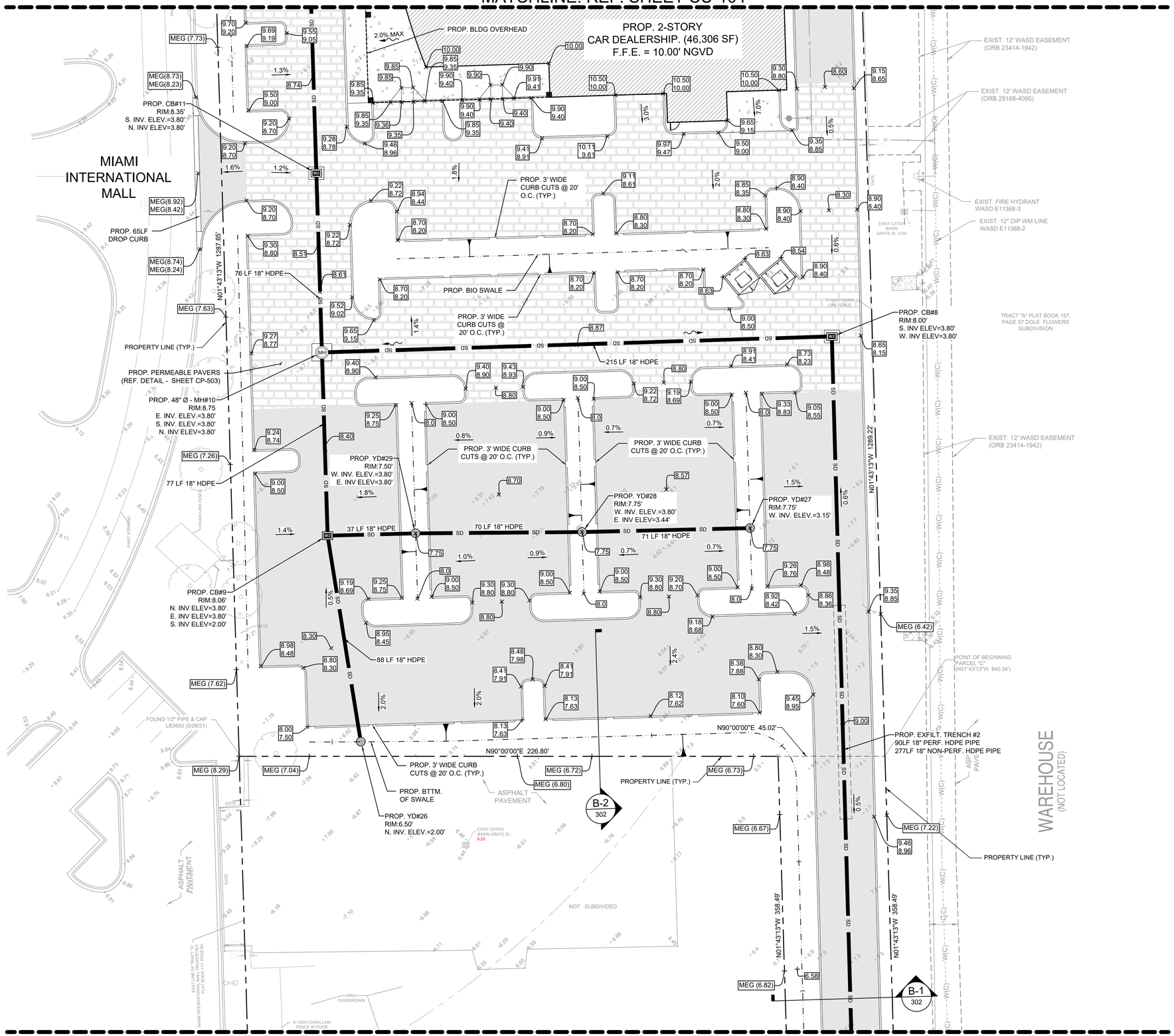
CP-102

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CU-104

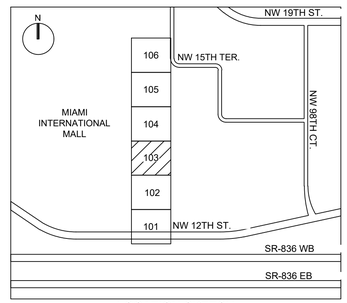


MATCHLINE: REF. SHEET CP-102

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

GENERAL ADA SLOPE NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADA CRITERIA IS MET FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO SIDEWALKS, RAMPS AND ADA PARKING STALLS).
2. ALL ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. SIDEWALKS SHALL NOT EXCEED 5% IN THE LONGITUDINAL DIRECTION AND CROSS-SECTIONAL SLOPES SHALL NEVER EXCEED 2%, UNLESS CLEARLY IDENTIFIED ON PLANS.
4. FOR ANY REASON THE CONTRACTOR FINDS ANY GRADING DISCREPANCIES THAT WOULD RESULT IN NOT BEING ABLE TO MEET ADA CRITERIA; IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ADVISE THE ENGINEER AT ONCE AND PROVIDE ADEQUATE TIME TO DETERMINE PROPER COURSE OF ACTION. IF FOR ANY REASON IT IS DEEMED NECESSARY FOR AS-BUILT INFORMATION TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO MAKE THE NECESSARY DECISIONS AND/OR PROVIDE DIRECTION, THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR.

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REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:46 PM

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301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Civil\11916.00-CP-11XX.dwg

CP-103

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CP-105

MATCHLINE: REF. SHEET CP-103

MIAMI INTERNATIONAL MALL

PROP. CB#19
RIM:7.44'
S. INV. ELEV.=3.80'
N. INV ELEV=3.40'

PROP. CB#16
RIM:7.45'
E. INV. ELEV.=3.20'
N. INV ELEV=3.80' (PRB)

PROP. CB#15
RIM:7.45'
S. INV. ELEV.=3.80'
N. INV. ELEV.=3.80'
W. INV ELEV=3.20'

PROP. CB#14
RIM:9.00'
W. INV. ELEV.=1.00'
N. INV ELEV=3.80'

PROP. CB#13
RIM:8.58'
S. INV. ELEV.=3.80'
E. INV ELEV=1.00
N. INV ELEV=3.80

PROP. CB#12
RIM:8.75'
S. INV. ELEV.=3.80'
N. INV ELEV=3.80'

120 LF 18" HDPE

124 LF 18" HDPE

123 LF 24" HDPE

195 LF 18" HDPE

151 LF 18" HDPE

159 LF 18" HDPE

PROP. PERMEABLE PAVERS
(REF. DETAIL - SHEET CP-503)

PROP. BLDG OVERHEAD

PROP. TYPE D CURB

PROP HIGH CURB/WALL
ELEV VARIES. 2' MAX.

PROPERTY LINE (TYP.)

PROP. 2-STORY
CAR DEALERSHIP. (46,306 SF)
F.F.E. = 10.00' NGVD

MEG (8.13)
MEG (7.45)
MEG (7.81)
MEG (7.11)
MEG (7.63)
MEG (7.25)

B-4
CP-302

B-3
CP-302

TRACT "A" PLAT BOOK 117, PAGE 84
INTERNATIONAL MALL PROPERTIES

WEST LINE OF TRACT "A"

EXIST. 12" DIP WM
WASD E11368-2

EXIST. 12" DIP WM LINE
WASD E11368-2

ASPHALT PAVEMENT

STRIPING

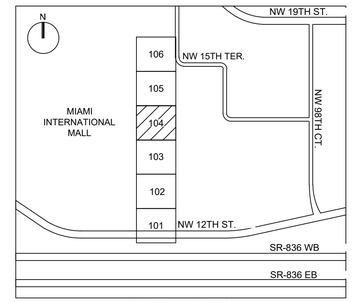
N01°43'13"W 1289.22'

1.4%
1.1%
1.6%
0.9%
1.3%
0.5%
2.0%
2.0% MAX
5.0% MAX

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

GENERAL ADA SLOPE NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADA CRITERIA IS MET FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO SIDEWALKS, RAMPS AND ADA PARKING STALLS).
2. ALL ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. SIDEWALKS SHALL NOT EXCEED 5% IN THE LONGITUDINAL DIRECTION AND CROSS-SECTIONAL SLOPES SHALL NEVER EXCEED 2%, UNLESS CLEARLY IDENTIFIED ON PLANS.
4. FOR ANY REASON THE CONTRACTOR FINDS ANY GRADING DISCREPANCIES THAT WOULD RESULT IN NOT BEING ABLE TO MEET ADA CRITERIA; IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ADVISE THE ENGINEER AT ONCE AND PROVIDE ADEQUATE TIME TO DETERMINE PROPER COURSE OF ACTION. IF FOR ANY REASON IT IS DEEMED NECESSARY FOR AS-BUILT INFORMATION TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO MAKE THE NECESSARY DECISIONS AND/OR PROVIDE DIRECTION, THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR.

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

SUBARU FLOOD LEGEND	
FLOOD ZONE	AH
BASE FLOOD ELEVATION	8.00
BACK OF SIDEWALK ELEVATION(s)	N/A
CROWN OF ROAD ELEVATION(s)	N/A
FEMA LETTER OF MAP CHANGE #	N/A
LOWEST FLOOR ELEVATION	10.00
SUPPORT BLDG FLOOR ELEVATION(s)	
LOWEST MACHINERY ELEVATION(s)	

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:46 PM

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\11916.00-CP-1XX.dwg

CP-104

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CP-106

MATCHLINE: REF. SHEET CP-104

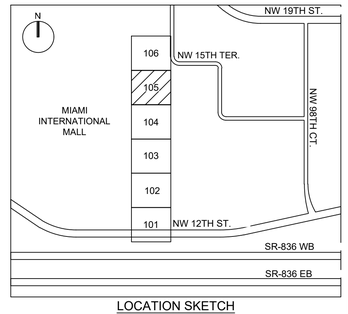
N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

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NOTE:
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REVISIONS :

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SHOWROOM & SERVICE BUILDING
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DORAL, FLORIDA 33172

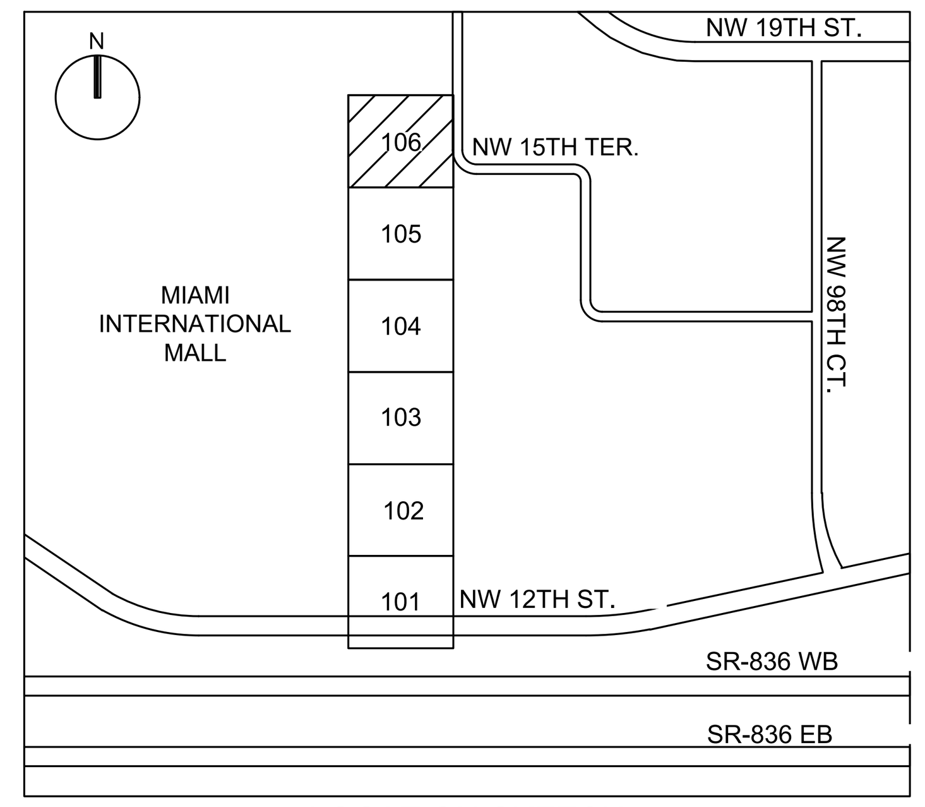
CP-105

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-1XX.dwg



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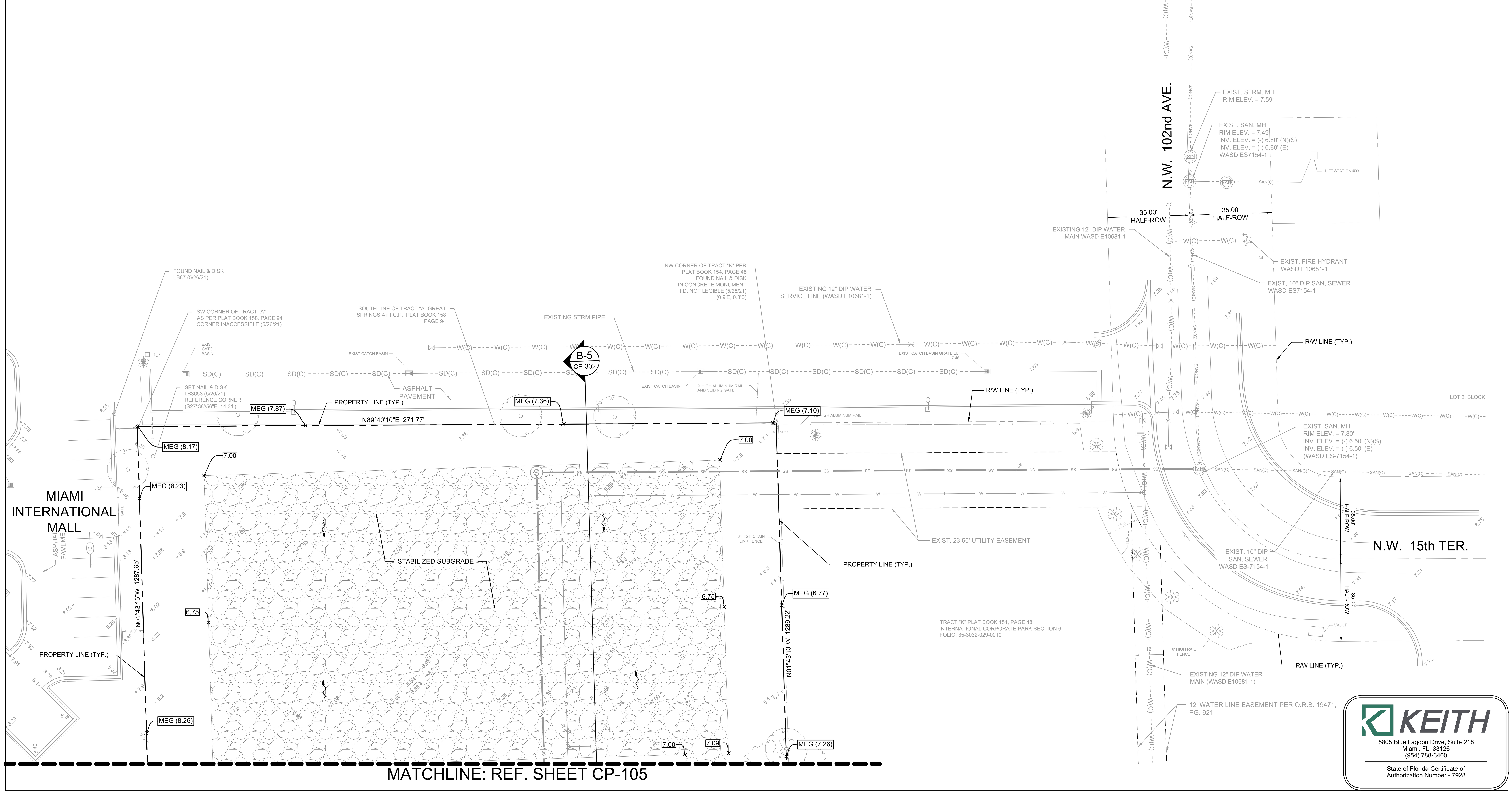
GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '
NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
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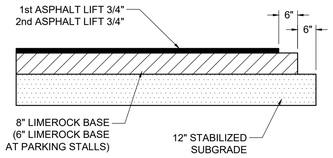
Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-1XX.dwg

CP-106

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO. 11916.00
DRAWN BY : AARON K.
CHECKED BY : CARLOS M.
DATE : 11/16/2021

STATUS: PERMIT



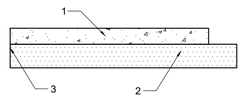
ASPHALTIC CONCRETE VEHICULAR:
FIRST LIFT - 3/4" FDOT - SP 9.5 (FINE MIX). SECOND (FINAL) LIFT - 3/4" FDOT - SP 9.5 (FINE MIX). ASPHALT SURFACE COURSE SHALL CONFORM TO THE REQUIREMENTS OF FDOT STANDARDS SPECIFICATIONS SECTIONS 330 AND 334. SECOND LIFT OF ASPHALT SHALL NOT BE PLACED UNTIL FINAL LANDSCAPE/HARDSCAPE HAS BEEN INSTALLED.

PRIME AND TACK COAT:
LIMEROCK BASE COURSE SHALL CONFORM TO THE REQUIREMENTS OF FDOT STANDARDS SPECIFICATIONS SECTION 300.
APPLICATION RATES:
PRIME COAT - 0.10 GALLONS PER SQ. YD.
TACK COAT - 0.08 GALLONS PER SQ. YD.

BASE:
8"/ 6" LIMEROCK BASE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180), LIMEROCK BASE TO CONFORM WITH THE REQUIREMENTS OF FDOT SPECIFICATIONS SECTIONS 200 AND 911.

SUBGRADE:
12" STABILIZED SUBGRADE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180); MINIMUM LBR = 40.

1 ASPHALT PAVEMENT DETAIL
NOT TO SCALE

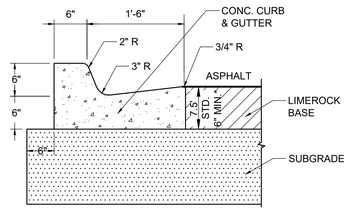


1. CONCRETE VEHICULAR COURSE:
   8" - 3,000 PSI CONCRETE PER FDOT STANDARD SPECIFICATIONS SECTION 346 AND 350.
2. STABILIZED SUBGRADE:
   12" SUBGRADE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180). MINIMUM LBR = 40. GROUND ADJACENT TO PAVEMENT HAVING RUNOFF SHALL BE GRADED TWO INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD.
3. SAWED JOINTS:
   3/16" SAW CUT, 1½" DEEP (WITHIN 12 HOURS), MAX. 15' O.C., AND MIN.3' PARALLEL TO THE EDGE OF PAVEMENT.

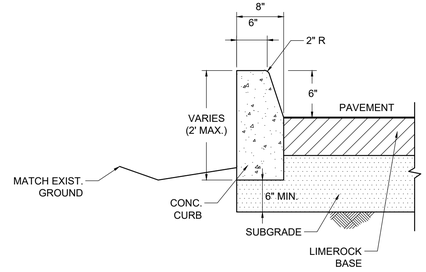
2 CONCRETE PAVEMENT DETAIL
NOT TO SCALE

NOTES:
ALL TYPE "F" CURB & GUTTER SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF FDOT INDEX 520-001.

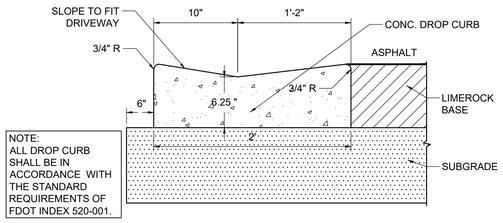
*WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.



3 TYPE "F" CURB DETAIL PER FDOT INDEX No. 520-001
NOT TO SCALE

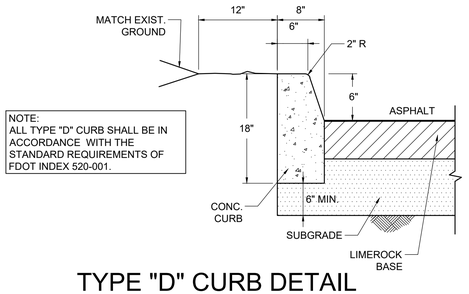


4 CURB HIGH WALL DETAIL
NOT TO SCALE



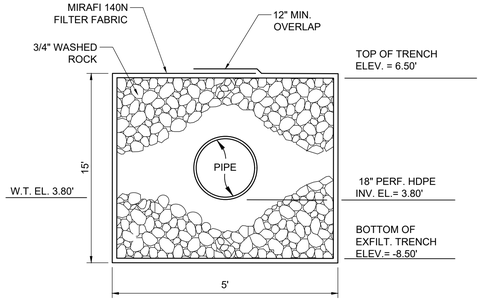
NOTE:
ALL DROP CURB SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF FDOT INDEX 520-001.

6 DROP CURB DETAIL PER FDOT INDEX No. 520-001
NOT TO SCALE

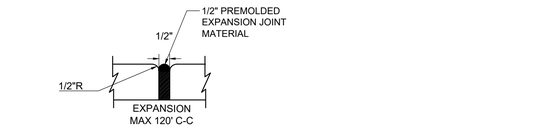


NOTE:
ALL TYPE "D" CURB SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF FDOT INDEX 520-001.

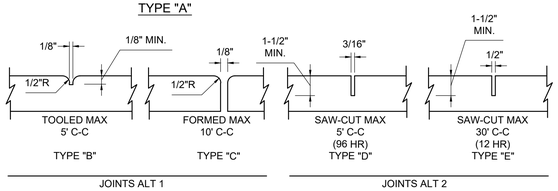
5 TYPE "D" CURB DETAIL PER FDOT INDEX No. 520-001
NOT TO SCALE



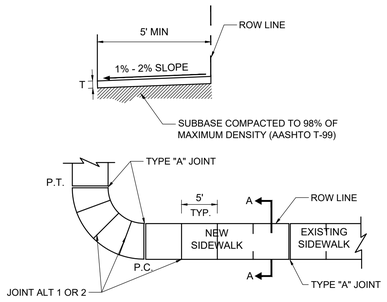
9A EXFILTRATION TRENCH #1 DETAIL
NOT TO SCALE



TYPE "A"



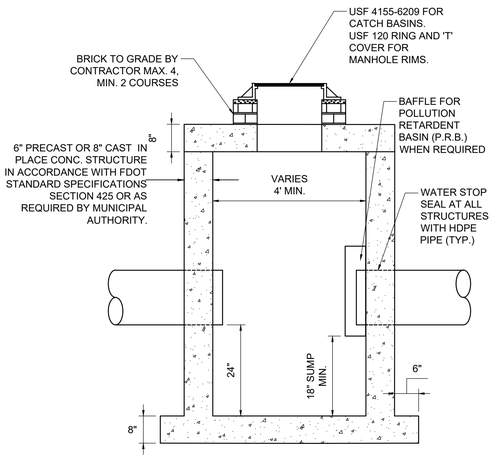
CONCRETE PAVEMENT & SIDEWALK JOINTS



SIDEWALK PLAN

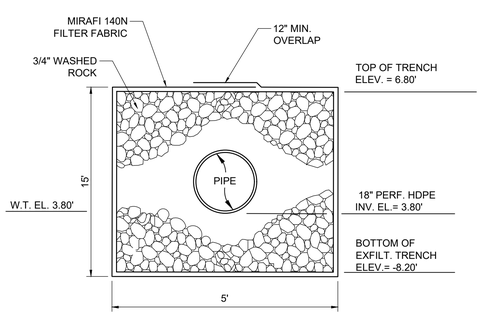
NOTES:
1. Sidewalk construction is to comply with the latest FDOT standards for sidewalks and ADA curb ramps, per FDOT index 522-001 and 522-002.
2. Provide either joint alternate 1 or 2. If using joint alternate 2: construct type "E" joints at not more than 30' intervals - within 12 hours after finishing, construct 1/2" expansion, provide joint type "A", with non-rising performed joint filler at not more than 120' intervals, construct remaining joints within 96 hours after finishing.
3. Provide 1/2" expansion joint type "A", with non-rising performed joint filler where concrete pavement abuts concrete curbs, driveways and other fixed objects.
4. Sidewalk thickness shall be 4" thick unless otherwise noted. Thickness shall be 6" through driveways and on all commercial sidewalk applications.
5. The use of steel reinforcement is not permitted.
6. Concrete to be 3,000 psi in 28 days.
7. Cure all concrete with approved method.
8. Sidewalk foundation shall be compacted to a firm, even surface, true to grade and cross section, and shall be moist at the time concrete is placed.
9. All construction shall conform to local construction codes and standards.
10. Sidewalk slopes shall meet the requirements of the Americans with Disabilities Act. Minimum transverse slope 0.01 ft./ft. And maximum transverse slope 0.02 ft./ft. toward swale or gutter. Longitudinal slope shall conform to ADA requirements.
11. The vertical deviation for a new sidewalk shall not be more than ½".
12. The vertical deviation for a new maintenance access structure cover shall not be more than ¼".
13. Where truncated domes are used, stamped concrete is not permitted. Truncated domes to be cast with the concrete.
14. Sidewalk shall have a transverse hair broom finish.

7 SIDEWALK DETAIL
NOT TO SCALE



NOTES:
1. STRUCTURE MANUFACTURER AND/OR CONTRACTOR SHALL CONFIRM ALL STEEL REINFORCEMENT MEETS FDOT STANDARDS PER INDEX 425-010, SECTION 415 AND 425 PRIOR TO SUBMITTING ANY SHOP DRAWINGS FOR APPROVAL.
2. LOCKING GRATES TO BE PROVIDED.

8 CATCH BASIN / DRAINAGE MANHOLE DETAIL
NOT TO SCALE



11B EXFILTRATION TRENCH #2 DETAIL
NOT TO SCALE

KEITH
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REVISIONS :

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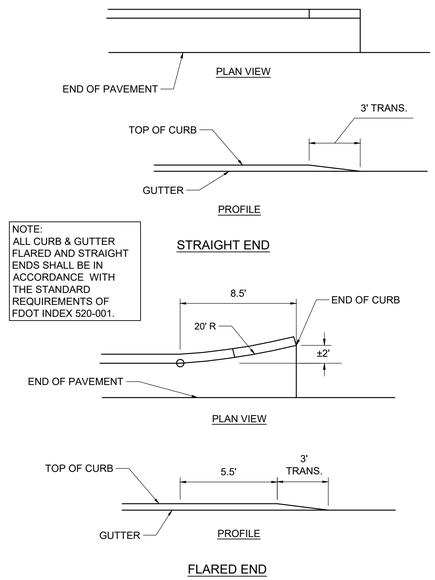
Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-5XX.dwg

CP-501

PAVING, GRADING, AND DRAINAGE DETAILS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

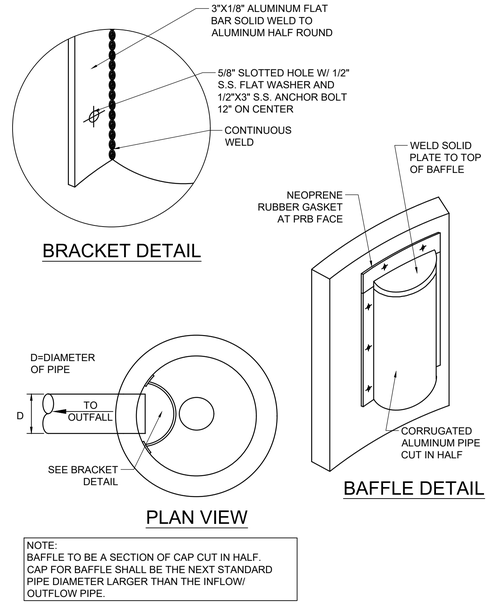
STATUS: PERMIT



NOTE:
ALL CURB & GUTTER FLARED AND STRAIGHT ENDS SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF FDOT INDEX 520-001.

10 CURB & GUTTER FLARED AND STRAIGHT ENDS

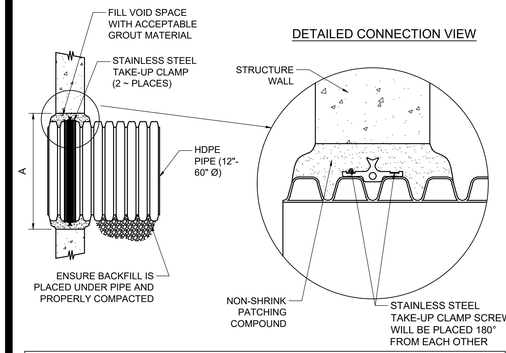
NOT TO SCALE



NOTE:
BAFFLE TO BE A SECTION OF CAP CUT IN HALF. CAP FOR BAFFLE SHALL BE THE NEXT STANDARD PIPE DIAMETER LARGER THAN THE INFLOW/ OUTFLOW PIPE.

14 POLLUTION RETARDENT BAFFLE DETAIL

NOT TO SCALE



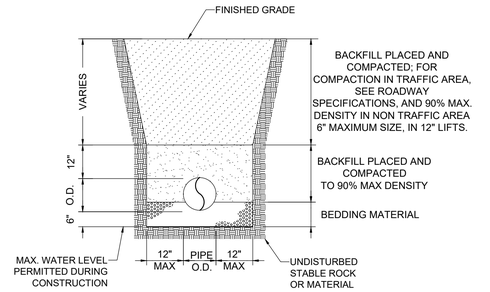
NOTES:
PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

SEE ADS STANDARD DETAIL STD-201 AND ADS INSTALLATION GUIDE 1.05: WATERSTOP INSTALLATION FOR INSTALLATION RECOMMENDATIONS.

PIPE SIZE	PIPE OD		"A" MIN. HOLE DIA.	MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT
	A-PROFILE	H-PROFILE		
12"	14.5"	N/A	19.5"	3.7"
15"	17.6"	N/A	23.00"	4.0"
18"	21.2"	N/A	26.50"	4.2"
24"	27.8"	N/A	33.25"	4.5
30"	35.1"	N/A	40.50"	5.2"
36"	41.1"	41.1"	47.00"	5.5"
42"	47.7"	48.0"	53.00"	5.7"
48"	53.6"	54.0"	59.00"	5.7"
60"	66.3"	67.3"	72.00"	6.4"

16 GROUTED MANHOLE CONNECTION (HDPE PIPE) DETAIL

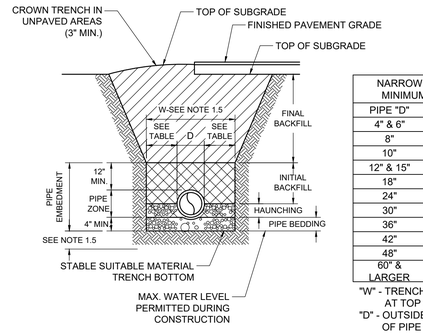
NOT TO SCALE



NOTES:
1. WHERE SOIL CONDITION CANNOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED MEANS OF CONSTRUCTION.
2. WHERE REQUIRED SHEETING AND SHORING SHALL BE IN ACCORDANCE WITH THE LOCAL GOVERNMENTAL AGENCY.
3. MUCK OR OTHER UNSUITABLE MATERIAL SHALL BE COMPLETELY REMOVED.
4. WHEN THE PIPE IS LAID IN THE PREPARED TRENCH, TRUE TO LINE AND GRADE, THE PIPE BARREL SHALL RECEIVE CONTINUOUS UNIFORM SUPPORT. WHERE NECESSARY, COURSE SAND, PEA ROCK OR 3/4" LIMESTONE GRAVEL SHALL BE USED TO PROVIDE UNIFORM BEDDING.
5. JOINTS MAY BE REQUIRED TO BE WRAPPED AT THE DISCRETION OF THE DISTRICT AND THE SITE CONDITIONS.
6. BACKFILL MATERIAL SHALL BE NON-COHESIVE AND NON-PLASTIC SOIL THAT IS FREE OF ALL DEBRIS, LUMPS, WOOD BROKEN PAVING OR ANY ORGANIC OR UNSUITABLE MATERIAL. BACKFILL MATERIAL PLACED WITHIN 12" OF THE PIPE SHALL CONTAIN NO ROCKS OR STONES LARGER THAN 3-1/2" INCHES IN DIAMETER. NO ROCKS OR STONES LARGER THAN 6" IN DIAMETER WILL BE PERMITTED IN THE REMAINING BACKFILL UNLESS OTHERWISE SPECIFIED.
7. TRENCH BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 90 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY AASHTO T-180. BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE TO THE STANDARD ENGINEERING DESIGN REQUIRED BY THE LOCAL GOVERNMENTAL AGENCY.

29 PIPE TRENCH EXCAVATION DETAIL

NOT TO SCALE



NARROW TRENCH MINIMUM WIDTH	
PIPE "D"	WIDTH "D"
4" & 6"	18"
8"	24"
10"	26"
12" & 15"	30"
18"	32"
24"	36"
30"	42"
36"	48"
42"	54"
48"	60"
60" & LARGER	1.3 TIMES PIPE O.D.

"W" - TRENCH WIDTH AT TOP OF PIPE
"D" - OUTSIDE DIAMETER OF PIPE

1. NOTES - PRESSURE FLOW AND STORM SEWER PIPE.

1.1. GENERAL: TRENCH CONSTRUCTION SHALL BE IN CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 125. PVC PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE UNI-BELL PVC PIPE ASSOCIATION, HANDBOOK OF PVC PIPE, DESIGN AND CONSTRUCTION. CONCRETE PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH ANSI / ASCE 15-93.

1.2. PIPE BEDDING: PROVIDE BELL HOLES AT EACH JOINT, FOR PIPES LARGER THAN 4" IN DIAMETER, TO PERMIT PROPER ASSEMBLY AND PIPE SUPPORT.

1.3. HAUNCHING: USE MATERIAL MEETING THE CLASSIFICATION OF A-3 IN ACCORDANCE WITH ASTM D3282 (AASHTO M-145). MAXIMUM PARTICAL SIZE SHALL BE LESS THAN 1.5 INCHES.

1.4. INITIAL BACKFILL: USE SAME MATERIAL AS SPECIFIED FOR FINAL BACKFILL (SEE NOTE 1.9).

1.5. UNSUITABLE SOIL EXCAVATION: SE SHEET PD-2 FOR ADDITIONAL REQUIREMENTS. MINIMUM DIMENSIONS SHALL BE THE LARGER OF THE REQUIREMENTS SHOWN ON THIS SHEET AND SHEET PD-2.

30 TRENCH SECTION FOR BURIED PIPES AND CULVERTS

NOT TO SCALE

2. GENERAL NOTES:

2.1. TRENCH WALLS - EXCAVATE TRENCH TO ENSURE SIDES WILL BE STABLE UNDER WORKING CONDITIONS. TRENCH WALLS TO BE SLOPED OR SUPPORTED IN ACCORDANCE WITH THE CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT) AND FEDERAL OSHA STANDARD CFR SECTION 1926.650 SUBPART - P.

2.2. DEWATERING: WHEN RUNNING OR STANDING WATER OCCURS IN THE TRENCH BOTTOM, OR THE TRENCH BOTTOM DISPLAYS A "QUICK" CONDITION, WATER SHALL BE REMOVED TO BELOW THE PIPE INVERT BY A SUITABLE MEANS, UNTIL THE PIPE IS BACKFILLED TO A SUFFICIENT HEIGHT TO PREVENT PIPE FLOATATION.

2.3. MINIMUM TRENCH WIDTH: PROVIDE A TRENCH WIDTH SUFFICIENT, BUT NO WIDER THAN NECESSARY, TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING BACKFILL MATERIAL. SEE TABLE FOR MINIMUM TRENCH WIDTHS. WHERE SOIL CONDITIONS REQUIRE TRENCH WALLS TO BE SUPPORTED, MINIMUM WIDTH SHALL BE BETWEEN INNER FACE OF TRENCH SUPPORTS.

2.4. MOVABLE SHEETING, TRENCH BOXES OR SHIELDS: WHEN MOVABLE TRENCH SUPPORT IS USED, THE MINIMUM DISTANCE BETWEEN INNER FACE OF TRENCH SUPPORT, AND THE OUTER PIPE WALL, SHALL BE AT LEAST ONE PIPE DIAMETER OR 2 FEET WHICH EVER IS GREATER.

2.5. PREPARATION OF TRENCH BOTTOM: TRENCH BOTTOM SHALL BE PREPARED TO PROVIDE A FIRM STABLE UNIFORM FOUNDATION THE FULL LENGTH OF THE PIPE. IF UNSUITABLE MATERIAL IS ENCOUNTERED AT BOTTOM OF TRENCH, CONTINUE TO EXCAVATE TILL SUITABLE MATERIAL IS ENCOUNTERED. IF DEPTH TO SUITABLE MATERIAL IS GREATER THAN 2 FEET BELOW BOTTOM OF TRENCH, NOTIFY ENGINEER OF SUCH CONDITION BEFORE CONTINUING FURTHER TRENCH EXCAVATION.

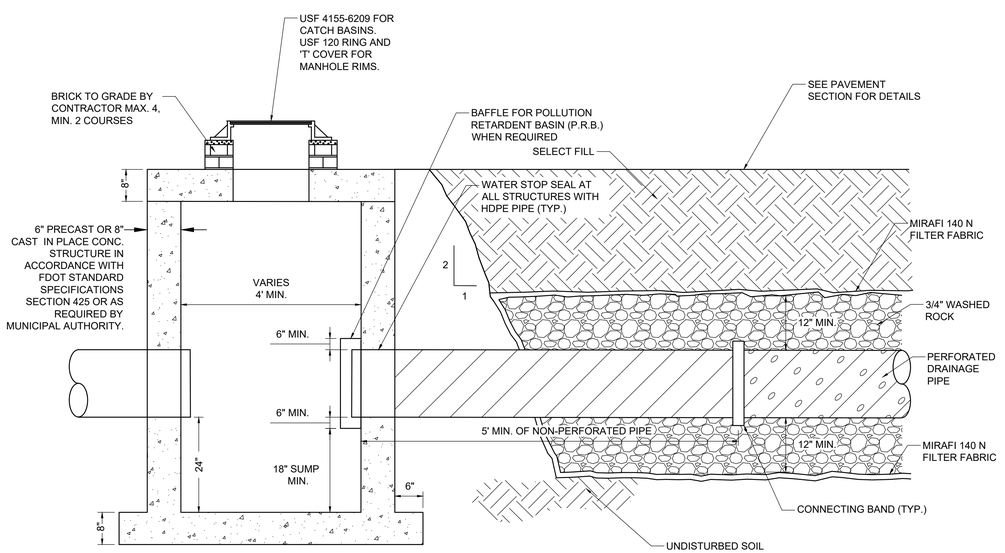
2.6. PIPE BEDDING: BEDDING MATERIAL SHALL CONFORM TO ASTM D-2321, AND MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. FOR PVC AND OTHER "FLEXIBLE" PIPES, EXCAVATE 4" BELOW PROPOSED OUTSIDE BOTTOM OF PIPE, BACKFILL AND COMPACT WITH SPECIFIED BEDDING MATERIAL TO PROPER GRADE.

2.7. HAUNCHING: MATERIAL SHALL MEET AND BE INSTALLED AND COMPACTED INACCORDANCE WITH THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. PLACE AND CONSOLDATE MATERIAL UNDER THE PIPE HAUNCH, UP TO THE PIPE SPRINGLINE, FOR THE FULL WIDTH OF THE TRENCH, BEFORE PLACING AND COMPACTING THE REMAINDER OF THE EMBEDMENT IN THE PIPE ZONE. HAUCHING MATERIAL SHALL BE PLACED AND CONSOLIDATED BY HAND SHOVEL SLICING ALONG HAUNCH OF PIPE AND BY WATERING (JETTING OR PUDDLING) OR HAND TAMPING. MECHANICAL COMPACTION IS NOT TO BE USED WITHIN 1 PIPE DIAMETER OR 2 FEET, WHICH EVER IS GREATER, EITHER SIDE OF THE OUTSIDE WALL OF THE PIPE.

2.8. INITIAL BACKFILL: SHALL EXTEND FROM THE SPRINGLINE OF THE PIPE TO 1 FOOT ABOVE THE TOP OF PIPE. MATERIAL SHALL BE PLACED AND CONSOLIDATED AS SPECIFIED FOR THE HAUNCHING MATERIAL.

2.9. FINAL BACKFILL: MATERIAL SHALL MEET AND BE INSTALLED AND COMPACTED INACCORDANCE WITH THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. SELECT BACKFILL MEETING THE CLASSIFICATION OF A-1, A-3, OR A-2-4 IN ACCORDANCE WITH ASTM D3282 (AASHTO M-145). THE MATERIAL MUST NOT CONTAIN MUCK, STUMPS, ROOTS, BRUSH, VEGITABLE MATTER, RUBBISH, CONSTRUCTION DEBRI OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE EMBANKMENT. MATERIAL MUST HAVE MAXIMUM PARTICLE SIZE AS FOLLOWS: WITHIN 12" OF TOP OF SUBGRADE - 31/2"; 12" TO 24" BELOW TOP OF SUBGRADE - 6"; GREATER THAN 24" BELOW TOP OF SUBGRADE - 12" OR COMPACTED THICKNESS OF LAYER BEING PLACED, WHICH EVER IS LESS. FINAL BACKFILL MAY BE NATIVE MATERIAL MEETING THE SPECIFIED REQUIREMENTS. UNLESS OTHERWISE NOTED.

2.10. COMPACTION TEST: COMPACTION PERCENTAGES SHOWN FOR TRENCH SECTION BACKFILL MATERIAL REFER TO ASTM - D698 (AASHTO - T-99, STANDARD PROCTOR). COMPACTION PERCENTAGES FOR LIMEROCK BASE COURSE MATERIAL REFER TO ASTM - D1557 (AASHTO -T-180, MODIFIED PROCTOR).



15 CATCH BASIN W/ PRB AND EXFILTRATION TRENCH

NOT TO SCALE

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

REVISIONS

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:47 PM

STILES
ARCHITECTURAL GROUP
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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

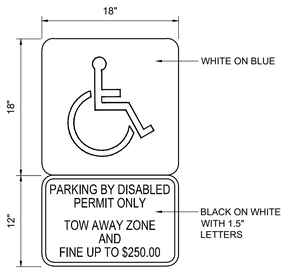
Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-5XX.dwg

CP-502

PAVING, GRADING, AND DRAINAGE DETAILS

PROJECT NO. 11916.00
DRAWN BY : AARON K.
CHECKED BY : CARLOS M.
DATE : 11/16/2021

STATUS: PERMIT

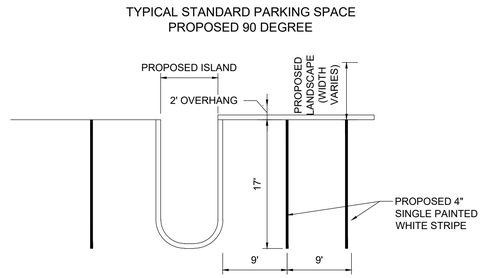


NOTES:

1. TOP PORTION OF SIGN SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL.
2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. SIGN MAY BE FABRICATED ON ONE PANEL OR TWO.
4. SIGNS ARE TO BE MOUNTED AT A HEIGHT OF 5 FT. MINIMUM FROM PAVEMENT TO BOTTOM OF SIGN.

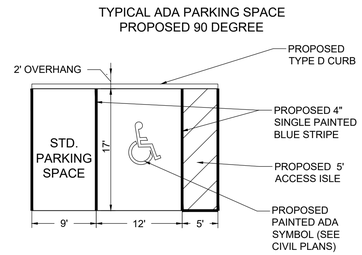
26 HANDICAP PARKING SIGN DETAIL

NOT TO SCALE



24 TYPICAL STANDARD PARKING SPACE DETAIL

NOT TO SCALE



25 TYPICAL ADA PARKING SPACE DETAIL

NOT TO SCALE

REVISIONS :

REVISIONS

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

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DORAL, FLORIDA 33172

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CP-503

PAVING, GRADING, AND DRAINAGE DETAILS

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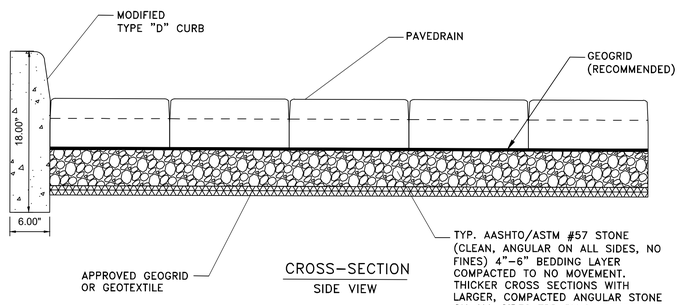
PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

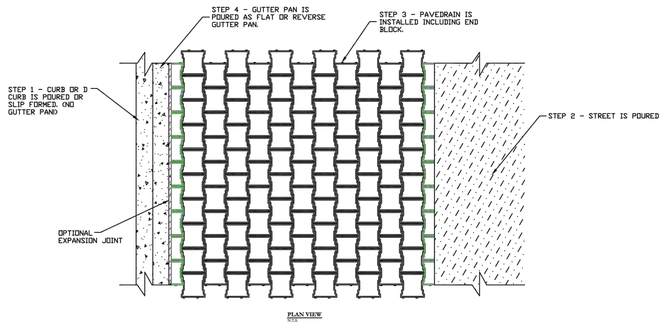
STATUS: PERMIT



CROSS-SECTION
SIDE VIEW

PATENTED PAVEDRAIN
STANDARD DETAIL
CURB SECTIONS
SCALE: AS SHOWN

PAVE DRAIN
STORMWATER'S ABOVE EVENT
PH: (800) 573-5339
WWW.PAVEDRAIN.COM
Email: info@pavedrain.com



CROSS-SECTION
NTS

PATENTED PAVEDRAIN
STANDARD DETAIL
CURB & GUTTER
SCALE: N.T.S.

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CROSS-SECTION
SIDE VIEW

CROSS-SECTION
END VIEW

PAVEDRAIN
STANDARD DETAIL
CROSS-SECTIONS
SCALE: N.T.S.

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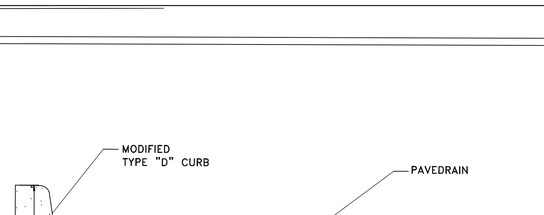
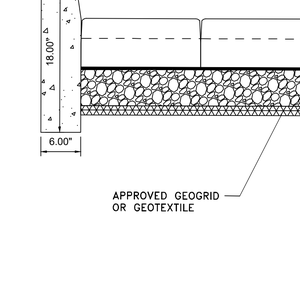


SIDE VIEW "A"

SIDE VIEW "B"



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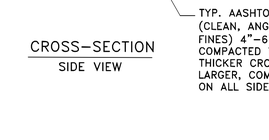

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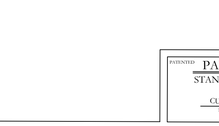
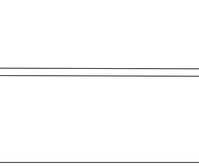


END VIEW



PATENTED PAVEDRAIN
STANDARD DETAIL
ARCHED BLOCK
DIMENSIONS
SCALE: AS SHOWN

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STORMWATER'S ABOVE EVENT
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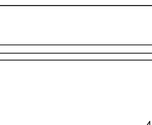
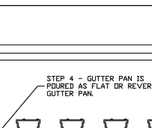
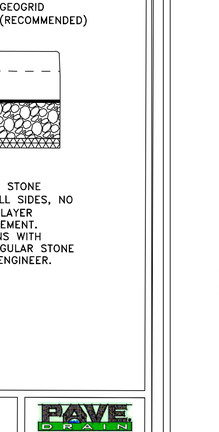


SIDE VIEW "A"



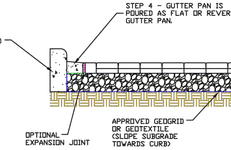
SIDE VIEW "B"



INSTALLED

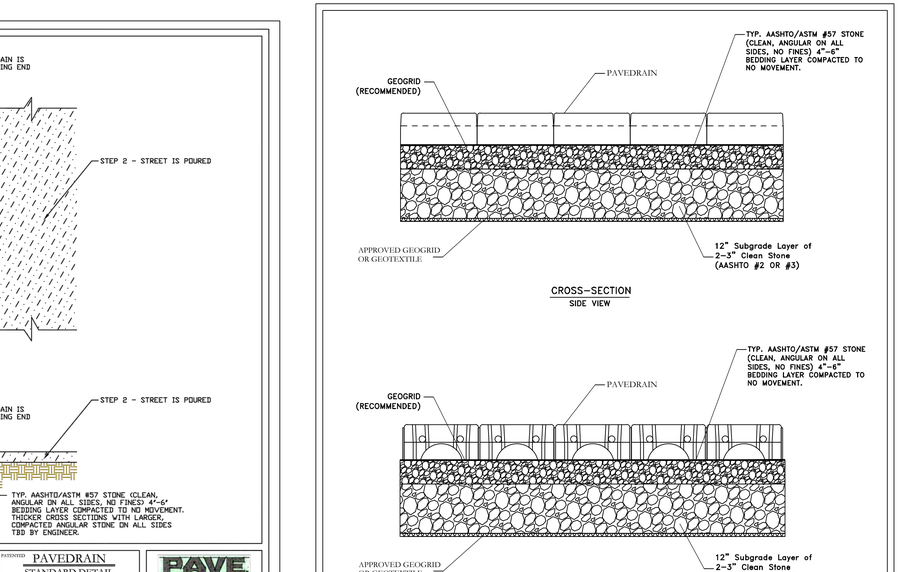
FRONT VIEW

BACK VIEW



PATENTED PAVEDRAIN
STANDARD DETAIL
END BLOCK
DIMENSIONS
SCALE: AS SHOWN
WWW.PAVEDRAIN.COM

PAVE DRAIN
STORMWATER'S ABOVE EVENT
4880 W. ABBOTT AVE;
GREENFIELD, WI. 53220
(414) 423-6531
WWW.PAVEDRAIN.COM



PATENTED PAVEDRAIN
STANDARD DETAIL
PAVEDRAIN
MANHOLE DETAIL
SCALE: N.T.S.

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Email: info@pavedrain.com

KEITH
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State of Florida Certificate of
Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:47 PM

STILES
ARCHITECTURAL GROUP
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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Civil\11916.00-CP-SSX.dwg

CP-504

PAVING, GRADING, AND DRAINAGE DETAILS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CU-102

EXIST. 6" PVC C.O.
INV. EL = 4.10'

EXIST. 6" PVC C-900
SAN. LATERAL

PROP. 6" PVC(C-900) C.O.
PER WASD SS 1.0 (TYP.)

PROPOSED BUILDING
F.F.E. = 10.00 NGVD

EXIST. 12" WASD EASEMENT
WASD E14493-1 = 8.46'
WASD ES9390-1 = 7.76' (N)

VH #.3

N01°43'13"W 484.64'

EXIST. 6" DIP FIRE LINE TO BE
UTILIZED FOR PROP. BUILDING

EXIST. 2" HDPE DOMESTIC
WATER SERVICE TO BE
UTILIZED FOR PROP. BUILDING

N01°43'13"W 481.55'

EXIST. 12' WASD EASEMENT

S89°20'56"W 271.74'

PROPERTY LINE (TYP.)

℄ NW 12TH ST.

NW 12TH ST.

40'
RIGHT-OF-WAY PER
PLAT BOOK 117,
PAGE 84

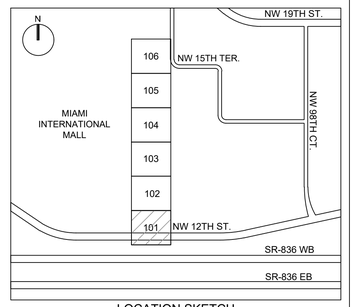
40'
RIGHT-OF-WAY PER
PLAT BOOK 117,
PAGE 84

100.0'
RAILROAD RIGHT-OF-WAY
AS SHOWN ON PLAT
BOOK 117,
PAGE 84

MD-WASD AGGREEMENT ID#24152

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

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Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CU-1XX.dwg

CU-101

WATER AND
SEWER PLANS

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of
Authorization Number - 7928

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CU-103

NO PROPOSED WATER & SEWER IMPROVEMENTS ON SHEET CU-102

N01°43'13"W 358.49'

PROPERTY LINE (TYP.)

N01°43'13"W 358.49'

N01°43'13"W 484.64'

N90°00'00"E 226.80'

N90°00'00"E 271.82' WEST 273.20' (LEGAL)

N90°00'00"W 271.82'

S90°00'00"W 3.02'

EXIST. 12" W.A.S.D EASEMENT

PROPERTY LINE (TYP.)

EXIST. 12" W.A.S.D EASEMENT

EXIST. SAN. MH
RIM ELEV. = 8.34'
INV. ELEV. = 2.67' (SE)
WASD ES9390-1

EXIST. SAN. MH #2
RIM ELEV. = 8.96'
INV. ELEV. = 3.11' (W)
INV. ELEV. = 3.18' (S)
WASD ES9390-1

EXIST. SAN. MH #1
RIM ELEV. = 8.21'
INV. ELEV. = 2.73' (NW)
INV. ELEV. = 2.92' (S)
WASD ES9390-1

EXIST. 8" PVC C-900
SAN. SEWER
WASD ES9390-1

EXIST. 15" WASD EASEMENT

PROPOSED BUILDING
F.F.E. = 10.00 NGVD

N01°43'13"W 481.55'

EXIST. 15' UTILITY EASEMENT

EXIST. 12' WASD EASEMENT

MATCHLINE: REF. SHEET CU-101

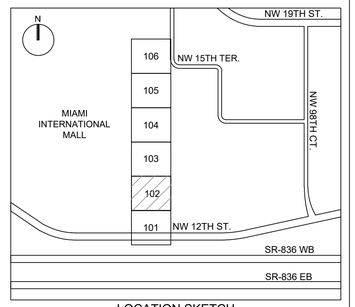
MD-WASD AGGREEMENT ID#24152

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

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NEW KIA & SUBARU
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LEHMAN DORAL

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DORAL, FLORIDA 33172

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CU-102

WATER AND SEWER PLANS

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State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00

DRAWN BY :
AARON K.

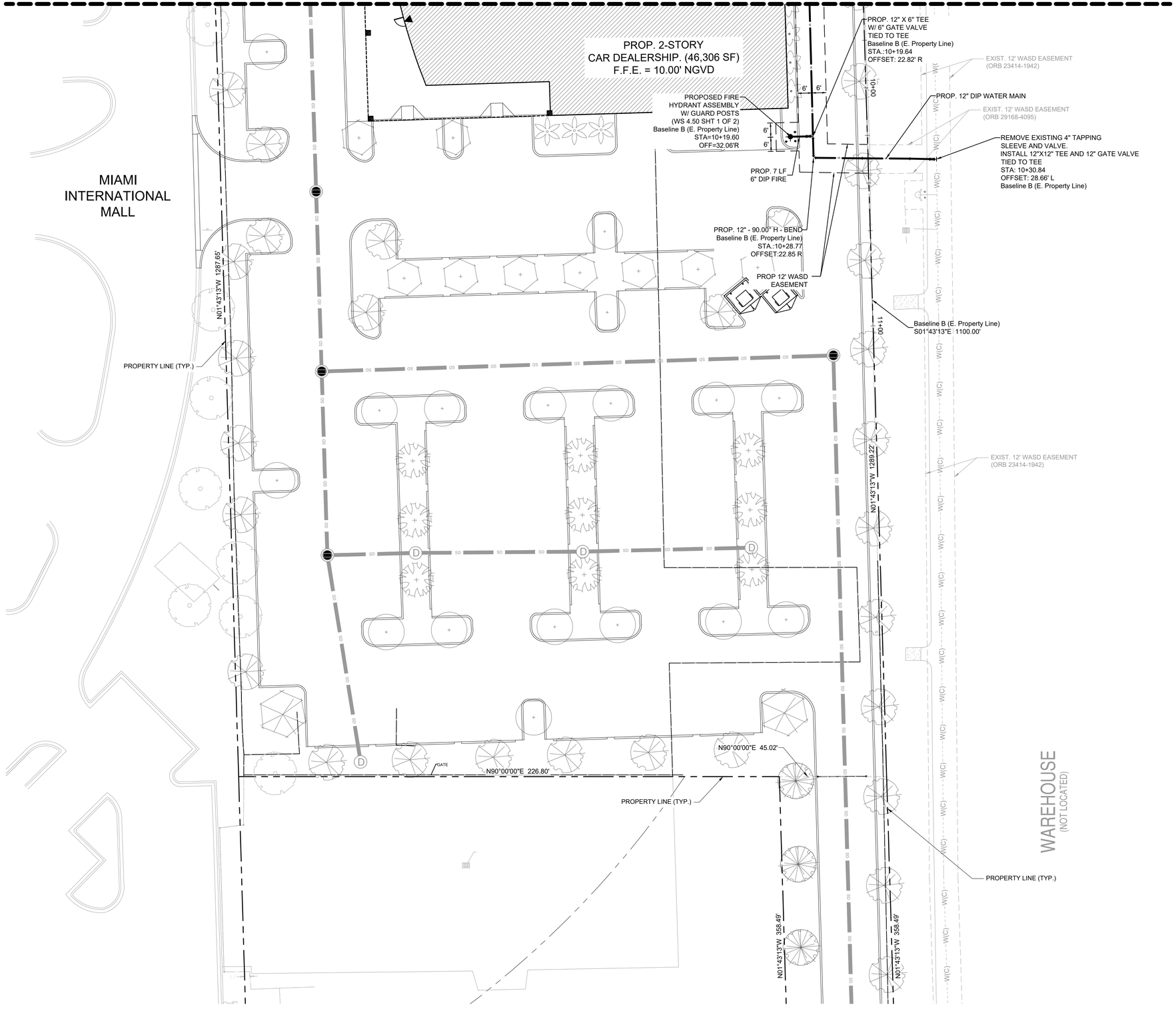
CHECKED BY :
CARLOS M.

DATE :
11/16/2021

STATUS: PERMIT

MD-WASD AGGREEMENT ID#24152

MATCHLINE: REF. SHEET CU-104



N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

DATUM NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

NOTES:

1. ALL EXISTING MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROPOSED WATER AND SEWER FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0
2. ALL DUCTILE IRON PIPE (DIP) WATER & SEWER PIPE TO BE PRESSURE CLASS 350

KEITH
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REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

10155 NW 12th STREET
DORAL, FLORIDA 33172

CU-103

WATER AND SEWER PLANS

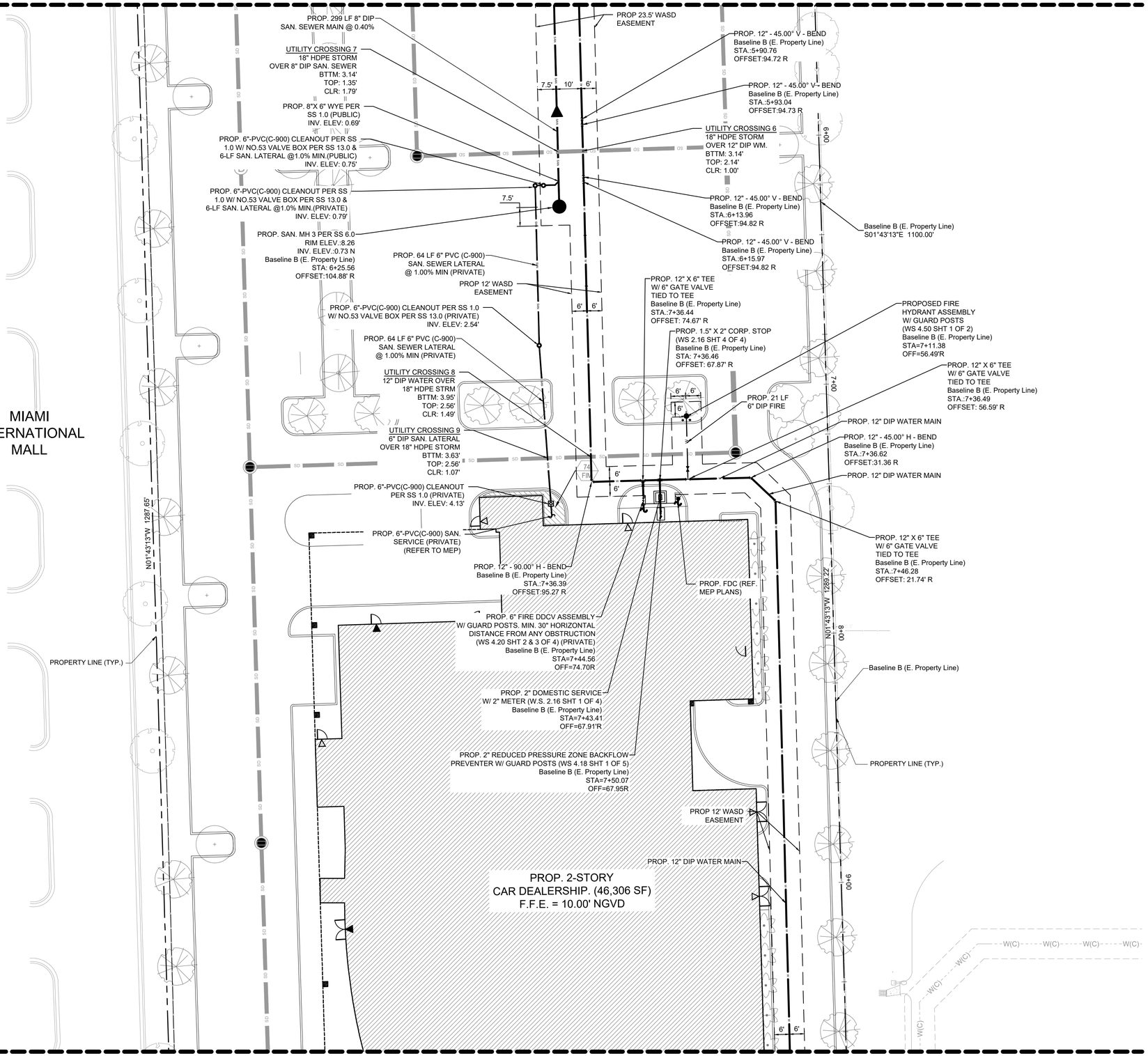
PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE. :
11/16/2021

STATUS: PERMIT

Plotted by: akosh On 11/15/2021 7:49 PM

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CU-1XX.dwg

MATCHLINE: REF. SHEET CU-105



MATCHLINE: REF. SHEET CU-103

MD-WASD AGGREEMENT ID#24152

N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

DATUM NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

NOTES:

1. ALL EXISTING MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROPOSED WATER AND SEWER FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0
2. ALL DUCTILE IRON PIPE (DIP) WATER & SEWER PIPE TO BE PRESSURE CLASS 350

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

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CU-104

WATER AND
SEWER PLANS

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STATUS: PERMIT

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MD-WASD AGGREEMENT ID#24152

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

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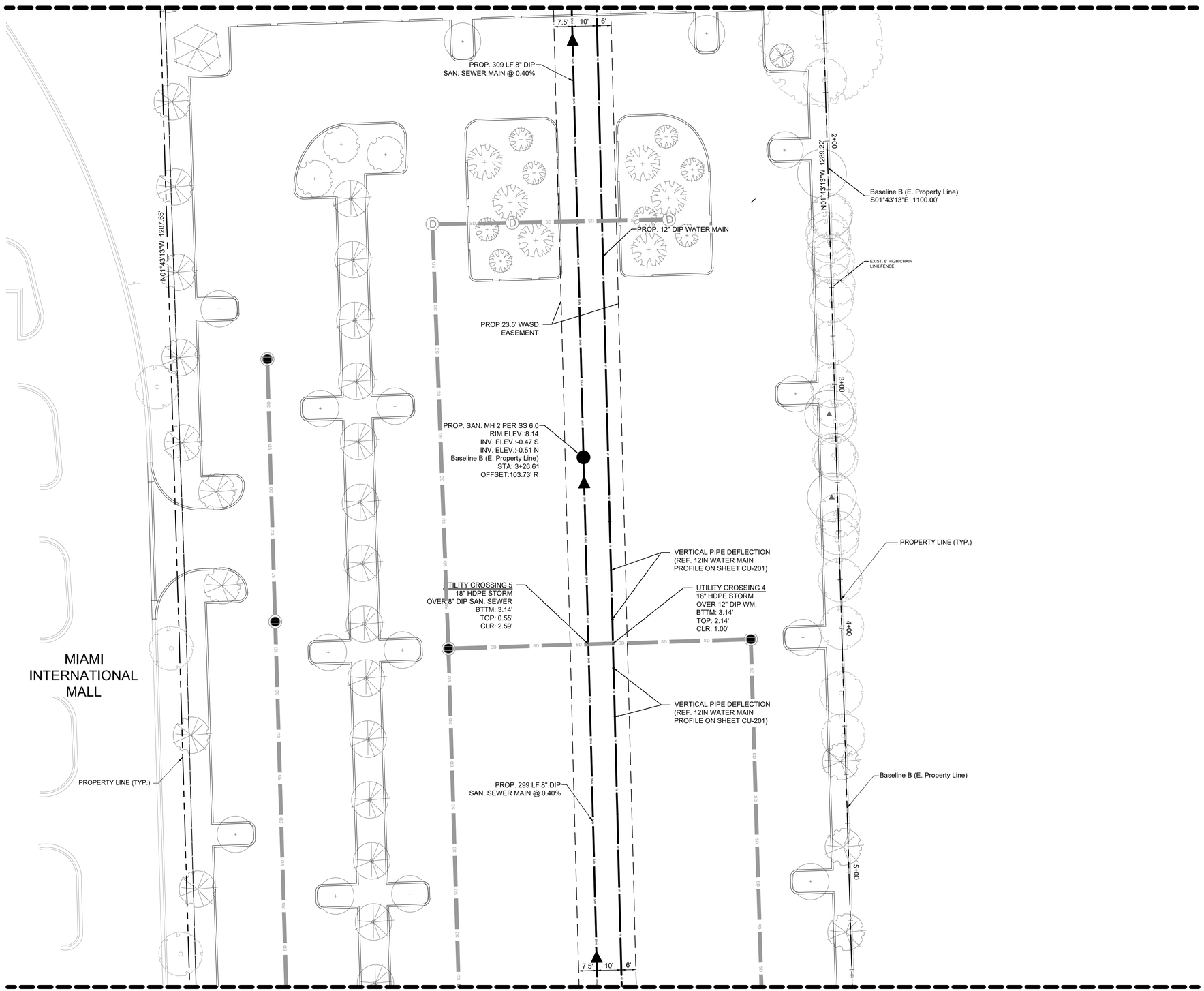
N

MATCHLINE: REF. SHEET CU-106



MATCHLINE: REF. SHEET CU-104

DATUM NOTE:
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NOTES:

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2. ALL DUCTILE IRON PIPE (DIP) WATER & SEWER PIPE TO BE PRESSURE CLASS 350

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CU-105

WATER AND SEWER PLANS

PROJECT NO.
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CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MD-WASD AGGREEMENT ID#24152

GRAPHIC SCALE

0 20 40

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N.W. 102nd AVE.

EXIST. STRM. MH
RIM ELEV. = 7.59'

EXIST. SAN. MH
RIM ELEV. = 7.49'
INV. ELEV. = (-) 6.80' (N)(S)
INV. ELEV. = (-) 6.80' (E)
WASD ES7154-1

35.00' HALF-ROW

35.00' HALF-ROW

EXIST. GAS LINE TO REMAIN. CONTRACTOR TO FIELD VERIFY AND ADJUST AS REQUIRED TO INSTALL PROP. 12" WATER MAIN & 8" SAN. SEWER MAIN

EXIST. FIRE HYDRANT
WASD E10681-1

EXIST. 10" DIP SAN. SEWER
WASD ES7154-1

UTILITY CROSSING 2
EXIST. 2" GAS OVER
8" DIP SAN. SEWER
BTTM: 4.65
TOP: -3.66'
CLR: 8.31'

UTILITY CROSSING 3
EXIST. 12" DIP WATER
OVER 8" DIP SAN. SEWER
BTTM: 1.23'
TOP: -3.68'
CLR: 4.91'

R/W LINE (TYP.)

NW 15th TER. CL STA: 1+23.27
= Baseline A (N. Property Line) STA: 0+00

Baseline A (N. Property Line) STA: 1+78.47
= Baseline B (E Property Line) STA: 0+00

Baseline A(N. Property Line)
S89°40'07"W 450.24'

PROPERTY LINE (TYP.)

4+50.24 4+00 N89°40'10"E 271.77' 3+00 2+00 1+00 0+00

Baseline A (N. Property Line)

R/W LINE (TYP.)

CORE DRILL INTO EXIST. SAN. MH PER SS 6.2
W INV. EL.=(-)4.50-8" DIP
(WASD ES7154-1)

EXIST. SAN. MH
RIM ELEV. = 7.80'
INV. ELEV. = (-) 6.50' (N)(S)
INV. ELEV. = (-) 6.50' (E)
(WASD ES-7154-1)

PROP. 282 LF 8" DIP
SAN. SEWER MAIN @ 0.45%

7.5' 10' 6'

7.5' 10' 6'

NW 15th TER. CL

35.00' HALF-ROW

27.7' TO ℄ NW 15th TER.

N.W. 15th TER.

EXIST. 10" DIP SAN. SEWER
WASD ES-7154-1

35.00' HALF-ROW

R/W LINE (TYP.)

PROP. SAN. MH 1 PER SS 6.0
RIM ELEV.:6.99
INV. ELEV.:-1.74 S
INV. ELEV.:-3.24 E
Baseline A (N. Property Line)
STA: 2+80.54
OFFSET:20.59' L

PROP. 12" - 90.00° H - BEND
Baseline A (N. Property Line)
STA.:2+70.15
OFFSET:30.59 L

PROP 23.5' WASD EASEMENT

EXIST. 23.50' UTILITY EASEMENT

PROP. 12" DIP WATER MAIN

PROPERTY LINE (TYP.)

EXIST FENCE TO BE REPLACED WITH PROP FENCE GATE W/ POSTS OUTSIDE 23.5' WASD EASEMENT

UTILITY CROSSING 1
EXIST. 2" GAS
OVER 12" DIP WM.
BTTM: 4.65'
TOP: 3.20'
CLR: 1.45'

TAP EXISTING 12" WM W/ 12"X12" TAPPING SLEEVE AND 12" TAPPING VALVE PER WS 4.12 SHT 1 OF 2

PROP. 12" DIP WATER MAIN

PROP. 1.5" X 2" CORP. STOP
(WS 2.16 SHT 4 OF 4)
Baseline B (E. Property Line)
STA: 1+34.98
OFFSET: 92.85' R

PROP. 2" IRRIGATION SERVICE
W/ 2" METER (W.S. 2.16 SHT 1 OF 4)
STA=1+35.09
OFF=86.88R
Baseline B (E. Property Line)

PROP. 2" PRESSURE VACUUM BREAKER (W.S. 4.19 SHT 1 OF 2)
STA=1+35.31
OFF=79.21R
Baseline B (E. Property Line)

PROP. 309 LF 8" DIP
SAN. SEWER MAIN @ 0.40%

Baseline B (E. Property Line)
N01°43'13"W 1289.22'

Baseline B (E. Property Line)
S01°43'13"E 1100.00'

7.5' 10' 6'

12' WATER LINE EASEMENT PER O.R.B. 19471, PG. 921

N01°43'13"W 1287.65'

GATE

MATCHLINE: REF. SHEET CU-105

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REVISIONS :

THOMAS F. DONAHUE, P.E.
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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

CU-106

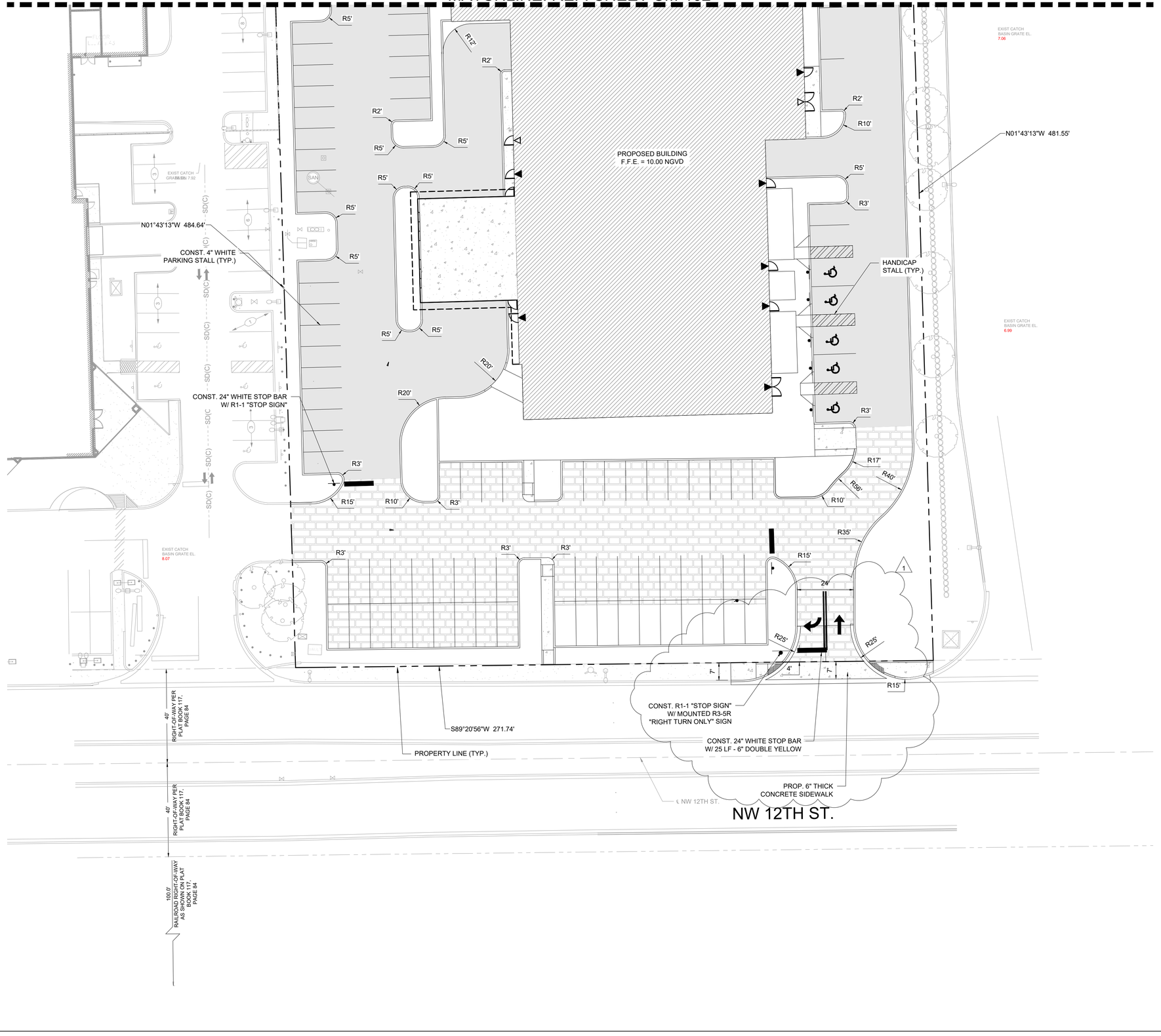
WATER AND SEWER PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\11916.00-CU-1XX.dwg

MATCHLINE: REF. SHEET CM-102



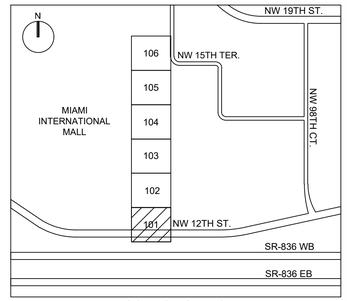
N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

REVISIONS :

1	PLANNING & ZONING COMMENTS

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 8:07 PM

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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\d11916.00-CM-1XX.dwg

CM-101

PAVEMENT
MARKING &
SIGNAGE PLAN

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of
Authorization Number - 7928

PROJECT NO.
11916.00

DRAWN BY :
AARON K.

CHECKED BY :
CARLOS M.

DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CP-103

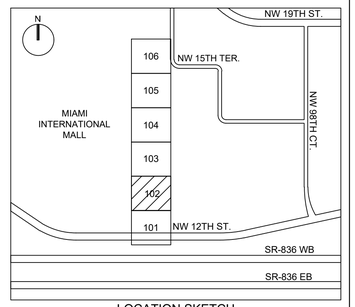
N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

PROPERTY LINE (TYP.)

N01°43'13"W 358.49'

N01°43'13"W 358.49'

N01°43'13"W 484.64'

CONST. 4" WHITE PARKING STALL (TYP.)

N90°00'00"E 226.80'

N90°00'00"E 271.82' WEST 273.20' (LEGAL)

N90°00'00"W 271.82'

S90°00'00"W 45.02'

CONST. 24" WHITE STOP BAR W/ 25 LF - 6" DOUBLE YELLOW W/ R1-1 "STOP SIGN"

PROPERTY LINE (TYP.)

CONST. 24" WHITE STOP BAR W/ R1-1 "STOP SIGN"

N01°43'13"W 481.55'

CONST. 24" WHITE STOP BAR W/ R1-1 "STOP SIGN"

PROPOSED BUILDING
F.F.E. = 10.00 NGVD

MATCHLINE: REF. SHEET CP-101

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Miami, FL, 33126
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REVISIONS :

THOMAS F. DONAHUE, P.E.
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Plotted by: akosh On 11/15/2021 7:51 PM

STILES
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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CM-1XX.dwg

CM-102

PAVEMENT MARKING & SIGNAGE PLAN

PROJECT NO.
11916.00

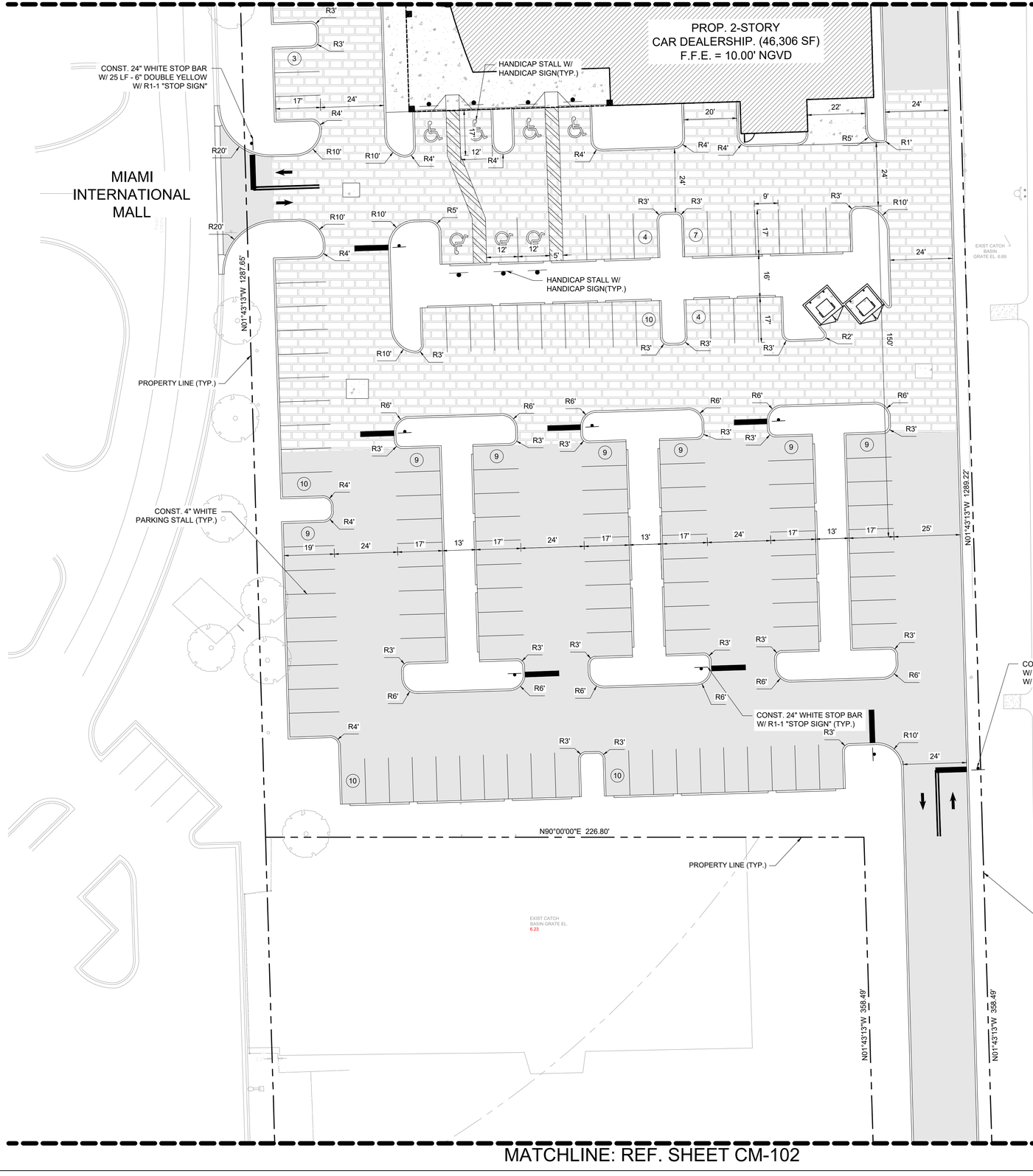
DRAWN BY :
AARON K.

CHECKED BY :
CARLOS M.

DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CM-104



MATCHLINE: REF. SHEET CM-102

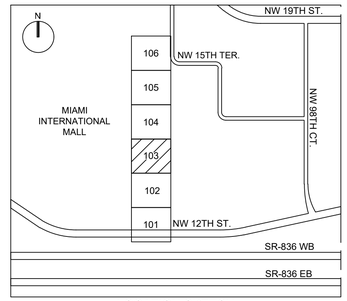
N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

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Plotted by: akosh On 11/15/2021 7:51 PM

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CM-103

PAVEMENT MARKING & SIGNAGE PLAN

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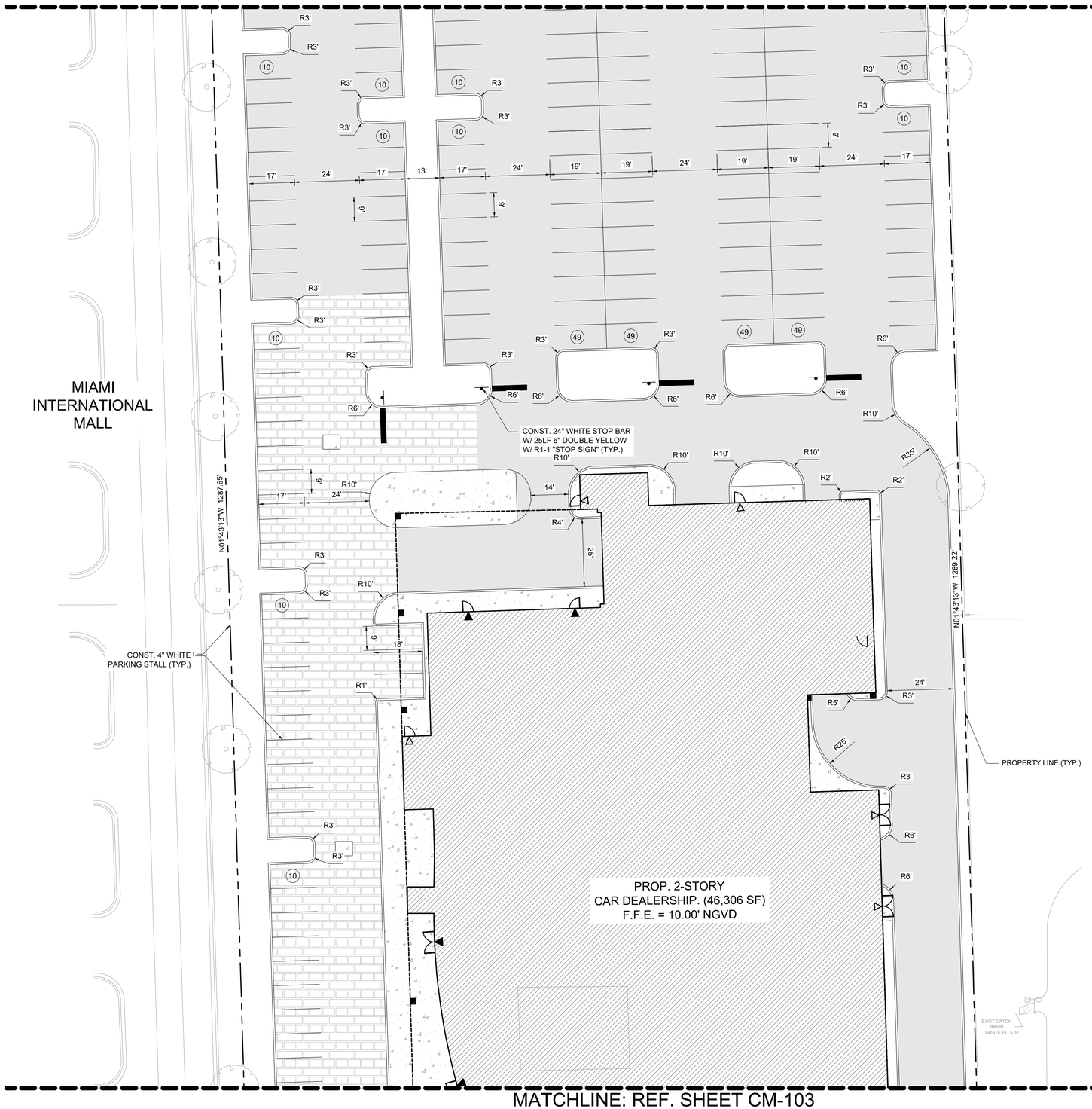
MATCH LINE: REF. SHEET CM-105



MATCHLINE: REF. SHEET CM-103

N

GRAPHIC SCALE
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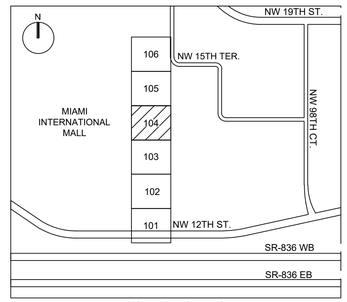

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CM-104

PAVEMENT
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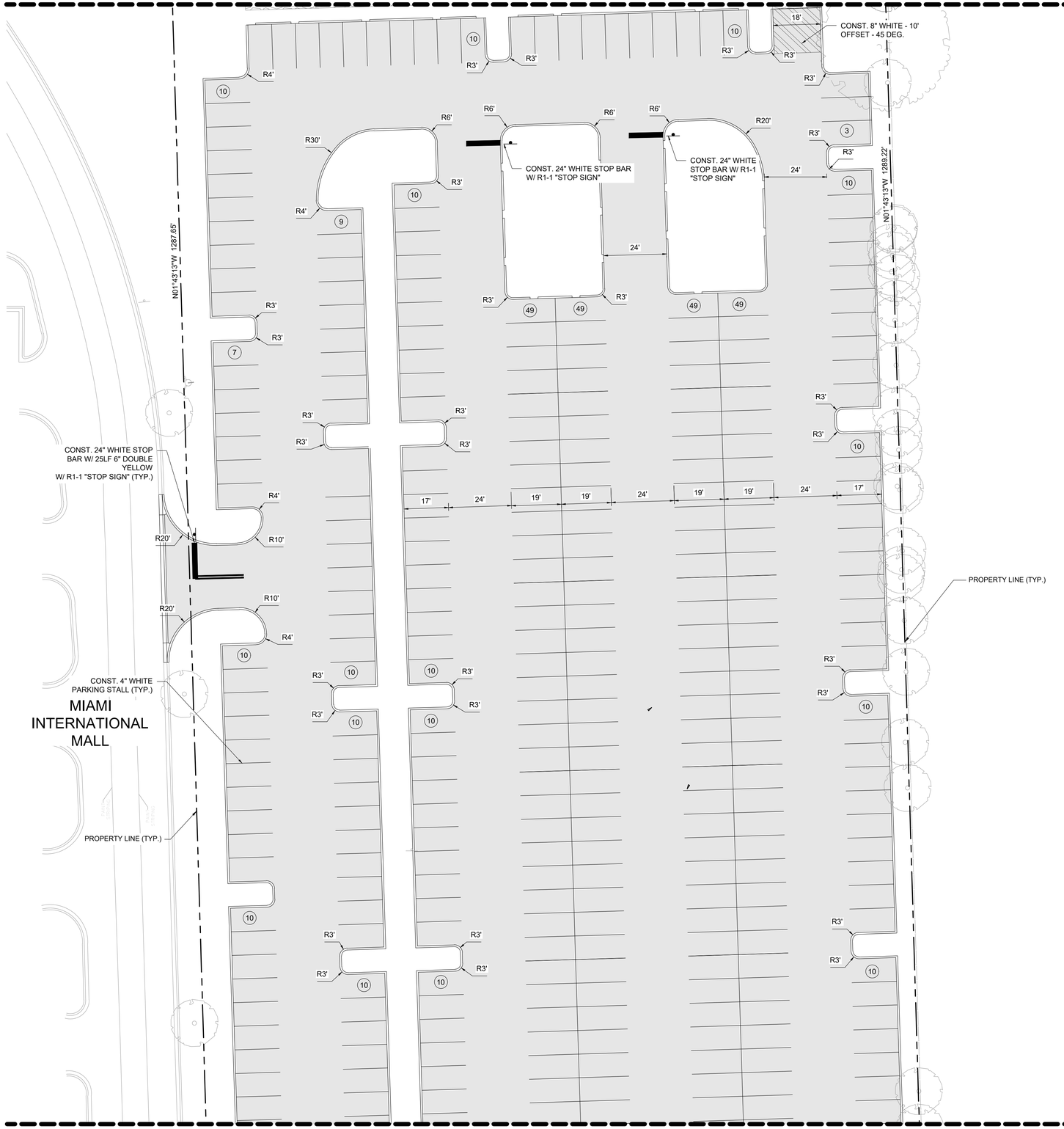

MATCHLINE: REF. SHEET CM-106

N

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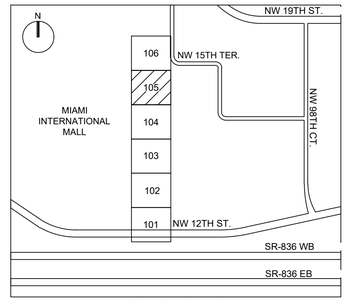

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CM-105

PAVEMENT MARKING & SIGNAGE PLAN

PROJECT NO.
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DRAWN BY :
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CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

NO PROPOSED PAVEMENT MARKING OR SIGNING ON SHEET CM-106

N

GRAPHIC SCALE

0 20 40

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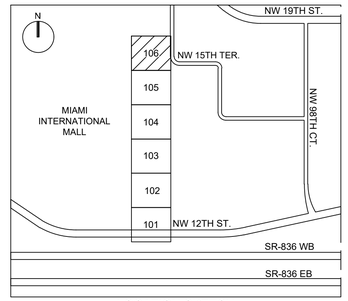

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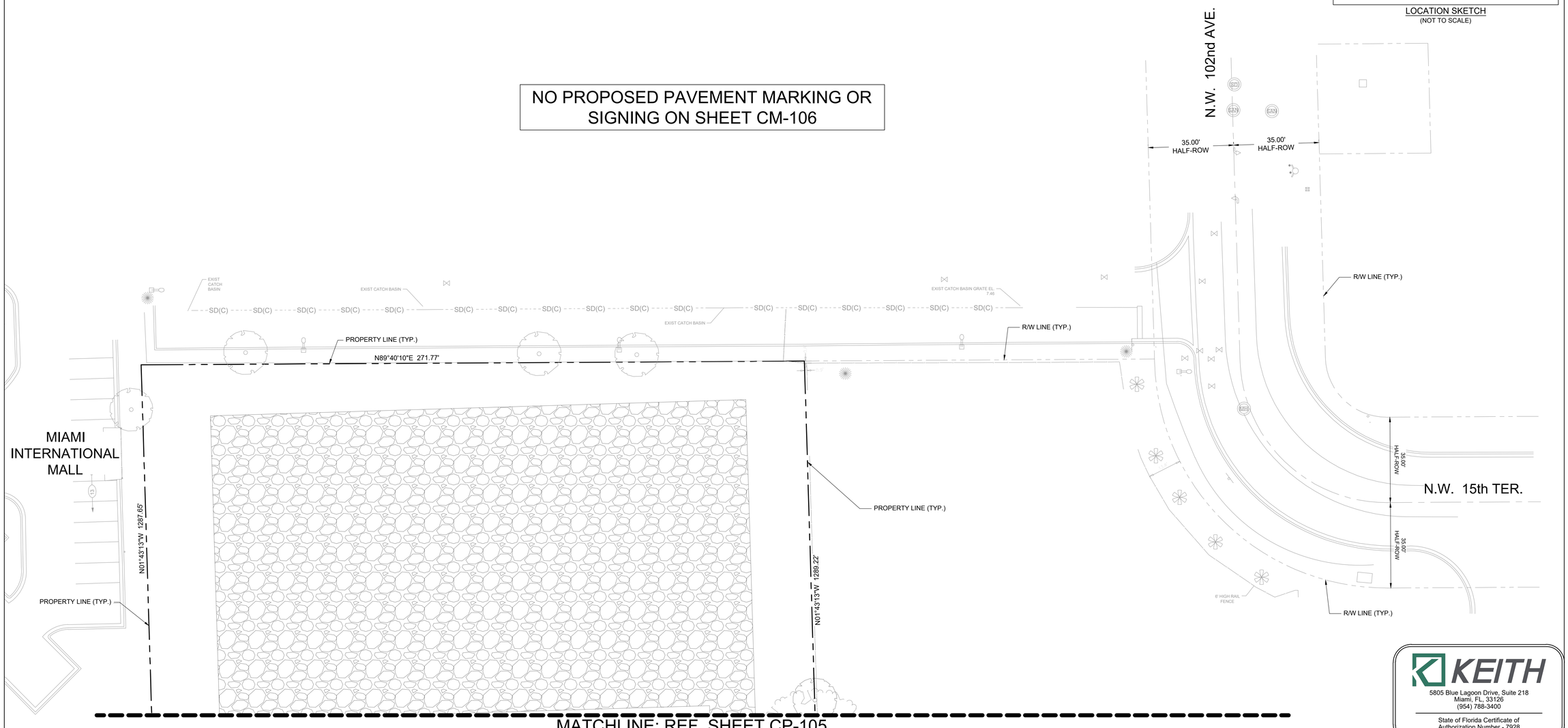

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CM-106

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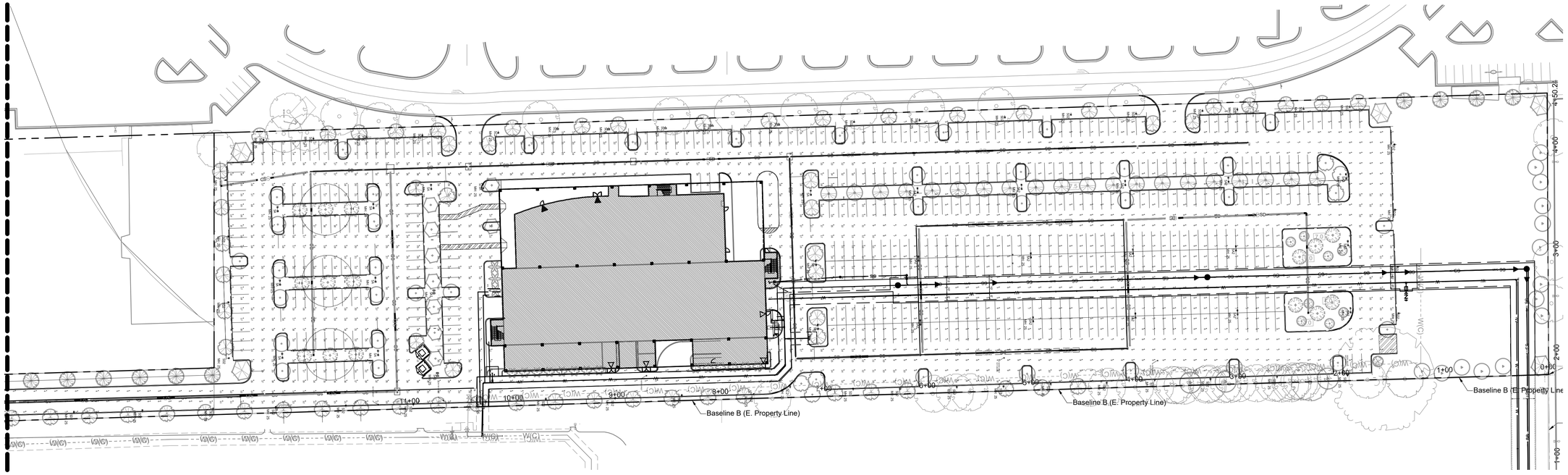


Luminaire Schedule

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Symbol	Qty	Label	Description	LLD	Lum. Watts	Total Watts
	37	CL	FC LIGHTING FCC800-13-SF-940-65L-xx-72	0.900	48	1776
	17	SA	VISIONAIRE BLX-II-4-T5LS-65L-4K-UNV POLE MOUNT 25' AFG	0.900	498	16932
	2	SA1	VISIONAIRE BLX-II-6-T5LS-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	3172
	15	SA2	VISIONAIRE BLX-II-3-T5LS-20L-4K-UNV POLE MOUNT 25' AFG	0.900	149	4470
	1	SB1	VISIONAIRE BLX-II-6-T4A-80L-4K-UNV POLE MOUNT 25' AFG	0.900	508	508
	6	SC	VISIONAIRE BLX-II-6-T4L-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	4758
	16	SC1	VISIONAIRE BLX-II-6_T4L-90L-4K-UNV POLE MOUNT 25' AFG	0.900	625	10000
	5	SC2	VISIONAIRE BLX-II-3-T4L-50L-4K-UNV POLE MOUNT 25' AFG	0.900	397	1985
	1	SD1	VISIONAIRE BLX-II-4-T3L-55L-4K-UNV POLE MOUNT 25' AFG	0.900	407	407
	47	SD2	VISIONAIRE BLX-II-3-T3L-30L-4K-UNV POLE MOUNT 25' AFG	0.900	200	9400

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33122
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

SEAL

CONSULTANT
MICHAEL J. PHILLIPS, R.L.A.
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

lehman doral

KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LL-100

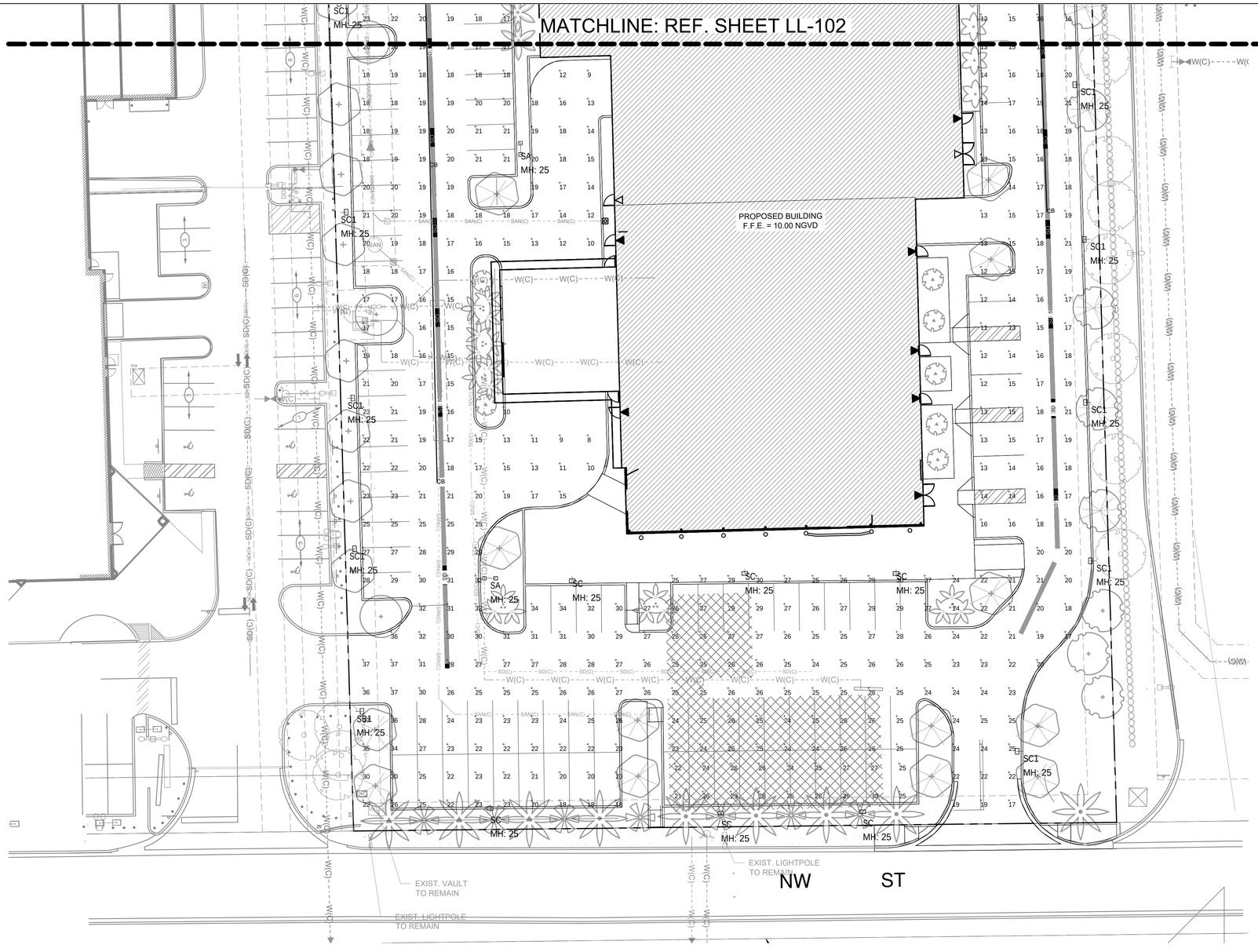
OVERALL PHOTOMETRIC PLAN

PROJECT NO.
11916.00

DRAWN BY :
BRITTANY J.

CHECKED BY :
MICHAEL P.

DATE :
06/08/2021



N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

Calculation Summary					
Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021					
Label	Avg	Max	Min	Avg/Min	Max/Min
DISPLAY LIGHT AREA	24.97	37.0	12.0	2.08	3.08
MID-LEVEL LIGHT AREA	18.99	37.0	8.0	2.37	4.63
MIDDLE ROAD	5.78	11.0	4.0	1.45	2.75
MINIMAL LIGHT AREA	8.33	21.0	3.0	2.78	7.00
NORTH BUILDING - ZONE 1	22.68	35.0	12.0	1.89	2.92

Symbol	Qty	Label	Description	LLD	Lum. Watts	Total Watts
	37	CL	FC LIGHTING FCC800-13-SF-940-65L-xx-72	0.900	48	1776
	17	SA	VISIONAIRE BLX-II-4-T5LS-65L-4K-UNV POLE MOUNT 25' AFG	0.900	498	16932
	2	SA1	VISIONAIRE BLX-II-6-T5LS-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	3172
	15	SA2	VISIONAIRE BLX-II-3-T5LS-20L-4K-UNV POLE MOUNT 25' AFG	0.900	149	4470
	1	SB1	VISIONAIRE BLX-II-6-T4A-80L-4K-UNV POLE MOUNT 25' AFG	0.900	508	508
	6	SC	VISIONAIRE BLX-II-6-T4L-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	4758
	16	SC1	VISIONAIRE BLX-II-6_T4L-90L-4K-UNV POLE MOUNT 25' AFG	0.900	625	10000
	5	SC2	VISIONAIRE BLX-II-3-T4L-50L-4K-UNV POLE MOUNT 25' AFG	0.900	397	1985
	1	SD1	VISIONAIRE BLX-II-4-T3L-55L-4K-UNV POLE MOUNT 25' AFG	0.900	407	407
	47	SD2	VISIONAIRE BLX-II-3-T3L-30L-4K-UNV POLE MOUNT 25' AFG	0.900	200	9400

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REVISIONS :

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lehman doral

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LL-101

PHOTOMETRIC PLAN

PROJECT NO.
11916.00

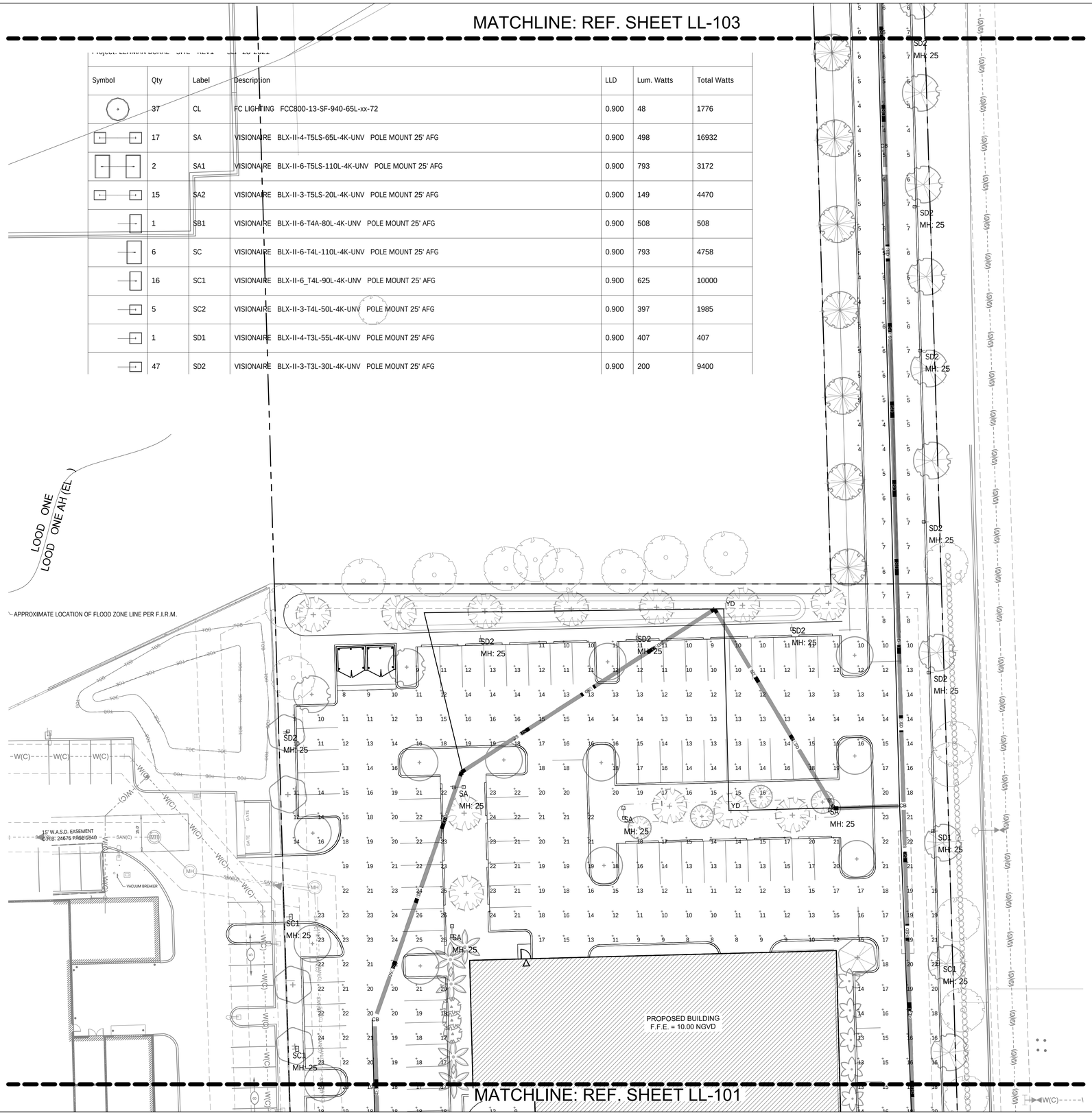
DRAWN BY :
BRITTANY J.

CHECKED BY :
MICHAEL P.

DATE :
06/08/2021

MATCHLINE: REF. SHEET LL-103

Symbol	Qty	Label	Description	LLD	Lum. Watts	Total Watts
	37	CL	FC LIGHTING FCC800-13-SF-940-65L-xx-72	0.900	48	1776
	17	SA	VISIONAIRE BLX-II-4-T5LS-65L-4K-UNV POLE MOUNT 25' AFG	0.900	498	16932
	2	SA1	VISIONAIRE BLX-II-6-T5LS-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	3172
	15	SA2	VISIONAIRE BLX-II-3-T5LS-20L-4K-UNV POLE MOUNT 25' AFG	0.900	149	4470
	1	SB1	VISIONAIRE BLX-II-6-T4A-80L-4K-UNV POLE MOUNT 25' AFG	0.900	508	508
	6	SC	VISIONAIRE BLX-II-6-T4L-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	4758
	16	SC1	VISIONAIRE BLX-II-6_T4L-90L-4K-UNV POLE MOUNT 25' AFG	0.900	625	10000
	5	SC2	VISIONAIRE BLX-II-3-T4L-50L-4K-UNV POLE MOUNT 25' AFG	0.900	397	1985
	1	SD1	VISIONAIRE BLX-II-4-T3L-55L-4K-UNV POLE MOUNT 25' AFG	0.900	407	407
	47	SD2	VISIONAIRE BLX-II-3-T3L-30L-4K-UNV POLE MOUNT 25' AFG	0.900	200	9400



Calculation Summary					
Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021					
Label	Avg	Max	Min	Avg/Min	Max/Min
DISPLAY LIGHT AREA	24.97	37.0	12.0	2.08	3.08
MID-LEVEL LIGHT AREA	18.99	37.0	8.0	2.37	4.63
MIDDLE ROAD	5.78	11.0	4.0	1.45	2.75
MINIMAL LIGHT AREA	8.33	21.0	3.0	2.78	7.00
NORTH BUILDING - ZONE 1	22.68	35.0	12.0	1.89	2.92
NORTH BUILDING - ZONE 2	10.60	32.0	3.0	3.53	10.67

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

REVISIONS :

SEAL

CONSULTANT
MICHAEL J. PHILLIPS, R.L.A.
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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
lehman doral
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LL-102

PHOTOMETRIC PLAN

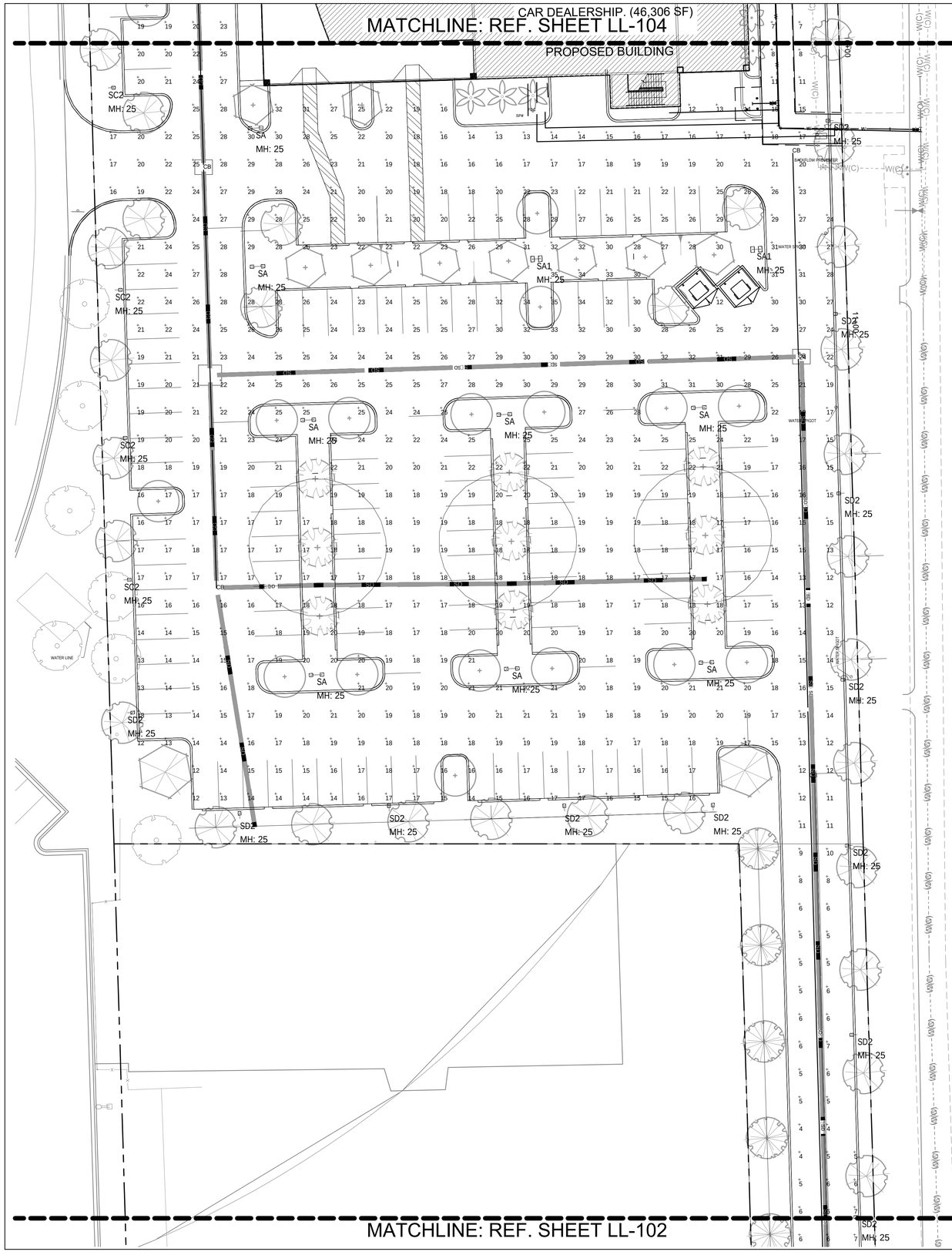
KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33122
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021

CAR DEALERSHIP. (46,306 SF)

MATCHLINE: REF. SHEET LL-104

PROPOSED BUILDING



MATCHLINE: REF. SHEET LL-102

N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Symbol	Qty	Label	Description	LLD	Lum. Watts	Total Watts
	37	CL	FC LIGHTING FCC800-13-SF-940-65L-xx-72	0.900	48	1776
	17	SA	VISIONAIRE BLX-II-4-T5LS-65L-4K-UNV POLE MOUNT 25' AFG	0.900	498	16932
	2	SA1	VISIONAIRE BLX-II-6-T5LS-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	3172
	15	SA2	VISIONAIRE BLX-II-3-T5LS-20L-4K-UNV POLE MOUNT 25' AFG	0.900	149	4470
	1	SB1	VISIONAIRE BLX-II-6-T4A-80L-4K-UNV POLE MOUNT 25' AFG	0.900	508	508
	6	SC	VISIONAIRE BLX-II-6-T4L-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	4758
	16	SC1	VISIONAIRE BLX-II-6_T4L-90L-4K-UNV POLE MOUNT 25' AFG	0.900	625	10000
	5	SC2	VISIONAIRE BLX-II-3-T4L-50L-4K-UNV POLE MOUNT 25' AFG	0.900	397	1985
	1	SD1	VISIONAIRE BLX-II-4-T3L-55L-4K-UNV POLE MOUNT 25' AFG	0.900	407	407
	47	SD2	VISIONAIRE BLX-II-3-T3L-30L-4K-UNV POLE MOUNT 25' AFG	0.900	200	9400

Calculation Summary

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Label	Avg	Max	Min	Avg/Min	Max/Min
DISPLAY LIGHT AREA	24.97	37.0	12.0	2.08	3.08
MID-LEVEL LIGHT AREA	18.99	37.0	8.0	2.37	4.63
MIDDLE ROAD	5.78	11.0	4.0	1.45	2.75
MINIMAL LIGHT AREA	8.33	21.0	3.0	2.78	7.00
NORTH BUILDING - ZONE 1	22.68	35.0	12.0	1.89	2.92

KEITH
5805 Blue Lagoon Drive, Suite 218
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(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

SEAL

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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

lehman doral

KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LL-103

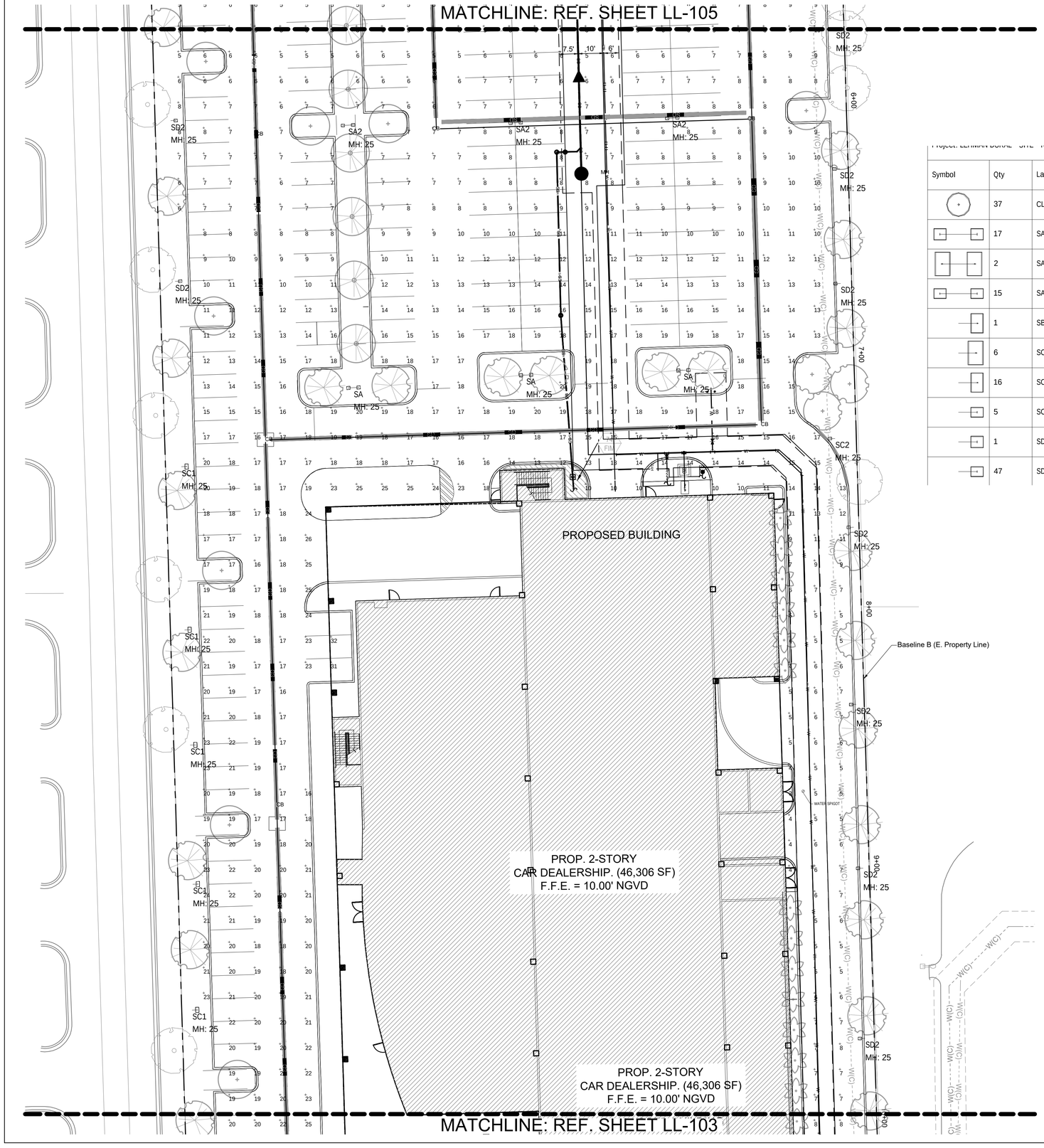
PHOTOMETRIC PLAN

PROJECT NO.
11916.00

DRAWN BY :
BRITTANY J.

CHECKED BY :
MICHAEL P.

DATE :
06/08/2021



N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Symbol	Qty	Label	Description	LLD	Lum. Watts	Total Watts
	37	CL	FC LIGHTING FCC800-13-SF-940-65L-xx-72	0.900	48	1776
	17	SA	VISIONAIRE BLX-II-4-T5LS-65L-4K-UNV POLE MOUNT 25' AFG	0.900	498	16932
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	16	SC1	VISIONAIRE BLX-II-6_T4L-90L-4K-UNV POLE MOUNT 25' AFG	0.900	625	10000
	5	SC2	VISIONAIRE BLX-II-3-T4L-50L-4K-UNV POLE MOUNT 25' AFG	0.900	397	1985
	1	SD1	VISIONAIRE BLX-II-4-T3L-55L-4K-UNV POLE MOUNT 25' AFG	0.900	407	407
	47	SD2	VISIONAIRE BLX-II-3-T3L-30L-4K-UNV POLE MOUNT 25' AFG	0.900	200	9400

Calculation Summary

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Label	Avg	Max	Min	Avg/Min	Max/Min
DISPLAY LIGHT AREA	24.97	37.0	12.0	2.08	3.08
MID-LEVEL LIGHT AREA	18.99	37.0	8.0	2.37	4.63
MIDDLE ROAD	5.78	11.0	4.0	1.45	2.75
MINIMAL LIGHT AREA	8.33	21.0	3.0	2.78	7.00
NORTH BUILDING - ZONE 1	22.68	35.0	12.0	1.89	2.92

KEITH
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State of Florida Certificate of Authorization Number - 7928

REVISIONS :

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(FOR THE FIRM)

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FL. REG # AA-26001798

lehman doral

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LL-104

PHOTOMETRIC PLAN

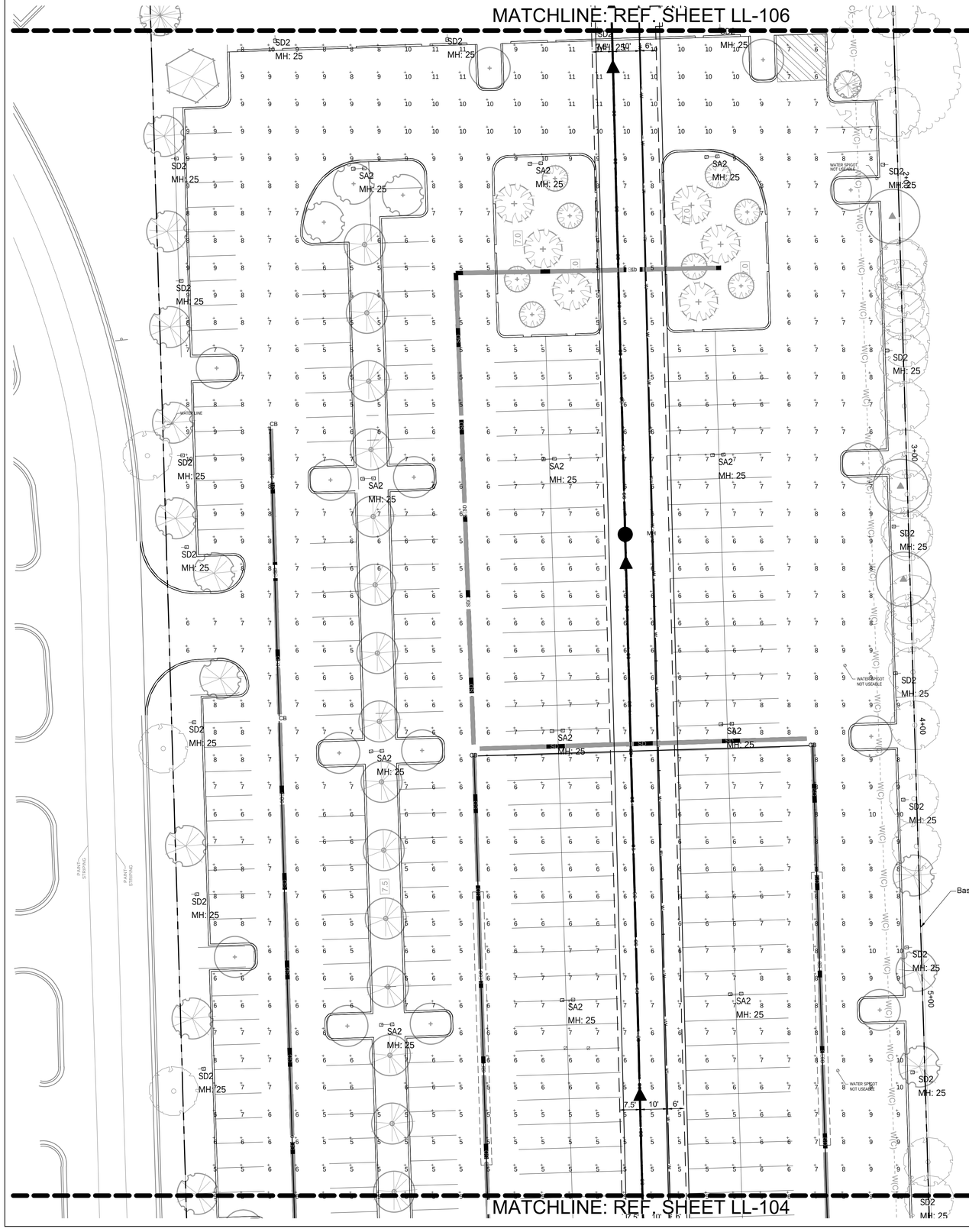
PROJECT NO.
11916.00

DRAWN BY :
BRITTANY J.

CHECKED BY :
MICHAEL P.

DATE :
06/08/2021

MATCHLINE: REF. SHEET LL-106



MATCHLINE: REF. SHEET LL-104

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Symbol	Qty	Label	Description	LLD	Lum. Watts	Total Watts
	37	CL	FC LIGHTING FCC800-13-SF-940-65L-xx-72	0.900	48	1776
	17	SA	VISIONAIRE BLX-II-4-T5LS-65L-4K-UNV POLE MOUNT 25' AFG	0.900	498	16932
	2	SA1	VISIONAIRE BLX-II-6-T5LS-110L-4K-UNV POLE MOUNT 25' AFG	0.900	793	3172
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	1	SD1	VISIONAIRE BLX-II-4-T3L-55L-4K-UNV POLE MOUNT 25' AFG	0.900	407	407
	47	SD2	VISIONAIRE BLX-II-3-T3L-30L-4K-UNV POLE MOUNT 25' AFG	0.900	200	9400

Calculation Summary

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Label	Avg	Max	Min	Avg/Min	Max/Min
DISPLAY LIGHT AREA	24.97	37.0	12.0	2.08	3.08
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MIDDLE ROAD	5.78	11.0	4.0	1.45	2.75
MINIMAL LIGHT AREA	8.33	21.0	3.0	2.78	7.00
NORTH BUILDING - ZONE 1	22.68	35.0	12.0	1.89	2.92

REVISIONS :

SEAL

CONSULTANT
MICHAEL J. PHILLIPS, R.L.A.
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(FOR THE FIRM)

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954 - 627- 9180
FL. REG # AA-26001798

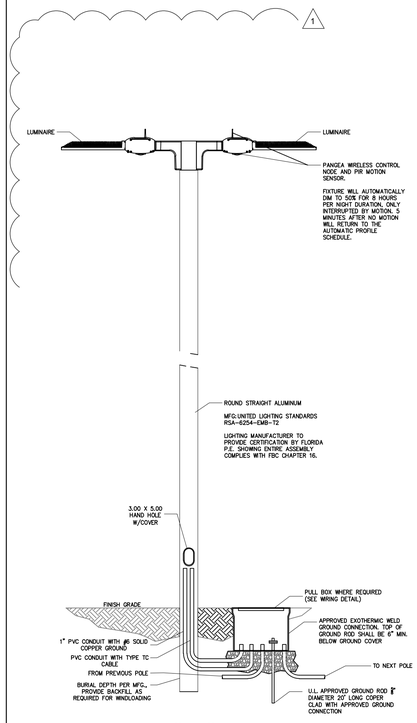
NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
lehman doral
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LL-105

PHOTOMETRIC PLAN

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33122
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

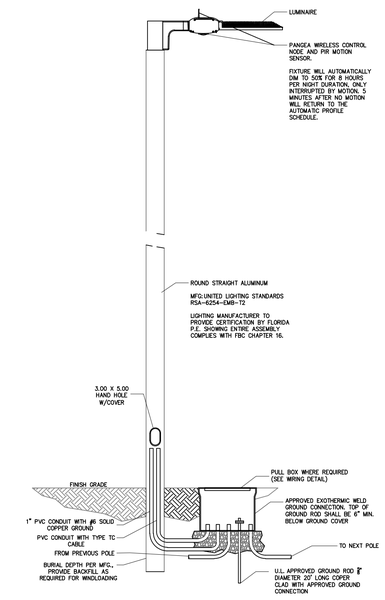
PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021



X SL-X TYPICAL

FIXTURES "SA"
LIGHT POLE DETAIL

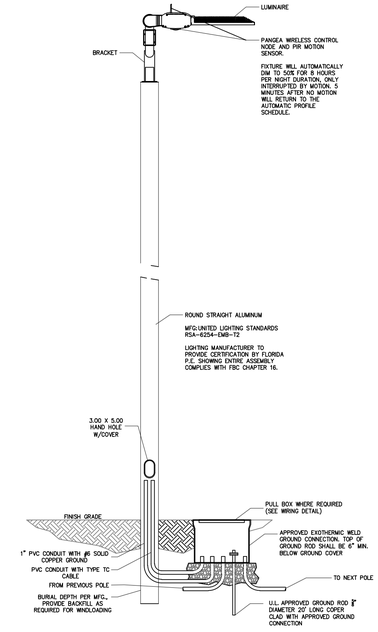
NOT TO SCALE



X SL-X TYPICAL

FIXTURES "SB,SC,SD"
LIGHT POLE DETAIL

NOT TO SCALE



X SL-X TYPICAL

FIXTURES "SE"
LIGHT POLE DETAIL

NOT TO SCALE

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Symbol	Qty	Label	Description	LLD	Lum. Watts	Total Watts
	37	CL	FC LIGHTING FCC800-13-SF-940-65L-xx-72	0.900	48	1776
	17	SA	VISIONAIRE BLX-II-4-T5LS-65L-4K-UNV POLE MOUNT 25' AFG	0.900	498	16932
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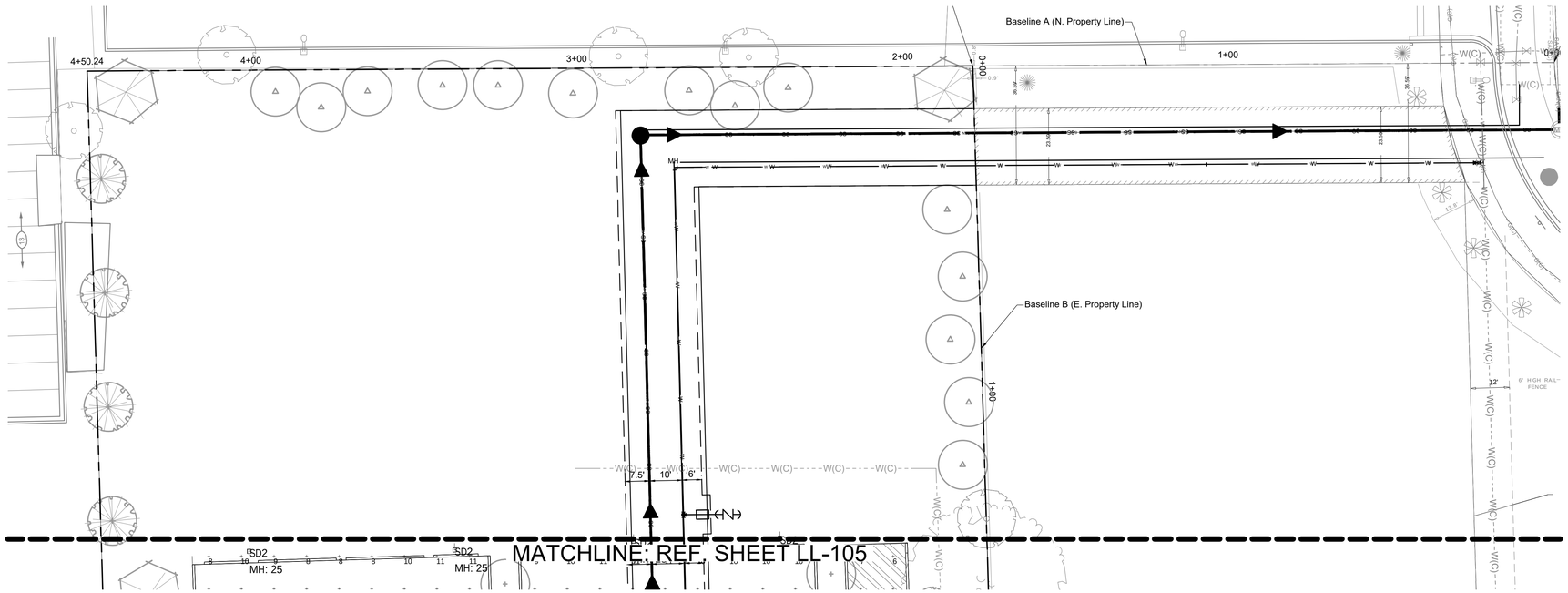
	1	SD1	VISIONAIRE BLX-II-4-T3L-55L-4K-UNV POLE MOUNT 25' AFG	0.900	407	407
	47	SD2	VISIONAIRE BLX-II-3-T3L-30L-4K-UNV POLE MOUNT 25' AFG	0.900	200	9400

Calculation Summary

Project: LEHMAN DORAL - SITE - REV1 --- SEP-28-2021

Label	Avg	Max	Min	Avg/Min	Max/Min
DISPLAY LIGHT AREA	24.97	37.0	12.0	2.08	3.08
MID-LEVEL LIGHT AREA	18.99	37.0	8.0	2.37	4.63
MIDDLE ROAD	5.78	11.0	4.0	1.45	2.75
MINIMAL LIGHT AREA	8.33	21.0	3.0	2.78	7.00
NORTH BUILDING - ZONE 1	22.68	35.0	12.0	1.89	2.92



N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33122
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

1	PLANNING & ZONING COMMENTS 08/24/2021

SEAL

CONSULTANT
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(FOR THE FIRM)

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NEW KIA & SUBARU
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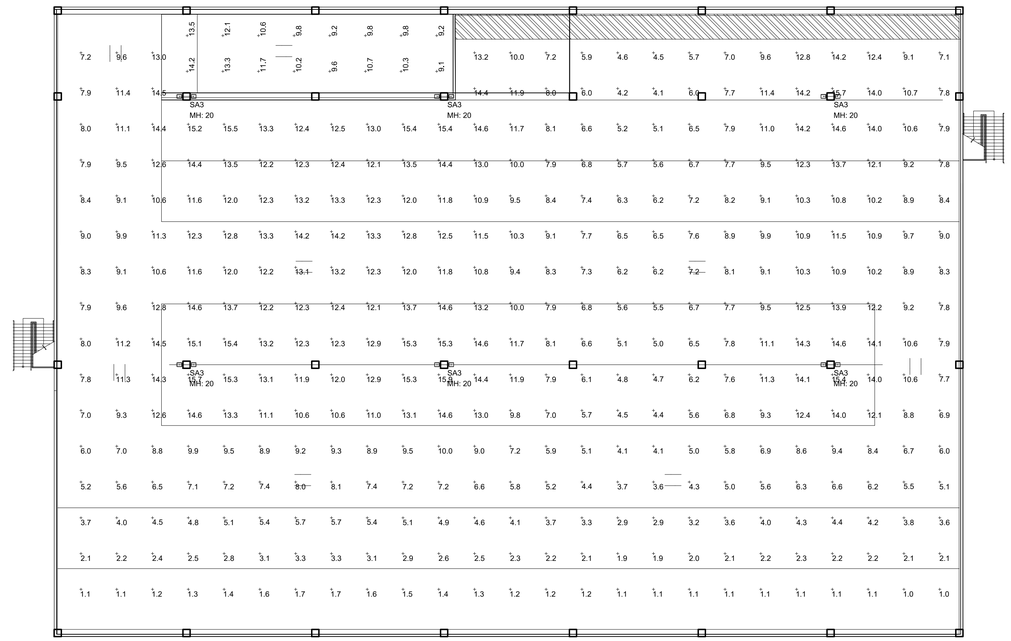
KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LL-106

PHOTOMETRIC PLAN

PROJECT NO.
11916.00
DRAWN BY :
BRITTANY J.
CHECKED BY :
MICHAEL P.
DATE :
06/08/2021



Luminaire Schedule					
Symbol	**Qty**	**Label**	**Description**	**Lum. Watts**	**LLF**
←→	6	SA3	VISIONAIRE BLX-II-3-T5LS-40L-4K-UNV POLE MOUNT 20' AFG	305	0.900

Calculation Summary						
Label	**CalcType**	**Units**	**Avg**	**Max**	**Min**	**Max/Min**
GARAGE ROOF DECK	Illuminance	Fc	8.46	15.9	1.0	15.90
RAMP_2_Side_1	Illuminance	Fc	10.82	14.2	9.1	1.56

N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

REVISIONS :

SEAL

CONSULTANT
MICHAEL J. PHILLIPS, R.L.A.
FLORIDA REG. NO. LA0001540
(FOR THE FIRM)

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

KIA
10155 NW 12th STREET
DORAL, FLORIDA 33172

LL-107

PHOTOMETRIC PLAN - ROOF

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33122
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00

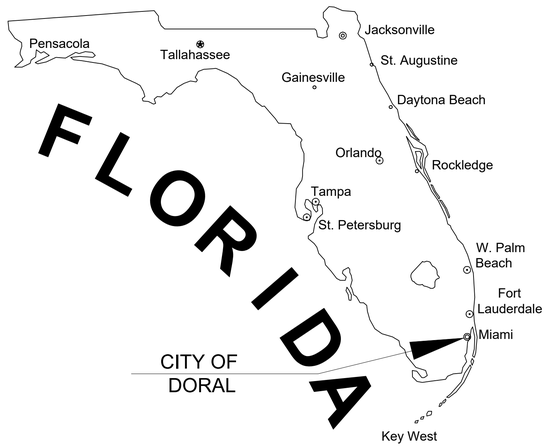
DRAWN BY :
BRITTANY J.

CHECKED BY :
MICHAEL P.

DATE :
06/08/2021

LEHMAN DORAL
KIA & SUBARU

10155 NW 12th St
CITY OF DORAL, MIAMI DADE COUNTY, FLORIDA



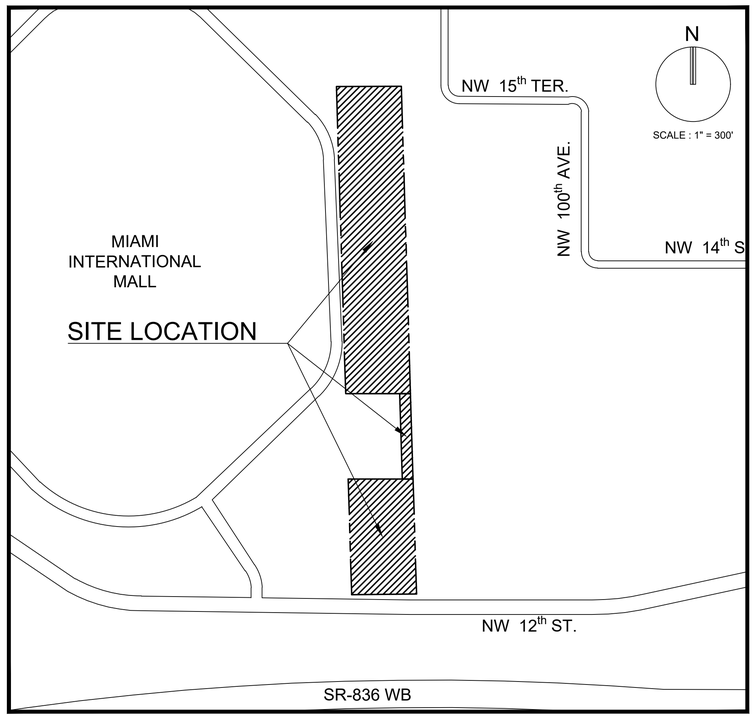
PRELIMINARY CIVIL ENGINEERING PLANS

INDEX OF SHEETS	
SHEET IDENTIFICATON	SHEET TITLE
GI-001	KEY SHEET
GI-002	LEGEND AND ABBREVIATIONS
GI-003	GENERAL CONSTRUCTION NOTES
GI-004	GENERAL SPECIFICATIONS
CP-101 - CP-106	PAVING, GRADING, AND DRAINAGE PLANS
CP-501 - CP-503	PAVING, GRADING, AND DRAINAGE DETAILS
CU-101 - CU-106	WATER AND SEWER PLAN
CM-101 - CM-106	PAVEMENT MARKING AND SIGNAGE PLAN

LAND DESCRIPTION:

Parcel A:
The East 45.00 feet of the following property as described in Official Records Book 24375 at Page 3970 of the Public Records of Miami-Dade County, Florida:

A portion of the South 1/2 of Section 32, Township 53 South, Range 40 East, Miami-Dade County, Florida, being more particularly described as follows: Commence at the Southeast corner of the Southwest 1/4 of said Section 32; thence S89°20'56"W along the South line of said Section 32 for a distance of 118.68 feet to a point; thence N01°43'13"W for a distance of 80.01 feet to a point on the Northerly right-of-way of N.W. 12th Street; thence continuing N01°43'13"W for a distance of 481.55 feet to the POINT OF BEGINNING; thence due West a distance of 273.70 feet to a point; thence S64°49'27"W a distance of 497.70 feet to a point; thence N34°00'00"W a distance of 151.31 feet to a point; thence N45°56'45"E a distance of 190.52 feet to a point; thence 60.36 feet along a curve to the right having a radius of 150.00 feet and a central angle of 23°03'15" to a point; thence N69°00'00"E a distance of 360.94 feet to a point; thence 245.30 feet along an arc to the left having a radius of 400 feet and an central angle of 35°08'13" to a point; thence due East a distance of 84.73 feet to a point; thence S01°43'13"E a distance of 358.49 feet to a POINT OF BEGINNING.
AND
Parcel C:
A portion of the South 1/2 of Section 32, Township 53 South, Range 40 East, Miami-Dade County, Florida, being more particularly described as follows: Commence at the Southeast corner of the Southwest 1/4 of said Section 32; thence S89°20'56"W along the South line of said Section 32 for a distance of 118.68 feet to a point; thence N01°43'13"W for a distance of 80.01 feet to a point on the Northerly right-of-way of N.W. 12th Street; thence continuing N01°43'13"W for a distance of 840.04 feet to the POINT OF BEGINNING; thence N90°00'00"W for 271.82 feet to a point on the East Line of Tract "A" of MIAMI INTERNATIONAL MALL PROPERTIES, according to the plat thereof as recorded in Plat Book 117 at Page 84 of the Public Records of Miami-Dade County, Florida; thence N01°43'13"W along said East line of Tract "A", for 1287.65 feet to the Southwest Corner of Tract "A" of GREAT SPRINGS AT I.C.P., according to the Plat thereof as recorded in Plat Book 158 at Page 94, of the Public Records of Miami-Dade County, Florida; thence N89°40'09"E along the South line of said Tract "A" of GREAT SPRINGS AT I.C.P for 271.77 feet to the Northwest Corner of Tract "K" of INTERNATIONAL CORPORATE PARK SECTION 6; thence S01°43'13"E along the West line of said Tract "K" and along the West Line of Tract "A" of DOLE FLOWERS SUBDIVISION, according to the Plat thereof as recorded in Plat Book 157 at Page 57, of the Public Records of Miami-Dade County, for 1289.22 feet to the POINT OF BEGINNING.
AND
Tract "A", LEHMAN DORAL, according to the plat thereof as recorded in Plat Book 172 at Page 41 of the Public Records of Miami-Dade County, Florida.



LOCATION MAP

SECTION 53, TOWNSHIP 40S, RANGE 32E
FOLIO #35-3032-000-0121
FOLIO #35-3032-045-0010
FOLIO #35-3032-008-0017

FEMA FLOOD ZONE:

THE PROPERTY IS LOCATED WITHIN FLOOD ZONE AH WITH A BASE FLOOD ELEVATION OF 8 FEET, AS SHOWN ON F.I.R.M. NUM. 12086C0286L, BEARING A MAP EFFECTIVE DATE OF 9/11/2009

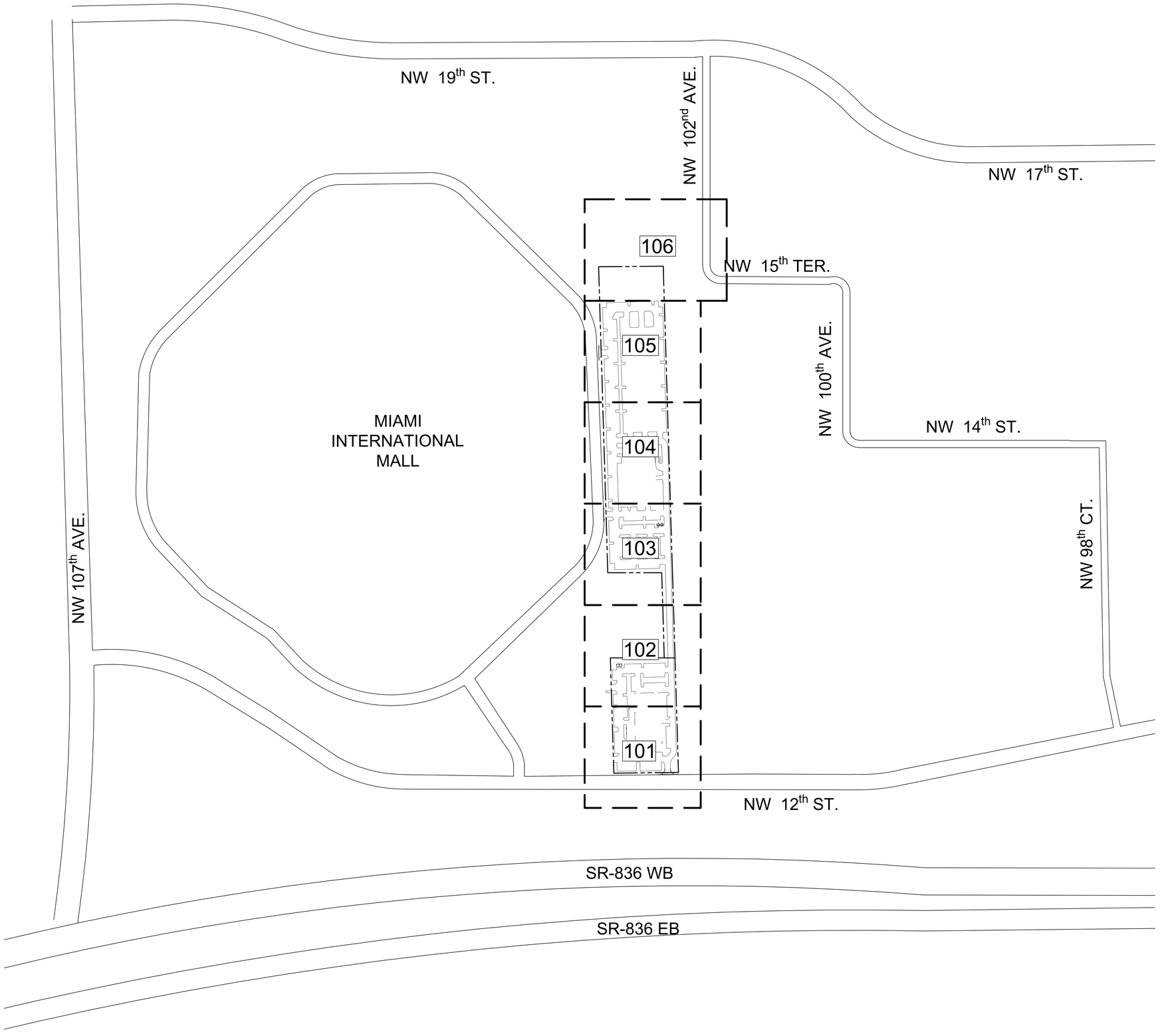
THESE PLANS MAY HAVE BEEN REDUCED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.

PREPARED FOR:
STILES ARCHITECTURAL GROUP
301 EAST LAS OLAS BOULEVARD
FORT LAUDERDALE, FLORIDA 33301

KEITH
5808 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

PROJECT No. 11916.00 DATE: November 2021



REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:43 PM

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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\11916.00-GI-XXX.dwg

GI-001

KEY SHEET

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

GENERAL SYMBOLS

SYMBOL	DESCRIPTION
A / CP-301	PROPOSED SECTION MARKER INDICATING THE SECTION LETTER AND THE SHEET ON WHICH THE SECTION VIEW APPEARS.
22 / C-05	DETAIL REFERENCE CALL OUT INDICATING THE DETAIL NUMBER AND THE SHEET ON WHICH THE DETAIL VIEW APPEARS.
1	REVISION TRIANGLE NUMBER
	MISC BREAK LINES
PIC#	PHOTO LOCATION AND CORRESPONDING PICTURE NUMBER.
N: 623025.4322 E: 850262.1786	COORDINATE VALUES SHOWN ON PROPOSED IMPROVEMENTS ARE RELATIVE TO THE COORDINATE VALUES INDICATED ON THE RIGHT-OF-WAY, PROPERTY CORNERS OR REFERENCE MONUMENT

GEN SITE & PMS

SYMBOL	DESCRIPTION
	PAVEMENT MARKING ARROWS
	STOP BAR
	ADA PARKING
	CONCRETE CAR STOP
	BICYCLE
	BICYCLE RACK
	AUTOMOBILE
	POST MOUNTED SIGNS 1,2, DOUBLE POST & 4 WAY
33	PARKING SPACE NUMBER
	BASELINE, CENTER, PROPERTY, FLOW & MONUMENT LINE
	BUILDING ACCESS (ADA) / (NON-ADA)

PAVING & GRADING

SYMBOL	DESCRIPTION
0.04% 0.04%	FLOW DIRECTIONAL ARROW
6"	ELEVATION CHANGE
5.00 5.00	MAJOR / MINOR CONTOUR ELEVATION
13.56	GRADE ELEVATION
13.56 / 22.00	TOP OF CURB / PAVEMENT ELEVATION
MEG	MATCH EXISTING GRADE
	SLOPE BANK
A-1 24'	DRIVEWAY TURNOUT IDENTIFICATION (FDOT INDEX 515) W/ DRIVE WIDTH
CR-?	SIDEWALK CURB RAMP (PER FDOT INDEX 304)
	SEAWALL

UTILITY PIPES

SYMBOL	DESCRIPTION
	PIPE FITTINGS: TEE, 90, 45, 22.5, 11.2, CAP,
	CAP W/FVO, REDUCER, VERTICAL, PLUG
	VALVES: GATE, BUTTERFLY, DOUBLE BTRFLY, BFP, DDCV, VACUUM BREAKER
MBO ABO ARV	MAN/AUTO BLOWOFF, ARV, PIV, FLUSH VLV, CORP STOP
SP# HYD FDC WW	SAMPLE PNT, HYDRANT, FDC, WATER WELL
	TAPPING SADDLE
SD	EXFILTRATION TRENCH
W	PIPE CASING
V	VENT PIPE BOX
22	UTILITY CROSSING TABLE REFERENCE
22	UTILITY CROSSING

HATCH PATTERNS

SYM	DESCRIPTION	SYM	DESCRIPTION
	CONCRETE AREA		BRICK PAVERS
	JOGGING PATH		SOIL TRACKING PREVENTION DEVICE
	PAVEMENT AREA		SAND (DETAIL / ELEVATION)
	BUILDING HATCH		EARTH (DETAIL / ELEVATION)
	MILLING AND RESURFACING		GRAVEL (DETAIL / ELEVATION)
	DETECTABLE WARNING PER FLORIDA CODE		GRASS AREA
	DEMOLITION AREA		ADA STRIPING
			PAVEDRAIN (PERMEABLE ARTICULATING CONCRETE BLOCK)

UTILITY STRUCTURES

SYMBOL	DESCRIPTION
	FDOT C,D,E,F,G & FABRIC CATCH BASIN
CB MH SS	NON-FDOT ROUND CB'S & MANHOLES, MDC STRUCTURE
	FDOT CURB INLETS TYPE1-TYPE10
	TRENCH DRAIN
	PIPE CULVERT - MITERED END SECTION
	STRAIGHT ENDWALL
PS#	PUMP STATION LOCATION AND NUMBER
	GREASE TRAP SINGLE AND DOUBLE
	SEPTIC TANK
	SEPTIC DRAIN FIELD
	DRAINAGE WELL, DRAIN C.B., CONTROL STRUCTURE
MW	MONITORING WELL
WELL	WATER WELL
M	METER BOX WATER AND IRRIGATION
YD DD DD	YARD DRAIN / 9" DECK DRAIN ROUND & SQUARE
CO CO CO	CLEAN OUT 6", 4" & BOX
22	STORM STRUCTURE TABLE REFERENCE NUMBER
22	SEWER STRUCTURE TABLE REFERENCE NUMBER

XX — CONST. 5' Ø CB
RIM EL. = 12.88
N INV. ELEV. = 4.50' - XX" DIP
E INV. ELEV. = 4.50' - XX" DIP
S INV. ELEV. = 4.50' - XX" DIP
W INV. ELEV. = 4.50' - XX" DIP

SEWER STRUCTURE CALLOUT (SHOWN AS A CIRCLE CIRCUMSCRIBING THE STRUCTURE NUMBER.)

XX — CONST. 5' Ø CB
RIM EL. = 12.88
N INV. ELEV. = 4.50' - XX" DIP
E INV. ELEV. = 4.50' - XX" DIP
S INV. ELEV. = 4.50' - XX" DIP
W INV. ELEV. = 4.50' - XX" DIP

STORM STRUCTURE CALLOUT (SHOWN AS A HEXAGON CIRCUMSCRIBING THE STRUCTURE NUMBER.)

INDICATES STRUCTURE NUMBER, STATION & OFFSET, STRUCTURE SIZE & TYPE, RIM/GRATE ELEVATION, PIPE INVERT ELEVATIONS & DIRECTION, PIPE SIZE & MATERIAL AS WELL AS ANY SPECIAL NOTES.

LINE TYPES

PROPOSED UTILITIES

W	WATER LINE
SAN	SANITARY SEWER
FM	FORCE MAIN
LFM	LOW PRESSURE FM
SD	STORM DRAIN
PSD	PRESSURE STORM
IRR	IRRIGATION
RAW	RAW WATER
RCW	RECLAIMED WATER
G	GAS LINE

TOPO

	BREAKLINE
	MAJOR CONTOUR
	MINOR CONTOUR
	TOP OF BANK
	TOE OF SLOPE
	EDGE OF WATER
CLS CLS	CENTERLINE OF SWALE

PAVEMENT MARKING

	STRIPE SKIP 2-4
	STRIPE SKIP 3-9
	STRIPE SKIP 6-10
	STRIPE SKIP 10-30
	STRIPE SKIP 10-10-20
	STRIPE SKIP 2-2-2

GENERAL SITE

	DEMOLITION
	TURBIDITY BARRIER
	PARKING STRIPING (SINGLE)
	BUILDING SETBACK
	FIRE TRUCK PATH
	SIGHT TRIANGLE
	BUILDING FOOTPRINT
	VEHICLE OVERHANG
O	CONSTRUCTION LIMITS
SF SF	SILT FENCE
SSF	SUPER SILT FENCE
	PARKING STRIPING (DOUBLE)

ABBREVIATIONS

ABBRV	DESCRIPTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL
BIT.	BITUMINOUS
BC	BACK OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWY	DRIVEWAY
ELEV (OR EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (OR EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MEG	MATCH EXISTING GRADE
MH	MANHOLE
MIN	MINIMUM
NIC	NOT IN CONTRACT

ABBREVIATIONS CONTINUED

ABBRV	DESCRIPTION
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
RT	RIGHT
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TSV	TAPPING SLEEVE AND VALVE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

LINE WEIGHTS

EXISTING	SHADED LINES & TEXT DENOTE EXISTING EQUIPMENT AND STRUCTURES.
FUTURE	NON-SHADED DASHED LINES & TEXT DENOTE FUTURE EQUIPMENT, STRUCTURES AND WORK.
PROPOSED / CONSTRUCT	NON-SHADED, BOLD, SOLID LINES & TEXT DENOTE PROPOSED EQUIPMENT, STRUCTURES AND WORK.

NOTE: THIS IS A STANDARD LEGEND SHEET. NOT ALL ITEMS ARE PERTINENT TO THIS SET OF DRAWINGS

KEITH
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Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:43 PM

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Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\d11916.00-GI-XXX.dwg

GI-002

LEGEND AND ABBREVIATIONS

PROJECT NO. 11916.00
DRAWN BY : AARON K.
CHECKED BY : CARLOS M.
DATE : 11/16/2021

STATUS: PERMIT

GENERAL NOTES

THIS CONSTRUCTION PROJECT MAY OR MAY NOT INCLUDE ALL ITEMS COVERED BY THESE NOTES AND SPECIFICATIONS, I.E. PAVING, GRADING, DRAINAGE LINES, WATER LINES, OR SANITARY SEWER LINES. SEE PLANS FOR DETAILED PROJECT SCOPE. NOTES AND SPECIFICATIONS ON THIS SHEET REFER TO PAVING, GRADING, DRAINAGE, WATER, AND SANITARY SEWER, AND ARE INTENDED FOR THIS PROJECTS SCOPE OF WORK AND FOR REFERENCE PURPOSES FOR OTHER WORK ITEMS THAT MAY BE REQUIRED DUE TO UNFORESEEN EXISTING CONDITIONS OR REQUIRED REMEDIAL WORK.

1. SPECIFIC SITE NOTES

1.1. COUNTY AND "CITY" IN THESE NOTES REFERS TO COUNTY AND CITY IN WHICH PROJECT RESIDES.

1.2. STATE IN THESE NOTES REFERS TO THE STATE OF FLORIDA.

1.3. EXISTING TOPOGRAPHIC INFORMATION IN THE PLANS IS BASED ON SURVEY DATA AND BEST AVAILABLE INFORMATION. SEE PROJECT SURVEY AND NOTES ON PLAN SHEETS REGARDING THE SOURCE OF THE TOPOGRAPHIC INFORMATION.

2. APPLICABLE CODES

2.1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY, COUNTY, AND ALL OTHER JURISDICTIONAL, STATE AND NATIONAL CODES WHERE APPLICABLE.

2.2. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS, AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATION BOOKLET, THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION.

2.3. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND JURISDICTIONAL SAFETY AND HEALTH REGULATIONS.

2.4. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, AND REGULATIONS.

2.5. ALL HANDICAP ACCESSIBLE AREAS TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), STATE ADA CODES, AND FLORIDA BUILDING CODE ADA CODES LATEST EDITION.

2.6. TRENCH SAFETY ACT

2.6.1. ALL TRENCH EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT).

2.6.2. ALL TRENCH EXCAVATION IN EXCESS OF 5 FEET IN DEPTH SHALL BE UNDERTAKEN IN ACCORDANCE WITH O.S.H.A. STANDARD 29 CFR. SECTION 1926.650 SUBPART P.

2.6.3. THE CONTRACTOR SHALL SUBMIT WITH HIS CONTRACT A COMPLETED, SIGNED, AND NOTARIZED COPY OF THE TRENCH SAFETY ACT COMPLIANCE STATEMENT. THE CONTRACTOR SHALL ALSO SUBMIT A SEPARATE COST ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY CODES.

2.6.4. A TRENCH SAFETY SYSTEM, IF REQUIRED, SHALL BE DESIGNED BY THE EXCAVATION CONTRACTOR UTILIZING A SPECIALTY ENGINEER AS REQUIRED.

3. CONSTRUCTION NOTES:

3.1. CONTRACTOR SHALL TIE TO EXISTING GRADE BY EVENLY SLOPING FROM CLOSEST PROPOSED GRADE PROVIDED TO EXISTING GRADE AT LIMITS OF CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PLANS. IF NO LIMIT OF WORK LINE IS INDICATED, SLOPE TO ADJACENT PROPERTY LINE OR RIGHT-OF-WAY LINE, AS APPLICABLE.

3.2. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL EXISTING MANHOLES, CATCH BASINS, METERS AND OTHER STRUCTURES, WHETHER INDICATED ON THE PLANS OR NOT SHALL BE ADJUSTED TO MATCH THE NEW GRADE, BY THE CONTRACTOR.

3.3. THE CURB SHALL BE SLOPED TO ACCOMMODATE THE NEW PAVEMENT, CATCH BASIN AND GRATE, AND THE SURFACE FLOW PATTERN.

3.4. THE CONTRACTOR SHALL USE CARE WHEN CUTTING THE EXISTING ASPHALT PAVEMENT AND DURING EXCAVATIONS, SO THAT THE EXISTING CATCH BASINS AND GRATES THAT ARE TO REMAIN WILL NOT BE DAMAGED.

3.5. THE CONTRACTOR SHALL MAINTAIN THE ROADWAY SLOPE WHEN RESURFACING THE ROADWAY. THE EDGE OF PAVEMENT SHALL MATCH THE NEW GUTTER LIP PER FDOT INDEX 300.

3.6. THE NEW SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GIVEN ELEVATIONS AND AT THE PROPER SLOPES DEPICTED IN THE SPECIFICATIONS, DETAILS AND STANDARDS. EXISTING DRIVEWAYS AND OTHER FEATURES SHALL BE MATCHED WHEN POSSIBLE AS DIRECTED BY THE ENGINEER.

3.7. RADII SHOWN ARE TO THE EDGE OF PAVEMENT.

3.8. ALL BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS.

3.9. ALL EXCESS MATERIAL IS TO BE DISPOSED BY THE CONTRACTOR WITHIN 72 HOURS.

3.10. IN AREAS WHERE THE BASE IS EXPOSED BY THE MILLING OPERATION, THE CONTRACTOR SHALL RESTORE THE BASE TO ITS ORIGINAL THICKNESS AND STRUCTURAL CAPACITY BEFORE PAVING OVER SUCH AREAS. THIS INCLUDES BUT IS NOT LIMITED TO RESTORING ORIGINAL DEGREE OF COMPACTION, MOISTURE CONTENT, COMPOSITION, STABILITY, AND INTENDED SLOPE. IF PAVING WILL NOT TAKE PLACE THE SAME DAY THE BASE IS EXPOSED AND REWORKED, THE BASE SHALL BE SEALED ACCORDING TO THE GOVERNING STANDARDS AND SPECIFICATIONS. ANY ADDITIONAL WORK RESULTING FROM THE CONTRACTOR'S FAILURE TO PROTECT THE EXPOSED BASE AS STATED ABOVE IN ORDER TO RESTORE THE ORIGINAL STRUCTURAL CAPACITY SHALL BE THE CONTRACTOR'S COST.

3.11. THE CONTRACTOR IS TO MAINTAIN EXISTING SIGNAGE DURING CONSTRUCTION OPERATIONS, IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC.

3.12. THE TOPOGRAPHIC SURVEY INCLUDED WITH THIS SET OF PLANS REFLECTS PRE-DEMOLITION CONDITIONS AND DOES NOT REFLECT THE SITE CONDITIONS AFTER DEMOLITION. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE IN DETERMINING THE REQUIRED EARTHWORK FOR THE PROPOSED DEVELOPMENT OF THE SITE. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY EXCAVATION/DREDGE AND FILL ACTIVITIES REQUIRED AT ANY PHASE OF THE PROJECT. THE CONTRACTOR SHALL USE THE FINAL APPROVED (RELEASED FOR CONSTRUCTION) PLANS, SURVEYS, GEOTECHNICAL REPORTS, AND ANY OTHER AVAILABLE INFORMATION FOR DETERMINING THE AMOUNT OF EXCAVATION/DREDGING AND FILLING REQUIRED. ANY QUANTITIES INCLUDED IN THE APPROVED PERMITS WERE ESTIMATED BY THE ENGINEER FOR PURPOSES OF OBTAINING THE PERMIT AND UNDER NO CIRCUMSTANCES SHALL BE USED BY THE CONTRACTOR IN LIEU OF PERFORMING THEIR OWN EARTHWORK CALCULATIONS REQUIRED FOR COST ESTIMATING AND BIDDING THE PROJECT.

3.13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FAMILIARIZING THEMSELVES WITH ANY AND ALL AVAILABLE GEOTECHNICAL REPORTS PREPARED BY OTHERS AND/OR ANY RECOMMENDATIONS WRITTEN OR IMPLIED BY THE GEOTECHNICAL ENGINEER FOR THIS PROJECT. THE GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THESE REPORTS ARE IN FORCE AND IN FULL EFFECT AS PART OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL THE WORK ASSOCIATED WITH THIS PROJECT IS IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. KEITH AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE SUITABILITY OR UNSUITABILITY OF THE SOILS ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE MEANS AND METHODS OF CONSTRUCTION USED CAN AND WILL ALLOW FOR THE SUCCESSFUL COMPLETION OF THE REQUIRED SITE IMPROVEMENTS.

3.14. THE CONTRACTOR SHALL ENSURE THAT THE AVAILABLE GEOTECHNICAL INFORMATION IS SUFFICIENT FOR HIS COMPLETE UNDERSTANDING OF THE SOIL CONDITIONS FOR THE SITE. IF ADDITIONAL GEOTECHNICAL INVESTIGATION IS REQUIRED BY THE CONTRACTOR, THIS ADDITIONAL WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

3.15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF EXISTING PAVEMENT, PIPES, CONDUITS, SPRINKLER HEADS, CABLES, ETC., AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS AND SHALL RESTORE AT NO ADDITIONAL COST.

3.16. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION FROM THE OWNER, CITY AND ENGINEER. THE CONTRACTOR SHALL PROVIDE THE OWNER, CITY AND ENGINEER WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE. THE PROJECT ENGINEER SHALL COORDINATE WITH THE OWNER AND CITY PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR.

3.17. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT BY THE CONTRACTOR SHALL BE IMMEDIATELY REPORTED TO THE CITY AND/OR ENGINEER, WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS. THE CITY AND/OR ENGINEER ARE TO NOTIFY THE OWNER/ENGINEER OF THE DISCOVERY. THE OWNER/ENGINEER WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION OF THE HAZARDOUS MATERIAL. THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE ENGINEER.

3.18. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE CITY ENGINEERING INSPECTOR AND ENGINEER 48 HOURS IN ADVANCE OF THE EVENT TO NOTIFY THE CITY OF CONSTRUCTION START UP, OR TO SCHEDULE ALL REQUIRED TESTS AND INSPECTIONS INCLUDING FINAL WALK-THROUGHS.

4. PRECONSTRUCTION RESPONSIBILITIES

4.1. ALL UTILITY / ACCESS EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION.

4.2. NO CONSTRUCTION MAY COMMENCE UNTIL THE APPROPRIATE PERMITS HAVE BEEN OBTAINED FROM ALL MUNICIPAL, STATE, COUNTY, AND FEDERAL AGENCIES AND A PRE-CONSTRUCTION MEETING HAS BEEN CONDUCTED.

4.3. ALL REQUIRED GOVERNMENTAL AGENCY BUILDING PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY.

4.4. CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULING FOR CONNECTION TO THE EXISTING WATER AND SEWER LINES WITH THE UTILITY DEPARTMENT THAT OWNS AND/OR MAINTAINS THE WATER AND SEWER LINES.

4.5. PRIOR TO THE START OF CONSTRUCTION, THE OWNER SHALL SUBMIT AN NPDES CONSTRUCTION GENERAL PERMIT (CGP) "NOTICE OF INTENT (N.O.I.) TO USE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITIES FORM (DEP FORM 62-621.300(4)(B)) TO FDEP NOTICES CENTER. THE CONTRACTOR WILL BE RESPONSIBLE FOR (1) IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT WAS REQUIRED TO BE DEVELOPED PRIOR TO NOI SUBMITTAL, AND (2) RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION. A "NOTICE OF TERMINATION (N.O.T.) OF GENERIC PERMIT COVERAGE" FORM (DEP FORM 62-621.300(6)) MUST BE SUBMITTED TO FDEP TO DISCONTINUE PERMIT COVERAGE, SUBSEQUENT TO COMPLETION OF CONSTRUCTION. FOR ADDITIONAL INFORMATION SEE FDEP WEBSITE: HTTP://WWW.DEP.STATE.FL.US/WATER/ STORM WATER/NPDES.

4.6. PRIOR TO CONSTRUCTION OR INSTALLATION, 5 SETS OF SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AS REQUIRED FOR THE FOLLOWING ITEMS LISTED BELOW, BUT NOT LIMITED TO:

- DRAINAGE: CATCH BASINS, MANHOLES, HEADWALLS, GRATES/TOPS, YARD DRAINS.
- WATER: FIRE HYDRANTS, VALVES, BACKFLOW PREVENTER, DDCV, METER BOX.
- SEWER: MANHOLES, LIFT STATIONS (WETWELL, HATCHES, VALVES, PUMP DATA, ELECTRICAL PANEL)

4.0.1. CATALOGUE LITERATURE SHALL BE SUBMITTED FOR DRAINAGE, WATER AND SEWER PIPES, FITTINGS, AND APPURTENANCES.

4.0.2. PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS, AND SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S PLANS OR SPECIFICATIONS.

4.0.3. INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

4.7CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC PLAN(S) IN ACCORDANCE WITH FDOT AND COUNTY REQUIREMENTS, AND SUBMIT FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION.

5. INSPECTIONS / TESTING:

5.1. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER, CITY, COUNTY, ENGINEER OF RECORD, AND ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO REQUIRED INSPECTIONS OF THE FOLLOWING ITEMS, WHERE APPLICABLE:

- CLEARING AND EARTHWORK
- STORM DRAINAGE SYSTEMS
- SANITARY SEWER SYSTEMS
- WATER DISTRIBUTION SYSTEMS
- SUBGRADE
- LIMEROCK BASE
- ASPHALT OR CONCRETE PAVEMENT
- SIDEWALKS, CONCRETE FLATWORK/CURBING
- LANDSCAPING
- PAVEMENT MARKING AND SIGNAGE
- SIGNALIZATION
- SITE LIGHTING
- ELECTRICAL AND COMMUNICATION LINES
- UTILITY CONDUITS
- IRRIGATION
- FINAL

5.1. THE OWNER, ENGINEER, AND JURISDICTIONAL PERMITTING AGENCIES MAY MAKE INSPECTIONS OF THE WORK AT ANY TIME. THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL INSPECTIONS.

5.3. TESTING - ALL TESTING REQUIRED BY THE PLANS AND SPECIFICATIONS SHALL BE PERFORMED BY A LICENSED / FDOT QUALIFIED TESTING COMPANY. REQUIRED TEST FOR ASPHALT AND LIMEROCK SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OR THE JURISDICTIONAL GOVERNMENTAL AGENCY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

6. TEMPORARY FACILITIES

6.1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, COMMUNICATIONS, AND ELECTRICITY, FOR HIS OPERATIONS AND WORKS, COST INCLUDED UNDER MOBILIZATION.

6.2. CONTRACTOR SHALL CONSTRUCT TEMPORARY FENCING TO SECURE CONSTRUCTION AREAS AT ALL TIMES, COST INCLUDED IN MOBILIZATION.

6.3. CONTRACTOR TO OBTAIN A SECURE STAGING AREA AND OBTAIN ALL NECESSARY APPROVALS FROM THE OWNER.

6.4. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY LIGHTING AS REQUIRED TO LIGHT THE CONSTRUCTION PROJECT LIMITS AT ALL TIMES, TO AT LEAST THE SAME LIGHTING INTENSITY LEVELS AS THE EXISTING CONDITIONS.

6.5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.

7. PROJECT PROGRESS AND CLOSEOUT

7.1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE BROOM SWEPT CLEAN.

7.2. THE CONTRACTOR SHALL RESTORE OR REPLACE ANY PUBLIC OR PRIVATE PROPERTY (SUCH AS HIGHWAY, DRIVEWAY, WALKWAY, AND LANDSCAPING), DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.

7.3. MATERIAL OR DEBRIS SHALL BE HAULED IN ACCORDANCE WITH NPDES PERMIT AND JURISDICTIONAL LAWS.

7.4. ALL LAND SURVEY PROPERTY MONUMENTS OR PERMANENT REFERENCE MARKERS, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

7.5. ALL UNPAVED SURFACES DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE GRADED, SODDED, & RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.

8. PROJECT RECORD DOCUMENTS:

8.1. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE LOCATION, LENGTH, MATERIAL AND ELEVATION OF ANY FACILITY NOT BUILT ACCORDING TO PLANS. THIS COPY OF THE "AS-BUILT" SHALL BE SUBMITTED TO ENGINEER FOR PROJECT RECORD.

8.2. UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AT LEAST 48 HOURS BEFORE PLACING ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 50 FOOT INTERVALS, INCLUDING LOCATIONS AND ELEVATIONS OF ALL HIGH AND LOW POINTS.

8.3. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES, DIMENSIONS, LOCATIONS, AND ELEVATIONS OF ALL IMPROVEMENTS.

8.4. "AS-BUILT" DRAWINGS OF WATER LINES AND FORCE MAINS SHALL INCLUDE THE FOLLOWING INFORMATION:

8.4.1. TOP OF PIPE ELEVATIONS EVERY 100 LF.

8.4.2. LOCATIONS AND ELEVATIONS OF ALL FITTINGS INCLUDING BENDS, TEES, GATE VALVES, DOUBLE DETECTOR CHECK VALVES, FIRE HYDRANTS, AND APPURTENANCES.

8.4.3. ALL CONNECTIONS TO EXISTING LINES.

8.4.4. ENDS OF ALL WATER SERVICES AT THE BUILDINGS WHERE THE WATER SERVICE TERMINATES.

8.5. "AS-BUILT" DRAWINGS OF GRAVITY SANITARY SEWER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

8.5.1. RIM ELEVATIONS, INVERT ELEVATIONS, LENGTH OF PIPING BETWEEN STRUCTURES, AND SLOPES.

8.5.2. THE STUB ENDS AND CLEANOUTS OF ALL SEWER LATERALS SHALL BE LOCATED HORIZONTALLY AND VERTICALLY.

8.6. "AS-BUILT" DRAWINGS OF ALL DRAINAGE LINES SHALL INCLUDE THE FOLLOWING INFORMATION:

8.6.1. RIM ELEVATION, INVERT ELEVATION, LENGTH OF PIPING BETWEEN STRUCTURES, AND CONTROL STRUCTURE ELEVATIONS IF APPLICABLE.

8.6.2. THE SIZE OF THE LINES.

8.6.3. DRAINAGE WELL STRUCTURE SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP OF CASING ELEVATION, TOP AND BOTTOM ELEVATIONS OF THE STRUCTURE AND BAFFLE WALLS, RIM ELEVATIONS AND PIPE INVERTS.

8.7. "AS-BUILT" DRAWINGS OF CONSTRUCTION AREAS SHALL INCLUDE THE FOLLOWING:

8.7.1. ROCK ELEVATIONS AT ALL HIGH, AND LOW POINTS, AND AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY.

8.7.2. ROCK ELEVATIONS AND CONCRETE BASE ELEVATIONS SHALL BE TAKEN AT ALL LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS.

8.7.3. ALL CATCH BASIN AND MANHOLE RIM ELEVATIONS.

8.7.4. FINISH GRADE ELEVATIONS IN ISLAND AREAS.

8.7.5. "AS-BUILT" ELEVATIONS SHALL BE TAKEN ON ALL PAVED AND UNPAVED SWALES, AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY AND CONFORMANCE TO THE PLAN DETAILS.

8.7.6. LAKE AND CANAL BANK "AS-BUILT" DRAWINGS SHALL INCLUDE A KEY SHEET OF THE LAKE FOR THE LOCATION OF CROSS SECTIONS. LAKE AND CANAL BANK CROSS SECTIONS SHALL BE PLOTTED AT A MINIMUM OF EVERY 100 LF, UNLESS OTHERWISE SPECIFIED. "AS-BUILT" DRAWINGS SHALL CONSIST OF THE LOCATION AND ELEVATION OF THE TOP OF BANK, EDGE OF WATER, AND THE DEEP CUT LINE, WITH THE DISTANCE BETWEEN EACH SHOWN ON THE DRAWING.

8.7.7. RETENTION AREA "AS-BUILT" ELEVATIONS SHALL BE TAKEN AT THE BOTTOM OF THE RETENTION AREA AND AT THE TOP OF BANK. IF THERE ARE CONTOURS INDICATED ON THE DESIGN PLANS, THEN THEY SHALL BE INCLUDED IN "AS-BUILT" DRAWINGS AS WELL.

8.8. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PREPARE "AS-BUILT" DRAWINGS ON FULL SIZE, 24" X 36" SHEETS. ALL "AS-BUILT" INFORMATION SHALL BE PUT ON THE LATEST ENGINEERING DRAWINGS. EIGHT (8) SETS OF BLUE OR BLACK LINE DRAWINGS SHALL BE SUBMITTED. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR.

8.9. AN ELECTRONIC COPY OF THESE "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN AUTOCAD, VERSION 2008 OR LATER.

9. UTILITY NOTES

9.1. CONTRACTOR IS RESPONSIBLE FOR UTILITY VERIFICATION PRIOR TO FABRICATION.

9.2. THE CONTRACTOR IS ADVISED THAT PROPERTIES ADJACENT TO THE PROJECT HAVE ELECTRIC, TELEPHONE, GAS, WATER AND/OR SEWER SERVICE LATERALS WHICH MAY NOT BE SHOWN IN PLANS. THE CONTRACTOR MUST REQUEST THE LOCATION OF THESE LATERAL SERVICES FROM THE UTILITY COMPANIES.

9.3. THE CONTRACTOR SHALL USE HAND DIGGING WHEN EXCAVATING NEAR EXISTING UTILITIES. EXTREME CAUTION SHALL BE EXERCISED BY THE CONTRACTOR WHILE EXCAVATING, INSTALLING, BACKFILLING OR COMPACTING AROUND THE UTILITIES.

9.4. THE CONTRACTOR SHALL NOTIFY AND OBTAIN AN UNDERGROUND CLEARANCE FROM ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A SUNSHINE811.COM CERTIFICATION CLEARANCE NUMBER AND FIELD MARKINGS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.

- PRIOR TO COMMENCEMENT OF ANY EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH FLORIDA STATUTE 553.851 FOR THE PROTECTION OF UNDERGROUND GAS PIPELINES.

9.1. FOR STREET EXCAVATION OR CLOSING OR FOR ALTERATION OF ACCESS TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR SHALL NOTIFY:

- ROADWAY JURISDICTIONAL ENGINEERING / PUBLIC WORKS AUTHORITY.
- COUNTY TRANSIT AUTHORITY
- SCHOOL BOARD TRANSPORTATION AUTHORITY
- JURISDICTIONAL FIRE DEPARTMENT DISPATCH
- JURISDICTIONAL POLICE DEPARTMENT(S)

9.1. THE CONTRACTOR SHALL USE EXTREME CAUTION WORKING UNDER, OVER, AND AROUND EXISTING ELECTRIC LINES. THE CONTRACTOR SHALL CONTACT THE ELECTRIC PROVIDER COMPANY TO VERIFY LOCATIONS, VOLTAGE, AND REQUIRED CLEARANCES, ONSITE, IN RIGHT-OF-WAYS, AND IN EASEMENTS, PRIOR TO ANY CONSTRUCTION IN THE VICINITY OF EXISTING LINES.

9.2. LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY (FACILITIES) AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION (VERTICAL & HORIZONTAL) OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS AND LOCATIONS OF ALL EXISTING FACILITIES, IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. IF AN EXISTING FACILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE CONFLICT.

9.3. THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND UTILITY COMPANIES REQUIRED. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY COMPANIES.

10. SIGNING AND PAVEMENT MARKINGS

10.1. ALL SIGNING AND PAVEMENT MARKINGS INSTALLED AS PART OF THESE PLANS SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), COUNTY TRAFFIC DESIGN STANDARDS AND FDOT DESIGN STANDARDS AS A MINIMUM CRITERIA.

10.2. MATCH EXISTING PAVEMENT MARKINGS AT THE LIMITS OF CONSTRUCTION.

10.3. REMOVAL OF THE EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY WATER BLASTING OR OTHER APPROVED METHODS DETERMINED BY THE ENGINEER.

10.4. INCORRECTLY PLACED PAINT OR THERMOPLASTIC PAVEMENT MARKINGS OVER FRICTION COURSE WILL BE REMOVED BY MILLING AND REPLACING THE FRICTION COURSE A MINIMUM WIDTH OF 18 IN AT THE CONTRACTOR'S EXPENSE. THE ENGINEER MAY APPROVE AN ALTERNATIVE METHOD IF IT CAN BE DEMONSTRATED TO COMPLETELY REMOVE THE MARKINGS WITHOUT DAMAGING THE ASPHALT.

10.5. PLACE ALL RETRO-REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH STANDARD INDEX 17352 AND / OR AS SHOWN IN THE PLANS.

10.6. CAUTION SHOULD BE EXERCISED WHILE RELOCATING EXISTING SIGNS TO PREVENT UNNECESSARY DAMAGE TO SIGNS. IF THE SIGN IS DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.

10.7. ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED, STOCKPILED, AND RELOCATED BY THE CONTRACTOR. SIGN REMOVAL SHALL BE DIRECTED BY THE ENGINEER.

10.8. RELOCATED SIGN SUPPORT SYSTEM MUST MEET THE CURRENT DESIGN STANDARD.

10.9. THE CONTRACTOR SHALL PROVIDE AN INVENTORY OF EXISTING SIGNS TO REMAIN OR TO BE RELOCATED PRIOR TO STARTING THE JOB AND FORWARD THIS LIST TO THE ENGINEER. CONTRACTOR SHALL NOTIFY IF THERE ARE ANY MISSING OR DAMAGE SIGNS THAT THE PLANS SHOW TO REMAIN OR TO BE RELOCATED.

10.10. ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 711.

10.11. HAND DIG THE FIRST FOUR FEET OF SIGN FOUNDATION.

10.12. ALL SIGNS SHALL MEET ALL OF THE FOLLOWING:

- MEET THE CRITERIA OUTLINED IN SECTION 2A.08 OF THE 2009 MUTCD
- MEET THE SPECIFICATIONS OUTLINED IN SECTION 700 AND 994 OF THE LATEST FDOT STANDARD SPECIFICATIONS.
- CONSIST OF MATERIALS CERTIFIED TO MEET THE RETROREFLECTIVE SHEETING REQUIREMENTS OUTLINED IN THE CURRENT VERSION OF ASTM D4956 FOR TYPE-XI RETROREFLECTIVE SHEETING MATERIALS MADE WITH PRISIMS, EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL BE COMPRISED OF RETROREFLECTIVE FLUORESCENT YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS.
- CONSIST OF RETROREFLECTIVE SHEETING MATERIALS THAT HAVE A VALID FDOT APPROVED PRODUCT LIST (APL) CERTIFICATION FOR SPECIFICATION 700 HIGHWAY SIGNING FOR FDOT SHEETING TYPE XI (OR TYPE IV FOR SCHOOL AND PEDESTRIAN SIGNS).

10.13. PATCH ATTACHMENT HARDWARE, SUCH AS COUNTERSUNK SCREWS OR RIVET HEADS, WITH RETRO REFLECTIVE BUTTONS THAT MATCH THE COLOR AND SHEETING MATERIAL OF THE FINISHED SI

CONSTRUCTION SPECIFICATIONS

SECTION 20 - GENERAL SPECIFICATIONS PAVING GRADING DRAINAGE AND EARTHWORK

20.GENERAL

20.1. IT IS THE INTENT OF THESE SPECIFICATIONS TO DESCRIBE THE MINIMUM ACCEPTABLE TECHNICAL REQUIREMENTS FOR THE MATERIALS AND WORKMANSHIP FOR CONSTRUCTION OF SITE IMPROVEMENTS FOR THIS PROJECT. SUCH IMPROVEMENTS MAY GENERALLY INCLUDE, BUT NOT TO BE LIMITED TO, CLEARING, GRADING, PAVING, REMOVAL OF EXISTING PAVEMENT STORM DRAINAGE, WATER LINES AND SANITARY SEWERS.

20.2. IT IS THE INTENT THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION: (CURRENT EDITION) TOGETHER WITH "SUPPLEMENTAL SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (CURRENT EDITION) BE USED WHERE APPLICABLE FOR THE VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THE WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY; THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" TOGETHER WITH THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT. IF WITHIN A PARTICULAR SECTION, ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE PART OF THE STANDARD SPECIFICATIONS ALSO. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL AND STATE LAWS, REGULATIONS AND BUILDING CODES WHICH HAVE JURISDICTION IN THE AREA.

20.3. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT AND PERFORM ALL OPERATIONS REQUIRED TO COMPLETE THE CONSTRUCTION OF A PAVING AND DRAINAGE SYSTEM AS SHOWN ON THE PLANS, SPECIFIED HEREIN, OR BOTH. IT IS THE INTENT TO PROVIDE A COMPLETE AND OPERATING FACILITY IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS. THE MATERIAL AND EQUIPMENT SHOWN OR SPECIFIED SHALL NOT BE TAKEN TO EXCLUDE ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.

20.4. ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE PLANS AND CONSTRUCTION SPECIFICATIONS AND THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE UNIT OF GOVERNMENT WHICH HAS JURISDICTION AND RESPONSIBILITY FOR THE CONSTRUCTION. WHERE CONFLICTS OR OMISSIONS EXIST, THE JURISDICTIONAL GOVERNMENT ENGINEERING DEPARTMENT'S STANDARDS SHALL GOVERN. SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.

20.5. GUARANTEE - ALL MATERIALS AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT, SHALL BE GUARANTEED FOR A PERIOD OF (L) ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP. UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTEE PERIOD, THE AFFECTED PART OR MATERIALS SHALL BE REPLACED PROMPTLY WITH NEW PARTS OR MATERIALS BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER. IN THE EVENT THE CONTRACTOR FAILS TO MAKE NECESSARY REPLACEMENT OR REPAIRS WITHIN (7) SEVEN DAYS AFTER NOTIFICATION BY THE OWNER, THE OWNER MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.

21.EARTHWORK

21.1. ALL AREAS WITHIN THE PROJECT LIMITS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1'. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.

21.2. NONE OF THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT IS TO BE INCORPORATED IN THE NEW LIMEROCK BASE, UNLESS NOTED IN PLANS. THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT MAY BE INCORPORATED INTO THE STABILIZED SUBGRADE / SUBBASE, OR STABILIZED SHOULDER.

21.3. FILL MATERIAL SHALL BE CLASSIFIED AS A-L, A-3, OR A-2-4 IN ACCORDANCE WITH AASHTO N--145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL. NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.

21.4. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.

21.5. ALL MATERIAL OF CONSTRUCTION SHALL BE SUBJECT TO INSPECTION AND TESTING TO ESTABLISH CONFORMANCE WITH THE SPECIFICATIONS AND SUITABLY FOR THE USES INTENDED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO THE TIME HE WILL BE READY FOR AN INSPECTION OR TEST. THE CONTRACTOR SHALL FOLLOW CITY AND COUNTY INSPECTION PROCEDURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PHASE OF WORK DEPENDENT ON AN INSPECTION OR TEST OF AN EARLIER PHASE OF WORK, PRIOR TO THAT TEST OR INSPECTION PASSING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND LIMEROCK, UTILITIES, EXCAVATION, ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC.

21.6. WHEN ENCOUNTERED, MUCK SHALL BE COMPLETELY REMOVED FROM THE CENTER LINE (10) TEN FEET BEYOND THE EDGE OF PAVEMENT EACH SIDE. ALL SUCH MATERIAL SHALL BE REPLACED BY APPROVED GRANULAR FILL.

21.7. WHEN ENCOUNTERED WITHIN DRAINAGE SWALES, HARDPAN SHALL BE REMOVED TO FULL DEPTH FOR A WIDTH OF (5) FIVE FEET AT THE INVERT AND REPLACED WITH GRANULAR MATERIALS.

21.8. ALL UNDERGROUND UTILITIES AND DRAINAGE INSTALLATIONS SHALL BE IN PLACE PRIOR TO SUBGRADE COMPACTION AND PAVEMENT CONSTRUCTION.

21.9. GROUND ADJACENT TO ROADWAY/PAVEMENT HAVING RUNOFF SHALL BE GRADED (2) TWO INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD.

21.10.SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1' OF THE REQUIRED ELEVATION FOR NON PAVED AREAS AND ALL AREAS SHALL BE GRADED TO DRAIN WITHOUT PONDING.

21.11.THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, FILL, EMBANKMENT AND GRADING TO ACHIEVE THE PROPOSED PLAN GRADES INCLUDING TYPICAL ROAD SECTIONS, SIDE SLOPES AND CANAL SECTIONS. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS. IF FILL MATERIAL IS REQUIRED IN EXCESS OF THAT GENERATED BY THE EXCAVATION, THE CONTRACTOR SHALL SUPPLY THIS MATERIAL AS REQUIRED FROM OFF-SITE.

21.12.A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SODDED OR SEEDED AND MULCHED WITHIN THE PROJECT LIMITS UNLESS OTHERWISE INDICATED ON THE PLANS.

21.13.SOD SHALL BE ST. AUGUSTINE UNLESS OTHERWISE INDICATED ON THE PLANS, AND SHALL BE PLACED ON THE GRADED TOP SOIL AND WATERED TO INSURE SATISFACTORY CONDITION UPON FINAL ACCEPTANCE OF THE PROJECT.

22.DRAINAGE

22.1. INLETS - ALL INLETS SHALL BE THE TYPE DESIGNATED ON THE PLANS, AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.

22.2. PIPE SPECIFICATIONS: THE MATERIAL TYPE IS SHOWN ON THE DRAWINGS BY ONE OF THE FOLLOWING DESIGNATIONS:

- RCP = REINFORCED CONCRETE PIPE, ASTM DESIGNATION C--76, SECTION 941 OF THE STANDARD SPECIFICATIONS.
- CMP = CORRUGATED METAL (ALUMINUM) PIPE, ASTM DESIGNATION M-196.
- CMP (SMOOTH LINED) = CORRUGATED METAL ALUMINUM PIPE, (SMOOTH LINED) ASTM DESIGNATION M-196.
- SCP = SLOTTED CONCRETE PIPE, SECTIONS 941 AND 942, OF THE STANDARD SPECIFICATIONS.
- PVC = POLYVINYL CHLORIDE PIPE.
- PCMP = PERFORATED CMP, SECTION 945, OF THE STANDARD SPECIFICATIONS
- CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE) (12 INCHES TO 60 INCHES), SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 948-2.3.

22.3. PIPE BACKFILL - REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE AS DEFINED IN THE SECTION 125-8, OF THE STANDARD SPECIFICATIONS. PIPELINE BACKFILL SHALL BE PLACED IN 6 INCH LIFTS AND COMPACTED TO 100% OF THE STANDARD PROCTOR (AASHTO T--99 SPECIFICATIONS)

22.4. LOCATION OF DRAINAGE STRUCTURES SHALL GOVERN, AND PIPE LENGTH MAY HAVE TO BE ADJUSTED TO ACCOMPLISH CONSTRUCTION AS SHOWN ON THESE PLANS.

22.5. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE INNER WALLS OF STRUCTURES.

22.6. FILTER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL CONFORMING TO SECTION 985 OF THE STANDARD SPECIFICATIONS.

23.ASPHALT PAVING

23.1. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.

23.2. INTERNAL ASPHALT PAVING CONSTRUCTED ON EXISTING SANDY SOILS SHALL BE CONSTRUCTED WITH A 12" SUBGRADE, COMPACTED TO A MINIMUM DENSITY OF 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. THE COMPACTED SUBGRADE SHALL BE CONSTRUCTED IN THE LIMITS SHOWN ON THE PLANS. ALL SUBGRADE SHALL HAVE AN LBR OF 40 UNLESS OTHERWISE NOTED.

23.3. ASPHALTIC CONCRETE SURFACE COURSE SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE SURFACE COURSE SHALL CONSIST OF THE THICKNESS AND TYPE ASPHALTIC CONCRETE AS SPECIFIED IN THE PLANS. ALL ASPHALTIC CONCRETE SHALL BE IN ACCORDANCE WITH SECTIONS 320, 327, 330, 334, 336, 337, 337, 338, 339 AND 341 OF THE STANDARD SPECIFICATIONS.

23.4. LIMEROCK BASE SHALL BE PREPARED, COMPACTED AND GRADED AND SHALL BE IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS. ALL LIMEROCK SHALL BE COMPACTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 70% OF CARBONATES OF CALCIUM AND MAGNESIUM UNLESS OTHERWISE DESIGNATED. THE ENGINEER SHALL INSPECT THE COMPLETED BASE COURSE AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES AND CLEAN THE BASE COURSE PRIOR TO THE PLACEMENT OF THE PRIME COAT. A TACK COAT WILL ALSO BE REQUIRED IF THE ENGINEER FINDS THAT THE PRIMED BASE HAS BECOME EXCESSIVELY DIRTY OR THE PRIME COAT HAS CURED TO THE EXTENT OF LOSING BOUNDING EFFECT PRIOR TO PLACEMENT OF THE ASPHALTIC CONCRETE SURFACE COURSE. THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

23.5. LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO EQUAL LIFTS. IF, THROUGH FIELD TESTS, THE CONTRACTOR CAN DEMONSTRATE THAT THE COMPACTION EQUIPMENT CAN ACHIEVE DENSITY FOR THE FULL DEPTH OF A THICKER LIFT, AND IF APPROVED BY THE ENGINEER, THE BASE MAY BE CONSTRUCTED IN SUCCESSIVE COURSES OF NOT MORE THAN 8 INCHES (200 MM) COMPACTED THICKNESS.

23.6. ASPHALT EDGES THAT ARE NOT CURBED SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE TO THE DIMENSIONS SHOWN ON PLANS.

24.CONCRETE CONSTRUCTION

24.1. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH SECTION 522 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 310. CONCRETE SIDEWALK SHALL BE 4" THICK, UNLESS OTHERWISE NOT AND CONSTRUCTED ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS PLACED AT A MAXIMUM OF 75', UNLESS OTHERWISE NOTED ON PLANS. CRACK CONTROL JOINTS SHALL BE 5' ON CENTER. ALL CONCRETE SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE 6" THICK, UNLESS OTHERWISE NOTED ON PLANS.

24.2. SIDEWALK CURB RAMPS HALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 304.

24.3. CONCRETE CURB SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS AND SHALL BE IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS. CONCRETE CURBING SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 300.

24.4.

SECTION 30 - WATER DISTRIBUTION AND SANITARY SEWER FORCE MAINS.

30. MATERIALS:

NOTE: IF MATERIALS LIST HERE ON ARE IN CONFLICT WITH UTILITY OWNER, MATERIAL OWNER REQUIREMENTS SHALL GOVERN.

30.1. ALL WATER MAIN PIPE, INCLUDING FITTINGS, SHALL BE COLOR CODED OR MARKED USING BLUE AS A PREDOMINANT COLOR TO DIFFERENTIATE DRINKING WATER FROM RECLAIMED OR OTHER WATER. UNDERGROUND PLASTIC PIPE SHALL BE SOLID-WALL BLUE PIPE, SHALL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR SHALL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE SHALL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE SHALL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE, THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT SHALL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ALONG THE TOP OF THE PIPE; FOR PIPES WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.

30.2. DUCTILE IRON PIPE FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. THE PIPE SHALL BE ADAPTED FOR USE WITH CLASS 250 FITTINGS FOR ALL SIZES. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.

30.3. DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND- LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE INTERIOR CERAMIC EPOXY LINED AND EXTERIOR COATED WITH THE MANUFACTURER'S COATING SYSTEM (PROTECTO 401 CERAMIC EPOXY WITH A MINIMUM DRY FILM THICKNESS OF 40 MILS AND AN OUTSIDE COATING OF EITHER COAL TAR EPOXY OR ASPHALT). CEMENT MORTARED LININGS ARE NOT APPROPRIATE FOR THIS APPLICATION.

30.4. ALL PIPE & FITTINGS ON THE LIFT STATION SITES SHALL BE DUCTILE IRON CONFORMING TO THE SAME SPECIFICATIONS AS ABOVE FOR SEWAGE FORCE MAINS EXCEPT THAT FLANGED DUCTILE IRON PIPE & FITTINGS SHALL BE USED INSIDE VALVE PITS AND WET WELLS. FLANGED PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA C115/A21.15 LATEST REVISION AND ANSI/AWWA C110/A21.10 LATEST REVISION. THE FOLLOWING THICKNESS CLASSES SHALL BE ADHERED TO: 4" - 12" - CLASS 52, 14" & LARGER - CLASS 51.

30.5. PVC PRESSURE PIPE FOR SIZES 4" THROUGH 12" AND SHALL CONFORM TO ANSI/AWWA STANDARD C900 LATEST REVISION. PVC PRESSURE PIPE SHALL BE MADE FROM CLASS 12454-A OR CLASS 12454-B VIRGIN MATERIAL AND CONFORM WITH THE OUTSIDE DIAMETER OF CAST IRON PIPE WITH A MINIMUM WALL THICKNESS OF DR SERIES 18. ULTRA VIOLET DEGRADATION OR SUN BLEACHED PIPE WILL BE CAUSE FOR REJECTION. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES. FORCE MAIN SHALL BE IMPREGNATED WITH GREEN PIGMENT. REUSE MAIN SHALL BE IMPREGNATED WITH PURPLE PIGMENT.

30.6. DUCTILE IRON FITTINGS FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. WATER MAIN FITTING SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.

30.7. CAST IRON AND DUCTILE IRON FITTINGS FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10 LATEST REVISION. FITTINGS 4" AND LARGER SHALL BE COATED IN ACCORDANCE WITH THE REQUIREMENTS OF DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS.

30.8. JOINTS FOR BELL AND SPIGOT DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C111/A21.11 LATEST REVISION. MECHANICAL JOINT OR PUSH-ON JOINT TO BE RUBBER GASKET COMPRESSION-TYPE. SPECIAL FITTINGS AND JOINTS SHALL BE CONSIDERED FOR SPECIFIC INSTALLATION SUBJECT TO THE APPROVAL OF THE ENGINEER.

30.9. JOINTS FOR PVC PRESSURE PIPE SHALL BE BELL AND SPIGOT PUSH-ON RUBBER GASKET TYPE ONLY. NO SOLVENT WELD OR THREADED JOINTS WILL BE PERMITTED.

30.10.WATER DISTRIBUTION SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW:

- JOINT RESTRAINT
- PUSH-ON P.V.C. EBAA IRON SERIES 1600
- PUSH-ON DIP EBAA IRON SERIES 1700
- TR-FLEX BY U.S. PIPE OR
- FLEX RING BY AMERICAN
- FITTINGS W/ DIP EBAA IRON SERIES 1100 MEGALUG
- FITTINGS W/ P.V.C. EBAA IRON SERIES 2000 MEGALUG
- LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET)

30.11. SEWAGE FORCE MAIN SYSTEM RESTRAINT: ALL FITTINGS AND SPECIFIC PIPE JOINTS SHALL BE RESTRAINED AS OUTLINED BELOW

- JOINT RESTRAINT
- PUSH-ON P.V.C. EBAA IRON SERIES 1600
- PUSH-ON DIP EBAA IRON SERIES 1700
- TR-FLEX BY U.S. PIPE OR
- FLEX RING BY AMERICAN
- FITTINGS W/ DIP EBAA IRON SERIES 1100 MEGALUG
- FITTINGS W/ P.V.C. EBAA IRON SERIES 2000 MEGALUG
- LENGTH OF RESTRAINED PIPE SHALL BE AS INDICATED ON RESTRAINED JOINT PIPE DETAIL. (SEE WATER & SEWER DETAIL SHEET)

30.12.WATER DISTRIBUTION VALVES SHALL BE GATE VALVES, IRON BODY, FULLY RESILIENT SEAT BRONZED MOUNTED NON-RISING STEM, RATED AT 200 PSI AND CONFORMING TO ANSI/AWWA C509 LATEST REVISION, AND SHALL HAVE MECHANICAL JOINTS.

30.12.1. GATE VALVES 4" AND LARGER SHALL BE MUELLER A-2361/2362, AMERICAN 250 LINE OR CLOW F-6100, CONFORMING TO ANSI/AWWA C500 LATEST REVISION OR APPROVED EQUAL.

30.12.2. TAPPING VALVES SHALL BE MUELLER T-2361/2362 OR APPROVED EQUAL.

30.12.3. GATE VALVES 3" OR LESS SHALL BE NIBCO T-133 OR T-136 WITH MALLEABLE HAND WHEELS OR APPROVED EQUAL.

30.13.TAPPING SLEEVES SHALL BE MUELLER H615, CLOW F- 2505 OR APPROVED EQUAL.

30.14.VALVE BOXES SHALL BE U.S. FOUNDRY 7500 OR APPROVED EQUAL PAINTED BLUE WITH THE DESIGNATION "WATER".

30.15.RETAINER GLANDS FOR DIP SHALL CONFORM TO ANSI/AWWA C111/A21.11 LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWRITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE RATING. CLOW CORPORATION MODEL F-1058, STANDARD FIRE PROTECTION EQUIPMENT COMPANY OR APPROVED EQUAL.

30.16.DRESSER COUPLINGS SHALL BE REGULAR BLACK COUPLINGS WITH PLAIN GASKETS FOR GALVANIZED STEEL PIPE. THEY SHALL BE DRESSER STYLE 90. NO SUBSTITUTIONS ALLOWED.

30.17.FIRE HYDRANTS SHALL BE MUELLER CENTURION TRAFFIC TYPE A-423 WITH 5 1/4" INTERNAL VALVE OPENING OR APPROVED EQUAL. PUMPER NOZZLE TO BE 18" FROM FINISHED GRADE. ALL HYDRANTS TO BE INSTALLED WITH CONTROL VALVE. RETAINER GLANDS ARE PREFERRED FOR RESTRAINING. FIRE HYDRANT SHALL COMPLY WITH ANSI/AWWA C502 LATEST REVISION. FIRE HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH NFPA #291 OR PER AGENCY STANDARDS HAVING JURISDICTION. BLUE RAISED REFLECTIVE PAVEMENT MARKER (RPM) SHALL BE USED TO IDENTIFY FIRE HYDRANT LOCATION. THE PLACEMENT OF THE RPM TO BE AT THE CENTERLINE OF THE OUTSIDE ROADWAY LANE.

30.18.SEWAGE FORCE MAIN VALVES SHALL BE PLUG VALVES WHICH SHALL BE OF THE NON-LUBRICATED, ECCENTRIC TYPE WITH RESILIENT FACED PLUGS, PORT AREAS FOR VALVES 20 INCHES AND SMALLER SHALL BE AT LEAST 80% OF FULL PIPE AREA. PORT AREA OF VALVES 24 INCHES AND LARGER SHALL BE AT LEAST 70% OF FULL PIPE AREA. THE BODY SHALL BE OF SEMI-STEEL (ASTM A-126 C1.B) AND SHALL HAVE BOLTED BONNET WHICH GIVES ACCESS TO THE INTERNALS OF THE VALVE. SEATS SHALL BE WELDED OVERLAY OF HIGH NICKEL CONTENT OR A STAINLESS STEEL PLATE LOCKED IN THE BODY CAVITY. IF A PLATE IS USED, IT SHALL BE REPLACEABLE THROUGH THE BONNET ACCESS. BEARINGS SHALL BE PERMANENTLY LUBRICATED OF STAINLESS STEEL, BRONZE OR TEFLON LINED, FIBER GLASS BACKED DURALON. BEARING AREAS SHALL BE ISOLATED FROM THE FLOW WITH GRIT SEALS. VALVES SHALL HAVE PACKING BONNETS WHERE THE SHAFT PROTRUDES FROM THE VALVE AND THE PACKING SHALL BE SELF-ADJUSTING CHEVRON TYPE WHICH CAN BE REPLACED WITHOUT REMOVING THE BONNET. ALL NUTS, BOLTS, SPRINGS AND WASHERS SHALL BE STAINLESS STEEL.

30.19.PLUG VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 150 PSI THE VALVE AND ACTUATOR SHALL BE CAPABLE OF SATISFACTORY OPERATION IN EITHER DIRECTION OF FLOW AGAINST PRESSURE DROPS UP TO AND INCLUDING 100 PSI (FOR PLUG VALVES OVER 12" IN DIAMETER). VALVES SHALL BE BUBBLE TIGHT IN BOTH DIRECTIONS AT 100 PSI DIFFERENTIAL. PLUG VALVES OVER 12" IN DIAMETER SHALL HAVE WORM GEAR OPERATORS. THE OPERATING MECHANISM SHALL BE FOR BURIED SERVICE WITH A 2 INCH SQUARE OPERATING NUT.

30.20.PLUG VALVES ARE TO BE INSTALLED WITH THE SEAT POINTED TOWARDS THE UPSTREAM FLOW, WHEN SPECIFIED.

30.21.SWING CHECK VALVES FOR WATER, SEWAGE, SLUDGE, AND GENERAL SERVICE SHALL BE OF THE OUTSIDE LEVER AND SPRING OR WEIGHT TYPE, IN ACCORDANCE WITH ANSI/AWWA C 508 LATEST REVISION SWING-CHECK VALVES FOR WATERWORKS SERVICE, 2" THROUGH 24" NPS, UNLESS OTHERWISE INDICATED, WITH FULL-OPENING PASSAGES, DESIGNED FOR A WATER-WORKING PRESSURE OF 150 PSI THEY SHALL HAVE A FLANGED COVER PIECE TO PROVIDE ACCESS TO THE DISC.

30.22.HIGH DENSITY POLYETHYLENE PIPE (HDPE) FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO AWWA C906 STANDARD, LATEST REVISION. PIPES SHALL BE COLOR-CODED BLUE, MINIMUM 40 FEET STANDARD LENGTHS.

31.SERVICE CONNECTION:

31.1. SERVICE SADDLES SHALL BE FUSION BONDED PLASTIC COATED DUCTILE IRON (ASTM A536) WITH STAINLESS STEEL STRAPS, SADDLES SHALL BE DOUBLE STRAP TYPE.

31.2. SERVICE LINES SHALL BE POLYETHYLENE (PE 3408), 200 P.S.I RATED, DR9. PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE TOTALLY CONFINED GRIP SEAL AND COUPLING NUT.

31.3. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN ACCORDANCE WITH ASTM B-62 WITH THREADED ENDS, AS MANUFACTURED BY FORD BALLCORP, CATALOG # 1100 OR APPROVED EQUAL.

31.4. CURB STOPS SHALL BE FORD V63-44W-X" LATEST REVISION OR APPROVED EQUAL.

31.5. METER STOPS SHALL BE 90 DEGREE LOCKWING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE FV63-777W" LATEST REVISION WITH ASTM B-62. METER STOPS SHALL BE CLOSED BOTTOM DESIGN AND RESILIENT "0" RING SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES, AS MANUFACTURED BY FORD OR APPROVED EQUAL.

32. INSTALLATION:

32.1. WHERE RESTRAINED PIPE JOINTS ARE REQUIRED DUE TO FITTINGS, APPURTENANCES, ETC., PIPE MATERIAL SHALL BE DIP

32.2. ALL PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION "GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEM," AND ANSI/AWWA C605-XX LATEST REVISION STANDARD.

32.3. ALL DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/ C600-XX LATEST REVISION.

32.4. ALL WATER MAINS SHALL TYPICALLY BE LAID WITH A MINIMUM 36" COVER FOR PVC AND 30" COVER FOR DIP.

32.5. DETECTOR TAPE SHALL BE LAID 18 INCHES ABOVE ALL WATER AND SEWER LINES. A 14 GAUGE MULTI-STRAND WIRE SHALL BE ATTACHED TO ALL NONCONDUCTIVE WATER MAINS TO FACILITATE LOCATION. AN EXTRA 4 FEET OF WIRE SHALL BE PROVIDED AT ALL VALVES, BLOW-OFFS, HYDRANTS, ETC. THE WIRE SHALL BE TESTED FOR CONTINUITY AT THE PRESSURE TEST.

32.6. PIPE DEFLECTION SHALL NOT EXCEED 50% OF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER.

32.7. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED. BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

32.8. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER" OR "SEWER", AS APPLICABLE, CAST IN THE COVER. U.S. FOUNDRY OR APPROVED EQUAL.

33.TESTING:

33.1. BEFORE ANY PHYSICAL CONNECTIONS AND ACCEPTANCE FOR OPERATION TO THE EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE FLUSHED, PRESSURE TESTED AND DISINFECTED. COPIES OF PASSING BACTERIOLOGICAL RESULTS AND PRESSURE TEST RESULTS MUST BE SUBMITTED TO, AND APPRO

1. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF THE MIAMI-DADE WATER AND SEWER DEPARTMENT AND SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS AVAILABLE AND ON FILE WITH THE DEPARTMENT. SUBMIT SHOP DRAWINGS FOR ALL MATERIALS.

2. COVER OVER WATER OR SEWER FORCE MAINS SHALL BE 4'-0" MIN.

3. ALL MAIN LINE VALVES SHALL BE INSTALLED COMPLETE WITH 10" RISER PIPES AND NO. 3 OR 5.3 VALVE BOXES FIRE HYDRANTS AND SERVICE VALVES SHALL BE INSTALLED COMPLETE WITH 6" RISER PIPES AND NO. 2 VALVE BOXES.

4. ALL FORCE MAIN SERVICE CONNECTIONS INTO PRESSURE TRANSMISSION MAINS SHALL HAVE A SHUT OFF VALVE AND CHECK VALVE AT THE POINT OF ENTRY.

5. ALL GRAVITY SYSTEMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DEPARTMENT STANDARDS.

6. ALL WATER METERS WILL BE INSTALLED BY THE MIAMI-DADE WATER AND SEWER DEPARTMENT, PROVIDING THE APPROPRIATE CHARGES HAVE BEEN PREPAID.

7. FIRE HYDRANT REQUIREMENTS (NUMBER AND LOCATION) SHALL BE AS REQUIRED BY MIAMI-DADE COUNTY FIRE DEPARTMENT OR THE APPROPRIATE FIRE AGENCY WITH INSTALLATION IN ACCORDANCE WITH DEPARTMENT STANDARDS.

8. CONTRACTOR MUST CALL MDWASD INSPECTION DIVISION TO ARRANGE FOR A PRECONSTRUCTION MEETING 2 FULL BUSINESS DAYS PRIOR TO PROPOSED START OF CONSTRUCTION. CONTACT ONE CALL CENTER 48 HRS PRIOR TO EXCAVATION.

9. CONTRACT INSPECTOR WILL INSPECT ANY FACILITIES APPROVED BY THE DEPARTMENT. ALL OTHER REQUIREMENTS OF THE PERMITTING AGENCY SHALL BE IN ACCORDANCE WITH THEIR STANDARDS AND REQUIREMENTS.

10. WORK PERFORMED UNDER THIS PROJECT WILL NOT BE CONSIDERED AS COMPLETE UNTIL FINAL ACCEPTANCE OF THE SYSTEM BY THE DEPARTMENT AND UNTIL THE FOLLOWING DOCUMENTS ARE RECEIVED AND APPROVED BY THE DEPARTMENT:

a. EASEMENTS, IF REQUIRED
b. CONTRACTOR'S WAIVER AND RELEASE OF LIEN
c. ABSOLUTE BILL OF SALE
d. i. CONTRACTOR'S LETTER OF WARRANTY (I.E.; LETTER AGREEMENT)
   ii DEVELOPER'S CONTRACT BOND (I.E., CONTRACT AGREEMENT).
e. "RECORD DRAWING" PRINTS (24"x 36") SHOWING SPECIFIC LOCATIONS, DEPTH, ETC. OF ALL WATER AND SEWER FACILITIES AS LOCATED BY A LICENSED SURVEYOR & MAPPER, ALONG WITH PRINTS OF "RECORD DRAWINGS" WHICH HAVE BEEN SIGNED AND SEALED BY A REGISTERED SURVEYOR & MAPPER. (No. OF PRINTS: 3–FOR WATER, 4–FOR GRAVITY SEWER AND 5–FOR FORCE MAIN OR PUMP STATION PROJECTS). Submittal of final CAD Files required.
f. H.R.S. LETTER OF RELEASE REQUIRED FOR ALL WATER PROJECTS
g. BILL OF SALE SKETCH (8½"x 11") FOR WATER AND SEWER, SEPARATELY

11. ALL NEW CONNECTIONS FROM EXISTING DEPARTMENT MAINS TO BE MADE BY DEPARTMENT FORCES ONLY. THE CONTRACTOR TO EXCAVATE AT REQUIRED LOCATIONS, PROVIDE AND INSTALL MATERIAL WITH FITTINGS, PRIOR TO TAP.

12. AN APPROVED PAVING AND DRAINAGE PLAN MUST BE SUBMITTED TO MDWASD FOR ALL NEW SUBDIVISIONS PRIOR TO APPROVAL OF WATER AND SEWER PERMIT PLANS, UPON REQUEST.

13. UNLESS OTHERWISE SPECIFIED, ALL TAPS 20 INCHES AND SMALLER FOR CONNECTIONS TO EXISTING MAINS WILL BE DONE BY DEPARTMENT FORCES. UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO TAP EXISTING MAINS IN THE SIZE RANGE SPECIFIED ABOVE. THE TAPPING SLEEVE AND TAPPING VALVE ARE FURNISHED AND INSTALLED BY THE CONTRACTOR UNDER THE SUPERVISION OF THE INSPECTOR.

ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — Delivering Excellence Every Day — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
03/01/2010	V.F.C.
07/20/2016	D.V.

STANDARD DETAIL

STANDARD REQUIREMENTS WATER AND SEWER CONSTRUCTION

GS 0.5 SHEET 1 OF 2

1. AT THE COMPLETION OF ANY WATER AND SEWER JOB EITHER DONATION OR CONTRACT, THE CONTRACTOR SHALL SUBMIT:
   a. RECORD DRAWING PRINTS WHICH HAVE BEEN SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL SURVEYOR AND MAPPER (QTY. OF PRINTS AS REQUIRED BY THE DEPARTMENT).

2. "RECORD DRAWING" FORMAT:
   a. 24"x 36" PRINTS
   b. PDF FILE
   c. CADD FILE (DWG OR DXF) ROTATED AND TRANSLATED TO STATE PLANE COORDINATES NAD 83 FLORIDA EAST ZONE
   d. THE WORDS "RECORD DRAWING" IN LARGE LETTERS
   e. TITLE BLOCK WITH DEPARTMENT DS, DW OR ER NUMBER AND PERTINENT INFORMATION
   f. PREFERRED SCALE TO BE 1"= 40' HORIZONTALLY AND 1"= 4' VERTICALLY*
   g. STREET NOMENCLATURE
   h. SEPARATE RECORD DRAWINGS FOR WATER AND SEWER
   i. SEPARATE WATER AND SEWER PROFILE
   j. STATIONING STARTING WITH 0+00 AT PERMANENT REFERENCE POINT (I.E. ℄, ℈, ETC.) OR AS SHOWN ON DESIGN PERMIT PLANS, AND TO RUN CONTINUOUSLY TO END OF MAIN
   k. EASEMENTS, IF ANY, TIED TO PERMANENT REFERENCE POINT
   l. IDENTIFY ALL CONTROL LINES (I.E. BLDG. LINE, PROPERTY LINE, R/W, ETC.)
   m. ALL "PROPOSED" INFORMATION TO BE REMOVED FROM PRINTS, LEAVING ONLY RECORD DRAWING INFORMATION REFLECTED IN DRAWINGS

3. WATER "RECORD DRAWINGS" MUST INCLUDE:
   a. PLANS SHOWING PIPE SIZE, MATERIAL AND OFFSET OF MAIN, DEFLECTIONS (IF ANY), STATION OF SERVICES, HYDRANTS, VALVES, FITTINGS, IF ANY, ALL IN STATE PLANE COORDINATES. UTILITY CROSSINGS SHALL BE CLEARLY IDENTIFIED AND LOCATED.
   b. PROFILE SHOWING TOP OF GROUND AND TOP OF PIPE ELEVATIONS AT EVERY 100' STATION AND AT ANY CHANGE IN GRADE (WITH CORRESPONDING STATION), PIPE SIZE AND PIPE MATERIALS REFERENCED TO PLAN.

4. SEWER "RECORD DRAWINGS" MUST INCLUDE:
   a. PLAN SHOWING MANHOLE NUMBER, PIPE SIZE AND PIPE MATERIAL OF PIPE, DEFLECTION, SLOPE OF GRAVITY SEWER, LOCATION OF LATERALS WITH REFERENCE TO MANHOLE AND CLEANOUTS.
   b. THE NORTHERLY AND EASTERLY COORDINATES ON ALL FIELD OBTAINED MEASUREMENTS AND PROVIDED ON ALL RECORD DRAWING SUBMITTALS
   c. PROFILE SHOWING MANHOLE NUMBER (AS PER PLAN), RIM AND INVERT ELEVATIONS (IF MORE THAN ONE INVERT, LABEL NORTH, SOUTH, ETC.), AND STATION STARTING AT 0+00 AT DOWNSTREAM MANHOLE.

5. FORCE MAIN "RECORD DRAWING" SAME AS WATER MAIN.

6. EACH RECORD DRAWING SHALL SHOW THE FLORIDA STATE PLANE COORDINATES (CURRENT READJUSTMENT) OF ALL THE MANHOLES AND VALVES AND OF AT LEAST TWO HORIZONTAL CONTROL POINTS PROPERLY IDENTIFIED AND LOCATED WITHIN THE PROJECT.

* OTHER SCALE MAY BE PERMITTED, BUT MUST BE APPROVED BY THE DEPARTMENT PRIOR TO PREPARATION OF DRAWINGS.

ITEM	CROSS REF.	SPEC. REF.

MIAMI-DADE COUNTY — Delivering Excellence Every Day — WATER & SEWER DEPARTMENT

ISSUE DATE	APPROVED BY
03/11/2009	V.F.C.
07/20/2016	D.V.

STANDARD DETAIL

"RECORD DRAWING" REQUIREMENTS

GS 0.5 SHEET 2 OF 2

NOT A PART OF MD-WASD NOTES NOR APPROVAL

RER-DERM WATER-SEWER GENERAL NOTES

1. A horizontal distance of at least 6 feet, and preferably 10 feet (outside to outside), shall be maintained between gravity or pressure sewer pipes and water pipes. The minimum horizontal separation can be reduced to 3 feet for vacuum-type sewers or for gravity sewers where the top of the sewer pipe is at least 6 inches below the bottom of the water pipe. When the above specified horizontal distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met:
   a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
   b) The sewer is encased in a watertight carrier pipe or concrete.
   c) The top of the sewer is at least 18 inches below the bottom of the water pipe.
2. A vertical distance of at least 12 inches (outside to outside) shall be maintained between any water and sewer mains with sewer pipes preferably crossing under water mains. The minimum vertical separation can be reduced to 6 inches for vacuum-type sewers or for gravity sewers where the sewer pipe is below the water main. The crossing shall be arranged so that all water main joints are at least 6 feet from all joints in gravity and pressure sewer pipes. This distance can be reduced to 3 feet for vacuum-type sewers. When the above specified vertical distance criteria cannot be met due to an existing underground facility conflict, smaller separations are allowed if one of the following is met:
   a) The sewer pipes are designed and constructed equal to the water pipe and pressure tested at 150 psi.
   b) The sewer is encased in a watertight carrier pipe or concrete.
3. Air release valves shall be provided at high points of new force main sanitary sewers.
4. Gravity sanitary sewers constructed within a public wellfield protection area shall be C-900 PVC or Ductile Iron Pipe. The maximum allowable exfiltration rate of gravity sanitary sewers constructed in a public wellfield protection area shall be:
   a) Residential Land Uses. Fifty (50) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
   b) Non-Residential Land Uses. Twenty (20) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe.
   c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
5. The maximum allowable exfiltration rate of gravity sanitary sewers constructed outside a public wellfield protection area shall be one hundred (100) gallons per inch pipe diameter per mile per day, based on a minimum two (2) hour test having a minimum of two (2) feet of positive head above the crown of the pipe. Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
6. Forcemain sanitary sewers constructed within a public wellfield protection area shall be ductile iron, C-900 PVC, HDPE or reinforced concrete pressure sewer pipes.
7. The maximum allowable exfiltration/leakage rate of forcemain sanitary sewers shall be:
   a) Ductile Iron, C-900 PVC, HDPE and PVC Pipe. The allowable leakage rate specified in American Water Works Association Standard (AWWAS) C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours.
   b) Reinforced Concrete Pressure Pipe. Half (1/2) the allowable leakage rate specified in AWWA C600-82 at a test pressure of 100 psi for a duration of not less than two (2) hours.
   c) Any observed leaks or any obviously defective joints or pipes shall be replaced even when the total leakage is below that allowed.
8. The contractor shall verify nature, depth, and character of existing underground utilities prior to start of construction.
9. In no case shall a contractor install utility pipes, conduits, cables, etc. in the same trench above an existing water or sewer pipe except where they cross.
10. If any area of the work site is found to contain buried solid waste and/or ground or ground water contamination, the following shall apply:
   a) All work in the area shall follow all applicable safety requirements (e.g., OSHA, etc.) and notification must be provided to the appropriate agencies.
   b) Immediately notify the Environmental Monitoring and Restoration Division (EMRD). The EMRD can be contacted at (305) 372-6700.
   c) If contaminated soils and/or buried solid waste material is excavated during construction, then they require proper handling and disposal in accordance with the local, state and federal regulations. Be advised that the landfill owner/operator is the final authority on disposal and may have requirements beyond those provided by herein. If disposal within a Miami-Dade County owned landfill (Class I landfill) is appropriate and selected, please contact the Miami-Dade County Department of Solid Waste Management at (305) 594-6666 for information.
   d) The reuse of contaminated soils that are not returned to the original excavation requires prior approval of a Soil Management Plan from the Environmental Monitoring and Restoration Division. The EMRD can be contacted at (305) 372-6700.
11. Pumps must comply with the National Electrical Code (NEC) requirements for Class I, Group D, Division 1 locations (Explosion Proof).

Rev. 5/25/2017

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M-D WASD NOTES:

FOR ALL PROJECTS WHERE REMOVAL OF UTILITY LINES IS PROPOSED

1. ALL EXISTING UTILITIES BEING REMOVED AND/OR RELOCATED MUST REMAIN ACTIVE AND IN SERVICE, UNTIL SUCH TIME WHEN NEW REPLACING UTILITIES HAVE BEEN INSTALLED, IN SERVICE, ACCEPTED BY THE DEPARTMENT AND ALL RELATED SERVICES FROM THE EXISTING MAINS HAVE BEEN TRANSFERRED TO THE NEW ONES, BY A LICENSED CONTRACTOR UNDER SUPERVISION OF WASD LICENSED OPERATOR AND WASD DONATION INSPECTOR UNDER THE SCOPE AND JURISDICTION OF THE CONTRACTOR'S RIGHT-OF-WAY PERMIT.

2. ALL WATER AND/OR SEWER FACILITIES LOCATED IN PRIVATE PROPERTY SHALL BE REMOVED AFTER ALL INSTALLED SERVICES FROM THEM HAVE BEEN TRANSFERRED TO THE ALREADY INSTALLED AND IN SERVICE NEW MAINS. ANY ASSOCIATED EXCLUSIVE EASEMENTS SHALL BE CLOSED AND RELEASED AFTER THE REMOVAL OF THE EXISTING WATER AND/OR SEWER FACILITIES.

DISCLOSURE RELATED TO CRITICAL HABITAT FOR ENDANGERED SPECIES

PLEASE BE ADVISED THAT THE FEDERAL GOVERNMENT HAS DESIGNATED ALL OR A PART OF THE SUBJECT PROPERTY AS CRITICAL HABITAT FOR ONE OR MORE ENDANGERED SPECIES.

YOU ARE NOT AUTHORIZED TO COMMENCE ANY WORK OR ACTIVITIES PURSUANT TO THIS PERMIT UNTIL YOU OBTAIN ANY AND ALL APPROVALS OR PERMITS, IF NECESSARY, FROM THE FEDERAL GOVERNMENT PURSUANT TO THE ENDANGERED SPECIES ACT AND FROM THE STATE OF FLORIDA PURSUANT TO FLORIDA LAW ON ENDANGERED SPECIES. PLEASE BE ADVISED THAT, EVEN AFTER WORK COMMENCES, IF MIAMI-DADE COUNTY IS ADVISED BY THE FEDERAL GOVERNMENT, THE STATE OF FLORIDA, OR A COURT THAT AN ACTIVITY ON THE SUBJECT PROPERTY IS IN VIOLATION OF THE ENDANGERED SPECIES ACT, IN VIOLATION OF FLORIDA LAW ON ENDANGERED SPECIES, OR IN VIOLATION OF A PERMIT OR APPROVAL GRANTED BY THE FEDERAL GOVERNMENT PURSUANT TO THE ENDANGERED SPECIES ACT, SUCH VIOLATION MAY RESULT IN AN IMMEDIATE STOP WORK ORDER.

YOU ARE STRONGLY ADVISED TO CONSULT WITH THE UNITED STATES FISH AND WILDLIFE SERVICE AND ANY OTHER NECESSARY FEDERAL OR STATE AGENCIES BEFORE CONDUCTING ANY WORK OR\ ACTIVITIES ON THE PROPERTY. THE VERO BEACH OFFICE OF THE UNITED STATES FISH AND WILDLIFE SERVICE MAY BE REACHED AT (772) 562-3909. PLEASE BE AWARE THAT THE FEDERAL GOVERNMENT MAY REQUIRE CERTAIN ACTIONS OR PROTECTIONS ON THE PROPERTY, AND THIS MAY RESULT IN THE NEED TO MODIFY THE PLANS FOR THE PROPERTY. THEREFORE, IT IS RECOMMENDED THAT YOU CONSULT WITH THE UNITED STATES FISH AND WILDLIFE SERVICE AT AN EARLY STAGE IN THE PROCESS.

IN THE EVENT THAT THE UNITED STATES FISH AND WILDLIFE SERVICE ADVISES THAT YOUR PLANS FOR THE SUBJECT PROPERTY MAY RESULT IN A "TAKE" OF ENDANGERED OR THREATENED SPECIES, YOU ARE STRONGLY RECOMMENDED TO INFORM MIAMI-DADE COUNTY IN WRITING AT THE EARLIEST STAGE POSSIBLE.

MD-WASD AGGREEMENT ID#24152

HEALTH DEPARTMENT NOTES

(NOT PART OF MD-WASD NOTES NOR APPROVAL)

WATER MAIN HORIZONTAL SEPARATION

SEPARATION SHALL BE MEASURED OUTSIDE EDGE TO OUTSIDE EDGE BETWEEN WATER MAINS AND, STORM SEWERS, STORMWATER FORCE MAINS, OR RECLAIMED WATER LINES, SHALL BE 3 FT MINIMUM.

BETWEEN WATER MAINS AND VACUUM TYPE SEWER PREFERABLY 10 FT, AND AT LEAST 3 FT, MINIMUM

GRAVITY OR PRESSURE SANITARY SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER PREFERABLE 10FT, AND AT LEAST 6FT, MAY BE REDUCED TO 3 FT. WHERE BOTTOM OF WATER MAINS IS AT LEAST 6 INCHES ABOVE TOP OF SEWER.

10 FT TO ANY PART OF ON-SITE SEWER TREATMENT OR DISPOSAL SYSTEM.

WATER MAIN VERTICAL SEPARATION

SEPARATION BETWEEN WATER MAINS AND GRAVITY SEWER, VACUUM TYPE SEWER, OR STORM SEWERS, TO BE PREFERABLY 12 INCHES, OR AT LEAST 6 INCHES ABOVE, OR AT LEAST 12 INCHES IF BELOW.*

PRESSURE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR RECLAIMED WATER, AT LEAST 12 INCHES ABOVE OR BELOW.*

* NOTE: CENTER 1-FULL LENGTH OF WATER MAIN PIPE AT CROSSINGS: ALTERNATIVELY ARRANGE PIPES SO JOINTS ARE AT LEAST 3 FEET FROM JOINTS I NVACUUM, STORM OR STORM FORCE MAINS. AT LEAST 6 FEET FROM JOINTS IN GRAVITY OR PRESSURE SEWERS, WASTEWATER FORCE MAINS OR RECLAIMED WATER

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:43 PM

STILES ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-GI-XXX.dwg

GI-005

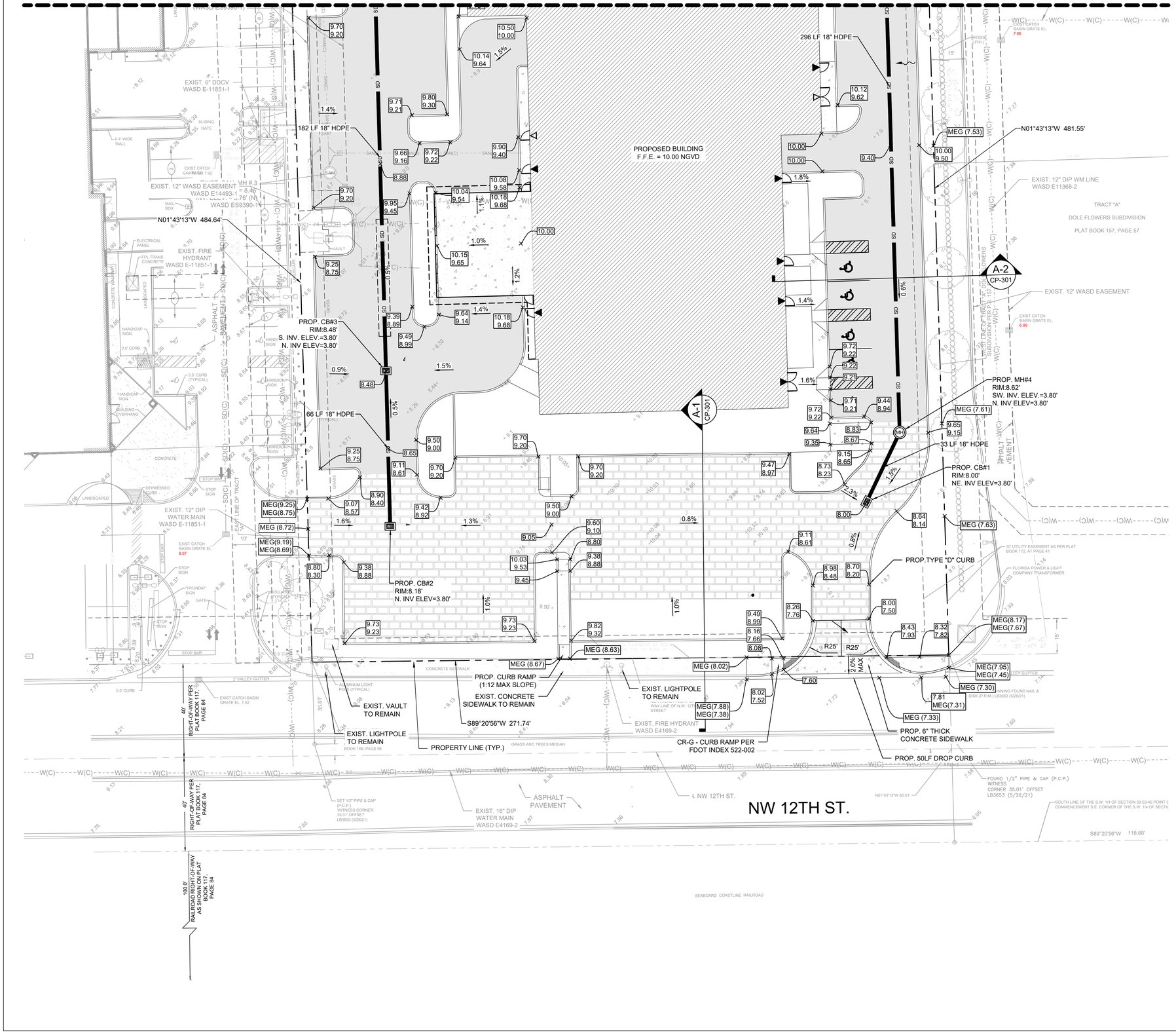
WATER & SEWER NOTES

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL. 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CP-102



N

GRAPHIC SCALE

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SCALE: 1" = 65.62

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

LOCATION SKETCH
(NOT TO SCALE)

GENERAL ADA SLOPE NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADA CRITERIA IS MET FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO SIDEWALKS, RAMPS AND ADA PARKING STALLS).
2. ALL ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. SIDEWALKS SHALL NOT EXCEED 5% IN THE LONGITUDINAL DIRECTION AND CROSS-SECTIONAL SLOPES SHALL NEVER EXCEED 2%, UNLESS CLEARLY IDENTIFIED ON PLANS.
4. FOR ANY REASON THE CONTRACTOR FINDS ANY GRADING DISCREPANCIES THAT WOULD RESULT IN NOT BEING ABLE TO MEET ADA CRITERIA; IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ADVISE THE ENGINEER AT ONCE AND PROVIDE ADEQUATE TIME TO DETERMINE PROPER COURSE OF ACTION. IF FOR ANY REASON IT IS DEEMED NECESSARY FOR AS-BUILT INFORMATION TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO MAKE THE NECESSARY DECISIONS AND/OR PROVIDE DIRECTION, THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR.

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

KIA FLOOD LEGEND	
FLOOD ZONE	AH
BASE FLOOD ELEVATION	8.00
BACK OF SIDEWALK ELEVATION(s)	8.41
CROWN OF ROAD ELEVATION(s)	8.49
FEMA LETTER OF MAP CHANGE #	
LOWEST FLOOR ELEVATION	10.00
SUPPORT BLDG FLOOR ELEVATION(s)	
LOWEST MACHINERY ELEVATION(s)	

KEITH
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Miami, FL, 33126
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State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:46 PM

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-1XX.dwg

CP-101

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00

DRAWN BY :
AARON K.

CHECKED BY :
CARLOS M.

DATE :
11/16/2021

STATUS: PERMIT

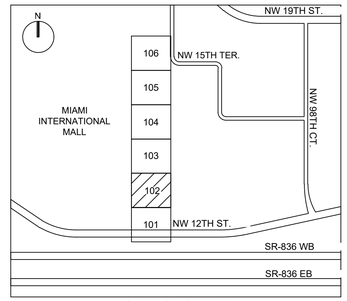
MATCHLINE: REF. SHEET CP-103

MATCHLINE: REF. SHEET CP-101

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

GENERAL ADA SLOPE NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADA CRITERIA IS MET FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO SIDEWALKS, RAMPS AND ADA PARKING STALLS).
2. ALL ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. SIDEWALKS SHALL NOT EXCEED 5% IN THE LONGITUDINAL DIRECTION AND CROSS-SECTIONAL SLOPES SHALL NEVER EXCEED 2%, UNLESS CLEARLY IDENTIFIED ON PLANS.
4. FOR ANY REASON THE CONTRACTOR FINDS ANY GRADING DISCREPANCIES THAT WOULD RESULT IN NOT BEING ABLE TO MEET ADA CRITERIA; IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ADVISE THE ENGINEER AT ONCE AND PROVIDE ADEQUATE TIME TO DETERMINE PROPER COURSE OF ACTION. IF FOR ANY REASON IT IS DEEMED NECESSARY FOR AS-BUILT INFORMATION TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO MAKE THE NECESSARY DECISIONS AND/OR PROVIDE DIRECTION, THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR.

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:46 PM

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NEW KIA & SUBARU
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10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-1XX.dwg

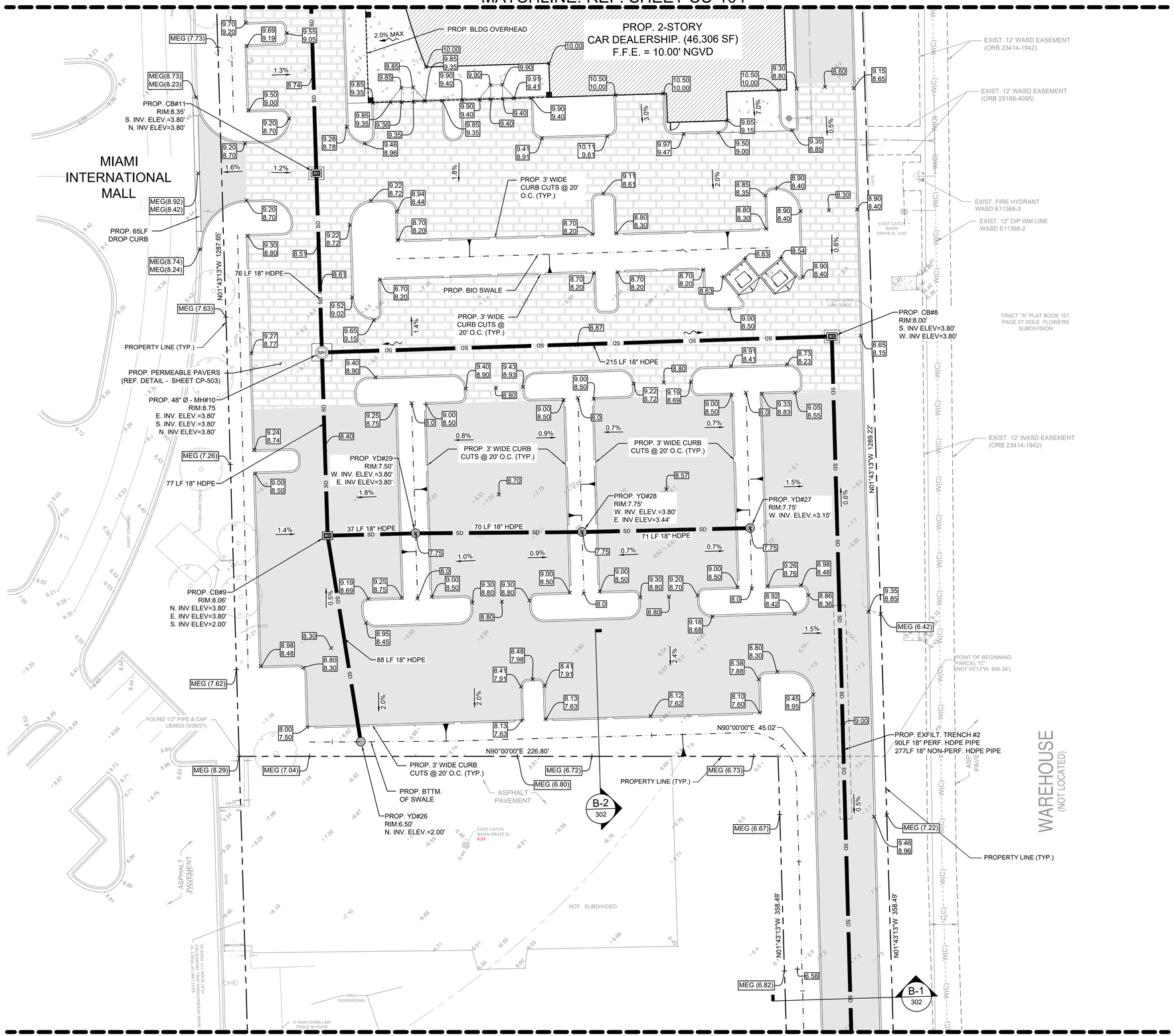
CP-102

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CU-104

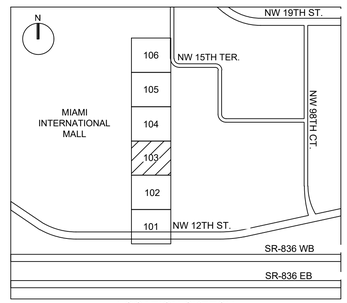


MATCHLINE: REF. SHEET CP-102

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

GENERAL ADA SLOPE NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADA CRITERIA IS MET FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO SIDEWALKS, RAMPS AND ADA PARKING STALLS).
2. ALL ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. SIDEWALKS SHALL NOT EXCEED 5% IN THE LONGITUDINAL DIRECTION AND CROSS-SECTIONAL SLOPES SHALL NEVER EXCEED 2%, UNLESS CLEARLY IDENTIFIED ON PLANS.
4. FOR ANY REASON THE CONTRACTOR FINDS ANY GRADING DISCREPANCIES THAT WOULD RESULT IN NOT BEING ABLE TO MEET ADA CRITERIA; IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ADVISE THE ENGINEER AT ONCE AND PROVIDE ADEQUATE TIME TO DETERMINE PROPER COURSE OF ACTION. IF FOR ANY REASON IT IS DEEMED NECESSARY FOR AS-BUILT INFORMATION TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO MAKE THE NECESSARY DECISIONS AND/OR PROVIDE DIRECTION, THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR.

NOTE:
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KEITH
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State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:46 PM

STILES
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301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Civil\11916.00-CP-11XX.dwg

CP-103

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CP-105

MATCHLINE: REF. SHEET CP-103

MIAMI INTERNATIONAL MALL

PROP. CB#19
RIM:7.44'
S. INV. ELEV.=3.80'
N. INV ELEV=3.40'

PROP. CB#16
RIM:7.45'
E. INV. ELEV.=3.20'
N. INV ELEV=3.80' (PRB)

PROP. CB#15
RIM:7.45'
S. INV. ELEV.=3.80'
N. INV. ELEV.=3.80'
W. INV ELEV=3.20'

PROP. CB#14
RIM:9.00'
W. INV. ELEV.=1.00'
N. INV ELEV=3.80'

PROP. CB#13
RIM:8.58'
S. INV. ELEV.=3.80'
E. INV ELEV=1.00
N. INV ELEV=3.80

PROP. CB#12
RIM:8.75'
S. INV. ELEV.=3.80'
N. INV ELEV=3.80'

120 LF 18" HDPE

124 LF 18" HDPE

123 LF 24" HDPE

195 LF 18" HDPE

151 LF 18" HDPE

159 LF 18" HDPE

PROP. PERMEABLE PAVERS
(REF. DETAIL - SHEET CP-503)

PROP. BLDG OVERHEAD

PROP. TYPE D CURB

PROP HIGH CURB/WALL
ELEV VARIES. 2' MAX.

PROPERTY LINE (TYP.)

PROP. 2-STORY
CAR DEALERSHIP. (46,306 SF)
F.F.E. = 10.00' NGVD

MEG (8.13)
MEG (7.45)
MEG (7.81)
MEG (7.11)
MEG (7.63)
MEG (7.25)

B-4
CP-302

B-3
CP-302

TRACT "A" PLAT BOOK 117, PAGE 84
INTERNATIONAL MALL PROPERTIES

WEST LINE OF TRACT "A"

EXIST. 12" DIP WM
WASD E11368-2

EXIST. 12" DIP WM LINE
WASD E11368-2

ASPHALT PAVEMENT

STRIPING

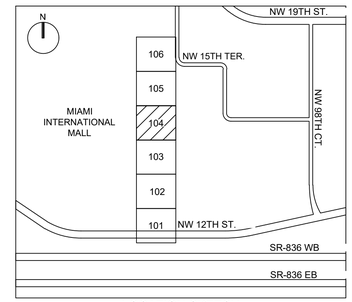
N01°43'13"W 1289.22'

1.4%
1.1%
1.6%
0.9%
1.3%
0.5%
2.0%
2.0% MAX
5.0% MAX

N

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

GENERAL ADA SLOPE NOTES:

1. THE CONTRACTOR SHALL ENSURE THAT ALL ADA CRITERIA IS MET FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS INCLUDING BUT NOT LIMITED TO SIDEWALKS, RAMPS AND ADA PARKING STALLS).
2. ALL ADA PARKING STALLS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. SIDEWALKS SHALL NOT EXCEED 5% IN THE LONGITUDINAL DIRECTION AND CROSS-SECTIONAL SLOPES SHALL NEVER EXCEED 2%, UNLESS CLEARLY IDENTIFIED ON PLANS.
4. FOR ANY REASON THE CONTRACTOR FINDS ANY GRADING DISCREPANCIES THAT WOULD RESULT IN NOT BEING ABLE TO MEET ADA CRITERIA; IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ADVISE THE ENGINEER AT ONCE AND PROVIDE ADEQUATE TIME TO DETERMINE PROPER COURSE OF ACTION. IF FOR ANY REASON IT IS DEEMED NECESSARY FOR AS-BUILT INFORMATION TO BE MADE AVAILABLE TO THE ENGINEER IN ORDER TO MAKE THE NECESSARY DECISIONS AND/OR PROVIDE DIRECTION, THIS INFORMATION SHALL BE PROVIDED BY THE CONTRACTOR.

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

SUBARU FLOOD LEGEND	
FLOOD ZONE	AH
BASE FLOOD ELEVATION	8.00
BACK OF SIDEWALK ELEVATION(s)	N/A
CROWN OF ROAD ELEVATION(s)	N/A
FEMA LETTER OF MAP CHANGE #	N/A
LOWEST FLOOR ELEVATION	10.00
SUPPORT BLDG FLOOR ELEVATION(s)	
LOWEST MACHINERY ELEVATION(s)	

KEITH
5805 Blue Lagoon Drive, Suite 218
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(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:46 PM

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\11916.00-CP-1XX.dwg

CP-104

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CP-106

MATCHLINE: REF. SHEET CP-104

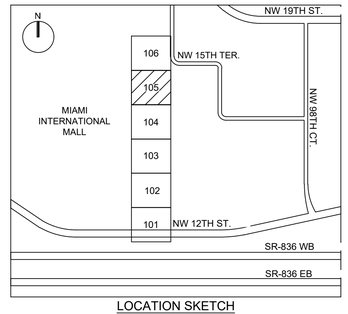
N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

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CP-105

PAVING, GRADING, AND DRAINAGE PLANS

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11916.00
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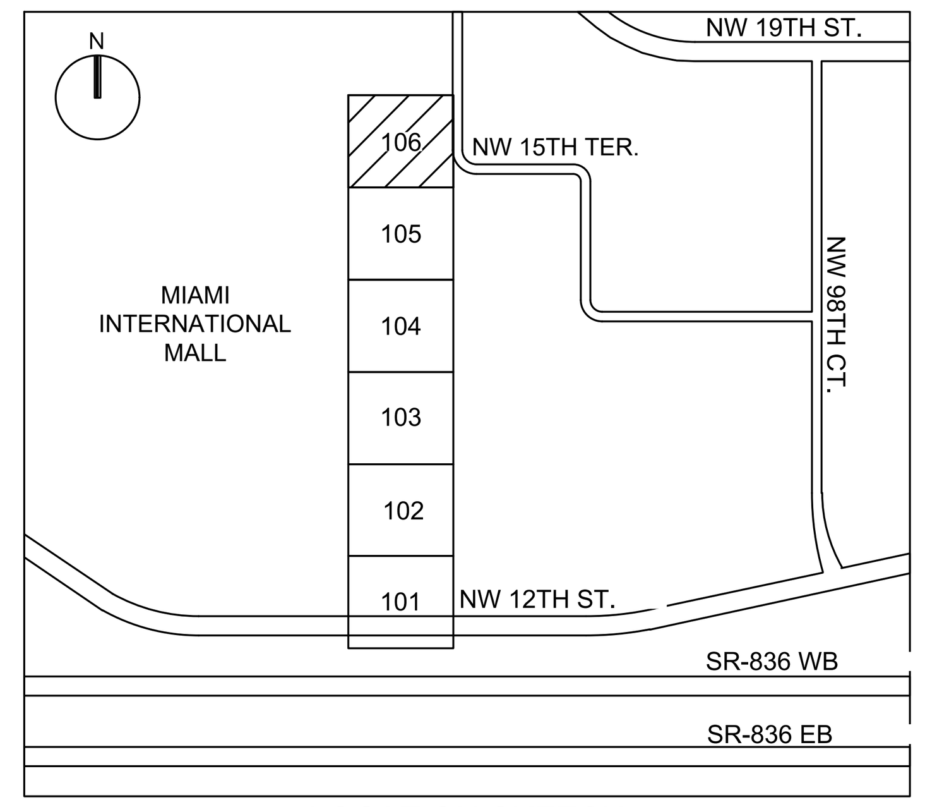
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-1XX.dwg



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(NOT TO SCALE)

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0 20 40
SCALE: 1" = 20 '
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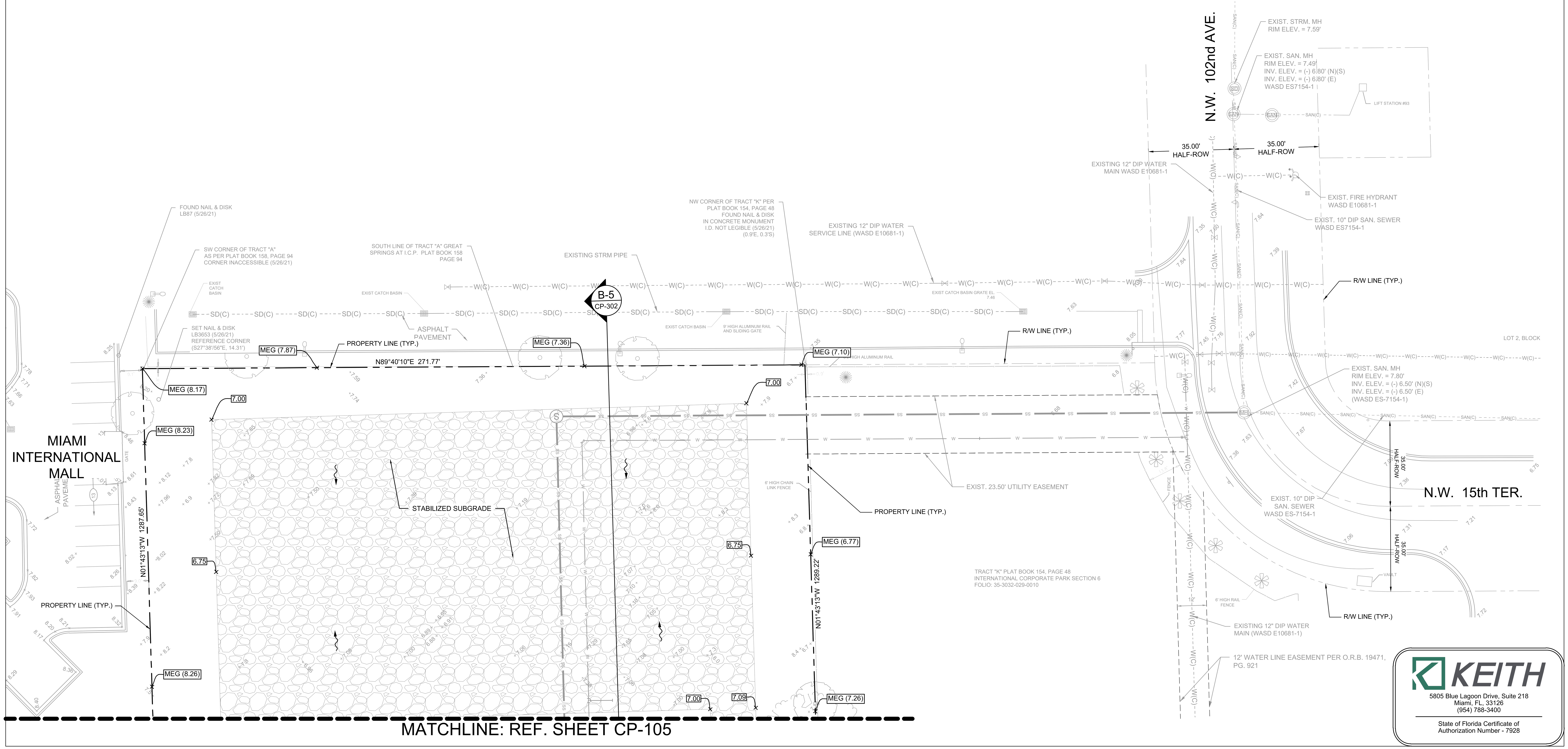

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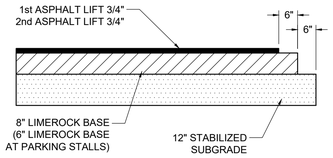
Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-1XX.dwg

CP-106

PAVING, GRADING, AND DRAINAGE PLANS

PROJECT NO. 11916.00
DRAWN BY : AARON K.
CHECKED BY : CARLOS M.
DATE : 11/16/2021

STATUS: PERMIT



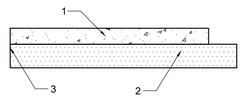
ASPHALTIC CONCRETE VEHICULAR:
FIRST LIFT - 3/4" FDOT - SP 9.5 (FINE MIX). SECOND (FINAL) LIFT - 3/4" FDOT - SP 9.5 (FINE MIX). ASPHALT SURFACE COURSE SHALL CONFORM TO THE REQUIREMENTS OF FDOT STANDARDS SPECIFICATIONS SECTIONS 330 AND 334. SECOND LIFT OF ASPHALT SHALL NOT BE PLACED UNTIL FINAL LANDSCAPE/HARDSCAPE HAS BEEN INSTALLED.

PRIME AND TACK COAT:
LIMEROCK BASE COURSE SHALL CONFORM TO THE REQUIREMENTS OF FDOT STANDARDS SPECIFICATIONS SECTION 300.
APPLICATION RATES:
PRIME COAT - 0.10 GALLONS PER SQ. YD.
TACK COAT - 0.08 GALLONS PER SQ. YD.

BASE:
8"/ 6" LIMEROCK BASE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180), LIMEROCK BASE TO CONFORM WITH THE REQUIREMENTS OF FDOT SPECIFICATIONS SECTIONS 200 AND 911.

SUBGRADE:
12" STABILIZED SUBGRADE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180); MINIMUM LBR = 40.

1 ASPHALT PAVEMENT DETAIL
NOT TO SCALE

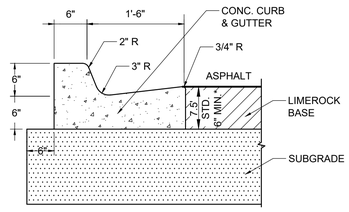


1. CONCRETE VEHICULAR COURSE:
   8" - 3,000 PSI CONCRETE PER FDOT STANDARD SPECIFICATIONS SECTION 346 AND 350.
2. STABILIZED SUBGRADE:
   12" SUBGRADE COMPACTED TO 98% OF MAXIMUM DENSITY (AASHTO T-180). MINIMUM LBR = 40. GROUND ADJACENT TO PAVEMENT HAVING RUNOFF SHALL BE GRADED TWO INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW FOR THE PLACEMENT OF SOD.
3. SAWED JOINTS:
   3/16" SAW CUT, 1½" DEEP (WITHIN 12 HOURS), MAX. 15' O.C., AND MIN.3' PARALLEL TO THE EDGE OF PAVEMENT.

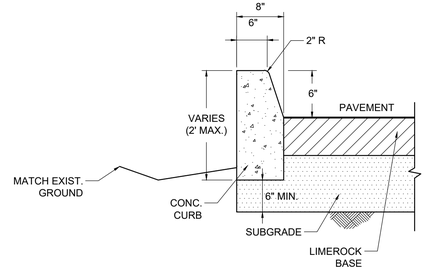
2 CONCRETE PAVEMENT DETAIL
NOT TO SCALE

NOTES:
ALL TYPE "F" CURB & GUTTER SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF FDOT INDEX 520-001.

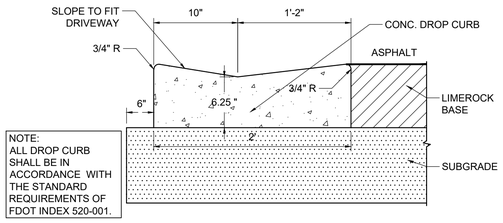
*WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT. THE THICKNESS OF THE LIP SHALL BE 6", UNLESS OTHERWISE SHOWN ON PLANS.



3 TYPE "F" CURB DETAIL PER FDOT INDEX No. 520-001
NOT TO SCALE

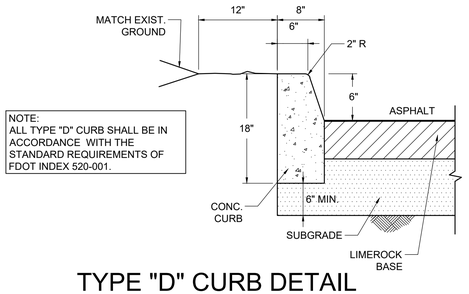


4 CURB HIGH WALL DETAIL
NOT TO SCALE



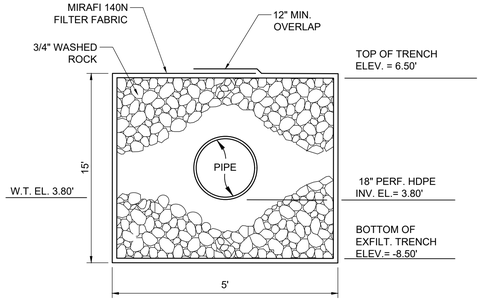
NOTE:
ALL DROP CURB SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF FDOT INDEX 520-001.

6 DROP CURB DETAIL PER FDOT INDEX No. 520-001
NOT TO SCALE

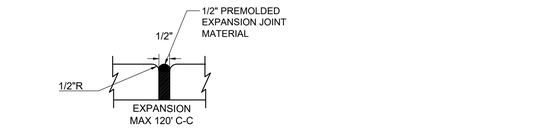


NOTE:
ALL TYPE "D" CURB SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF FDOT INDEX 520-001.

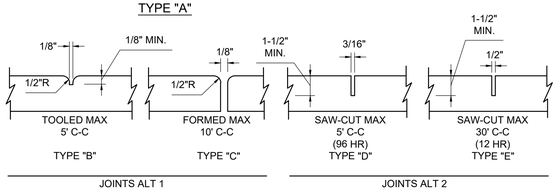
5 TYPE "D" CURB DETAIL PER FDOT INDEX No. 520-001
NOT TO SCALE



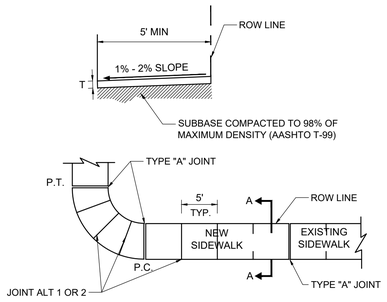
9A EXFILTRATION TRENCH #1 DETAIL
NOT TO SCALE



TYPE "A"



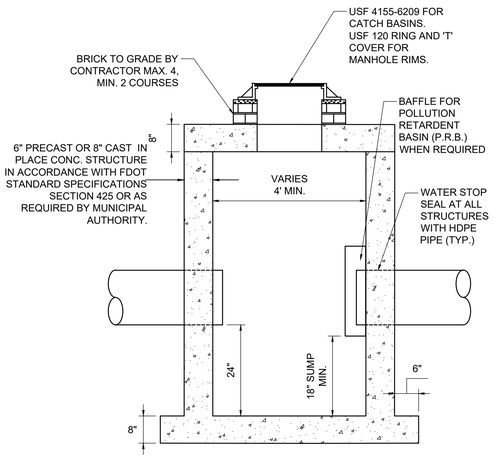
CONCRETE PAVEMENT & SIDEWALK JOINTS



SIDEWALK PLAN

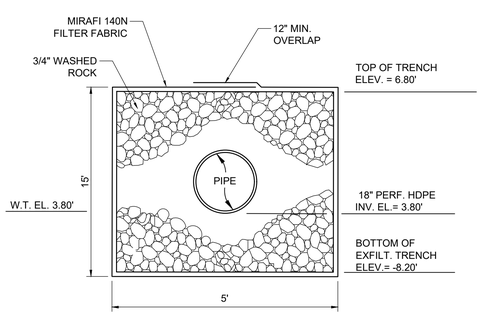
NOTES:
1. Sidewalk construction is to comply with the latest FDOT standards for sidewalks and ADA curb ramps, per FDOT index 522-001 and 522-002.
2. Provide either joint alternate 1 or 2. If using joint alternate 2: construct type "E" joints at not more than 30' intervals - within 12 hours after finishing, construct 1/2" expansion, provide joint type "A", with non-rising performed joint filler at not more than 120' intervals, construct remaining joints within 96 hours after finishing.
3. Provide 1/2" expansion joint type "A", with non-rising performed joint filler where concrete pavement abuts concrete curbs, driveways and other fixed objects.
4. Sidewalk thickness shall be 4" thick unless otherwise noted. Thickness shall be 6" through driveways and on all commercial sidewalk applications.
5. The use of steel reinforcement is not permitted.
6. Concrete to be 3,000 psi in 28 days.
7. Cure all concrete with approved method.
8. Sidewalk foundation shall be compacted to a firm, even surface, true to grade and cross section, and shall be moist at the time concrete is placed.
9. All construction shall conform to local construction codes and standards.
10. Sidewalk slopes shall meet the requirements of the Americans with Disabilities Act. Minimum transverse slope 0.01 ft./ft. And maximum transverse slope 0.02 ft./ft. toward swale or gutter. Longitudinal slope shall conform to ADA requirements.
11. The vertical deviation for a new sidewalk shall not be more than ½".
12. The vertical deviation for a new maintenance access structure cover shall not be more than ¼".
13. Where truncated domes are used, stamped concrete is not permitted. Truncated domes to be cast with the concrete.
14. Sidewalk shall have a transverse hair broom finish.

7 SIDEWALK DETAIL
NOT TO SCALE



NOTES:
1. STRUCTURE MANUFACTURER AND/OR CONTRACTOR SHALL CONFIRM ALL STEEL REINFORCEMENT MEETS FDOT STANDARDS PER INDEX 425-010, SECTION 415 AND 425 PRIOR TO SUBMITTING ANY SHOP DRAWINGS FOR APPROVAL.
2. LOCKING GRATES TO BE PROVIDED.

8 CATCH BASIN / DRAINAGE MANHOLE DETAIL
NOT TO SCALE



11B EXFILTRATION TRENCH #2 DETAIL
NOT TO SCALE

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REVISIONS :

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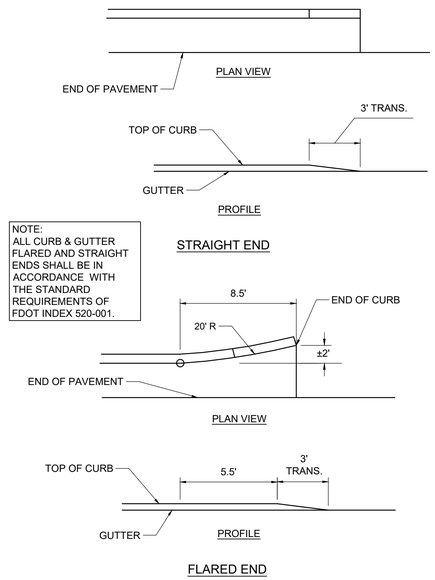
CP-501

PAVING, GRADING, AND DRAINAGE DETAILS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

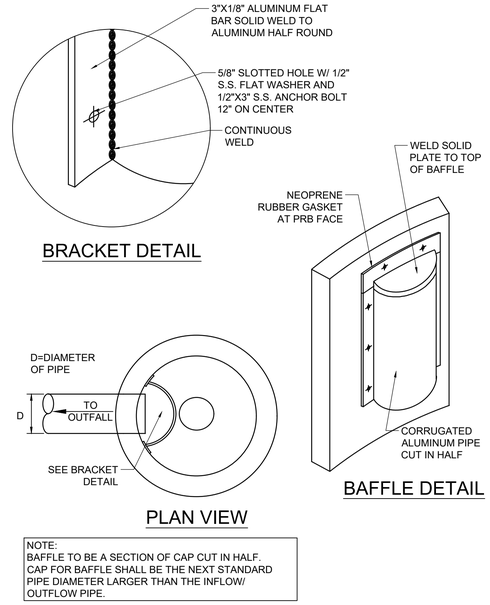
STATUS: PERMIT



NOTE:
ALL CURB & GUTTER FLARED AND STRAIGHT ENDS SHALL BE IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF FDOT INDEX 520-001.

10 CURB & GUTTER FLARED AND STRAIGHT ENDS

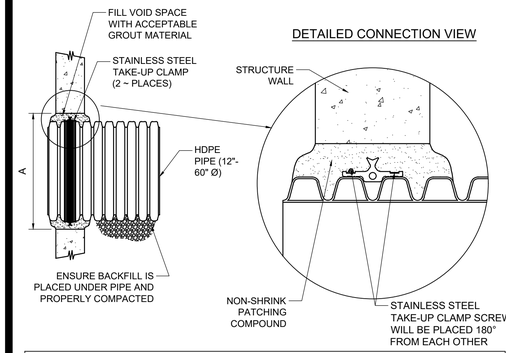
NOT TO SCALE



NOTE:
BAFFLE TO BE A SECTION OF CAP CUT IN HALF. CAP FOR BAFFLE SHALL BE THE NEXT STANDARD PIPE DIAMETER LARGER THAN THE INFLOW/ OUTFLOW PIPE.

14 POLLUTION RETARDENT BAFFLE DETAIL

NOT TO SCALE



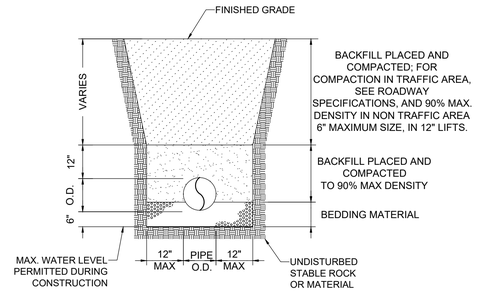
NOTES:
PERFORMANCE HIGHLY DEPENDENT ON INSTALLATION. CONTRACTOR MUST ENSURE MANHOLE GASKET IS UNIFORMLY SEATED AROUND STRUCTURE ADAPTER. EXTRA PRECAUTIONS MUST BE TAKEN TO PREVENT DIFFERENTIAL SETTLEMENT BETWEEN THE PIPE AND MANHOLE.

SEE ADS STANDARD DETAIL STD-201 AND ADS INSTALLATION GUIDE 1.05: WATERSTOP INSTALLATION FOR INSTALLATION RECOMMENDATIONS.

PIPE SIZE	PIPE OD		"A" MIN. HOLE DIA.	MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT
	A-PROFILE	H-PROFILE		
12"	14.5"	N/A	19.5"	3.7"
15"	17.6"	N/A	23.00"	4.0"
18"	21.2"	N/A	26.50"	4.2"
24"	27.8"	N/A	33.25"	4.5
30"	35.1"	N/A	40.50"	5.2"
36"	41.1"	41.1"	47.00"	5.5"
42"	47.7"	48.0"	53.00"	5.7"
48"	53.6"	54.0"	59.00"	5.7"
60"	66.3"	67.3"	72.00"	6.4"

16 GROUTED MANHOLE CONNECTION (HDPE PIPE) DETAIL

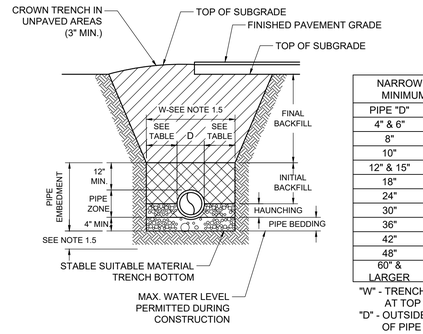
NOT TO SCALE



NOTES:
1. WHERE SOIL CONDITION CANNOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED MEANS OF CONSTRUCTION.
2. WHERE REQUIRED SHEETING AND SHORING SHALL BE IN ACCORDANCE WITH THE LOCAL GOVERNMENTAL AGENCY.
3. MUCK OR OTHER UNSUITABLE MATERIAL SHALL BE COMPLETELY REMOVED.
4. WHEN THE PIPE IS LAID IN THE PREPARED TRENCH, TRUE TO LINE AND GRADE, THE PIPE BARREL SHALL RECEIVE CONTINUOUS UNIFORM SUPPORT. WHERE NECESSARY, COURSE SAND, PEA ROCK OR 3/4" LIMESTONE GRAVEL SHALL BE USED TO PROVIDE UNIFORM BEDDING.
5. JOINTS MAY BE REQUIRED TO BE WRAPPED AT THE DISCRETION OF THE DISTRICT AND THE SITE CONDITIONS.
6. BACKFILL MATERIAL SHALL BE NON-COHESIVE AND NON-PLASTIC SOIL THAT IS FREE OF ALL DEBRIS, LUMPS, WOOD BROKEN PAVING OR ANY ORGANIC OR UNSUITABLE MATERIAL. BACKFILL MATERIAL PLACED WITHIN 12" OF THE PIPE SHALL CONTAIN NO ROCKS OR STONES LARGER THAN 3-1/2" INCHES IN DIAMETER. NO ROCKS OR STONES LARGER THAN 6" IN DIAMETER WILL BE PERMITTED IN THE REMAINING BACKFILL UNLESS OTHERWISE SPECIFIED.
7. TRENCH BACKFILL SHALL BE COMPACTED TO NOT LESS THAN 90 PERCENT OF THE MAXIMUM DRY DENSITY DETERMINED BY AASHTO T-180. BACKFILL AND COMPACTION SHALL BE IN ACCORDANCE TO THE STANDARD ENGINEERING DESIGN REQUIRED BY THE LOCAL GOVERNMENTAL AGENCY.

29 PIPE TRENCH EXCAVATION DETAIL

NOT TO SCALE



NARROW TRENCH MINIMUM WIDTH	
PIPE "D"	WIDTH "D"
4" & 6"	18"
8"	24"
10"	26"
12" & 15"	30"
18"	32"
24"	36"
30"	42"
36"	48"
42"	54"
48"	60"
60" & LARGER	1.3 TIMES PIPE O.D.

"W" - TRENCH WIDTH AT TOP OF PIPE
"D" - OUTSIDE DIAMETER OF PIPE

1. NOTES - PRESSURE FLOW AND STORM SEWER PIPE.

1.1. GENERAL: TRENCH CONSTRUCTION SHALL BE IN CONFORMANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 125. PVC PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH THE UNI-BELL PVC PIPE ASSOCIATION, HANDBOOK OF PVC PIPE, DESIGN AND CONSTRUCTION. CONCRETE PIPE INSTALLATION SHALL BE IN ACCORDANCE WITH ANSI / ASCE 15-93.

1.2. PIPE BEDDING: PROVIDE BELL HOLES AT EACH JOINT, FOR PIPES LARGER THAN 4" IN DIAMETER, TO PERMIT PROPER ASSEMBLY AND PIPE SUPPORT.

1.3. HAUNCHING: USE MATERIAL MEETING THE CLASSIFICATION OF A-3 IN ACCORDANCE WITH ASTM D3282 (AASHTO M-145). MAXIMUM PARTICAL SIZE SHALL BE LESS THAN 1.5 INCHES.

1.4. INITIAL BACKFILL: USE SAME MATERIAL AS SPECIFIED FOR FINAL BACKFILL (SEE NOTE 1.9).

1.5. UNSUITABLE SOIL EXCAVATION: SE SHEET PD-2 FOR ADDITIONAL REQUIREMENTS. MINIMUM DIMENSIONS SHALL BE THE LARGER OF THE REQUIREMENTS SHOWN ON THIS SHEET AND SHEET PD-2.

30 TRENCH SECTION FOR BURIED PIPES AND CULVERTS

NOT TO SCALE

2. GENERAL NOTES:

2.1. TRENCH WALLS - EXCAVATE TRENCH TO ENSURE SIDES WILL BE STABLE UNDER WORKING CONDITIONS. TRENCH WALLS TO BE SLOPED OR SUPPORTED IN ACCORDANCE WITH THE CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT) AND FEDERAL OSHA STANDARD CFR SECTION 1926.650 SUBPART - P.

2.2. DEWATERING: WHEN RUNNING OR STANDING WATER OCCURS IN THE TRENCH BOTTOM, OR THE TRENCH BOTTOM DISPLAYS A "QUICK" CONDITION, WATER SHALL BE REMOVED TO BELOW THE PIPE INVERT BY A SUITABLE MEANS, UNTIL THE PIPE IS BACKFILLED TO A SUFFICIENT HEIGHT TO PREVENT PIPE FLOATATION.

2.3. MINIMUM TRENCH WIDTH: PROVIDE A TRENCH WIDTH SUFFICIENT, BUT NO WIDER THAN NECESSARY, TO ENSURE WORKING ROOM TO PROPERLY AND SAFELY PLACE AND COMPACT HAUNCHING BACKFILL MATERIAL. SEE TABLE FOR MINIMUM TRENCH WIDTHS. WHERE SOIL CONDITIONS REQUIRE TRENCH WALLS TO BE SUPPORTED, MINIMUM WIDTH SHALL BE BETWEEN INNER FACE OF TRENCH SUPPORTS.

2.4. MOVABLE SHEETING, TRENCH BOXES OR SHIELDS: WHEN MOVABLE TRENCH SUPPORT IS USED, THE MINIMUM DISTANCE BETWEEN INNER FACE OF TRENCH SUPPORT, AND THE OUTER PIPE WALL, SHALL BE AT LEAST ONE PIPE DIAMETER OR 2 FEET WHICH EVER IS GREATER.

2.5. PREPARATION OF TRENCH BOTTOM: TRENCH BOTTOM SHALL BE PREPARED TO PROVIDE A FIRM STABLE UNIFORM FOUNDATION THE FULL LENGTH OF THE PIPE. IF UNSUITABLE MATERIAL IS ENCOUNTERED AT BOTTOM OF TRENCH, CONTINUE TO EXCAVATE TILL SUITABLE MATERIAL IS ENCOUNTERED. IF DEPTH TO SUITABLE MATERIAL IS GREATER THAN 2 FEET BELOW BOTTOM OF TRENCH, NOTIFY ENGINEER OF SUCH CONDITION BEFORE CONTINUING FURTHER TRENCH EXCAVATION.

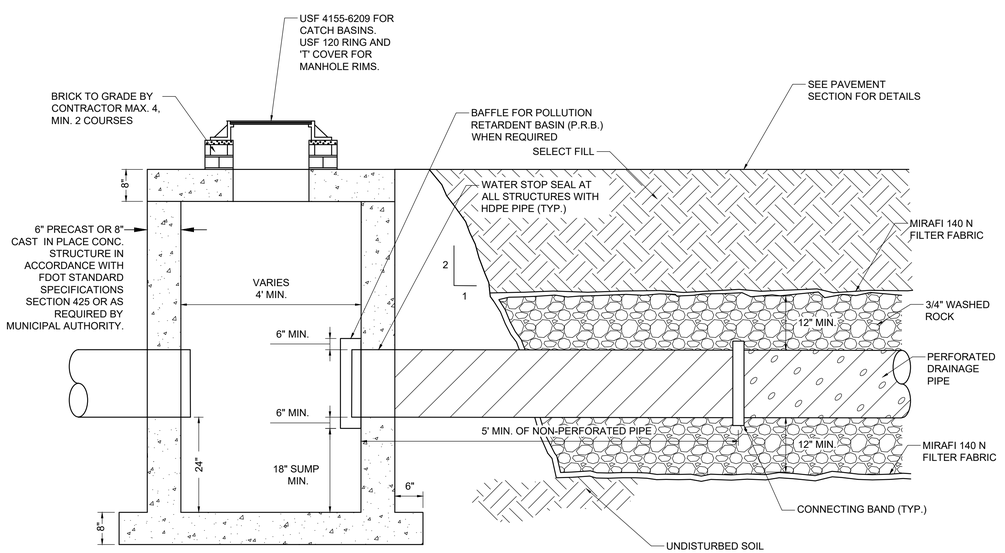
2.6. PIPE BEDDING: BEDDING MATERIAL SHALL CONFORM TO ASTM D-2321, AND MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. FOR PVC AND OTHER "FLEXIBLE" PIPES, EXCAVATE 4" BELOW PROPOSED OUTSIDE BOTTOM OF PIPE, BACKFILL AND COMPACT WITH SPECIFIED BEDDING MATERIAL TO PROPER GRADE.

2.7. HAUNCHING: MATERIAL SHALL MEET AND BE INSTALLED AND COMPACTED INACCORDANCE WITH THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. PLACE AND CONSOLDATE MATERIAL UNDER THE PIPE HAUNCH, UP TO THE PIPE SPRINGLINE, FOR THE FULL WIDTH OF THE TRENCH, BEFORE PLACING AND COMPACTING THE REMAINDER OF THE EMBEDMENT IN THE PIPE ZONE. HAUCHING MATERIAL SHALL BE PLACED AND CONSOLIDATED BY HAND SHOVEL SLICING ALONG HAUNCH OF PIPE AND BY WATERING (JETTING OR PUDDLING) OR HAND TAMPING. MECHANICAL COMPACTION IS NOT TO BE USED WITHIN 1 PIPE DIAMETER OR 2 FEET, WHICH EVER IS GREATER, EITHER SIDE OF THE OUTSIDE WALL OF THE PIPE.

2.8. INITIAL BACKFILL: SHALL EXTEND FROM THE SPRINGLINE OF THE PIPE TO 1 FOOT ABOVE THE TOP OF PIPE. MATERIAL SHALL BE PLACED AND CONSOLIDATED AS SPECIFIED FOR THE HAUNCHING MATERIAL.

2.9. FINAL BACKFILL: MATERIAL SHALL MEET AND BE INSTALLED AND COMPACTED INACCORDANCE WITH THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 125-8 BACKFILLING. SELECT BACKFILL MEETING THE CLASSIFICATION OF A-1, A-3, OR A-2-4 IN ACCORDANCE WITH ASTM D3282 (AASHTO M-145). THE MATERIAL MUST NOT CONTAIN MUCK, STUMPS, ROOTS, BRUSH, VEGITABLE MATTER, RUBBISH, CONSTRUCTION DEBRI OR OTHER MATERIAL THAT WILL NOT COMPACT INTO A SUITABLE EMBANKMENT. MATERIAL MUST HAVE MAXIMUM PARTICLE SIZE AS FOLLOWS: WITHIN 12" OF TOP OF SUBGRADE - 31/2"; 12" TO 24" BELOW TOP OF SUBGRADE - 6"; GREATER THAN 24" BELOW TOP OF SUBGRADE - 12" OR COMPACTED THICKNESS OF LAYER BEING PLACED, WHICH EVER IS LESS. FINAL BACKFILL MAY BE NATIVE MATERIAL MEETING THE SPECIFIED REQUIREMENTS. UNLESS OTHERWISE NOTED.

2.10. COMPACTION TEST: COMPACTION PERCENTAGES SHOWN FOR TRENCH SECTION BACKFILL MATERIAL REFER TO ASTM - D698 (AASHTO - T-99, STANDARD PROCTOR). COMPACTION PERCENTAGES FOR LIMEROCK BASE COURSE MATERIAL REFER TO ASTM - D1557 (AASHTO -T-180, MODIFIED PROCTOR).



15 CATCH BASIN W/ PRB AND EXFILTRATION TRENCH

NOT TO SCALE

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

REVISIONS

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:47 PM

STILES
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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

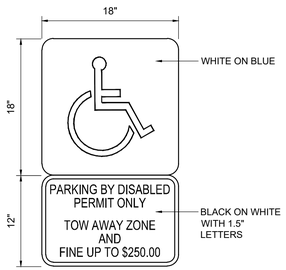
Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CP-5XX.dwg

CP-502

PAVING, GRADING, AND DRAINAGE DETAILS

PROJECT NO. 11916.00
DRAWN BY : AARON K.
CHECKED BY : CARLOS M.
DATE : 11/16/2021

STATUS: PERMIT

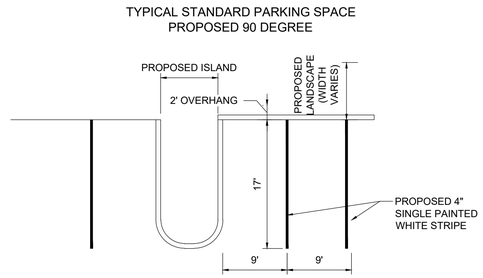


NOTES:

1. TOP PORTION OF SIGN SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL.
2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. SIGN MAY BE FABRICATED ON ONE PANEL OR TWO.
4. SIGNS ARE TO BE MOUNTED AT A HEIGHT OF 5 FT. MINIMUM FROM PAVEMENT TO BOTTOM OF SIGN.

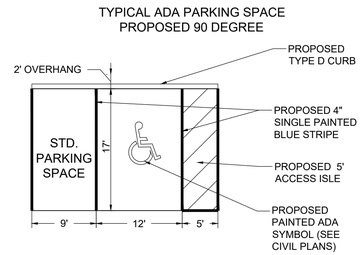
26 HANDICAP PARKING SIGN DETAIL

NOT TO SCALE



24 TYPICAL STANDARD PARKING SPACE DETAIL

NOT TO SCALE



25 TYPICAL ADA PARKING SPACE DETAIL

NOT TO SCALE

REVISIONS :

REVISIONS

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

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CP-503

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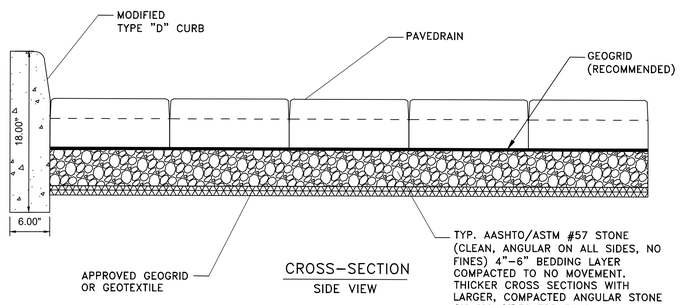
PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT



CROSS-SECTION
SIDE VIEW

PATENTED PAVEDRAIN
STANDARD DETAIL
CURB SECTIONS
SCALE: AS SHOWN

PAVE DRAIN
STORMWATER'S ABOVE EVENT
PH: (800) 573-5339
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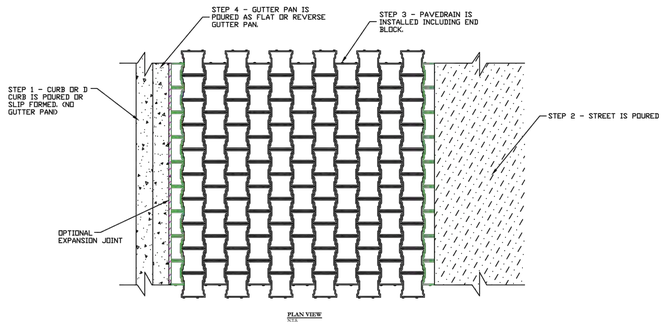
Email: info@pavedrain.com



CROSS-SECTION
NTS

PATENTED PAVEDRAIN
STANDARD DETAIL
CURB & GUTTER
SCALE: N.T.S.

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CROSS-SECTION
SIDE VIEW

CROSS-SECTION
END VIEW

PAVEDRAIN
STANDARD DETAIL
CROSS-SECTIONS
SCALE: N.T.S.

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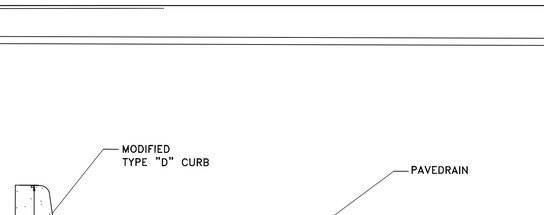
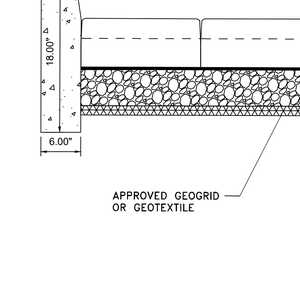


SIDE VIEW "A"

SIDE VIEW "B"



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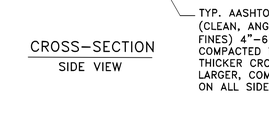
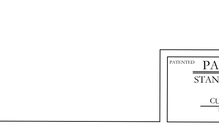
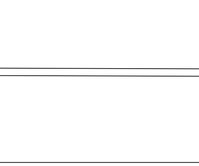


END VIEW



END VIEW



PATENTED PAVEDRAIN
STANDARD DETAIL
ARCHED BLOCK
DIMENSIONS
SCALE: AS SHOWN

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STORMWATER'S ABOVE EVENT
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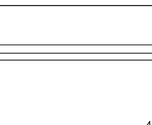
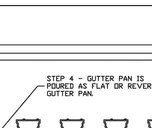
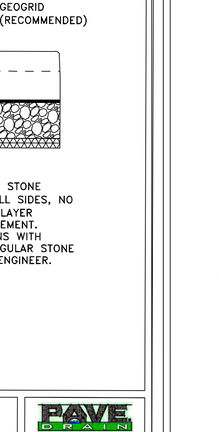


SIDE VIEW "A"



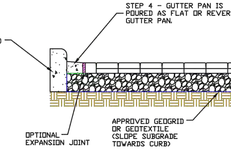
SIDE VIEW "B"



INSTALLED

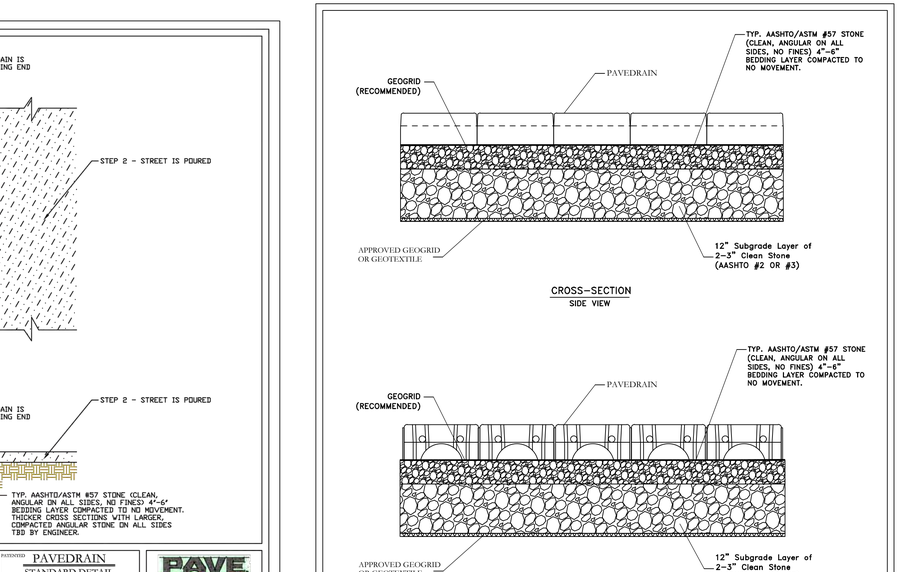
FRONT VIEW

BACK VIEW



PATENTED PAVEDRAIN
STANDARD DETAIL
END BLOCK
DIMENSIONS
SCALE: AS SHOWN
WWW.PAVEDRAIN.COM

PAVE DRAIN
STORMWATER'S ABOVE EVENT
4880 W. ABBOTT AVE;
GREENFIELD, WI. 53220
(414) 423-6531
WWW.PAVEDRAIN.COM



PATENTED PAVEDRAIN
STANDARD DETAIL
PAVEDRAIN
MANHOLE DETAIL
SCALE: N.T.S.

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State of Florida Certificate of
Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

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STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Civil\11916.00-CP-SSX.dwg

CP-504

PAVING, GRADING, AND DRAINAGE DETAILS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CU-102

EXIST. 6" PVC C.O.
INV. EL = 4.10'

EXIST. 6" PVC C-900
SAN. LATERAL

PROP. 6" PVC(C-900) C.O.
PER WASD SS 1.0 (TYP.)

PROPOSED BUILDING
F.F.E. = 10.00 NGVD

EXIST. 12" WASD EASEMENT
WASD E14493-1 = 8.46'
WASD ES9390-1 = 7.76' (N)

VH #.3

N01°43'13"W 484.64'

EXIST. 6" DIP FIRE LINE TO BE
UTILIZED FOR PROP. BUILDING

EXIST. 2" HDPE DOMESTIC
WATER SERVICE TO BE
UTILIZED FOR PROP. BUILDING

N01°43'13"W 481.55'

EXIST. 12' WASD EASEMENT

S89°20'56"W 271.74'

PROPERTY LINE (TYP.)

℄ NW 12TH ST.

NW 12TH ST.

40'
RIGHT-OF-WAY PER
PLAT BOOK 117,
PAGE 84

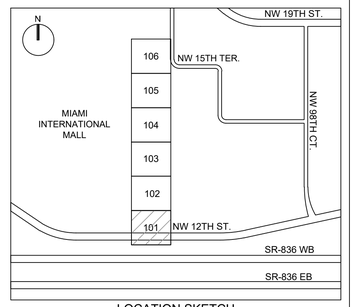
40'
RIGHT-OF-WAY PER
PLAT BOOK 117,
PAGE 84

100.0'
RAILROAD RIGHT-OF-WAY
AS SHOWN ON PLAT
BOOK 117,
PAGE 84

MD-WASD AGGREEMENT ID#24152

GRAPHIC SCALE
0 20 40
SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

REVISIONS :

THOMAS F. DONAHUE, P.E.
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LEHMAN DORAL
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DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CU-1XX.dwg

CU-101

WATER AND
SEWER PLANS

KEITH
5805 Blue Lagoon Drive, Suite 218
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(954) 788-3400
State of Florida Certificate of
Authorization Number - 7928

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CU-103

NO PROPOSED WATER & SEWER IMPROVEMENTS ON SHEET CU-102

N01°43'13"W 358.49'

PROPERTY LINE (TYP.)

N01°43'13"W 358.49'

N01°43'13"W 484.64'

N90°00'00"E 226.80'

N90°00'00"E 271.82' WEST 273.20' (LEGAL)

N90°00'00"W 271.82'

S90°00'00"W 3.02'

EXIST. 12" W.A.S.D EASEMENT

PROPERTY LINE (TYP.)

EXIST. 12" W.A.S.D EASEMENT

EXIST. SAN. MH
RIM ELEV. = 8.34'
INV. ELEV. = 2.67' (SE)
WASD ES9390-1

EXIST. SAN. MH #2
RIM ELEV. = 8.96'
INV. ELEV. = 3.11' (W)
INV. ELEV. = 3.18' (S)
WASD ES9390-1

EXIST. SAN. MH #1
RIM ELEV. = 8.21'
INV. ELEV. = 2.73' (NW)
INV. ELEV. = 2.92' (S)
WASD ES9390-1

EXIST. 8" PVC C-900
SAN. SEWER
WASD ES9390-1

EXIST. 15" WASD EASEMENT

PROPOSED BUILDING
F.F.E. = 10.00 NGVD

N01°43'13"W 481.55'

EXIST. 15' UTILITY EASEMENT

EXIST. 12' WASD EASEMENT

MATCHLINE: REF. SHEET CU-101

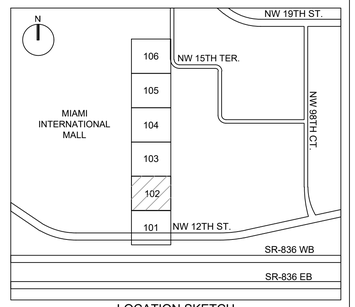
MD-WASD AGGREEMENT ID#24152

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

REVISIONS :

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NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

10155 NW 12th STREET
DORAL, FLORIDA 33172

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CU-102

WATER AND SEWER PLANS

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Miami, FL, 33126
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State of Florida Certificate of Authorization Number - 7928

PROJECT NO.
11916.00

DRAWN BY :
AARON K.

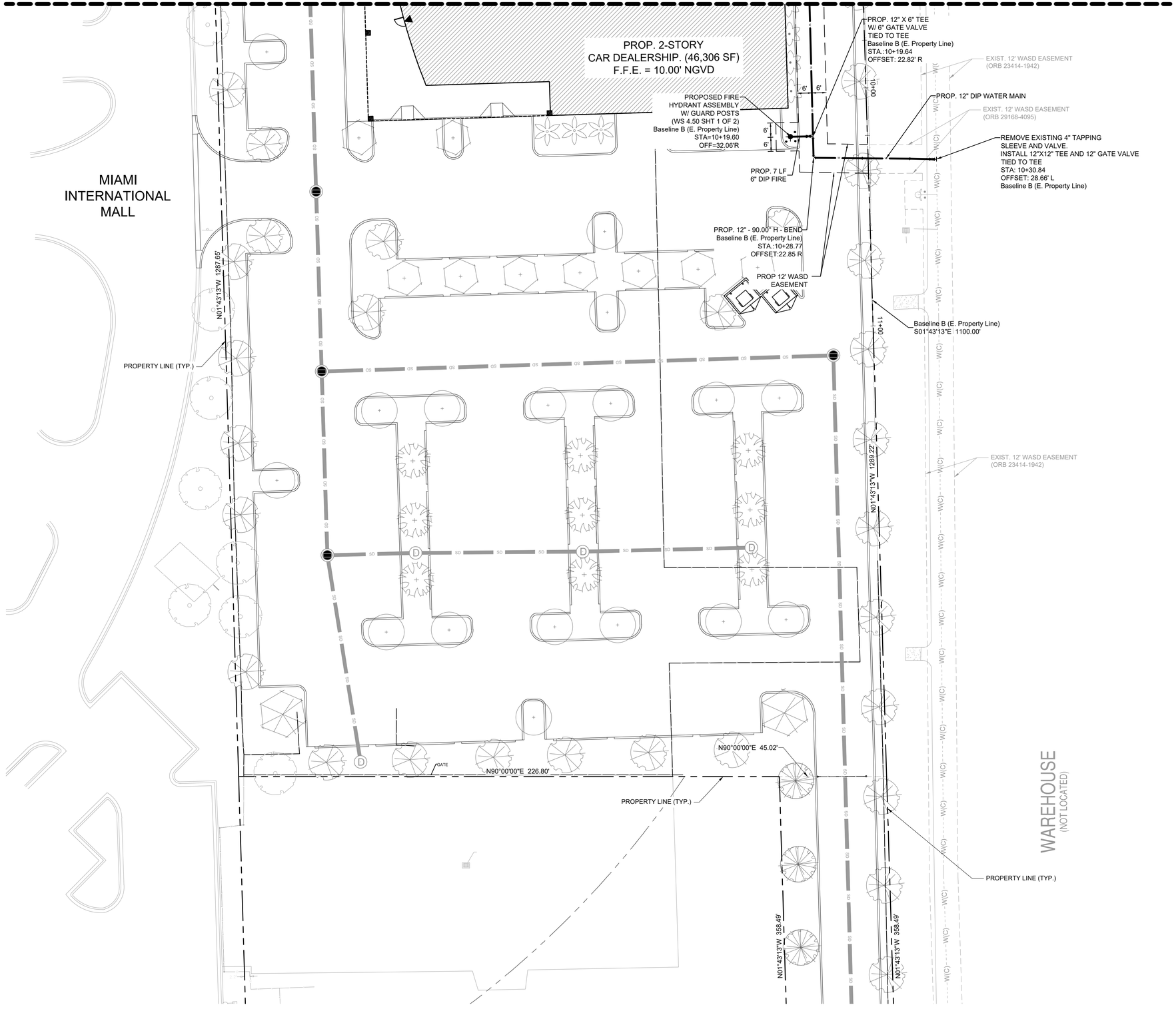
CHECKED BY :
CARLOS M.

DATE :
11/16/2021

STATUS: PERMIT

MD-WASD AGGREEMENT ID#24152

MATCHLINE: REF. SHEET CU-104



N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.

DATUM NOTE:
ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 1929).

NOTES:

1. ALL EXISTING MAINS BEING IMPACTED BY THIS PROJECT AND ALL PROPOSED WATER AND SEWER FORCE MAINS AND FITTINGS TO BE RESTRAINED PER GS 2.0
2. ALL DUCTILE IRON PIPE (DIP) WATER & SEWER PIPE TO BE PRESSURE CLASS 350

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

STILES
ARCHITECTURAL GROUP
301 East Las Olas Blvd
Fort Lauderdale, Florida. 33301
954 - 627- 9180
FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

10155 NW 12th STREET
DORAL, FLORIDA 33172

CU-103

WATER AND SEWER PLANS

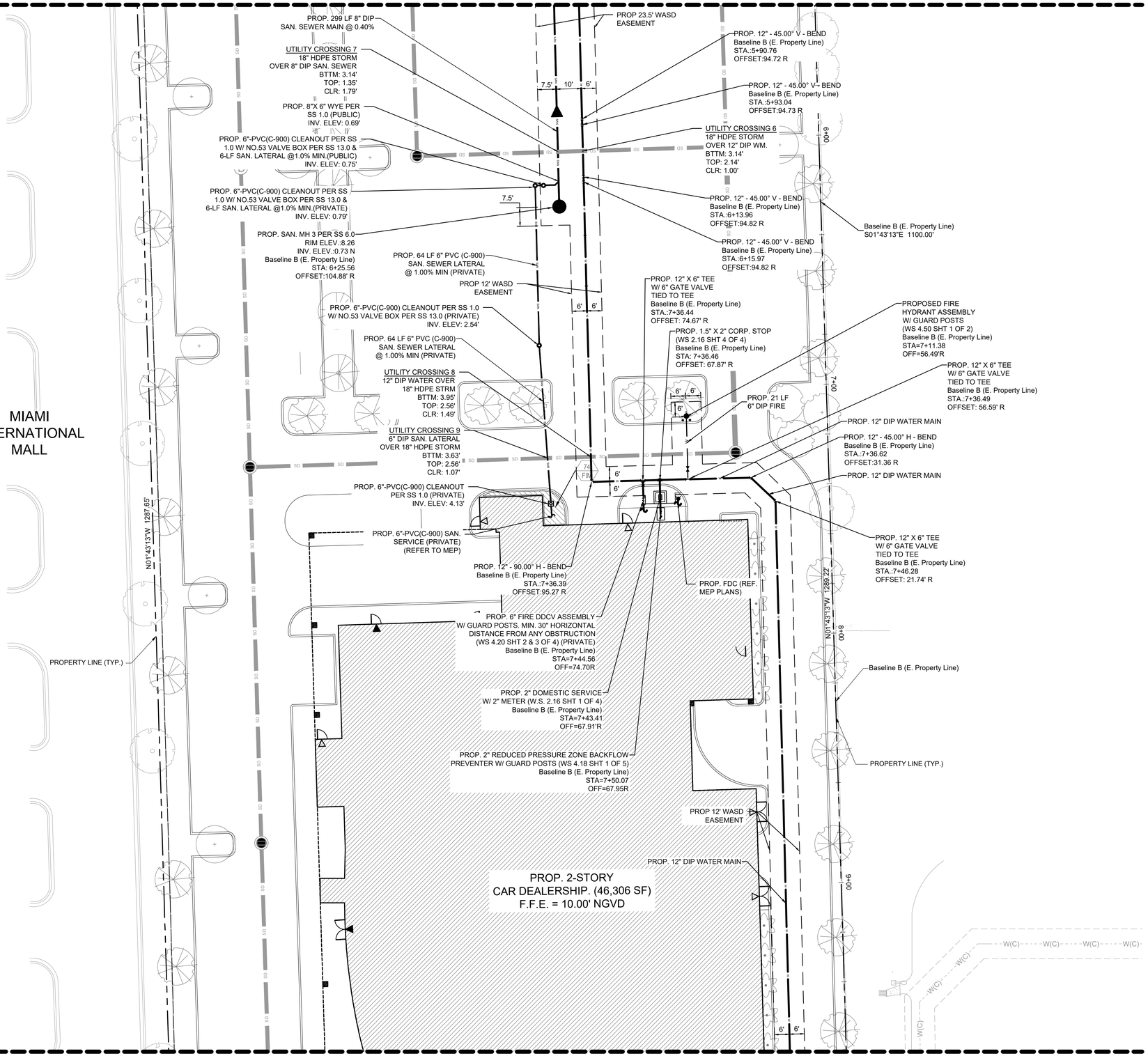
PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE. :
11/16/2021

STATUS: PERMIT

Plotted by: akosh On 11/15/2021 7:49 PM

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CU-1XX.dwg

MATCHLINE: REF. SHEET CU-105



MATCHLINE: REF. SHEET CU-103

MD-WASD AGGREEMENT ID#24152

N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

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CU-104

WATER AND
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11/16/2021

STATUS: PERMIT

Plotted by: akosh On 11/15/2021 7:49 PM

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Civil\11916.00-CU-1XX.dwg

MD-WASD AGGREEMENT ID#24152

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

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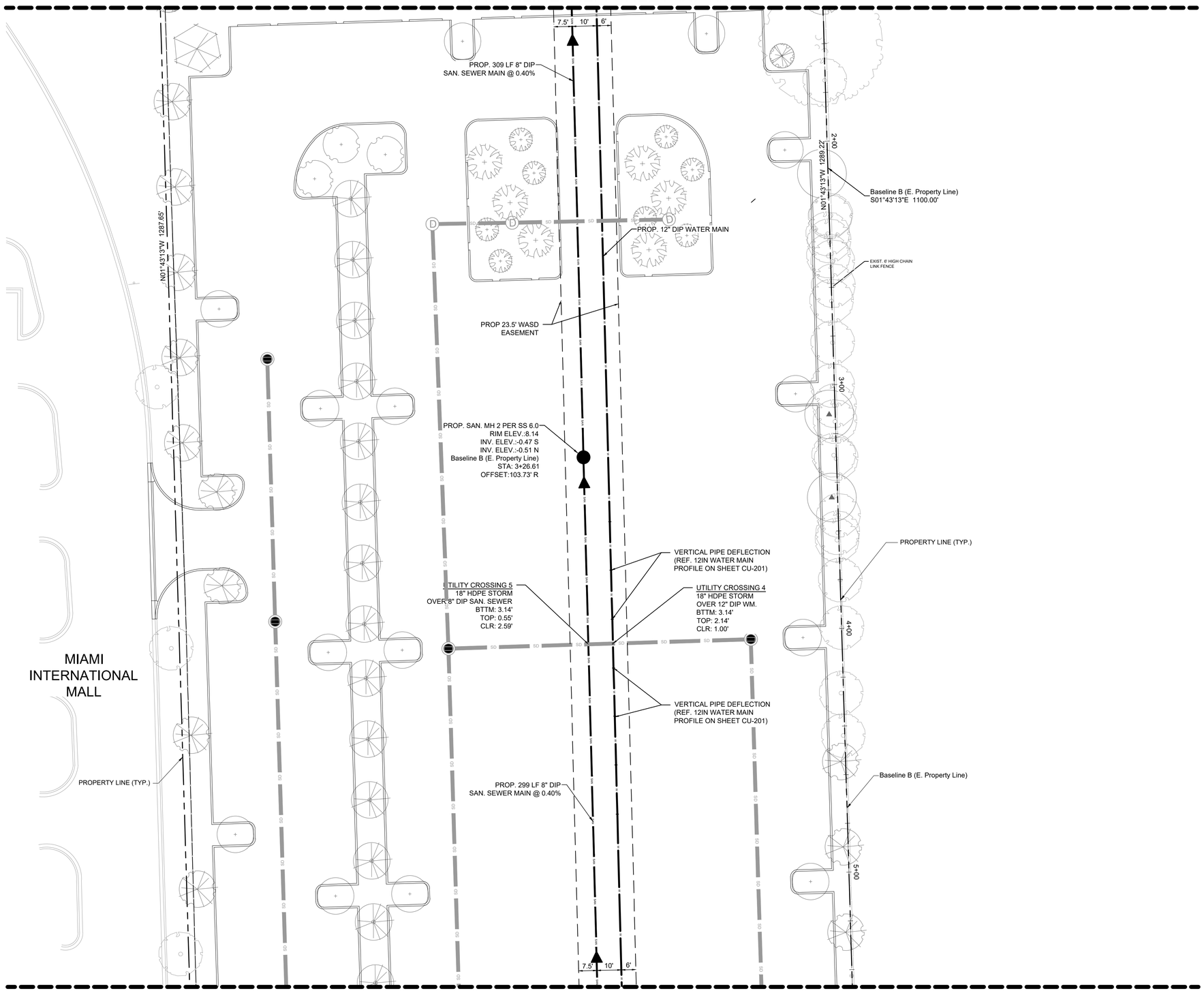
N

MATCHLINE: REF. SHEET CU-106



MATCHLINE: REF. SHEET CU-104

DATUM NOTE:
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SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
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DORAL, FLORIDA 33172

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CU-105

WATER AND SEWER PLANS

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11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

MD-WASD AGGREEMENT ID#24152

GRAPHIC SCALE

0 20 40

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N.W. 102nd AVE.

EXIST. STRM. MH
RIM ELEV. = 7.59'

EXIST. SAN. MH
RIM ELEV. = 7.49'
INV. ELEV. = (-) 6.80' (N)(S)
INV. ELEV. = (-) 6.80' (E)
WASD ES7154-1

35.00' HALF-ROW

35.00' HALF-ROW

EXIST. GAS LINE TO REMAIN. CONTRACTOR TO FIELD VERIFY AND ADJUST AS REQUIRED TO INSTALL PROP. 12" WATER MAIN & 8" SAN. SEWER MAIN

EXIST. FIRE HYDRANT
WASD E10681-1

EXIST. 10" DIP SAN. SEWER
WASD ES7154-1

UTILITY CROSSING 2
EXIST. 2" GAS OVER
8" DIP SAN. SEWER
BTTM: 4.65
TOP: -3.66'
CLR: 8.31'

UTILITY CROSSING 3
EXIST. 12" DIP WATER
OVER 8" DIP SAN. SEWER
BTTM: 1.23'
TOP: -3.68'
CLR: 4.91'

R/W LINE (TYP.)

NW 15th TER. CL STA: 1+23.27
= Baseline A (N. Property Line) STA: 0+00

Baseline A (N. Property Line) STA: 1+78.47
= Baseline B (E Property Line) STA: 0+00

Baseline A(N. Property Line)
S89°40'07"W 450.24'

PROPERTY LINE (TYP.)

4+50.24 4+00 N89°40'10"E 271.77' 3+00 2+00 1+00 0+00

Baseline A (N. Property Line)

R/W LINE (TYP.)

CORE DRILL INTO EXIST. SAN. MH PER SS 6.2
W INV. EL.=(-)4.50-8" DIP
(WASD ES7154-1)

EXIST. SAN. MH
RIM ELEV. = 7.80'
INV. ELEV. = (-) 6.50' (N)(S)
INV. ELEV. = (-) 6.50' (E)
(WASD ES-7154-1)

PROP. 282 LF 8" DIP
SAN. SEWER MAIN @ 0.45%

7.5' 10' 6'

7.5' 10' 6'

NW 15th TER. CL

35.00' HALF-ROW

27.7' TO ℄ NW 15th TER.

N.W. 15th TER.

EXIST. 10" DIP SAN. SEWER
WASD ES-7154-1

35.00' HALF-ROW

R/W LINE (TYP.)

PROP. SAN. MH 1 PER SS 6.0
RIM ELEV.:6.99
INV. ELEV.:-1.74 S
INV. ELEV.:-3.24 E
Baseline A (N. Property Line)
STA: 2+80.54
OFFSET:20.59' L

PROP. 12" - 90.00° H - BEND
Baseline A (N. Property Line)
STA.:2+70.15
OFFSET:30.59 L

PROP 23.5' WASD EASEMENT

EXIST. 23.50' UTILITY EASEMENT

PROP. 12" DIP WATER MAIN

PROPERTY LINE (TYP.)

EXIST FENCE TO BE REPLACED WITH PROP FENCE GATE W/ POSTS OUTSIDE 23.5' WASD EASEMENT

UTILITY CROSSING 1
EXIST. 2" GAS
OVER 12" DIP WM.
BTTM: 4.65'
TOP: 3.20'
CLR: 1.45'

TAP EXISTING 12" WM W/ 12"X12" TAPPING SLEEVE AND 12" TAPPING VALVE PER WS 4.12 SHT 1 OF 2

PROP. 12" DIP WATER MAIN

PROP. 1.5" X 2" CORP. STOP
(WS 2.16 SHT 4 OF 4)
Baseline B (E. Property Line)
STA: 1+34.98
OFFSET: 92.85' R

PROP. 2" IRRIGATION SERVICE
W/ 2" METER (W.S. 2.16 SHT 1 OF 4)
STA=1+35.09
OFF=86.88R
Baseline B (E. Property Line)

PROP. 2" PRESSURE VACUUM BREAKER (W.S. 4.19 SHT 1 OF 2)
STA=1+35.31
OFF=79.21R
Baseline B (E. Property Line)

PROP. 309 LF 8" DIP
SAN. SEWER MAIN @ 0.40%

Baseline B (E. Property Line)
N01°43'13"W 1289.22'

Baseline B (E. Property Line)
S01°43'13"E 1100.00'

7.5' 10' 6'

12' WATER LINE EASEMENT PER O.R.B. 19471, PG. 921

N01°43'13"W 1287.65'

GATE

MATCHLINE: REF. SHEET CU-105

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REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:49 PM

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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING
LEHMAN DORAL
10155 NW 12th STREET
DORAL, FLORIDA 33172

CU-106

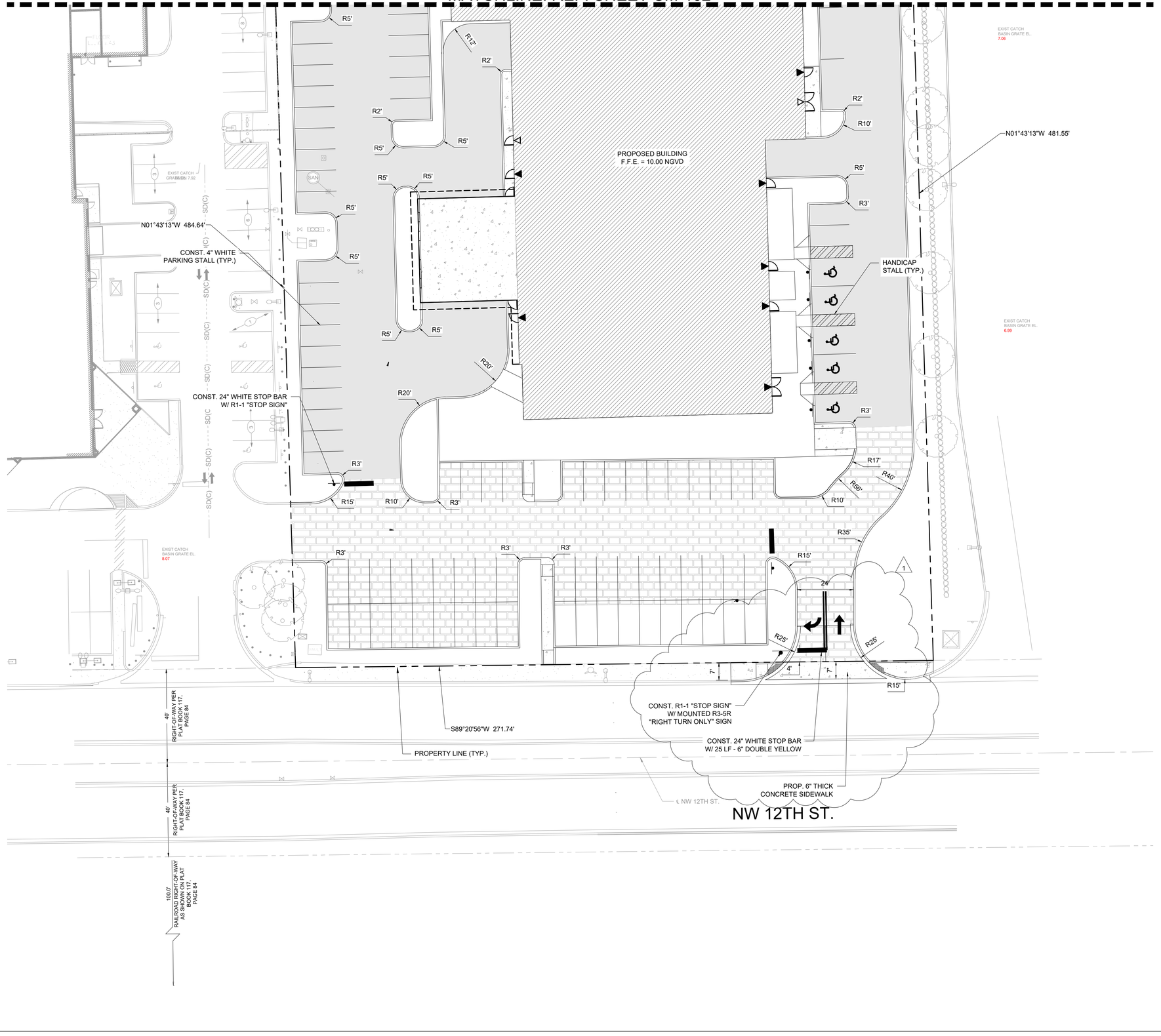
WATER AND SEWER PLANS

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\11916.00-CU-1XX.dwg

MATCHLINE: REF. SHEET CM-102



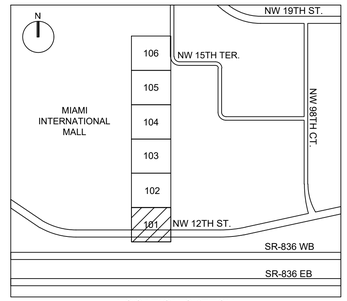
N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

REVISIONS :

1	PLANNING & ZONING COMMENTS

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 8:07 PM

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FL. REG # AA-26001798

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LEHMAN DORAL

10155 NW 12th STREET
DORAL, FLORIDA 33172

Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cad\d11916.00-CM-1XX.dwg

CM-101

PAVEMENT
MARKING &
SIGNAGE PLAN

KEITH
5805 Blue Lagoon Drive, Suite 218
Miami, FL, 33126
(954) 788-3400
State of Florida Certificate of
Authorization Number - 7928

PROJECT NO.
11916.00

DRAWN BY :
AARON K.

CHECKED BY :
CARLOS M.

DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CP-103

N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

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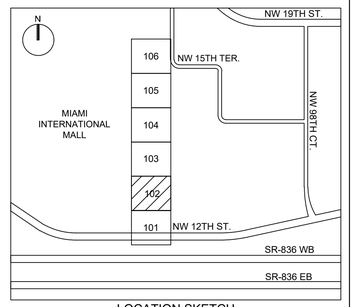

LOCATION SKETCH
(NOT TO SCALE)

PROPERTY LINE (TYP.)

N01°43'13"W 358.49'

N01°43'13"W 358.49'

N01°43'13"W 484.64'

CONST. 4" WHITE PARKING STALL (TYP.)

N90°00'00"E 226.80'

N90°00'00"E 271.82' WEST 273.20' (LEGAL)

N90°00'00"W 271.82'

S90°00'00"W 45.02'

CONST. 24" WHITE STOP BAR W/ 25 LF - 6" DOUBLE YELLOW W/ R1-1 "STOP SIGN"

PROPERTY LINE (TYP.)

CONST. 24" WHITE STOP BAR W/ R1-1 "STOP SIGN"

N01°43'13"W 481.55'

CONST. 24" WHITE STOP BAR W/ R1-1 "STOP SIGN"

PROPOSED BUILDING
F.F.E. = 10.00 NGVD

MATCHLINE: REF. SHEET CP-101

KEITH
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Miami, FL, 33126
(954) 788-3400

State of Florida Certificate of Authorization Number - 7928

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
(FOR THE FIRM)

Plotted by: akosh On 11/15/2021 7:51 PM

STILES
ARCHITECTURAL GROUP
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FL. REG # AA-26001798

NEW KIA & SUBARU
SHOWROOM & SERVICE BUILDING

LEHMAN DORAL

10155 NW 12th STREET
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Drawing name: S:\11916.00 - Lehman Doral Kia & Subaru - Stiles Architectural Group\Engineering\Cadd\11916.00-CM-1XX.dwg

CM-102

PAVEMENT MARKING & SIGNAGE PLAN

PROJECT NO.
11916.00

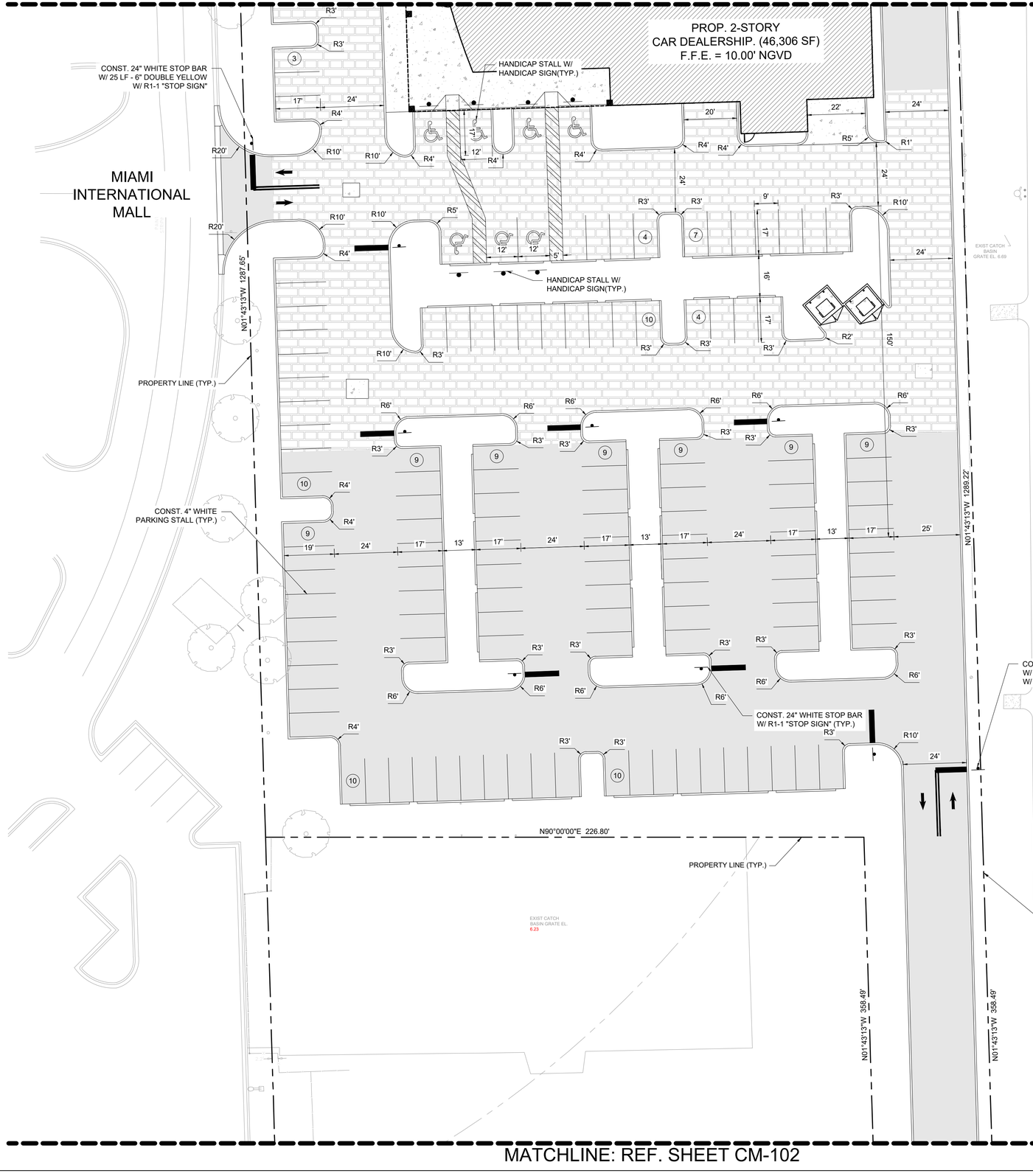
DRAWN BY :
AARON K.

CHECKED BY :
CARLOS M.

DATE :
11/16/2021

STATUS: PERMIT

MATCHLINE: REF. SHEET CM-104



MATCHLINE: REF. SHEET CM-102

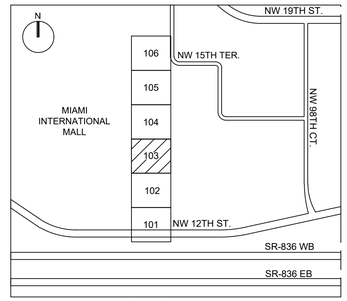
N

GRAPHIC SCALE

0 20 40

SCALE: 1" = 20 '

NOTE: PRINTED DRAWING SIZE MAY HAVE CHANGED FROM ORIGINAL. VERIFY SCALE USING BAR SCALE ABOVE.



LOCATION SKETCH
(NOT TO SCALE)

REVISIONS :

THOMAS F. DONAHUE, P.E.
FLORIDA REG. NO. 60529
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Plotted by: akosh On 11/15/2021 7:51 PM

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NEW KIA & SUBARU
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CM-103

PAVEMENT MARKING & SIGNAGE PLAN

PROJECT NO.
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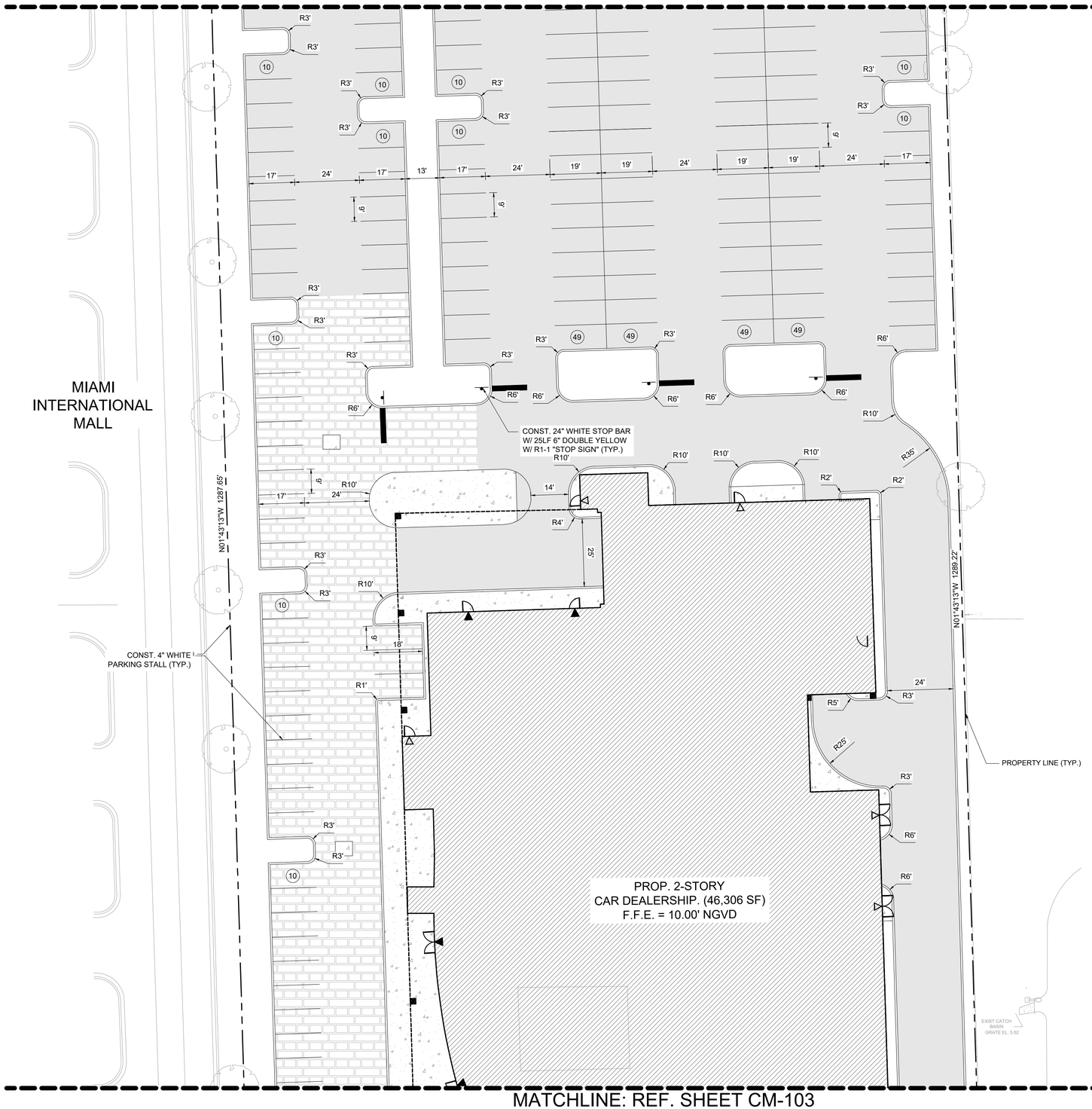
MATCH LINE: REF. SHEET CM-105



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N

GRAPHIC SCALE
0 20 40
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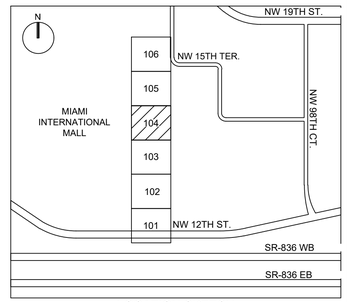

LOCATION SKETCH
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CM-104

PAVEMENT
MARKING &
SIGNAGE PLAN

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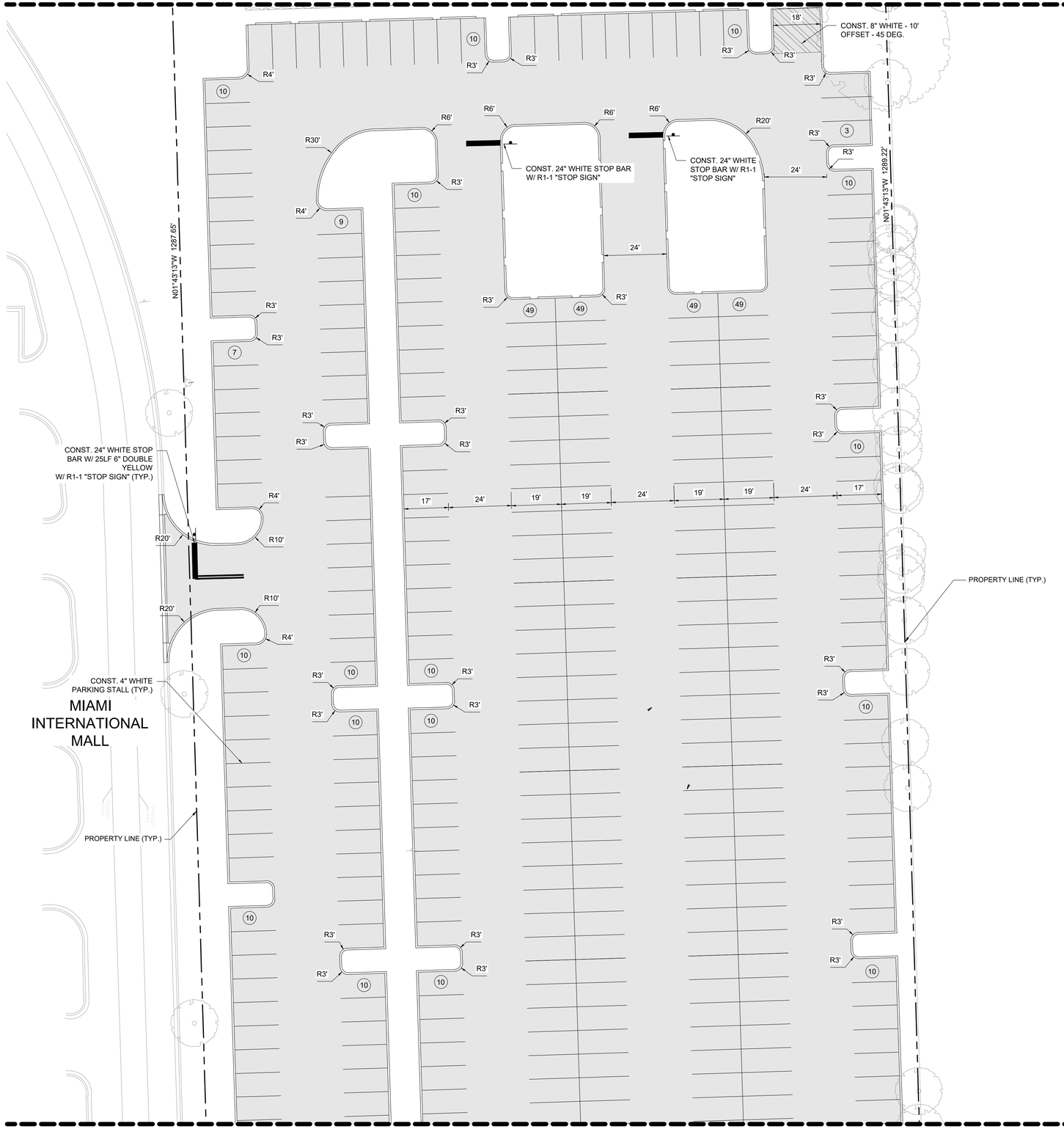

MATCHLINE: REF. SHEET CM-106

N

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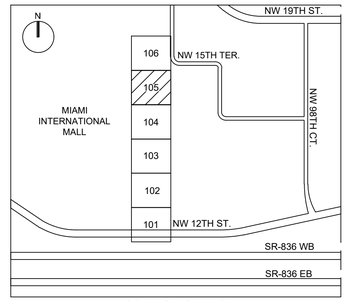

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CM-105

PAVEMENT MARKING & SIGNAGE PLAN

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT

NO PROPOSED PAVEMENT MARKING OR SIGNING ON SHEET CM-106

N

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0 20 40

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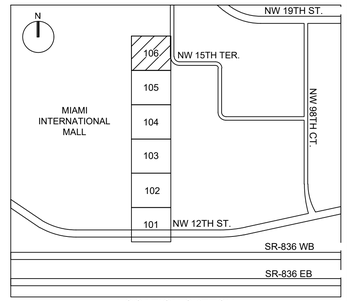

LOCATION SKETCH
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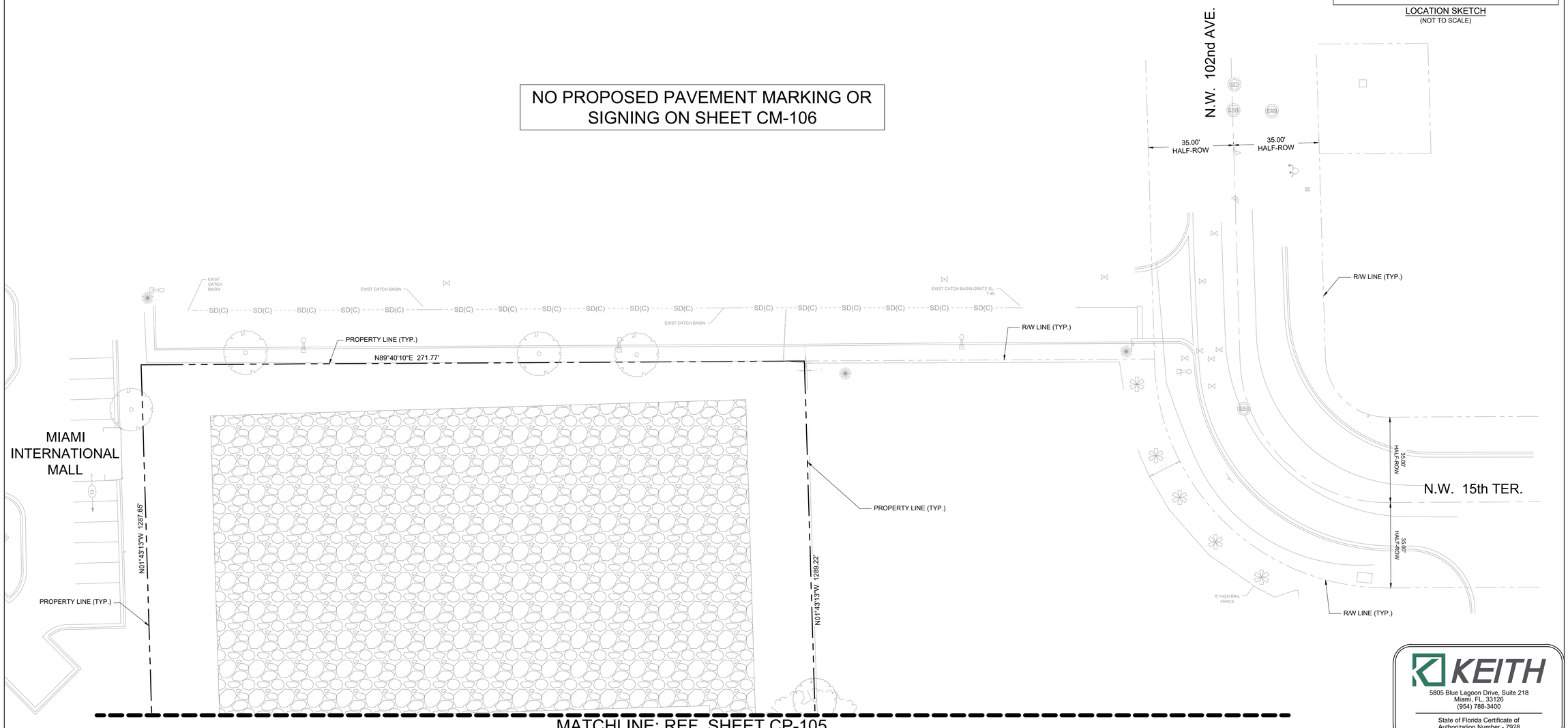

MATCHLINE: REF. SHEET CP-105

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CM-106

PAVEMENT MARKING & SIGNAGE PLAN

PROJECT NO.
11916.00
DRAWN BY :
AARON K.
CHECKED BY :
CARLOS M.
DATE :
11/16/2021

STATUS: PERMIT